

### HIGH-EFFICIENCY PACKAGE HEAT PUMPS, R-410A SINGLE PACKAGE ROOFTOP 3 - 10 TONS [1 & 3-Phase] BUILT TO LAST, EASY TO INSTALL AND SERVICE

- ASHRAE 90.1-2013 compliant and ENERGY STAR\* certified
- SEERs up to 15.8, EERs up to 12.8
- IEERs up to 14.0 with single speed indoor fan motor
- IEERs up to 15.6 with 2-speed/VFD indoor fan motor
- Exclusive non-corrosive composite condensate pan in accordance with ASHRAE 62 Standard, sloping design; side or center drain
- Convertible from vertical to horizontal airflow for slab mounting. Supply duct kit required for 120 size models.
- Copper tube aluminum fin coils with optional corrosion resistant coils
- Pre-painted exterior panels and primer coated interior panels tested to 500 hours salt spray protection
- TXV refrigerant metering system on each circuit
- Cooling operating range up to 125°F (52°C) and down to 30°F (-1°C)
- Solid-state control board and easy access terminal board
- Refrigerant filter drier and accumulator on each refrigerant circuit
- Automatic changeover when used with auto-changeover thermostat
- Rated in accordance with AHRI Standards 210/240 (036-060) and 340/360 (072-120)
- Designed in accordance with Underwriters' Laboratories' Laboratories Std 1995
- Listed by UL and UL, Canada or ETL, ETL Canada
- Access panels with easy grip handles
- Innovative, easy starting, no strip screw features 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 sizes to meet any application
- Direct Drive X13 (5 speed/torque) indoor motor on 036-060 models
- Central terminal board facilitating simple safety circuit troubleshooting and simplified control box arrangement
- Thru-the-bottom power entry capability standard
- Single point electric connections
- Full perimeter base rail with built-in rigging adapters & fork truck slots
- Scroll compressors with internal line break overload protection
- Dependable Time / Temperature defrost board and logic
- 24-volt control circuit protected with resettable circuit breaker
- Permanently lubricated evaporator-fan motor
- Totally enclosed condenser motors with permanently lubricated bearings
- Loss of charge, freeze protection, and high-pressure switches

#### OPTIONS AND ACCESSORIES INCLUDING BUT NOT LIMITED TO:

- 115-volt convenience outlet (powered and unpowered)
- Non-fused disconnect switch
- Economizer with db, enthalpy or CO<sub>2</sub> control options
- Corrosion resistant coil options for evaporator and condenser
- Multiple indoor fan motors for expanded airflow capability (3ph)
- Accessory electric heat (field-installed option only)
- Smoke detectors – Supply and Return air
- Hinged access panels
- 2-Speed indoor fan motor with VFD controller on 073 to 120 size models
- Standard and Ultra low leak economizers available

#### LIMITED WARRANTY

- 5 Year compressor limited warranty
- 1 Year parts limited warranty



RHH036-060



RHH072-120



OR



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](http://www.ahridirectory.org).

\* ENERGY STAR is a registered trademark of the U.S. Environmental Protection Agency.

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<b>UNIT PERFORMANCE DATA</b>									
BASE MODEL	Nom Tons	COOLING			HEATING			Unit Dimensions H x W x L in. (mm)	Unit Weight lbs (kg)
		Net Cap. (Btuh)	SEER	EER	High Cap. (Btuh)	HSPF	COP		
RHH036*0XA0AAA	3	36,400	15.6	12.7	34,000	8.0	N/A	33 <sup>3</sup> / <sub>8</sub> x 46 <sup>3</sup> / <sub>4</sub> x 74 <sup>3</sup> / <sub>8</sub> (847 x 1187 x 1888)	495 (225)
RHH048*0XA0AAA	4	47,000	15.8	12.8	46,000	8.1	N/A	41 <sup>3</sup> / <sub>8</sub> x 46 <sup>3</sup> / <sub>4</sub> x 74 <sup>3</sup> / <sub>8</sub> (1051 x 1187 x 1888)	580 (263)
RHH060*0XA0AAA	5	58,500	15.0	11.7	55,000	8.2	N/A	41 <sup>3</sup> / <sub>8</sub> x 46 <sup>3</sup> / <sub>4</sub> x 74 <sup>3</sup> / <sub>8</sub> (1051 x 1187 x 1888)	610 (277)
RHH072*0AA0AAA	6	72,000	N/A	12.0	70,000	N/A	3.4	41 <sup>3</sup> / <sub>8</sub> x 59 <sup>1</sup> / <sub>2</sub> x 88 <sup>1</sup> / <sub>8</sub> (1051 x 1510 x 2238)	710 (322)
RHH073*0AA0AAA	6	70,000	N/A	12.0	69,000	N/A	3.4	41 <sup>3</sup> / <sub>8</sub> x 59 <sup>1</sup> / <sub>2</sub> x 88 <sup>1</sup> / <sub>8</sub> (1051 x 1510 x 2238)	710 (322)
RHH090*0AA0AAA	7 <sup>1</sup> / <sub>2</sub>	90,000	N/A	12.1	84,000	N/A	3.5	49 <sup>3</sup> / <sub>8</sub> x 59 <sup>1</sup> / <sub>2</sub> x 88 <sup>1</sup> / <sub>8</sub> (1253 x 1510 x 2238)	875 (397)
RHH102*0AA0AAA	8 <sup>1</sup> / <sub>2</sub>	100,000	N/A	12.0	100,000	N/A	3.4	49 <sup>3</sup> / <sub>8</sub> x 59 <sup>1</sup> / <sub>2</sub> x 88 <sup>1</sup> / <sub>8</sub> (1253 x 1510 x 2238)	1020 (463)
RHH120*0AA0AAA	10	119,000	N/A	12.3	116,000	N/A	3.5	57 <sup>3</sup> / <sub>8</sub> x 63 <sup>3</sup> / <sub>8</sub> x 115 <sup>7</sup> / <sub>8</sub> (1456 x 1609 x 2942)	1390 (632)

\* Indicates Unit voltage: K = 208/230-1-60, H = 208/230-3-60, L = 460-3-60, S = 575-3-60

# MODEL NUMBER NOMENCLATURE

MODEL SERIES	R	H	H	0	9	0	H	0	A	A	0	A	A	A
Position Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14
R = Rooftop														
H = Heat Pump <span style="float: right;">Type</span>														
H = High Efficiency <span style="float: right;">Efficiency</span>														
036 = 36,000 = 3 Tons														
048 = 48,000 = 4 Tons														
060 = 60,000 = 5 Tons														
072 = 72,000 = 6 Tons (Single Compressor/Single Stage)														
073 = 71,000 = 6 Tons (Single Compressor/2-Stage)														
090 = 90,000 = 7.5 Tons (Dual Compressor)														
102 = 102,000 = 8.5 Tons (Dual Compressor)														
120 = 120,000 = 10 Tons (Dual Compressor) <span style="float: right;">Nominal Cooling Capacity</span>														
K = 208/230-1-60														
H = 208/230-3-60														
L = 460-3-60														
S = 575-3-60 <span style="float: right;">Voltage</span>														
0 = No Heat <span style="float: right;">Heating Capacity</span>														
X = Direct drive ECM Motor (3-5 Ton)														
A = Standard Static Option - Belt Drive (6-10 Ton, 3 Phase Only)														
C = Medium Static Option (Belt Drive) (3-10 Ton, 3 Phase Only)														
B = High Static Option (Belt Drive) (3-8.5 Ton w/1-Speed IFM, 7.5-10 Ton w/2-Speed IFM)														
E = High Static with High Efficiency Motor (10 Ton only, 1-Speed IFM) <span style="float: right;">Motor Option</span>														
A = None														
B = Economizer w/Barometric relief, OA Temp sensor														
E = Economizer w/Barometric relief + CO <sub>2</sub> Sensor														
H = Economizer w/Barometric relief														
L = Economizer w/Barometric relief + CO <sub>2</sub> Sensor														
U = Temp Ultra Low Leak Economizer w/Barometric relief														
W = Enthalpy Ultra Low Leak Economizer w/Barometric relief														
P = 2-Position damper w/Barometric relief <span style="float: right;">Outdoor Air Options / Control</span>														
0A = No Options														
AT = Unpowered Convenience Outlet														
4B = Non-Fused Disconnect Switch														
BB = Powered Convenience Outlet														
BR = Supply Air Smoke Detector														
BP = Return Air Smoke Detector														
AA = Easy Access Hinged Panels <span style="float: right;">Factory Installed Options</span>														
A = Aluminum/Copper Cond & Alum/Copper Evap Coil														
B = Pre-coat Alum/Copper Cond & Alum/Copper Evap (3 phase only)														
C = E-Coated Alum/Copper Cond & Alum/Copper Evap (3 phase only)														
D = E-Coated Alum/Copper Cond & E-Coated Alum/Copper Evap (3 phase only)														
E = Copper/Copper Cond & Alum/Copper Evap (3 phase only)														
F = Copper/Copper Cond & Copper/Copper Evap (3 phase only) <span style="float: right;">Condenser / Evaporator Coil Configuration</span>														
A = Standard Single Speed Indoor Fan Motor, for W7212 Controls														
B = Standard Single Speed Indoor Fan Motor, for W7220 Controls														
T = 2-Speed Indoor Fan VFD Controller (For 2-stage units only) <span style="float: right;">Motor Type Option</span>														

**NOTE:** On single phase (K voltage code) models, the following are not available as factory installed options:

- Coated or copper fin coils
- Economizers
- 2-position dampers

# FACTORY OPTIONS AND/OR ACCESSORIES

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

CATEGORY	ITEM	FACTORY-INSTALLED OPTION	FIELD-INSTALLED ACCESSORY
Cabinet	Hinged access doors	X	
	Thru-the-base electrical connections		X
	Supply duct kit-Horizontal air applications (size 120 only)		X
Coil Options	Cu/Cu indoor and/or outdoor coil <sup>5</sup>	X	
	Pre-coated outdoor coils <sup>5</sup>	X	
	Premium, E-coated outdoor coils <sup>5</sup>	X	
Condenser Protection	Condenser coil hail guard (louvered design) <sup>5</sup>	X	X
Controls	Thermostats, temperature sensors, and subbases		X
	Smoke detector (supply and/or return air)	X	
	Horn/Strobe Annunciator <sup>7</sup>		X
	Time Guard II compressor delay control circuit		X
	Phase Monitor		X
	Condensate Overflow switch - for electro-mechanical controls only	X	X
Economizers & Outdoor Air Dampers	EconoMi\$er IV <sup>®</sup> (for electro-mechanical controlled - Non FDD, Standard air leak damper models) <sup>5, 6</sup>	X	X
	EconoMi\$er2 for DDC controls, complies with FDD (Standard and Ultra Low Leak air damper models) <sup>5</sup>	X	X
	EconoMi\$er X for electro-mechanical controls, complies with FDD (Standard and Ultra Low Leak air damper models) <sup>5, 6</sup>	X	X
	Motorized 2 position outdoor air damper <sup>5</sup>	X	X
	Manual outdoor air damper (25% and 50%)		X
	Barometric relief <sup>1</sup>	X	X
	Power exhaust		X
Economizer Sensors & AQ Devices	Single dry bulb temperature sensors <sup>2</sup>	X	X
	Differential dry bulb temperature sensors <sup>2</sup>		X
	Single enthalpy sensors <sup>2</sup>	X	X
	Differential enthalpy sensors <sup>2</sup>		X
	CO <sub>2</sub> sensor (wall, duct, or unit mounted) <sup>2</sup>	X	X
Electric Heat	Electric Resistance Heaters		X
	Single Point Kit		X
Indoor Motor & Drive	Multiple motor and belt drive packages	X	
	Electric Drive, X13, 5-speed/torque (3-5 ton)	X	
	2-Speed Indoor Fan Motor System w/VFD controller (2-stage cool only with electro-mechanical controls)	X	
	Display Kit for 2-Speed Indoor Fan Motor system with VFD		X
Low Ambient Control	Motormaster <sup>®</sup> head pressure controller <sup>3</sup>		X
Power Options	Convenience outlet (powered) <sup>5</sup>	X	
	Convenience outlet (unpowered)	X	
	Non-fused disconnect <sup>4</sup>	X	
Roof Curbs	Roof curb 14-in. (356mm)		X
	Roof curb 24-in. (610mm)		X

**NOTES:**

1. Included with economizer.
2. Sensors for optimizing economizer.
3. See application data for assistance.
4. Non-fused disconnect switch cannot be used when unit electrical rating exceeds-  
 036-102 sizes: 208/230/1/60 and 208/230/3/60 = 80 amps (FLA)  
 460/3/60 and 575/3/60 = 80 amps (FLA)  
 120 size: 208/230/3/60 = 115 amps (MCA)  
 460/3/60 and 575/3/60 = 100 amps (FLA)
5. Not available as a factory installed option on single phase (208/230-1-60) models. Use field-install accessory where available.
6. FDD - (Fault Detection and Diagnostic) capability per California Title 24 section 120.2.
7. Requires a field-supplied 24V transformer for each application. See price pages for details.

## FACTORY OPTIONS AND/OR ACCESSORIES (cont)

### Economizer

Economizers can reduce operating costs. 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 coupled to CO<sub>2</sub> sensors, economizers can limit the ventilation air to only that amount required.

Economizers are available, installed and tested by the factory, with either enthalpy or temperature dry-bulb inputs. There are also models for electro-mechanical, 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<sub>2</sub> Sensors

The CO<sub>2</sub> sensor works with the economizer to intake only the correct amount of outside air for ventilation. As occupants fill your building, the CO<sub>2</sub> sensor detects their presence through increasing CO<sub>2</sub> levels, and opens the economizer appropriately.

When the occupants leave, the CO<sub>2</sub> levels decrease, and the sensor appropriately closes the economizer. This intelligent control of the ventilation air, called Demand Controlled Ventilation (DCV) reduces the overall load on the rooftop, saving money.

### Smoke Detectors

Smoke detectors make your application safer and your job easier. ICP 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 unpowered)

Reduce service and/or installation costs by including a convenience outlet in your specification. ICP 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. When selecting a factory-installed non-fused disconnect, note they are sized for the unit as ordered from the factory. The sizing of these do not accommodate field-installed items such as power exhaust devices, etc.

### Power Exhaust with Barometric Relief

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

### 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 authorized commercial thermostats.

### Motorized 2-Position Damper

The 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. Not available with 2-speed indoor fan motor models.

### 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. Not available with 2-speed indoor fan motor models.

### Motormaster<sup>®</sup> 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.

### Alternate Motors and Drives

Some applications need larger horsepower motors, some need more airflow, and some need both. Regardless of the case, your ICP 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.

## FACTORY OPTIONS AND/OR ACCESSORIES (cont)

### 2-Speed Indoor Fan Motor System

ICP's 2-speed indoor fan motor 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 90.1-2013 standard section 6.4.3.10.b, during the first stage of cooling operation the VFD will adjust the fan motor to provide 66% 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 66% of total cfm.

Compared to single speed indoor fan motor systems, ICP's 2-speed indoor fan motor system can save substantial energy, 25%+ versus single speed indoor fan motor systems.

**IMPORTANT:** Data based on .10 (\$/kWh) in an office application utilizing ICP's Rooftop Energy Savings Calculator simulation software program.

The VFD used in ICP's 2-speed indoor fan motor 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 2-speed indoor fan motor system is available on models with 2-stage cooling operation with electrical mechanical controls. Both space sensor and conventional thermostats controls can be used to provide accurate control in any application.

The 2-speed indoor fan motor 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.

### Thru-the-Base Connections

Thru-the-base connections, available as an accessory, 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

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

### 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.

### Condensate Overflow Switch (Factory-Installed Option)

This sensor and related controller monitors the condensate level in the drain pan and shuts down compression operation when overflow conditions occur. It includes:

- Indicator light – solid red (more than 10 seconds on water contact – compressors disabled), blinking red (sensor disconnected)
- 10 second delay to break – eliminates nuisance trips from splashing or waves in pan (sensor needs 10 seconds of constant water contact before tripping)
- Disables the compressor(s) operation when condensate plug is detected, but still allows fans to run for Economizer.

**NOTE:** The Condensate Overflow switch FIOP is only available for units with electro-mechanical controls.

## ACCESSORIES - RHH036-120

<b>FLAT ROOF CURBS</b>		
Model Number	Description	Use With Model Size
CRRFCURB001A01	14" High Roof Curb. Complies with NRCA standards. Ductwork attaches to the roof curb. Includes thru-the-bottom capability.	036 - 060
CRRFCURB003A01		072 - 102
CRRFCURB072A00		120
CRRFCURB002A01	24" High Roof Curb. Complies with NRCA standards. Ductwork attaches to the roof curb. Includes thru-the-bottom capability.	036 - 060
CRRFCURB004A01		072 - 102
CRRFCURB073A00		120

## ACCESSORIES - RHH036-120 (cont)

<b>ECONOMIZERS</b>		
<b>Model Number</b>	<b>Description</b>	<b>Use With Model Size</b>
<b>VERTICAL (1-SPEED INDOOR FAN MOTOR ONLY) - STANDARD LEAK CONTROLLER INCLUDED</b>		
CRECOMZR020A02	STANDARD LEAK Vertical EconoMi\$er® IV with solid-state controller, gear-driven, damper, spring return actuator, up to 100% barometric relief, supply and outdoor air temperature sensors, and CO <sub>2</sub> sensor compatible, for use in non-DDC applications.	036 - 060 Electro-mechanical control
CRECOMZR021A03	STANDARD LEAK Vertical EconoMi\$er IV with solid-state controller, gear-driven, modulating damper, spring return actuator, up to 100% barometric relief, supply and outdoor air temperature sensors, and CO <sub>2</sub> sensor compatible, for use in non-DDC applications.	072-102 Electro-mechanical control
CRECOMZR062A00		120 Electro-mechanical control
<b>HORIZONTAL (1-SPEED INDOOR FAN MOTOR ONLY) - STANDARD LEAK CONTROLLER INCLUDED</b>		
CRECOMZR024A02	STANDARD LEAK Horizontal EconoMi\$er IV with solid-state controller, gear-driven, modulating damper, spring return actuator, up to 100% barometric relief, supply and outdoor air temperature sensors, and CO <sub>2</sub> sensor compatible, for use in non-DDC applications.	036 - 060 Electro-mechanical control
CRECOMZR025A02		072-102 Electro-mechanical control
CRECOMZR064A00		120 Electro-mechanical control

**NOTES:**

- EconoMi\$er IV cannot be installed with an EconoMi\$er2, EconoMi\$er X, Manual Damper, or Motorized Damper or any other DDC controlled models.
- When installed on a unit with hinged panels, hinged panel access kit is also required.

<b>Model Number</b>	<b>Description</b>	<b>Use With Model Size</b>
<b>VERTICAL (1 &amp; 2-SPEED INDOOR FAN MOTOR) - STANDARD LEAK CONTROLLER INCLUDED</b>		
CRECOMZR076A00	STANDARD LEAK - Vertical EconoMi\$er X with solid-state W7220 controller, gear-driven, modulating damper, spring return actuator, up to 100% barometric relief, supply and outdoor air temperature sensors, and CO <sub>2</sub> sensor compatible, for use in electro mechanical controls only. Controller meets California Title 24 Section 120.2 Fault Detection and Diagnostic (FDD) requirements.	036 - 060 Electro-mechanical control
CRECOMZR078A00		072-102 Electro-mechanical control
CRECOMZR080A00		120 Electro-mechanical control
<b>HORIZONTAL (1 &amp; 2-SPEED INDOOR FAN MOTOR ONLY) - STANDARD LEAK CONTROLLER INCLUDED</b>		
CRECOMZR077A00	STANDARD LEAK - Horizontal EconoMi\$er X with solid-state W7220 controller, gear-driven, modulating damper, spring return actuator, up to 100% barometric relief, supply and outdoor air temperature sensors, and CO <sub>2</sub> sensor compatible, for use in electro mechanical controls only. Controller meets California title 24 Section 120.2 Fault Detection and Diagnostic (FDD) requirements.	036 - 060 Electro-mechanical control
CRECOMZR079A00		072 - 102 Electro-mechanical control
CRECOMZR081A00		120 Electro-mechanical control

**NOTES:**

- EconoMi\$er X cannot be installed with an EconoMi\$er2, EconoMi\$er IV, Manual Damper or Motorized Damper.
- When installed on a unit with hinged panels, hinged panel access kit is also required.

<b>Model Number</b>	<b>Description</b>	<b>Use With Model Size</b>
<b>VERTICAL (1 &amp; 2-SPEED INDOOR FAN MOTOR ONLY) - ULTRA LOW LEAK CONTROLLER INCLUDED</b>		
CRECOMZR067A00	Ultra LOW LEAK - Vertical EconoMi\$er X with solid-state W7220 controller, gear-driven, modulating damper, spring return actuator, up to 100% barometric relief, supply and outdoor air temperature sensors, and CO <sub>2</sub> sensor compatible, for use in electro mechanical controls only. Also includes return, outside air, and relief air damper leakage that meets Title 24 section 140.4 and ASHRAE 90.1-2013 requirements. Controller meets California Title 24 Fault Detection and Diagnostic (FDD) requirements.	036 - 060 Electro-mechanical control
CRECOMZR069A00		072-102 Electro-mechanical control
CRECOMZR071A00		120 Electro-mechanical control

**NOTES:**

- EconoMi\$er X cannot be installed with an EconoMi\$er2, EconoMi\$er IV, Manual Damper or Motorized Damper.
- Currently only available on vertical air flow configuration models. Contact your local MicroMetl account manager at 1- 800-884-4662 if horizontal model is required.
- When installed on a unit with hinged panels, hinged panel access kit is also required.

## ACCESSORIES - RHH036-120 (cont)

<b>ECONOMIZER SENSORS</b>		
<b>Model Number</b>	<b>Description</b>	<b>Use With Economizer</b>
CRTEMPSN002A00	Outdoor or Return Dry Bulb Temperature Sensor used with electro-mechanical control.	EconoMiSer® IV
CRCBDIOX005A00	CO <sub>2</sub> Sensor for use in return airstream. Also includes Aspirator Box required for Duct Mounting.	EconoMiSer IV & X
CRENTDIF004A00	Return Air Enthalpy Sensor used with electro-mechanical controls, use with AXB078ENT for differential enthalpy control.	EconoMiSer IV
--HH--57AC-078	Accusensor II Economizer Differential Enthalpy Control Upgrade	EconoMiSer IV
--HH--57AC-081	Enthalpy control for W7220 controller only. (One required for single enthalpy, two required for differential enthalpy)	EconoMiSer X

**NOTE:** Supply air temperature sensor (SAT and low ambient lockout switch) provided with EconoMiSer IV or EconoMiSer X.

<b>POWER EXHAUST</b>		
<b>Model Number</b>	<b>Description</b>	<b>Use With Model Size</b>
CRPWREXH030A01	Vertical Power Exhaust 208/230 volt (1 or 3 Phase)	036 - 060 208/230 volt (1 or 3 Phase)
CRPWREXH021A01	Vertical Power Exhaust 460 volt	036 - 060 460-3-60
CRPWREXH022A01	Vertical Power Exhaust 208/230 volt	072 - 102 208/230 volt (3 Phase)
CRPWREXH023A01	Vertical Power Exhaust 460 volt	072 - 102 460-3-60
CRPWREXH080A00	Vertical Power Exhaust 208/230 volt	120 208/230 volt (3 Phase)
CRPWREXH081A00	Vertical Power Exhaust 460 volt	120 460 volt (3 Phase)
CRPWREXH028A01	Horizontal Power Exhaust 208/230 (1 or 3 Phase) volt	036 - 102 208/230 volt (1 or 3 Phase) 575 volt (3 Phase)
CRPWREXH029A01	Horizontal Power Exhaust 460 volt	036 - 102 460 volt (3 Phase)
CRPWREXH082A00	Horizontal Power Exhaust 208/230 volt	120 208/230 volt (3 Phase)
CRPWREXH083A00	Horizontal Power Exhaust 460 volt	120 460 volt (3 Phase)

**NOTES:**

1. Vertical Power Exhaust requires a Vertical Economizer.
2. Vertical Power Exhaust package includes exhaust hood, screens, and propeller fan system.
3. Horizontal Power Exhaust should be duct-mounted in the return duct.
4. Horizontal Power Exhaust package includes exhaust hood, screens, and propeller fan system.

<b>575V TRANSFORMER</b>		
<b>Model Number</b>	<b>Description</b>	<b>Use With Model Size</b>
--HH--01AH-859 1171494 <sup>1</sup>	Transformer for conversion from 575v to 208/230v power exhaust applications.	036 - 120

<sup>1</sup> Available from Fast parts.

<b>MANUAL OUTDOOR AIR DAMPERS</b>		
<b>Model Number</b>	<b>Description</b>	<b>Use With Model Size</b>
CRMANDPR001A03	25% Open Manual Fresh Air Damper	036 - 060
CRMANDPR001A02	50% Open Manual Fresh Air Damper	036 - 060
CRMANDPR002A03	25% Open Manual Fresh Air Damper	072 - 102
CRMANDPR002A02	50% Open Manual Fresh Air Damper	072 - 102
CRMANDPR011A02	50% Open Manual Fresh Air Damper	120



## ACCESSORIES - RHH036-120 (cont)

<b>MOTORIZED OUTDOOR AIR DAMPERS</b>		
<b>Model Number</b>	<b>Description</b>	<b>Use With Model Size</b>
CRTWOPOS010A00	Motorized 2 position outdoor air damper (25-100% Outdoor Air)	036 - 060
CRTWOPOS011A00	Motorized 2 position outdoor air damper	072 - 102
CRTWOPOS014A00	Motorized 2 position outdoor air damper	120

<b>SPECIAL-120 SIZE SPECIFIC ACCESSORIES</b>		
<b>Model Number</b>	<b>Description</b>	<b>Use With Model Size</b>
CRDISBKT001A00	Disconnect Switch Bracket - Provides a pre engineered and sized mounting bracket for applications requiring a unit mounted fused disconnect of greater than 100 amps. Bracket assures that no damage will occur to coils when mounting with screws and other fasteners.	120
CRDUCTCV001A00	Supply Duct Cover - This supply duct cover is required when field converting the factory standard vertical duct supply to horizontal duct supply configuration. One required per unit.	120

<b>THROUGH-THE-BOTTOM/CURB POWER CONNECTION</b>		
<b>Model Number</b>	<b>Description</b>	<b>Use With Model Size</b>
CRBTMPWR001A01	Thru-the-bottom electrical connections and thru-the-curb (not thru the bottom) gas connections. Includes a 3/4-inch diameter liquid tight conduit fitting for high voltage power wires and (2) 1/2-inch diameter liquid tight conduit fittings for thermostat wires and convenience outlet wires. Includes a 3/4-inch inside pipe coupling and gas plate assembly for thru-the-curb connections. Provides for watertight seals.	036 - 060
CRBTMPWR002A01	Thru-the-bottom electrical connections and thru-the-curb (not thru the bottom) gas connections. Includes a 1-1/4-inch diameter liquid tight conduit fitting for high voltage power wires and (2) 1/2-inch diameter liquid tight conduit fittings for thermostat wires and convenience outlet wires. Includes a 3/4-inch inside pipe coupling and gas plate assembly for thru-the-curb connections. Provides for watertight seals.	072 - 102
CRBTMPWR003A01	Thru-the bottom power, control and gas connections. Includes a 3/4- inch diameter liquid tight conduit fitting for high voltage power wires, (2) 1/2-inch diameter liquid tight conduits for thermostat wires and convenience outlet wires and 1/2-inch gas adapter fitting for gas piping. Provides for watertight seal.	036 - 060
CRBTMPWR004A01	Thru-the bottom power, control and gas connections. Includes a 1- 1/4-inch diameter liquid tight conduit fitting for high voltage power wires, (2) 1/2-inch diameter liquid tight conduits for thermostat wires and convenience outlet wires and 3/4-inch gas adapter fitting for gas piping. Provides for watertight seal.	072 - 102
CRBTMPWR005A00	Thru-the bottom power, control and gas connections. Includes a 1-1/4-inch diameter liquid tight conduit fitting for high voltage power wires, (2) 1/2-inch diameter liquid tight conduits for thermostat wires and convenience outlet wires and 3/4-inch gas adapter fitting for gas piping, 4 cover plates, and gaskets for watertight seal.	120
CRBTMPWR006A00	Thru-the bottom power, control and gas connections. Includes a 1-1/2-inch diameter liquid tight conduit fitting for high voltage power wires, (2) 1/2-inch diameter liquid tight conduits for thermostat wires and convenience outlet wires and 3/4-inch gas adapter fitting for gas piping, 4 cover plates, and gaskets for watertight seal.	120
CRBTMPWR007A00	Thru-the bottom power, control and gas connections. Includes a 2- inch diameter liquid tight conduit fitting for high voltage power wires, (2) 1/2-inch diameter liquid tight conduits for thermostat wires and convenience outlet wires and 3/4-inch gas adapter fitting for gas piping, 4 cover plates, and gaskets for watertight seal.	120

**NOTE:** Access to the bottom of the RTU is required to install a THRU-THE-BOTTOM connection kit. Recommended installation prior to installing RTU on roof curb.

