50HC
High Efficiency
Cooling Only/Electric Heat Packaged Rooftop
3 to 12.5 Nominal Tons

Carrier
turn to the experts

Product Data

WeatherMaster®

C10222

Puron™
the environmentally sound refrigerant

ENERGY STAR

ASHRAE 90.1 COMPLIANT

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Carrier
turn to the experts

Your Carrier rooftop unit (RTU) was designed by customers for customers. With “no-strip” screw collars, handled access panels, and more we’ve made your unit easy to install, easy to maintain and easy to use.

Easy to install:

All WeatherMaster® units are field-convertible to horizontal air flow, which makes it easy to adjust to unexpected job-site complications. Lighter units make easy replacement. Most of Carrier’s 3-12.5 ton 50HC rooftops fit on existing Carrier curbs dating back to 1989. Also, our large control box gives you room to work and room to mount Carrier accessory controls.

Easy to maintain:

Easy access handles by Carrier provide quick and easy access to all normally serviced components. Our “no-strip” screw system has superior holding power and guides screws into position while preventing the screw from stripping the unit’s metal. Take accurate pressure readings by reading condenser pressure with panels on. Simply remove the black, composite plug, route your gauge line(s) through the hole, and connect them to the refrigeration service valve(s). Now, you can take refrigeration system pressure readings without affecting the condenser airflow.

Easy to use:

The newly designed, central terminal board by Carrier puts all your connections and troubleshooting points in one convenient place, standard. Most low voltage connections are made to the same board and make it easy to find what you’re looking for and easy to access it. Carrier rooftops have high and low pressure switches, a filter drier, and 2-in (51mm) filters standard.

FEATURES AND BENEFITS

- Single-stage cooling capacity control on 04 to 07 models
- Two-stage cooling capacity control on 08-14 models
- SEER up to 15.6
- EER up to 13.0
- IEER's up to 13.2 with single speed indoor fan motor and up to 14.5 with SAV™ (Staged Air Volume) 2-speed/VFD indoor fan motor system
- Exclusive non-corrosive composite condensate pan in accordance with ASHRAE 62 Standard, sloping design; side or center drain
- Single point electrical connection
- Pre-painted exterior panels and primer-coated interior panels tested to 500 hours salt spray protection
- TXV refrigerant metering system on each circuit
- Fully insulated cabinet
- Cooling operating range up to 125°F (52°C), and down to 35°F (2°C), 0°F (-18 °C) on 11 size standard
- Access panels with easy grip handles
- Innovative , easy starting, no-strip screw feature on unit access panels
- Two-inch disposable return air filters
- Tool-less filter access door
- Belt drive evaporator-fan motor and pulley combinations available on all three phase models
- Electric Drive X13 (5 speed/torque) motor on 04 to 06 models
- New terminal board facilitating simple safety circuit troubleshooting and simplified control box arrangement
- Field Convertible airflow (3-12.5 ton). Being able to convert a unit from vertical airflow to horizontal makes it easy to overcome job site complications. 12.5 ton models require a simple supply air duct cover to field convert from factory vertical to horizontal.
- Provisions for thru-the-bottom power entry capability as standard
- Full perimeter base rail with built-in rigging adapters and fork truck slots
- Scroll compressors with internal line-break overload protection
- 24-volt control circuit protected with resettable circuit breaker
- Permanently lubricated evaporator-fan motor
- Totally enclosed condenser motors with permanently lubricated bearings
- Low Pressure switch and high-pressure switch protection
- Liquid line filter drier on each circuit
- Factory-installed Humidi-MiZer® adaptive dehumidification system on all sizes, includes MotorMaster I controller.
- Standard Warranty: 5 years electric heater exchanger, 5 years compressor, 1 year parts
- Optional Staged Air Volume (SAV) system utilizes a Variable Frequency Drive (VFD) to automatically adjust the indoor fan motor speed between cooling stages. Available on 2-stage cooling models 08-14 with electromechanical, ComfortLink or RTU Open controls.

MODEL NUMBER NOMENCLATURE

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
5	0	H	C	–	D	0	8	A	3	A	5	–	0	A	0	A	0

Product Type
50 – Elect Heat Pkg. Rooftop

Model Series – WeatherMaster
HC – High Efficiency

Electric Heater Option
– – Standard (No Electric Heat)
A – Low Electric Heat
B – Medium Electric Heat
C – High Electric Heat

Refrigerant System Options
A – Single stage cooling models
B – Single stg cooling w/Humidi–MiZer
D – 2 stage Cooling
E – 2 stg cooling w/Humidi–MiZer
F – Single stg cool w/MotorMaster low amb cntl
G – 2 stg cool w/Motormaster low amb cntl

Nominal Cooling Capacity (Tons)
04 – 3 ton
05 – 4 ton
06 – 5 ton
07 – 6 ton
08 – 7.5 ton
09 – 8.5 ton
11 – 10 ton (12.0 EER)
12 – 10 ton (11.7 EER)
14 – 12.5 ton

Sensor Options
A – None
B – RA Smoke Detector
C – SA Smoke Detector
D – RA + SA Smoke Detector
E – CO_2 Sensor
F – RA Smoke Detector + CO_2
G – SA Smoke Detector + CO_2
H – RA + SA Smoke Detector + CO_2

Indoor Fan Options 3, 4, 5 Ton Models Only*
0 – Electric (Direct) Drive X13 motor
2 – Medium Static Option – Belt Drive
3 – High Static Option – Belt Drive

Indoor Fan Options 6–12.5 Ton Models Only
1 – Standard Static Option – Belt Drive
2 – Medium Static Option – Belt Drive
3 – High Static Option – Belt Drive
C = High Static Option w/Hi–Effy Motor – Belt Drive (14 size only)

Coil Options (RTPF) (Outdoor–Indoor–Hail Guard)
A – Al/Cu – Al/Cu
B – Pre–coat Al/Cu – Al/Cu
C – E–coat Al/Cu – Al/Cu
D – E–coat AL/Cu – E–coat AL/Cu
E – Cu/Cu – Al/Cu
F – Cu/Cu – Cu/Cu
M – Al/Cu – Al/Cu – Louvered Hail Guard
N – Pre–Coat Al/Cu – Al/Cu – Louvered Hail Guard
P – E–Coat Al/Cu – Al/Cu Louvered Hail Guard
Q – E–Coat Al/Cu – E–coat Al/Cu – Louvered Hail Guard
R – Cu/Cu – Al/Cu – Louvered Hail Guard
S – Cu/Cu – Cu/Cu – Louvered Hail Guard

Voltage
1 – 575/3/60
3 – 208–230/1/60
5 – 208–230/3/60
6 – 460/3/60

Design Revision
– Factory Design Revision

Base Unit Controls
0 – Base Electromechanical Controls. Can be used with W7212 EconoMi$er IV (Non–Fault Detection and Diagnostic)
1 – PremierLink Controller
2 – RTU Open Multi–Protocol Controller
6 – Electromechanical Controls. Can be used with W7220 EconoMi$er X (Non–Fault Detection and Diagnostic)
D – ComfortLink Controls

Intake / Exhaust Options
A – None
B – Temperature Economizer w/Barometric Relief
F – Enthalpy Economizer w/Barometric Relief
K – 2 position Damper
U – Temp Ultra Low Leak Economizer w/Baro Relief
W – Enthalpy Ultra Low Leak Econo w/Baro Relief

Service Options
0 – None
1 – Un–powered Convenience Outlet
2 – Powered Convenience Outlet
3 – Hinged Panels
4 – Hinged Panels, un–powered C.O.
5 – Hinged Panels, powered C.O.
C – Foil faced insulation

Electrical Options
A – None
B – HACR breaker
C – Non–fused disconnect
D – Thru the base connections
F – Non–fused disconnect & thru the base
G – 2–speed indoor fan (VFD) controller
J – 2–spd contr (VFD) & non–fused disc.
K – 2–spd contr (VFD) & thru the base
M – 2–spd cont (VFD) non–fused disc. & thru the base connections

Packaging
0 – Standard
1 = LTL

Note: On single phase (–3 voltage code) models, the following are not available as a factory installed option:
– Humidi–MiZer
– Coated Coils or CU Fin Coils
– Louvered Hail Guards
– Economizer or 2 Position Damper
– Powered 115 Volt Convenience Outlet

* See Price Page details for specific Humidi–MiZer models

Not all possible options can be displayed above – see price pages or contact your Carrier Expert for more details

Table 1 – FACTORY-INSTALLED OPTIONS AND FIELD-INSTALLED ACCESSORIES

CATEGORY	ITEM	FACTORY INSTALLED OPTION	FIELD INSTALLED ACCESSORY
Cabinet	Thru–the–base electrical connections	X	X
	Hinged access panels	X	
	Supply duct cover – 14 size only		X
	Foil faced insulation throughout entire cabinet	X	
Coil Options	Cu/Cu indoor and/or outdoor coils[1]	X	
	Pre–coated outdoor coils[1]	X	
	Premium, E–coated outdoor coils[1]	X	
Humidity Control	Humidi–MiZer Adaptive Dehumidification System[1]	X	
Condenser Protection	Condenser coil hail guard (louvered design)[1]	X	X
Controls	Thermostats, temperature sensors, and subbases		X
	PremierLink DDC communicating controller	X	X
	RTU Open Multi–Protocol Controller	X	
	ComfortLink Controls	X	
	Smoke detector (supply and/or return air)	X	
	Time Guard II compressor delay control circuit		X
	Phase Monitor		X
Economizers & Outdoor Air Dampers	EconoMi$er IV for electro–mechanical controls – Non FDD (Standard air leak damper models)[1, 9]	X	X
	EconoMi$er2 for DDC controls (Standard and Ultra Low Leak air damper models)[1, 10]	X	X
	Motorized 2 position outdoor–air damper[1]	X	X
	Manual outdoor–air damper (25% and 50%)	X	X
	Barometric relief[2]	X	X
	Power exhaust – prop design		X
	EconoMi$erX for electro–mechanical controls, complies with FDD. (Standard and Ultra Low Leak air damper models)[1, 9]	X	X
Economizer Sensors & IAQ Devices	Single dry bulb temperature sensors[3]	X	X
	Differential dry bulb temperature sensors[3]		X
	Single enthalpy sensors[3]	X	X
	Differential enthalpy sensors[3]		X
	CO_2 sensor (wall, duct, or unit mounted)[3]	X	X
Electric Heat	Electric Resistance Heaters	X	X
	Single Point Kit	X	X
Indoor Motor & Drive	Multiple motor and drive packages	X	
	Staged Air Vol (SAV) system w/VFD controller (2–stage cool only with electrical mechanical and RTU Open controls)	X	
	Display Kit for SAV system with VFD		X
Low Ambient Control	Winter start kit[4]		X
	Motormaster head pressure controller to –20°F (–29°C)[4]		X
	Cooling Low Ambient Controller to 0°F/–18°C (except 11 size)[4]	X	
Power Options	Convenience outlet (powered)[1,5]	X	
	Convenience outlet (unpowered)	X	
	HACR circuit breaker[6]	X	
	Non–fused disconnect[7,8]	X	
Roof Curbs	Roof curb 14–in (356mm)		X
	Roof curb 24–in (610mm)		X

NOTES:

1. Not available as factory installed option on single phase (208/230/1/60) models. Use field installed accessory where available.
2. Included with economizer.
3. Sensors used to optimize economizer performance.
4. See application data for assistance.
5. Powered convenience outlet is not available on 11 size models with 460/3/60 or 575/3/60 voltage.
6. HACR circuit breaker cannot be used when unit MOCP electrical rating exceeds:
   04–12 sizes – 208/230/1/60 and 208/230/3/60 = 100 amps, 460/3/60 = 90 amps, 575/3/60 = 70 amps.
   14 size – 208/230/3/60 = 200 amps, 460/3/60 = 90 amps, 575/3/60 = 80 amps.
   HACR circuit breaker on 575 volt can only be used on Wye power supply. Delta power supply is prohibited.
   Carrier RTUBuilder automatically selects the amp limitations.
7. Non–fused disconnect switch (04–12 sizes) cannot be used when unit electrical rating exceeds:
   Without factory installed electric heat: 208/230/1/60 and 208/230/3/60 = 80 amps (FLA), 460/3/60 and 575/3/60 = 80 amps (FLA).
   With factory installed electric heat: 208/230/1/60 and 208/230/3/60 = 100 amps (FLA), 460/3/60 and 575/3/60 = 80 amps (FLA).
   Non–fused disconnect switch (14 size) cannot be used when unit electrical rating exceeds:
   Without factory installed electric heat: 208/230/3/60 = 115 amps (MCA), 460/3/60 and 575/3/60 = 100 amps (FLA).
   With factory installed electric heat: 208/230/2/60 = 200 amps (FLA), 460/3/60 and 575/3/60 = 100 amps (FLA)
   Carrier RTUBuilder automatically selects the amp limitations.
8. If field installing electric heaters, Single Point Kits are required:
   On sizes 04, 05 and 06 – Single Point Kit CRSINGLE037A00 is required.
   On size 07 – Single Point Kit CRSINGLE042A00 is required.
   On sizes 08, 09 and 12 – Single Point Kit CRSINGLE047A00 is required.
9. FDD – (Fault Detection and Diagnostic) capability per California Title 24 section 120.2.
10. Models with ComfortLink and RTU Open DDC controls comply with California Title 24 Fault Detection and Diagnostic (FDD) PremierLink in non FDD

FACTORY OPTIONS AND/OR ACCESSORIES

Economizer (dry-bulb or enthalpy)

Economizers save energy, money and improve comfort levels in the conditioned space. They bring in fresh, outside air for ventilation; and provide cool outside air to cool your building. This also is the preferred method of low ambient cooling. When integrated with CO2 sensors, economizers can provide even more savings by coupling the ventilation air to only that amount required based on space occupancy. Economizers are available, installed and tested by the factory, with either enthalpy or temperature dry-bulb inputs. There are also models for electromechanical, direct digital controllers and single speed fan or 2-speed indoor fan motors. Additional sensors are available as accessories to optimize the economizer. Economizers include gravity controlled barometric relief that helps equalize building pressure and ambient air pressures. This can be a cost effective solution to prevent building pressurization. Economizers are available in Ultra Low Leak and standard low leak versions.

CO_2 Sensor

Improves productivity and saves money by working with the economizer to intake only the correct amount of outside air for ventilation. As occupants fill your building, the CO_2 sensor detects their presence through increasing CO_2 levels, and opens the economizer appropriately.

When the occupants leave, the CO_2 levels decrease, and the sensor appropriately closes the economizer. This intelligent control of the ventilation air, called Demand Control Ventilation (DCV) reduces the overall load on the rooftop, saving money.

Smoke Detectors

Trust the experts. Smoke detectors make your application safer and your job easier. Carrier smoke detectors immediately shut down the rooftop unit when smoke is detected. They are available, installed by the factory, for supply air, return air, or both.

Louvered Hail Guards

Sleek, louvered panels protect the condenser coil from hail damage, foreign objects, and incidental contact.

Convenience Outlet (powered or un-powered)

Reduce service and/or installation costs by including a convenience outlet in your specification. Carrier will install this service feature at our factory. Provides a convenient, 15 amp, 115v GFCI receptacle with “Wet in Use” cover. The “powered” option allows the installer to power the outlet from the line side of the disconnect or load side as required by code. The “unpowered” option is to be powered from a separate 115/120v power source.

Non-fused Disconnect

This OSHA-compliant, factory-installed, safety switch allows a service technician to locally secure power to the rooftop.

If field installing electric heat with factory-installed non-fused disconnect switch, a Single Point Kit is required. See details on page 5, Note 8.

Power Exhaust

Superior internal building pressure control. This field-installed accessory may eliminate the need for costly, external pressure control fans.

PremierLink

This CCN controller regulates your rooftop’s performance to tighter tolerances and expanded limits, as well as facilitates zoning systems and digital accessories. It also unites your Carrier HVAC equipment together on one, coherent CCN network. The PremierLink can be factory-installed, or easily field-installed.

RTU Open, Multi-protocol Controller

Connect the rooftop to an existing BAS without needing complicated translators or adapter modules using the RTU Open controller. This new controller speaks the 4 most common building automation system languages (Bacnet, Modbus, N2, and Lonworks). Use this controller when you have an existing BAS. Besides the 4 protocols, it also communicates with a Carrier Open system (I-Vu and VVT).

Time Guard II Control Circuit

This accessory protects your compressor by preventing short-cycling in the event of some other failure, prevents the compressor from restarting for 30 seconds after stopping. Not required with PremierLink, RTU-Open, or authorized commercial thermostats.

Motorized 2-Position Damper

The new Carrier 2-position, motorized outdoor air damper admits up to 100% outside air. Using reliable, gear-driven technology, the 2-position damper opens to allow ventilation air and closes when the rooftop stops, stopping unwanted infiltration.

Manual OA Damper

Manual outdoor air dampers are an economical way to bring in ventilation air. The dampers are available in 25% and 50% versions.

Optional Humidi-MiZer Adaptive Dehumidification System

Carrier’s Humidi-MiZer adaptive dehumidification system is an all-inclusive factory installed option that can be ordered with any WeatherMaster 50HC04-14 rooftop unit.

This system expands the envelope of operation of Carrier’s WeatherMaster rooftop products to provide unprecedented flexibility to meet year round comfort conditions.

FACTORY OPTIONS AND/OR ACCESSORIES (cont.)

Optional Humidi-MiZer Adaptive Dehumidification System (cont.)

The Humidi-MiZer adaptive dehumidification system has the industry's only dual dehumidification mode setting. The Humidi-MiZer system includes two new modes of operation.

The WeatherMaster 50HC04-14 rooftop coupled with the Humidi-MiZer system is capable of operating in normal design cooling mode, subcooling mode, and hot gas reheat mode. Normal design cooling mode is when the unit will operate under its normal sequence of operation by cycling compressors to maintain comfort conditions.

Subcooling mode will operate to satisfy part load type conditions when the space requires combined sensible and a higher proportion of latent load control. Hot Gas Reheat mode will operate when outdoor temperatures diminish and the need for latent capacity is required for sole humidity control. Hot Gas Reheat mode will provide neutral air for maximum dehumidification operation.

Staged Air Volume (SAV) Indoor Fan Speed System

Carrier's Staged Air Volume (SAV) system saves energy and installation time by utilizing a Variable Frequency Drive (VFD) to automatically adjust the indoor fan motor speed in sequence with the units cooling operation. Per ASHRAE 90.1 2010 standard section 6.4.3.10.b, during the first stage of cooling operation the VFD will adjust the fan motor to provide 2/3rd of the total cfm established for the unit. When a call for the second stage of cooling is required, the VFD will allow the total cfm for the unit established (100%). During the heating mode the VFD will allow total design cfm (100%) operation and during the ventilation mode the VFD will allow operation to 2/3rd of total cfm.

Compared to single speed indoor fan motor systems, Carrier's SAV system can save substantial energy, 25%+*, versus single speed indoor fan motor systems.

The VFD used in Carrier's SAV system has soft start capabilities to slowly ramp up the speeds, thus eliminating any high inrush air volume during initial start-up. It also has internal over current protection for the fan motor and a field installed display kit that allows adjustment and in depth diagnostics of the VFD.

This SAV system is available on models with 2-stage cooling operation with electrical mechanical or RTU Open, Multi Protocol controls. Both space sensor and conventional thermostats controls can be used to provide accurate control in any application.

The SAV system is very flexible for initial fan performance set up and adjustment. The standard factory shipped VFD is pre-programmed to automatically stage the fan speed between the first and second stage of cooling. The unit fan performance static pressure and cfm can be easily adjusted using the traditional means of pulley adjustments. The other means to adjust the unit static and cfm performance is to utilize the field installed Display Kit and adjust the frequency and voltage in the VFD to required performance requirements. In either case, once set up, the VFD will automatically adjust the speed between the cooling stage operations.

*Data based on .10 ($/kWh) in an office application utilizing Carrier's HAP 4.6 simulation software program

Hinged Access Panels

Allows access to unit's major components with specifically designed hinged access panels. Panels are: filter, control box, fan motor and compressor.

MotorMaster Head Pressure Controller

The Motormaster motor controller is a low ambient, head pressure controller kit that is designed to maintain the unit's condenser head pressure during periods of low ambient cooling operation. This device should be used as an alternative to economizer free cooling not when economizer usage is either not appropriate or desired. The MotorMaster will either cycle the outdoor-fan motors or operate them at reduced speed to maintain the unit operation, depending on the model.

MotorMaster allows cooling operation down to -20°F (-29°C) ambient conditions.

Winter Start Kit

The winter start kit by Carrier extends the low ambient limit of your rooftop to 25°F (-4°C). The kit bypasses the low pressure switch, preventing nuisance tripping of the low pressure switch. Other low ambient precautions may still be prudent.

Alternate Motors and Drives

Some applications need larger horsepower motors, some need more airflow, and some need both. Regardless of the case, your Carrier expert has a factory installed combination to meet your application. A wide selection of motors and pulleys (drives) are available, factory installed, to handle nearly any application.

Thru-the-Base Connections

Thru-the-base connections, available as either an accessory or as a factory option, are necessary to ensure proper connection and seal when routing wire and piping through the rooftop's basepan and curb. These couplings eliminate roof penetration and should be considered for gas lines, main power lines, as well as control power.

Electric Heaters

Carrier offers a full-line of field-installed accessory heaters. The heaters are very easy to use, install and are all pre-engineered and certified.

FACTORY OPTIONS AND/OR ACCESSORIES (cont.)

ComfortLink Controls

Models with the optional Carrier ComfortLink Controls allow added unit diagnostics and operation setup capabilities, as well as controlling logic for single zone Variable Air Volume (VAV) applications.

The ComfortLink control is your link to a world of simple and easy to use rooftop units that offer outstanding performance and value. It optimizes the performance of the refrigeration circuits as conditions change, resulting in the following features:

- — Better control of temperature and humidity
- — Superior reliability
- — Automatic redundancy
- — Low ambient cooling operation to 0°F
- — More accurate diagnostics, at unit or remote

The ComfortLink Scrolling Marquee is very easy to use. The messages are displayed in easy to understand English, no decoding is required. A scrolling readout provides detailed explanations of control information. Only four, large, easy-to-use buttons are required to maneuver through the entire menu. The readout is designed to be visible even in the brightest sunlight. A handheld Navigator accessory or wall-mounted System Pilot™ accessory can be used for added service flexibility.

The ComfortLink control provides unparalleled service diagnostic information. Temperature and pressure can be read directly from the display with no need for separate gauges. Other data, such as compressor cycles, unit run time hours, current alarms, can also be accessed. A history of alarms is also available for viewing.

The service run test can be very helpful when troubleshooting. The user can run test major components to determine the root cause of a problem. The unit can be run-tested before an installation is complete to ensure satisfactory start-up. To ensure reliability, the ComfortLink control prevents reverse compressor rotation. No laptop computers are required for start-up.

Time schedules are built in and the Scrolling Marquee display provides easy access to setpoints. The ComfortLink control accepts input from a CO_2 sensor and a smoke detector. Both are available as factory installed options or as field installed accessories.

HACR Breaker

These manual reset devices provide overload and short circuit protection for the unit. Factory wired and mounted with the units with access cover to help provide environment protection.

On 575V applications, HACR breaker can only be used with WYE power distribution systems. Use on Delta power distribution systems is prohibited.

Foil Faced Insulated Cabinet

Cabinet is fully insulated with non-fibrous, foil faced cleanable insulation that is mechanically secured and encapsulated in unit design.

Low Ambient Controller

The low ambient controller is a head pressure controller kit that is designed to maintain the unit's condenser head pressure during periods of low ambient cooling operation. This device should be used as an alternative to economizer free cooling not when economizer usage is either not appropriate or desired. The low ambient controller will either cycle the outdoor fan motors or operate them at reduced speed to maintain the unit operation, depending on the model. This controller allows cooling operation down to 0°F (-18°C) ambient conditions. (Not available on 11 size models as standard unit cooling operation down to 0°F /-18°C.)

Table 2 – AHRI COOLING RATING TABLE 1-STAGE COOLING

UNIT	COOLING STAGES	NOM. CAPACITY (TONS)	NET COOLING CAPACITY (MBH)	TOTAL POWER (kW)	SEER	EER	IEER
A04	1	3	36.0	2.9	15.00	12.50	–
A05	1	4	48.5	3.7	15.60	13.00	–
A06	1	5	57.5	4.6	15.20	12.45	–
A07	1	6	73.0	6.0	–	12.20	13.20

Table 3 – AHRI COOLING RATING TABLE 2-STAGE COOLING

UNIT	COOLING STAGES	NOM. CAPACITY (TONS)	NET COOLING CAPACITY (MBH)	TOTAL POWER (kW)	EER	IEER WITH SINGLE SPEED INDOOR FAN MOTOR	IEER WITH 2–SPEED INDOOR MOTOR
D08	2	7.5	89.0	7.3	12.20	13.20	14.0
D09	2	8.5	97.0	8.0	12.20	13.20	14.0
D11	2	10.0	111.0	9.3	12.00	12.60	14.5
D12	2	10.0	115.0	9.8	11.70	12.20	12.6
D14	2	12.5	146.0	11.8	12.40	13.20	14.1

LEGEND

AHRI – Air Conditioning, Heating and Refrigeration Institute Test Standard
ASHRAE – American Society of Heating, Refrigerating and Air Conditioning, Inc.
EER – Energy Efficiency Ratio
IEER – Integrated Energy Efficiency Ratio
SEER – Seasonal Energy Efficiency Ratio

Use of the AHRI Certified TM Mark indicates a manufacturer's participation in the program For verification of certification for individual products, go to www.ahridirectory.org.

or

NOTES:

1. Rated in accordance with AHRI Standards 210/240 (04–06 size) and 340/360 (07–14 size).
2. Ratings are based on:
   Cooling Standard: 80°F (27°C) db, 67°F (19°C) wb indoor air temp and 95°F (35°C) db outdoor air temp.
   IEER Standard: A measure that expresses cooling part–load EER efficiency for commercial unitary air–conditioning and heat pump equipment on the basis of weighted operation at various load capacities.
3. All 50HC units comply with ASHRAE 90.1 and Energy Star Energy Standard for minimum SEER and EER requirements.
4. 50HC units comply with US Energy Policy Act (2005). To evaluate code compliance requirements, refer to state and local codes.

Table 4 – MINIMUM - MAXIMUM AIRFLOWS ELECTRIC HEAT

UNIT	COOLING				ELECTRIC HEATERS	
	Minimum Single Speed Fan Motor	Minimum 2–speed Fan Motor (at high speed)	Minimum 2–speed Fan Motor (at low speed)	Maximum	Minimum	Maximum
50HC**04	900	–	–	1500	900	1500
50HC**05	1200	–	–	2000	1200	2000
50HC**06	1500	–	–	2500	1500	2500
50HC**07	1800	–	–	3000	1800	3000
50HC**08	2250	2535	1673	3750	2250	3750
50HC**09	2550	2550	1683	4250	2250	4250
50HC**11	3000	3380	2231	5000	3000	5000
50HC**12	3000	3380	2231	5000	3000	5000
50HC**14	3750	4225	2789	6250	3750	6250

– Not available

Table 5 – SOUND PERFORMANCE TABLE

UNIT	COOLING STAGES	OUTDOOR SOUND (dB) AT 60								
		A–WEIGHTED	63	125	250	500	1000	2000	4000	8000
A04	1	76	78.2	78.0	74.2	73.3	70.6	66.0	62.4	56.9
A05	1	78	84.7	83.6	77.1	74.6	72.3	68.3	64.7	60.9
A06	1	77	87.5	82.5	76.1	73.6	71.3	67.1	64.1	60.0
A07	1	82	90.1	82.6	81.0	79.4	77.0	73.0	70.4	66.7
D08	2	82	90.6	84.3	80.2	79.3	77.1	72.2	67.4	63.7
D09	2	82	88.6	85.0	81.6	79.5	77.4	74.1	71.0	66.3
D11	2	87	85.9	87.9	85.6	84.4	82.8	78.5	74.9	72.5
D12	2	87	85.9	87.9	85.6	84.4	82.8	78.5	74.9	72.5
D14	2	83	89.3	86.0	82.9	80.7	78.5	73.6	69.6	64.5

LEGEND: dB – Decibel

NOTES:

1. Outdoor sound data is measure in accordance with AHRI.
2. Measurements are expressed in terms of sound power. Do not compare these values to sound pressure values because sound pressure depends on specific environmental factors which normally do not match individual applications. Sound power values are independent of the environment and therefore more accurate.
3. A–weighted sound ratings filter out very high and very low frequencies, to better approximate the response of “average” human ear. A–weighted measurements for Carrier units are taken in accordance with AHRI.

Table 6 – PHYSICAL DATA (COOLING) 3 - 6 TONS

	50HC*04	50HC*05	50HC*06	50HC*07
Refrigeration System				
# Circuits / # Comp. / Type	1 / 1 / Scroll	1 / 1 / Scroll	1 / 1 / Scroll	1 / 1 / Scroll
Puron® refrig. (R–410A) charge (lbs–oz)	9 – 0	12 – 8	13 – 3	14 – 0
Humidi–MiZer Puron refrig. (R–410A) charge (lbs–oz)	11 – 0	19 – 12	20 – 0	22 – 8
Metering Device	TXV	TXV	TXV	TXV
High–press. Trip / Reset (psig)	630 / 505	630 / 505	630 / 505	630 / 505
Low–press. Trip / Reset (psig)	54 / 117	54 / 117	54 / 117	54 / 117
Compressor Capacity Staging (%)	100%	100%	100%	100%
Evaporator Coil				
Material (Tube Fin)	Cu / Al	Cu / Al	Cu / Al	Cu / Al
Coil type	3/8–in RTPF	3/8–in RTPF	3/8–in RTPF	3/8–in RTPF
Rows / FPI	3 / 15	3 / 15	4 / 15	3 / 15
Total Face Area (ft^2)	5.5	7.3	7.3	8.9
Condensate Drain Conn. Size	3/4–in	3/4–in	3/4–in	3/4–in
Humidi–MiZer Coil				
Material (Tube Fin)	Cu / Al	Cu / Al	Cu / Al	Cu / Al
Coil type	3/8–in RTPF	3/8–in RTPF	3/8–in RTPF	3/8–in RTPF
Rows / FPI	1 / 17	2 / 17	2 / 17	2 / 17
Total Face Area (ft^2)	3.9	5.2	5.2	5.2
Evaporator Fan and Motor				
Standard Static 1 phase – Motor Qty / Drive Type	1 / Direct	1 / Direct	1 / Direct	–
Max BHP	1.0	1.0	1.0	–
RPM Range	600–1200	600–1200	600–1200	–
Motor Frame Size	48	48	48	–
Fan Qty / Type	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal	–
Fan Diameter (in)	10 x 10	10 x 10	10 x 10	–
Standard Static 3 phase – Motor Qty / Drive Type	1 / Direct	1 / Direct	1 / Direct	1 / Belt
Max BHP	1.0	1.0	1.0	1.7
RPM Range	600–1200	600–1200	600–1200	489–747
Motor Frame Size	48	48	48	56
Fan Qty / Type	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal
Fan Diameter (in)	10 x 10	10 x 10	11 x 10	15 x 15
Standard Static 3 phase* – Motor Qty / Drive Type	1 / Belt	1 / Belt	1 / Belt	1 / Belt
Max BHP	1.7	1.7	1.7	1.7
RPM Range	560–854	560–854	770–1175	489–747
Motor Frame Size	48	48	48	56
Fan Qty / Type	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal
Fan Diameter (in)	10 x 10	10 x 10	10 x 10	15 x 15

* Humidi–MiZer models only

– Not applicable

Table 6 (cont.) - PHYSICAL DATA (COOLING) 3 - 6 TONS

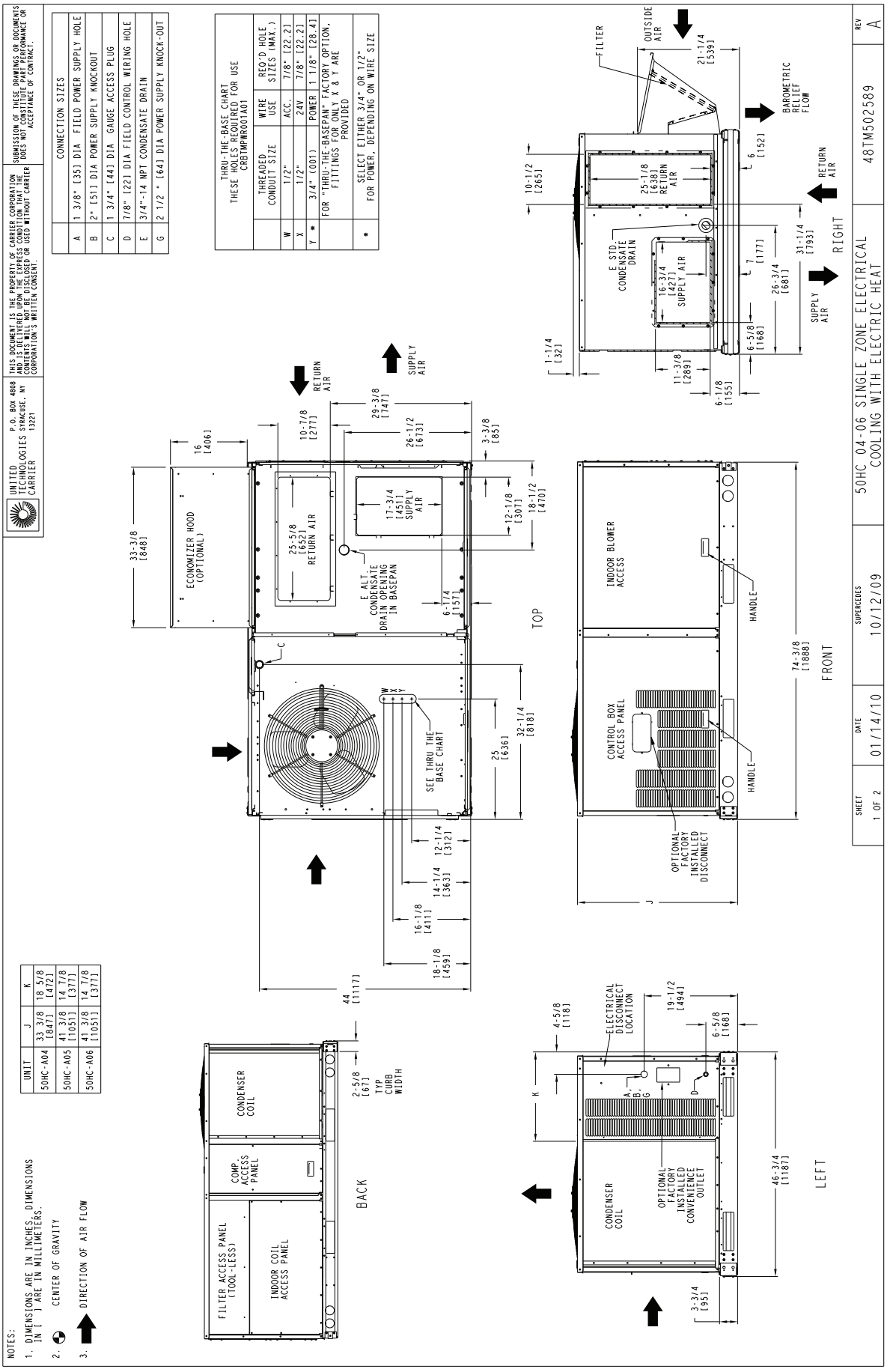
		50HC*04	50HC*05	50HC*06	50HC*07
Evaporator Fan and Motor					
Medium Static 3 phase	Motor Qty / Drive Type	1 / Belt	1 / Belt	1 / Belt	1 / Belt
	Max BHP	1.7	1.7	2.4	2.9
	RPM Range	770–1175	920–1303	1035–1466	733–949
	Motor Frame Size	48	56	56	56
	Fan Qty / Type	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal
	Fan Diameter (in)	10 x 10	10 x 10	10 x 10	15 x 15
Medium Static 3 phase*	Motor Qty / Drive Type	1 / Belt	1 / Belt	1 / Belt	–
	Max BHP	1.7	1.7	2.4	–
	RPM Range	770–1175	770–1175	1035–1466	–
	Motor Frame Size	48	48	56	–
	Fan Qty / Type	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal	–
	Fan Diameter (in)	10 x 10	10 x 10	10 x 10	–
High Static 3 phase	Motor Qty / Drive Type	1 / Belt	1 / Belt	1 / Belt	1 / Belt
	Max BHP	2.4	2.9	2.9	4.7
	RPM Range	1035–1466	1208–1639	1303–1687	909–1102
	Motor Frame Size	56	56	56	14
	Fan Qty / Type	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal
	Fan Diameter (in)	10 x 10	10 x 10	10 x 10	15 x 15
Cond. Coil					
	Material (Tube/Fin)	Cu / Al	Cu / Al	Cu / Al	Cu / Al
	Coil type	3/8–in RTPF	3/8–in RTPF	3/8–in RTPF	3/8–in RTPF
	Rows / FPI	2 / 17	2 / 17	2 / 17	2 / 17
	Total Face Area (ft^2)	12.7	21.3	21.3	20.5
Cond. fan / motor					
	Qty / Motor Drive Type	1/ Direct	1/ Direct	1/ Direct	2/ Direct
	Motor HP / RPM	1/8 / 825	1/4 / 1100	1/4 / 1100	1/4 / 1100
	Fan diameter (in)	22	22	22	22
Filters					
	RA Filter # / Size (in)	2 / 16 x 25 x 2	4 / 16 x 16 x 2	4 / 16 x 16 x 2	4 / 16 x 20 x 2
	OA inlet screen # / Size (in)	1 / 20 x 24 x 1	1 / 20 x 24 x 1	1 / 20 x 24 x 1	1 / 20 x 36 x 1

* Humidi–MiZer models only
– Not applicable

Table 7 – PHYSICAL DATA (COOLING) 7.5 - 12.5 TONS

	50HC*08	50HC*09	50HC*11	50HC*12	50HC*14
Refrigeration System					
# Circuits / # Comp. / Type	2 / 2 / Scroll	2 / 2 / Scroll	2 / 2 / Scroll	2 / 2 / Scroll	2 / 2 / Scroll
Puron Refrig (R–410A) charge A/B (lbs–oz)	9 – 10 / 9 – 10	9 – 14 / 9 – 14	12 – 10 / 13 – 0	12 – 11 / 12 – 5	16 – 7 / 15 – 5
Humidi–MiZer Puron Refrig (R–410A) charge A/B (lbs–oz)	17–0 / 17–0	15–2 / 15–0	18–0 / 18–0	18–3 / 17–3	25–8 / 22–8
Metering device	TXV	TXV	TXV	TXV	TXV
High–press. Trip / Reset (psig)	630 / 505	630 / 505	630 / 505	630 / 505	630 / 505
Low–press. Trip / Reset (psig)	54 / 117	54 / 117	27 / 44	54 / 117	54 / 117
Compressor Capacity Staging (%)	50% / 100%	50% / 100%	50% / 100%	50% / 100%	50% / 100%
Evaporator Coil					
Material (Tube/Fin)	Cu / Al	Cu / Al	Cu / Al	Cu / Al	Cu / Al
Coil type	3/8–in RTPF	3/8–in RTPF	3/8–in RTPF	3/8–in RTPF	3/8–in RTPF
Rows / FPI	4 / 15	4 / 15	4 / 15	4 / 15	4 / 15
total face area (ft2)	11.1	11.1	11.1	11.1	17.5
Condensate drain conn. size	3/4–in	3/4–in	3/4–in	3/4–in	3/4–in
Humidi–MiZer Coil					
Material (Tube/Fin)	Cu / Al	Cu / Al	Cu / Al	Cu / Al	Cu / Al
Coil type	3/8–in RTPF	3/8–in RTPF	3/8–in RTPF	3/8–in RTPF	3/8–in RTPF
Rows / FPI	2 / 17	2 / 17	2 / 17	2 / 17	1 / 17
total face area (ft2)	6.3	8.4	8.6	8.6	13.8
Evaporator fan and motor					
Standard Static 3 phase – Motor Qty / Drive type	1 / Belt	1 / Belt	1 / Belt	1 / Belt	1 / Belt
Max BHP	1.7	1.7	2.4	2.4	2.9
RPM range	518–733	518–733	591–838	591–838	440–609
Motor Frame Size	56	56	56	56	56Y
Fan Qty / Type	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal
Fan Diameter (in)	15 x 15	15 x 15	15 x 15	15 x 15	18 x 18
Medium Static 3 phase – Motor Qty / Drive type	1 / Belt	1 / Belt	1 / Belt	1 / Belt	1 / Belt
Max BHP	2.4	2.4	3.7	3.7	3.7
RPM range	690–936	690–936	838–1084	838–1084	609–778
Motor Frame Size	56	56	56HZ	56HZ	56HZ
Fan Qty / Type	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal
Fan Diameter (in)	15 x 15	15 x 15	15 x 15	15 x 15	18 x 18
High Static 3 phase – Motor Qty / Drive type	1 / Belt	1 / Belt	1 / Belt	1 / Belt	1 / Belt
Max BHP	3.7	3.7	4.9	4.9	6.1*
RPM range	838–1084	838–1084	1022–1240	1022–1240	776–955
Motor Frame Size	56	56	145TY	145TY	S184T
Fan Qty / Type	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal
Fan Diameter (in)	15 x 15	15 x 15	15 x 15	15 x 15	18 x 18
Condenser Coil					
Material (Tube/Fin)	Cu / Al	Cu / Al	Cu / Al	Cu / Al	Cu / Al
Coil type	3/8–in RTPF	3/8–in RTPF	3/8–in RTPF	3/8–in RTPF	3/8–in RTPF
Rows / FPI	2 / 17	2 / 17	3 / 17	3 / 17	2 / 17
Total Face Area (ft^2)	25.1	25.1	25.1	25.1	2 at 23.1
Condenser fan / motor					
Qty / Motor drive type	2 / direct	2 / direct	1 / direct ECM	1 / direct	3 / direct
Motor HP / RPM	1/4 / 1100	1/4 / 1100	1 / 1050	1 / 1175	1/4 / 1100
Fan diameter (in)	22	22	30	30	22
Filters					
RA Filter # / size (in)	4 / 20 x 20 x 2	4 / 20 x 20 x 2	4 / 20 x 20 x 2	4 / 20 x 20 x 2	6 / 18 x 24 x 2 Vert 2/24 x 27 x 1
OA inlet screen # / size (in)	1 / 20 x 24 x 1	1 / 20 x 24 x 1	1 / 20 x 24 x 1	1 / 20 x 24 x 1	Horz 1/30 x 39 x1

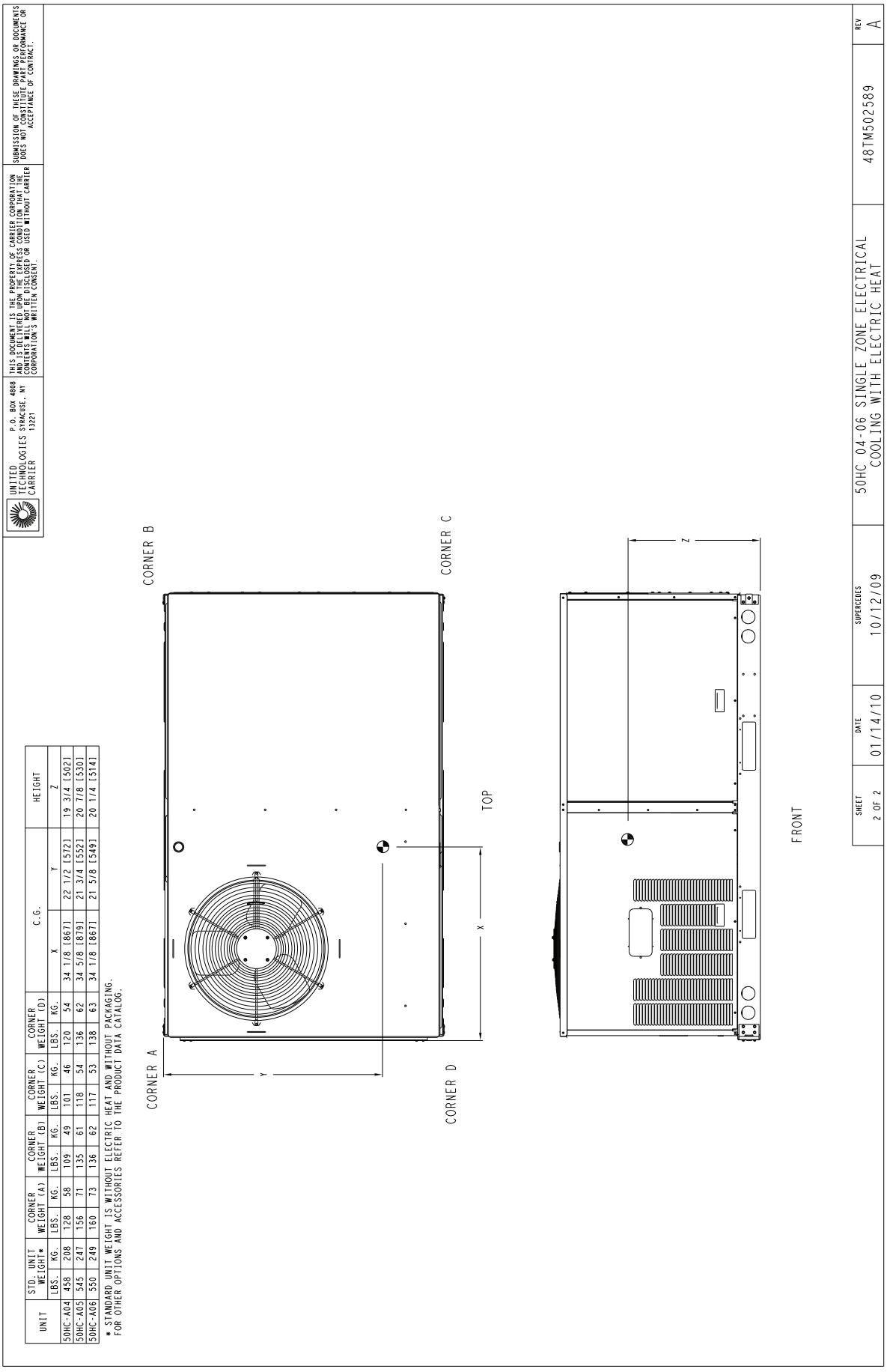
CURBS & WEIGHTS DIMENSIONS - 50HC 04-06



C10106

Fig. 1 - Dimensions 50HC 04-06

CURBS & WEIGHTS DIMENSIONS - 50HC 04-06 (cont.)



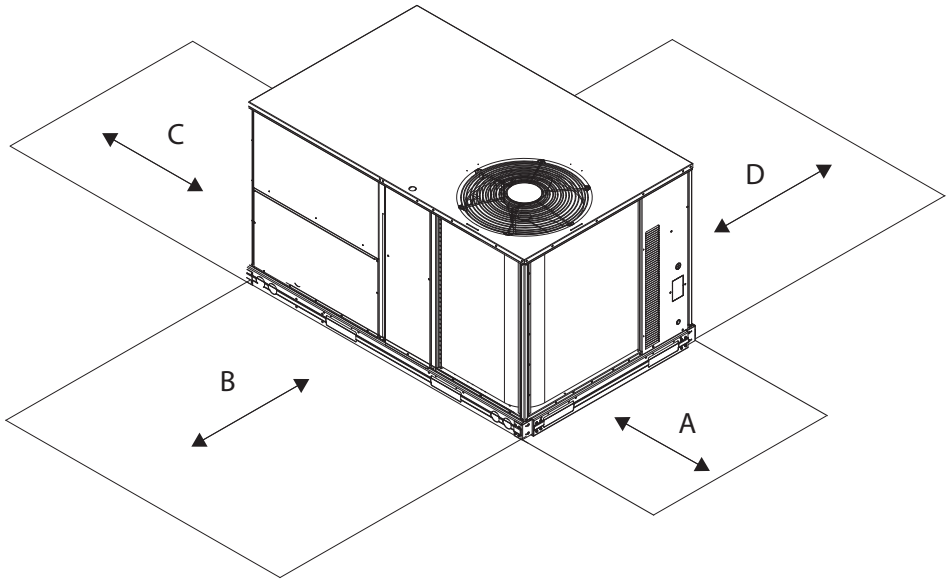
UNIT	STD. UNIT WEIGHT*		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.		HEIGHT
	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z
50HC-A04	458	208	128	58	109	49	101	46	120	54	34 1/8 [867]	22 1/2 [572]	19 3/4 [502]
50HC-A05	545	247	156	71	135	61	118	54	136	62	34 5/8 [879]	21 3/4 [552]	20 7/8 [530]
50HC-A06	550	249	160	73	136	62	117	53	138	63	34 1/8 [867]	21 5/8 [549]	20 1/4 [514]

* STANDARD UNIT WEIGHT IS WITHOUT ELECTRIC HEAT AND WITHOUT PACKAGING.
FOR OTHER OPTIONS AND ACCESSORIES REFER TO THE PRODUCT DATA CATALOG.

C10107

Fig. 2 - Dimensions 50HC 04-06

CURBS & WEIGHTS DIMENSIONS - 50HC 04-06 (cont.)



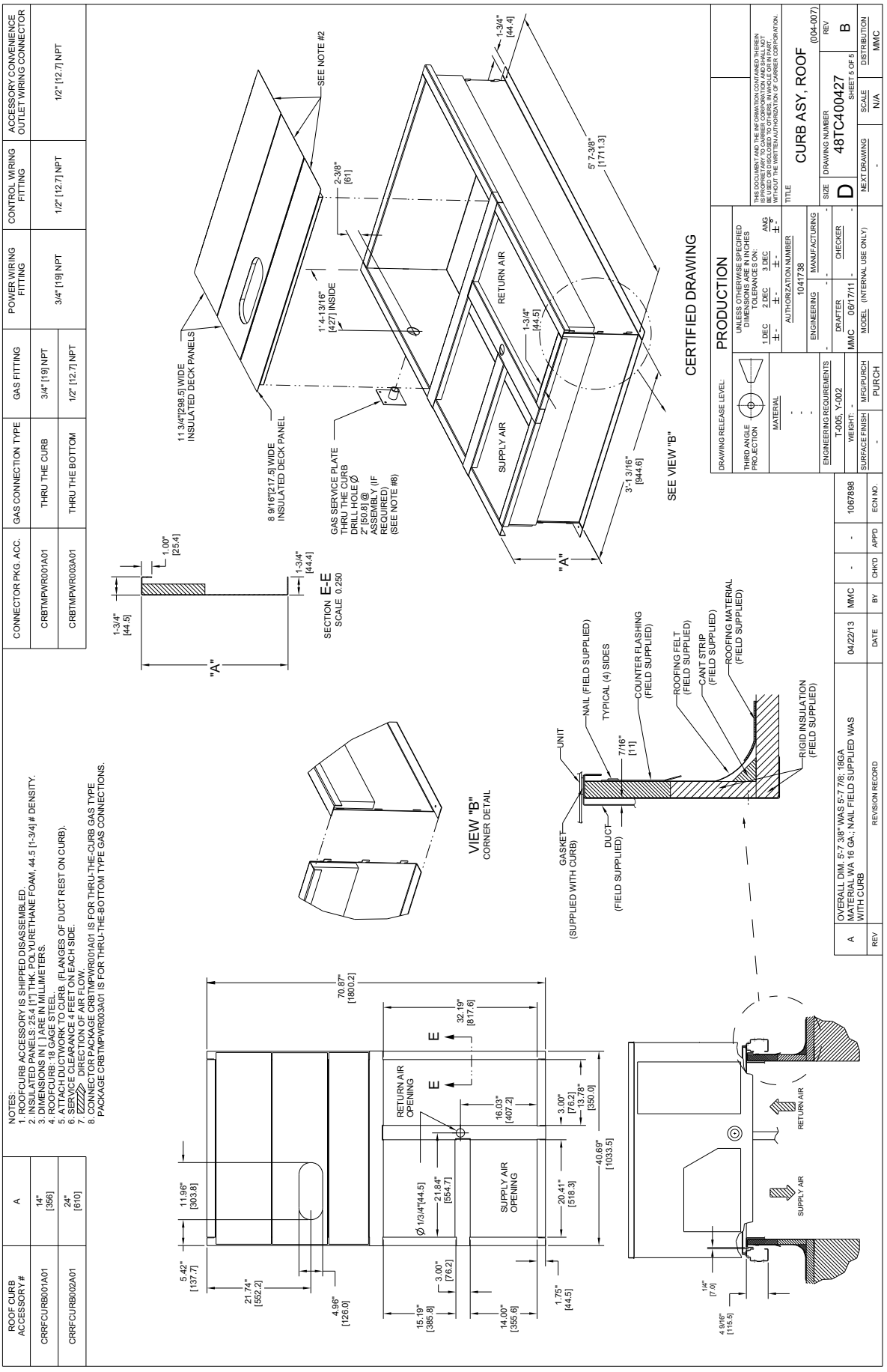
C08337

Fig. 3 - Service Clearance

LOC	DIMENSION	CONDITION
A	48–in (1219 mm)	Unit disconnect is mounted on panel
	18–in (457 mm)	No disconnect, convenience outlet option
	18–in (457 mm)	Recommended service clearance
	12–in (305 mm)	Minimum clearance
B	42–in (1067 mm)	Surface behind servicer is grounded (e.g., metal, masonry wall)
	36–in (914 mm)	Surface behind servicer is electrically non–conductive (e.g., wood, fiberglass)
	Special	Check for sources of flue products within 10–ft of unit fresh air intake hood
C	36–in (914 mm)	Side condensate drain is used
	18–in (457 mm)	Minimum clearance
D	42–in (1067 mm)	Surface behind servicer is grounded (e.g., metal, masonry wall, another unit)
	36–in (914 mm)	Surface behind servicer is electrically non–conductive (e.g., wood, fiberglass)

NOTE: Unit not designed to have overhead obstruction. Contact Application Engineering for guidance on any application planning overhead obstruction or for vertical clearances.

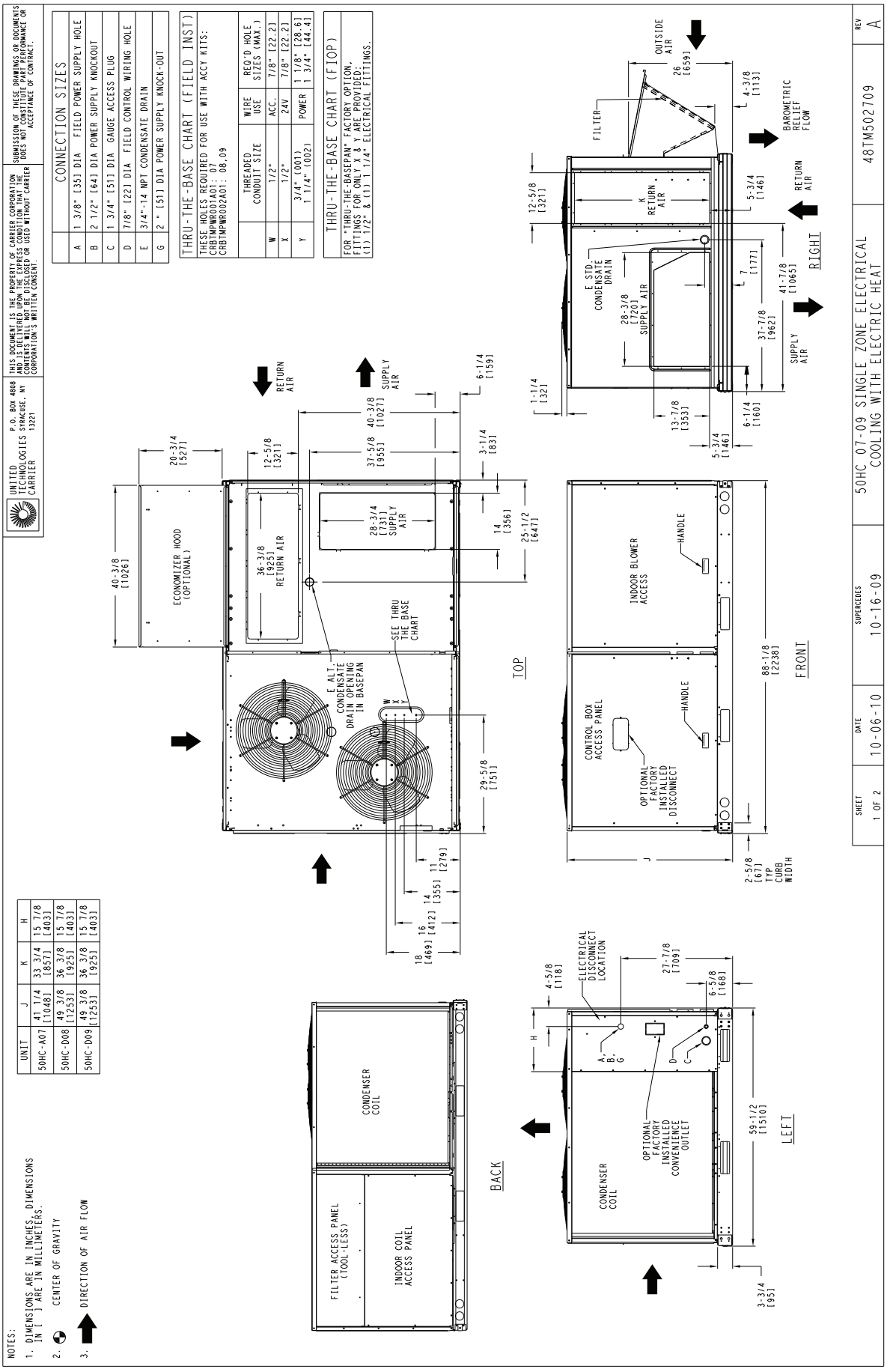
CURBS & WEIGHTS DIMENSIONS - 50HC 04-06 (cont.)



C13310

Fig. 4 - Roof Curb Details

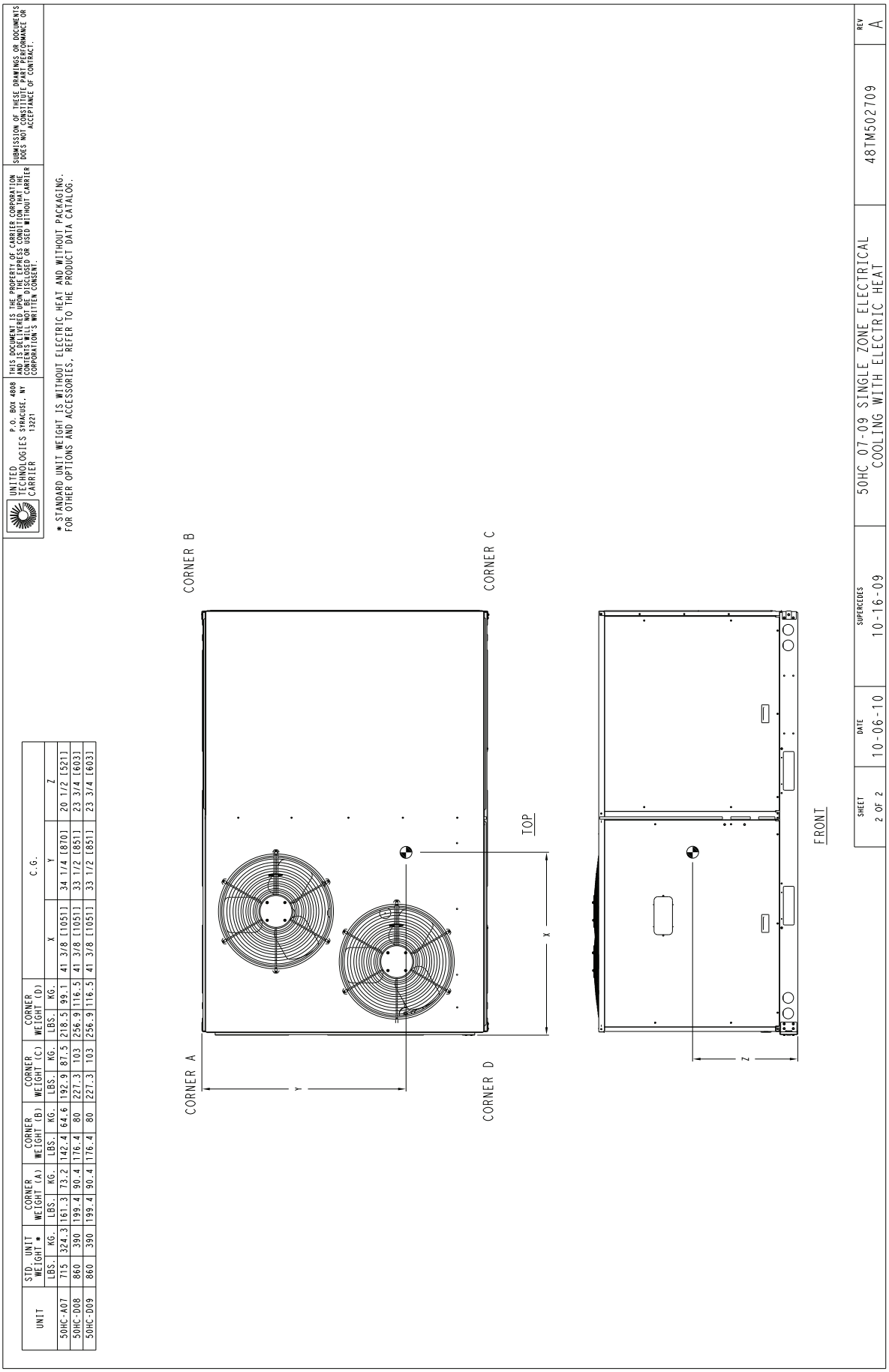
CURBS & WEIGHTS DIMENSIONS - 50HC 07-09



C11334

Fig. 5 - Dimensions 50HC 07-09

CURBS & WEIGHTS DIMENSIONS - 50HC 07-09 (cont.)

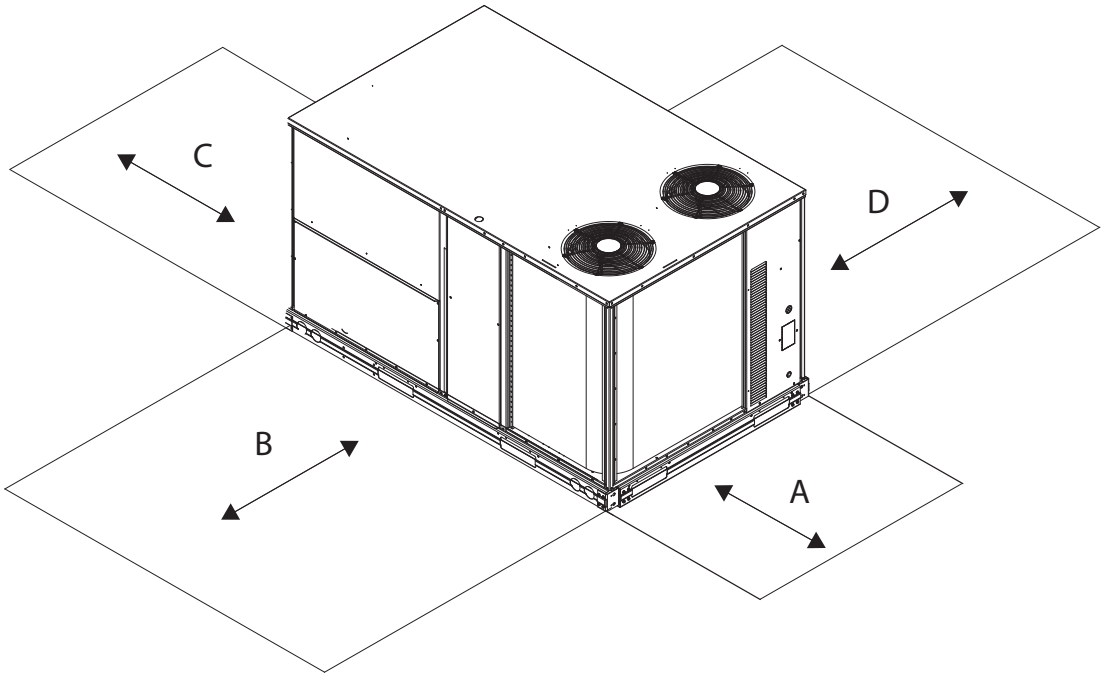


UNIT	STD. UNIT WEIGHT *		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.		
	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z
50HC-A07	715	324.3	161.3	73.2	142.4	64.6	192.9	87.5	218.5	99.1	41 3/8 [1051]	34 1/4 [870]	20 1/2 [521]
50HC-D08	860	390	199.4	90.4	176.4	80	227.3	103	256.9	116.5	41 3/8 [1051]	33 1/2 [851]	23 3/4 [603]
50HC-D09	860	390	199.4	90.4	176.4	80	227.3	103	256.9	116.5	41 3/8 [1051]	33 1/2 [851]	23 3/4 [603]

C11335

Fig. 6 - Dimensions 50HC 07-09

CURBS & WEIGHTS DIMENSIONS - 50HC 07-09 (cont.)



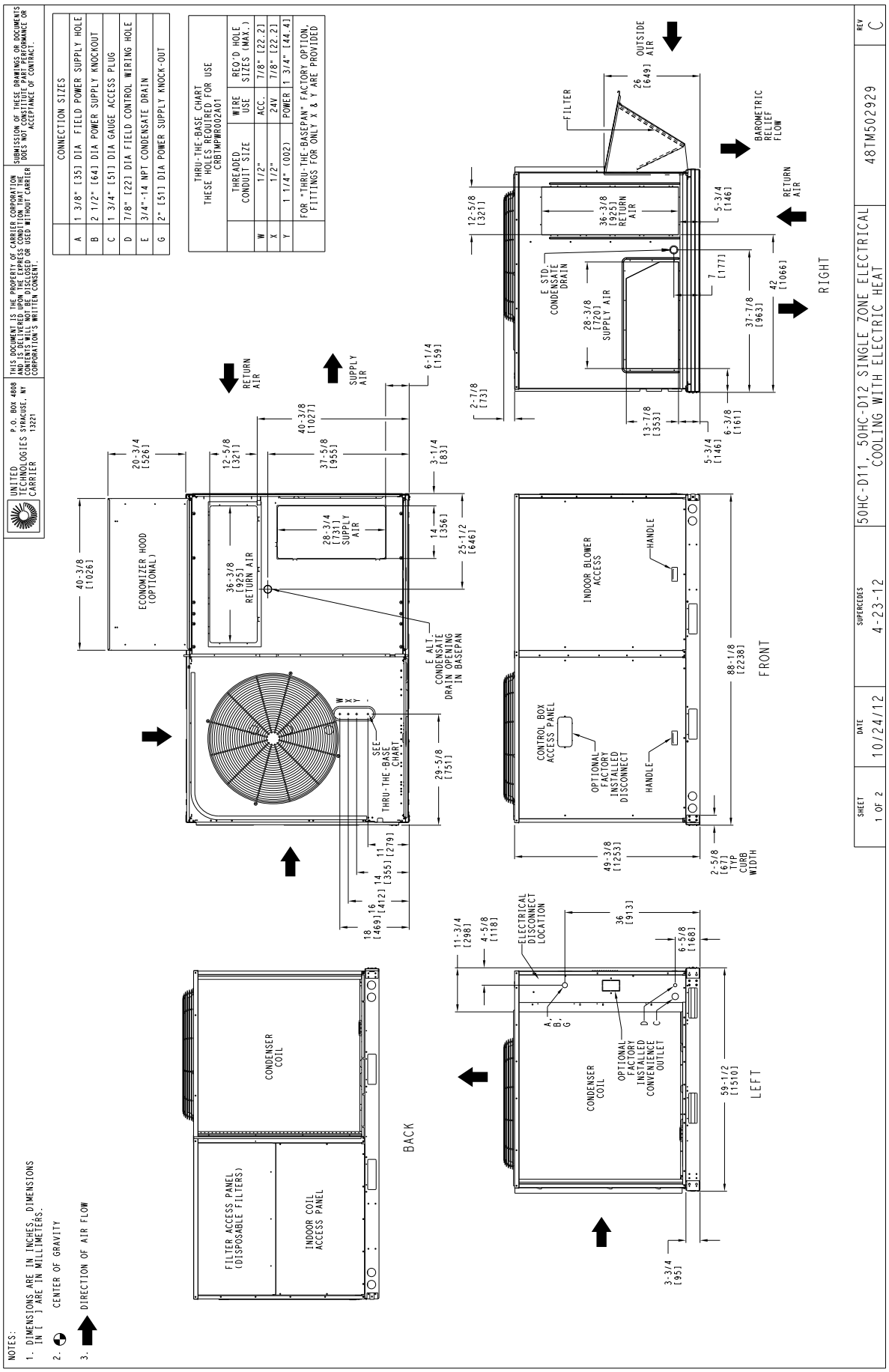
C10577

Fig. 7 - Service Clearance

LOC	DIMENSION	CONDITION
A	48–in (1219 mm)	Unit disconnect is mounted on panel
	18–in (457 mm)	No disconnect, convenience outlet option
	18–in (457 mm)	Recommended service clearance
	12–in (305 mm)	Minimum clearance
B	42–in (1067 mm)	Surface behind servicer is grounded (e.g., metal, masonry wall)
	36–in (914 mm)	Surface behind servicer is electrically non–conductive (e.g., wood, fiberglass)
	Special	Check for sources of flue products within 10–ft of unit fresh air intake hood
C	36–in (914 mm)	Side condensate drain is used
	18–in (457 mm)	Minimum clearance
D	42–in (1067 mm)	Surface behind servicer is grounded (e.g., metal, masonry wall, another unit)
	36–in (914 mm)	Surface behind servicer is electrically non–conductive (e.g., wood, fiberglass)

NOTE: Unit not designed to have overhead obstruction. Contact Application Engineering for guidance on any application planning overhead obstruction or for vertical clearances.

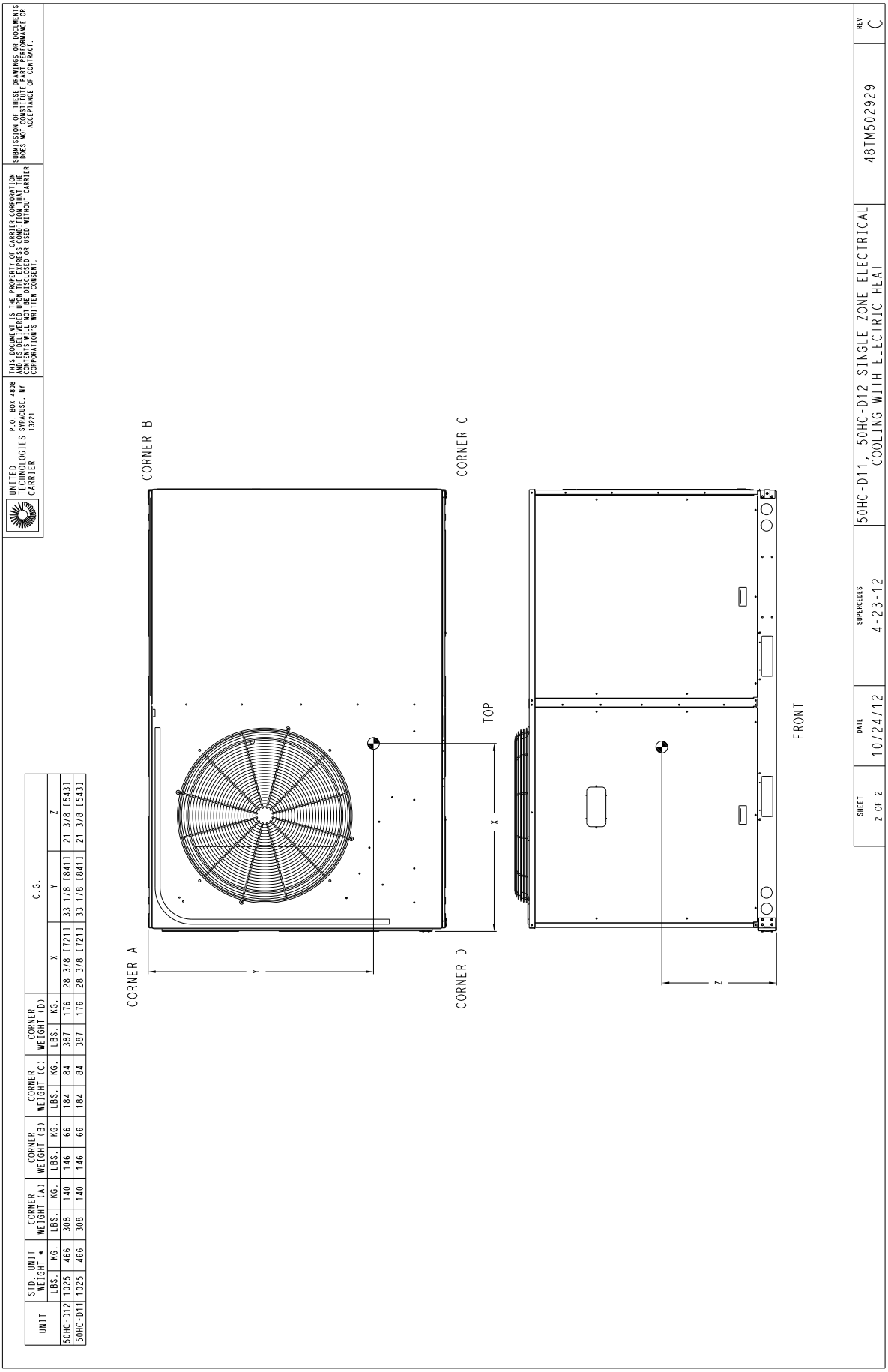
CURBS & WEIGHTS DIMENSIONS - 50HC 11-12



C13296

Fig. 8 - Dimensions 50HC 11-12

CURBS & WEIGHTS DIMENSIONS - 50HC 11-12 (cont.)

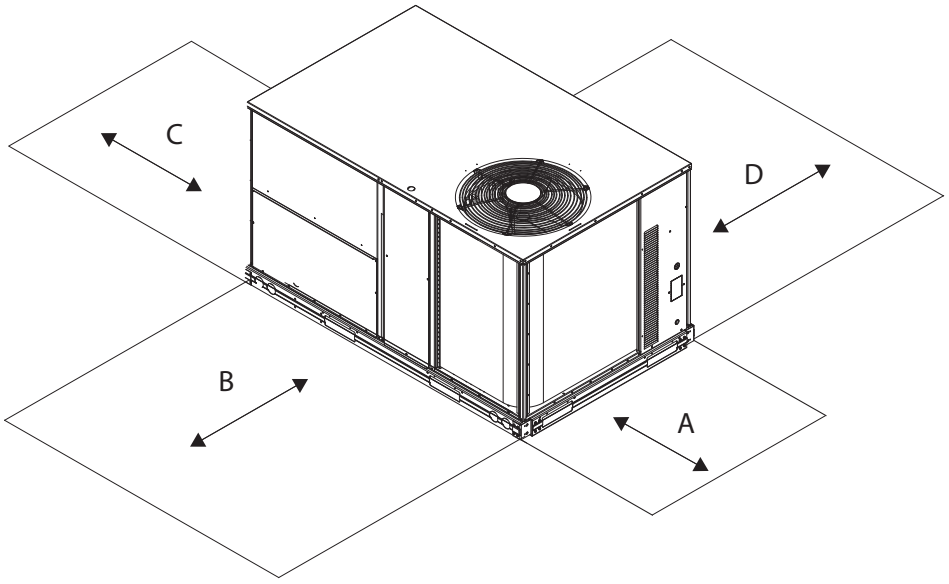


UNIT	STD. UNIT WEIGHT *		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.		
	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z
50HC-D12	1025	466	308	140	146	66	184	84	387	176	28 3/8 [721]	33 1/8 [841]	21 3/8 [543]
50HC-D11	1025	466	308	140	146	66	184	84	387	176	28 3/8 [721]	33 1/8 [841]	21 3/8 [543]

C13297

Fig. 9 - Dimensions 50HC 12

CURBS & WEIGHTS DIMENSIONS - 50HC 11-12 (cont.)



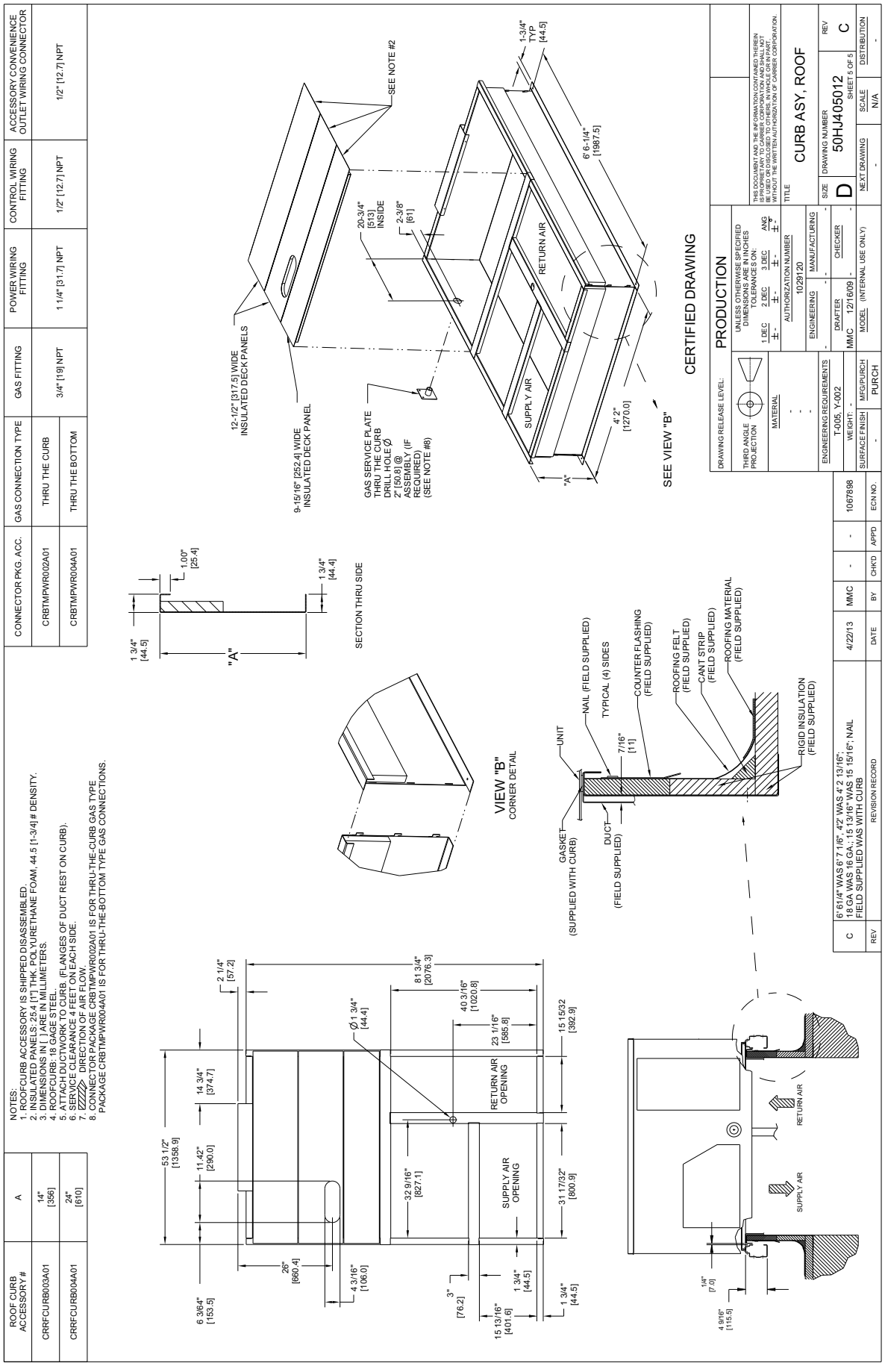
C08337

Fig. 10 - Service Clearance

LOC	DIMENSION	CONDITION
A	48–in (1219 mm)	Unit disconnect is mounted on panel
	18–in (457 mm)	No disconnect, convenience outlet option
	18–in (457 mm)	Recommended service clearance
	12–in (305 mm)	Minimum clearance
B	42–in (1067 mm)	Surface behind servicer is grounded (e.g., metal, masonry wall)
	36–in (914 mm)	Surface behind servicer is electrically non–conductive (e.g., wood, fiberglass)
	Special	Check for sources of flue products within 10–ft of unit fresh air intake hood
C	36–in (914 mm)	Side condensate drain is used
	18–in (457 mm)	Minimum clearance
D	42–in (1067 mm)	Surface behind servicer is grounded (e.g., metal, masonry wall, another unit)
	36–in (914 mm)	Surface behind servicer is electrically non–conductive (e.g., wood, fiberglass)

NOTE: Unit not designed to have overhead obstruction. Contact Application Engineering for guidance on any application planning overhead obstruction or for vertical clearances.

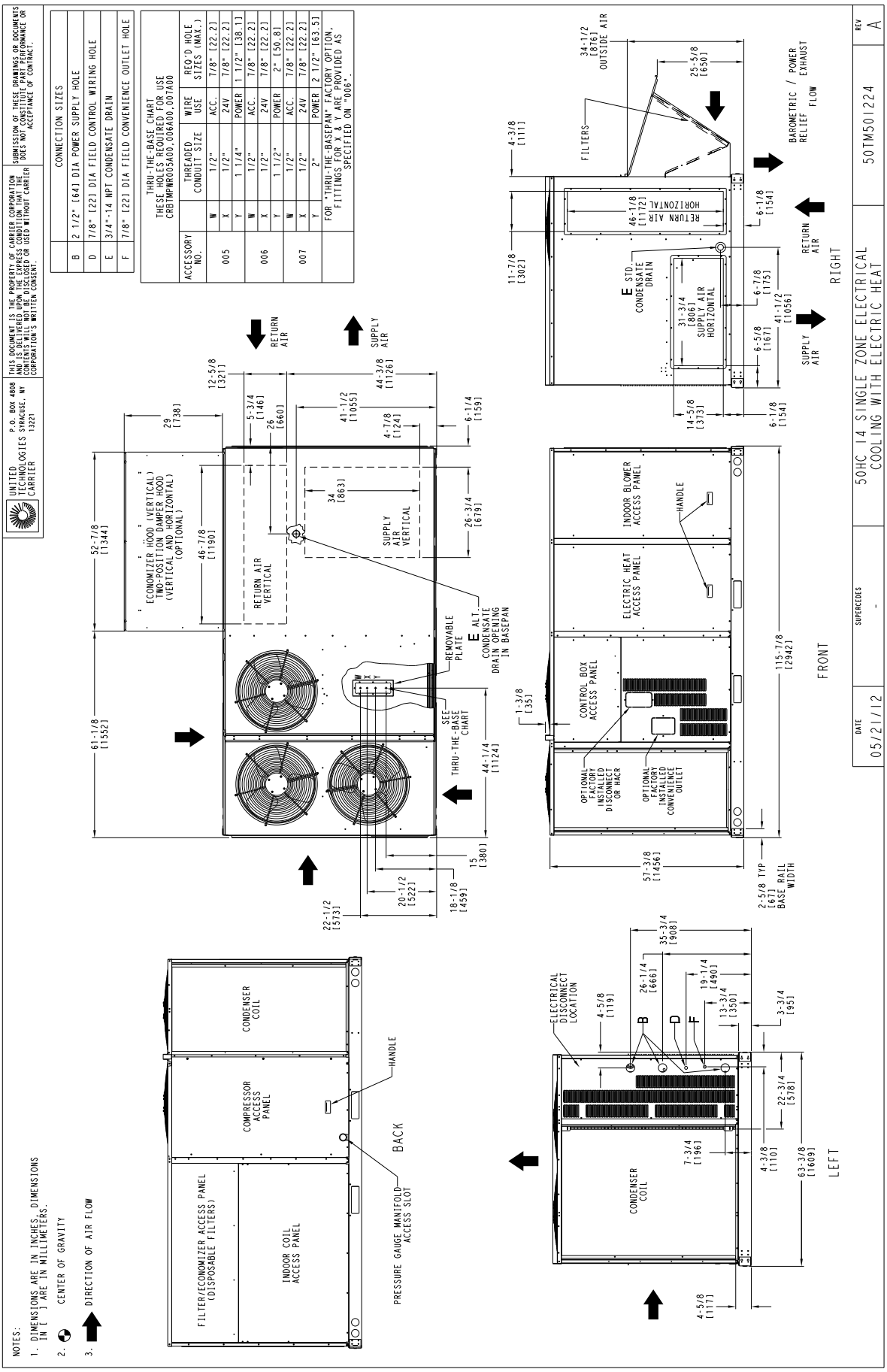
CURBS & WEIGHTS DIMENSIONS - 50HC 07-12 (cont.)



C13311

Fig. 11 - Roof Curb Details

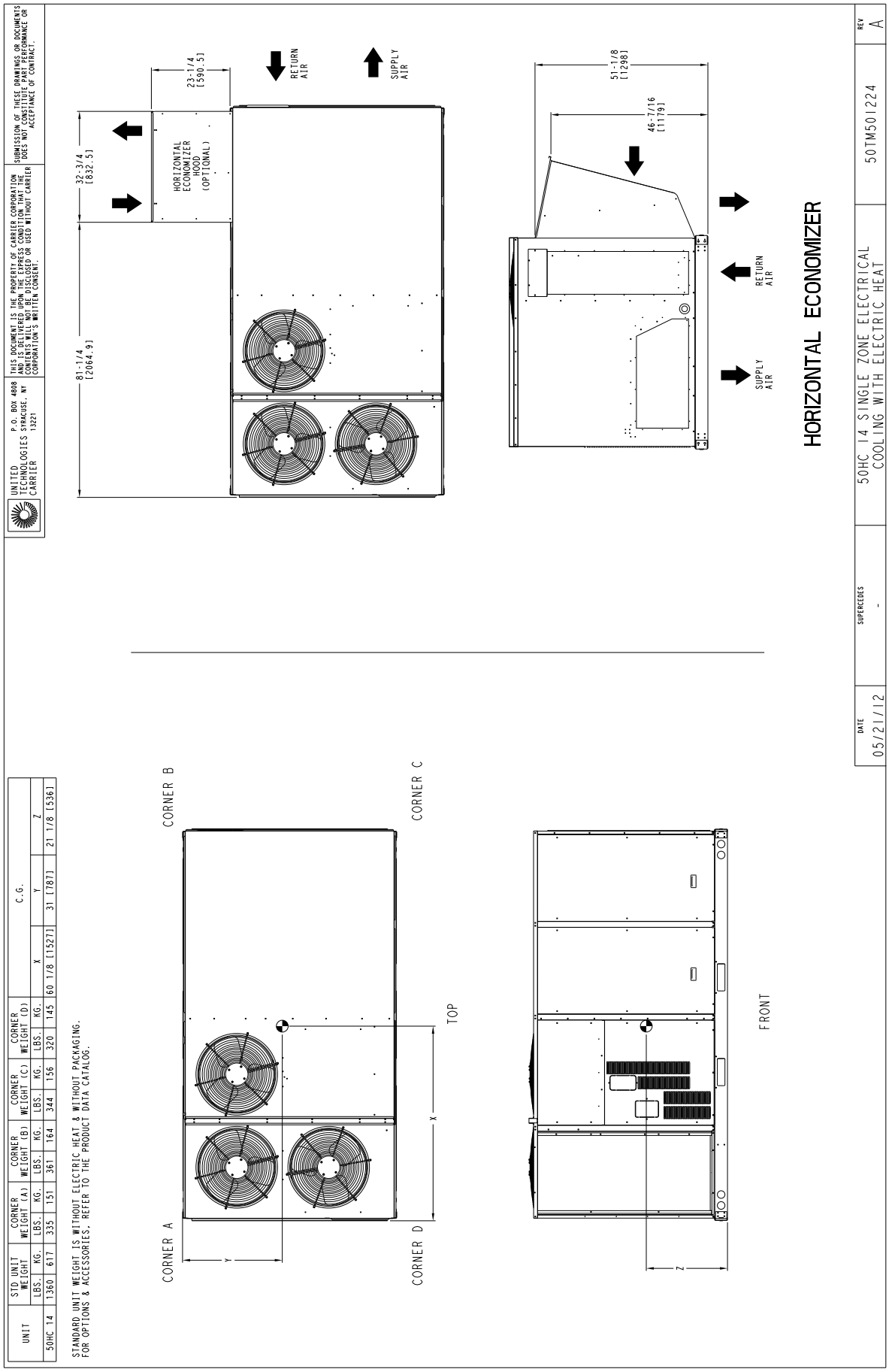
CURBS & WEIGHTS DIMENSIONS - 50HC 14



C13298

Fig. 12 - Dimensions 50HC 14

CURBS & WEIGHTS DIMENSIONS - 50HC 14 (cont.)



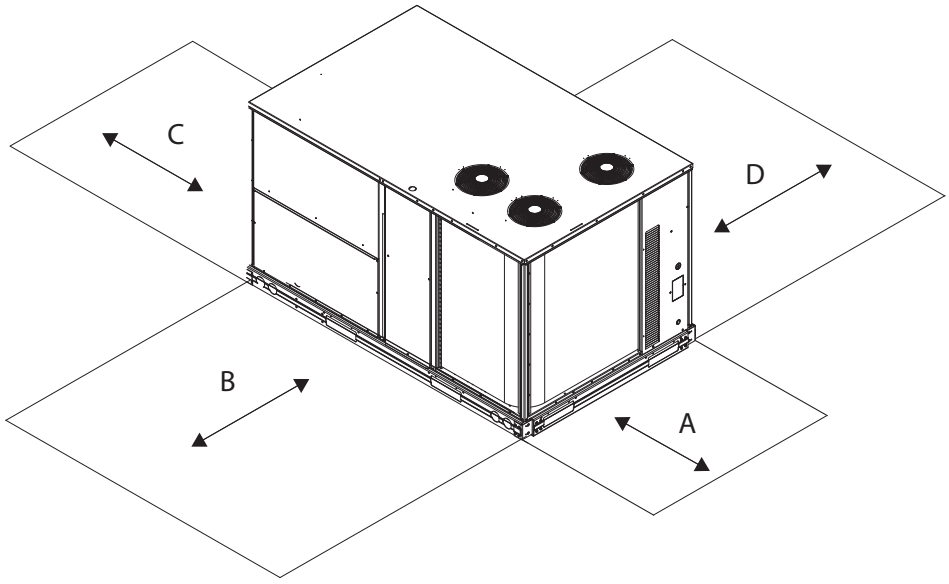
UNIT	STD UNIT WEIGHT		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.		
	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z
50HC 14	1360	617	335	151	361	164	344	156	320	145	60 1/8 [15271]	31 [787]	21 1/8 [536]

STANDARD UNIT WEIGHT IS WITHOUT ELECTRIC HEAT & WITHOUT PACKAGING.
FOR OPTIONS & ACCESSORIES, REFER TO THE PRODUCT DATA CATALOG.

C13299

Fig. 13 - Dimensions 50HC 14

CURBS & WEIGHTS DIMENSIONS - 50HC 14 (cont.)



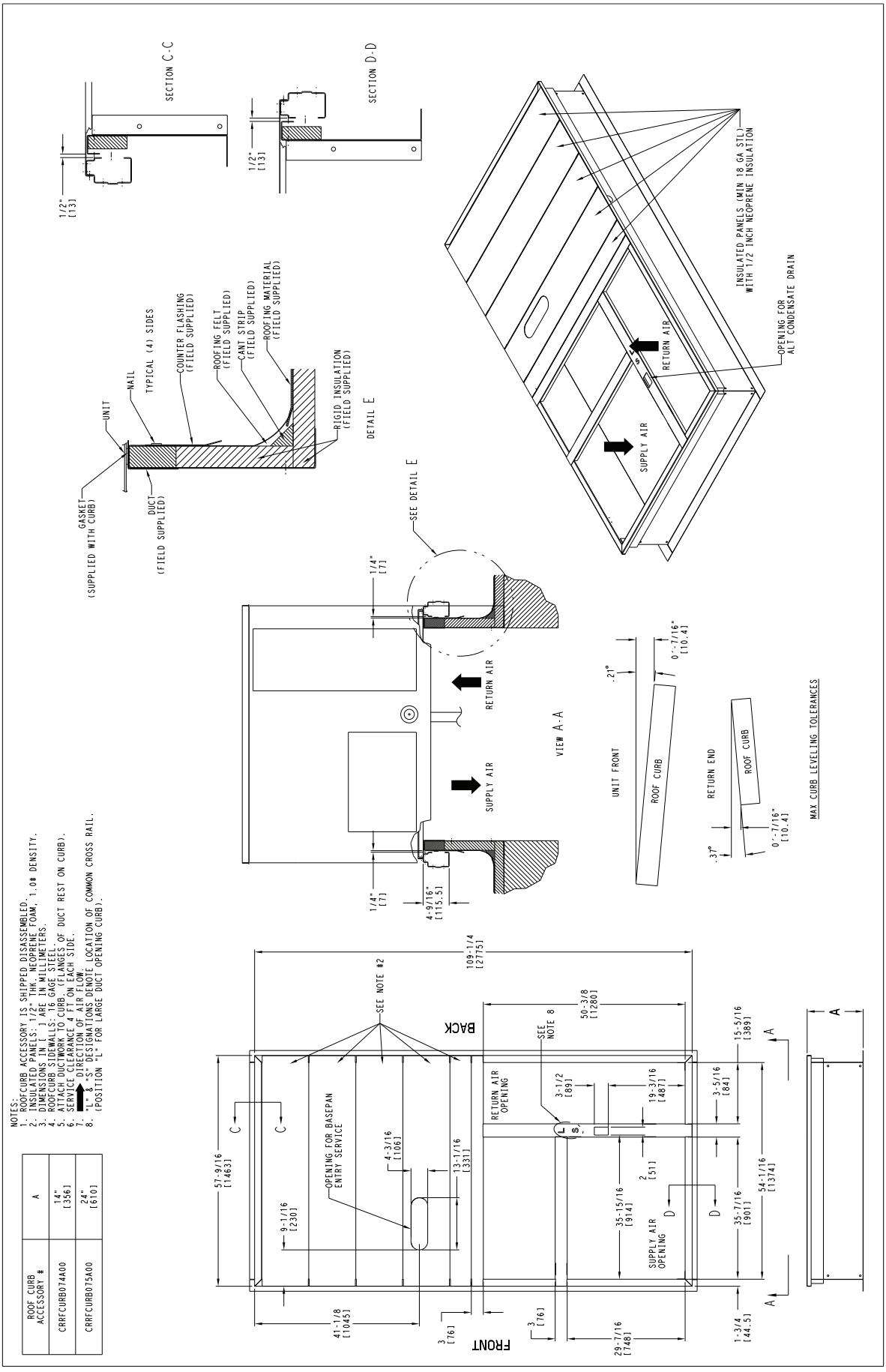
C10578B

Fig. 14 - Service Clearance

LOC	DIMENSION	CONDITION
A	48–in (1219 mm)	Unit disconnect is mounted on panel
	18–in (457 mm)	No disconnect, convenience outlet option
	18–in (457 mm)	Recommended service clearance
	12–in (305 mm)	Minimum clearance
B	42–in (1067 mm)	Surface behind servicer is grounded (e.g., metal, masonry wall)
	36–in (914 mm)	Surface behind servicer is electrically non–conductive (e.g., wood, fiberglass)
	Special	Check for sources of flue products within 10–ft of unit fresh air intake hood
C	36–in (914 mm)	Side condensate drain is used
	18–in (457 mm)	Minimum clearance
D	42–in (1067 mm)	Surface behind servicer is grounded (e.g., metal, masonry wall, another unit)
	36–in (914 mm)	Surface behind servicer is electrically non–conductive (e.g., wood, fiberglass)

NOTE: Unit not designed to have overhead obstruction. Contact Application Engineering for guidance on any application planning overhead obstruction or for vertical clearances.

CURBS & WEIGHTS DIMENSIONS - 50HC 14 (cont.)



ROOF CURB ACCESSORY #	A
CRRFCURB074A00	14" [356]
CRRFCURB075A00	24" [610]

NOTES:
1. ROOFCURB ACCESSORY IS SHIPPED DISASSEMBLED.
2. INSULATED PANELS: 1/2" THK. NEOPRENE FOAM, 1.0# DENSITY.
3. DIMENSIONS IN [ ] ARE IN MILLIMETERS.
4. ROOFCURB SIDEWALLS: 16 GAGE STEEL.
5. ATTACH DUCTWORK TO CURB (FLANGES OF DUCT REST ON CURB).
6. SERVICE CLEARANCE 4 FT ON EACH SIDE.
7. ➡ DIRECTION OF AIR FLOW.
8. "L" & "S" DESIGNATIONS DENOTE LOCATION OF COMMON CROSS RAIL. (POSITION "L" FOR LARGE DUCT OPENING CURB).

C10772B

Fig. 15 - Roof Curb DetailOPTIONS & ACCESSORY WEIGHTS

OPTION / ACCESSORY	OPTION / ACCESSORY WEIGHTS																	
	04		05		06		07		08		09		11		12		14	
	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg
Humidi–MiZer[1]	50	23	55	25	55	25	80	36	80	36	80	36	85	39	85	39	90	41
Power Exhaust – vertical	50	23	50	23	50	23	75	34	75	34	75	34	75	34	75	34	85	39
Power Exhaust – horizontal	30	14	30	14	30	14	30	14	30	14	30	14	30	14	30	14	75	34
EconoMi$er (X, IV or 2)	50	23	50	23	50	23	75	34	75	34	75	34	75	34	75	34	115	52
Two Position damper	39	18	39	18	39	18	58	26	58	26	58	26	58	26	58	26	65	29
Manual Dampers	12	5	12	5	12	5	18	8	18	8	18	8	18	8	18	8	25	11
Hail Guard (louvered)	16	7	16	7	16	7	34	15	34	15	34	15	34	15	34	15	45	20
Cu/Cu Condenser Coil	35	16	35	16	35	16	95	43	95	43	95	43	170	77	170	77	160	73
Cu/Cu Cond. & Evaporator Coils	60	27	60	27	90	41	140	64	140	64	195	88	270	122	270	122	280	127
Roof Curb (14–in. curb)	115	52	115	52	115	52	143	65	143	65	143	65	143	65	143	65	180	82
Roof Curb (24–in. curb)	197	89	197	89	197	89	245	111	245	111	245	111	245	111	245	111	255	116
CO_2 sensor	5	2	5	2	5	2	5	2	5	2	5	2	5	2	5	2	5	2
Electric Heater	30	14	30	14	30	14	45	20	45	20	45	20	45	20	45	20	25	11
Single Point Kit	10	5	10	5	10	5	12	5	12	5	12	5	12	5	12	5	25	11
Optional Indoor Motor / Drive	10	5	10	5	10	5	15	7	15	7	15	7	15	7	15	7	45	20
MotorMaster Controller	35	16	35	16	35	16	35	16	35	16	35	16	35	16	35	16	40	18
Low Ambient Controller	5	2	5	2	5	2	5	2	5	2	5	2	5	2	5	2	5	2
Return Smoke Detector	5	2	5	2	5	2	5	2	5	2	5	2	5	2	5	2	5	2
Supply Smoke Detector	5	2	5	2	5	2	5	2	5	2	5	2	5	2	5	2	5	2
Fan / Filter Status Switch	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1
Non–Fused Disconnect	15	7	15	7	15	7	15	7	15	7	15	7	15	7	15	7	10	5
HACR Circuit Breaker	15	7	15	7	15	7	15	7	15	7	15	7	15	7	15	7	10	5
Powered Convenience outlet	35	16	35	16	35	16	35	16	35	16	35	16	35	16	35	16	32	15
Non–Powered C.O.	5	2	5	2	5	2	5	2	5	2	5	2	5	2	5	2	4	2
Enthalpy Sensor	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1
Differential Enthalpy Sensor	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1
SAV System with VFD	–	–	–	–	–	–	–	–	20	9	20	9	20	9	20	9	20	9

NOTE: Where multiple variations are available, the heaviest combination is listed.

– Not Available

[1] For Humidi–MiZer add MotorMaster Controller.

APPLICATION DATA

Min operating ambient temp (cooling):

In mechanical cooling mode, your Carrier rooftop can safely operate down to an outdoor ambient temperature of 35°F (-2°C) and 25°F (-4°C), with an accessory winter start kit. It is possible to provide cooling at lower outdoor ambient temperatures by using less outside air, economizers, and/or accessory low ambient kits.

Max operating ambient temp (cooling):

The maximum operating ambient temperature for cooling mode is 125°F (52°C). While cooling operation above 125°F (52°C) may be possible, it could cause either a reduction in performance, reliability, or a protective action by the unit's internal safety devices.

Min and max airflow (cooling mode):

To maintain safe and reliable operation of your rooftop, operate within the cooling airflow limits. Operating above the max may cause blow-off, undesired airflow noise, or airflow related problems with the rooftop unit. Operating below the min may cause problems with coil freeze-up.

Airflow:

All units are draw-through in cooling mode.

Outdoor air application strategies:

Economizers reduce operating expenses and compressor run time by providing a free source of cooling and a means of ventilation to match application changing needs. In fact, they should be considered for most applications. Also, consider the various economizer control methods and their benefits, as well as sensors required to accomplish your application goals. Please contact your local Carrier representative for assistance.

Motor limits, break horsepower (BHP):

Due to Carrier's internal unit design, air path, and specially designed motors, the full horsepower (maximum continuous BHP) band, as listed in Table 6 and 7, can be used with the utmost confidence. There is no need for extra safety factors, as Carrier's motors are designed and rigorously tested to use the entire, listed BHP range without either nuisance tripping or premature motor failure.

Sizing a rooftop

Bigger isn't necessarily better. While an air conditioner needs to have enough capacity to meet the load, it doesn't need excess capacity. In fact, having excess capacity typically results in very poor part load performance and humidity control.

Using higher design temperatures than ASHRAE recommends for your location, adding "safety factors" to the calculated load, and rounding up to the next largest unit, are all signs of oversizing air conditioners. Oversizing can cause short-cycling, and short cycling leads to poor humidity control, reduced efficiency, higher utility bills, drastic indoor temperature swings, excessive noise, and increased wear and tear on the air conditioner.

Rather than oversizing an air conditioner, wise contractors and engineers "right-size" or even slightly undersize air conditioners. Correctly sizing an air conditioner controls humidity better; promotes efficiency; reduces utility bills; extends equipment life, and maintains even, comfortable temperatures.

Low ambient applications

When equipped with a Carrier economizer, your rooftop unit can cool your space by bringing in fresh, cool outside air. In fact, when so equipped, accessory low-ambient kit may not be necessary. In low ambient conditions, unless the outdoor air is excessively humid or contaminated, economizer-based "free cooling" is the preferred less costly and energy conscious method.

In low ambient applications where outside air might not be desired (such as contaminated or excessively humid outdoor environments), your Carrier rooftop can operate to ambient temperatures down to -20°F (-29°C) using the recommended field installed accessory MotorMaster low ambient controller or 0°F (-18°C) with the factory installed low ambient controller option.

Winter start

Carrier's winter start kit extends the low ambient limit of your rooftop to 25°F (-4°C). The kit bypasses the low pressure switch, preventing nuisance tripping of the low pressure switch. Other low ambient precautions may still be prudent.

SELECTION PROCEDURE (WITH 50HC*A07 EXAMPLE)[1]

I. Determine cooling and heating loads.

Given:

Mixed Air Drybulb	80°F (27°C)
Mixed Air Wetbulb	67°F (19°C)
Ambient Drybulb	95°F (35°C)
TC_{Load}	69.0 MBH
SHC_{Load}	51.0 MBH
Vertical Supply Air	2100 CFM
External Static Pressure	0.66 in. w.g.
Electrical Characteristics	230-3-60

II. Make an initial guess at cooling tons.

Refrig. tons = TC_{Load} / 12 MBH per ton
Refrig. tons = 69.0 / 12 = 5.75 tons

In this case, start by looking at the 50HC*A07.

III. Look up the rooftop's TC and SHC.

Cooling Capacity Table shows that, at the application's supply air CFM, mixed air and ambient temperatures, the 50HC*A07 supplies:
TC_{Load} = 73.6 MBH
SHC_{Load} = 53.3 MBH.

IV. Calculate the building Latent Heat Load.

$LC_{Load} = TC_{Load} - SHC_{Load}$
LC_{Load} = 69.0 MBH - 51.0 MBH = 18.0 MBH

V. Calculate RTU Latent Heat Capacity

LC = TC - SHC
LC = 73.6 MBH - 53.3 MBH = 20.3 MBH

VI. Compare RTU capacities to loads. [2,3]

Compare the rooftop's SHC and LC to the building's Sensible and Latent Heat Loads.

VII. Select factory options (FIOP)

Local code requires an economizer for any unit with TC larger than 65.0 MBH.