## ACCESSORIES - RHH036-120 (cont)

CONTROL UPGRADE KITS		
Model Number	Description	Use With Model Size
CRDISKIT001A00	2-Speed VFD display kit provides the field capability to set up points and troubleshooting codes on the VFD controller. Can be used for any associated unit with VFD.	All 2-Speed VFD Controllers
CRTIMEGD001A00	Time Guard II - Automatically prevents the compressor from restarting for at least 4 minutes and 45 seconds after shutdown of the compressor. Not required when a corporate programmable thermostat is applied or the commercial thermostat has a minimum 5 min time delay between cooling cycles available.	036 - 120
CRPHASE3001A02	Phase Monitor Control	All 208/230v, 460v(3 Ph only)
CRPHASE3002A00	Phase Monitor Control	All 575v
CRWINSTR001A00	Electronic phase monitor breaks "R" control signal if trouble is detected. (Allows operation down to 25°F from standard 40°F.)	036 - 120
CRSDTEST001A00	Remote keyed attenuator / test / reset station for use with factory-installed smoke detectors. Includes power, alarm & trouble indicator lights.	All
LOW AMBIENT CONTROLS*		
Model Number	Description	Use With Model Size
32LT-900--301	Motormaster® I -20°F (-29°C) Low Ambient Control 208/230-1-60, 208/203-3-60, 575-3-60	036 - 102
32LT-900--611	Motormaster I -20°F (-29°C) Low Ambient Control 460-3-60	036 - 102
HC38GE231 1178185 <sup>1</sup>	Motormaster I Compatible Condenser Fan Motor, 208/230-1-60, 208/230-3-60, 575-3-60	036
HC36GE461 1178186 <sup>1</sup>	Motormaster I Compatible Condenser Fan Motor, 460-3-60	036
HC40GE233 1171974 <sup>1</sup>	Motormaster I Compatible Condenser Fan Motor, 208/230-3-60, 575-3-60	048 - 090
HC40GE463 1171975 <sup>1</sup>	Motormaster I Compatible Condenser Fan Motor, 460-3-60	048 - 090
HC91CL010 1171807 <sup>1</sup>	MFD 10	Refer to Motormaster I Usage Table
HC93CA013 1175708 <sup>1</sup>	Dual MFD 10 + 10	Refer to Motormaster I Usage Table
CRLOWAMB030A00 <sup>2</sup>	Motormaster V Low Ambient Control Mechanical cooling operation down to -20°F (-29°C)	102, 208/230-3-60
CRLOWAMB031A00 <sup>2</sup>		102, 460-3-60
CRLOWAMB032A00 <sup>2</sup>		102, 575-3-60
CRLOAMHP001A00	Low Ambient Heat Pump Relay Kit - This kit provides the necessary relay and hardware required for heat pump duty Motormaster V operation.	All size 102 models with Low Ambient Motormaster V controls - One per unit
CRLOWAMB039A00	Motormaster I Low Ambient Kit. Mechanical cooling operation down to -20°F (-29°C). Kit includes 3 motors, Motormaster controller, wiring label, and required wire ties and connectors, CRWINSTR001A00 also required (one per refrigerant circuit), 208/230-3-60.	120 208/230-3-60
CRLOWAMB040A00	Motormaster I Low Ambient Kit. Mechanical cooling operation down to -20°F (-29°C). Kit includes 3 motors, Motormaster controller, wiring label, and required wire ties and connectors ) 575 Volt models also require CRTRXKIT002A00 plus CRWINSTR001A00 also required (one per refrigerant circuit), 460-3-60 and 575-3-60.	120 460-3-60 575-3-60
→ CRLWHPKT001A00	Low Ambient Heat Pump Relay Kit - This kit provides the necessary relay and hardware required for heat pump duty Motormaster I operation. Typically a separate field installed relay and relay base, now all combined into one. All voltages.	All size 120 models with Low Ambient Motormaster controls - One per unit
CRTRXKIT002A00	Motormaster I Low Ambient Control - Transformer Kit. Must be used in conjunction with Low Ambient Controller if used on 575-3-60 volt models, 575-3-60.	120 575-3-60

\* See usage tables in kit instructions.

<sup>1</sup> Available from FAST Parts.

<sup>2</sup> No motor change is required on these specific models.

**NOTE:** Sizes 036-072 requires (1) low ambient controller and (1) compatible condenser fan motor for change out  
 Sizes 090 requires (1) low ambient controller and (2) compatible condenser fan motors for change out

## ACCESSORIES - RHH036-120 (cont)

ACCESSORY KITS FOR UNITS WITH HINGED ACCESS PANELS		
Model Number	Description	Use With Model Size
<b>VERTICAL</b>		
CRPECONV003A00	Vertical accessory kit is required when field installing a vertical economizer, 2-position damper or manual damper on a unit that has hinged access panels. Includes angle and seal strip.	036 - 060
CRPECONV004A00		072 - 102
CRPECONV007B00	Vertical accessory kit is required when field installing a vertical economizer, power exhaust, 2-position damper, or manual damper on a unit that has hinged access panels. Includes angle and seal strip.	120
<b>HORIZONTAL</b>		
CRHNGPNL001A00	Horizontal accessory kit is required when field installing a horizontal economizer, 2-position damper or manual damper on a unit that has hinged access panels. Includes door panel, angle and seal strip.	036 - 060
CRHNGPNL002A00		072 - 102
CRHNGPNL003A00	Currently in development - please contact application engineering Horizontal accessory kit is required when field installing a horizontal economizer, power exhaust, 2-position damper or manual damper on a unit that has hinged access panels. Includes door panel, angle and seal strip.	120

LOUVERED HAIL GUARDS - CONDENSER COIL		
Model Number	Description	Use With Model Size
CRLVHLGD012A00	Louvered Condenser Coil Hail Guard - Includes louvered panel(s) to protect condenser coil from damage and vandalism.	036
CRLVHLGD013A00		048 - 060
CRLVHLGD014A00		072 - 073
CRLVHLGD016A00		090 - 102
CRLVHLGD032A00		120

See pages 15 through 29 for Electric Heater and Single Point kit models and usage.

**NOTE:** If "CR" is not found, "DN" may be substituted.

**Table 2 – AHRI COOLING AND HEATING RATING TABLES**

RHH UNIT	COOLING STAGES	NOMINAL CAPACITY (TONS)	NET COOLING CAPACITY (BTUH)	TOTAL POWER (kW)	SEER	EER	IEER
036	1	3	36,400	2.8	15.60	12.70	N/A
048	1	4	47,000	3.6	15.80	12.80	N/A
060	1	5	58,500	4.6	15.00	11.70	N/A
072	1	6	72,000	6.0	N/A	12.00	12.8

RHH UNIT	COOLING STAGES	NOMINAL CAPACITY (TONS)	NET COOLING CAPACITY (BTUH)	TOTAL POWER (kW)	SEER	EER	IEER WITH SINGLE SPEED INDOOR MOTOR	IEER WITH 2-SPEED INDOOR MOTOR
073	2	6	70,000	5.9	N/A	12.00	14.0	15.6
090	2	7.5	90,000	7.4	N/A	12.10	12.8	13.7
102	2	8.5	100,000	8.3	N/A	12.00	12.5	12.9
120	2	10	119,000	9.8	N/A	12.30	13.0	13.6

HEATING MODE						
RHH UNIT	HSPF	HEATING, LOW @ 17°F (-8°C) AMBIENT		HEATING, HIGH @ 47°F (8°C) AMBIENT		
		CAPACITY (BTUH)	COP	CAPACITY (BTUH)	COP	
036	8.00	18,400	N/A	34,000	N/A	
048	8.10	23,800	N/A	46,000	N/A	
060	8.20	28,600	N/A	55,000	N/A	
072	N/A	39,000	2.40	70,000	3.40	
073	N/A	38,000	2.40	69,000	3.40	
090	N/A	47,000	2.40	84,000	3.50	
102	N/A	56,000	2.26	100,000	3.40	
120	N/A	65,000	2.40	116,000	3.50	

See "Legend and Notes for Table 2" on the following page.

**LEGEND AND NOTES FOR TABLE 2**

**LEGEND**

- AHRI - Air-Conditioning, Heating and Refrigeration Institute
- ASHRAE - American Society of Heating, Refrigerating and Air-Conditioning Engineers
- COP - Coefficient of Performance
- EER - Energy Efficiency Ratio
- HSPF - Heating Seasonal Performance Factor
- IEER - Integrated Energy Efficiency Ratio
- NA - Not applicable
- SEER - Seasonal Energy Efficiency Ratio

**NOTES:**

1. Rated and certified under AHRI Standard 210/240 or 340/360, as appropriate.
2. Ratings are based on:  
**Cooling Standard:** 80°F (27°C) db, 67°F (19°C) wb indoor air temp and 95°F 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 variable load capacities.
3. All RHH units comply with ASHRAE 90.1-2013 Energy Standard for minimum SEER and EER requirements.



**Intertek**

**Table 3 – MINIMUM - MAXIMUM AIRFLOWS ELECTRIC HEAT**

UNIT	COOLING			ELECTRIC HEATERS		
	Minimum CFM	Minimum CFM 2-Speed Fan Motor (at High Speed)	Minimum CFM 2-Speed Fan Motor (at Low Speed)	Maximum CFM	Minimum CFM	Maximum CFM
RHH036	900	N/A	N/A	1500	900	1500
RHH048	1200	N/A	N/A	2000	1200	2000
RHH060	1500	N/A	N/A	2500	1500	2500
RHH072	1800	N/A	N/A	3000	1800	3000
RHH073	1800	1800	1200	3000	1800	3000
RHH090	2250	2250	1500	3750	2250*	3750
RHH102	2550	2873	1915	4250	2252*	4250
RHH120	3000	3380	2253	5000	3000*	5000

\* - Minimum electric heat CFM exceptions :

Unit	Unit Voltage	Heater kW	Unit Configuration	Required Minimum CFM
RHH090 RHH102	575	17.0	Horizontal or Vertical	2800
		34.0		2350
RHH120	230	50.0	Vertical	3550
		50.0	Horizontal	3420
		43.5	Horizontal or Vertical	3040
	575	50.0	Vertical	3150
		33.5	Vertical	3520
		33.5	Horizontal	3420
		26.5	Vertical	3610

**Table 4 – SOUND PERFORMANCE TABLE**

RHH	OUTDOOR SOUND (dB) AT 60HZ								
	A-WEIGHTED	63	125	250	500	1000	2000	4000	8000
036	76	51.8	69.0	64.6	67.8	70.7	63.8	60.9	59.0
048	79	56.1	69.6	68.7	72.5	72.8	68.9	65.0	61.2
060	79	57.7	66.6	68.7	72.9	74.5	71.1	67.6	62.6
072	81	86.7	82.7	79.1	78.4	75.4	71.2	67.8	62.9
073	81	86.7	82.7	79.1	78.4	75.4	71.2	67.8	62.9
090	83	87.3	81.6	79.7	80.6	79.0	73.5	69.2	66.1
102	87	61.7	74.7	77.4	82.6	84.9	81.9	78.8	75.9
120	83	61.0	67.3	75.1	77.7	78.1	75.5	71.2	66.7

**LEGEND**

dB - Decibel

**NOTES:**

1. Outdoor sound data is measured in accordance with AHRI standard 270-95.
2. Measurements are expressed in terms of sound power. Do not compare these values to sound pressure values because sound pressure accounts for specific environmental factors which 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 an "average" human ear. A-weighted measurements for ICP units are taken in accordance with 270-95.

**Table 5 – PHYSICAL DATA**

**(COOLING)**

**3 - 6 TONS**

	RHH036	RHH048	RHH060	RHH072	RHH073	
<b>Refrigeration System</b>						
# Circuits / # Comp. / Type	1 / 1 / Scroll	1 / 1 / Scroll	1 / 1 / Scroll	1 / 1 / 1-Stage Scroll	1 / 1 / 2-Stage Scroll	
Refrig. Charge per circuit A/B(lbs-oz)	12 - 8 / -	15 - 8 / -	17 - 8 / -	15 - 8 / -	15 - 8 / -	
Metering Device	TXV	TXV	TXV	TXV	TXV	
High pressure Trip / Reset (psig)	630 / 505	630 / 505	630 / 505	630 / 505	630 / 505	
Loss of Charge Press. Trip / Reset (psig)	27 / 44	27 / 44	27 / 44	27 / 44	27 / 44	
<b>Evap. Coil</b>						
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	3 / 15	3 / 15	4 / 15	3 / 15	3 / 15	
Total Face Area (ft <sup>2</sup> )	5.5	7.3	7.3	8.9	8.9	
Condensate Drain Conn. Size	3/4-in	3/4-in	3/4-in	3/4-in	3/4-in	
<b>Evap. Fan and Motor</b>						
Standard Static 1 phase	Motor Qty / Drive Type	1 / Direct	1 / Direct	1 / Direct	N/A	N/A
	Max BHP	1.0	1.0	1.0	N/A	N/A
	RPM Range	600-1200	600-1200	600-1200	N/A	N/A
	Motor Frame Size	48	48	48	N/A	N/A
	Fan Qty / Type	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal	N/A	N/A
	Fan Diameter x Length (in)	10 x 10	10 x 10	11 x 10	N/A	N/A
Standard Static 3 phase	Motor Qty / Drive Type	1 / Direct	1 / Direct	1 / Direct	1 / Belt	1 / Belt
	Max BHP	1.0	1.0	1.0	1.2	1.2
	RPM Range	600-1200	600-1200	600-1200	489-747	489-652
	Motor Frame Size	48	48	48	56	56
	Fan Qty / Type	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal
	Fan Diameter x Length (in)	10 x 10	10 x 10	11 x 10	15 x 15	15 x 15
Medium Static 3 phase	Motor Qty / Drive Type	1 / Belt	1 / Belt	1 / Belt	1 / Belt	1 / Belt
	Max BHP	1.5	1.5	2.0	2.9	2.9
	RPM Range	819-1251	920-1303	1066-1380	733-949	591-838
	Motor Frame Size	56	56	56	56	56
	Fan Qty / Type	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal
	Fan Diameter x Length (in)	10 x 10	10 x 10	10 x 10	15 x 15	15 x 15
High Static 3 phase	Motor Qty / Drive Type	1 / Belt	1 / Belt	1 / Belt	1 / Belt	1 / Belt
	Max BHP	2.0	2.0	2.9	4.0	2.9
	RPM Range	1035-1466	1035-1466	1208-1550	909-1102	838-1084
	Motor Frame Size	56	56	56	145	145
	Fan Qty / Type	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal
	Fan Diameter x Length (in)	10 x 10	10 x 10	10 x 10	15 x 15	15 x 15
<b>Cond. Coil</b>						
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	2 / 17	
Total Face Area (ft <sup>2</sup> )	16.5	21.3	21.3	20.5	20.5	
<b>Cond. fan / motor</b>						
Qty / Motor Drive Type	1 / direct	1 / direct	1 / direct	2 / direct	2 / direct	
Motor HP / RPM	1/8 / 825	1/4 / 1100	1/4 / 1100	1/4 / 1100	1/4 / 1100	
Fan diameter (in)	22	22	22	22	22	
<b>Filters</b>						
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	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	1 / 20 x 36 x 1	

**Table 6 – PHYSICAL DATA**

**(COOLING)**

**7.5 - 10 TONS**

		RHH090	RHH102	RHH120
<b>Refrigeration System</b>				
# Circuits / # Comp. / Type		2 / 2 / Scroll	2 / 2 / Scroll	2 / 2 / Scroll
Refrig. charge per circuit A/B (lbs-oz)		11 - 12 / 11 - 12	14-1/14-4	16-3/17-3
Metering Device		TXV	TXV	TXV
High pressure Trip / Reset (psig)		630 / 505	630 / 505	630 / 505
Loss of Charge Press. Trip / Reset (psig)		27 / 44	27 / 44	27 / 44
Compressor Capacity Staging (%)		50 / 100	50 / 100	50 / 100
<b>Evap. Coil</b>				
Material - Tube / Fin		Cu / Al	Cu / Al	Cu / Al
Coil type		3/8-in RTPF	3/8-in RTPF	3/8-in RTPF
Rows / FPI		4 / 15	4 / 15	3 / 15
Total Face Area (ft <sup>2</sup> )		11.1	11.1	17.3
Condensate Drain Conn. Size		3/4-in	3/4-in	3/4-in
<b>Evap. Fan and Motor</b>				
Standard Static 3 phase	Motor Qty / Drive Type	1 / Belt	1 / Belt	1 / Belt
	Max BHP	1.2	1.7	1.9
	RPM Range	518-733	460-652	440-609
	Motor Frame Size	56	56	56
	Fan Qty / Type	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal
Fan Diameter x Length (in)		15 x 15	15 x 15	18 x 18
Medium Static 3 phase	Motor Qty / Drive Type	1 / Belt	1 / Belt	1 / Belt
	Max BHP	1.7	2.9	2.9
	RPM Range	690-936	591-838	547-757
	Motor Frame Size	56	56	56
	Fan Qty / Type	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal
Fan Diameter x Length (in)		15 x 15	15 x 15	18 x 18
High Static 3 phase	Motor Qty / Drive Type	1 / Belt	1 / Belt	1 / Belt
	Max BHP	2.8	2.8	6.1
	RPM Range	838-1084	838-1084	762-963
	Motor Frame Size	56	56	S184T
	Fan Qty / Type	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal
Fan Diameter x Length (in)		15 x 15	15 x 15	18 x 18
High Static - High Efficiency 3 phase	Motor Qty / Drive Type	-	-	1 / Belt
	Max BHP	-	-	6.5/6.9/7.0/8.3 <sup>‡</sup>
	RPM Range	-	-	762-963
	Motor Frame Size	-	-	S184T
	Fan Qty / Type	-	-	1 / Centrifugal
Fan Diameter x Length (in)		-	-	18 x 18
<b>Cond. Coil</b>				
Material - Tube / Fin		Cu / Al	Cu / Al	Cu / Al
Coil type		3/8-in RTPF	3/8-in RTPF	3/8-in RTPF
Rows / FPI		2 / 17	3 / 17	2 / 17
Total Face Area (ft <sup>2</sup> )		25.1	25.1	46.2
<b>Cond. fan / motor</b>				
Qty / Motor Drive Type		2 / direct	1 / direct	3 / direct
Motor HP / RPM		1/4 / 1100	1 / 1175	1 / 1100
Fan diameter (in)		22	30	22
<b>Filters</b>				
RA Filter # / Size (in)		4 / 20 x 20 x 2	4 / 20 x 20 x 2	6 / 18 x 24 x 2
OA inlet screen # / Size (in)		1 / 20 x 24 x 1	1 / 20 x 24 x 1	2 / 24 x 27 x 1 (Vert) 1 / 30 x 39 x 1 (Horiz)

<sup>‡</sup> On Size 120 units, Max BHP for the High Static motor varies with the motor's voltage; see the table below.

Voltage	BHP
208	6.5
230	6.9
460	7.0
575	8.3

**Table 7 – RHH036**

**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*****			
					WITHOUT C.O. or UNPWRD C.O.		w/PWRD C.O.	
					WITHOUT P.E.	w/ P.E. (pwrd fr/unit)	WITHOUT P.E.	w/ P.E. (pwrd fr/unit)
208/ 230-1-60	DD- STD	101A00	4.4	3.3/4.0	037A00	037A00	-	-
		102A00	6.5	4.9/6.0	040A00	040A00	-	-
		103B00	8.7	6.5/8.0	040A00	040A00	-	-
		104B00	10.5	7.9/9.6	040A00	040A00	-	-
		102A00,102A00	13.0	9.8/11.9	041A00	041A00	-	-
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	-	-	037A00	037A00
		104B00	10.5	7.9/9.6	037A00	037A00	037A00	037A00
		105A00	16.0	12.0/14.7	038A00	038A00	038A00	038A00
	MED	101A00	4.4	3.3/4.0	-	-	-	-
		102A00	6.5	4.9/6.0	-	-	-	-
		103B00	8.7	6.5/8.0	-	-	-	037A00
		104B00	10.5	7.9/9.6	037A00	037A00	037A00	037A00
		105A00	16.0	12.0/14.7	038A00	038A00	038A00	038A00
	HIGH	101A00	4.4	3.3/4.0	-	-	-	-
		102A00	6.5	4.9/6.0	-	-	-	-
		103B00	8.7	6.5/8.0	-	-	037A00	037A00
		104B00	10.5	7.9/9.6	037A00	037A00	037A00	037A00
		105A00	16.0	12.0/14.7	038A00	038A00	038A00	038A00
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	-	-	-	-
	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	10.0	9.2	-	-	-	-
		298A00	15.0	13.8	-	-	-	-
	MED	297A00	10.0	9.2	-	-	-	-
		298A00	15.0	13.8	-	-	-	-
	HIGH	297A00	10.0	9.2	-	-	-	-
		298A00	15.0	13.8	-	-	-	-

**LEGEND**

- No Single Point Kit required
- APP PWR - 208 / 230V / 460V / 575V
- C.O. - Convenience outlet
- DD. - Electric Drive X13 5 speed/torque motor
- IFM - Indoor fan motor
- NOM PWR - 240V / 480V / 600V
- P.E. - Power exhaust
- PWRD - Powered convenience outlet
- UNPWRD - Unpowered convenience outlet

**Table 8 – RHH036**

**ELECTRIC HEAT - ELECTRICAL DATA  
SINGLE STAGE COOLING SINGLE SPEED INDOOR FAN AND  
FACTORY-INSTALLED NON-FUSED DISCONNECT SWITCH**

NOM. V-Ph-Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER CRHEATER *****	NOM PWR (kW)	APP PWR (kW)	SINGLE POINT KIT PART NUMBER CRSINGLE*****			
					WITHOUT C.O. or UNPWRD C.O.		w/PWRD C.O.	
					WITHOUT P.E.	w/ P.E. (pwrd fr/unit)	WITHOUT P.E.	w/ P.E. (pwrd fr/unit)
208/ 230-1-60	DD- STD	101A00	4.4	3.3/4.0	037A00	037A00	-	-
		102A00	6.5	4.9/6.0	040A00	040A00	-	-
		103B00	8.7	6.5/8.0	040A00	040A00	-	-
		104B00	10.5	7.9/9.6	040A00	040A00	-	-
		102A00,102A00	13.0	9.8/11.9	041A00	041A00	-	-
208/ 230-3-60	DD- STD	101A00	4.4	3.3/4.0	037A00	037A00	037A00	037A00
		102A00	6.5	4.9/6.0	037A00	037A00	037A00	037A00
		103B00	8.7	6.5/8.0	037A00	037A00	037A00	037A00
		104B00	10.5	7.9/9.6	037A00	037A00	037A00	037A00
		105A00	16.0	12.0/14.7	038A00	038A00	038A00	038A00
	MED	101A00	4.4	3.3/4.0	049A00	037A00	037A00	037A00
		102A00	6.5	4.9/6.0	049A00	037A00	037A00	037A00
		103B00	8.7	6.5/8.0	051A00	037A00	037A00	037A00
		104B00	10.5	7.9/9.6	051A00	037A00	037A00	037A00
		105A00	16.0	12.0/14.7	038A00	038A00	038A00	038A00
	HIGH	101A00	4.4	3.3/4.0	049A00	037A00	037A00	037A00
		102A00	6.5	4.9/6.0	049A00	037A00	037A00	037A00
		103B00	8.7	6.5/8.0	051A00	037A00	037A00	037A00
		104B00	10.5	7.9/9.6	051A00	037A00	037A00	037A00
		105A00	16.0	12.0/14.7	038A00	038A00	038A00	038A00
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	-	-	-	-
	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	16.5	8.1	-	-	-	-
		108A00	11.5	10.6	-	-	-	-
		109A00	14.0	12.9	-	-	-	-
575-3-60	DD- STD	297A00	10.0	9.2	-	-	-	-
		298A00	15.0	13.8	-	-	-	-
	MED	297A00	10.0	9.2	-	-	-	-
		298A00	15.0	13.8	-	-	-	-
	HIGH	297A00	10.0	9.2	-	-	-	-
		298A00	15.0	13.8	-	-	-	-

**LEGEND**

- No Single Point Kit required
- APP PWR - 208 / 230V / 460V / 575V
- C.O. - Convenience outlet
- DD. - Electric Drive X13 5 speed/torque motor
- IFM - Indoor fan motor
- NOM PWR - 240V / 480V / 600V
- P.E. - Power exhaust
- PWRD - Powered convenience outlet
- UNPWRD - Unpowered convenience outlet



**Table 9 – RHH048**

**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*****			
					WITHOUT C.O. or UNPWRD C.O.		w/PWRD C.O.	
					WITHOUT P.E.	w/ P.E. (pwrd fr/unit)	WITHOUT P.E.	w/ P.E. (pwrd fr/unit)
208/ 230-1-60	DD- STD	101A00	4.4	3.3/4.0	037A00	037A00	-	-
		103B00	8.7	6.5/8.0	040A00	040A00	-	-
		102A00,102A00	13.0	9.8/11.9	041A00	041A00	-	-
		103B00,103B00	17.4	13.1/16.0	041A00	041A00	-	-
		104B00,104B00	21.0	15.8/19.3	041A00	041A00	-	-
208/ 230-3-60	DD- STD	102A00	6.5	4.9/6.0	-	-	-	037A00
		103B00	8.7	6.5/8.0	037A00	037A00	037A00	037A00
		105A00	16.0	12.0/14.7	038A00	038A00	038A00	038A00
		104B00,104B00	21.0	15.8/19.3	039A00	039A00	039A00	039A00
	MED	102A00	6.5	4.9/6.0	-	-	-	-
		103B00	8.7	6.5/8.0	-	037A00	037A00	037A00
		105A00	16.0	12.0/14.7	038A00	038A00	038A00	038A00
		104B00,104B00	21.0	15.8/19.3	039A00	039A00	039A00	039A00
	HIGH	102A00	6.5	4.9/6.0	-	-	-	037A00
		103B00	8.7	6.5/8.0	037A00	037A00	037A00	037A00
		105A00	16.0	12.0/14.7	038A00	038A00	038A00	038A00
		104B00,104B00	21.0	15.8/19.3	039A00	039A00	039A00	039A00
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	037A00	037A00	037A00	037A00
	MED	106A00	6.0	5.5	-	-	-	-
		108A00	11.5	10.6	-	-	-	-
		109A00	14.0	12.9	-	-	-	-
		108A00,108A00	23.0	21.1	037A00	037A00	037A00	037A00
	HIGH	106A00	6.0	5.5	-	-	-	-
		108A00	11.5	10.6	-	-	-	-
		109A00	14.0	12.9	-	-	-	-
		108A00,108A00	23.0	21.1	037A00	037A00	037A00	037A00
575-3-60	DD- STD	297A00	10.0	9.2	-	-	-	-
		298A00	15.0	13.8	-	-	-	-
	MED	297A00	10.0	9.2	-	-	-	-
		298A00	15.0	13.8	-	-	-	-
	HIGH	297A00	10.0	9.2	-	-	-	-
		298A00	15.0	13.8	-	-	-	-

**LEGEND**

- No Single Point Kit required
- APP PWR - 208 / 230V / 460V / 575V
- C.O. - Convenience outlet
- DD. - Electric Drive X13 5 speed/torque motor
- IFM - Indoor fan motor
- NOM PWR - 240V / 480V / 600V
- P.E. - Power exhaust
- PWRD - Powered convenience outlet
- UNPWRD - Unpowered convenience outlet

**Table 10 – RHH048**

**ELECTRIC HEAT - ELECTRICAL DATA  
SINGLE STAGE COOLING SINGLE SPEED INDOOR FAN AND  
FACTORY-INSTALLED NON-FUSED DISCONNECT SWITCH**

NOM. V-Ph-Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER CRHEATER *****	NOM PWR (kW)	APP PWR (kW)	SINGLE POINT KIT PART NUMBER CRSINGLE*****			
					WITHOUT C.O. or UNPWRD C.O.		w/PWRD C.O.	
					WITHOUT P.E.	w/ P.E. (pwrd fr/unit)	WITHOUT P.E.	w/ P.E. (pwrd fr/unit)
208/ 230-1-60	DD- STD	101A00	4.4	3.3/4.0	037A00	037A00	-	-
		103B00	8.7	6.5/8.0	040A00	040A00	-	-
		102A00,102A00	13.0	9.8/11.9	041A00	041A00	-	-
		103B00,103B00	17.4	13.1/16.0	041A00	041A00	-	-
		104B00,104B00	21.0	15.8/19.3	041A00	041A00	-	-
208/ 230-3-60	DD- STD	102A00	6.5	4.9/6.0	037A00	037A00	037A00	037A00
		103B00	8.7	6.5/8.0	037A00	037A00	037A00	037A00
		105A00	16.0	12.0/14.7	038A00	038A00	038A00	038A00
		104B00, 104B00	21.0	15.8/19.3	039A00	039A00	039A00	039A00
	MED	102A00	6.5	4.9/6.0	037A00	037A00	037A00	037A00
		103B00	8.7	6.5/8.0	037A00	037A00	037A00	037A00
		105A00	16.0	12.0/14.7	038A00	038A00	038A00	038A00
		104B00, 104B00	21.0	15.8/19.3	039A00	039A00	039A00	039A00
	HIGH	102A00	6.5	4.9/6.0	037A00	037A00	037A00	037A00
		103B00	8.7	6.5/8.0	037A00	037A00	037A00	037A00
		105A00	16.0	12.0/14.7	038A00	038A00	038A00	038A00
		104B00, 104B00	21.0	15.8/19.3	039A00	039A00	039A00	039A00
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	037A00	037A00	037A00	037A00
	MED	106A00	6.0	5.5	-	-	-	-
		108A00	11.5	10.6	-	-	-	-
		109A00	14.0	12.9	-	-	-	-
		108A00, 108A00	23.0	21.1	037A00	037A00	037A00	037A00
	HIGH	106A00	6.0	5.5	-	-	-	-
		108A00	11.5	10.6	-	-	-	-
		109A00	14.0	12.9	-	-	-	-
		108A00, 108A00	23.0	21.1	037A00	037A00	037A00	037A00
575-3-60	DD- STD	297A00	10.0	9.2	-	-	-	-
		298A00	15.0	13.8	-	-	-	-
	MED	297A00	10.0	9.2	-	-	-	-
		298A00	15.0	13.8	-	-	-	-
	HIGH	297A00	10.0	9.2	-	-	-	-
		298A00	15.0	13.8	-	-	-	-

**LEGEND**

- No Single Point Kit required
- APP PWR - 208 / 230V / 460V / 575V
- C.O. - Convenience outlet
- DD. - Electric Drive X13 5 speed/torque motor
- IFM - Indoor fan motor
- NOM PWR - 240V / 480V / 600V
- P.E. - Power exhaust
- PWRD - Powered convenience outlet
- UNPWRD - Unpowered convenience outlet

**Table 11 – RHH060**

**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*****			
					WITHOUT C.O. or UNPWRD C.O.		w/PWRD C.O.	
					WITHOUT P.E.	w/ P.E. (pwrd fr/unit)	WITHOUT P.E.	w/ P.E. (pwrd fr/unit)
208/ 230-1-60	DD- STD	102A00	6.5	4.9/6.0	040A00	040A00	-	-
		103B00	8.7	6.5/8.0	040A00	040A00	-	-
		102A00,102A00	13.0	9.8/11.9	041A00	041A00	-	-
		103B00,103B00	17.4	13.1/16.0	041A00	041A00	-	-
		104B00,104B00	21.0	15.8/19.3	041A00	041A00	-	-
208/ 230-3-60	DD- STD	102A00	6.5	4.9/6.0	-	037A00	037A00	037A00
		104B00	10.5	7.9/9.6	038A00	038A00	038A00	038A00
		105A00	16.0	12.0/14.7	038A00	038A00	038A00	038A00
		104B00,104B00	21.0	15.8/19.3	039A00	039A00	039A00	039A00
		104B00,105A00	26.5	19.9/24.3	039A00	039A00	039A00	039A00
	MED	102A00	6.5	4.9/6.0	-	038A00	037A00	037A00
		104B00	10.5	7.9/9.6	037A00	037A00	038A00	038A00
		105A00	16.0	12.0/14.7	038A00	038A00	038A00	038A00
		104B00,104B00	21.0	15.8/19.3	039A00	039A00	039A00	039A00
		104B00,105A00	26.5	19.9/24.3	039A00	039A00	039A00	039A00
	HIGH	102A00	6.5	4.9/6.0	-	037A00	037A00	037A00
		104B00	10.5	7.9/9.6	038A00	038A00	038A00	038A00
		105A00	16.0	12.0/14.7	038A00	038A00	038A00	038A00
		104B00,104B00	21.0	15.8/19.3	039A00	039A00	039A00	039A00
		104B00,105A00	26.5	19.9/24.3	039A00	039A00	039A00	039A00
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	037A00	037A00	037A00	037A00
		108A00,109A00	25.5	23.4	037A00	037A00	037A00	037A00
	MED	106A00	6.0	5.5	-	-	-	-
		108A00	11.5	10.6	-	-	-	-
		109A00	14.0	12.9	-	-	-	-
		108A00,108A00	23.0	21.1	037A00	037A00	037A00	037A00
		108A00,109A00	25.5	23.4	037A00	037A00	037A00	037A00
	HIGH	106A00	6.0	5.5	-	-	-	-
		108A00	11.5	10.6	-	-	-	-
		109A00	14.0	12.9	-	-	-	-
		108A00,108A00	23.0	21.1	037A00	037A00	037A00	037A00
		108A00,109A00	25.5	23.4	037A00	037A00	037A00	037A00
575-3-60	DD- STD	298A00	15.0	13.8	-	-	-	-
		301A00	25.0	23.0	-	-	-	-
	MED	298A00	15.0	13.8	-	-	-	-
		301A00	25.0	23.0	-	-	-	-
	HIGH	298A00	15.0	13.8	-	-	-	-
		301A00	25.0	23.0	-	-	-	-