VIII. Calculate the total static pressure.

External static pressure	0.66 in. wg
Sum of FIOP/Accessory static	+0.05 in. wg
Total Static Pressure	0.71 in. wg

IX. Look up the Indoor Fan RPM & BHP.

Table 22 shows, at 2100 CFM & ESP= 0.71,
RPM = 680 & BHP = 0.97

X. Convert BHP (Step IX) into fan motor heat.

Fan Motor Heat = 2.546*097/.80 efficiency.
Fan Motor Heat = 1.98 MBH
Deduct this value from the gross capacity values for net capacity.

XI. Determine electrical requirements

MCA/MOCP table shows the MCA and MOCP of a 50HC*A07 (without convenience outlet) as:

MCA = 32 amps & Breaker size = 50 amps
Min. Disconnect Size: FLA = 31 & LRA = 148.

Legend

BHP	—	Break horsepower
FLA	—	Full load amps
LC	—	Latent capacity
LRA	—	Lock rotor amp
MBH	—	(1,000) BTUH
MCA	—	Min. circuit ampacity
MOCP	—	Max. over–current protection
RPM	—	Revolutions per minute
RTU	—	Rooftop unit
SHC	—	Sensible heat capacity
TC	—	Total capacity

NOTES:

1. Selection software by Carrier saves time by performing many of the steps above. Contact your Carrier sales representative for assistance.
2. Selecting a unit with a SHC slightly lower than the SHC_{Load} is often better than oversizing. Slightly lower SHC's will help control indoor humidity, and prevent temperature swings.
3. If the rooftop's capacity meets the Sensible Heat Load, but not the Latent Heat Load.
4. Indoor Fan Motor efficiency is available in Table NO TAG. Use the decimal form in the equation eg. 80% =.8.

Table 8 – COOLING CAPACITIES **1-STAGE COOLING**

50HC*A04				AMBIENT TEMPERATURE															
				85			95			105			115			125		
				EA (dB)			EA (dB)			EA (dB)			EA (dB)			EA (dB)		
				75	80	85	75	80	85	75	80	85	75	80	85	75	80	85
900 Cfm	EA (wB)	58	TC	32.1	32.1	36.3	30.8	30.8	34.9	29.4	29.4	33.4	28.0	28.0	31.7	26.3	26.3	29.8
			SHC	27.8	32.1	36.3	26.7	30.8	34.9	25.5	29.4	33.4	24.2	28.0	31.7	22.8	26.3	29.8
		62	TC	34.0	34.0	34.3	32.3	32.3	33.5	30.6	30.6	32.6	28.7	28.7	31.7	26.6	26.6	30.6
			SHC	25.0	29.7	34.3	24.2	28.9	33.5	23.4	28.0	32.6	22.5	27.1	31.7	21.5	26.0	30.6
		67	TC	37.3	37.3	37.3	35.5	35.5	35.5	33.6	33.6	33.6	31.5	31.5	31.5	29.2	29.2	29.2
			SHC	20.7	25.4	30.0	20.0	24.6	29.3	19.2	23.8	28.4	18.3	22.9	27.6	17.4	22.0	26.6
		72	TC	40.8	40.8	40.8	38.9	38.9	38.9	36.9	36.9	36.9	34.6	34.6	34.6	32.2	32.2	32.2
			SHC	16.3	21.0	25.7	15.6	20.3	25.0	14.8	19.5	24.1	13.9	18.6	23.3	13.0	17.7	22.3
		76	TC	–	43.9	43.9	–	41.8	41.8	–	39.6	39.6	–	37.2	37.2	–	34.6	34.6
			SHC	–	17.4	22.4	–	16.7	21.7	–	15.9	20.8	–	15.1	19.9	–	14.2	19.0
1050 Cfm	EA (wB)	58	TC	33.8	33.8	38.4	32.5	32.5	36.8	31.0	31.0	35.1	29.4	29.4	33.3	27.6	27.6	31.3
			SHC	29.3	33.8	38.4	28.1	32.5	36.8	26.9	31.0	35.1	25.5	29.4	33.3	23.9	27.6	31.3
		62	TC	35.1	35.1	37.5	33.3	33.3	36.6	31.5	31.5	35.7	29.6	29.6	34.5	27.7	27.7	32.6
			SHC	26.9	32.2	37.5	26.0	31.3	36.6	25.1	30.4	35.7	24.1	29.3	34.5	22.7	27.7	32.6
		67	TC	38.4	38.4	38.4	36.5	36.5	36.5	34.5	34.5	34.5	32.3	32.3	32.3	29.9	29.9	29.9
			SHC	22.0	27.3	32.7	21.2	26.5	31.9	20.3	25.7	31.0	19.4	24.8	30.1	18.5	23.8	29.1
		72	TC	42.0	42.0	42.0	40.0	40.0	40.0	37.8	37.8	37.8	35.5	35.5	35.5	32.9	32.9	32.9
			SHC	16.9	22.3	27.6	16.1	21.5	26.9	15.3	20.7	26.0	14.4	19.8	25.1	13.5	18.8	24.2
		76	TC	–	45.0	45.0	–	42.9	42.9	–	40.6	40.6	–	38.0	38.0	–	35.3	35.3
			SHC	–	18.1	23.8	–	17.4	23.0	–	16.6	22.2	–	15.7	21.3	–	14.8	20.3
1200 Cfm	EA (wB)	58	TC	35.3	35.3	40.0	33.9	33.9	38.4	32.3	32.3	36.6	30.6	30.6	34.7	28.7	28.7	32.5
			SHC	30.6	35.3	40.0	29.4	33.9	38.4	28.0	32.3	36.6	26.5	30.6	34.7	24.9	28.7	32.5
		62	TC	35.9	35.9	40.5	34.2	34.2	39.4	32.4	32.4	38.1	30.6	30.6	36.1	28.7	28.7	33.9
			SHC	28.6	34.5	40.5	27.7	33.6	39.4	26.6	32.4	38.1	25.2	30.6	36.1	23.6	28.7	33.9
		67	TC	39.3	39.3	39.3	37.3	37.3	37.3	35.2	35.2	35.2	32.9	32.9	32.9	30.5	30.5	31.6
			SHC	23.1	29.1	35.2	22.3	28.3	34.4	21.4	27.5	33.5	20.5	26.6	32.6	19.5	25.6	31.6
		72	TC	42.9	42.9	42.9	40.8	40.8	40.8	38.5	38.5	38.5	36.1	36.1	36.1	33.4	33.4	33.4
			SHC	17.3	23.4	29.5	16.6	22.6	28.7	15.7	21.8	27.9	14.8	20.9	27.0	13.9	19.9	26.0
		76	TC	–	45.9	45.9	–	43.7	43.7	–	41.3	41.3	–	38.7	38.7	–	35.9	35.9
			SHC	–	18.8	25.1	–	18.0	24.3	–	17.2	23.4	–	16.3	22.5	–	15.4	21.5
1350 Cfm	EA (wB)	58	TC	36.6	36.6	41.5	35.1	35.1	39.7	33.4	33.4	37.9	31.6	31.6	35.8	29.6	29.6	33.6
			SHC	31.7	36.6	41.5	30.4	35.1	39.7	28.9	33.4	37.9	27.4	31.6	35.8	25.7	29.6	33.6
		62	TC	36.7	36.7	43.2	35.1	35.1	41.3	33.4	33.4	39.4	31.6	31.6	37.3	29.6	29.6	34.9
			SHC	30.2	36.7	43.2	28.8	35.1	41.3	27.5	33.4	39.4	26.0	31.6	37.3	24.4	29.6	34.9
		67	TC	39.9	39.9	39.9	37.9	37.9	37.9	35.8	35.8	35.9	33.4	33.4	34.9	30.9	30.9	33.9
			SHC	24.2	30.9	37.6	23.4	30.1	36.8	22.5	29.2	35.9	21.6	28.3	34.9	20.6	27.2	33.9
		72	TC	43.6	43.6	43.6	41.4	41.4	41.4	39.1	39.1	39.1	36.6	36.6	36.6	33.9	33.9	33.9
			SHC	17.8	24.5	31.3	17.0	23.7	30.5	16.1	22.9	29.6	15.2	22.0	28.7	14.3	21.0	27.7
		76	TC	–	46.7	46.7	–	44.4	44.4	–	41.9	41.9	–	39.2	39.2	–	36.3	36.3
			SHC	–	19.4	26.3	–	18.6	25.5	–	17.8	24.6	–	16.9	23.7	–	15.9	22.7
1500 Cfm	EA (wB)	58	TC	37.7	37.7	42.7	36.1	36.1	40.9	34.3	34.3	38.9	32.5	32.5	36.8	30.4	30.4	34.4
			SHC	32.6	37.7	42.7	31.3	36.1	40.9	29.8	34.3	38.9	28.1	32.5	36.8	26.3	30.4	34.4
		62	TC	37.7	37.7	44.4	36.1	36.1	42.5	34.4	34.4	40.5	32.5	32.5	38.3	30.4	30.4	35.8
			SHC	31.0	37.7	44.4	29.7	36.1	42.5	28.3	34.4	40.5	26.7	32.5	38.3	25.0	30.4	35.8
		67	TC	40.5	40.5	40.5	38.4	38.4	39.1	36.2	36.2	38.2	33.8	33.8	37.2	31.2	31.2	36.1
			SHC	25.2	32.6	40.0	24.4	31.7	39.1	23.5	30.8	38.2	22.5	29.9	37.2	21.5	28.8	36.1
		72	TC	44.2	44.2	44.2	41.9	41.9	41.9	39.6	39.6	39.6	37.0	37.0	37.0	34.2	34.2	34.2
			SHC	18.2	25.6	33.0	17.4	24.8	32.2	16.5	23.9	31.3	15.6	23.0	30.4	14.7	22.0	29.4
		76	TC	–	47.2	47.2	–	44.9	44.9	–	42.3	42.3	–	39.6	39.6	–	36.7	36.7
			SHC	–	19.9	27.5	–	19.1	26.7	–	18.3	25.8	–	17.4	24.9	–	16.4	23.9

LEGEND:

– – Do not operate
Cfm – Cubic feet per minute (supply air)
EAT(db) – Entering air temperature (dry bulb)
EAT(wb) – Entering air temperature (wet bulb)
SHC – Sensible heat capacity
TC – Total capacity

50HC04 (3 TONS) – UNIT WITH HUMIDI–MIZER SYSTEM IN SUBCOOLING MODE										
Temp (F) Air Ent Condenser (Edb)		AIR ENTERING EVAPORATOR – CFM								
		900			1200			1500		
		Air Entering Evaporator – Ewb (F)								
		72	67	62	72	67	62	72	67	62
75	TC	44.6	40.3	36.5	47.0	43.0	39.1	48.8	44.3	40.8
	SHC	19.8	24.5	29.3	22.6	29.1	35.3	25.4	33.0	40.4
	kW	2.02	1.97	1.93	1.96	2.00	2.05	2.08	2.02	1.98
85	TC	42.1	38.1	34.4	44.6	40.5	36.9	46.1	41.9	38.6
	SHC	17.5	22.5	27.4	20.4	26.8	33.2	22.9	30.8	38.2
	kW	2.28	2.23	2.19	2.22	2.26	2.31	2.33	2.28	2.24
95	TC	39.6	35.8	32.3	41.9	38.0	34.5	43.2	39.3	36.2
	SHC	15.2	20.3	25.5	17.8	24.5	31.1	20.2	28.4	35.9
	kW	2.56	2.51	2.47	2.50	2.54	2.60	2.62	2.56	2.52
105	TC	36.8	33.2	30.0	38.9	35.3	32.0	40.2	36.5	33.6
	SHC	12.7	18.1	23.4	15.1	22.0	28.8	17.5	25.8	33.6
	kW	2.88	2.83	2.79	2.82	2.86	2.91	2.93	2.88	2.84
115	TC	33.9	30.5	27.5	35.8	32.4	29.4	37.0	33.5	30.9
	SHC	10.1	15.7	21.2	12.3	19.5	26.4	14.5	23.1	30.9
	kW	3.23	3.19	3.15	3.17	3.21	3.26	3.28	3.23	3.19
125	TC	30.8	27.7	24.9	32.5	29.3	26.5	33.5	30.3	27.9
	SHC	7.3	13.1	18.9	9.4	16.7	23.9	11.4	20.3	27.9
	kW	3.62	3.59	3.56	3.57	3.60	3.65	3.66	3.62	3.59

50HC04 (3 TONS) – UNIT WITH HUMIDI–MIZER SYSTEM IN HOT GAS REHEAT MODE										
Temp (F) Air Ent Condenser (Edb)		AIR ENTERING EVAPORATOR - Ewb (F)								
		75 Dry Bulb 62.5 Wet Bulb (50% Relative)			75 Dry Bulb 64 Wet Bulb (56% Relative)			75 Dry Bulb 65.3 Wet Bulb (60% Relative)		
		Air Entering Evaporator - Cfm								
		900	1200	1500	900	1200	1500	900	1200	1500
80	TC	16.46	17.15	17.74	16.66	17.23	17.79	16.85	17.74	18.29
	SHC	5.10	6.60	8.15	3.21	4.33	5.61	1.59	2.75	3.83
	kW	1.94	2.01	2.02	2.04	2.13	2.15	2.12	2.14	2.16
75	TC	16.61	17.52	18.09	17.18	18.09	18.67	17.69	18.61	19.19
	SHC	5.24	6.96	8.48	3.71	5.15	6.45	2.40	3.59	4.69
	kW	1.98	2.00	2.01	1.99	2.01	2.02	2.00	2.02	2.03
70	TC	17.00	18.06	18.63	17.56	18.46	19.40	18.41	19.35	20.10
	SHC	5.62	7.47	9.00	4.08	5.50	7.16	3.09	4.31	5.58
	kW	1.96	1.94	1.96	1.97	2.00	1.94	1.91	1.94	1.92
60	TC	17.63	18.49	19.37	18.17	19.38	19.95	18.66	19.52	20.46
	SHC	6.21	7.89	9.71	4.66	6.39	7.68	3.31	4.45	5.90
	kW	1.93	1.96	1.92	1.95	1.92	1.94	1.97	2.00	1.96
50	TC	17.82	18.59	19.72	18.31	19.73	20.26	18.76	20.21	20.73
	SHC	6.40	7.99	10.05	4.79	6.71	7.97	3.40	5.11	6.16
	kW	1.98	2.03	1.94	2.01	1.94	1.97	2.03	1.96	1.99
40	TC	17.70	19.38	19.85	19.10	20.30	20.34	19.53	20.76	21.26
	SHC	6.30	8.74	10.17	5.54	7.26	8.05	4.13	5.64	6.67
	kW	2.07	1.95	1.99	1.93	1.91	2.02	1.96	1.94	1.97

LEGEND

Edb – Entering Dry–Bulb
Ewb – Entering Wet–Bulb
kW – Compressor Motor Power Input
Idb – Leaving Dry–Bulb
Iwb – Leaving Wet–Bulb
SHC – Sensible Heat Capacity (1000 Btuh) Gross
TC – Total Capacity (1000 Btuh) Gross

NOTES:

1. Direct interpolation is permissible. Do not extrapolate.
2. The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet–bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

50HC*A05				AMBIENT TEMPERATURE															
				85			95			105			115			125			
				EA (dB)			EA (dB)			EA (dB)			EA (dB)			EA (dB)			
				75	80	85	75	80	85	75	80	85	75	80	85	75	80	85	
1200 Cfm	EA (wB)	58	TC	43.2	43.2	49.1	41.5	41.5	47.2	39.7	39.7	45.1	37.7	37.7	42.9	35.6	35.6	40.4	
			SHC	37.3	43.2	49.1	35.9	41.5	47.2	34.3	39.7	45.1	32.6	37.7	42.9	30.7	35.6	40.4	
		62	TC	45.9	45.9	46.0	43.7	43.7	45.0	41.3	41.3	43.8	38.8	38.8	42.6	36.0	36.0	41.2	
			SHC	33.5	39.8	46.0	32.5	38.7	45.0	31.3	37.6	43.8	30.1	36.3	42.6	28.8	35.0	41.2	
		67	TC	50.5	50.5	50.5	48.0	48.0	48.0	45.4	45.4	45.4	42.6	42.6	42.6	39.6	39.6	39.6	
			SHC	27.9	34.1	40.4	26.8	33.1	39.4	25.7	32.0	38.2	24.5	30.8	37.1	23.2	29.5	35.8	
		72	TC	55.4	55.4	55.4	52.7	52.7	52.7	49.9	49.9	49.9	46.8	46.8	46.8	43.5	43.5	43.5	
			SHC	22.0	28.4	34.7	21.0	27.3	33.7	19.9	26.2	32.5	18.7	25.0	31.3	17.4	23.8	30.1	
		76	TC	–	59.7	59.7	–	56.8	56.8	–	53.7	53.7	–	50.4	50.4	–	46.8	46.8	
			SHC	–	23.6	30.2	–	22.6	29.2	–	21.5	28.1	–	20.3	26.8	–	19.1	25.5	
1400 Cfm	EA (wB)	58	TC	45.6	45.6	51.9	43.8	43.8	49.8	41.9	41.9	47.6	39.7	39.7	45.1	37.3	37.3	42.4	
			SHC	39.4	45.6	51.9	37.9	43.8	49.8	36.2	41.9	47.6	34.3	39.7	45.1	32.3	37.3	42.4	
		62	TC	47.4	47.4	50.5	45.1	45.1	49.3	42.6	42.6	48.0	40.0	40.0	46.5	37.4	37.4	44.2	
			SHC	36.0	43.2	50.5	34.9	42.1	49.3	33.7	40.9	48.0	32.4	39.5	46.5	30.6	37.4	44.2	
		67	TC	52.1	52.1	52.1	49.5	49.5	49.5	46.7	46.7	46.7	43.7	43.7	43.7	40.5	40.5	40.5	
			SHC	29.5	36.8	44.0	28.4	35.7	42.9	27.3	34.5	41.8	26.0	33.3	40.5	24.7	32.0	39.2	
		72	TC	57.1	57.1	57.1	54.3	54.3	54.3	51.2	51.2	51.2	48.0	48.0	48.0	44.5	44.5	44.5	
			SHC	22.8	30.1	37.4	21.7	29.0	36.3	20.5	27.8	35.1	19.3	26.6	33.9	18.0	25.3	32.6	
		76	TC	–	61.4	61.4	–	58.3	58.3	–	55.1	55.1	–	51.6	51.6	–	47.8	47.8	
			SHC	–	24.6	32.2	–	23.5	31.1	–	22.4	29.9	–	21.2	28.7	–	19.9	27.4	
1600 Cfm	EA (wB)	58	TC	47.7	47.7	54.2	45.8	45.8	52.0	43.7	43.7	49.6	41.3	41.3	47.0	38.8	38.8	44.1	
			SHC	41.2	47.7	54.2	39.5	45.8	52.0	37.7	43.7	49.6	35.7	41.3	47.0	33.5	38.8	44.1	
		62	TC	48.7	48.7	54.5	46.3	46.3	53.2	43.7	43.7	51.7	41.4	41.4	48.9	38.8	38.8	45.9	
			SHC	38.3	46.4	54.5	37.1	45.2	53.2	35.8	43.7	51.7	33.9	41.4	48.9	31.8	38.8	45.9	
		67	TC	53.3	53.3	53.3	50.6	50.6	50.6	47.7	47.7	47.7	44.6	44.6	44.6	41.2	41.2	42.6	
			SHC	31.0	39.2	47.5	29.9	38.1	46.3	28.7	37.0	45.2	27.5	35.7	43.9	26.2	34.4	42.6	
		72	TC	58.4	58.4	58.4	55.4	55.4	55.4	52.3	52.3	52.3	48.9	48.9	48.9	45.2	45.2	45.2	
			SHC	23.4	31.7	39.9	22.3	30.6	38.8	21.1	29.4	37.6	19.9	28.2	36.4	18.6	26.8	35.1	
		76	TC	–	62.7	62.7	–	59.5	59.5	–	56.1	56.1	–	52.5	52.5	–	48.6	48.6	
			SHC	–	25.5	34.0	–	24.4	32.9	–	23.2	31.7	–	22.0	30.4	–	20.7	29.1	
1800 Cfm	EA (wB)	58	TC	49.5	49.5	56.2	47.4	47.4	53.9	45.2	45.2	51.3	42.7	42.7	48.5	40.1	40.1	45.5	
			SHC	42.8	49.5	56.2	41.0	47.4	53.9	39.0	45.2	51.3	36.9	42.7	48.5	34.6	40.1	45.5	
		62	TC	49.8	49.8	58.1	47.5	47.5	56.1	45.2	45.2	53.4	42.8	42.8	50.5	40.1	40.1	47.4	
			SHC	40.4	49.2	58.1	38.8	47.5	56.1	37.0	45.2	53.4	35.0	42.8	50.5	32.8	40.1	47.4	
		67	TC	54.3	54.3	54.3	51.5	51.5	51.5	48.5	48.5	48.5	45.3	45.3	47.1	41.8	41.8	45.7	
			SHC	32.5	41.7	50.8	31.4	40.5	49.7	30.2	39.3	48.5	28.9	38.0	47.1	27.5	36.6	45.7	
		72	TC	59.4	59.4	59.4	56.3	56.3	56.3	53.1	53.1	53.1	49.6	49.6	49.6	45.8	45.8	45.8	
			SHC	24.0	33.2	42.4	22.9	32.1	41.3	21.7	30.9	40.1	20.4	29.6	38.8	19.1	28.3	37.5	
		76	TC	–	63.8	63.8	–	60.5	60.5	–	57.0	57.0	–	53.2	53.2	–	49.2	49.2	
			SHC	–	26.3	35.8	–	25.2	34.6	–	24.0	33.4	–	22.8	32.1	–	21.5	30.8	
2000 Cfm	EA (wB)	58	TC	51.0	51.0	58.0	48.8	48.8	55.5	46.5	46.5	52.8	43.9	43.9	49.9	41.1	41.1	46.7	
			SHC	44.1	51.0	58.0	42.2	48.8	55.5	40.2	46.5	52.8	37.9	43.9	49.9	35.5	41.1	46.7	
		62	TC	51.1	51.1	60.4	48.9	48.9	57.8	46.5	46.5	55.0	44.0	44.0	51.9	41.1	41.1	48.6	
			SHC	41.8	51.1	60.4	40.0	48.9	57.8	38.1	46.5	55.0	36.0	44.0	51.9	33.7	41.1	48.6	
		67	TC	55.1	55.1	55.1	52.1	52.1	52.9	49.1	49.1	51.6	45.8	45.8	50.2	42.3	42.3	48.7	
			SHC	33.9	44.0	54.1	32.7	42.8	52.9	31.5	41.5	51.6	30.2	40.2	50.2	28.8	38.8	48.7	
		72	TC	60.3	60.3	60.3	57.1	57.1	57.1	53.7	53.7	53.7	50.1	50.1	50.1	46.3	46.3	46.3	
			SHC	24.5	34.7	44.8	23.4	33.5	43.6	22.2	32.3	42.4	21.0	31.1	41.2	19.6	29.7	39.8	
		76	TC	–	64.6	64.6	–	61.2	61.2	–	57.6	57.6	–	53.8	53.8	–	49.7	49.7	
			SHC	–	27.1	37.5	–	26.0	36.3	–	24.8	35.1	–	23.5	33.8	–	22.2	32.4	

LEGEND:

– – Do not operate
Cfm – Cubic feet per minute (supply air)
EAT(db) – Entering air temperature (dry bulb)
EAT(wb) – Entering air temperature (wet bulb)
SHC – Sensible heat capacity
TC – Total capacity

50HC05 (4 TONS) – UNIT WITH HUMIDI–MIZER IN SUBCOOLING MODE										
Temp (F) Air Ent Condenser (Edb)		AIR ENTERING EVAPORATOR – CFM								
		1200			1600			2000		
		Air Entering Evaporator – Ewb (F)								
		72	67	62	72	67	62	72	67	62
75	TC	57.8	52.3	47.2	61.5	55.6	50.6	63.7	57.9	0.0
	SHC	24.2	30.5	36.8	27.9	35.9	44.0	31.2	40.9	0.0
	kW	2.50	2.47	2.44	2.46	2.48	2.51	2.53	2.50	0.00
85	TC	54.1	48.9	44.1	57.1	52.0	47.3	59.6	54.0	49.5
	SHC	20.7	27.3	33.9	23.9	32.6	41.0	27.3	37.3	47.1
	kW	2.81	2.78	2.76	2.78	2.80	2.82	2.84	2.81	2.79
95	TC	50.1	45.3	40.8	53.3	48.2	43.7	55.2	50.1	45.8
	SHC	17.0	24.0	30.9	20.4	29.1	37.7	23.3	33.6	43.6
	kW	3.16	3.14	3.12	3.13	3.15	3.18	3.19	3.16	3.14
105	TC	45.7	41.1	37.2	48.6	43.8	39.8	50.5	45.5	41.8
	SHC	12.9	20.1	27.6	16.0	25.0	34.1	19.0	29.4	39.9
	kW	3.56	3.54	3.52	3.54	3.55	3.58	3.59	3.56	3.55
115	TC	41.1	37.0	33.2	43.5	39.2	35.5	45.4	41.1	37.5
	SHC	8.7	16.4	23.9	11.3	20.7	30.1	14.3	25.4	35.8
	kW	4.02	4.01	4.00	4.00	4.01	4.03	4.04	4.03	4.01
125	TC	36.3	32.5	29.0	38.6	34.7	31.2	40.2	36.1	32.9
	SHC	4.3	12.2	20.1	6.8	16.6	26.2	9.4	20.8	31.5
	kW	4.54	4.53	4.53	4.53	4.54	4.54	4.55	4.54	4.54

50HC05 (4 TONS) – UNIT WITH HUMIDI–MIZER SYSTEM IN HOT GAS REHEAT MODE										
Temp (F) Air Ent Condenser (Edb)		AIR ENTERING EVAPORATOR – Ewb (F)								
		75 Dry Bulb 62.5 Wet Bulb (50% Relative)			75 Dry Bulb 64 Wet Bulb (56% Relative)			75 Dry Bulb 65.3 Wet Bulb (60% Relative)		
		Air Entering Evaporator – Cfm								
		1200	1600	2000	1200	1600	2000	1200	1600	2000
80	TC	18.64	19.95	20.78	19.35	20.71	21.51	20.00	21.37	22.33
	SHC	0.78	4.36	8.24	–1.95	1.01	4.29	–4.33	–1.91	0.99
	kW	2.66	2.68	2.69	2.67	2.69	2.69	2.68	2.69	2.68
75	TC	19.37	21.21	22.15	20.47	21.97	22.92	21.15	22.78	23.65
	SHC	1.48	5.52	9.49	–0.91	2.18	5.57	–3.26	–0.61	2.20
	kW	2.62	2.54	2.54	2.56	2.55	2.55	2.56	2.55	2.56
70	TC	19.92	21.63	22.64	20.77	22.52	23.61	21.70	23.39	24.26
	SHC	2.01	5.94	9.98	–0.61	2.70	6.23	–2.72	–0.02	2.78
	kW	2.60	2.56	2.54	2.58	2.54	2.53	2.54	2.52	2.54
60	TC	20.11	21.27	22.23	20.75	23.15	23.43	22.49	23.78	24.55
	SHC	2.24	5.70	9.70	–0.57	3.35	6.15	–1.95	0.40	3.13
	kW	2.69	2.74	2.73	2.72	2.58	2.68	2.56	2.60	2.63
50	TC	21.56	22.70	23.37	22.18	23.33	24.01	22.75	23.90	25.40
	SHC	3.61	7.03	10.76	0.78	3.57	6.73	–1.67	0.57	3.96
	kW	2.57	2.63	2.66	2.60	2.66	2.69	2.63	2.69	2.62
40	TC	21.67	23.23	24.04	22.76	23.82	25.57	23.28	24.34	26.13
	SHC	3.74	7.56	9.89	1.35	4.06	8.17	–1.15	1.01	4.67
	kW	2.64	2.64	2.69	2.61	2.67	2.58	2.64	2.70	2.61

LEGEND

Edb – Entering Dry–Bulb
Ewb – Entering Wet–Bulb
kW – Compressor Motor Power Input
ldb – Leaving Dry–Bulb
lwb – Leaving Wet–Bulb
SHC – Sensible Heat Capacity (1000 Btuh) Gross
TC – Total Capacity (1000 Btuh) Gross

NOTES:

1. Direct interpolation is permissible. Do not extrapolate.
2. The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet–bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

Table 8 (cont.) - COOLING CAPACITIES **1-STAGE COOLING**

50HC*A06				AMBIENT TEMPERATURE															
				85			95			105			115			125			
				EA (dB)			EA (dB)			EA (dB)			EA (dB)			EA (dB)			
				75	80	85	75	80	85	75	80	85	75	80	85	75	80	85	
1500 Cfm	EA (wB)	58	TC	53.4	53.4	60.6	51.3	51.3	58.2	49.0	49.0	55.6	46.5	46.5	52.7	43.7	43.7	49.5	
			SHC	46.3	53.4	60.6	44.5	51.3	58.2	42.5	49.0	55.6	40.3	46.5	52.7	37.9	43.7	49.5	
		62	TC	55.6	55.6	58.2	52.9	52.9	56.9	50.0	50.0	55.5	46.9	46.9	53.9	43.8	43.8	51.6	
			SHC	42.0	50.1	58.2	40.7	48.8	56.9	39.4	47.4	55.5	37.9	45.9	53.9	36.0	43.8	51.6	
		67	TC	60.8	60.8	60.8	57.8	57.8	57.8	54.6	54.6	54.6	51.1	51.1	51.1	47.4	47.4	47.4	
			SHC	34.4	42.6	50.7	33.2	41.3	49.4	31.8	39.9	48.1	30.4	38.5	46.6	28.9	37.0	45.1	
		72	TC	66.6	66.6	66.6	63.2	63.2	63.2	59.7	59.7	59.7	55.9	55.9	55.9	51.8	51.8	51.8	
			SHC	26.7	34.8	43.0	25.4	33.6	41.7	24.1	32.2	40.4	22.6	30.8	38.9	21.1	29.3	37.4	
		76	TC	–	71.4	71.4	–	67.9	67.9	–	64.0	64.0	–	59.9	59.9	–	55.5	55.5	
			SHC	–	28.5	36.7	–	27.2	35.5	–	25.9	34.2	–	24.5	32.7	–	23.0	31.3	
1750 Cfm	EA (wB)	58	TC	56.3	56.3	63.8	54.0	54.0	61.2	51.5	51.5	58.3	48.7	48.7	55.2	45.7	45.7	51.8	
			SHC	48.8	56.3	63.8	46.8	54.0	61.2	44.6	51.5	58.3	42.2	48.7	55.2	39.6	45.7	51.8	
		62	TC	57.3	57.3	64.0	54.5	54.5	62.5	51.6	51.6	60.7	48.8	48.8	57.5	45.8	45.8	53.9	
			SHC	45.3	54.7	64.0	44.0	53.3	62.5	42.4	51.6	60.7	40.1	48.8	57.5	37.6	45.8	53.9	
		67	TC	62.5	62.5	62.5	59.3	59.3	59.3	55.9	55.9	55.9	52.3	52.3	52.3	48.3	48.3	49.7	
			SHC	36.6	46.0	55.4	35.3	44.7	54.1	33.9	43.3	52.7	32.4	41.8	51.3	30.9	40.3	49.7	
		72	TC	68.3	68.3	68.3	64.8	64.8	64.8	61.0	61.0	61.0	57.0	57.0	57.0	52.7	52.7	52.7	
			SHC	27.5	37.0	46.5	26.2	35.7	45.2	24.9	34.4	43.8	23.4	32.9	42.4	21.9	31.4	40.8	
		76	TC	–	73.2	73.2	–	69.4	69.4	–	65.4	65.4	–	61.1	61.1	–	56.5	56.5	
			SHC	–	29.7	39.3	–	28.4	38.0	–	27.1	36.7	–	25.6	35.2	–	24.1	33.7	
2000 Cfm	EA (wB)	58	TC	58.7	58.7	66.5	56.2	56.2	63.7	53.5	53.5	60.6	50.6	50.6	57.3	47.3	47.3	53.7	
			SHC	50.9	58.7	66.5	48.7	56.2	63.7	46.4	53.5	60.6	43.8	50.6	57.3	41.0	47.3	53.7	
		62	TC	58.8	58.8	69.2	56.3	56.3	66.3	53.6	53.6	63.1	50.6	50.6	59.6	47.4	47.4	55.8	
			SHC	48.3	58.8	69.2	46.3	56.3	66.3	44.0	53.6	63.1	41.6	50.6	59.6	39.0	47.4	55.8	
		67	TC	63.8	63.8	63.8	60.4	60.4	60.4	56.9	56.9	57.3	53.1	53.1	55.8	49.1	49.1	54.1	
			SHC	38.6	49.3	60.1	37.3	48.0	58.7	35.9	46.6	57.3	34.4	45.1	55.8	32.8	43.4	54.1	
		72	TC	69.6	69.6	69.6	65.9	65.9	65.9	62.1	62.1	62.1	57.9	57.9	57.9	53.5	53.5	53.5	
			SHC	28.4	39.1	49.9	27.0	37.8	48.6	25.7	36.4	47.2	24.2	35.0	45.7	22.6	33.4	44.2	
		76	TC	–	74.5	74.5	–	70.6	70.6	–	66.5	66.5	–	62.0	62.0	–	–	–	
			SHC	–	30.8	41.8	–	29.5	40.4	–	28.2	39.0	–	26.7	37.6	–	–	–	
2250 Cfm	EA (wB)	58	TC	60.7	60.7	68.8	58.1	58.1	65.8	55.2	55.2	62.6	52.1	52.1	59.1	48.7	48.7	55.2	
			SHC	52.6	60.7	68.8	50.3	58.1	65.8	47.9	55.2	62.6	45.2	52.1	59.1	42.2	48.7	55.2	
		62	TC	60.8	60.8	71.6	58.1	58.1	68.5	55.3	55.3	65.1	52.2	52.2	61.4	48.7	48.7	57.4	
			SHC	50.0	60.8	71.6	47.8	58.1	68.5	45.4	55.3	65.1	42.9	52.2	61.4	40.1	48.7	57.4	
		67	TC	64.7	64.7	64.7	61.3	61.3	63.2	57.7	57.7	61.7	53.8	53.8	60.1	49.7	49.7	58.3	
			SHC	40.6	52.6	64.5	39.2	51.2	63.2	37.8	49.7	61.7	36.2	48.2	60.1	34.6	46.5	58.3	
		72	TC	70.6	70.6	70.6	66.8	66.8	66.8	62.8	62.8	62.8	58.6	58.6	58.6	54.0	54.0	54.0	
			SHC	29.1	41.2	53.3	27.8	39.9	51.9	26.4	38.4	50.5	24.9	37.0	49.0	23.3	35.4	47.4	
		76	TC	–	75.6	75.6	–	71.6	71.6	–	67.3	67.3	–	–	–	–	–	–	
			SHC	–	31.9	44.1	–	30.6	42.8	–	29.2	41.4	–	–	–	–	–	–	
2500 Cfm	EA (wB)	58	TC	62.5	62.5	70.8	59.7	59.7	67.6	56.7	56.7	64.2	53.4	53.4	60.5	49.9	49.9	56.5	
			SHC	54.1	62.5	70.8	51.7	59.7	67.6	49.1	56.7	64.2	46.3	53.4	60.5	43.2	49.9	56.5	
		62	TC	62.5	62.5	73.6	59.7	59.7	70.3	56.7	56.7	66.8	53.5	53.5	63.0	49.9	49.9	58.8	
			SHC	51.4	62.5	73.6	49.1	59.7	70.3	46.6	56.7	66.8	43.9	53.5	63.0	41.0	49.9	58.8	
		67	TC	65.5	65.5	68.9	62.0	62.0	67.4	58.3	58.3	65.9	54.4	54.4	64.2	50.2	50.2	62.2	
			SHC	42.5	55.7	68.9	41.1	54.3	67.4	39.6	52.7	65.9	38.0	51.1	64.2	36.3	49.2	62.2	
		72	TC	71.4	71.4	71.4	67.5	67.5	67.5	63.4	63.4	63.4	59.1	59.1	59.1	54.4	54.4	54.4	
			SHC	29.9	43.2	56.5	28.5	41.8	55.2	27.1	40.4	53.7	25.6	38.9	52.2	24.0	37.3	50.6	
		76	TC	–	76.4	76.4	–	72.3	72.3	–	–	–	–	–	–	–	–	–	
			SHC	–	33.0	46.4	–	31.6	45.1	–	–	–	–	–	–	–	–	–	

LEGEND:

– – Do not operate
Cfm – Cubic feet per minute (supply air)
EAT(db) – Entering air temperature (dry bulb)
EAT(wb) – Entering air temperature (wet bulb)
SHC – Sensible heat capacity
TC – Total capacity

50HC06 (5 TONS) – UNIT WITH HUMIDI–MIZER IN SUBCOOLING MODE										
Temp (F) Air Ent Condenser (Edb)		AIR ENTERING EVAPORATOR – CFM								
		1500			2000			2500		
		Air Entering Evaporator – Ewb (F)								
		72	67	62	72	67	62	72	67	62
75	TC	66.9	60.3	54.8	71.0	64.4	58.6	73.5	66.9	61.6
	SHC	25.8	34.1	43.0	30.5	41.7	52.6	35.0	48.6	61.2
	kW	3.11	3.06	3.03	3.05	3.09	3.16	3.16	3.11	3.07
85	TC	62.4	56.5	51.2	66.3	60.1	54.7	68.2	62.3	57.5
	SHC	21.5	30.6	39.6	26.1	37.6	49.0	29.9	44.2	57.2
	kW	3.47	3.43	3.39	3.42	3.46	3.51	3.52	3.48	3.44
95	TC	57.8	52.3	47.3	61.3	55.6	50.6	63.5	57.7	53.2
	SHC	17.2	26.6	35.9	21.4	33.3	45.1	25.6	39.9	53.2
	kW	3.89	3.85	3.80	3.83	3.88	3.93	3.95	3.90	3.86
105	TC	52.8	47.5	42.9	55.4	50.0	45.3	58.0	52.2	47.9
	SHC	12.5	22.1	31.7	15.8	28.1	40.1	20.4	34.7	47.9
	kW	4.36	4.31	4.26	4.29	4.33	4.38	4.42	4.36	4.32
115	TC	47.4	42.8	38.6	50.1	45.2	41.1	51.8	47.1	43.4
	SHC	7.4	17.7	27.8	11.0	23.6	36.1	14.7	30.0	43.4
	kW	4.88	4.83	4.78	4.81	4.86	4.91	4.93	4.88	4.84
125	TC	41.6	37.5	33.8	44.0	39.7	35.8	45.8	41.3	38.0
	SHC	2.1	12.8	23.3	5.3	18.6	31.2	9.1	24.7	38.0
	kW	5.44	5.39	5.35	5.37	5.42	5.47	5.49	5.44	5.40

50HC06 (5 TONS) – UNIT WITH HUMIDI–MIZER SYSTEM IN HOT GAS REHEAT MODE										
Temp (F) Air Ent Condenser (Edb)		AIR ENTERING EVAPORATOR – Ewb (F)								
		75 Dry Bulb 62.5 Wet Bulb (50% Relative)			75 Dry Bulb 64 Wet Bulb (56% Relative)			75 Dry Bulb 65.3 Wet Bulb (60% Relative)		
		Air Entering Evaporator – Cfm								
		1500	2000	2500	1500	2000	2500	1500	2000	2500
80	TC	25.29	27.61	28.72	26.81	28.62	29.71	27.68	29.53	30.63
	SHC	5.06	10.68	15.86	2.37	6.73	11.22	–0.40	3.30	7.17
	kW	3.23	3.12	3.13	3.12	3.13	3.14	3.12	3.14	3.15
75	TC	26.69	28.45	29.73	27.65	29.64	30.73	28.53	30.55	31.65
	SHC	6.39	11.52	16.85	3.20	7.72	12.20	0.43	4.29	8.16
	kW	3.08	3.11	3.09	3.10	3.09	3.11	3.11	3.10	3.12
70	TC	27.04	29.08	30.15	28.29	30.04	31.09	29.13	30.91	31.97
	SHC	6.76	12.14	17.28	3.82	8.14	12.60	1.02	4.67	8.51
	kW	3.15	3.12	3.15	3.11	3.14	3.17	3.13	3.16	3.18
60	TC	27.99	29.57	31.33	28.86	30.46	32.25	29.63	32.44	33.81
	SHC	7.70	12.66	18.45	4.41	8.60	13.74	1.54	6.16	10.28
	kW	3.17	3.23	3.15	3.21	3.26	3.18	3.23	3.12	3.10
50	TC	30.09	31.66	32.64	30.93	32.57	33.53	31.73	33.38	34.35
	SHC	9.72	14.66	19.72	6.40	10.61	14.99	3.56	7.10	10.85
	kW	3.01	3.07	3.11	3.04	3.10	3.15	3.07	3.14	3.18
40	TC	28.39	30.78	32.67	31.13	32.60	34.40	31.86	33.33	36.07
	SHC	8.17	13.89	19.80	6.63	10.69	15.85	3.72	7.10	12.51
	kW	3.39	3.32	3.24	3.14	3.23	3.15	3.18	3.27	3.08

LEGEND

Edb – Entering Dry–Bulb
Ewb – Entering Wet–Bulb
kW – Compressor Motor Power Input
ldb – Leaving Dry–Bulb
lwb – Leaving Wet–Bulb
SHC – Sensible Heat Capacity (1000 Btuh) Gross
TC – Total Capacity (1000 Btuh) Gross

NOTES:

1. Direct interpolation is permissible. Do not extrapolate.
2. The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet–bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

50HC*A07				AMBIENT TEMPERATURE													
				85			95			105			115			125		
				EA (dB)			EA (dB)			EA (dB)			EA (dB)			EA (dB)		
				75	80	85	75	80	85	75	80	85	75	80	85	75	80	85
1800 Cfm	EA (wB)	58	TC	64.1	64.1	72.5	61.8	61.8	69.9	59.2	59.2	67	56.3	56.3	63.7	53.2	53.2	60.2
			SHC	55.7	64.1	72.5	53.7	61.8	69.9	51.4	59.2	67	48.9	56.3	63.7	46.2	53.2	60.2
		62	TC	67.9	67.9	68.5	64.9	64.9	67	61.5	61.5	65.3	57.9	57.9	63.5	54	54	61.4
			SHC	50.2	59.4	68.5	48.8	57.9	67	47.1	56.2	65.3	45.4	54.4	63.5	43.4	52.4	61.4
		67	TC	74.8	74.8	74.8	71.5	71.5	71.5	67.8	67.8	67.8	63.8	63.8	63.8	59.5	59.5	59.5
			SHC	41.8	50.9	60.1	40.3	49.5	58.7	38.8	47.9	57.1	37.1	46.2	55.4	35.3	44.4	53.6
		72	TC	82.2	82.2	82.2	78.7	78.7	78.7	74.7	74.7	74.7	70.4	70.4	70.4	65.6	65.6	65.6
			SHC	33	42.3	51.6	31.6	40.9	50.2	30.1	39.3	48.6	28.4	37.7	46.9	26.7	35.9	45.1
		76	TC	–	88.7	88.7	–	84.8	84.8	–	80.6	80.6	–	76	76	–	70.9	70.9
			SHC	–	35.3	45.2	–	33.9	43.7	–	32.4	42	–	30.7	40.3	–	28.9	38.5
2100 Cfm	EA (wB)	58	TC	67.6	67.6	76.5	65.1	65.1	73.7	62.3	62.3	70.5	59.3	59.3	67.1	55.9	55.9	63.2
			SHC	58.7	67.6	76.5	56.6	65.1	73.7	54.1	62.3	70.5	51.5	59.3	67.1	48.5	55.9	63.2
		62	TC	70.1	70.1	74.9	67	67	73.2	63.5	63.5	71.3	59.7	59.7	69.1	56	56	65.8
			SHC	53.9	64.4	74.9	52.4	62.8	73.2	50.6	61	71.3	48.7	58.9	69.1	46.2	56	65.8
		67	TC	77.1	77.1	77.1	73.6	73.6	73.6	69.7	69.7	69.7	65.5	65.5	65.5	60.9	60.9	60.9
			SHC	44.2	54.8	65.3	42.7	53.3	63.9	41.2	51.7	62.3	39.4	50	60.5	37.6	48.1	58.6
		72	TC	84.7	84.7	84.7	80.9	80.9	80.9	76.8	76.8	76.8	72.2	72.2	72.2	67.2	67.2	67.2
			SHC	34.2	44.8	55.5	32.7	43.4	54	31.1	41.8	52.4	29.5	40.1	50.7	27.6	38.2	48.8
		76	TC	–	91.3	91.3	–	87.2	87.2	–	82.7	82.7	–	77.8	77.8	–	72.5	72.5
			SHC	–	36.7	47.8	–	35.3	46.3	–	33.7	44.7	–	32	43	–	30.2	41.1
2400 Cfm	EA (wB)	58	TC	70.6	70.6	79.9	68	68	76.9	65	65	73.5	61.7	61.7	69.8	58.1	58.1	65.8
			SHC	61.3	70.6	79.9	59	68	76.9	56.4	65	73.5	53.6	61.7	69.8	50.5	58.1	65.8
		62	TC	72	72	80.6	68.7	68.7	78.7	65.2	65.2	76.6	61.8	61.8	72.6	58.2	58.2	68.4
			SHC	57.3	69	80.6	55.6	67.2	78.7	53.7	65.2	76.6	50.9	61.8	72.6	48	58.2	68.4
		67	TC	78.9	78.9	78.9	75.2	75.2	75.2	71.2	71.2	71.2	66.8	66.8	66.8	62	62	63.4
			SHC	46.5	58.4	70.3	45	56.9	68.8	43.4	55.3	67.2	41.6	53.5	65.4	39.7	51.6	63.4
		72	TC	86.6	86.6	86.6	82.7	82.7	82.7	78.3	78.3	78.3	73.6	73.6	73.6	68.4	68.4	68.4
			SHC	35.2	47.2	59.2	33.7	45.7	57.7	32.1	44.1	56	30.4	42.3	54.3	28.5	40.5	52.4
		76	TC	–	93.3	93.3	–	89	89	–	84.4	84.4	–	79.3	79.3	–	73.7	73.7
			SHC	–	38	50.4	–	36.6	48.9	–	35	47.3	–	33.3	45.5	–	31.4	43.6
2700 Cfm	EA (wB)	58	TC	73.2	73.2	82.8	70.4	70.4	79.6	67.3	67.3	76.1	63.8	63.8	72.2	60	60	67.9
			SHC	63.6	73.2	82.8	61.1	70.4	79.6	58.4	67.3	76.1	55.4	63.8	72.2	52.1	60	67.9
		62	TC	73.7	73.7	85.5	70.5	70.5	82.8	67.3	67.3	79.1	63.9	63.9	75.1	60.1	60.1	70.6
			SHC	60.2	72.9	85.5	58.1	70.5	82.8	55.5	67.3	79.1	52.7	63.9	75.1	49.5	60.1	70.6
		67	TC	80.3	80.3	80.3	76.5	76.5	76.5	72.4	72.4	72.4	67.8	67.8	70	62.9	62.9	67.9
			SHC	48.7	61.9	75.1	47.1	60.4	73.6	45.5	58.7	71.9	43.7	56.8	70	41.7	54.8	67.9
		72	TC	88.2	88.2	88.2	84	84	84	79.6	79.6	79.6	74.6	74.6	74.6	69.3	69.3	69.3
			SHC	36.1	49.4	62.7	34.6	47.9	61.2	33	46.2	59.5	31.2	44.5	57.7	29.3	42.6	55.8
		76	TC	–	94.9	94.9	–	90.4	90.4	–	85.6	85.6	–	80.4	80.4	–	74.7	74.7
			SHC	–	39.2	52.9	–	37.7	51.4	–	36.1	49.7	–	34.4	47.9	–	32.5	46
3000 Cfm	EA (wB)	58	TC	75.4	75.4	85.3	72.5	72.5	82	69.2	69.2	78.3	65.6	65.6	74.2	61.7	61.7	69.8
			SHC	65.5	75.4	85.3	62.9	72.5	82	60.1	69.2	78.3	57	65.6	74.2	53.5	61.7	69.8
		62	TC	75.5	75.5	88.7	72.5	72.5	85.3	69.3	69.3	81.4	65.7	65.7	77.2	61.7	61.7	72.5
			SHC	62.2	75.5	88.7	59.8	72.5	85.3	57.1	69.3	81.4	54.1	65.7	77.2	50.9	61.7	72.5
		67	TC	81.4	81.4	81.4	77.5	77.5	78.1	73.3	73.3	76.4	68.7	68.7	74.4	63.7	63.7	72.2
			SHC	50.7	65.2	79.7	49.2	63.7	78.1	47.5	61.9	76.4	45.6	60	74.4	43.6	57.9	72.2
		72	TC	89.4	89.4	89.4	85.2	85.2	85.2	80.5	80.5	80.5	75.5	75.5	75.5	70.1	70.1	70.1
			SHC	36.9	51.5	66.1	35.4	50	64.6	33.8	48.3	62.9	32	46.5	61.1	30.1	44.6	59.1
		76	TC	–	96.1	96.1	–	91.6	91.6	–	86.7	86.7	–	81.3	81.3	–	75.5	75.5
			SHC	–	40.4	55.3	–	38.9	53.8	–	37.2	52.1	–	35.5	50.3	–	33.6	48.3

LEGEND:

– – Do not operate
Cfm – Cubic feet per minute (supply air)
EAT(db) – Entering air temperature (dry bulb)
EAT(wb) – Entering air temperature (wet bulb)
SHC – Sensible heat capacity
TC – Total capacity

50HC07 (6 TONS) – UNIT WITH HUMIDI–MIZER SYSTEM IN SUBCOOLING MODE										
Temp (F) Air Ent Condenser (Edb)		AIR ENTERING EVAPORATOR – CFM								
		1800			2400			3000		
		Air Entering Evaporator – Ewb (F)								
		72	67	62	72	67	62	72	67	62
75	TC	85.7	77.4	70.0	91.1	82.6	74.9	94.5	85.7	78.4
	SHC	38.2	47.1	56.1	43.9	55.6	67.1	49.0	63.1	76.4
	kW	4.05	4.01	3.97	4.00	4.04	4.08	4.09	4.05	4.02
85	TC	80.9	73.1	66.0	85.9	77.9	70.6	89.2	80.9	73.9
	SHC	33.5	42.9	52.3	38.8	51.1	63.0	43.9	58.6	72.1
	kW	4.46	4.43	4.39	4.42	4.45	4.48	4.51	4.47	4.43
95	TC	75.7	68.4	61.7	80.6	72.9	66.0	83.6	75.7	69.1
	SHC	28.7	38.5	48.3	33.8	46.4	58.7	38.6	53.7	67.6
	kW	4.92	4.89	4.86	4.88	4.91	4.95	4.96	4.92	4.90
105	TC	70.2	63.3	57.0	74.7	67.5	61.1	77.5	70.1	64.0
	SHC	23.6	33.9	44.1	28.4	41.4	54.2	32.9	48.6	62.7
	kW	5.43	5.40	5.37	5.39	5.42	5.45	5.47	5.43	5.41
115	TC	64.3	57.8	52.0	68.4	61.7	55.7	71.0	64.1	58.3
	SHC	18.2	28.9	39.6	22.7	36.2	49.4	27.0	43.1	58.2
	kW	5.99	5.96	5.93	5.95	5.98	6.01	6.02	5.99	5.97
125	TC	57.9	52.0	46.6	61.6	55.4	49.9	64.0	57.5	52.4
	SHC	12.4	23.8	34.9	16.6	30.7	44.3	20.7	37.3	52.4
	kW	6.59	6.57	6.55	6.56	6.59	6.61	6.62	6.60	6.58

50HC07 (6 TONS) – UNIT WITH HUMIDI–MIZER SYSTEM IN HOT GAS REHEAT MODE										
Temp (F) Air Ent Condenser (Edb)		AIR ENTERING EVAPORATOR – Ewb (F)								
		75 Dry Bulb 62.5 Wet Bulb (50% Relative)			75 Dry Bulb 64 Wet Bulb (56% Relative)			75 Dry Bulb 65.3 Wet Bulb (60% Relative)		
		Air Entering Evaporator – Cfm								
		1800	2400	3000	1800	2400	3000	1800	2400	3000
80	TC	24.17	25.88	26.92	25.35	27.08	28.15	26.39	28.18	29.25
	SHC	–1.44	2.99	7.86	–5.08	–1.55	2.50	–8.25	–5.47	–2.14
	kW	4.15	4.16	4.17	4.17	4.18	4.18	4.18	4.19	4.20
75	TC	26.03	27.87	28.95	27.27	29.11	30.21	28.36	30.24	31.35
	SHC	0.43	4.97	9.86	–3.12	0.49	4.56	–6.19	–3.36	–0.03
	kW	3.96	3.97	3.98	3.98	3.99	4.00	4.00	4.01	4.01
70	TC	26.50	28.76	30.07	27.92	29.99	31.34	29.45	31.67	33.23
	SHC	0.87	5.84	10.97	–2.49	1.35	5.68	–5.06	–1.85	1.94
	kW	3.97	3.93	3.91	3.96	3.95	3.93	3.92	3.89	3.87
60	TC	27.59	29.22	30.17	28.70	30.33	31.30	31.50	31.32	32.91
	SHC	1.91	6.25	11.02	–1.79	1.63	5.57	–3.31	–2.39	1.45
	kW	3.95	3.99	4.01	3.99	4.02	4.04	4.09	4.05	4.01
50	TC	27.77	29.18	30.03	28.75	30.18	32.02	29.63	32.07	32.96
	SHC	2.03	6.18	10.85	–1.80	1.43	6.25	–5.14	–1.69	1.45
	kW	4.03	4.08	4.11	4.07	4.12	4.05	4.12	4.06	4.09
40	TC	29.02	30.38	31.46	29.96	31.32	32.09	30.79	33.49	34.34
	SHC	3.26	7.34	10.07	–0.63	2.54	6.29	–4.01	–0.30	2.80
	kW	3.96	4.02	4.08	4.01	4.08	4.11	4.06	4.00	4.03

LEGEND

Edb – Entering Dry–Bulb
Ewb – Entering Wet–Bulb
kW – Compressor Motor Power Input
Idb – Leaving Dry–Bulb
Iwb – Leaving Wet–Bulb
SHC – Sensible Heat Capacity (1000 Btuh) Gross
TC – Total Capacity (1000 Btuh) Gross

NOTES:

1. Direct interpolation is permissible. Do not extrapolate.
2. The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet–bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

50HC*D08				AMBIENT TEMPERATURE															
				85			95			105			115			125			
				EA (dB)			EA (dB)			EA (dB)			EA (dB)			EA (dB)			
				75	80	85	75	80	85	75	80	85	75	80	85	75	80	85	
2250 Cfm	EA (wB)	58	TC	81	81	91.8	77.9	77.9	88.4	74.7	74.7	84.6	71.1	71.1	80.6	67.3	67.3	76.3	
			SHC	70.2	81	91.8	67.5	77.9	88.4	64.7	74.7	84.6	61.6	71.1	80.6	58.3	67.3	76.3	
		62	TC	85.1	85.1	87.2	81.1	81.1	85.3	76.9	76.9	83.2	72.5	72.5	81	67.8	67.8	78.5	
			SHC	63.3	75.3	87.2	61.4	73.4	85.3	59.5	71.3	83.2	57.3	69.2	81	55	66.7	78.5	
		67	TC	93.3	93.3	93.3	89	89	89	84.3	84.3	84.3	79.4	79.4	79.4	74.1	74.1	74.1	
			SHC	52.3	64.2	76.2	50.4	62.4	74.4	48.4	60.4	72.4	46.4	58.3	70.3	44.2	56.2	68.1	
		72	TC	102.3	102.3	102.3	97.5	97.5	97.5	92.5	92.5	92.5	87.1	87.1	87.1	81.3	81.3	81.3	
			SHC	40.9	53	65	39	51.1	63.1	37.1	49.2	61.2	35.1	47.1	59.1	32.9	44.9	57	
		76	TC	–	110	110	–	104.8	104.8	–	99.4	99.4	–	93.5	93.5	–	87.3	87.3	
			SHC	–	43.7	56.1	–	41.9	54.2	–	39.9	52.2	–	37.9	50.2	–	35.8	48	
2625 Cfm	EA (wB)	58	TC	85.4	85.4	96.9	82.1	82.1	93.1	78.6	78.6	89.1	74.7	74.7	84.7	70.5	70.5	80	
			SHC	74	85.4	96.9	71.2	82.1	93.1	68.1	78.6	89.1	64.7	74.7	84.7	61.1	70.5	80	
		62	TC	87.8	87.8	95.7	83.7	83.7	93.6	79.3	79.3	91.3	75	75	87.8	70.6	70.6	83.2	
			SHC	68.2	82	95.7	66.2	79.9	93.6	64.1	77.7	91.3	61.3	74.6	87.8	58	70.6	83.2	
		67	TC	96	96	96	91.4	91.4	91.4	86.5	86.5	86.5	81.3	81.3	81.3	75.8	75.8	75.8	
			SHC	55.4	69.3	83.2	53.5	67.4	81.2	51.5	65.4	79.2	49.4	63.2	77.1	47.2	61	74.8	
		72	TC	105.2	105.2	105.2	100.1	100.1	100.1	94.8	94.8	94.8	89.1	89.1	89.1	83	83	83	
			SHC	42.3	56.2	70.2	40.4	54.3	68.2	38.4	52.3	66.2	36.3	50.2	64.1	34.1	48	61.9	
		76	TC	–	112.9	112.9	–	107.5	107.5	–	101.7	101.7	–	95.6	95.6	–	89.1	89.1	
			SHC	–	45.5	59.8	–	43.6	57.8	–	41.7	55.8	–	39.6	53.7	–	37.4	51.5	
3000 Cfm	EA (wB)	58	TC	89.2	89.2	101.1	85.6	85.6	97.1	81.8	81.8	92.8	77.7	77.7	88.1	73.2	73.2	83	
			SHC	77.3	89.2	101.1	74.2	85.6	97.1	70.9	81.8	92.8	67.3	77.7	88.1	63.5	73.2	83	
		62	TC	90.1	90.1	103.5	86.1	86.1	100.3	81.9	81.9	96.5	77.8	77.8	91.6	73.3	73.3	86.4	
			SHC	72.7	88.1	103.5	70.1	85.2	100.3	67.3	81.9	96.5	63.9	77.8	91.6	60.2	73.3	86.4	
		67	TC	98.1	98.1	98.1	93.3	93.3	93.3	88.2	88.2	88.2	82.8	82.8	83.6	77	77	81.3	
			SHC	58.4	74.1	89.9	56.5	72.2	87.9	54.4	70.1	85.8	52.3	67.9	83.6	50	65.6	81.3	
		72	TC	107.3	107.3	107.3	102.1	102.1	102.1	96.5	96.5	96.5	90.6	90.6	90.6	84.3	84.3	84.3	
			SHC	43.5	59.3	75.1	41.6	57.3	73.1	39.5	55.3	71.1	37.4	53.2	69	35.2	50.9	66.7	
		76	TC	–	115.2	115.2	–	109.5	109.5	–	103.5	103.5	–	97.2	97.2	–	90.4	90.4	
			SHC	–	47.2	63.2	–	45.3	61.3	–	43.3	59.3	–	41.2	57.1	–	38.9	54.8	
3375 Cfm	EA (wB)	58	TC	92.4	92.4	104.7	88.6	88.6	100.4	84.6	84.6	95.9	80.2	80.2	90.9	75.5	75.5	85.6	
			SHC	80	92.4	104.7	76.8	88.6	100.4	73.3	84.6	95.9	69.5	80.2	90.9	65.4	75.5	85.6	
		62	TC	92.5	92.5	109	88.7	88.7	104.5	84.6	84.6	99.7	80.3	80.3	94.6	75.6	75.6	89	
			SHC	76	92.5	109	72.9	88.7	104.5	69.6	84.6	99.7	66	80.3	94.6	62.1	75.6	89	
		67	TC	99.7	99.7	99.7	94.8	94.8	94.8	89.5	89.5	92.2	84	84	89.9	78	78	87.4	
			SHC	61.3	78.8	96.4	59.3	76.8	94.3	57.2	74.7	92.2	55	72.4	89.9	52.6	70	87.4	
		72	TC	109	109	109	103.6	103.6	103.6	97.8	97.8	97.8	91.8	91.8	91.8	85.3	85.3	85.3	
			SHC	44.6	62.2	79.9	42.7	60.3	77.9	40.6	58.2	75.8	38.5	56.1	73.6	36.2	53.8	71.3	
		76	TC	–	116.9	116.9	–	111.1	111.1	–	104.9	104.9	–	98.4	98.4	–	91.5	91.5	
			SHC	–	48.8	66.6	–	46.8	64.6	–	44.8	62.6	–	42.7	60.4	–	40.4	58.1	
3750 Cfm	EA (wB)	58	TC	95.1	95.1	107.8	91.2	91.2	103.3	86.9	86.9	98.5	82.3	82.3	93.3	77.4	77.4	87.8	
			SHC	82.4	95.1	107.8	79	91.2	103.3	75.3	86.9	98.5	71.3	82.3	93.3	67.1	77.4	87.8	
		62	TC	95.2	95.2	112.2	91.2	91.2	107.5	87	87	102.5	82.4	82.4	97.1	77.5	77.5	91.3	
			SHC	78.2	95.2	112.2	75	91.2	107.5	71.5	87	102.5	67.7	82.4	97.1	63.7	77.5	91.3	
		67	TC	101.1	101.1	102.6	96	96	100.5	90.6	90.6	98.3	84.9	84.9	95.9	78.9	78.9	93.2	
			SHC	64	83.3	102.6	62	81.2	100.5	59.8	79.1	98.3	57.6	76.7	95.9	55.1	74.2	93.2	
		72	TC	110.4	110.4	110.4	104.8	104.8	104.8	98.9	98.9	98.9	92.7	92.7	92.7	86.1	86.1	86.1	
			SHC	45.7	65.1	84.5	43.7	63.1	82.5	41.7	61	80.4	39.5	58.8	78.2	37.2	56.5	75.9	
		76	TC	–	118.3	118.3	–	112.4	112.4	–	106	106	–	99.4	99.4	–	92.3	92.3	
			SHC	–	50.3	69.9	–	48.3	67.9	–	46.2	65.8	–	44.1	63.6	–	41.8	61.3	

* See Minimum–Maximum Airflow Ratings in Table 4. Do not operate outside these limits.

LEGEND:

– – Do not operate
Cfm – Cubic feet per minute (supply air)
EAT(db) – Entering air temperature (dry bulb)
EAT(wb) – Entering air temperature (wet bulb)
SHC – Sensible heat capacity
TC – Total capacity

50HC08 (7.5 TONS) – UNIT WITH HUMIDI–MIZER SYSTEM IS SUBCOOLING MODE										
Temp (F) Air Ent Condenser (Edb)		AIR ENTERING EVAPORATOR – CFM								
		2250			3000			3750		
		Air Entering Evaporator – Ewb (F)								
		72	67	62	72	67	62	72	67	62
75	TC	101.9	92.9	84.0	109.6	96.3	89.9	113.6	103.0	94.5
	SHC	43.9	54.6	66.7	50.2	62.7	80.9	56.8	75.8	93.0
	kW	4.60	4.54	4.48	4.65	4.50	4.52	4.68	4.60	4.55
85	TC	96.6	87.3	78.9	102.8	92.9	84.5	106.5	96.7	88.7
	SHC	36.8	49.3	61.9	43.8	59.7	75.9	50.2	69.8	87.4
	kW	5.15	5.09	5.04	5.20	5.13	5.08	5.22	5.16	5.11
95	TC	90.2	81.4	73.5	95.7	86.8	78.8	99.4	90.1	82.7
	SHC	30.8	43.9	56.9	37.2	54.1	70.5	43.6	63.8	81.6
	kW	5.78	5.72	5.67	5.82	5.76	5.71	5.85	5.79	5.74
105	TC	83.5	75.2	67.8	88.8	80.2	72.7	92.0	83.2	76.4
	SHC	24.6	38.2	51.7	30.8	48.0	64.9	36.7	57.4	75.5
	kW	6.50	6.45	6.40	6.54	6.48	6.43	6.57	6.50	6.46
115	TC	76.3	68.7	61.8	81.1	73.2	66.3	84.1	76.0	69.7
	SHC	17.9	32.1	46.2	23.7	41.5	59.0	29.4	50.7	69.0
	kW	7.32	7.28	7.24	7.35	7.31	7.27	7.38	7.32	7.29
125	TC	68.6	61.6	55.4	73.0	65.7	59.3	75.8	68.2	62.6
	SHC	10.9	25.6	40.3	16.2	34.7	52.6	21.7	43.6	62.1
	kW	8.24	8.22	8.20	8.27	8.23	8.21	8.29	8.25	8.22

50HC08 (7.5 TONS) – UNIT WITH HUMIDI–MIZER SYSTEM IN HOT GAS REHEAT MODE										
Temp (F) Air Ent Condenser (Edb)		AIR ENTERING EVAPORATOR – Ewb (F)								
		75 Dry Bulb 62.5 Wet Bulb (50% Relative)			75 Dry Bulb 64 Wet Bulb (56% Relative)			75 Dry Bulb 65.3 Wet Bulb (60% Relative)		
		Air Entering Evaporator – Cfm								
		2250	3000	3750	2250	3000	3750	2250	3000	3750
80	TC	24.06	26.14	27.48	25.50	27.56	28.78	26.59	28.71	29.96
	SHC	–5.55	1.16	8.38	–10.20	–4.69	1.40	–14.39	–9.85	–4.68
	kW	4.43	4.42	4.41	4.40	4.41	4.42	4.42	4.43	4.44
75	TC	24.87	27.26	28.47	26.06	28.53	30.02	27.67	29.77	31.02
	SHC	–4.77	2.23	9.32	–9.65	–3.76	2.59	–13.35	–8.83	–3.66
	kW	4.42	4.36	4.38	4.45	4.38	4.36	4.36	4.39	4.40
70	TC	25.16	27.88	28.56	26.72	29.10	30.26	28.17	30.20	31.83
	SHC	–4.48	2.84	9.45	–9.02	–3.19	2.85	–12.88	–8.40	–2.87
	kW	4.49	4.38	4.48	4.44	4.41	4.44	4.40	4.44	4.40
60	TC	26.43	28.14	29.14	27.49	29.24	30.27	28.50	30.24	32.33
	SHC	–3.25	3.14	10.05	–8.26	–2.99	2.94	–12.54	–8.29	–2.32
	kW	4.48	4.55	4.59	4.53	4.60	4.65	4.58	4.65	4.54
50	TC	27.19	29.55	31.26	28.94	30.59	32.36	30.54	31.54	32.52
	SHC	–2.50	4.50	12.05	–6.87	–1.69	4.92	–10.60	–7.02	–2.07
	kW	4.53	4.51	4.46	4.48	4.57	4.52	4.43	4.63	4.70
40	TC	27.92	31.58	32.82	28.81	32.60	33.54	31.82	33.50	34.44
	SHC	–1.79	6.42	10.84	–6.94	0.23	6.05	–9.36	–5.15	–0.25
	kW	4.57	4.37	4.46	4.65	4.45	4.51	4.40	4.51	4.58

LEGEND

Edb – Entering Dry–Bulb
Ewb – Entering Wet–Bulb
kW – Compressor Motor Power Input
Idb – Leaving Dry–Bulb
Iwb – Leaving Wet–Bulb
SHC – Sensible Heat Capacity (1000 Btuh) Gross
TC – Total Capacity (1000 Btuh) Gross

NOTES:

1. Direct interpolation is permissible. Do not extrapolate.
2. The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet–bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

50HC*D09				AMBIENT TEMPERATURE													
				85			95			105			115			125		
				EA (dB)			EA (dB)			EA (dB)			EA (dB)			EA (dB)		
				75	80	85	75	80	85	75	80	85	75	80	85	75	80	85
2550 Cfm	EA (wB)	58	TC	90.5	90.5	102.4	87	87	98.5	83.2	83.2	94.2	79.1	79.1	89.6	74.7	74.7	84.6
			SHC	78.6	90.5	102.4	75.5	87	98.5	72.2	83.2	94.2	68.7	79.1	89.6	64.8	74.7	84.6
		62	TC	94.8	94.8	98.1	90.2	90.2	95.8	85.4	85.4	93.4	80.3	80.3	90.8	74.9	74.9	87.8
			SHC	71.2	84.6	98.1	69.1	82.4	95.8	66.8	80.1	93.4	64.3	77.5	90.8	61.6	74.7	87.8
		67	TC	104	104	104	99	99	99	93.7	93.7	93.7	88	88	88	81.9	81.9	81.9
			SHC	58.7	72.2	85.7	56.6	70	83.5	54.3	67.8	81.3	52	65.4	78.9	49.5	62.9	76.4
		72	TC	114	114	114	108.5	108.5	108.5	102.7	102.7	102.7	96.5	96.5	96.5	89.8	89.8	89.8
			SHC	45.8	59.3	72.9	43.7	57.2	70.8	41.4	55	68.5	39.1	52.7	66.2	36.7	50.2	63.7
		76	TC	–	122.4	122.4	–	116.5	116.5	–	110.3	110.3	–	103.7	103.7	–	96.5	96.5
			SHC	–	48.8	62.8	–	46.7	60.6	–	44.5	58.4	–	42.2	56	–	39.8	53.5
2975 Cfm	EA (wB)	58	TC	95.4	95.4	108	91.6	91.6	103.7	87.5	87.5	99	83.1	83.1	94	78.3	78.3	88.6
			SHC	82.8	95.4	108	79.5	91.6	103.7	75.9	87.5	99	72.1	83.1	94	68	78.3	88.6
		62	TC	97.7	97.7	107.4	93	93	104.9	88.1	88.1	102.1	83.2	83.2	97.9	78.4	78.4	92.2
			SHC	76.7	92	107.4	74.3	89.6	104.9	71.8	86.9	102.1	68.6	83.2	97.9	64.6	78.4	92.2
		67	TC	106.9	106.9	106.9	101.6	101.6	101.6	96	96	96	90.1	90.1	90.1	83.7	83.7	83.9
			SHC	62.3	77.8	93.4	60.1	75.6	91.2	57.8	73.3	88.9	55.4	70.9	86.5	52.8	68.3	83.9
		72	TC	117	117	117	111.2	111.2	111.2	105.1	105.1	105.1	98.6	98.6	98.6	91.7	91.7	91.7
			SHC	47.3	62.9	78.6	45.1	60.8	76.4	42.9	58.5	74.1	40.5	56.1	71.7	38	53.6	69.2
		76	TC	–	125.6	125.6	–	119.4	119.4	–	112.8	112.8	–	105.9	105.9	–	98.4	98.4
			SHC	–	50.8	66.8	–	48.7	64.6	–	46.4	62.3	–	44.1	59.9	–	41.6	57.4
3400 Cfm	EA (wB)	58	TC	99.5	99.5	112.7	95.4	95.4	108	91	91	103	86.3	86.3	97.7	81.2	81.2	91.9
			SHC	86.4	99.5	112.7	82.8	95.4	108	79	91	103	74.9	86.3	97.7	70.5	81.2	91.9
		62	TC	100.3	100.3	115.8	95.6	95.6	112.4	91.2	91.2	107.2	86.4	86.4	101.6	81.3	81.3	95.6
			SHC	81.5	98.6	115.8	78.7	95.6	112.4	75.1	91.2	107.2	71.2	86.4	101.6	67	81.3	95.6
		67	TC	109.1	109.1	109.1	103.6	103.6	103.6	97.8	97.8	97.8	91.6	91.6	93.7	85	85	90.9
			SHC	65.6	83.2	100.8	63.4	81	98.6	61	78.6	96.2	58.6	76.1	93.7	55.9	73.4	90.9
		72	TC	119.3	119.3	119.3	113.3	113.3	113.3	107	107	107	100.3	100.3	100.3	93	93	93
			SHC	48.7	66.4	84.1	46.5	64.2	81.8	44.2	61.8	79.5	41.8	59.4	77.1	39.2	56.9	74.5
		76	TC	–	128	128	–	121.5	121.5	–	114.7	114.7	–	107.5	107.5	–	99.8	99.8
			SHC	–	52.6	70.6	–	50.5	68.4	–	48.2	66.1	–	45.8	63.6	–	43.3	61.1
3825 Cfm	EA (wB)	58	TC	103	103	116.6	98.7	98.7	111.7	94	94	106.4	89	89	100.8	83.6	83.6	94.7
			SHC	89.4	103	116.6	85.6	98.7	111.7	81.6	94	106.4	77.3	89	100.8	72.6	83.6	94.7
		62	TC	103.1	103.1	121.3	98.8	98.8	116.1	94.1	94.1	110.7	89.1	89.1	104.8	83.7	83.7	98.4
			SHC	85	103.1	121.3	81.4	98.8	116.1	77.5	94.1	110.7	73.4	89.1	104.8	69	83.7	98.4
		67	TC	110.9	110.9	110.9	105.2	105.2	105.7	99.2	99.2	103.2	92.9	92.9	100.5	86.1	86.1	97.6
			SHC	68.8	88.4	108	66.5	86.1	105.7	64.1	83.7	103.2	61.6	81.1	100.5	58.9	78.3	97.6
		72	TC	121.2	121.2	121.2	114.9	114.9	114.9	108.4	108.4	108.4	101.5	101.5	101.5	94.1	94.1	94.1
			SHC	50	69.7	89.4	47.7	67.4	87.1	45.4	65.1	84.7	43	62.6	82.3	40.4	60	79.6
		76	TC	–	129.8	129.8	–	123.2	123.2	–	116.2	116.2	–	108.8	108.8	–	100.9	100.9
			SHC	–	54.4	74.3	–	52.2	72.1	–	49.9	69.7	–	47.5	67.3	–	44.9	64.7
4250 Cfm	EA (wB)	58	TC	106	106	119.9	101.4	101.4	114.8	96.6	96.6	109.3	91.3	91.3	103.4	85.7	85.7	97
			SHC	92	106	119.9	88	101.4	114.8	83.8	96.6	109.3	79.3	91.3	103.4	74.4	85.7	97
		62	TC	106.1	106.1	124.7	101.5	101.5	119.4	96.6	96.6	113.6	91.4	91.4	107.5	85.7	85.7	100.8
			SHC	87.4	106.1	124.7	83.6	101.5	119.4	79.6	96.6	113.6	75.3	91.4	107.5	70.6	85.7	100.8
		67	TC	112.3	112.3	114.9	106.5	106.5	112.5	100.4	100.4	109.9	93.9	93.9	107	87.1	87.1	103.8
			SHC	71.8	93.4	114.9	69.5	91	112.5	67	88.5	109.9	64.4	85.7	107	61.6	82.7	103.8
		72	TC	122.6	122.6	122.6	116.2	116.2	116.2	109.5	109.5	109.5	102.5	102.5	102.5	94.9	94.9	94.9
			SHC	51.2	72.8	94.5	48.9	70.5	92.2	46.6	68.2	89.8	44.1	65.7	87.3	41.5	63.1	84.6
		76	TC	–	131.3	131.3	–	124.5	124.5	–	117.4	117.4	–	109.8	109.8	–	101.8	101.8
			SHC	–	56	77.9	–	53.8	75.6	–	51.5	73.3	–	49.1	70.8	–	46.5	68.1

* See Minimum–Maximum Airflow Ratings in Table 4. Do not operate outside these limits.

LEGEND:

– – Do not operate
Cfm – Cubic feet per minute (supply air)
EAT(db) – Entering air temperature (dry bulb)
EAT(wb) – Entering air temperature (wet bulb)
SHC – Sensible heat capacity
TC – Total capacity

50HC09 (8.5 TONS) – UNIT WITH HUMIDI–MIZER SYSTEM IN SUBCOOLING MODE										
Temp (F) Air Ent Condenser (Edb)		AIR ENTERING EVAPORATOR – CFM								
		2550			3400			4250		
		Air Entering Evaporator – Ewb (F)								
		72	67	62	72	67	62	72	67	62
75	TC	114.7	103.9	93.9	104.3	110.6	100.5	122.9	114.6	105.5
	SHC	48.7	62.2	75.7	84.7	74.2	91.4	60.6	85.1	103.9
	kW	5.17	5.09	5.01	5.10	5.14	5.07	5.20	5.18	5.11
85	TC	107.8	97.4	88.0	114.2	102.9	94.2	116.2	107.6	98.7
	SHC	42.3	56.3	70.3	49.7	67.0	85.6	61.1	78.7	97.3
	kW	5.79	5.71	5.63	5.85	5.75	5.69	5.88	5.80	5.72
95	TC	100.5	90.8	82.0	106.6	96.2	87.7	110.2	100.1	92.2
	SHC	35.6	50.2	64.8	42.8	61.0	79.6	49.2	71.9	91.0
	kW	6.50	6.42	6.34	6.56	6.46	6.40	6.59	6.50	6.44
105	TC	92.7	83.8	75.7	98.5	89.0	80.9	102.1	92.4	85.1
	SHC	28.5	43.9	59.1	35.4	54.6	73.4	41.9	64.9	84.2
	kW	7.30	7.23	7.16	7.36	7.28	7.21	7.40	7.31	7.25
115	TC	85.0	76.5	69.0	90.0	81.3	73.8	93.3	84.4	77.7
	SHC	21.5	37.4	53.1	27.7	47.6	66.9	34.0	57.7	77.0
	kW	8.23	8.16	8.10	8.27	8.20	8.14	8.31	8.23	8.18
125	TC	76.5	68.8	61.8	81.1	72.9	66.2	84.1	75.8	69.8
	SHC	13.8	30.4	46.7	19.7	40.0	60.1	25.6	50.0	69.8
	kW	9.25	9.20	9.16	9.28	9.22	9.19	9.31	9.25	9.21

50HC09 (8.5 TONS) – UNIT WITH HUMIDI–MIZER SYSTEM IN HOT GAS REHEAT MODE										
Temp (F) Air Ent Condenser (Edb)		AIR ENTERING EVAPORATOR – Ewb (F)								
		75 Dry Bulb 62.5 Wet Bulb (50% Relative)			75 Dry Bulb 64 Wet Bulb (56% Relative)			75 Dry Bulb 65.3 Wet Bulb (60% Relative)		
		Air Entering Evaporator – Cfm								
		2550	3400	4250	2550	3400	4250	2550	3400	4250
80	TC	27.53	29.56	30.72	28.95	31.03	32.22	30.26	32.33	33.58
	SHC	–3.84	3.82	11.92	–9.25	–2.92	4.09	–13.93	–8.77	–2.82
	kW	5.09	5.11	5.13	5.11	5.14	5.15	5.14	5.15	5.17
75	TC	29.09	31.60	32.81	30.77	33.10	34.33	32.30	34.45	35.73
	SHC	–2.34	5.72	13.84	–7.51	–0.98	6.04	–11.95	–6.78	–0.82
	kW	4.97	4.91	4.93	4.95	4.94	4.95	4.94	4.96	4.97
70	TC	29.58	32.45	33.63	31.48	34.12	35.55	33.12	35.65	37.38
	SHC	–1.88	6.54	14.63	–6.83	0.00	7.20	–11.16	–5.63	0.75
	kW	4.99	4.90	4.92	4.96	4.90	4.89	4.93	4.90	4.86
60	TC	30.71	33.44	34.52	32.90	34.79	35.86	34.07	36.02	37.09
	SHC	–0.78	7.52	15.54	–5.47	0.68	7.57	–10.28	–5.24	0.55
	kW	5.03	4.95	5.00	4.94	5.01	5.05	4.99	5.06	5.09
50	TC	32.63	34.31	35.26	33.81	35.53	36.51	34.90	36.66	37.65
	SHC	1.05	8.38	16.29	–4.60	1.42	8.24	–9.49	–4.59	1.14
	kW	4.92	5.01	5.06	4.99	5.07	5.13	5.05	5.14	5.19
40	TC	31.94	33.26	35.77	32.96	35.70	37.86	35.17	38.01	38.92
	SHC	0.45	7.47	13.75	–5.35	1.63	9.52	–9.20	–3.29	2.36
	kW	5.16	5.27	5.20	5.25	5.19	5.10	5.16	5.11	5.17

LEGEND

Edb – Entering Dry–Bulb
Ewb – Entering Wet–Bulb
kW – Compressor Motor Power Input
ldb – Leaving Dry–Bulb
lwb – Leaving Wet–Bulb
SHC – Sensible Heat Capacity (1000 Btuh) Gross
TC – Total Capacity (1000 Btuh) Gross

NOTES:

1. Direct interpolation is permissible. Do not extrapolate.
2. The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet–bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

50HC*D11				AMBIENT TEMPERATURE													
				85			95			105			115			125		
				EA (dB)			EA (dB)			EA (dB)			EA (dB)			EA (dB)		
				75	80	85	75	80	85	75	80	85	75	80	85	75	80	85
3000 Cfm	EA (wB)	58	THC	105.6	105.6	118.0	101.7	101.7	114.1	97.5	97.5	109.9	97.5	97.5	109.9	87.8	87.8	100.2
			SHC	93.3	105.6	118.0	89.4	101.7	114.1	85.1	97.5	109.9	85.1	97.5	109.9	75.4	87.8	100.2
		62	THC	110.6	110.6	110.6	105.5	105.5	108.0	100.1	100.1	105.5	100.1	100.1	105.5	88.5	88.5	98.5
			SHC	85.6	98.0	110.3	83.3	95.7	108.0	80.7	93.1	105.5	80.7	93.1	105.5	73.8	86.1	98.5
		67	THC	120.5	120.5	120.5	115.0	115.0	115.0	109.0	109.0	109.0	109.0	109.0	109.0	95.7	95.7	95.7
			SHC	70.0	82.3	94.7	67.7	80.1	92.5	65.4	77.8	90.1	65.4	77.8	90.1	60.0	72.4	84.8
		72	THC	131.4	131.4	131.4	125.4	125.4	125.4	118.8	118.8	118.8	118.8	118.8	118.8	104.2	104.2	104.2
			SHC	53.9	66.3	78.7	51.8	64.2	76.6	49.5	61.9	74.3	49.5	61.9	74.3	44.3	56.7	69.1
		76	THC	–	140.8	140.8	–	134.2	134.2	–	127.0	127.0	–	127.0	127.0	–	111.5	111.5
			SHC	–	52.5	64.9	–	50.8	63.2	–	48.7	61.1	–	48.7	61.1	–	44.0	56.4
3500 Cfm	EA (wB)	58	THC	110.9	110.9	125.3	106.7	106.7	121.1	102.1	102.1	116.5	102.1	102.1	116.5	91.6	91.6	106.0
			SHC	96.4	110.9	125.3	92.2	106.7	121.1	87.6	102.1	116.5	87.6	102.1	116.5	77.1	91.6	106.0
		62	THC	113.6	113.6	120.7	108.4	108.4	118.1	103.1	103.1	114.5	103.1	103.1	114.5	92.0	92.0	105.3
			SHC	91.9	106.3	120.7	89.3	103.7	118.1	85.7	100.1	114.5	85.7	100.1	114.5	76.4	90.8	105.3
		67	THC	123.5	123.5	123.5	117.8	117.8	117.8	111.5	111.5	111.5	111.5	111.5	111.5	97.6	97.6	97.6
			SHC	74.2	88.6	103.1	72.2	86.6	101.0	69.8	84.3	98.7	69.8	84.3	98.7	64.3	78.8	93.2
		72	THC	134.6	134.6	134.6	128.2	128.2	128.2	121.3	121.3	121.3	121.3	121.3	121.3	106.1	106.1	106.1
			SHC	55.9	70.3	84.8	53.7	68.1	82.6	51.4	65.8	80.2	51.4	65.8	80.2	46.1	60.6	75.0
		76	THC	–	144.0	144.0	–	137.1	137.1	–	129.7	129.7	–	129.7	129.7	–	113.5	113.5
			SHC	–	55.3	69.7	–	53.1	67.6	–	50.9	65.4	–	50.9	65.4	–	46.0	60.5
4000 Cfm	EA (wB)	58	THC	115.3	115.3	131.8	110.7	110.7	127.2	105.8	105.8	122.3	105.8	105.8	122.3	94.6	94.6	111.1
			SHC	98.8	115.3	131.8	94.2	110.7	127.2	89.3	105.8	122.3	89.3	105.8	122.3	78.1	94.6	111.1
		62	THC	116.5	116.5	129.1	112.0	112.0	124.0	106.5	106.5	120.9	106.5	106.5	120.9	94.7	94.7	111.2
			SHC	96.1	112.6	129.1	91.0	107.5	124.0	87.9	104.4	120.9	87.9	104.4	120.9	78.2	94.7	111.2
		67	THC	125.9	125.9	125.9	119.8	119.8	119.8	113.3	113.3	113.3	113.3	113.3	113.3	99.1	99.1	101.1
			SHC	78.2	94.7	111.2	76.0	92.5	109.0	73.5	90.0	106.5	73.5	90.0	106.5	68.1	84.6	101.1
		72	THC	137.0	137.0	137.0	130.3	130.3	130.3	123.2	123.2	123.2	123.2	123.2	123.2	107.5	107.5	107.5
			SHC	57.7	74.2	90.7	55.4	71.9	88.4	53.0	69.5	86.0	53.0	69.5	86.0	47.7	64.2	80.7
		76	THC	–	146.5	146.5	–	139.3	139.3	–	131.6	131.6	–	131.6	131.6	–	115.0	115.0
			SHC	–	57.4	73.9	–	55.3	71.8	–	53.0	69.5	–	53.0	69.5	–	48.0	64.5
4500 Cfm	EA (wB)	58	THC	118.9	118.9	137.5	114.1	114.1	132.7	108.9	108.9	127.5	108.9	108.9	127.5	97.2	97.2	115.8
			SHC	100.3	118.9	137.5	95.5	114.1	132.7	90.3	108.9	127.5	90.3	108.9	127.5	78.6	97.2	115.8
		62	THC	119.9	119.9	135.3	115.0	115.0	130.8	109.2	109.2	126.7	109.2	109.2	126.7	97.2	97.2	115.8
			SHC	98.2	116.8	135.3	93.7	112.3	130.8	89.6	108.2	126.7	89.6	108.2	126.7	78.7	97.2	115.8
		67	THC	127.7	127.7	127.7	121.4	121.4	121.4	114.8	114.8	114.8	114.8	114.8	114.8	100.1	100.1	108.5
			SHC	82.1	100.7	119.3	79.8	98.3	116.9	77.2	95.8	114.4	77.2	95.8	114.4	71.4	89.9	108.5
		72	THC	138.9	138.9	138.9	132.1	132.1	132.1	124.7	124.7	124.7	124.7	124.7	124.7	108.6	108.6	108.6
			SHC	59.3	77.9	96.5	57.2	75.7	94.3	54.8	73.3	91.9	54.8	73.3	91.9	49.3	67.9	86.5
		76	THC	–	148.4	148.4	–	141.1	141.1	–	133.2	133.2	–	133.2	133.2	–	116.1	116.1
			SHC	–	59.4	78.0	–	57.2	75.8	–	54.9	73.5	–	54.9	73.5	–	49.9	68.4
5000 Cfm	EA (wB)	58	THC	122.0	122.0	142.6	117.0	117.0	137.6	111.6	111.6	132.2	111.6	111.6	132.2	99.3	99.3	119.9
			SHC	101.4	122.0	142.6	96.4	117.0	137.6	90.9	111.6	132.2	90.9	111.6	132.2	78.7	99.3	119.9
		62	THC	122.7	122.7	141.4	117.1	117.1	137.7	111.6	111.6	132.2	111.6	111.6	132.2	99.4	99.4	120.0
			SHC	100.2	120.8	141.4	96.4	117.1	137.7	91.0	111.6	132.2	91.0	111.6	132.2	78.8	99.4	120.0
		67	THC	129.2	129.2	129.2	122.8	122.8	124.6	115.9	115.9	121.9	115.9	115.9	121.9	101.1	101.1	115.7
			SHC	85.7	106.4	127.0	83.3	104.0	124.6	80.7	101.3	121.9	80.7	101.3	121.9	74.4	95.1	115.7
		72	THC	140.5	140.5	140.5	133.4	133.4	133.4	125.9	125.9	125.9	125.9	125.9	125.9	109.6	109.6	109.6
			SHC	61.0	81.6	102.3	58.7	79.3	99.9	56.3	76.9	97.5	56.3	76.9	97.5	50.9	71.5	92.1
		76	THC	–	150.1	150.1	–	142.6	142.6	–	134.5	134.5	–	134.5	134.5	–	117.1	117.1
			SHC	–	61.4	82.0	–	59.2	79.8	–	56.8	77.4	–	56.8	77.4	–	51.7	72.3

* See Minimum–Maximum Airflow Ratings in Table 4. Do not operate outside these limits.

LEGEND:

– – Do not operate
Cfm – Cubic feet per minute (supply air)
EAT(db) – Entering air temperature (dry bulb)
EAT(wb) – Entering air temperature (wet bulb)
SHC – Sensible heat capacity
TC – Total capacity

NOTES:

1. Direct interpolation is permissible. Do not extrapolate.
2. The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet–bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

50HC11 (10 TONS) – UNIT WITH HUMIDI–MIZER SYSTEM IN SUBCOOLING MODE										
Temp (F) Air Entering Condenser (Edb)		AIR ENTERING EVAPORATOR – CFM								
		3000			4000			5000		
		Air Entering Evaporator – Ewb (F)								
		72	67	62	72	67	62	72	67	62
75	TC	121.34	110.46	99.60	139.20	125.18	111.17	157.20	140.10	110.50
	SHC	58.86	72.03	85.20	67.31	80.25	93.18	74.00	86.80	72.00
	kW	6.61	6.54	6.45	6.65	6.58	6.50	6.67	6.62	6.53
85	TC	115.30	105.01	94.73	128.03	114.90	101.77	140.90	124.90	105.00
	SHC	45.81	62.19	78.57	55.02	71.16	87.29	62.30	78.30	62.20
	kW	6.76	6.88	6.78	6.80	6.73	6.83	6.82	6.77	6.87
95	TC	109.26	99.57	89.89	116.87	104.62	92.38	124.60	109.70	99.60
	SHC	32.76	52.35	71.93	42.70	62.07	81.40	50.60	69.80	52.30
	kW	7.55	7.49	7.39	7.58	7.51	7.45	7.60	7.56	7.49
105	TC	103.21	94.13	85.04	105.71	94.34	82.98	108.20	94.60	94.10
	SHC	19.71	42.51	65.30	30.45	52.98	75.51	39.00	61.30	42.50
	kW	8.47	8.42	8.32	8.51	8.44	8.37	8.53	8.49	8.41
115	TC	97.17	88.68	80.20	94.54	84.06	73.58	91.90	79.40	88.70
	SHC	6.67	32.66	58.66	18.16	43.89	69.62	27.30	52.80	32.60
	kW	9.42	9.37	9.27	9.46	9.39	9.32	9.48	9.44	9.36
125	TC	91.12	83.24	75.36	83.38	73.78	64.19	75.60	64.20	83.20
	SHC	–6.40	22.82	52.03	5.87	34.80	63.73	15.60	44.30	22.80
	kW	10.35	10.30	10.20	10.39	10.32	10.25	10.41	10.37	10.29

50HC11 (10 TONS) – UNIT WITH HUMIDI–MIZER SYSTEM IN HOT GAS REHEAT MODE										
Temp (F) Air Entering Condenser (Edb)		AIR ENTERING EVAPORATOR – Ewb (F)								
		75 Dry Bulb 62.5 Wet Bulb (50% Relative)			75 Dry Bulb 64 Wet Bulb (56% Relative)			75 Dry Bulb 65.3 Wet Bulb (60% Relative)		
		Air Entering Evaporator – Cfm								
		3000	4000	5000	3000	4000	5000	3000	4000	5000
75	TC	46.00	49.70	52.50	50.20	52.60	55.00	51.40	55.60	57.90
	SHC	8.50	18.40	26.50	3.60	11.90	18.50	–1.10	5.20	11.70
	kW	6.56	6.50	6.42	6.55	6.48	6.40	6.53	6.49	6.40
85	TC	47.80	51.30	54.10	51.70	54.20	56.80	53.30	57.50	59.70
	SHC	10.20	20.00	28.20	5.30	13.40	20.10	0.50	6.80	13.20
	kW	6.51	6.45	6.36	6.50	6.44	6.35	6.47	6.44	6.35
95	TC	50.00	53.60	56.20	54.00	56.30	58.80	55.30	59.60	61.80
	SHC	12.00	21.60	29.80	6.90	15.00	21.70	2.20	8.50	14.70
	kW	6.45	6.40	6.29	6.45	6.39	6.28	6.42	6.39	6.28
105	TC	54.00	57.50	60.10	57.90	60.20	62.70	59.30	63.50	65.70
	SHC	15.20	24.70	31.90	10.20	18.30	24.90	5.40	11.80	18.00
	kW	6.33	6.28	6.19	6.33	6.27	6.17	6.30	6.27	6.17
115	TC	58.00	61.40	64.20	61.80	64.40	66.50	63.30	67.20	69.50
	SHC	18.50	28.00	36.20	13.50	21.50	28.20	8.70	15.10	21.30
	kW	6.22	6.17	6.10	6.22	6.16	6.08	6.19	6.16	6.08
125	TC	61.90	65.30	68.00	65.70	68.10	70.50	67.20	71.30	73.50
	SHC	21.70	31.10	39.30	16.70	24.90	31.20	12.00	18.30	24.60
	kW	6.10	6.05	5.98	6.10	6.04	5.96	6.07	6.04	5.96

LEGEND

Edb – Entering Dry–Bulb
Ewb – Entering Wet–Bulb
kW – Compressor Motor Power Input
ldb – Leaving Dry–Bulb
lwb – Leaving Wet–Bulb
SHC – Sensible Heat Capacity (1000 Btuh) Gross
TC – Total Capacity (1000 Btuh) Gross

NOTES:

1. Direct interpolation is permissible. Do not extrapolate.
2. The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet–bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

50HC*D12				AMBIENT TEMPERATURE															
				85			95			105			115			125			
				EA (dB)			EA (dB)			EA (dB)			EA (dB)			EA (dB)			
				75	80	85	75	80	85	75	80	85	75	80	85	75	80	85	
3000 Cfm	EA (wb)	58	TC	104.3	104.3	118.5	99.5	99.5	113	93.4	93.4	106.1	86.7	86.7	98.6	79.7	79.7	90.6	
			SHC	90.2	104.3	118.5	86	99.5	113	80.6	93.4	106.1	74.9	86.7	98.6	68.8	79.7	90.6	
		62	TC	109.7	109.7	112.4	103.6	103.6	109.5	95.9	95.9	105.9	87.6	87.6	101.2	79.8	79.8	94.4	
			SHC	80.8	96.6	112.4	78	93.8	109.5	74.5	90.2	105.9	70.3	85.7	101.2	65.2	79.8	94.4	
		67	TC	121.5	121.5	121.5	115.4	115.4	115.4	107.8	107.8	107.8	98.7	98.7	98.7	89.1	89.1	89.1	
			SHC	65.2	81	96.9	62.7	78.6	94.5	59.7	75.6	91.5	56.2	72	87.9	52.5	68.3	84.2	
		72	TC	133	133	133	127.1	127.1	127.1	120.5	120.5	120.5	112	112	112	102.1	102.1	102.1	
			SHC	48.7	64.5	80.4	46.5	62.4	78.3	44.1	60	75.9	41.2	57.1	73	37.8	53.7	69.6	
		76	TC	–	140.9	140.9	–	135.1	135.1	–	128.4	128.4	–	121.3	121.3	–	112.5	112.5	
			SHC	–	50.6	67.1	–	48.7	65.2	–	46.6	63.1	–	44.3	60.7	–	41.4	57.7	
3500 Cfm	EA (wb)	58	TC	109.9	109.9	124.9	104.9	104.9	119.3	98.7	98.7	112.2	91.6	91.6	104.2	84.2	84.2	95.8	
			SHC	94.9	109.9	124.9	90.6	104.9	119.3	85.2	98.7	112.2	79	91.6	104.2	72.6	84.2	95.8	
		62	TC	112.8	112.8	123.1	106.7	106.7	120	99.5	99.5	115.3	91.7	91.7	108.5	84.3	84.3	99.8	
			SHC	86.8	104.9	123.1	83.9	102	120	80	97.6	115.3	74.9	91.7	108.5	68.8	84.3	99.8	
		67	TC	124.2	124.2	124.2	118	118	118	110.3	110.3	110.3	101	101	101	91	91	92.5	
			SHC	68.4	86.7	104.9	66.1	84.3	102.6	63.2	81.5	99.8	59.6	78	96.3	55.9	74.2	92.5	
		72	TC	135.2	135.2	135.2	129.1	129.1	129.1	122.4	122.4	122.4	114.2	114.2	114.2	104.2	104.2	104.2	
			SHC	49.2	67.3	85.4	47.1	65.3	83.4	44.8	63	81.2	42	60.4	78.7	38.7	57.1	75.5	
		76	TC	–	142.4	142.4	–	136.5	136.5	–	129.6	129.6	–	122.4	122.4	–	114	114	
			SHC	–	51.7	70.9	–	49.7	68.7	–	47.5	66.3	–	45.2	63.8	–	42.6	61.2	
4000 Cfm	EA (wb)	58	TC	114.3	114.3	130	109.2	109.2	124.2	102.9	102.9	117	95.4	95.4	108.7	87.7	87.7	99.9	
			SHC	98.6	114.3	130	94.2	109.2	124.2	88.7	102.9	117	82.2	95.4	108.7	75.5	87.7	99.9	
		62	TC	115.3	115.3	132.4	109.6	109.6	128.3	102.9	102.9	121.9	95.5	95.5	113.2	87.8	87.8	104.1	
			SHC	91.9	112.2	132.4	88.7	108.5	128.3	84	102.9	121.9	77.9	95.5	113.2	71.5	87.8	104.1	
		67	TC	125.8	125.8	125.8	119.5	119.5	119.5	111.9	111.9	111.9	102.4	102.4	104.2	92.2	92.2	100.4	
			SHC	71.3	91.8	112.3	69	89.6	110.2	66.2	86.9	107.6	62.8	83.5	104.2	59.1	79.7	100.4	
		72	TC	136.3	136.3	136.3	130.2	130.2	130.2	123.4	123.4	123.4	115.4	115.4	115.4	105.3	105.3	105.3	
			SHC	49.5	69.7	89.8	47.4	67.7	87.9	45.1	65.5	85.9	42.5	63.1	83.7	39.3	60.1	80.9	
		76	TC	–	143.1	143.1	–	137.1	137.1	–	130.1	130.1	–	122.6	122.6	–	114.5	114.5	
			SHC	–	52.2	73.2	–	50.2	71.1	–	48	68.7	–	45.7	66.4	–	43.3	64.1	
4500 Cfm	EA (wb)	58	TC	117.5	117.5	133.8	112.4	112.4	127.9	106	106	120.7	98.4	98.4	112.1	90.3	90.3	103	
			SHC	101.3	117.5	133.8	96.8	112.4	127.9	91.2	106	120.7	84.6	98.4	112.1	77.7	90.3	103	
		62	TC	117.6	117.6	139.4	112.5	112.5	133.3	106.1	106.1	125.8	98.5	98.5	116.8	90.4	90.4	107.4	
			SHC	95.9	117.6	139.4	91.6	112.5	133.3	86.4	106.1	125.8	80.1	98.5	116.8	73.5	90.4	107.4	
		67	TC	126.6	126.6	126.6	120.2	120.2	120.2	112.8	112.8	114.8	103.2	103.2	111.6	93	93	107.6	
			SHC	73.7	96.4	119.2	71.5	94.3	117.2	68.9	91.8	114.8	65.6	88.6	111.6	61.8	84.7	107.6	
		72	TC	136.7	136.7	136.7	130.5	130.5	130.5	123.6	123.6	123.6	115.7	115.7	115.7	105.7	105.7	105.7	
			SHC	49.4	71.6	93.7	47.4	69.7	91.9	45.1	67.5	89.9	42.7	65.4	88.2	39.5	62.6	85.8	
		76	TC	–	143.1	143.1	–	137	137	–	129.9	129.9	–	122.4	122.4	–	114.3	114.3	
			SHC	–	52.4	75.1	–	50.5	73.1	–	48.2	70.8	–	46	68.5	–	43.7	66.5	
5000 Cfm	EA (wb)	58	TC	119.9	119.9	136.7	114.7	114.7	130.7	108.4	108.4	123.6	100.6	100.6	114.8	92.3	92.3	105.4	
			SHC	103.2	119.9	136.7	98.6	114.7	130.7	93.2	108.4	123.6	86.4	100.6	114.8	79.2	92.3	105.4	
		62	TC	120	120	142.4	114.7	114.7	136.2	108.5	108.5	128.8	100.7	100.7	119.7	92.4	92.4	109.9	
			SHC	97.6	120	142.4	93.3	114.7	136.2	88.1	108.5	128.8	81.7	100.7	119.7	74.9	92.4	109.9	
		67	TC	126.8	126.8	126.8	120.4	120.4	123.6	113.2	113.2	121.3	103.8	103.8	118.4	93.6	93.6	114	
			SHC	75.7	100.6	125.4	73.6	98.6	123.6	71.2	96.2	121.3	68	93.2	118.4	64.2	89.1	114	
		72	TC	136.5	136.5	136.5	130.2	130.2	130.2	123.2	123.2	123.2	115.5	115.5	115.5	105.6	105.6	105.6	
			SHC	49.1	73.1	97	47.1	71.3	95.4	44.9	69.2	93.5	42.5	67.3	92	39.5	64.9	90.2	
		76	TC	–	142.7	142.7	–	136.5	136.5	–	129.4	129.4	–	121.6	121.6	–	113.6	113.6	
			SHC	–	52.2	76.7	–	50.4	74.7	–	48.2	72.4	–	45.9	70.1	–	43.7	68.3	

* See Minimum–Maximum Airflow Ratings in Table 4. Do not operate outside these limits.