**LEGEND**

- No Single Point Kit required
- APP PWR - 208 / 230V / 460V / 575V
- C.O. - Convenience outlet
- DD. - Electric Drive X13 5 speed/torque motor
- IFM - Indoor fan motor
- NOM PWR - 240V / 480V / 600V
- P.E. - Power exhaust
- PWRD - Powered convenience outlet
- UNPWRD - Unpowered convenience outlet

**Table 12 – RHH060**

**ELECTRIC HEAT - ELECTRICAL DATA  
SINGLE STAGE COOLING SINGLE SPEED INDOOR FAN AND  
FACTORY-INSTALLED NON-FUSED DISCONNECT SWITCH**

NOM. V-Ph-Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER CRHEATER *****	NOM PWR (kW)	APP PWR (kW)	SINGLE POINT KIT PART NUMBER CRSINGLE*****			
					WITHOUT C.O. or UNPWRD C.O.		w/PWRD C.O.	
					WITHOUT P.E.	w/ P.E. (pwrd fr/unit)	WITHOUT P.E.	w/ P.E. (pwrd fr/unit)
208/ 230-1-60	DD- STD	102A00	6.5	4.9/6.0	040A00	040A00	-	-
		103B00	8.7	6.5/8.0	040A00	040A00	-	-
		102A00, 102A00	13.0	9.8/11.9	041A00	041A00	-	-
		103B00.,103B00	17.4	13.1/16.0	041A00	041A00	-	-
		104B00, 104B00	21.0	15.8/19.3	041A00	041A00	-	-
208/ 230-3-60	DD- STD	102A00	6.5	4.9/6.0	037A00	037A00	037A00	037A00
		104B00	10.5	7.9/9.6	038A00	038A00	038A00	038A00
		105A00	16.0	12.0/14.7	038A00	038A00	038A00	038A00
		104B00, 104B00	21.0	15.8/19.3	039A00	039A00	039A00	039A00
		104B00. 105A00	26.5	19.9/24.3	039A00	039A00	039A00	039A00
	MED	102A00	6.5	4.9/6.0	037A00	037A00	037A00	037A00
		104B00	10.5	7.9/9.6	038A00	038A00	038A00	038A00
		105A00	16.0	12.0/14.7	038A00	038A00	038A00	038A00
		104B00, 104B00	21.0	15.8/19.3	039A00	039A00	039A00	039A00
		104B00. 105A00	26.5	19.9/24.3	039A00	039A00	039A00	039A00
	HIGH	102A00	6.5	4.9/6.0	037A00	037A00	037A00	037A00
		104B00	10.5	7.9/9.6	038A00	038A00	038A00	038A00
		105A00	16.0	12.0/14.7	038A00	038A00	038A00	038A00
		104B00, 104B00	21.0	15.8/19.3	039A00	039A00	039A00	039A00
		104B00. 105A00	26.5	19.9/24.3	039A00	039A00	039A00	039A00
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	037A00	037A00	037A00	037A00
		108A00, 109A00	25.5	23.4	037A00	037A00	037A00	037A00
	MED	106A00	6.0	5.5	-	-	-	-
		108A00	11.5	10.6	-	-	-	-
		109A00	14.0	12.9	-	-	-	-
		108A00, 108A00	23.0	21.1	037A00	037A00	037A00	037A00
		108A00, 109A00	25.5	23.4	037A00	037A00	037A00	037A00
	HIGH	106A00	6.0	5.5	-	-	-	-
		108A00	11.5	10.6	-	-	-	-
		109A00	14.0	12.9	-	-	-	-
		108A00, 108A00	23.0	21.1	037A00	037A00	037A00	037A00
		108A00, 109A00	25.5	23.4	037A00	037A00	037A00	037A00
575-3-60	DD- STD	298A00	15.0	13.8	-	-	-	-
		301A00	25.0	23.0	037A00	037A00	037A00	037A00
	MED	298A00	15.0	13.8	-	-	-	-
		301A00	25.0	23.0	037A00	037A00	037A00	037A00
	HIGH	298A00	15.0	13.8	-	-	-	-
		301A00	25.0	23.0	037A00	037A00	037A00	037A00

**LEGEND**

- No Single Point Kit required
- APP PWR - 208 / 230V / 460V / 575V
- C.O. - Convenience outlet
- DD. - Electric Drive X13 5 speed/torque motor
- IFM - Indoor fan motor
- NOM PWR - 240V / 480V / 600V
- P.E. - Power exhaust
- PWRD - Powered convenience outlet
- UNPWRD - Unpowered convenience outlet

**Table 13 – RHH072**

**ELECTRIC HEAT - ELECTRICAL DATA  
SINGLE STAGE COOLING SINGLE SPEED INDOOR FAN MOTOR  
WITH AND WITHOUT FACTORY-INSTALLED NON-FUSED DISCONNECT SWITCH**

NOM. V-Ph-Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER CRHEATER *****	NOM PWR (kW)	APP PWR (kW)	SINGLE POINT KIT PART NUMBER CRSINGLE*****			
					WITHOUT C.O. or UNPWRD C.O.		w/PWRD C.O.	
					WITHOUT P.E.	w/ P.E. (pwrd fr/unit)	WITHOUT P.E.	w/ P.E. (pwrd fr/unit)
208/ 230-3-60	STD	264A00	6.5	4.9/6.0	042A00	042A00	042A00	045A00
		117A00	10.4	7.8/9.6	043A00	043A00	043A00	043A00
		110A00	16.0	12.0/14.7	043A00	043A00	043A00	043A00
		117A00,117A00	21.0	15.8/19.3	045A00	045A00	045A00	045A00
		110A00,117A00	26.5	19.9/24.3	045A00	045A00	045A00	045A00
	MED	264A00	6.5	4.9/6.0	042A00	042A00	045A00	045A00
		117A00	10.4	7.8/9.6	043A00	043A00	043A00	043A00
		110A00	16.0	12.0/14.7	043A00	043A00	043A00	043A00
		117A00,117A00	21.0	15.8/19.3	045A00	045A00	045A00	045A00
		110A00,117A00	26.5	19.9/24.3	045A00	045A00	045A00	045A00
	HIGH	264A00	6.5	4.9/6.0	042A00	045A00	045A00	045A00
		117A00	10.4	7.8/9.6	043A00	043A00	043A00	043A00
110A00		16.0	12.0/14.7	043A00	043A00	043A00	043A00	
117A00,117A00		21.0	15.8/19.3	045A00	045A00	045A00	045A00	
110A00,117A00		26.5	19.9/24.3	045A00	045A00	045A00	045A00	
460-3-60	STD	265A00	6.0	5.5	042A00	042A00	042A00	042A00
		266A00	11.5	10.6	042A00	042A00	042A00	042A00
		267A00	14.0	12.9	042A00	042A00	042A00	042A00
		268A00	23.0	21.1	042A00	042A00	042A00	042A00
		269A00	25.5	23.4	042A00	042A00	042A00	042A00
	MED	265A00	6.0	5.5	042A00	042A00	042A00	042A00
		266A00	11.5	10.6	042A00	042A00	042A00	042A00
		267A00	14.0	12.9	042A00	042A00	042A00	042A00
		268A00	23.0	21.1	042A00	042A00	042A00	042A00
		269A00	25.5	23.4	042A00	042A00	042A00	048A00
	HIGH	265A00	6.0	5.5	042A00	042A00	042A00	042A00
		266A00	11.5	10.6	042A00	042A00	042A00	042A00
		267A00	14.0	12.9	042A00	042A00	042A00	042A00
		268A00	23.0	21.1	042A00	042A00	042A00	042A00
		269A00	25.5	23.4	042A00	048A00	048A00	048A00
575-3-60	DD- STD	118A00	18.0	16.5	042A00	042A00	042A00	042A00
		299A00	28.0	25.7	042A00	042A00	042A00	042A00
	MED	118A00	18.0	16.5	042A00	042A00	042A00	042A00
		299A00	28.0	25.7	042A00	042A00	042A00	042A00
	HIGH	118A00	18.0	16.5	042A00	042A00	042A00	042A00
		299A00	28.0	25.7	042A00	042A00	042A00	042A00

**LEGEND**

- No Single Point Kit required
- APP PWR - 208 / 230V / 460V / 575V
- C.O. - Convenience outlet
- DD. - Electric Drive X13 5 speed/torque motor
- IFM - Indoor fan motor
- NOM PWR - 240V / 480V / 600V
- P.E. - Power exhaust
- PWRD - Powered convenience outlet
- UNPWRD - Unpowered convenience outlet

**Table 14 – RHH073**

**ELECTRIC HEAT - ELECTRICAL DATA  
2-STAGE COOLING SINGLE SPEED INDOOR FAN MOTOR  
WITH AND WITHOUT FACTORY-INSTALLED NON-FUSED DISCONNECT SWITCH**

NOM. V-Ph-Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER CRHEATER *****	NOM PWR (kW)	APP PWR (kW)	SINGLE POINT KIT PART NUMBER CRSINGLE*****			
					WITHOUT C.O. or UNPWRD C.O.		w/PWRD C.O.	
					WITHOUT P.E.	w/ P.E. (pwrd fr/unit)	WITHOUT P.E.	w/ P.E. (pwrd fr/unit)
208/ 230-3-60	STD	264A00	6.5	4.9/6.0	042A00	042A00	042A00	045A00
		117A00	10.4	7.8/9.6	043A00	043A00	043A00	043A00
		110A00	16.0	12.0/14.7	043A00	043A00	043A00	043A00
		117A00,117A00	21.0	15.8/19.3	045A00	045A00	045A00	045A00
		110A00,117A00	26.5	19.9/24.3	045A00	045A00	045A00	045A00
	MED	264A00	6.5	4.9/6.0	042A00	042A00	042A00	045A00
		117A00	10.4	7.8/9.6	043A00	043A00	043A00	043A00
		110A00	16.0	12.0/14.7	043A00	043A00	043A00	043A00
		117A00,117A00	21.0	15.8/19.3	045A00	045A00	045A00	045A00
		110A00,117A00	26.5	19.9/24.3	045A00	045A00	045A00	045A00
	HIGH	264A00	6.5	4.9/6.0	042A00	045A00	045A00	045A00
		117A00	10.4	7.8/9.6	043A00	043A00	043A00	043A00
		110A00	16.0	12.0/14.7	043A00	043A00	043A00	043A00
		117A00,117A00	21.0	15.8/19.3	045A00	045A00	045A00	045A00
		110A00,117A00	26.5	19.9/24.3	045A00	045A00	045A00	045A00
460-3-60	STD	265A00	6.0	5.5	042A00	042A00	042A00	042A00
		266A00	11.5	10.6	042A00	042A00	042A00	042A00
		267A00	14.0	12.9	042A00	042A00	042A00	042A00
		268A00	23.0	21.1	042A00	042A00	042A00	042A00
		269A00	25.5	23.4	042A00	042A00	042A00	042A00
	MED	265A00	6.0	5.5	042A00	042A00	042A00	042A00
		266A00	11.5	10.6	042A00	042A00	042A00	042A00
		267A00	14.0	12.9	042A00	042A00	042A00	042A00
		268A00	23.0	21.1	042A00	042A00	042A00	042A00
		269A00	25.5	23.4	042A00	042A00	042A00	042A00
	HIGH	265A00	6.0	5.5	042A00	042A00	042A00	042A00
		266A00	11.5	10.6	042A00	042A00	042A00	042A00
		267A00	14.0	12.9	042A00	042A00	042A00	042A00
		268A00	23.0	21.1	042A00	042A00	042A00	042A00
		269A00	25.5	23.4	042A00	048A00	048A00	048A00
575-3-60	STD	118A00	18.0	16.5	042A00	042A00	042A00	042A00
		299A00	28.0	25.7	042A00	042A00	042A00	042A00
	MED	118A00	18.0	16.5	042A00	042A00	042A00	042A00
		299A00	28.0	25.7	042A00	042A00	042A00	042A00
	HIGH	118A00	18.0	16.5	042A00	042A00	042A00	042A00
		299A00	28.0	25.7	042A00	042A00	042A00	042A00

**LEGEND**

- No Single Point Kit required
- APP PWR - 208 / 230V / 460V / 575V
- C.O. - Convenience outlet
- DD. - Electric Drive X13 5 speed/torque motor
- IFM - Indoor fan motor
- NOM PWR - 240V / 480V / 600V
- P.E. - Power exhaust
- PWRD - Powered convenience outlet
- UNPWRD - Unpowered convenience outlet

**Table 15 – RHH073**

**ELECTRIC HEAT - ELECTRICAL DATA  
2-STAGE COOLING 2-SPEED INDOOR FAN MOTOR  
WITH AND WITHOUT FACTORY-INSTALLED NON-FUSED DISCONNECT SWITCH**

NOM. V-Ph-Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER CRHEATER *****	NOM PWR (kW)	APP PWR (kW)	SINGLE POINT KIT PART NUMBER CRSINGLE*****			
					WITHOUT C.O. or UNPWRD C.O.		w/PWRD C.O.	
					WITHOUT P.E.	w/ P.E. (pwrd fr/unit)	WITHOUT P.E.	w/ P.E. (pwrd fr/unit)
208/ 230-3-60	STD	264A00	6.5	4.9/6.0	042A00	042A00	042A00	045A00
		117A00	10.4	7.8/9.6	043A00	043A00	043A00	043A00
		110A00	16.0	12.0/14.7	043A00	043A00	043A00	043A00
		117A00,117A00	21.0	15.8/19.3	045A00	045A00	045A00	045A00
		110A00,117A00	26.5	19.9/24.3	045A00	045A00	045A00	045A00
	MED	264A00	6.5	4.9/6.0	042A00	042A00	042A00	045A00
		117A00	10.4	7.8/9.6	043A00	043A00	043A00	043A00
		110A00	16.0	12.0/14.7	043A00	043A00	043A00	043A00
		117A00,117A00	21.0	15.8/19.3	045A00	045A00	045A00	045A00
		110A00,117A00	26.5	19.9/24.3	045A00	045A00	045A00	045A00
	HIGH	264A00	6.5	4.9/6.0	042A00	045A00	045A00	045A00
		117A00	10.4	7.8/9.6	043A00	043A00	043A00	043A00
		110A00	16.0	12.0/14.7	043A00	043A00	043A00	043A00
		117A00,117A00	21.0	15.8/19.3	045A00	045A00	045A00	045A00
		110A00,117A00	26.5	19.9/24.3	045A00	045A00	045A00	045A00
460-3-60	STD	265A00	6.0	5.5	042A00	042A00	042A00	042A00
		266A00	11.5	10.6	042A00	042A00	042A00	042A00
		267A00	14.0	12.9	042A00	042A00	042A00	042A00
		268A00	23.0	21.1	042A00	042A00	042A00	042A00
		269A00	25.5	23.4	042A00	042A00	042A00	042A00
	MED	265A00	6.0	5.5	042A00	042A00	042A00	042A00
		266A00	11.5	10.6	042A00	042A00	042A00	042A00
		267A00	14.0	12.9	042A00	042A00	042A00	042A00
		268A00	23.0	21.1	042A00	042A00	042A00	042A00
		269A00	25.5	23.4	042A00	042A00	042A00	042A00
	HIGH	265A00	6.0	5.5	042A00	042A00	042A00	042A00
		266A00	11.5	10.6	042A00	042A00	042A00	042A00
		267A00	14.0	12.9	042A00	042A00	042A00	042A00
		268A00	23.0	21.1	042A00	042A00	042A00	042A00
		269A00	25.5	23.4	042A00	048A00	048A00	048A00
575-3-60	STD	118A00	18.0	16.5	042A00	042A00	042A00	042A00
		299A00	28.0	25.7	042A00	042A00	042A00	042A00
	MED	118A00	18.0	16.5	042A00	042A00	042A00	042A00
		299A00	28.0	25.7	042A00	042A00	042A00	042A00
	HIGH	118A00	18.0	16.5	042A00	042A00	042A00	042A00
		299A00	28.0	25.7	042A00	042A00	042A00	042A00

**LEGEND**

- No Single Point Kit required
- APP PWR - 208 / 230V / 460V / 575V
- C.O. - Convenience outlet
- DD. - Electric Drive X13 5 speed/torque motor
- IFM - Indoor fan motor
- NOM PWR - 240V / 480V / 600V
- P.E. - Power exhaust
- PWRD - Powered convenience outlet
- UNPWRD - Unpowered convenience outlet

Table 16 – RHH090

**ELECTRIC HEAT - ELECTRICAL DATA  
2-STAGE COOLING SINGLE SPEED INDOOR FAN MOTOR  
WITH AND WITHOUT FACTORY-INSTALLED NON-FUSED DISCONNECT SWITCH**

NOM. V-Ph-Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER CRHEATER *****	NOM PWR (kW)	APP PWR (kW)	SINGLE POINT KIT PART NUMBER CRSINGLE*****			
					WITHOUT C.O. or UNPWRD C.O.		w/PWRD C.O.	
					WITHOUT P.E.	w/ P.E. (pwrd fr/unit)	WITHOUT P.E.	w/ P.E. (pwrd fr/unit)
208/ 230-3-60	STD	117A00	10.4	7.8/9.6	049A00	049A00	049A00	049A00
		110A00	16.0	12.0/14.7	049A00	049A00	049A00	049A00
		111A00	24.8	18.6/22.8	051A00	051A00	051A00	051A00
		112A00	32.0	24.0/29.4	051A00	051A00	051A00	051A00
		112A00,117A00	42.4	31.8/38.9	053A00	053A00	053A00	053A00
	MED	117A00	10.4	7.8/9.6	049A00	049A00	049A00	049A00
		110A00	16.0	12.0/14.7	049A00	049A00	049A00	049A00
		111A00	24.8	18.6/22.8	051A00	051A00	051A00	051A00
		112A00	32.0	24.0/29.4	051A00	051A00	051A00	051A00
		112A00,117A00	42.4	31.8/38.9	053A00	053A00	053A00	053A00
	HIGH	117A00	10.4	7.8/9.6	049A00	049A00	049A00	049A00
		110A00	16.0	12.0/14.7	049A00	049A00	049A00	049A00
111A00		24.8	18.6/22.8	051A00	051A00	051A00	051A00	
112A00		32.0	24.0/29.4	051A00	051A00	051A00	051A00	
112A00,117A00		42.4	31.8/38.9	053A00	053A00	053A00	053A00	
460-3-60	STD	116B00	13.9	12.8	047A00	047A00	047A00	047A00
		113B00	16.5	15.2	047A00	047A00	047A00	047A00
		114B00	27.8	25.5	047A00	050A00	050A00	050A00
		115B00	33.0	30.3	050A00	050A00	050A00	050A00
	MED	116B00	13.9	12.8	047A00	047A00	047A00	047A00
		113B00	16.5	15.2	047A00	047A00	047A00	047A00
		114B00	27.8	25.5	050A00	050A00	050A00	050A00
		115B00	33.0	30.3	050A00	050A00	050A00	050A00
	HIGH	116B00	13.9	12.8	047A00	047A00	047A00	047A00
		113B00	16.5	15.2	047A00	047A00	047A00	047A00
		114B00	27.8	25.5	050A00	050A00	050A00	050A00
		115B00	33.0	30.3	050A00	050A00	050A00	050A00
575-3-60	STD	118A00	18.0	16.5	047A00	047A00	047A00	047A00
		119A00	36.0	33.1	050A00	050A00	050A00	050A00
	MED	118A00	18.0	16.5	047A00	047A00	047A00	047A00
		119A00	36.0	33.1	050A00	050A00	050A00	050A00
	HIGH	118A00	18.0	16.5	047A00	047A00	047A00	047A00
		119A00	36.0	33.1	050A00	050A00	050A00	050A00

**LEGEND**

- No Single Point Kit required
- APP PWR - 208 / 230V / 460V / 575V
- C.O. - Convenience outlet
- DD. - Electric Drive X13 5 speed/torque motor
- IFM - Indoor fan motor
- NOM PWR - 240V / 480V / 600V
- P.E. - Power exhaust
- PWRD - Powered convenience outlet
- UNPWRD - Unpowered convenience outlet



**Table 17 – RHH090**

**ELECTRIC HEAT - ELECTRICAL DATA  
2-STAGE COOLING 2-SPEED INDOOR FAN MOTOR  
WITH AND WITHOUT FACTORY-INSTALLED NON-FUSED DISCONNECT SWITCH**

NOM. V-Ph-Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER CRHEATER *****	NOM PWR (kW)	APP PWR (kW)	SINGLE POINT KIT PART NUMBER CRSINGLE*****			
					WITHOUT C.O. or UNPWRD C.O.		w/PWRD C.O.	
					WITHOUT P.E.	w/ P.E. (pwrd fr/unit)	WITHOUT P.E.	w/ P.E. (pwrd fr/unit)
208/ 230-3-60	STD	117A00	10.4	7.8/9.6	049A00	049A00	049A00	049A00
		110A00	16.0	12.0/14.7	049A00	049A00	049A00	049A00
		111A00	24.8	18.6/22.8	051A00	051A00	051A00	051A00
		112A00	32.0	24.0/29.4	051A00	051A00	051A00	051A00
		112A00,117A00	42.4	31.8/38.9	053A00	053A00	053A00	053A00
	MED	117A00	10.4	7.8/9.6	049A00	049A00	049A00	049A00
		110A00	16.0	12.0/14.7	049A00	049A00	049A00	049A00
		111A00	24.8	18.6/22.8	051A00	051A00	051A00	051A00
		112A00	32.0	24.0/29.4	051A00	051A00	051A00	051A00
		112A00,117A00	42.4	31.8/38.9	053A00	053A00	053A00	053A00
	HIGH	117A00	10.4	7.8/9.6	049A00	049A00	049A00	049A00
		110A00	16.0	12.0/14.7	049A00	049A00	049A00	049A00
111A00		24.8	18.6/22.8	051A00	051A00	051A00	051A00	
112A00		32.0	24.0/29.4	051A00	051A00	051A00	051A00	
112A00,117A00		42.4	31.8/38.9	053A00	053A00	053A00	053A00	
460-3-60	STD	116B00	13.9	12.8	047A00	047A00	047A00	047A00
		113B00	16.5	15.2	047A00	047A00	047A00	047A00
		114B00	27.8	25.5	047A00	050A00	050A00	050A00
		115B00	33.0	30.3	050A00	050A00	050A00	050A00
	MED	116B00	13.9	12.8	047A00	047A00	047A00	047A00
		113B00	16.5	15.2	047A00	047A00	047A00	047A00
		114B00	27.8	25.5	050A00	050A00	050A00	050A00
		115B00	33.0	30.3	050A00	050A00	050A00	050A00
	HIGH	116B00	13.9	12.8	047A00	047A00	047A00	047A00
		113B00	16.5	15.2	047A00	047A00	047A00	047A00
		114B00	27.8	25.5	050A00	050A00	050A00	050A00
		115B00	33.0	30.3	050A00	050A00	050A00	050A00
575-3-60	STD	118A00	18.0	16.5	047A00	047A00	047A00	047A00
		119A00	36.0	33.1	050A00	050A00	050A00	050A00
	MED	118A00	18.0	16.5	047A00	047A00	047A00	047A00
		119A00	36.0	33.1	050A00	050A00	050A00	050A00
	HIGH	118A00	18.0	16.5	047A00	047A00	047A00	047A00
		119A00	36.0	33.1	050A00	050A00	050A00	050A00

**LEGEND**

- No Single Point Kit required
- APP PWR - 208 / 230V / 460V / 575V
- C.O. - Convenience outlet
- DD. - Electric Drive X13 5 speed/torque motor
- IFM - Indoor fan motor
- NOM PWR - 240V / 480V / 600V
- P.E. - Power exhaust
- PWRD - Powered convenience outlet
- UNPWRD - Unpowered convenience outlet

**Table 18 – RHH102**

**ELECTRIC HEAT - ELECTRICAL DATA  
2-STAGE COOLING SINGLE SPEED INDOOR FAN MOTOR  
WITH AND WITHOUT FACTORY-INSTALLED NON-FUSED DISCONNECT SWITCH**

NOM. V-Ph-Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER CRHEATER *****	NOM PWR (kW)	APP PWR (kW)	SINGLE POINT KIT PART NUMBER CRSINGLE*****			
					WITHOUT C.O. or UNPWRD C.O.		w/PWRD C.O.	
					WITHOUT P.E.	w/ P.E. (pwrd fr/unit)	WITHOUT P.E.	w/ P.E. (pwrd fr/unit)
208/ 203-3-60	STD	117A00	10.4	7.8/9.6	049A00	049A00	049A00	049A00
		110A00	16.0	12.0/14.7	049A00	049A00	049A00	049A00
		111A00	24.8	18.6/22.8	051A00	051A00	051A00	051A00
		112A00	32.0	24.0/29.4	051A00	051A00	051A00	051A00
		112A00,117A00	42.4	31.8/38.9	053A00	053A00	053A00	053A00
	MED	117A00	10.4	7.8/9.6	049A00	049A00	049A00	051A00
		110A00	16.0	12.0/14.7	049A00	049A00	049A00	051A00
		111A00	24.8	18.6/22.8	051A00	051A00	051A00	053A00
		112A00	32.0	24.0/29.4	051A00	051A00	051A00	053A00
		112A00,117A00	42.4	31.8/38.9	053A00	053A00	053A00	054A00
	HIGH	117A00	10.4	7.8/9.6	049A00	049A00	049A00	051A00
		110A00	16.0	12.0/14.7	049A00	049A00	049A00	051A00
111A00		24.8	18.6/22.8	051A00	051A00	051A00	053A00	
112A00		32.0	24.0/29.4	051A00	051A00	051A00	053A00	
112A00,117A00		42.4	31.8/38.9	053A00	053A00	053A00	054A00	
460-3-60	STD	116B00	13.9	12.8	047A00	047A00	047A00	047A00
		113B00	16.5	15.2	047A00	047A00	047A00	047A00
		114B00	27.8	25.5	050A00	050A00	050A00	050A00
		115B00	33.0	30.3	050A00	050A00	050A00	050A00
	MED	116B00	13.9	12.8	047A00	047A00	047A00	047A00
		113B00	16.5	15.2	047A00	047A00	047A00	047A00
		114B00	27.8	25.5	050A00	050A00	050A00	050A00
		115B00	33.0	30.3	050A00	050A00	050A00	050A00
	HIGH	116B00	13.9	12.8	047A00	047A00	047A00	047A00
		113B00	16.5	15.2	047A00	047A00	047A00	047A00
		114B00	27.8	25.5	050A00	050A00	050A00	050A00
		115B00	33.0	30.3	050A00	050A00	050A00	050A00
575-3-60	STD	118A00	18.0	16.5	047A00	047A00	047A00	047A00
		119A00	36.0	33.1	050A00	050A00	050A00	050A00
	MED	118A00	18.0	16.5	047A00	047A00	047A00	047A00
		119A00	36.0	33.1	050A00	050A00	050A00	050A00
	HIGH	118A00	18.0	16.5	047A00	047A00	047A00	047A00
		119A00	36.0	33.1	050A00	050A00	050A00	050A00

**LEGEND**

- No Single Point Kit required
- APP PWR - 208 / 230V / 460V / 575V
- C.O. - Convenience outlet
- DD. - Electric Drive X13 5 speed/torque motor
- IFM - Indoor fan motor
- NOM PWR - 240V / 480V / 600V
- P.E. - Power exhaust
- PWRD - Powered convenience outlet
- UNPWRD - Unpowered convenience outlet

**Table 19 – RHH102**

**ELECTRIC HEAT - ELECTRICAL DATA  
2-STAGE COOLING 2-SPEED INDOOR FAN MOTOR  
WITH AND WITHOUT FACTORY-INSTALLED NON-FUSED DISCONNECT SWITCH**

NOM. V-Ph-Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER CRHEATER *****	NOM PWR (kW)	APP PWR (kW)	SINGLE POINT KIT PART NUMBER CRSINGLE*****			
					WITHOUT C.O. or UNPWRD C.O.		w/PWRD C.O.	
					WITHOUT P.E.	w/ P.E. (pwrd fr/unit)	WITHOUT P.E.	w/ P.E. (pwrd fr/unit)
208/ 203-3-60	STD	117A00	10.4	7.8/9.6	049A00	049A00	049A00	049A00
		110A00	16.0	12.0/14.7	049A00	049A00	049A00	049A00
		111A00	24.8	18.6/22.8	051A00	051A00	051A00	051A00
		112A00	32.0	24.0/29.4	051A00	051A00	051A00	051A00
		112A00,117A00	42.4	31.8/38.9	053A00	053A00	053A00	053A00
	MED	117A00	10.4	7.8/9.6	049A00	049A00	049A00	051A00
		110A00	16.0	12.0/14.7	049A00	049A00	049A00	051A00
		111A00	24.8	18.6/22.8	051A00	051A00	051A00	053A00
		112A00	32.0	24.0/29.4	051A00	051A00	051A00	053A00
		112A00,117A00	42.4	31.8/38.9	053A00	053A00	053A00	054A00
	HIGH	117A00	10.4	7.8/9.6	049A00	049A00	049A00	051A00
		110A00	16.0	12.0/14.7	049A00	049A00	049A00	051A00
		111A00	24.8	18.6/22.8	051A00	051A00	051A00	053A00
		112A00	32.0	24.0/29.4	051A00	051A00	051A00	053A00
		112A00,117A00	42.4	31.8/38.9	053A00	053A00	053A00	054A00
460-3-60	STD	116B00	13.9	12.8	047A00	047A00	047A00	047A00
		113B00	16.5	15.2	047A00	047A00	047A00	047A00
		114B00	27.8	25.5	050A00	050A00	050A00	050A00
		115B00	33.0	30.3	050A00	050A00	050A00	050A00
		116B00	13.9	12.8	047A00	047A00	047A00	047A00
	MED	113B00	16.5	15.2	047A00	047A00	047A00	047A00
		114B00	27.8	25.5	050A00	050A00	050A00	050A00
		115B00	33.0	30.3	050A00	050A00	050A00	050A00
		116B00	13.9	12.8	047A00	047A00	047A00	047A00
		113B00	16.5	15.2	047A00	047A00	047A00	047A00
	HIGH	114B00	27.8	25.5	050A00	050A00	050A00	050A00
		115B00	33.0	30.3	050A00	050A00	050A00	050A00
		118A00	18.0	16.5	047A00	047A00	047A00	047A00
		119A00	36.0	33.1	050A00	050A00	050A00	050A00
		118A00	18.0	16.5	047A00	047A00	047A00	047A00
575-3-60	STD	119A00	36.0	33.1	050A00	050A00	050A00	050A00
		118A00	18.0	16.5	047A00	047A00	047A00	047A00
	MED	119A00	36.0	33.1	050A00	050A00	050A00	050A00
		118A00	18.0	16.5	047A00	047A00	047A00	047A00
HIGH	119A00	36.0	33.1	050A00	050A00	050A00	050A00	
	118A00	18.0	16.5	047A00	047A00	047A00	047A00	