LEGEND:

– – Do not operate
Cfm – Cubic feet per minute (supply air)
EAT(db) – Entering air temperature (dry bulb)
EAT(wb) – Entering air temperature (wet bulb)
SHC – Sensible heat capacity
TC – Total capacity

50HC12 (10 TONS) – UNIT WITH HUMIDI–MIZER SYSTEM IN SUBCOOLING MODE										
Temp (F) Air Ent Condenser (Edb)		AIR ENTERING EVAPORATOR – CFM								
		3000			4000			5000		
		Air Entering Evaporator – Ewb (F)								
		72	67	62	72	67	62	72	67	62
75	TC	135.8	123.1	111.6	144.0	130.9	119.2	148.7	135.7	122.9
	SHC	56.7	72.8	88.9	66.1	86.9	107.4	74.4	100.1	121.0
	kW	6.42	6.26	6.13	6.54	6.37	6.22	6.61	6.43	6.26
85	TC	127.3	115.4	104.5	134.9	120.1	111.7	139.3	126.9	116.8
	SHC	48.6	65.4	82.1	57.5	76.6	100.2	65.4	91.8	115.0
	kW	7.20	7.04	6.90	7.31	7.11	7.00	7.38	7.21	7.07
95	TC	118.1	106.5	96.9	125.2	113.6	103.6	129.5	117.8	108.4
	SHC	39.9	57.0	74.9	48.3	70.5	92.4	56.2	83.1	106.8
	kW	8.06	7.89	7.76	8.17	8.00	7.86	8.24	8.07	7.93
105	TC	107.3	97.8	87.8	114.5	103.8	94.5	117.6	107.3	99.0
	SHC	29.6	48.7	66.2	38.1	61.3	83.8	44.9	73.1	97.5
	kW	8.99	8.85	8.72	9.11	8.95	8.82	9.16	9.01	8.88
115	TC	95.7	86.3	78.2	102.1	91.3	83.4	105.7	95.8	88.2
	SHC	18.6	37.8	57.1	26.4	49.4	73.2	33.6	62.3	87.0
	kW	10.03	9.89	9.79	10.14	9.97	9.86	10.20	10.05	9.94
125	TC	83.7	75.2	67.7	87.5	80.1	72.5	92.1	83.1	75.2
	SHC	7.3	27.4	47.2	12.5	38.8	62.9	20.6	50.3	74.2
	kW	11.17	11.06	10.98	11.23	11.13	11.03	11.30	11.17	11.07

50HC12 (10 TONS) – UNIT WITH HUMIDI–MIZER SYSTEM IN HOT GAS REHEAT MODE										
Temp (F) Air Ent Condenser (Edb)		AIR ENTERING EVAPORATOR – Ewb (F)								
		75 Dry Bulb 62.5 Wet Bulb (50% Relative)			75 Dry Bulb 64 Wet Bulb (56% Relative)			75 Dry Bulb 65.3 Wet Bulb (60% Relative)		
		Air Entering Evaporator – Cfm								
		3000	4000	5000	3000	4000	5000	3000	4000	5000
80	TC	45.83	49.08	50.90	47.62	50.84	52.72	49.16	52.45	54.33
	SHC	4.82	14.45	24.36	–1.60	6.39	14.99	–7.27	–0.59	6.73
	kW	7.33	7.46	7.55	7.40	7.53	7.62	7.46	7.60	7.68
75	TC	48.52	51.89	53.81	50.31	53.74	55.73	51.92	55.47	57.43
	SHC	7.37	17.08	27.08	0.95	9.11	17.81	–4.65	2.25	9.63
	kW	6.93	7.07	7.15	7.00	7.14	7.23	7.06	7.21	7.29
70	TC	51.15	54.66	56.69	52.96	56.60	58.66	54.65	58.34	60.43
	SHC	9.87	19.70	29.80	3.47	11.82	20.57	–2.05	4.98	12.45
	kW	6.56	6.69	6.78	6.62	6.76	6.85	6.68	6.83	6.91
60	TC	52.89	56.41	59.04	55.63	59.10	62.68	58.00	62.31	64.50
	SHC	11.58	21.44	32.07	6.06	14.26	24.41	1.21	8.78	16.36
	kW	6.60	6.80	6.72	6.53	6.71	6.51	6.46	6.48	6.58
50	TC	55.13	59.53	62.75	58.04	62.61	64.69	59.64	64.34	66.41
	SHC	13.77	24.43	35.63	8.41	17.62	26.38	2.80	10.77	18.23
	kW	6.57	6.53	6.44	6.43	6.41	6.54	6.52	6.50	6.64
40	TC	57.08	60.11	64.35	58.75	63.63	65.58	60.16	65.23	69.04
	SHC	15.67	25.05	33.55	9.13	18.64	27.28	3.34	11.67	20.76
	kW	6.51	6.77	6.62	6.64	6.54	6.70	6.75	6.65	6.50

LEGEND

Edb – Entering Dry–Bulb
Ewb – Entering Wet–Bulb
kW – Compressor Motor Power Input
ldb – Leaving Dry–Bulb
lwb – Leaving Wet–Bulb
SHC – Sensible Heat Capacity (1000 Btuh) Gross
TC – Total Capacity (1000 Btuh) Gross

NOTES:

1. Direct interpolation is permissible. Do not extrapolate.
2. The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet–bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

50HC*D14				Ambient Temperature													
				85			95			105			115			125		
				EA (dB)			EA (dB)			EA (dB)			EA (dB)			EA (dB)		
				75	80	85	75	80	85	75	80	85	75	80	85	75	80	85
3750 Cfm	EA (wB)	58	TC	131.9	131.9	149.8	127.0	127.0	144.1	121.5	121.5	137.9	115.4	115.4	131.0	108.7	108.7	123.4
			SHC	114.1	131.9	149.8	109.8	127.0	144.1	105.0	121.5	137.9	99.8	115.4	131.0	94.0	108.7	123.4
		62	TC	138.0	138.0	143.4	131.7	131.7	140.4	124.7	124.7	136.9	117.1	117.1	133.1	109.4	109.4	127.4
			SHC	103.4	123.4	143.4	100.4	120.4	140.4	97.1	117.0	136.9	93.4	113.2	133.1	88.8	108.1	127.4
		67	TC	151.5	151.5	151.5	144.5	144.5	144.5	136.9	136.9	136.9	128.5	128.5	128.5	119.4	119.4	119.4
			SHC	85.1	105.2	125.3	82.1	102.2	122.3	78.9	99.0	119.0	75.4	95.5	115.5	71.7	91.8	111.8
		72	TC	166.1	166.1	166.1	158.5	158.5	158.5	150.2	150.2	150.2	141.1	141.1	141.1	131.3	131.3	131.3
			SHC	66.2	86.5	106.7	63.3	83.6	103.8	60.2	80.4	100.6	56.8	76.9	97.1	53.1	73.3	93.4
		76	TC	–	178.6	178.6	–	170.5	170.5	–	161.6	161.6	–	151.8	151.8	–	141.3	141.3
			SHC	–	71.1	91.8	–	68.3	88.9	–	65.2	85.8	–	61.8	82.5	–	58.2	78.7
4375 Cfm	EA (wB)	58	TC	139.2	139.2	158.0	133.8	133.8	151.9	127.9	127.9	145.2	121.3	121.3	137.7	114.1	114.1	129.5
			SHC	120.4	139.2	158.0	115.7	133.8	151.9	110.6	127.9	145.2	104.9	121.3	137.7	98.7	114.1	129.5
		62	TC	142.4	142.4	157.6	135.8	135.8	154.1	128.9	128.9	149.2	121.7	121.7	142.9	114.2	114.2	134.8
			SHC	111.5	134.5	157.6	108.2	131.2	154.1	104.2	126.7	149.2	99.4	121.1	142.9	93.6	114.2	134.8
		67	TC	155.8	155.8	155.8	148.5	148.5	148.5	140.4	140.4	140.4	131.6	131.6	131.6	122.1	122.1	123.0
			SHC	90.3	113.6	136.8	87.3	110.5	133.8	84.0	107.2	130.5	80.4	103.6	126.8	76.6	99.8	123.0
		72	TC	170.6	170.6	170.6	162.7	162.7	162.7	154.0	154.0	154.0	144.4	144.4	144.4	134.1	134.1	134.1
			SHC	68.5	91.9	115.3	65.5	88.9	112.3	62.3	85.6	109.0	58.8	82.1	105.4	55.1	78.4	101.7
		76	TC	–	183.3	183.3	–	174.8	174.8	–	165.4	165.4	–	155.2	155.2	–	144.3	144.3
			SHC	–	74.3	98.3	–	71.3	95.2	–	68.0	91.9	–	64.6	88.3	–	60.9	84.5
5000 Cfm	EA (wB)	58	TC	145.3	145.3	164.9	139.5	139.5	158.4	133.2	133.2	151.2	126.2	126.2	143.2	118.5	118.5	134.5
			SHC	125.6	145.3	164.9	120.7	139.5	158.4	115.2	133.2	151.2	109.1	126.2	143.2	102.5	118.5	134.5
		62	TC	146.5	146.5	169.3	140.2	140.2	163.9	133.3	133.3	157.4	126.3	126.3	149.1	118.6	118.6	140.0
			SHC	118.3	143.8	169.3	114.1	139.0	163.9	109.3	133.3	157.4	103.5	126.3	149.1	97.2	118.6	140.0
		67	TC	159.1	159.1	159.1	151.5	151.5	151.5	143.1	143.1	143.1	134.0	134.0	137.7	124.2	124.2	133.7
			SHC	95.2	121.6	148.0	92.2	118.5	144.9	88.8	115.1	141.5	85.1	111.4	137.7	81.3	107.5	133.7
		72	TC	174.1	174.1	174.1	165.9	165.9	165.9	156.8	156.8	156.8	146.9	146.9	146.9	136.2	136.2	136.2
			SHC	70.5	97.0	123.5	67.5	94.0	120.5	64.2	90.7	117.1	60.6	87.1	113.5	56.9	83.3	109.6
		76	TC	–	187.0	187.0	–	178.1	178.1	–	168.3	168.3	–	157.7	157.7	–	146.4	146.4
			SHC	–	77.0	104.0	–	74.0	100.9	–	70.7	97.5	–	67.2	93.9	–	63.4	90.0
5625 Cfm	EA (wB)	58	TC	150.4	150.4	170.8	144.4	144.4	163.9	137.7	137.7	156.3	130.3	130.3	147.9	122.2	122.2	138.7
			SHC	130.1	150.4	170.8	124.9	144.4	163.9	119.0	137.7	156.3	112.7	130.3	147.9	105.7	122.2	138.7
		62	TC	150.7	150.7	177.9	144.5	144.5	170.6	137.8	137.8	162.7	130.4	130.4	153.9	122.3	122.3	144.4
			SHC	123.5	150.7	177.9	118.4	144.5	170.6	112.9	137.8	162.7	106.8	130.4	153.9	100.2	122.3	144.4
		67	TC	161.7	161.7	161.7	153.9	153.9	155.6	145.3	145.3	152.1	135.9	135.9	148.2	125.9	125.9	143.9
			SHC	100.0	129.4	158.8	96.8	126.2	155.6	93.4	122.7	152.1	89.7	118.9	148.2	85.6	114.8	143.9
		72	TC	176.9	176.9	176.9	168.3	168.3	168.3	159.0	159.0	159.0	148.8	148.8	148.8	137.9	137.9	137.9
			SHC	72.3	101.9	131.5	69.3	98.8	128.4	66.0	95.5	125.0	62.4	91.8	121.3	58.6	88.0	117.4
		76	TC	–	189.8	189.8	–	180.6	180.6	–	170.6	170.6	–	159.7	159.7	–	148.1	148.1
			SHC	–	79.6	109.7	–	76.5	106.5	–	73.2	103.0	–	69.6	99.2	–	65.7	95.1
6250 Cfm	EA (wB)	58	TC	154.8	154.8	175.8	148.5	148.5	168.6	141.5	141.5	160.6	133.7	133.7	151.8	125.3	125.3	142.3
			SHC	133.9	154.8	175.8	128.4	148.5	168.6	122.3	141.5	160.6	115.6	133.7	151.8	108.4	125.3	142.3
		62	TC	155.0	155.0	183.0	148.6	148.6	175.5	141.6	141.6	167.2	133.9	133.9	158.0	125.4	125.4	148.1
			SHC	127.0	155.0	183.0	121.8	148.6	175.5	116.0	141.6	167.2	109.7	133.9	158.0	102.8	125.4	148.1
		67	TC	163.8	163.8	169.3	155.8	155.8	166.0	147.0	147.0	162.3	137.5	137.5	158.1	127.4	127.4	153.3
			SHC	104.5	136.9	169.3	101.3	133.6	166.0	97.8	130.0	162.3	93.9	126.0	158.1	89.7	121.5	153.3
		72	TC	179.1	179.1	179.1	170.3	170.3	170.3	160.8	160.8	160.8	150.3	150.3	150.3	139.2	139.2	139.2
			SHC	74.1	106.7	139.3	71.0	103.6	136.1	67.7	100.2	132.7	64.1	96.5	128.9	60.2	92.6	124.9
		76	TC	–	192.1	192.1	–	182.7	182.7	–	172.3	172.3	–	161.2	161.2	–	149.4	149.4
			SHC	–	82.1	115.1	–	79.0	111.8	–	75.6	108.2	–	71.9	104.3	–	67.9	100.0

* See Minimum–Maximum Airflow Ratings in Table 4. Do not operate outside these limits.

LEGEND:

– – Do not operate
Cfm – Cubic feet per minute (supply air)
EAT(db) – Entering air temperature (dry bulb)
EAT(wb) – Entering air temperature (wet bulb)
SHC – Sensible heat capacity
TC – Total capacity

50HC14 (12.5 TONS) – UNIT WITH HUMIDI–MIZER SYSTEM IN SUBCOOLING MODE										
Temp (F) Air Ent Condenser (Edb)		AIR ENTERING EVAPORATOR – CFM								
		3750			5000			6250		
		Air Entering Evaporator – Ewb (F)								
		72	67	62	72	67	62	72	67	62
75	TC	162.0	147.4	132.8	185.6	167.2	148.8	209.5	187.2	164.9
	SHC	85.0	101.4	117.4	96.9	113.0	129.0	106.5	122.4	138.4
	kW	7.70	7.60	7.30	7.90	7.70	7.40	8.10	7.80	7.50
85	TC	154.8	140.9	127.0	171.7	154.4	137.1	188.8	168.0	147.2
	SHC	70.2	90.4	110.6	83.1	103.2	123.2	93.4	113.4	133.3
	kW	8.80	8.70	8.30	8.90	8.70	8.40	9.10	8.80	8.50
95	TC	147.5	134.4	121.2	157.8	141.6	125.4	168.1	148.8	129.6
	SHC	55.5	79.7	103.9	69.3	93.4	117.5	80.4	104.3	128.3
	kW	9.80	9.70	9.30	9.90	9.70	9.50	10.10	9.80	9.60
105	TC	140.3	127.8	115.4	143.8	128.7	113.7	147.4	129.7	111.9
	SHC	40.9	69.0	97.2	55.5	83.6	111.7	67.3	95.3	111.9
	kW	10.80	10.70	10.30	10.90	10.70	10.50	11.10	10.80	10.60
115	TC	133.0	121.3	109.5	129.9	115.9	101.9	126.7	110.5	94.2
	SHC	26.2	58.3	90.4	41.8	73.8	101.9	54.2	86.2	94.2
	kW	11.80	11.70	11.40	11.90	11.70	11.60	12.10	11.80	11.70
125	TC	125.8	114.7	103.7	115.9	103.1	90.2	106.0	91.3	76.6
	SHC	11.5	47.6	83.7	28.0	64.0	90.2	41.2	77.2	76.6
	kW	12.80	12.70	12.40	12.90	12.70	12.60	13.10	12.80	12.70

50HC14 (12.5 TONS) – UNIT WITH HUMIDI–MIZER SYSTEM IN HOT GAS REHEAT MODE										
Temp (F) Air Ent Condenser (Edb)		AIR ENTERING EVAPORATOR – Ewb (F)								
		75 Dry Bulb			75 Dry Bulb			75 Dry Bulb		
		62.5 Wet Bulb			64 Wet Bulb			65.3 Wet Bulb		
		(50% Relative)			(56% Relative)			(60% Relative)		
		Air Entering Evaporator – Cfm								
		3750	5000	6250	3750	5000	6250	3750	5000	6250
80	TC	57.70	60.00	66.40	60.20	66.80	69.50	64.30	69.10	72.30
	SHC	21.30	27.00	44.00	12.80	22.40	32.50	8.60	16.20	25.50
	kW	8.08	8.15	8.23	8.28	8.34	8.37	8.36	8.43	8.52
75	TC	59.00	61.20	67.90	61.40	68.10	71.00	65.80	70.70	73.70
	SHC	22.40	28.10	44.80	13.50	23.50	33.70	9.30	17.10	26.30
	kW	8.06	8.13	8.21	8.25	8.31	8.34	8.33	8.40	8.49
70	TC	60.40	62.90	69.20	63.10	69.40	72.50	67.00	72.00	75.00
	SHC	23.20	28.90	46.00	14.50	24.30	34.40	10.30	17.90	27.40
	kW	8.04	8.11	8.18	8.23	8.29	8.32	8.31	8.38	8.47
60	TC	63.40	65.70	72.00	65.90	72.30	75.20	70.00	74.80	77.80
	SHC	24.80	30.50	47.80	16.10	25.90	36.00	11.90	19.60	29.00
	kW	8.00	8.07	8.15	8.20	8.25	8.29	8.28	8.35	8.44
50	TC	66.20	68.60	74.30	68.80	74.60	78.20	72.80	77.80	80.70
	SHC	26.60	32.30	49.40	17.70	27.70	37.80	13.50	21.20	30.60
	kW	7.94	8.01	8.08	8.13	8.20	8.23	8.22	8.29	8.38
40	TC	69.10	71.60	77.80	71.80	78.00	81.00	75.70	80.60	83.70
	SHC	28.20	33.90	50.10	19.40	29.30	39.80	15.20	22.90	32.20
	kW	7.90	7.97	8.04	8.09	8.15	8.17	8.16	8.23	8.32

LEGEND

Edb – Entering Dry–Bulb
Ewb – Entering Wet–Bulb
kW – Compressor Motor Power Input
ldb – Leaving Dry–Bulb
lwb – Leaving Wet–Bulb
SHC – Sensible Heat Capacity (1000 Btuh) Gross
TC – Total Capacity (1000 Btuh) Gross

NOTES:

1. Direct interpolation is permissible. Do not extrapolate.
2. The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet–bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

Table 9 – STATIC PRESSURE ADDERS (in. wg) - Factory Options and/or Accessories

Electric Heaters

3–5 TONS										
CFM	600	900	1200	1400	1600	1800	2000	2200	2400	2600
1 Electric Heater Module	0.03	0.05	0.07	0.09	0.09	0.10	0.11	0.11	0.12	0.13
2 Electric Heater Modules	0.13	0.15	0.16	0.16	0.16	0.17	0.17	0.17	0.18	0.18

6 – 10 TONS								
CFM	2250	2500	2750	3000	3250	3500	3750	4000
1 Electric Heater Module	0.031	0.037	0.044	0.051	0.059	0.067	0.076	0.085
2 Electric Heater Modules	0.038	0.046	0.053	0.062	0.070	0.080	0.089	0.100

6 – 10 TONS								
CFM	4250	4500	4750	5000	5250	5500	5750	6000
1 Electric Heater Module	0.095	0.105	0.116	0.127	0.139	0.151	0.164	0.177
2 Electric Heater Modules	0.110	0.122	0.133	0.146	0.158	0.172	0.185	0.200

12.5 TON									
CFM	3750	4063	4375	4688	5000	5313	5625	5938	6250
Vertical - 1 Electric Heater Module	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.04
Vertical - 2 Electric Heater Modules	0.03	0.04	0.04	0.05	0.05	0.06	0.06	0.07	0.08
Horizontal - 1 Electric Heater Module	0.04	0.05	0.05	0.06	0.06	0.07	0.07	0.08	0.09
Horizontal - 2 Electric Heater Modules	0.04	0.04	0.04	0.05	0.05	0.06	0.06	0.07	0.08

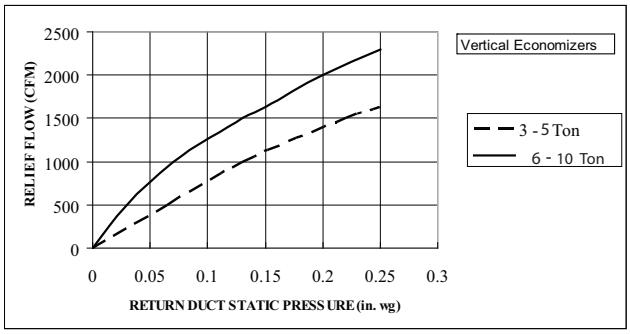
Humidi-MiZer

3–6 TONS									
CFM (in. wg)	1000	1250	1500	1750	2000	2250	2500	2750	3000
3 Tons	0.04	0.052	0.07	–	–	–	–	–	–
4 Tons	–	0.106	0.138	0.172	0.21	–	–	–	–
5 Tons	–	–	0.138	0.172	0.21	0.252	0.30	–	–
6 Tons	–	–	–	0.112	0.125	0.161	0.19	0.22	0.25

7.5–12.5 TONS										
CFM (in. wg)	4000	4250	4500	4750	5000	5250	5500	5750	6000	6250
7.5 Tons	–	–	–	–	–	–	–	–	–	–
8.5 Tons	0.20	0.22	–	–	–	–	–	–	–	–
10 Tons	0.20	0.22	0.24	0.26	0.28	–	–	–	–	–
12.5 Tons	0.06	0.07	0.07	0.08	0.08	0.09	0.10	0.10	0.11	0.12

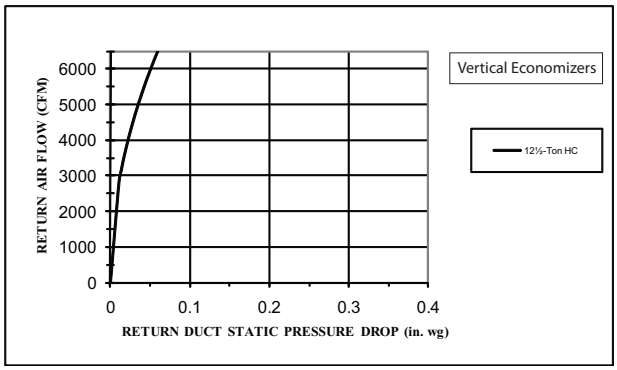
ECONOMIZER, BAROMETRIC RELIEF AND PE PERFORMANCE

Vertical Application



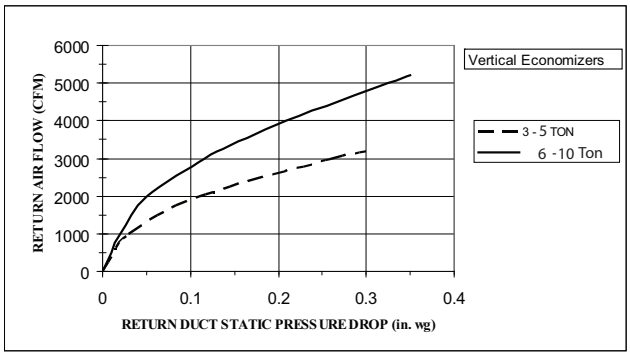
C10475

Fig. 16 - Barometric Relief Flow-Vertical 3-10 Ton



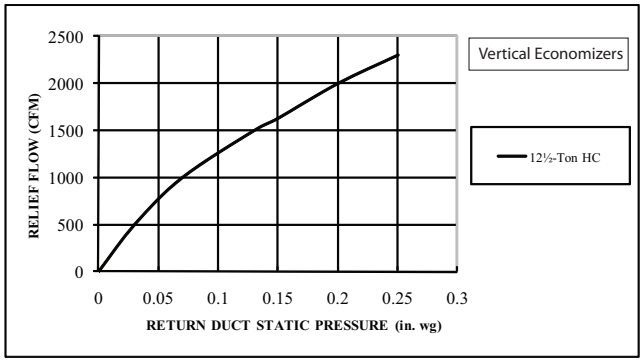
C101005

Fig. 18 - Return Air Pressure Drop-Vertical 12.5 Ton



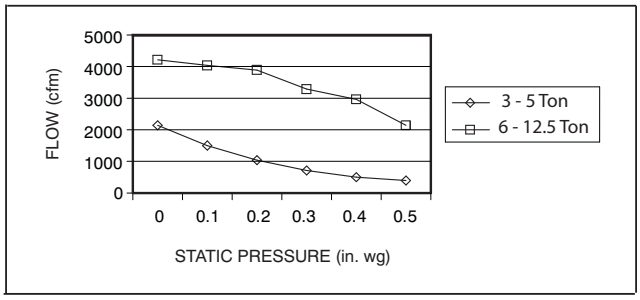
C10477

Fig. 17 - Return Air Pressure Drop-Vertical 3-10 Ton



C101004

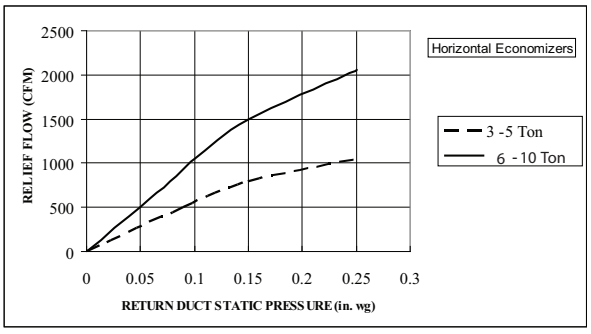
Fig. 19 - Barometric Relief Flow-Vertical 12.5 Ton



C10996

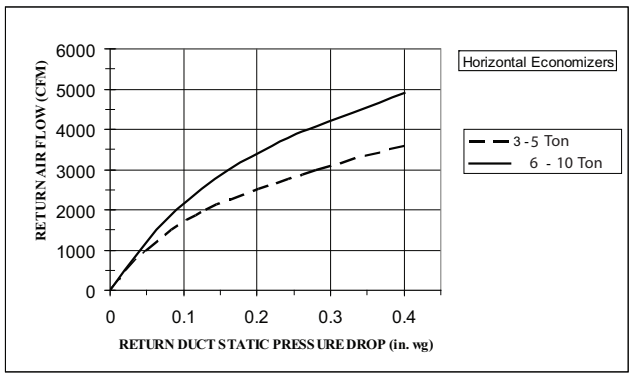
Fig. 20 - Vertical Power Exhaust Performance

Horizontal Application



C10472

Fig. 21 - Barometric Relief Flow-Horizontal 3-10 Ton

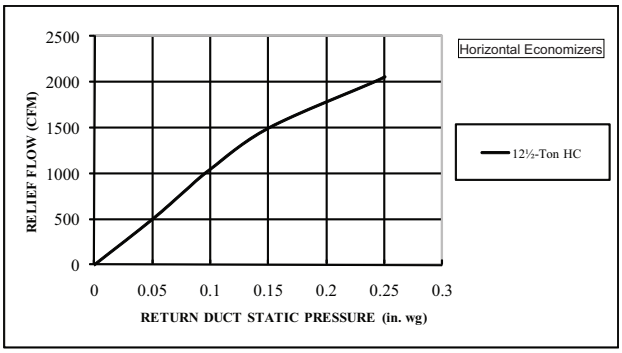


C10474

Fig. 22 - Return Air Pressure Drop-Horizontal 3-10 Ton

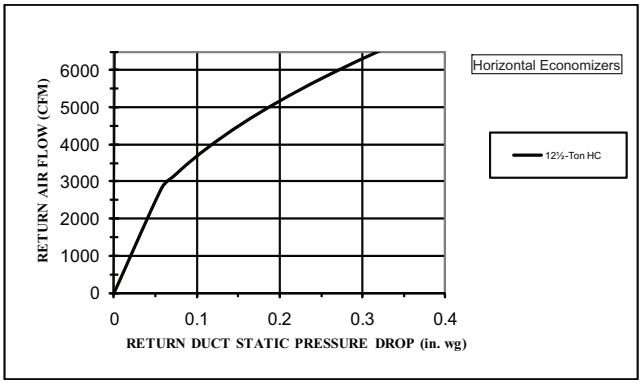
ECONOMIZER, BAROMETRIC RELIEF AND PE PERFORMANCE (cont.)

Horizontal Application (cont.)



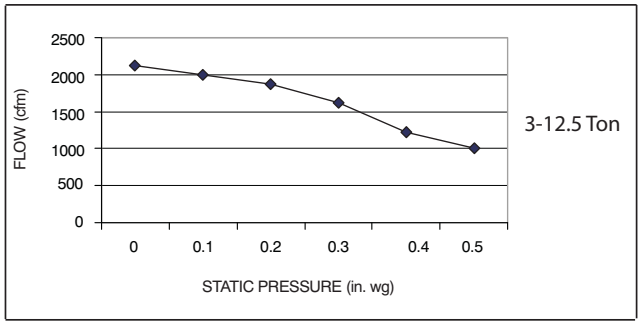
C101002

Fig. 23 - Barometric Relief Flow-Horizontal 12.5 Ton



C101003

Fig. 24 - Return Air Pressure Drop-Horizontal-12.5 Ton



C10995

Fig. 25 - Horizontal Power Exhaust Performance

GENERAL FAN PERFORMANCE NOTES:

1. Interpolation is permissible. Do not extrapolate.
2. External static pressure is the static pressure difference between the return duct and the supply duct plus the static pressure caused by any FIOPs or accessories.
3. Tabular data accounts for pressure loss due to clean filters, unit casing, and wet coils. Factory options and accessories may add static pressure losses. Selection software is available, through your salesperson, to help you select the best motor/drive combination for your application.
4. The Fan Performance tables offer motor/drive recommendations. In cases when two motor/drive combinations would work, Carrier recommended the lower horsepower option.
5. For information on the electrical properties of Carrier motors, please see the Electrical information section of this book.
6. For more information on the performance limits of Carrier motors, see the application data section of this book.
7. The EPACT (Energy Policy Act of 1992) regulates energy requirements for specific types of indoor fan motors. Motors regulated by EPACT include any general purpose, T-frame (three-digit, 143 and larger), single-speed, foot mounted, polyphase, squirrel cage induction motors of NEMA (National Electrical Manufacturers Association) design A and B, manufactured for use in the United States. Ranging from 1 to 200 Hp, these continuous-duty motors operate on 230 and 460 volt, 60 Hz power. If a motor does not fit into these specifications, the motor does not have to be replaced by an EPACT compliant energy-efficient motor. Variable-speed motors are exempt from EPACT compliance requirements.

FAN PERFORMANCE (BELT DRIVE)

Table 10 – 50HC04 3 PHASE NON-HUMIDI-MIZER 3 TON VERTICAL SUPPLY**

CFM	Available External Static Pressure (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
900	**594**	**0.15**	**740**	**0.25**	867	0.37	981	0.52	1084	0.68
975	**618**	**0.17**	**758**	**0.28**	881	0.40	991	0.55	1092	0.71
1050	**642**	**0.19**	777	0.30	896	0.43	1003	0.58	1102	0.75
1125	**668**	**0.22**	797	0.34	912	0.47	1017	0.62	1113	0.79
1200	**695**	**0.25**	818	0.37	930	0.51	1032	0.66	1126	0.83
1275	**722**	**0.29**	841	0.41	949	0.55	1048	0.71	1140	0.88
1350	**750**	**0.33**	864	0.46	968	0.60	1065	0.76	1155	0.93
1425	778	0.37	888	0.50	989	0.65	1083	0.81	1171	0.99
1500	807	0.42	913	0.56	1011	0.71	1103	0.87	1188	1.05

CFM	Available External Static Pressure (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
900	1180	0.86	1269	1.05	1354	1.25	1434	1.47	**1511**	**1.70**
975	1186	0.89	1275	1.08	1358	1.29	1437	1.51	**1513**	**1.74**
1050	1194	0.92	1281	1.12	1363	1.32	1441	1.54	**1516**	**1.78**
1125	1204	0.97	1289	1.16	1370	1.37	1447	1.59	**1520**	**1.82**
1200	1215	1.01	1298	1.21	1378	1.42	1454	1.64	**1526**	**1.87**
1275	1227	1.06	1309	1.26	1387	1.47	1462	1.69	**1533**	**1.92**
1350	1240	1.12	1321	1.32	1397	1.53	**1471**	**1.75**	**1541**	**1.99**
1425	1254	1.18	1333	1.38	1409	1.59	**1481**	**1.82**	**–**	**–**
1500	1270	1.24	1347	1.45	1421	1.66	**1492**	**1.89**	**–**	**–**

NOTE: For more information, see General Fan Performance Notes.
Boldface indicates field–supplied drive is required.
Medium static 770–1175 RPM, 1.2 BHP max
High static 1035–1466 RPM, 2.4 BHP max

Table 11 – 50HC04 3 PHASE HUMIDI-MIZER 3 TON VERTICAL SUPPLY**

CFM	Available External Static Pressure (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
900	594	0.15	740	0.25	867	0.37	981	0.52	1084	0.68
975	618	0.17	758	0.28	881	0.40	991	0.55	1092	0.71
1050	642	0.19	777	0.30	896	0.43	1003	0.58	1102	0.75
1125	668	0.22	797	0.34	912	0.47	1017	0.62	1113	0.79
1200	695	0.25	818	0.37	930	0.51	1032	0.66	1126	0.83
1275	722	0.29	841	0.41	949	0.55	1048	0.71	1140	0.88
1350	750	0.33	864	0.46	968	0.60	1065	0.76	1155	0.93
1425	778	0.37	888	0.50	989	0.65	1083	0.81	1171	0.99
1500	807	0.42	913	0.56	1011	0.71	1103	0.87	1188	1.05

CFM	Available External Static Pressure (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
900	1180	0.86	1269	1.05	1354	1.25	1434	1.47	**1511**	**1.70**
975	1186	0.89	1275	1.08	1358	1.29	1437	1.51	**1513**	**1.74**
1050	1194	0.92	1281	1.12	1363	1.32	1441	1.54	**1516**	**1.78**
1125	1204	0.97	1289	1.16	1370	1.37	1447	1.59	**1520**	**1.82**
1200	1215	1.01	1298	1.21	1378	1.42	1454	1.64	**1526**	**1.87**
1275	1227	1.06	1309	1.26	1387	1.47	1462	1.69	**1533**	**1.92**
1350	1240	1.12	1321	1.32	1397	1.53	**1471**	**1.75**	**1541**	**1.99**
1425	1254	1.18	1333	1.38	1409	1.59	**1481**	**1.82**	**–**	**–**
1500	1270	1.24	1347	1.45	1421	1.66	**1492**	**1.89**	**–**	**–**

NOTE: For more information, see General Fan Performance Notes.
Boldface indicates field–supplied drive is required.
Standard static 560–854 RPM, 1.7 BHP max
Medium static 770–1175 RPM, 1.7 BHP max
High static 1035–1466 RPM, 2.4 BHP max

FAN PERFORMANCE (BELT DRIVE) (cont.)

Table 12 – 50HC04 3 PHASE NON-HUMIDI-MIZER 3 TON HORIZONTAL SUPPLY**

CFM	Available External Static Pressure (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
900	**574**	**0.13**	**707**	**0.23**	817	0.34	913	0.47	999	0.61
975	**597**	**0.15**	**727**	**0.25**	835	0.37	929	0.50	1015	0.64
1050	**621**	**0.18**	**747**	**0.28**	853	0.40	946	0.53	1030	0.68
1125	**646**	**0.20**	**768**	**0.31**	872	0.43	964	0.57	1047	0.72
1200	**671**	**0.23**	790	0.34	892	0.47	982	0.61	1064	0.76
1275	**696**	**0.26**	812	0.38	912	0.51	1001	0.65	1082	0.81
1350	**723**	**0.30**	835	0.42	933	0.55	1020	0.70	1100	0.86
1425	**749**	**0.34**	859	0.46	955	0.60	1040	0.75	1119	0.91
1500	776	0.38	883	0.51	977	0.65	1061	0.80	1138	0.97

CFM	Available External Static Pressure (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
900	1078	0.77	1151	0.93	1220	1.11	1284	1.30	1346	1.49
975	1093	0.80	1165	0.97	1233	1.15	1297	1.33	1358	1.53
1050	1108	0.84	1180	1.01	1247	1.19	1311	1.38	1371	1.58
1125	1123	0.88	1195	1.05	1261	1.23	1325	1.42	1385	1.62
1200	1140	0.92	1210	1.10	1276	1.28	1339	1.47	1399	1.68
1275	1157	0.97	1226	1.15	1292	1.33	1354	1.53	1414	1.73
1350	1174	1.02	1243	1.20	1308	1.39	1370	1.59	1429	1.80
1425	1192	1.08	1260	1.26	1325	1.45	1386	1.65	1444	1.86
1500	1210	1.14	1278	1.33	1342	1.52	1403	1.72	1461	1.93

NOTE: For more information, see General Fan Performance Notes.
Boldface indicates field–supplied drive is required.
Medium static 770–1175 RPM, 1.7 BHP max
High static 1035–1466 RPM, 2.4 BHP max

Table 13 – 50HC04 3 PHASE HUMIDI-MIZER 3 TON HORIZONTAL SUPPLY**

CFM	Available External Static Pressure (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
900	574	0.13	707	0.23	817	0.34	913	0.47	999	0.61
975	597	0.15	727	0.25	835	0.37	929	0.50	1015	0.64
1050	621	0.18	747	0.28	853	0.40	946	0.53	1030	0.68
1125	646	0.20	768	0.31	872	0.43	964	0.57	1047	0.72
1200	671	0.23	790	0.34	892	0.47	982	0.61	1064	0.76
1275	696	0.26	812	0.38	912	0.51	1001	0.65	1082	0.81
1350	723	0.30	835	0.42	933	0.55	1020	0.70	1100	0.86
1425	749	0.34	859	0.46	955	0.60	1040	0.75	1119	0.91
1500	776	0.38	883	0.51	977	0.65	1061	0.80	1138	0.97

CFM	Available External Static Pressure (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
900	1078	0.77	1151	0.93	1220	1.11	1284	1.30	1346	1.49
975	1093	0.80	1165	0.97	1233	1.15	1297	1.33	1358	1.53
1050	1108	0.84	1180	1.01	1247	1.19	1311	1.38	1371	1.58
1125	1123	0.88	1195	1.05	1261	1.23	1325	1.42	1385	1.62
1200	1140	0.92	1210	1.10	1276	1.28	1339	1.47	1399	1.68
1275	1157	0.97	1226	1.15	1292	1.33	1354	1.53	1414	1.73
1350	1174	1.02	1243	1.20	1308	1.39	1370	1.59	1429	1.80
1425	1192	1.08	1260	1.26	1325	1.45	1386	1.65	1444	1.86
1500	1210	1.14	1278	1.33	1342	1.52	1403	1.72	1461	1.93

NOTE: For more information, see General Fan Performance Notes.
Boldface indicates field–supplied drive is required.
Standard static 560–854 RPM, 1.7 BHP max
Medium static 770–1175 RPM, 1.7 BHP max
High static 1035–1466 RPM, 2.4 BHP max

FAN PERFORMANCE (BELT DRIVE) (cont.)

Table 14 – 50HC05** **3 PHASE NON-HUMIDI-MIZER** **4 TON VERTICAL SUPPLY**

CFM	Available External Static Pressure (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1200	**695**	**0.25**	**818**	**0.37**	930	0.51	1032	0.66	1126	0.83
1300	**731**	**0.30**	**849**	**0.43**	955	0.57	1053	0.72	1145	0.89
1400	**769**	**0.36**	**880**	**0.49**	982	0.63	1077	0.79	1166	0.97
1500	**807**	**0.42**	**913**	**0.56**	1011	0.71	1103	0.87	1188	1.05
1600	**847**	**0.49**	948	0.63	1042	0.79	1130	0.96	1213	1.14
1700	**887**	**0.57**	983	0.72	1073	0.88	1158	1.06	1239	1.24
1800	928	0.66	1020	0.82	1106	0.98	1188	1.16	1266	1.35
1900	969	0.76	1057	0.92	1140	1.09	1219	1.28	1295	1.48
2000	1010	0.87	1095	1.04	1175	1.21	1251	1.41	1325	1.61

CFM	Available External Static Pressure (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1200	1215	1.01	1298	1.21	1378	1.42	1454	1.64	1526	1.87
1300	1231	1.08	1313	1.28	1390	1.49	1465	1.71	1536	1.94
1400	1249	1.16	1329	1.36	1405	1.57	1478	1.79	1547	2.03
1500	1270	1.24	1347	1.45	1421	1.66	1492	1.89	1561	2.13
1600	1292	1.34	1367	1.54	1440	1.76	1509	1.99	1576	2.23
1700	1315	1.44	1389	1.65	1459	1.88	1527	2.11	1593	2.35
1800	1341	1.56	1412	1.77	1481	2.00	1547	2.23	1612	2.48
1900	1367	1.68	1437	1.90	1504	2.13	1569	2.37	1632	2.62
2000	1395	1.82	1463	2.04	1528	2.28	1591	2.52	**1653**	**2.77**

NOTE: For more information, see General Fan Performance Notes.
Boldface indicates field–supplied drive is required.
Medium Static 920–1303 RPM, 1.7 BHP max
High Static 1208–1639 RPM, 2.9 BHP max

Table 15 – 50HC05** **3 PHASE HUMIDI-MIZER** **4 TON VERTICAL SUPPLY**

CFM	Available External Static Pressure (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1200	695	0.25	818	0.37	930	0.51	1032	0.66	1126	0.83
1300	731	0.30	849	0.43	955	0.57	1053	0.72	1145	0.89
1400	769	0.36	880	0.49	982	0.63	1077	0.79	1166	0.97
1500	807	0.42	913	0.56	1011	0.71	1103	0.87	1188	1.05
1600	847	0.49	948	0.63	1042	0.79	1130	0.96	1213	1.14
1700	887	0.57	983	0.72	1073	0.88	1158	1.06	1239	1.24
1800	928	0.66	1020	0.82	1106	0.98	1188	1.16	1266	1.35
1900	969	0.76	1057	0.92	1140	1.09	1219	1.28	1295	1.48
2000	1010	0.87	1095	1.04	1175	1.21	1251	1.41	1325	1.61

CFM	Available External Static Pressure (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1200	1215	1.01	1298	1.21	1378	1.42	1454	1.64	1526	1.87
1300	1231	1.08	1313	1.28	1390	1.49	1465	1.71	1536	1.94
1400	1249	1.16	1329	1.36	1405	1.57	1478	1.79	1547	2.03
1500	1270	1.24	1347	1.45	1421	1.66	1492	1.89	1561	2.13
1600	1292	1.34	1367	1.54	1440	1.76	1509	1.99	1576	2.23
1700	1315	1.44	1389	1.65	1459	1.88	1527	2.11	1593	2.35
1800	1341	1.56	1412	1.77	1481	2.00	1547	2.23	1612	2.48
1900	1367	1.68	1437	1.90	1504	2.13	1569	2.37	1632	2.62
2000	1395	1.82	1463	2.04	1528	2.28	1591	2.52	**1653**	**2.77**

NOTE: For more information, see General Fan Performance Notes.
Boldface indicates field–supplied drive is required.
Standard Static 560–854 RPM, 1.7 BHP max
Medium Static 770–1175 RPM, 1.7 BHP max
High Static 1208–1639 RPM, 2.9 BHP max

FAN PERFORMANCE (BELT DRIVE) (cont.)

Table 16 – 50HC05 3 PHASE NON-HUMIDI-MIZER 4 TON HORIZONTAL SUPPLY**

CFM	Available External Static Pressure (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1200	**671**	**0.23**	**790**	**0.34**	**892**	**0.47**	982	0.61	1064	0.76
1300	**705**	**0.28**	**820**	**0.39**	**919**	**0.52**	1007	0.67	1088	0.82
1400	**740**	**0.33**	**851**	**0.45**	947	0.58	1034	0.73	1113	0.89
1500	**776**	**0.38**	**883**	**0.51**	977	0.65	1061	0.80	1138	0.97
1600	**813**	**0.45**	**916**	**0.58**	1007	0.73	1089	0.89	1165	1.05
1700	**851**	**0.52**	949	0.66	1038	0.81	1118	0.97	1192	1.15
1800	**888**	**0.60**	984	0.75	1069	0.90	1148	1.07	1221	1.25
1900	927	0.69	1019	0.84	1102	1.00	1179	1.18	1250	1.36
2000	965	0.78	1054	0.94	1135	1.11	1210	1.29	1280	1.48

CFM	Available External Static Pressure (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1200	1140	0.92	1210	1.10	1276	1.28	1339	1.47	1399	1.68
1300	1162	0.99	1232	1.16	1297	1.35	1360	1.55	1419	1.75
1400	1186	1.06	1254	1.24	1319	1.43	1381	1.63	1439	1.84
1500	1210	1.14	1278	1.33	1342	1.52	1403	1.72	1461	1.93
1600	1236	1.23	1302	1.42	1365	1.62	1425	1.82	1483	2.04
1700	1262	1.33	1328	1.52	1390	1.72	1449	1.93	1505	2.15
1800	1289	1.44	1354	1.63	1415	1.84	1473	2.05	1529	2.27
1900	1317	1.55	1380	1.75	1441	1.96	1498	2.18	1553	2.41
2000	1345	1.68	1408	1.88	1467	2.10	1524	2.32	1579	2.55

NOTE: For more information, see General Fan Performance Notes.
Boldface indicates field–supplied drive is required.
Medium Static 920–1303 RPM, 1.7 BHP max
High Static 1208–1639 RPM, 2.9 max BHP

Table 17 – 50HC05 3 PHASE HUMIDI-MIZER 4 TON HORIZONTAL SUPPLY**

CFM	Available External Static Pressure (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1200	671	0.23	790	0.34	892	0.47	982	0.61	1064	0.76
1300	705	0.28	820	0.39	919	0.52	1007	0.67	1088	0.82
1400	740	0.33	851	0.45	947	0.58	1034	0.73	1113	0.89
1500	776	0.38	883	0.51	977	0.65	1061	0.80	1138	0.97
1600	813	0.45	916	0.58	1007	0.73	1089	0.89	1165	1.05
1700	851	0.52	949	0.66	1038	0.81	1118	0.97	1192	1.15
1800	888	0.60	984	0.75	1069	0.90	1148	1.07	1221	1.25
1900	927	0.69	1019	0.84	1102	1.00	1179	1.18	1250	1.36
2000	965	0.78	1054	0.94	1135	1.11	1210	1.29	1280	1.48

CFM	Available External Static Pressure (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1200	1140	0.92	1210	1.10	1276	1.28	1339	1.47	1399	1.68
1300	1162	0.99	1232	1.16	1297	1.35	1360	1.55	1419	1.75
1400	1186	1.06	1254	1.24	1319	1.43	1381	1.63	1439	1.84
1500	1210	1.14	1278	1.33	1342	1.52	1403	1.72	1461	1.93
1600	1236	1.23	1302	1.42	1365	1.62	1425	1.82	1483	2.04
1700	1262	1.33	1328	1.52	1390	1.72	1449	1.93	1505	2.15
1800	1289	1.44	1354	1.63	1415	1.84	1473	2.05	1529	2.27
1900	1317	1.55	1380	1.75	1441	1.96	1498	2.18	1553	2.41
2000	1345	1.68	1408	1.88	1467	2.10	1524	2.32	1579	2.55

NOTE: For more information, see General Fan Performance Notes.
Boldface indicates field–supplied drive is required.
Standard Static 560–854 RPM, 1.7 BHP max
Medium Static 770–1175 RPM, 1.7 BHP max
High Static 1208–1639 RPM, 2.9 BHP max

FAN PERFORMANCE (BELT DRIVE) (cont.)

Table 18 – 50HC06 3 PHASE NON-HUMIDI-MIZER 5 TON VERTICAL SUPPLY**

CFM	Available External Static Pressure (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1500	**794**	**0.41**	**902**	**0.55**	**993**	**0.69**	1074	0.85	1147	1.00
1625	**840**	**0.49**	**945**	**0.64**	**1034**	**0.80**	1113	0.96	1185	1.13
1750	**888**	**0.59**	**988**	**0.75**	1075	0.92	1153	1.09	1223	1.26
1875	**936**	**0.70**	**1033**	**0.87**	1117	1.05	1193	1.23	1263	1.41
2000	**984**	**0.82**	1078	1.00	1160	1.19	1235	1.39	1303	1.58
2125	**1033**	**0.96**	1124	1.15	1204	1.35	1277	1.56	1343	1.76
2250	1083	1.11	1170	1.32	1248	1.53	1319	1.74	1385	1.96
2375	1133	1.28	1217	1.50	1293	1.72	1363	1.95	1427	2.17
2500	1183	1.47	1265	1.70	1339	1.93	1406	2.17	1470	2.41

CFM	Available External Static Pressure (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1500	1214	1.16	1277	1.33	1336	1.50	1392	1.67	1445	1.85
1625	1251	1.30	1313	1.47	1371	1.65	1427	1.83	1479	2.02
1750	1289	1.44	1350	1.63	1407	1.81	1462	2.01	1514	2.20
1875	1327	1.60	1387	1.80	1444	1.99	1498	2.19	1550	2.40
2000	1366	1.78	1426	1.98	1482	2.19	1535	2.40	1586	2.61
2125	1406	1.97	1464	2.18	1520	2.40	1573	2.62	1623	2.84
2250	1446	2.18	1504	2.40	1559	2.62	1611	2.85	**1661**	**3.09**
2375	1487	2.40	1544	2.63	1598	2.87	**1650**	**3.11**	–	–
2500	1529	2.64	1585	2.89	**1638**	**3.13**	–	–	–	–

NOTE: For more information, see General Fan Performance Notes.
Boldface indicates field–supplied drive is required.

Medium Static 1035 – 1466 RPM, 2.4 BHP max
High Static 1303 – 1687 RPM, 2.9 max BHP

Table 19 – 50HC06 3 PHASE HUMIDI-MIZER 5 TON VERTICAL SUPPLY**

CFM	Available External Static Pressure (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1500	794	0.41	902	0.55	993	0.69	1074	0.85	1147	1.00
1625	840	0.49	945	0.64	1034	0.80	1113	0.96	1185	1.13
1750	888	0.59	988	0.75	1075	0.92	1153	1.09	1223	1.26
1875	936	0.70	1033	0.87	1117	1.05	1193	1.23	1263	1.41
2000	984	0.82	1078	1.00	1160	1.19	1235	1.39	1303	1.58
2125	1033	0.96	1124	1.15	1204	1.35	1277	1.56	1343	1.76
2250	1083	1.11	1170	1.32	1248	1.53	1319	1.74	1385	1.96
2375	1133	1.28	1217	1.50	1293	1.72	1363	1.95	1427	2.17
2500	1183	1.47	1265	1.70	1339	1.93	1406	2.17	1470	2.41

CFM	Available External Static Pressure (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1500	1214	1.16	1277	1.33	1336	1.50	1392	1.67	1445	1.85
1625	1251	1.30	1313	1.47	1371	1.65	1427	1.83	1479	2.02
1750	1289	1.44	1350	1.63	1407	1.81	1462	2.01	1514	2.20
1875	1327	1.60	1387	1.80	1444	1.99	1498	2.19	1550	2.40
2000	1366	1.78	1426	1.98	1482	2.19	1535	2.40	1586	2.61
2125	1406	1.97	1464	2.18	1520	2.40	1573	2.62	1623	2.84
2250	1446	2.18	1504	2.40	1559	2.62	1611	2.85	**1661**	**3.09**
2375	1487	2.40	1544	2.63	1598	2.87	**1650**	**3.11**	–	–
2500	1529	2.64	1585	2.89	**1638**	**3.13**	–	–	–	–

NOTE: For more information, see General Fan Performance Notes.
Boldface indicates field–supplied drive is required.

Standard Static 770–1175 RPM, 1.7 BHP max
Medium Static 1035–1466 RPM, 2.4 BHP max
High Static 1303–1687 RPM, 2.9 BHP max

FAN PERFORMANCE (BELT DRIVE) (cont.)

Table 20 – 50HC06 3 PHASE NON-HUMIDI-MIZER 5 TON HORIZONTAL SUPPLY**

CFM	Available External Static Pressure (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1500	**725**	**0.33**	**840**	**0.46**	937	0.60	1023	0.75	1101	0.90
1625	**765**	**0.40**	**876**	**0.54**	970	0.68	1054	0.84	1131	1.00
1750	**806**	**0.48**	**912**	**0.63**	1004	0.78	1087	0.94	1162	1.11
1875	**847**	**0.57**	**950**	**0.72**	1039	0.88	1120	1.05	1194	1.23
2000	**889**	**0.66**	**988**	**0.83**	1075	1.00	1154	1.18	1226	1.36
2125	**931**	**0.78**	**1027**	**0.95**	1112	1.13	1189	1.31	1260	1.50
2250	**974**	**0.90**	1067	1.08	1149	1.27	1224	1.46	1294	1.66
2375	**1018**	**1.03**	1107	1.23	1187	1.43	1261	1.63	1329	1.84
2500	1061	1.19	1148	1.39	1226	1.59	1297	1.81	1364	2.02

CFM	Available External Static Pressure (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1500	1172	1.06	1239	1.23	1302	1.40	1361	1.58	1418	1.77
1625	1201	1.16	1267	1.34	1329	1.52	1388	1.71	1444	1.90
1750	1231	1.28	1296	1.46	1358	1.65	1416	1.84	1472	2.04
1875	1262	1.41	1326	1.60	1387	1.79	1445	1.99	1499	2.20
2000	1294	1.55	1357	1.74	1417	1.95	1474	2.15	1528	2.36
2125	1326	1.70	1388	1.90	1447	2.11	1504	2.33	1557	2.55
2250	1359	1.87	1420	2.08	1479	2.29	1534	2.51	1587	2.74
2375	1393	2.05	1453	2.27	1511	2.49	1566	2.72	**1618**	**2.95**
2500	1427	2.24	1487	2.47	1543	2.70	**1597**	**2.94**	**1649**	**3.18**

NOTE: For more information, see General Fan Performance Notes.
Boldface indicates field–supplied drive is required.

Medium Static 1035 – 1466 RPM, 2.4 BHP max
High Static 1303 – 1687 RPM, 2.9 BHP max

Table 21 – 50HC06 3 PHASE HUMIDI-MIZER 5 TON HORIZONTAL SUPPLY**

CFM	Available External Static Pressure (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1500	725	0.33	840	0.46	937	0.60	1023	0.75	1101	0.90
1625	765	0.40	876	0.54	970	0.68	1054	0.84	1131	1.00
1750	806	0.48	912	0.63	1004	0.78	1087	0.94	1162	1.11
1875	847	0.57	950	0.72	1039	0.88	1120	1.05	1194	1.23
2000	889	0.66	988	0.83	1075	1.00	1154	1.18	1226	1.36
2125	931	0.78	1027	0.95	1112	1.13	1189	1.31	1260	1.50
2250	974	0.90	1067	1.08	1149	1.27	1224	1.46	1294	1.66
2375	1018	1.03	1107	1.23	1187	1.43	1261	1.63	1329	1.84
2500	1061	1.19	1148	1.39	1226	1.59	1297	1.81	1364	2.02

CFM	Available External Static Pressure (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1500	1172	1.06	1239	1.23	1302	1.40	1361	1.58	1418	1.77
1625	1201	1.16	1267	1.34	1329	1.52	1388	1.71	1444	1.90
1750	1231	1.28	1296	1.46	1358	1.65	1416	1.84	1472	2.04
1875	1262	1.41	1326	1.60	1387	1.79	1445	1.99	1499	2.20
2000	1294	1.55	1357	1.74	1417	1.95	1474	2.15	1528	2.36
2125	1326	1.70	1388	1.90	1447	2.11	1504	2.33	1557	2.55
2250	1359	1.87	1420	2.08	1479	2.29	1534	2.51	1587	2.74
2375	1393	2.05	1453	2.27	1511	2.49	1566	2.72	1618	2.95
2500	1427	2.24	1487	2.47	1543	2.70	1597	2.94	**1649**	**3.18**

NOTE: For more information, see General Fan Performance Notes.
Boldface indicates field–supplied drive is required.

Standard Static 770 – 1175 RPM 1.7 BHP max
Medium Static 1035–1466 2.4 BHP max
High Static 1303–1687 2.9 BHP max

FAN PERFORMANCE (BELT DRIVE) (cont.)

Table 22 – 50HC07** **3 PHASE** **6 TON VERTICAL SUPPLY**

CFM	Available External Static Pressure (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1800	446	0.33	534	0.50	609	0.70	676	0.91	736	1.14
1950	467	0.39	552	0.57	625	0.77	690	0.99	750	1.23
2100	489	0.45	571	0.64	642	0.86	706	1.08	764	1.33
2250	511	0.53	591	0.73	660	0.95	722	1.19	779	1.44
2400	534	0.61	611	0.82	678	1.05	739	1.30	795	1.56
2550	558	0.71	631	0.93	697	1.17	756	1.42	811	1.69
2700	581	0.81	652	1.04	716	1.29	774	1.55	828	1.83
2850	605	0.93	674	1.17	736	1.43	792	1.70	845	1.98
3000	630	1.06	696	1.31	756	1.58	811	1.86	863	2.15

CFM	Available External Static Pressure (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1800	791	1.39	843	1.65	892	1.93	938	2.22	981	2.53
1950	804	1.49	855	1.76	903	2.04	949	2.34	992	2.65
2100	818	1.59	868	1.87	915	2.16	961	2.46	1003	2.78
2250	832	1.71	882	1.99	928	2.29	973	2.59	1015	2.92
2400	847	1.83	896	2.12	942	2.43	986	2.74	1028	3.07
2550	862	1.97	910	2.27	956	2.58	999	2.90	1041	3.23
2700	878	2.12	926	2.42	971	2.74	1013	3.07	1055	3.41
2850	895	2.28	941	2.59	986	2.92	1028	3.25	1069	3.60
3000	912	2.46	958	2.78	1001	3.11	1043	3.45	1083	3.80

NOTE: For more information, see General Fan Performance Notes.

Standard static 489–747 RPM, 1.7 BHP max
Medium static 733–949 RPM, 2.9 BHP max
High static 909–1102 RPM, 4.7 BHP max

Table 23 – 50HC07** **3 PHASE** **6 TON HORIZONTAL SUPPLY**

CFM	Available External Static Pressure (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1800	415	0.28	510	0.46	588	0.65	655	0.85	715	1.08
1950	431	0.32	525	0.51	601	0.71	668	0.93	727	1.16
2100	448	0.38	540	0.57	615	0.78	681	1.01	740	1.25
2250	465	0.43	555	0.64	629	0.86	694	1.10	753	1.34
2400	483	0.49	571	0.71	644	0.94	708	1.19	766	1.45
2550	501	0.56	587	0.79	659	1.04	722	1.29	779	1.56
2700	519	0.64	603	0.88	674	1.14	737	1.40	793	1.68
2850	538	0.72	620	0.98	689	1.24	751	1.52	807	1.80
3000	557	0.82	637	1.08	705	1.36	766	1.64	822	1.94

CFM	Available External Static Pressure (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1800	770	1.31	821	1.56	868	1.82	913	2.09	955	2.36
1950	782	1.40	832	1.66	879	1.92	924	2.20	966	2.49
2100	794	1.50	844	1.76	891	2.03	935	2.32	977	2.61
2250	806	1.60	856	1.87	903	2.15	947	2.45	988	2.75
2400	819	1.71	868	1.99	915	2.28	958	2.58	1000	2.89
2550	832	1.83	881	2.12	927	2.42	971	2.73	1012	3.05
2700	845	1.96	894	2.26	940	2.57	983	2.88	1024	3.21
2850	859	2.10	907	2.41	953	2.72	995	3.05	1036	3.38
3000	873	2.24	921	2.56	966	2.89	1008	3.22	1049	3.56

NOTE: For more information, see General Fan Performance Notes.

Standard static 489–747 RPM, 1.7 BHP max
Medium static 733–949 RPM, 2.9 BHP max
High static 909–1102 RPM, 4.7 BHP max

FAN PERFORMANCE (BELT DRIVE) (cont.)

Table 24 – 50HC08** **3 PHASE** **7.5 TON VERTICAL SUPPLY**

CFM	Available External Static Pressure (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2250	482	0.36	577	0.51	659	0.66	732	0.82	799	0.98
2438	505	0.43	597	0.59	676	0.75	748	0.92	813	1.09
2625	529	0.51	617	0.68	694	0.85	764	1.03	827	1.22
2813	554	0.60	638	0.78	713	0.97	781	1.16	843	1.35
3000	579	0.70	660	0.89	732	1.09	799	1.29	860	1.50
3188	604	0.81	683	1.02	753	1.23	817	1.44	877	1.65
3375	630	0.94	706	1.15	774	1.37	836	1.60	895	1.82
3563	657	1.08	729	1.31	795	1.54	856	1.77	913	2.01
3750	683	1.23	753	1.47	817	1.71	877	1.96	933	2.21

CFM	Available External Static Pressure (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2250	860	1.14	917	1.31	971	1.48	1022	1.66	1071	1.84
2438	873	1.27	929	1.45	983	1.63	1033	1.81	1081	2.00
2625	887	1.40	942	1.59	995	1.78	1045	1.98	1092	2.18
2813	901	1.55	956	1.75	1008	1.95	1057	2.15	1104	2.36
3000	917	1.70	970	1.91	1021	2.13	1070	2.34	1117	2.56
3188	933	1.87	986	2.09	1036	2.32	1084	2.54	1130	2.77
3375	950	2.05	1002	2.29	1051	2.52	1098	2.76	1144	3.00
3563	967	2.25	1018	2.49	1067	2.74	1113	2.99	1158	3.24
3750	985	2.46	1035	2.71	1083	2.97	1129	3.23	1173	3.49

NOTE: For more information, see General Fan Performance Notes.

Standard static 518–733 RPM, 1.7 BHP max
Medium static 690–936 RPM, 2.4 BHP max
High static 838–1084 RPM, 3.7 BHP max

Table 25 – 50HC08** **3 PHASE** **7.5 TON HORIZONTAL SUPPLY**

CFM	Available External Static Pressure (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2250	433	0.29	518	0.41	596	0.54	667	0.67	733	0.81
2438	454	0.35	535	0.48	609	0.61	677	0.75	741	0.90
2625	477	0.42	553	0.55	624	0.69	689	0.84	751	1.00
2813	500	0.49	572	0.64	640	0.78	703	0.94	763	1.10
3000	523	0.58	592	0.73	657	0.88	718	1.05	775	1.22
3188	547	0.68	613	0.83	675	1.00	733	1.17	789	1.34
3375	571	0.78	634	0.95	694	1.12	750	1.30	804	1.48
3563	596	0.90	656	1.07	713	1.25	768	1.44	820	1.63
3750	621	1.03	679	1.21	734	1.40	786	1.59	837	1.79

CFM	Available External Static Pressure (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2250	795	0.96	854	1.11	910	1.27	963	1.43	1014	1.60
2438	802	1.05	859	1.21	913	1.38	966	1.55	1016	1.72
2625	810	1.16	865	1.32	919	1.49	970	1.67	1019	1.85
2813	819	1.27	874	1.44	925	1.62	975	1.80	1023	1.99
3000	830	1.39	883	1.57	934	1.76	982	1.95	1029	2.14
3188	843	1.53	894	1.71	943	1.90	990	2.10	1036	2.30
3375	856	1.67	905	1.86	953	2.06	1000	2.27	1045	2.48
3563	870	1.83	918	2.03	965	2.23	1010	2.44	1054	2.66
3750	885	1.99	932	2.20	978	2.42	1022	2.64	1065	2.86

NOTE: For more information, see General Fan Performance Notes.

Standard static 518–733 RPM, 1.7 BHP max
Medium static 690–936 RPM, 2.4 BHP max
High static 838–1084 RPM, 3.7 BHP max

FAN PERFORMANCE (BELT DRIVE) (cont.)

Table 26 – 50HC09** **3 PHASE** **8.5 TON VERTICAL SUPPLY**

CFM	Available External Static Pressure (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2250	482	0.36	577	0.51	659	0.66	732	0.82	799	0.98
2438	505	0.43	597	0.59	676	0.75	748	0.92	813	1.09
2625	529	0.51	617	0.68	694	0.85	764	1.03	827	1.22
2813	554	0.60	638	0.78	713	0.97	781	1.16	843	1.35
3000	579	0.70	660	0.89	732	1.09	799	1.29	860	1.50
3188	604	0.81	683	1.02	753	1.23	817	1.44	877	1.65
3375	630	0.94	706	1.15	774	1.37	836	1.60	895	1.82
3563	657	1.08	729	1.31	795	1.54	856	1.77	913	2.01
3750	683	1.23	753	1.47	817	1.71	877	1.96	933	2.21

CFM	Available External Static Pressure (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2250	860	1.14	917	1.31	971	1.48	1022	1.66	1071	1.84
2438	873	1.27	929	1.45	983	1.63	1033	1.81	1081	2.00
2625	887	1.40	942	1.59	995	1.78	1045	1.98	1092	2.18
2813	901	1.55	956	1.75	1008	1.95	1057	2.15	1104	2.36
3000	917	1.70	970	1.91	1021	2.13	1070	2.34	1117	2.56
3188	933	1.87	986	2.09	1036	2.32	1084	2.54	1130	2.77
3375	950	2.05	1002	2.29	1051	2.52	1098	2.76	1144	3.00
3563	967	2.25	1018	2.49	1067	2.74	1113	2.99	1158	3.24
3750	985	2.46	1035	2.71	1083	2.97	1129	3.23	1173	3.49

NOTE: For more information, see General Fan Performance Notes.

Standard static 518–733 RPM, 1.7 BHP max
Medium static 690–936 RPM, 2.4 BHP max
High static 838–1084 RPM, 3.7 BHP max

Table 27 – 50HC09** **3 PHASE** **8.5 TON HORIZONTAL SUPPLY**

CFM	Available External Static Pressure (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2250	433	0.29	518	0.41	596	0.54	667	0.67	733	0.81
2438	454	0.35	535	0.48	609	0.61	677	0.75	741	0.90
2625	477	0.42	553	0.55	624	0.69	689	0.84	751	1.00
2813	500	0.49	572	0.64	640	0.78	703	0.94	763	1.10
3000	523	0.58	592	0.73	657	0.88	718	1.05	775	1.22
3188	547	0.68	613	0.83	675	1.00	733	1.17	789	1.34
3375	571	0.78	634	0.95	694	1.12	750	1.30	804	1.48
3563	596	0.90	656	1.07	713	1.25	768	1.44	820	1.63
3750	621	1.03	679	1.21	734	1.40	786	1.59	837	1.79

CFM	Available External Static Pressure (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2250	795	0.96	854	1.11	910	1.27	963	1.43	1014	1.60
2438	802	1.05	859	1.21	913	1.38	966	1.55	1016	1.72
2625	810	1.16	865	1.32	919	1.49	970	1.67	1019	1.85
2813	819	1.27	874	1.44	925	1.62	975	1.80	1023	1.99
3000	830	1.39	883	1.57	934	1.76	982	1.95	1029	2.14
3188	843	1.53	894	1.71	943	1.90	990	2.10	1036	2.30
3375	856	1.67	905	1.86	953	2.06	1000	2.27	1045	2.48
3563	870	1.83	918	2.03	965	2.23	1010	2.44	1054	2.66
3750	885	1.99	932	2.20	978	2.42	1022	2.64	1065	2.86

NOTE: For more information, see General Fan Performance Notes.

Standard static 518–733 RPM, 1.7 BHP max
Medium static 690–936 RPM, 2.4 BHP max
High static 838–1084 RPM, 3.7 BHP max

FAN PERFORMANCE (BELT DRIVE) (cont.)

Table 28 – 50HC11** **3 PHASE** **10 TON VERTICAL SUPPLY**

CFM	Available External Static Pressure (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3000	556	0.65	623	0.80	684	0.95	738	1.11	789	1.26
3250	590	0.79	655	0.96	713	1.13	766	1.29	815	1.46
3500	625	0.96	687	1.14	742	1.32	794	1.50	841	1.68
3750	661	1.16	719	1.35	773	1.54	822	1.73	869	1.93
4000	697	1.37	753	1.58	804	1.79	852	1.99	897	2.20
4250	733	1.62	787	1.84	836	2.06	883	2.28	926	2.49
4500	770	1.89	821	2.13	869	2.36	914	2.59	956	2.82
4750	807	2.20	856	2.45	902	2.69	945	2.94	986	3.18
5000	844	2.54	891	2.80	936	3.06	978	3.31	1018	3.57

CFM	Available External Static Pressure (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3000	836	1.42	881	1.57	923	1.73	963	1.89	1001	2.05
3250	861	1.63	904	1.79	945	1.96	985	2.13	1023	2.30
3500	886	1.86	929	2.04	969	2.22	1008	2.40	1045	2.58
3750	912	2.12	954	2.31	994	2.50	1031	2.70	1068	2.89
4000	940	2.40	980	2.61	1019	2.81	1056	3.02	1092	3.22
4250	968	2.71	1007	2.93	1045	3.15	1081	3.36	1117	3.58
4500	996	3.05	1035	3.28	1072	3.51	1108	3.74	1142	3.97
4750	1026	3.42	1063	3.66	1100	3.91	1135	4.15	1168	4.39
5000	1056	3.82	1093	4.08	1128	4.34	1162	4.59	–	–

NOTE: For more information, see General Fan Performance Notes.

Standard static 591 – 838 RPM, 2.4 BHP max

Medium static 838 – 1084 RPM, 3.7 BHP max

High static 1022 – 1240 RPM, 4.9 BHP max

Table 29 – 50HC11** **3 PHASE** **10 TON HORIZONTAL SUPPLY**

CFM	Available External Static Pressure (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3000	523	0.58	592	0.73	657	0.88	718	1.05	775	1.22
3250	555	0.71	620	0.87	681	1.04	739	1.21	794	1.39
3500	588	0.86	649	1.03	707	1.21	762	1.39	815	1.58
3750	621	1.03	679	1.21	734	1.40	786	1.59	837	1.79
4000	655	1.23	709	1.42	761	1.61	812	1.82	860	2.03
4250	689	1.45	741	1.65	790	1.86	838	2.07	885	2.29
4500	723	1.69	773	1.90	820	2.12	866	2.35	910	2.57
4750	758	1.96	805	2.19	850	2.42	894	2.65	937	2.89
5000	793	2.26	838	2.50	881	2.74	923	2.98	965	3.23

CFM	Available External Static Pressure (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3000	830	1.39	883	1.57	934	1.76	982	1.95	1029	2.14
3250	847	1.57	897	1.76	946	1.96	993	2.16	1039	2.36
3500	865	1.77	914	1.97	961	2.18	1007	2.38	1051	2.60
3750	885	1.99	932	2.20	978	2.42	1022	2.64	1065	2.86
4000	907	2.24	952	2.46	996	2.68	1038	2.91	1080	3.14
4250	930	2.51	973	2.74	1015	2.97	1057	3.21	1097	3.45
4500	954	2.81	996	3.05	1037	3.29	1076	3.54	1115	3.79
4750	979	3.13	1019	3.38	1059	3.63	1097	3.89	1135	4.15
5000	1005	3.49	1044	3.74	1082	4.01	1119	4.27	1156	4.55

NOTE: For more information, see General Fan Performance Notes.

Standard static 591 – 838 RPM, 2.4 BHP max

Medium static 838 – 1084 RPM, 3.7 BHP max

High static 1022 – 1240 RPM, 4.9 BHP max

FAN PERFORMANCE (BELT DRIVE) (cont.)

Table 30 – 50HC12** **3 PHASE** **10 TON VERTICAL SUPPLY**

CFM	Available External Static Pressure (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3000	556	0.65	623	0.80	684	0.95	738	1.11	789	1.26
3250	590	0.79	655	0.96	713	1.13	766	1.29	815	1.46
3500	625	0.96	687	1.14	742	1.32	794	1.50	841	1.68
3750	661	1.16	719	1.35	773	1.54	822	1.73	869	1.93
4000	697	1.37	753	1.58	804	1.79	852	1.99	897	2.20
4250	733	1.62	787	1.84	836	2.06	883	2.28	926	2.49
4500	770	1.89	821	2.13	869	2.36	914	2.59	956	2.82
4750	807	2.20	856	2.45	902	2.69	945	2.94	986	3.18
5000	844	2.54	891	2.80	936	3.06	978	3.31	1018	3.57

CFM	Available External Static Pressure (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3000	836	1.42	881	1.57	923	1.73	963	1.89	1001	2.05
3250	861	1.63	904	1.79	945	1.96	985	2.13	1023	2.30
3500	886	1.86	929	2.04	969	2.22	1008	2.40	1045	2.58
3750	912	2.12	954	2.31	994	2.50	1031	2.70	1068	2.89
4000	940	2.40	980	2.61	1019	2.81	1056	3.02	1092	3.22
4250	968	2.71	1007	2.93	1045	3.15	1081	3.36	1117	3.58
4500	996	3.05	1035	3.28	1072	3.51	1108	3.74	1142	3.97
4750	1026	3.42	1063	3.66	1100	3.91	1135	4.15	1168	4.39
5000	1056	3.82	1093	4.08	1128	4.34	1162	4.59	–	–

NOTE: For more information, see General Fan Performance Notes.

Standard static 591 – 838 RPM, 2.4 BHP max

Medium static 838 – 1084 RPM, 3.7 BHP max

High static 1022 – 1240 RPM, 4.9 BHP max

Table 31 – 50HC12** **3 PHASE** **10 TON HORIZONTAL SUPPLY**

CFM	Available External Static Pressure (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3000	523	0.58	592	0.73	657	0.88	718	1.05	775	1.22
3250	555	0.71	620	0.87	681	1.04	739	1.21	794	1.39
3500	588	0.86	649	1.03	707	1.21	762	1.39	815	1.58
3750	621	1.03	679	1.21	734	1.40	786	1.59	837	1.79
4000	655	1.23	709	1.42	761	1.61	812	1.82	860	2.03
4250	689	1.45	741	1.65	790	1.86	838	2.07	885	2.29
4500	723	1.69	773	1.90	820	2.12	866	2.35	910	2.57
4750	758	1.96	805	2.19	850	2.42	894	2.65	937	2.89
5000	793	2.26	838	2.50	881	2.74	923	2.98	965	3.23

CFM	Available External Static Pressure (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3000	830	1.39	883	1.57	934	1.76	982	1.95	1029	2.14
3250	847	1.57	897	1.76	946	1.96	993	2.16	1039	2.36
3500	865	1.77	914	1.97	961	2.18	1007	2.38	1051	2.60
3750	885	1.99	932	2.20	978	2.42	1022	2.64	1065	2.86
4000	907	2.24	952	2.46	996	2.68	1038	2.91	1080	3.14
4250	930	2.51	973	2.74	1015	2.97	1057	3.21	1097	3.45
4500	954	2.81	996	3.05	1037	3.29	1076	3.54	1115	3.79
4750	979	3.13	1019	3.38	1059	3.63	1097	3.89	1135	4.15
5000	1005	3.49	1044	3.74	1082	4.01	1119	4.27	1156	4.55

NOTE: For more information, see General Fan Performance Notes.

Standard static 591 – 838 RPM, 2.4 BHP max

Medium static 838 – 1084 RPM, 3.7 BHP max

High static 1022 – 1240 RPM, 4.9 BHP max

FAN PERFORMANCE (BELT DRIVE) (cont.)

Table 32 – 50HC14** **3 PHASE** **12.5 TON VERTICAL SUPPLY**

CFM	Available External Static Pressure (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3438	383	0.46	458	0.66	530	0.91	601	1.20	668	1.53
3750	402	0.56	474	0.77	540	1.01	605	1.30	670	1.64
4063	422	0.67	491	0.90	552	1.14	613	1.43	674	1.76
4375	443	0.79	508	1.04	567	1.29	623	1.58	680	1.90
4688	464	0.93	527	1.19	583	1.46	636	1.75	689	2.07
5000	486	1.10	546	1.37	600	1.65	651	1.95	700	2.27
5313	509	1.28	565	1.56	618	1.86	666	2.17	713	2.49
5625	533	1.48	585	1.77	636	2.09	683	2.41	728	2.74
5938	557	1.71	605	2.01	655	2.34	701	2.67	744	3.02
6250	581	1.97	626	2.26	673	2.61	718	2.96	760	3.32

CFM	Available External Static Pressure (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3438	729	1.88	783	2.25	833	2.62	879	2.99	921	3.37
3750	731	2.00	787	2.39	838	2.78	885	3.18	929	3.59
4063	733	2.13	789	2.52	841	2.94	890	3.36	935	3.79
4375	736	2.27	791	2.67	843	3.10	892	3.54	938	3.99
4688	741	2.43	794	2.83	845	3.26	894	3.72	941	4.19
5000	749	2.63	799	3.02	848	3.45	896	3.90	942	4.39
5313	760	2.85	806	3.23	853	3.66	899	4.11	944	4.60
5625	772	3.10	816	3.48	860	3.90	904	4.35	947	4.83
5938	786	3.38	827	3.76	869	4.18	911	4.62	952	5.09
6250	801	3.69	841	4.07	880	4.49	920	4.93	959	5.40

NOTE: For more information, see General Fan Performance Notes.

Standard static 440–609 RPM, 2.9 BHP max

Medium static 609–778 RPM, 3.7 BHP max

High static 776–955 RPM, 6.1 BHP max

Table 33 – 50HC14** **3 PHASE** **12.5 TON HORIZONTAL SUPPLY**

CFM	Available External Static Pressure (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3438	379	0.48	455	0.69	526	0.94	593	1.23	655	1.54
3750	399	0.59	469	0.80	536	1.06	600	1.35	660	1.67
4063	420	0.71	486	0.93	549	1.19	609	1.49	667	1.81
4375	442	0.84	503	1.08	562	1.35	620	1.65	675	1.97
4688	464	1.00	522	1.25	578	1.52	632	1.83	685	2.16
5000	486	1.17	541	1.44	594	1.72	646	2.03	696	2.37
5313	509	1.37	561	1.64	612	1.94	661	2.26	708	2.60
5625	532	1.58	582	1.87	630	2.18	677	2.51	722	2.86
5938	555	1.82	603	2.13	649	2.45	694	2.78	737	3.14
6250	578	2.09	625	2.41	669	2.74	711	3.09	753	3.45

CFM	Available External Static Pressure (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3438	713	1.89	766	2.25	816	2.64	863	3.04	907	3.46
3750	717	2.02	770	2.39	820	2.79	867	3.20	911	3.63
4063	722	2.17	774	2.55	824	2.95	870	3.37	914	3.81
4375	728	2.33	779	2.72	828	3.13	874	3.56	918	4.00
4688	736	2.52	785	2.91	832	3.32	878	3.76	922	4.21
5000	745	2.73	792	3.12	838	3.54	883	3.98	926	4.44
5313	755	2.97	801	3.36	846	3.78	889	4.23	931	4.69
5625	767	3.23	811	3.63	854	4.05	896	4.50	937	4.97
5938	780	3.52	822	3.92	864	4.35	904	4.80	944	5.27
6250	794	3.84	835	4.25	875	4.68	914	5.13	952	5.61

NOTE: For more information, see General Fan Performance Notes.

Standard static 440–609 RPM, 2.9 BHP max

Medium static 609–778 RPM, 3.7 BHP max

High static 776–955 RPM, 6.1 BHP max

FAN PERFORMANCE (cont.)
X13 MULTI SPEED/TORQUE MOTOR

Table 34 – 50HC*A04 Vertical Unit-Direct Drive

Speed (Torque) Tap	CFM	ESP	BHP
1	900	0.36	0.16
	975	0.27	0.16
	1050	0.18	0.15
	1125	0.10	0.15
	1200	0.04	0.16
	1275	–	–
	1350	–	–
	1425	–	–
	1500	–	–
2	900	0.51	0.21
	975	0.40	0.20
	1050	0.30	0.19
	1125	0.21	0.18
	1200	0.11	0.17
	1275	0.02	0.16
	1350	–	–
	1425	–	–
	1500	–	–
3	900	0.84	0.33
	975	0.72	0.32
	1050	0.60	0.31
	1125	0.49	0.29
	1200	0.38	0.28
	1275	0.28	0.26
	1350	0.17	0.25
	1425	0.07	0.24
	1500	–	–
4	900	1.06	0.41
	975	0.96	0.41
	1050	0.86	0.41
	1125	0.74	0.40
	1200	0.63	0.38
	1275	0.50	0.37
	1350	0.38	0.35
	1425	0.26	0.34
	1500	0.15	0.32
5	900	1.24	0.51
	975	1.19	0.52
	1050	1.14	0.54
	1125	1.08	0.57
	1200	1.03	0.59
	1275	0.98	0.61
	1350	0.93	0.64
	1425	0.88	0.67
	1500	0.82	0.69

Table 35 – 50HC*A04 Horizontal Unit-Direct Drive

Speed (Torque) Tap	CFM	ESP	BHP
1	900	0.47	0.21
	975	0.38	0.20
	1050	0.29	0.19
	1125	0.21	0.18
	1200	0.13	0.18
	1275	0.06	0.20
	1350	–	–
	1425	–	–
	1500	–	–
2	900	0.65	0.27
	975	0.54	0.26
	1050	0.44	0.25
	1125	0.33	0.24
	1200	0.23	0.23
	1275	0.13	0.21
	1350	0.02	0.20
	1425	–	–
	1500	–	–
3	900	0.96	0.38
	975	0.84	0.37
	1050	0.73	0.36
	1125	0.61	0.34
	1200	0.50	0.33
	1275	0.38	0.31
	1350	0.26	0.30
	1425	0.15	0.28
	1500	0.04	0.26
4	900	1.17	0.46
	975	1.08	0.46
	1050	0.98	0.46
	1125	0.87	0.45
	1200	0.75	0.44
	1275	0.63	0.42
	1350	0.51	0.40
	1425	0.39	0.39
	1500	0.27	0.37
5	900	1.35	0.52
	975	1.30	0.54
	1050	1.26	0.57
	1125	1.21	0.59
	1200	1.16	0.62
	1275	1.12	0.64
	1350	1.07	0.67
	1425	1.02	0.70
	1500	0.97	0.73

FAN PERFORMANCE (cont.)
X13 MULTI SPEED/TORQUE MOTOR

Table 36 – 50HC*A05 Vertical Unit-Direct Drive

Speed (Torque) Tap	CFM	ESP	BHP
1	1200	0.57	0.31
	1300	0.44	0.29
	1400	0.30	0.27
	1500	0.16	0.25
	1600	0.03	0.25
	1700	–	–
	1800	–	–
	1900	–	–
	2000	–	–
2	1200	0.68	0.35
	1300	0.54	0.33
	1400	0.40	0.31
	1500	0.24	0.28
	1600	0.10	0.26
	1700	–	–
	1800	–	–
	1900	–	–
	2000	–	–
3	1200	1.15	0.54
	1300	1.09	0.54
	1400	1.02	0.55
	1500	0.93	0.58
	1600	0.82	0.57
	1700	0.69	0.55
	1800	0.54	0.52
	1900	0.38	0.50
	2000	0.21	0.47
4	1200	1.16	0.56
	1300	1.12	0.59
	1400	1.07	0.61
	1500	1.00	0.65
	1600	0.92	0.65
	1700	0.80	0.66
	1800	0.67	0.65
	1900	0.51	0.62
	2000	0.34	0.59
5	1200	1.16	0.59
	1300	1.11	0.63
	1400	1.00	0.67
	1500	0.88	0.67
	1600	0.96	0.75
	1700	0.91	0.75
	1800	0.86	0.83
	1900	0.80	0.87
	2000	0.74	0.91

Table 37 – 50HC*A05 Horizontal Unit-Direct Drive

Speed (Torque) Tap	CFM	ESP	BHP
1	1200	0.62	0.34
	1300	0.48	0.32
	1400	0.35	0.30
	1500	0.23	0.28
	1600	0.12	0.28
	1700	0.02	0.27
	1800	–	–
	1900	–	–
	2000	–	–
2	1200	0.74	0.39
	1300	0.60	0.37
	1400	0.46	0.35
	1500	0.32	0.32
	1600	0.19	0.30
	1700	0.07	0.27
	1800	–	–
	1900	–	–
	2000	–	–
3	1200	1.20	0.59
	1300	1.12	0.60
	1400	1.01	0.61
	1500	0.89	0.62
	1600	0.76	0.59
	1700	0.61	0.56
	1800	0.47	0.53
	1900	0.32	0.50
	2000	0.18	0.47
4	1200	1.24	0.60
	1300	1.18	0.63
	1400	1.11	0.65
	1500	1.03	0.69
	1600	0.93	0.69
	1700	0.82	0.69
	1800	0.70	0.69
	1900	0.56	0.66
	2000	0.41	0.63
5	1200	1.25	0.61
	1300	1.20	0.65
	1400	1.11	0.68
	1500	1.03	0.68
	1600	1.05	0.76
	1700	1.01	0.76
	1800	0.96	0.84
	1900	0.91	0.89
	2000	0.87	0.93

FAN PERFORMANCE (cont.)
X13 MULTI SPEED/TORQUE MOTOR

Table 38 – 50HC*A06 Vertical Unit-Direct Drive

Speed (Torque) tap	CFM	ESP	BHP
1	1500	0.50	0.44
	1625	0.32	0.42
	1750	0.14	0.39
	1875	–	–
	2000	–	–
	2125	–	–
	2250	–	–
	2375	–	–
	2500	–	–
2	1500	0.72	0.56
	1625	0.53	0.53
	1750	0.34	0.50
	1875	0.18	0.48
	2000	–	–
	2125	–	–
	2250	–	–
	2375	–	–
	2500	–	–
3	1500	1.20	0.84
	1625	1.02	0.82
	1750	0.82	0.82
	1875	0.61	0.79
	2000	0.40	0.75
	2125	0.20	0.71
	2250	0.04	0.67
	2375	–	–
	2500	–	–
4	1500	1.31	0.92
	1625	1.17	0.92
	1750	0.99	0.95
	1875	0.80	0.94
	2000	0.59	0.90
	2125	0.37	0.86
	2250	0.17	0.83
	2375	0.00	0.79
	2500	–	–
5	1500	1.36	0.94
	1625	1.24	0.99
	1750	0.99	1.02
	1875	0.80	1.05
	2000	0.74	1.03
	2125	0.53	0.99
	2250	0.31	0.94
	2375	0.08	0.90
	2500	–	0.86

Table 39 – 50HC*A06 Horizontal Unit-Direct Drive

Speed (Torque) tap	CFM	ESP	BHP
1	1500	0.63	0.49
	1625	0.45	0.46
	1750	0.27	0.43
	1875	0.10	0.39
	2000	–	–
	2125	–	–
	2250	–	–
	2375	–	–
	2500	–	–
2	1500	0.88	0.61
	1625	0.69	0.58
	1750	0.49	0.55
	1875	0.30	0.51
	2000	0.12	0.48
	2125	–	–
	2250	–	–
	2375	–	–
	2500	–	–
3	1500	1.37	0.89
	1625	1.20	0.87
	1750	1.02	0.86
	1875	0.81	0.83
	2000	0.60	0.79
	2125	0.39	0.75
	2250	0.21	0.71
	2375	0.07	0.67
	2500	–	–
4	1500	1.48	0.95
	1625	1.35	0.95
	1750	1.20	0.99
	1875	1.03	0.99
	2000	0.83	0.96
	2125	0.63	0.93
	2250	0.42	0.89
	2375	0.22	0.84
	2500	0.05	0.78
5	1500	1.52	0.97
	1625	1.42	1.01
	1750	1.20	1.05
	1875	1.03	1.09
	2000	1.00	1.09
	2125	0.82	1.06
	2250	0.62	1.02
	2375	0.40	0.98
	2500	0.16	0.93

Table 40 – PULLEY ADJUSTMENT

UNIT		Motor/Drive Combo	Motor Pulley turns open										
			0	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5
04	1 Phase	Standard Static	854	825	795	766	736	707	678	648	619	589	560
		Medium Static	1175	1135	1094	1054	1013	973	932	892	851	811	770
	3 Phase	Standard Static*	854	825	795	766	736	707	678	648	619	589	560
		Medium Static*	1175	1135	1094	1054	1013	973	932	892	851	811	770
		High Static	1466	1423	1380	1337	1294	1251	1207	1164	1121	1078	1035
05	1 Phase	Standard Static	854	825	795	766	736	707	678	648	619	589	560
		Medium Static	1175	1135	1094	1054	1013	973	932	892	851	811	770
	3 Phase	Standard Static*	854	825	795	766	736	707	678	648	619	589	560
		Medium Static*	1175	1135	1094	1054	1013	973	932	892	851	811	770
		Medium Static	1303	1265	1226	1188	1150	1112	1073	1035	997	958	920
		High Static	1639	1596	1553	1510	1467	1424	1380	1337	1294	1251	1208
06	1 Phase	Standard Static	1175	1135	1094	1054	1013	973	932	892	851	811	770
		Medium Static	1466	1423	1380	1337	1294	1251	1207	1164	1121	1078	1035
	3 Phase	Standard Static*	1175	1135	1094	1054	1013	973	932	892	851	811	770
		Medium Static*	1466	1423	1380	1337	1294	1251	1207	1164	1121	1078	1035
		High Static	1687	1649	1610	1572	1533	1495	1457	1418	1380	1341	1303
07	3 Phase	Standard Static	747	721	695	670	644	618	592	566	541	515	489
		Medium Static	949	927	906	884	863	841	819	798	776	755	733
		High Static	1102	1083	1063	1044	1025	1006	986	967	948	928	909
08	3 Phase	Standard Static	733	712	690	669	647	626	604	583	561	540	518
		Medium Static	936	911	887	862	838	813	788	764	739	715	690
		High Static	1084	1059	1035	1010	986	961	936	912	887	863	838
09	3 Phase	Standard Static	733	712	690	669	647	626	604	583	561	540	518
		Medium Static	936	911	887	862	838	813	788	764	739	715	690
		High Static	1084	1059	1035	1010	986	961	936	912	887	863	838
11	3 Phase	Standard Static	838	813	789	764	739	715	690	665	640	616	591
		Medium Static	1084	1059	1035	1010	986	961	936	912	887	863	838
		High Static	1240	1218	1196	1175	1153	1131	1109	1087	1066	1044	1022
12	3 Phase	Standard Static	838	813	789	764	739	715	690	665	640	616	591
		Medium Static	1084	1059	1035	1010	986	961	936	912	887	863	838
		High Static	1240	1218	1196	1175	1153	1131	1109	1087	1066	1044	1022
14	3 Phase	Standard Static	609	592	575	558	541	525	508	491	474	457	440
		Medium Static	778	761	744	727	710	694	677	660	643	626	609
		High Static	955	973	951	929	907	886	864	842	820	798	776

– Factory settings

* Humidi–Mizer models only

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Table 41 – 50HC04** **SINGLE STAGE COOLING WITH SINGLE SPEED INDOOR FAN MOTOR**

V–Ph–Hz	VOLTAGE RANGE		COMP (ea)		OFM (ea)		IFM		
	MIN	MAX	RLA	LRA	WATTS	FLA	TYPE	EFF at Full Load	FLA
208–1–60	187	253	16.6	79	190	1.0	DD–STD	78%	7.4
					190	1.0	STD	67%	4.9
					190	1.0	MED	67%	4.9
230–1–60	187	253	16.6	79	190	1.0	DD–STD	78%	7.4
					190	1.0	STD	67%	4.9
					190	1.0	MED	67%	4.9
208–3–60	187	253	10.4	73	190	1.0	DD–STD	78%	7.4
					190	1.0	STD	75%	5.2
					190	1.0	MED	75%	5.2
					190	1.0	HIGH	87%	6.9
230–3–60	187	253	10.4	73	190	1.0	DD–STD	78%	7.4
					190	1.0	STD	75%	5.2
					190	1.0	MED	75%	5.2
					190	1.0	HIGH	87%	6.7
460–3–60	414	506	5.8	38	190	0.5	DD–STD	78%	4.0
					190	0.5	STD	75%	2.6
					190	0.5	MED	75%	2.6
					190	0.5	HIGH	87%	3.4
575–3–60	518	633	3.8	37	190	0.5	DD–STD	78%	4.0
					190	0.5	STD	73%	1.2
					190	0.5	MED	73%	1.2
					190	0.5	HIGH	78%	2.0

Table 42 – 50HC05** **SINGLE STAGE COOLING WITH SINGLE SPEED INDOOR FAN MOTOR**

V–Ph–Hz	VOLTAGE RANGE		COMP (ea)		OFM (ea)		IFM		
	MIN	MAX	RLA	LRA	WATTS	FLA	TYPE	EFF at Full Load	FLA
208–1–60	187	253	21.8	117	325	1.4	DD–STD	78%	7.4
					325	1.4	STD	67%	4.9
					325	1.4	MED	67%	4.9
230–1–60	187	253	21.8	117	325	1.4	DD–STD	78%	7.4
					325	1.4	STD	67%	4.9
					325	1.4	MED	67%	4.9
208–3–60	187	253	13.7	83	325	1.4	DD–STD	78%	7.4
					325	1.4	STD	75%	5.2
					325	1.4	MED	87%	5.2
					325	1.4	HIGH	89%	8.4
230–3–60	187	253	13.7	83	325	1.4	DD–STD	78%	7.4
					325	1.4	STD	75%	5.2
					325	1.4	MED	87%	4.9
					325	1.4	HIGH	89%	8.3
460–3–60	414	506	6.2	41	325	0.9	DD–STD	78%	4.0
					325	0.9	STD	75%	2.6
					325	0.9	MED	87%	2.5
					325	0.9	HIGH	89%	4.2
575–3–60	518	633	4.8	33	325	0.9	DD–STD	78%	4.0
					325	0.9	STD	73%	1.2
					325	0.9	MED	72%	1.6
					325	0.9	HIGH	77%	2.8

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Table 43 – 50HC06 SINGLE STAGE COOLING WITH SINGLE SPEED INDOOR FAN MOTOR**

V–Ph–Hz	VOLTAGE RANGE		COMP (ea)		OFM (ea)		IFM		
	MIN	MAX	RLA	LRA	WATTS	FLA	TYPE	EFF at Full Load	FLA
208–1–60	187	253	25.0	134	325	1.4	DD–STD	78%	7.4
					325	1.4	STD	67%	4.9
					325	1.4	MED	76%	7.0
230–1–60	187	253	25.0	134	325	1.4	DD–STD	78%	7.4
					325	1.4	STD	67%	4.9
					325	1.4	MED	76%	7.0
208–3–60	187	253	15.9	110	325	1.4	DD–STD	78%	7.4
					325	1.4	STD	75%	5.2
					325	1.4	MED	87%	6.9
					325	1.4	HIGH	89%	8.4
230–3–60	187	253	15.9	110	325	1.4	DD–STD	78%	7.4
					325	1.4	STD	75%	5.2
					325	1.4	MED	87%	6.7
					325	1.4	HIGH	89%	8.3
460–3–60	414	506	7.0	52	325	0.9	DD–STD	78%	4.0
					325	0.9	STD	75%	2.6
					325	0.9	MED	87%	3.4
					325	0.9	HIGH	89%	4.2
575–3–60	518	633	5.1	40	325	0.9	DD–STD	78%	4.0
					325	0.9	STD	73%	1.2
					325	0.9	MED	78%	2.0
					325	0.9	HIGH	77%	2.8

Table 44 – 50HC07 SINGLE STAGE COOLING WITH SINGLE SPEED INDOOR FAN MOTOR**

V–Ph–Hz	VOLTAGE RANGE		COMP (ea)		OFM (ea)		IFM		
	MIN	MAX	RLA	LRA	WATTS	FLA	TYPE	EFF at Full Load	FLA
208–3–60	187	253	19.0	123	325	1.5	STD	87%	5.2
					325	1.5	MED	89%	8.4
					325	1.5	HIGH	83%	13.6
230–3–60	187	253	19.0	123	325	1.5	STD	87%	4.9
					325	1.5	MED	89%	8.3
					325	1.5	HIGH	83%	12.7
460–3–60	414	506	9.7	62	325	0.8	STD	87%	2.5
					325	0.8	MED	89%	4.2
					325	0.8	HIGH	83%	6.4
575–3–60	518	633	7.4	50	325	0.6	STD	72%	1.6
					325	0.6	MED	77%	2.8
					325	0.6	HIGH	81%	5.6

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Table 45 – 50HC08** **2-STAGE COOLING WITH SINGLE SPEED INDOOR FAN MOTOR**

V–Ph–Hz	VOLTAGE RANGE		COMP (Cir 1)		COMP (Cir 2)		OFM (ea)		IFM		
	MIN	MAX	RLA	LRA	RLA	LRA	WATTS	FLA	TYPE	EFF at Full Load	FLA
208–3–60	187	253	13.6	83	13.6	83	325	1.5	STD	87%	5.2
							325	1.5	MED	87%	6.9
							325	1.5	HIGH	87%	10.6
230–3–60	187	253	13.6	83	13.6	83	325	1.5	STD	87%	4.9
							325	1.5	MED	87%	6.7
							325	1.5	HIGH	87%	10.6
460–3–60	414	506	6.1	41	6.1	41	325	0.8	STD	87%	2.5
							325	0.8	MED	87%	3.4
							325	0.8	HIGH	87%	5.3
575–3–60	518	633	4.2	33	4.2	33	325	0.6	STD	72%	1.6
							325	0.6	MED	78%	2
							325	0.6	HIGH	77%	2.8

Table 46 – 50HC09** **2-STAGE COOLING WITH SINGLE SPEED INDOOR FAN MOTOR**

V–Ph–Hz	VOLTAGE RANGE		COMP (Cir 1)		COMP (Cir 2)		OFM (ea)		IFM		
	MIN	MAX	RLA	LRA	RLA	LRA	WATTS	FLA	TYPE	EFF at Full Load	FLA
208–3–60	187	253	13.7	83	13.7	83	325	1.5	STD	87%	5.2
							325	1.5	MED	87%	6.9
							325	1.5	HIGH	87%	10.6
230–3–60	187	253	13.7	83	13.7	83	325	1.5	STD	87%	4.9
							325	1.5	MED	87%	6.7
							325	1.5	HIGH	87%	10.6
460–3–60	414	506	6.2	41	6.2	41	325	0.8	STD	87%	2.5
							325	0.8	MED	87%	3.4
							325	0.8	HIGH	87%	5.3
575–3–60	518	633	4.8	33	4.8	33	325	0.6	STD	72%	1.6
							325	0.6	MED	78%	2
							325	0.6	HIGH	77%	2.8

Table 47 – 50HC11** **2-STAGE COOLING WITH SINGLE SPEED INDOOR FAN MOTOR**

V–Ph–Hz	VOLTAGE RANGE		COMP (Cir 1)		COMP (Cir 2)		OFM (ea)		IFM		
	MIN	MAX	RLA	LRA	RLA	LRA	WATTS	FLA	TYPE	EFF at Full Load	FLA
208–3–60	187	253	15.9	110	15.9	110	610	7.4	STD	87%	6.9
							610	7.4	MED	87%	10.6
							610	7.4	HIGH	83%	13.6
230–3–60	187	253	15.9	110	15.9	110	610	7.4	STD	87%	6.7
							610	7.4	MED	87%	10.6
							610	7.4	HIGH	83%	12.7
460–3–60	414	506	7.0	52	7.0	52	610	3.6	STD	87%	3.4
							610	3.6	MED	87%	5.3
							610	3.6	HIGH	83%	6.4
575–3–60	518	633	5.1	40	5.1	40	610	3.6	STD	78%	2
							610	3.6	MED	77%	2.8
							610	3.6	HIGH	81%	5.6

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Table 48 – 50HC12 2-STAGE COOLING WITH SINGLE SPEED INDOOR FAN MOTOR**

V–Ph–Hz	VOLTAGE RANGE		COMP (Cir 1)		COMP (Cir 2)		OFM (ea)		IFM		
	MIN	MAX	RLA	LRA	RLA	LRA	WATTS	FLA	TYPE	EFF at Full Load	FLA
208–3–60	187	253	15.9	110	15.9	110	1070	6.2	STD	87%	6.9
							1070	6.2	MED	87%	10.6
							1070	6.2	HIGH	83%	13.6
230–3–60	187	253	15.9	110	15.9	110	1070	6.2	STD	87%	6.7
							1070	6.2	MED	87%	10.6
							1070	6.2	HIGH	83%	12.7
460–3–60	414	506	7.7	52	7.7	52	1070	3.1	STD	87%	3.4
							1070	3.1	MED	87%	5.3
							1070	3.1	HIGH	83%	6.4
575–3–60	518	633	5.7	39	5.7	39	1070	2.5	STD	78%	2
							1070	2.5	MED	77%	2.8
							1070	2.5	HIGH	81%	5.6

Table 49 – 50HC14 2-STAGE COOLING WITH SINGLE SPEED INDOOR FAN MOTOR**

V–Ph–Hz	VOLTAGE RANGE		COMP (Cir 1)		COMP (Cir 2)		OFM (ea)		IFM		
	MIN	MAX	RLA	LRA	RLA	LRA	WATTS	FLA	TYPE	EFF at Full Load	FLA
208–3–60	187	253	19.0	123	19.0	123	280	1.5	STD	89%	8.4
							280	1.5	MED	87%	10.6
							280	1.5	HIGH	90%	20.4
230–3–60	187	253	19.0	123	19.0	123	280	1.5	STD	89%	8.3
							280	1.5	MED	87%	10.6
							280	1.5	HIGH	90%	20.4
460–3–60	414	506	9.7	62	9.7	62	280	0.8	STD	89%	4.2
							280	0.8	MED	87%	5.3
							280	0.8	HIGH	90%	10.2
575–3–60	518	633	7.4	50	7.4	50	280	0.7	STD	77%	2.8
							280	0.7	MED	77%	2.8
							280	0.7	HIGH	94%	9

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Table 50 – 50HC08** **2-STAGE COOLING WITH 2-SPEED INDOOR FAN MOTOR**

V–Ph–Hz	VOLTAGE RANGE		COMP (Cir 1)		COMP (Cir 2)		OFM (ea)		IFM		
	MIN	MAX	RLA	LRA	RLA	LRA	WATTS	FLA	TYPE	EFF at Full Load	FLA
208–3–60	187	253	13.6	83	13.6	83	325	1.5	STD	84%	5.8
							325	1.5	MED	77%	7.1
							325	1.5	HIGH	82%	10.8
230–3–60	187	253	13.6	83	13.6	83	325	1.5	STD	84%	5.6
							325	1.5	MED	77%	6.8
							325	1.5	HIGH	82%	9.8
460–3–60	414	506	6.1	41	6.1	41	325	0.8	STD	79%	2.9
							325	0.8	MED	77%	3.8
							325	0.8	HIGH	82%	4.9
575–3–60	518	633	4.2	33	4.2	33	325	0.6	STD	81%	2.8
							325	0.6	MED	80%	3.5
							325	0.6	HIGH	84%	4.5

Table 51 – 50HC09** **2-STAGE COOLING WITH 2-SPEED INDOOR FAN MOTOR**

V–Ph–Hz	VOLTAGE RANGE		COMP (Cir 1)		COMP (Cir 2)		OFM (ea)		IFM		
	MIN	MAX	RLA	LRA	RLA	LRA	WATTS	FLA	TYPE	EFF at Full Load	FLA
208–3–60	187	253	13.7	83	13.7	83	325	1.5	STD	84%	5.8
							325	1.5	MED	77%	7.1
							325	1.5	HIGH	82%	10.8
230–3–60	187	253	13.7	83	13.7	83	325	1.5	STD	84%	5.6
							325	1.5	MED	77%	6.8
							325	1.5	HIGH	82%	9.8
460–3–60	414	506	6.2	41	6.2	41	325	0.8	STD	79%	2.9
							325	0.8	MED	77%	3.8
							325	0.8	HIGH	82%	4.9
575–3–60	518	633	4.8	33	4.8	33	325	0.6	STD	81%	2.8
							325	0.6	MED	80%	3.5
							325	0.6	HIGH	84%	4.5

Table 52 – 50HC11** **2-STAGE COOLING WITH 2-SPEED INDOOR FAN MOTOR**

V–Ph–Hz	VOLTAGE RANGE		COMP (Cir 1)		COMP (Cir 2)		OFM (ea)		IFM		
	MIN	MAX	RLA	LRA	RLA	LRA	WATTS	FLA	TYPE	EFF at Full Load	FLA
208–3–60	187	253	15.9	110	15.9	110	610	7.4	STD	77%	7.1
							610	7.4	MED	82%	10.8
							610	7.4	HIGH	84%	13.6
230–3–60	187	253	15.9	110	15.9	110	610	7.4	STD	77%	6.8
							610	7.4	MED	82%	9.8
							610	7.4	HIGH	84%	12.7
460–3–60	414	506	7.0	52	7.0	52	610	3.6	STD	77%	3.8
							610	3.6	MED	82%	4.9
							610	3.6	HIGH	84%	6.4
575–3–60	518	633	5.1	40	5.1	40	610	3.6	STD	80%	3.5
							610	3.6	MED	84%	4.5
							610	3.6	HIGH	83%	6.2

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Table 53 – 50HC12** **2-STAGE COOLING WITH 2-SPEED INDOOR FAN MOTOR**

V–Ph–Hz	VOLTAGE RANGE		COMP (Cir 1)		COMP (Cir 2)		OFM (ea)		IFM		
	MIN	MAX	RLA	LRA	RLA	LRA	WATTS	FLA	TYPE	EFF at Full Load	FLA
208–3–60	187	253	15.9	110	15.9	110	1070	6.2	STD	77%	7.1
							1070	6.2	MED	82%	10.8
							1070	6.2	HIGH	84%	13.6
230–3–60	187	253	15.9	110	15.9	110	1070	6.2	STD	77%	6.8
							1070	6.2	MED	82%	9.8
							1070	6.2	HIGH	84%	12.7
460–3–60	414	506	7.7	52	7.7	52	1070	3.1	STD	77%	3.8
							1070	3.1	MED	82%	4.9
							1070	3.1	HIGH	84%	6.4
575–3–60	518	633	5.7	39	5.7	39	1070	2.5	STD	80%	3.5
							1070	2.5	MED	84%	4.5
							1070	2.5	HIGH	83%	6.2

Table 54 – 50HC14** **2-STAGE COOLING WITH 2-SPEED INDOOR FAN MOTOR**

V–Ph–Hz	VOLTAGE RANGE		COMP (Cir 1)		COMP (Cir 2)		OFM (ea)		IFM		
	MIN	MAX	RLA	LRA	RLA	LRA	WATTS	FLA	TYPE	EFF at Full Load	FLA
208–3–60	187	253	19.0	123	19.0	123	280	1.5	STD	85%	8.6
							280	1.5	MED	82%	10.8
							280	1.5	HIGH	90%	20.4
230–3–60	187	253	19.0	123	19.0	123	280	1.5	STD	85%	7.8
							280	1.5	MED	82%	9.8
							280	1.5	HIGH	90%	20.4
460–3–60	414	506	9.7	62	9.7	62	280	0.8	STD	85%	3.8
							280	0.8	MED	82%	4.9
							280	0.8	HIGH	90%	10.2
575–3–60	518	633	7.4	50	7.4	50	280	0.7	STD	84%	4.5
							280	0.7	MED	84%	4.5
							280	0.7	HIGH	94%	9

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Table 55 – 50HC-A04 **ELECTRIC HEAT - ELECTRICAL DATA**
SINGLE STAGE COOLING SINGLE SPEED INDOOR FAN MOTOR

NOM. V–PH–Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER CRHEATER	NOM PWR (kW)	APP PWR (kW)	SINGLE POINT KIT PART NUMBER CRSINGLE			
					NO C.O. or UNPWRD C.O.		w/PWRD C.O.	
					NO P.E.	w/P.E. (pwrd fr/unit)	NO P.E.	w/P.E. (pwrd fr/unit)
208/230–1–60	DD–STD	101A00	4.4	3.3/4.0	–	–	–	–
		102A00	6.5	4.9/6.0	–	–	–	–
		103B00	8.7	6.5/8.0	037	037	–	–
		104B00	10.5	7.9/9.6	040	040	–	–
		102A00,102A00	13.0	9.8/11.9	040	040	–	–
	STD	101A00	4.4	3.3/4.0	–	–	–	–
		102A00	6.5	4.9/6.0	–	–	–	–
		103B00	8.7	6.5/8.0	037	037	–	–
		104B00	10.5	7.9/9.6	040	040	–	–
		102A00,102A00	13.0	9.8/11.9	040	040	–	–
	MED	101A00	4.4	3.3/4.0	–	–	–	–
		102A00	6.5	4.9/6.0	–	–	–	–
		103B00	8.7	6.5/8.0	037	037	–	–
		104B00	10.5	7.9/9.6	040	040	–	–
		102A00,102A00	13.0	9.8/11.9	040	040	–	–
208/230–3–60	DD–STD	101A00	4.4	3.3/4.0	–	–	–	–
		102A00	6.5	4.9/6.0	–	–	–	–
		103B00	8.7	6.5/8.0	–	–	–	–
		104B00	10.5	7.9/9.6	–	–	–	–
		105A00	16.0	12.0/14.7	037	037	038	038
	STD	101A00	4.4	3.3/4.0	–	–	–	–
		102A00	6.5	4.9/6.0	–	–	–	–
		103B00	8.7	6.5/8.0	–	–	–	–
		104B00	10.5	7.9/9.6	–	–	–	–
		105A00	16.0	12.0/14.7	037	037	038	038
	MED	101A00	4.4	3.3/4.0	–	–	–	–
		102A00	6.5	4.9/6.0	–	–	–	–
		103B00	8.7	6.5/8.0	–	–	–	–
		104B00	10.5	7.9/9.6	–	–	–	–
		105A00	16.0	12.0/14.7	037	037	038	038
	HIGH	101A00	4.4	3.3/4.0	–	–	–	–
		102A00	6.5	4.9/6.0	–	–	–	–
		103B00	8.7	6.5/8.0	–	–	–	–
		104B00	10.5	7.9/9.6	–	–	–	–
		105A00	16.0	12.0/14.7	037	037	038	038
460–3–60	DD–STD	106A00	6.0	5.5	–	–	–	–
		107A00	8.8	8.1	–	–	–	–
		108A00	11.5	10.6	–	–	–	–
		109A00	14.0	12.9	–	–	–	–
	STD	106A00	6.0	5.5	–	–	–	–
		107A00	8.8	8.1	–	–	–	–
		108A00	11.5	10.6	–	–	–	–
		109A00	14.0	12.9	–	–	–	–
	MED	106A00	6.0	5.5	–	–	–	–
		107A00	8.8	8.1	–	–	–	–
		108A00	11.5	10.6	–	–	–	–
		109A00	14.0	12.9	–	–	–	–
	HIGH	106A00	6.0	5.5	–	–	–	–
		107A00	8.8	8.1	–	–	–	–
		108A00	11.5	10.6	–	–	–	–
		109A00	14.0	12.9	–	–	–	–
575–3–60	DD–STD	297A00	9.2	9.2	–	–	–	–
		298A00	13.8	13.8	–	–	–	–
	STD	297A00	9.2	9.2	–	–	–	–
		298A00	13.8	13.8	–	–	–	–
	MED	297A00	9.2	9.2	–	–	–	–
		298A00	13.8	13.8	–	–	–	–
	HIGH	297A00	9.2	9.2	–	–	–	–
		298A00	13.8	13.8	–	–	–	–

NOTE: STD and MED IFM type are belt drive for 1 phase HC w/Humidi–MiZer. HC 1 phase w/o Humidi–MiZer must use DD–STD IFM type only.

ELECTRICAL INFORMATION

Table 56 – 50HC-A05

ELECTRIC HEAT - ELECTRICAL DATA
SINGLE STAGE COOLING SINGLE SPEED INDOOR FAN MOTOR

NOM. V–PH–Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER CRHEATER	NOM PWR (kW)	APP PWR (kW)	SINGLE POINT KIT PART NUMBER CRSINGLE			
					NO C.O. or UNPWRD C.O.		w/PWRD C.O.	
					NO P.E.	w/P.E. (pwrd fr/unit)	NO P.E.	w/P.E. (pwrd fr/unit)
208/230–1–60	DD–STD	101A00	4.4	3.3/4.0	–	–	–	–
		103B00	8.7	6.5/8.0	037	037	–	–
		102A00,102A00	13.0	9.8/11.9	040	040	–	–
		103B00,103B00	17.4	13.1/16.0	040	040	–	–
		104B00,104B00	21.0	15.8/19.3	040	040	–	–
	STD	101A00	4.4	3.3/4.0	–	–	–	–
		103B00	8.7	6.5/8.0	037	037	–	–
		102A00,102A00	13.0	9.8/11.9	040	040	–	–
		103B00,103B00	17.4	13.1/16.0	040	040	–	–
		104B00,104B00	21.0	15.8/19.3	040	040	–	–
	MED	101A00	4.4	3.3/4.0	–	–	–	–
		103B00	8.7	6.5/8.0	037	037	–	–
		102A00,102A00	13.0	9.8/11.9	040	040	–	–
		103B00,103B00	17.4	13.1/16.0	040	040	–	–
		104B00,104B00	21.0	15.8/19.3	040	040	–	–
208/230–3–60	DD–STD	102A00	6.5	4.9/6.0	–	–	–	–
		103B00	8.7	6.5/8.0	–	–	–	–
		105A00	16.0	12.0/14.7	037	037	038	038
		104B00,104B00	21.0	15.8/19.3	038	038	038	038
	STD	102A00	6.5	4.9/6.0	–	–	–	–
		103B00	8.7	6.5/8.0	–	–	–	–
		105A00	16.0	12.0/14.7	037	037	038	038
		104B00,104B00	21.0	15.8/19.3	038	038	038	038
	MED	102A00	6.5	4.9/6.0	–	–	–	–
		103B00	8.7	6.5/8.0	–	–	–	–
		105A00	16.0	12.0/14.7	037	037	038	038
		104B00,104B00	21.0	15.8/19.3	038	038	038	038
	HIGH	102A00	6.5	4.9/6.0	–	–	–	–
		103B00	8.7	6.5/8.0	–	–	–	–
		105A00	16.0	12.0/14.7	037	038	038	038
		104B00,104B00	21.0	15.8/19.3	038	038	038	038
460–3–60	DD–STD	106A00	6.0	5.5	–	–	–	–
		108A00	11.5	10.6	–	–	–	–
		109A00	14.0	12.9	–	–	–	–
		108A00,108A00	23.0	21.1	037	037	037	037
	STD	106A00	6.0	5.5	–	–	–	–
		108A00	11.5	10.6	–	–	–	–
		109A00	14.0	12.9	–	–	–	–
		108A00,108A00	23.0	21.1	037	037	037	037
	MED	106A00	6.0	5.5	–	–	–	–
		108A00	11.5	10.6	–	–	–	–
		109A00	14.0	12.9	–	–	–	–
		108A00,108A00	23.0	21.1	037	037	037	037
	HIGH	106A00	6.0	5.5	–	–	–	–
		108A00	11.5	10.6	–	–	–	–
		109A00	14.0	12.9	–	–	–	–
		108A00,108A00	23.0	21.1	037	037	037	037
575–3–60	DD–STD	297A00	9.2	9.2	–	–	–	–
		298A00	13.8	13.8	–	–	–	–
	STD	297A00	9.2	9.2	–	–	–	–
		298A00	13.8	13.8	–	–	–	–
	MED	297A00	9.2	9.2	–	–	–	–
		298A00	13.8	13.8	–	–	–	–
	HIGH	297A00	9.2	9.2	–	–	–	–
		298A00	13.8	13.8	–	–	–	–

NOTE: STD and MED IFM type are belt drive for 1 phase HC w/Humidi–MiZer. HC 1 phase w/o Humidi–MiZer must use DD–STD IFM type only.

ELECTRICAL INFORMATION

Table 57 – 50HC-A06 **ELECTRIC HEAT - ELECTRICAL DATA**
SINGLE STAGE COOLING SINGLE SPEED INDOOR FAN MOTOR

NOM. V–PH–Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER CRHEATER	NOM PWR (kW)	APP PWR (kW)	SINGLE POINT KIT PART NUMBER CRSINGLE			
					NO C.O. or UNPWRD C.O.		w/PWRD C.O.	
					NO P.E.	w/P.E. (pwrd fr/unit)	NO P.E.	w/P.E. (pwrd fr/unit)
208/230–1–60	DD–STD	102A00	6.5	4.9/6.0	–	–	–	–
		103B00	8.7	6.5/8.0	037	037	–	–
		102A00,102A00	13.0	9.8/11.9	040	040	–	–
		103B00,103B00	17.4	13.1/16.0	040	040	–	–
		104B00,104B00	21.0	15.8/19.3	040	040	–	–
	STD	102A00	6.5	4.9/6.0	–	–	–	–
		103B00	8.7	6.5/8.0	037	037	–	–
		102A00,102A00	13.0	9.8/11.9	040	040	–	–
		103B00,103B00	17.4	13.1/16.0	040	040	–	–
		104B00,104B00	21.0	15.8/19.3	040	040	–	–
	MED	102A00	6.5	4.9/6.0	–	–	–	–
		103B00	8.7	6.5/8.0	037	037	–	–
		102A00,102A00	13.0	9.8/11.9	040	040	–	–
		103B00,103B00	17.4	13.1/16.0	040	040	–	–
		104B00,104B00	21.0	15.8/19.3	040	040	–	–
208/230–3–60	DD–STD	102A00	6.5	4.9/6.0	–	–	–	–
		104B00	10.5	7.9/9.6	–	–	–	–
		105A00	16.0	12.0/14.7	037	037	038	038
		104B00,104B00	21.0	15.8/19.3	038	038	038	038
		104B00,105A00	26.5	19.9/24.3	038	038	038	038
	STD	102A00	6.5	4.9/6.0	–	–	–	–
		104B00	10.5	7.9/9.6	–	–	–	–
		105A00	16.0	12.0/14.7	037	037	038	038
		104B00,104B00	21.0	15.8/19.3	038	038	038	038
		104B00,105A00	26.5	19.9/24.3	038	038	038	038
	MED	102A00	6.5	4.9/6.0	–	–	–	–
		104B00	10.5	7.9/9.6	–	–	–	–
		105A00	16.0	12.0/14.7	037	037	038	038
		104B00,104B00	21.0	15.8/19.3	038	038	038	038
		104B00,105A00	26.5	19.9/24.3	038	038	038	038
	HIGH	102A00	6.5	4.9/6.0	–	–	–	–
		104B00	10.5	7.9/9.6	–	–	–	037
		105A00	16.0	12.0/14.7	037	038	038	038
		104B00,104B00	21.0	15.8/19.3	038	038	038	038
		104B00,105A00	26.5	19.9/24.3	038	038	038	038
460–3–60	DD–STD	106A00	6.0	5.5	–	–	–	–
		108A00	11.5	10.6	–	–	–	–
		109A00	14.0	12.9	–	–	–	–
		108A00,108A00	23.0	21.1	037	037	037	037
		108A00,109A00	25.5	23.4	037	037	037	037
	STD	106A00	6.0	5.5	–	–	–	–
		108A00	11.5	10.6	–	–	–	–
		109A00	14.0	12.9	–	–	–	–
		108A00,108A00	23.0	21.1	037	037	037	037
		108A00,109A00			037	037	037	037
	MED	106A00	6.0	5.5	–	–	–	–
		108A00	11.5	10.6	–	–	–	–
		109A00	14.0	12.9	–	–	–	–
		108A00,108A00	23.0	21.1	037	037	037	037
		108A00,109A00	25.5	23.4	037	037	037	037
	HIGH	106A00	6.0	5.5	–	–	–	–
		108A00	11.5	10.6	–	–	–	–
		109A00	14.0	12.9	–	–	–	–
		108A00,108A00	23.0	21.1	037	037	037	037
		108A00,109A00	25.5	23.4	037	037	037	037
575–3–60	DD–STD	298A00	13.8	13.8	–	–	–	–
		301A00	23.0	23.0	037	037	037	037
	STD	298A00	13.8	13.8	–	–	–	–
		301A00	23.0	23.0	037	037	037	037
	MED	298A00	13.8	13.8	–	–	–	–
		301A00	23.0	23.0	037	037	037	037
	HIGH	298A00	13.8	13.8	–	–	–	–
		301A00	23.0	23.0	037	037	037	037

NOTE: STD and MED IFM type are belt drive for 1 phase HC w/Humidi–MiZer. HC 1 phase w/o Humidi–MiZer must use DD–STD IFM type only.

ELECTRICAL INFORMATION

Table 58 – 50HC-A04 **ELECTRIC HEAT - ELECTRICAL DATA**

SINGLE STAGE COOLING SINGLE SPEED INDOOR FAN MOTOR W/NON-FUSED DISCONNECT

NOM. V–PH–Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER CRHEATER	NOM PWR (kW)	APP PWR (kW)	SINGLE POINT KIT PART NUMBER CRSINGLE			
					NO C.O. or UNPWRD C.O.		w/PWRD C.O.	
					NO P.E.	w/P.E. (pwrd fr/unit)	NO P.E.	w/P.E. (pwrd fr/unit)
208/230–1–60	DD–STD	101A00	4.4	3.3/4.0	037	037	–	–
		102A00	6.5	4.9/6.0	037	037	–	–
		103B00	8.7	6.5/8.0	037	037	–	–
		104B00	10.5	7.9/9.6	040	040	–	–
		102A00,102A00	13.0	9.8/11.9	040	040	–	–
	STD	101A00	4.4	3.3/4.0	037	037	–	–
		102A00	6.5	4.9/6.0	037	037	–	–
		103B00	8.7	6.5/8.0	037	037	–	–
		104B00	10.5	7.9/9.6	040	040	–	–
		102A00,102A00	13.0	9.8/11.9	040	040	–	–
	MED	101A00	4.4	3.3/4.0	037	037	–	–
		102A00	6.5	4.9/6.0	037	037	–	–
		103B00	8.7	6.5/8.0	037	037	–	–
		104B00	10.5	7.9/9.6	040	040	–	–
		102A00,102A00	13.0	9.8/11.9	040	040	–	–
208/230–3–60	DD–STD	101A00	4.4	3.3/4.0	037	037	037	037
		102A00	6.5	4.9/6.0	037	037	037	037
		103B00	8.7	6.5/8.0	037	037	037	037
		104B00	10.5	7.9/9.6	037	037	037	037
		105A00	16.0	12.0/14.7	037	037	038	038
	STD	101A00	4.4	3.3/4.0	037	037	037	037
		102A00	6.5	4.9/6.0	037	037	037	037
		103B00	8.7	6.5/8.0	037	037	037	037
		104B00	10.5	7.9/9.6	037	037	037	037
		105A00	16.0	12.0/14.7	037	037	038	038
	MED	101A00	4.4	3.3/4.0	037	037	037	037
		102A00	6.5	4.9/6.0	037	037	037	037
		103B00	8.7	6.5/8.0	037	037	037	037
		104B00	10.5	7.9/9.6	037	037	037	037
		105A00	16.0	12.0/14.7	037	037	038	038
	HIGH	101A00	4.4	3.3/4.0	037	037	037	037
		102A00	6.5	4.9/6.0	037	037	037	037
		103B00	8.7	6.5/8.0	037	037	037	037
		104B00	10.5	7.9/9.6	037	037	037	037
		105A00	16.0	12.0/14.7	037	037	038	038
460–3–60	DD–STD	106A00	6.0	5.5	–	–	–	–
		107A00	8.8	8.1	–	–	–	–
		108A00	11.5	10.6	–	–	–	–
		109A00	14.0	12.9	–	–	–	–
	STD	106A00	6.0	5.5	–	–	–	–
		107A00	8.8	8.1	–	–	–	–
		108A00	11.5	10.6	–	–	–	–
		109A00	14.0	12.9	–	–	–	–
	MED	106A00	6.0	5.5	–	–	–	–
		107A00	8.8	8.1	–	–	–	–
		108A00	11.5	10.6	–	–	–	–
		109A00	14.0	12.9	–	–	–	–
	HIGH	106A00	6.0	5.5	–	–	–	–
		107A00	8.8	8.1	–	–	–	–
		108A00	11.5	10.6	–	–	–	–
		109A00	14.0	12.9	–	–	–	–
575–3–60	DD–STD	297A00	9.2	9.2	–	–	–	–
		298A00	13.8	13.8	–	–	–	–
	STD	297A00	9.2	9.2	–	–	–	–
		298A00	13.8	13.8	–	–	–	–
	MED	297A00	9.2	9.2	–	–	–	–
		298A00	13.8	13.8	–	–	–	–
	HIGH	297A00	9.2	9.2	–	–	–	–
		298A00	13.8	13.8	–	–	–	–

NOTE: STD and MED IFM type are belt drive for 1 phase HC w/Humidi–MiZer. HC 1 phase w/o Humidi–MiZer must use DD–STD IFM type only.

ELECTRICAL INFORMATION

Table 59 – 50HC-A05 **ELECTRIC HEAT - ELECTRICAL DATA**

SINGLE STAGE COOLING SINGLE SPEED INDOOR FAN MOTOR W/NON-FUSED DISCONNECT

NOM. V–PH–Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER CRHEATER	NOM PWR (kW)	APP PWR (kW)	SINGLE POINT KIT PART NUMBER CRSINGLE			
					NO C.O. or UNPWRD C.O.		w/PWRD C.O.	
					NO P.E.	w/P.E. (pwrd fr/unit)	NO P.E.	w/P.E. (pwrd fr/unit)
208/ 230–1–60	DD–STD	101A00	4.4	3.3/4.0	037	037	–	–
		103B00	8.7	6.5/8.0	037	037	–	–
		102A00,102A00	13.0	9.8/11.9	040	040	–	–
		103B00,103B00	17.4	13.1/16.0	040	040	–	–
		104B00,104B00	21.0	15.8/19.3	040	040	–	–
	STD	101A00	4.4	3.3/4.0	037	037	–	–
		103B00	8.7	6.5/8.0	037	037	–	–
		102A00,102A00	13.0	9.8/11.9	040	040	–	–
		103B00,103B00	17.4	13.1/16.0	040	040	–	–
		104B00,104B00	21.0	15.8/19.3	040	040	–	–
	MED	101A00	4.4	3.3/4.0	037	037	–	–
		103B00	8.7	6.5/8.0	037	037	–	–
		102A00,102A00	13.0	9.8/11.9	040	040	–	–
		103B00,103B00	17.4	13.1/16.0	040	040	–	–
		104B00,104B00	21.0	15.8/19.3	040	040	–	–
208/ 230–3–60	DD–STD	102A00	6.5	4.9/6.0	037	037	037	037
		103B00	8.7	6.5/8.0	037	037	037	037
		105A00	16.0	12.0/14.7	037	037	038	038
		104B00,104B00	21.0	15.8/19.3	038	038	038	038
	STD	102A00	6.5	4.9/6.0	037	037	037	037
		103B00	8.7	6.5/8.0	037	037	037	037
		105A00	16.0	12.0/14.7	037	037	038	038
		104B00,104B00	21.0	15.8/19.3	038	038	038	038
	MED	102A00	6.5	4.9/6.0	037	037	037	037
		103B00	8.7	6.5/8.0	037	037	037	037
		105A00	16.0	12.0/14.7	037	037	038	038
		104B00,104B00	21.0	15.8/19.3	038	038	038	038
	HIGH	102A00	6.5	4.9/6.0	037	037	037	037
		103B00	8.7	6.5/8.0	037	037	037	037
		105A00	16.0	12.0/14.7	037	038	038	038
		104B00,104B00	21.0	15.8/19.3	038	038	038	038
460–3–60	DD–STD	106A00	6.0	5.5	–	–	–	–
		108A00	11.5	10.6	–	–	–	–
		109A00	14.0	12.9	–	–	–	–
		108A00,108A00	23.0	21.1	037	037	037	037
	STD	106A00	6.0	5.5	–	–	–	–
		108A00	11.5	10.6	–	–	–	–
		109A00	14.0	12.9	–	–	–	–
		108A00,108A00	23.0	21.1	037	037	037	037
	MED	106A00	6.0	5.5	–	–	–	–
		108A00	11.5	10.6	–	–	–	–
		109A00	14.0	12.9	–	–	–	–
		108A00,108A00	23.0	21.1	037	037	037	037
	HIGH	106A00	6.0	5.5	–	–	–	–
		108A00	11.5	10.6	–	–	–	–
		109A00	14.0	12.9	–	–	–	–
		108A00,108A00	23.0	21.1	037	037	037	037
575–3–60	DD–STD	297A00	9.2	9.2	–	–	–	–
		298A00	13.8	13.8	–	–	–	–
	STD	297A00	9.2	9.2	–	–	–	–
		298A00	13.8	13.8	–	–	–	–
	MED	297A00	9.2	9.2	–	–	–	–
		298A00	13.8	13.8	–	–	–	–
	HIGH	297A00	9.2	9.2	–	–	–	–
		298A00	13.8	13.8	–	–	–	–

NOTE: STD and MED IFM type are belt drive for 1 phase HC w/Humidi–MiZer. HC 1 phase w/o Humidi–MiZer must use DD–STD IFM type only.

ELECTRICAL INFORMATION

Table 60 – 50HC-A06 **ELECTRIC HEAT - ELECTRICAL DATA**

SINGLE STAGE COOLING SINGLE SPEED INDOOR FAN MOTOR W/NON-FUSED DISCONNECT

NOM. V–PH–Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER CRHEATER	NOM PWR (kW)	APP PWR (kW)	SINGLE POINT KIT PART NUMBER CRSINGLE			
					NO C.O. or UNPWRD C.O.		w/PWRD C.O.	
					NO P.E.	w/P.E. (pwrd fr/unit)	NO P.E.	w/P.E. (pwrd fr/unit)
208/230–1–60	DD–STD	102A00	6.5	4.9/6.0	037	037	–	–
		103B00	8.7	6.5/8.0	037	037	–	–
		102A00,102A00	13.0	9.8/11.9	040	040	–	–
		103B00,103B00	17.4	13.1/16.0	040	040	–	–
		104B00,104B00	21.0	15.8/19.3	040	040	–	–
	STD	102A00	6.5	4.9/6.0	037	037	–	–
		103B00	8.7	6.5/8.0	037	037	–	–
		102A00,102A00	13.0	9.8/11.9	040	040	–	–
		103B00,103B00	17.4	13.1/16.0	040	040	–	–
		104B00,104B00	21.0	15.8/19.3	040	040	–	–
	MED	102A00	6.5	4.9/6.0	037	037	–	–
		103B00	8.7	6.5/8.0	037	037	–	–
		102A00,102A00	13.0	9.8/11.9	040	040	–	–
		103B00,103B00	17.4	13.1/16.0	040	040	–	–
		104B00,104B00	21.0	15.8/19.3	040	040	–	–
208/230–3–60	DD–STD	102A00	6.5	4.9/6.0	037	037	037	037
		104B00	10.5	7.9/9.6	037	037	037	037
		105A00	16.0	12.0/14.7	037	037	038	038
		104B00,104B00	21.0	15.8/19.3	038	038	038	038
		104B00,105A00	26.5	19.9/24.3	038	038	038	038
	STD	102A00	6.5	4.9/6.0	037	037	037	037
		104B00	10.5	7.9/9.6	037	037	037	037
		105A00	16.0	12.0/14.7	037	037	038	038
		104B00,104B00	21.0	15.8/19.3	038	038	038	038
		104B00,105A00	26.5	19.9/24.3	038	038	038	038
	MED	102A00	6.5	4.9/6.0	037	037	037	037
		104B00	10.5	7.9/9.6	037	037	037	037
		105A00	16.0	12.0/14.7	037	037	038	038
		104B00,104B00	21.0	15.8/19.3	038	038	038	038
		104B00,105A00	26.5	19.9/24.3	038	038	038	038
	HIGH	102A00	6.5	4.9/6.0	037	037	037	037
		104B00	10.5	7.9/9.6	037	037	037	037
		105A00	16.0	12.0/14.7	037	038	038	038
		104B00,104B00	21.0	15.8/19.3	038	038	038	038
		104B00,105A00	26.5	19.9/24.3	038	038	038	038
460–3–60	DD–STD	106A00	6.0	5.5	–	–	–	–
		108A00	11.5	10.6	–	–	–	–
		109A00	14.0	12.9	–	–	–	–
		108A00,108A00	23.0	21.1	037	037	037	037
		108A00,109A00	25.5	23.4	037	037	037	037
	STD	106A00	6.0	5.5	–	–	–	–
		108A00	11.5	10.6	–	–	–	–
		109A00	14.0	12.9	–	–	–	–
		108A00,108A00	23.0	21.1	037	037	037	037
		108A00,109A00			037	037	037	037
	MED	106A00	6.0	5.5	–	–	–	–
		108A00	11.5	10.6	–	–	–	–
		109A00	14.0	12.9	–	–	–	–
		108A00,108A00	23.0	21.1	037	037	037	037
		108A00,109A00	25.5	23.4	037	037	037	037
	HIGH	106A00	6.0	5.5	–	–	–	–
		108A00	11.5	10.6	–	–	–	–
		109A00	14.0	12.9	–	–	–	–
		108A00,108A00	23.0	21.1	037	037	037	037
		108A00,109A00	25.5	23.4	037	037	037	037
575–3–60	DD–STD	298A00	13.8	13.8	–	–	–	–
		301A00	23.0	23.0	037	037	037	037
	STD	298A00	13.8	13.8	–	–	–	–
		301A00	23.0	23.0	037	037	037	037
	MED	298A00	13.8	13.8	–	–	–	–
		301A00	23.0	23.0	037	037	037	037
	HIGH	298A00	13.8	13.8	–	–	–	–
		301A00	23.0	23.0	037	037	037	037

NOTE: STD and MED IFM type are belt drive for 1 phase HC w/Humidi–MiZer. HC 1 phase w/o Humidi–MiZer must use DD–STD IFM type only.

ELECTRICAL INFORMATION

Table 61 – 50HC-A07

ELECTRIC HEAT - ELECTRICAL DATA
SINGLE STAGE COOLING SINGLE SPEED INDOOR FAN MOTOR

NOM. V–PH–Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER CRHEATER	NOM PWR (kW)	APP PWR (kW)	SINGLE POINT KIT PART NUMBER CRSINGLE			
					NO C.O. or UNPWRD C.O.		w/PWRD C.O.	
					NO P.E.	w/P.E. (pwrd fr/unit)	NO P.E.	w/P.E. (pwrd fr/unit)
208/ 230–3–60	STD	264A00	6.5	4.9/6.0	042	042	042	042
		117A00	10.4	7.8/9.6	042	042	042	042
		110A00	16.0	12.0/14.7	042	042	043	043
		117A00,117A00	21.0	15.8/19.3	043	043	043	043
		110A00,117A00	26.5	19.9/24.3	043	043	043	043
	MED	264A00	6.5	4.9/6.0	042	042	042	042
		117A00	10.4	7.8/9.6	042	042	042	042
		110A00	16.0	12.0/14.7	042	043	043	043
		117A00,117A00	21.0	15.8/19.3	043	043	043	043
		110A00,117A00	26.5	19.9/24.3	043	043	043	043
	HIGH	264A00	6.5	4.9/6.0	042	042	042	042
		117A00	10.4	7.8/9.6	042	042	042	042
		110A00	16.0	12.0/14.7	043	043	043	043
		117A00,117A00	21.0	15.8/19.3	043	043	043	043
		110A00,117A00	26.5	19.9/24.3	043	043	043	043
460–3–60	STD	265A00	6.0	5.5	042	042	042	042
		266A00	11.5	10.6	042	042	042	042
		267A00	14.0	12.9	042	042	042	042
		268A00	23.0	21.1	042	042	042	042
		269A00	25.5	23.4	042	042	042	042
	MED	265A00	6.0	5.5	042	042	042	042
		266A00	11.5	10.6	042	042	042	042
		267A00	14.0	12.9	042	042	042	042
		268A00	23.0	21.1	042	042	042	042
		269A00	25.5	23.4	042	042	042	042
	HIGH	265A00	6.0	5.5	042	042	042	042
		266A00	11.5	10.6	042	042	042	042
		267A00	14.0	12.9	042	042	042	042
		268A00	23.0	21.1	042	042	042	042
		269A00	25.5	23.4	042	042	042	042
575–3–60	STD	118A00	17.0	17.0	042	042	042	042
		299A00	25.7	25.7	042	042	042	042
	MED	118A00	17.0	17.0	042	042	042	042
		299A00	25.7	25.7	042	042	042	042
	HIGH	118A00	17.0	17.0	042	042	042	042
		299A00	25.7	25.7	042	042	042	042

ELECTRICAL INFORMATION

Table 62 – 50HC-D08 **ELECTRIC HEAT - ELECTRICAL DATA**
2-STAGE COOLING SINGLE SPEED INDOOR FAN MOTOR

NOM. V–PH–Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER CRHEATER	NOM PWR (kW)	APP PWR (kW)	SINGLE POINT KIT PART NUMBER CRSINGLE			
					NO C.O. or UNPWRD C.O.		w/PWRD C.O.	
					NO P.E.	w/P.E. (pwrd fr/unit)	NO P.E.	w/P.E. (pwrd fr/unit)
208/ 230–3–60	STD	117A00	10.4	7.8/9.6	047	047	047	047
		110A00	16.0	12.0/14.7	047	047	049	049
		111A00	24.8	18.6/22.8	049	049	049	049
		112A00	32.0	24.0/29.4	049	049	049	049
		112A00,117A00	42.4	31.8/38.9	051	051	051	051
	MED	117A00	10.4	7.8/9.6	047	047	047	047
		110A00	16.0	12.0/14.7	047	049	049	049
		111A00	24.8	18.6/22.8	049	049	049	049
		112A00	32.0	24.0/29.4	049	049	049	049
		112A00,117A00	42.4	31.8/38.9	051	051	051	051
	HIGH	117A00	10.4	7.8/9.6	047	047	047	047
		110A00	16.0	12.0/14.7	049	049	049	049
		111A00	24.8	18.6/22.8	049	049	049	049
		112A00	32.0	24.0/29.4	049	049	049	049
		112A00,117A00	42.4	31.8/38.9	051	051	051	051
460–3–60	STD	116A00	13.9	12.8	047	047	047	047
		113A00	16.5	15.2	047	047	047	047
		114A00	27.8	25.5	047	047	047	047
		115A00	33.0	30.3	047	047	047	047
		114A00,116A00	41.7	38.3	050	050	050	050
	MED	116A00	13.9	12.8	047	047	047	047
		113A00	16.5	15.2	047	047	047	047
		114A00	27.8	25.5	047	047	047	047
		115A00	33.0	30.3	047	047	047	047
		114A00,116A00	41.7	38.3	050	050	050	050
	HIGH	116A00	13.9	12.8	047	047	047	047
		113A00	16.5	15.2	047	047	047	047
		114A00	27.8	25.5	047	047	047	047
		115A00	33.0	30.3	047	047	047	050
		114A00,116A00	41.7	38.3	050	050	050	050
575–3–60	STD	118A00	17.0	17.0	047	047	047	047
		119A00	34.0	34.0	047	047	047	050
	MED	118A00	17.0	17.0	047	047	047	047
		119A00	34.0	34.0	047	047	047	050
	HIGH	118A00	17.0	17.0	047	047	047	047
		119A00	34.0	34.0	047	047	047	050

ELECTRICAL INFORMATION

Table 63 – 50HC-D09 **ELECTRIC HEAT - ELECTRICAL DATA**
2-STAGE COOLING SINGLE SPEED INDOOR FAN MOTOR

NOM. V–PH–Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER CRHEATER	NOM PWR (kW)	APP PWR (kW)	SINGLE POINT KIT PART NUMBER CRSINGLE			
					NO C.O. or UNPWRD C.O.		w/PWRD C.O.	
					NO P.E.	w/P.E. (pwrd fr/unit)	NO P.E.	w/P.E. (pwrd fr/unit)
208/ 230–3–60	STD	117A00	10.4	7.8/9.6	047	047	047	047
		110A00	16.0	12.0/14.7	047	047	049	049
		111A00	24.8	18.6/22.8	049	049	049	049
		112A00	32.0	24.0/29.4	049	049	049	049
		112A00,117A00	42.4	31.8/38.9	051	051	051	051
	MED	117A00	10.4	7.8/9.6	047	047	047	047
		110A00	16.0	12.0/14.7	047	049	049	049
		111A00	24.8	18.6/22.8	049	049	049	049
		112A00	32.0	24.0/29.4	049	049	049	049
		112A00,117A00	42.4	31.8/38.9	051	051	051	051
	HIGH	117A00	10.4	7.8/9.6	047	047	047	047
		110A00	16.0	12.0/14.7	049	049	049	049
		111A00	24.8	18.6/22.8	049	049	049	049
		112A00	32.0	24.0/29.4	049	049	049	049
		112A00,117A00	42.4	31.8/38.9	051	051	051	051
460–3–60	STD	116A00	13.9	12.8	047	047	047	047
		113A00	16.5	15.2	047	047	047	047
		114A00	27.8	25.5	047	047	047	047
		115A00	33.0	30.3	047	047	047	047
		114A00,116A00	41.7	38.3	050	050	050	050
	MED	116A00	13.9	12.8	047	047	047	047
		113A00	16.5	15.2	047	047	047	047
		114A00	27.8	25.5	047	047	047	047
		115A00	33.0	30.3	047	047	047	047
		114A00,116A00	41.7	38.3	050	050	050	050
	HIGH	116A00	13.9	12.8	047	047	047	047
		113A00	16.5	15.2	047	047	047	047
		114A00	27.8	25.5	047	047	047	047
		115A00	33.0	30.3	047	047	047	050
		114A00,116A00	41.7	38.3	050	050	050	050
575–3–60	STD	118A00	17.0	17.0	047	047	047	047
		119A00	34.0	34.0	047	047	047	050
	MED	118A00	17.0	17.0	047	047	047	047
		119A00	34.0	34.0	047	047	047	050
	HIGH	118A00	17.0	17.0	047	047	047	047
		119A00	34.0	34.0	047	047	047	050

ELECTRICAL INFORMATION

Table 64 – 50HC-D11 **ELECTRIC HEAT - ELECTRICAL DATA**
2-STAGE COOLING SINGLE SPEED INDOOR FAN MOTOR

NOM. V–PH–Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER CRHEATER	NOM PWR (kW)	APP PWR (kW)	SINGLE POINT KIT PART NUMBER CRSINGLE			
					NO C.O. or UNPWRD C.O.		w/PWRD C.O.	
					NO P.E.	w/P.E. (pwrd fr/unit)	NO P.E.	w/P.E. (pwrd fr/unit)
208/ 230–3–60	STD	117A00	10.4	7.8/9.6	047	047	047	049
		110A00	16.0	12.0/14.7	047	049	049	049
		112A00	32.0	24.0/29.4	049	049	049	049
		112A00,117A00	42.4	31.8/38.9	051	051	051	051
		112A00,110A00	50.0	37.6/45.9	051	051	051	051
	MED	117A00	10.4	7.8/9.6	047	049	049	049
		110A00	16.0	12.0/14.7	049	049	049	049
		112A00	32.0	24.0/29.4	049	049	049	049
		112A00,117A00	42.4	31.8/38.9	051	051	051	051
		112A00,110A00	50.0	37.6/45.9	051	051	051	051
	HIGH	117A00	10.4	7.8/9.6	049	049	049	049
		110A00	16.0	12.0/14.7	049	049	049	049
		112A00	32.0	24.0/29.4	049	049	049	049
		112A00,117A00	42.4	31.8/38.9	051	051	051	051
		112A00,110A00	50.0	37.6/45.9	051	051	051	051
460–3–60	STD	116A00	13.9	12.8	047	047	047	047
		113A00	16.5	15.2	047	047	047	047
		115A00	33.0	30.3	047	047	047	047
		114A00,116A00	41.7	38.3	050	050	050	050
		115A00,113A00	50.0	45.9	050	050	050	050
	MED	116A00	13.9	12.8	047	047	047	047
		113A00	16.5	15.2	047	047	047	047
		115A00	33.0	30.3	047	047	047	050
		114A00,116A00	41.7	38.3	050	050	050	050
		115A00,113A00	50.0	45.9	050	050	050	050
	HIGH	116A00	13.9	12.8	047	047	047	047
		113A00	16.5	15.2	047	047	047	047
		115A00	33.0	30.3	047	047	050	050
		114A00,116A00	41.7	38.3	050	050	050	050
		115A00,113A00	50.0	45.9	050	050	050	050
575–3–60	STD	118A00	17.0	17.0	047	047	047	047
		119A00	34.0	34.0	047	047	047	050
		118A00,119A00	51.0	51.0	050	050	050	050
	MED	118A00	17.0	17.0	047	047	047	047
		119A00	34.0	34.0	047	047	047	050
		118A00,119A00	51.0	51.0	050	050	050	050
	HIGH	118A00	17.0	17.0	047	047	047	047
		119A00	34.0	34.0	047	050	050	050
		118A00,119A00	51.0	51.0	050	050	050	050

ELECTRICAL INFORMATION

Table 65 – 50HC-D12 **ELECTRIC HEAT - ELECTRICAL DATA**
2-STAGE COOLING SINGLE SPEED INDOOR FAN MOTOR

NOM. V–PH–Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER CRHEATER	NOM PWR (kW)	APP PWR (kW)	SINGLE POINT KIT PART NUMBER CRSINGLE			
					NO C.O. or UNPWRD C.O.		w/PWRD C.O.	
					NO P.E.	w/P.E. (pwrd fr/unit)	NO P.E.	w/P.E. (pwrd fr/unit)
208/ 230–3–60	STD	117A00	10.4	7.8/9.6	047	047	047	049
		110A00	16.0	12.0/14.7	047	049	049	049
		112A00	32.0	24.0/29.4	049	049	049	049
		112A00,117A00	42.4	31.8/38.9	051	051	051	051
		112A00,110A00	50.0	37.6/45.9	051	051	051	051
	MED	117A00	10.4	7.8/9.6	047	049	049	049
		110A00	16.0	12.0/14.7	049	049	049	049
		112A00	32.0	24.0/29.4	049	049	049	049
		112A00,117A00	42.4	31.8/38.9	051	051	051	051
		112A00,110A00	50.0	37.6/45.9	051	051	051	051
	HIGH	117A00	10.4	7.8/9.6	047	049	049	049
		110A00	16.0	12.0/14.7	049	049	049	049
		112A00	32.0	24.0/29.4	049	049	049	049
		112A00,117A00	42.4	31.8/38.9	051	051	051	051
		112A00,110A00	50.0	37.6/45.9	051	051	051	051
460–3–60	STD	116A00	13.9	12.8	047	047	047	047
		113A00	16.5	15.2	047	047	047	047
		115A00	33.0	30.3	047	047	047	047
		114A00,116A00	41.7	38.3	050	050	050	050
		115A00,113A00	50.0	45.9	050	050	050	050
	MED	116A00	13.9	12.8	047	047	047	047
		113A00	16.5	15.2	047	047	047	047
		115A00	33.0	30.3	047	047	047	050
		114A00,116A00	41.7	38.3	050	050	050	050
		115A00,113A00	50.0	45.9	050	050	050	050
	HIGH	116A00	13.9	12.8	047	047	047	047
		113A00	16.5	15.2	047	047	047	047
		115A00	33.0	30.3	047	047	050	050
		114A00,116A00	41.7	38.3	050	050	050	050
		115A00,113A00	50.0	45.9	050	050	050	050
575–3–60	STD	118A00	17.0	17.0	047	047	047	047
		119A00	34.0	34.0	047	047	047	050
		118A00,119A00	51.0	51.0	050	050	050	050
	MED	118A00	17.0	17.0	047	047	047	047
		119A00	34.0	34.0	047	047	047	050
		118A00,119A00	51.0	51.0	050	050	050	050
	HIGH	118A00	17.0	17.0	047	047	047	047
		119A00	34.0	34.0	047	050	050	050
		118A00,119A00	51.0	51.0	050	050	050	050

ELECTRICAL INFORMATION

Table 66 – 50HC-D14 **ELECTRIC HEAT - ELECTRICAL DATA**

2-STAGE COOLING SINGLE SPEED INDOOR FAN MOTOR

NOM. V–PH–Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER CRHEATER	NOM PWR (kW)	APP PWR (kW)	SINGLE POINT KIT PART NUMBER CRSINGLE			
					NO C.O. or UNPWRD C.O.		w/PWRD C.O.	
					NO P.E.	w/P.E. (pwrd fr/unit)	NO P.E.	w/P.E. (pwrd fr/unit)
208/ 230–3–60	STD	291A00	16.5	12.4/15.2	049	049	049	049
		288A00,291A00	26.5	19.9/24.3	049	049	049	049
		294A00	33.5	25.2/30.8	049	049	049	049
		288A00,294A00	43.5	32.7/40.0	051	051	051	051
		291A00,294A00	50.0	37.6/45.9	051	051	051	051
	MED	291A00	16.5	12.4/15.2	049	049	049	049
		288A00,291A00	26.5	19.9/24.3	049	049	049	049
		294A00	33.5	25.2/30.8	049	049	049	049
		288A00,294A00	43.5	32.7/40.0	051	051	051	051
		291A00,294A00	50.0	37.6/45.9	051	051	051	051
	HIGH	291A00	16.5	12.4/15.2	049	049	049	049
		288A00,291A00	26.5	19.9/24.3	049	049	049	049
		294A00	33.5	25.2/30.8	049	049	049	049
		288A00,294A00	43.5	32.7/40.0	051	051	051	051
		291A00,294A00	50.0	37.6/45.9	051	051	051	051
460–3–60	STD	292A00	16.5	15.2	–	–	–	–
		289A00,292A00	26.5	24.3	047	047	047	047
		295A00	33.5	30.8	047	047	047	050
		289A00,295A00	43.5	40.0	050	050	050	050
		292A00,295A00	50.0	45.9	050	050	050	050
	MED	292A00	16.5	15.2	–	–	–	–
		289A00,292A00	26.5	24.3	047	047	047	047
		295A00	33.5	30.8	047	047	047	050
		289A00,295A00	43.5	40.0	050	050	050	050
		292A00,295A00	50.0	45.9	050	050	050	050
	HIGH	292A00	16.5	15.2	–	–	–	–
		289A00,292A00	26.5	24.3	047	047	047	047
		295A00	33.5	30.8	050	050	050	050
		289A00,295A00	43.5	40.0	050	050	050	050
		292A00,295A00	50.0	45.9	050	050	050	050
575–3–60	STD	293A00	16.5	15.2	–	–	–	–
		290A00,293A00	26.5	24.3	047	047	047	047
		296A00	33.5	30.8	047	047	047	047
		290A00,296A00	43.5	40.0	047	050	047	050
		293A00,296A00	50.0	45.9	047	047	047	047
	MED	293A00	16.5	15.2	–	–	–	–
		290A00,293A00	26.5	24.3	047	047	047	047
		296A00	33.5	30.8	047	047	047	047
		290A00,296A00	43.5	40.0	047	050	047	050
		293A00,296A00	50.0	45.9	047	047	047	047
	HIGH	293A00	16.5	15.2	–	–	–	–
		290A00,293A00	26.5	24.3	047	047	047	047
		296A00	33.5	30.8	047	047	047	047
		290A00,296A00	43.5	40.0	050	050	050	050
		293A00,296A00	50.0	45.9	050	050	050	050

ELECTRICAL INFORMATION

Table 67 – 50HC-D08 **ELECTRIC HEAT - ELECTRICAL DATA**
2-STAGE COOLING 2-SPEED INDOOR FAN MOTOR

NOM. V–PH–Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER CRHEATER	NOM PWR (kW)	APP PWR (kW)	SINGLE POINT KIT PART NUMBER CRSINGLE			
					NO C.O. or UNPWRD C.O.		w/PWRD C.O.	
					NO P.E.	w/P.E. (pwrd fr/unit)	NO P.E.	w/P.E. (pwrd fr/unit)
208/ 230–3–60	STD	117A00	10.4	7.8/9.6	047	047	047	047
		110A00	16.0	12.0/14.7	047	047	049	049
		111A00	24.8	18.6/22.8	049	049	049	049
		112A00	32.0	24.0/29.4	049	049	049	049
		112A00,117A00	42.4	31.8/38.9	051	051	051	051
	MED	117A00	10.4	7.8/9.6	047	047	047	047
		110A00	16.0	12.0/14.7	047	049	049	049
		111A00	24.8	18.6/22.8	049	049	049	049
		112A00	32.0	24.0/29.4	049	049	049	049
		112A00,117A00	42.4	31.8/38.9	051	051	051	051
	HIGH	117A00	10.4	7.8/9.6	047	047	047	047
		110A00	16.0	12.0/14.7	049	049	049	049
		111A00	24.8	18.6/22.8	049	049	049	049
		112A00	32.0	24.0/29.4	049	049	049	049
		112A00,117A00	42.4	31.8/38.9	051	051	051	051
460–3–60	STD	116A00	13.9	12.8	047	047	047	047
		113A00	16.5	15.2	047	047	047	047
		114A00	27.8	25.5	047	047	047	047
		115A00	33.0	30.3	047	047	047	047
		114A00,116A00	41.7	38.3	050	050	050	050
	MED	116A00	13.9	12.8	047	047	047	047
		113A00	16.5	15.2	047	047	047	047
		114A00	27.8	25.5	047	047	047	047
		115A00	33.0	30.3	047	047	047	047
		114A00,116A00	41.7	38.3	050	050	050	050
	HIGH	116A00	13.9	12.8	047	047	047	047
		113A00	16.5	15.2	047	047	047	047
		114A00	27.8	25.5	047	047	047	047
		115A00	33.0	30.3	047	047	047	050
		114A00,116A00	41.7	38.3	050	050	050	050
575–3–60	STD	118A00	17.0	17.0	047	047	047	047
		119A00	34.0	34.0	047	047	047	050
	MED	118A00	17.0	17.0	047	047	047	047
		119A00	34.0	34.0	047	050	047	050
	HIGH	118A00	17.0	17.0	047	047	047	047
		119A00	34.0	34.0	047	050	047	050

ELECTRICAL INFORMATION

Table 68 – 50HC-D09

ELECTRIC HEAT - ELECTRICAL DATA
2-STAGE COOLING 2-SPEED INDOOR FAN MOTOR

NOM. V–PH–Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER CRHEATER	NOM PWR (kW)	APP PWR (kW)	SINGLE POINT KIT PART NUMBER CRSINGLE			
					NO C.O. or UNPWRD C.O.		w/PWRD C.O.	
					NO P.E.	w/P.E. (pwrd fr/unit)	NO P.E.	w/P.E. (pwrd fr/unit)
208/ 230–3–60	STD	117A00	10.4	7.8/9.6	047	047	047	047
		110A00	16.0	12.0/14.7	047	047	049	049
		111A00	24.8	18.6/22.8	049	049	049	049
		112A00	32.0	24.0/29.4	049	049	049	049
		112A00,117A00	42.4	31.8/38.9	051	051	051	051
	MED	117A00	10.4	7.8/9.6	047	047	047	047
		110A00	16.0	12.0/14.7	047	049	049	049
		111A00	24.8	18.6/22.8	049	049	049	049
		112A00	32.0	24.0/29.4	049	049	049	049
		112A00,117A00	42.4	31.8/38.9	051	051	051	051
	HIGH	117A00	10.4	7.8/9.6	047	047	047	047
		110A00	16.0	12.0/14.7	049	049	049	049
		111A00	24.8	18.6/22.8	049	049	049	049
		112A00	32.0	24.0/29.4	049	049	049	049
		112A00,117A00	42.4	31.8/38.9	051	051	051	051
460–3–60	STD	116A00	13.9	12.8	047	047	047	047
		113A00	16.5	15.2	047	047	047	047
		114A00	27.8	25.5	047	047	047	047
		115A00	33.0	30.3	047	047	047	047
		114A00,116A00	41.7	38.3	050	050	050	050
	MED	116A00	13.9	12.8	047	047	047	047
		113A00	16.5	15.2	047	047	047	047
		114A00	27.8	25.5	047	047	047	047
		115A00	33.0	30.3	047	047	047	047
		114A00,116A00	41.7	38.3	050	050	050	050
	HIGH	116A00	13.9	12.8	047	047	047	047
		113A00	16.5	15.2	047	047	047	047
		114A00	27.8	25.5	047	047	047	047
		115A00	33.0	30.3	047	047	047	050
		114A00,116A00	41.7	38.3	050	050	050	050
575–3–60	STD	118A00	17.0	17.0	047	047	047	047
		119A00	34.0	34.0	047	047	047	050
	MED	118A00	17.0	17.0	047	047	047	047
		119A00	34.0	34.0	047	050	047	050
	HIGH	118A00	17.0	17.0	047	047	047	047
		119A00	34.0	34.0	047	050	047	050

ELECTRICAL INFORMATION

Table 69 – 50HC-D11 **ELECTRIC HEAT - ELECTRICAL DATA**
2-STAGE COOLING 2-SPEED INDOOR FAN MOTOR

NOM. V–PH–Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER CRHEATER	NOM PWR (kW)	APP PWR (kW)	SINGLE POINT KIT PART NUMBER CRSINGLE			
					NO C.O. or UNPWRD C.O.		w/PWRD C.O.	
					NO P.E.	w/P.E. (pwrd fr/unit)	NO P.E.	w/P.E. (pwrd fr/unit)
208/ 230–3–60	STD	117A00	10.4	7.8/9.6	047	047	047	049
		110A00	16.0	12.0/14.7	047	049	049	049
		112A00	32.0	24.0/29.4	049	049	049	049
		112A00,117A00	42.4	31.8/38.9	051	051	051	051
		112A00,110A00	50.0	37.6/45.9	051	051	051	051
	MED	117A00	10.4	7.8/9.6	047	049	049	049
		110A00	16.0	12.0/14.7	049	049	049	049
		112A00	32.0	24.0/29.4	049	049	049	049
		112A00,117A00	42.4	31.8/38.9	051	051	051	051
		112A00,110A00	50.0	37.6/45.9	051	051	051	051
	HIGH	117A00	10.4	7.8/9.6	049	049	049	049
		110A00	16.0	12.0/14.7	049	049	049	049
		112A00	32.0	24.0/29.4	049	049	049	049
		112A00,117A00	42.4	31.8/38.9	051	051	051	051
		112A00,110A00	50.0	37.6/45.9	051	051	051	051
460–3–60	STD	116A00	13.9	12.8	047	047	047	047
		113A00	16.5	15.2	047	047	047	047
		115A00	33.0	30.3	047	047	047	047
		114A00,116A00	41.7	38.3	050	050	050	050
		115A00,113A00	50.0	45.9	050	050	050	050
	MED	116A00	13.9	12.8	047	047	047	047
		113A00	16.5	15.2	047	047	047	047
		115A00	33.0	30.3	047	047	047	050
		114A00,116A00	41.7	38.3	050	050	050	050
		115A00,113A00	50.0	45.9	050	050	050	050
	HIGH	116A00	13.9	12.8	047	047	047	047
		113A00	16.5	15.2	047	047	047	047
		115A00	33.0	30.3	047	047	050	050
		114A00,116A00	41.7	38.3	050	050	050	050
		115A00,113A00	50.0	45.9	050	050	050	050
575–3–60	STD	118A00	17.0	17.0	047	047	047	047
		119A00	34.0	34.0	047	050	047	050
		118A00,119A00	51.0	51.0	050	050	050	050
	MED	118A00	17.0	17.0	047	047	047	047
		119A00	34.0	34.0	047	050	047	050
		118A00,119A00	51.0	51.0	050	050	050	050
	HIGH	118A00	17.0	17.0	047	047	047	047
		119A00	34.0	34.0	047	050	050	050
		118A00,119A00	51.0	51.0	050	050	050	050

ELECTRICAL INFORMATION

Table 70 – 50HC-D12 **ELECTRIC HEAT - ELECTRICAL DATA**
2-STAGE COOLING 2-SPEED INDOOR FAN MOTOR

NOM. V–PH–Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER CRHEATER	NOM PWR (kW)	APP PWR (kW)	SINGLE POINT KIT PART NUMBER CRSINGLE			
					NO C.O. or UNPWRD C.O.		w/PWRD C.O.	
					NO P.E.	w/P.E. (pwrd fr/unit)	NO P.E.	w/P.E. (pwrd fr/unit)
208/ 230–3–60	STD	117A00	10.4	7.8/9.6	047	047	047	049
		110A00	16.0	12.0/14.7	047	049	049	049
		112A00	32.0	24.0/29.4	049	049	049	049
		112A00,117A00	42.4	31.8/38.9	051	051	051	051
		112A00,110A00	50.0	37.6/45.9	051	051	051	051
	MED	117A00	10.4	7.8/9.6	047	049	049	049
		110A00	16.0	12.0/14.7	049	049	049	049
		112A00	32.0	24.0/29.4	049	049	049	049
		112A00,117A00	42.4	31.8/38.9	051	051	051	051
		112A00,110A00	50.0	37.6/45.9	051	051	051	051
	HIGH	117A00	10.4	7.8/9.6	047	049	049	049
		110A00	16.0	12.0/14.7	049	049	049	049
		112A00	32.0	24.0/29.4	049	049	049	049
		112A00,117A00	42.4	31.8/38.9	051	051	051	051
		112A00,110A00	50.0	37.6/45.9	051	051	051	051
460–3–60	STD	116A00	13.9	12.8	047	047	047	047
		113A00	16.5	15.2	047	047	047	047
		115A00	33.0	30.3	047	047	047	047
		114A00,116A00	41.7	38.3	050	050	050	050
		115A00,113A00	50.0	45.9	050	050	050	050
	MED	116A00	13.9	12.8	047	047	047	047
		113A00	16.5	15.2	047	047	047	047
		115A00	33.0	30.3	047	047	047	050
		114A00,116A00	41.7	38.3	050	050	050	050
		115A00,113A00	50.0	45.9	050	050	050	050
	HIGH	116A00	13.9	12.8	047	047	047	047
		113A00	16.5	15.2	047	047	047	047
		115A00	33.0	30.3	047	047	050	050
		114A00,116A00	41.7	38.3	050	050	050	050
		115A00,113A00	50.0	45.9	050	050	050	050
575–3–60	STD	118A00	17.0	17.0	047	047	047	047
		119A00	34.0	34.0	047	050	047	050
		118A00,119A00	51.0	51.0	050	050	050	050
	MED	118A00	17.0	17.0	047	047	047	047
		119A00	34.0	34.0	047	050	047	050
		118A00,119A00	51.0	51.0	050	050	050	050
	HIGH	118A00	17.0	17.0	047	047	047	047
		119A00	34.0	34.0	047	050	050	050
		118A00,119A00	51.0	51.0	050	050	050	050

ELECTRICAL INFORMATION

Table 71 – 50HC-D14

ELECTRIC HEAT - ELECTRICAL DATA
2-STAGE COOLING 2-SPEED INDOOR FAN MOTOR

NOM. V–PH–Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER CRHEATER	NOM PWR (kW)	APP PWR (kW)	SINGLE POINT KIT PART NUMBER CRSINGLE			
					NO C.O. or UNPWRD C.O.		w/PWRD C.O.	
					NO P.E.	w/P.E. (pwrd fr/unit)	NO P.E.	w/P.E. (pwrd fr/unit)
208/ 230–3–60	STD	291A00	16.5	12.4/15.2	049	049	049	049
		288A00,291A00	26.5	19.9/24.3	049	049	049	049
		294A00	33.5	25.2/30.8	049	049	049	049
		288A00,294A00	43.5	32.7/40.0	051	051	051	051
		291A00,294A00	50.0	37.6/45.9	051	051	051	051
	MED	291A00	16.5	12.4/15.2	049	049	049	049
		288A00,291A00	26.5	19.9/24.3	049	049	049	049
		294A00	33.5	25.2/30.8	049	049	049	049
		288A00,294A00	43.5	32.7/40.0	051	051	051	051
		291A00,294A00	50.0	37.6/45.9	051	051	051	051
	HIGH	291A00	16.5	12.4/15.2	049	049	049	049
		288A00,291A00	26.5	19.9/24.3	049	049	049	049
		294A00	33.5	25.2/30.8	049	049	049	049
		288A00,294A00	43.5	32.7/40.0	051	051	051	051
		291A00,294A00	50.0	37.6/45.9	051	051	051	051
460–3–60	STD	292A00	16.5	15.2	–	–	–	–
		289A00,292A00	26.5	24.3	047	047	047	047
		295A00	33.5	30.8	047	047	047	050
		289A00,295A00	43.5	40.0	050	050	050	050
		292A00,295A00	50.0	45.9	050	050	050	050
	MED	292A00	16.5	15.2	–	–	–	–
		289A00,292A00	26.5	24.3	047	047	047	047
		295A00	33.5	30.8	047	047	047	050
		289A00,295A00	43.5	40.0	050	050	050	050
		292A00,295A00	50.0	45.9	050	050	050	050
	HIGH	292A00	16.5	15.2	–	–	–	–
		289A00,292A00	26.5	24.3	047	047	047	047
		295A00	33.5	30.8	050	050	050	050
		289A00,295A00	43.5	40.0	050	050	050	050
		292A00,295A00	50.0	45.9	050	050	050	050
575–3–60	STD	293A00	16.5	15.2	–	–	–	–
		290A00,293A00	26.5	24.3	047	047	047	047
		296A00	33.5	30.8	047	047	047	047
		290A00,296A00	43.5	40.0	047	050	047	050
		293A00,296A00	50.0	45.9	047	047	047	050
	MED	293A00	16.5	15.2	–	–	–	–
		290A00,293A00	26.5	24.3	047	047	047	047
		296A00	33.5	30.8	047	047	047	047
		290A00,296A00	43.5	40.0	047	050	047	050
		293A00,296A00	50.0	45.9	047	047	047	050
	HIGH	293A00	16.5	15.2	–	–	–	–
		290A00,293A00	26.5	24.3	047	047	047	047
		296A00	33.5	30.8	047	047	047	047
		290A00,296A00	43.5	40.0	050	050	050	050
		293A00,296A00	50.0	45.9	050	050	050	050

ELECTRICAL INFORMATION

Table 72 – UNIT WIRE/FUSE OR HACR BREAKER SIZING DATA WITH SINGLE SPEED INDOOR FAN MOTOR

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC*A04	208/230–1–60	DD–STD	NONE	–	–	30	45	29	88	32	45	31	90	–	–	–	–	–	–	–	–
			101A	3.3/4.4	15.9/18.3	30/33	45/45	29/30	88/88	32/35	45/45	31/32	90/90	–	–	–	–	–	–	–	–
			102A	4.9/6.5	23.5/27.1	39/44	45/45	36/40	88/88	41/46	45/50	38/42	90/90	–	–	–	–	–	–	–	–
			103B	6.5/8.7	31.4/36.3	49/55	50/60	45/50	88/88	51/57	60/60	47/52	90/90	–	–	–	–	–	–	–	–
			104B	7.9/10.5	37.9/43.8	57/64	60/70	52/59	88/88	59/67	60/70	54/61	90/90	–	–	–	–	–	–	–	–
			102A+102A	9.8/13.0	46.9/54.2	68/77	70/80	62/71	88/88	71/80	80/80	65/73	90/90	–	–	–	–	–	–	–	–
		STD	NONE	–	–	27	40	26	93	29	45	28	95	–	–	–	–	–	–	–	–
			101A	3.3/4.4	15.9/18.3	27/29	40/40	26/27	93/93	29/32	45/45	28/29	95/95	–	–	–	–	–	–	–	–
			102A	4.9/6.5	23.5/27.1	36/40	40/45	33/37	93/93	38/43	45/45	35/39	95/95	–	–	–	–	–	–	–	–
			103B	6.5/8.7	31.4/36.3	46/52	50/60	42/47	93/93	48/54	50/60	44/50	95/95	–	–	–	–	–	–	–	–
			104B	7.9/10.5	37.9/43.8	54/61	60/70	49/56	93/93	56/64	60/70	51/58	95/95	–	–	–	–	–	–	–	–
			102A+102A	9.8/13.0	46.9/54.2	65/74	70/80	60/68	93/93	68/77	70/80	62/70	95/95	–	–	–	–	–	–	–	–
		MED	NONE	–	–	27	40	26	93	29	45	28	95	–	–	–	–	–	–	–	–
			101A	3.3/4.4	15.9/18.3	27/29	40/40	26/27	93/93	29/32	45/45	28/29	95/95	–	–	–	–	–	–	–	–
			102A	4.9/6.5	23.5/27.1	36/40	40/45	33/37	93/93	38/43	45/45	35/39	95/95	–	–	–	–	–	–	–	–
			103B	6.5/8.7	31.4/36.3	46/52	50/60	42/47	93/93	48/54	50/60	44/50	95/95	–	–	–	–	–	–	–	–
			104B	7.9/10.5	37.9/43.8	54/61	60/70	49/56	93/93	56/64	60/70	51/58	95/95	–	–	–	–	–	–	–	–
			102A+102A	9.8/13.0	46.9/54.2	65/74	70/80	60/68	93/93	68/77	70/80	62/70	95/95	–	–	–	–	–	–	–	–
	208/230–3–60	DD–STD	NONE	–	–	22	30	22	82	24	30	24	84	27	30	27	87	29	35	29	89
			101A	3.3/4.4	9.2/10.6	22/23	30/30	22/22	82/82	24/25	30/30	24/24	84/84	27/29	30/30	27/27	87/87	30/31	35/35	29/29	89/89
			102A	4.9/6.5	13.6/15.6	27/29	30/30	24/26	82/82	29/32	30/35	26/29	84/84	33/35	35/35	30/32	87/87	35/38	35/40	32/34	89/89
			103B	6.5/8.7	18.1/20.9	32/36	35/40	29/33	82/82	35/38	35/40	32/35	84/84	38/42	40/45	35/38	87/87	41/44	45/45	37/40	89/89
			104B	7.9/10.5	21.9/25.3	37/41	40/45	34/38	82/82	39/44	40/45	36/40	84/84	43/47	45/50	39/43	87/87	45/50	50/50	41/45	89/89
			105A	12.0/16.0	33.4/38.5	51/58	60/60	47/53	82/82	54/60	60/60	49/55	84/84	57/64	60/70	52/58	87/87	60/66	60/70	55/60	89/89
		STD	NONE	–	–	20	25	19	94	22	30	21	96	24	30	25	99	26	30	27	101
			101A	3.3/4.4	9.2/10.6	20/20	25/25	19/19	94/94	22/23	30/30	21/21	96/96	24/26	30/30	25/25	99/99	27/29	30/30	27/27	101/101
			102A	4.9/6.5	13.6/15.6	24/26	25/30	22/24	94/94	26/29	30/30	24/26	96/96	30/32	30/35	27/29	99/99	32/35	35/35	29/32	101/101
			103B	6.5/8.7	18.1/20.9	30/33	30/35	27/30	94/94	32/35	35/40	29/32	96/96	36/39	40/40	32/36	99/99	38/41	40/45	35/38	101/101
			104B	7.9/10.5	21.9/25.3	34/39	35/40	31/35	94/94	37/41	40/45	33/37	96/96	40/45	40/45	37/41	99/99	43/47	45/50	39/43	101/101
			105A	12.0/16.0	33.4/38.5	49/55	50/60	44/50	94/94	51/57	60/60	47/52	96/96	55/61	60/70	50/56	99/99	57/63	60/70	52/58	101/101
		MED	NONE	–	–	20	25	19	94	22	30	21	96	24	30	25	99	26	30	27	101
			101A	3.3/4.4	9.2/10.6	20/20	25/25	19/19	94/94	22/23	30/30	21/21	96/96	24/26	30/30	25/25	99/99	27/29	30/30	27/27	101/101
			102A	4.9/6.5	13.6/15.6	24/26	25/30	22/24	94/94	26/29	30/30	24/26	96/96	30/32	30/35	27/29	99/99	32/35	35/35	29/32	101/101
			103B	6.5/8.7	18.1/20.9	30/33	30/35	27/30	94/94	32/35	35/40	29/32	96/96	36/39	40/40	32/36	99/99	38/41	40/45	35/38	101/101
			104B	7.9/10.5	21.9/25.3	34/39	35/40	31/35	94/94	37/41	40/45	33/37	96/96	40/45	40/45	37/41	99/99	43/47	45/50	39/43	101/101
			105A	12.0/16.0	33.4/38.5	49/55	50/60	44/50	94/94	51/57	60/60	47/52	96/96	55/61	60/70	50/56	99/99	57/63	60/70	52/58	101/101
		HIGH	NONE	–	–	21/21	30/30	21/21	132	23/23	30/30	23/23	134	26/26	30/30	27/26	137	28/28	35/35	29/29	139
			101A	3.3/4.4	9.2/10.6	21/22	30/30	21/21	132/132	23/24	30/30	23/23	134/134	27/28	30/30	27/26	137/137	29/30	35/35	29/29	139/139
			102A	4.9/6.5	13.6/15.6	26/28	30/30	24/26	132/132	28/31	30/35	26/28	134/134	32/34	35/35	29/31	137/137	34/37	35/40	31/33	139/139
			103B	6.5/8.7	18.1/20.9	32/35	35/35	29/32	132/132	34/37	35/40	31/34	134/134	38/41	40/45	34/37	137/137	40/43	40/45	36/39	139/139
			104B	7.9/10.5	21.9/25.3	36/40	40/40	33/37	132/132	39/43	40/45	35/39	134/134	42/46	45/50	39/42	137/137	45/49	45/50	41/45	139/139
			105A	12.0/16.0	33.4/38.5	51/57	60/60	46/52	132/132	53/59	60/60	49/54	134/134	57/63	60/70	52/58	137/137	59/65	60/70	54/60	139/139

See “Legend and Notes for Tables 72 – 75” on page129

ELECTRICAL INFORMATION

Table 72 - UNIT WIRE/FUSE OR HACR BREAKER SIZING DATA WITH SINGLE SPEED INDOOR FAN MOTOR (cont)

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC*A04	460–3–60	DD–STD	NONE	–	–	12	15	12	43	13	15	13	44	14	20	14	45	15	20	16	46
			106A	6.0	7.2	14	15	13	43	16	20	14	44	17	20	15	45	18	20	17	46
			107A	8.8	10.6	19	20	17	43	20	20	18	44	21	25	19	45	23	25	20	46
			108A	11.5	13.8	23	25	20	43	24	25	22	44	25	25	23	45	27	30	24	46
			109A	14.0	16.8	26	30	24	43	28	30	25	44	29	30	26	45	30	30	28	46
		STD	NONE	–	–	11	15	10	48	12	15	11	49	13	15	13	50	14	20	14	51
			106A	6.0	7.2	13	15	11	48	14	15	12	49	15	15	14	50	17	20	15	51
			107A	8.8	10.6	17	20	15	48	18	20	16	49	20	20	18	50	21	25	19	51
			108A	11.5	13.8	21	25	19	48	22	25	20	49	24	25	21	50	25	25	23	51
			109A	14.0	16.8	25	25	22	48	26	30	23	49	27	30	25	50	29	30	26	51
		MED	NONE	–	–	11	15	10	48	12	15	11	49	13	15	13	50	14	20	14	51
			106A	6.0	7.2	13	15	11	48	14	15	12	49	15	15	14	50	17	20	15	51
			107A	8.8	10.6	17	20	15	48	18	20	16	49	20	20	18	50	21	25	19	51
			108A	11.5	13.8	21	25	19	48	22	25	20	49	24	25	21	50	25	25	23	51
			109A	14.0	16.8	25	25	22	48	26	30	23	49	27	30	25	50	29	30	26	51
		HIGH	NONE	–	–	12	15	11	67	13	15	12	68	14	15	14	69	15	20	15	70
			106A	6.0	7.2	14	15	12	67	15	15	13	68	16	20	15	69	18	20	16	70
			107A	8.8	10.6	18	20	16	67	19	20	17	68	21	25	19	69	22	25	20	70
			108A	11.5	13.8	22	25	20	67	23	25	21	68	25	25	22	69	26	30	23	70
			109A	14.0	16.8	26	30	23	67	27	30	24	68	28	30	26	69	30	30	27	70
	575–3–60	DD–STD	NONE	–	–	10	15	10	42	12	15	12	44	11	15	12	44	13	15	14	46
			297A	9.2	9.2	17	20	15	42	19	20	17	44	19	20	17	44	21	25	19	46
			298A	13.8	13.8	23	25	20	42	25	25	23	44	25	25	22	44	27	30	25	46
		STD	NONE	–	–	7	15	6	45	9	15	9	47	9	15	8	47	11	15	10	49
			297A	9.2	9.2	13	15	12	45	16	20	14	47	16	20	14	47	18	20	16	49
			298A	13.8	13.8	19	20	17	45	22	25	19	47	21	25	19	47	24	25	21	49
		MED	NONE	–	–	7	15	6	45	9	15	9	47	9	15	8	47	11	15	10	49
			297A	9.2	9.2	13	15	12	45	16	20	14	47	16	20	14	47	18	20	16	49
			298A	13.8	13.8	19	20	17	45	22	25	19	47	21	25	19	47	24	25	21	49
		HIGH	NONE	–	–	8	15	7	49	10	15	9	51	9	15	9	51	11	15	11	53
			297A	9.2	9.2	14	15	13	49	17	20	15	51	17	20	15	51	19	20	17	53
			298A	13.8	13.8	20	20	18	49	23	25	20	51	22	25	20	51	25	25	22	53

See “Legend and Notes for Tables 72 – 75” on page129

ELECTRICAL INFORMATION

Table 72 - UNIT WIRE/FUSE OR HACR BREAKER SIZING DATA WITH SINGLE SPEED INDOOR FAN MOTOR (cont)

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC*A05	208/230–1–60	DD–STD	NONE	–	–	37	50	35	127	38	50	37	129	–	–	–	–	–	–	–	–
			101A	3.3/4.4	15.9/18.3	37/37	50/50	35/35	127/127	38/38	50/50	37/37	129/129	–	–	–	–	–	–	–	–
			103B	6.5/8.7	31.4/36.3	49/55	50/60	45/50	127/127	51/57	60/60	47/52	129/129	–	–	–	–	–	–	–	–
			102A+102A	9.8/13.0	46.9/54.2	68/77	70/80	62/71	127/127	71/80	80/80	65/73	129/129	–	–	–	–	–	–	–	–
			103B+103B	13.1/17.4	62.8/72.5	88/100	90/100	81/92	127/127	91/103	100/110	83/94	129/129	–	–	–	–	–	–	–	–
			104B+104B	15.8/21.0	75.8/87.5	104/119	110/125	96/109	127/127	107/121	110/125	98/111	129/129	–	–	–	–	–	–	–	–
		STD	NONE	–	–	34	50	32	132	36	50	35	134	–	–	–	–	–	–	–	–
			101A	3.3/4.4	15.9/18.3	34/34	50/50	32/32	132/132	36/36	50/50	35/35	134/134	–	–	–	–	–	–	–	–
			103B	6.5/8.7	31.4/36.3	46/52	50/60	42/47	132/132	48/54	50/60	44/50	134/134	–	–	–	–	–	–	–	–
			102A+102A	9.8/13.0	46.9/54.2	65/74	70/80	60/68	132/132	68/77	70/80	62/70	134/134	–	–	–	–	–	–	–	–
			103B+103B	13.1/17.4	62.8/72.5	85/97	90/100	78/89	132/132	87/100	90/100	80/91	134/134	–	–	–	–	–	–	–	–
			104B+104B	15.8/21.0	75.8/87.5	101/116	110/125	93/106	132/132	104/118	110/125	95/108	134/134	–	–	–	–	–	–	–	–
		MED	NONE	–	–	34	50	32	132	36	50	35	134	–	–	–	–	–	–	–	–
			101A	3.3/4.4	15.9/18.3	34/34	50/50	32/32	132/132	36/36	50/50	35/35	134/134	–	–	–	–	–	–	–	–
			103B	6.5/8.7	31.4/36.3	46/52	50/60	42/47	132/132	48/54	50/60	44/50	134/134	–	–	–	–	–	–	–	–
			102A+102A	9.8/13.0	46.9/54.2	65/74	70/80	60/68	132/132	68/77	70/80	62/70	134/134	–	–	–	–	–	–	–	–
			103B+103B	13.1/17.4	62.8/72.5	85/97	90/100	78/89	132/132	87/100	90/100	80/91	134/134	–	–	–	–	–	–	–	–
			104B+104B	15.8/21.0	75.8/87.5	101/116	110/125	93/106	132/132	104/118	110/125	95/108	134/134	–	–	–	–	–	–	–	–
	208/230–3–60	DD–STD	NONE	–	–	26	30	26	93	28	40	28	95	31	40	31	98	33	45	34	100
			102A	4.9/6.5	13.6/15.6	27/29	30/30	26/26	93/93	29/32	40/40	28/29	95/95	33/35	40/40	31/32	98/98	35/38	45/45	34/34	100/100
			103B	6.5/8.7	18.1/20.9	32/36	35/40	29/33	93/93	35/38	40/40	32/35	95/95	38/42	40/45	35/38	98/98	41/44	45/45	37/40	100/100
			105A	12.0/16.0	33.4/38.5	51/58	60/60	47/53	93/93	54/60	60/60	49/55	95/95	57/64	60/70	52/58	98/98	60/66	60/70	55/60	100/100
			104B+104B	15.8/21.0	43.8/50.5	64/73	70/80	59/67	93/93	67/75	70/80	61/69	95/95	70/79	80/80	64/72	98/98	73/81	80/90	67/74	100/100
		STD	NONE	–	–	24	30	23	105	26	30	26	107	29	40	29	110	31	40	31	112
			102A	4.9/6.5	13.6/15.6	24/26	30/30	23/24	105/105	26/29	30/30	26/26	107/107	30/32	40/40	29/29	110/110	32/35	40/40	31/32	112/112
			103B	6.5/8.7	18.1/20.9	30/33	30/35	27/30	105/105	32/35	35/40	29/32	107/107	36/39	40/40	32/36	110/110	38/41	40/45	35/38	112/112
			105A	12.0/16.0	33.4/38.5	49/55	50/60	44/50	105/105	51/57	60/60	47/52	107/107	55/61	60/70	50/56	110/110	57/63	60/70	52/58	112/112
			104B+104B	15.8/21.0	43.8/50.5	62/70	70/70	56/64	105/105	64/72	70/80	59/66	107/107	68/76	70/80	62/70	110/110	70/78	70/80	64/72	112/112
		MED	NONE	–	–	24/24	30/30	23/23	122	26/26	30/30	26/25	124	29/29	40/40	29/29	127	31/31	40/40	31/31	129
			102A	4.9/6.5	13.6/15.6	24/26	30/30	23/24	122/122	26/28	30/30	26/26	124/124	30/32	40/40	29/29	127/127	32/34	40/40	31/31	129/129
			103B	6.5/8.7	18.1/20.9	30/33	30/35	27/30	122/122	32/35	35/35	29/32	124/124	36/39	40/40	32/35	127/127	38/41	40/45	35/37	129/129
			105A	12.0/16.0	33.4/38.5	49/55	50/60	44/50	122/122	51/57	60/60	47/52	124/124	55/61	60/70	50/55	127/127	57/63	60/70	52/58	129/129
			104B+104B	15.8/21.0	43.8/50.5	62/70	70/70	56/64	122/122	64/72	70/80	59/66	124/124	68/76	70/80	62/69	127/127	70/78	70/80	64/71	129/129
		HIGH	NONE	–	–	27/27	40/40	27/27	158	29/29	40/40	29/29	160	32/32	45/45	33/32	163	34/34	45/45	35/35	165
			102A	4.9/6.5	13.6/15.6	28/30	40/40	27/27	158/158	30/33	40/40	29/30	160/160	34/36	45/45	33/33	163/163	36/39	45/45	35/35	165/165
			103B	6.5/8.7	18.1/20.9	34/37	40/40	30/34	158/158	36/39	40/40	33/36	160/160	40/43	45/45	36/39	163/163	42/45	45/45	38/41	165/165
			105A	12.0/16.0	33.4/38.5	53/59	60/60	48/54	158/158	55/61	60/70	50/56	160/160	59/65	60/70	54/59	163/163	61/67	70/70	56/62	165/165
			104B+104B	15.8/21.0	43.8/50.5	66/74	70/80	60/68	158/158	68/76	70/80	62/70	160/160	72/80	80/80	66/73	163/163	74/82	80/90	68/75	165/165

See “Legend and Notes for Tables 72 – 75” on page129

ELECTRICAL INFORMATION

Table 72 - UNIT WIRE/FUSE OR HACR BREAKER SIZING DATA WITH SINGLE SPEED INDOOR FAN MOTOR (cont)

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC*A05	460–3–60	DD–STD	NONE	–	–	13	15	13	47	14	20	14	48	15	20	15	49	16	20	16	50
			106A	6.0	7.2	14	15	13	47	16	20	14	48	17	20	15	49	18	20	17	50
			108A	11.5	13.8	23	25	20	47	24	25	22	48	25	25	23	49	27	30	24	50
			109A	14.0	16.8	26	30	24	47	28	30	25	48	29	30	26	49	30	30	28	50
			108A+108A	23.0	27.7	40	40	36	47	41	45	38	48	43	45	39	49	44	45	40	50
		STD	NONE	–	–	12	15	11	52	13	15	12	53	14	20	14	54	15	20	15	55
			106A	6.0	7.2	13	15	11	52	14	15	12	53	15	20	14	54	17	20	15	55
			108A	11.5	13.8	21	25	19	52	22	25	20	53	24	25	21	54	25	25	23	55
			109A	14.0	16.8	25	25	22	52	26	30	23	53	27	30	25	54	29	30	26	55
			108A+108A	23.0	27.7	38	40	35	52	40	40	36	53	41	45	37	54	42	45	39	55
		MED	NONE	–	–	12	15	11	61	13	15	12	62	14	15	14	63	15	20	15	64
			106A	6.0	7.2	13	15	11	61	14	15	12	62	15	15	14	63	17	20	15	64
			108A	11.5	13.8	21	25	19	61	22	25	20	62	24	25	21	63	25	25	22	64
			109A	14.0	16.8	25	25	22	61	26	30	23	62	27	30	25	63	29	30	26	64
			108A+108A	23.0	27.7	38	40	35	61	39	40	36	62	41	45	37	63	42	45	38	64
		HIGH	NONE	–	–	13	15	13	79	14	20	14	80	16	20	16	81	17	20	17	82
			106A	6.0	7.2	15	15	13	79	16	20	14	80	17	20	16	81	19	20	17	82
			108A	11.5	13.8	23	25	21	79	24	25	22	80	26	30	23	81	27	30	24	82
			109A	14.0	16.8	27	30	24	79	28	30	25	80	29	30	27	81	31	35	28	82
			108A+108A	23.0	27.7	40	40	37	79	42	45	38	80	43	45	39	81	44	45	40	82
	575–3–60	DD–STD	NONE	–	–	11	15	11	39	13	15	13	41	13	15	13	41	15	20	15	43
			297A	9.2	9.2	17	20	15	39	19	20	17	41	19	20	17	41	21	25	19	43
			298A	13.8	13.8	23	25	20	39	25	25	23	41	25	25	22	41	27	30	25	43
		STD	NONE	–	–	9	15	8	42	10	15	10	44	10	15	10	44	12	15	12	46
			297A	9.2	9.2	13	15	12	42	16	20	14	44	16	20	14	44	18	20	16	46
			298A	13.8	13.8	19	20	17	42	22	25	19	44	21	25	19	44	24	25	21	46
		MED	NONE	–	–	9	15	8	42	11	15	11	44	11	15	10	44	13	15	13	46
			297A	9.2	9.2	14	15	12	42	16	20	15	44	16	20	14	44	18	20	17	46
			298A	13.8	13.8	20	20	18	42	22	25	20	44	22	25	20	44	24	25	22	46
		HIGH	NONE	–	–	10	15	10	57	12	15	12	59	12	15	12	59	14	15	14	61
			297A	9.2	9.2	15	15	14	57	18	20	16	59	18	20	16	59	20	20	18	61
			298A	13.8	13.8	21	25	19	57	24	25	21	59	23	25	21	59	26	30	23	61

See “Legend and Notes for Tables 72 – 75” on page129

ELECTRICAL INFORMATION

Table 72 - UNIT WIRE/FUSE OR HACR BREAKER SIZING DATA WITH SINGLE SPEED INDOOR FAN MOTOR (cont)

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC*A06	208/230–1–60	DD–STD	NONE	–	–	41	60	39	144	42	60	41	146	–	–	–	–	–	–	–	–
			102A	4.9/6.5	23.5/27.1	41/44	60/60	39/40	144/144	42/46	60/60	41/42	146/146	–	–	–	–	–	–	–	–
			103B	6.5/8.7	31.4/36.3	49/55	60/60	45/50	144/144	51/57	60/60	47/52	146/146	–	–	–	–	–	–	–	–
			102A+102A	9.8/13.0	46.9/54.2	68/77	70/80	62/71	144/144	71/80	80/80	65/73	146/146	–	–	–	–	–	–	–	–
			103B+103B	13.1/17.4	62.8/72.5	88/100	90/100	81/92	144/144	91/103	100/110	83/94	146/146	–	–	–	–	–	–	–	–
			104B+104B	15.8/21.0	75.8/87.5	104/119	110/125	96/109	144/144	107/121	110/125	98/111	146/146	–	–	–	–	–	–	–	–
		STD	NONE	–	–	38	60	36	149	40	60	38	151	–	–	–	–	–	–	–	–
			102A	4.9/6.5	23.5/27.1	38/40	60/60	36/37	149/149	40/43	60/60	38/39	151/151	–	–	–	–	–	–	–	–
			103B	6.5/8.7	31.4/36.3	46/52	60/60	42/47	149/149	48/54	60/60	44/50	151/151	–	–	–	–	–	–	–	–
			102A+102A	9.8/13.0	46.9/54.2	65/74	70/80	60/68	149/149	68/77	70/80	62/70	151/151	–	–	–	–	–	–	–	–
			103B+103B	13.1/17.4	62.8/72.5	85/97	90/100	78/89	149/149	87/100	90/100	80/91	151/151	–	–	–	–	–	–	–	–
			104B+104B	15.8/21.0	75.8/87.5	101/116	110/125	93/106	149/149	104/118	110/125	95/108	151/151	–	–	–	–	–	–	–	–
		MED	NONE	–	–	40	60	38	174	42	60	41	176	–	–	–	–	–	–	–	–
			102A	4.9/6.5	23.5/27.1	40/43	60/60	38/39	174/174	42/45	60/60	41/41	176/176	–	–	–	–	–	–	–	–
			103B	6.5/8.7	31.4/36.3	48/55	60/60	44/50	174/174	51/57	60/60	46/52	176/176	–	–	–	–	–	–	–	–
			102A+102A	9.8/13.0	46.9/54.2	68/77	70/80	62/70	174/174	70/79	70/80	64/73	176/176	–	–	–	–	–	–	–	–
			103B+103B	13.1/17.4	62.8/72.5	88/100	90/100	80/91	174/174	90/102	90/110	82/94	176/176	–	–	–	–	–	–	–	–
			104B+104B	15.8/21.0	75.8/87.5	104/119	110/125	95/109	174/174	106/121	110/125	97/111	176/176	–	–	–	–	–	–	–	–
	208/230–3–60	DD–STD	NONE	–	–	29	40	28	120	31	45	31	122	34	45	34	125	36	50	36	127
			102A	4.9/6.5	13.6/15.6	29/29	40/40	28/28	120/120	31/32	45/45	31/31	122/122	34/35	45/45	34/34	125/125	36/38	50/50	36/36	127/127
			104B	7.9/10.5	21.9/25.3	37/41	40/45	34/38	120/120	39/44	45/45	36/40	122/122	43/47	45/50	39/43	125/125	45/50	50/50	41/45	127/127
			105A	12.0/16.0	33.4/38.5	51/58	60/60	47/53	120/120	54/60	60/60	49/55	122/122	57/64	60/70	52/58	125/125	60/66	60/70	55/60	127/127
			104B+104B	15.8/21.0	43.8/50.5	64/73	70/80	59/67	120/120	67/75	70/80	61/69	122/122	70/79	80/80	64/72	125/125	73/81	80/90	67/74	127/127
			104B+105A	19.9/26.5	55.2/63.8	79/89	80/90	72/82	120/120	81/92	90/100	74/84	122/122	85/95	90/100	78/87	125/125	87/98	90/100	80/90	127/127
		STD	NONE	–	–	27	40	26	132	29	40	28	134	32	45	31	137	34	45	34	139
			102A	4.9/6.5	13.6/15.6	27/27	40/40	26/26	132/132	29/29	40/40	28/28	134/134	32/32	45/45	31/31	137/137	34/35	45/45	34/34	139/139
			104B	7.9/10.5	21.9/25.3	34/39	40/40	31/35	132/132	37/41	40/45	33/37	134/134	40/45	45/45	37/41	137/137	43/47	45/50	39/43	139/139
			105A	12.0/16.0	33.4/38.5	49/55	50/60	44/50	132/132	51/57	60/60	47/52	134/134	55/61	60/70	50/56	137/137	57/63	60/70	52/58	139/139
			104B+104B	15.8/21.0	43.8/50.5	62/70	70/70	56/64	132/132	64/72	70/80	59/66	134/134	68/76	70/80	62/70	137/137	70/78	70/80	64/72	139/139
			104B+105A	19.9/26.5	55.2/63.8	76/87	80/90	69/79	132/132	78/89	80/90	72/82	134/134	82/93	90/100	75/85	137/137	84/95	90/100	77/87	139/139
		MED	NONE	–	–	29/28	40/40	28/28	170	31/30	45/45	30/30	172	33/33	45/45	33/33	175	35/35	50/50	36/35	177
			102A	4.9/6.5	13.6/15.6	29/28	40/40	28/28	170/170	31/31	45/45	30/30	172/172	33/34	45/45	33/33	175/175	35/37	50/50	36/35	177/177
			104B	7.9/10.5	21.9/25.3	36/40	40/40	33/37	170/170	39/43	45/45	35/39	172/172	42/46	45/50	39/42	175/175	45/49	50/50	41/45	177/177
			105A	12.0/16.0	33.4/38.5	51/57	60/60	46/52	170/170	53/59	60/60	49/54	172/172	57/63	60/70	52/58	175/175	59/65	60/70	54/60	177/177
			104B+104B	15.8/21.0	43.8/50.5	64/72	70/80	58/66	170/170	66/74	70/80	60/68	172/172	70/78	70/80	64/71	175/175	72/80	80/80	66/73	177/177
			104B+105A	19.9/26.5	55.2/63.8	78/89	80/90	71/81	170/170	80/91	90/100	74/83	172/172	84/95	90/100	77/87	175/175	86/97	90/100	79/89	177/177
		HIGH	NONE	–	–	30/30	45/45	30/29	185	32/32	45/45	32/32	187	35/35	50/50	35/35	190	37/37	50/50	37/37	192
			102A	4.9/6.5	13.6/15.6	30/30	45/45	30/29	185/185	32/33	45/45	32/32	187/187	35/36	50/50	35/35	190/190	37/39	50/50	37/37	192/192
			104B	7.9/10.5	21.9/25.3	38/42	45/45	35/39	185/185	41/45	45/45	37/41	187/187	44/48	50/50	40/44	190/190	47/51	50/60	43/46	192/192
			105A	12.0/16.0	33.4/38.5	53/59	60/60	48/54	185/185	55/61	60/70	50/56	187/187	59/65	60/70	54/59	190/190	61/67	70/70	56/62	192/192
			104B+104B	15.8/21.0	43.8/50.5	66/74	70/80	60/68	185/185	68/76	70/80	62/70	187/187	72/80	80/80	66/73	190/190	74/82	80/90	68/75	192/192
			104B+105A	19.9/26.5	55.2/63.8	80/91	80/100	73/83	185/185	82/93	90/100	75/85	187/187	86/97	90/100	79/88	190/190	88/99	90/100	81/91	192/192

See “Legend and Notes for Tables 72 – 75” on page129

ELECTRICAL INFORMATION

Table 72 - UNIT WIRE/FUSE OR HACR BREAKER SIZING DATA WITH SINGLE SPEED INDOOR FAN MOTOR (cont)

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC*A06	460–3–60	DD–STD	NONE	–	–	14	20	14	58	15	20	15	59	16	20	16	60	17	20	17	61
			106A	6.0	7.2	14	20	14	58	16	20	15	59	17	20	16	60	18	20	17	61
			108A	11.5	13.8	23	25	20	58	24	25	22	59	25	25	23	60	27	30	24	61
			109A	14.0	16.8	26	30	24	58	28	30	25	59	29	30	26	60	30	30	28	61
			108A+108A	23.0	27.7	40	40	36	58	41	45	38	59	43	45	39	60	44	45	40	61
			108A+109A	25.5	30.7	44	45	40	58	45	45	41	59	47	50	42	60	48	50	44	61
		STD	NONE	–	–	13	15	12	63	14	20	13	64	15	20	15	65	16	20	16	66
			106A	6.0	7.2	13	15	12	63	14	20	13	64	15	20	15	65	17	20	16	66
			108A	11.5	13.8	21	25	19	63	22	25	20	64	24	25	21	65	25	25	23	66
			109A	14.0	16.8	25	25	22	63	26	30	23	64	27	30	25	65	29	30	26	66
			108A+108A	23.0	27.7	38	40	35	63	40	40	36	64	41	45	37	65	42	45	39	66
			108A+109A	25.5	30.7	42	45	38	63	43	45	39	64	45	45	41	65	46	50	42	66
		MED	NONE	–	–	14	20	13	82	15	20	14	83	16	20	16	84	17	20	17	85
			106A	6.0	7.2	14	20	13	82	15	20	14	83	16	20	16	84	18	20	17	85
			108A	11.5	13.8	22	25	20	82	23	25	21	83	25	25	22	84	26	30	23	85
			109A	14.0	16.8	26	30	23	82	27	30	24	83	28	30	26	84	30	30	27	85
			108A+108A	23.0	27.7	39	40	36	82	41	45	37	83	42	45	38	84	43	45	39	85
			108A+109A	25.5	30.7	43	45	39	82	44	45	40	83	46	50	42	84	47	50	43	85
		HIGH	NONE	–	–	14	20	14	90	15	20	15	91	17	20	16	92	18	20	18	93
			106A	6.0	7.2	15	20	14	90	16	20	15	91	17	20	16	92	19	20	18	93
			108A	11.5	13.8	23	25	21	90	24	25	22	91	26	30	23	92	27	30	24	93
			109A	14.0	16.8	27	30	24	90	28	30	25	91	29	30	27	92	31	35	28	93
			108A+108A	23.0	27.7	40	40	37	90	42	45	38	91	43	45	39	92	44	45	40	93
			108A+109A	25.5	30.7	44	45	40	90	45	45	41	91	47	50	43	92	48	50	44	93
	575–3–60	DD–STD	NONE	–	–	12	15	12	46	14	15	14	48	13	15	13	48	15	20	16	50
			298A	13.8	13.8	23	25	20	46	25	25	23	48	25	25	22	48	27	30	25	50
			301A	23.0	23.1	34	35	31	46	37	40	33	48	36	40	33	48	39	40	35	50
		STD	NONE	–	–	9	15	8	49	11	15	10	51	11	15	10	51	13	15	12	53
			298A	13.8	13.8	19	20	17	49	22	25	19	51	21	25	19	51	24	25	21	53
			301A	23.0	23.1	31	35	28	49	33	35	30	51	33	35	30	51	35	35	32	53
		MED	NONE	–	–	10	15	9	53	12	15	11	55	11	15	11	55	13	15	13	57
			298A	13.8	13.8	20	20	18	53	23	25	20	55	22	25	20	55	25	25	22	57
			301A	23.0	23.1	32	35	29	53	34	35	31	55	34	35	31	55	36	40	33	57
		HIGH	NONE	–	–	11	15	10	64	12	15	12	66	12	15	12	66	14	15	14	68
			298A	13.8	13.8	21	25	19	64	24	25	21	66	23	25	21	66	26	30	23	68
			301A	23.0	23.1	33	35	30	64	35	35	32	66	35	35	32	66	37	40	34	68

See “Legend and Notes for Tables 72 – 75” on page129

ELECTRICAL INFORMATION

Table 72 - UNIT WIRE/FUSE OR HACR BREAKER SIZING DATA WITH SINGLE SPEED INDOOR FAN MOTOR (cont)

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC*A07	208/230–3–60	STD	NONE	–	–	32/32	50/50	31/31	165	36/36	50/50	36/35	169	37/37	50/50	37/36	170	41/41	50/50	41/41	174
			264A	4.9/6.5	13.6/15.6	32/32	50/50	31/31	165/165	36/36	50/50	36/35	169/169	37/37	50/50	37/36	170/170	41/41	50/50	41/41	174/174
			117A	7.8/10.4	21.7/25.0	34/38	50/50	31/34	165/165	39/43	50/50	36/39	169/169	40/44	50/50	37/40	170/170	45/49	50/50	41/44	174/174
			110A	12.0/16.0	33.4/38.5	49/55	50/60	44/50	165/165	53/59	60/60	49/54	169/169	55/61	60/70	50/55	170/170	59/65	60/70	54/60	174/174
			117A+117A	15.8/21.0	43.8/50.5	62/70	70/70	56/64	165/165	66/74	70/80	61/68	169/169	68/76	70/80	62/69	170/170	72/80	80/90	66/74	174/174
			110A+117A	19.9/26.5	55.2/63.8	76/86	80/90	69/79	165/165	81/91	90/100	74/83	169/169	82/92	90/100	75/85	170/170	87/97	90/100	79/89	174/174
		MED	NONE	–	–	36/36	50/50	35/35	201	39/39	50/50	39/39	205	40/40	50/50	40/40	206	44/44	60/60	45/45	210
			264A	4.9/6.5	13.6/15.6	36/36	50/50	35/35	201/201	39/39	50/50	39/39	205/205	40/40	50/50	40/40	206/206	44/44	60/60	45/45	210/210
			117A	7.8/10.4	21.7/25.0	38/42	50/50	35/38	201/201	43/47	50/50	39/43	205/205	44/48	50/50	40/44	206/206	49/53	60/60	45/48	210/210
			110A	12.0/16.0	33.4/38.5	53/59	60/60	48/54	201/201	57/64	60/70	52/58	205/205	59/65	60/70	54/59	206/206	63/70	70/70	58/64	210/210
			117A+117A	15.8/21.0	43.8/50.5	66/74	70/80	60/68	201/201	70/79	80/80	64/72	205/205	72/80	80/80	66/73	206/206	76/85	80/90	70/78	210/210
			110A+117A	19.9/26.5	55.2/63.8	80/91	80/100	73/83	201/201	85/95	90/100	78/87	205/205	86/97	90/100	79/88	206/206	91/101	100/110	83/93	210/210
		HIGH	NONE	–	–	41/40	50/50	41/40	217	45/44	60/60	45/44	221	46/45	60/60	46/45	222	49/49	60/60	51/50	226
			264A	4.9/6.5	13.6/15.6	41/40	50/50	41/40	217/217	45/44	60/60	45/44	221/221	46/45	60/60	46/45	222/222	49/49	60/60	51/50	226/226
			117A	7.8/10.4	21.7/25.0	45/48	50/50	41/43	217/217	49/52	60/60	45/48	221/221	51/54	60/60	46/49	222/222	55/58	60/60	51/53	226/226
			110A	12.0/16.0	33.4/38.5	59/64	60/70	54/59	217/217	64/69	70/70	58/63	221/221	65/70	70/70	60/64	222/222	70/75	70/80	64/69	226/226
			117A+117A	15.8/21.0	43.8/50.5	72/79	80/80	66/73	217/217	77/84	80/90	70/77	221/221	78/85	80/90	72/78	222/222	83/90	90/90	76/83	226/226
			110A+117A	19.9/26.5	55.2/63.8	86/96	90/100	79/88	217/217	91/101	100/110	83/92	221/221	92/102	100/110	85/93	222/222	97/107	100/110	89/98	226/226
	460–3–60	STD	NONE	–	–	17	25	16	84	18	25	18	86	19	25	18	86	21	25	20	88
			265A	6.0	7.2	17	25	16	84	18	25	18	86	19	25	18	86	21	25	20	88
			266A	11.5	13.8	21	25	19	84	23	25	21	86	24	25	21	86	26	30	23	88
			267A	14.0	16.8	25	25	22	84	27	30	24	86	27	30	25	86	30	30	27	88
			268A	23.0	27.7	38	40	35	84	40	45	37	86	41	45	37	86	43	45	39	88
			269A	25.5	30.7	42	45	38	84	44	45	40	86	45	45	41	86	47	50	43	88
		MED	NONE	–	–	18	25	18	102	20	25	20	104	21	25	20	104	22	30	22	106
			265A	6.0	7.2	18	25	18	102	20	25	20	104	21	25	20	104	22	30	22	106
			266A	11.5	13.8	23	25	21	102	25	25	23	104	26	30	23	104	28	30	25	106
			267A	14.0	16.8	27	30	24	102	29	30	26	104	29	30	27	104	32	35	29	106
			268A	23.0	27.7	40	40	37	102	43	45	39	104	43	45	39	104	45	45	41	106
			269A	25.5	30.7	44	45	40	102	46	50	42	104	47	50	43	104	49	50	45	106
		HIGH	NONE	–	–	21	25	20	110	22	30	22	112	23	30	23	112	25	30	25	114
			265A	6.0	7.2	21	25	20	110	22	30	22	112	23	30	23	112	25	30	25	114
			266A	11.5	13.8	26	30	23	110	28	30	25	112	28	30	26	112	31	35	28	114
			267A	14.0	16.8	29	30	27	110	32	35	29	112	32	35	29	112	34	35	31	114
			268A	23.0	27.7	43	45	39	110	45	45	41	112	46	50	42	112	48	50	44	114
			269A	25.5	30.7	47	50	43	110	49	50	45	112	50	50	45	112	52	60	47	114
	575–3–60	STD	NONE	–	–	13	15	12	61	16	20	16	65	14	20	14	63	18	20	18	67
			118A	17.0	20.4	28	30	25	61	33	35	30	65	30	30	27	63	35	35	32	67
			299A	25.7	25.8	35	35	32	61	39	40	36	65	37	40	33	63	42	45	38	67
		MED	NONE	–	–	14	20	13	76	18	20	17	80	15	20	15	78	19	25	19	82
			118A	17.0	20.4	29	30	27	76	34	35	31	80	32	35	29	78	36	40	33	82
			299A	25.7	25.8	36	40	33	76	41	45	37	80	38	40	35	78	43	45	39	82
		HIGH	NONE	–	–	17	20	16	90	20	25	21	94	18	25	18	92	22	25	23	96
			118A	17.0	20.4	33	35	30	90	38	40	34	94	35	35	32	92	40	40	36	96
			299A	25.7	25.8	40	40	36	90	44	45	40	94	42	45	38	92	47	50	42	96

See “Legend and Notes for Tables 72 – 75” on page129

ELECTRICAL INFORMATION

Table 72 - UNIT WIRE/FUSE OR HACR BREAKER SIZING DATA WITH SINGLE SPEED INDOOR FAN MOTOR (cont)

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC*D08	208/230–3–60	STD	NONE	–	–	39/39	50/50	41/40	208	43/43	50/50	45/45	212	44/44	50/50	46/46	213	48/48	60/60	51/50	217
			117A	7.8/10.4	21.7/25.0	39/39	50/50	41/40	208/208	43/43	50/50	45/45	212/212	44/44	50/50	46/46	213/213	48/49	60/60	51/50	217/217
			110A	12.0/16.0	33.4/38.5	49/55	50/60	44/50	208/208	53/59	60/60	49/54	212/212	55/61	60/70	50/55	213/213	59/65	60/70	54/60	217/217
			111A	18.6/24.8	51.7/59.7	72/81	80/90	65/74	208/208	76/86	80/90	70/79	212/212	78/87	80/90	71/80	213/213	82/92	90/100	75/84	217/217
			112A	24.0/32.0	66.7/77.0	90/103	90/110	83/94	208/208	95/108	100/110	87/99	212/212	96/109	100/110	88/100	213/213	101/114	110/125	93/104	217/217
			112A+117A	31.8/42.4	88.4/102.0	117/134	125/150	108/123	208/208	122/139	125/150	112/127	212/212	123/140	125/150	113/128	213/213	128/145	150/150	118/133	217/217
		MED	NONE	–	–	41/41	50/50	43/42	229	45/45	50/50	47/47	233	46/46	50/50	48/48	234	50/49	60/60	53/52	238
			117A	7.8/10.4	21.7/25.0	41/41	50/50	43/42	229/229	45/45	50/50	47/47	233/233	46/46	50/50	48/48	234/234	50/51	60/60	53/52	238/238
			110A	12.0/16.0	33.4/38.5	51/57	60/60	46/52	229/229	56/62	60/70	51/56	233/233	57/63	60/70	52/58	234/234	62/68	70/70	56/62	238/238
			111A	18.6/24.8	51.7/59.7	74/83	80/90	67/76	229/229	78/88	80/90	72/81	233/233	80/89	80/90	73/82	234/234	84/94	90/100	77/86	238/238
			112A	24.0/32.0	66.7/77.0	92/105	100/110	85/96	229/229	97/110	100/110	89/101	233/233	98/111	100/125	90/102	234/234	103/116	110/125	95/106	238/238
			112A+117A	31.8/42.4	88.4/102.0	120/136	125/150	110/125	229/229	124/141	125/150	114/129	233/233	126/142	150/150	115/131	234/234	130/147	150/150	119/135	238/238
		HIGH	NONE	–	–	45	50	47	258	48	60	51	262	49	60	52	263	53	60	57	267
			117A	7.8/10.4	21.7/25.0	45/45	50/50	47/47	258/258	48/50	60/60	51/51	262/262	49/51	60/60	52/52	263/263	53/56	60/60	57/57	267/267
			110A	12.0/16.0	33.4/38.5	55/62	60/70	51/56	258/258	60/67	60/70	55/61	262/262	61/68	70/70	56/62	263/263	66/73	70/80	60/66	267/267
			111A	18.6/24.8	51.7/59.7	78/88	80/90	72/81	258/258	83/93	90/100	76/85	262/262	84/94	90/100	77/86	263/263	89/99	90/100	82/91	267/267
			112A	24.0/32.0	66.7/77.0	97/110	100/110	89/101	258/258	102/115	110/125	93/105	262/262	103/116	110/125	94/106	263/263	108/121	110/125	99/111	267/267
			112A+117A	31.8/42.4	88.4/102.0	124/141	125/150	114/129	258/258	129/146	150/150	118/134	262/262	130/147	150/150	119/135	263/263	135/152	150/175	124/139	267/267
	460–3–60	STD	NONE	–	–	18	20	19	104	20	25	21	106	20	25	21	106	22	25	23	108
			116A	13.9	16.7	24	25	22	104	27	30	24	106	27	30	25	106	29	30	27	108
			113A	16.5	19.8	28	30	26	104	31	35	28	106	31	35	28	106	33	35	30	108
			114A	27.8	33.4	45	45	41	104	48	50	43	106	48	50	44	106	50	50	46	108
			115A	33.0	39.7	53	60	49	104	55	60	51	106	56	60	51	106	58	60	53	108
			114A+116A	41.7	50.2	66	70	61	104	69	70	63	106	69	70	63	106	71	80	65	108
		MED	NONE	–	–	19	25	20	114	21	25	22	116	21	25	22	116	23	25	24	118
			116A	13.9	16.7	26	30	23	114	28	30	25	116	28	30	26	116	31	35	28	118
			113A	16.5	19.8	29	30	27	114	32	35	29	116	32	35	29	116	34	35	31	118
			114A	27.8	33.4	46	50	42	114	49	50	44	116	49	50	45	116	51	60	47	118
			115A	33.0	39.7	54	60	50	114	57	60	52	116	57	60	52	116	59	60	54	118
			114A+116A	41.7	50.2	67	70	62	114	70	70	64	116	70	70	64	116	72	80	66	118
		HIGH	NONE	–	–	21	25	22	129	23	25	24	131	23	25	24	131	25	30	27	133
			116A	13.9	16.7	28	30	25	129	30	30	27	131	31	35	28	131	33	35	30	133
			113A	16.5	19.8	32	35	29	129	34	35	31	131	35	35	31	131	37	40	33	133
			114A	27.8	33.4	49	50	45	129	51	60	47	131	52	60	47	131	54	60	49	133
			115A	33.0	39.7	57	60	52	129	59	60	54	131	59	60	54	131	62	70	56	133
			114A+116A	41.7	50.2	70	70	64	129	72	80	66	131	73	80	66	131	75	80	68	133
	575–3–60	STD	NONE	–	–	13	15	13	77	17	20	17	81	14	15	15	79	18	20	19	83
			118A	17.0	20.4	28	30	25	77	33	35	30	81	30	30	27	79	35	35	32	83
			119A	34.0	40.9	54	60	49	77	58	60	53	81	56	60	51	79	60	70	55	83
		MED	NONE	–	–	13	15	13	81	17	20	18	85	15	20	15	83	19	20	20	87
			118A	17.0	20.4	28	30	26	81	33	35	30	85	31	35	28	83	35	35	32	87
			119A	34.0	40.9	54	60	49	81	59	60	54	85	56	60	51	83	61	70	56	87
		HIGH	NONE	–	–	14	15	14	92	18	20	19	96	16	20	16	94	19	25	21	98
			118A	17.0	20.4	29	30	27	92	34	35	31	96	32	35	29	94	36	40	33	98
			119A	34.0	40.9	55	60	50	92	60	60	55	96	57	60	52	94	62	70	57	98