**LEGEND**

- No Single Point Kit required
- APP PWR - 208 / 230V / 460V / 575V
- C.O. - Convenience outlet
- DD. - Electric Drive X13 5 speed/torque motor
- IFM - Indoor fan motor
- NOM PWR - 240V / 480V / 600V
- P.E. - Power exhaust
- PWRD - Powered convenience outlet
- UNPWRD - Unpowered convenience outlet

Table 20 – RHH120

**ELECTRIC HEAT - ELECTRICAL DATA  
2-STAGE COOLING SINGLE SPEED INDOOR FAN MOTOR  
WITH AND WITHOUT FACTORY-INSTALLED NON-FUSED DISCONNECT SWITCH**

NOM. V-Ph-Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER CRHEATER *****	NOM PWR (kW)	APP PWR (kW)	SINGLE POINT KIT PART NUMBER CRSINGLE*****			
					WITHOUT C.O. or UNPWRD C.O.		w/PWRD C.O.	
					WITHOUT P.E.	w/ P.E. (pwrd fr/unit)	WITHOUT P.E.	w/ P.E. (pwrd fr/unit)
208/ 230-3-60	STD	288A00	10.0	7.5/9.2	049A00	049A00	049A00	049A00
		291A00	16.5	12.4/15.2	049A00	049A00	049A00	049A00
		294A00	33.5	25.2/30.8	051A00	051A00	051A00	051A00
		288A00,294A00	43.5	32.7/40.0	053A00	053A00	053A00	053A00
		291A00,294A00	50.0	37.6/45.9	053A00	053A00	053A00	053A00
	MED	288A00	10.0	7.5/9.2	049A00	049A00	049A00	051A00
		291A00	16.5	12.4/15.2	049A00	049A00	049A00	051A00
		294A00	33.5	25.2/30.8	051A00	051A00	051A00	053A00
		288A00,294A00	43.5	32.7/40.0	053A00	053A00	053A00	054A00
		291A00,294A00	50.0	37.6/45.9	053A00	053A00	053A00	054A00
	HIGH	288A00	10.0	7.5/9.2	051A00	051A00	051A00	051A00
		291A00	16.5	12.4/15.2	051A00	051A00	051A00	051A00
		294A00	33.5	25.2/30.8	053A00	053A00	053A00	053A00
		288A00,294A00	43.5	32.7/40.0	054A00	054A00	054A00	054A00
		291A00,294A00	50.0	37.6/45.9	054A00	054A00	054A00	054A00
460-3-60	STD	289A00	10.0	9.2	047A00	047A00	047A00	047A00
		292A00	16.5	15.2	047A00	047A00	047A00	047A00
		295A00	33.5	30.8	050A00	050A00	050A00	050A00
		289A00,295A00	43.5	40.0	052A00	052A00	052A00	052A00
		292A00,295A00	50.0	45.9	052A00	052A00	052A00	052A00
	MED	289A00	10.0	9.2	047A00	047A00	047A00	047A00
		292A00	16.5	15.2	047A00	047A00	047A00	047A00
		295A00	33.5	30.8	050A00	050A00	050A00	050A00
		289A00,295A00	43.5	40.0	052A00	052A00	052A00	052A00
		292A00,295A00	50.0	45.9	052A00	052A00	052A00	052A00
	HIGH	289A00	10.0	9.2	047A00	047A00	047A00	047A00
		292A00	16.5	15.2	047A00	047A00	047A00	047A00
		295A00	33.5	30.8	050A00	050A00	050A00	050A00
		289A00,295A00	43.5	40.0	052A00	052A00	052A00	052A00
		292A00,295A00	50.0	45.9	052A00	052A00	052A00	052A00
575-3-60	STD	290A00	10.0	9.2	047A00	047A00	047A00	047A00
		293A00	16.5	15.2	047A00	047A00	047A00	047A00
		296A00	33.5	30.8	047A00	050A00	047A00	050A00
		290A00,296A00	43.5	40.0	052A00	052A00	052A00	052A00
		293A00,296A00	50.0	45.9	052A00	052A00	052A00	052A00
	MED	290A00	10.0	9.2	047A00	047A00	047A00	047A00
		293A00	16.5	15.2	047A00	047A00	047A00	047A00
		296A00	33.5	30.8	047A00	050A00	047A00	050A00
		290A00,296A00	43.5	40.0	052A00	052A00	052A00	052A00
		293A00,296A00	50.0	45.9	052A00	052A00	052A00	052A00
	HIGH	290A00	10.0	9.2	047A00	047A00	047A00	047A00
		293A00	16.5	15.2	047A00	047A00	047A00	047A00
		296A00	33.5	30.8	050A00	050A00	050A00	050A00
		290A00,296A00	43.5	40.0	052A00	052A00	052A00	052A00
		293A00,296A00	50.0	45.9	052A00	052A00	052A00	052A00

**LEGEND**

- No Single Point Kit required
- APP PWR - 208 / 230V / 460V / 575V
- C.O. - Convenience outlet
- DD. - Electric Drive X13 5 speed/torque motor
- IFM - Indoor fan motor
- NOM PWR - 240V / 480V / 600V
- P.E. - Power exhaust
- PWRD - Powered convenience outlet
- UNPWRD - Unpowered convenience outlet

**Table 21 – RHH120**

**ELECTRIC HEAT - ELECTRICAL DATA  
2-STAGE COOLING 2-SPEED INDOOR FAN MOTOR  
WITH AND WITHOUT FACTORY-INSTALLED NON-FUSED DISCONNECT SWITCH**

NOM. V-Ph-Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER CRHEATER *****	NOM PWR (kW)	APP PWR (kW)	SINGLE POINT KIT PART NUMBER CRSINGLE*****			
					WITHOUT C.O. or UNPWRD C.O.		w/PWRD C.O.	
					WITHOUT P.E.	w/ P.E. (pwrd fr/unit)	WITHOUT P.E.	w/ P.E. (pwrd fr/unit)
208/ 230-3-60	STD	288A00	10.0	7.5/9.2	049A00	049A00	049A00	049A00
		291A00	16.5	12.4/15.2	049A00	049A00	049A00	049A00
		294A00	33.5	25.2/30.8	051A00	051A00	051A00	051A00
		288A00,294A00	43.5	32.7/40.0	053A00	053A00	053A00	053A00
		291A00,294A00	50.0	37.6/45.9	053A00	053A00	053A00	053A00
	MED	288A00	10.0	7.5/9.2	049A00	049A00	049A00	051A00
		291A00	16.5	12.4/15.2	049A00	049A00	049A00	051A00
		294A00	33.5	25.2/30.8	051A00	051A00	051A00	053A00
		288A00,294A00	43.5	32.7/40.0	053A00	053A00	053A00	054A00
		291A00,294A00	50.0	37.6/45.9	053A00	053A00	053A00	054A00
	HIGH	288A00	10.0	7.5/9.2	051A00	051A00	051A00	051A00
		291A00	16.5	12.4/15.2	051A00	051A00	051A00	051A00
		294A00	33.5	25.2/30.8	053A00	053A00	053A00	053A00
		288A00,294A00	43.5	32.7/40.0	054A00	054A00	054A00	054A00
		291A00,294A00	50.0	37.6/45.9	054A00	054A00	054A00	054A00
460-3-60	STD	289A00	10.0	9.2	047A00	047A00	047A00	047A00
		292A00	16.5	15.2	047A00	047A00	047A00	047A00
		295A00	33.5	30.8	050A00	050A00	050A00	050A00
		289A00,295A00	43.5	40.0	052A00	052A00	052A00	052A00
		292A00,295A00	50.0	45.9	052A00	052A00	052A00	052A00
	MED	289A00	10.0	9.2	047A00	047A00	047A00	047A00
		292A00	16.5	15.2	047A00	047A00	047A00	047A00
		295A00	33.5	30.8	050A00	050A00	050A00	050A00
		289A00,295A00	43.5	40.0	052A00	052A00	052A00	052A00
		292A00,295A00	50.0	45.9	052A00	052A00	052A00	052A00
	HIGH	289A00	10.0	9.2	047A00	047A00	047A00	047A00
		292A00	16.5	15.2	047A00	047A00	047A00	047A00
		295A00	33.5	30.8	050A00	050A00	050A00	050A00
		289A00,295A00	43.5	40.0	052A00	052A00	052A00	052A00
		292A00,295A00	50.0	45.9	052A00	052A00	052A00	052A00
575-3-60	STD	290A00	10.0	9.2	047A00	047A00	047A00	047A00
		293A00	16.5	15.2	047A00	047A00	047A00	047A00
		296A00	33.5	30.8	047A00	050A00	050A00	050A00
		290A00,296A00	43.5	40.0	052A00	052A00	052A00	052A00
		293A00,296A00	50.0	45.9	052A00	052A00	052A00	052A00
	MED	290A00	10.0	9.2	047A00	047A00	047A00	047A00
		293A00	16.5	15.2	047A00	047A00	047A00	047A00
		296A00	33.5	30.8	047A00	050A00	050A00	050A00
		290A00,296A00	43.5	40.0	052A00	052A00	052A00	052A00
		293A00,296A00	50.0	45.9	052A00	052A00	052A00	052A00
	HIGH	290A00	10.0	9.2	047A00	047A00	047A00	047A00
		293A00	16.5	15.2	047A00	047A00	047A00	047A00
		296A00	33.5	30.8	050A00	050A00	050A00	050A00
		290A00,296A00	43.5	40.0	052A00	052A00	052A00	052A00
		293A00,296A00	50.0	45.9	052A00	052A00	052A00	052A00

**LEGEND**

- No Single Point Kit required
- APP PWR - 208 / 230V / 460V / 575V
- C.O. - Convenience outlet
- DD. - Electric Drive X13 5 speed/torque motor
- IFM - Indoor fan motor
- NOM PWR - 240V / 480V / 600V
- P.E. - Power exhaust
- PWRD - Powered convenience outlet
- UNPWRD - Unpowered convenience outlet

# WEIGHTS & DIMENSIONS

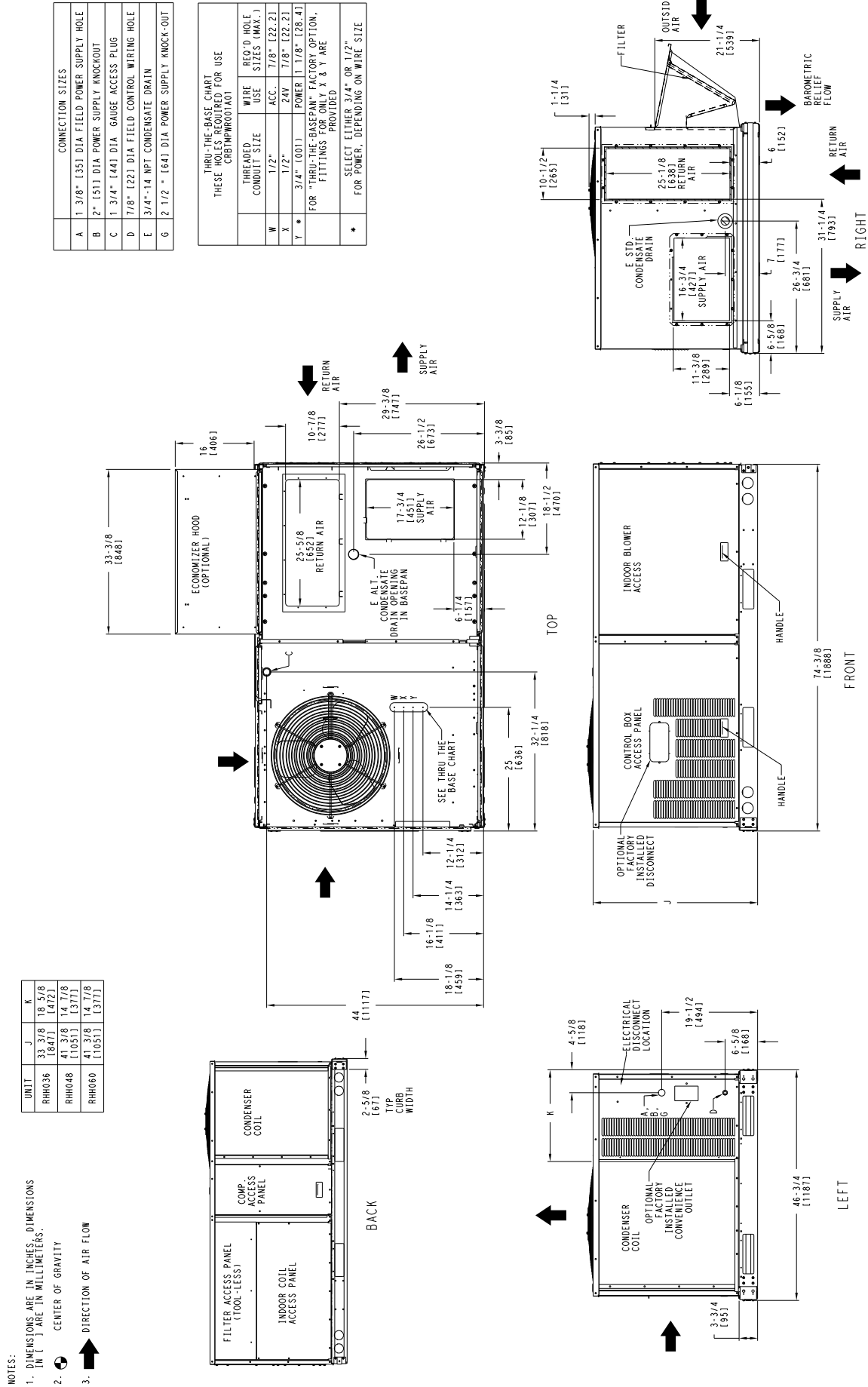
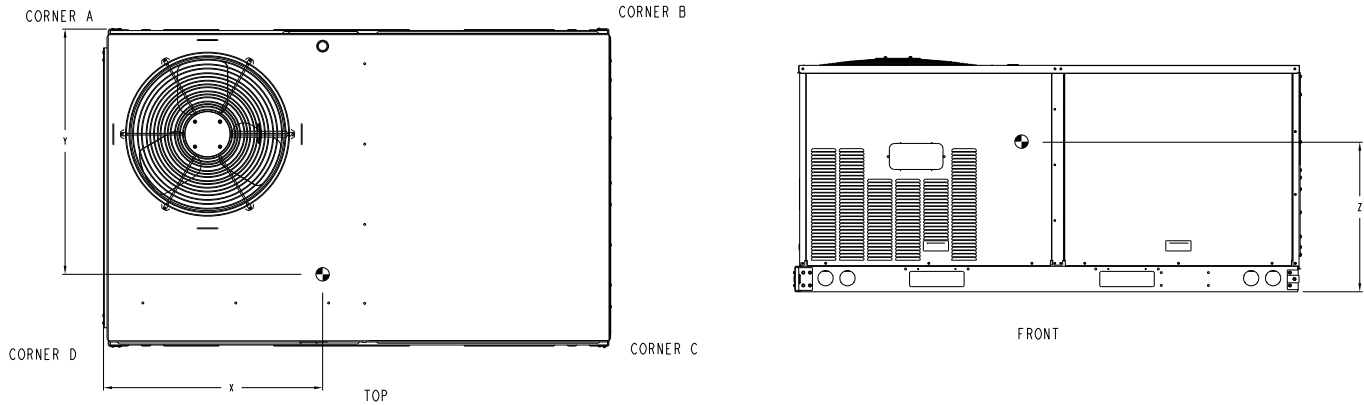


Fig. 1 - Dimensions RHH 036-060 (Sheet 1 of 2)

C150206B

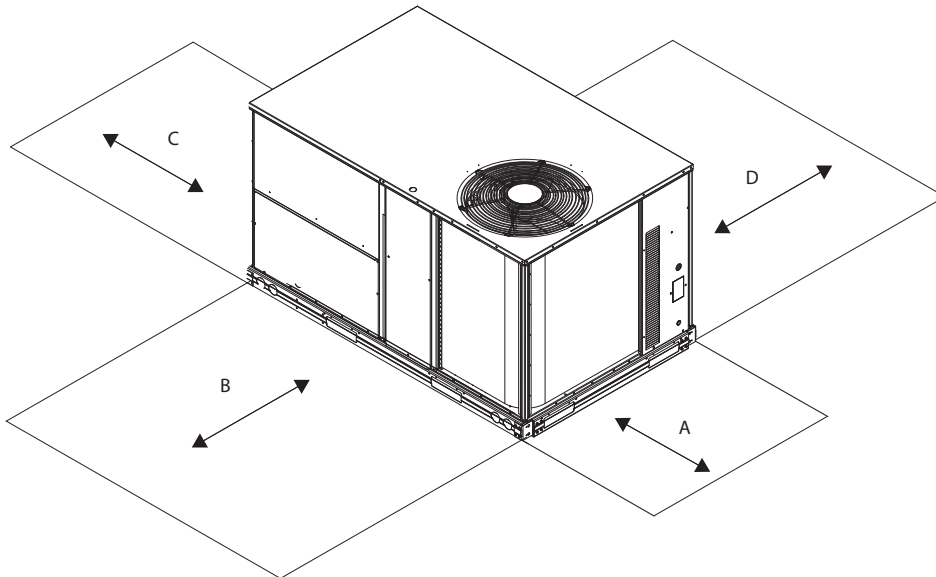
## WEIGHTS & DIMENSIONS (cont)

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
RHH036	495	225	130	59	118	54	118	54	130	59	35 3/8 [899]	23 3/8 [594]	18 3/8 [467]
RHH048	580	263	161	73	147	67	130	59	142	64	35 1/2 [902]	21 7/8 [556]	20 1/2 [521]
RHH060	610	277	165	75	152	69	141	64	152	69	35 3/4 [908]	22 1/2 [572]	20 3/4 [527]



**Fig. 2 - Dimensions RHH 036-060 (Sheet 2 of 2)**

C150195B



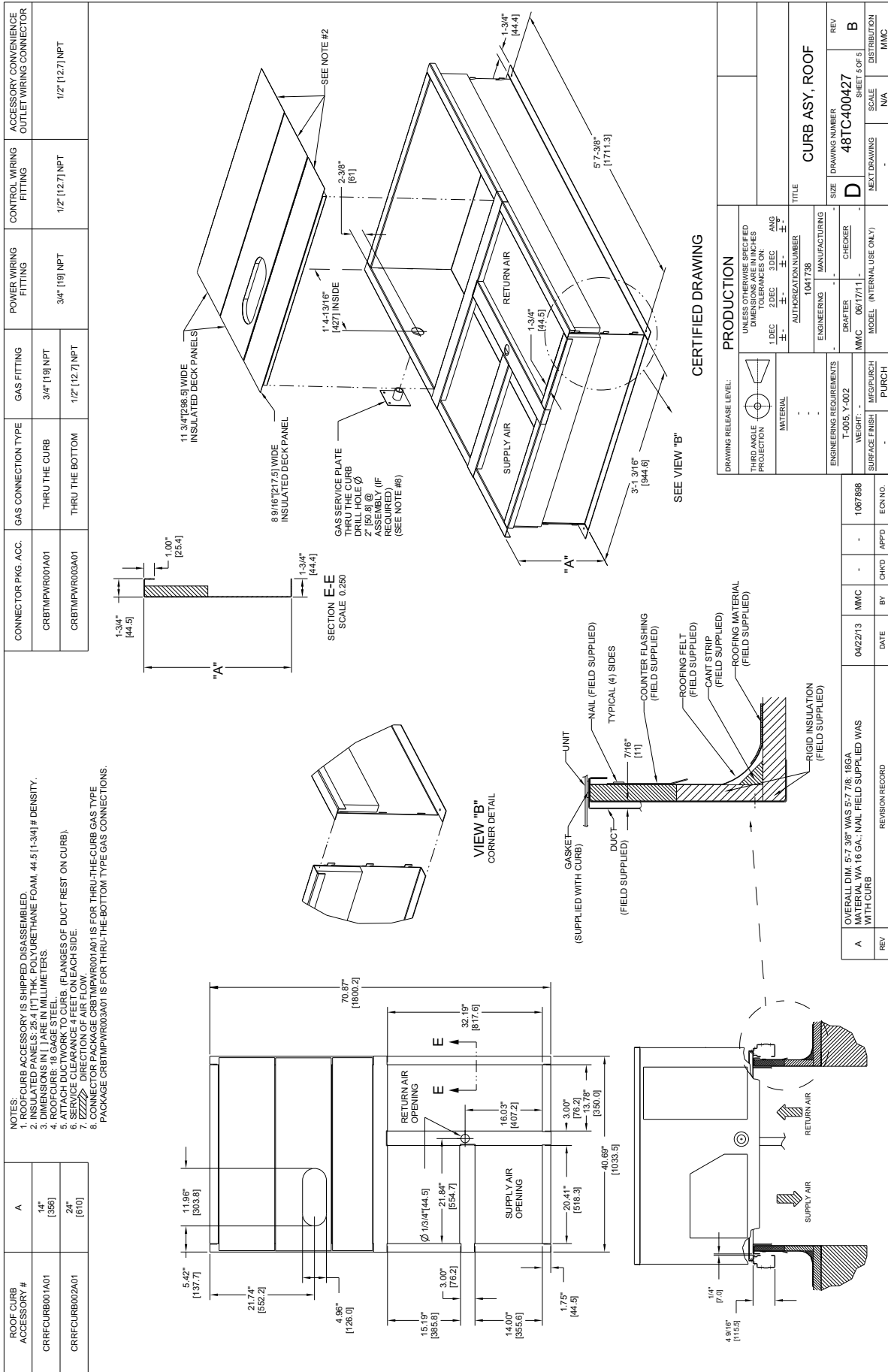
**Fig. 3 - Service Clearance**

C10577

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.

# WEIGHTS & DIMENSIONS (cont)



**Fig. 4 - Curb Dimensions RHH 036-060**



# WEIGHTS & DIMENSIONS (cont)

CONNECTION SIZES	
A	1 3/8" DIA. FIELD POWER SUPPLY HOLE
B	2 1/2" DIA. POWER SUPPLY KNOCKOUT
C	1 3/4" DIA. GAUGE ACCESS PLUG
D	7/8" DIA. FIELD CONTROL WIRING HOLE
E	3/4" - 14 NPT CONDENSATE DRAIN
G	2" DIA. POWER SUPPLY KNOCK-OUT

## THRU-THE-BASE CHART (FIELD INST)

THESE HOLES REQUIRED FOR USE WITH ACCY KITS:  
 CR8TMR001A01: 072-073  
 CR8TMR002A01: 090

	THREADED CONDUIT SIZE	WIPE USE SIZES (MAX.)	REQ'D HOLE SIZES (MAX.)
W	1/2"	ACC.	7/8" [22.2]
X	1/2"	24V	7/8" [22.2]
Y	3/4" (001)	POWER	1 1/8" [28.6]
	1 1/4" (002)		1 3/4" [44.4]

## THRU-THE-BASE CHART (FIOP)

FOR "THRU-THE-BASEPAN" FACTORY OPTION, FITTINGS FOR ONLY X & Y ARE PROVIDED. (1) 1/2" & (1) 1 1/4" ELECTRICAL FITTINGS.

UNIT	J	K	H
RHH072-073	45-1 1/4 [11046]	33-3/4 [8571]	15-7/8 [4037]
RHH090	49-3/8 [12533]	36-3/8 [9253]	15-7/8 [4037]

- NOTES:  
 1. DIMENSIONS ARE IN INCHES. DIMENSIONS IN ( ) ARE IN MILLIMETERS.  
 2. CENTER OF GRAVITY  
 3. DIRECTION OF AIR FLOW

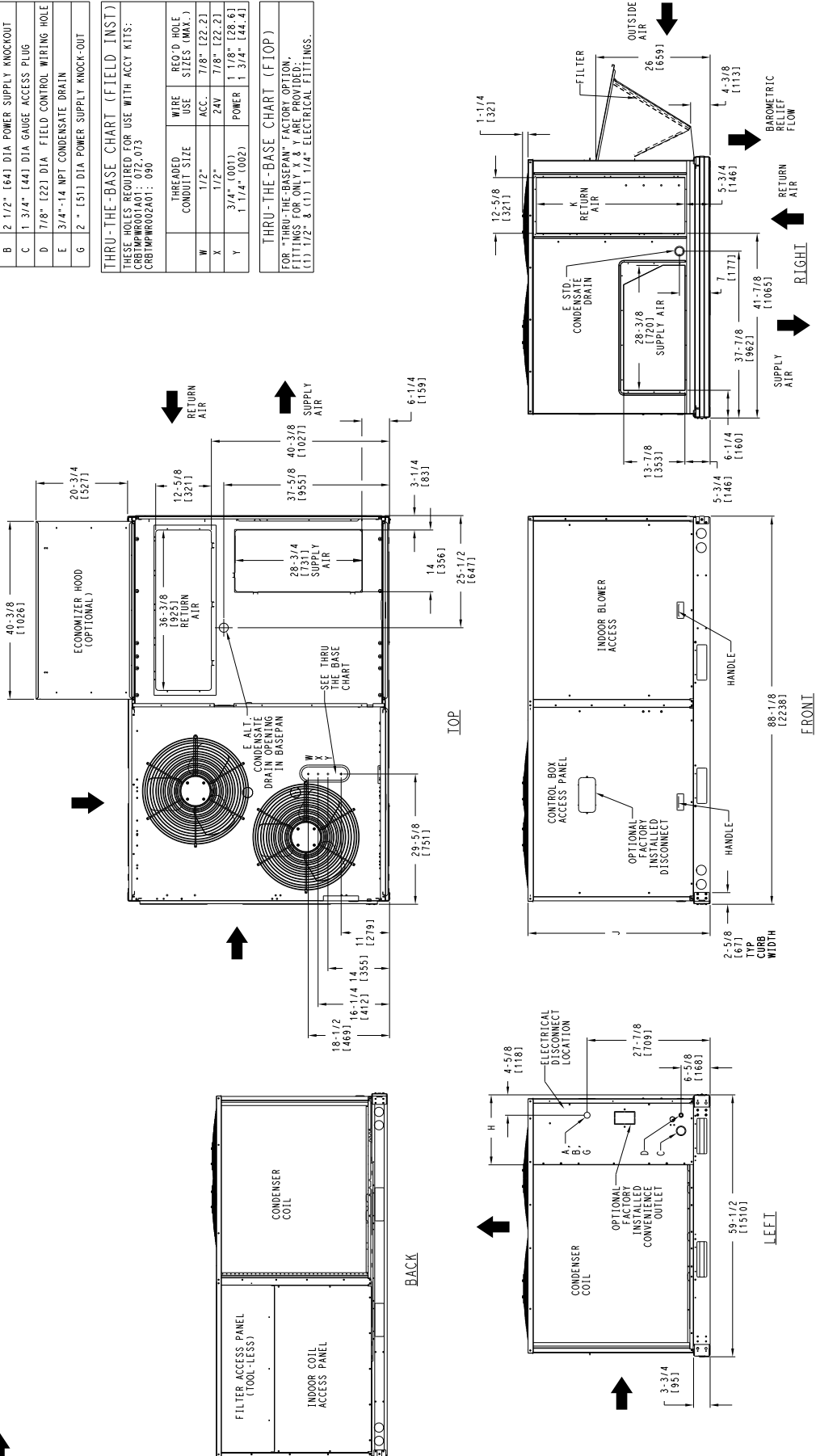


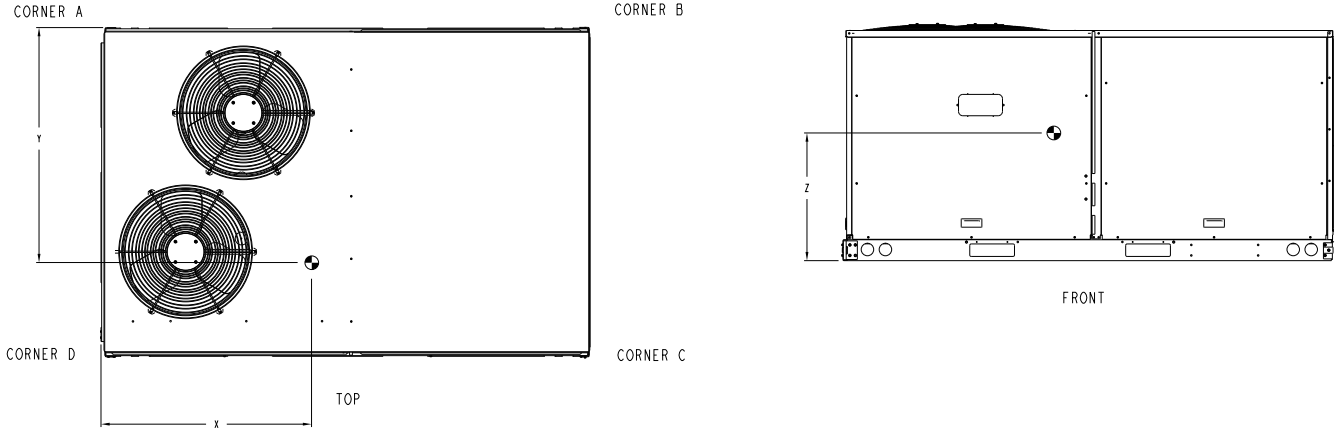
Fig. 5 - Dimensions RHH 072-090 (Sheet 1 of 2)

Specifications subject to change without notice.

## WEIGHTS & DIMENSIONS (cont)

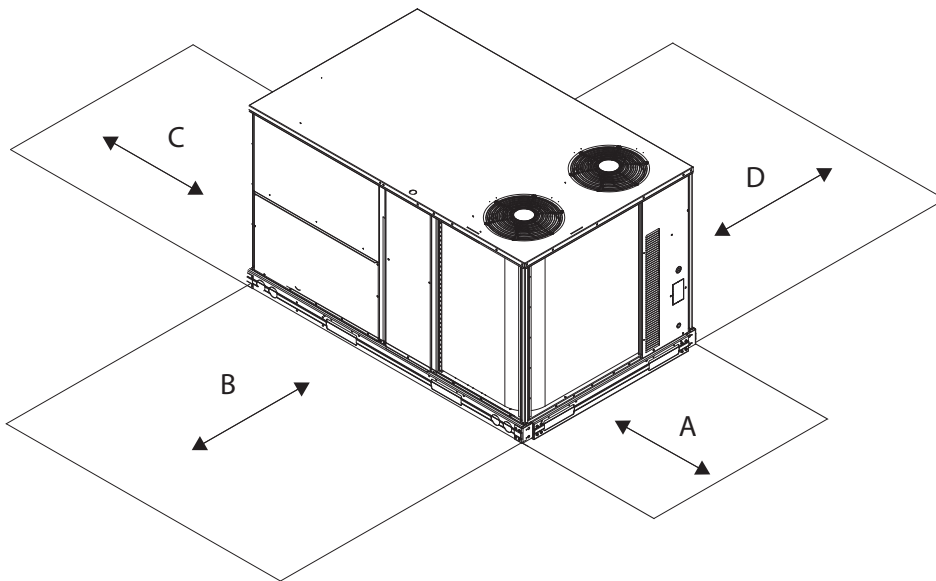
UNIT	STD. UNIT WEIGHT *		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.		
	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z
RHH072,073	710	322	162	73.5	129	58.5	186	84.4	234	106	38 5/8 [981]	34 1/8 [867]	21 1/4 [540]
RHH090	875	397	190	86.2	160	72.6	253	114.8	284	128.8	40 [1016]	34 5/8 [879]	24 3/8 [619]

\* STANDARD UNIT WEIGHT IS WITHOUT MAX. GAS HEAT & WITHOUT PACKAGING.  
FOR OPTIONS & ACCESSORIES, REFER TO THE PRODUCT SPECIFICATIONS CATALOG.