See “Legend and Notes for Tables 72 – 75” on page129

ELECTRICAL INFORMATION

Table 72 - UNIT WIRE/FUSE OR HACR BREAKER SIZING DATA WITH SINGLE SPEED INDOOR FAN MOTOR (cont)

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC*D09	208/230–3–60	STD	NONE	–	–	39/39	50/50	41/41	208	43/43	50/50	45/45	212	44/44	50/50	46/46	213	48/48	60/60	51/50	217
			117A	7.8/10.4	21.7/25.0	39/39	50/50	41/41	208/208	43/43	50/50	45/45	212/212	44/44	50/50	46/46	213/213	48/49	60/60	51/50	217/217
			110A	12.0/16.0	33.4/38.5	49/55	50/60	44/50	208/208	53/59	60/60	49/54	212/212	55/61	60/70	50/55	213/213	59/65	60/70	54/60	217/217
			111A	18.6/24.8	51.7/59.7	72/81	80/90	65/74	208/208	76/86	80/90	70/79	212/212	78/87	80/90	71/80	213/213	82/92	90/100	75/84	217/217
			112A	24.0/32.0	66.7/77.0	90/103	90/110	83/94	208/208	95/108	100/110	87/99	212/212	96/109	100/110	88/100	213/213	101/114	110/125	93/104	217/217
			112A+117A	31.8/42.4	88.4/102.0	117/134	125/150	108/123	208/208	122/139	125/150	112/127	212/212	123/140	125/150	113/128	213/213	128/145	150/150	118/133	217/217
		MED	NONE	–	–	41/41	50/50	43/43	229	45/45	50/50	47/47	233	46/46	50/50	48/48	234	50/50	60/60	53/53	238
			117A	7.8/10.4	21.7/25.0	41/41	50/50	43/43	229/229	45/45	50/50	47/47	233/233	46/46	50/50	48/48	234/234	50/51	60/60	53/53	238/238
			110A	12.0/16.0	33.4/38.5	51/57	60/60	46/52	229/229	56/62	60/70	51/56	233/233	57/63	60/70	52/58	234/234	62/68	70/70	56/62	238/238
			111A	18.6/24.8	51.7/59.7	74/83	80/90	67/76	229/229	78/88	80/90	72/81	233/233	80/89	80/90	73/82	234/234	84/94	90/100	77/86	238/238
			112A	24.0/32.0	66.7/77.0	92/105	100/110	85/96	229/229	97/110	100/110	89/101	233/233	98/111	100/125	90/102	234/234	103/116	110/125	95/106	238/238
			112A+117A	31.8/42.4	88.4/102.0	120/136	125/150	110/125	229/229	124/141	125/150	114/129	233/233	126/142	150/150	115/131	234/234	130/147	150/150	119/135	238/238
		HIGH	NONE	–	–	45	50	47	258	49	60	52	262	50	60	53	263	53	60	57	267
			117A	7.8/10.4	21.7/25.0	45/45	50/50	47/47	258/258	49/50	60/60	52/52	262/262	50/51	60/60	53/53	263/263	53/56	60/60	57/57	267/267
			110A	12.0/16.0	33.4/38.5	55/62	60/70	51/56	258/258	60/67	60/70	55/61	262/262	61/68	70/70	56/62	263/263	66/73	70/80	60/66	267/267
			111A	18.6/24.8	51.7/59.7	78/88	80/90	72/81	258/258	83/93	90/100	76/85	262/262	84/94	90/100	77/86	263/263	89/99	90/100	82/91	267/267
			112A	24.0/32.0	66.7/77.0	97/110	100/110	89/101	258/258	102/115	110/125	93/105	262/262	103/116	110/125	94/106	263/263	108/121	110/125	99/111	267/267
			112A+117A	31.8/42.4	88.4/102.0	124/141	125/150	114/129	258/258	129/146	150/150	118/134	262/262	130/147	150/150	119/135	263/263	135/152	150/175	124/139	267/267
	460–3–60	STD	NONE	–	–	19	20	19	104	20	25	21	106	21	25	22	106	23	25	24	108
			116A	13.9	16.7	24	25	22	104	27	30	24	106	27	30	25	106	29	30	27	108
			113A	16.5	19.8	28	30	26	104	31	35	28	106	31	35	28	106	33	35	30	108
			114A	27.8	33.4	45	45	41	104	48	50	43	106	48	50	44	106	50	50	46	108
			115A	33.0	39.7	53	60	49	104	55	60	51	106	56	60	51	106	58	60	53	108
			114A+116A	41.7	50.2	66	70	61	104	69	70	63	106	69	70	63	106	71	80	65	108
		MED	NONE	–	–	19	25	20	114	21	25	22	116	22	25	23	116	23	25	25	118
			116A	13.9	16.7	26	30	23	114	28	30	25	116	28	30	26	116	31	35	28	118
			113A	16.5	19.8	29	30	27	114	32	35	29	116	32	35	29	116	34	35	31	118
			114A	27.8	33.4	46	50	42	114	49	50	44	116	49	50	45	116	51	60	47	118
			115A	33.0	39.7	54	60	50	114	57	60	52	116	57	60	52	116	59	60	54	118
			114A+116A	41.7	50.2	67	70	62	114	70	70	64	116	70	70	64	116	72	80	66	118
		HIGH	NONE	–	–	21	25	22	129	23	25	24	131	24	25	25	131	25	30	27	133
			116A	13.9	16.7	28	30	25	129	30	30	27	131	31	35	28	131	33	35	30	133
			113A	16.5	19.8	32	35	29	129	34	35	31	131	35	35	31	131	37	40	33	133
			114A	27.8	33.4	49	50	45	129	51	60	47	131	52	60	47	131	54	60	49	133
			115A	33.0	39.7	57	60	52	129	59	60	54	131	59	60	54	131	62	70	56	133
			114A+116A	41.7	50.2	70	70	64	129	72	80	66	131	73	80	66	131	75	80	68	133
	575–3–60	STD	NONE	–	–	14	15	14	77	18	20	19	81	16	20	16	79	20	25	21	83
			118A	17.0	20.4	28	30	25	77	33	35	30	81	30	30	27	79	35	35	32	83
			119A	34.0	40.9	54	60	49	77	58	60	53	81	56	60	51	79	60	70	55	83
		MED	NONE	–	–	14	20	15	81	18	20	19	85	16	20	17	83	20	25	21	87
			118A	17.0	20.4	28	30	26	81	33	35	30	85	31	35	28	83	35	35	32	87
			119A	34.0	40.9	54	60	49	81	59	60	54	85	56	60	51	83	61	70	56	87
		HIGH	NONE	–	–	15	20	16	92	19	20	20	96	17	20	18	94	21	25	22	98
			118A	17.0	20.4	29	30	27	92	34	35	31	96	32	35	29	94	36	40	33	98
			119A	34.0	40.9	55	60	50	92	60	60	55	96	57	60	52	94	62	70	57	98

See “Legend and Notes for Tables 72 – 75” on page129

ELECTRICAL INFORMATION

Table 72 – UNIT WIRE/FUSE OR HACR BREAKER SIZING DATA WITH SINGLE SPEED INDOOR FAN MOTOR (cont)

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC*D11	208/230–3–60	STD	NONE	–	–	51/50	60/60	53/53	284	54/54	60/60	57/57	288	55/55	60/60	59/58	289	59/59	70/70	63/63	293
			117A	7.8/10.4	21.7/25.0	51/50	60/60	53/53	284/284	54/54	60/60	57/57	288/288	55/55	60/60	59/58	289/289	59/59	70/70	63/63	293/293
			110A	12.0/16.0	33.4/38.5	51/57	60/60	53/53	284/284	56/62	60/70	57/57	288/288	57/63	60/70	59/58	289/289	62/68	70/70	63/63	293/293
			112A	24.0/32.0	66.7/77.0	92/105	100/110	85/96	284/284	97/110	100/110	89/101	288/288	98/111	100/125	90/102	289/289	103/116	110/125	95/106	293/293
			112A+117A	31.8/42.4	88.4/102.0	120/136	125/150	110/125	284/284	124/141	125/150	114/129	288/288	126/142	150/150	115/131	289/289	130/147	150/150	119/135	293/293
			112A+110A	37.6/50.0	104.2/120.3	139/129	150/150	128/146	284/284	144/134	150/150	132/150	288/288	145/135	150/150	133/152	289/289	150/140	150/150	138/156	293/293
		MED	NONE	–	–	54	60	57	313	58	70	62	317	59	70	63	318	63	70	67	322
			117A	7.8/10.4	21.7/25.0	54/54	60/60	57/57	313/313	58/58	70/70	62/62	317/317	59/59	70/70	63/63	318/318	63/63	70/70	67/67	322/322
			110A	12.0/16.0	33.4/38.5	55/62	60/70	57/57	313/313	60/67	70/70	62/62	317/317	61/68	70/70	63/63	318/318	66/73	70/80	67/67	322/322
			112A	24.0/32.0	66.7/77.0	97/110	100/110	89/101	313/313	102/115	110/125	93/105	317/317	103/116	110/125	94/106	318/318	108/121	110/125	99/111	322/322
			112A+117A	31.8/42.4	88.4/102.0	124/141	125/150	114/129	313/313	129/146	150/150	118/134	317/317	130/147	150/150	119/135	318/318	135/152	150/175	124/139	322/322
			112A+110A	37.6/50.0	104.2/120.3	144/134	150/150	132/151	313/313	149/139	150/150	136/155	317/317	150/140	150/150	138/156	318/318	155/145	175/175	142/160	322/322
		HIGH	NONE	–	–	57/56	70/60	61/60	315	61/60	70/70	65/64	319	62/61	70/70	66/65	320	66/65	80/80	71/70	324
			117A	7.8/10.4	21.7/25.0	57/56	70/60	61/60	315/315	61/60	70/70	65/64	319/319	62/61	70/70	66/65	320/320	66/65	80/80	71/70	324/324
			110A	12.0/16.0	33.4/38.5	59/64	70/70	61/60	315/315	64/69	70/70	65/64	319/319	65/70	70/70	66/65	320/320	70/75	80/80	71/70	324/324
			112A	24.0/32.0	66.7/77.0	101/113	110/125	92/103	315/315	106/117	110/125	97/108	319/319	107/119	110/125	98/109	320/320	112/123	125/125	102/113	324/324
			112A+117A	31.8/42.4	88.4/102.0	128/144	150/150	117/132	315/315	133/149	150/150	122/136	319/319	134/150	150/150	123/137	320/320	139/155	150/175	127/142	324/324
			112A+110A	37.6/50.0	104.2/120.3	148/137	150/150	135/153	315/315	152/141	175/175	140/157	319/319	154/143	175/175	141/158	320/320	158/147	175/175	145/163	324/324
	460–3–60	STD	NONE	–	–	23	25	24	136	25	30	26	138	25	30	27	138	27	30	29	140
			116A	13.9	16.7	26	30	24	136	28	30	26	138	28	30	27	138	31	35	29	140
			113A	16.5	19.8	29	30	27	136	32	35	29	138	32	35	29	138	34	35	31	140
			115A	33.0	39.7	54	60	50	136	57	60	52	138	57	60	52	138	59	60	54	140
			114A+116A	41.7	50.2	67	70	62	136	70	70	64	138	70	70	64	138	72	80	66	140
			115A+113A	50.0	60.1	65	70	73	136	67	70	75	138	68	70	76	138	70	80	78	140
		MED	NONE	–	–	25	30	26	151	27	30	28	153	27	30	29	153	29	35	31	155
			116A	13.9	16.7	28	30	26	151	30	30	28	153	31	35	29	153	33	35	31	155
			113A	16.5	19.8	32	35	29	151	34	35	31	153	35	35	31	153	37	40	33	155
			115A	33.0	39.7	57	60	52	151	59	60	54	153	59	60	54	153	62	70	56	155
			114A+116A	41.7	50.2	70	70	64	151	72	80	66	153	73	80	66	153	75	80	68	155
			115A+113A	50.0	60.1	67	80	75	151	69	80	77	153	70	80	78	153	72	80	80	155
		HIGH	NONE	–	–	26	30	28	152	28	30	30	154	28	30	30	154	30	35	32	156
			116A	13.9	16.7	29	30	28	152	32	35	30	154	32	35	30	154	34	35	32	156
			113A	16.5	19.8	33	35	30	152	35	35	32	154	36	40	33	154	38	40	35	156
			115A	33.0	39.7	58	60	53	152	60	60	55	154	61	70	56	154	63	70	58	156
			114A+116A	41.7	50.2	71	80	65	152	73	80	67	154	74	80	68	154	76	80	70	156
			115A+113A	50.0	60.1	69	80	76	152	71	80	79	154	71	80	79	154	74	80	81	156
	575–3–60	STD	NONE	–	–	18	20	18	95	21	25	23	99	19	25	20	97	23	25	24	101
			118A	17.0	20.4	28	30	26	95	33	35	30	99	31	35	28	97	35	35	32	101
			119A	34.0	40.9	54	60	49	95	59	60	54	99	56	60	51	97	61	70	56	101
			118A+119A	51.0	61.3	64	70	73	95	69	80	77	99	66	70	75	97	71	80	79	101
		MED	NONE	–	–	18	20	19	106	22	25	23	110	20	25	21	108	24	25	25	112
			118A	17.0	20.4	29	30	27	106	34	35	31	110	32	35	29	108	36	40	33	112
			119A	34.0	40.9	55	60	50	106	60	60	55	110	57	60	52	108	62	70	57	112
			118A+119A	51.0	61.3	65	70	74	106	70	80	78	110	67	70	76	108	72	80	80	112
		HIGH	NONE	–	–	21	25	22	120	25	30	27	124	23	25	24	122	27	30	29	126
			118A	17.0	20.4	33	35	30	120	38	40	34	124	35	35	32	122	40	40	36	126
			119A	34.0	40.9	59	60	53	120	63	70	58	124	61	70	55	122	65	70	60	126
			118A+119A	51.0	61.3	69	80	77	120	74	80	81	124	71	80	79	122	76	80	83	126

See “Legend and Notes for Tables 72 – 75” on page129

ELECTRICAL INFORMATION

Table 72 – UNIT WIRE/FUSE OR HACR BREAKER SIZING DATA WITH SINGLE SPEED INDOOR FAN MOTOR (cont)

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC*D12	208/230–3–60	STD	NONE	–	–	49/49	60/60	52/51	309	53/53	60/60	56/56	313	54/54	60/60	57/57	314	58/58	70/70	62/61	318
			117A	7.8/10.4	21.7/25.0	49/49	60/60	52/51	309/309	53/53	60/60	56/56	313/313	54/54	60/60	57/57	314/314	58/58	70/70	62/61	318/318
			110A	12.0/16.0	33.4/38.5	51/57	60/60	52/52	309/309	56/62	60/70	56/56	313/313	57/63	60/70	57/58	314/314	62/68	70/70	62/62	318/318
			112A	24.0/32.0	66.7/77.0	92/105	100/110	85/96	309/309	97/110	100/110	89/101	313/313	98/111	100/125	90/102	314/314	103/116	110/125	95/106	318/318
			112A+117A	31.8/42.4	88.4/102.0	120/136	125/150	110/125	309/309	124/141	125/150	114/129	313/313	126/142	150/150	115/131	314/314	130/147	150/150	119/135	318/318
			112A+110A	37.6/50.0	104.2/120.3	139/129	150/150	128/146	309/309	144/134	150/150	132/150	313/313	145/135	150/150	133/152	314/314	150/140	150/150	138/156	318/318
		MED	NONE	–	–	53	60	56	338	57	70	60	342	58	70	61	343	62	70	66	347
			117A	7.8/10.4	21.7/25.0	53/53	60/60	56/56	338/338	57/57	70/70	60/60	342/342	58/58	70/70	61/61	343/343	62/62	70/70	66/66	347/347
			110A	12.0/16.0	33.4/38.5	55/62	60/70	56/56	338/338	60/67	70/70	60/61	342/342	61/68	70/70	61/62	343/343	66/73	70/80	66/66	347/347
			112A	24.0/32.0	66.7/77.0	97/110	100/110	89/101	338/338	102/115	110/125	93/105	342/342	103/116	110/125	94/106	343/343	108/121	110/125	99/111	347/347
			112A+117A	31.8/42.4	88.4/102.0	124/141	125/150	114/129	338/338	129/146	150/150	118/134	342/342	130/147	150/150	119/135	343/343	135/152	150/175	124/139	347/347
			112A+110A	37.6/50.0	104.2/120.3	144/134	150/150	132/151	338/338	149/139	150/150	136/155	342/342	150/140	150/150	138/156	343/343	155/145	175/175	142/160	347/347
		HIGH	NONE	–	–	56/55	60/60	59/58	340	60/59	70/70	64/63	344	61/60	70/70	65/64	345	65/64	80/70	69/68	349
			117A	7.8/10.4	21.7/25.0	56/55	60/60	59/58	340/340	60/59	70/70	64/63	344/344	61/60	70/70	65/64	345/345	65/64	80/70	69/68	349/349
			110A	12.0/16.0	33.4/38.5	59/64	60/70	59/59	340/340	64/69	70/70	64/63	344/344	65/70	70/70	65/64	345/345	70/75	80/80	69/69	349/349
			112A	24.0/32.0	66.7/77.0	101/113	110/125	92/103	340/340	106/117	110/125	97/108	344/344	107/119	110/125	98/109	345/345	112/123	125/125	102/113	349/349
			112A+117A	31.8/42.4	88.4/102.0	128/144	150/150	117/132	340/340	133/149	150/150	122/136	344/344	134/150	150/150	123/137	345/345	139/155	150/175	127/142	349/349
			112A+110A	37.6/50.0	104.2/120.3	148/137	150/150	135/153	340/340	152/141	175/175	140/157	344/344	154/143	175/175	141/158	345/345	158/147	175/175	145/163	349/349
	460–3–60	STD	NONE	–	–	24	30	25	148	26	30	27	150	26	30	28	150	28	30	30	152
			116A	13.9	16.7	26	30	25	148	28	30	27	150	28	30	28	150	31	35	30	152
			113A	16.5	19.8	29	30	27	148	32	35	29	150	32	35	29	150	34	35	31	152
			115A	33.0	39.7	54	60	50	148	57	60	52	150	57	60	52	150	59	60	54	152
			114A+116A	41.7	50.2	67	70	62	148	70	70	64	150	70	70	64	150	72	80	66	152
			115A+113A	50.0	60.1	65	70	73	148	67	70	75	150	68	70	76	150	70	80	78	152
		MED	NONE	–	–	26	30	27	163	28	30	29	165	28	30	30	165	30	35	32	167
			116A	13.9	16.7	28	30	27	163	30	30	29	165	31	35	30	165	33	35	32	167
			113A	16.5	19.8	32	35	29	163	34	35	31	165	35	35	31	165	37	40	33	167
			115A	33.0	39.7	57	60	52	163	59	60	54	165	59	60	54	165	62	70	56	167
			114A+116A	41.7	50.2	70	70	64	163	72	80	66	165	73	80	66	165	75	80	68	167
			115A+113A	50.0	60.1	67	80	75	163	69	80	77	165	70	80	78	165	72	80	80	167
		HIGH	NONE	–	–	27	30	29	164	29	35	31	166	29	35	31	166	31	35	33	168
			116A	13.9	16.7	29	30	29	164	32	35	31	166	32	35	31	166	34	35	33	168
			113A	16.5	19.8	33	35	30	164	35	35	32	166	36	40	33	166	38	40	35	168
			115A	33.0	39.7	58	60	53	164	60	60	55	166	61	70	56	166	63	70	58	168
			114A+116A	41.7	50.2	71	80	65	164	73	80	67	166	74	80	68	166	76	80	70	168
			115A+113A	50.0	60.1	69	80	76	164	71	80	79	166	71	80	79	166	74	80	81	168
	575–3–60	STD	NONE	–	–	18	20	18	105	22	25	23	109	19	25	20	107	23	25	25	111
			118A	17.0	20.4	28	30	26	105	33	35	30	109	31	35	28	107	35	35	32	111
			119A	34.0	40.9	54	60	49	105	59	60	54	109	56	60	51	107	61	70	56	111
			118A+119A	51.0	61.3	64	70	73	105	69	80	77	109	66	70	75	107	71	80	79	111
		MED	NONE	–	–	19	20	19	116	22	25	24	120	20	25	21	118	24	30	26	122
			118A	17.0	20.4	29	30	27	116	34	35	31	120	32	35	29	118	36	40	33	122
			119A	34.0	40.9	55	60	50	116	60	60	55	120	57	60	52	118	62	70	57	122
			118A+119A	51.0	61.3	65	70	74	116	70	80	78	120	67	70	76	118	72	80	80	122
		HIGH	NONE	–	–	21	25	22	130	25	30	27	134	23	25	24	132	27	30	29	136
			118A	17.0	20.4	33	35	30	130	38	40	34	134	35	35	32	132	40	40	36	136
			119A	34.0	40.9	59	60	53	130	63	70	58	134	61	70	55	132	65	70	60	136
			118A+119A	51.0	61.3	69	80	77	130	74	80	81	134	71	80	79	132	76	80	83	136

See “Legend and Notes for Tables 72 – 75” on page129

ELECTRICAL INFORMATION

Table 72 - UNIT WIRE/FUSE OR HACR BREAKER SIZING DATA WITH SINGLE SPEED INDOOR FAN MOTOR (cont)

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC*D14	208/230–3–60	STD	NONE	–	–	56/56	70/70	59/58	330	60/60	70/70	63/63	334	61/61	70/70	64/64	335	65/65	80/80	68/68	339
			291A	12.4/16.5	34.4/39.7	56/60	70/70	59/58	330/330	60/65	70/70	63/63	334/334	61/66	70/70	64/64	335/335	65/71	80/80	68/68	339/339
			288A+291A	19.9/26.5	55.3/63.8	80/91	80/100	73/83	330/330	85/95	90/100	78/87	334/334	86/97	90/100	79/88	335/335	91/101	100/110	83/93	339/339
			294A	25.2/33.5	69.9/80.6	98/112	100/125	90/102	330/330	103/116	110/125	94/107	334/334	104/118	110/125	96/108	335/335	109/122	110/125	100/112	339/339
			288A+294A	32.7/43.5	90.7/104.7	124/142	125/150	114/130	330/330	129/146	150/150	118/134	334/334	130/148	150/150	119/135	335/335	135/152	150/175	124/140	339/339
			291A+294A	37.6/50.0	104.3/120.3	141/131	150/150	130/148	330/330	146/136	150/150	134/152	334/334	147/137	150/150	135/153	335/335	152/142	175/150	139/158	339/339
		MED	NONE	–	–	58	70	61	344	62	80	65	348	63	80	67	349	67	80	71	353
			291A	12.4/16.5	34.4/39.7	58/63	70/70	61/61	344/344	62/68	80/80	65/65	348/348	63/69	80/80	67/67	349/349	67/74	80/80	71/71	353/353
			288A+291A	19.9/26.5	55.3/63.8	83/93	90/100	76/86	344/344	88/98	90/100	80/90	348/348	89/99	90/100	81/91	349/349	94/104	100/110	86/95	353/353
			294A	25.2/33.5	69.9/80.6	101/114	110/125	93/105	344/344	106/119	110/125	97/109	348/348	107/120	110/125	98/110	349/349	112/125	125/125	102/115	353/353
			288A+294A	32.7/43.5	90.7/104.7	127/145	150/150	116/133	344/344	132/149	150/150	121/137	348/348	133/151	150/175	122/138	349/349	138/155	150/175	126/142	353/353
			291A+294A	37.6/50.0	104.3/120.3	144/134	150/150	132/151	344/344	149/139	150/150	137/155	348/348	150/140	150/150	138/156	349/349	155/145	175/175	142/160	353/353
		HIGH	NONE	–	–	68	80	72	350	72	80	77	354	73	80	78	355	77	90	82	359
			291A	12.4/16.5	34.4/39.7	69/76	80/80	72/72	350/350	74/80	80/80	77/77	354/354	75/82	80/90	78/78	355/355	80/86	90/90	82/82	359/359
			288A+291A	19.9/26.5	55.3/63.8	95/106	100/110	87/97	350/350	100/110	100/125	91/101	354/354	101/112	110/125	93/102	355/355	106/116	110/125	97/107	359/359
			294A	25.2/33.5	69.9/80.6	113/127	125/150	104/116	350/350	118/131	125/150	108/121	354/354	119/133	125/150	109/122	355/355	124/137	125/150	114/126	359/359
			288A+294A	32.7/43.5	90.7/104.7	139/157	150/175	128/144	350/350	144/162	150/175	132/148	354/354	145/163	150/175	133/149	355/355	150/168	150/175	138/154	359/359
			291A+294A	37.6/50.0	104.3/120.3	156/146	175/175	143/162	350/350	161/151	175/175	148/166	354/354	162/152	175/175	149/167	355/355	167/157	175/175	153/172	359/359
	460–3–60	STD	NONE	–	–	29	35	30	166	31	35	32	168	31	40	32	168	33	40	35	170
			292A	16.5	19.9	31	35	30	166	33	35	32	168	33	40	32	168	36	40	35	170
			289A+292A	26.5	31.9	46	50	42	166	48	50	44	168	48	50	44	168	51	60	46	170
			295A	33.5	40.3	56	60	51	166	58	60	53	168	59	60	54	168	61	70	56	170
			289A+295A	43.5	52.3	71	80	65	166	73	80	67	168	74	80	68	168	76	80	70	170
			292A+295A	50.0	60.2	66	70	74	166	68	80	76	168	69	80	77	168	71	80	79	170
		MED	NONE	–	–	30	35	31	173	32	40	33	175	32	40	34	175	34	40	36	177
			292A	16.5	19.9	32	35	31	173	34	40	33	175	35	40	34	175	37	40	36	177
			289A+292A	26.5	31.9	47	50	43	173	49	50	45	175	50	50	45	175	52	60	47	177
			295A	33.5	40.3	57	60	52	173	60	60	55	175	60	60	55	175	62	70	57	177
			289A+295A	43.5	52.3	72	80	66	173	75	80	68	175	75	80	69	175	77	80	71	177
			292A+295A	50.0	60.2	67	80	75	173	70	80	77	175	70	80	78	175	72	80	80	177
		HIGH	NONE	–	–	35	40	37	176	37	45	39	178	37	45	39	178	39	45	41	180
			292A	16.5	19.9	38	40	37	176	40	45	39	178	41	45	39	178	43	45	41	180
			289A+292A	26.5	31.9	53	60	48	176	55	60	50	178	56	60	51	178	58	60	53	180
			295A	33.5	40.3	64	70	58	176	66	70	60	178	66	70	61	178	69	70	63	180
			289A+295A	43.5	52.3	79	80	72	176	81	90	74	178	81	90	74	178	84	90	76	180
			292A+295A	50.0	60.2	73	80	81	176	76	80	83	178	76	80	83	178	78	80	86	180

See “Legend and Notes for Tables 72 – 75” on page129

ELECTRICAL INFORMATION

Table 72 - UNIT WIRE/FUSE OR HACR BREAKER SIZING DATA WITH SINGLE SPEED INDOOR FAN MOTOR (cont)

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC*D14	575–3–60	STD	NONE	–	–	22	25	23	128	26	30	27	132	24	30	25	130	28	30	29	134
			293A	16.5	15.9	24	25	23	128	29	30	27	132	26	30	25	130	31	35	29	134
			290A+293A	26.5	25.5	36	40	33	128	41	45	37	132	38	40	35	130	43	45	39	134
			296A	33.5	32.2	44	45	40	128	49	50	45	132	46	50	42	130	51	60	47	134
			290A+296A	43.5	41.8	56	60	51	128	61	70	56	132	58	60	53	130	63	70	58	134
			293A+296A	50.0	48.1	52	60	59	128	57	60	63	132	54	60	60	130	59	60	65	134
		MED	NONE	–	–	22	25	23	128	26	30	27	132	24	30	25	130	28	30	29	134
			293A	16.5	15.9	24	25	23	128	29	30	27	132	26	30	25	130	31	35	29	134
			290A+293A	26.5	25.5	36	40	33	128	41	45	37	132	38	40	35	130	43	45	39	134
			296A	33.5	32.2	44	45	40	128	49	50	45	132	46	50	42	130	51	60	47	134
			290A+296A	43.5	41.8	56	60	51	128	61	70	56	132	58	60	53	130	63	70	58	134
			293A+296A	50.0	48.1	52	60	59	128	57	60	63	132	54	60	60	130	59	60	65	134
		HIGH	NONE	–	–	29	35	30	140	32	40	34	144	30	35	32	142	34	40	36	146
			293A	16.5	15.9	32	35	30	140	36	40	34	144	34	35	32	142	38	40	36	146
			290A+293A	26.5	25.5	44	45	40	140	48	50	44	144	46	50	42	142	50	60	46	146
			296A	33.5	32.2	52	60	47	140	57	60	52	144	54	60	49	142	59	60	54	146
			290A+296A	43.5	41.8	64	70	58	140	69	70	63	144	66	70	60	142	71	80	65	146
			293A+296A	50.0	48.1	60	70	66	140	65	70	70	144	62	70	68	142	67	70	72	146

See “Legend and Notes for Tables 72 – 75” on page129

ELECTRICAL INFORMATION

Table 73 – UNIT WIRE SIZING DATA WITH FACTORY INSTALLED HACR BREAKER WITH SINGLE SPEED INDOOR FAN MOTOR

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC*A04	208/230–1–60	DD–STD	NONE	–	–	30	45	29	88	32	45	31	90	–	–	–	–	–	–	–	–
			101A	3.3/4.4	15.9/18.3	33/33	45/45	29/30	88/88	35/35	45/45	31/32	90/90	–	–	–	–	–	–	–	–
			102A	4.9/6.5	23.5/27.1	44/44	45/45	36/40	88/88	46/46	50/50	38/42	90/90	–	–	–	–	–	–	–	–
			103B	6.5/8.7	31.4/36.3	55/55	60/60	45/50	88/88	57/57	60/60	47/52	90/90	–	–	–	–	–	–	–	–
			104B	7.9/10.5	37.9/43.8	64/64	70/70	52/59	88/88	67/67	70/70	54/61	90/90	–	–	–	–	–	–	–	–
			102A+102A	9.8/13.0	46.9/54.2	77/77	80/80	62/71	88/88	80/80	80/80	65/73	90/90	–	–	–	–	–	–	–	–
		STD	NONE	–	–	27	40	26	93	29	45	28	95	–	–	–	–	–	–	–	–
			101A	3.3/4.4	15.9/18.3	29/29	40/40	26/27	93/93	32/32	45/45	28/29	95/95	–	–	–	–	–	–	–	–
			102A	4.9/6.5	23.5/27.1	40/40	45/45	33/37	93/93	43/43	45/45	35/39	95/95	–	–	–	–	–	–	–	–
			103B	6.5/8.7	31.4/36.3	52/52	60/60	42/47	93/93	54/54	60/60	44/50	95/95	–	–	–	–	–	–	–	–
			104B	7.9/10.5	37.9/43.8	61/61	70/70	49/56	93/93	64/64	70/70	51/58	95/95	–	–	–	–	–	–	–	–
			102A+102A	9.8/13.0	46.9/54.2	74/74	80/80	60/68	93/93	77/77	80/80	62/70	95/95	–	–	–	–	–	–	–	–
		MED	NONE	–	–	27	40	26	93	29	45	28	95	–	–	–	–	–	–	–	–
			101A	3.3/4.4	15.9/18.3	29/29	40/40	26/27	93/93	32/32	45/45	28/29	95/95	–	–	–	–	–	–	–	–
			102A	4.9/6.5	23.5/27.1	40/40	45/45	33/37	93/93	43/43	45/45	35/39	95/95	–	–	–	–	–	–	–	–
			103B	6.5/8.7	31.4/36.3	52/52	60/60	42/47	93/93	54/54	60/60	44/50	95/95	–	–	–	–	–	–	–	–
			104B	7.9/10.5	37.9/43.8	61/61	70/70	49/56	93/93	64/64	70/70	51/58	95/95	–	–	–	–	–	–	–	–
			102A+102A	9.8/13.0	46.9/54.2	74/74	80/80	60/68	93/93	77/77	80/80	62/70	95/95	–	–	–	–	–	–	–	–
	208/230–3–60	DD–STD	NONE	–	–	22	30	22	82	24	30	24	84	27	30	27	87	29	35	29	89
			101A	3.3/4.4	9.2/10.6	23/23	30/30	22/22	82/82	25/25	30/30	24/24	84/84	29/29	30/30	27/27	87/87	31/31	35/35	29/29	89/89
			102A	4.9/6.5	13.6/15.6	29/29	30/30	24/26	82/82	32/32	35/35	26/29	84/84	35/35	35/35	30/32	87/87	38/38	40/40	32/34	89/89
			103B	6.5/8.7	18.1/20.9	36/36	40/40	29/33	82/82	38/38	40/40	32/35	84/84	42/42	45/45	35/38	87/87	44/44	45/45	37/40	89/89
			104B	7.9/10.5	21.9/25.3	41/41	45/45	34/38	82/82	44/44	45/45	36/40	84/84	47/47	50/50	39/43	87/87	50/50	50/50	41/45	89/89
			105A	12.0/16.0	33.4/38.5	58/58	60/60	47/53	82/82	60/60	60/60	49/55	84/84	64/64	70/70	52/58	87/87	66/66	70/70	55/60	89/89
		STD	NONE	–	–	20	25	19	94	22	30	21	96	24	30	25	99	26	30	27	101
			101A	3.3/4.4	9.2/10.6	20/20	25/25	19/19	94/94	23/23	30/30	21/21	96/96	26/26	30/30	25/25	99/99	29/29	30/30	27/27	101/101
			102A	4.9/6.5	13.6/15.6	26/26	30/30	22/24	94/94	29/29	30/30	24/26	96/96	32/32	35/35	27/29	99/99	35/35	35/35	29/32	101/101
			103B	6.5/8.7	18.1/20.9	33/33	35/35	27/30	94/94	35/35	40/40	29/32	96/96	39/39	40/40	32/36	99/99	41/41	45/45	35/38	101/101
			104B	7.9/10.5	21.9/25.3	39/39	40/40	31/35	94/94	41/41	45/45	33/37	96/96	45/45	45/45	37/41	99/99	47/47	50/50	39/43	101/101
			105A	12.0/16.0	33.4/38.5	55/55	60/60	44/50	94/94	57/57	60/60	47/52	96/96	61/61	70/70	50/56	99/99	63/63	70/70	52/58	101/101
		MED	NONE	–	–	20	25	19	94	22	30	21	96	24	30	25	99	26	30	27	101
			101A	3.3/4.4	9.2/10.6	20/20	25/25	19/19	94/94	23/23	30/30	21/21	96/96	26/26	30/30	25/25	99/99	29/29	30/30	27/27	101/101
			102A	4.9/6.5	13.6/15.6	26/26	30/30	22/24	94/94	29/29	30/30	24/26	96/96	32/32	35/35	27/29	99/99	35/35	35/35	29/32	101/101
			103B	6.5/8.7	18.1/20.9	33/33	35/35	27/30	94/94	35/35	40/40	29/32	96/96	39/39	40/40	32/36	99/99	41/41	45/45	35/38	101/101
			104B	7.9/10.5	21.9/25.3	39/39	40/40	31/35	94/94	41/41	45/45	33/37	96/96	45/45	45/45	37/41	99/99	47/47	50/50	39/43	101/101
			105A	12.0/16.0	33.4/38.5	55/55	60/60	44/50	94/94	57/57	60/60	47/52	96/96	61/61	70/70	50/56	99/99	63/63	70/70	52/58	101/101
		HIGH	NONE	–	–	21/21	30/30	21/21	132	23/23	30/30	23/23	134	26/26	30/30	27/26	137	28/28	35/35	29/29	139
			101A	3.3/4.4	9.2/10.6	22/22	30/30	21/21	132/132	24/24	30/30	23/23	134/134	28/28	30/30	27/26	137/137	30/30	35/35	29/29	139/139
			102A	4.9/6.5	13.6/15.6	28/28	30/30	24/26	132/132	31/31	35/35	26/28	134/134	34/34	35/35	29/31	137/137	37/37	40/40	31/33	139/139
			103B	6.5/8.7	18.1/20.9	35/35	35/35	29/32	132/132	37/37	40/40	31/34	134/134	41/41	45/45	34/37	137/137	43/43	45/45	36/39	139/139
			104B	7.9/10.5	21.9/25.3	40/40	45/40	33/37	132/132	43/43	45/45	35/39	134/134	46/46	50/50	39/42	137/137	49/49	50/50	41/45	139/139
			105A	12.0/16.0	33.4/38.5	57/57	60/60	46/52	132/132	59/59	60/60	49/54	134/134	63/63	70/70	52/58	137/137	65/65	70/70	54/60	139/139

See “Legend and Notes for Tables 72 – 75” on page129

ELECTRICAL INFORMATION

Table 73 - UNIT WIRE SIZING DATA WITH FACTORY INSTALLED HACR BREAKER WITH SINGLE SPEED INDOOR FAN MOTOR (cont)

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC*A04	460–3–60	DD–STD	NONE	–	–	12	15	12	43	13	15	13	44	14	20	14	45	15	20	16	46
			106A	6.0	7.2	14	15	13	43	16	20	14	44	17	20	15	45	18	20	17	46
			107A	8.8	10.6	19	20	17	43	20	20	18	44	21	25	19	45	23	25	20	46
			108A	11.5	13.8	23	25	20	43	24	25	22	44	25	25	23	45	27	30	24	46
			109A	14.0	16.8	26	30	24	43	28	30	25	44	29	30	26	45	30	30	28	46
		STD	NONE	–	–	11	15	10	48	12	15	11	49	13	15	13	50	14	20	14	51
			106A	6.0	7.2	13	15	11	48	14	15	12	49	15	15	14	50	17	20	15	51
			107A	8.8	10.6	17	20	15	48	18	20	16	49	20	20	18	50	21	25	19	51
			108A	11.5	13.8	21	25	19	48	22	25	20	49	24	25	21	50	25	25	23	51
			109A	14.0	16.8	25	25	22	48	26	30	23	49	27	30	25	50	29	30	26	51
		MED	NONE	–	–	11	15	10	48	12	15	11	49	13	15	13	50	14	20	14	51
			106A	6.0	7.2	13	15	11	48	14	15	12	49	15	15	14	50	17	20	15	51
			107A	8.8	10.6	17	20	15	48	18	20	16	49	20	20	18	50	21	25	19	51
			108A	11.5	13.8	21	25	19	48	22	25	20	49	24	25	21	50	25	25	23	51
			109A	14.0	16.8	25	25	22	48	26	30	23	49	27	30	25	50	29	30	26	51
		HIGH	NONE	–	–	12	15	11	67	13	15	12	68	14	15	14	69	15	20	15	70
			106A	6.0	7.2	14	15	12	67	15	15	13	68	16	20	15	69	18	20	16	70
			107A	8.8	10.6	18	20	16	67	19	20	17	68	21	25	19	69	22	25	20	70
			108A	11.5	13.8	22	25	20	67	23	25	21	68	25	25	22	69	26	30	23	70
			109A	14.0	16.8	26	30	23	67	27	30	24	68	28	30	26	69	30	30	27	70
	575–3–60	DD–STD	NONE	–	–	10	15	10	42	12	15	12	44	11	15	12	44	13	15	14	46
			297A	9.2	9.2	17	20	15	42	19	20	17	44	19	20	17	44	21	25	19	46
			298A	13.8	13.8	23	25	20	42	25	25	23	44	25	25	22	44	27	30	25	46
		STD	NONE	–	–	7	15	6	45	9	15	9	47	9	15	8	47	11	15	10	49
			297A	9.2	9.2	13	15	12	45	16	20	14	47	16	20	14	47	18	20	16	49
			298A	13.8	13.8	19	20	17	45	22	25	19	47	21	25	19	47	24	25	21	49
		MED	NONE	–	–	7	15	6	45	9	15	9	47	9	15	8	47	11	15	10	49
			297A	9.2	9.2	13	15	12	45	16	20	14	47	16	20	14	47	18	20	16	49
			298A	13.8	13.8	19	20	17	45	22	25	19	47	21	25	19	47	24	25	21	49
		HIGH	NONE	–	–	8	15	7	49	10	15	9	51	9	15	9	51	11	15	11	53
			297A	9.2	9.2	14	15	13	49	17	20	15	51	17	20	15	51	19	20	17	53
			298A	13.8	13.8	20	20	18	49	23	25	20	51	22	25	20	51	25	25	22	53

See “Legend and Notes for Tables 72 – 75” on page129

ELECTRICAL INFORMATION

Table 73 - UNIT WIRE SIZING DATA WITH FACTORY INSTALLED HACR BREAKER WITH SINGLE SPEED INDOOR FAN MOTOR (cont)

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC*A05	208/230–1–60	DD–STD	NONE	–	–	37	50	35	127	38	50	37	129	–	–	–	–	–	–	–	–
			101A	3.3/4.4	15.9/18.3	37/37	50/50	35/35	127/127	38/38	50/50	37/37	129/129	–	–	–	–	–	–	–	–
			103B	6.5/8.7	31.4/36.3	55/55	60/60	45/50	127/127	57/57	60/60	47/52	129/129	–	–	–	–	–	–	–	–
			102A+102A	9.8/13.0	46.9/54.2	77/77	80/80	62/71	127/127	80/80	80/80	65/73	129/129	–	–	–	–	–	–	–	–
			103B+103B	13.1/17.4	62.8/72.5	100/100	100/100	81/92	127/127	103/103	110/110	83/94	129/129	–	–	–	–	–	–	–	–
			104B+104B	15.8/21.0	75.8/87.5	119/119	125/125	96/109	127/127	121/121	125/125	98/111	129/129	–	–	–	–	–	–	–	–
		STD	NONE	–	–	34	50	32	132	36	50	35	134	–	–	–	–	–	–	–	–
			101A	3.3/4.4	15.9/18.3	34/34	50/50	32/32	132/132	36/36	50/50	35/35	134/134	–	–	–	–	–	–	–	–
			103B	6.5/8.7	31.4/36.3	52/52	60/60	42/47	132/132	54/54	60/60	44/50	134/134	–	–	–	–	–	–	–	–
			102A+102A	9.8/13.0	46.9/54.2	74/74	80/80	60/68	132/132	77/77	80/80	62/70	134/134	–	–	–	–	–	–	–	–
			103B+103B	13.1/17.4	62.8/72.5	97/97	100/100	78/89	132/132	100/100	100/100	80/91	134/134	–	–	–	–	–	–	–	–
			104B+104B	15.8/21.0	75.8/87.5	116/116	125/125	93/106	132/132	118/118	125/125	95/108	134/134	–	–	–	–	–	–	–	–
		MED	NONE	–	–	34	50	32	132	36	50	35	134	–	–	–	–	–	–	–	–
			101A	3.3/4.4	15.9/18.3	34/34	50/50	32/32	132/132	36/36	50/50	35/35	134/134	–	–	–	–	–	–	–	–
			103B	6.5/8.7	31.4/36.3	52/52	60/60	42/47	132/132	54/54	60/60	44/50	134/134	–	–	–	–	–	–	–	–
			102A+102A	9.8/13.0	46.9/54.2	74/74	80/80	60/68	132/132	77/77	80/80	62/70	134/134	–	–	–	–	–	–	–	–
			103B+103B	13.1/17.4	62.8/72.5	97/97	100/100	78/89	132/132	100/100	100/100	80/91	134/134	–	–	–	–	–	–	–	–
			104B+104B	15.8/21.0	75.8/87.5	116/116	125/125	93/106	132/132	118/118	125/125	95/108	134/134	–	–	–	–	–	–	–	–
	208/230–3–60	DD–STD	NONE	–	–	26	30	26	93	28	40	28	95	31	40	31	98	33	45	34	100
			102A	4.9/6.5	13.6/15.6	29/29	30/30	26/26	93/93	32/32	40/40	28/29	95/95	35/35	40/40	31/32	98/98	38/38	45/45	34/34	100/100
			103B	6.5/8.7	18.1/20.9	36/36	40/40	29/33	93/93	38/38	40/40	32/35	95/95	42/42	45/45	35/38	98/98	44/44	45/45	37/40	100/100
			105A	12.0/16.0	33.4/38.5	58/58	60/60	47/53	93/93	60/60	60/60	49/55	95/95	64/64	70/70	52/58	98/98	66/66	70/70	55/60	100/100
			104B+104B	15.8/21.0	43.8/50.5	73/73	80/80	59/67	93/93	75/75	80/80	61/69	95/95	79/79	80/80	64/72	98/98	81/81	90/90	67/74	100/100
		STD	NONE	–	–	24	30	23	105	26	30	26	107	29	40	29	110	31	40	31	112
			102A	4.9/6.5	13.6/15.6	26/26	30/30	23/24	105/105	29/29	30/30	26/26	107/107	32/32	40/40	29/29	110/110	35/35	40/40	31/32	112/112
			103B	6.5/8.7	18.1/20.9	33/33	35/35	27/30	105/105	35/35	40/40	29/32	107/107	39/39	40/40	32/36	110/110	41/41	45/45	35/38	112/112
			105A	12.0/16.0	33.4/38.5	55/55	60/60	44/50	105/105	57/57	60/60	47/52	107/107	61/61	70/70	50/56	110/110	63/63	70/70	52/58	112/112
			104B+104B	15.8/21.0	43.8/50.5	70/70	70/70	56/64	105/105	72/72	80/80	59/66	107/107	76/76	80/80	62/70	110/110	78/78	80/80	64/72	112/112
		MED	NONE	–	–	24/24	30/30	23/23	122	26/26	30/30	26/25	124	29/29	40/40	29/29	127	31/31	40/40	31/31	129
			102A	4.9/6.5	13.6/15.6	26/26	30/30	23/24	122/122	28/28	30/30	26/26	124/124	32/32	40/40	29/29	127/127	34/34	40/40	31/31	129/129
			103B	6.5/8.7	18.1/20.9	33/33	35/35	27/30	122/122	35/35	35/35	29/32	124/124	39/39	40/40	32/35	127/127	41/41	45/45	35/37	129/129
			105A	12.0/16.0	33.4/38.5	55/55	60/60	44/50	122/122	57/57	60/60	47/52	124/124	61/61	70/70	50/55	127/127	63/63	70/70	52/58	129/129
			104B+104B	15.8/21.0	43.8/50.5	70/70	70/70	56/64	122/122	72/72	80/80	59/66	124/124	76/76	80/80	62/69	127/127	78/78	80/80	64/71	129/129
		HIGH	NONE	–	–	27/27	40/40	27/27	158	29/29	40/40	29/29	160	32/32	45/45	33/32	163	34/34	45/45	35/35	165
			102A	4.9/6.5	13.6/15.6	30/30	40/40	27/27	158/158	33/33	40/40	29/30	160/160	36/36	45/45	33/33	163/163	39/39	45/45	35/35	165/165
			103B	6.5/8.7	18.1/20.9	37/37	40/40	30/34	158/158	39/39	40/40	33/36	160/160	43/43	45/45	36/39	163/163	45/45	45/45	38/41	165/165
			105A	12.0/16.0	33.4/38.5	59/59	60/60	48/54	158/158	61/61	70/70	50/56	160/160	65/65	70/70	54/59	163/163	67/67	70/70	56/62	165/165
			104B+104B	15.8/21.0	43.8/50.5	74/74	80/80	60/68	158/158	76/76	80/80	62/70	160/160	80/80	80/80	66/73	163/163	82/82	90/90	68/75	165/165

See “Legend and Notes for Tables 72 – 75” on page129

ELECTRICAL INFORMATION

Table 73 - UNIT WIRE SIZING DATA WITH FACTORY INSTALLED HACR BREAKER WITH SINGLE SPEED INDOOR FAN MOTOR (cont)

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC*A05	460–3–60	DD–STD	NONE	–	–	13	15	13	47	14	20	14	48	15	20	15	49	16	20	16	50
			106A	6.0	7.2	14	15	13	47	16	20	14	48	17	20	15	49	18	20	17	50
			108A	11.5	13.8	23	25	20	47	24	25	22	48	25	25	23	49	27	30	24	50
			109A	14.0	16.8	26	30	24	47	28	30	25	48	29	30	26	49	30	30	28	50
			108A+108A	23.0	27.7	40	40	36	47	41	45	38	48	43	45	39	49	44	45	40	50
		STD	NONE	–	–	12	15	11	52	13	15	12	53	14	20	14	54	15	20	15	55
			106A	6.0	7.2	13	15	11	52	14	15	12	53	15	20	14	54	17	20	15	55
			108A	11.5	13.8	21	25	19	52	22	25	20	53	24	25	21	54	25	25	23	55
			109A	14.0	16.8	25	25	22	52	26	30	23	53	27	30	25	54	29	30	26	55
			108A+108A	23.0	27.7	38	40	35	52	40	40	36	53	41	45	37	54	42	45	39	55
		MED	NONE	–	–	12	15	11	61	13	15	12	62	14	15	14	63	15	20	15	64
			106A	6.0	7.2	13	15	11	61	14	15	12	62	15	15	14	63	17	20	15	64
			108A	11.5	13.8	21	25	19	61	22	25	20	62	24	25	21	63	25	25	22	64
			109A	14.0	16.8	25	25	22	61	26	30	23	62	27	30	25	63	29	30	26	64
			108A+108A	23.0	27.7	38	40	35	61	39	40	36	62	41	45	37	63	42	45	38	64
		HIGH	NONE	–	–	13	15	13	79	14	20	14	80	16	20	16	81	17	20	17	82
			106A	6.0	7.2	15	15	13	79	16	20	14	80	17	20	16	81	19	20	17	82
			108A	11.5	13.8	23	25	21	79	24	25	22	80	26	30	23	81	27	30	24	82
			109A	14.0	16.8	27	30	24	79	28	30	25	80	29	30	27	81	31	35	28	82
			108A+108A	23.0	27.7	40	40	37	79	42	45	38	80	43	45	39	81	44	45	40	82
	575–3–60	DD–STD	NONE	–	–	11	15	11	39	13	15	13	41	13	15	13	41	15	20	15	43
			297A	9.2	9.2	17	20	15	39	19	20	17	41	19	20	17	41	21	25	19	43
			298A	13.8	13.8	23	25	20	39	25	25	23	41	25	25	22	41	27	30	25	43
		STD	NONE	–	–	9	15	8	42	10	15	10	44	10	15	10	44	12	15	12	46
			297A	9.2	9.2	13	15	12	42	16	20	14	44	16	20	14	44	18	20	16	46
			298A	13.8	13.8	19	20	17	42	22	25	19	44	21	25	19	44	24	25	21	46
		MED	NONE	–	–	9	15	8	42	11	15	11	44	11	15	10	44	13	15	13	46
			297A	9.2	9.2	14	15	12	42	16	20	15	44	16	20	14	44	18	20	17	46
			298A	13.8	13.8	20	20	18	42	22	25	20	44	22	25	20	44	24	25	22	46
		HIGH	NONE	–	–	10	15	10	57	12	15	12	59	12	15	12	59	14	15	14	61
			297A	9.2	9.2	15	15	14	57	18	20	16	59	18	20	16	59	20	20	18	61
			298A	13.8	13.8	21	25	19	57	24	25	21	59	23	25	21	59	26	30	23	61

See “Legend and Notes for Tables 72 – 75” on page129

ELECTRICAL INFORMATION

Table 73 – UNIT WIRE SIZING DATA WITH FACTORY INSTALLED HACR BREAKER WITH SINGLE SPEED INDOOR FAN MOTOR (cont)

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC*A06	208/230–1–60	DD–STD	NONE	–	–	41	60	39	144	42	60	41	146	–	–	–	–	–	–	–	–
			102A	4.9/6.5	23.5/27.1	44/44	60/60	39/40	144/144	46/46	60/60	41/42	146/146	–	–	–	–	–	–	–	–
			103B	6.5/8.7	31.4/36.3	55/55	60/60	45/50	144/144	57/57	60/60	47/52	146/146	–	–	–	–	–	–	–	–
			102A+102A	9.8/13.0	46.9/54.2	77/77	80/80	62/71	144/144	80/80	80/80	65/73	146/146	–	–	–	–	–	–	–	–
			103B+103B	13.1/17.4	62.8/72.5	100/100	100/100	81/92	144/144	103/103	110/110	83/94	146/146	–	–	–	–	–	–	–	–
			104B+104B	15.8/21.0	75.8/87.5	119/119	125/125	96/109	144/144	121/121	125/125	98/111	146/146	–	–	–	–	–	–	–	–
		STD	NONE	–	–	38	60	36	149	40	60	38	151	–	–	–	–	–	–	–	–
			102A	4.9/6.5	23.5/27.1	40/40	60/60	36/37	149/149	43/43	60/60	38/39	151/151	–	–	–	–	–	–	–	–
			103B	6.5/8.7	31.4/36.3	52/52	60/60	42/47	149/149	54/54	60/60	44/50	151/151	–	–	–	–	–	–	–	–
			102A+102A	9.8/13.0	46.9/54.2	74/74	80/80	60/68	149/149	77/77	80/80	62/70	151/151	–	–	–	–	–	–	–	–
			103B+103B	13.1/17.4	62.8/72.5	97/97	100/100	78/89	149/149	100/100	100/100	80/91	151/151	–	–	–	–	–	–	–	–
			104B+104B	15.8/21.0	75.8/87.5	116/116	125/125	93/106	149/149	118/118	125/125	95/108	151/151	–	–	–	–	–	–	–	–
		MED	NONE	–	–	40	60	38	174	42	60	41	176	–	–	–	–	–	–	–	–
			102A	4.9/6.5	23.5/27.1	43/43	60/60	38/39	174/174	45/45	60/60	41/41	176/176	–	–	–	–	–	–	–	–
			103B	6.5/8.7	31.4/36.3	55/55	60/60	44/50	174/174	57/57	60/60	46/52	176/176	–	–	–	–	–	–	–	–
			102A+102A	9.8/13.0	46.9/54.2	77/77	80/80	62/70	174/174	79/79	80/80	64/73	176/176	–	–	–	–	–	–	–	–
			103B+103B	13.1/17.4	62.8/72.5	100/100	100/100	80/91	174/174	102/102	110/110	82/94	176/176	–	–	–	–	–	–	–	–
			104B+104B	15.8/21.0	75.8/87.5	119/119	125/125	95/109	174/174	121/121	125/125	97/111	176/176	–	–	–	–	–	–	–	–
	208/230–3–60	DD–STD	NONE	–	–	29	40	28	120	31	45	31	122	34	45	34	125	36	50	36	127
			102A	4.9/6.5	13.6/15.6	29/29	40/40	28/28	120/120	32/32	45/45	31/31	122/122	35/35	45/45	34/34	125/125	38/38	50/50	36/36	127/127
			104B	7.9/10.5	21.9/25.3	41/41	45/45	34/38	120/120	44/44	45/45	36/40	122/122	47/47	50/50	39/43	125/125	50/50	50/50	41/45	127/127
			105A	12.0/16.0	33.4/38.5	58/58	60/60	47/53	120/120	60/60	60/60	49/55	122/122	64/64	70/70	52/58	125/125	66/66	70/70	55/60	127/127
			104B+104B	15.8/21.0	43.8/50.5	73/73	80/80	59/67	120/120	75/75	80/80	61/69	122/122	79/79	80/80	64/72	125/125	81/81	90/90	67/74	127/127
			104B+105A	19.9/26.5	55.2/63.8	89/89	90/90	72/82	120/120	92/92	100/100	74/84	122/122	95/95	100/100	78/87	125/125	98/98	100/100	80/90	127/127
		STD	NONE	–	–	27	40	26	132	29	40	28	134	32	45	31	137	34	45	34	139
			102A	4.9/6.5	13.6/15.6	27/27	40/40	26/26	132/132	29/29	40/40	28/28	134/134	32/32	45/45	31/31	137/137	35/35	45/45	34/34	139/139
			104B	7.9/10.5	21.9/25.3	39/39	40/40	31/35	132/132	41/41	45/45	33/37	134/134	45/45	45/45	37/41	137/137	47/47	50/50	39/43	139/139
			105A	12.0/16.0	33.4/38.5	55/55	60/60	44/50	132/132	57/57	60/60	47/52	134/134	61/61	70/70	50/56	137/137	63/63	70/70	52/58	139/139
			104B+104B	15.8/21.0	43.8/50.5	70/70	70/70	56/64	132/132	72/72	80/80	59/66	134/134	76/76	80/80	62/70	137/137	78/78	80/80	64/72	139/139
			104B+105A	19.9/26.5	55.2/63.8	87/87	90/90	69/79	132/132	89/89	90/90	72/82	134/134	93/93	100/100	75/85	137/137	95/95	100/100	77/87	139/139
		MED	NONE	–	–	29/29	40/40	28/28	170	31/31	45/45	30/30	172	33/33	45/45	33/33	175	35/35	50/50	36/35	177
			102A	4.9/6.5	13.6/15.6	29/29	40/40	28/28	170/170	31/31	45/45	30/30	172/172	34/34	45/45	33/33	175/175	37/37	50/50	36/35	177/177
			104B	7.9/10.5	21.9/25.3	40/40	45/40	33/37	170/170	43/43	45/45	35/39	172/172	46/46	50/50	39/42	175/175	49/49	50/50	41/45	177/177
			105A	12.0/16.0	33.4/38.5	57/57	60/60	46/52	170/170	59/59	60/60	49/54	172/172	63/63	70/70	52/58	175/175	65/65	70/70	54/60	177/177
			104B+104B	15.8/21.0	43.8/50.5	72/72	80/80	58/66	170/170	74/74	80/80	60/68	172/172	78/78	80/80	64/71	175/175	80/80	80/80	66/73	177/177
			104B+105A	19.9/26.5	55.2/63.8	89/89	90/90	71/81	170/170	91/91	100/100	74/83	172/172	95/95	100/100	77/87	175/175	97/97	100/100	79/89	177/177
		HIGH	NONE	–	–	30/30	45/45	30/29	185	32/32	45/45	32/32	187	35/35	50/50	35/35	190	37/37	50/50	37/37	192
			102A	4.9/6.5	13.6/15.6	30/30	45/45	30/29	185/185	33/33	45/45	32/32	187/187	36/36	50/50	35/35	190/190	39/39	50/50	37/37	192/192
			104B	7.9/10.5	21.9/25.3	42/42	45/45	35/39	185/185	45/45	45/45	37/41	187/187	48/48	50/50	40/44	190/190	51/51	60/60	43/46	192/192
			105A	12.0/16.0	33.4/38.5	59/59	60/60	48/54	185/185	61/61	70/70	50/56	187/187	65/65	70/70	54/59	190/190	67/67	70/70	56/62	192/192
			104B+104B	15.8/21.0	43.8/50.5	74/74	80/80	60/68	185/185	76/76	80/80	62/70	187/187	80/80	80/80	66/73	190/190	82/82	90/90	68/75	192/192
			104B+105A	19.9/26.5	55.2/63.8	91/91	100/100	73/83	185/185	93/93	100/100	75/85	187/187	97/97	100/100	79/88	190/190	99/99	100/100	81/91	192/192

See “Legend and Notes for Tables 72 – 75” on page129

Table 73 - UNIT WIRE SIZING DATA WITH FACTORY INSTALLED HACR BREAKER WITH SINGLE SPEED INDOOR FAN MOTOR (cont)

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC*A06	460–3–60	DD–STD	NONE	–	–	14	20	14	58	15	20	15	59	16	20	16	60	17	20	17	61
			106A	6.0	7.2	14	20	14	58	16	20	15	59	17	20	16	60	18	20	17	61
			108A	11.5	13.8	23	25	20	58	24	25	22	59	25	25	23	60	27	30	24	61
			109A	14.0	16.8	26	30	24	58	28	30	25	59	29	30	26	60	30	30	28	61
			108A+108A	23.0	27.7	40	40	36	58	41	45	38	59	43	45	39	60	44	45	40	61
			108A+109A	25.5	30.7	44	45	40	58	45	45	41	59	47	50	42	60	48	50	44	61
		STD	NONE	–	–	13	15	12	63	14	20	13	64	15	20	15	65	16	20	16	66
			106A	6.0	7.2	13	15	12	63	14	20	13	64	15	20	15	65	17	20	16	66
			108A	11.5	13.8	21	25	19	63	22	25	20	64	24	25	21	65	25	25	23	66
			109A	14.0	16.8	25	25	22	63	26	30	23	64	27	30	25	65	29	30	26	66
			108A+108A	23.0	27.7	38	40	35	63	40	40	36	64	41	45	37	65	42	45	39	66
			108A+109A	25.5	30.7	42	45	38	63	43	45	39	64	45	45	41	65	46	50	42	66
		MED	NONE	–	–	14	20	13	82	15	20	14	83	16	20	16	84	17	20	17	85
			106A	6.0	7.2	14	20	13	82	15	20	14	83	16	20	16	84	18	20	17	85
			108A	11.5	13.8	22	25	20	82	23	25	21	83	25	25	22	84	26	30	23	85
			109A	14.0	16.8	26	30	23	82	27	30	24	83	28	30	26	84	30	30	27	85
			108A+108A	23.0	27.7	39	40	36	82	41	45	37	83	42	45	38	84	43	45	39	85
			108A+109A	25.5	30.7	43	45	39	82	44	45	40	83	46	50	42	84	47	50	43	85
		HIGH	NONE	–	–	14	20	14	90	15	20	15	91	17	20	16	92	18	20	18	93
			106A	6.0	7.2	15	20	14	90	16	20	15	91	17	20	16	92	19	20	18	93
			108A	11.5	13.8	23	25	21	90	24	25	22	91	26	30	23	92	27	30	24	93
			109A	14.0	16.8	27	30	24	90	28	30	25	91	29	30	27	92	31	35	28	93
			108A+108A	23.0	27.7	40	40	37	90	42	45	38	91	43	45	39	92	44	45	40	93
			108A+109A	25.5	30.7	44	45	40	90	45	45	41	91	47	50	43	92	48	50	44	93
	575–3–60	DD–STD	NONE	–	–	12	15	12	46	14	15	14	48	13	15	13	48	15	20	16	50
			298A	13.8	13.8	23	25	20	46	25	25	23	48	25	25	22	48	27	30	25	50
			301A	23.0	23.1	34	35	31	46	37	40	33	48	36	40	33	48	39	40	35	50
		STD	NONE	–	–	9	15	8	49	11	15	10	51	11	15	10	51	13	15	12	53
			298A	13.8	13.8	19	20	17	49	22	25	19	51	21	25	19	51	24	25	21	53
			301A	23.0	23.1	31	35	28	49	33	35	30	51	33	35	30	51	35	35	32	53
		MED	NONE	–	–	10	15	9	53	12	15	11	55	11	15	11	55	13	15	13	57
			298A	13.8	13.8	20	20	18	53	23	25	20	55	22	25	20	55	25	25	22	57
			301A	23.0	23.1	32	35	29	53	34	35	31	55	34	35	31	55	36	40	33	57
		HIGH	NONE	–	–	11	15	10	64	12	15	12	66	12	15	12	66	14	15	14	68
			298A	13.8	13.8	21	25	19	64	24	25	21	66	23	25	21	66	26	30	23	68
			301A	23.0	23.1	33	35	30	64	35	35	32	66	35	35	32	66	37	40	34	68

See “Legend and Notes for Tables 72 – 75” on page129

ELECTRICAL INFORMATION

Table 73 - UNIT WIRE SIZING DATA WITH FACTORY INSTALLED HACR BREAKER WITH SINGLE SPEED INDOOR FAN MOTOR (cont)

UNIT	NO M. V-Ph-HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC*A07	208/230-3-60	STD	NONE	–	–	32/32	50/50	31/31	165	36/36	50/50	36/35	169	37/37	50/50	37/36	170	41/41	50/50	41/41	174
			264A	4.9/6.5	13.6/15.6	32/32	50/50	31/31	165/165	36/36	50/50	36/35	169/169	37/37	50/50	37/36	170/170	41/41	50/50	41/41	174/174
			117A	7.8/10.4	21.7/25.0	38/38	50/50	31/34	165/165	43/43	50/50	36/39	169/169	44/44	50/50	37/40	170/170	49/49	50/50	41/44	174/174
			110A	12.0/16.0	33.4/38.5	55/55	60/60	44/50	165/165	59/59	60/60	49/54	169/169	61/61	70/70	50/55	170/170	65/65	70/70	54/60	174/174
			117A+117A	15.8/21.0	43.8/50.5	70/70	70/70	56/64	165/165	74/74	80/80	61/68	169/169	76/76	80/80	62/69	170/170	80/80	90/90	66/74	174/174
			110A+117A	19.9/26.5	55.2/63.8	86/86	90/90	69/79	165/165	91/91	100/100	74/83	169/169	92/92	100/100	75/85	170/170	97/97	100/100	79/89	174/174
		MED	NONE	–	–	36/36	50/50	35/35	201	39/39	50/50	39/39	205	40/40	50/50	40/40	206	44/44	60/60	45/45	210
			264A	4.9/6.5	13.6/15.6	36/36	50/50	35/35	201/201	39/39	50/50	39/39	205/205	40/40	50/50	40/40	206/206	44/44	60/60	45/45	210/210
			117A	7.8/10.4	21.7/25.0	42/42	50/50	35/38	201/201	47/47	50/50	39/43	205/205	48/48	50/50	40/44	206/206	53/53	60/60	45/48	210/210
			110A	12.0/16.0	33.4/38.5	59/59	60/60	48/54	201/201	64/64	70/70	52/58	205/205	65/65	70/70	54/59	206/206	70/70	70/70	58/64	210/210
			117A+117A	15.8/21.0	43.8/50.5	74/74	80/80	60/68	201/201	79/79	80/80	64/72	205/205	80/80	80/80	66/73	206/206	85/85	90/90	70/78	210/210
			110A+117A	19.9/26.5	55.2/63.8	91/91	100/100	73/83	201/201	95/95	100/100	78/87	205/205	97/97	100/100	79/88	206/206	101/101	110/110	83/93	210/210
		HIGH	NONE	–	–	41/41	50/50	41/40	217	45/45	60/60	45/44	221	46/46	60/60	46/45	222	49/49	60/60	51/50	226
			264A	4.9/6.5	13.6/15.6	41/41	50/50	41/40	217/217	45/45	60/60	45/44	221/221	46/46	60/60	46/45	222/222	49/49	60/60	51/50	226/226
			117A	7.8/10.4	21.7/25.0	48/48	50/50	41/43	217/217	52/52	60/60	45/48	221/221	54/54	60/60	46/49	222/222	58/58	60/60	51/53	226/226
			110A	12.0/16.0	33.4/38.5	64/64	70/70	54/59	217/217	69/69	70/70	58/63	221/221	70/70	80/70	60/64	222/222	75/75	80/80	64/69	226/226
			117A+117A	15.8/21.0	43.8/50.5	79/79	80/80	66/73	217/217	84/84	90/90	70/77	221/221	85/85	90/90	72/78	222/222	90/90	90/90	76/83	226/226
			110A+117A	19.9/26.5	55.2/63.8	96/96	100/100	79/88	217/217	101/101	110/110	83/92	221/221	102/102	110/110	85/93	222/222	107/107	110/110	89/98	226/226
	460-3-60	STD	NONE	–	–	17	25	16	84	18	25	18	86	19	25	18	86	21	25	20	88
			265A	6.0	7.2	17	25	16	84	18	25	18	86	19	25	18	86	21	25	20	88
			266A	11.5	13.8	21	25	19	84	23	25	21	86	24	25	21	86	26	30	23	88
			267A	14.0	16.8	25	25	22	84	27	30	24	86	27	30	25	86	30	30	27	88
			268A	23.0	27.7	38	40	35	84	40	45	37	86	41	45	37	86	43	45	39	88
			269A	25.5	30.7	42	45	38	84	44	45	40	86	45	45	41	86	47	50	43	88
		MED	NONE	–	–	18	25	18	102	20	25	20	104	21	25	20	104	22	30	22	106
			265A	6.0	7.2	18	25	18	102	20	25	20	104	21	25	20	104	22	30	22	106
			266A	11.5	13.8	23	25	21	102	25	25	23	104	26	30	23	104	28	30	25	106
			267A	14.0	16.8	27	30	24	102	29	30	26	104	29	30	27	104	32	35	29	106
			268A	23.0	27.7	40	40	37	102	43	45	39	104	43	45	39	104	45	45	41	106
			269A	25.5	30.7	44	45	40	102	46	50	42	104	47	50	43	104	49	50	45	106
		HIGH	NONE	–	–	21	25	20	110	22	30	22	112	23	30	23	112	25	30	25	114
			265A	6.0	7.2	21	25	20	110	22	30	22	112	23	30	23	112	25	30	25	114
			266A	11.5	13.8	26	30	23	110	28	30	25	112	28	30	26	112	31	35	28	114
			267A	14.0	16.8	29	30	27	110	32	35	29	112	32	35	29	112	34	35	31	114
			268A	23.0	27.7	43	45	39	110	45	45	41	112	46	50	42	112	48	50	44	114
			269A	25.5	30.7	47	50	43	110	49	50	45	112	50	50	45	112	52	60	47	114
	575-3-60	STD	NONE	–	–	13	15	12	61	16	20	16	65	14	20	14	63	18	20	18	67
			118A	17.0	20.4	28	30	25	61	33	35	30	65	30	30	27	63	35	35	32	67
			299A	25.7	25.8	35	35	32	61	39	40	36	65	37	40	33	63	42	45	38	67
		MED	NONE	–	–	14	20	13	76	18	20	17	80	15	20	15	78	19	25	19	82
			118A	17.0	20.4	29	30	27	76	34	35	31	80	32	35	29	78	36	40	33	82
			299A	25.7	25.8	36	40	33	76	41	45	37	80	38	40	35	78	43	45	39	82
		HIGH	NONE	–	–	17	20	16	90	20	25	21	94	18	25	18	92	22	25	23	96
			118A	17.0	20.4	33	35	30	90	38	40	34	94	35	35	32	92	40	40	36	96
			299A	25.7	25.8	40	40	36	90	44	45	40	94	42	45	38	92	47	50	42	96

See “Legend and Notes for Tables 72 – 75” on page129

ELECTRICAL INFORMATION

Table 73 - UNIT WIRE SIZING DATA WITH FACTORY INSTALLED HACR BREAKER WITH SINGLE SPEED INDOOR FAN MOTOR (cont)

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC*D08	208/230–3–60	STD	NONE	–	–	39/39	50/50	41/40	208	43/43	50/50	45/45	212	44/44	50/50	46/46	213	48/48	60/60	51/50	217
			117A	7.8/10.4	21.7/25.0	39/39	50/50	41/40	208/208	43/43	50/50	45/45	212/212	44/44	50/50	46/46	213/213	49/49	60/60	51/50	217/217
			110A	12.0/16.0	33.4/38.5	55/55	60/60	44/50	208/208	59/59	60/60	49/54	212/212	61/61	70/70	50/55	213/213	65/65	70/70	54/60	217/217
			111A	18.6/24.8	51.7/59.7	81/81	90/90	65/74	208/208	86/86	90/90	70/79	212/212	87/87	90/90	71/80	213/213	92/92	100/100	75/84	217/217
			112A	24.0/32.0	66.7/77.0	103/103	110/110	83/94	208/208	108/108	110/110	87/99	212/212	109/109	110/110	88/100	213/213	114/114	125/125	93/104	217/217
			112A+117A	31.8/42.4	88.4/102.0	134/134	150/150	108/123	208/208	139/139	150/150	112/127	212/212	140/140	150/150	113/128	213/213	145/145	150/150	118/133	217/217
		MED	NONE	–	–	41/41	50/50	43/42	229	45/45	50/50	47/47	233	46/46	50/50	48/48	234	50/50	60/60	53/52	238
			117A	7.8/10.4	21.7/25.0	41/41	50/50	43/42	229/229	45/45	50/50	47/47	233/233	46/46	50/50	48/48	234/234	51/51	60/60	53/52	238/238
			110A	12.0/16.0	33.4/38.5	57/57	60/60	46/52	229/229	62/62	70/70	51/56	233/233	63/63	70/70	52/58	234/234	68/68	70/70	56/62	238/238
			111A	18.6/24.8	51.7/59.7	83/83	90/90	67/76	229/229	88/88	90/90	72/81	233/233	89/89	90/90	73/82	234/234	94/94	100/100	77/86	238/238
			112A	24.0/32.0	66.7/77.0	105/105	110/110	85/96	229/229	110/110	110/110	89/101	233/233	111/111	125/125	90/102	234/234	116/116	125/125	95/106	238/238
			112A+117A	31.8/42.4	88.4/102.0	136/136	150/150	110/125	229/229	141/141	150/150	114/129	233/233	142/142	150/150	115/131	234/234	147/147	150/150	119/135	238/238
		HIGH	NONE	–	–	45	50	47	258	48	60	51	262	49	60	52	263	53	60	57	267
			117A	7.8/10.4	21.7/25.0	45/45	50/50	47/47	258/258	50/50	60/60	51/51	262/262	51/51	60/60	52/52	263/263	56/56	60/60	57/57	267/267
			110A	12.0/16.0	33.4/38.5	62/62	70/70	51/56	258/258	67/67	70/70	55/61	262/262	68/68	70/70	56/62	263/263	73/73	80/80	60/66	267/267
			111A	18.6/24.8	51.7/59.7	88/88	90/90	72/81	258/258	93/93	100/100	76/85	262/262	94/94	100/100	77/86	263/263	99/99	100/100	82/91	267/267
			112A	24.0/32.0	66.7/77.0	110/110	110/110	89/101	258/258	115/115	125/125	93/105	262/262	116/116	125/125	94/106	263/263	121/121	125/125	99/111	267/267
			112A+117A	31.8/42.4	88.4/102.0	141/141	150/150	114/129	258/258	146/146	150/150	118/134	262/262	147/147	150/150	119/135	263/263	152/152	175/175	124/139	267/267
	460–3–60	STD	NONE	–	–	18	20	19	104	20	25	21	106	20	25	21	106	22	25	23	108
			116A	13.9	16.7	24	25	22	104	27	30	24	106	27	30	25	106	29	30	27	108
			113A	16.5	19.8	28	30	26	104	31	35	28	106	31	35	28	106	33	35	30	108
			114A	27.8	33.4	45	45	41	104	48	50	43	106	48	50	44	106	50	50	46	108
			115A	33.0	39.7	53	60	49	104	55	60	51	106	56	60	51	106	58	60	53	108
			114A+116A	41.7	50.2	66	70	61	104	69	70	63	106	69	70	63	106	71	80	65	108
		MED	NONE	–	–	19	25	20	114	21	25	22	116	21	25	22	116	23	25	24	118
			116A	13.9	16.7	26	30	23	114	28	30	25	116	28	30	26	116	31	35	28	118
			113A	16.5	19.8	29	30	27	114	32	35	29	116	32	35	29	116	34	35	31	118
			114A	27.8	33.4	46	50	42	114	49	50	44	116	49	50	45	116	51	60	47	118
			115A	33.0	39.7	54	60	50	114	57	60	52	116	57	60	52	116	59	60	54	118
			114A+116A	41.7	50.2	67	70	62	114	70	70	64	116	70	70	64	116	72	80	66	118
		HIGH	NONE	–	–	21	25	22	129	23	25	24	131	23	25	24	131	25	30	27	133
			116A	13.9	16.7	28	30	25	129	30	30	27	131	31	35	28	131	33	35	30	133
			113A	16.5	19.8	32	35	29	129	34	35	31	131	35	35	31	131	37	40	33	133
			114A	27.8	33.4	49	50	45	129	51	60	47	131	52	60	47	131	54	60	49	133
			115A	33.0	39.7	57	60	52	129	59	60	54	131	59	60	54	131	62	70	56	133
			114A+116A	41.7	50.2	70	70	64	129	72	80	66	131	73	80	66	131	75	80	68	133
	575–3–60	STD	NONE	–	–	13	15	13	77	17	20	17	81	14	15	15	79	18	20	19	83
			118A	17.0	20.4	28	30	25	77	33	35	30	81	30	30	27	79	35	35	32	83
			119A	34.0	40.9	54	60	49	77	58	60	53	81	56	60	51	79	60	70	55	83
		MED	NONE	–	–	13	15	13	81	17	20	18	85	15	20	15	83	19	20	20	87
			118A	17.0	20.4	28	30	26	81	33	35	30	85	31	35	28	83	35	35	32	87
			119A	34.0	40.9	54	60	49	81	59	60	54	85	56	60	51	83	61	70	56	87
		HIGH	NONE	–	–	14	15	14	92	18	20	19	96	16	20	16	94	19	25	21	98
			118A	17.0	20.4	29	30	27	92	34	35	31	96	32	35	29	94	36	40	33	98
			119A	34.0	40.9	55	60	50	92	60	60	55	96	57	60	52	94	62	70	57	98

See “Legend and Notes for Tables 72 – 75” on page129

ELECTRICAL INFORMATION

Table 73 - UNIT WIRE SIZING DATA WITH FACTORY INSTALLED HACR BREAKER WITH SINGLE SPEED INDOOR FAN MOTOR (cont)

UNIT	NO M. V-Ph-HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC*D09	208/230-3-60	STD	NONE	–	–	39/39	50/50	41/41	208	43/43	50/50	45/45	212	44/44	50/50	46/46	213	48/48	60/60	51/50	217
			117A	7.8/10.4	21.7/25.0	39/39	50/50	41/41	208/208	43/43	50/50	45/45	212/212	44/44	50/50	46/46	213/213	49/49	60/60	51/50	217/217
			110A	12.0/16.0	33.4/38.5	55/55	60/60	44/50	208/208	59/59	60/60	49/54	212/212	61/61	70/70	50/55	213/213	65/65	70/70	54/60	217/217
			111A	18.6/24.8	51.7/59.7	81/81	90/90	65/74	208/208	86/86	90/90	70/79	212/212	87/87	90/90	71/80	213/213	92/92	100/100	75/84	217/217
			112A	24.0/32.0	66.7/77.0	103/103	110/110	83/94	208/208	108/108	110/110	87/99	212/212	109/109	110/110	88/100	213/213	114/114	125/125	93/104	217/217
			112A+117A	31.8/42.4	88.4/102.0	134/134	150/150	108/123	208/208	139/139	150/150	112/127	212/212	140/140	150/150	113/128	213/213	145/145	150/150	118/133	217/217
		MED	NONE	–	–	41/41	50/50	43/43	229	45/45	50/50	47/47	233	46/46	50/50	48/48	234	50/50	60/60	53/53	238
			117A	7.8/10.4	21.7/25.0	41/41	50/50	43/43	229/229	45/45	50/50	47/47	233/233	46/46	50/50	48/48	234/234	51/51	60/60	53/53	238/238
			110A	12.0/16.0	33.4/38.5	57/57	60/60	46/52	229/229	62/62	70/70	51/56	233/233	63/63	70/70	52/58	234/234	68/68	70/70	56/62	238/238
			111A	18.6/24.8	51.7/59.7	83/83	90/90	67/76	229/229	88/88	90/90	72/81	233/233	89/89	90/90	73/82	234/234	94/94	100/100	77/86	238/238
			112A	24.0/32.0	66.7/77.0	105/105	110/110	85/96	229/229	110/110	110/110	89/101	233/233	111/111	125/125	90/102	234/234	116/116	125/125	95/106	238/238
			112A+117A	31.8/42.4	88.4/102.0	136/136	150/150	110/125	229/229	141/141	150/150	114/129	233/233	142/142	150/150	115/131	234/234	147/147	150/150	119/135	238/238
		HIGH	NONE	–	–	45	50	47	258	49	60	52	262	50	60	53	263	53	60	57	267
			117A	7.8/10.4	21.7/25.0	45/45	50/50	47/47	258/258	50/50	60/60	52/52	262/262	51/51	60/60	53/53	263/263	56/56	60/60	57/57	267/267
			110A	12.0/16.0	33.4/38.5	62/62	70/70	51/56	258/258	67/67	70/70	55/61	262/262	68/68	70/70	56/62	263/263	73/73	80/80	60/66	267/267
			111A	18.6/24.8	51.7/59.7	88/88	90/90	72/81	258/258	93/93	100/100	76/85	262/262	94/94	100/100	77/86	263/263	99/99	100/100	82/91	267/267
			112A	24.0/32.0	66.7/77.0	110/110	110/110	89/101	258/258	115/115	125/125	93/105	262/262	116/116	125/125	94/106	263/263	121/121	125/125	99/111	267/267
			112A+117A	31.8/42.4	88.4/102.0	141/141	150/150	114/129	258/258	146/146	150/150	118/134	262/262	147/147	150/150	119/135	263/263	152/152	175/175	124/139	267/267
	460-3-60	STD	NONE	–	–	19	20	19	104	20	25	21	106	21	25	22	106	23	25	24	108
			116A	13.9	16.7	24	25	22	104	27	30	24	106	27	30	25	106	29	30	27	108
			113A	16.5	19.8	28	30	26	104	31	35	28	106	31	35	28	106	33	35	30	108
			114A	27.8	33.4	45	45	41	104	48	50	43	106	48	50	44	106	50	50	46	108
			115A	33.0	39.7	53	60	49	104	55	60	51	106	56	60	51	106	58	60	53	108
			114A+116A	41.7	50.2	66	70	61	104	69	70	63	106	69	70	63	106	71	80	65	108
		MED	NONE	–	–	19	25	20	114	21	25	22	116	22	25	23	116	23	25	25	118
			116A	13.9	16.7	26	30	23	114	28	30	25	116	28	30	26	116	31	35	28	118
			113A	16.5	19.8	29	30	27	114	32	35	29	116	32	35	29	116	34	35	31	118
			114A	27.8	33.4	46	50	42	114	49	50	44	116	49	50	45	116	51	60	47	118
			115A	33.0	39.7	54	60	50	114	57	60	52	116	57	60	52	116	59	60	54	118
			114A+116A	41.7	50.2	67	70	62	114	70	70	64	116	70	70	64	116	72	80	66	118
		HIGH	NONE	–	–	21	25	22	129	23	25	24	131	24	25	25	131	25	30	27	133
			116A	13.9	16.7	28	30	25	129	30	30	27	131	31	35	28	131	33	35	30	133
			113A	16.5	19.8	32	35	29	129	34	35	31	131	35	35	31	131	37	40	33	133
			114A	27.8	33.4	49	50	45	129	51	60	47	131	52	60	47	131	54	60	49	133
			115A	33.0	39.7	57	60	52	129	59	60	54	131	59	60	54	131	62	70	56	133
			114A+116A	41.7	50.2	70	70	64	129	72	80	66	131	73	80	66	131	75	80	68	133
	575-3-60	STD	NONE	–	–	14	15	14	77	18	20	19	81	16	20	16	79	20	25	21	83
			118A	17.0	20.4	28	30	25	77	33	35	30	81	30	30	27	79	35	35	32	83
			119A	34.0	40.9	54	60	49	77	58	60	53	81	56	60	51	79	60	70	55	83
		MED	NONE	–	–	14	20	15	81	18	20	19	85	16	20	17	83	20	25	21	87
			118A	17.0	20.4	28	30	26	81	33	35	30	85	31	35	28	83	35	35	32	87
			119A	34.0	40.9	54	60	49	81	59	60	54	85	56	60	51	83	61	70	56	87
		HIGH	NONE	–	–	15	20	16	92	19	20	20	96	17	20	18	94	21	25	22	98
			118A	17.0	20.4	29	30	27	92	34	35	31	96	32	35	29	94	36	40	33	98
			119A	34.0	40.9	55	60	50	92	60	60	55	96	57	60	52	94	62	70	57	98

See “Legend and Notes for Tables 72 – 75” on page129

ELECTRICAL INFORMATION

Table 73 - UNIT WIRE SIZING DATA WITH FACTORY INSTALLED HACR BREAKER WITH SINGLE SPEED INDOOR FAN MOTOR (cont)

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC*D11	208/230–3–60	STD	NONE	–	–	51/51	60/60	53/53	284	54/54	60/60	57/57	288	55/55	60/60	59/58	289	59/59	70/70	63/63	293
			117A	7.8/10.4	21.7/25.0	51/51	60/60	53/53	284/284	54/54	60/60	57/57	288/288	55/55	60/60	59/58	289/289	59/59	70/70	63/63	293/293
			110A	12.0/16.0	33.4/38.5	57/57	60/60	53/53	284/284	62/62	70/70	57/57	288/288	63/63	70/70	59/58	289/289	68/68	70/70	63/63	293/293
			112A	24.0/32.0	66.7/77.0	105/105	110/110	85/96	284/284	110/110	110/110	89/101	288/288	111/111	125/125	90/102	289/289	116/116	125/125	95/106	293/293
			112A+117A	31.8/42.4	88.4/102.0	136/136	150/150	110/125	284/284	141/141	150/150	114/129	288/288	142/142	150/150	115/131	289/289	147/147	150/150	119/135	293/293
			112A+110A	37.6/50.0	104.2/120.3	139/139	150/150	128/146	284/284	144/144	150/150	132/150	288/288	145/145	150/150	133/152	289/289	150/150	150/150	138/156	293/293
		MED	NONE	–	–	54	60	57	313	58	70	62	317	59	70	63	318	63	70	67	322
			117A	7.8/10.4	21.7/25.0	54/54	60/60	57/57	313/313	58/58	70/70	62/62	317/317	59/59	70/70	63/63	318/318	63/63	70/70	67/67	322/322
			110A	12.0/16.0	33.4/38.5	62/62	70/70	57/57	313/313	67/67	70/70	62/62	317/317	68/68	70/70	63/63	318/318	73/73	80/80	67/67	322/322
			112A	24.0/32.0	66.7/77.0	110/110	110/110	89/101	313/313	115/115	125/125	93/105	317/317	116/116	125/125	94/106	318/318	121/121	125/125	99/111	322/322
			112A+117A	31.8/42.4	88.4/102.0	141/141	150/150	114/129	313/313	146/146	150/150	118/134	317/317	147/147	150/150	119/135	318/318	152/152	175/175	124/139	322/322
			112A+110A	37.6/50.0	104.2/120.3	144/144	150/150	132/151	313/313	149/149	150/150	136/155	317/317	150/150	150/150	138/156	318/318	155/155	175/175	142/160	322/322
		HIGH	NONE	–	–	57/57	70/70	61/60	315	61/61	70/70	65/64	319	62/62	70/70	66/65	320	66/66	80/80	71/70	324
			117A	7.8/10.4	21.7/25.0	57/57	70/70	61/60	315/315	61/61	70/70	65/64	319/319	62/62	70/70	66/65	320/320	66/66	80/80	71/70	324/324
			110A	12.0/16.0	33.4/38.5	64/64	70/70	61/60	315/315	69/69	70/70	65/64	319/319	70/70	80/70	66/65	320/320	75/75	80/80	71/70	324/324
			112A	24.0/32.0	66.7/77.0	113/113	125/125	92/103	315/315	117/117	125/125	97/108	319/319	119/119	125/125	98/109	320/320	123/123	125/125	102/113	324/324
			112A+117A	31.8/42.4	88.4/102.0	144/144	150/150	117/132	315/315	149/149	150/150	122/136	319/319	150/150	150/150	123/137	320/320	155/155	175/175	127/142	324/324
			112A+110A	37.6/50.0	104.2/120.3	148/148	150/150	135/153	315/315	152/152	175/175	140/157	319/319	154/154	175/175	141/158	320/320	158/158	175/175	145/163	324/324
	460–3–60	STD	NONE	–	–	23	25	24	136	25	30	26	138	25	30	27	138	27	30	29	140
			116A	13.9	16.7	26	30	24	136	28	30	26	138	28	30	27	138	31	35	29	140
			113A	16.5	19.8	29	30	27	136	32	35	29	138	32	35	29	138	34	35	31	140
			115A	33.0	39.7	54	60	50	136	57	60	52	138	57	60	52	138	59	60	54	140
			114A+116A	41.7	50.2	67	70	62	136	70	70	64	138	70	70	64	138	72	80	66	140
			115A+113A	50.0	60.1	65	70	73	136	67	70	75	138	68	70	76	138	70	80	78	140
		MED	NONE	–	–	25	30	26	151	27	30	28	153	27	30	29	153	29	35	31	155
			116A	13.9	16.7	28	30	26	151	30	30	28	153	31	35	29	153	33	35	31	155
			113A	16.5	19.8	32	35	29	151	34	35	31	153	35	35	31	153	37	40	33	155
			115A	33.0	39.7	57	60	52	151	59	60	54	153	59	60	54	153	62	70	56	155
			114A+116A	41.7	50.2	70	70	64	151	72	80	66	153	73	80	66	153	75	80	68	155
			115A+113A	50.0	60.1	67	80	75	151	69	80	77	153	70	80	78	153	72	80	80	155
		HIGH	NONE	–	–	26	30	28	152	28	30	30	154	28	30	30	154	30	35	32	156
			116A	13.9	16.7	29	30	28	152	32	35	30	154	32	35	30	154	34	35	32	156
			113A	16.5	19.8	33	35	30	152	35	35	32	154	36	40	33	154	38	40	35	156
			115A	33.0	39.7	58	60	53	152	60	60	55	154	61	70	56	154	63	70	58	156
			114A+116A	41.7	50.2	71	80	65	152	73	80	67	154	74	80	68	154	76	80	70	156
			115A+113A	50.0	60.1	69	80	76	152	71	80	79	154	71	80	79	154	74	80	81	156
	575–3–60	STD	NONE	–	–	18	20	18	95	21	25	23	99	19	25	20	97	23	25	24	101
			118A	17.0	20.4	28	30	26	95	33	35	30	99	31	35	28	97	35	35	32	101
			119A	34.0	40.9	54	60	49	95	59	60	54	99	56	60	51	97	61	70	56	101
			118A+119A	51.0	61.3	64	70	73	95	69	80	77	99	66	70	75	97	71	80	79	101
		MED	NONE	–	–	18	20	19	106	22	25	23	110	20	25	21	108	24	25	25	112
			118A	17.0	20.4	29	30	27	106	34	35	31	110	32	35	29	108	36	40	33	112
			119A	34.0	40.9	55	60	50	106	60	60	55	110	57	60	52	108	62	70	57	112
			118A+119A	51.0	61.3	65	70	74	106	70	80	78	110	67	70	76	108	72	80	80	112
		HIGH	NONE	–	–	21	25	22	120	25	30	27	124	23	25	24	122	27	30	29	126
			118A	17.0	20.4	33	35	30	120	38	40	34	124	35	35	32	122	40	40	36	126
			119A	34.0	40.9	59	60	53	120	63	70	58	124	61	70	55	122	65	70	60	126
			118A+119A	51.0	61.3	69	80	77	120	74	80	81	124	71	80	79	122	76	80	83	126

See “Legend and Notes for Tables 72 – 75” on page129

ELECTRICAL INFORMATION

Table 73 – UNIT WIRE SIZING DATA WITH FACTORY INSTALLED HACR BREAKER WITH SINGLE SPEED INDOOR FAN MOTOR (cont)

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC*D12	208/230–3–60	STD	NONE	–	–	49/49	60/60	52/51	309	53/53	60/60	56/56	313	54/54	60/60	57/57	314	58/58	70/70	62/61	318
			117A	7.8/10.4	21.7/25.0	49/49	60/60	52/51	309/309	53/53	60/60	56/56	313/313	54/54	60/60	57/57	314/314	58/58	70/70	62/61	318/318
			110A	12.0/16.0	33.4/38.5	57/57	60/60	52/52	309/309	62/62	70/70	56/56	313/313	63/63	70/70	57/58	314/314	68/68	70/70	62/62	318/318
			112A	24.0/32.0	66.7/77.0	105/105	110/110	85/96	309/309	110/110	110/110	89/101	313/313	111/111	125/125	90/102	314/314	116/116	125/125	95/106	318/318
			112A+117A	31.8/42.4	88.4/102.0	136/136	150/150	110/125	309/309	141/141	150/150	114/129	313/313	142/142	150/150	115/131	314/314	147/147	150/150	119/135	318/318
			112A+110A	37.6/50.0	104.2/120.3	139/139	150/150	128/146	309/309	144/144	150/150	132/150	313/313	145/145	150/150	133/152	314/314	150/150	150/150	138/156	318/318
		MED	NONE	–	–	53	60	56	338	57	70	60	342	58	70	61	343	62	70	66	347
			117A	7.8/10.4	21.7/25.0	53/53	60/60	56/56	338/338	57/57	70/70	60/60	342/342	58/58	70/70	61/61	343/343	62/62	70/70	66/66	347/347
			110A	12.0/16.0	33.4/38.5	62/62	70/70	56/56	338/338	67/67	70/70	60/61	342/342	68/68	70/70	61/62	343/343	73/73	80/80	66/66	347/347
			112A	24.0/32.0	66.7/77.0	110/110	110/110	89/101	338/338	115/115	125/125	93/105	342/342	116/116	125/125	94/106	343/343	121/121	125/125	99/111	347/347
			112A+117A	31.8/42.4	88.4/102.0	141/141	150/150	114/129	338/338	146/146	150/150	118/134	342/342	147/147	150/150	119/135	343/343	152/152	175/175	124/139	347/347
			112A+110A	37.6/50.0	104.2/120.3	144/144	150/150	132/151	338/338	149/149	150/150	136/155	342/342	150/150	150/150	138/156	343/343	155/155	175/175	142/160	347/347
		HIGH	NONE	–	–	56/56	60/60	59/58	340	60/60	70/70	64/63	344	61/61	70/70	65/64	345	65/65	80/80	69/68	349
			117A	7.8/10.4	21.7/25.0	56/56	60/60	59/58	340/340	60/60	70/70	64/63	344/344	61/61	70/70	65/64	345/345	65/65	80/80	69/68	349/349
			110A	12.0/16.0	33.4/38.5	64/64	70/70	59/59	340/340	69/69	70/70	64/63	344/344	70/70	80/70	65/64	345/345	75/75	80/80	69/69	349/349
			112A	24.0/32.0	66.7/77.0	113/113	125/125	92/103	340/340	117/117	125/125	97/108	344/344	119/119	125/125	98/109	345/345	123/123	125/125	102/113	349/349
			112A+117A	31.8/42.4	88.4/102.0	144/144	150/150	117/132	340/340	149/149	150/150	122/136	344/344	150/150	150/150	123/137	345/345	155/155	175/175	127/142	349/349
			112A+110A	37.6/50.0	104.2/120.3	148/148	150/150	135/153	340/340	152/152	175/175	140/157	344/344	154/154	175/175	141/158	345/345	158/158	175/175	145/163	349/349
	460–3–60	STD	NONE	–	–	24	30	25	148	26	30	27	150	26	30	28	150	28	30	30	152
			116A	13.9	16.7	26	30	25	148	28	30	27	150	28	30	28	150	31	35	30	152
			113A	16.5	19.8	29	30	27	148	32	35	29	150	32	35	29	150	34	35	31	152
			115A	33.0	39.7	54	60	50	148	57	60	52	150	57	60	52	150	59	60	54	152
			114A+116A	41.7	50.2	67	70	62	148	70	70	64	150	70	70	64	150	72	80	66	152
			115A+113A	50.0	60.1	65	70	73	148	67	70	75	150	68	70	76	150	70	80	78	152
		MED	NONE	–	–	26	30	27	163	28	30	29	165	28	30	30	165	30	35	32	167
			116A	13.9	16.7	28	30	27	163	30	30	29	165	31	35	30	165	33	35	32	167
			113A	16.5	19.8	32	35	29	163	34	35	31	165	35	35	31	165	37	40	33	167
			115A	33.0	39.7	57	60	52	163	59	60	54	165	59	60	54	165	62	70	56	167
			114A+116A	41.7	50.2	70	70	64	163	72	80	66	165	73	80	66	165	75	80	68	167
			115A+113A	50.0	60.1	67	80	75	163	69	80	77	165	70	80	78	165	72	80	80	167
		HIGH	NONE	–	–	27	30	29	164	29	35	31	166	29	35	31	166	31	35	33	168
			116A	13.9	16.7	29	30	29	164	32	35	31	166	32	35	31	166	34	35	33	168
			113A	16.5	19.8	33	35	30	164	35	35	32	166	36	40	33	166	38	40	35	168
			115A	33.0	39.7	58	60	53	164	60	60	55	166	61	70	56	166	63	70	58	168
			114A+116A	41.7	50.2	71	80	65	164	73	80	67	166	74	80	68	166	76	80	70	168
			115A+113A	50.0	60.1	69	80	76	164	71	80	79	166	71	80	79	166	74	80	81	168
	575–3–60	STD	NONE	–	–	18	20	18	105	22	25	23	109	19	25	20	107	23	25	25	111
			118A	17.0	20.4	28	30	26	105	33	35	30	109	31	35	28	107	35	35	32	111
			119A	34.0	40.9	54	60	49	105	59	60	54	109	56	60	51	107	61	70	56	111
			118A+119A	51.0	61.3	64	70	73	105	69	80	77	109	66	70	75	107	71	80	79	111
		MED	NONE	–	–	19	20	19	116	22	25	24	120	20	25	21	118	24	30	26	122
			118A	17.0	20.4	29	30	27	116	34	35	31	120	32	35	29	118	36	40	33	122
			119A	34.0	40.9	55	60	50	116	60	60	55	120	57	60	52	118	62	70	57	122
			118A+119A	51.0	61.3	65	70	74	116	70	80	78	120	67	70	76	118	72	80	80	122
		HIGH	NONE	–	–	21	25	22	130	25	30	27	134	23	25	24	132	27	30	29	136
			118A	17.0	20.4	33	35	30	130	38	40	34	134	35	35	32	132	40	40	36	136
			119A	34.0	40.9	59	60	53	130	63	70	58	134	61	70	55	132	65	70	60	136
			118A+119A	51.0	61.3	69	80	77	130	74	80	81	134	71	80	79	132	76	80	83	136

See “Legend and Notes for Tables 72 – 75” on page129

ELECTRICAL INFORMATION

Table 73 - UNIT WIRE SIZING DATA WITH FACTORY INSTALLED HACR BREAKER WITH SINGLE SPEED INDOOR FAN MOTOR (cont)

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC*D14	208/230–3–60	STD	NONE	–	–	56/56	70/70	59/58	330	60/60	70/70	63/63	334	61/61	70/70	64/64	335	65/65	80/80	68/68	339
			291A	12.4/16.5	34.4/39.7	60/60	70/70	59/58	330/330	65/65	70/70	63/63	334/334	66/66	70/70	64/64	335/335	71/71	80/80	68/68	339/339
			288A+291A	19.9/26.5	55.3/63.8	91/91	100/100	73/83	330/330	95/95	100/100	78/87	334/334	97/97	100/100	79/88	335/335	101/101	110/110	83/93	339/339
			294A	25.2/33.5	69.9/80.6	112/112	125/125	90/102	330/330	116/116	125/125	94/107	334/334	118/118	125/125	96/108	335/335	122/122	125/125	100/112	339/339
			288A+294A	32.7/43.5	90.7/104.7	142/142	150/150	114/130	330/330	146/146	150/150	118/134	334/334	148/148	150/150	119/135	335/335	152/152	175/175	124/140	339/339
			291A+294A	37.6/50.0	104.3/120.3	141/141	150/150	130/148	330/330	146/146	150/150	134/152	334/334	147/147	150/150	135/153	335/335	152/152	175/175	139/158	339/339
		MED	NONE	–	–	58	70	61	344	62	80	65	348	63	80	67	349	67	80	71	353
			291A	12.4/16.5	34.4/39.7	63/63	70/70	61/61	344/344	68/68	80/80	65/65	348/348	69/69	80/80	67/67	349/349	74/74	80/80	71/71	353/353
			288A+291A	19.9/26.5	55.3/63.8	93/93	100/100	76/86	344/344	98/98	100/100	80/90	348/348	99/99	100/100	81/91	349/349	104/104	110/110	86/95	353/353
			294A	25.2/33.5	69.9/80.6	114/114	125/125	93/105	344/344	119/119	125/125	97/109	348/348	120/120	125/125	98/110	349/349	125/125	125/125	102/115	353/353
			288A+294A	32.7/43.5	90.7/104.7	145/145	150/150	116/133	344/344	149/149	150/150	121/137	348/348	151/151	175/175	122/138	349/349	155/155	175/175	126/142	353/353
			291A+294A	37.6/50.0	104.3/120.3	144/144	150/150	132/151	344/344	149/149	150/150	137/155	348/348	150/150	150/150	138/156	349/349	155/155	175/175	142/160	353/353
		HIGH	NONE	–	–	68	80	72	350	72	80	77	354	73	80	78	355	77	90	82	359
			291A	12.4/16.5	34.4/39.7	76/76	80/80	72/72	350/350	80/80	80/80	77/77	354/354	82/82	90/90	78/78	355/355	86/86	90/90	82/82	359/359
			288A+291A	19.9/26.5	55.3/63.8	106/106	110/110	87/97	350/350	110/110	125/125	91/101	354/354	112/112	125/125	93/102	355/355	116/116	125/125	97/107	359/359
			294A	25.2/33.5	69.9/80.6	127/127	150/150	104/116	350/350	131/131	150/150	108/121	354/354	133/133	150/150	109/122	355/355	137/137	150/150	114/126	359/359
			288A+294A	32.7/43.5	90.7/104.7	157/157	175/175	128/144	350/350	162/162	175/175	132/148	354/354	163/163	175/175	133/149	355/355	168/168	175/175	138/154	359/359
			291A+294A	37.6/50.0	104.3/120.3	156/156	175/175	143/162	350/350	161/161	175/175	148/166	354/354	162/162	175/175	149/167	355/355	167/167	175/175	153/172	359/359
	460–3–60	STD	NONE	–	–	29	35	30	166	31	35	32	168	31	40	32	168	33	40	35	170
			292A	16.5	19.9	31	35	30	166	33	35	32	168	33	40	32	168	36	40	35	170
			289A+292A	26.5	31.9	46	50	42	166	48	50	44	168	48	50	44	168	51	60	46	170
			295A	33.5	40.3	56	60	51	166	58	60	53	168	59	60	54	168	61	70	56	170
			289A+295A	43.5	52.3	71	80	65	166	73	80	67	168	74	80	68	168	76	80	70	170
			292A+295A	50.0	60.2	66	70	74	166	68	80	76	168	69	80	77	168	71	80	79	170
		MED	NONE	–	–	30	35	31	173	32	40	33	175	32	40	34	175	34	40	36	177
			292A	16.5	19.9	32	35	31	173	34	40	33	175	35	40	34	175	37	40	36	177
			289A+292A	26.5	31.9	47	50	43	173	49	50	45	175	50	50	45	175	52	60	47	177
			295A	33.5	40.3	57	60	52	173	60	60	55	175	60	60	55	175	62	70	57	177
			289A+295A	43.5	52.3	72	80	66	173	75	80	68	175	75	80	69	175	77	80	71	177
			292A+295A	50.0	60.2	67	80	75	173	70	80	77	175	70	80	78	175	72	80	80	177
		HIGH	NONE	–	–	35	40	37	176	37	45	39	178	37	45	39	178	39	45	41	180
			292A	16.5	19.9	38	40	37	176	40	45	39	178	41	45	39	178	43	45	41	180
			289A+292A	26.5	31.9	53	60	48	176	55	60	50	178	56	60	51	178	58	60	53	180
			295A	33.5	40.3	64	70	58	176	66	70	60	178	66	70	61	178	69	70	63	180
			289A+295A	43.5	52.3	79	80	72	176	81	90	74	178	81	90	74	178	84	90	76	180
			292A+295A	50.0	60.2	73	80	81	176	76	80	83	178	76	80	83	178	78	80	86	180

See “Legend and Notes for Tables 72 – 75” on page129

ELECTRICAL INFORMATION

Table 73 - UNIT WIRE SIZING DATA WITH FACTORY INSTALLED HACR BREAKER WITH SINGLE SPEED INDOOR FAN MOTOR (cont)