**Fig. 6 - Dimensions RHH 072-090 (Sheet 2 of 2)**

C150204B



**Fig. 7 - Service Clearance**

C10577

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) Special	Surface behind servicer is electrically non-conductive (e.g., wood, fiberglass) 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.

# WEIGHTS & DIMENSIONS (cont)

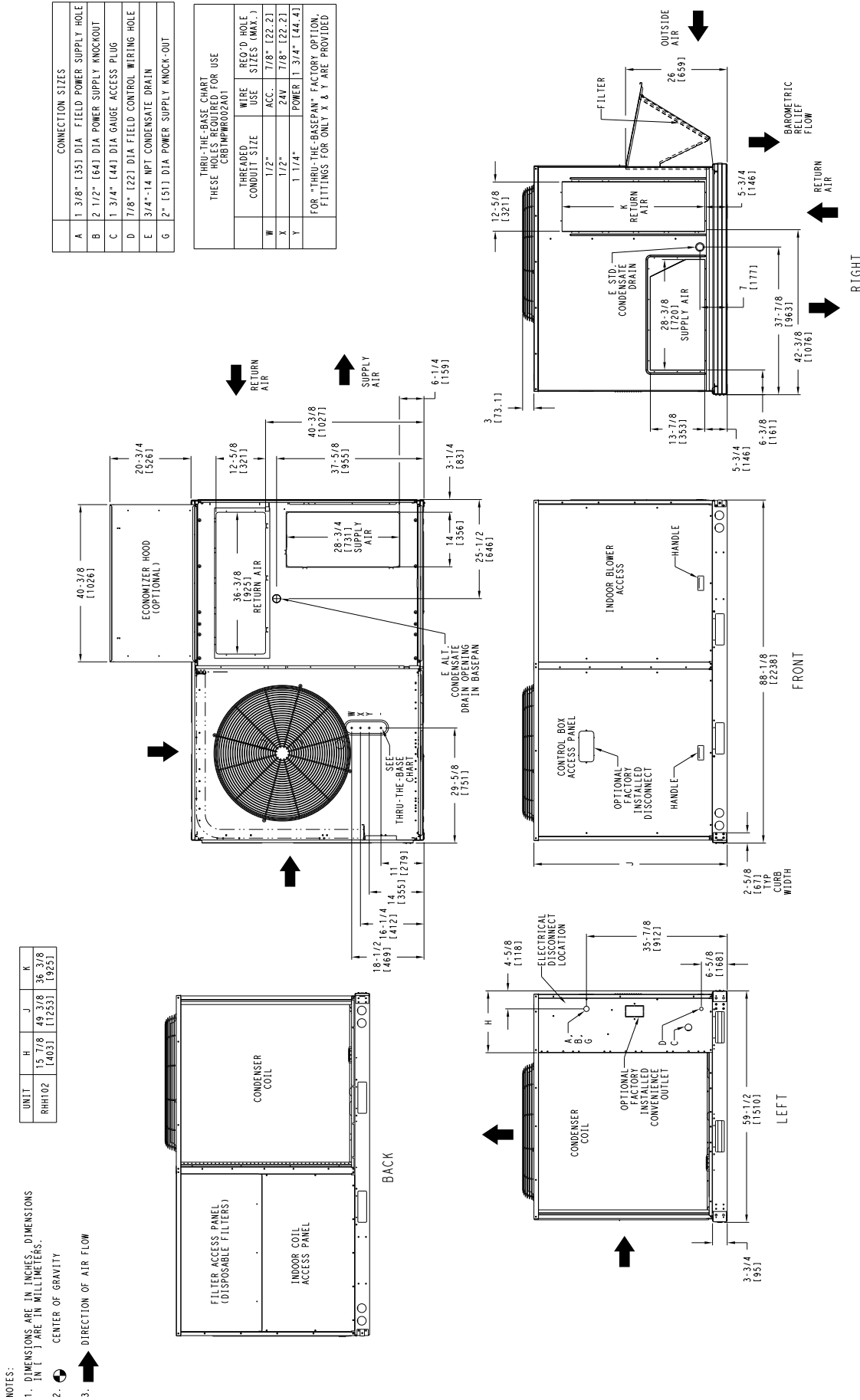
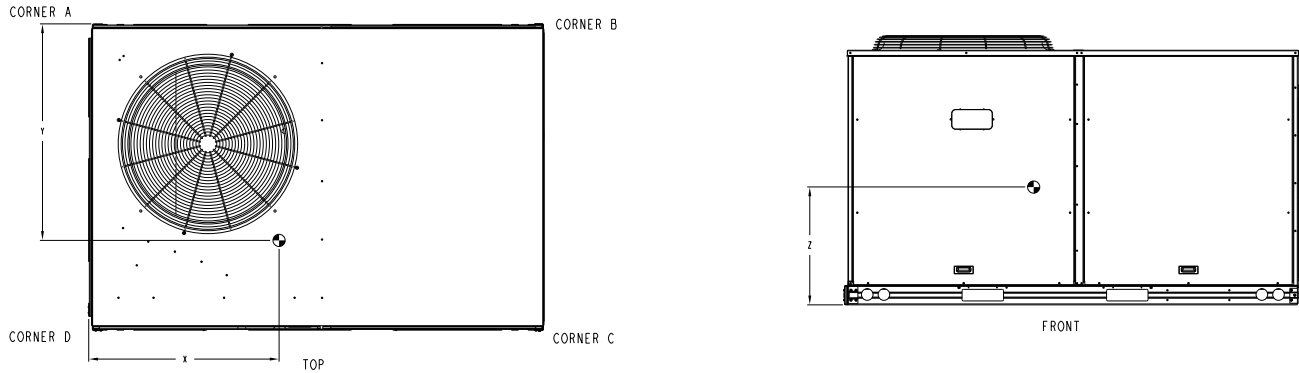


Fig. 8 - Dimensions RHH 102 (Sheet 1 of 2)

## WEIGHTS & DIMENSIONS (cont)

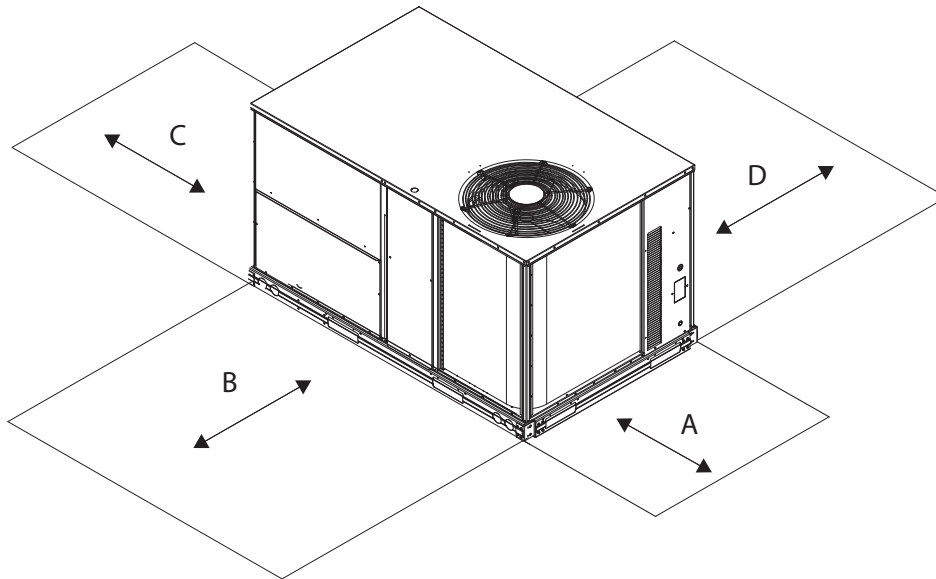
UNIT	STD. UNIT WEIGHT*		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.		
	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z
RHH102	1020	463	255	115.7	199	90.3	248	112.5	318	144.2	38 1/4 [972]	32 [813]	24 [610]

\* STANDARD UNIT WEIGHT IS WITHOUT MAX. GAS HEAT & WITHOUT PACKAGING.  
FOR OPTIONS & ACCESSORIES, REFER TO THE PRODUCT SPECIFICATIONS CATALOG.



**Fig. 9 - Dimensions RHH 102 (Sheet 2 of 2)**

C150202B



**Fig. 10 - Service Clearance**

C08337

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

# WEIGHTS & DIMENSIONS (cont)

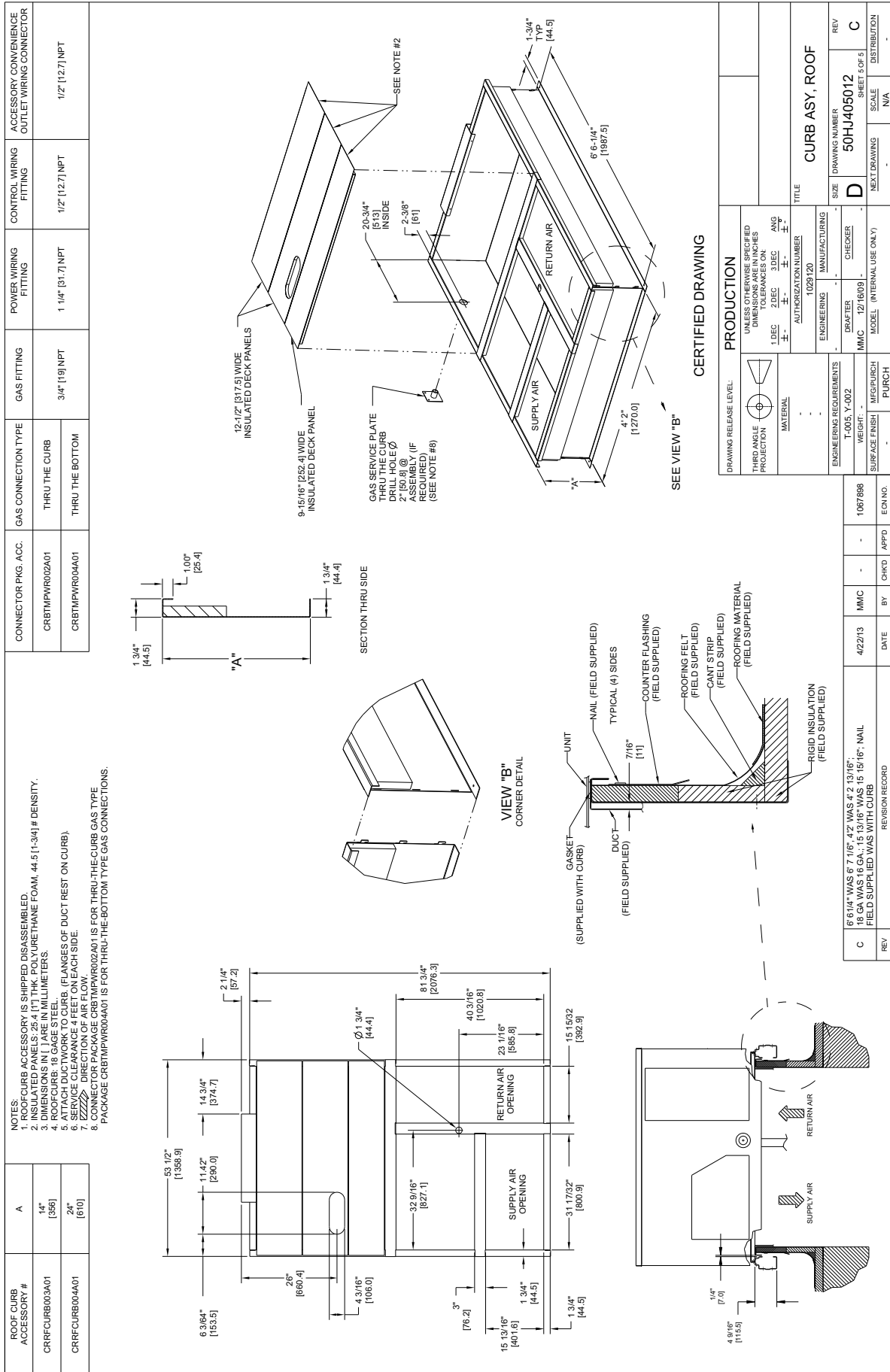


Fig. 11 - Curb Dimensions RHH 072-102

Specifications subject to change without notice.

# WEIGHTS & DIMENSIONS (cont)

- NOTES:  
 1. DIMENSIONS ARE IN INCHES. DIMENSIONS IN [ ] ARE IN MILLIMETERS.  
 2. CENTER OF GRAVITY  
 3. DIRECTION OF AIR FLOW

CONNECTION SIZES			
B	2	1/2" [64]	DIA POWER SUPPLY HOLE
D	7/8"	[22]	DIA FIELD CONTROL WIRING HOLE
E	3/4"-14	NPT	CONDENSATE DRAIN
F	7/8"	[22]	DIA FIELD CONVENIENCE OUTLET HOLE

THRU-THE-BASE CHART THESE HOLES REQUIRED FOR USE CRBTPR005A00, 006A00, 007A00			
ACCESSORY NO.	THREADED CONDUIT SIZE	WIRE USE SIZES (MAX.)	REQ'D HOLE SIZES (MAX.)
005	W	1/2" ACC.	7/8" [22.2]
	X	1/2" 24V	7/8" [22.2]
	Y	1/4" POWER	1 1/2" [38.1]
006	W	1/2" ACC.	7/8" [22.2]
	X	1/2" 24V	7/8" [22.2]
	Y	1/2" POWER	2" [50.8]
007	W	1/2" ACC.	7/8" [22.2]
	X	1/2" 24V	7/8" [22.2]
	Y	2" POWER	2 1/2" [63.5]

FOR "THRU-THE-BASEPAN" FACTORY OPTION, FITTINGS FOR X & Y ARE PROVIDED AS SPECIFIED ON "006".

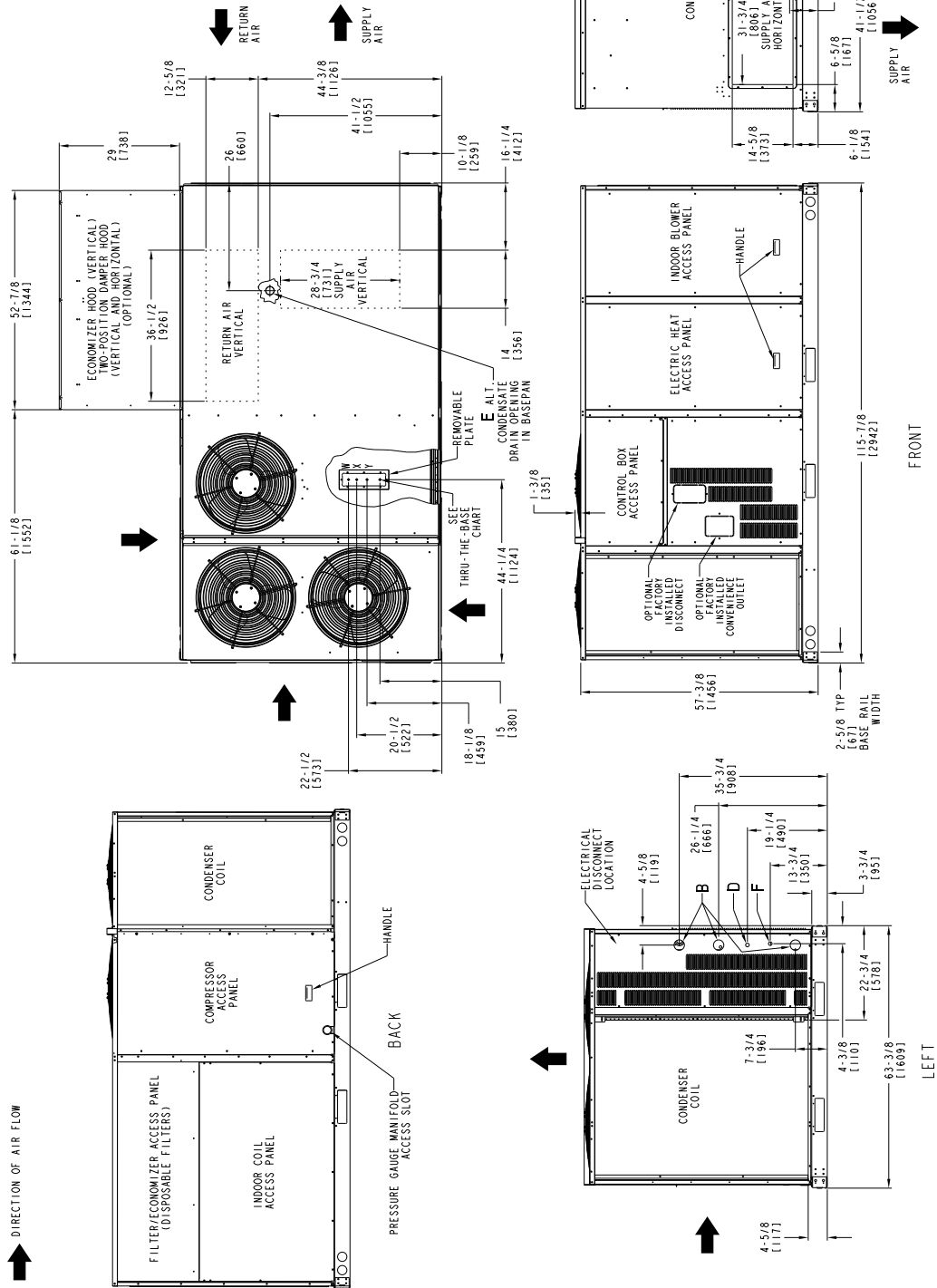
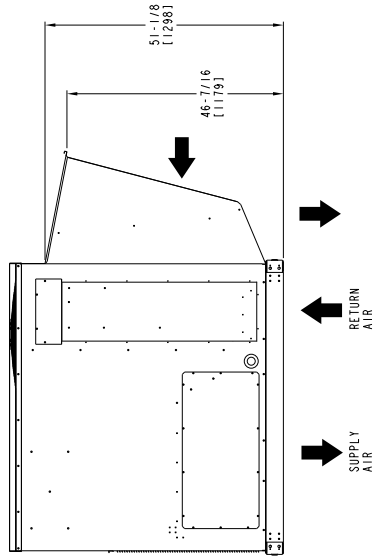
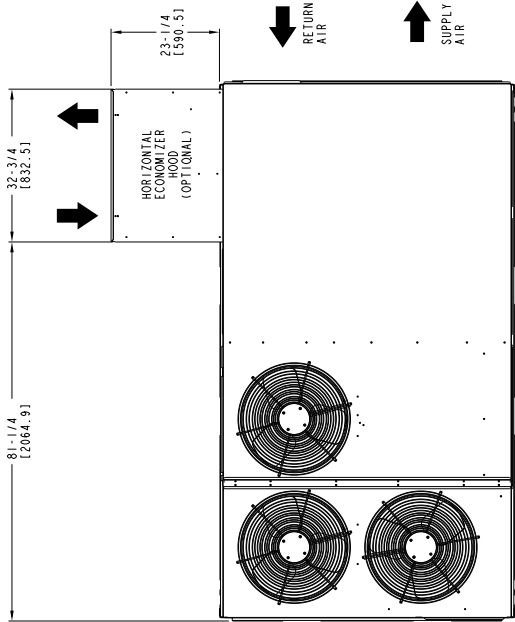
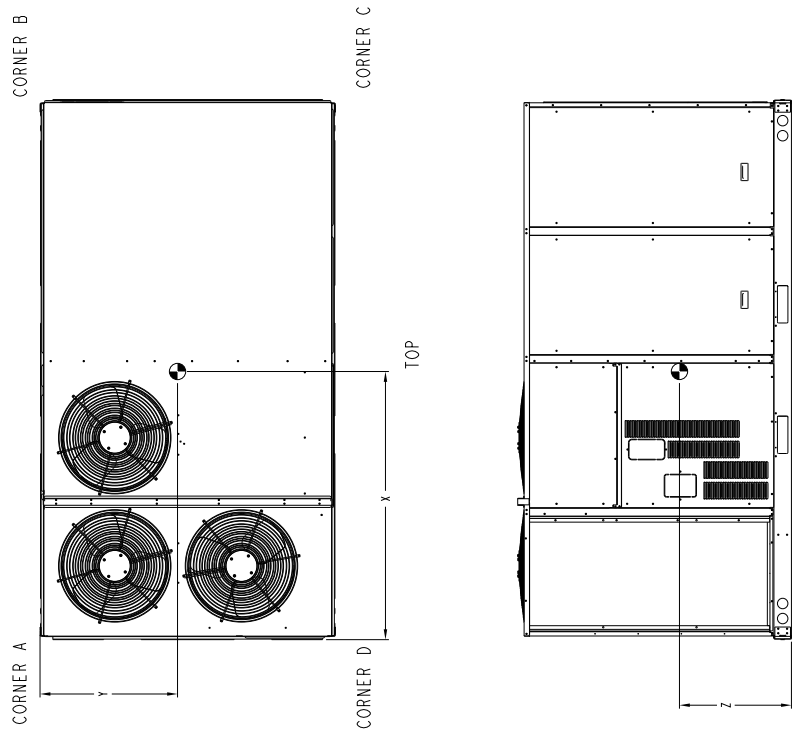


Fig. 12 - Dimensions RHH 120 (Sheet 1 of 2)

# WEIGHTS & DIMENSIONS (cont)

UNIT	CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.									
	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z							
RHH 120	1390	632	356	162	344	156	339	154	351	160	57	[1448]	31	172	[8001]	21	178	[5371]

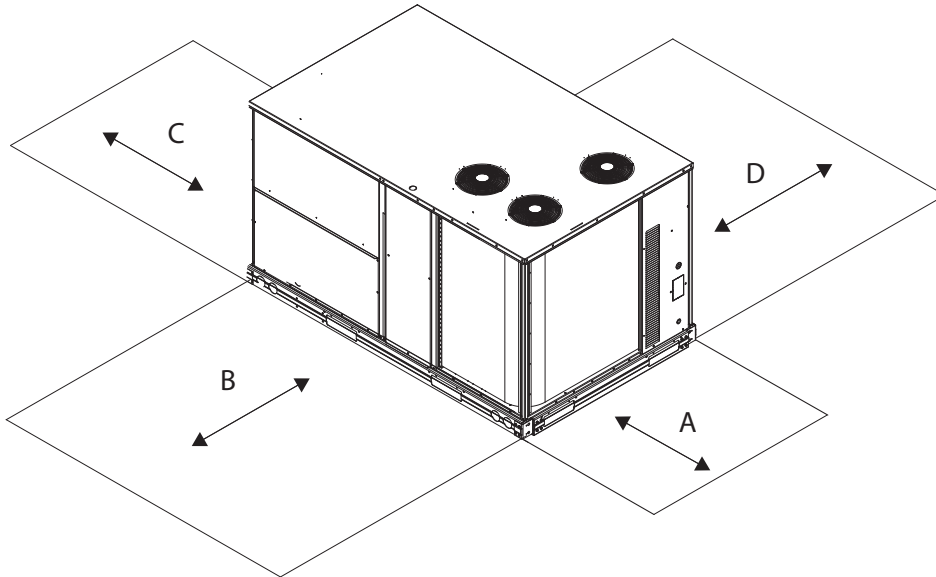
STANDARD UNIT WEIGHT IS WITHOUT ELECTRIC HEAT & WITHOUT PACKAGING. FOR OPTIONS & ACCESSORIES, REFER TO THE PRODUCT DATA CATALOG.



HORIZONTAL ECONOMIZER

Fig. 13 - Dimensions RHH 120 (Sheet 2 of 2)

## WEIGHTS & DIMENSIONS (cont)



**Fig. 14 - Service Clearance**

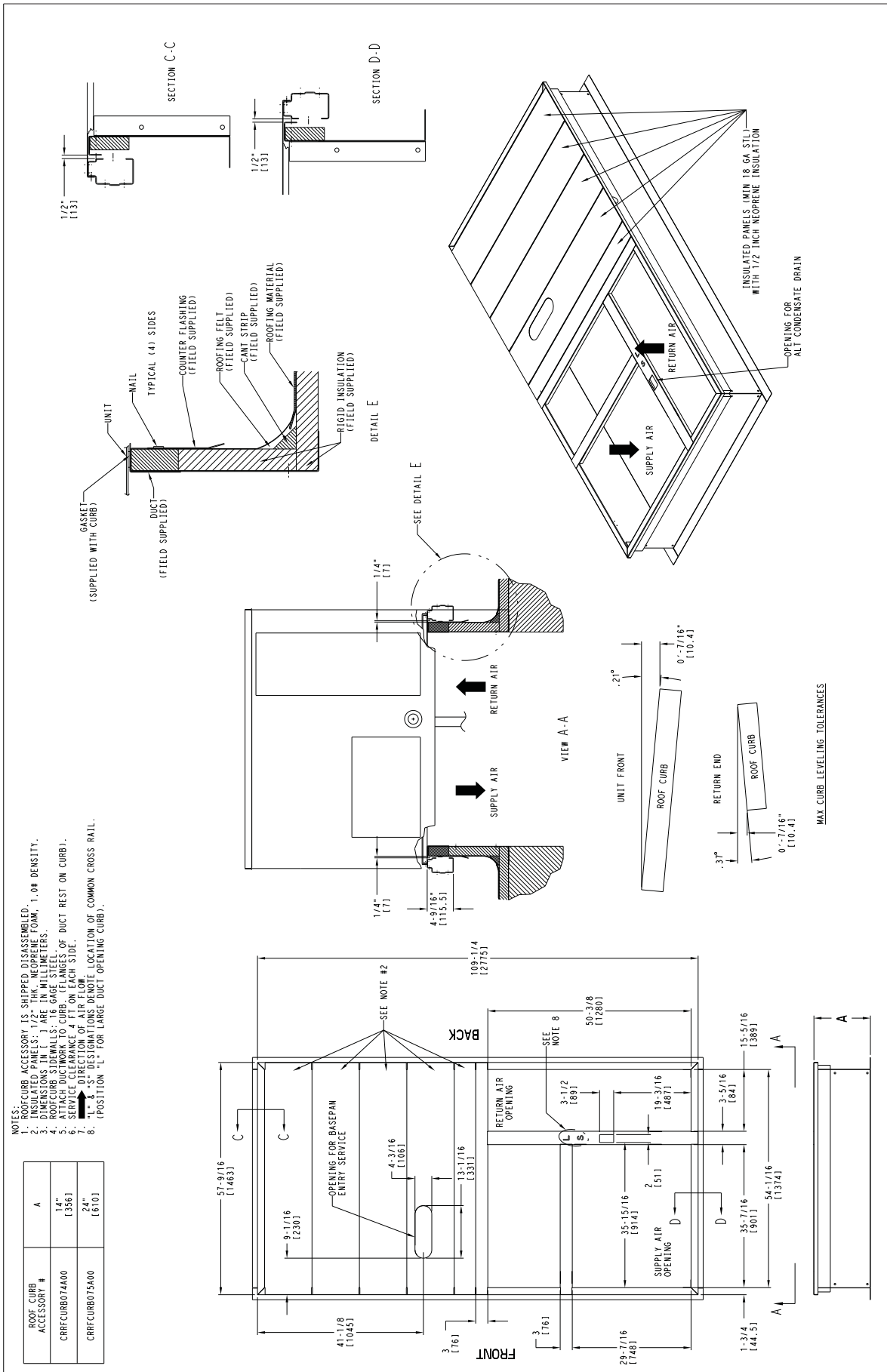
C10578B

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.



# WEIGHTS & DIMENSIONS (cont)



**Fig. 15 - Curb Dimensions RHH 120**

Specifications subject to change without notice.

## OPTION / ACCESSORY WEIGHTS

Option / Accessory	OPTION / ACCESSORY WEIGHTS													
	036		048		060		072/073		090		102		120	
	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg
Power Exhaust - vertical	50	23	50	23	50	23	50	23	75	34	75	34	85	39
Power Exhaust - horizontal	30	14	30	14	30	14	30	14	30	14	30	14	75	34
EconoMiSer® (IV, X or 2)	50	23	50	23	50	23	50	23	75	34	75	34	115	52
Two Position damper	39	18	39	18	39	18	39	18	58	26	58	26	65	29
Manual Dampers	12	5	12	5	12	5	12	5	18	8	18	8	25	11
Hail Guard (louvered)	16	7	16	7	16	7	16	7	34	15	34	15	45	20
Cu/Cu Condenser Coil	35	16	35	16	35	16	95	43	95	43	95	43	160	73
Cu/Cu Cond. & Evaporator Coils	60	27	60	27	90	41	165	75	140	64	195	88	280	127
Roof Curb (14-in. curb)	115	52	115	52	115	52	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	255	116
CO <sub>2</sub> sensor	5	2	5	2	5	2	5	2	5	2	5	2	5	2
Electric Heater	30	14	30	14	30	14	30	14	45	20	45	20	25	11
Single Point Kit	10	5	10	5	10	5	10	5	12	5	12	5	25	11
Optional Indoor Motor / Drive	10	5	10	5	10	5	10	5	15	7	15	7	45	20
Motormaster® Controller	35	16	35	16	35	16	35	16	35	16	35	16	35	16
Return Smoke Detector	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
Non-Fused Disconnect	15	7	15	7	15	7	15	7	15	7	15	7	15	7
Powered Convenience outlet	35	16	35	16	35	16	35	16	35	16	35	16	35	16
Unpowered Convenience outlet	5	2	5	2	5	2	5	2	5	2	5	2	5	2
Enthalpy Sensor	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
2-Speed Indoor Fan Motor System with VFD	-	-	-	-	-	-	20	9	20	9	20	9	20	9

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

## APPLICATION / SELECTION DATA

### Min operating ambient temp (cooling):

In mechanical cooling mode, your ICP rooftop can safely operate down to an outdoor ambient temperature of 30°F (-1°C). It is possible to provide cooling at lower outdoor AMBIENT TEMPERATURE (F)s 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 ICP representative for assistance.

### Motor limits, Brake horsepower (BHP):

Due to ICP's internal unit design, air path, and specially designed motors, the full horsepower (maximum continuous BHP) band, as listed in this manual, can be used with the utmost confidence. There is no need for extra safety factors, as ICP'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 ICP 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 ICP rooftop can operate at ambient temperatures down to -20°F (-29°C) using the recommended accessory Motormaster® low ambient controller.

### 2-Speed Indoor Fan Motor System

ICP's 2-Speed Indoor Fan Motor system utilizes a Variable Frequency Drive (VFD) to automatically adjust the indoor fan motor speed in sequence with the units cooling operation. Per ASHRAE 90.1-2013 standard, during the first stage of cooling operation the VFD will adjust the fan motor to provide 66% 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 66% of total cfm.

The VFD used in ICP's 2-Speed Indoor Fan Motor 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.

The 2-Speed Indoor Fan Motor system is available on models with 2-stage cooling operation with electro-mechanical controls. Both space sensor and conventional thermostat controls can be used to provide accurate control in any application.

The 2-Speed Indoor Fan Motor 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 module 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.

## APPLICATION / SELECTION DATA (cont)

### RHH - 2-Speed Indoor Fan Motor System - Variable Frequency Drive (VFD) HP Rating

UNIT SIZE	VOLTAGE	STATIC OPTION	VFD HP RATING
073	208/230, 460, 575	STD	3
	208/230, 460	MED	3
	575	MED	5
	208/230, 460, 575	HIGH	7.5
090	208/230, 460, 575	STD	3
	208/230, 460, 575	MED	3
	208/230, 460, 575	HIGH	5
102	208/230, 460, 575	STD	3
	208/230, 460	MED	3
	575	MED	5
	208/230, 460, 575	HIGH	5
120	208/230, 460, 575	STD	3
	208/230, 460	MED	3
	575	MED	5
	208/230, 460, 575	HIGH	7.5

**Table 22 – COOLING CAPACITIES**

**1-STAGE COOLING**

**3 TONS**

RHH036				AMBIENT TEMPERATURE (F)														
				85			95			105			115			125		
				EAT (db)			EAT (db)			EAT (db)			EAT (db)			EAT (db)		
				75	80	85	75	80	85	75	80	85	75	80	85	75	80	85
900 Cfm	EAT (wb)	58	TC	31.8	31.8	36.0	30.5	30.5	34.5	29.0	29.0	32.9	27.5	27.5	31.1	25.7	25.7	29.2
			SHC	27.5	31.8	36.0	26.4	30.5	34.5	25.2	29.0	32.9	23.8	27.5	31.1	22.3	25.7	29.2
		62	TC	33.5	33.5	34.2	31.8	31.8	33.4	30.0	30.0	32.5	28.0	28.0	31.4	25.9	25.9	30.2
			SHC	24.9	29.5	34.2	24.0	28.7	33.4	23.2	27.8	32.5	22.2	26.8	31.4	21.1	25.7	30.2
		67	TC	36.8	36.8	36.8	34.9	34.9	34.9	32.9	32.9	32.9	30.8	30.8	30.8	28.4	28.4	28.4
	SHC		20.6	25.2	29.9	19.8	24.4	29.1	18.9	23.6	28.3	18.0	22.7	27.4	17.0	21.7	26.4	
	72	TC	40.4	40.4	40.4	38.4	38.4	38.4	36.2	36.2	36.2	33.8	33.8	33.8	31.3	31.3	31.3	
		SHC	16.1	20.9	25.6	15.4	20.1	24.8	14.5	19.2	24.0	13.6	18.3	23.0	12.7	17.4	22.1	
	76	TC	-	43.4	43.4	-	41.2	41.2	-	38.9	38.9	-	36.4	36.4	-	33.7	33.7	
		SHC	-	17.3	22.2	-	16.5	21.5	-	15.7	20.6	-	14.8	19.6	-	13.9	18.7	
1050 Cfm	EAT (wb)	58	TC	33.5	33.5	38.0	32.1	32.1	36.4	30.6	30.6	34.7	28.9	28.9	32.7	27.0	27.0	30.6
			SHC	29.0	33.5	38.0	27.8	32.1	36.4	26.5	30.6	34.7	25.0	28.9	32.7	23.4	27.0	30.6
		62	TC	34.6	34.6	37.4	32.8	32.8	36.5	30.9	30.9	35.5	28.9	28.9	34.1	27.0	27.0	31.9
			SHC	26.7	32.1	37.4	25.9	31.2	36.5	24.9	30.2	35.5	23.8	28.9	34.1	22.2	27.0	31.9
		67	TC	37.9	37.9	37.9	35.9	35.9	35.9	33.8	33.8	33.8	31.5	31.5	31.5	29.0	29.0	29.0
	SHC		21.8	27.2	32.6	21.0	26.4	31.8	20.1	25.5	30.9	19.2	24.6	29.9	18.2	23.6	28.9	
	72	TC	41.5	41.5	41.5	39.4	39.4	39.4	37.1	37.1	37.1	34.6	34.6	34.6	31.9	31.9	31.9	
		SHC	16.7	22.1	27.6	15.9	21.3	26.7	15.0	20.4	25.9	14.1	19.5	24.9	13.1	18.6	24.0	
	76	TC	-	44.6	44.6	-	42.3	42.3	-	39.8	39.8	-	37.2	37.2	-	34.4	34.4	
		SHC	-	18.0	23.6	-	17.2	22.8	-	16.3	21.9	-	15.4	21.0	-	14.5	20.0	
1200 Cfm	EAT (wb)	58	TC	35.0	35.0	39.7	33.5	33.5	38.0	31.8	31.8	36.1	30.0	30.0	34.0	28.1	28.1	31.8
			SHC	30.3	35.0	39.7	29.0	33.5	38.0	27.6	31.8	36.1	26.0	30.0	34.0	24.3	28.1	31.8
		62	TC	35.5	35.5	40.4	33.7	33.7	39.3	31.9	31.9	37.6	30.1	30.1	35.4	28.1	28.1	33.1
			SHC	28.4	34.4	40.4	27.4	33.3	39.3	26.2	31.9	37.6	24.7	30.1	35.4	23.1	28.1	33.1
		67	TC	38.7	38.7	38.7	36.7	36.7	36.7	34.5	34.5	34.5	32.1	32.1	32.4	29.5	29.5	31.4
	SHC		22.9	29.0	35.1	22.1	28.2	34.3	21.2	27.3	33.4	20.3	26.3	32.4	19.2	25.3	31.4	
	72	TC	42.4	42.4	42.4	40.2	40.2	40.2	37.8	37.8	37.8	35.2	35.2	35.2	32.5	32.5	32.5	
		SHC	17.1	23.3	29.4	16.3	22.5	28.6	15.5	21.6	27.7	14.5	20.7	26.8	13.6	19.7	25.8	
	76	TC	-	45.5	45.5	-	43.1	43.1	-	40.6	40.6	-	37.8	37.8	-	34.9	34.9	
		SHC	-	18.6	25.0	-	17.8	24.1	-	17.0	23.2	-	16.0	22.3	-	15.1	21.3	
1350 Cfm	EAT (wb)	58	TC	36.2	36.2	41.1	34.6	34.6	39.3	32.9	32.9	37.3	31.0	31.0	35.1	28.9	28.9	32.8
			SHC	31.4	36.2	41.1	30.0	34.6	39.3	28.5	32.9	37.3	26.9	31.0	35.1	25.1	28.9	32.8
		62	TC	36.3	36.3	42.8	34.7	34.7	40.9	32.9	32.9	38.8	31.0	31.0	36.6	29.0	29.0	34.1
			SHC	29.8	36.3	42.8	28.5	34.7	40.9	27.1	32.9	38.8	25.5	31.0	36.6	23.8	29.0	34.1
		67	TC	39.4	39.4	39.4	37.3	37.3	37.3	35.0	35.0	35.8	32.5	32.5	34.8	29.9	29.9	33.7
	SHC		24.0	30.8	37.6	23.2	30.0	36.8	22.3	29.1	35.8	21.3	28.1	34.8	20.3	27.0	33.7	
	72	TC	43.1	43.1	43.1	40.8	40.8	40.8	38.3	38.3	38.3	35.7	35.7	35.7	32.9	32.9	32.9	
		SHC	17.6	24.4	31.3	16.8	23.6	30.4	15.9	22.7	29.5	14.9	21.8	28.6	14.0	20.8	27.6	
	76	TC	-	46.2	46.2	-	43.8	43.8	-	41.1	41.1	-	38.3	38.3	-	35.3	35.3	
		SHC	-	19.2	26.2	-	18.4	25.4	-	17.5	24.5	-	16.6	23.5	-	15.6	22.5	
1500 Cfm	EAT (wb)	58	TC	37.3	37.3	42.3	35.6	35.6	40.4	33.8	33.8	38.3	31.8	31.8	36.1	29.7	29.7	33.6
			SHC	32.3	37.3	42.3	30.9	35.6	40.4	29.3	33.8	38.3	27.6	31.8	36.1	25.7	29.7	33.6
		62	TC	37.3	37.3	44.0	35.7	35.7	42.0	33.9	33.9	39.9	31.9	31.9	37.5	29.7	29.7	35.0
			SHC	30.7	37.3	44.0	29.3	35.7	42.0	27.8	33.9	39.9	26.2	31.9	37.5	24.4	29.7	35.0
		67	TC	39.9	39.9	40.0	37.8	37.8	39.1	35.4	35.4	38.1	32.9	32.9	37.1	30.3	30.3	35.9
	SHC		25.1	32.5	40.0	24.2	31.7	39.1	23.3	30.7	38.1	22.3	29.7	37.1	21.2	28.5	35.9	
	72	TC	43.7	43.7	43.7	41.3	41.3	41.3	38.8	38.8	38.8	36.1	36.1	36.1	33.2	33.2	33.2	
		SHC	18.0	25.5	33.0	17.2	24.7	32.1	16.3	23.8	31.2	15.3	22.8	30.3	14.3	21.8	29.3	
	76	TC	-	46.8	46.8	-	44.3	44.3	-	41.6	41.6	-	38.7	38.7	-	35.6	35.6	
		SHC	-	19.8	27.4	-	19.0	26.6	-	18.1	25.7	-	17.1	24.7	-	16.1	23.7	

**LEGEND**

- Do not operate in this region
- 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 (1000 Btuh) Gross
- TC - Total Capacity (1000 Btuh) Gross

**Table 23 – COOLING CAPACITIES**

**1-STAGE COOLING**

**4 TONS**

RHH048			AMBIENT TEMPERATURE (F)															
			85			95			105			115			125			
			EAT (db)			EAT (db)			EAT (db)			EAT (db)			EAT (db)			
			75	80	85	75	80	85	75	80	85	75	80	85	75	80	85	
1200 Cfm	EAT (wb)	58	TC	41.1	41.1	46.6	39.5	39.5	44.8	37.7	37.7	42.7	35.8	35.8	40.6	33.7	33.7	38.2
		SHC	35.6	41.1	46.6	34.2	39.5	44.8	32.7	37.7	42.7	31.0	35.8	40.6	29.2	33.7	38.2	
		62	TC	43.1	43.1	44.7	41.0	41.0	43.6	38.7	38.7	42.5	36.3	36.3	41.2	33.8	33.8	39.8
		SHC	32.3	38.5	44.7	31.3	37.5	43.6	30.2	36.3	42.5	29.0	35.1	41.2	27.8	33.8	39.8	
		67	TC	47.4	47.4	47.4	45.1	45.1	45.1	42.6	42.6	42.6	39.9	39.9	39.9	37.1	37.1	37.1
	SHC	26.7	32.9	39.1	25.7	31.9	38.0	24.6	30.8	37.0	23.5	29.7	35.9	22.4	28.5	34.7		
	72	TC	52.1	52.1	52.1	49.6	49.6	49.6	46.8	46.8	46.8	43.9	43.9	43.9	40.8	40.8	40.8	
	SHC	20.8	27.1	33.4	19.9	26.1	32.3	18.8	25.1	31.3	17.7	24.0	30.2	16.6	22.8	29.0		
	76	TC	-	56.1	56.1	-	53.3	53.3	-	50.4	50.4	-	47.3	47.3	-	44.0	44.0	
	SHC	-	22.4	29.0	-	21.4	28.0	-	20.4	26.9	-	19.3	25.7	-	18.2	24.6		
1400 Cfm	EAT (wb)	58	TC	43.3	43.3	49.1	41.6	41.6	47.1	39.6	39.6	44.9	37.6	37.6	42.6	35.4	35.4	40.1
		SHC	37.5	43.3	49.1	36.0	41.6	47.1	34.4	39.6	44.9	32.6	37.6	42.6	30.6	35.4	40.1	
		62	TC	44.5	44.5	48.9	42.3	42.3	47.7	39.9	39.9	46.3	37.7	37.7	44.4	35.4	35.4	41.7
		SHC	34.7	41.8	48.9	33.6	40.7	47.7	32.4	39.4	46.3	30.9	37.7	44.4	29.1	35.4	41.7	
		67	TC	48.8	48.8	48.8	46.3	46.3	46.3	43.7	43.7	43.7	40.9	40.9	40.9	37.9	37.9	38.1
	SHC	28.3	35.4	42.5	27.2	34.4	41.5	26.2	33.3	40.4	25.0	32.2	39.3	23.8	31.0	38.1		
	72	TC	53.6	53.6	53.6	50.9	50.9	50.9	48.0	48.0	48.0	45.0	45.0	45.0	41.7	41.7	41.7	
	SHC	21.6	28.7	35.9	20.5	27.7	34.9	19.5	26.6	33.8	18.4	25.5	32.7	17.2	24.3	31.5		
	76	TC	-	57.6	57.6	-	54.7	54.7	-	51.6	51.6	-	48.4	48.4	-	44.9	44.9	
	SHC	-	23.3	30.9	-	22.3	29.8	-	21.3	28.7	-	20.1	27.5	-	19.0	26.3		
1600 Cfm	EAT (wb)	58	TC	45.2	45.2	51.3	43.3	43.3	49.1	41.3	41.3	46.8	39.1	39.1	44.3	36.7	36.7	41.6
		SHC	39.2	45.2	51.3	37.5	43.3	49.1	35.8	41.3	46.8	33.9	39.1	44.3	31.8	36.7	41.6	
		62	TC	46.1	46.1	50.5	43.4	43.4	51.1	41.3	41.3	48.7	39.1	39.1	46.1	36.7	36.7	43.3
		SHC	36.0	43.3	50.5	35.7	43.4	51.1	33.9	41.3	48.7	32.1	39.1	46.1	30.2	36.7	43.3	
		67	TC	49.9	49.9	49.9	47.3	47.3	47.3	44.6	44.6	44.6	41.6	41.6	42.6	38.6	38.6	41.3
	SHC	29.8	37.8	45.9	28.7	36.8	44.8	27.6	35.7	43.7	26.5	34.5	42.6	25.2	33.3	41.3		
	72	TC	54.7	54.7	54.7	51.9	51.9	51.9	48.9	48.9	48.9	45.7	45.7	45.7	42.4	42.4	42.4	
	SHC	22.2	30.3	38.4	21.2	29.2	37.3	20.1	28.2	36.2	18.9	27.0	35.1	17.7	25.8	33.9		
	76	TC	-	58.8	58.8	-	55.8	55.8	-	52.6	52.6	-	49.2	49.2	-	45.6	45.6	
	SHC	-	24.2	32.6	-	23.1	31.5	-	22.1	30.3	-	20.9	29.1	-	19.7	27.9		
1800 Cfm	EAT (wb)	58	TC	46.8	46.8	53.1	44.8	44.8	50.8	42.7	42.7	48.3	40.3	40.3	45.7	37.8	37.8	42.9
		SHC	40.6	46.8	53.1	38.8	44.8	50.8	37.0	42.7	48.3	34.9	40.3	45.7	32.8	37.8	42.9	
		62	TC	46.9	46.9	55.2	44.8	44.8	52.8	42.7	42.7	50.3	40.4	40.4	47.6	37.9	37.9	44.6
		SHC	38.5	46.9	55.2	36.8	44.8	52.8	35.1	42.7	50.3	33.2	40.4	47.6	31.1	37.9	44.6	
		67	TC	50.8	50.8	50.8	48.1	48.1	48.1	45.2	45.2	46.9	42.2	42.2	45.7	39.1	39.1	44.3
	SHC	31.2	40.2	49.1	30.1	39.1	48.0	29.0	37.9	46.9	27.8	36.7	45.7	26.6	35.4	44.3		
	72	TC	55.7	55.7	55.7	52.7	52.7	52.7	49.6	49.6	49.6	46.4	46.4	46.4	42.9	42.9	42.9	
	SHC	22.8	31.8	40.8	21.7	30.7	39.7	20.6	29.6	38.6	19.5	28.4	37.4	18.3	27.2	36.2		
	76	TC	-	59.7	59.7	-	56.6	56.6	-	53.3	53.3	-	49.8	49.8	-	46.1	46.1	
	SHC	-	25.0	34.2	-	23.9	33.1	-	22.8	31.9	-	21.6	30.7	-	20.4	29.5		
2000 Cfm	EAT (wb)	58	TC	48.2	48.2	54.6	46.1	46.1	52.2	43.8	43.8	49.7	41.4	41.4	46.9	38.8	38.8	44.0
		SHC	41.8	48.2	54.6	39.9	46.1	52.2	38.0	43.8	49.7	35.9	41.4	46.9	33.6	38.8	44.0	
		62	TC	48.2	48.2	56.8	46.1	46.1	54.4	43.9	43.9	51.7	41.4	41.4	48.8	38.8	38.8	45.7
		SHC	39.6	48.2	56.8	37.9	46.1	54.4	36.0	43.9	51.7	34.0	41.4	48.8	31.9	38.8	45.7	
		67	TC	51.4	51.4	52.2	48.7	48.7	51.1	45.8	45.8	49.9	42.7	42.7	48.6	39.5	39.5	47.1
	SHC	32.6	42.4	52.2	31.5	41.3	51.1	30.3	40.1	49.9	29.1	38.8	48.6	27.8	37.4	47.1		
	72	TC	56.4	56.4	56.4	53.4	53.4	53.4	50.2	50.2	50.2	46.9	46.9	46.9	43.3	43.3	43.3	
	SHC	23.3	33.2	43.0	22.2	32.1	41.9	21.1	31.0	40.8	20.0	29.8	39.6	18.8	28.6	38.4		
	76	TC	-	60.4	60.4	-	57.2	57.2	-	53.9	53.9	-	50.3	50.3	-	46.5	46.5	
	SHC	-	25.7	35.7	-	24.6	34.6	-	23.5	33.5	-	22.3	32.2	-	21.1	31.0		

**LEGEND**

- Do not operate in this region
- 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 (1000 Btuh) Gross
- TC - Total Capacity (1000 Btuh) Gross

**Table 24 – COOLING CAPACITIES**

**1-STAGE COOLING**

**5 TONS**

RHH060				AMBIENT TEMPERATURE (F)														
				85			95			105			115			125		
				EAT (db)			EAT (db)			EAT (db)			EAT (db)			EAT (db)		
				75	80	85	75	80	85	75	80	85	75	80	85	75	80	85
1500 Cfm	EAT (wb)	58	TC	53.8	53.8	60.7	51.7	51.7	58.3	49.4	49.4	55.8	46.9	46.9	53.0	44.2	44.2	49.9
			SHC	46.9	53.8	60.7	45.0	51.7	58.3	43.0	49.4	55.8	40.9	46.9	53.0	38.5	44.2	49.9
		62	TC	56.2	56.2	58.3	53.5	53.5	57.0	50.6	50.6	55.5	47.5	47.5	53.9	44.2	44.2	51.8
			SHC	42.6	50.5	58.3	41.3	49.1	57.0	39.9	47.7	55.5	38.4	46.2	53.9	36.6	44.2	51.8
		67	TC	61.7	61.7	61.7	58.7	58.7	58.7	55.5	55.5	55.5	52.0	52.0	52.0	48.2	48.2	48.2
	SHC		35.1	43.0	50.9	33.8	41.7	49.6	32.5	40.4	48.3	31.1	38.9	46.8	29.5	37.4	45.3	
	72	TC	67.7	67.7	67.7	64.4	64.4	64.4	60.9	60.9	60.9	57.1	57.1	57.1	53.0	53.0	53.0	
		SHC	27.4	35.3	43.3	26.1	34.1	42.0	24.8	32.7	40.7	23.4	31.3	39.2	21.9	29.8	37.7	
	76	TC	-	72.7	72.7	-	69.2	69.2	-	65.4	65.4	-	61.3	61.3	-	56.9	56.9	
		SHC	-	29.0	37.3	-	27.8	36.1	-	26.5	34.7	-	25.1	33.2	-	23.5	31.6	
1750 Cfm	EAT (wb)	58	TC	56.7	56.7	64.0	54.4	54.4	61.4	51.9	51.9	58.6	49.2	49.2	55.6	46.2	46.2	52.2
			SHC	49.4	56.7	64.0	47.4	54.4	61.4	45.2	51.9	58.6	42.9	49.2	55.6	40.3	46.2	52.2
		62	TC	58.0	58.0	63.8	55.2	55.2	62.3	52.2	52.2	60.5	49.3	49.3	57.8	46.3	46.3	54.2
			SHC	45.9	54.8	63.8	44.5	53.4	62.3	42.9	51.7	60.5	40.8	49.3	57.8	38.3	46.3	54.2
		67	TC	63.4	63.4	63.4	60.3	60.3	60.3	56.9	56.9	56.9	53.2	53.2	53.2	49.3	49.3	49.7
	SHC		37.3	46.4	55.5	36.0	45.1	54.2	34.6	43.7	52.8	33.1	42.2	51.3	31.5	40.6	49.7	
	72	TC	69.5	69.5	69.5	66.0	66.0	66.0	62.4	62.4	62.4	58.3	58.3	58.3	54.0	54.0	54.0	
		SHC	28.3	37.5	46.7	27.0	36.2	45.4	25.7	34.8	44.0	24.2	33.4	42.5	22.7	31.8	41.0	
	76	TC	-	74.5	74.5	-	70.9	70.9	-	66.9	66.9	-	62.6	62.6	-	58.0	58.0	
		SHC	-	30.2	39.7	-	29.0	38.4	-	27.6	37.0	-	26.2	35.5	-	24.6	33.9	
2000 Cfm	EAT (wb)	58	TC	59.1	59.1	66.7	56.7	56.7	64.0	54.0	54.0	61.0	51.1	51.1	57.7	48.0	48.0	54.1
			SHC	51.5	59.1	66.7	49.4	56.7	64.0	47.1	54.0	61.0	44.5	51.1	57.7	41.8	48.0	54.1
		62	TC	59.5	59.5	68.7	56.7	56.7	66.5	54.1	54.1	63.4	51.2	51.2	60.0	48.0	48.0	56.2
			SHC	48.7	58.7	68.7	47.0	56.7	66.5	44.8	54.1	63.4	42.4	51.2	60.0	39.7	48.0	56.2
		67	TC	64.7	64.7	64.7	61.5	61.5	61.5	57.9	57.9	57.9	54.1	54.1	55.6	50.1	50.1	53.9
	SHC		39.3	49.6	59.9	38.0	48.3	58.6	36.6	46.9	57.2	35.0	45.3	55.6	33.4	43.7	53.9	
	72	TC	70.9	70.9	70.9	67.3	67.3	67.3	63.4	63.4	63.4	59.3	59.3	59.3	54.8	54.8	54.8	
		SHC	29.2	39.5	49.9	27.9	38.2	48.6	26.5	36.8	47.2	25.0	35.3	45.7	23.4	33.8	44.1	
	76	TC	-	75.9	75.9	-	72.1	72.1	-	68.0	68.0	-	63.6	63.6	-	58.8	58.8	
		SHC	-	31.3	41.9	-	30.0	40.6	-	28.7	39.2	-	27.2	37.6	-	25.6	36.0	
2250 Cfm	EAT (wb)	58	TC	61.2	61.2	69.1	58.6	58.6	66.1	55.8	55.8	63.0	52.7	52.7	59.5	49.4	49.4	55.7
			SHC	53.3	61.2	69.1	51.0	58.6	66.1	48.6	55.8	63.0	45.9	52.7	59.5	43.0	49.4	55.7
		62	TC	61.2	61.2	71.8	58.6	58.6	68.7	55.8	55.8	65.4	52.8	52.8	61.9	49.4	49.4	57.9
			SHC	50.7	61.2	71.8	48.6	58.6	68.7	46.2	55.8	65.4	43.7	52.8	61.9	40.9	49.4	57.9
		67	TC	65.8	65.8	65.8	62.4	62.4	62.8	58.8	58.8	61.3	54.9	54.9	59.7	50.7	50.7	57.9
	SHC		41.2	52.7	64.2	39.9	51.3	62.8	38.4	49.9	61.3	36.9	48.3	59.7	35.2	46.5	57.9	
	72	TC	72.0	72.0	72.0	68.3	68.3	68.3	64.3	64.3	64.3	60.0	60.0	60.0	55.4	55.4	55.4	
		SHC	30.0	41.5	53.0	28.6	40.1	51.6	27.2	38.7	50.2	25.8	37.2	48.7	24.2	35.6	47.1	
	76	TC	-	77.0	77.0	-	73.1	73.1	-	68.9	68.9	-	64.3	64.3	-	59.5	59.5	
		SHC	-	32.3	44.1	-	31.0	42.7	-	29.6	41.3	-	28.1	39.7	-	26.6	38.1	
2500 Cfm	EAT (wb)	58	TC	62.9	62.9	71.1	60.2	60.2	68.0	57.3	57.3	64.7	54.1	54.1	61.1	50.6	50.6	57.1
			SHC	54.8	62.9	71.1	52.5	60.2	68.0	49.9	57.3	64.7	47.1	54.1	61.1	44.1	50.6	57.1
		62	TC	63.0	63.0	73.8	60.3	60.3	70.6	57.3	57.3	67.2	54.1	54.1	63.4	50.6	50.6	59.3
			SHC	52.2	63.0	73.8	49.9	60.3	70.6	47.5	57.3	67.2	44.8	54.1	63.4	41.9	50.6	59.3
		67	TC	66.6	66.6	68.2	63.2	63.2	66.8	59.5	59.5	65.2	55.5	55.5	63.5	51.3	51.3	61.5
	SHC		43.1	55.6	68.2	41.7	54.2	66.8	40.2	52.7	65.2	38.6	51.0	63.5	36.8	49.1	61.5	
	72	TC	72.8	72.8	72.8	69.0	69.0	69.0	65.0	65.0	65.0	60.6	60.6	60.6	55.9	55.9	55.9	
		SHC	30.7	43.3	56.0	29.4	42.0	54.6	28.0	40.6	53.2	26.5	39.1	51.7	24.9	37.5	50.1	
	76	TC	-	77.9	77.9	-	73.9	73.9	-	69.5	69.5	-	64.9	64.9	-	59.9	59.9	
		SHC	-	33.3	46.1	-	32.0	44.7	-	30.6	43.3	-	29.1	41.7	-	27.5	40.1	

**LEGEND**

- Do not operate in this region
- 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 (1000 Btuh) Gross
- TC - Total Capacity (1000 Btuh) Gross

**Table 25 – COOLING CAPACITIES**

**1-STAGE COOLING**

**6 TONS**

RHH072				AMBIENT TEMPERATURE (F)														
				85			95			105			115			125		
				EAT (db)			EAT (db)			EAT (db)			EAT (db)			EAT (db)		
				75	80	85	75	80	85	75	80	85	75	80	85	75	80	85
1800 Cfm	EAT (wb)	58	TC	63.5	63.5	71.7	60.1	60.1	67.9	56.4	56.4	63.7	52.3	52.3	59.1	47.8	47.8	54
			SHC	55.2	63.5	71.7	52.3	60.1	67.9	49.1	56.4	63.7	45.5	52.3	59.1	41.6	47.8	54
		62	TC	66.5	66.5	68.9	62.1	62.1	66.9	57.4	57.4	64.6	52.4	52.4	61.4	47.9	47.9	56.2
			SHC	50.2	59.5	68.9	48.1	57.5	66.9	45.9	55.2	64.6	43.3	52.4	61.4	39.6	47.9	56.2
		67	TC	73.9	73.9	73.9	69.9	69.9	69.9	64.6	64.6	64.6	59	59	59	52.8	52.8	52.8
	SHC		40.7	50	59.4	39.2	48.7	58.1	37.2	46.6	56	35	44.5	53.9	32.7	42.1	51.6	
	72	TC	78.2	78.2	78.2	76.9	76.9	76.9	73.1	73.1	73.1	67.5	67.5	67.5	61	61	61	
		SHC	29.8	38.9	47.9	29.4	38.7	48	28	37.4	46.8	26.1	35.5	44.9	23.9	33.3	42.7	
	76	TC	-	79.5	79.5	-	79.9	79.9	-	78.1	78.1	-	74	74	-	68.1	68.1	
		SHC	-	29.8	39.7	-	29.9	39.8	-	29.3	39.1	-	27.9	37.5	-	26.1	35.5	
2100 Cfm	EAT (wb)	58	TC	67.7	67.7	76.4	64	64	72.3	60.1	60.1	67.9	55.8	55.8	63	51	51	57.7
			SHC	58.9	67.7	76.4	55.7	64	72.3	52.3	60.1	67.9	48.5	55.8	63	44.4	51	57.7
		62	TC	69.2	69.2	75.6	64.7	64.7	73.5	60.2	60.2	70.5	55.8	55.8	65.5	51.1	51.1	60
			SHC	54.2	64.9	75.6	52.2	62.8	73.5	49.7	60.1	70.5	46.2	55.8	65.5	42.2	51.1	60
		67	TC	75.6	75.6	75.6	72.1	72.1	72.1	66.9	66.9	66.9	60.9	60.9	60.9	54.5	54.5	56.9
	SHC		42.8	53.4	63.9	41.8	52.6	63.3	39.9	50.7	61.6	37.6	48.5	59.3	35.3	46.1	56.9	
	72	TC	78.9	78.9	78.9	78.2	78.2	78.2	75	75	75	69.6	69.6	69.6	63	63	63	
		SHC	30.2	40.2	50.2	30.1	40.6	51	29.1	39.8	50.5	27.3	38.1	48.9	25.1	35.9	46.7	
	76	TC	-	79.7	79.7	-	80.5	80.5	-	79.1	79.1	-	75.5	75.5	-	69.8	69.8	
		SHC	-	30.7	42.3	-	30.8	42.1	-	30.3	41.4	-	29.1	40.1	-	27.4	38.3	
2400 Cfm	EAT (wb)	58	TC	70.8	70.8	80	67.3	67.3	76.1	63.1	63.1	71.3	58.6	58.6	66.2	53.7	53.7	60.7
			SHC	61.6	70.8	80	58.6	67.3	76.1	54.9	63.1	71.3	51	58.6	66.2	46.7	53.7	60.7
		62	TC	71.3	71.3	81.4	67.4	67.4	79	63.1	63.1	74.1	58.7	58.7	68.9	53.7	53.7	63.1
			SHC	57.7	69.6	81.4	55.7	67.4	79	52.2	63.1	74.1	48.5	58.7	68.9	44.4	53.7	63.1
		67	TC	76.7	76.7	76.7	73.7	73.7	73.7	68.5	68.5	68.5	62.4	62.4	64.4	56	56	62
	SHC		44.7	56.2	67.8	44.1	56.1	68.1	42.3	54.5	66.7	40.1	52.2	64.4	37.8	49.9	62	
	72	TC	79.3	79.3	79.3	79	79	79	76.3	76.3	76.3	71.1	71.1	71.1	64.4	64.4	64.4	
		SHC	30.5	41.3	52.1	30.7	42.1	53.6	29.9	41.8	53.8	28.3	40.4	52.5	26.2	38.3	50.5	
	76	TC	-	80	80	-	80.8	80.8	-	79.8	79.8	-	76.5	76.5	-	71	71	
		SHC	-	31.2	43.5	-	31.4	43.6	-	31.1	43.3	-	30.2	42.4	-	28.6	40.8	
2700 Cfm	EAT (wb)	58	TC	73.3	73.3	82.8	70	70	79.1	65.8	65.8	74.3	61	61	68.9	55.9	55.9	63.2
			SHC	63.7	73.3	82.8	60.9	70	79.1	57.2	65.8	74.3	53.1	61	68.9	48.7	55.9	63.2
		62	TC	73.3	73.3	85.8	70.1	70.1	82.3	65.8	65.8	77.3	61.1	61.1	71.7	56	56	65.7
			SHC	60.5	73.2	85.8	58	70.1	82.3	54.4	65.8	77.3	50.5	61.1	71.7	46.3	56	65.7
		67	TC	77.5	77.5	77.5	74.9	74.9	74.9	70	70	71.5	63.7	63.7	69.2	57.2	57.2	66.6
	SHC		46.1	58.6	71.1	46.1	59.3	72.5	44.7	58.1	71.5	42.4	55.8	69.2	40	53.3	66.6	
	72	TC	79.6	79.6	79.6	79.5	79.5	79.5	77.2	77.2	77.2	72.3	72.3	72.3	65.6	65.6	65.6	
		SHC	30.8	42.3	53.7	31.1	43.4	55.8	30.7	43.7	56.7	29.2	42.5	55.9	27.2	40.6	54.1	
	76	TC	-	80.1	80.1	-	81.1	81.1	-	80.3	80.3	-	77.1	77.1	-	71.9	71.9	
		SHC	-	31.6	44.5	-	32	44.9	-	31.8	44.9	-	31	44.3	-	29.6	43	
3000 Cfm	EAT (wb)	58	TC	75	75	84.8	72.2	72.2	81.6	68.1	68.1	76.9	63.1	63.1	71.2	57.8	57.8	65.3
			SHC	65.3	75	84.8	62.9	72.2	81.6	59.2	68.1	76.9	54.9	63.1	71.2	50.3	57.8	65.3
		62	TC	75.1	75.1	88.1	72.3	72.3	84.8	68.1	68.1	79.9	63.1	63.1	74.1	57.9	57.9	67.9
			SHC	62.1	75.1	88.1	59.8	72.3	84.8	56.3	68.1	79.9	52.2	63.1	74.1	47.8	57.9	67.9
		67	TC	77.9	77.9	77.9	75.9	75.9	76.5	71.1	71.1	76	65	65	73.8	58.4	58.4	70.9
	SHC		47.3	60.6	73.8	48	62.2	76.5	46.8	61.4	76	44.6	59.2	73.8	42.1	56.5	70.9	
	72	TC	79.3	79.3	79.3	79.9	79.9	79.9	77.9	77.9	77.9	73.2	73.2	73.2	66.5	66.5	66.5	
		SHC	30.9	42.8	54.6	31.6	44.6	57.7	31.3	45.3	59.3	30	44.5	59	28.1	42.7	57.4	
	76	TC	-	80.1	80.1	-	81.2	81.2	-	80.6	80.6	-	77.6	77.6	-	72.5	72.5	
		SHC	-	32	45.4	-	32.4	46	-	32.5	46.4	-	31.8	46.1	-	30.6	45.1	