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC*D14	575–3–60	STD	NONE	–	–	22	25	23	128	26	30	27	132	24	30	25	130	28	30	29	134
			293A	16.5	15.9	24	25	23	128	29	30	27	132	26	30	25	130	31	35	29	134
			290A+293A	26.5	25.5	36	40	33	128	41	45	37	132	38	40	35	130	43	45	39	134
			296A	33.5	32.2	44	45	40	128	49	50	45	132	46	50	42	130	51	60	47	134
			290A+296A	43.5	41.8	56	60	51	128	61	70	56	132	58	60	53	130	63	70	58	134
			293A+296A	50.0	48.1	52	60	59	128	57	60	63	132	54	60	60	130	59	60	65	134
		MED	NONE	–	–	22	25	23	128	26	30	27	132	24	30	25	130	28	30	29	134
			293A	16.5	15.9	24	25	23	128	29	30	27	132	26	30	25	130	31	35	29	134
			290A+293A	26.5	25.5	36	40	33	128	41	45	37	132	38	40	35	130	43	45	39	134
			296A	33.5	32.2	44	45	40	128	49	50	45	132	46	50	42	130	51	60	47	134
			290A+296A	43.5	41.8	56	60	51	128	61	70	56	132	58	60	53	130	63	70	58	134
			293A+296A	50.0	48.1	52	60	59	128	57	60	63	132	54	60	60	130	59	60	65	134
		HIGH	NONE	–	–	29	35	30	140	32	40	34	144	30	35	32	142	34	40	36	146
			293A	16.5	15.9	32	35	30	140	36	40	34	144	34	35	32	142	38	40	36	146
			290A+293A	26.5	25.5	44	45	40	140	48	50	44	144	46	50	42	142	50	60	46	146
			296A	33.5	32.2	52	60	47	140	57	60	52	144	54	60	49	142	59	60	54	146
			290A+296A	43.5	41.8	64	70	58	140	69	70	63	144	66	70	60	142	71	80	65	146
			293A+296A	50.0	48.1	60	70	66	140	65	70	70	144	62	70	68	142	67	70	72	146

See “Legend and Notes for Tables 72 – 75” on page129

ELECTRICAL INFORMATION

Table 74 – UNIT WIRE SIZING DATA WITH FACTORY INSTALLED 2 SPEED INDOOR FAN OPTION

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC*D08	208/230–3–60	STD	NONE	–	–	40/40	50/50	41/41	195	44/43	50/50	46/46	199	45/44	50/50	47/47	200	48/48	60/60	51/51	204
			117A	7.8/10.4	21.7/25.0	40/40	50/50	41/41	195/195	44/43	50/50	46/46	199/199	45/45	50/50	47/47	200/200	48/49	60/60	51/51	204/204
			110A	12.0/16.0	33.4/38.5	49/56	50/60	45/51	195/195	54/60	60/60	49/55	199/199	55/62	60/70	51/56	200/200	60/66	60/70	55/61	204/204
			111A	18.6/24.8	51.7/59.7	72/82	80/90	66/75	195/195	77/87	80/90	70/79	199/199	78/88	80/90	72/81	200/200	83/93	90/100	76/85	204/204
			112A	24.0/32.0	66.7/77.0	91/104	100/110	83/95	195/195	96/108	100/110	88/99	199/199	97/110	100/110	89/101	200/200	102/114	110/125	93/105	204/204
			112A+117A	31.8/42.4	88.4/102.0	118/135	125/150	108/124	195/195	123/140	125/150	113/128	199/199	124/141	125/150	114/129	200/200	129/146	150/150	118/134	204/204
		MED	NONE	–	–	41/41	50/50	43/43	199	45/45	50/50	47/47	203	46/46	50/50	48/48	204	50/49	60/60	53/52	208
			117A	7.8/10.4	21.7/25.0	41/41	50/50	43/43	199/199	45/45	50/50	47/47	203/203	46/46	50/50	48/48	204/204	50/51	60/60	53/52	208/208
			110A	12.0/16.0	33.4/38.5	51/57	60/60	47/52	199/199	56/62	60/70	51/56	203/203	57/63	60/70	52/58	204/204	62/68	70/70	56/62	208/208
			111A	18.6/24.8	51.7/59.7	74/84	80/90	68/76	199/199	79/88	80/90	72/81	203/203	80/90	80/90	73/82	204/204	85/94	90/100	78/86	208/208
			112A	24.0/32.0	66.7/77.0	93/105	100/110	85/96	199/199	97/110	100/110	89/101	203/203	99/111	100/125	90/102	204/204	103/116	110/125	95/106	208/208
			112A+117A	31.8/42.4	88.4/102.0	120/136	125/150	110/125	199/199	125/141	125/150	114/129	203/203	126/142	150/150	115/131	204/204	131/147	150/150	120/135	208/208
		HIGH	NONE	–	–	45/44	50/50	47/46	249	49/48	60/60	52/50	253	50/49	60/60	53/52	254	53/52	60/60	57/56	258
			117A	7.8/10.4	21.7/25.0	45/44	50/50	47/46	249/249	49/49	60/60	52/50	253/253	50/50	60/60	53/52	254/254	53/55	60/60	57/56	258/258
			110A	12.0/16.0	33.4/38.5	56/61	60/70	51/56	249/249	60/66	60/70	55/60	253/253	62/67	70/70	56/61	254/254	66/72	70/80	61/65	258/258
			111A	18.6/24.8	51.7/59.7	79/87	80/90	72/80	249/249	83/92	90/100	76/84	253/253	85/93	90/100	77/85	254/254	89/98	90/100	82/90	258/258
			112A	24.0/32.0	66.7/77.0	97/109	100/110	89/100	249/249	102/114	110/125	93/104	253/253	103/115	110/125	95/105	254/254	108/120	110/125	99/110	258/258
			112A+117A	31.8/42.4	88.4/102.0	124/140	125/150	114/129	249/249	129/145	150/150	118/133	253/253	130/146	150/150	120/134	254/254	135/151	150/175	124/138	258/258
	460–3–60	STD	NONE	–	–	19	20	19	97	20	25	21	99	21	25	22	99	23	25	24	101
			116A	13.9	16.7	25	25	23	97	27	30	25	99	28	30	25	99	30	30	27	101
			113A	16.5	19.8	29	30	26	97	31	35	28	99	32	35	29	99	34	35	31	101
			114A	27.8	33.4	46	50	42	97	48	50	44	99	49	50	44	99	51	60	46	101
			115A	33.0	39.7	54	60	49	97	56	60	51	99	56	60	52	99	59	60	54	101
			114A+116A	41.7	50.2	67	70	61	97	69	70	63	99	70	70	64	99	72	80	66	101
		MED	NONE	–	–	20	25	20	100	21	25	22	102	22	25	23	102	24	25	25	104
			116A	13.9	16.7	26	30	24	100	28	30	26	102	29	30	26	102	31	35	28	104
			113A	16.5	19.8	30	30	27	100	32	35	29	102	33	35	30	102	35	35	32	104
			114A	27.8	33.4	47	50	43	100	49	50	45	102	50	50	45	102	52	60	47	104
			115A	33.0	39.7	55	60	50	100	57	60	52	102	58	60	53	102	60	60	55	104
			114A+116A	41.7	50.2	68	70	62	100	70	70	64	102	71	80	65	102	73	80	67	104
		HIGH	NONE	–	–	21	25	22	125	22	25	24	127	23	25	24	127	25	30	26	129
			116A	13.9	16.7	27	30	25	125	30	30	27	127	30	30	27	127	32	35	29	129
			113A	16.5	19.8	31	35	28	125	34	35	30	127	34	35	31	127	36	40	33	129
			114A	27.8	33.4	48	50	44	125	51	60	46	127	51	60	47	127	53	60	49	129
			115A	33.0	39.7	56	60	51	125	58	60	53	127	59	60	54	127	61	70	56	129
			114A+116A	41.7	50.2	69	70	63	125	72	80	65	127	72	80	66	127	74	80	68	129
	575–3–60	STD	NONE	–	–	14	15	14	79	18	20	19	83	16	20	16	81	19	25	21	85
			118A	17.0	20.4	29	30	27	79	34	35	31	83	32	35	29	81	36	40	33	85
			119A	34.0	40.9	55	60	50	79	60	60	55	83	57	60	52	81	62	70	57	85
		MED	NONE	–	–	15	20	15	83	18	20	19	87	16	20	17	85	20	25	21	89
			118A	17.0	20.4	30	30	27	83	35	35	32	87	32	35	29	85	37	40	34	89
			119A	34.0	40.9	56	60	51	83	61	70	55	87	58	60	53	85	63	70	57	89
		HIGH	NONE	–	–	16	20	16	92	19	25	21	96	17	20	18	94	21	25	23	98
			118A	17.0	20.4	32	35	29	92	36	40	33	96	34	35	31	94	38	40	35	98
			119A	34.0	40.9	57	60	52	92	62	70	57	96	59	60	54	94	64	70	59	98

See “Legend and Notes for Tables 72 – 75” on page129

ELECTRICAL INFORMATION

Table 74 - UNIT WIRE SIZING DATA WITH FACTORY INSTALLED 2 SPEED INDOOR FAN OPTION (cont)

UNIT	NO M. V-Ph-HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC*D09	208/230-3-60	STD	NONE	–	–	40/40	50/50	42/41	195	44/44	50/50	46/46	199	45/45	50/50	47/47	200	49/48	60/60	52/51	204
			117A	7.8/10.4	21.7/25.0	40/40	50/50	42/41	195/195	44/44	50/50	46/46	199/199	45/45	50/50	47/47	200/200	49/49	60/60	52/51	204/204
			110A	12.0/16.0	33.4/38.5	49/56	50/60	45/51	195/195	54/60	60/60	49/55	199/199	55/62	60/70	51/56	200/200	60/66	60/70	55/61	204/204
			111A	18.6/24.8	51.7/59.7	72/82	80/90	66/75	195/195	77/87	80/90	70/79	199/199	78/88	80/90	72/81	200/200	83/93	90/100	76/85	204/204
			112A	24.0/32.0	66.7/77.0	91/104	100/110	83/95	195/195	96/108	100/110	88/99	199/199	97/110	100/110	89/101	200/200	102/114	110/125	93/105	204/204
			112A+117A	31.8/42.4	88.4/102.0	118/135	125/150	108/124	195/195	123/140	125/150	113/128	199/199	124/141	125/150	114/129	200/200	129/146	150/150	118/134	204/204
		MED	NONE	–	–	41/41	50/50	43/43	199	45/45	50/50	47/47	203	46/46	50/50	49/48	204	50/50	60/60	53/53	208
			117A	7.8/10.4	21.7/25.0	41/41	50/50	43/43	199/199	45/45	50/50	47/47	203/203	46/46	50/50	49/48	204/204	50/51	60/60	53/53	208/208
			110A	12.0/16.0	33.4/38.5	51/57	60/60	47/52	199/199	56/62	60/70	51/56	203/203	57/63	60/70	52/58	204/204	62/68	70/70	56/62	208/208
			111A	18.6/24.8	51.7/59.7	74/84	80/90	68/76	199/199	79/88	80/90	72/81	203/203	80/90	80/90	73/82	204/204	85/94	90/100	78/86	208/208
			112A	24.0/32.0	66.7/77.0	93/105	100/110	85/96	199/199	97/110	100/110	89/101	203/203	99/111	100/125	90/102	204/204	103/116	110/125	95/106	208/208
			112A+117A	31.8/42.4	88.4/102.0	120/136	125/150	110/125	199/199	125/141	125/150	114/129	203/203	126/142	150/150	115/131	204/204	131/147	150/150	120/135	208/208
		HIGH	NONE	–	–	45/44	50/50	47/46	249	49/48	60/60	52/51	253	50/49	60/60	53/52	254	54/53	60/60	57/56	258
			117A	7.8/10.4	21.7/25.0	45/44	50/50	47/46	249/249	49/49	60/60	52/51	253/253	50/50	60/60	53/52	254/254	54/55	60/60	57/56	258/258
			110A	12.0/16.0	33.4/38.5	56/61	60/70	51/56	249/249	60/66	60/70	55/60	253/253	62/67	70/70	56/61	254/254	66/72	70/80	61/65	258/258
			111A	18.6/24.8	51.7/59.7	79/87	80/90	72/80	249/249	83/92	90/100	76/84	253/253	85/93	90/100	77/85	254/254	89/98	90/100	82/90	258/258
			112A	24.0/32.0	66.7/77.0	97/109	100/110	89/100	249/249	102/114	110/125	93/104	253/253	103/115	110/125	95/105	254/254	108/120	110/125	99/110	258/258
			112A+117A	31.8/42.4	88.4/102.0	124/140	125/150	114/129	249/249	129/145	150/150	118/133	253/253	130/146	150/150	120/134	254/254	135/151	150/175	124/138	258/258
	460-3-60	STD	NONE	–	–	19	25	19	97	21	25	22	99	21	25	22	99	23	25	24	101
			116A	13.9	16.7	25	25	23	97	27	30	25	99	28	30	25	99	30	30	27	101
			113A	16.5	19.8	29	30	26	97	31	35	28	99	32	35	29	99	34	35	31	101
			114A	27.8	33.4	46	50	42	97	48	50	44	99	49	50	44	99	51	60	46	101
			115A	33.0	39.7	54	60	49	97	56	60	51	99	56	60	52	99	59	60	54	101
			114A+116A	41.7	50.2	67	70	61	97	69	70	63	99	70	70	64	99	72	80	66	101
		MED	NONE	–	–	20	25	20	100	22	25	23	102	22	25	23	102	24	25	25	104
			116A	13.9	16.7	26	30	24	100	28	30	26	102	29	30	26	102	31	35	28	104
			113A	16.5	19.8	30	30	27	100	32	35	29	102	33	35	30	102	35	35	32	104
			114A	27.8	33.4	47	50	43	100	49	50	45	102	50	50	45	102	52	60	47	104
			115A	33.0	39.7	55	60	50	100	57	60	52	102	58	60	53	102	60	60	55	104
			114A+116A	41.7	50.2	68	70	62	100	70	70	64	102	71	80	65	102	73	80	67	104
		HIGH	NONE	–	–	21	25	22	125	23	25	24	127	23	25	24	127	25	30	26	129
			116A	13.9	16.7	27	30	25	125	30	30	27	127	30	30	27	127	32	35	29	129
			113A	16.5	19.8	31	35	28	125	34	35	30	127	34	35	31	127	36	40	33	129
			114A	27.8	33.4	48	50	44	125	51	60	46	127	51	60	47	127	53	60	49	129
			115A	33.0	39.7	56	60	51	125	58	60	53	127	59	60	54	127	61	70	56	129
			114A+116A	41.7	50.2	69	70	63	125	72	80	65	127	72	80	66	127	74	80	68	129
	575-3-60	STD	NONE	–	–	15	20	16	79	19	20	20	83	17	20	18	81	21	25	22	85
			118A	17.0	20.4	29	30	27	79	34	35	31	83	32	35	29	81	36	40	33	85
			119A	34.0	40.9	55	60	50	79	60	60	55	83	57	60	52	81	62	70	57	85
		MED	NONE	–	–	16	20	16	83	20	25	21	87	18	20	18	85	21	25	23	89
			118A	17.0	20.4	30	30	27	83	35	35	32	87	32	35	29	85	37	40	34	89
			119A	34.0	40.9	56	60	51	83	61	70	55	87	58	60	53	85	63	70	57	89
		HIGH	NONE	–	–	17	20	18	92	21	25	22	96	19	20	20	94	22	25	24	98
			118A	17.0	20.4	32	35	29	92	36	40	33	96	34	35	31	94	38	40	35	98
			119A	34.0	40.9	57	60	52	92	62	70	57	96	59	60	54	94	64	70	59	98

See “Legend and Notes for Tables 72 – 75” on page129

ELECTRICAL INFORMATION

Table 74 - UNIT WIRE SIZING DATA WITH FACTORY INSTALLED 2 SPEED INDOOR FAN OPTION (cont)

UNIT	NO M. V-Ph-HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC*D11	208/230-3-60	STD	NONE	–	–	51/50	60/60	53/53	254	55/54	60/60	58/57	258	56/55	60/60	59/58	259	59/59	70/70	63/63	263
			117A	7.8/10.4	21.7/25.0	51/50	60/60	53/53	254/254	55/54	60/60	58/57	258/258	56/55	60/60	59/58	259/259	59/59	70/70	63/63	263/263
			110A	12.0/16.0	33.4/38.5	51/57	60/60	53/53	254/254	56/62	60/70	58/57	258/258	57/63	60/70	59/58	259/259	62/68	70/70	63/63	263/263
			112A	24.0/32.0	66.7/77.0	93/105	100/110	85/96	254/254	97/110	100/110	89/101	258/258	99/111	100/125	90/102	259/259	103/116	110/125	95/106	263/263
			112A+117A	31.8/42.4	88.4/102.0	120/136	125/150	110/125	254/254	125/141	125/150	114/129	258/258	126/142	150/150	115/131	259/259	131/147	150/150	120/135	263/263
			112A+110A	37.6/50.0	104.2/120.3	140/129	150/150	128/146	254/254	144/134	150/150	132/151	258/258	146/135	150/150	134/152	259/259	150/140	150/150	138/156	263/263
		MED	NONE	–	–	54/53	60/60	58/56	304	58/57	70/70	62/61	308	59/58	70/70	63/62	309	63/62	70/70	67/66	313
			117A	7.8/10.4	21.7/25.0	54/53	60/60	58/56	304/304	58/57	70/70	62/61	308/308	59/58	70/70	63/62	309/309	63/62	70/70	67/66	313/313
			110A	12.0/16.0	33.4/38.5	56/61	60/70	58/56	304/304	60/66	70/70	62/61	308/308	62/67	70/70	63/62	309/309	66/72	70/80	67/66	313/313
			112A	24.0/32.0	66.7/77.0	97/109	100/110	89/100	304/304	102/114	110/125	93/104	308/308	103/115	110/125	95/105	309/309	108/120	110/125	99/110	313/313
			112A+117A	31.8/42.4	88.4/102.0	124/140	125/150	114/129	304/304	129/145	150/150	118/133	308/308	130/146	150/150	120/134	309/309	135/151	150/175	124/138	313/313
			112A+110A	37.6/50.0	104.2/120.3	144/133	150/150	132/150	304/304	149/138	150/150	137/154	308/308	150/139	150/150	138/155	309/309	155/144	175/175	142/160	313/313
		HIGH	NONE	–	–	57/56	70/60	61/60	315	61/60	70/70	65/64	319	62/61	70/70	66/65	320	66/65	80/80	71/70	324
			117A	7.8/10.4	21.7/25.0	57/56	70/60	61/60	315/315	61/60	70/70	65/64	319/319	62/61	70/70	66/65	320/320	66/65	80/80	71/70	324/324
			110A	12.0/16.0	33.4/38.5	59/64	70/70	61/60	315/315	64/69	70/70	65/64	319/319	65/70	70/70	66/65	320/320	70/75	80/80	71/70	324/324
			112A	24.0/32.0	66.7/77.0	101/113	110/125	92/103	315/315	106/117	110/125	97/108	319/319	107/119	110/125	98/109	320/320	112/123	125/125	102/113	324/324
			112A+117A	31.8/42.4	88.4/102.0	128/144	150/150	117/132	315/315	133/149	150/150	122/136	319/319	134/150	150/150	123/137	320/320	139/155	150/175	127/142	324/324
			112A+110A	37.6/50.0	104.2/120.3	148/137	150/150	135/153	315/315	152/141	175/175	140/157	319/319	154/143	175/175	141/158	320/320	158/147	175/175	145/163	324/324
	460-3-60	STD	NONE	–	–	24	30	25	122	25	30	27	124	26	30	27	124	28	30	29	126
			116A	13.9	16.7	26	30	25	122	28	30	27	124	29	30	27	124	31	35	29	126
			113A	16.5	19.8	30	30	27	122	32	35	29	124	33	35	30	124	35	35	32	126
			115A	33.0	39.7	55	60	50	122	57	60	52	124	58	60	53	124	60	60	55	126
			114A+116A	41.7	50.2	68	70	62	122	70	70	64	124	71	80	65	124	73	80	67	126
			115A+113A	50.0	60.1	65	70	73	122	68	80	76	124	68	80	76	124	70	80	78	126
		MED	NONE	–	–	25	30	26	147	27	30	28	149	27	30	28	149	29	35	30	151
			116A	13.9	16.7	27	30	26	147	30	30	28	149	30	30	28	149	32	35	30	151
			113A	16.5	19.8	31	35	28	147	34	35	30	149	34	35	31	149	36	40	33	151
			115A	33.0	39.7	56	60	51	147	58	60	53	149	59	60	54	149	61	70	56	151
			114A+116A	41.7	50.2	69	70	63	147	72	80	65	149	72	80	66	149	74	80	68	151
			115A+113A	50.0	60.1	67	80	75	147	69	80	77	149	69	80	77	149	72	80	79	151
		HIGH	NONE	–	–	26	30	28	152	28	30	30	154	28	30	30	154	30	35	32	156
			116A	13.9	16.7	29	30	28	152	32	35	30	154	32	35	30	154	34	35	32	156
			113A	16.5	19.8	33	35	30	152	35	35	32	154	36	40	33	154	38	40	35	156
			115A	33.0	39.7	58	60	53	152	60	60	55	154	61	70	56	154	63	70	58	156
			114A+116A	41.7	50.2	71	80	65	152	73	80	67	154	74	80	68	154	76	80	70	156
			115A+113A	50.0	60.1	69	80	76	152	71	80	79	154	71	80	79	154	74	80	81	156
	575-3-60	STD	NONE	–	–	19	20	20	97	23	25	24	101	21	25	22	99	25	30	26	103
			118A	17.0	20.4	30	30	27	97	35	35	32	101	32	35	29	99	37	40	34	103
			119A	34.0	40.9	56	60	51	97	61	70	55	101	58	60	53	99	63	70	57	103
			118A+119A	51.0	61.3	66	70	75	97	71	80	79	101	68	80	76	99	73	80	81	103
		MED	NONE	–	–	20	25	21	106	24	25	25	110	22	25	23	108	26	30	27	112
			118A	17.0	20.4	32	35	29	106	36	40	33	110	34	35	31	108	38	40	35	112
			119A	34.0	40.9	57	60	52	106	62	70	57	110	59	60	54	108	64	70	59	112
			118A+119A	51.0	61.3	67	80	76	106	72	80	80	110	70	80	78	108	74	80	82	112
		HIGH	NONE	–	–	22	25	23	120	26	30	27	124	24	25	25	122	28	30	29	126
			118A	17.0	20.4	34	35	31	120	38	40	35	124	36	40	33	122	41	45	37	126
			119A	34.0	40.9	59	60	54	120	64	70	59	124	61	70	56	122	66	70	60	126
			118A+119A	51.0	61.3	70	80	78	120	74	80	82	124	72	80	80	122	76	80	84	126

See “Legend and Notes for Tables 72 – 75” on page129

ELECTRICAL INFORMATION

Table 74 - UNIT WIRE SIZING DATA WITH FACTORY INSTALLED 2 SPEED INDOOR FAN OPTION (cont)

UNIT	NO M. V-Ph-HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC*D12	208/230-3-60	STD	NONE	–	–	50/49	60/60	52/52	279	53/53	60/60	56/56	283	54/54	60/60	57/57	284	58/58	70/70	62/61	288
			117A	7.8/10.4	21.7/25.0	50/49	60/60	52/52	279/279	53/53	60/60	56/56	283/283	54/54	60/60	57/57	284/284	58/58	70/70	62/61	288/288
			110A	12.0/16.0	33.4/38.5	51/57	60/60	52/52	279/279	56/62	60/70	56/56	283/283	57/63	60/70	57/58	284/284	62/68	70/70	62/62	288/288
			112A	24.0/32.0	66.7/77.0	93/105	100/110	85/96	279/279	97/110	100/110	89/101	283/283	99/111	100/125	90/102	284/284	103/116	110/125	95/106	288/288
			112A+117A	31.8/42.4	88.4/102.0	120/136	125/150	110/125	279/279	125/141	125/150	114/129	283/283	126/142	150/150	115/131	284/284	131/147	150/150	120/135	288/288
			112A+110A	37.6/50.0	104.2/120.3	140/129	150/150	128/146	279/279	144/134	150/150	132/151	283/283	146/135	150/150	134/152	284/284	150/140	150/150	138/156	288/288
		MED	NONE	–	–	53/52	60/60	56/55	329	57/56	70/60	60/59	333	58/57	70/70	62/60	334	62/61	70/70	66/65	338
			117A	7.8/10.4	21.7/25.0	53/52	60/60	56/55	329/329	57/56	70/60	60/59	333/333	58/57	70/70	62/60	334/334	62/61	70/70	66/65	338/338
			110A	12.0/16.0	33.4/38.5	56/61	60/70	56/56	329/329	60/66	70/70	60/60	333/333	62/67	70/70	62/61	334/334	66/72	70/80	66/65	338/338
			112A	24.0/32.0	66.7/77.0	97/109	100/110	89/100	329/329	102/114	110/125	93/104	333/333	103/115	110/125	95/105	334/334	108/120	110/125	99/110	338/338
			112A+117A	31.8/42.4	88.4/102.0	124/140	125/150	114/129	329/329	129/145	150/150	118/133	333/333	130/146	150/150	120/134	334/334	135/151	150/175	124/138	338/338
			112A+110A	37.6/50.0	104.2/120.3	144/133	150/150	132/150	329/329	149/138	150/150	137/154	333/333	150/139	150/150	138/155	334/334	155/144	175/175	142/160	338/338
		HIGH	NONE	–	–	56/55	60/60	59/58	340	60/59	70/70	64/63	344	61/60	70/70	65/64	345	65/64	80/70	69/68	349
			117A	7.8/10.4	21.7/25.0	56/55	60/60	59/58	340/340	60/59	70/70	64/63	344/344	61/60	70/70	65/64	345/345	65/64	80/70	69/68	349/349
			110A	12.0/16.0	33.4/38.5	59/64	60/70	59/59	340/340	64/69	70/70	64/63	344/344	65/70	70/70	65/64	345/345	70/75	80/80	69/69	349/349
			112A	24.0/32.0	66.7/77.0	101/113	110/125	92/103	340/340	106/117	110/125	97/108	344/344	107/119	110/125	98/109	345/345	112/123	125/125	102/113	349/349
			112A+117A	31.8/42.4	88.4/102.0	128/144	150/150	117/132	340/340	133/149	150/150	122/136	344/344	134/150	150/150	123/137	345/345	139/155	150/175	127/142	349/349
			112A+110A	37.6/50.0	104.2/120.3	148/137	150/150	135/153	340/340	152/141	175/175	140/157	344/344	154/143	175/175	141/158	345/345	158/147	175/175	145/163	349/349
	460-3-60	STD	NONE	–	–	25	30	26	134	26	30	28	136	27	30	28	136	29	35	30	138
			116A	13.9	16.7	26	30	26	134	28	30	28	136	29	30	28	136	31	35	30	138
			113A	16.5	19.8	30	30	27	134	32	35	29	136	33	35	30	136	35	35	32	138
			115A	33.0	39.7	55	60	50	134	57	60	52	136	58	60	53	136	60	60	55	138
			114A+116A	41.7	50.2	68	70	62	134	70	70	64	136	71	80	65	136	73	80	67	138
			115A+113A	50.0	60.1	65	70	73	134	68	80	76	136	68	80	76	136	70	80	78	138
		MED	NONE	–	–	26	30	27	159	28	30	29	161	28	30	29	161	30	35	32	163
			116A	13.9	16.7	27	30	27	159	30	30	29	161	30	30	29	161	32	35	32	163
			113A	16.5	19.8	31	35	28	159	34	35	30	161	34	35	31	161	36	40	33	163
			115A	33.0	39.7	56	60	51	159	58	60	53	161	59	60	54	161	61	70	56	163
			114A+116A	41.7	50.2	69	70	63	159	72	80	65	161	72	80	66	161	74	80	68	163
			115A+113A	50.0	60.1	67	80	75	159	69	80	77	161	69	80	77	161	72	80	79	163
		HIGH	NONE	–	–	27	30	29	164	29	35	31	166	29	35	31	166	31	35	33	168
			116A	13.9	16.7	29	30	29	164	32	35	31	166	32	35	31	166	34	35	33	168
			113A	16.5	19.8	33	35	30	164	35	35	32	166	36	40	33	166	38	40	35	168
			115A	33.0	39.7	58	60	53	164	60	60	55	166	61	70	56	166	63	70	58	168
			114A+116A	41.7	50.2	71	80	65	164	73	80	67	166	74	80	68	166	76	80	70	168
			115A+113A	50.0	60.1	69	80	76	164	71	80	79	166	71	80	79	166	74	80	81	168
	575-3-60	STD	NONE	–	–	19	25	20	107	23	25	24	111	21	25	22	109	25	30	26	113
			118A	17.0	20.4	30	30	27	107	35	35	32	111	32	35	29	109	37	40	34	113
			119A	34.0	40.9	56	60	51	107	61	70	55	111	58	60	53	109	63	70	57	113
			118A+119A	51.0	61.3	66	70	75	107	71	80	79	111	68	80	76	109	73	80	81	113
		MED	NONE	–	–	20	25	21	116	24	30	26	120	22	25	23	118	26	30	27	122
			118A	17.0	20.4	32	35	29	116	36	40	33	120	34	35	31	118	38	40	35	122
			119A	34.0	40.9	57	60	52	116	62	70	57	120	59	60	54	118	64	70	59	122
			118A+119A	51.0	61.3	67	80	76	116	72	80	80	120	70	80	78	118	74	80	82	122
		HIGH	NONE	–	–	22	25	23	130	26	30	27	134	24	25	25	132	28	30	29	136
			118A	17.0	20.4	34	35	31	130	38	40	35	134	36	40	33	132	41	45	37	136
			119A	34.0	40.9	59	60	54	130	64	70	59	134	61	70	56	132	66	70	60	136
			118A+119A	51.0	61.3	70	80	78	130	74	80	82	134	72	80	80	132	76	80	84	136

See “Legend and Notes for Tables 72 – 75” on page129

ELECTRICAL INFORMATION

Table 74 - UNIT WIRE SIZING DATA WITH FACTORY INSTALLED 2 SPEED INDOOR FAN OPTION (cont)

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC*D14	208/230–3–60	STD	NONE	–	–	56/56	70/60	59/58	311	60/59	70/70	63/62	315	61/60	70/70	64/63	316	65/64	80/80	69/68	320
			291A	12.4/16.5	34.4/39.7	56/60	70/60	59/58	311/311	60/65	70/70	63/62	315/315	61/66	70/70	64/63	316/316	65/71	80/80	69/68	320/320
			288A+291A	19.9/26.5	55.3/63.8	80/90	80/90	73/82	311/311	85/95	90/100	78/87	315/315	86/96	90/100	79/88	316/316	91/101	100/110	83/92	320/320
			294A	25.2/33.5	69.9/80.6	99/111	100/125	90/102	311/311	103/116	110/125	95/106	315/315	105/117	110/125	96/107	316/316	109/122	110/125	100/112	320/320
			288A+294A	32.7/43.5	90.7/104.7	125/141	125/150	114/129	311/311	129/146	150/150	119/134	315/315	131/147	150/150	120/135	316/316	135/152	150/175	124/139	320/320
			291A+294A	37.6/50.0	104.3/120.3	142/131	150/150	130/147	311/311	146/135	150/150	134/152	315/315	148/137	150/150	135/153	316/316	152/141	175/150	140/157	320/320
		MED	NONE	–	–	59/58	70/70	61/60	335	62/61	80/70	66/65	339	63/62	80/80	67/66	340	67/66	80/80	71/70	344
			291A	12.4/16.5	34.4/39.7	59/62	70/70	61/60	335/335	62/67	80/70	66/65	339/339	63/68	80/80	67/66	340/340	68/73	80/80	71/70	344/344
			288A+291A	19.9/26.5	55.3/63.8	83/92	90/100	76/85	335/335	88/97	90/100	80/89	339/339	89/98	90/100	82/90	340/340	94/103	100/110	86/95	344/344
			294A	25.2/33.5	69.9/80.6	101/113	110/125	93/104	335/335	106/118	110/125	97/108	339/339	107/119	110/125	98/109	340/340	112/124	125/125	103/114	344/344
			288A+294A	32.7/43.5	90.7/104.7	127/144	150/150	117/132	335/335	132/148	150/150	121/136	339/339	133/150	150/150	122/137	340/340	138/154	150/175	127/142	344/344
			291A+294A	37.6/50.0	104.3/120.3	144/133	150/150	132/150	335/335	149/138	150/150	137/154	339/339	150/139	150/150	138/155	340/340	155/144	175/175	142/160	344/344
		HIGH	NONE	–	–	68	80	72	350	72	80	77	354	73	80	78	355	77	90	82	359
			291A	12.4/16.5	34.4/39.7	69/76	80/80	72/72	350/350	74/80	80/80	77/77	354/354	75/82	80/90	78/78	355/355	80/86	90/90	82/82	359/359
			288A+291A	19.9/26.5	55.3/63.8	95/106	100/110	87/97	350/350	100/110	100/125	91/101	354/354	101/112	110/125	93/102	355/355	106/116	110/125	97/107	359/359
			294A	25.2/33.5	69.9/80.6	113/127	125/150	104/116	350/350	118/131	125/150	108/121	354/354	119/133	125/150	109/122	355/355	124/137	125/150	114/126	359/359
			288A+294A	32.7/43.5	90.7/104.7	139/157	150/175	128/144	350/350	144/162	150/175	132/148	354/354	145/163	150/175	133/149	355/355	150/168	150/175	138/154	359/359
			291A+294A	37.6/50.0	104.3/120.3	156/146	175/175	143/162	350/350	161/151	175/175	148/166	354/354	162/152	175/175	149/167	355/355	167/157	175/175	153/172	359/359
	460–3–60	STD	NONE	–	–	28	35	29	157	30	35	32	159	31	35	32	159	32	40	34	161
			292A	16.5	19.9	30	35	29	157	32	35	32	159	33	35	32	159	35	40	34	161
			289A+292A	26.5	31.9	45	45	41	157	47	50	43	159	48	50	44	159	50	50	46	161
			295A	33.5	40.3	56	60	51	157	58	60	53	159	58	60	53	159	61	70	55	161
			289A+295A	43.5	52.3	71	80	65	157	73	80	67	159	73	80	67	159	76	80	69	161
			292A+295A	50.0	60.2	65	70	74	157	68	80	76	159	68	80	76	159	70	80	78	161
		MED	NONE	–	–	30	35	31	169	31	40	33	171	32	40	33	171	34	40	35	173
			292A	16.5	19.9	31	35	31	169	34	40	33	171	34	40	33	171	36	40	35	173
			289A+292A	26.5	31.9	46	50	42	169	49	50	44	171	49	50	45	171	51	60	47	173
			295A	33.5	40.3	57	60	52	169	59	60	54	171	60	60	55	171	62	70	57	173
			289A+295A	43.5	52.3	72	80	66	169	74	80	68	171	75	80	68	171	77	80	70	173
			292A+295A	50.0	60.2	67	80	75	169	69	80	77	171	70	80	77	171	72	80	79	173
		HIGH	NONE	–	–	35	40	37	176	37	45	39	178	37	45	39	178	39	45	41	180
			292A	16.5	19.9	38	40	37	176	40	45	39	178	41	45	39	178	43	45	41	180
			289A+292A	26.5	31.9	53	60	48	176	55	60	50	178	56	60	51	178	58	60	53	180
			295A	33.5	40.3	64	70	58	176	66	70	60	178	66	70	61	178	69	70	63	180
			289A+295A	43.5	52.3	79	80	72	176	81	90	74	178	81	90	74	178	84	90	76	180
			292A+295A	50.0	60.2	73	80	81	176	76	80	83	178	76	80	83	178	78	80	86	180

See “Legend and Notes for Tables 72 – 75” on page129

ELECTRICAL INFORMATION

Table 74 - UNIT WIRE SIZING DATA WITH FACTORY INSTALLED 2 SPEED INDOOR FAN OPTION (cont)

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC*D14	575–3–60	STD	NONE	–	–	24	30	25	128	28	30	29	132	25	30	27	130	29	35	31	134
			293A	16.5	15.9	26	30	25	128	31	35	29	132	28	30	27	130	33	35	31	134
			290A+293A	26.5	25.5	38	40	35	128	43	45	39	132	40	40	36	130	45	45	41	134
			296A	33.5	32.2	46	50	42	128	51	60	47	132	48	50	44	130	53	60	49	134
			290A+296A	43.5	41.8	58	60	53	128	63	70	58	132	60	60	55	130	65	70	60	134
			293A+296A	50.0	48.1	54	60	60	128	59	60	65	132	56	60	62	130	61	70	67	134
		MED	NONE	–	–	24	30	25	128	28	30	29	132	25	30	27	130	29	35	31	134
			293A	16.5	15.9	26	30	25	128	31	35	29	132	28	30	27	130	33	35	31	134
			290A+293A	26.5	25.5	38	40	35	128	43	45	39	132	40	40	36	130	45	45	41	134
			296A	33.5	32.2	46	50	42	128	51	60	47	132	48	50	44	130	53	60	49	134
			290A+296A	43.5	41.8	58	60	53	128	63	70	58	132	60	60	55	130	65	70	60	134
			293A+296A	50.0	48.1	54	60	60	128	59	60	65	132	56	60	62	130	61	70	67	134
		HIGH	NONE	–	–	29	35	30	140	32	40	34	144	30	35	32	142	34	40	36	146
			293A	16.5	15.9	32	35	30	140	36	40	34	144	34	35	32	142	38	40	36	146
			290A+293A	26.5	25.5	44	45	40	140	48	50	44	144	46	50	42	142	50	60	46	146
			296A	33.5	32.2	52	60	47	140	57	60	52	144	54	60	49	142	59	60	54	146
			290A+296A	43.5	41.8	64	70	58	140	69	70	63	144	66	70	60	142	71	80	65	146
			293A+296A	50.0	48.1	60	70	66	140	65	70	70	144	62	70	68	142	67	70	72	146

See “Legend and Notes for Tables 72 – 75” on page129

ELECTRICAL INFORMATION

Table 75 – UNIT WIRE SIZING DATA WITH FACTORY INSTALLED HACR BREAKER AND 2 SPEED INDOOR FAN OPTION

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC*D08	208/230–3–60	STD	NONE	–	–	40/40	50/50	41/41	195	44/44	50/50	46/46	199	45/45	50/50	47/47	200	48/48	60/60	51/51	204
			117A	7.8/10.4	21.7/25.0	40/40	50/50	41/41	195/195	44/44	50/50	46/46	199/199	45/45	50/50	47/47	200/200	49/49	60/60	51/51	204/204
			110A	12.0/16.0	33.4/38.5	56/56	60/60	45/51	195/195	60/60	60/60	49/55	199/199	62/62	70/70	51/56	200/200	66/66	70/70	55/61	204/204
			111A	18.6/24.8	51.7/59.7	82/82	90/90	66/75	195/195	87/87	90/90	70/79	199/199	88/88	90/90	72/81	200/200	93/93	100/100	76/85	204/204
			112A	24.0/32.0	66.7/77.0	104/104	110/110	83/95	195/195	108/108	110/110	88/99	199/199	110/110	110/110	89/101	200/200	114/114	125/125	93/105	204/204
			112A+117A	31.8/42.4	88.4/102.0	135/135	150/150	108/124	195/195	140/140	150/150	113/128	199/199	141/141	150/150	114/129	200/200	146/146	150/150	118/134	204/204
		MED	NONE	–	–	41/41	50/50	43/43	199	45/45	50/50	47/47	203	46/46	50/50	48/48	204	50/50	60/60	53/52	208
			117A	7.8/10.4	21.7/25.0	41/41	50/50	43/43	199/199	45/45	50/50	47/47	203/203	46/46	50/50	48/48	204/204	51/51	60/60	53/52	208/208
			110A	12.0/16.0	33.4/38.5	57/57	60/60	47/52	199/199	62/62	70/70	51/56	203/203	63/63	70/70	52/58	204/204	68/68	70/70	56/62	208/208
			111A	18.6/24.8	51.7/59.7	84/84	90/90	68/76	199/199	88/88	90/90	72/81	203/203	90/90	90/90	73/82	204/204	94/94	100/100	78/86	208/208
			112A	24.0/32.0	66.7/77.0	105/105	110/110	85/96	199/199	110/110	110/110	89/101	203/203	111/111	125/125	90/102	204/204	116/116	125/125	95/106	208/208
			112A+117A	31.8/42.4	88.4/102.0	136/136	150/150	110/125	199/199	141/141	150/150	114/129	203/203	142/142	150/150	115/131	204/204	147/147	150/150	120/135	208/208
		HIGH	NONE	–	–	45/45	50/50	47/46	249	49/49	60/60	52/50	253	50/50	60/60	53/52	254	53/53	60/60	57/56	258
			117A	7.8/10.4	21.7/25.0	45/45	50/50	47/46	249/249	49/49	60/60	52/50	253/253	50/50	60/60	53/52	254/254	55/55	60/60	57/56	258/258
			110A	12.0/16.0	33.4/38.5	61/61	70/70	51/56	249/249	66/66	70/70	55/60	253/253	67/67	70/70	56/61	254/254	72/72	80/80	61/65	258/258
			111A	18.6/24.8	51.7/59.7	87/87	90/90	72/80	249/249	92/92	100/100	76/84	253/253	93/93	100/100	77/85	254/254	98/98	100/100	82/90	258/258
			112A	24.0/32.0	66.7/77.0	109/109	110/110	89/100	249/249	114/114	125/125	93/104	253/253	115/115	125/125	95/105	254/254	120/120	125/125	99/110	258/258
			112A+117A	31.8/42.4	88.4/102.0	140/140	150/150	114/129	249/249	145/145	150/150	118/133	253/253	146/146	150/150	120/134	254/254	151/151	175/175	124/138	258/258
	460–3–60	STD	NONE	–	–	19	20	19	97	20	25	21	99	21	25	22	99	23	25	24	101
			116A	13.9	16.7	25	25	23	97	27	30	25	99	28	30	25	99	30	30	27	101
			113A	16.5	19.8	29	30	26	97	31	35	28	99	32	35	29	99	34	35	31	101
			114A	27.8	33.4	46	50	42	97	48	50	44	99	49	50	44	99	51	60	46	101
			115A	33.0	39.7	54	60	49	97	56	60	51	99	56	60	52	99	59	60	54	101
			114A+116A	41.7	50.2	67	70	61	97	69	70	63	99	70	70	64	99	72	80	66	101
		MED	NONE	–	–	20	25	20	100	21	25	22	102	22	25	23	102	24	25	25	104
			116A	13.9	16.7	26	30	24	100	28	30	26	102	29	30	26	102	31	35	28	104
			113A	16.5	19.8	30	30	27	100	32	35	29	102	33	35	30	102	35	35	32	104
			114A	27.8	33.4	47	50	43	100	49	50	45	102	50	50	45	102	52	60	47	104
			115A	33.0	39.7	55	60	50	100	57	60	52	102	58	60	53	102	60	60	55	104
			114A+116A	41.7	50.2	68	70	62	100	70	70	64	102	71	80	65	102	73	80	67	104
		HIGH	NONE	–	–	21	25	22	125	22	25	24	127	23	25	24	127	25	30	26	129
			116A	13.9	16.7	27	30	25	125	30	30	27	127	30	30	27	127	32	35	29	129
			113A	16.5	19.8	31	35	28	125	34	35	30	127	34	35	31	127	36	40	33	129
			114A	27.8	33.4	48	50	44	125	51	60	46	127	51	60	47	127	53	60	49	129
			115A	33.0	39.7	56	60	51	125	58	60	53	127	59	60	54	127	61	70	56	129
			114A+116A	41.7	50.2	69	70	63	125	72	80	65	127	72	80	66	127	74	80	68	129
	575–3–60	STD	NONE	–	–	14	15	14	79	18	20	19	83	16	20	16	81	19	25	21	85
			118A	17.0	20.4	29	30	27	79	34	35	31	83	32	35	29	81	36	40	33	85
			119A	34.0	40.9	55	60	50	79	60	60	55	83	57	60	52	81	62	70	57	85
		MED	NONE	–	–	15	20	15	83	18	20	19	87	16	20	17	85	20	25	21	89
			118A	17.0	20.4	30	30	27	83	35	35	32	87	32	35	29	85	37	40	34	89
			119A	34.0	40.9	56	60	51	83	61	70	55	87	58	60	53	85	63	70	57	89
		HIGH	NONE	–	–	16	20	16	92	19	25	21	96	17	20	18	94	21	25	23	98
			118A	17.0	20.4	32	35	29	92	36	40	33	96	34	35	31	94	38	40	35	98
			119A	34.0	40.9	57	60	52	92	62	70	57	96	59	60	54	94	64	70	59	98

See “Legend and Notes for Tables 72 – 75” on page129

ELECTRICAL INFORMATION

Table 75 - UNIT WIRE SIZING DATA WITH FACTORY INSTALLED HACR BREAKER AND 2 SPEED INDOOR FAN OPTION (cont)

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC*D09	208/230–3–60	STD	NONE	–	–	40/40	50/50	42/41	195	44/44	50/50	46/46	199	45/45	50/50	47/47	200	49/49	60/60	52/51	204
			117A	7.8/10.4	21.7/25.0	40/40	50/50	42/41	195/195	44/44	50/50	46/46	199/199	45/45	50/50	47/47	200/200	49/49	60/60	52/51	204/204
			110A	12.0/16.0	33.4/38.5	56/56	60/60	45/51	195/195	60/60	60/60	49/55	199/199	62/62	70/70	51/56	200/200	66/66	70/70	55/61	204/204
			111A	18.6/24.8	51.7/59.7	82/82	90/90	66/75	195/195	87/87	90/90	70/79	199/199	88/88	90/90	72/81	200/200	93/93	100/100	76/85	204/204
			112A	24.0/32.0	66.7/77.0	104/104	110/110	83/95	195/195	108/108	110/110	88/99	199/199	110/110	110/110	89/101	200/200	114/114	125/125	93/105	204/204
			112A+117A	31.8/42.4	88.4/102.0	135/135	150/150	108/124	195/195	140/140	150/150	113/128	199/199	141/141	150/150	114/129	200/200	146/146	150/150	118/134	204/204
		MED	NONE	–	–	41/41	50/50	43/43	199	45/45	50/50	47/47	203	46/46	50/50	49/48	204	50/50	60/60	53/53	208
			117A	7.8/10.4	21.7/25.0	41/41	50/50	43/43	199/199	45/45	50/50	47/47	203/203	46/46	50/50	49/48	204/204	51/51	60/60	53/53	208/208
			110A	12.0/16.0	33.4/38.5	57/57	60/60	47/52	199/199	62/62	70/70	51/56	203/203	63/63	70/70	52/58	204/204	68/68	70/70	56/62	208/208
			111A	18.6/24.8	51.7/59.7	84/84	90/90	68/76	199/199	88/88	90/90	72/81	203/203	90/90	90/90	73/82	204/204	94/94	100/100	78/86	208/208
			112A	24.0/32.0	66.7/77.0	105/105	110/110	85/96	199/199	110/110	110/110	89/101	203/203	111/111	125/125	90/102	204/204	116/116	125/125	95/106	208/208
			112A+117A	31.8/42.4	88.4/102.0	136/136	150/150	110/125	199/199	141/141	150/150	114/129	203/203	142/142	150/150	115/131	204/204	147/147	150/150	120/135	208/208
		HIGH	NONE	–	–	45/45	50/50	47/46	249	49/49	60/60	52/51	253	50/50	60/60	53/52	254	54/54	60/60	57/56	258
			117A	7.8/10.4	21.7/25.0	45/45	50/50	47/46	249/249	49/49	60/60	52/51	253/253	50/50	60/60	53/52	254/254	55/55	60/60	57/56	258/258
			110A	12.0/16.0	33.4/38.5	61/61	70/70	51/56	249/249	66/66	70/70	55/60	253/253	67/67	70/70	56/61	254/254	72/72	80/80	61/65	258/258
			111A	18.6/24.8	51.7/59.7	87/87	90/90	72/80	249/249	92/92	100/100	76/84	253/253	93/93	100/100	77/85	254/254	98/98	100/100	82/90	258/258
			112A	24.0/32.0	66.7/77.0	109/109	110/110	89/100	249/249	114/114	125/125	93/104	253/253	115/115	125/125	95/105	254/254	120/120	125/125	99/110	258/258
			112A+117A	31.8/42.4	88.4/102.0	140/140	150/150	114/129	249/249	145/145	150/150	118/133	253/253	146/146	150/150	120/134	254/254	151/151	175/175	124/138	258/258
	460–3–60	STD	NONE	–	–	19	25	19	97	21	25	22	99	21	25	22	99	23	25	24	101
			116A	13.9	16.7	25	25	23	97	27	30	25	99	28	30	25	99	30	30	27	101
			113A	16.5	19.8	29	30	26	97	31	35	28	99	32	35	29	99	34	35	31	101
			114A	27.8	33.4	46	50	42	97	48	50	44	99	49	50	44	99	51	60	46	101
			115A	33.0	39.7	54	60	49	97	56	60	51	99	56	60	52	99	59	60	54	101
			114A+116A	41.7	50.2	67	70	61	97	69	70	63	99	70	70	64	99	72	80	66	101
		MED	NONE	–	–	20	25	20	100	22	25	23	102	22	25	23	102	24	25	25	104
			116A	13.9	16.7	26	30	24	100	28	30	26	102	29	30	26	102	31	35	28	104
			113A	16.5	19.8	30	30	27	100	32	35	29	102	33	35	30	102	35	35	32	104
			114A	27.8	33.4	47	50	43	100	49	50	45	102	50	50	45	102	52	60	47	104
			115A	33.0	39.7	55	60	50	100	57	60	52	102	58	60	53	102	60	60	55	104
			114A+116A	41.7	50.2	68	70	62	100	70	70	64	102	71	80	65	102	73	80	67	104
		HIGH	NONE	–	–	21	25	22	125	23	25	24	127	23	25	24	127	25	30	26	129
			116A	13.9	16.7	27	30	25	125	30	30	27	127	30	30	27	127	32	35	29	129
			113A	16.5	19.8	31	35	28	125	34	35	30	127	34	35	31	127	36	40	33	129
			114A	27.8	33.4	48	50	44	125	51	60	46	127	51	60	47	127	53	60	49	129
			115A	33.0	39.7	56	60	51	125	58	60	53	127	59	60	54	127	61	70	56	129
			114A+116A	41.7	50.2	69	70	63	125	72	80	65	127	72	80	66	127	74	80	68	129
	575–3–60	STD	NONE	–	–	15	20	16	79	19	20	20	83	17	20	18	81	21	25	22	85
			118A	17.0	20.4	29	30	27	79	34	35	31	83	32	35	29	81	36	40	33	85
			119A	34.0	40.9	55	60	50	79	60	60	55	83	57	60	52	81	62	70	57	85
		MED	NONE	–	–	16	20	16	83	20	25	21	87	18	20	18	85	21	25	23	89
			118A	17.0	20.4	30	30	27	83	35	35	32	87	32	35	29	85	37	40	34	89
			119A	34.0	40.9	56	60	51	83	61	70	55	87	58	60	53	85	63	70	57	89
		HIGH	NONE	–	–	17	20	18	92	21	25	22	96	19	20	20	94	22	25	24	98
			118A	17.0	20.4	32	35	29	92	36	40	33	96	34	35	31	94	38	40	35	98
			119A	34.0	40.9	57	60	52	92	62	70	57	96	59	60	54	94	64	70	59	98

See “Legend and Notes for Tables 72 – 75” on page129

ELECTRICAL INFORMATION

Table 75 - UNIT WIRE SIZING DATA WITH FACTORY INSTALLED HACR BREAKER AND 2 SPEED INDOOR FAN OPTION (cont)

UNIT	NO M. V-Ph-HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC*D11	208/230-3-60	STD	NONE	–	–	51/51	60/60	53/53	254	55/55	60/60	58/57	258	56/56	60/60	59/58	259	59/59	70/70	63/63	263
			117A	7.8/10.4	21.7/25.0	51/51	60/60	53/53	254/254	55/55	60/60	58/57	258/258	56/56	60/60	59/58	259/259	59/59	70/70	63/63	263/263
			110A	12.0/16.0	33.4/38.5	57/57	60/60	53/53	254/254	62/62	70/70	58/57	258/258	63/63	70/70	59/58	259/259	68/68	70/70	63/63	263/263
			112A	24.0/32.0	66.7/77.0	105/105	110/110	85/96	254/254	110/110	110/110	89/101	258/258	111/111	125/125	90/102	259/259	116/116	125/125	95/106	263/263
			112A+117A	31.8/42.4	88.4/102.0	136/136	150/150	110/125	254/254	141/141	150/150	114/129	258/258	142/142	150/150	115/131	259/259	147/147	150/150	120/135	263/263
			112A+110A	37.6/50.0	104.2/120.3	140/140	150/150	128/146	254/254	144/144	150/150	132/151	258/258	146/146	150/150	134/152	259/259	150/150	150/150	138/156	263/263
		MED	NONE	–	–	54/54	60/60	58/56	304	58/58	70/70	62/61	308	59/59	70/70	63/62	309	63/63	70/70	67/66	313
			117A	7.8/10.4	21.7/25.0	54/54	60/60	58/56	304/304	58/58	70/70	62/61	308/308	59/59	70/70	63/62	309/309	63/63	70/70	67/66	313/313
			110A	12.0/16.0	33.4/38.5	61/61	70/70	58/56	304/304	66/66	70/70	62/61	308/308	67/67	70/70	63/62	309/309	72/72	80/80	67/66	313/313
			112A	24.0/32.0	66.7/77.0	109/109	110/110	89/100	304/304	114/114	125/125	93/104	308/308	115/115	125/125	95/105	309/309	120/120	125/125	99/110	313/313
			112A+117A	31.8/42.4	88.4/102.0	140/140	150/150	114/129	304/304	145/145	150/150	118/133	308/308	146/146	150/150	120/134	309/309	151/151	175/175	124/138	313/313
			112A+110A	37.6/50.0	104.2/120.3	144/144	150/150	132/150	304/304	149/149	150/150	137/154	308/308	150/150	150/150	138/155	309/309	155/155	175/175	142/160	313/313
		HIGH	NONE	–	–	57/57	70/70	61/60	315	61/61	70/70	65/64	319	62/62	70/70	66/65	320	66/66	80/80	71/70	324
			117A	7.8/10.4	21.7/25.0	57/57	70/70	61/60	315/315	61/61	70/70	65/64	319/319	62/62	70/70	66/65	320/320	66/66	80/80	71/70	324/324
			110A	12.0/16.0	33.4/38.5	64/64	70/70	61/60	315/315	69/69	70/70	65/64	319/319	70/70	80/70	66/65	320/320	75/75	80/80	71/70	324/324
			112A	24.0/32.0	66.7/77.0	113/113	125/125	92/103	315/315	117/117	125/125	97/108	319/319	119/119	125/125	98/109	320/320	123/123	125/125	102/113	324/324
			112A+117A	31.8/42.4	88.4/102.0	144/144	150/150	117/132	315/315	149/149	150/150	122/136	319/319	150/150	150/150	123/137	320/320	155/155	175/175	127/142	324/324
			112A+110A	37.6/50.0	104.2/120.3	148/148	150/150	135/153	315/315	152/152	175/175	140/157	319/319	154/154	175/175	141/158	320/320	158/158	175/175	145/163	324/324
	460-3-60	STD	NONE	–	–	24	30	25	122	25	30	27	124	26	30	27	124	28	30	29	126
			116A	13.9	16.7	26	30	25	122	28	30	27	124	29	30	27	124	31	35	29	126
			113A	16.5	19.8	30	30	27	122	32	35	29	124	33	35	30	124	35	35	32	126
			115A	33.0	39.7	55	60	50	122	57	60	52	124	58	60	53	124	60	60	55	126
			114A+116A	41.7	50.2	68	70	62	122	70	70	64	124	71	80	65	124	73	80	67	126
			115A+113A	50.0	60.1	65	70	73	122	68	80	76	124	68	80	76	124	70	80	78	126
		MED	NONE	–	–	25	30	26	147	27	30	28	149	27	30	28	149	29	35	30	151
			116A	13.9	16.7	27	30	26	147	30	30	28	149	30	30	28	149	32	35	30	151
			113A	16.5	19.8	31	35	28	147	34	35	30	149	34	35	31	149	36	40	33	151
			115A	33.0	39.7	56	60	51	147	58	60	53	149	59	60	54	149	61	70	56	151
			114A+116A	41.7	50.2	69	70	63	147	72	80	65	149	72	80	66	149	74	80	68	151
			115A+113A	50.0	60.1	67	80	75	147	69	80	77	149	69	80	77	149	72	80	79	151
		HIGH	NONE	–	–	26	30	28	152	28	30	30	154	28	30	30	154	30	35	32	156
			116A	13.9	16.7	29	30	28	152	32	35	30	154	32	35	30	154	34	35	32	156
			113A	16.5	19.8	33	35	30	152	35	35	32	154	36	40	33	154	38	40	35	156
			115A	33.0	39.7	58	60	53	152	60	60	55	154	61	70	56	154	63	70	58	156
			114A+116A	41.7	50.2	71	80	65	152	73	80	67	154	74	80	68	154	76	80	70	156
			115A+113A	50.0	60.1	69	80	76	152	71	80	79	154	71	80	79	154	74	80	81	156
	575-3-60	STD	NONE	–	–	19	20	20	97	23	25	24	101	21	25	22	99	25	30	26	103
			118A	17.0	20.4	30	30	27	97	35	35	32	101	32	35	29	99	37	40	34	103
			119A	34.0	40.9	56	60	51	97	61	70	55	101	58	60	53	99	63	70	57	103
			118A+119A	51.0	61.3	66	70	75	97	71	80	79	101	68	80	76	99	73	80	81	103
		MED	NONE	–	–	20	25	21	106	24	25	25	110	22	25	23	108	26	30	27	112
			118A	17.0	20.4	32	35	29	106	36	40	33	110	34	35	31	108	38	40	35	112
			119A	34.0	40.9	57	60	52	106	62	70	57	110	59	60	54	108	64	70	59	112
			118A+119A	51.0	61.3	67	80	76	106	72	80	80	110	70	80	78	108	74	80	82	112
		HIGH	NONE	–	–	22	25	23	120	26	30	27	124	24	25	25	122	28	30	29	126
			118A	17.0	20.4	34	35	31	120	38	40	35	124	36	40	33	122	41	45	37	126
			119A	34.0	40.9	59	60	54	120	64	70	59	124	61	70	56	122	66	70	60	126
			118A+119A	51.0	61.3	70	80	78	120	74	80	82	124	72	80	80	122	76	80	84	126

See “Legend and Notes for Tables 72 – 75” on page129

ELECTRICAL INFORMATION

Table 75 - UNIT WIRE SIZING DATA WITH FACTORY INSTALLED HACR BREAKER AND 2 SPEED INDOOR FAN OPTION (cont)

UNIT	NOM. V-Ph-HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC*D12	208/230-3-60	STD	NONE	–	–	50/50	60/60	52/52	279	53/53	60/60	56/56	283	54/54	60/60	57/57	284	58/58	70/70	62/61	288
			117A	7.8/10.4	21.7/25.0	50/50	60/60	52/52	279/279	53/53	60/60	56/56	283/283	54/54	60/60	57/57	284/284	58/58	70/70	62/61	288/288
			110A	12.0/16.0	33.4/38.5	57/57	60/60	52/52	279/279	62/62	70/70	56/56	283/283	63/63	70/70	57/58	284/284	68/68	70/70	62/62	288/288
			112A	24.0/32.0	66.7/77.0	105/105	110/110	85/96	279/279	110/110	110/110	89/101	283/283	111/111	125/125	90/102	284/284	116/116	125/125	95/106	288/288
			112A+117A	31.8/42.4	88.4/102.0	136/136	150/150	110/125	279/279	141/141	150/150	114/129	283/283	142/142	150/150	115/131	284/284	147/147	150/150	120/135	288/288
			112A+110A	37.6/50.0	104.2/120.3	140/140	150/150	128/146	279/279	144/144	150/150	132/151	283/283	146/146	150/150	134/152	284/284	150/150	150/150	138/156	288/288
		MED	NONE	–	–	53/53	60/60	56/55	329	57/57	70/70	60/59	333	58/58	70/70	62/60	334	62/62	70/70	66/65	338
			117A	7.8/10.4	21.7/25.0	53/53	60/60	56/55	329/329	57/57	70/70	60/59	333/333	58/58	70/70	62/60	334/334	62/62	70/70	66/65	338/338
			110A	12.0/16.0	33.4/38.5	61/61	70/70	56/56	329/329	66/66	70/70	60/60	333/333	67/67	70/70	62/61	334/334	72/72	80/80	66/65	338/338
			112A	24.0/32.0	66.7/77.0	109/109	110/110	89/100	329/329	114/114	125/125	93/104	333/333	115/115	125/125	95/105	334/334	120/120	125/125	99/110	338/338
			112A+117A	31.8/42.4	88.4/102.0	140/140	150/150	114/129	329/329	145/145	150/150	118/133	333/333	146/146	150/150	120/134	334/334	151/151	175/175	124/138	338/338
			112A+110A	37.6/50.0	104.2/120.3	144/144	150/150	132/150	329/329	149/149	150/150	137/154	333/333	150/150	150/150	138/155	334/334	155/155	175/175	142/160	338/338
		HIGH	NONE	–	–	56/56	60/60	59/58	340	60/60	70/70	64/63	344	61/61	70/70	65/64	345	65/65	80/80	69/68	349
			117A	7.8/10.4	21.7/25.0	56/56	60/60	59/58	340/340	60/60	70/70	64/63	344/344	61/61	70/70	65/64	345/345	65/65	80/80	69/68	349/349
			110A	12.0/16.0	33.4/38.5	64/64	70/70	59/59	340/340	69/69	70/70	64/63	344/344	70/70	80/70	65/64	345/345	75/75	80/80	69/69	349/349
			112A	24.0/32.0	66.7/77.0	113/113	125/125	92/103	340/340	117/117	125/125	97/108	344/344	119/119	125/125	98/109	345/345	123/123	125/125	102/113	349/349
			112A+117A	31.8/42.4	88.4/102.0	144/144	150/150	117/132	340/340	149/149	150/150	122/136	344/344	150/150	150/150	123/137	345/345	155/155	175/175	127/142	349/349
			112A+110A	37.6/50.0	104.2/120.3	148/148	150/150	135/153	340/340	152/152	175/175	140/157	344/344	154/154	175/175	141/158	345/345	158/158	175/175	145/163	349/349
	460-3-60	STD	NONE	–	–	25	30	26	134	26	30	28	136	27	30	28	136	29	35	30	138
			116A	13.9	16.7	26	30	26	134	28	30	28	136	29	30	28	136	31	35	30	138
			113A	16.5	19.8	30	30	27	134	32	35	29	136	33	35	30	136	35	35	32	138
			115A	33.0	39.7	55	60	50	134	57	60	52	136	58	60	53	136	60	60	55	138
			114A+116A	41.7	50.2	68	70	62	134	70	70	64	136	71	80	65	136	73	80	67	138
			115A+113A	50.0	60.1	65	70	73	134	68	80	76	136	68	80	76	136	70	80	78	138
		MED	NONE	–	–	26	30	27	159	28	30	29	161	28	30	29	161	30	35	32	163
			116A	13.9	16.7	27	30	27	159	30	30	29	161	30	30	29	161	32	35	32	163
			113A	16.5	19.8	31	35	28	159	34	35	30	161	34	35	31	161	36	40	33	163
			115A	33.0	39.7	56	60	51	159	58	60	53	161	59	60	54	161	61	70	56	163
			114A+116A	41.7	50.2	69	70	63	159	72	80	65	161	72	80	66	161	74	80	68	163
			115A+113A	50.0	60.1	67	80	75	159	69	80	77	161	69	80	77	161	72	80	79	163
		HIGH	NONE	–	–	27	30	29	164	29	35	31	166	29	35	31	166	31	35	33	168
			116A	13.9	16.7	29	30	29	164	32	35	31	166	32	35	31	166	34	35	33	168
			113A	16.5	19.8	33	35	30	164	35	35	32	166	36	40	33	166	38	40	35	168
			115A	33.0	39.7	58	60	53	164	60	60	55	166	61	70	56	166	63	70	58	168
			114A+116A	41.7	50.2	71	80	65	164	73	80	67	166	74	80	68	166	76	80	70	168
			115A+113A	50.0	60.1	69	80	76	164	71	80	79	166	71	80	79	166	74	80	81	168
	575-3-60	STD	NONE	–	–	19	25	20	107	23	25	24	111	21	25	22	109	25	30	26	113
			118A	17.0	20.4	30	30	27	107	35	35	32	111	32	35	29	109	37	40	34	113
			119A	34.0	40.9	56	60	51	107	61	70	55	111	58	60	53	109	63	70	57	113
			118A+119A	51.0	61.3	66	70	75	107	71	80	79	111	68	80	76	109	73	80	81	113
		MED	NONE	–	–	20	25	21	116	24	30	26	120	22	25	23	118	26	30	27	122
			118A	17.0	20.4	32	35	29	116	36	40	33	120	34	35	31	118	38	40	35	122
			119A	34.0	40.9	57	60	52	116	62	70	57	120	59	60	54	118	64	70	59	122
			118A+119A	51.0	61.3	67	80	76	116	72	80	80	120	70	80	78	118	74	80	82	122
		HIGH	NONE	–	–	22	25	23	130	26	30	27	134	24	25	25	132	28	30	29	136
			118A	17.0	20.4	34	35	31	130	38	40	35	134	36	40	33	132	41	45	37	136
			119A	34.0	40.9	59	60	54	130	64	70	59	134	61	70	56	132	66	70	60	136
			118A+119A	51.0	61.3	70	80	78	130	74	80	82	134	72	80	80	132	76	80	84	136

See “Legend and Notes for Tables 72 – 75” on page129

ELECTRICAL INFORMATION

Table 75 - UNIT WIRE SIZING DATA WITH FACTORY INSTALLED HACR BREAKER AND 2 SPEED INDOOR FAN OPTION (cont)

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC*D14	208/230–3–60	STD	NONE	–	–	56/56	70/70	59/58	311	60/60	70/70	63/62	315	61/61	70/70	64/63	316	65/65	80/80	69/68	320
			291A	12.4/16.5	34.4/39.7	60/60	70/70	59/58	311/311	65/65	70/70	63/62	315/315	66/66	70/70	64/63	316/316	71/71	80/80	69/68	320/320
			288A+291A	19.9/26.5	55.3/63.8	90/90	90/90	73/82	311/311	95/95	100/100	78/87	315/315	96/96	100/100	79/88	316/316	101/101	110/110	83/92	320/320
			294A	25.2/33.5	69.9/80.6	111/111	125/125	90/102	311/311	116/116	125/125	95/106	315/315	117/117	125/125	96/107	316/316	122/122	125/125	100/112	320/320
			288A+294A	32.7/43.5	90.7/104.7	141/141	150/150	114/129	311/311	146/146	150/150	119/134	315/315	147/147	150/150	120/135	316/316	152/152	175/175	124/139	320/320
			291A+294A	37.6/50.0	104.3/120.3	142/142	150/150	130/147	311/311	146/146	150/150	134/152	315/315	148/148	150/150	135/153	316/316	152/152	175/175	140/157	320/320
		MED	NONE	–	–	59/59	70/70	61/60	335	62/62	80/80	66/65	339	63/63	80/80	67/66	340	67/67	80/80	71/70	344
			291A	12.4/16.5	34.4/39.7	62/62	70/70	61/60	335/335	67/67	80/80	66/65	339/339	68/68	80/80	67/66	340/340	73/73	80/80	71/70	344/344
			288A+291A	19.9/26.5	55.3/63.8	92/92	100/100	76/85	335/335	97/97	100/100	80/89	339/339	98/98	100/100	82/90	340/340	103/103	110/110	86/95	344/344
			294A	25.2/33.5	69.9/80.6	113/113	125/125	93/104	335/335	118/118	125/125	97/108	339/339	119/119	125/125	98/109	340/340	124/124	125/125	103/114	344/344
			288A+294A	32.7/43.5	90.7/104.7	144/144	150/150	117/132	335/335	148/148	150/150	121/136	339/339	150/150	150/150	122/137	340/340	154/154	175/175	127/142	344/344
			291A+294A	37.6/50.0	104.3/120.3	144/144	150/150	132/150	335/335	149/149	150/150	137/154	339/339	150/150	150/150	138/155	340/340	155/155	175/175	142/160	344/344
		HIGH	NONE	–	–	68	80	72	350	72	80	77	354	73	80	78	355	77	90	82	359
			291A	12.4/16.5	34.4/39.7	76/76	80/80	72/72	350/350	80/80	80/80	77/77	354/354	82/82	90/90	78/78	355/355	86/86	90/90	82/82	359/359
			288A+291A	19.9/26.5	55.3/63.8	106/106	110/110	87/97	350/350	110/110	125/125	91/101	354/354	112/112	125/125	93/102	355/355	116/116	125/125	97/107	359/359
			294A	25.2/33.5	69.9/80.6	127/127	150/150	104/116	350/350	131/131	150/150	108/121	354/354	133/133	150/150	109/122	355/355	137/137	150/150	114/126	359/359
			288A+294A	32.7/43.5	90.7/104.7	157/157	175/175	128/144	350/350	162/162	175/175	132/148	354/354	163/163	175/175	133/149	355/355	168/168	175/175	138/154	359/359
			291A+294A	37.6/50.0	104.3/120.3	156/156	175/175	143/162	350/350	161/161	175/175	148/166	354/354	162/162	175/175	149/167	355/355	167/167	175/175	153/172	359/359
	460–3–60	STD	NONE	–	–	28	35	29	157	30	35	32	159	31	35	32	159	32	40	34	161
			292A	16.5	19.9	30	35	29	157	32	35	32	159	33	35	32	159	35	40	34	161
			289A+292A	26.5	31.9	45	45	41	157	47	50	43	159	48	50	44	159	50	50	46	161
			295A	33.5	40.3	56	60	51	157	58	60	53	159	58	60	53	159	61	70	55	161
			289A+295A	43.5	52.3	71	80	65	157	73	80	67	159	73	80	67	159	76	80	69	161
			292A+295A	50.0	60.2	65	70	74	157	68	80	76	159	68	80	76	159	70	80	78	161
		MED	NONE	–	–	30	35	31	169	31	40	33	171	32	40	33	171	34	40	35	173
			292A	16.5	19.9	31	35	31	169	34	40	33	171	34	40	33	171	36	40	35	173
			289A+292A	26.5	31.9	46	50	42	169	49	50	44	171	49	50	45	171	51	60	47	173
			295A	33.5	40.3	57	60	52	169	59	60	54	171	60	60	55	171	62	70	57	173
			289A+295A	43.5	52.3	72	80	66	169	74	80	68	171	75	80	68	171	77	80	70	173
			292A+295A	50.0	60.2	67	80	75	169	69	80	77	171	70	80	77	171	72	80	79	173
		HIGH	NONE	–	–	35	40	37	176	37	45	39	178	37	45	39	178	39	45	41	180
			292A	16.5	19.9	38	40	37	176	40	45	39	178	41	45	39	178	43	45	41	180
			289A+292A	26.5	31.9	53	60	48	176	55	60	50	178	56	60	51	178	58	60	53	180
			295A	33.5	40.3	64	70	58	176	66	70	60	178	66	70	61	178	69	70	63	180
			289A+295A	43.5	52.3	79	80	72	176	81	90	74	178	81	90	74	178	84	90	76	180
			292A+295A	50.0	60.2	73	80	81	176	76	80	83	178	76	80	83	178	78	80	86	180

See “Legend and Notes for Tables 72 – 75” on page129

ELECTRICAL INFORMATION

Table 75 - UNIT WIRE SIZING DATA WITH FACTORY INSTALLED HACR BREAKER AND 2 SPEED INDOOR FAN OPTION (cont)

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC*D14	575–3–60	STD	NONE	–	–	24	30	25	128	28	30	29	132	25	30	27	130	29	35	31	134
			293A	16.5	15.9	26	30	25	128	31	35	29	132	28	30	27	130	33	35	31	134
			290A+293A	26.5	25.5	38	40	35	128	43	45	39	132	40	40	36	130	45	45	41	134
			296A	33.5	32.2	46	50	42	128	51	60	47	132	48	50	44	130	53	60	49	134
			290A+296A	43.5	41.8	58	60	53	128	63	70	58	132	60	60	55	130	65	70	60	134
			293A+296A	50.0	48.1	54	60	60	128	59	60	65	132	56	60	62	130	61	70	67	134
		MED	NONE	–	–	24	30	25	128	28	30	29	132	25	30	27	130	29	35	31	134
			293A	16.5	15.9	26	30	25	128	31	35	29	132	28	30	27	130	33	35	31	134
			290A+293A	26.5	25.5	38	40	35	128	43	45	39	132	40	40	36	130	45	45	41	134
			296A	33.5	32.2	46	50	42	128	51	60	47	132	48	50	44	130	53	60	49	134
			290A+296A	43.5	41.8	58	60	53	128	63	70	58	132	60	60	55	130	65	70	60	134
			293A+296A	50.0	48.1	54	60	60	128	59	60	65	132	56	60	62	130	61	70	67	134
		HIGH	NONE	–	–	29	35	30	140	32	40	34	144	30	35	32	142	34	40	36	146
			293A	16.5	15.9	32	35	30	140	36	40	34	144	34	35	32	142	38	40	36	146
			290A+293A	26.5	25.5	44	45	40	140	48	50	44	144	46	50	42	142	50	60	46	146
			296A	33.5	32.2	52	60	47	140	57	60	52	144	54	60	49	142	59	60	54	146
			290A+296A	43.5	41.8	64	70	58	140	69	70	63	144	66	70	60	142	71	80	65	146
			293A+296A	50.0	48.1	60	70	66	140	65	70	70	144	62	70	68	142	67	70	72	146

See “Legend and Notes for Tables 72 – 75” on page129

Legend and Notes for Tables 72 — 75

LEGEND:

BRKR	–	Circuit breaker
CO	–	Convenience outlet
DISC	–	Disconnect
FLA	–	Full load amps
IFM	–	Indoor fan motor
LRA	–	Locked rotor amps
MCA	–	Minimum circuit amps
MOCP	–	MAX FUSE or HACR Breaker
PE	–	Power exhaust
PWRD CO	–	Powered convenient outlet
UNPWR CO	–	Unpowered convenient outlet

NOTES:

1. In compliance with NEC requirements for multimotor and combination load equipment (refer to NEC Articles 430 and 440), the overcurrent protective device for the unit shall be fuse or HACR breaker. Canadian units may be fuse or circuit breaker.
2. **Unbalanced 3-Phase Supply Voltage**
   Never operate a motor where a phase imbalance in supply voltage is greater than 2%. Use the following formula to determine the percentage of voltage imbalance.

$$\% \text{ Voltage Imbalance} = 100 \times \frac{\text{max voltage deviation from average voltage}}{\text{average voltage}}$$

Example: Supply voltage is 230-3-60

AB = 224 v
BC = 231 v
AC = 226 v

$$\text{Average Voltage} = \frac{(224 + 231 + 226)}{3} = \frac{681}{3}$$

$$= 227$$

Determine maximum deviation from average voltage.
(AB) 227 – 224 = 3 v
(BC) 231 – 227 = 4 v
(AC) 227 – 226 = 1 v
Maximum deviation is 4 v.
Determine percent of voltage imbalance.

$$\% \text{ Voltage Imbalance} = 100 \times \frac{4}{227}$$

$$= 1.76\%$$

This amount of phase imbalance is satisfactory as it is below the maximum allowable 2%.
IMPORTANT: If the supply voltage phase imbalance is more than 2%, contact your local electric utility company immediately.

Table 76 – UNIT WIRE/FUSE OR HACR BREAKER SIZING DATA

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC–A/B/F04	208/230–1–60*	DD–STD	NONE	–	–	30	45	29	88	32	45	31	90	34	50	34	93	36	50	36	95
			101A	3.3/4.4	15.9/18.3	30/33	45/45	29/30	88/88	32/35	45/45	31/32	90/90	36/39	50/50	34/35	93/93	38/41	50/50	36/37	95/95
			102A	4.9/6.5	23.5/27.1	39/44	45/45	36/40	88/88	41/46	45/50	38/42	90/90	45/50	50/50	41/45	93/93	47/52	50/60	43/47	95/95
			103B	6.5/8.7	31.4/36.3	49/55	50/60	45/50	88/88	51/57	60/60	47/52	90/90	55/61	60/70	50/56	93/93	57/63	60/70	52/58	95/95
			104B	7.9/10.5	37.9/43.8	57/64	60/70	52/59	88/88	59/67	60/70	54/61	90/90	63/70	70/80	58/64	93/93	65/73	70/80	60/67	95/95
			102A+102A	9.8/13.0	46.9/54.2	68/77	70/80	62/71	88/88	71/80	80/80	65/73	90/90	74/83	80/90	68/76	93/93	77/86	80/90	70/79	95/95
		STD†	NONE	–	–	27	40	26	93	29	45	28	95	32	45	31	98	34	45	34	100
			101A	3.3/4.4	15.9/18.3	27/29	40/40	26/27	93/93	29/32	45/45	28/29	95/95	32/35	45/45	31/32	98/98	35/38	45/45	34/34	100/100
			102A	4.9/6.5	23.5/27.1	36/40	40/45	33/37	93/93	38/43	45/45	35/39	95/95	42/46	45/50	38/42	98/98	44/49	45/50	40/45	100/100
			103B	6.5/8.7	31.4/36.3	46/52	50/60	42/47	93/93	48/54	50/60	44/50	95/95	52/58	60/60	47/53	98/98	54/60	60/60	49/55	100/100
			104B	7.9/10.5	37.9/43.8	54/61	60/70	49/56	93/93	56/64	60/70	51/58	95/95	60/67	60/70	55/62	98/98	62/70	70/70	57/64	100/100
			102A+102A	9.8/13.0	46.9/54.2	65/74	70/80	60/68	93/93	68/77	70/80	62/70	95/95	71/80	80/80	65/73	98/98	74/83	80/90	67/76	100/100
		MED†	NONE	–	–	27	40	26	93	29	45	28	95	32	45	31	98	34	45	34	100
			101A	3.3/4.4	15.9/18.3	27/29	40/40	26/27	93/93	29/32	45/45	28/29	95/95	32/35	45/45	31/32	98/98	35/38	45/45	34/34	100/100
			102A	4.9/6.5	23.5/27.1	36/40	40/45	33/37	93/93	38/43	45/45	35/39	95/95	42/46	45/50	38/42	98/98	44/49	45/50	40/45	100/100
			103B	6.5/8.7	31.4/36.3	46/52	50/60	42/47	93/93	48/54	50/60	44/50	95/95	52/58	60/60	47/53	98/98	54/60	60/60	49/55	100/100
			104B	7.9/10.5	37.9/43.8	54/61	60/70	49/56	93/93	56/64	60/70	51/58	95/95	60/67	60/70	55/62	98/98	62/70	70/70	57/64	100/100
			102A+102A	9.8/13.0	46.9/54.2	65/74	70/80	60/68	93/93	68/77	70/80	62/70	95/95	71/80	80/80	65/73	98/98	74/83	80/90	67/76	100/100
	208/230–3–60	DD–STD	NONE	–	–	22	30	22	82	24	30	24	84	27	30	27	87	29	35	29	89
			101A	3.3/4.4	9.2/10.6	22/23	30/30	22/22	82/82	24/25	30/30	24/24	84/84	27/29	30/30	27/27	87/87	30/31	35/35	29/29	89/89
			102A	4.9/6.5	13.6/15.6	27/29	30/30	24/26	82/82	29/32	30/35	26/29	84/84	33/35	35/35	30/32	87/87	35/38	35/40	32/34	89/89
			103B	6.5/8.7	18.1/20.9	32/36	35/40	29/33	82/82	35/38	35/40	32/35	84/84	38/42	40/45	35/38	87/87	41/44	45/45	37/40	89/89
			104B	7.9/10.5	21.9/25.3	37/41	40/45	34/38	82/82	39/44	40/45	36/40	84/84	43/47	45/50	39/43	87/87	45/50	50/50	41/45	89/89
			105A	12.0/16.0	33.4/38.5	51/58	60/60	47/53	82/82	54/60	60/60	49/55	84/84	57/64	60/70	52/58	87/87	60/66	60/70	55/60	89/89
		STD	NONE	–	–	19	25	19	87	21	30	21	89	24	30	24	92	26	30	26	94
			101A	3.3/4.4	9.2/10.6	19/20	25/25	19/19	87/87	21/22	30/30	21/21	89/89	24/26	30/30	24/24	92/92	26/28	30/30	26/26	94/94
			102A	4.9/6.5	13.6/15.6	24/26	25/30	21/24	87/87	26/28	30/30	23/26	89/89	30/32	30/35	27/29	92/92	32/34	35/35	29/31	94/94
			103B	6.5/8.7	18.1/20.9	29/33	30/35	26/30	87/87	32/35	35/35	29/32	89/89	35/39	35/40	32/35	92/92	38/41	40/45	34/37	94/94
			104B	7.9/10.5	21.9/25.3	34/38	35/40	31/35	87/87	36/41	40/45	33/37	89/89	40/44	40/45	36/40	92/92	42/47	45/50	39/42	94/94
			105A	12.0/16.0	33.4/38.5	48/55	50/60	44/50	87/87	51/57	60/60	46/52	89/89	54/61	60/70	50/55	92/92	57/63	60/70	52/58	94/94
		MED	NONE	–	–	19	25	19	87	21	30	21	89	24	30	24	92	26	30	26	94
			101A	3.3/4.4	9.2/10.6	19/20	25/25	19/19	87/87	21/22	30/30	21/21	89/89	24/26	30/30	24/24	92/92	26/28	30/30	26/26	94/94
			102A	4.9/6.5	13.6/15.6	24/26	25/30	21/24	87/87	26/28	30/30	23/26	89/89	30/32	30/35	27/29	92/92	32/34	35/35	29/31	94/94
			103B	6.5/8.7	18.1/20.9	29/33	30/35	26/30	87/87	32/35	35/35	29/32	89/89	35/39	35/40	32/35	92/92	38/41	40/45	34/37	94/94
			104B	7.9/10.5	21.9/25.3	34/38	35/40	31/35	87/87	36/41	40/45	33/37	89/89	40/44	40/45	36/40	92/92	42/47	45/50	39/42	94/94
			105A	12.0/16.0	33.4/38.5	48/55	50/60	44/50	87/87	51/57	60/60	46/52	89/89	54/61	60/70	50/55	92/92	57/63	60/70	52/58	94/94
		HIGH	NONE	–	–	20	25	19	105	22	30	21	107	24	30	25	110	26	30	27	112
			101A	3.3/4.4	9.2/10.6	20/20	25/25	19/19	105/105	22/23	30/30	21/21	107/107	24/26	30/30	25/25	110/110	27/29	30/30	27/27	112/112
			102A	4.9/6.5	13.6/15.6	24/26	25/30	22/24	105/105	26/29	30/30	24/26	107/107	30/32	30/35	27/29	110/110	32/35	35/35	29/32	112/112
			103B	6.5/8.7	18.1/20.9	30/33	30/35	27/30	105/105	32/35	35/40	29/32	107/107	36/39	40/40	32/36	110/110	38/41	40/45	35/38	112/112
			104B	7.9/10.5	21.9/25.3	34/39	35/40	31/35	105/105	37/41	40/45	33/37	107/107	40/45	40/45	37/41	110/110	43/47	45/50	39/43	112/112
			105A	12.0/16.0	33.4/38.5	49/55	50/60	44/50	105/105	51/57	60/60	47/52	107/107	55/61	60/70	50/56	110/110	57/63	60/70	52/58	112/112

See “Legend and Notes for Tables 76 – 83” on page161

Table 76 - UNIT WIRE/FUSE OR HACR BREAKER SIZING DATA (cont)

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC–A/B/F04	460–3–60	DD–STD	NONE	–	–	12	15	12	43	13	15	13	44	14	20	14	45	15	20	16	46
			106A	6.0	7.2	14	15	13	43	16	20	14	44	17	20	15	45	18	20	17	46
			107A	8.8	10.6	19	20	17	43	20	20	18	44	21	25	19	45	23	25	20	46
			108A	11.5	13.8	23	25	20	43	24	25	22	44	25	25	23	45	27	30	24	46
			109A	14.0	16.8	26	30	24	43	28	30	25	44	29	30	26	45	30	30	28	46
		STD	NONE	–	–	10	15	10	45	11	15	11	46	13	15	12	47	14	15	13	48
			106A	6.0	7.2	12	15	11	45	13	15	12	46	15	15	13	47	16	20	14	48
			107A	8.8	10.6	16	20	15	45	18	20	16	46	19	20	17	47	20	20	18	48
			108A	11.5	13.8	20	20	18	45	22	25	19	46	23	25	21	47	24	25	22	48
			109A	14.0	16.8	24	25	22	45	25	25	23	46	27	30	24	47	28	30	25	48
		MED	NONE	–	–	10	15	10	45	11	15	11	46	13	15	12	47	14	15	13	48
			106A	6.0	7.2	12	15	11	45	13	15	12	46	15	15	13	47	16	20	14	48
			107A	8.8	10.6	16	20	15	45	18	20	16	46	19	20	17	47	20	20	18	48
			108A	11.5	13.8	20	20	18	45	22	25	19	46	23	25	21	47	24	25	22	48
			109A	14.0	16.8	24	25	22	45	25	25	23	46	27	30	24	47	28	30	25	48
		HIGH	NONE	–	–	11	15	10	54	12	15	11	55	13	15	13	56	14	20	14	57
			106A	6.0	7.2	13	15	11	54	14	15	12	55	15	15	14	56	17	20	15	57
			107A	8.8	10.6	17	20	15	54	18	20	16	55	20	20	18	56	21	25	19	57
			108A	11.5	13.8	21	25	19	54	22	25	20	55	24	25	21	56	25	25	23	57
			109A	14.0	16.8	25	25	22	54	26	30	23	55	27	30	25	56	29	30	26	57
	575–3–60	DD–STD	NONE	–	–	10	15	10	42	12	15	12	44	11	15	12	44	13	15	14	46
			297A	9.2	9.2	17	20	15	42	19	20	17	44	19	20	17	44	21	25	19	46
			298A	13.8	13.8	23	25	20	42	25	25	23	44	25	25	22	44	27	30	25	46
		STD	NONE	–	–	8	15	7	43	10	15	9	45	9	15	9	45	11	15	11	47
			297A	9.2	9.2	14	15	13	43	17	20	15	45	16	20	15	45	19	20	17	47
			298A	13.8	13.8	20	20	18	43	22	25	20	45	22	25	20	45	25	25	22	47
		MED	NONE	–	–	8	15	7	43	10	15	9	45	9	15	9	45	11	15	11	47
			297A	9.2	9.2	14	15	13	43	17	20	15	45	16	20	15	45	19	20	17	47
			298A	13.8	13.8	20	20	18	43	22	25	20	45	22	25	20	45	25	25	22	47
		HIGH	NONE	–	–	8	15	7	49	10	15	9	51	9	15	9	51	11	15	11	53
			297A	9.2	9.2	14	15	13	49	17	20	15	51	17	20	15	51	19	20	17	53
			298A	13.8	13.8	20	20	18	49	23	25	20	51	22	25	20	51	25	25	22	53

See “Legend and Notes for Tables 76 – 83” on page161

Table 76 - UNIT WIRE/FUSE OR HACR BREAKER SIZING DATA (cont)

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC–A/B/F05	208/230–1–60*	DD–STD	NONE	–	–	37	50	35	127	38	50	37	129	41	60	41	132	43	60	43	134
			101A	3.3/4.4	15.9/18.3	37/37	50/50	35/35	127/127	38/38	50/50	37/37	129/129	41/41	60/60	41/41	132/132	43/43	60/60	43/43	134/134
			103B	6.5/8.7	31.4/36.3	49/55	50/60	45/50	127/127	51/57	60/60	47/52	129/129	55/61	60/70	50/56	132/132	57/63	60/70	52/58	134/134
			102A+102A	9.8/13.0	46.9/54.2	68/77	70/80	62/71	127/127	71/80	80/80	65/73	129/129	74/83	80/90	68/76	132/132	77/86	80/90	70/79	134/134
			103B+103B	13.1/17.4	62.8/72.5	88/100	90/100	81/92	127/127	91/103	100/110	83/94	129/129	94/106	100/110	86/97	132/132	97/109	100/110	88/100	134/134
			104B+104B	15.8/21.0	75.8/87.5	104/119	110/125	96/109	127/127	107/121	110/125	98/111	129/129	110/125	125/125	101/115	132/132	113/127	125/150	103/117	134/134
		STD†	NONE	–	–	34	50	32	132	36	50	35	134	39	60	38	137	41	60	40	139
			101A	3.3/4.4	15.9/18.3	34/34	50/50	32/32	132/132	36/36	50/50	35/35	134/134	39/39	60/60	38/38	137/137	41/41	60/60	40/40	139/139
			103B	6.5/8.7	31.4/36.3	46/52	50/60	42/47	132/132	48/54	50/60	44/50	134/134	52/58	60/60	47/53	137/137	54/60	60/60	49/55	139/139
			102A+102A	9.8/13.0	46.9/54.2	65/74	70/80	60/68	132/132	68/77	70/80	62/70	134/134	71/80	80/80	65/73	137/137	74/83	80/90	67/76	139/139
			103B+103B	13.1/17.4	62.8/72.5	85/97	90/100	78/89	132/132	87/100	90/100	80/91	134/134	91/103	100/110	83/95	137/137	93/106	100/110	86/97	139/139
			104B+104B	15.8/21.0	75.8/87.5	101/116	110/125	93/106	132/132	104/118	110/125	95/108	134/134	107/122	110/125	98/112	137/137	110/124	110/125	101/114	139/139
		MED†	NONE	–	–	34	50	32	132	36	50	35	134	39	60	38	137	41	60	40	139
			101A	3.3/4.4	15.9/18.3	34/34	50/50	32/32	132/132	36/36	50/50	35/35	134/134	39/39	60/60	38/38	137/137	41/41	60/60	40/40	139/139
			103B	6.5/8.7	31.4/36.3	46/52	50/60	42/47	132/132	48/54	50/60	44/50	134/134	52/58	60/60	47/53	137/137	54/60	60/60	49/55	139/139
			102A+102A	9.8/13.0	46.9/54.2	65/74	70/80	60/68	132/132	68/77	70/80	62/70	134/134	71/80	80/80	65/73	137/137	74/83	80/90	67/76	139/139
			103B+103B	13.1/17.4	62.8/72.5	85/97	90/100	78/89	132/132	87/100	90/100	80/91	134/134	91/103	100/110	83/95	137/137	93/106	100/110	86/97	139/139
			104B+104B	15.8/21.0	75.8/87.5	101/116	110/125	93/106	132/132	104/118	110/125	95/108	134/134	107/122	110/125	98/112	137/137	110/124	110/125	101/114	139/139
	208/230–3–60	DD–STD	NONE	–	–	26	30	26	93	28	40	28	95	31	40	31	98	33	45	34	100
			102A	4.9/6.5	13.6/15.6	27/29	30/30	26/26	93/93	29/32	40/40	28/29	95/95	33/35	40/40	31/32	98/98	35/38	45/45	34/34	100/100
			103B	6.5/8.7	18.1/20.9	32/36	35/40	29/33	93/93	35/38	40/40	32/35	95/95	38/42	40/45	35/38	98/98	41/44	45/45	37/40	100/100
			105A	12.0/16.0	33.4/38.5	51/58	60/60	47/53	93/93	54/60	60/60	49/55	95/95	57/64	60/70	52/58	98/98	60/66	60/70	55/60	100/100
			104B+104B	15.8/21.0	43.8/50.5	64/73	70/80	59/67	93/93	67/75	70/80	61/69	95/95	70/79	80/80	64/72	98/98	73/81	80/90	67/74	100/100
		STD	NONE	–	–	24	30	23	98	26	30	25	100	29	40	29	103	31	40	31	105
			102A	4.9/6.5	13.6/15.6	24/26	30/30	23/24	98/98	26/28	30/30	25/26	100/100	30/32	40/40	29/29	103/103	32/34	40/40	31/31	105/105
			103B	6.5/8.7	18.1/20.9	29/33	30/35	26/30	98/98	32/35	35/35	29/32	100/100	35/39	40/40	32/35	103/103	38/41	40/45	34/37	105/105
			105A	12.0/16.0	33.4/38.5	48/55	50/60	44/50	98/98	51/57	60/60	46/52	100/100	54/61	60/70	50/55	103/103	57/63	60/70	52/58	105/105
			104B+104B	15.8/21.0	43.8/50.5	61/70	70/70	56/64	98/98	64/72	70/80	58/66	100/100	67/76	70/80	62/69	103/103	70/78	70/80	64/71	105/105
		MED	NONE	–	–	24	30	23	105	26	30	26	107	29	40	29	110	31	40	31	112
			102A	4.9/6.5	13.6/15.6	24/26	30/30	23/24	105/105	26/29	30/30	26/26	107/107	30/32	40/40	29/29	110/110	32/35	40/40	31/32	112/112
			103B	6.5/8.7	18.1/20.9	30/33	30/35	27/30	105/105	32/35	35/40	29/32	107/107	36/39	40/40	32/36	110/110	38/41	40/45	35/38	112/112
			105A	12.0/16.0	33.4/38.5	49/55	50/60	44/50	105/105	51/57	60/60	47/52	107/107	55/61	60/70	50/56	110/110	57/63	60/70	52/58	112/112
			104B+104B	15.8/21.0	43.8/50.5	62/70	70/70	56/64	105/105	64/72	70/80	59/66	107/107	68/76	70/80	62/70	110/110	70/78	70/80	64/72	112/112
		HIGH	NONE	–	–	26	30	26	142	28	40	28	144	31	40	32	147	33	45	34	149
			102A	4.9/6.5	13.6/15.6	27/29	30/30	26/27	142/142	29/32	40/40	28/29	144/144	33/35	40/40	32/32	147/147	35/38	45/45	34/34	149/149
			103B	6.5/8.7	18.1/20.9	32/36	35/40	29/33	142/142	35/38	40/40	32/35	144/144	38/42	40/45	35/38	147/147	41/44	45/45	37/40	149/149
			105A	12.0/16.0	33.4/38.5	52/58	60/60	47/53	142/142	54/60	60/60	49/55	144/144	58/64	60/70	53/58	147/147	60/66	60/70	55/61	149/149
			104B+104B	15.8/21.0	43.8/50.5	65/73	70/80	59/67	142/142	67/75	70/80	61/69	144/144	71/79	80/80	65/72	147/147	73/81	80/90	67/74	149/149

See “Legend and Notes for Tables 76 – 83” on page161

† Drive package is only available on Humidi–MiZer® equipped units.

* Single phase units are no longer available with factory installed Powered 115 Volt Convenience Outlet option.

Table 76 - UNIT WIRE/FUSE OR HACR BREAKER SIZING DATA (cont)

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC–A/B/F05	460–3–60	DD–STD	NONE	–	–	13	15	13	47	14	20	14	48	15	20	15	49	16	20	16	50
			106A	6.0	7.2	14	15	13	47	16	20	14	48	17	20	15	49	18	20	17	50
			108A	11.5	13.8	23	25	20	47	24	25	22	48	25	25	23	49	27	30	24	50
			109A	14.0	16.8	26	30	24	47	28	30	25	48	29	30	26	49	30	30	28	50
			108A+108A	23.0	27.7	40	40	36	47	41	45	38	48	43	45	39	49	44	45	40	50
		STD	NONE	–	–	11	15	11	49	12	15	12	50	13	15	13	51	14	20	14	52
			106A	6.0	7.2	12	15	11	49	13	15	12	50	15	15	13	51	16	20	14	52
			108A	11.5	13.8	20	20	18	49	22	25	19	50	23	25	21	51	24	25	22	52
			109A	14.0	16.8	24	25	22	49	25	25	23	50	27	30	24	51	28	30	25	52
			108A+108A	23.0	27.7	38	40	34	49	39	40	35	50	40	45	37	51	42	45	38	52
		MED	NONE	–	–	12	15	11	52	13	15	12	53	14	20	14	54	15	20	15	55
			106A	6.0	7.2	13	15	11	52	14	15	12	53	15	20	14	54	17	20	15	55
			108A	11.5	13.8	21	25	19	52	22	25	20	53	24	25	21	54	25	25	23	55
			109A	14.0	16.8	25	25	22	52	26	30	23	53	27	30	25	54	29	30	26	55
			108A+108A	23.0	27.7	38	40	35	52	40	40	36	53	41	45	37	54	42	45	39	55
		HIGH	NONE	–	–	13	15	12	71	14	15	13	72	15	20	15	73	16	20	16	74
			106A	6.0	7.2	14	15	12	71	15	15	13	72	16	20	15	73	18	20	16	74
			108A	11.5	13.8	22	25	20	71	23	25	21	72	25	25	22	73	26	30	23	74
			109A	14.0	16.8	26	30	23	71	27	30	24	72	28	30	26	73	30	30	27	74
			108A+108A	23.0	27.7	39	40	36	71	41	45	37	72	42	45	38	73	43	45	39	74
	575–3–60	DD–STD	NONE	–	–	11	15	11	39	13	15	13	41	13	15	13	41	15	20	15	43
			297A	9.2	9.2	17	20	15	39	19	20	17	41	19	20	17	41	21	25	19	43
			298A	13.8	13.8	23	25	20	39	25	25	23	41	25	25	22	41	27	30	25	43
		STD	NONE	–	–	9	15	9	40	11	15	11	42	11	15	11	42	13	15	13	44
			297A	9.2	9.2	14	15	13	40	17	20	15	42	16	20	15	42	19	20	17	44
			298A	13.8	13.8	20	20	18	40	22	25	20	42	22	25	20	42	25	25	22	44
		MED	NONE	–	–	9	15	8	42	11	15	11	44	11	15	10	44	13	15	13	46
			297A	9.2	9.2	14	15	12	42	16	20	15	44	16	20	14	44	18	20	17	46
			298A	13.8	13.8	20	20	18	42	22	25	20	44	22	25	20	44	24	25	22	46
		HIGH	NONE	–	–	10	15	10	57	12	15	12	59	12	15	12	59	14	15	14	61
			297A	9.2	9.2	15	15	14	57	18	20	16	59	18	20	16	59	20	20	18	61
			298A	13.8	13.8	21	25	19	57	24	25	21	59	23	25	21	59	26	30	23	61

See “Legend and Notes for Tables 76 – 83” on page161

Table 76 - UNIT WIRE/FUSE OR HACR BREAKER SIZING DATA (cont)

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC–A/B/F06	208/230–1–60*	DD–STD	NONE	–	–	41	60	39	144	42	60	41	146	45	60	44	149	47	60	47	151
			102A	4.9/6.5	23.5/27.1	41/44	60/60	39/40	144/144	42/46	60/60	41/42	146/146	45/50	60/60	44/45	149/149	47/52	60/60	47/47	151/151
			103B	6.5/8.7	31.4/36.3	49/55	60/60	45/50	144/144	51/57	60/60	47/52	146/146	55/61	60/70	50/56	149/149	57/63	60/70	52/58	151/151
			102A+102A	9.8/13.0	46.9/54.2	68/77	70/80	62/71	144/144	71/80	80/80	65/73	146/146	74/83	80/90	68/76	149/149	77/86	80/90	70/79	151/151
			103B+103B	13.1/17.4	62.8/72.5	88/100	90/100	81/92	144/144	91/103	100/110	83/94	146/146	94/106	100/110	86/97	149/149	97/109	100/110	88/100	151/151
			104B+104B	15.8/21.0	75.8/87.5	104/119	110/125	96/109	144/144	107/121	110/125	98/111	146/146	110/125	125/125	101/115	149/149	113/127	125/150	103/117	151/151
		STD†	NONE	–	–	38	60	36	149	40	60	38	151	43	60	42	154	45	60	44	156
			102A	4.9/6.5	23.5/27.1	38/40	60/60	36/37	149/149	40/43	60/60	38/39	151/151	43/46	60/60	42/42	154/154	45/49	60/60	44/45	156/156
			103B	6.5/8.7	31.4/36.3	46/52	60/60	42/47	149/149	48/54	60/60	44/50	151/151	52/58	60/60	47/53	154/154	54/60	60/60	49/55	156/156
			102A+102A	9.8/13.0	46.9/54.2	65/74	70/80	60/68	149/149	68/77	70/80	62/70	151/151	71/80	80/80	65/73	154/154	74/83	80/90	67/76	156/156
			103B+103B	13.1/17.4	62.8/72.5	85/97	90/100	78/89	149/149	87/100	90/100	80/91	151/151	91/103	100/110	83/95	154/154	93/106	100/110	86/97	156/156
			104B+104B	15.8/21.0	75.8/87.5	101/116	110/125	93/106	149/149	104/118	110/125	95/108	151/151	107/122	110/125	98/112	154/154	110/124	110/125	101/114	156/156
		MED†	NONE	–	–	40	60	38	174	42	60	41	176	45	60	44	179	47	60	46	181
			102A	4.9/6.5	23.5/27.1	40/43	60/60	38/39	174/174	42/45	60/60	41/41	176/176	45/49	60/60	44/45	179/179	47/51	60/60	46/47	181/181
			103B	6.5/8.7	31.4/36.3	48/55	60/60	44/50	174/174	51/57	60/60	46/52	176/176	54/61	60/70	50/55	179/179	57/63	60/70	52/58	181/181
			102A+102A	9.8/13.0	46.9/54.2	68/77	70/80	62/70	174/174	70/79	70/80	64/73	176/176	74/83	80/90	68/76	179/179	76/85	80/90	70/78	181/181
			103B+103B	13.1/17.4	62.8/72.5	88/100	90/100	80/91	174/174	90/102	90/110	82/94	176/176	94/106	100/110	86/97	179/179	96/108	100/110	88/99	181/181
			104B+104B	15.8/21.0	75.8/87.5	104/119	110/125	95/109	174/174	106/121	110/125	97/111	176/176	110/125	110/125	101/114	179/179	112/127	125/150	103/116	181/181
	208/230–3–60	DD–STD	NONE	–	–	29	40	28	120	31	45	31	122	34	45	34	125	36	50	36	127
			102A	4.9/6.5	13.6/15.6	29/29	40/40	28/28	120/120	31/32	45/45	31/31	122/122	34/35	45/45	34/34	125/125	36/38	50/50	36/36	127/127
			104B	7.9/10.5	21.9/25.3	37/41	40/45	34/38	120/120	39/44	45/45	36/40	122/122	43/47	45/50	39/43	125/125	45/50	50/50	41/45	127/127
			105A	12.0/16.0	33.4/38.5	51/58	60/60	47/53	120/120	54/60	60/60	49/55	122/122	57/64	60/70	52/58	125/125	60/66	60/70	55/60	127/127
			104B+104B	15.8/21.0	43.8/50.5	64/73	70/80	59/67	120/120	67/75	70/80	61/69	122/122	70/79	80/80	64/72	125/125	73/81	80/90	67/74	127/127
			104B+105A	19.9/26.5	55.2/63.8	79/89	80/90	72/82	120/120	81/92	90/100	74/84	122/122	85/95	90/100	78/87	125/125	87/98	90/100	80/90	127/127
		STD	NONE	–	–	27	40	26	125	29	40	28	127	31	45	31	130	33	45	33	132
			102A	4.9/6.5	13.6/15.6	27/27	40/40	26/26	125/125	29/29	40/40	28/28	127/127	31/32	45/45	31/31	130/130	33/34	45/45	33/33	132/132
			104B	7.9/10.5	21.9/25.3	34/38	40/40	31/35	125/125	36/41	40/45	33/37	127/127	40/44	45/45	36/40	130/130	42/47	45/50	39/42	132/132
			105A	12.0/16.0	33.4/38.5	48/55	50/60	44/50	125/125	51/57	60/60	46/52	127/127	54/61	60/70	50/55	130/130	57/63	60/70	52/58	132/132
			104B+104B	15.8/21.0	43.8/50.5	61/70	70/70	56/64	125/125	64/72	70/80	58/66	127/127	67/76	70/80	62/69	130/130	70/78	70/80	64/71	132/132
			104B+105A	19.9/26.5	55.2/63.8	76/86	80/90	69/79	125/125	78/89	80/90	71/81	127/127	82/92	90/100	75/85	130/130	84/95	90/100	77/87	132/132
		MED	NONE	–	–	27	40	26	143	29	40	28	145	32	45	31	148	34	45	34	150
			102A	4.9/6.5	13.6/15.6	27/27	40/40	26/26	143/143	29/29	40/40	28/28	145/145	32/32	45/45	31/31	148/148	34/35	45/45	34/34	150/150
			104B	7.9/10.5	21.9/25.3	34/39	40/40	31/35	143/143	37/41	40/45	33/37	145/145	40/45	45/45	37/41	148/148	43/47	45/50	39/43	150/150
			105A	12.0/16.0	33.4/38.5	49/55	50/60	44/50	143/143	51/57	60/60	47/52	145/145	55/61	60/70	50/56	148/148	57/63	60/70	52/58	150/150
			104B+104B	15.8/21.0	43.8/50.5	62/70	70/70	56/64	143/143	64/72	70/80	59/66	145/145	68/76	70/80	62/70	148/148	70/78	70/80	64/72	150/150
			104B+105A	19.9/26.5	55.2/63.8	76/87	80/90	69/79	143/143	78/89	80/90	72/82	145/145	82/93	90/100	75/85	148/148	84/95	90/100	77/87	150/150
		HIGH	NONE	–	–	29	40	29	169	31	45	31	171	34	45	34	174	36	50	36	176
			102A	4.9/6.5	13.6/15.6	29/29	40/40	29/29	169/169	31/32	45/45	31/31	171/171	34/35	45/45	34/34	174/174	36/38	50/50	36/36	176/176
			104B	7.9/10.5	21.9/25.3	37/41	40/45	34/38	169/169	40/44	45/45	36/40	171/171	43/47	45/50	39/43	174/174	46/50	50/50	42/45	176/176
			105A	12.0/16.0	33.4/38.5	52/58	60/60	47/53	169/169	54/60	60/60	49/55	171/171	58/64	60/70	53/58	174/174	60/66	60/70	55/61	176/176
			104B+104B	15.8/21.0	43.8/50.5	65/73	70/80	59/67	169/169	67/75	70/80	61/69	171/171	71/79	80/80	65/72	174/174	73/81	80/90	67/74	176/176
			104B+105A	19.9/26.5	55.2/63.8	79/90	80/90	72/82	169/169	81/92	90/100	74/84	171/171	85/96	90/100	78/88	174/174	87/98	90/100	80/90	176/176

See “Legend and Notes for Tables 76 – 83” on page161

† Drive package is only available on Humidi–MiZer® equipped units.

* Single phase units are no longer available with factory installed Powered 115 Volt Convenience Outlet option.

Table 76 - UNIT WIRE/FUSE OR HACR BREAKER SIZING DATA (cont)

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC–A/B/F06	460–3–60	DD–STD	NONE	–	–	14	20	14	58	15	20	15	59	16	20	16	60	17	20	17	61
			106A	6.0	7.2	14	20	14	58	16	20	15	59	17	20	16	60	18	20	17	61
			108A	11.5	13.8	23	25	20	58	24	25	22	59	25	25	23	60	27	30	24	61
			109A	14.0	16.8	26	30	24	58	28	30	25	59	29	30	26	60	30	30	28	61
			108A+108A	23.0	27.7	40	40	36	58	41	45	38	59	43	45	39	60	44	45	40	61
			108A+109A	25.5	30.7	44	45	40	58	45	45	41	59	47	50	42	60	48	50	44	61
		STD	NONE	–	–	12	15	12	60	13	15	13	61	14	20	14	62	15	20	15	63
			106A	6.0	7.2	12	15	12	60	13	15	13	61	15	20	14	62	16	20	15	63
			108A	11.5	13.8	20	20	18	60	22	25	19	61	23	25	21	62	24	25	22	63
			109A	14.0	16.8	24	25	22	60	25	25	23	61	27	30	24	62	28	30	25	63
			108A+108A	23.0	27.7	38	40	34	60	39	40	35	61	40	45	37	62	42	45	38	63
			108A+109A	25.5	30.7	41	45	38	60	43	45	39	61	44	45	40	62	45	50	41	63
		MED	NONE	–	–	13	15	12	69	14	20	13	70	15	20	15	71	16	20	16	72
			106A	6.0	7.2	13	15	12	69	14	20	13	70	15	20	15	71	17	20	16	72
			108A	11.5	13.8	21	25	19	69	22	25	20	70	24	25	21	71	25	25	23	72
			109A	14.0	16.8	25	25	22	69	26	30	23	70	27	30	25	71	29	30	26	72
			108A+108A	23.0	27.7	38	40	35	69	40	40	36	70	41	45	37	71	42	45	39	72
			108A+109A	25.5	30.7	42	45	38	69	43	45	39	70	45	45	41	71	46	50	42	72
		HIGH	NONE	–	–	14	20	13	82	15	20	14	83	16	20	16	84	17	20	17	85
			106A	6.0	7.2	14	20	13	82	15	20	14	83	16	20	16	84	18	20	17	85
			108A	11.5	13.8	22	25	20	82	23	25	21	83	25	25	22	84	26	30	23	85
			109A	14.0	16.8	26	30	23	82	27	30	24	83	28	30	26	84	30	30	27	85
			108A+108A	23.0	27.7	39	40	36	82	41	45	37	83	42	45	38	84	43	45	39	85
			108A+109A	25.5	30.7	43	45	39	82	44	45	40	83	46	50	42	84	47	50	43	85
	575–3–60	DD–STD	NONE	–	–	12	15	12	46	14	15	14	48	13	15	13	48	15	20	16	50
			298A	13.8	13.8	23	25	20	46	25	25	23	48	25	25	22	48	27	30	25	50
			301A	23.0	23.1	34	35	31	46	37	40	33	48	36	40	33	48	39	40	35	50
		STD	NONE	–	–	10	15	9	47	12	15	11	49	11	15	11	49	13	15	13	51
			298A	13.8	13.8	20	20	18	47	22	25	20	49	22	25	20	49	25	25	22	51
			301A	23.0	23.1	32	35	29	47	34	35	31	49	34	35	31	49	36	40	33	51
		MED	NONE	–	–	10	15	9	53	12	15	11	55	11	15	11	55	13	15	13	57
			298A	13.8	13.8	20	20	18	53	23	25	20	55	22	25	20	55	25	25	22	57
			301A	23.0	23.1	32	35	29	53	34	35	31	55	34	35	31	55	36	40	33	57
		HIGH	NONE	–	–	11	15	10	64	12	15	12	66	12	15	12	66	14	15	14	68
			298A	13.8	13.8	21	25	19	64	24	25	21	66	23	25	21	66	26	30	23	68
			301A	23.0	23.1	33	35	30	64	35	35	32	66	35	35	32	66	37	40	34	68

See “Legend and Notes for Tables 76 – 83” on page161

Table 77 – UNIT WIRE SIZING DATA WITH FACTORY-INSTALLED HACR BREAKER

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC–A/B/F04	208/230–1–60*	DD–STD	NONE	–	–	30	45	29	88	32	45	31	90	34	50	34	93	36	50	36	95
			101A	3.3/4.4	15.9/18.3	33/33	45/45	29/30	88/88	35/35	45/45	31/32	90/90	39/39	50/50	34/35	93/93	41/41	50/50	36/37	95/95
			102A	4.9/6.5	23.5/27.1	44/44	45/45	36/40	88/88	46/46	50/50	38/42	90/90	50/50	50/50	41/45	93/93	52/52	60/60	43/47	95/95
			103B	6.5/8.7	31.4/36.3	55/55	60/60	45/50	88/88	57/57	60/60	47/52	90/90	61/61	70/70	50/56	93/93	63/63	70/70	52/58	95/95
			104B	7.9/10.5	37.9/43.8	64/64	70/70	52/59	88/88	67/67	70/70	54/61	90/90	70/70	80/80	58/64	93/93	73/73	80/80	60/67	95/95
			102A+102A	9.8/13.0	46.9/54.2	77/77	80/80	62/71	88/88	80/80	80/80	65/73	90/90	83/83	90/90	68/76	93/93	86/86	90/90	70/79	95/95
		STD†	NONE	–	–	27	40	26	93	29	45	28	95	32	45	31	98	34	45	34	100
			101A	3.3/4.4	15.9/18.3	29/29	40/40	26/27	93/93	32/32	45/45	28/29	95/95	35/35	45/45	31/32	98/98	38/38	45/45	34/34	100/100
			102A	4.9/6.5	23.5/27.1	40/40	45/45	33/37	93/93	43/43	45/45	35/39	95/95	46/46	50/50	38/42	98/98	49/49	50/50	40/45	100/100
			103B	6.5/8.7	31.4/36.3	52/52	60/60	42/47	93/93	54/54	60/60	44/50	95/95	58/58	60/60	47/53	98/98	60/60	60/60	49/55	100/100
			104B	7.9/10.5	37.9/43.8	61/61	70/70	49/56	93/93	64/64	70/70	51/58	95/95	67/67	70/70	55/62	98/98	70/70	70/70	57/64	100/100
			102A+102A	9.8/13.0	46.9/54.2	74/74	80/80	60/68	93/93	77/77	80/80	62/70	95/95	80/80	80/80	65/73	98/98	83/83	90/90	67/76	100/100
		MED†	NONE	–	–	27	40	26	93	29	45	28	95	32	45	31	98	34	45	34	100
			101A	3.3/4.4	15.9/18.3	29/29	40/40	26/27	93/93	32/32	45/45	28/29	95/95	35/35	45/45	31/32	98/98	38/38	45/45	34/34	100/100
			102A	4.9/6.5	23.5/27.1	40/40	45/45	33/37	93/93	43/43	45/45	35/39	95/95	46/46	50/50	38/42	98/98	49/49	50/50	40/45	100/100
			103B	6.5/8.7	31.4/36.3	52/52	60/60	42/47	93/93	54/54	60/60	44/50	95/95	58/58	60/60	47/53	98/98	60/60	60/60	49/55	100/100
			104B	7.9/10.5	37.9/43.8	61/61	70/70	49/56	93/93	64/64	70/70	51/58	95/95	67/67	70/70	55/62	98/98	70/70	70/70	57/64	100/100
			102A+102A	9.8/13.0	46.9/54.2	74/74	80/80	60/68	93/93	77/77	80/80	62/70	95/95	80/80	80/80	65/73	98/98	83/83	90/90	67/76	100/100
	208/230–3–60	DD–STD	NONE	–	–	22	30	22	82	24	30	24	84	27	30	27	87	29	35	29	89
			101A	3.3/4.4	9.2/10.6	23/23	30/30	22/22	82/82	25/25	30/30	24/24	84/84	29/29	30/30	27/27	87/87	31/31	35/35	29/29	89/89
			102A	4.9/6.5	13.6/15.6	29/29	30/30	24/26	82/82	32/32	35/35	26/29	84/84	35/35	35/35	30/32	87/87	38/38	40/40	32/34	89/89
			103B	6.5/8.7	18.1/20.9	36/36	40/40	29/33	82/82	38/38	40/40	32/35	84/84	42/42	45/45	35/38	87/87	44/44	45/45	37/40	89/89
			104B	7.9/10.5	21.9/25.3	41/41	45/45	34/38	82/82	44/44	45/45	36/40	84/84	47/47	50/50	39/43	87/87	50/50	50/50	41/45	89/89
			105A	12.0/16.0	33.4/38.5	58/58	60/60	47/53	82/82	60/60	60/60	49/55	84/84	64/64	70/70	52/58	87/87	66/66	70/70	55/60	89/89
		STD	NONE	–	–	19	25	19	87	21	30	21	89	24	30	24	92	26	30	26	94
			101A	3.3/4.4	9.2/10.6	20/20	25/25	19/19	87/87	22/22	30/30	21/21	89/89	26/26	30/30	24/24	92/92	28/28	30/30	26/26	94/94
			102A	4.9/6.5	13.6/15.6	26/26	30/30	21/24	87/87	28/28	30/30	23/26	89/89	32/32	35/35	27/29	92/92	34/34	35/35	29/31	94/94
			103B	6.5/8.7	18.1/20.9	33/33	35/35	26/30	87/87	35/35	35/35	29/32	89/89	39/39	40/40	32/35	92/92	41/41	45/45	34/37	94/94
			104B	7.9/10.5	21.9/25.3	38/38	40/40	31/35	87/87	41/41	45/45	33/37	89/89	44/44	45/45	36/40	92/92	47/47	50/50	39/42	94/94
			105A	12.0/16.0	33.4/38.5	55/55	60/60	44/50	87/87	57/57	60/60	46/52	89/89	61/61	70/70	50/55	92/92	63/63	70/70	52/58	94/94
		MED	NONE	–	–	19	25	19	87	21	30	21	89	24	30	24	92	26	30	26	94
			101A	3.3/4.4	9.2/10.6	20/20	25/25	19/19	87/87	22/22	30/30	21/21	89/89	26/26	30/30	24/24	92/92	28/28	30/30	26/26	94/94
			102A	4.9/6.5	13.6/15.6	26/26	30/30	21/24	87/87	28/28	30/30	23/26	89/89	32/32	35/35	27/29	92/92	34/34	35/35	29/31	94/94
			103B	6.5/8.7	18.1/20.9	33/33	35/35	26/30	87/87	35/35	35/35	29/32	89/89	39/39	40/40	32/35	92/92	41/41	45/45	34/37	94/94
			104B	7.9/10.5	21.9/25.3	38/38	40/40	31/35	87/87	41/41	45/45	33/37	89/89	44/44	45/45	36/40	92/92	47/47	50/50	39/42	94/94
			105A	12.0/16.0	33.4/38.5	55/55	60/60	44/50	87/87	57/57	60/60	46/52	89/89	61/61	70/70	50/55	92/92	63/63	70/70	52/58	94/94
		HIGH	NONE	–	–	20	25	19	105	22	30	21	107	24	30	25	110	26	30	27	112
			101A	3.3/4.4	9.2/10.6	20/20	25/25	19/19	105/105	23/23	30/30	21/21	107/107	26/26	30/30	25/25	110/110	29/29	30/30	27/27	112/112
			102A	4.9/6.5	13.6/15.6	26/26	30/30	22/24	105/105	29/29	30/30	24/26	107/107	32/32	35/35	27/29	110/110	35/35	35/35	29/32	112/112
			103B	6.5/8.7	18.1/20.9	33/33	35/35	27/30	105/105	35/35	40/40	29/32	107/107	39/39	40/40	32/36	110/110	41/41	45/45	35/38	112/112
			104B	7.9/10.5	21.9/25.3	39/39	40/40	31/35	105/105	41/41	45/45	33/37	107/107	45/45	45/45	37/41	110/110	47/47	50/50	39/43	112/112
			105A	12.0/16.0	33.4/38.5	55/55	60/60	44/50	105/105	57/57	60/60	47/52	107/107	61/61	70/70	50/56	110/110	63/63	70/70	52/58	112/112

See “Legend and Notes for Tables 76 – 83” on page161

† Drive package is only available on Humidi–MiZer® equipped units.

* Single phase units are no longer available with factory installed Powered 115 Volt Convenience Outlet option.

Table 77 - UNIT WIRE SIZING DATA WITH FACTORY-INSTALLED HACR BREAKER (cont)

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC–A/B/F04	460–3–60	DD–STD	NONE	–	–	12	15	12	43	13	15	13	44	14	20	14	45	15	20	16	46
			106A	6.0	7.2	14	15	13	43	16	20	14	44	17	20	15	45	18	20	17	46
			107A	8.8	10.6	19	20	17	43	20	20	18	44	21	25	19	45	23	25	20	46
			108A	11.5	13.8	23	25	20	43	24	25	22	44	25	25	23	45	27	30	24	46
			109A	14.0	16.8	26	30	24	43	28	30	25	44	29	30	26	45	30	30	28	46
		STD	NONE	–	–	10	15	10	45	11	15	11	46	13	15	12	47	14	15	13	48
			106A	6.0	7.2	12	15	11	45	13	15	12	46	15	15	13	47	16	20	14	48
			107A	8.8	10.6	16	20	15	45	18	20	16	46	19	20	17	47	20	20	18	48
			108A	11.5	13.8	20	20	18	45	22	25	19	46	23	25	21	47	24	25	22	48
			109A	14.0	16.8	24	25	22	45	25	25	23	46	27	30	24	47	28	30	25	48
		MED	NONE	–	–	10	15	10	45	11	15	11	46	13	15	12	47	14	15	13	48
			106A	6.0	7.2	12	15	11	45	13	15	12	46	15	15	13	47	16	20	14	48
			107A	8.8	10.6	16	20	15	45	18	20	16	46	19	20	17	47	20	20	18	48
			108A	11.5	13.8	20	20	18	45	22	25	19	46	23	25	21	47	24	25	22	48
			109A	14.0	16.8	24	25	22	45	25	25	23	46	27	30	24	47	28	30	25	48
		HIGH	NONE	–	–	11	15	10	54	12	15	11	55	13	15	13	56	14	20	14	57
			106A	6.0	7.2	13	15	11	54	14	15	12	55	15	15	14	56	17	20	15	57
			107A	8.8	10.6	17	20	15	54	18	20	16	55	20	20	18	56	21	25	19	57
			108A	11.5	13.8	21	25	19	54	22	25	20	55	24	25	21	56	25	25	23	57
			109A	14.0	16.8	25	25	22	54	26	30	23	55	27	30	25	56	29	30	26	57
	575–3–60	DD–STD	NONE	–	–	10	15	10	42	12	15	12	44	11	15	12	44	13	15	14	46
			297A	9.2	9.2	17	20	15	42	19	20	17	44	19	20	17	44	21	25	19	46
			298A	13.8	13.8	23	25	20	42	25	25	23	44	25	25	22	44	27	30	25	46
		STD	NONE	–	–	8	15	7	43	10	15	9	45	9	15	9	45	11	15	11	47
			297A	9.2	9.2	14	15	13	43	17	20	15	45	16	20	15	45	19	20	17	47
			298A	13.8	13.8	20	20	18	43	22	25	20	45	22	25	20	45	25	25	22	47
		MED	NONE	–	–	8	15	7	43	10	15	9	45	9	15	9	45	11	15	11	47
			297A	9.2	9.2	14	15	13	43	17	20	15	45	16	20	15	45	19	20	17	47
			298A	13.8	13.8	20	20	18	43	22	25	20	45	22	25	20	45	25	25	22	47
		HIGH	NONE	–	–	8	15	7	49	10	15	9	51	9	15	9	51	11	15	11	53
			297A	9.2	9.2	14	15	13	49	17	20	15	51	17	20	15	51	19	20	17	53
			298A	13.8	13.8	20	20	18	49	23	25	20	51	22	25	20	51	25	25	22	53

See “Legend and Notes for Tables 76 – 83” on page161

† Drive package is only available on Humidi–MiZer® equipped units.

Table 77 - UNIT WIRE SIZING DATA WITH FACTORY-INSTALLED HACR BREAKER (cont)

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC–A/B/F05	208/230–1–60*	DD–STD	NONE	–	–	37	50	35	127	38	50	37	129	41	60	41	132	43	60	43	134
			101A	3.3/4.4	15.9/18.3	37/37	50/50	35/35	127/127	38/38	50/50	37/37	129/129	41/41	60/60	41/41	132/132	43/43	60/60	43/43	134/134
			103B	6.5/8.7	31.4/36.3	55/55	60/60	45/50	127/127	57/57	60/60	47/52	129/129	61/61	70/70	50/56	132/132	63/63	70/70	52/58	134/134
			102A+102A	9.8/13.0	46.9/54.2	77/77	80/80	62/71	127/127	80/80	80/80	65/73	129/129	83/83	90/90	68/76	132/132	86/86	90/90	70/79	134/134
			103B+103B	13.1/17.4	62.8/72.5	100/100	100/100	81/92	127/127	103/103	110/110	83/94	129/129	106/106	110/110	86/97	132/132	109/109	110/110	88/100	134/134
			104B+104B	15.8/21.0	75.8/87.5	119/119	125/125	96/109	127/127	121/121	125/125	98/111	129/129	125/125	125/125	101/115	132/132	127/127	150/150	103/117	134/134
		STD†	NONE	–	–	34	50	32	132	36	50	35	134	39	60	38	137	41	60	40	139
			101A	3.3/4.4	15.9/18.3	34/34	50/50	32/32	132/132	36/36	50/50	35/35	134/134	39/39	60/60	38/38	137/137	41/41	60/60	40/40	139/139
			103B	6.5/8.7	31.4/36.3	52/52	60/60	42/47	132/132	54/54	60/60	44/50	134/134	58/58	60/60	47/53	137/137	60/60	60/60	49/55	139/139
			102A+102A	9.8/13.0	46.9/54.2	74/74	80/80	60/68	132/132	77/77	80/80	62/70	134/134	80/80	80/80	65/73	137/137	83/83	90/90	67/76	139/139
			103B+103B	13.1/17.4	62.8/72.5	97/97	100/100	78/89	132/132	100/100	100/100	80/91	134/134	103/103	110/110	83/95	137/137	106/106	110/110	86/97	139/139
			104B+104B	15.8/21.0	75.8/87.5	116/116	125/125	93/106	132/132	118/118	125/125	95/108	134/134	122/122	125/125	98/112	137/137	124/124	125/125	101/114	139/139
		MED†	NONE	–	–	34	50	32	132	36	50	35	134	39	60	38	137	41	60	40	139
			101A	3.3/4.4	15.9/18.3	34/34	50/50	32/32	132/132	36/36	50/50	35/35	134/134	39/39	60/60	38/38	137/137	41/41	60/60	40/40	139/139
			103B	6.5/8.7	31.4/36.3	52/52	60/60	42/47	132/132	54/54	60/60	44/50	134/134	58/58	60/60	47/53	137/137	60/60	60/60	49/55	139/139
			102A+102A	9.8/13.0	46.9/54.2	74/74	80/80	60/68	132/132	77/77	80/80	62/70	134/134	80/80	80/80	65/73	137/137	83/83	90/90	67/76	139/139
			103B+103B	13.1/17.4	62.8/72.5	97/97	100/100	78/89	132/132	100/100	100/100	80/91	134/134	103/103	110/110	83/95	137/137	106/106	110/110	86/97	139/139
			104B+104B	15.8/21.0	75.8/87.5	116/116	125/125	93/106	132/132	118/118	125/125	95/108	134/134	122/122	125/125	98/112	137/137	124/124	125/125	101/114	139/139
	208/230–3–60	DD–STD	NONE	–	–	26	30	26	93	28	40	28	95	31	40	31	98	33	45	34	100
			102A	4.9/6.5	13.6/15.6	29/29	30/30	26/26	93/93	32/32	40/40	28/29	95/95	35/35	40/40	31/32	98/98	38/38	45/45	34/34	100/100
			103B	6.5/8.7	18.1/20.9	36/36	40/40	29/33	93/93	38/38	40/40	32/35	95/95	42/42	45/45	35/38	98/98	44/44	45/45	37/40	100/100
			105A	12.0/16.0	33.4/38.5	58/58	60/60	47/53	93/93	60/60	60/60	49/55	95/95	64/64	70/70	52/58	98/98	66/66	70/70	55/60	100/100
			104B+104B	15.8/21.0	43.8/50.5	73/73	80/80	59/67	93/93	75/75	80/80	61/69	95/95	79/79	80/80	64/72	98/98	81/81	90/90	67/74	100/100
		STD	NONE	–	–	24	30	23	98	26	30	25	100	29	40	29	103	31	40	31	105
			102A	4.9/6.5	13.6/15.6	26/26	30/30	23/24	98/98	28/28	30/30	25/26	100/100	32/32	40/40	29/29	103/103	34/34	40/40	31/31	105/105
			103B	6.5/8.7	18.1/20.9	33/33	35/35	26/30	98/98	35/35	35/35	29/32	100/100	39/39	40/40	32/35	103/103	41/41	45/45	34/37	105/105
			105A	12.0/16.0	33.4/38.5	55/55	60/60	44/50	98/98	57/57	60/60	46/52	100/100	61/61	70/70	50/55	103/103	63/63	70/70	52/58	105/105
			104B+104B	15.8/21.0	43.8/50.5	70/70	70/70	56/64	98/98	72/72	80/80	58/66	100/100	76/76	80/80	62/69	103/103	78/78	80/80	64/71	105/105
		MED	NONE	–	–	24	30	23	105	26	30	26	107	29	40	29	110	31	40	31	112
			102A	4.9/6.5	13.6/15.6	26/26	30/30	23/24	105/105	29/29	30/30	26/26	107/107	32/32	40/40	29/29	110/110	35/35	40/40	31/32	112/112
			103B	6.5/8.7	18.1/20.9	33/33	35/35	27/30	105/105	35/35	40/40	29/32	107/107	39/39	40/40	32/36	110/110	41/41	45/45	35/38	112/112
			105A	12.0/16.0	33.4/38.5	55/55	60/60	44/50	105/105	57/57	60/60	47/52	107/107	61/61	70/70	50/56	110/110	63/63	70/70	52/58	112/112
			104B+104B	15.8/21.0	43.8/50.5	70/70	70/70	56/64	105/105	72/72	80/80	59/66	107/107	76/76	80/80	62/70	110/110	78/78	80/80	64/72	112/112
		HIGH	NONE	–	–	26	30	26	142	28	40	28	144	31	40	32	147	33	45	34	149
			102A	4.9/6.5	13.6/15.6	29/29	30/30	26/27	142/142	32/32	40/40	28/29	144/144	35/35	40/40	32/32	147/147	38/38	45/45	34/34	149/149
			103B	6.5/8.7	18.1/20.9	36/36	40/40	29/33	142/142	38/38	40/40	32/35	144/144	42/42	45/45	35/38	147/147	44/44	45/45	37/40	149/149
			105A	12.0/16.0	33.4/38.5	58/58	60/60	47/53	142/142	60/60	60/60	49/55	144/144	64/64	70/70	53/58	147/147	66/66	70/70	55/61	149/149
			104B+104B	15.8/21.0	43.8/50.5	73/73	80/80	59/67	142/142	75/75	80/80	61/69	144/144	79/79	80/80	65/72	147/147	81/81	90/90	67/74	149/149

† Drive package is only available on Humidi–MiZer® equipped units.

* Single phase units are no longer available with factory installed Powered 115 Volt Convenience Outlet option.

Table 77 - UNIT WIRE SIZING DATA WITH FACTORY-INSTALLED HACR BREAKER (cont)

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC–A/B/F05	460–3–60	DD–STD	NONE	–	–	13	15	13	47	14	20	14	48	15	20	15	49	16	20	16	50
			106A	6.0	7.2	14	15	13	47	16	20	14	48	17	20	15	49	18	20	17	50
			108A	11.5	13.8	23	25	20	47	24	25	22	48	25	25	23	49	27	30	24	50
			109A	14.0	16.8	26	30	24	47	28	30	25	48	29	30	26	49	30	30	28	50
			108A+108A	23.0	27.7	40	40	36	47	41	45	38	48	43	45	39	49	44	45	40	50
		STD	NONE	–	–	11	15	11	49	12	15	12	50	13	15	13	51	14	20	14	52
			106A	6.0	7.2	12	15	11	49	13	15	12	50	15	15	13	51	16	20	14	52
			108A	11.5	13.8	20	20	18	49	22	25	19	50	23	25	21	51	24	25	22	52
			109A	14.0	16.8	24	25	22	49	25	25	23	50	27	30	24	51	28	30	25	52
			108A+108A	23.0	27.7	38	40	34	49	39	40	35	50	40	45	37	51	42	45	38	52
		MED	NONE	–	–	12	15	11	52	13	15	12	53	14	20	14	54	15	20	15	55
			106A	6.0	7.2	13	15	11	52	14	15	12	53	15	20	14	54	17	20	15	55
			108A	11.5	13.8	21	25	19	52	22	25	20	53	24	25	21	54	25	25	23	55
			109A	14.0	16.8	25	25	22	52	26	30	23	53	27	30	25	54	29	30	26	55
			108A+108A	23.0	27.7	38	40	35	52	40	40	36	53	41	45	37	54	42	45	39	55
		HIGH	NONE	–	–	13	15	12	71	14	15	13	72	15	20	15	73	16	20	16	74
			106A	6.0	7.2	14	15	12	71	15	15	13	72	16	20	15	73	18	20	16	74
			108A	11.5	13.8	22	25	20	71	23	25	21	72	25	25	22	73	26	30	23	74
			109A	14.0	16.8	26	30	23	71	27	30	24	72	28	30	26	73	30	30	27	74
			108A+108A	23.0	27.7	39	40	36	71	41	45	37	72	42	45	38	73	43	45	39	74
	575–3–60	DD–STD	NONE	–	–	11	15	11	39	13	15	13	41	13	15	13	41	15	20	15	43
			297A	9.2	9.2	17	20	15	39	19	20	17	41	19	20	17	41	21	25	19	43
			298A	13.8	13.8	23	25	20	39	25	25	23	41	25	25	22	41	27	30	25	43
		STD	NONE	–	–	9	15	9	40	11	15	11	42	11	15	11	42	13	15	13	44
			297A	9.2	9.2	14	15	13	40	17	20	15	42	16	20	15	42	19	20	17	44
			298A	13.8	13.8	20	20	18	40	22	25	20	42	22	25	20	42	25	25	22	44
		MED	NONE	–	–	9	15	8	42	11	15	11	44	11	15	10	44	13	15	13	46
			297A	9.2	9.2	14	15	12	42	16	20	15	44	16	20	14	44	18	20	17	46
			298A	13.8	13.8	20	20	18	42	22	25	20	44	22	25	20	44	24	25	22	46
		HIGH	NONE	–	–	10	15	10	57	12	15	12	59	12	15	12	59	14	15	14	61
			297A	9.2	9.2	15	15	14	57	18	20	16	59	18	20	16	59	20	20	18	61
			298A	13.8	13.8	21	25	19	57	24	25	21	59	23	25	21	59	26	30	23	61

See “Legend and Notes for Tables 76 – 83” on page161

† Drive package is only available on Humidi–MiZer® equipped units.

Table 77 - UNIT WIRE SIZING DATA WITH FACTORY-INSTALLED HACR BREAKER (cont)

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC–A/B/F06	208/230–1–60*	DD–STD	NONE	–	–	41	60	39	144	42	60	41	146	45	60	44	149	47	60	47	151
			102A	4.9/6.5	23.5/27.1	44/44	60/60	39/40	144/144	46/46	60/60	41/42	146/146	50/50	60/60	44/45	149/149	52/52	60/60	47/47	151/151
			103B	6.5/8.7	31.4/36.3	55/55	60/60	45/50	144/144	57/57	60/60	47/52	146/146	61/61	70/70	50/56	149/149	63/63	70/70	52/58	151/151
			102A+102A	9.8/13.0	46.9/54.2	77/77	80/80	62/71	144/144	80/80	80/80	65/73	146/146	83/83	90/90	68/76	149/149	86/86	90/90	70/79	151/151
			103B+103B	13.1/17.4	62.8/72.5	100/100	100/100	81/92	144/144	103/103	110/110	83/94	146/146	106/106	110/110	86/97	149/149	109/109	110/110	88/100	151/151
			104B+104B	15.8/21.0	75.8/87.5	119/119	125/125	96/109	144/144	121/121	125/125	98/111	146/146	125/125	125/125	101/115	149/149	127/127	150/150	103/117	151/151
		STD†	NONE	–	–	38	60	36	149	40	60	38	151	43	60	42	154	45	60	44	156
			102A	4.9/6.5	23.5/27.1	40/40	60/60	36/37	149/149	43/43	60/60	38/39	151/151	46/46	60/60	42/42	154/154	49/49	60/60	44/45	156/156
			103B	6.5/8.7	31.4/36.3	52/52	60/60	42/47	149/149	54/54	60/60	44/50	151/151	58/58	60/60	47/53	154/154	60/60	60/60	49/55	156/156
			102A+102A	9.8/13.0	46.9/54.2	74/74	80/80	60/68	149/149	77/77	80/80	62/70	151/151	80/80	80/80	65/73	154/154	83/83	90/90	67/76	156/156
			103B+103B	13.1/17.4	62.8/72.5	97/97	100/100	78/89	149/149	100/100	100/100	80/91	151/151	103/103	110/110	83/95	154/154	106/106	110/110	86/97	156/156
			104B+104B	15.8/21.0	75.8/87.5	116/116	125/125	93/106	149/149	118/118	125/125	95/108	151/151	122/122	125/125	98/112	154/154	124/124	125/125	101/114	156/156
		MED†	NONE	–	–	40	60	38	174	42	60	41	176	45	60	44	179	47	60	46	181
			102A	4.9/6.5	23.5/27.1	43/43	60/60	38/39	174/174	45/45	60/60	41/41	176/176	49/49	60/60	44/45	179/179	51/51	60/60	46/47	181/181
			103B	6.5/8.7	31.4/36.3	55/55	60/60	44/50	174/174	57/57	60/60	46/52	176/176	61/61	70/70	50/55	179/179	63/63	70/70	52/58	181/181
			102A+102A	9.8/13.0	46.9/54.2	77/77	80/80	62/70	174/174	79/79	80/80	64/73	176/176	83/83	90/90	68/76	179/179	85/85	90/90	70/78	181/181
			103B+103B	13.1/17.4	62.8/72.5	100/100	100/100	80/91	174/174	102/102	110/110	82/94	176/176	106/106	110/110	86/97	179/179	108/108	110/110	88/99	181/181
			104B+104B	15.8/21.0	75.8/87.5	119/119	125/125	95/109	174/174	121/121	125/125	97/111	176/176	125/125	125/125	101/114	179/179	127/127	150/150	103/116	181/181
	208/230–3–60	DD–STD	NONE	–	–	29	40	28	120	31	45	31	122	34	45	34	125	36	50	36	127
			102A	4.9/6.5	13.6/15.6	29/29	40/40	28/28	120/120	32/32	45/45	31/31	122/122	35/35	45/45	34/34	125/125	38/38	50/50	36/36	127/127
			104B	7.9/10.5	21.9/25.3	41/41	45/45	34/38	120/120	44/44	45/45	36/40	122/122	47/47	50/50	39/43	125/125	50/50	50/50	41/45	127/127
			105A	12.0/16.0	33.4/38.5	58/58	60/60	47/53	120/120	60/60	60/60	49/55	122/122	64/64	70/70	52/58	125/125	66/66	70/70	55/60	127/127
			104B+104B	15.8/21.0	43.8/50.5	73/73	80/80	59/67	120/120	75/75	80/80	61/69	122/122	79/79	80/80	64/72	125/125	81/81	90/90	67/74	127/127
			104B+105A	19.9/26.5	55.2/63.8	89/89	90/90	72/82	120/120	92/92	100/100	74/84	122/122	95/95	100/100	78/87	125/125	98/98	100/100	80/90	127/127
		STD	NONE	–	–	27	40	26	125	29	40	28	127	31	45	31	130	33	45	33	132
			102A	4.9/6.5	13.6/15.6	27/27	40/40	26/26	125/125	29/29	40/40	28/28	127/127	32/32	45/45	31/31	130/130	34/34	45/45	33/33	132/132
			104B	7.9/10.5	21.9/25.3	38/38	40/40	31/35	125/125	41/41	45/45	33/37	127/127	44/44	45/45	36/40	130/130	47/47	50/50	39/42	132/132
			105A	12.0/16.0	33.4/38.5	55/55	60/60	44/50	125/125	57/57	60/60	46/52	127/127	61/61	70/70	50/55	130/130	63/63	70/70	52/58	132/132
			104B+104B	15.8/21.0	43.8/50.5	70/70	70/70	56/64	125/125	72/72	80/80	58/66	127/127	76/76	80/80	62/69	130/130	78/78	80/80	64/71	132/132
			104B+105A	19.9/26.5	55.2/63.8	86/86	90/90	69/79	125/125	89/89	90/90	71/81	127/127	92/92	100/100	75/85	130/130	95/95	100/100	77/87	132/132
		MED	NONE	–	–	27	40	26	143	29	40	28	145	32	45	31	148	34	45	34	150
			102A	4.9/6.5	13.6/15.6	27/27	40/40	26/26	143/143	29/29	40/40	28/28	145/145	32/32	45/45	31/31	148/148	35/35	45/45	34/34	150/150
			104B	7.9/10.5	21.9/25.3	39/39	40/40	31/35	143/143	41/41	45/45	33/37	145/145	45/45	45/45	37/41	148/148	47/47	50/50	39/43	150/150
			105A	12.0/16.0	33.4/38.5	55/55	60/60	44/50	143/143	57/57	60/60	47/52	145/145	61/61	70/70	50/56	148/148	63/63	70/70	52/58	150/150
			104B+104B	15.8/21.0	43.8/50.5	70/70	70/70	56/64	143/143	72/72	80/80	59/66	145/145	76/76	80/80	62/70	148/148	78/78	80/80	64/72	150/150
			104B+105A	19.9/26.5	55.2/63.8	87/87	90/90	69/79	143/143	89/89	90/90	72/82	145/145	93/93	100/100	75/85	148/148	95/95	100/100	77/87	150/150
		HIGH	NONE	–	–	29	40	29	169	31	45	31	171	34	45	34	174	36	50	36	176
			102A	4.9/6.5	13.6/15.6	29/29	40/40	29/29	169/169	32/32	45/45	31/31	171/171	35/35	45/45	34/34	174/174	38/38	50/50	36/36	176/176
			104B	7.9/10.5	21.9/25.3	41/41	45/45	34/38	169/169	44/44	45/45	36/40	171/171	47/47	50/50	39/43	174/174	50/50	50/50	42/45	176/176
			105A	12.0/16.0	33.4/38.5	58/58	60/60	47/53	169/169	60/60	60/60	49/55	171/171	64/64	70/70	53/58	174/174	66/66	70/70	55/61	176/176
			104B+104B	15.8/21.0	43.8/50.5	73/73	80/80	59/67	169/169	75/75	80/80	61/69	171/171	79/79	80/80	65/72	174/174	81/81	90/90	67/74	176/176
			104B+105A	19.9/26.5	55.2/63.8	90/90	90/90	72/82	169/169	92/92	100/100	74/84	171/171	96/96	100/100	78/88	174/174	98/98	100/100	80/90	176/176

See “Legend and Notes for Tables 76 – 83” on page161

† Drive package is only available on Humidi–MiZer® equipped units.

* Single phase units are no longer available with factory installed Powered 115 Volt Convenience Outlet option.

Table 77 - UNIT WIRE SIZING DATA WITH FACTORY-INSTALLED HACR BREAKER (cont)

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC–A/B/F06	460–3–60	DD–STD	NONE	–	–	14	20	14	58	15	20	15	59	16	20	16	60	17	20	17	61
			106A	6.0	7.2	14	20	14	58	16	20	15	59	17	20	16	60	18	20	17	61
			108A	11.5	13.8	23	25	20	58	24	25	22	59	25	25	23	60	27	30	24	61
			109A	14.0	16.8	26	30	24	58	28	30	25	59	29	30	26	60	30	30	28	61
			108A+108A	23.0	27.7	40	40	36	58	41	45	38	59	43	45	39	60	44	45	40	61
			108A+109A	25.5	30.7	44	45	40	58	45	45	41	59	47	50	42	60	48	50	44	61
		STD	NONE	–	–	12	15	12	60	13	15	13	61	14	20	14	62	15	20	15	63
			106A	6.0	7.2	12	15	12	60	13	15	13	61	15	20	14	62	16	20	15	63
			108A	11.5	13.8	20	20	18	60	22	25	19	61	23	25	21	62	24	25	22	63
			109A	14.0	16.8	24	25	22	60	25	25	23	61	27	30	24	62	28	30	25	63
			108A+108A	23.0	27.7	38	40	34	60	39	40	35	61	40	45	37	62	42	45	38	63
			108A+109A	25.5	30.7	41	45	38	60	43	45	39	61	44	45	40	62	45	50	41	63
		MED	NONE	–	–	13	15	12	69	14	20	13	70	15	20	15	71	16	20	16	72
			106A	6.0	7.2	13	15	12	69	14	20	13	70	15	20	15	71	17	20	16	72
			108A	11.5	13.8	21	25	19	69	22	25	20	70	24	25	21	71	25	25	23	72
			109A	14.0	16.8	25	25	22	69	26	30	23	70	27	30	25	71	29	30	26	72
			108A+108A	23.0	27.7	38	40	35	69	40	40	36	70	41	45	37	71	42	45	39	72
			108A+109A	25.5	30.7	42	45	38	69	43	45	39	70	45	45	41	71	46	50	42	72
		HIGH	NONE	–	–	14	20	13	82	15	20	14	83	16	20	16	84	17	20	17	85
			106A	6.0	7.2	14	20	13	82	15	20	14	83	16	20	16	84	18	20	17	85
			108A	11.5	13.8	22	25	20	82	23	25	21	83	25	25	22	84	26	30	23	85
			109A	14.0	16.8	26	30	23	82	27	30	24	83	28	30	26	84	30	30	27	85
			108A+108A	23.0	27.7	39	40	36	82	41	45	37	83	42	45	38	84	43	45	39	85
			108A+109A	25.5	30.7	43	45	39	82	44	45	40	83	46	50	42	84	47	50	43	85
	575–3–60	DD–STD	NONE	–	–	12	15	12	46	14	15	14	48	13	15	13	48	15	20	16	50
			298A	13.8	13.8	23	25	20	46	25	25	23	48	25	25	22	48	27	30	25	50
			301A	23.0	23.1	34	35	31	46	37	40	33	48	36	40	33	48	39	40	35	50
		STD	NONE	–	–	10	15	9	47	12	15	11	49	11	15	11	49	13	15	13	51
			298A	13.8	13.8	20	20	18	47	22	25	20	49	22	25	20	49	25	25	22	51
			301A	23.0	23.1	32	35	29	47	34	35	31	49	34	35	31	49	36	40	33	51
		MED	NONE	–	–	10	15	9	53	12	15	11	55	11	15	11	55	13	15	13	57
			298A	13.8	13.8	20	20	18	53	23	25	20	55	22	25	20	55	25	25	22	57
			301A	23.0	23.1	32	35	29	53	34	35	31	55	34	35	31	55	36	40	33	57
		HIGH	NONE	–	–	11	15	10	64	12	15	12	66	12	15	12	66	14	15	14	68
			298A	13.8	13.8	21	25	19	64	24	25	21	66	23	25	21	66	26	30	23	68
			301A	23.0	23.1	33	35	30	64	35	35	32	66	35	35	32	66	37	40	34	68

See “Legend and Notes for Tables 76 – 83” on page161

† Drive package is only available on Humidi–MiZer® equipped units.

Table 78 – UNIT WIRE/FUSE OR HACR BREAKER SIZING DATA

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC**07	208/230–3–60	STD	NONE	–	–	32	50	31	148	36	50	36	152	37	50	37	153	41	50	41	157
			264A	4.9/6.5	13.6/15.6	32/32	50/50	31/31	148/148	36/36	50/50	36/36	152/152	37/37	50/50	37/37	153/153	41/41	50/50	41/41	157/157
			117A	7.8/10.4	21.7/25.0	34/38	50/50	31/35	148/148	39/43	50/50	36/39	152/152	40/44	50/50	37/40	153/153	45/49	50/50	41/45	157/157
			110A	12.0/16.0	33.4/38.5	49/55	50/60	44/50	148/148	53/60	60/60	49/55	152/152	55/61	60/70	50/56	153/153	59/66	60/70	54/60	157/157
			117A+117A	15.8/21.0	43.8/50.5	62/70	70/70	56/64	148/148	66/75	70/80	61/68	152/152	68/76	70/80	62/70	153/153	72/81	80/90	66/74	157/157
			110A+117A	19.9/26.5	55.2/63.8	76/87	80/90	69/79	148/148	81/91	90/100	74/84	152/152	82/93	90/100	75/85	153/153	87/97	90/100	79/89	157/157
		MED	NONE	–	–	35	50	34	185	39	50	38	189	40	50	39	190	43	60	44	194
			264A	4.9/6.5	13.6/15.6	35/35	50/50	34/34	185/185	39/39	50/50	38/38	189/189	40/40	50/50	39/39	190/190	43/43	60/60	44/44	194/194
			117A	7.8/10.4	21.7/25.0	37/41	50/50	34/37	185/185	42/46	50/50	38/42	189/189	43/47	50/50	39/43	190/190	48/52	60/60	44/47	194/194
			110A	12.0/16.0	33.4/38.5	52/58	60/60	47/53	185/185	56/63	60/70	51/57	189/189	58/64	60/70	53/58	190/190	62/69	70/70	57/63	194/194
			117A+117A	15.8/21.0	43.8/50.5	65/73	70/80	59/67	185/185	69/78	70/80	63/71	189/189	71/79	80/80	65/72	190/190	75/84	80/90	69/77	194/194
			110A+117A	19.9/26.5	55.2/63.8	79/90	80/90	72/82	185/185	84/94	90/100	76/86	189/189	85/96	90/100	78/88	190/190	90/100	90/100	82/92	194/194
		HIGH	NONE	–	–	42	60	43	211	46	60	47	215	47	60	48	216	51	60	52	220
			264A	4.9/6.5	13.6/15.6	42/42	60/60	43/43	211/211	46/46	60/60	47/47	215/215	47/47	60/60	48/48	216/216	51/51	60/60	52/52	220/220
			117A	7.8/10.4	21.7/25.0	46/50	60/60	43/46	211/211	51/55	60/60	47/50	215/215	52/56	60/60	48/52	216/216	57/61	60/70	52/56	220/220
			110A	12.0/16.0	33.4/38.5	61/67	70/70	56/62	211/211	66/72	70/80	60/66	215/215	67/73	70/80	61/67	216/216	72/78	80/80	66/71	220/220
			117A+117A	15.8/21.0	43.8/50.5	74/82	80/90	68/75	211/211	79/87	80/90	72/80	215/215	80/88	80/90	73/81	216/216	85/93	90/100	78/85	220/220
			110A+117A	19.9/26.5	55.2/63.8	88/99	90/100	81/91	211/211	93/104	100/110	85/95	215/215	94/105	100/110	86/96	216/216	99/110	100/110	91/101	220/220
	460–3–60	STD	NONE	–	–	17	25	16	75	19	25	18	77	19	25	19	77	21	30	21	79
			265A	6.0	7.2	17	25	16	75	19	25	18	77	19	25	19	77	21	30	21	79
			266A	11.5	13.8	21	25	19	75	23	25	21	77	24	25	21	77	26	30	23	79
			267A	14.0	16.8	25	25	22	75	27	30	24	77	27	30	25	77	30	30	27	79
			268A	23.0	27.7	38	40	35	75	41	45	37	77	41	45	37	77	43	45	39	79
			269A	25.5	30.7	42	45	38	75	44	45	40	77	45	45	41	77	47	50	43	79
		MED	NONE	–	–	18	25	17	94	19	25	19	96	20	25	19	96	22	30	22	98
			265A	6.0	7.2	18	25	17	94	19	25	19	96	20	25	19	96	22	30	22	98
			266A	11.5	13.8	22	25	20	94	24	25	22	96	25	25	22	96	27	30	24	98
			267A	14.0	16.8	26	30	23	94	28	30	25	96	28	30	26	96	31	35	28	98
			268A	23.0	27.7	39	40	36	94	42	45	38	96	42	45	38	96	44	45	40	98
			269A	25.5	30.7	43	45	39	94	45	45	41	96	46	50	42	96	48	50	44	98
		HIGH	NONE	–	–	22	30	22	107	23	30	24	109	24	30	24	109	26	30	26	111
			265A	6.0	7.2	22	30	22	107	23	30	24	109	24	30	24	109	26	30	26	111
			266A	11.5	13.8	27	30	24	107	29	30	26	109	30	30	27	109	32	35	29	111
			267A	14.0	16.8	31	35	28	107	33	35	30	109	33	35	30	109	36	40	32	111
			268A	23.0	27.7	44	45	40	107	47	50	42	109	47	50	43	109	49	50	45	111
			269A	25.5	30.7	48	50	44	107	50	50	46	109	51	60	46	109	53	60	48	111
	575–3–60	STD	NONE	–	–	12	15	11	61	16	20	16	65	14	20	13	63	18	20	18	67
			118A	17.0	20.4	27	30	25	61	32	35	29	65	30	30	27	63	34	35	31	67
			299A	25.7	25.8	34	35	31	61	39	40	35	65	36	40	33	63	41	45	37	67
		MED	NONE	–	–	14	20	13	76	18	20	17	80	15	20	15	78	19	25	19	82
			118A	17.0	20.4	29	30	27	76	34	35	31	80	32	35	29	78	36	40	33	82
			299A	25.7	25.8	36	40	33	76	41	45	37	80	38	40	35	78	43	45	39	82
		HIGH	NONE	–	–	17	20	16	90	20	25	21	94	18	25	18	92	22	25	23	96
			118A	17.0	20.4	33	35	30	90	38	40	34	94	35	35	32	92	40	40	36	96
			299A	25.7	25.8	40	40	36	90	44	45	40	94	42	45	38	92	47	50	42	96

Table 78 - UNIT WIRE/FUSE OR HACR BREAKER SIZING DATA (cont)

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC**08	208/230–3–60	STD	NONE	–	–	39	50	41	191	43	50	45	195	44	50	46	196	48	60	51	200
			117A	7.8/10.4	21.7/25.0	39/39	50/50	41/41	191/191	43/43	50/50	45/45	195/195	44/44	50/50	46/46	196/196	48/49	60/60	51/51	200/200
			110A	12.0/16.0	33.4/38.5	49/55	50/60	44/50	191/191	53/60	60/60	49/55	195/195	55/61	60/70	50/56	196/196	59/66	60/70	54/60	200/200
			111A	18.6/24.8	51.7/59.7	72/82	80/90	65/75	191/191	76/86	80/90	70/79	195/195	78/88	80/90	71/80	196/196	82/92	90/100	75/85	200/200
			112A	24.0/32.0	66.7/77.0	90/103	90/110	83/95	191/191	95/108	100/110	87/99	195/195	96/109	100/110	88/100	196/196	101/114	110/125	93/104	200/200
			112A+117A	31.8/42.4	88.4/102.0	117/134	125/150	108/123	191/191	122/139	125/150	112/128	195/195	123/140	125/150	113/129	196/196	128/145	150/150	118/133	200/200
		MED	NONE	–	–	39	50	41	202	43	50	45	206	44	50	46	207	48	60	51	211
			117A	7.8/10.4	21.7/25.0	39/39	50/50	41/41	202/202	43/43	50/50	45/45	206/206	44/44	50/50	46/46	207/207	48/49	60/60	51/51	211/211
			110A	12.0/16.0	33.4/38.5	49/55	50/60	44/50	202/202	53/60	60/60	49/55	206/206	55/61	60/70	50/56	207/207	59/66	60/70	54/60	211/211
			111A	18.6/24.8	51.7/59.7	72/82	80/90	65/75	202/202	76/86	80/90	70/79	206/206	78/88	80/90	71/80	207/207	82/92	90/100	75/85	211/211
			112A	24.0/32.0	66.7/77.0	90/103	90/110	83/95	202/202	95/108	100/110	87/99	206/206	96/109	100/110	88/100	207/207	101/114	110/125	93/104	211/211
			112A+117A	31.8/42.4	88.4/102.0	117/134	125/150	108/123	202/202	122/139	125/150	112/128	206/206	123/140	125/150	113/129	207/207	128/145	150/150	118/133	211/211
		HIGH	NONE	–	–	44	50	46	245	48	60	51	249	49	60	52	250	53	60	56	254
			117A	7.8/10.4	21.7/25.0	44/44	50/50	46/46	245/245	48/49	60/60	51/51	249/249	49/50	60/60	52/52	250/250	53/55	60/60	56/56	254/254
			110A	12.0/16.0	33.4/38.5	55/61	60/70	50/56	245/245	59/66	60/70	54/60	249/249	61/67	70/70	55/61	250/250	65/72	70/80	60/66	254/254
			111A	18.6/24.8	51.7/59.7	78/88	80/90	71/80	245/245	82/92	90/100	75/85	249/249	84/94	90/100	76/86	250/250	88/98	90/100	81/90	254/254
			112A	24.0/32.0	66.7/77.0	96/109	100/110	88/100	245/245	101/114	110/125	93/104	249/249	102/115	110/125	94/106	250/250	107/120	110/125	98/110	254/254
			112A+117A	31.8/42.4	88.4/102.0	123/140	125/150	113/129	245/245	128/145	150/150	118/133	249/249	129/146	150/150	119/134	250/250	134/151	150/175	123/139	254/254
	460–3–60	STD	NONE	–	–	18	20	19	95	20	25	21	97	21	25	21	97	22	25	23	99
			116A	13.9	16.7	25	25	22	95	27	30	24	97	27	30	25	97	30	30	27	99
			113A	16.5	19.8	28	30	26	95	31	35	28	97	31	35	28	97	33	35	30	99
			114A	27.8	33.4	45	50	41	95	48	50	43	97	48	50	44	97	50	60	46	99
			115A	33.0	39.7	53	60	49	95	56	60	51	97	56	60	51	97	58	60	53	99
			114A+116A	41.7	50.2	66	70	61	95	69	70	63	97	69	70	63	97	71	80	65	99
		MED	NONE	–	–	18	20	19	101	20	25	21	103	21	25	21	103	22	25	23	105
			116A	13.9	16.7	25	25	22	101	27	30	24	103	27	30	25	103	30	30	27	105
			113A	16.5	19.8	28	30	26	101	31	35	28	103	31	35	28	103	33	35	30	105
			114A	27.8	33.4	45	50	41	101	48	50	43	103	48	50	44	103	50	60	46	105
			115A	33.0	39.7	53	60	49	101	56	60	51	103	56	60	51	103	58	60	53	105
			114A+116A	41.7	50.2	66	70	61	101	69	70	63	103	69	70	63	103	71	80	65	105
		HIGH	NONE	–	–	20	25	21	123	22	25	23	125	22	25	23	125	24	30	26	127
			116A	13.9	16.7	27	30	24	123	29	30	26	125	30	30	27	125	32	35	29	127
			113A	16.5	19.8	31	35	28	123	33	35	30	125	33	35	30	125	36	40	32	127
			114A	27.8	33.4	48	50	43	123	50	50	46	125	50	60	46	125	53	60	48	127
			115A	33.0	39.7	56	60	51	123	58	60	53	125	58	60	53	125	61	70	55	127
			114A+116A	41.7	50.2	69	70	63	123	71	80	65	125	71	80	65	125	74	80	67	127
	575–3–60	STD	NONE	–	–	12	15	12	77	16	20	17	81	14	15	14	79	18	20	19	83
			118A	17.0	20.4	27	30	25	77	32	35	29	81	30	30	27	79	34	35	31	83
			119A	34.0	40.9	53	60	48	77	58	60	53	81	55	60	50	79	60	60	55	83
		MED	NONE	–	–	13	15	13	81	17	20	18	85	15	20	15	83	19	20	20	87
			118A	17.0	20.4	28	30	26	81	33	35	30	85	31	35	28	83	35	35	32	87
			119A	34.0	40.9	54	60	49	81	59	60	54	85	56	60	51	83	61	70	56	87
		HIGH	NONE	–	–	14	15	14	92	18	20	19	96	16	20	16	94	19	25	21	98
			118A	17.0	20.4	29	30	27	92	34	35	31	96	32	35	29	94	36	40	33	98
			119A	34.0	40.9	55	60	50	92	60	60	55	96	57	60	52	94	62	70	57	98

See “Legend and Notes for Tables 76 – 83” on page161

Table 78 - UNIT WIRE/FUSE OR HACR BREAKER SIZING DATA (cont)

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC**09	208/230–3–60	STD	NONE	–	–	39	50	41	191	43	50	45	195	44	50	46	196	48	60	51	200
			117A	7.8/10.4	21.7/25.0	39/39	50/50	41/41	191/191	43/43	50/50	45/45	195/195	44/44	50/50	46/46	196/196	48/49	60/60	51/51	200/200
			110A	12.0/16.0	33.4/38.5	49/55	50/60	44/50	191/191	53/60	60/60	49/55	195/195	55/61	60/70	50/56	196/196	59/66	60/70	54/60	200/200
			111A	18.6/24.8	51.7/59.7	72/82	80/90	65/75	191/191	76/86	80/90	70/79	195/195	78/88	80/90	71/80	196/196	82/92	90/100	75/85	200/200
			112A	24.0/32.0	66.7/77.0	90/103	90/110	83/95	191/191	95/108	100/110	87/99	195/195	96/109	100/110	88/100	196/196	101/114	110/125	93/104	200/200
			112A+117A	31.8/42.4	88.4/102.0	117/134	125/150	108/123	191/191	122/139	125/150	112/128	195/195	123/140	125/150	113/129	196/196	128/145	150/150	118/133	200/200
		MED	NONE	–	–	39	50	41	202	43	50	45	206	44	50	46	207	48	60	51	211
			117A	7.8/10.4	21.7/25.0	39/39	50/50	41/41	202/202	43/43	50/50	45/45	206/206	44/44	50/50	46/46	207/207	48/49	60/60	51/51	211/211
			110A	12.0/16.0	33.4/38.5	49/55	50/60	44/50	202/202	53/60	60/60	49/55	206/206	55/61	60/70	50/56	207/207	59/66	60/70	54/60	211/211
			111A	18.6/24.8	51.7/59.7	72/82	80/90	65/75	202/202	76/86	80/90	70/79	206/206	78/88	80/90	71/80	207/207	82/92	90/100	75/85	211/211
			112A	24.0/32.0	66.7/77.0	90/103	90/110	83/95	202/202	95/108	100/110	87/99	206/206	96/109	100/110	88/100	207/207	101/114	110/125	93/104	211/211
			112A+117A	31.8/42.4	88.4/102.0	117/134	125/150	108/123	202/202	122/139	125/150	112/128	206/206	123/140	125/150	113/129	207/207	128/145	150/150	118/133	211/211
		HIGH	NONE	–	–	44	50	46	245	48	60	51	249	49	60	52	250	53	60	56	254
			117A	7.8/10.4	21.7/25.0	44/44	50/50	46/46	245/245	48/49	60/60	51/51	249/249	49/50	60/60	52/52	250/250	53/55	60/60	56/56	254/254
			110A	12.0/16.0	33.4/38.5	55/61	60/70	50/56	245/245	59/66	60/70	54/60	249/249	61/67	70/70	55/61	250/250	65/72	70/80	60/66	254/254
			111A	18.6/24.8	51.7/59.7	78/88	80/90	71/80	245/245	82/92	90/100	75/85	249/249	84/94	90/100	76/86	250/250	88/98	90/100	81/90	254/254
			112A	24.0/32.0	66.7/77.0	96/109	100/110	88/100	245/245	101/114	110/125	93/104	249/249	102/115	110/125	94/106	250/250	107/120	110/125	98/110	254/254
			112A+117A	31.8/42.4	88.4/102.0	123/140	125/150	113/129	245/245	128/145	150/150	118/133	249/249	129/146	150/150	119/134	250/250	134/151	150/175	123/139	254/254
	460–3–60	STD	NONE	–	–	19	20	19	95	20	25	21	97	21	25	22	97	23	25	24	99
			116A	13.9	16.7	25	25	22	95	27	30	24	97	27	30	25	97	30	30	27	99
			113A	16.5	19.8	28	30	26	95	31	35	28	97	31	35	28	97	33	35	30	99
			114A	27.8	33.4	45	50	41	95	48	50	43	97	48	50	44	97	50	60	46	99
			115A	33.0	39.7	53	60	49	95	56	60	51	97	56	60	51	97	58	60	53	99
			114A+116A	41.7	50.2	66	70	61	95	69	70	63	97	69	70	63	97	71	80	65	99
		MED	NONE	–	–	19	20	19	101	20	25	21	103	21	25	22	103	23	25	24	105
			116A	13.9	16.7	25	25	22	101	27	30	24	103	27	30	25	103	30	30	27	105
			113A	16.5	19.8	28	30	26	101	31	35	28	103	31	35	28	103	33	35	30	105
			114A	27.8	33.4	45	50	41	101	48	50	43	103	48	50	44	103	50	60	46	105
			115A	33.0	39.7	53	60	49	101	56	60	51	103	56	60	51	103	58	60	53	105
			114A+116A	41.7	50.2	66	70	61	101	69	70	63	103	69	70	63	103	71	80	65	105
		HIGH	NONE	–	–	20	25	21	123	22	25	23	125	23	25	24	125	24	30	26	127
			116A	13.9	16.7	27	30	24	123	29	30	26	125	30	30	27	125	32	35	29	127
			113A	16.5	19.8	31	35	28	123	33	35	30	125	33	35	30	125	36	40	32	127
			114A	27.8	33.4	48	50	43	123	50	50	46	125	50	60	46	125	53	60	48	127
			115A	33.0	39.7	56	60	51	123	58	60	53	125	58	60	53	125	61	70	55	127
			114A+116A	41.7	50.2	69	70	63	123	71	80	65	125	71	80	65	125	74	80	67	127
	575–3–60	STD	NONE	–	–	14	15	14	77	17	20	18	81	15	20	16	79	19	20	20	83
			118A	17.0	20.4	27	30	25	77	32	35	29	81	30	30	27	79	34	35	31	83
			119A	34.0	40.9	53	60	48	77	58	60	53	81	55	60	50	79	60	60	55	83
		MED	NONE	–	–	14	20	15	81	18	20	19	85	16	20	17	83	20	25	21	87
			118A	17.0	20.4	28	30	26	81	33	35	30	85	31	35	28	83	35	35	32	87
			119A	34.0	40.9	54	60	49	81	59	60	54	85	56	60	51	83	61	70	56	87
		HIGH	NONE	–	–	15	20	16	92	19	20	20	96	17	20	18	94	21	25	22	98
			118A	17.0	20.4	29	30	27	92	34	35	31	96	32	35	29	94	36	40	33	98
			119A	34.0	40.9	55	60	50	92	60	60	55	96	57	60	52	94	62	70	57	98

See “Legend and Notes for Tables 76 – 83” on page161

Table 78 - UNIT WIRE/FUSE OR HACR BREAKER SIZING DATA (cont)

UNIT	NO M. V - Ph - HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC**11	208/230 - 3 - 60	STD	NONE	–	–	49	60	51	257	53	60	55	261	54	60	57	262	57	70	61	266
			117A	7.8/10.4	21.7/25.0	49/49	60/60	51/51	257/257	53/53	60/60	55/55	261/261	54/54	60/60	57/57	262/262	57/57	70/70	61/61	266/266
			110A	12.0/16.0	33.4/38.5	49/55	60/60	51/51	257/257	53/60	60/60	55/55	261/261	55/61	60/70	57/57	262/262	59/66	70/70	61/61	266/266
			112A	24.0/32.0	66.7/77.0	90/103	90/110	83/95	257/257	95/108	100/110	87/99	261/261	96/109	100/110	88/100	262/262	101/114	110/125	93/104	266/266
			112A+117A	31.8/42.4	88.4/102.0	117/134	125/150	108/123	257/257	122/139	125/150	112/128	261/261	123/140	125/150	113/129	262/262	128/145	150/150	118/133	266/266
			112A+110A	37.6/50.0	104.2/120.3	137/127	150/150	126/144	257/257	142/132	150/150	130/149	261/261	143/133	150/150	131/150	262/262	148/138	150/150	136/154	266/266
		MED	NONE	–	–	54	60	57	300	57	70	61	304	58	70	62	305	62	70	66	309
			117A	7.8/10.4	21.7/25.0	54/54	60/60	57/57	300/300	57/57	70/70	61/61	304/304	58/58	70/70	62/62	305/305	62/62	70/70	66/66	309/309
			110A	12.0/16.0	33.4/38.5	55/61	60/70	57/57	300/300	59/66	70/70	61/61	304/304	61/67	70/70	62/62	305/305	65/72	70/80	66/66	309/309
			112A	24.0/32.0	66.7/77.0	96/109	100/110	88/100	300/300	101/114	110/125	93/104	304/304	102/115	110/125	94/106	305/305	107/120	110/125	98/110	309/309
			112A+117A	31.8/42.4	88.4/102.0	123/140	125/150	113/129	300/300	128/145	150/150	118/133	304/304	129/146	150/150	119/134	305/305	134/151	150/175	123/139	309/309
			112A+110A	37.6/50.0	104.2/120.3	143/133	150/150	131/150	300/300	148/138	150/150	136/154	304/304	149/139	150/150	137/155	305/305	154/144	175/175	141/160	309/309
		HIGH	NONE	–	–	59	70	62	309	62	70	67	313	63	70	68	314	67	80	72	318
			117A	7.8/10.4	21.7/25.0	59/59	70/70	62/62	309/309	62/62	70/70	67/67	313/313	63/63	70/70	68/68	314/314	67/67	80/80	72/72	318/318
			110A	12.0/16.0	33.4/38.5	61/67	70/70	62/62	309/309	66/72	70/80	67/67	313/313	67/73	70/80	68/68	314/314	72/78	80/80	72/72	318/318
			112A	24.0/32.0	66.7/77.0	103/115	110/125	94/106	309/309	107/120	110/125	98/110	313/313	109/121	110/125	99/111	314/314	113/126	125/150	104/116	318/318
			112A+117A	31.8/42.4	88.4/102.0	130/147	150/150	119/135	309/309	134/151	150/175	123/139	313/313	136/153	150/175	124/140	314/314	140/157	150/175	129/144	318/318
			112A+110A	37.6/50.0	104.2/120.3	149/140	150/175	137/156	309/309	154/144	175/175	141/160	313/313	155/146	175/175	143/161	314/314	160/150	175/175	147/165	318/318
	460 - 3 - 60	STD	NONE	–	–	22	25	23	123	24	30	25	125	25	30	26	125	26	30	28	127
			116A	13.9	16.7	25	25	23	123	27	30	25	125	27	30	26	125	30	30	28	127
			113A	16.5	19.8	28	30	26	123	31	35	28	125	31	35	28	125	33	35	30	127
			115A	33.0	39.7	53	60	49	123	56	60	51	125	56	60	51	125	58	60	53	127
			114A+116A	41.7	50.2	66	70	61	123	69	70	63	125	69	70	63	125	71	80	65	127
			115A+113A	50.0	60.1	64	70	72	123	66	70	74	125	67	70	75	125	69	70	77	127
		MED	NONE	–	–	24	30	25	145	26	30	27	147	26	30	28	147	28	30	30	149
			116A	13.9	16.7	27	30	25	145	29	30	27	147	30	30	28	147	32	35	30	149
			113A	16.5	19.8	31	35	28	145	33	35	30	147	33	35	30	147	36	40	32	149
			115A	33.0	39.7	56	60	51	145	58	60	53	147	58	60	53	147	61	70	55	149
			114A+116A	41.7	50.2	69	70	63	145	71	80	65	147	71	80	65	147	74	80	67	149
			115A+113A	50.0	60.1	66	80	74	145	68	80	76	147	69	80	77	147	71	80	79	149
		HIGH	NONE	–	–	27	30	29	149	29	35	31	151	30	35	31	151	31	35	33	153
			116A	13.9	16.7	31	35	29	149	33	35	31	151	33	35	31	151	36	40	33	153
			113A	16.5	19.8	34	35	31	149	37	40	33	151	37	40	34	151	39	40	36	153
			115A	33.0	39.7	59	60	54	149	62	70	56	151	62	70	57	151	64	70	59	153
			114A+116A	41.7	50.2	72	80	66	149	75	80	68	151	75	80	69	151	77	80	71	153
			115A+113A	50.0	60.1	70	80	78	149	72	80	80	151	73	80	80	151	75	80	82	153
	575 - 3 - 60	STD	NONE	–	–	18	20	18	95	21	25	23	99	19	25	20	97	23	25	24	101
			118A	17.0	20.4	28	30	26	95	33	35	30	99	31	35	28	97	35	35	32	101
			119A	34.0	40.9	54	60	49	95	59	60	54	99	56	60	51	97	61	70	56	101
			118A+119A	51.0	61.3	64	70	73	95	69	80	77	99	66	70	75	97	71	80	79	101
		MED	NONE	–	–	18	20	19	106	22	25	23	110	20	25	21	108	24	25	25	112
			118A	17.0	20.4	29	30	27	106	34	35	31	110	32	35	29	108	36	40	33	112
			119A	34.0	40.9	55	60	50	106	60	60	55	110	57	60	52	108	62	70	57	112
			118A+119A	51.0	61.3	65	70	74	106	70	80	78	110	67	70	76	108	72	80	80	112
		HIGH	NONE	–	–	21	25	22	120	25	30	27	124	23	25	24	122	27	30	29	126
			118A	17.0	20.4	33	35	30	120	38	40	34	124	35	35	32	122	40	40	36	126
			119A	34.0	40.9	59	60	53	120	63	70	58	124	61	70	55	122	65	70	60	126
			118A+119A	51.0	61.3	69	80	77	120	74	80	81	124	71	80	79	122	76	80	83	126

See “Legend and Notes for Tables 76 – 83” on page161

Table 78 - UNIT WIRE/FUSE OR HACR BREAKER SIZING DATA (cont)

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC**12	208/230–3–60	STD	NONE	–	–	48	60	50	282	51	60	54	286	52	60	55	287	56	60	60	291
			117A	7.8/10.4	21.7/25.0	48/48	60/60	50/50	282/282	51/51	60/60	54/54	286/286	52/52	60/60	55/55	287/287	56/56	60/60	60/60	291/291
			110A	12.0/16.0	33.4/38.5	49/55	60/60	50/50	282/282	53/60	60/60	54/55	286/286	55/61	60/70	55/56	287/287	59/66	60/70	60/60	291/291
			112A	24.0/32.0	66.7/77.0	90/103	90/110	83/95	282/282	95/108	100/110	87/99	286/286	96/109	100/110	88/100	287/287	101/114	110/125	93/104	291/291
			112A+117A	31.8/42.4	88.4/102.0	117/134	125/150	108/123	282/282	122/139	125/150	112/128	286/286	123/140	125/150	113/129	287/287	128/145	150/150	118/133	291/291
			112A+110A	37.6/50.0	104.2/120.3	137/127	150/150	126/144	282/282	142/132	150/150	130/149	286/286	143/133	150/150	131/150	287/287	148/138	150/150	136/154	291/291
		MED	NONE	–	–	52	60	55	325	56	60	60	329	57	70	61	330	61	70	65	334
			117A	7.8/10.4	21.7/25.0	52/52	60/60	55/55	325/325	56/56	60/60	60/60	329/329	57/57	70/70	61/61	330/330	61/61	70/70	65/65	334/334
			110A	12.0/16.0	33.4/38.5	55/61	60/70	55/56	325/325	59/66	60/70	60/60	329/329	61/67	70/70	61/61	330/330	65/72	70/80	65/66	334/334
			112A	24.0/32.0	66.7/77.0	96/109	100/110	88/100	325/325	101/114	110/125	93/104	329/329	102/115	110/125	94/106	330/330	107/120	110/125	98/110	334/334
			112A+117A	31.8/42.4	88.4/102.0	123/140	125/150	113/129	325/325	128/145	150/150	118/133	329/329	129/146	150/150	119/134	330/330	134/151	150/175	123/139	334/334
			112A+110A	37.6/50.0	104.2/120.3	143/133	150/150	131/150	325/325	148/138	150/150	136/154	329/329	149/139	150/150	137/155	330/330	154/144	175/175	141/160	334/334
		HIGH	NONE	–	–	57	70	61	334	61	70	65	338	62	70	66	339	66	80	71	343
			117A	7.8/10.4	21.7/25.0	57/57	70/70	61/61	334/334	61/61	70/70	65/65	338/338	62/62	70/70	66/66	339/339	66/66	80/80	71/71	343/343
			110A	12.0/16.0	33.4/38.5	61/67	70/70	61/62	334/334	66/72	70/80	65/66	338/338	67/73	70/80	66/67	339/339	72/78	80/80	71/71	343/343
			112A	24.0/32.0	66.7/77.0	103/115	110/125	94/106	334/334	107/120	110/125	98/110	338/338	109/121	110/125	99/111	339/339	113/126	125/150	104/116	343/343
			112A+117A	31.8/42.4	88.4/102.0	130/147	150/150	119/135	334/334	134/151	150/175	123/139	338/338	136/153	150/175	124/140	339/339	140/157	150/175	129/144	343/343
			112A+110A	37.6/50.0	104.2/120.3	149/140	150/175	137/156	334/334	154/144	175/175	141/160	338/338	155/146	175/175	143/161	339/339	160/150	175/175	147/165	343/343
	460–3–60	STD	NONE	–	–	23	30	24	135	25	30	26	137	26	30	27	137	27	30	29	139
			116A	13.9	16.7	25	30	24	135	27	30	26	137	27	30	27	137	30	30	29	139
			113A	16.5	19.8	28	30	26	135	31	35	28	137	31	35	28	137	33	35	30	139
			115A	33.0	39.7	53	60	49	135	56	60	51	137	56	60	51	137	58	60	53	139
			114A+116A	41.7	50.2	66	70	61	135	69	70	63	137	69	70	63	137	71	80	65	139
			115A+113A	50.0	60.1	64	70	72	135	66	70	74	137	67	70	75	137	69	70	77	139
		MED	NONE	–	–	25	30	26	157	27	30	28	159	27	30	29	159	29	35	31	161
			116A	13.9	16.7	27	30	26	157	29	30	28	159	30	30	29	159	32	35	31	161
			113A	16.5	19.8	31	35	28	157	33	35	30	159	33	35	30	159	36	40	32	161
			115A	33.0	39.7	56	60	51	157	58	60	53	159	58	60	53	159	61	70	55	161
			114A+116A	41.7	50.2	69	70	63	157	71	80	65	159	71	80	65	159	74	80	67	161
			115A+113A	50.0	60.1	66	80	74	157	68	80	76	159	69	80	77	159	71	80	79	161
		HIGH	NONE	–	–	28	30	30	161	30	35	32	163	30	35	32	163	32	35	34	165
			116A	13.9	16.7	31	35	30	161	33	35	32	163	33	35	32	163	36	40	34	165
			113A	16.5	19.8	34	35	31	161	37	40	33	163	37	40	34	163	39	40	36	165
			115A	33.0	39.7	59	60	54	161	62	70	56	163	62	70	57	163	64	70	59	165
			114A+116A	41.7	50.2	72	80	66	161	75	80	68	163	75	80	69	163	77	80	71	165
			115A+113A	50.0	60.1	70	80	78	161	72	80	80	163	73	80	80	163	75	80	82	165
	575–3–60	STD	NONE	–	–	18	20	18	105	22	25	23	109	19	25	20	107	23	25	25	111
			118A	17.0	20.4	28	30	26	105	33	35	30	109	31	35	28	107	35	35	32	111
			119A	34.0	40.9	54	60	49	105	59	60	54	109	56	60	51	107	61	70	56	111
			118A+119A	51.0	61.3	64	70	73	105	69	80	77	109	66	70	75	107	71	80	79	111
		MED	NONE	–	–	19	20	19	116	22	25	24	120	20	25	21	118	24	30	26	122
			118A	17.0	20.4	29	30	27	116	34	35	31	120	32	35	29	118	36	40	33	122
			119A	34.0	40.9	55	60	50	116	60	60	55	120	57	60	52	118	62	70	57	122
			118A+119A	51.0	61.3	65	70	74	116	70	80	78	120	67	70	76	118	72	80	80	122
		HIGH	NONE	–	–	21	25	22	130	25	30	27	134	23	25	24	132	27	30	29	136
			118A	17.0	20.4	33	35	30	130	38	40	34	134	35	35	32	132	40	40	36	136
			119A	34.0	40.9	59	60	53	130	63	70	58	134	61	70	55	132	65	70	60	136
			118A+119A	51.0	61.3	69	80	77	130	74	80	81	134	71	80	79	132	76	80	83	136

See “Legend and Notes for Tables 76 – 83” on page161

Table 79 – UNIT WIRE SIZING DATA WITH FACTORY INSTALLED HACR BREAKER

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC**07	208/230–3–60	STD	NONE	–	–	32	50	31	148	36	50	36	152	37	50	37	153	41	50	41	157
			264A	4.9/6.5	13.6/15.6	32/32	50/50	31/31	148/148	36/36	50/50	36/36	152/152	37/37	50/50	37/37	153/153	41/41	50/50	41/41	157/157
			117A	7.8/10.4	21.7/25.0	38/38	50/50	31/35	148/148	43/43	50/50	36/39	152/152	44/44	50/50	37/40	153/153	49/49	50/50	41/45	157/157
			110A	12.0/16.0	33.4/38.5	55/55	60/60	44/50	148/148	60/60	60/60	49/55	152/152	61/61	70/70	50/56	153/153	66/66	70/70	54/60	157/157
			117A+117A	15.8/21.0	43.8/50.5	70/70	70/70	56/64	148/148	75/75	80/80	61/68	152/152	76/76	80/80	62/70	153/153	81/81	90/90	66/74	157/157
			110A+117A	19.9/26.5	55.2/63.8	87/87	90/90	69/79	148/148	91/91	100/100	74/84	152/152	93/93	100/100	75/85	153/153	97/97	100/100	79/89	157/157
		MED	NONE	–	–	35	50	34	185	39	50	38	189	40	50	39	190	43	60	44	194
			264A	4.9/6.5	13.6/15.6	35/35	50/50	34/34	185/185	39/39	50/50	38/38	189/189	40/40	50/50	39/39	190/190	43/43	60/60	44/44	194/194
			117A	7.8/10.4	21.7/25.0	41/41	50/50	34/37	185/185	46/46	50/50	38/42	189/189	47/47	50/50	39/43	190/190	52/52	60/60	44/47	194/194
			110A	12.0/16.0	33.4/38.5	58/58	60/60	47/53	185/185	63/63	70/70	51/57	189/189	64/64	70/70	53/58	190/190	69/69	70/70	57/63	194/194
			117A+117A	15.8/21.0	43.8/50.5	73/73	80/80	59/67	185/185	78/78	80/80	63/71	189/189	79/79	80/80	65/72	190/190	84/84	90/90	69/77	194/194
			110A+117A	19.9/26.5	55.2/63.8	90/90	90/90	72/82	185/185	94/94	100/100	76/86	189/189	96/96	100/100	78/88	190/190	100/100	100/100	82/92	194/194
		HIGH	NONE	–	–	42	60	43	211	46	60	47	215	47	60	48	216	51	60	52	220
			264A	4.9/6.5	13.6/15.6	42/42	60/60	43/43	211/211	46/46	60/60	47/47	215/215	47/47	60/60	48/48	216/216	51/51	60/60	52/52	220/220
			117A	7.8/10.4	21.7/25.0	50/50	60/60	43/46	211/211	55/55	60/60	47/50	215/215	56/56	60/60	48/52	216/216	61/61	70/70	52/56	220/220
			110A	12.0/16.0	33.4/38.5	67/67	70/70	56/62	211/211	72/72	80/80	60/66	215/215	73/73	80/80	61/67	216/216	78/78	80/80	66/71	220/220
			117A+117A	15.8/21.0	43.8/50.5	82/82	90/90	68/75	211/211	87/87	90/90	72/80	215/215	88/88	90/90	73/81	216/216	93/93	100/100	78/85	220/220
			110A+117A	19.9/26.5	55.2/63.8	99/99	100/100	81/91	211/211	104/104	110/110	85/95	215/215	105/105	110/110	86/96	216/216	110/110	110/110	91/101	220/220
	460–3–60	STD	NONE	–	–	17	25	16	75	19	25	18	77	19	25	19	77	21	30	21	79
			265A	6.0	7.2	17	25	16	75	19	25	18	77	19	25	19	77	21	30	21	79
			266A	11.5	13.8	21	25	19	75	23	25	21	77	24	25	21	77	26	30	23	79
			267A	14.0	16.8	25	25	22	75	27	30	24	77	27	30	25	77	30	30	27	79
			268A	23.0	27.7	38	40	35	75	41	45	37	77	41	45	37	77	43	45	39	79
			269A	25.5	30.7	42	45	38	75	44	45	40	77	45	45	41	77	47	50	43	79
		MED	NONE	–	–	18	25	17	94	19	25	19	96	20	25	19	96	22	30	22	98
			265A	6.0	7.2	18	25	17	94	19	25	19	96	20	25	19	96	22	30	22	98
			266A	11.5	13.8	22	25	20	94	24	25	22	96	25	25	22	96	27	30	24	98
			267A	14.0	16.8	26	30	23	94	28	30	25	96	28	30	26	96	31	35	28	98
			268A	23.0	27.7	39	40	36	94	42	45	38	96	42	45	38	96	44	45	40	98
			269A	25.5	30.7	43	45	39	94	45	45	41	96	46	50	42	96	48	50	44	98
		HIGH	NONE	–	–	22	30	22	107	23	30	24	109	24	30	24	109	26	30	26	111
			265A	6.0	7.2	22	30	22	107	23	30	24	109	24	30	24	109	26	30	26	111
			266A	11.5	13.8	27	30	24	107	29	30	26	109	30	30	27	109	32	35	29	111
			267A	14.0	16.8	31	35	28	107	33	35	30	109	33	35	30	109	36	40	32	111
			268A	23.0	27.7	44	45	40	107	47	50	42	109	47	50	43	109	49	50	45	111
			269A	25.5	30.7	48	50	44	107	50	50	46	109	51	60	46	109	53	60	48	111
	575–3–60	STD	NONE	–	–	12	15	11	61	16	20	16	65	14	20	13	63	18	20	18	67
			118A	17.0	20.4	27	30	25	61	32	35	29	65	30	30	27	63	34	35	31	67
			299A	25.7	25.8	34	35	31	61	39	40	35	65	36	40	33	63	41	45	37	67
		MED	NONE	–	–	14	20	13	76	18	20	17	80	15	20	15	78	19	25	19	82
			118A	17.0	20.4	29	30	27	76	34	35	31	80	32	35	29	78	36	40	33	82
			299A	25.7	25.8	36	40	33	76	41	45	37	80	38	40	35	78	43	45	39	82
		HIGH	NONE	–	–	17	20	16	90	20	25	21	94	18	25	18	92	22	25	23	96
			118A	17.0	20.4	33	35	30	90	38	40	34	94	35	35	32	92	40	40	36	96
			299A	25.7	25.8	40	40	36	90	44	45	40	94	42	45	38	92	47	50	42	96

See “Legend and Notes for Tables 76 – 83” on page161

Table 79 - UNIT WIRE SIZING DATA WITH FACTORY INSTALLED HACR BREAKER (cont)

UNIT	NO M. V – Ph – HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC**08	208/230 – 3 – 60	STD	NONE	–	–	39	50	41	191	43	50	45	195	44	50	46	196	48	60	51	200
			117A	7.8/10.4	21.7/25.0	39/39	50/50	41/41	191/191	43/43	50/50	45/45	195/195	44/44	50/50	46/46	196/196	49/49	60/60	51/51	200/200
			110A	12.0/16.0	33.4/38.5	55/55	60/60	44/50	191/191	60/60	60/60	49/55	195/195	61/61	70/70	50/56	196/196	66/66	70/70	54/60	200/200
			111A	18.6/24.8	51.7/59.7	82/82	90/90	65/75	191/191	86/86	90/90	70/79	195/195	88/88	90/90	71/80	196/196	92/92	100/100	75/85	200/200
			112A	24.0/32.0	66.7/77.0	103/103	110/110	83/95	191/191	108/108	110/110	87/99	195/195	109/109	110/110	88/100	196/196	114/114	125/125	93/104	200/200
			112A+117A	31.8/42.4	88.4/102.0	134/134	150/150	108/123	191/191	139/139	150/150	112/128	195/195	140/140	150/150	113/129	196/196	145/145	150/150	118/133	200/200
		MED	NONE	–	–	39	50	41	202	43	50	45	206	44	50	46	207	48	60	51	211
			117A	7.8/10.4	21.7/25.0	39/39	50/50	41/41	202/202	43/43	50/50	45/45	206/206	44/44	50/50	46/46	207/207	49/49	60/60	51/51	211/211
			110A	12.0/16.0	33.4/38.5	55/55	60/60	44/50	202/202	60/60	60/60	49/55	206/206	61/61	70/70	50/56	207/207	66/66	70/70	54/60	211/211
			111A	18.6/24.8	51.7/59.7	82/82	90/90	65/75	202/202	86/86	90/90	70/79	206/206	88/88	90/90	71/80	207/207	92/92	100/100	75/85	211/211
			112A	24.0/32.0	66.7/77.0	103/103	110/110	83/95	202/202	108/108	110/110	87/99	206/206	109/109	110/110	88/100	207/207	114/114	125/125	93/104	211/211
			112A+117A	31.8/42.4	88.4/102.0	134/134	150/150	108/123	202/202	139/139	150/150	112/128	206/206	140/140	150/150	113/129	207/207	145/145	150/150	118/133	211/211
		HIGH	NONE	–	–	44	50	46	245	48	60	51	249	49	60	52	250	53	60	56	254
			117A	7.8/10.4	21.7/25.0	44/44	50/50	46/46	245/245	49/49	60/60	51/51	249/249	50/50	60/60	52/52	250/250	55/55	60/60	56/56	254/254
			110A	12.0/16.0	33.4/38.5	61/61	70/70	50/56	245/245	66/66	70/70	54/60	249/249	67/67	70/70	55/61	250/250	72/72	80/80	60/66	254/254
			111A	18.6/24.8	51.7/59.7	88/88	90/90	71/80	245/245	92/92	100/100	75/85	249/249	94/94	100/100	76/86	250/250	98/98	100/100	81/90	254/254
			112A	24.0/32.0	66.7/77.0	109/109	110/110	88/100	245/245	114/114	125/125	93/104	249/249	115/115	125/125	94/106	250/250	120/120	125/125	98/110	254/254
			112A+117A	31.8/42.4	88.4/102.0	140/140	150/150	113/129	245/245	145/145	150/150	118/133	249/249	146/146	150/150	119/134	250/250	151/151	175/175	123/139	254/254
	460 – 3 – 60	STD	NONE	–	–	18	20	19	95	20	25	21	97	21	25	21	97	22	25	23	99
			116A	13.9	16.7	25	25	22	95	27	30	24	97	27	30	25	97	30	30	27	99
			113A	16.5	19.8	28	30	26	95	31	35	28	97	31	35	28	97	33	35	30	99
			114A	27.8	33.4	45	50	41	95	48	50	43	97	48	50	44	97	50	60	46	99
			115A	33.0	39.7	53	60	49	95	56	60	51	97	56	60	51	97	58	60	53	99
			114A+116A	41.7	50.2	66	70	61	95	69	70	63	97	69	70	63	97	71	80	65	99
		MED	NONE	–	–	18	20	19	101	20	25	21	103	21	25	21	103	22	25	23	105
			116A	13.9	16.7	25	25	22	101	27	30	24	103	27	30	25	103	30	30	27	105
			113A	16.5	19.8	28	30	26	101	31	35	28	103	31	35	28	103	33	35	30	105
			114A	27.8	33.4	45	50	41	101	48	50	43	103	48	50	44	103	50	60	46	105
			115A	33.0	39.7	53	60	49	101	56	60	51	103	56	60	51	103	58	60	53	105
			114A+116A	41.7	50.2	66	70	61	101	69	70	63	103	69	70	63	103	71	80	65	105
		HIGH	NONE	–	–	20	25	21	123	22	25	23	125	22	25	23	125	24	30	26	127
			116A	13.9	16.7	27	30	24	123	29	30	26	125	30	30	27	125	32	35	29	127
			113A	16.5	19.8	31	35	28	123	33	35	30	125	33	35	30	125	36	40	32	127
			114A	27.8	33.4	48	50	43	123	50	50	46	125	50	60	46	125	53	60	48	127
			115A	33.0	39.7	56	60	51	123	58	60	53	125	58	60	53	125	61	70	55	127
			114A+116A	41.7	50.2	69	70	63	123	71	80	65	125	71	80	65	125	74	80	67	127
	575 – 3 – 60	STD	NONE	–	–	12	15	12	77	16	20	17	81	14	15	14	79	18	20	19	83
			118A	17.0	20.4	27	30	25	77	32	35	29	81	30	30	27	79	34	35	31	83
			119A	34.0	40.9	53	60	48	77	58	60	53	81	55	60	50	79	60	60	55	83
		MED	NONE	–	–	13	15	13	81	17	20	18	85	15	20	15	83	19	20	20	87
			118A	17.0	20.4	28	30	26	81	33	35	30	85	31	35	28	83	35	35	32	87
			119A	34.0	40.9	54	60	49	81	59	60	54	85	56	60	51	83	61	70	56	87
		HIGH	NONE	–	–	14	15	14	92	18	20	19	96	16	20	16	94	19	25	21	98
			118A	17.0	20.4	29	30	27	92	34	35	31	96	32	35	29	94	36	40	33	98
			119A	34.0	40.9	55	60	50	92	60	60	55	96	57	60	52	94	62	70	57	98

See “Legend and Notes for Tables 76 – 83” on page161

Table 79 - UNIT WIRE SIZING DATA WITH FACTORY INSTALLED HACR BREAKER (cont)

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC**09	208/230–3–60	STD	NONE	–	–	39	50	41	191	43	50	45	195	44	50	46	196	48	60	51	200
			117A	7.8/10.4	21.7/25.0	39/39	50/50	41/41	191/191	43/43	50/50	45/45	195/195	44/44	50/50	46/46	196/196	49/49	60/60	51/51	200/200
			110A	12.0/16.0	33.4/38.5	55/55	60/60	44/50	191/191	60/60	60/60	49/55	195/195	61/61	70/70	50/56	196/196	66/66	70/70	54/60	200/200
			111A	18.6/24.8	51.7/59.7	82/82	90/90	65/75	191/191	86/86	90/90	70/79	195/195	88/88	90/90	71/80	196/196	92/92	100/100	75/85	200/200
			112A	24.0/32.0	66.7/77.0	103/103	110/110	83/95	191/191	108/108	110/110	87/99	195/195	109/109	110/110	88/100	196/196	114/114	125/125	93/104	200/200
			112A+117A	31.8/42.4	88.4/102.0	134/134	150/150	108/123	191/191	139/139	150/150	112/128	195/195	140/140	150/150	113/129	196/196	145/145	150/150	118/133	200/200
		MED	NONE	–	–	39	50	41	202	43	50	45	206	44	50	46	207	48	60	51	211
			117A	7.8/10.4	21.7/25.0	39/39	50/50	41/41	202/202	43/43	50/50	45/45	206/206	44/44	50/50	46/46	207/207	49/49	60/60	51/51	211/211
			110A	12.0/16.0	33.4/38.5	55/55	60/60	44/50	202/202	60/60	60/60	49/55	206/206	61/61	70/70	50/56	207/207	66/66	70/70	54/60	211/211
			111A	18.6/24.8	51.7/59.7	82/82	90/90	65/75	202/202	86/86	90/90	70/79	206/206	88/88	90/90	71/80	207/207	92/92	100/100	75/85	211/211
			112A	24.0/32.0	66.7/77.0	103/103	110/110	83/95	202/202	108/108	110/110	87/99	206/206	109/109	110/110	88/100	207/207	114/114	125/125	93/104	211/211
			112A+117A	31.8/42.4	88.4/102.0	134/134	150/150	108/123	202/202	139/139	150/150	112/128	206/206	140/140	150/150	113/129	207/207	145/145	150/150	118/133	211/211
		HIGH	NONE	–	–	44	50	46	245	48	60	51	249	49	60	52	250	53	60	56	254
			117A	7.8/10.4	21.7/25.0	44/44	50/50	46/46	245/245	49/49	60/60	51/51	249/249	50/50	60/60	52/52	250/250	55/55	60/60	56/56	254/254
			110A	12.0/16.0	33.4/38.5	61/61	70/70	50/56	245/245	66/66	70/70	54/60	249/249	67/67	70/70	55/61	250/250	72/72	80/80	60/66	254/254
			111A	18.6/24.8	51.7/59.7	88/88	90/90	71/80	245/245	92/92	100/100	75/85	249/249	94/94	100/100	76/86	250/250	98/98	100/100	81/90	254/254
			112A	24.0/32.0	66.7/77.0	109/109	110/110	88/100	245/245	114/114	125/125	93/104	249/249	115/115	125/125	94/106	250/250	120/120	125/125	98/110	254/254
			112A+117A	31.8/42.4	88.4/102.0	140/140	150/150	113/129	245/245	145/145	150/150	118/133	249/249	146/146	150/150	119/134	250/250	151/151	175/175	123/139	254/254
	460–3–60	STD	NONE	–	–	19	20	19	95	20	25	21	97	21	25	22	97	23	25	24	99
			116A	13.9	16.7	25	25	22	95	27	30	24	97	27	30	25	97	30	30	27	99
			113A	16.5	19.8	28	30	26	95	31	35	28	97	31	35	28	97	33	35	30	99
			114A	27.8	33.4	45	50	41	95	48	50	43	97	48	50	44	97	50	60	46	99
			115A	33.0	39.7	53	60	49	95	56	60	51	97	56	60	51	97	58	60	53	99
			114A+116A	41.7	50.2	66	70	61	95	69	70	63	97	69	70	63	97	71	80	65	99
		MED	NONE	–	–	19	20	19	101	20	25	21	103	21	25	22	103	23	25	24	105
			116A	13.9	16.7	25	25	22	101	27	30	24	103	27	30	25	103	30	30	27	105
			113A	16.5	19.8	28	30	26	101	31	35	28	103	31	35	28	103	33	35	30	105
			114A	27.8	33.4	45	50	41	101	48	50	43	103	48	50	44	103	50	60	46	105
			115A	33.0	39.7	53	60	49	101	56	60	51	103	56	60	51	103	58	60	53	105
			114A+116A	41.7	50.2	66	70	61	101	69	70	63	103	69	70	63	103	71	80	65	105
		HIGH	NONE	–	–	20	25	21	123	22	25	23	125	23	25	24	125	24	30	26	127
			116A	13.9	16.7	27	30	24	123	29	30	26	125	30	30	27	125	32	35	29	127
			113A	16.5	19.8	31	35	28	123	33	35	30	125	33	35	30	125	36	40	32	127
			114A	27.8	33.4	48	50	43	123	50	50	46	125	50	60	46	125	53	60	48	127
			115A	33.0	39.7	56	60	51	123	58	60	53	125	58	60	53	125	61	70	55	127
			114A+116A	41.7	50.2	69	70	63	123	71	80	65	125	71	80	65	125	74	80	67	127
	575–3–60	STD	NONE	–	–	14	15	14	77	17	20	18	81	15	20	16	79	19	20	20	83
			118A	17.0	20.4	27	30	25	77	32	35	29	81	30	30	27	79	34	35	31	83
			119A	34.0	40.9	53	60	48	77	58	60	53	81	55	60	50	79	60	60	55	83
		MED	NONE	–	–	14	20	15	81	18	20	19	85	16	20	17	83	20	25	21	87
			118A	17.0	20.4	28	30	26	81	33	35	30	85	31	35	28	83	35	35	32	87
			119A	34.0	40.9	54	60	49	81	59	60	54	85	56	60	51	83	61	70	56	87
		HIGH	NONE	–	–	15	20	16	92	19	20	20	96	17	20	18	94	21	25	22	98
			118A	17.0	20.4	29	30	27	92	34	35	31	96	32	35	29	94	36	40	33	98
			119A	34.0	40.9	55	60	50	92	60	60	55	96	57	60	52	94	62	70	57	98

See “Legend and Notes for Tables 76 – 83” on page161

Table 79 - UNIT WIRE SIZING DATA WITH FACTORY INSTALLED HACR BREAKER (cont)

UNIT	NO M. V-Ph-HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC**11	208/230-3-60	STD	NONE	–	–	49	60	51	257	53	60	55	261	54	60	57	262	57	70	61	266
			117A	7.8/10.4	21.7/25.0	49/49	60/60	51/51	257/257	53/53	60/60	55/55	261/261	54/54	60/60	57/57	262/262	57/57	70/70	61/61	266/266
			110A	12.0/16.0	33.4/38.5	55/55	60/60	51/51	257/257	60/60	60/60	55/55	261/261	61/61	70/70	57/57	262/262	66/66	70/70	61/61	266/266
			112A	24.0/32.0	66.7/77.0	103/103	110/110	83/95	257/257	108/108	110/110	87/99	261/261	109/109	110/110	88/100	262/262	114/114	125/125	93/104	266/266
			112A+117A	31.8/42.4	88.4/102.0	134/134	150/150	108/123	257/257	139/139	150/150	112/128	261/261	140/140	150/150	113/129	262/262	145/145	150/150	118/133	266/266
			112A+110A	37.6/50.0	104.2/120.3	137/137	150/150	126/144	257/257	142/142	150/150	130/149	261/261	143/143	150/150	131/150	262/262	148/148	150/150	136/154	266/266
		MED	NONE	–	–	54	60	57	300	57	70	61	304	58	70	62	305	62	70	66	309
			117A	7.8/10.4	21.7/25.0	54/54	60/60	57/57	300/300	57/57	70/70	61/61	304/304	58/58	70/70	62/62	305/305	62/62	70/70	66/66	309/309
			110A	12.0/16.0	33.4/38.5	61/61	70/70	57/57	300/300	66/66	70/70	61/61	304/304	67/67	70/70	62/62	305/305	72/72	80/80	66/66	309/309
			112A	24.0/32.0	66.7/77.0	109/109	110/110	88/100	300/300	114/114	125/125	93/104	304/304	115/115	125/125	94/106	305/305	120/120	125/125	98/110	309/309
			112A+117A	31.8/42.4	88.4/102.0	140/140	150/150	113/129	300/300	145/145	150/150	118/133	304/304	146/146	150/150	119/134	305/305	151/151	175/175	123/139	309/309
			112A+110A	37.6/50.0	104.2/120.3	143/143	150/150	131/150	300/300	148/148	150/150	136/154	304/304	149/149	150/150	137/155	305/305	154/154	175/175	141/160	309/309
		HIGH	NONE	–	–	59	70	62	309	62	70	67	313	63	70	68	314	67	80	72	318
			117A	7.8/10.4	21.7/25.0	59/59	70/70	62/62	309/309	62/62	70/70	67/67	313/313	63/63	70/70	68/68	314/314	67/67	80/80	72/72	318/318
			110A	12.0/16.0	33.4/38.5	67/67	70/70	62/62	309/309	72/72	80/80	67/67	313/313	73/73	80/80	68/68	314/314	78/78	80/80	72/72	318/318
			112A	24.0/32.0	66.7/77.0	115/115	125/125	94/106	309/309	120/120	125/125	98/110	313/313	121/121	125/125	99/111	314/314	126/126	150/150	104/116	318/318
			112A+117A	31.8/42.4	88.4/102.0	147/147	150/150	119/135	309/309	151/151	175/175	123/139	313/313	153/153	175/175	124/140	314/314	157/157	175/175	129/144	318/318
			112A+110A	37.6/50.0	104.2/120.3	149/149	150/175	137/156	309/309	154/154	175/175	141/160	313/313	155/155	175/175	143/161	314/314	160/160	175/175	147/165	318/318
	460-3-60	STD	NONE	–	–	22	25	23	123	24	30	25	125	25	30	26	125	26	30	28	127
			116A	13.9	16.7	25	25	23	123	27	30	25	125	27	30	26	125	30	30	28	127
			113A	16.5	19.8	28	30	26	123	31	35	28	125	31	35	28	125	33	35	30	127
			115A	33.0	39.7	53	60	49	123	56	60	51	125	56	60	51	125	58	60	53	127
			114A+116A	41.7	50.2	66	70	61	123	69	70	63	125	69	70	63	125	71	80	65	127
			115A+113A	50.0	60.1	64	70	72	123	66	70	74	125	67	70	75	125	69	70	77	127
		MED	NONE	–	–	24	30	25	145	26	30	27	147	26	30	28	147	28	30	30	149
			116A	13.9	16.7	27	30	25	145	29	30	27	147	30	30	28	147	32	35	30	149
			113A	16.5	19.8	31	35	28	145	33	35	30	147	33	35	30	147	36	40	32	149
			115A	33.0	39.7	56	60	51	145	58	60	53	147	58	60	53	147	61	70	55	149
			114A+116A	41.7	50.2	69	70	63	145	71	80	65	147	71	80	65	147	74	80	67	149
			115A+113A	50.0	60.1	66	80	74	145	68	80	76	147	69	80	77	147	71	80	79	149
		HIGH	NONE	–	–	27	30	29	149	29	35	31	151	30	35	31	151	31	35	33	153
			116A	13.9	16.7	31	35	29	149	33	35	31	151	33	35	31	151	36	40	33	153
			113A	16.5	19.8	34	35	31	149	37	40	33	151	37	40	34	151	39	40	36	153
			115A	33.0	39.7	59	60	54	149	62	70	56	151	62	70	57	151	64	70	59	153
			114A+116A	41.7	50.2	72	80	66	149	75	80	68	151	75	80	69	151	77	80	71	153
			115A+113A	50.0	60.1	70	80	78	149	72	80	80	151	73	80	80	151	75	80	82	153
	575-3-60	STD	NONE	–	–	18	20	18	95	21	25	23	99	19	25	20	97	23	25	24	101
			118A	17.0	20.4	28	30	26	95	33	35	30	99	31	35	28	97	35	35	32	101
			119A	34.0	40.9	54	60	49	95	59	60	54	99	56	60	51	97	61	70	56	101
			118A+119A	51.0	61.3	64	70	73	95	69	80	77	99	66	70	75	97	71	80	79	101
		MED	NONE	–	–	18	20	19	106	22	25	23	110	20	25	21	108	24	25	25	112
			118A	17.0	20.4	29	30	27	106	34	35	31	110	32	35	29	108	36	40	33	112
			119A	34.0	40.9	55	60	50	106	60	60	55	110	57	60	52	108	62	70	57	112
			118A+119A	51.0	61.3	65	70	74	106	70	80	78	110	67	70	76	108	72	80	80	112
		HIGH	NONE	–	–	21	25	22	120	25	30	27	124	23	25	24	122	27	30	29	126
			118A	17.0	20.4	33	35	30	120	38	40	34	124	35	35	32	122	40	40	36	126
			119A	34.0	40.9	59	60	53	120	63	70	58	124	61	70	55	122	65	70	60	126
			118A+119A	51.0	61.3	69	80	77	120	74	80	81	124	71	80	79	122	76	80	83	126

See “Legend and Notes for Tables 76 – 83” on page161

Table 79 - UNIT WIRE SIZING DATA WITH FACTORY INSTALLED HACR BREAKER (cont)