**LEGEND**

- Do not operate in this region
- 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 (1000 Btuh) Gross
- TC - Total Capacity (1000 Btuh) Gross



**Table 26 – COOLING CAPACITIES**

**2-STAGE COOLING**

**6 TONS**

RHH073			AMBIENT TEMPERATURE (F)															
			85			95			105			115			125			
			EAT (db)			EAT (db)			EAT (db)			EAT (db)			EAT (db)			
			75	80	85	75	80	85	75	80	85	75	80	85	75	80	85	
1800 Cfm	EAT (wb)	58	TC	64.5	64.5	72.8	61.9	61.9	69.9	59.1	59.1	66.7	56	56	63.3	52.7	52.7	59.6
			SHC	56.1	64.5	72.8	53.8	61.9	69.9	51.4	59.1	66.7	48.7	56	63.3	45.8	52.7	59.6
		62	TC	67.4	67.4	69.3	64.1	64.1	67.5	60.6	60.6	65.7	56.9	56.9	63.7	53	53	61.4
			SHC	50.7	60	69.3	49	58.3	67.5	47.2	56.5	65.7	45.3	54.5	63.7	43.2	52.3	61.4
		67	TC	73.7	73.7	73.7	70	70	70	66.2	66.2	66.2	62.2	62.2	62.2	57.8	57.8	57.8
		SHC	41.7	51	60.3	40	49.3	58.6	38.3	47.6	56.9	36.5	45.8	55.1	34.6	43.9	53.2	
	72	TC	80.6	80.6	80.6	76.8	76.8	76.8	72.7	72.7	72.7	68.3	68.3	68.3	63.6	63.6	63.6	
		SHC	32.4	41.8	51.2	30.8	40.2	49.6	29.1	38.5	47.9	27.4	36.7	46.1	25.5	34.9	44.2	
	76	TC	-	86.6	86.6	-	82.4	82.4	-	78.1	78.1	-	73.4	73.4	-	68.4	68.4	
		SHC	-	34.4	44.3	-	32.8	42.7	-	31.2	40.9	-	29.4	39.1	-	27.6	37.2	
2100 Cfm	EAT (wb)	58	TC	67.9	67.9	76.7	65	65	73.5	62	62	70.1	58.8	58.8	66.4	55.2	55.2	62.5
			SHC	59.1	67.9	76.7	56.6	65	73.5	53.9	62	70.1	51.1	58.8	66.4	48	55.2	62.5
		62	TC	69.3	69.3	75.5	66	66	73.6	62.4	62.4	71.5	58.8	58.8	69.1	55.3	55.3	65
			SHC	54.3	64.9	75.5	52.6	63.1	73.6	50.7	61.1	71.5	48.6	58.8	69.1	45.6	55.3	65
		67	TC	75.6	75.6	75.6	71.7	71.7	71.7	67.7	67.7	67.7	63.5	63.5	63.5	59	59	59
		SHC	44	54.7	65.3	42.3	53	63.6	40.6	51.2	61.9	38.7	49.4	60	36.8	47.5	58.1	
	72	TC	82.6	82.6	82.6	78.6	78.6	78.6	74.3	74.3	74.3	69.7	69.7	69.7	64.8	64.8	64.8	
		SHC	33.5	44.2	54.9	31.8	42.5	53.2	30.1	40.8	51.5	28.3	39	49.7	26.5	37.1	47.7	
	76	TC	-	88.5	88.5	-	84.3	84.3	-	79.7	79.7	-	74.8	74.8	-	69.6	69.6	
		SHC	-	35.7	46.9	-	34.1	45.2	-	32.4	43.5	-	30.6	41.6	-	28.7	39.6	
2400 Cfm	EAT (wb)	58	TC	70.6	70.6	79.7	67.6	67.6	76.3	64.4	64.4	72.7	60.9	60.9	68.9	57.2	57.2	64.7
			SHC	61.5	70.6	79.7	58.8	67.6	76.3	56	64.4	72.7	53	60.9	68.9	49.7	57.2	64.7
		62	TC	71.1	71.1	81	67.9	67.9	78.2	64.4	64.4	75.6	61	61	71.6	57.3	57.3	67.3
			SHC	57.6	69.3	81	55.4	66.8	78.2	53.3	64.4	75.6	50.4	61	71.6	47.3	57.3	67.3
		67	TC	77	77	77	73	73	73	68.9	68.9	68.9	64.5	64.5	64.6	59.9	59.9	62.6
		SHC	46.2	58.1	70	44.5	56.4	68.3	42.7	54.6	66.5	40.9	52.7	64.6	38.9	50.8	62.6	
	72	TC	84.1	84.1	84.1	79.9	79.9	79.9	75.5	75.5	75.5	70.8	70.8	70.8	65.8	65.8	65.8	
		SHC	34.4	46.4	58.3	32.7	44.7	56.6	31	42.9	54.9	29.2	41.1	53	27.3	39.2	51	
	76	TC	-	90.1	90.1	-	85.6	85.6	-	80.9	80.9	-	75.9	75.9	-	70.5	70.5	
		SHC	-	36.9	49.3	-	35.3	47.6	-	33.5	45.8	-	31.7	43.9	-	29.8	41.9	
2700 Cfm	EAT (wb)	58	TC	72.8	72.8	82.1	69.6	69.6	78.6	66.3	66.3	74.9	62.7	62.7	70.9	58.8	58.8	66.5
			SHC	63.4	72.8	82.1	60.6	69.6	78.6	57.7	66.3	74.9	54.5	62.7	70.9	51.2	58.8	66.5
		62	TC	72.8	72.8	85.3	69.7	69.7	81.7	66.4	66.4	77.9	62.8	62.8	73.7	58.9	58.9	69.2
			SHC	60.3	72.8	85.3	57.7	69.7	81.7	54.9	66.4	77.9	51.9	62.8	73.7	48.6	58.9	69.2
		67	TC	78	78	78	74	74	74	69.8	69.8	70.9	65.4	65.4	69	60.7	60.7	66.9
		SHC	48.2	61.3	74.4	46.5	59.6	72.7	44.7	57.8	70.9	42.8	55.9	69	40.8	53.9	66.9	
	72	TC	85.2	85.2	85.2	81	81	81	76.4	76.4	76.4	71.6	71.6	71.6	66.5	66.5	66.5	
		SHC	35.2	48.4	61.5	33.6	46.7	59.8	31.8	44.9	58	30	43	56.1	28.1	41.1	54.1	
	76	TC	-	91.2	91.2	-	86.6	86.6	-	81.8	81.8	-	76.7	76.7	-	71.2	71.2	
		SHC	-	38	51.5	-	36.3	49.8	-	34.6	47.9	-	32.7	46	-	30.8	44	
3000 Cfm	EAT (wb)	58	TC	74.8	74.8	84.4	71.4	71.4	80.7	68	68	76.8	64.2	64.2	72.6	60.2	60.2	68.1
			SHC	65.1	74.8	84.4	62.2	71.4	80.7	59.1	68	76.8	55.9	64.2	72.6	52.4	60.2	68.1
		62	TC	74.8	74.8	87.7	71.5	71.5	83.8	68	68	79.8	64.3	64.3	75.4	60.3	60.3	70.8
			SHC	62	74.8	87.7	59.2	71.5	83.8	56.2	68	79.8	53.1	64.3	75.4	49.8	60.3	70.8
		67	TC	78.9	78.9	78.9	74.9	74.9	76.9	70.6	70.6	75	66.1	66.1	73	61.4	61.4	70.8
		SHC	50.1	64.4	78.6	48.4	62.6	76.9	46.6	60.8	75	44.7	58.8	73	42.6	56.7	70.8	
	72	TC	86.2	86.2	86.2	81.8	81.8	81.8	77.2	77.2	77.2	72.3	72.3	72.3	67.1	67.1	67.1	
		SHC	36	50.3	64.5	34.3	48.6	62.8	32.6	46.8	60.9	30.7	44.9	59	28.8	42.9	57	
	76	TC	-	92.1	92.1	-	87.4	87.4	-	82.5	82.5	-	77.3	77.3	-	71.8	71.8	
		SHC	-	39	53.6	-	37.3	51.8	-	35.5	49.9	-	33.6	48	-	31.7	45.9	

**LEGEND**

- Do not operate in this region
- 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 (1000 Btuh) Gross
- TC - Total Capacity (1000 Btuh) Gross

**Table 27 – COOLING CAPACITIES**

**2-STAGE COOLING**

**7.5 TONS**

RHH090			AMBIENT TEMPERATURE (F)															
			85			95			105			115			125			
			EAT (db)			EAT (db)			EAT (db)			EAT (db)			EAT (db)			
			75	80	85	75	80	85	75	80	85	75	80	85	75	80	85	
2250Cfm	EAT (wb)	58	TC	81.1	81.1	92.1	76.4	76.4	86.8	73.0	73.0	82.9	69.3	69.3	78.7	65.2	65.2	74.1
			SHC	70.1	81.1	92.1	66.0	76.4	86.8	63.1	73.0	82.9	59.8	69.3	78.7	56.4	65.2	74.1
		62	TC	86.2	86.2	86.2	80.1	80.1	83.0	75.6	75.6	80.9	70.8	70.8	78.6	65.9	65.9	76.1
			SHC	62.5	74.2	85.9	59.7	71.3	83.0	57.6	69.3	80.9	55.4	67.0	78.6	53	64.5	76.1
		67	TC	94.3	94.3	94.3	87.6	87.6	87.6	82.8	82.8	82.8	77.6	77.6	77.6	72.1	72.1	72.1
		SHC	51.3	63.0	74.6	48.5	60.1	71.8	46.5	58.1	69.8	44.4	56.0	67.7	42.2	53.8	65.5	
	72	TC	102.9	102.9	102.9	95.6	95.6	95.6	90.3	90.3	90.3	84.7	84.7	84.7	78.7	78.7	78.7	
		SHC	39.6	51.4	63.1	36.9	48.6	60.3	34.9	46.6	58.3	32.9	44.5	56.2	30.7	42.4	54.1	
	76	TC	-	109.9	109.9	-	102.1	102.1	-	96.4	96.4	-	90.5	90.5	-	84.1	84.1	
		SHC	-	41.8	54.2	-	39.1	51.4	-	37.2	49.4	-	35.2	47.2	-	33.1	45	
2625 Cfm	EAT (wb)	58	TC	85.7	85.7	97.3	80.6	80.6	91.5	76.9	76.9	87.3	72.8	72.8	82.7	68.5	68.5	77.8
			SHC	74.0	85.7	97.3	69.6	80.6	91.5	66.4	76.9	87.3	62.9	72.8	82.7	59.2	68.5	77.8
		62	TC	89.0	89.0	94.2	82.6	82.6	91.1	78.0	78.0	88.7	73.3	73.3	85.3	68.5	68.5	81
			SHC	67.3	80.7	94.2	64.3	77.7	91.1	62.1	75.4	88.7	59.3	72.3	85.3	56.1	68.5	81
		67	TC	97.2	97.2	97.2	90.1	90.1	90.1	85.0	85.0	85.0	79.6	79.6	79.6	73.8	73.8	73.8
		SHC	54.3	67.8	81.2	51.4	64.9	78.3	49.4	62.8	76.3	47.3	60.7	74.1	45	58.5	71.9	
	72	TC	105.8	105.8	105.8	98.1	98.1	98.1	92.6	92.6	92.6	86.7	86.7	86.7	80.5	80.5	80.5	
		SHC	40.9	54.4	67.9	38.1	51.5	65.0	36.1	49.5	63.0	34.0	47.4	60.9	31.8	45.3	58.7	
	76	TC	-	112.7	112.7	-	104.5	104.5	-	98.6	98.6	-	92.4	92.4	-	85.8	85.8	
		SHC	-	43.5	57.6	-	40.7	54.6	-	38.7	52.5	-	36.7	50.4	-	34.5	48.1	
3000 Cfm	EAT (wb)	58	TC	89.5	89.5	101.6	84.1	84.1	95.5	80.1	80.1	90.9	75.7	75.7	86.0	71.2	71.2	80.8
			SHC	77.3	89.5	101.6	72.6	84.1	95.5	69.2	80.1	90.9	65.5	75.7	86.0	61.5	71.2	80.8
		62	TC	91.3	91.3	101.9	84.8	84.8	97.7	80.3	80.3	94.3	75.8	75.8	89.5	71.2	71.2	84.1
			SHC	71.7	86.8	101.9	68.2	83.0	97.7	65.5	79.9	94.3	62.1	75.8	89.5	58.3	71.2	84.1
		67	TC	99.5	99.5	99.5	92.1	92.1	92.1	86.8	86.8	86.8	81.1	81.1	81.1	75.1	75.1	78.2
		SHC	57.2	72.4	87.5	54.2	69.4	84.6	52.2	67.4	82.6	50.0	65.2	80.4	47.8	63	78.2	
	72	TC	108.1	108.1	108.1	100.0	100.0	100.0	94.3	94.3	94.3	88.2	88.2	88.2	81.8	81.8	81.8	
		SHC	42.0	57.2	72.4	39.1	54.3	69.5	37.1	52.3	67.4	35.0	50.2	65.3	32.9	48	63.1	
	76	TC	-	114.8	114.8	-	106.3	106.3	-	100.3	100.3	-	93.8	93.8	-	87	87	
		SHC	-	44.9	60.6	-	42.0	57.6	-	40.1	55.5	-	38.0	53.3	-	35.8	51	
3375 Cfm	EAT (wb)	58	TC	92.8	92.8	105.4	87.0	87.0	98.8	82.8	82.8	94.0	78.2	78.2	88.9	73.4	73.4	83.4
			SHC	80.2	92.8	105.4	75.2	87.0	98.8	71.5	82.8	94.0	67.6	78.2	88.9	63.4	73.4	83.4
		62	TC	93.6	93.6	108.0	87.1	87.1	102.8	82.8	82.8	97.8	78.3	78.3	92.5	73.5	73.5	86.8
			SHC	75.3	91.6	108.0	71.3	87.1	102.8	67.9	82.8	97.8	64.1	78.3	92.5	60.1	73.5	86.8
		67	TC	101.3	101.3	101.3	93.6	93.6	93.6	88.1	88.1	88.6	82.3	82.3	86.4	76.2	76.2	84
		SHC	59.9	76.8	93.6	56.9	73.8	90.7	54.8	71.7	88.6	52.6	69.5	86.4	50.3	67.2	84	
	72	TC	109.8	109.8	109.8	101.5	101.5	101.5	95.6	95.6	95.6	89.3	89.3	89.3	82.8	82.8	82.8	
		SHC	43.0	59.9	76.7	40.1	56.9	73.8	38.1	54.9	71.7	36.0	52.8	69.6	33.8	50.6	67.4	
	76	TC	-	116.4	116.4	-	107.6	107.6	-	101.4	101.4	-	94.8	94.8	-	87.9	87.9	
		SHC	-	46.1	63.3	-	43.2	60.2	-	41.2	58.1	-	39.1	55.9	-	37	53.6	
3750 Cfm	EAT (wb)	58	TC	95.6	95.6	108.6	89.5	89.5	101.7	85.1	85.1	96.7	80.4	80.4	91.3	75.3	75.3	85.5
			SHC	82.6	95.6	108.6	77.4	89.5	101.7	73.6	85.1	96.7	69.4	80.4	91.3	65.1	75.3	85.5
		62	TC	95.7	95.7	113.0	89.6	89.6	105.8	85.2	85.2	100.6	80.4	80.4	95.0	75.4	75.4	89
			SHC	78.3	95.7	113.0	73.4	89.6	105.8	69.7	85.2	100.6	65.8	80.4	95.0	61.7	75.4	89
		67	TC	102.7	102.7	102.7	94.8	94.8	96.6	89.2	89.2	94.4	83.3	83.3	92.1	77.1	77.1	89.6
		SHC	62.5	81.0	99.6	59.5	78.0	96.6	57.4	75.9	94.4	55.1	73.6	92.1	52.8	71.2	89.6	
	72	TC	111.3	111.3	111.3	102.8	102.8	102.8	96.7	96.7	96.7	90.3	90.3	90.3	83.6	83.6	83.6	
		SHC	44.0	62.4	80.8	41.1	59.5	77.9	39.0	57.4	75.8	36.9	55.3	73.7	34.7	53.1	71.5	
	76	TC	-	117.5	117.5	-	108.6	108.6	-	102.3	102.3	-	95.6	95.6	-	88.6	88.6	
		SHC	-	47.2	65.7	-	44.3	62.6	-	42.3	60.5	-	40.2	58.2	-	38	55.9	

**LEGEND**

- Do not operate in this region
- 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 (1000 Btuh) Gross
- TC - Total Capacity (1000 Btuh) Gross

**Table 28 – COOLING CAPACITIES**

**2-STAGE COOLING**

**8.5 TONS**

RHH102			AMBIENT TEMPERATURE (F)															
			85			95			105			115			125			
			EAT (db)			EAT (db)			EAT (db)			EAT (db)			EAT (db)			
			75	80	85	75	80	85	75	80	85	75	80	85	75	80	85	
2550 Cfm	EAT (wb)	58	TC	85.8	85.8	97.8	80.9	80.9	91.8	75.7	75.7	85.9	70.2	70.2	79.7	64.4	64.4	73.1
			SHC	73.9	85.8	97.8	70	80.9	91.8	65.5	75.7	85.9	60.7	70.2	79.7	55.7	64.4	73.1
		62	TC	90.4	90.4	94.5	83.8	83.8	91.4	76.8	76.8	88	70.5	70.5	82.7	64.5	64.5	76.1
			SHC	67.8	81.1	94.5	64.8	78.1	91.4	61.6	74.8	88	57.6	70.1	82.7	52.8	64.5	76.1
		67	TC	101.6	101.6	101.6	95	95	95	87.4	87.4	87.4	79.3	79.3	79.3	71	71	71
		SHC	55.5	68.7	81.9	52.9	66.3	79.7	49.9	63.3	76.7	46.9	60.3	73.7	43.8	57.2	70.6	
	72	TC	109.3	109.3	109.3	106	106	106	99.6	99.6	99.6	91.4	91.4	91.4	82.7	82.7	82.7	
		SHC	41.1	54.1	67.2	39.9	53.3	66.6	37.7	51.1	64.6	34.9	48.3	61.7	32	45.4	58.8	
		76	TC	-	114.5	114.5	-	111.2	111.2	-	107.7	107.7	-	101	101	-	92.6	92.6
			SHC	-	42.6	56.7	-	41.6	55.6	-	40.5	54.5	-	38.3	51.9	-	35.6	49.2
2975 Cfm	EAT (wb)	58	TC	91.8	91.8	104.5	86.4	86.4	98	80.7	80.7	91.6	74.7	74.7	84.8	68.6	68.6	77.8
			SHC	79.1	91.8	104.5	74.7	86.4	98	69.8	80.7	91.6	64.6	74.7	84.8	59.3	68.6	77.8
		62	TC	94.4	94.4	104.4	87.5	87.5	100.5	81	81	95.1	74.8	74.8	88.3	68.7	68.7	81
			SHC	73.8	89.1	104.4	70.3	85.4	100.5	66.1	80.6	95.1	61.3	74.8	88.3	56.3	68.7	81
		67	TC	104.3	104.3	104.3	98.6	98.6	98.6	90.6	90.6	90.6	82.1	82.1	82.1	73.4	73.4	78.4
		SHC	58.7	73.7	88.6	56.8	72.3	87.8	53.8	69.3	84.8	50.7	66.1	81.6	47.5	62.9	78.4	
	72	TC	111.3	111.3	111.3	108	108	108	102.7	102.7	102.7	94.5	94.5	94.5	85.5	85.5	85.5	
		SHC	42.2	56.7	71.3	41	56.1	71.3	39.3	54.8	70.3	36.6	52.1	67.6	33.7	49.2	64.7	
		76	TC	-	116.3	116.3	-	112.7	112.7	-	109.2	109.2	-	103.5	103.5	-	95.4	95.4
			SHC	-	44.3	60.6	-	43.1	59	-	41.9	57.7	-	40.2	56	-	37.7	53.4
3400 Cfm	EAT (wb)	58	TC	96.6	96.6	109.9	91.1	91.1	103.4	85.1	85.1	96.6	78.7	78.7	89.3	72.1	72.1	81.8
			SHC	83.3	96.6	109.9	78.8	91.1	103.4	73.6	85.1	96.6	68.1	78.7	89.3	62.4	72.1	81.8
		62	TC	97.7	97.7	112.8	91.7	91.7	106.8	85.3	85.3	100.7	78.8	78.8	93	72.2	72.2	85.2
			SHC	78.6	95.7	112.8	74.4	90.6	106.8	69.9	85.3	100.7	64.6	78.8	93	59.2	72.2	85.2
		67	TC	106	106	106	101.2	101.2	101.2	93	93	93	84.4	84.4	89.2	75.5	75.5	85.8
		SHC	61.6	78.1	94.7	60.2	77.7	95.1	57.4	74.9	92.4	54.2	71.7	89.2	50.9	68.4	85.8	
	72	TC	112.7	112.7	112.7	109.3	109.3	109.3	104.8	104.8	104.8	96.8	96.8	96.8	87.7	87.7	87.7	
		SHC	43.1	59	75	41.9	58.5	75.2	40.7	58	75.4	38.1	55.7	73.2	35.2	52.8	70.4	
		76	TC	-	117.6	117.6	-	113.9	113.9	-	110.2	110.2	-	105.2	105.2	-	97.2	97.2
			SHC	-	45.4	63	-	44.2	61.5	-	43.1	60.5	-	41.8	59.4	-	39.5	57.2
3825 Cfm	EAT (wb)	58	TC	100.5	100.5	114.2	95.1	95.1	107.9	88.9	88.9	100.8	82.2	82.2	93.3	75.3	75.3	85.5
			SHC	86.7	100.5	114.2	82.3	95.1	107.9	76.9	88.9	100.8	71.1	82.2	93.3	65.2	75.3	85.5
		62	TC	100.6	100.6	119	95.4	95.4	112.5	89	89	105	82.3	82.3	97.1	75.4	75.4	89
			SHC	82.3	100.6	119	78.2	95.4	112.5	72.9	89	105	67.5	82.3	97.1	61.8	75.4	89
		67	TC	107.3	107.3	107.3	103.1	103.1	103.1	95.1	95.1	99.8	86.3	86.3	96.4	77.3	77.3	92.6
		SHC	64.1	82.2	100.2	63.4	82.7	102	60.8	80.3	99.8	57.6	77	96.4	54.2	73.4	92.6	
	72	TC	113.8	113.8	113.8	110.3	110.3	110.3	106.3	106.3	106.3	98.5	98.5	98.5	89.3	89.3	89.3	
		SHC	44	61.2	78.3	42.7	60.8	78.9	41.8	61	80.1	39.5	59	78.5	36.6	56.2	75.7	
		76	TC	-	118.6	118.6	-	114.8	114.8	-	110.9	110.9	-	106.3	106.3	-	98.5	98.5
			SHC	-	46.4	65.1	-	45.2	63.9	-	44.2	63	-	43.2	62.5	-	41.1	60.7
4250 Cfm	EAT (wb)	58	TC	103.2	103.2	117.2	98.5	98.5	111.8	92.2	92.2	104.6	85.3	85.3	96.8	78.1	78.1	88.7
			SHC	89.1	103.2	117.2	85.2	98.5	111.8	79.7	92.2	104.6	73.8	85.3	96.8	67.6	78.1	88.7
		62	TC	103.2	103.2	121.8	98.6	98.6	116.3	92.3	92.3	108.9	85.4	85.4	100.7	78.2	78.2	92.3
			SHC	84.6	103.2	121.8	80.8	98.6	116.3	75.6	92.3	108.9	70	85.4	100.7	64.1	78.2	92.3
		67	TC	108.3	108.3	108.3	104.5	104.5	108.3	96.8	96.8	106.7	88	88	103.2	79.3	79.3	97.6
		SHC	66.5	86	105.5	66.3	87.3	108.3	64	85.3	106.7	60.7	82	103.2	56.6	77.1	97.6	
	72	TC	114.7	114.7	114.7	111.1	111.1	111.1	107.3	107.3	107.3	99.9	99.9	99.9	90.6	90.6	90.6	
		SHC	44.8	63.1	81.5	43.5	62.9	82.3	42.8	63.5	84.2	40.7	62.1	83.5	37.9	59.4	81	
		76	TC	-	119.4	119.4	-	115.5	115.5	-	111.4	111.4	-	107.1	107.1	-	99.5	99.5
			SHC	-	47.3	67	-	46.2	66	-	45.2	65.3	-	44.5	65.3	-	42.6	63.9

**LEGEND**

- Do not operate in this region
- 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 (1000 Btuh) Gross
- TC - Total Capacity (1000 Btuh) Gross