UNIT	NOM. V–Ph–Hz	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC**12	208/230–3–60	STD	NONE	–	–	48	60	50	282	51	60	54	286	52	60	55	287	56	60	60	291
			117A	7.8/10.4	21.7/25.0	48/48	60/60	50/50	282/282	51/51	60/60	54/54	286/286	52/52	60/60	55/55	287/287	56/56	60/60	60/60	291/291
			110A	12.0/16.0	33.4/38.5	55/55	60/60	50/50	282/282	60/60	60/60	54/55	286/286	61/61	70/70	55/56	287/287	66/66	70/70	60/60	291/291
			112A	24.0/32.0	66.7/77.0	103/103	110/110	83/95	282/282	108/108	110/110	87/99	286/286	109/109	110/110	88/100	287/287	114/114	125/125	93/104	291/291
			112A+117A	31.8/42.4	88.4/102.0	134/134	150/150	108/123	282/282	139/139	150/150	112/128	286/286	140/140	150/150	113/129	287/287	145/145	150/150	118/133	291/291
			112A+110A	37.6/50.0	104.2/120.3	137/137	150/150	126/144	282/282	142/142	150/150	130/149	286/286	143/143	150/150	131/150	287/287	148/148	150/150	136/154	291/291
		MED	NONE	–	–	52	60	55	325	56	60	60	329	57	70	61	330	61	70	65	334
			117A	7.8/10.4	21.7/25.0	52/52	60/60	55/55	325/325	56/56	60/60	60/60	329/329	57/57	70/70	61/61	330/330	61/61	70/70	65/65	334/334
			110A	12.0/16.0	33.4/38.5	61/61	70/70	55/56	325/325	66/66	70/70	60/60	329/329	67/67	70/70	61/61	330/330	72/72	80/80	65/66	334/334
			112A	24.0/32.0	66.7/77.0	109/109	110/110	88/100	325/325	114/114	125/125	93/104	329/329	115/115	125/125	94/106	330/330	120/120	125/125	98/110	334/334
			112A+117A	31.8/42.4	88.4/102.0	140/140	150/150	113/129	325/325	145/145	150/150	118/133	329/329	146/146	150/150	119/134	330/330	151/151	175/175	123/139	334/334
			112A+110A	37.6/50.0	104.2/120.3	143/143	150/150	131/150	325/325	148/148	150/150	136/154	329/329	149/149	150/150	137/155	330/330	154/154	175/175	141/160	334/334
		HIGH	NONE	–	–	57	70	61	334	61	70	65	338	62	70	66	339	66	80	71	343
			117A	7.8/10.4	21.7/25.0	57/57	70/70	61/61	334/334	61/61	70/70	65/65	338/338	62/62	70/70	66/66	339/339	66/66	80/80	71/71	343/343
			110A	12.0/16.0	33.4/38.5	67/67	70/70	61/62	334/334	72/72	80/80	65/66	338/338	73/73	80/80	66/67	339/339	78/78	80/80	71/71	343/343
			112A	24.0/32.0	66.7/77.0	115/115	125/125	94/106	334/334	120/120	125/125	98/110	338/338	121/121	125/125	99/111	339/339	126/126	150/150	104/116	343/343
			112A+117A	31.8/42.4	88.4/102.0	147/147	150/150	119/135	334/334	151/151	175/175	123/139	338/338	153/153	175/175	124/140	339/339	157/157	175/175	129/144	343/343
			112A+110A	37.6/50.0	104.2/120.3	149/149	150/175	137/156	334/334	154/154	175/175	141/160	338/338	155/155	175/175	143/161	339/339	160/160	175/175	147/165	343/343
	460–3–60	STD	NONE	–	–	23	30	24	135	25	30	26	137	26	30	27	137	27	30	29	139
			116A	13.9	16.7	25	30	24	135	27	30	26	137	27	30	27	137	30	30	29	139
			113A	16.5	19.8	28	30	26	135	31	35	28	137	31	35	28	137	33	35	30	139
			115A	33.0	39.7	53	60	49	135	56	60	51	137	56	60	51	137	58	60	53	139
			114A+116A	41.7	50.2	66	70	61	135	69	70	63	137	69	70	63	137	71	80	65	139
			115A+113A	50.0	60.1	64	70	72	135	66	70	74	137	67	70	75	137	69	70	77	139
		MED	NONE	–	–	25	30	26	157	27	30	28	159	27	30	29	159	29	35	31	161
			116A	13.9	16.7	27	30	26	157	29	30	28	159	30	30	29	159	32	35	31	161
			113A	16.5	19.8	31	35	28	157	33	35	30	159	33	35	30	159	36	40	32	161
			115A	33.0	39.7	56	60	51	157	58	60	53	159	58	60	53	159	61	70	55	161
			114A+116A	41.7	50.2	69	70	63	157	71	80	65	159	71	80	65	159	74	80	67	161
			115A+113A	50.0	60.1	66	80	74	157	68	80	76	159	69	80	77	159	71	80	79	161
		HIGH	NONE	–	–	28	30	30	161	30	35	32	163	30	35	32	163	32	35	34	165
			116A	13.9	16.7	31	35	30	161	33	35	32	163	33	35	32	163	36	40	34	165
			113A	16.5	19.8	34	35	31	161	37	40	33	163	37	40	34	163	39	40	36	165
			115A	33.0	39.7	59	60	54	161	62	70	56	163	62	70	57	163	64	70	59	165
			114A+116A	41.7	50.2	72	80	66	161	75	80	68	163	75	80	69	163	77	80	71	165
			115A+113A	50.0	60.1	70	80	78	161	72	80	80	163	73	80	80	163	75	80	82	165
	575–3–60	STD	NONE	–	–	18	20	18	105	22	25	23	109	19	25	20	107	23	25	25	111
			118A	17.0	20.4	28	30	26	105	33	35	30	109	31	35	28	107	35	35	32	111
			119A	34.0	40.9	54	60	49	105	59	60	54	109	56	60	51	107	61	70	56	111
			118A+119A	51.0	61.3	64	70	73	105	69	80	77	109	66	70	75	107	71	80	79	111
		MED	NONE	–	–	19	20	19	116	22	25	24	120	20	25	21	118	24	30	26	122
			118A	17.0	20.4	29	30	27	116	34	35	31	120	32	35	29	118	36	40	33	122
			119A	34.0	40.9	55	60	50	116	60	60	55	120	57	60	52	118	62	70	57	122
			118A+119A	51.0	61.3	65	70	74	116	70	80	78	120	67	70	76	118	72	80	80	122
		HIGH	NONE	–	–	21	25	22	130	25	30	27	134	23	25	24	132	27	30	29	136
			118A	17.0	20.4	33	35	30	130	38	40	34	134	35	35	32	132	40	40	36	136
			119A	34.0	40.9	59	60	53	130	63	70	58	134	61	70	55	132	65	70	60	136
			118A+119A	51.0	61.3	69	80	77	130	74	80	81	134	71	80	79	132	76	80	83	136

See “Legend and Notes for Tables 76 – 83” on page161

Table 80 – UNIT WIRE SIZING DATA WITH FACTORY INSTALLED HACR BREAKER AND 2-SPEED INDOOR FAN OPTION

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC**08	208/230–3–60	STD	NONE	–	–	40/40	50/50	41/41	195	44/44	50/50	46/46	199	45/45	50/50	47/47	200	48/48	60/60	51/51	204
			117A	7.8/10.4	21.7/25.0	40/40	50/50	41/41	195/195	44/44	50/50	46/46	199/199	45/45	50/50	47/47	200/200	49/49	60/60	51/51	204/204
			110A	12.0/16.0	33.4/38.5	56/56	60/60	45/51	195/195	60/60	60/60	49/55	199/199	62/62	70/70	51/56	200/200	66/66	70/70	55/61	204/204
			111A	18.6/24.8	51.7/59.7	82/82	90/90	66/75	195/195	87/87	90/90	70/79	199/199	88/88	90/90	72/81	200/200	93/93	100/100	76/85	204/204
			112A	24.0/32.0	66.7/77.0	104/104	110/110	83/95	195/195	108/108	110/110	88/99	199/199	110/110	110/110	89/101	200/200	114/114	125/125	93/105	204/204
			112A+117A	31.8/42.4	88.4/102.0	135/135	150/150	108/124	195/195	140/140	150/150	113/128	199/199	141/141	150/150	114/129	200/200	146/146	150/150	118/134	204/204
		MED	NONE	–	–	41/41	50/50	43/43	199	45/45	50/50	47/47	203	46/46	50/50	48/48	204	50/50	60/60	53/52	208
			117A	7.8/10.4	21.7/25.0	41/41	50/50	43/43	199/199	45/45	50/50	47/47	203/203	46/46	50/50	48/48	204/204	51/51	60/60	53/52	208/208
			110A	12.0/16.0	33.4/38.5	57/57	60/60	47/52	199/199	62/62	70/70	51/56	203/203	63/63	70/70	52/58	204/204	68/68	70/70	56/62	208/208
			111A	18.6/24.8	51.7/59.7	84/84	90/90	68/76	199/199	88/88	90/90	72/81	203/203	90/90	90/90	73/82	204/204	94/94	100/100	78/86	208/208
			112A	24.0/32.0	66.7/77.0	105/105	110/110	85/96	199/199	110/110	110/110	89/101	203/203	111/111	125/125	90/102	204/204	116/116	125/125	95/106	208/208
			112A+117A	31.8/42.4	88.4/102.0	136/136	150/150	110/125	199/199	141/141	150/150	114/129	203/203	142/142	150/150	115/131	204/204	147/147	150/150	120/135	208/208
		HIGH	NONE	–	–	45/45	50/50	47/46	249	49/49	60/60	52/50	253	50/50	60/60	53/52	254	53/53	60/60	57/56	258
			117A	7.8/10.4	21.7/25.0	45/45	50/50	47/46	249/249	49/49	60/60	52/50	253/253	50/50	60/60	53/52	254/254	55/55	60/60	57/56	258/258
			110A	12.0/16.0	33.4/38.5	61/61	70/70	51/56	249/249	66/66	70/70	55/60	253/253	67/67	70/70	56/61	254/254	72/72	80/80	61/65	258/258
			111A	18.6/24.8	51.7/59.7	87/87	90/90	72/80	249/249	92/92	100/100	76/84	253/253	93/93	100/100	77/85	254/254	98/98	100/100	82/90	258/258
			112A	24.0/32.0	66.7/77.0	109/109	110/110	89/100	249/249	114/114	125/125	93/104	253/253	115/115	125/125	95/105	254/254	120/120	125/125	99/110	258/258
			112A+117A	31.8/42.4	88.4/102.0	140/140	150/150	114/129	249/249	145/145	150/150	118/133	253/253	146/146	150/150	120/134	254/254	151/151	175/175	124/138	258/258
	460–3–60	STD	NONE	–	–	19	20	19	97	20	25	21	99	21	25	22	99	23	25	24	101
			116A	13.9	16.7	25	25	23	97	27	30	25	99	28	30	25	99	30	30	27	101
			113A	16.5	19.8	29	30	26	97	31	35	28	99	32	35	29	99	34	35	31	101
			114A	27.8	33.4	46	50	42	97	48	50	44	99	49	50	44	99	51	60	46	101
			115A	33.0	39.7	54	60	49	97	56	60	51	99	56	60	52	99	59	60	54	101
			114A+116A	41.7	50.2	67	70	61	97	69	70	63	99	70	70	64	99	72	80	66	101
		MED	NONE	–	–	20	25	20	100	21	25	22	102	22	25	23	102	24	25	25	104
			116A	13.9	16.7	26	30	24	100	28	30	26	102	29	30	26	102	31	35	28	104
			113A	16.5	19.8	30	30	27	100	32	35	29	102	33	35	30	102	35	35	32	104
			114A	27.8	33.4	47	50	43	100	49	50	45	102	50	50	45	102	52	60	47	104
			115A	33.0	39.7	55	60	50	100	57	60	52	102	58	60	53	102	60	60	55	104
			114A+116A	41.7	50.2	68	70	62	100	70	70	64	102	71	80	65	102	73	80	67	104
		HIGH	NONE	–	–	21	25	22	125	22	25	24	127	23	25	24	127	25	30	26	129
			116A	13.9	16.7	27	30	25	125	30	30	27	127	30	30	27	127	32	35	29	129
			113A	16.5	19.8	31	35	28	125	34	35	30	127	34	35	31	127	36	40	33	129
			114A	27.8	33.4	48	50	44	125	51	60	46	127	51	60	47	127	53	60	49	129
			115A	33.0	39.7	56	60	51	125	58	60	53	127	59	60	54	127	61	70	56	129
			114A+116A	41.7	50.2	69	70	63	125	72	80	65	127	72	80	66	127	74	80	68	129
	575–3–60	STD	NONE	–	–	14	15	14	79	18	20	19	83	16	20	16	81	19	25	21	85
			118A	17.0	20.4	29	30	27	79	34	35	31	83	32	35	29	81	36	40	33	85
			119A	34.0	40.9	55	60	50	79	60	60	55	83	57	60	52	81	62	70	57	85
		MED	NONE	–	–	15	20	15	83	18	20	19	87	16	20	17	85	20	25	21	89
			118A	17.0	20.4	30	30	27	83	35	35	32	87	32	35	29	85	37	40	34	89
			119A	34.0	40.9	56	60	51	83	61	70	55	87	58	60	53	85	63	70	57	89
		HIGH	NONE	–	–	16	20	16	92	19	25	21	96	17	20	18	94	21	25	23	98
			118A	17.0	20.4	32	35	29	92	36	40	33	96	34	35	31	94	38	40	35	98
			119A	34.0	40.9	57	60	52	92	62	70	57	96	59	60	54	94	64	70	59	98

See “Legend and Notes for Tables 76 – 83” on page161

Table 80 - UNIT WIRE SIZING DATA WITH FACTORY INSTALLED HACR BREAKER AND 2-SPEED INDOOR FAN OPTION (cont)

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC**09	208/230–3–60	STD	NONE	–	–	40/40	50/50	42/41	195	44/44	50/50	46/46	199	45/45	50/50	47/47	200	49/49	60/60	52/51	204
			117A	7.8/10.4	21.7/25.0	40/40	50/50	42/41	195/195	44/44	50/50	46/46	199/199	45/45	50/50	47/47	200/200	49/49	60/60	52/51	204/204
			110A	12.0/16.0	33.4/38.5	56/56	60/60	45/51	195/195	60/60	60/60	49/55	199/199	62/62	70/70	51/56	200/200	66/66	70/70	55/61	204/204
			111A	18.6/24.8	51.7/59.7	82/82	90/90	66/75	195/195	87/87	90/90	70/79	199/199	88/88	90/90	72/81	200/200	93/93	100/100	76/85	204/204
			112A	24.0/32.0	66.7/77.0	104/104	110/110	83/95	195/195	108/108	110/110	88/99	199/199	110/110	110/110	89/101	200/200	114/114	125/125	93/105	204/204
			112A+117A	31.8/42.4	88.4/102.0	135/135	150/150	108/124	195/195	140/140	150/150	113/128	199/199	141/141	150/150	114/129	200/200	146/146	150/150	118/134	204/204
		MED	NONE	–	–	41/41	50/50	43/43	199	45/45	50/50	47/47	203	46/46	50/50	49/48	204	50/50	60/60	53/53	208
			117A	7.8/10.4	21.7/25.0	41/41	50/50	43/43	199/199	45/45	50/50	47/47	203/203	46/46	50/50	49/48	204/204	51/51	60/60	53/53	208/208
			110A	12.0/16.0	33.4/38.5	57/57	60/60	47/52	199/199	62/62	70/70	51/56	203/203	63/63	70/70	52/58	204/204	68/68	70/70	56/62	208/208
			111A	18.6/24.8	51.7/59.7	84/84	90/90	68/76	199/199	88/88	90/90	72/81	203/203	90/90	90/90	73/82	204/204	94/94	100/100	78/86	208/208
			112A	24.0/32.0	66.7/77.0	105/105	110/110	85/96	199/199	110/110	110/110	89/101	203/203	111/111	125/125	90/102	204/204	116/116	125/125	95/106	208/208
			112A+117A	31.8/42.4	88.4/102.0	136/136	150/150	110/125	199/199	141/141	150/150	114/129	203/203	142/142	150/150	115/131	204/204	147/147	150/150	120/135	208/208
		HIGH	NONE	–	–	45/45	50/50	47/46	249	49/49	60/60	52/51	253	50/50	60/60	53/52	254	54/54	60/60	57/56	258
			117A	7.8/10.4	21.7/25.0	45/45	50/50	47/46	249/249	49/49	60/60	52/51	253/253	50/50	60/60	53/52	254/254	55/55	60/60	57/56	258/258
			110A	12.0/16.0	33.4/38.5	61/61	70/70	51/56	249/249	66/66	70/70	55/60	253/253	67/67	70/70	56/61	254/254	72/72	80/80	61/65	258/258
			111A	18.6/24.8	51.7/59.7	87/87	90/90	72/80	249/249	92/92	100/100	76/84	253/253	93/93	100/100	77/85	254/254	98/98	100/100	82/90	258/258
			112A	24.0/32.0	66.7/77.0	109/109	110/110	89/100	249/249	114/114	125/125	93/104	253/253	115/115	125/125	95/105	254/254	120/120	125/125	99/110	258/258
			112A+117A	31.8/42.4	88.4/102.0	140/140	150/150	114/129	249/249	145/145	150/150	118/133	253/253	146/146	150/150	120/134	254/254	151/151	175/175	124/138	258/258
	460–3–60	STD	NONE	–	–	19	25	19	97	21	25	22	99	21	25	22	99	23	25	24	101
			116A	13.9	16.7	25	25	23	97	27	30	25	99	28	30	25	99	30	30	27	101
			113A	16.5	19.8	29	30	26	97	31	35	28	99	32	35	29	99	34	35	31	101
			114A	27.8	33.4	46	50	42	97	48	50	44	99	49	50	44	99	51	60	46	101
			115A	33.0	39.7	54	60	49	97	56	60	51	99	56	60	52	99	59	60	54	101
			114A+116A	41.7	50.2	67	70	61	97	69	70	63	99	70	70	64	99	72	80	66	101
		MED	NONE	–	–	20	25	20	100	22	25	23	102	22	25	23	102	24	25	25	104
			116A	13.9	16.7	26	30	24	100	28	30	26	102	29	30	26	102	31	35	28	104
			113A	16.5	19.8	30	30	27	100	32	35	29	102	33	35	30	102	35	35	32	104
			114A	27.8	33.4	47	50	43	100	49	50	45	102	50	50	45	102	52	60	47	104
			115A	33.0	39.7	55	60	50	100	57	60	52	102	58	60	53	102	60	60	55	104
			114A+116A	41.7	50.2	68	70	62	100	70	70	64	102	71	80	65	102	73	80	67	104
		HIGH	NONE	–	–	21	25	22	125	23	25	24	127	23	25	24	127	25	30	26	129
			116A	13.9	16.7	27	30	25	125	30	30	27	127	30	30	27	127	32	35	29	129
			113A	16.5	19.8	31	35	28	125	34	35	30	127	34	35	31	127	36	40	33	129
			114A	27.8	33.4	48	50	44	125	51	60	46	127	51	60	47	127	53	60	49	129
			115A	33.0	39.7	56	60	51	125	58	60	53	127	59	60	54	127	61	70	56	129
			114A+116A	41.7	50.2	69	70	63	125	72	80	65	127	72	80	66	127	74	80	68	129
	575–3–60	STD	NONE	–	–	15	20	16	79	19	20	20	83	17	20	18	81	21	25	22	85
			118A	17.0	20.4	29	30	27	79	34	35	31	83	32	35	29	81	36	40	33	85
			119A	34.0	40.9	55	60	50	79	60	60	55	83	57	60	52	81	62	70	57	85
		MED	NONE	–	–	16	20	16	83	20	25	21	87	18	20	18	85	21	25	23	89
			118A	17.0	20.4	30	30	27	83	35	35	32	87	32	35	29	85	37	40	34	89
			119A	34.0	40.9	56	60	51	83	61	70	55	87	58	60	53	85	63	70	57	89
		HIGH	NONE	–	–	17	20	18	92	21	25	22	96	19	20	20	94	22	25	24	98
			118A	17.0	20.4	32	35	29	92	36	40	33	96	34	35	31	94	38	40	35	98
			119A	34.0	40.9	57	60	52	92	62	70	57	96	59	60	54	94	64	70	59	98

See “Legend and Notes for Tables 76 – 83” on page161

Table 80 - UNIT WIRE SIZING DATA WITH FACTORY INSTALLED HACR BREAKER AND 2-SPEED INDOOR FAN OPTION (cont)

UNIT	NO M. V-Ph-HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC**11	208/230-3-60	STD	NONE	–	–	51/51	60/60	53/53	254	55/55	60/60	58/57	258	56/56	60/60	59/58	259	59/59	70/70	63/63	263
			117A	7.8/10.4	21.7/25.0	51/51	60/60	53/53	254/254	55/55	60/60	58/57	258/258	56/56	60/60	59/58	259/259	59/59	70/70	63/63	263/263
			110A	12.0/16.0	33.4/38.5	57/57	60/60	53/53	254/254	62/62	70/70	58/57	258/258	63/63	70/70	59/58	259/259	68/68	70/70	63/63	263/263
			112A	24.0/32.0	66.7/77.0	105/105	110/110	85/96	254/254	110/110	110/110	89/101	258/258	111/111	125/125	90/102	259/259	116/116	125/125	95/106	263/263
			112A+117A	31.8/42.4	88.4/102.0	136/136	150/150	110/125	254/254	141/141	150/150	114/129	258/258	142/142	150/150	115/131	259/259	147/147	150/150	120/135	263/263
			112A+110A	37.6/50.0	104.2/120.3	140/140	150/150	128/146	254/254	144/144	150/150	132/151	258/258	146/146	150/150	134/152	259/259	150/150	150/150	138/156	263/263
		MED	NONE	–	–	54/54	60/60	58/56	304	58/58	70/70	62/61	308	59/59	70/70	63/62	309	63/63	70/70	67/66	313
			117A	7.8/10.4	21.7/25.0	54/54	60/60	58/56	304/304	58/58	70/70	62/61	308/308	59/59	70/70	63/62	309/309	63/63	70/70	67/66	313/313
			110A	12.0/16.0	33.4/38.5	61/61	70/70	58/56	304/304	66/66	70/70	62/61	308/308	67/67	70/70	63/62	309/309	72/72	80/80	67/66	313/313
			112A	24.0/32.0	66.7/77.0	109/109	110/110	89/100	304/304	114/114	125/125	93/104	308/308	115/115	125/125	95/105	309/309	120/120	125/125	99/110	313/313
			112A+117A	31.8/42.4	88.4/102.0	140/140	150/150	114/129	304/304	145/145	150/150	118/133	308/308	146/146	150/150	120/134	309/309	151/151	175/175	124/138	313/313
			112A+110A	37.6/50.0	104.2/120.3	144/144	150/150	132/150	304/304	149/149	150/150	137/154	308/308	150/150	150/150	138/155	309/309	155/155	175/175	142/160	313/313
		HIGH	NONE	–	–	57/57	70/70	61/60	315	61/61	70/70	65/64	319	62/62	70/70	66/65	320	66/66	80/80	71/70	324
			117A	7.8/10.4	21.7/25.0	57/57	70/70	61/60	315/315	61/61	70/70	65/64	319/319	62/62	70/70	66/65	320/320	66/66	80/80	71/70	324/324
			110A	12.0/16.0	33.4/38.5	64/64	70/70	61/60	315/315	69/69	70/70	65/64	319/319	70/70	80/70	66/65	320/320	75/75	80/80	71/70	324/324
			112A	24.0/32.0	66.7/77.0	113/113	125/125	92/103	315/315	117/117	125/125	97/108	319/319	119/119	125/125	98/109	320/320	123/123	125/125	102/113	324/324
			112A+117A	31.8/42.4	88.4/102.0	144/144	150/150	117/132	315/315	149/149	150/150	122/136	319/319	150/150	150/150	123/137	320/320	155/155	175/175	127/142	324/324
			112A+110A	37.6/50.0	104.2/120.3	148/148	150/150	135/153	315/315	152/152	175/175	140/157	319/319	154/154	175/175	141/158	320/320	158/158	175/175	145/163	324/324
	460-3-60	STD	NONE	–	–	24	30	25	122	25	30	27	124	26	30	27	124	28	30	29	126
			116A	13.9	16.7	26	30	25	122	28	30	27	124	29	30	27	124	31	35	29	126
			113A	16.5	19.8	30	30	27	122	32	35	29	124	33	35	30	124	35	35	32	126
			115A	33.0	39.7	55	60	50	122	57	60	52	124	58	60	53	124	60	60	55	126
			114A+116A	41.7	50.2	68	70	62	122	70	70	64	124	71	80	65	124	73	80	67	126
			115A+113A	50.0	60.1	65	70	73	122	68	80	76	124	68	80	76	124	70	80	78	126
		MED	NONE	–	–	25	30	26	147	27	30	28	149	27	30	28	149	29	35	30	151
			116A	13.9	16.7	27	30	26	147	30	30	28	149	30	30	28	149	32	35	30	151
			113A	16.5	19.8	31	35	28	147	34	35	30	149	34	35	31	149	36	40	33	151
			115A	33.0	39.7	56	60	51	147	58	60	53	149	59	60	54	149	61	70	56	151
			114A+116A	41.7	50.2	69	70	63	147	72	80	65	149	72	80	66	149	74	80	68	151
			115A+113A	50.0	60.1	67	80	75	147	69	80	77	149	69	80	77	149	72	80	79	151
		HIGH	NONE	–	–	26	30	28	152	28	30	30	154	28	30	30	154	30	35	32	156
			116A	13.9	16.7	29	30	28	152	32	35	30	154	32	35	30	154	34	35	32	156
			113A	16.5	19.8	33	35	30	152	35	35	32	154	36	40	33	154	38	40	35	156
			115A	33.0	39.7	58	60	53	152	60	60	55	154	61	70	56	154	63	70	58	156
			114A+116A	41.7	50.2	71	80	65	152	73	80	67	154	74	80	68	154	76	80	70	156
			115A+113A	50.0	60.1	69	80	76	152	71	80	79	154	71	80	79	154	74	80	81	156
	575-3-60	STD	NONE	–	–	19	20	20	97	23	25	24	101	21	25	22	99	25	30	26	103
			118A	17.0	20.4	30	30	27	97	35	35	32	101	32	35	29	99	37	40	34	103
			119A	34.0	40.9	56	60	51	97	61	70	55	101	58	60	53	99	63	70	57	103
			118A+119A	51.0	61.3	66	70	75	97	71	80	79	101	68	80	76	99	73	80	81	103
		MED	NONE	–	–	20	25	21	106	24	25	25	110	22	25	23	108	26	30	27	112
			118A	17.0	20.4	32	35	29	106	36	40	33	110	34	35	31	108	38	40	35	112
			119A	34.0	40.9	57	60	52	106	62	70	57	110	59	60	54	108	64	70	59	112
			118A+119A	51.0	61.3	67	80	76	106	72	80	80	110	70	80	78	108	74	80	82	112
		HIGH	NONE	–	–	22	25	23	120	26	30	27	124	24	25	25	122	28	30	29	126
			118A	17.0	20.4	34	35	31	120	38	40	35	124	36	40	33	122	41	45	37	126
			119A	34.0	40.9	59	60	54	120	64	70	59	124	61	70	56	122	66	70	60	126
			118A+119A	51.0	61.3	70	80	78	120	74	80	82	124	72	80	80	122	76	80	84	126

See “Legend and Notes for Tables 76 – 83” on page161

Table 80 - UNIT WIRE SIZING DATA WITH FACTORY INSTALLED HACR BREAKER AND 2-SPEED INDOOR FAN OPTION (cont)

UNIT	NO M. V-Ph-HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC**12	208/230-3-60	STD	NONE	–	–	50/50	60/60	52/52	279	53/53	60/60	56/56	283	54/54	60/60	57/57	284	58/58	70/70	62/61	288
			117A	7.8/10.4	21.7/25.0	50/50	60/60	52/52	279/279	53/53	60/60	56/56	283/283	54/54	60/60	57/57	284/284	58/58	70/70	62/61	288/288
			110A	12.0/16.0	33.4/38.5	57/57	60/60	52/52	279/279	62/62	70/70	56/56	283/283	63/63	70/70	57/58	284/284	68/68	70/70	62/62	288/288
			112A	24.0/32.0	66.7/77.0	105/105	110/110	85/96	279/279	110/110	110/110	89/101	283/283	111/111	125/125	90/102	284/284	116/116	125/125	95/106	288/288
			112A+117A	31.8/42.4	88.4/102.0	136/136	150/150	110/125	279/279	141/141	150/150	114/129	283/283	142/142	150/150	115/131	284/284	147/147	150/150	120/135	288/288
			112A+110A	37.6/50.0	104.2/120.3	140/140	150/150	128/146	279/279	144/144	150/150	132/151	283/283	146/146	150/150	134/152	284/284	150/150	150/150	138/156	288/288
		MED	NONE	–	–	53/53	60/60	56/55	329	57/57	70/70	60/59	333	58/58	70/70	62/60	334	62/62	70/70	66/65	338
			117A	7.8/10.4	21.7/25.0	53/53	60/60	56/55	329/329	57/57	70/70	60/59	333/333	58/58	70/70	62/60	334/334	62/62	70/70	66/65	338/338
			110A	12.0/16.0	33.4/38.5	61/61	70/70	56/56	329/329	66/66	70/70	60/60	333/333	67/67	70/70	62/61	334/334	72/72	80/80	66/65	338/338
			112A	24.0/32.0	66.7/77.0	109/109	110/110	89/100	329/329	114/114	125/125	93/104	333/333	115/115	125/125	95/105	334/334	120/120	125/125	99/110	338/338
			112A+117A	31.8/42.4	88.4/102.0	140/140	150/150	114/129	329/329	145/145	150/150	118/133	333/333	146/146	150/150	120/134	334/334	151/151	175/175	124/138	338/338
			112A+110A	37.6/50.0	104.2/120.3	144/144	150/150	132/150	329/329	149/149	150/150	137/154	333/333	150/150	150/150	138/155	334/334	155/155	175/175	142/160	338/338
		HIGH	NONE	–	–	56/56	60/60	59/58	340	60/60	70/70	64/63	344	61/61	70/70	65/64	345	65/65	80/80	69/68	349
			117A	7.8/10.4	21.7/25.0	56/56	60/60	59/58	340/340	60/60	70/70	64/63	344/344	61/61	70/70	65/64	345/345	65/65	80/80	69/68	349/349
			110A	12.0/16.0	33.4/38.5	64/64	70/70	59/59	340/340	69/69	70/70	64/63	344/344	70/70	80/70	65/64	345/345	75/75	80/80	69/69	349/349
			112A	24.0/32.0	66.7/77.0	113/113	125/125	92/103	340/340	117/117	125/125	97/108	344/344	119/119	125/125	98/109	345/345	123/123	125/125	102/113	349/349
			112A+117A	31.8/42.4	88.4/102.0	144/144	150/150	117/132	340/340	149/149	150/150	122/136	344/344	150/150	150/150	123/137	345/345	155/155	175/175	127/142	349/349
			112A+110A	37.6/50.0	104.2/120.3	148/148	150/150	135/153	340/340	152/152	175/175	140/157	344/344	154/154	175/175	141/158	345/345	158/158	175/175	145/163	349/349
	460-3-60	STD	NONE	–	–	25	30	26	134	26	30	28	136	27	30	28	136	29	35	30	138
			116A	13.9	16.7	26	30	26	134	28	30	28	136	29	30	28	136	31	35	30	138
			113A	16.5	19.8	30	30	27	134	32	35	29	136	33	35	30	136	35	35	32	138
			115A	33.0	39.7	55	60	50	134	57	60	52	136	58	60	53	136	60	60	55	138
			114A+116A	41.7	50.2	68	70	62	134	70	70	64	136	71	80	65	136	73	80	67	138
			115A+113A	50.0	60.1	65	70	73	134	68	80	76	136	68	80	76	136	70	80	78	138
		MED	NONE	–	–	26	30	27	159	28	30	29	161	28	30	29	161	30	35	32	163
			116A	13.9	16.7	27	30	27	159	30	30	29	161	30	30	29	161	32	35	32	163
			113A	16.5	19.8	31	35	28	159	34	35	30	161	34	35	31	161	36	40	33	163
			115A	33.0	39.7	56	60	51	159	58	60	53	161	59	60	54	161	61	70	56	163
			114A+116A	41.7	50.2	69	70	63	159	72	80	65	161	72	80	66	161	74	80	68	163
			115A+113A	50.0	60.1	67	80	75	159	69	80	77	161	69	80	77	161	72	80	79	163
		HIGH	NONE	–	–	27	30	29	164	29	35	31	166	29	35	31	166	31	35	33	168
			116A	13.9	16.7	29	30	29	164	32	35	31	166	32	35	31	166	34	35	33	168
			113A	16.5	19.8	33	35	30	164	35	35	32	166	36	40	33	166	38	40	35	168
			115A	33.0	39.7	58	60	53	164	60	60	55	166	61	70	56	166	63	70	58	168
			114A+116A	41.7	50.2	71	80	65	164	73	80	67	166	74	80	68	166	76	80	70	168
			115A+113A	50.0	60.1	69	80	76	164	71	80	79	166	71	80	79	166	74	80	81	168
	575-3-60	STD	NONE	–	–	19	25	20	107	23	25	24	111	21	25	22	109	25	30	26	113
			118A	17.0	20.4	30	30	27	107	35	35	32	111	32	35	29	109	37	40	34	113
			119A	34.0	40.9	56	60	51	107	61	70	55	111	58	60	53	109	63	70	57	113
			118A+119A	51.0	61.3	66	70	75	107	71	80	79	111	68	80	76	109	73	80	81	113
		MED	NONE	–	–	20	25	21	116	24	30	26	120	22	25	23	118	26	30	27	122
			118A	17.0	20.4	32	35	29	116	36	40	33	120	34	35	31	118	38	40	35	122
			119A	34.0	40.9	57	60	52	116	62	70	57	120	59	60	54	118	64	70	59	122
			118A+119A	51.0	61.3	67	80	76	116	72	80	80	120	70	80	78	118	74	80	82	122
		HIGH	NONE	–	–	22	25	23	130	26	30	27	134	24	25	25	132	28	30	29	136
			118A	17.0	20.4	34	35	31	130	38	40	35	134	36	40	33	132	41	45	37	136
			119A	34.0	40.9	59	60	54	130	64	70	59	134	61	70	56	132	66	70	60	136
			118A+119A	51.0	61.3	70	80	78	130	74	80	82	134	72	80	80	132	76	80	84	136

See “Legend and Notes for Tables 76 – 83” on page161

Table 81 – UNIT WIRE/FUSE OR HACR BREAKER SIZING DATA

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC–*14	208/230–3–60	STD	NONE	–	–	55	60	58	314	59	70	62	318	60	70	63	319	64	80	67	323
			291A	12.4/16.5	34.4/39.7	55/59	60/60	58/58	314/314	59/64	70/70	62/62	318/318	60/65	70/70	63/63	319/319	64/70	80/80	67/67	323/323
			288A+291A	19.9/26.5	55.3/63.8	79/90	80/90	72/82	314/314	84/94	90/100	77/86	318/318	85/96	90/100	78/88	319/319	90/100	90/100	82/92	323/323
			294A	25.2/33.5	69.9/80.6	97/111	100/125	89/101	314/314	102/115	110/125	93/106	318/318	103/117	110/125	95/107	319/319	108/121	110/125	99/111	323/323
			288A+294A	32.7/43.5	90.7/104.7	123/141	125/150	113/129	314/314	128/145	150/150	117/133	318/318	129/147	150/150	118/135	319/319	134/151	150/175	123/139	323/323
			291A+294A	37.6/50.0	104.3/120.3	140/130	150/150	129/147	314/314	145/135	150/150	133/151	318/318	146/136	150/150	134/152	319/319	151/141	175/150	138/157	323/323
		MED	NONE	–	–	58	70	60	331	62	80	65	335	63	80	66	336	66	80	70	340
			291A	12.4/16.5	34.4/39.7	58/63	70/70	60/60	331/331	62/67	80/80	65/65	335/335	63/69	80/80	66/66	336/336	67/73	80/80	70/70	340/340
			288A+291A	19.9/26.5	55.3/63.8	82/93	90/100	75/85	331/331	87/97	90/100	79/89	335/335	88/99	90/100	81/90	336/336	93/103	100/110	85/95	340/340
			294A	25.2/33.5	69.9/80.6	100/114	100/125	92/104	331/331	105/118	110/125	96/109	335/335	106/120	110/125	97/110	336/336	111/124	125/125	102/114	340/340
			288A+294A	32.7/43.5	90.7/104.7	126/144	150/150	116/132	331/331	131/149	150/150	120/136	335/335	132/150	150/150	121/137	336/336	137/155	150/175	126/142	340/340
			291A+294A	37.6/50.0	104.3/120.3	143/133	150/150	131/150	331/331	148/138	150/150	136/154	335/335	149/139	150/150	137/155	336/336	154/144	175/175	141/160	340/340
		HIGH	NONE	–	–	68	80	72	350	72	80	77	354	73	80	78	355	77	90	82	359
			291A	12.4/16.5	34.4/39.7	69/76	80/80	72/72	350/350	74/80	80/80	77/77	354/354	75/82	80/90	78/78	355/355	80/86	90/90	82/82	359/359
			288A+291A	19.9/26.5	55.3/63.8	95/106	100/110	87/97	350/350	100/110	100/125	91/101	354/354	101/112	110/125	93/102	355/355	106/116	110/125	97/107	359/359
			294A	25.2/33.5	69.9/80.6	113/127	125/150	104/116	350/350	118/131	125/150	108/121	354/354	119/133	125/150	109/122	355/355	124/137	125/150	114/126	359/359
			288A+294A	32.7/43.5	90.7/104.7	139/157	150/175	128/144	350/350	144/162	150/175	132/148	354/354	145/163	150/175	133/149	355/355	150/168	150/175	138/154	359/359
			291A+294A	37.6/50.0	104.3/120.3	156/146	175/175	143/162	350/350	161/151	175/175	148/166	354/354	162/152	175/175	149/167	355/355	167/157	175/175	153/172	359/359
	460–3–60	STD	NONE	–	–	28	35	29	158	30	35	31	160	30	35	32	160	32	40	34	162
			292A	16.5	19.9	30	35	29	158	32	35	31	160	32	35	32	160	35	40	34	162
			289A+292A	26.5	31.9	45	45	41	158	47	50	43	160	47	50	43	160	50	50	45	162
			295A	33.5	40.3	55	60	50	158	57	60	52	160	58	60	53	160	60	60	55	162
			289A+295A	43.5	52.3	70	70	64	158	72	80	66	160	73	80	67	160	75	80	69	162
			292A+295A	50.0	60.2	65	70	73	158	67	70	75	160	68	80	76	160	70	80	78	162
		MED	NONE	–	–	29	35	30	167	31	40	32	169	31	40	33	169	33	40	35	171
			292A	16.5	19.9	31	35	30	167	33	40	32	169	34	40	33	169	36	40	35	171
			289A+292A	26.5	31.9	46	50	42	167	48	50	44	169	49	50	44	169	51	60	46	171
			295A	33.5	40.3	56	60	51	167	59	60	53	169	59	60	54	169	61	70	56	171
			289A+295A	43.5	52.3	71	80	65	167	74	80	67	169	74	80	68	169	76	80	70	171
			292A+295A	50.0	60.2	66	80	74	167	68	80	76	169	69	80	77	169	71	80	79	171
		HIGH	NONE	–	–	35	40	37	176	37	45	39	178	37	45	39	178	39	45	41	180
			292A	16.5	19.9	38	40	37	176	40	45	39	178	41	45	39	178	43	45	41	180
			289A+292A	26.5	31.9	53	60	48	176	55	60	50	178	56	60	51	178	58	60	53	180
			295A	33.5	40.3	64	70	58	176	66	70	60	178	66	70	61	178	69	70	63	180
			289A+295A	43.5	52.3	79	80	72	176	81	90	74	178	81	90	74	178	84	90	76	180
			292A+295A	50.0	60.2	73	80	81	176	76	80	83	178	76	80	83	178	78	80	86	180

See “Legend and Notes for Tables 76 – 83” on page161

Table 81 - UNIT WIRE/FUSE OR HACR BREAKER SIZING DATA (cont)

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC–*14	575–3–60	STD	NONE	–	–	22	25	23	128	26	30	27	132	24	30	25	130	28	30	29	134
			293A	16.5	15.9	24	25	23	128	29	30	27	132	26	30	25	130	31	35	29	134
			290A+293A	26.5	25.5	36	40	33	128	41	45	37	132	38	40	35	130	43	45	39	134
			296A	33.5	32.2	44	45	40	128	49	50	45	132	46	50	42	130	51	60	47	134
			290A+296A	43.5	41.8	56	60	51	128	61	70	56	132	58	60	53	130	63	70	58	134
			293A+296A	50.0	48.1	52	60	59	128	57	60	63	132	54	60	60	130	59	60	65	134
		MED	NONE	–	–	22	25	23	128	26	30	27	132	24	30	25	130	28	30	29	134
			293A	16.5	15.9	24	25	23	128	29	30	27	132	26	30	25	130	31	35	29	134
			290A+293A	26.5	25.5	36	40	33	128	41	45	37	132	38	40	35	130	43	45	39	134
			296A	33.5	32.2	44	45	40	128	49	50	45	132	46	50	42	130	51	60	47	134
			290A+296A	43.5	41.8	56	60	51	128	61	70	56	132	58	60	53	130	63	70	58	134
			293A+296A	50.0	48.1	52	60	59	128	57	60	63	132	54	60	60	130	59	60	65	134
		HIGH	NONE	–	–	29	35	30	140	32	40	34	144	30	35	32	142	34	40	36	146
			293A	16.5	15.9	32	35	30	140	36	40	34	144	34	35	32	142	38	40	36	146
			290A+293A	26.5	25.5	44	45	40	140	48	50	44	144	46	50	42	142	50	60	46	146
			296A	33.5	32.2	52	60	47	140	57	60	52	144	54	60	49	142	59	60	54	146
			290A+296A	43.5	41.8	64	70	58	140	69	70	63	144	66	70	60	142	71	80	65	146
			293A+296A	50.0	48.1	60	70	66	140	65	70	70	144	62	70	68	142	67	70	72	146

See “Legend and Notes for Tables 76 – 83” on page161

Table 82 – UNIT WIRE SIZING DATA WITH FACTORY INSTALLED HACR BREAKER

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC–*14	208/230–3–60	STD	NONE	–	–	55	60	58	314	59	70	62	318	60	70	63	319	64	80	67	323
			291A	12.4/16.5	34.4/39.7	59/59	60/60	58/58	314/314	64/64	70/70	62/62	318/318	65/65	70/70	63/63	319/319	70/70	80/80	67/67	323/323
			288A+291A	19.9/26.5	55.3/63.8	90/90	90/90	72/82	314/314	94/94	100/100	77/86	318/318	96/96	100/100	78/88	319/319	100/100	100/100	82/92	323/323
			294A	25.2/33.5	69.9/80.6	111/111	125/125	89/101	314/314	115/115	125/125	93/106	318/318	117/117	125/125	95/107	319/319	121/121	125/125	99/111	323/323
			288A+294A	32.7/43.5	90.7/104.7	141/141	150/150	113/129	314/314	145/145	150/150	117/133	318/318	147/147	150/150	118/135	319/319	151/151	175/175	123/139	323/323
			291A+294A	37.6/50.0	104.3/120.3	140/140	150/150	129/147	314/314	145/145	150/150	133/151	318/318	146/146	150/150	134/152	319/319	151/151	175/175	138/157	323/323
		MED	NONE	–	–	58	70	60	331	62	80	65	335	63	80	66	336	66	80	70	340
			291A	12.4/16.5	34.4/39.7	63/63	70/70	60/60	331/331	67/67	80/80	65/65	335/335	69/69	80/80	66/66	336/336	73/73	80/80	70/70	340/340
			288A+291A	19.9/26.5	55.3/63.8	93/93	100/100	75/85	331/331	97/97	100/100	79/89	335/335	99/99	100/100	81/90	336/336	103/103	110/110	85/95	340/340
			294A	25.2/33.5	69.9/80.6	114/114	125/125	92/104	331/331	118/118	125/125	96/109	335/335	120/120	125/125	97/110	336/336	124/124	125/125	102/114	340/340
			288A+294A	32.7/43.5	90.7/104.7	144/144	150/150	116/132	331/331	149/149	150/150	120/136	335/335	150/150	150/150	121/137	336/336	155/155	175/175	126/142	340/340
			291A+294A	37.6/50.0	104.3/120.3	143/143	150/150	131/150	331/331	148/148	150/150	136/154	335/335	149/149	150/150	137/155	336/336	154/154	175/175	141/160	340/340
		HIGH	NONE	–	–	68	80	72	350	72	80	77	354	73	80	78	355	77	90	82	359
			291A	12.4/16.5	34.4/39.7	76/76	80/80	72/72	350/350	80/80	80/80	77/77	354/354	82/82	90/90	78/78	355/355	86/86	90/90	82/82	359/359
			288A+291A	19.9/26.5	55.3/63.8	106/106	110/110	87/97	350/350	110/110	125/125	91/101	354/354	112/112	125/125	93/102	355/355	116/116	125/125	97/107	359/359
			294A	25.2/33.5	69.9/80.6	127/127	150/150	104/116	350/350	131/131	150/150	108/121	354/354	133/133	150/150	109/122	355/355	137/137	150/150	114/126	359/359
			288A+294A	32.7/43.5	90.7/104.7	157/157	175/175	128/144	350/350	162/162	175/175	132/148	354/354	163/163	175/175	133/149	355/355	168/168	175/175	138/154	359/359
			291A+294A	37.6/50.0	104.3/120.3	156/156	175/175	143/162	350/350	161/161	175/175	148/166	354/354	162/162	175/175	149/167	355/355	167/167	175/175	153/172	359/359
	460–3–60	STD	NONE	–	–	28	35	29	158	30	35	31	160	30	35	32	160	32	40	34	162
			292A	16.5	19.9	30	35	29	158	32	35	31	160	32	35	32	160	35	40	34	162
			289A+292A	26.5	31.9	45	45	41	158	47	50	43	160	47	50	43	160	50	50	45	162
			295A	33.5	40.3	55	60	50	158	57	60	52	160	58	60	53	160	60	60	55	162
			289A+295A	43.5	52.3	70	70	64	158	72	80	66	160	73	80	67	160	75	80	69	162
			292A+295A	50.0	60.2	65	70	73	158	67	70	75	160	68	80	76	160	70	80	78	162
		MED	NONE	–	–	29	35	30	167	31	40	32	169	31	40	33	169	33	40	35	171
			292A	16.5	19.9	31	35	30	167	33	40	32	169	34	40	33	169	36	40	35	171
			289A+292A	26.5	31.9	46	50	42	167	48	50	44	169	49	50	44	169	51	60	46	171
			295A	33.5	40.3	56	60	51	167	59	60	53	169	59	60	54	169	61	70	56	171
			289A+295A	43.5	52.3	71	80	65	167	74	80	67	169	74	80	68	169	76	80	70	171
			292A+295A	50.0	60.2	66	80	74	167	68	80	76	169	69	80	77	169	71	80	79	171
		HIGH	NONE	–	–	35	40	37	176	37	45	39	178	37	45	39	178	39	45	41	180
			292A	16.5	19.9	38	40	37	176	40	45	39	178	41	45	39	178	43	45	41	180
			289A+292A	26.5	31.9	53	60	48	176	55	60	50	178	56	60	51	178	58	60	53	180
			295A	33.5	40.3	64	70	58	176	66	70	60	178	66	70	61	178	69	70	63	180
			289A+295A	43.5	52.3	79	80	72	176	81	90	74	178	81	90	74	178	84	90	76	180
			292A+295A	50.0	60.2	73	80	81	176	76	80	83	178	76	80	83	178	78	80	86	180

See “Legend and Notes for Tables 76 – 83” on page161

Table 82 - UNIT WIRE SIZING DATA WITH FACTORY INSTALLED HACR BREAKER (cont)

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC–*14	575–3–60	STD	NONE	–	–	22	25	23	128	26	30	27	132	24	30	25	130	28	30	29	134
			293A	16.5	15.9	24	25	23	128	29	30	27	132	26	30	25	130	31	35	29	134
			290A+293A	26.5	25.5	36	40	33	128	41	45	37	132	38	40	35	130	43	45	39	134
			296A	33.5	32.2	44	45	40	128	49	50	45	132	46	50	42	130	51	60	47	134
			290A+296A	43.5	41.8	56	60	51	128	61	70	56	132	58	60	53	130	63	70	58	134
			293A+296A	50.0	48.1	52	60	59	128	57	60	63	132	54	60	60	130	59	60	65	134
		MED	NONE	–	–	22	25	23	128	26	30	27	132	24	30	25	130	28	30	29	134
			293A	16.5	15.9	24	25	23	128	29	30	27	132	26	30	25	130	31	35	29	134
			290A+293A	26.5	25.5	36	40	33	128	41	45	37	132	38	40	35	130	43	45	39	134
			296A	33.5	32.2	44	45	40	128	49	50	45	132	46	50	42	130	51	60	47	134
			290A+296A	43.5	41.8	56	60	51	128	61	70	56	132	58	60	53	130	63	70	58	134
			293A+296A	50.0	48.1	52	60	59	128	57	60	63	132	54	60	60	130	59	60	65	134
		HIGH	NONE	–	–	29	35	30	140	32	40	34	144	30	35	32	142	34	40	36	146
			293A	16.5	15.9	32	35	30	140	36	40	34	144	34	35	32	142	38	40	36	146
			290A+293A	26.5	25.5	44	45	40	140	48	50	44	144	46	50	42	142	50	60	46	146
			296A	33.5	32.2	52	60	47	140	57	60	52	144	54	60	49	142	59	60	54	146
			290A+296A	43.5	41.8	64	70	58	140	69	70	63	144	66	70	60	142	71	80	65	146
			293A+296A	50.0	48.1	60	70	66	140	65	70	70	144	62	70	68	142	67	70	72	146

See “Legend and Notes for Tables 76 – 83” on page161

Table 83 – UNIT WIRE SIZING DATA WITH FACTORY INSTALLED HACR BREAKER AND 2 SPEED INDOOR FAN OPTION

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC–*14	208/230–3–60	STD	NONE	–	–	56/56	70/70	59/58	311	60/60	70/70	63/62	315	61/61	70/70	64/63	316	65/65	80/80	69/68	320
			291A	12.4/16.5	34.4/39.7	60/60	70/70	59/58	311/311	65/65	70/70	63/62	315/315	66/66	70/70	64/63	316/316	71/71	80/80	69/68	320/320
			288A+291A	19.9/26.5	55.3/63.8	90/90	90/90	73/82	311/311	95/95	100/100	78/87	315/315	96/96	100/100	79/88	316/316	101/101	110/110	83/92	320/320
			294A	25.2/33.5	69.9/80.6	111/111	125/125	90/102	311/311	116/116	125/125	95/106	315/315	117/117	125/125	96/107	316/316	122/122	125/125	100/112	320/320
			288A+294A	32.7/43.5	90.7/104.7	141/141	150/150	114/129	311/311	146/146	150/150	119/134	315/315	147/147	150/150	120/135	316/316	152/152	175/175	124/139	320/320
			291A+294A	37.6/50.0	104.3/120.3	142/142	150/150	130/147	311/311	146/146	150/150	134/152	315/315	148/148	150/150	135/153	316/316	152/152	175/175	140/157	320/320
		MED	NONE	–	–	59/59	70/70	61/60	335	62/62	80/80	66/65	339	63/63	80/80	67/66	340	67/67	80/80	71/70	344
			291A	12.4/16.5	34.4/39.7	62/62	70/70	61/60	335/335	67/67	80/80	66/65	339/339	68/68	80/80	67/66	340/340	73/73	80/80	71/70	344/344
			288A+291A	19.9/26.5	55.3/63.8	92/92	100/100	76/85	335/335	97/97	100/100	80/89	339/339	98/98	100/100	82/90	340/340	103/103	110/110	86/95	344/344
			294A	25.2/33.5	69.9/80.6	113/113	125/125	93/104	335/335	118/118	125/125	97/108	339/339	119/119	125/125	98/109	340/340	124/124	125/125	103/114	344/344
			288A+294A	32.7/43.5	90.7/104.7	144/144	150/150	117/132	335/335	148/148	150/150	121/136	339/339	150/150	150/150	122/137	340/340	154/154	175/175	127/142	344/344
			291A+294A	37.6/50.0	104.3/120.3	144/144	150/150	132/150	335/335	149/149	150/150	137/154	339/339	150/150	150/150	138/155	340/340	155/155	175/175	142/160	344/344
		HIGH	NONE	–	–	68	80	72	350	72	80	77	354	73	80	78	355	77	90	82	359
			291A	12.4/16.5	34.4/39.7	76/76	80/80	72/72	350/350	80/80	80/80	77/77	354/354	82/82	90/90	78/78	355/355	86/86	90/90	82/82	359/359
			288A+291A	19.9/26.5	55.3/63.8	106/106	110/110	87/97	350/350	110/110	125/125	91/101	354/354	112/112	125/125	93/102	355/355	116/116	125/125	97/107	359/359
			294A	25.2/33.5	69.9/80.6	127/127	150/150	104/116	350/350	131/131	150/150	108/121	354/354	133/133	150/150	109/122	355/355	137/137	150/150	114/126	359/359
			288A+294A	32.7/43.5	90.7/104.7	157/157	175/175	128/144	350/350	162/162	175/175	132/148	354/354	163/163	175/175	133/149	355/355	168/168	175/175	138/154	359/359
			291A+294A	37.6/50.0	104.3/120.3	156/156	175/175	143/162	350/350	161/161	175/175	148/166	354/354	162/162	175/175	149/167	355/355	167/167	175/175	153/172	359/359
	460–3–60	STD	NONE	–	–	28	35	29	157	30	35	32	159	31	35	32	159	32	40	34	161
			292A	16.5	19.9	30	35	29	157	32	35	32	159	33	35	32	159	35	40	34	161
			289A+292A	26.5	31.9	45	45	41	157	47	50	43	159	48	50	44	159	50	50	46	161
			295A	33.5	40.3	56	60	51	157	58	60	53	159	58	60	53	159	61	70	55	161
			289A+295A	43.5	52.3	71	80	65	157	73	80	67	159	73	80	67	159	76	80	69	161
			292A+295A	50.0	60.2	65	70	74	157	68	80	76	159	68	80	76	159	70	80	78	161
		MED	NONE	–	–	30	35	31	169	31	40	33	171	32	40	33	171	34	40	35	173
			292A	16.5	19.9	31	35	31	169	34	40	33	171	34	40	33	171	36	40	35	173
			289A+292A	26.5	31.9	46	50	42	169	49	50	44	171	49	50	45	171	51	60	47	173
			295A	33.5	40.3	57	60	52	169	59	60	54	171	60	60	55	171	62	70	57	173
			289A+295A	43.5	52.3	72	80	66	169	74	80	68	171	75	80	68	171	77	80	70	173
			292A+295A	50.0	60.2	67	80	75	169	69	80	77	171	70	80	77	171	72	80	79	173
		HIGH	NONE	–	–	35	40	37	176	37	45	39	178	37	45	39	178	39	45	41	180
			292A	16.5	19.9	38	40	37	176	40	45	39	178	41	45	39	178	43	45	41	180
			289A+292A	26.5	31.9	53	60	48	176	55	60	50	178	56	60	51	178	58	60	53	180
			295A	33.5	40.3	64	70	58	176	66	70	60	178	66	70	61	178	69	70	63	180
			289A+295A	43.5	52.3	79	80	72	176	81	90	74	178	81	90	74	178	84	90	76	180
			292A+295A	50.0	60.2	73	80	81	176	76	80	83	178	76	80	83	178	78	80	86	180

See “Legend and Notes for Tables 76 – 83” on page161

Table 83 - UNIT WIRE SIZING DATA WITH FACTORY INSTALLED HACR BREAKER AND 2 SPEED INDOOR FAN OPTION (cont)

UNIT	NO M. V–Ph–HZ	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.								w/ PWRD C.O.							
						NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ P.E. (pwrd fr/unit)			
			CRHEATER***A00	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE		MCA	MAX FUSE or HACR BRKR	DISC. SIZE	
								FLA	LRA			FLA	LRA			FLA	LRA			FLA	LRA
50HC—*14	575–3–60	STD	NONE	–	–	24	30	25	128	28	30	29	132	25	30	27	130	29	35	31	134
			293A	16.5	15.9	26	30	25	128	31	35	29	132	28	30	27	130	33	35	31	134
			290A+293A	26.5	25.5	38	40	35	128	43	45	39	132	40	40	36	130	45	45	41	134
			296A	33.5	32.2	46	50	42	128	51	60	47	132	48	50	44	130	53	60	49	134
			290A+296A	43.5	41.8	58	60	53	128	63	70	58	132	60	60	55	130	65	70	60	134
			293A+296A	50.0	48.1	54	60	60	128	59	60	65	132	56	60	62	130	61	70	67	134
		MED	NONE	–	–	24	30	25	128	28	30	29	132	25	30	27	130	29	35	31	134
			293A	16.5	15.9	26	30	25	128	31	35	29	132	28	30	27	130	33	35	31	134
			290A+293A	26.5	25.5	38	40	35	128	43	45	39	132	40	40	36	130	45	45	41	134
			296A	33.5	32.2	46	50	42	128	51	60	47	132	48	50	44	130	53	60	49	134
			290A+296A	43.5	41.8	58	60	53	128	63	70	58	132	60	60	55	130	65	70	60	134
			293A+296A	50.0	48.1	54	60	60	128	59	60	65	132	56	60	62	130	61	70	67	134
		HIGH	NONE	–	–	29	35	30	140	32	40	34	144	30	35	32	142	34	40	36	146
			293A	16.5	15.9	32	35	30	140	36	40	34	144	34	35	32	142	38	40	36	146
			290A+293A	26.5	25.5	44	45	40	140	48	50	44	144	46	50	42	142	50	60	46	146
			296A	33.5	32.2	52	60	47	140	57	60	52	144	54	60	49	142	59	60	54	146
			290A+296A	43.5	41.8	64	70	58	140	69	70	63	144	66	70	60	142	71	80	65	146
			293A+296A	50.0	48.1	60	70	66	140	65	70	70	144	62	70	68	142	67	70	72	146

Legend and Notes for Tables 76 — 83

LEGEND:

BRKR	–	Circuit breaker
CO	–	Convenience outlet
DISC	–	Disconnect
FLA	–	Full load amps
IFM	–	Indoor fan motor
LRA	–	Locked rotor amps
MCA	–	Minimum circuit amps
MOCP	–	MAX FUSE or HACR Breaker
PE	–	Power exhaust
PWRD CO	–	Powered convenient outlet
UNPWR CO	–	Unpowered convenient outlet

NOTES:

1. In compliance with NEC requirements for multimotor and combination load equipment (refer to NEC Articles 430 and 440), the overcurrent protective device for the unit shall be fuse or HACR breaker. Canadian units may be fuse or circuit breaker.
2. **Unbalanced 3-Phase Supply Voltage**
   Never operate a motor where a phase imbalance in supply voltage is greater than 2%. Use the following formula to determine the percentage of voltage imbalance.

$$\% \text{ Voltage Imbalance} = 100 \times \frac{\text{max voltage deviation from average voltage}}{\text{average voltage}}$$

Example: Supply voltage is 230-3-60

AB = 224 v
BC = 231 v
AC = 226 v

$$\text{Average Voltage} = \frac{(224 + 231 + 226)}{3} = \frac{681}{3}$$

$$= 227$$

Determine maximum deviation from average voltage.
(AB) 227 – 224 = 3 v
(BC) 231 – 227 = 4 v
(AC) 227 – 226 = 1 v
Maximum deviation is 4 v.
Determine percent of voltage imbalance.

$$\% \text{ Voltage Imbalance} = 100 \times \frac{4}{227}$$

$$= 1.76\%$$

This amount of phase imbalance is satisfactory as it is below the maximum allowable 2%.
IMPORTANT: If the supply voltage phase imbalance is more than 2%, contact your local electric utility company immediately.

SEQUENCE OF OPERATION

General

The sequence below describes the sequence of operation for an electro-mechanical unit with and without a factory installed EconoMi$er™ IV and X (called "economizer" in this sequence). For information regarding a direct digital controller, see the start-up, operations, and troubleshooting manual for the applicable controller.

Electro-mechanical units with no economizer

Cooling (Single speed indoor fan motor) —

When the thermostat calls for cooling, terminals G and Y1 are energized. As a result, the indoor-fan contactor (IFC) and the compressor contactor (C1) are energized, causing the indoor-an motor (IFM), compressor #1, and outdoor fan to start. If the unit has 2 stages of cooling, the thermostat will additionally energize Y2. The Y2 signal will energize compressor contactor #2 (C2), causing compressor #2 to start. Regardless of the number of stages, the outdoor-fan motor runs continuously while unit is cooling.

Cooling (2-speed indoor fan motor) —

Per ASHRAE 90.1 2010 standard section 6.4.3.10.b, during the first stage of cooling operation the VFD will adjust the fan motor to provide 2/3rd of the total cfm established for the unit. When a call for the second stage of cooling is required, the VFD will allow the total cfm for the unit established (100%).

Heating

NOTE: The 50HC is sold as cooling only. If electric heaters are required, use only factory-approved electric heaters. They will operate as described below.

Units have either 1 or 2 stages of electric heat. When the thermostat calls for heating, power is applied to the W1 terminal at the unit. The unit control will energize the indoor fan contactor and the first stage of electric heat. On units with two-stage heating, when additional heating is required, the second stage of electric heat (if equipped) will be energized when power is applied at the W2 terminal on the unit.

Electro-mechanical units with an economizer

Cooling —

When free cooling is not available, the compressors will be controlled by the zone thermostat. When free cooling is available, the outdoor-air damper is modulated by the EconoMi$er IV and X control to provide a 50°F (10°C) to 55°F (13°C) mixed-air temperature into the zone. As the mixed air temperature fluctuates above 55°F (13°C) or below 50°F (10°C) dampers will be modulated (open or close) to bring the mixed-air temperature back within control. If mechanical cooling is utilized with free cooling, the outdoor-air damper will maintain its current position at the time the compressor is started. If the increase in cooling capacity causes the mixed-air temperature to drop below 45°F (9°C), then the outdoor-air damper position will be decreased to the minimum position. If the mixed-air temperature continues to fall, the outdoor-air damper will close. Control returns to normal once the mixed-air temperature rises above 48°F (9°C). The power exhaust fans will be energized and de-energized, if installed, as the outdoor-air damper opens and closes.

If field-installed accessory CO_2 sensors are connected to the EconoMi$er IV and X control, a demand controlled ventilation strategy will begin to operate. As the CO_2 level in the zone increases above the CO_2 setpoint, the minimum position of the damper will be increased proportionally. As the CO_2 level decreases because of the increase in fresh air, the outdoor-air damper will be proportionally closed. For EconoMi$er IV and X operation, there must be a thermostat call for the fan (G). If the unit is occupied and the fan is on, the damper will operate at minimum position. Otherwise, the damper will be closed.

When the EconoMi$er IV and X control is in the occupied mode and a call for cooling exists (Y1 on the thermostat), the control will first check for indoor fan operation. If the fan is not on, then cooling will not be activated. If the fan is on, then the control will open the EconoMi$er IV and X damper to the minimum position.

On the initial power to the EconoMi$er IV and X control, it will take the damper up to 2 1/2 minutes before it begins to position itself. After the initial power-up, further changes in damper position can take up to 30 seconds to initiate. Damper movement from full closed to full open (or vice versa) will take between 1 1/2 and 2 1/2 minutes. If free cooling can be used as determined from the appropriate changeover command (switch, dry bulb, enthalpy curve, differential dry bulb, or differential enthalpy), then the control will modulate the dampers open to maintain the mixed-air temperature setpoint at 50°F (10°C) to 55°F (13°C). If there is a further demand for cooling (cooling second stage - Y2 is energized), then the control will bring on compressor stage 1 to maintain the mixed-air temperature setpoint. The EconoMi$er IV and X damper will be open at maximum position. EconoMi$er IV and X operation is limited to a single compressor.

2-Speed Note: When operating in ventilation mode only, the indoor fan motor will automatically adjust to 2/3rd of the total cfm established.

Heating

The sequence of operation for the heating is the same as an electromechanical unit with no economizer. The only difference is how the economizer acts. The economizer will stay at the Economizer Minimum Position while the evaporator fan is operating. The outdoor-air damper is closed when the indoor fan is not operating.

SEQUENCE OF OPERATION (cont.)

Optional Humidi-MiZer Dehumidification System

Units with the factory equipped Humidi-MiZer option are capable of providing multiple modes of improved dehumidification as a variation of the normal cooling cycle. The Humidi-MiZer option includes additional valves in the liquid line and discharge line of each refrigerant circuit, a small reheat condenser coil downstream of the evaporator, and Motormaster variable-speed control of some or all outdoor fans. Operation of the revised refrigerant circuit for each mode is described below.

The Humidi-MiZer system provides three sub-modes of operation: Cool, Reheat1, and Reheat2.

Cool mode - provides a normal ratio of Sensible and Latent Cooling effect from the evaporator coil.

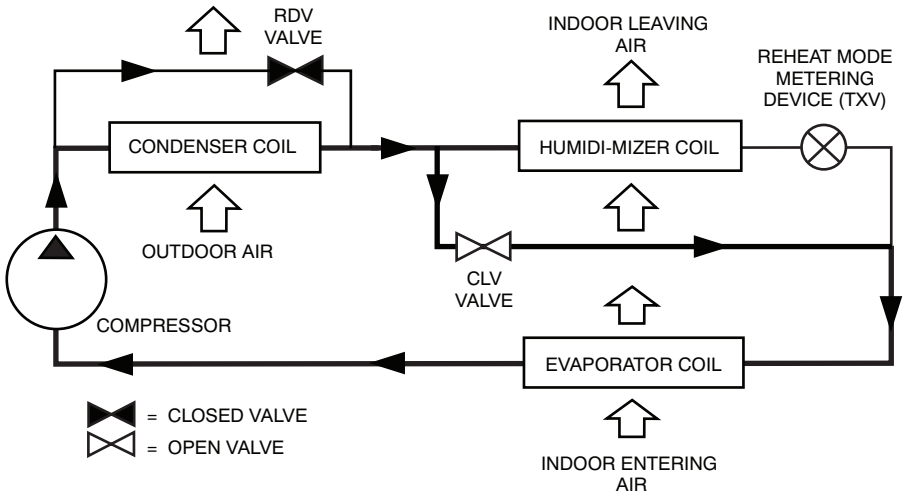
Reheat1 - provides increased Latent Cooling while slightly reducing the Sensible Cooling effect.

Reheat2 - provides normal Latent Cooling but with null or minimum Sensible Cooling effect delivered to the space.

The Reheat1 and Reheat2 modes are available when the unit is not in a Heating mode and when the Low Ambient Lockout switch is closed.

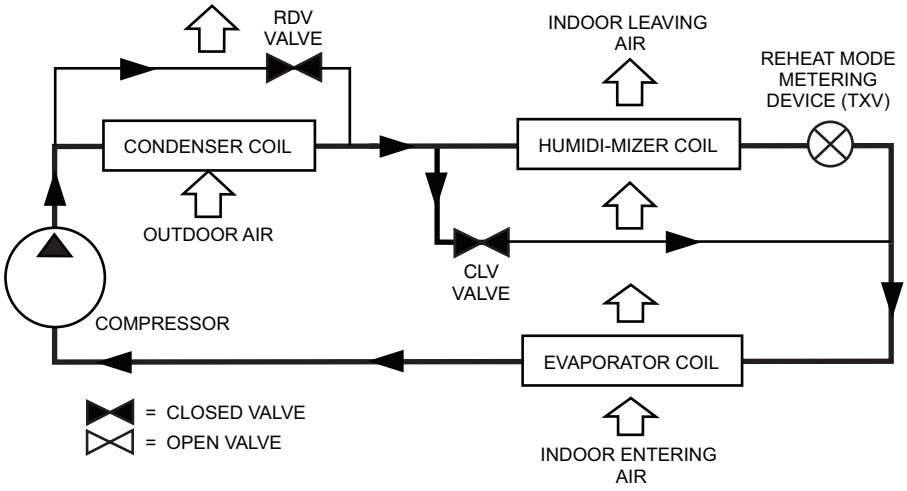
The following diagrams depict piping for Single Stage cooling units.

SEQUENCE OF OPERATION (cont.)



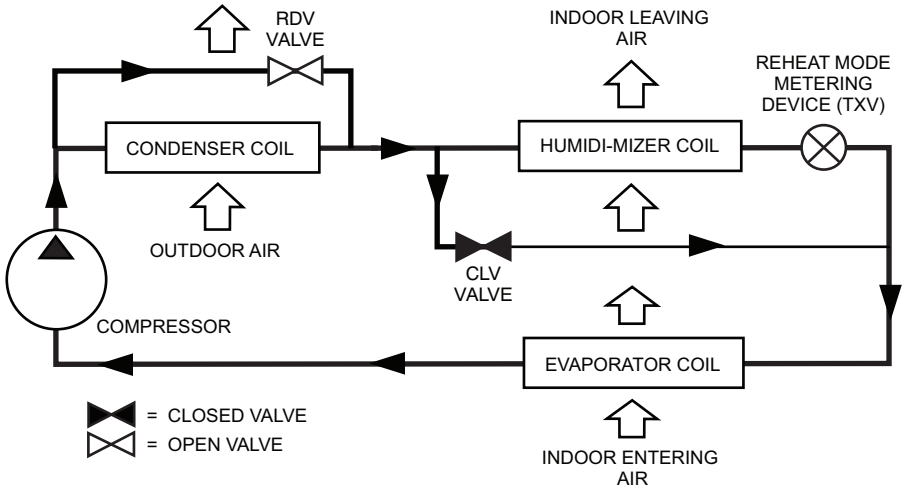
C12702

Normal Cooling Mode - Humidi-MiZer System with Single Stage Cooling



C12703

Subcooling Mode (Reheat 1) - Humidi-MiZer System with Single Stage Cooling



C12704

Hot Gas Reheat Mode (Reheat2) - Humidi-MiZer System with Single Stage Cooling

GUIDE SPECIFICATIONS - 50HC**04-14

Note about this specification:

This specification is in the "Masterformat" as published by the Construction Specification Institute. Please feel free to copy this specification directly into your building spec.

Cooling Only/Electric Heat Packaged Rooftop

HVAC Guide Specifications

Size Range: **3 to 12.5 Nominal Tons**

Section **Description**

23 06 80 Schedules for Decentralized HVAC Equipment

23 06 80.13 Decentralized Unitary HVAC Equipment Schedule

23 06 80.13.A. Rooftop unit schedule

1. Schedule is per the project specification requirements.

23 07 16 HVAC Equipment Insulation

23 07 16.13 Decentralized, Rooftop Units:

23 07 16.13.A. Evaporator fan compartment:

1. Interior cabinet surfaces shall be insulated with a minimum 1/2-in. thick, minimum 1 1/2 lb density, flexible fiberglass insulation bonded with a phenolic binder, neoprene coated on the air side.
2. Insulation and adhesive shall meet NFPA 90A requirements for flame spread and smoke generation.

23 07 16.13.B. Electric heat compartment:

1. Aluminum foil-faced fiberglass insulation shall be used.
2. Insulation and adhesive shall meet NFPA 90A requirements for flame spread and smoke generation.

23 09 13 Instrumentation and Control Devices for HVAC

23 09 13.23 Sensors and Transmitters

23 09 13.23.A. Thermostats

1. Thermostat must
   a. energize both "W" and "G" when calling for heat.
   b. have capability to energize 2 different stages of cooling, and 2 different stages of heating.
   c. include capability for occupancy scheduling.

23 09 23 Direct-digital Control system for HVAC

23 09 23.13 Decentralized, Rooftop Units:

23 09 23.13.A. PremierLink™ controller

1. Shall be ASHRAE 62-2001 compliant.
2. Shall accept 18-32VAC input power.
3. Shall have an operating temperature range from -40°F (-40°C) to 158°F (70°C), 10% - 95% RH (non-condensing).
4. Shall include an integrated economizer controller to support an economizer with 4 to 20 mA actuator input and no microprocessor controller.
5. Controller shall accept the following inputs: space temperature, setpoint adjustment, outdoor air temperature, indoor air quality, outdoor air quality, indoor relative humidity, compressor lock-out, fire shutdown, enthalpy, fan status, remote time clock/door switch.
6. Shall accept a CO_2 sensor in the conditioned space, and be Demand Control Ventilation (DCV) ready.
7. Shall provide the following outputs: Economizer, fan, cooling stage 1, cooling stage 2, heat stage 1, heat stage 2, heat stage 3/ exhaust/ reversing valve/ dehumidify/ occupied.
8. Unit shall provide surge protection for the controller through a circuit breaker.
9. Shall be Internet capable, and communicate at a Baud rate of 38.4K or faster.
10. Shall have an LED display independently showing the status of activity on the communication bus, and processor operation.

11. Shall include an EIA-485 protocol communication port, an access port for connection of either a computer or a Carrier technician tool, an EIA-485 port for network communication to intelligent space sensors and displays, and a port to connect an optional LonWorks plug-in communications card.
12. Shall have built-in Carrier Comfort Network (CCN) protocol, and be compatible with other CCN devices, including ComfortLink and ComfortVIEW controllers.
13. Shall have built-in support for Carrier technician tool.
14. Software upgrades will be accomplished by local download. Software upgrades through chip replacements are not allowed.
15. Shall be shock resistant in all planes to 5G peak, 11ms during operation, and 100G peak, 11ms during storage.
16. Shall be vibration resistant in all planes to 1.5G @ 20-300 Hz.
17. Shall support a bus length of 4000 ft max, 60 devices per 1000 ft section, and 1 RS-485 repeater per 1000ft sections.

23 09 23.13.B. ComfortLink Unit Controls shall contain:

1. Four button detailed English scrolling marquee display.
2. CCN (Carrier Comfort Network) capable.
3. Unit control with standard suction pressure transducers and condensing temperature thermistors.
4. Shall provide a 5°F temperature difference between cooling and heating set points to meet ASHRAE 90.1 Energy Standard.
5. Shall provide and display a current alarm list and an alarm history list.
6. Service run test capability.
7. Shall accept input from a CO_2 sensor (both indoor and outdoor).
8. Configurable alarm light shall be provided which activates when certain types of alarms occur.
9. Compressor minimum run time (3 minutes) and minimum off time (5 minutes) are provided.
10. Service diagnostic mode.
11. Economizer control (optional).
12. Control multi capacity stages
13. Unit shall be complete with self-contained low voltage control circuit.
14. Unit shall have 0°F low ambient cooling operation.

23 09 23.13.C. RTU Open multi-protocol, direct digital controller:

1. Shall be ASHRAE 62-2001 compliant.
2. Shall accept 18-30VAC, 50-60Hz, and consumer 15VA or less power.
3. Shall have an operating temperature range from -40°F (-40°C) to 130°F (54°C), 10% - 90% RH (non-condensing).
4. Shall include built-in protocol for BACNET (MS/TP and PTP modes), Modbus (RTU and ASCII), Johnson N2 and LonWorks. LonWorks Echelon processor required for all Lon applications shall be contained in separate communication board.
5. Shall allow access of up to 62 network variables (SNVT). Shall be compatible with all open controllers.
6. Baud rate Controller shall be selectable using a dipswitch.
7. Shall have an LED display independently showing the status of serial communication, running, errors, power, all digital outputs, and all analog inputs.
8. Shall accept the following inputs: space temperature, setpoint adjustment, outdoor air temperature, indoor air quality, outdoor air quality, compressor lock-out, fire shutdown, enthalpy switch, and fan status/filter status/ humidity/ remote occupancy.
9. Shall provide the following outputs: economizer, fan, cooling stage 1, cooling stage 2, heat stage 1, heat stage 2, heat stage 3/ exhaust/ reversing valve.
10. Shall have built-in surge protection circuitry through solid state polyswitches. Polyswitches shall be used on incoming power and network connections. Polyswitches will return to normal when the “trip” condition clears.
11. Shall have a battery back-up capable of a minimum of 10,000 hours of data and time clock retention during power outages.
12. Shall have built-in support for Carrier technician tool.
13. Shall include an EIA-485 protocol communication port, an access port for connection of either a computer or a Carrier technician tool, an EIA-485 port for network communication to intelligent space sensors and displays, and a port to connect an optional LonWorks communications card.
14. Software upgrades will be accomplished by either local or remote download. No software upgrades through chip replacements are allowed.

23 09 33 Electric and Electronic Control System for HVAC

23 09 33.13 Decentralized, Rooftop Units:

23 09 33.13.A. General:

1. Shall be complete with self-contained low-voltage control circuit protected by a resettable circuit breaker on the 24-v transformer side. Transformer shall have 75VA capability.
2. Shall utilize color-coded wiring.
3. Shall include a central control terminal board to conveniently and safely provide connection points for vital control functions such as: smoke detectors, phase monitor, economizer, thermostat, DDC control options, and low and high pressure switches.
4. Unit shall include a minimum of one 8-pin screw terminal connection board for connection of control wiring.

23 09 33.23.B. Safeties:

1. Compressor over-temperature, over current.
2. Low-pressure switch.
   a. Units with 2 compressors shall have different sized connectors for the circuit 1 and circuit 2 low and high pressure switches. They shall physically prevent the cross-wiring of the safety switches between circuits 1 and 2.
   b. Low pressure switch shall use different color wire than the high pressure switch. The purpose is to assist the installer and service technician to correctly wire and or troubleshoot the rooftop unit.
3. High-pressure switch.
   a. Units with 2 compressors shall have different sized connectors for the circuit 1 and circuit 2 low and high pressure switches. They shall physically prevent the cross-wiring of the safety switches between circuits 1 and 2.
   b. High pressure switch shall use different color wire than the low pressure switch. The purpose is to assist the installer and service technician to correctly wire and or troubleshoot the rooftop unit.
4. Automatic reset, motor thermal overload protector.

23 09 93 Sequence of Operations for HVAC Controls

23 09 93.13 Decentralized, Rooftop Units:

23 09 93.13 INSERT SEQUENCE OF OPERATION

23 40 13 Panel Air Filters

23 40 13.13 Decentralized, Rooftop Units:

23 40 13.13.A. Standard filter section

1. Shall consist of factory-installed, low velocity, throwaway 2-in. thick fiberglass filters of commercially available sizes.
2. Unit shall use only one filter size. Multiple sizes are not acceptable.
3. Filters shall be accessible through an access panel with “no-tool” removal as described in the unit cabinet section of this specification (23 81 19.13.H).

23 81 19 Self-Contained Air Conditioners

23 81 19.13 Small-Capacity Self-Contained Air Conditioners (50HC**04-14)

23 81 19.13.A. General

1. Outdoor, rooftop mounted, electrically controlled, heating and cooling unit utilizing a(n) hermetic scroll compressor(s) for cooling duty and gas combustion for heating duty.
2. Factory assembled, single-piece heating and cooling rooftop unit. Contained within the unit enclosure shall be all factory wiring, piping, controls, and special features required prior to field start-up.
3. Unit shall use environmentally safe, Puron® refrigerant.
4. Unit shall be installed in accordance with the manufacturer’s instructions.
5. Unit must be selected and installed in compliance with local, state, and federal codes.

23 81 19.13.B. Quality Assurance

1. Unit meets ASHRAE 90.1 minimum efficiency requirements.
2. 3 phase units are Energy Star qualified.
3. Unit shall be rated in accordance with AHRI Standards 210/240 and 340/360.
4. Unit shall be designed to conform to ASHRAE 15, 2001.
5. Unit shall be UL-tested and certified in accordance with ANSI Z21.47 Standards and UL-listed and certified under Canadian standards as a total package for safety requirements.
6. Insulation and adhesive shall meet NFPA 90A requirements for flame spread and smoke generation.

7. Unit casing shall be capable of withstanding 500-hour salt spray exposure per ASTM B117 (scribed specimen).
8. Unit shall be designed in accordance with ISO 9001, and shall be manufactured in a facility registered by ISO 9001.
9. Roof curb shall be designed to conform to NRCA Standards.
10. Unit shall be subjected to a completely automated run test on the assembly line. The data for each unit will be stored at the factory, and must be available upon request.
11. Unit shall be designed in accordance with UL Standard 1995, including tested to withstand rain.
12. Unit shall be constructed to prevent intrusion of snow and tested to prevent snow intrusion into the control box up to 40 mph.
13. Unit shake tested to assurance level 1, ASTM D4169 to ensure shipping reliability.
14. High Efficient Motors listed shall meet section 313 of the Energy Independence and Security Act of 2007 (EISA 2007).

23 81 19.13.C. Delivery, Storage, and Handling

1. Unit shall be stored and handled per manufacturer's recommendations.
2. Lifted by crane requires either shipping top panel or spreader bars.
3. Unit shall only be stored or positioned in the upright position.

23 81 19.13.D. Project Conditions

1. As specified in the contract.

23 81 19.13.E. Project Conditions

1. As specified in the contract.

23 81 19.13.F. Operating Characteristics

1. Unit shall be capable of starting and running at 125°F (52°C) ambient outdoor temperature, meeting maximum load criteria of AHRI Standard 210/240 or 340/360 at ± 10% voltage.
2. Compressor with standard controls shall be capable of operation down to 35°F (2°C), ambient outdoor temperatures. Accessory low ambient kits shall be available if operation below 35°F (2°C), is required. See below for head pressure control package or winter start kit.
3. Unit shall discharge supply air vertically or horizontally as shown on contract drawings.
4. Unit shall be factory configured for vertical supply & return configurations.
5. Unit shall be field convertible from vertical to horizontal airflow on all models. No special kit required on 04-12 models. Supply duct kit required for 14 size model only.
6. Unit shall be capable of mixed operation: vertical supply with horizontal return or horizontal supply with vertical return.

23 81 19.13.G. Electrical Requirements

1. Main power supply voltage, phase, and frequency must match those required by the manufacturer.

23 81 19.13.H. Unit Cabinet

1. Unit cabinet shall be constructed of galvanized steel, and shall be bonderized and coated with a pre-painted baked enamel finish on all externally exposed surfaces.
2. Unit cabinet exterior paint shall be: film thickness, (dry) 0.003 inches minimum, gloss (per ASTM D523, 60°F): 60, Hardness: H-2H Pencil hardness.
3. Evaporator fan compartment interior cabinet insulation shall conform to AHRI Standards 210/240 or 340/360 minimum exterior sweat criteria. Interior surfaces shall be insulated with a minimum 1/2-in. thick, 1 lb density, flexible fiberglass insulation, neoprene coated on the air side. Aluminum foil-faced fiberglass insulation shall be used in the heat compartment.
4. Base of unit shall have a minimum of four locations for thru-the-base gas and electrical connections (factory installed or field installed), standard.
5. Base Rail
   a. Unit shall have base rails on a minimum of 3 sides.
   b. Holes shall be provided in the base rails for rigging shackles to facilitate maneuvering and overhead rigging.
   c. Holes shall be provided in the base rail for moving the rooftop by fork truck.
   d. Base rail shall be a minimum of 16 gauge thickness.
6. Condensate pan and connections:
   a. Shall be an internally sloped condensate drain pan made of a non-corrosive material.
   b. Shall comply with ASHRAE Standard 62.
   c. Shall use a 3/4" -14 NPT drain connection, possible either through the bottom or end of the drain pan. Connection shall be made per manufacturer's recommendations.

7. Top panel:
    a. Shall be a single piece top panel on 04 thru 12 sizes, two piece on 14 size.
8. Electrical Connections
    a. All unit power wiring shall enter unit cabinet at a single, factory-prepared, knockout location.
    b. Thru-the-base capability
        (1.) Standard unit shall have a thru-the-base electrical location(s) using a raised, embossed portion of the unit basepan.
        (2.) Optional, factory-approved, water-tight connection method must be used for thru-the-base electrical connections.
        (3.) No basepan penetration, other than those authorized by the manufacturer, is permitted.
9. Component access panels (standard)
    a. Cabinet panels shall be easily removable for servicing.
    b. Unit shall have one factory installed, tool-less, removable, filter access panel.
    c. Panels covering control box, indoor fan, indoor fan motor, gas components (where applicable), and compressors shall have molded composite handles.
    d. Handles shall be UV modified, composite, permanently attached, and recessed into the panel.
    e. Screws on the vertical portion of all removable access panel shall engage into heat resistant, molded composite collars.
    f. Collars shall be removable and easily replaceable using manufacturer recommended parts.

23 81 19.13.I. N/A

23 81 19.13.J. Coils

1. Standard Aluminum Fin/Copper Tube Coils:
    a. Standard evaporator and condenser coils shall have aluminum lanced plate fins mechanically bonded to seamless internally grooved copper tubes with all joints brazed.
    b. Evaporator coils shall be leak tested to 150 psig, pressure tested to 450 psig, and qualified to UL 1995 burst test at 1775 psig.
    c. Condenser coils shall be leak tested to 150 psig, pressure tested to 650 psig, and qualified to UL 1995 burst test at 1980 psig.
2. Optional Pre-coated aluminum-fin condenser coils (3 phase models only):
    a. Shall have a durable epoxy-phenolic coating to provide protection in mildly corrosive coastal environments.
    b. Coating shall be applied to the aluminum fin stock prior to the fin stamping process to create an inert barrier between the aluminum fin and copper tube.
    c. Epoxy-phenolic barrier shall minimize galvanic action between dissimilar metals.
3. Optional Copper-fin evaporator and condenser coils (3 phase models only):
    a. Shall be constructed of copper fins mechanically bonded to copper tubes and copper tube sheets.
    b. Galvanized steel tube sheets shall not be acceptable.
    c. A polymer strip shall prevent coil assembly from contacting the sheet metal coil pan to minimize potential for galvanic corrosion between coil and pan.
4. Optional E-coated aluminum-fin evaporator and condenser coils (3 phase models only):
    a. Shall have a flexible epoxy polymer coating uniformly applied to all coil surface areas without material bridging between fins.
    b. Coating process shall ensure complete coil encapsulation of tubes, fins and headers.
    c. Color shall be high gloss black with gloss per ASTM D523-89.
    d. Uniform dry film thickness from 0.8 to 1.2 mil on all surface areas including fin edges.
    e. Superior hardness characteristics of 2H per ASTM D3363-92A and cross-hatch adhesion of 4B-5B per ASTM D3359-93.
    f. Impact resistance shall be up to 160 in.-lb (ASTM D2794-93).
    g. Humidity and water immersion resistance shall be up to minimum 1000 and 250 hours respectively (ASTM D2247-92 and ASTM D870-92).
    h. Corrosion durability shall be confirmed through testing to be no less than 1000 hours salt spray per ASTM B117-90.
5. Optional E-coated aluminum-fin, aluminum tube condenser coils:
    a. Shall have a flexible epoxy polymer coating uniformly applied to all coil external surface areas without material bridging between fins or louvers.
    b. Coating process shall ensure complete coil encapsulation, including all exposed fin edges.

c. E-coat thickness of 0.8 to 1.2 mil with top coat having a uniform dry film thickness from 1.0 to 2.0 mil on all external coil surface areas, including fin edges, shall be provided.
d. Shall have superior hardness characteristics of 2H per ASTM D3363-00 and cross-hatch adhesion of 4B-5B per ASTM D3359-02.
e. Shall have superior impact resistance with no cracking, chipping or peeling per NSF/ANSI 51-2002 Method 10.2.

23 81 19.13.K. Refrigerant Components

1. Refrigerant circuit shall include the following control, safety, and maintenance features:
   a. Thermostatic Expansion Valve (TXV) shall help provide optimum performance across the entire operating range. Shall contain removable power element to allow change out of power element and bulb without removing the valve body.
   b. Refrigerant filter drier.
   c. Service gauge connections on suction and discharge lines.
   d. Pressure gauge access through a specially designed access port in the top panel of the unit.
2. There shall be gauge line access port in the skin of the rooftop, covered by a black, removable plug.
   a. The plug shall be easy to remove and replace.
   b. When the plug is removed, the gauge access port shall enable maintenance personnel to route their pressure gauge lines.
   c. This gauge access port shall facilitate correct and accurate condenser pressure readings by enabling the reading with the compressor access panel on.
   d. The plug shall be made of a leak proof, UV-resistant, composite material.
3. Compressors
   a. Unit shall use one fully hermetic, scroll compressor for each independent refrigeration circuit.
   b. Models shall be available with single compressor/single stage cooling designs on 04-07 sizes and 2 compressor/2-stage cooling models on 08-14 sizes.
   c. Compressor motors shall be cooled by refrigerant gas passing through motor windings.
   d. Compressors shall be internally protected from high discharge temperature conditions.
   e. Compressors shall be protected from an over-temperature and over-amperage conditions by an internal, motor overload device.
   f. Compressor shall be factory mounted on rubber grommets.
   g. Compressor motors shall have internal line break thermal, current overload and high pressure differential protection.
   h. Crankcase heaters shall not be required for normal operating range, unless provided by the factory.

23 81 19.13.L. Filter Section

1. Filters access is specified in the unit cabinet section of this specification.
2. Filters shall be held in place by a pivoting filter tray, facilitating easy removal and installation.
3. Shall consist of factory-installed, low velocity, throw-away 2-in. thick fiberglass filters.
4. Filters shall be standard, commercially available sizes.
5. Only one size filter per unit is allowed.

23 81 19.13.M. Evaporator Fan and Motor

1. Evaporator fan motor:
   a. Shall have permanently lubricated bearings.
   b. Shall have inherent automatic-reset thermal overload protection or circuit breaker.
   c. Shall have a maximum continuous bhp rating for continuous duty operation; no safety factors above that rating shall be required.
2. Electric Drive (Direct Drive) X13 – 5 Speed/Torque Evaporator Fan:
   a. Multi speed motor with easy quick adjustment settings.
   b. Blower fan shall be double-inlet type with forward-curved blades.
   c. Shall be constructed from steel with a corrosion resistant finish and dynamically balanced.
   d. Standard on all 04-06 models with 208/230/1/60 operation without Humidi-MiZer.
   e. Standard on all 04-06 3-phase models without Humidi-MiZer, with optional belt drive.
3. Belt-driven Evaporator Fan:
   a. Belt drive shall include an adjustable-pitch motor pulley.
   b. Shall use sealed, permanently lubricated ball-bearing type.
   c. Blower fan shall be double-inlet type with forward-curved blades.

d. Shall be constructed from steel with a corrosion resistant finish and dynamically balanced.
e. Standard on all 04-07 size and 04-06 size models with Humidi-MiZer. Optional on all 04-06 3-phase models.

23 81 19.13.N. Condenser Fans and Motors

1. Condenser fan motors:
   a. Shall be a totally enclosed motor.
   b. Shall use permanently lubricated bearings.
   c. Shall have inherent thermal overload protection with an automatic reset feature.
   d. Shall use a shaft-down design on 04 to 14 models.
2. Condenser Fans:
   a. Shall be a direct-driven propeller type fan.
   b. Shall have galvalum blades riveted to corrosion-resistant steel spiders and shall be dynamically balanced.

23 81 19.13.O. Special Features, Options and Accessories

1. Staged Air Volume System (SAV) for 2-stage cooling models only:
   a. Evaporator fan motor:
      (1.) Shall have permanently lubricated bearings.
      (2.) Shall have a maximum continuous bhp rating for continuous duty operation; no safety factors above that rating.
      (3.) Shall be Variable Frequency duty and 2-speed control.
      (4.) Shall contain motor shaft grounding ring to prevent electrical bearing fluting damage by safely diverting harmful shaft voltages and bearing currents to ground.
2. Variable Frequency Drive (VFD). Only available on 2-speed indoor fan motor option (SAV):
   a. Shall be installed inside the unit cabinet, mounted, wired and tested.
   b. Shall contain Electromagnetic Interference (EMI) frequency protection.
   c. Insulated Gate Bi-Polar Transistors (IGBT) used to produce the output pulse width modulated (PWM) waveform, allowing for quiet motor operation.
   d. Self diagnostics with fault and power code LED indicator. Field accessory Display Kit available for further diagnostics and special setup applications.
   e. RS485 capability standard.
   f. Electronic thermal overload protection.
   g. 5% swinging chokes for harmonic reduction and improved power factor.
   h. All printed circuit boards shall be conformal coated.
3. Integrated EconoMi$er IV, EconoMi$er2, and EconoMi$er X standard leak rate models. (Factory installed on 3 phase models only. Field installed on all 3 and 1 phase models)
   a. Integrated, gear driven opposing modulating blade design type capable of simultaneous economizer and compressor operation.
   b. Independent modules for vertical or horizontal return configuration shall be available. Vertical return modules shall be available as a factory installed option.
   c. Damper blades shall be galvanized steel with composite gears. Plastic or composite blades on intake or return shall not be acceptable.
   d. Shall include all hardware and controls to provide free cooling with outdoor air when temperature and/or humidity are below setpoints.
   e. Shall be equipped with gear driven dampers for both the outdoor ventilation air and the return air for positive air stream control.
   f. Standard leak rate shall be equipped with dampers not to exceed 2% leakage at 1 in. wg pressure differential.
   g. Economizer controller on EconoMi$er IV models shall be the Honeywell W7212 that provides:
      (1.) Combined minimum and DCV maximum damper position potentiometers with compressor staging relay.
      (2.) Functions with solid state analog enthalpy or dry bulb changeover control sensing.
      (3.) Contain LED indicates for: when free cooling is available, when module is in DCV mode, when exhaust fan contact is closed.
   h. Economizer controller on EconoMi$er X models shall be the Honeywell W7220 that provides:
      (1.) 2-line LCD interface screen for setup, configuration and troubleshooting

(2.) On-board Fault Detection and Diagnostics (FDD) that senses and alerts when the economizer is not operating properly, per California Title 24.

(3.) Sensor failure loss of communication identification

(4.) Automatic sensor detection

(5.) Capabilities for use with multiple-speed indoor fan systems

(6.) Utilize digital sensors: Dry bulb and Enthalpy

i. Economizer controller on EconoMi$er 2 models with PremierLink shall be 4-20mA design and controlled by the PremierLink controller. PremierLink does not comply with California Title 24 Fault Detection & Diagnostic (FDD) requirements.

j. Economizer controller on EconoMi$er 2 models with RTU Open models shall be a 4-20mA design controlled directly by the RTU Open controller. RTU Open meets California Title 24 Fault Detection & Diagnostic (FDD) requirements.

k. Economizer controller on EconoMi$er 2 models with ComfortLink models shall be controlled directly by the ComfortLink controller. ComfortLink meets California Title 24 Fault Detection & Diagnostic (FDD) requirements.

l. Shall be capable of introducing up to 100% outdoor air.

m. Shall be equipped with a barometric relief damper capable of relieving up to 100% return air and contain seals that meet ASHRAE 90.1 requirements.

n. Shall be designed to close damper(s) during loss-of-power situations with spring return built into motor.

o. Dry bulb outdoor air temperature sensor shall be provided as standard. Enthalpy sensor is also available on factory installed only. Outdoor air sensor setpoint shall be adjustable and shall range from 40 to 100° F / 4 to 38° C. Additional sensor options shall be available as accessories.

p. The economizer controller shall also provide control of an accessory power exhaust unit function. Factory set at 100%, with a range of 0% to 100%.

q. The economizer shall maintain minimum airflow into the building during occupied period and provide design ventilation rate for full occupancy.

r. Dampers shall be completely closed when the unit is in the unoccupied mode.

s. Economizer controller shall accept a 2-10 Vdc CO2 sensor input for IAQ/DCV control. In this mode, dampers shall modulate the outdoor air damper to provide ventilation based on the sensor input.

t. Compressor lockout temperature on W7220 is adjustable from -45° F to 80° F, set at a factory default of 32° F. Others shall open at 35° F (2C) and closes at 50° F (10° C)

u. Actuator shall be direct coupled to economizer gear. No linkage arms or control rods shall be acceptable.

v. Economizer controller shall provide indications when in free cooling mode, in the DCV mode, or the exhaust fan contact is closed.

4. Integrated EconoMi$er 2, and EconoMi$er X Ultra Low Leak rate models. (Factory installed on 3 phase models only. Field installed on all 3 and 1 phase models)

a. Integrated, gear driven opposing modulating blade design type capable of simultaneous economizer and compressor operation.

b. Independent modules for vertical or horizontal return configuration shall be available. Vertical return modules shall be available as a factory installed option.

c. Damper blades shall be galvanized steel with composite gears. Plastic or composite blades on intake or return shall not be acceptable.

d. Shall include all hardware and controls to provide free cooling with outdoor air when temperature and/or humidity are below setpoints.

e. Shall be equipped with gear driven dampers for both the outdoor ventilation air and the return air for positive air stream control.

f. Ultra Low Leak design meets California Title 24 section 140.4 and ASHRAE 90.1 requirements of 4 cfm per sq. ft. on the outside air dampers and 10 cfm per sq. ft. on the return dampers.

g. Economizer controller on EconoMi$er X models shall be the Honeywell W7220 that provides:

(1.) 2-line LCD interface screen for setup, configuration and troubleshooting

(2.) On-board Fault Detection and Diagnostics (FDD) that senses and alerts when the economizer is not operating properly, per California Title 24.

(3.) Sensor failure loss of communication identification

(4.) Automatic sensor detection

(5.) Capabilities for use with multiple-speed indoor fan systems

(6.) Utilize digital sensors: Dry bulb and Enthalpy

h. Economizer controller on EconoMi$er 2 models with RTU Open models shall be a 4-20mA design controlled directly by the RTU Open controller. RTU Open meets California Title 24 Fault Detection & Diagnostic (FDD) requirements

i. Economizer controller on EconoMi$er 2 models with ComfortLink models shall be controlled directly by the ComfortLink controller. ComfortLink meets California Title 24 Fault Detection & Diagnostic (FDD) requirements.

j. Shall be capable of introducing up to 100% outdoor air.

k. Shall be equipped with a barometric relief damper capable of relieving up to 100% return air and contain seals that meet ASHRAE 90.1 requirements.

l. Shall be designed to close damper(s) during loss-of-power situations with spring return built into motor.

m. Dry bulb outdoor air temperature sensor shall be provided as standard. Enthalpy sensor is also available on factory installed only. Outdoor air sensor setpoint shall be adjustable and shall range from 40 to 100° F / 4 to 38° C. Additional sensor options shall be available as accessories.

n. The economizer controller shall also provide control of an accessory power exhaust unit function. Factory set at 100%, with a range of 0% to 100%.

o. The economizer shall maintain minimum airflow into the building during occupied period and provide design ventilation rate for full occupancy.

p. Dampers shall be completely closed when the unit is in the unoccupied mode.

q. Economizer controller shall accept a 2-10 Vdc CO2 sensor input for IAQ/DCV control. In this mode, dampers shall modulate the outdoor air damper to provide ventilation based on the sensor input.

r. Compressor lockout temperature on W7220 is adjustable from -45 F to 80 F, set at a factory default of 32° F. Others shall open at 35° F (2C) and closes at 50° F (10° C)

s. Actuator shall be direct coupled to economizer gear. No linkage arms or control rods shall be acceptable.

t. Economizer controller shall provide indications when in free cooling mode, in the DCV mode, or the exhaust fan contact is closed.

5. Two-Position Damper (Factory installed on 3 Phase Models Only. Field installed on all 3 and 1 Phase Models)

a. Damper shall be a Two-Position Damper. Damper travel shall be from the full closed position to the field adjustable %-open setpoint.

b. Damper shall include adjustable damper travel from 25% to 100% (full open).

c. Damper shall include single or dual blade, gear driven dampers and actuator motor.

d. Actuator shall be direct coupled to damper gear. No linkage arms or control rods shall be acceptable.

e. Damper will admit up to 100% outdoor air for applicable rooftop units.

f. Damper shall close upon indoor (evaporator) fan shutoff and/or loss of power.

g. The damper actuator shall plug into the rooftop unit's wiring harness plug. No hard wiring shall be required.

h. Outside air hood shall include aluminum water entrainment filter

6. Manual damper

a. Manual damper package shall consist of damper, air inlet screen, and rain hood which can be preset to admit up to 50% outdoor air for year round ventilation.

7. Humidi-MiZer Adaptive Dehumidification System (3 phase models only):

a. The Humidi-MiZer Adaptive Dehumidification System shall be factory-installed and shall provide greater dehumidification of the occupied space by two modes of dehumidification operations beside its normal design cooling mode:

(1.) Subcooling mode further subcools the hot liquid refrigerant leaving the condenser coil when both temperature and humidity in the space are not satisfied.

(2.) Hot gas reheat mode shall mix a portion of the hot gas from the discharge of the compressor with the hot liquid refrigerant leaving the condenser coil to create a two-phase heat transfer in the system, resulting in a neutral leaving- air temperature when only humidity in the space is not satisfied.

(3.) Includes Head Pressure Controller.

8. Head Pressure Control Package (MotorMaster)

a. Controller shall control coil head pressure by condenser-fan speed modulation or condenser-fan cycling and wind baffles.

b. Shall consist of solid-state control and condenser-coil temperature sensor to maintain condensing temperature at outdoor ambient temperatures down to -20°F (-29°C).

9. Low Ambient Controller (Factory installed only)

a. Controller shall control coil head pressure by condenser-fan speed modulation or condenser-fan cycling and wind baffles.

b. Shall consist of solid-state control and condenser-coil temperature sensor to maintain condensing temperature at outdoor ambient temperatures down to 0°F (-18°C). (Not available on 11 size models as standard unit cooling operation down to 0°F/-18°C.)

10. Condenser Coil Hail Guard Assembly (Factory installed option on 3 phase models. Field installed on all 3 and 1 phase models)
    a. Shall protect against damage from hail.
    b. Shall be louvered design.
11. Unit-Mounted, Non-Fused Disconnect Switch:
    a. Switch shall be factory-installed, internally mounted.
    b. National Electric Code (NEC) and UL or ETL approved non-fused switch shall provide unit power shutoff.
    c. Shall be accessible from outside the unit
    d. Shall provide local shutdown and lockout capability.
12. HACR Breaker
    a. These manual reset devices provide overload and short circuit protection for the unit. Factory wired and mounted with the units, with access cover to help provide environmental protection. On 575V applications, HACR breaker can only be used with WYE power distribution systems. Use on Delta power distribution systems is prohibited.
13. Convenience Outlet:
    a. Powered convenience outlet (3 phase models only).
        (1.) Outlet shall be powered from main line power to the rooftop unit.
        (2.) Outlet shall be powered from line side or load side of disconnect by installing contractor, as required by code. If outlet is powered from load side of disconnect, unit electrical ratings shall be UL or ETL certified and rated for additional outlet amperage.
        (3.) Outlet shall be factory-installed and internally mounted with easily accessible 115-v female receptacle.
        (4.) Outlet shall include 15 amp GFI receptacles with independent fuse protection.
        (5.) Voltage required to operate convenience outlet shall be provided by a factory-installed step-down transformer.
        (6.) Outlet shall be accessible from outside the unit.
        (7.) Outlet shall include a field-installed “Wet in Use” cover.
    b. Non-Powered convenience outlet.
        (1.) Outlet shall be powered from a separate 115/120v power source.
        (2.) A transformer shall not be included.
        (3.) Outlet shall be factory-installed and internally mounted with easily accessible 115-v female receptacle.
        (4.) Outlet shall include 15 amp GFI receptacles with independent fuse protection.
        (5.) Outlet shall be accessible from outside the unit.
        (6.) Outlet shall include a field-installed “Wet in Use” cover.
14. Thru-the-Base Connectors:
    a. Kits shall provide connectors to permit electrical connections to be brought to the unit through the unit basepan.
    b. Minimum of four connection locations per unit.
15. Propeller Power Exhaust:
    a. Power exhaust shall be used in conjunction with an integrated economizer.
    b. Independent modules for vertical or horizontal return configurations shall be available.
    c. Horizontal power exhaust is shall be mounted in return ductwork.
    d. Power exhaust shall be controlled by economizer controller operation. Exhaust fans shall be energized when dampers open past the 0-100% adjustable setpoint on the economizer control.
16. Roof Curbs (Vertical):
    a. Full perimeter roof curb with exhaust capability providing separate air streams for energy recovery from the exhaust air without supply air contamination.
    b. Formed galvanized steel with wood nailer strip and shall be capable of supporting entire unit weight.
    c. Permits installation and securing of ductwork to curb prior to mounting unit on the curb.
17. High-Static Indoor Fan Motor(s) and Drive(s):
    a. High-static motor(s) and drive(s) shall be factory-installed to provide additional performance range.
18. Condenser Coil Grille:
    a. Shall protect against damage from hail.

b. Shall be of louvered style.

19. Thru-the-Bottom Utility Connectors:
    a. Kit shall provide connectors to permit gas and electrical connections to be brought to the unit through the basepan.
20. Outdoor Air Enthalpy Sensor:
    a. The outdoor air enthalpy sensor shall be used to provide single enthalpy control. When used in conjunction with a return air enthalpy sensor, the unit will provide differential enthalpy control. The sensor allows the unit to determine if outside air is suitable for free cooling.
21. Return Air Enthalpy Sensor:
    a. The return air enthalpy sensor shall be used in conjunction with an outdoor air enthalpy sensor to provide differential enthalpy control.
22. Indoor Air Quality (CO_2) Sensor:
    a. Shall be able to provide demand ventilation indoor air quality (IAQ) control.
    b. The IAQ sensor shall be available in duct mount, wall mount, or wall mount with LED display. The setpoint shall have adjustment capability.
23. Smoke detectors (factory-installed only):
    a. Shall be a Four-Wire Controller and Detector.
    b. Shall be environmental compensated with differential sensing for reliable, stable, and drift-free sensitivity.
    c. Shall use magnet-activated test/reset sensor switches.
    d. Shall have tool-less connection terminal access.
    e. Shall have a recessed momentary switch for testing and resetting the detector.
    f. Controller shall include:
        (1.) One set of normally open alarm initiation contacts for connection to an initiating device circuit on a fire alarm control panel.
        (2.) Two Form-C auxiliary alarm relays for interface with rooftop unit or other equipment.
        (3.) One Form-C supervision (trouble) relay to control the operation of the Trouble LED on a remote test/reset station.
        (4.) Capable of direct connection to two individual detector modules.
        (5.) Can be wired to up to 14 other duct smoke detectors for multiple fan shutdown applications.
24. Winter start kit
    a. Shall contain a bypass device around the low pressure switch.
    b. Shall be required when mechanical cooling is required down to 25°F (-4°C).
    c. Shall not be required to operate on an economizer when below an outdoor ambient of 40°F (4°C).
25. Time Guard
    a. Shall prevent compressor short cycling by providing a 5-minute delay (±2 minutes) before restarting a compressor after shutdown for any reason.
    b. One device shall be required per compressor.
26. Electric Heat:
    a. Heating Section
        (1.) Heater element open coil resistance wire, nickel-chrome alloy, 0.29 inches inside diameter, strung through ceramic insulators mounted on metal frame. Coil ends are staked and welded to terminal screw slots.
        (2.) Heater assemblies are provided with integral fusing for protection of internal heater circuits not exceeding 48 amps each. Auto reset thermo limit controls, magnetic heater contactors (24 v coil) and terminal block all mounted in electric heater control box (minimum 18 ga galvanized steel) attached to end of heater assembly.
27. Hinged access panels:
    a. Shall provide easy access through integrated quarter turn latches.
    b. Shall be on major panels of; filter, control box, fan motor and compressor.
28. Display Kit for Variable Frequency Drive
    a. Kit allows the ability to access the VFD controller programs to provide special setup capabilities and diagnostics.
    b. Kit contains display module and communication cable.
    c. Display Kit can be permanently installed in the unit or used on any SAV system VFD controller as needed.
29. Foil faced insulation
    a. Throughout unit cabinet air stream, non-fibrous and cleanable foil faced insulation is used.

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