**Table 29 – COOLING CAPACITIES**

**2-STAGE COOLING**

**10 TONS**

RHH120			AMBIENT TEMPERATURE (F)															
			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	EAT (wb)	58	TC	106.0	106.0	119.9	102.0	102.0	115.3	97.6	97.6	110.4	92.9	92.9	105.0	87.5	87.5	98.9
			SHC	92.2	106.0	119.9	88.6	102.0	115.3	84.9	97.6	110.4	80.7	92.9	105.0	76.1	87.5	98.9
		62	TC	112.3	112.3	113.3	107.1	107.1	110.7	101.5	101.5	107.9	95.4	95.4	104.7	88.9	88.9	100.5
			SHC	83.4	98.3	113.3	80.8	95.8	110.7	78.1	93.0	107.9	75.1	89.9	104.7	71.5	86.0	100.5
		67	TC	123.3	123.3	123.3	117.6	117.6	117.6	111.4	111.4	111.4	104.5	104.5	104.5	97.0	97.0	97.0
	SHC		69.2	84.3	99.3	66.7	81.7	96.8	64.1	79.1	94.1	61.2	76.2	91.2	58.0	73.0	88.0	
	72	TC	135.2	135.2	135.2	128.8	128.8	128.8	121.9	121.9	121.9	114.4	114.4	114.4	106.2	106.2	106.2	
		SHC	54.5	69.8	85.0	52.0	67.3	82.5	49.4	64.6	79.8	46.5	61.7	76.8	43.4	58.5	73.6	
	76	TC	-	145.1	145.1	-	138.2	138.2	-	130.7	130.7	-	122.6	122.6	-	113.7	113.7	
		SHC	-	57.9	74.3	-	55.4	71.8	-	52.8	69.1	-	50.0	66.1	-	46.9	62.8	
3500 Cfm	EAT (wb)	58	TC	111.6	111.6	126.2	107.3	107.3	121.4	102.6	102.6	116.0	97.4	97.4	110.2	91.6	91.6	103.6
			SHC	97.1	111.6	126.2	93.3	107.3	121.4	89.2	102.6	116.0	84.7	97.4	110.2	79.6	91.6	103.6
		62	TC	115.9	115.9	123.6	110.5	110.5	120.7	104.6	104.6	117.4	98.6	98.6	112.5	92.1	92.1	106.9
			SHC	89.4	106.5	123.6	86.7	103.7	120.7	83.7	100.5	117.4	79.8	96.1	112.5	75.4	91.2	106.9
		67	TC	127.0	127.0	127.0	120.9	120.9	120.9	114.3	114.3	114.3	107.1	107.1	107.1	99.2	99.2	99.2
	SHC		73.2	90.5	107.8	70.7	87.9	105.2	67.9	85.1	102.4	64.9	82.2	99.4	61.7	78.9	96.1	
	72	TC	139.1	139.1	139.1	132.3	132.3	132.3	125.0	125.0	125.0	117.0	117.0	117.0	108.4	108.4	108.4	
		SHC	56.4	73.8	91.3	53.8	71.2	88.6	51.1	68.4	85.8	48.1	65.4	82.8	44.9	62.2	79.5	
	76	TC	-	149.0	149.0	-	141.7	141.7	-	133.8	133.8	-	125.2	125.2	-	-	-	
		SHC	-	60.3	79.1	-	57.7	76.3	-	54.9	73.3	-	52.0	70.1	-	-	-	
4000 Cfm	EAT (wb)	58	TC	116.5	116.5	131.7	111.8	111.8	126.5	106.8	106.8	120.7	101.2	101.2	114.4	95.0	95.0	107.4
			SHC	101.2	116.5	131.7	97.2	111.8	126.5	92.8	106.8	120.7	88.0	101.2	114.4	82.5	95.0	107.4
		62	TC	118.9	118.9	133.1	113.5	113.5	128.6	107.8	107.8	123.8	101.7	101.7	118.4	95.1	95.1	111.7
			SHC	94.9	114.0	133.1	91.4	110.0	128.6	87.6	105.7	123.8	83.4	100.9	118.4	78.5	95.1	111.7
		67	TC	129.9	129.9	129.9	123.5	123.5	123.5	116.6	116.6	116.6	109.1	109.1	109.1	100.9	100.9	103.8
	SHC		77.0	96.4	115.9	74.4	93.8	113.2	71.5	90.9	110.3	68.5	87.8	107.2	65.2	84.5	103.8	
	72	TC	142.0	142.0	142.0	135.0	135.0	135.0	127.3	127.3	127.3	119.1	119.1	119.1	110.1	110.1	110.1	
		SHC	58.0	77.6	97.2	55.4	74.9	94.5	52.6	72.1	91.6	49.6	69.0	88.5	46.3	65.7	85.1	
	76	TC	-	152.0	152.0	-	144.4	144.4	-	136.2	136.2	-	-	-	-	-	-	
		SHC	-	62.4	83.1	-	59.7	80.2	-	56.9	77.2	-	-	-	-	-	-	
4500 Cfm	EAT (wb)	58	TC	120.6	120.6	136.3	115.7	115.7	130.8	110.3	110.3	124.7	104.4	104.4	118.0	97.8	97.8	110.5
			SHC	104.8	120.6	136.3	100.5	115.7	130.8	95.9	110.3	124.7	90.7	104.4	118.0	85.0	97.8	110.5
		62	TC	122.1	122.1	139.4	116.6	116.6	134.6	110.6	110.6	129.9	104.4	104.4	122.7	97.8	97.8	114.9
			SHC	98.8	119.1	139.4	95.1	114.9	134.6	91.3	110.6	129.9	86.2	104.4	122.7	80.7	97.8	114.9
		67	TC	132.2	132.2	132.2	125.5	125.5	125.5	118.4	118.4	118.4	110.6	110.6	114.6	102.2	102.2	111.0
	SHC		80.6	102.1	123.7	77.8	99.4	120.9	74.9	96.4	117.9	71.8	93.2	114.6	68.4	89.7	111.0	
	72	TC	144.4	144.4	144.4	137.1	137.1	137.1	129.2	129.2	129.2	120.7	120.7	120.7	111.4	111.4	111.4	
		SHC	59.5	81.2	102.8	56.8	78.4	100.1	54.0	75.5	97.1	50.9	72.4	93.9	47.6	69.1	90.5	
	76	TC	-	154.4	154.4	-	146.5	146.5	-	138.0	138.0	-	-	-	-	-	-	
		SHC	-	64.2	86.9	-	61.5	84.0	-	58.7	81.0	-	-	-	-	-	-	
5000 Cfm	EAT (wb)	58	TC	124.1	124.1	140.4	119.0	119.0	134.5	113.3	113.3	128.1	107.1	107.1	121.1	100.1	100.1	113.2
			SHC	107.9	124.1	140.4	103.4	119.0	134.5	98.5	113.3	128.1	93.1	107.1	121.1	87.0	100.1	113.2
		62	TC	124.9	124.9	144.9	119.2	119.2	140.0	113.4	113.4	133.2	107.1	107.1	125.8	100.2	100.2	117.7
			SHC	102.2	123.6	144.9	98.4	119.2	140.0	93.6	113.4	133.2	88.4	107.1	125.8	82.7	100.2	117.7
		67	TC	134.0	134.0	134.0	127.2	127.2	128.2	119.8	119.8	125.1	111.9	111.9	121.6	103.3	103.3	117.6
	SHC		83.9	107.5	131.1	81.1	104.7	128.2	78.2	101.6	125.1	74.9	98.3	121.6	71.3	94.5	117.6	
	72	TC	146.3	146.3	146.3	138.8	138.8	138.8	130.7	130.7	130.7	121.9	121.9	121.9	112.5	112.5	112.5	
		SHC	60.9	84.6	108.3	58.1	81.8	105.4	55.2	78.8	102.4	52.2	75.6	99.1	48.8	72.2	95.6	
	76	TC	-	156.4	156.4	-	148.2	148.2	-	-	-	-	-	-	-	-	-	
		SHC	-	66.0	90.6	-	63.3	87.6	-	-	-	-	-	-	-	-	-	

**LEGEND**

- Do not operate in this region
- 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 (1000 Btuh) Gross
- TC - Total Capacity (1000 Btuh) Gross

**Table 30 – HEATING CAPACITIES**

**3 TONS**

RHH036											
RETURN AIR (°F db)	CFM (STANDARD AIR)		TEMPERATURE AIR ENTERING OUTDOOR COIL (°F db AT 70% RH)								
			-10	0	10	17	30	40	47	50	60
55	900	Capacity	///	13.3	17.2	20.0	26.0	31.3	35.6	37.0	42.7
		Int. Cap.	///	12.3	15.8	18.3	22.8	31.3	35.6	37.0	42.7
	1200	Capacity	///	13.8	17.8	20.8	27.0	32.8	36.9	38.3	44.1
		Int. Cap.	///	12.7	16.3	18.9	23.6	32.8	36.9	38.3	44.1
	1500	Capacity	///	///	18.7	21.8	28.2	34.0	38.1	39.4	45.1
		Int. Cap.	///	///	17.2	19.8	24.7	34.0	38.1	39.4	45.1
70	900	Capacity	7.5	11.0	14.9	17.8	23.6	28.5	32.7	34.2	40.4
		Int. Cap.	6.9	10.2	13.7	16.2	20.7	28.5	32.7	34.2	40.4
	1200	Capacity	7.9	11.6	15.6	18.6	24.7	29.9	34.6	36.0	41.9
		Int. Cap.	7.3	10.7	14.3	16.9	21.6	29.9	34.6	36.0	41.9
	1500	Capacity	8.7	12.4	16.5	19.6	25.8	31.3	35.9	37.3	43.1
		Int. Cap.	8.0	11.4	15.1	17.8	22.6	31.3	35.9	37.3	43.1
80	900	Capacity	5.7	9.3	13.2	16.1	21.9	26.8	30.5	32.1	38.4
		Int. Cap.	5.3	8.5	12.1	14.7	19.2	26.8	30.5	32.1	38.4
	1200	Capacity	6.1	9.8	13.9	16.9	22.9	28.1	32.3	33.9	40.3
		Int. Cap.	5.6	9.0	12.7	15.4	20.1	28.1	32.3	33.9	40.3
	1500	Capacity	6.8	10.6	14.8	17.9	24.1	29.4	34.0	35.6	41.6
		Int. Cap.	6.3	9.8	13.6	16.3	21.1	29.4	34.0	35.6	41.6

/// Indicates operation not permissible

**LEGEND**

- Capacity - Instantaneous Capacity (1000 Btu/h) includes indoor fan motor heat at AHRI static conditions
- Int. Cap. - Integrated Capacity is Instantaneous Capacity minus the effects of frost on the outdoor coil and the heat required to defrost
- RH - Relative Humidity
- db - Dry Bulb

**Table 31 – HEATING CAPACITIES**

**4 TONS**

RHH048											
RETURN AIR (°F db)	CFM (STANDARD AIR)		TEMPERATURE AIR ENTERING OUTDOOR COIL (°F db AT 70% RH)								
			-10	0	10	17	30	40	47	50	60
55	1200	Capacity	///	18.5	23.8	27.7	35.3	41.9	47.6	49.3	56.5
		Int. Cap.	///	17.1	21.8	25.2	30.9	41.9	47.6	49.3	56.5
	1600	Capacity	///	18.8	24.3	28.4	36.1	43.6	48.7	50.4	57.4
		Int. Cap.	///	17.3	22.3	25.9	31.6	43.6	48.7	50.4	57.4
	2000	Capacity	///	19.8	25.3	29.7	37.5	44.9	49.8	51.4	58.0
		Int. Cap.	///	18.2	23.2	27.1	32.9	44.9	49.8	51.4	58.0
70	1200	Capacity	10.9	16.2	21.4	25.2	32.8	38.9	44.0	46.0	54.0
		Int. Cap.	10.1	14.9	19.7	23.0	28.7	38.9	44.0	46.0	54.0
	1600	Capacity	11.2	16.6	22.0	25.9	34.0	40.0	46.1	48.0	55.2
		Int. Cap.	10.3	15.3	20.2	23.6	29.8	40.0	46.1	48.0	55.2
	2000	Capacity	12.1	17.7	23.2	27.1	35.2	41.8	47.7	49.4	56.2
		Int. Cap.	11.2	16.2	21.2	24.7	30.9	41.8	47.7	49.4	56.2
80	1200	Capacity	8.9	14.3	19.6	23.3	30.8	37.4	41.8	43.6	51.8
		Int. Cap.	8.2	13.1	18.0	21.3	27.0	37.4	41.8	43.6	51.8
	1600	Capacity	9.2	14.7	20.2	24.1	31.9	38.4	43.4	45.5	53.5
		Int. Cap.	8.5	13.6	18.6	22.0	28.0	38.4	43.4	45.5	53.5
	2000	Capacity	10.1	15.8	21.4	25.3	33.4	39.8	45.4	47.4	54.7
		Int. Cap.	9.4	14.5	19.6	23.1	29.2	39.8	45.4	47.4	54.7

/// Indicates operation not permissible

**LEGEND**

- Capacity - Instantaneous Capacity (1000 Btu/h) includes indoor fan motor heat at AHRI static conditions
- Int. Cap. - Integrated Capacity is Instantaneous Capacity minus the effects of frost on the outdoor coil and the heat required to defrost
- RH - Relative Humidity
- db - Dry Bulb

**Table 32 – HEATING CAPACITIES**

**5 TONS**

RHH060											
RETURN AIR (°F db)	CFM (STANDARD AIR)		TEMPERATURE AIR ENTERING OUTDOOR COIL (°F db AT 70% RH)								
			-10	0	10	17	30	40	47	50	60
55	1500	Capacity	///	22.0	28.5	33.3	43.5	51.4	58.0	60.1	68.6
		Int. Cap.	///	20.3	26.1	30.4	38.1	51.4	58.0	60.1	68.6
	2000	Capacity	///	23.9	30.5	35.5	45.7	54.1	60.4	62.3	69.9
		Int. Cap.	///	22.0	28.0	32.4	40.1	54.1	60.4	62.3	69.9
	2500	Capacity	///	25.0	31.7	36.9	47.1	55.2	60.7	62.3	68.8
		Int. Cap.	///	23.0	29.1	33.6	41.3	55.2	60.7	62.3	68.8
70	1500	Capacity	///	18.9	25.3	30.1	40.1	48.4	54.8	56.8	65.4
		Int. Cap.	///	17.4	23.3	27.5	35.2	48.4	54.8	56.8	65.4
	2000	Capacity	///	20.7	27.4	32.3	43.0	50.9	57.4	59.3	67.4
		Int. Cap.	///	19.1	25.1	29.4	37.7	50.9	57.4	59.3	67.4
	2500	Capacity	///	21.9	28.6	33.6	44.4	52.5	58.5	60.3	67.3
		Int. Cap.	///	20.1	26.3	30.7	38.9	52.5	58.5	60.3	67.3
80	1500	Capacity	10.3	16.5	23.1	27.8	37.4	46.2	52.4	54.7	63.2
		Int. Cap.	9.5	15.2	21.2	25.4	32.8	46.2	52.4	54.7	63.2
	2000	Capacity	12.0	18.4	25.1	30.0	40.1	48.9	55.2	57.4	65.4
		Int. Cap.	11.1	16.9	23.0	27.4	35.2	48.9	55.2	57.4	65.4
	2500	Capacity	13.0	19.5	26.3	31.4	41.9	50.5	56.6	58.4	65.7
		Int. Cap.	12.0	18.0	24.2	28.6	36.7	50.5	56.6	58.4	65.7

/// Indicates operation not permissible

**LEGEND**

- Capacity - Instantaneous Capacity (1000 Btu/h) includes indoor fan motor heat at AHRI static conditions
- Int. Cap. - Integrated Capacity is Instantaneous Capacity minus the effects of frost on the outdoor coil and the heat required to defrost
- RH - Relative Humidity
- db - Dry Bulb

**Table 33 – HEATING CAPACITIES**

**6 TONS**

RHH072											
RETURN AIR (°F db)	CFM (STANDARD AIR)		TEMPERATURE AIR ENTERING OUTDOOR COIL (°F db AT 70% RH)								
			-10	0	10	17	30	40	47	50	60
55	1800	Capacity	20.5	28.2	36.0	41.6	52.8	62.7	71.0	73.5	83.8
		Int. Cap.	19.0	25.9	33.0	38.0	46.3	62.7	71.0	73.5	83.8
	2400	Capacity	21.2	29.0	37.0	42.8	54.4	65.4	73.0	75.4	86.1
		Int. Cap.	19.6	26.7	34.0	39.1	47.7	65.4	73.0	75.4	86.1
	3000	Capacity	21.5	29.5	37.6	43.5	55.4	66.4	73.9	76.4	87.2
		Int. Cap.	19.9	27.1	34.5	39.7	48.5	66.4	73.9	76.4	87.2
70	1800	Capacity	15.8	23.6	31.6	37.3	48.5	57.7	65.5	68.5	79.7
		Int. Cap.	14.6	21.7	29.0	34.0	42.5	57.7	65.5	68.5	79.7
	2400	Capacity	16.4	24.6	32.8	38.7	50.2	60.1	68.9	71.7	82.3
		Int. Cap.	15.1	22.6	30.1	35.3	44.0	60.1	68.9	71.7	82.3
	3000	Capacity	16.8	25.1	33.5	39.5	51.3	61.6	70.5	73.0	83.6
		Int. Cap.	15.5	23.1	30.8	36.1	44.9	61.6	70.5	73.0	83.6
80	1800	Capacity	11.9	20.0	28.1	33.9	45.2	54.3	61.5	64.5	76.1
		Int. Cap.	11.0	18.4	25.8	30.9	39.6	54.3	61.5	64.5	76.1
	2400	Capacity	12.5	20.9	29.3	35.4	47.0	56.7	64.6	67.7	79.4
		Int. Cap.	11.5	19.2	26.9	32.3	41.2	56.7	64.6	67.7	79.4
	3000	Capacity	12.8	21.4	30.1	36.2	48.1	57.9	66.5	69.6	80.9
		Int. Cap.	11.8	19.7	27.6	33.0	42.1	57.9	66.5	69.6	80.9

Indicates standard rating point

**LEGEND**

- Capacity - Instantaneous Capacity (1000 Btu/h) includes indoor fan motor heat at AHRI static conditions
- Int. Cap. - Integrated Capacity is Instantaneous Capacity minus the effects of frost on the outdoor coil and the heat required to defrost
- RH - Relative Humidity
- db - Dry Bulb

**Table 34 – HEATING CAPACITIES**

**6 TONS**

RHH073											
RETURN AIR (°F db)	CFM (STANDARD AIR)		TEMPERATURE AIR ENTERING OUTDOOR COIL (°F db AT 70% RH)								
			-10	0	10	17	30	40	47	50	60
55	1500	Capacity	25.6	31.8	39.0	44.4	54.8	63.2	70.0	73.1	83.7
		Int. Cap.	23.7	29.3	35.8	40.5	48.0	63.2	70.0	73.1	83.7
	2000	Capacity	26.2	32.6	40.3	45.3	55.8	65.1	72.1	75.1	85.0
		Int. Cap.	24.2	30.0	37.0	41.3	48.9	65.1	72.1	75.1	85.0
	2500	Capacity	26.6	33.0	40.8	45.9	56.7	66.1	72.6	75.3	83.9
		Int. Cap.	24.6	30.4	37.5	41.9	49.7	66.1	72.6	75.3	83.9
70	1500	Capacity	22.5	28.8	35.5	41.0	51.5	59.8	66.2	69.2	79.8
		Int. Cap.	20.8	26.5	32.6	37.4	45.1	59.8	66.2	69.2	79.8
	2000	Capacity	23.1	29.6	36.5	42.7	52.9	61.6	68.3	71.5	81.5
		Int. Cap.	21.4	27.2	33.5	39.0	46.3	61.6	68.3	71.5	81.5
	2500	Capacity	23.5	30.1	37.2	43.4	53.7	62.6	69.4	72.3	81.3
		Int. Cap.	21.8	27.7	34.1	39.6	47.0	62.6	69.4	72.3	81.3
80	1500	Capacity	20.0	26.3	33.1	38.2	49.4	57.5	63.8	66.5	77.0
		Int. Cap.	18.5	24.2	30.4	34.8	43.3	57.5	63.8	66.5	77.0
	2000	Capacity	20.7	27.2	34.2	39.6	50.7	59.2	65.7	68.7	78.8
		Int. Cap.	19.1	25.0	31.4	36.1	44.4	59.2	65.7	68.7	78.8
	2500	Capacity	21.1	27.7	34.8	40.5	51.6	60.3	66.9	69.9	79.1
		Int. Cap.	19.5	25.5	31.9	36.9	45.2	60.3	66.9	69.9	79.1

Indicates standard rating point

**LEGEND**

- Capacity - Instantaneous Capacity (1000 Btu/h) includes indoor fan motor heat at AHRI static conditions
- Int. Cap. - Integrated Capacity is Instantaneous Capacity minus the effects of frost on the outdoor coil and the heat required to defrost
- RH - Relative Humidity
- db - Dry Bulb

**Table 35 – HEATING CAPACITIES**

**7.5 TONS**

RHH090											
RETURN AIR (°F db)	CFM (STANDARD AIR)		TEMPERATURE AIR ENTERING OUTDOOR COIL (°F db AT 70% RH)								
			-10	0	10	17	30	40	47	50	60
55	2250	Capacity	24.3	33.6	43.4	50.6	66.3	78.0	87.4	90.4	102.6
		Int. Cap.	22.4	30.9	39.8	46.2	58.1	78.0	87.4	90.4	102.6
	3000	Capacity	24.7	34.2	44.3	51.8	67.8	80.2	89.6	92.5	104.6
		Int. Cap.	22.8	31.5	40.7	47.3	59.4	80.2	89.6	92.5	104.6
	3750	Capacity	24.9	34.6	44.9	52.6	68.7	81.3	90.4	93.1	104.3
		Int. Cap.	23.1	31.9	41.2	48.0	60.2	81.3	90.4	93.1	104.3
70	2250	Capacity	20.3	29.6	39.3	46.5	60.8	73.8	82.7	85.9	98.3
		Int. Cap.	18.7	27.2	36.1	42.4	53.3	73.8	82.7	85.9	98.3
	3000	Capacity	20.8	30.4	40.5	47.9	63.4	75.9	85.4	88.5	100.6
		Int. Cap.	19.3	28.0	37.2	43.6	55.6	75.9	85.4	88.5	100.6
	3750	Capacity	21.2	31.0	41.2	48.7	64.8	77.2	86.8	89.8	101.4
		Int. Cap.	19.6	28.5	37.8	44.4	56.7	77.2	86.8	89.8	101.4
80	2250	Capacity	16.8	26.2	36.0	43.2	57.2	70.2	79.5	82.8	95.2
		Int. Cap.	15.5	24.1	33.0	39.4	50.1	70.2	79.5	82.8	95.2
	3000	Capacity	17.4	27.1	37.2	44.6	59.3	73.0	82.1	85.4	97.7
		Int. Cap.	16.1	24.9	34.2	40.7	52.0	73.0	82.1	85.4	97.7
	3750	Capacity	17.7	27.6	38.0	45.5	60.6	74.3	83.7	87.0	98.8
		Int. Cap.	16.4	25.4	34.9	41.5	53.1	74.3	83.7	87.0	98.8

Indicates standard rating point

**LEGEND**

- Capacity - Instantaneous Capacity (1000 Btu/h) includes indoor fan motor heat at AHRI static conditions
- Int. Cap. - Integrated Capacity is Instantaneous Capacity minus the effects of frost on the outdoor coil and the heat required to defrost
- RH - Relative Humidity
- db - Dry Bulb

**Table 36 – HEATING CAPACITIES**

**8.5 TONS**

RHH102											
RETURN AIR (°F db)	CFM (STANDARD AIR)		TEMPERATURE AIR ENTERING OUTDOOR COIL (°F db AT 70% RH)								
			-10	0	10	17	30	40	47	50	60
55	2250	Capacity	35.1	37.7	49.0	57.4	74.4	87.8	98.9	102.6	118.3
		Int. Cap.	32.5	34.7	45.0	52.3	65.2	87.8	98.9	102.6	118.3
	3400	Capacity	32.6	39.1	50.8	59.4	76.8	90.8	102.1	105.7	121.3
		Int. Cap.	30.1	36.0	46.6	54.1	67.3	90.8	102.1	105.7	121.3
	4250	Capacity	34.4	42.6	54.4	63.3	80.9	95.1	106.1	109.6	125.0
		Int. Cap.	31.8	39.2	50.0	57.7	70.9	95.1	106.1	109.6	125.0
70	2250	Capacity	35.2	33.3	44.5	52.8	69.3	83.1	93.6	97.3	112.9
		Int. Cap.	32.6	30.6	40.9	48.1	60.7	83.1	93.6	97.3	112.9
	3400	Capacity	35.6	34.9	46.5	55.0	72.5	86.1	97.1	100.8	116.2
		Int. Cap.	32.9	32.1	42.7	50.1	63.5	86.1	97.1	100.8	116.2
	4250	Capacity	38.2	38.6	50.3	59.0	76.7	90.5	101.6	105.2	120.2
		Int. Cap.	35.3	35.5	46.2	53.7	67.2	90.5	101.6	105.2	120.2
80	2250	Capacity	34.6	29.6	40.9	49.1	65.4	79.8	89.9	93.8	109.1
		Int. Cap.	32.0	27.2	37.5	44.8	57.3	79.8	89.9	93.8	109.1
	3400	Capacity	35.2	31.2	42.8	51.4	68.2	82.7	93.4	97.2	112.5
		Int. Cap.	32.5	28.7	39.3	46.8	59.8	82.7	93.4	97.2	112.5
	4250	Capacity	38.2	34.9	46.7	55.4	72.7	87.1	98.2	101.8	116.8
		Int. Cap.	35.3	32.1	42.9	50.5	63.7	87.1	98.2	101.8	116.8

Indicates standard rating point

**LEGEND**

- Capacity - Instantaneous Capacity (1000 Btu/h) includes indoor fan motor heat at AHRI static conditions
- Int. Cap. - Integrated Capacity is Instantaneous Capacity minus the effects of frost on the outdoor coil and the heat required to defrost
- RH - Relative Humidity
- db - Dry Bulb

**Table 37 – HEATING CAPACITIES**

**10 TONS**

RHH120											
RETURN AIR (°F db)	CFM (STANDARD AIR)		TEMPERATURE AIR ENTERING OUTDOOR COIL (°F db AT 70% RH)								
			-10	0	10	17	30	40	47	50	60
55	3000	Capacity	////	50.9	62.9	72.7	91.4	106.1	117.2	121.0	136.2
		Int. Cap.	////	46.8	57.8	66.3	80.1	106.1	117.2	121.0	136.2
	4000	Capacity	////	53.5	66.0	75.9	94.8	109.6	120.7	124.3	139.4
		Int. Cap.	////	49.2	60.6	69.2	83.0	109.6	120.7	124.3	139.4
	5000	Capacity	////	56.0	69.1	79.1	97.5	112.3	123.0	126.3	140.9
		Int. Cap.	////	51.5	63.4	72.1	85.4	112.3	123.0	126.3	140.9
70	3000	Capacity	////	45.8	57.9	66.9	86.4	101.6	112.2	116.3	131.2
		Int. Cap.	////	42.1	53.1	61.0	75.7	101.6	112.2	116.3	131.2
	4000	Capacity	////	48.5	60.9	70.4	90.4	105.1	116.1	120.0	134.8
		Int. Cap.	////	44.6	55.9	64.2	79.3	105.1	116.1	120.0	134.8
	5000	Capacity	////	51.1	63.7	73.6	93.5	108.0	118.9	122.5	137.0
		Int. Cap.	////	47.0	58.4	67.1	81.9	108.0	118.9	122.5	137.0
80	3000	Capacity	30.4	41.9	54.1	63.1	82.6	98.5	108.9	113.1	127.9
		Int. Cap.	28.1	38.6	49.6	57.6	72.3	98.5	108.9	113.1	127.9
	4000	Capacity	32.8	44.6	57.1	66.5	86.5	102.1	112.7	116.9	131.5
		Int. Cap.	30.4	41.1	52.4	60.6	75.8	102.1	112.7	116.9	131.5
	5000	Capacity	35.2	47.2	59.9	69.4	89.8	105.1	115.8	119.6	134.0
		Int. Cap.	32.6	43.5	55.0	63.3	78.7	105.1	115.8	119.6	134.0

Indicates standard rating point

////// Indicates operation not permissible

**LEGEND**

- Capacity - Instantaneous Capacity (1000 Btu/h) includes indoor fan motor heat at AHRI static conditions
- Int. Cap. - Integrated Capacity is Instantaneous Capacity minus the effects of frost on the outdoor coil and the heat required to defrost
- RH - Relative Humidity
- db - Dry Bulb



**Table 38 – STATIC PRESSURE ADDERS (FACTORY OPTIONS AND/OR ACCESSORIES)**

**Economizer**

3 - 5 TONS											
CFM (in. wg)	600	800	1000	1250	1500	1750	2000	2250	2500	2750	3000
Vertical Economizer	0.01	0.02	0.04	0.05	0.07	0.09	0.12	0.15	0.18	0.22	0.26
Horizontal Economizer	0.02	0.03	0.04	0.06	0.08	0.10	0.13	0.15	0.18	0.23	0.28

6 - 8.5 TONS																
CFM (in. wg)	2250	2500	2750	3000	3250	3500	3750	4000	4250	4500	4750	5000	5250	5500	5750	6000
Vertical Economizer	0.06	0.08	0.09	0.12	0.13	0.15	0.17	0.20	0.22	0.25	0.29	0.33	0.36	0.40	0.44	0.48
Horizontal Economizer	0.08	0.10	0.13	0.15	0.18	0.21	0.25	0.28	0.30	0.34	0.39	0.43	0.47	0.51	0.56	0.60

10 TONS																
CFM (in. wg)	2250	2500	2750	3000	3250	3500	3750	4000	4250	4500	4750	5000	5250	5500	5750	6000
Vertical Economizer	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.03	0.03	0.04	0.04	0.04	0.05	0.05
Horizontal Economizer	0.04	0.04	0.05	0.07	0.08	0.09	0.10	0.12	0.13	0.15	0.17	0.19	0.21	0.23	0.25	0.27

**Electric Heaters**

3 - 5 TONS										
CFM (in. wg)	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 - 8.5 TONS																
CFM (in. wg)	2250	2500	2750	3000	3250	3500	3750	4000	4250	4500	4750	5000	5250	5500	5750	6000
1 Electric Heater Module	0.03	0.04	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.18
2 Electric Heater Modules	0.04	0.05	0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.15	0.16	0.17	0.19	0.20

10 TONS																
CFM (in. wg)	2250	2500	2750	3000	3250	3500	3750	4000	4250	4500	4750	5000	5250	5500	5750	6000
Vertical 1 Electric Heater Module	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.04
Vertical 2 Electric Heater Modules	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.04	0.04	0.04	0.05	0.05	0.06	0.06	0.07	0.07
Horizontal 1 Electric Heater Module	0.02	0.02	0.03	0.03	0.03	0.04	0.04	0.05	0.05	0.05	0.06	0.06	0.07	0.07	0.08	0.08
Horizontal 2 Electric Heater Modules	0.02	0.02	0.02	0.03	0.03	0.03	0.04	0.04	0.04	0.05	0.05	0.05	0.06	0.06	0.07	0.07

## FAN 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, as shown in Table 38. 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, ICP recommended the lower horsepower option.
5. For information on the electrical properties of ICP motors, please see the Electrical information section of this book.
6. For more information on the performance limits of ICP motors, see the application data section of this book.

## FAN PERFORMANCE (cont)

**Table 39 – RHH036  
3 TON HORIZONTAL UNIT DIRECT DRIVE**

Speed (Torque) tap	CFM	ESP	BHP
1	900	0.57	0.25
	975	0.47	0.24
	1050	0.37	0.22
	1125	0.27	0.21
	1200	0.18	0.20
	1275	0.09	0.20
	1350	-	-
	1425	-	-
	1500	-	-
2	900	0.73	0.30
	975	0.62	0.29
	1050	0.51	0.28
	1125	0.41	0.27
	1200	0.30	0.25
	1275	0.19	0.24
	1350	0.08	0.22
	1425	-	-
	1500	-	-
3	900	1.04	0.41
	975	0.93	0.40
	1050	0.82	0.39
	1125	0.70	0.38
	1200	0.58	0.36
	1275	0.46	0.35
	1350	0.34	0.33
	1425	0.23	0.31
	1500	0.12	0.30
4	900	1.26	0.49
	975	1.18	0.50
	1050	1.09	0.50
	1125	0.99	0.50
	1200	0.88	0.49
	1275	0.76	0.47
	1350	0.63	0.46
	1425	0.50	0.44
	1500	0.37	0.42
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

**Table 40 – RHH036  
3 TON VERTICAL UNIT DIRECT DRIVE**

Speed (Torque) tap	CFM	ESP	BHP
1	900	0.44	0.19
	975	0.34	0.18
	1050	0.24	0.17
	1125	0.15	0.16
	1200	0.07	0.16
	1275	-	-
	1350	-	-
	1425	-	-
	1500	-	-
2	900	0.60	0.24
	975	0.49	0.23
	1050	0.38	0.22
	1125	0.28	0.21
	1200	0.18	0.20
	1275	0.09	0.19
	1350	-	-
	1425	-	-
	1500	-	-
3	900	0.93	0.36
	975	0.81	0.35
	1050	0.70	0.34
	1125	0.58	0.33
	1200	0.47	0.31
	1275	0.36	0.30
	1350	0.25	0.29
	1425	0.14	0.27
	1500	-	-
4	900	1.15	0.44
	975	1.07	0.45
	1050	0.97	0.46
	1125	0.86	0.46
	1200	0.74	0.43
	1275	0.61	0.41
	1350	0.48	0.40
	1425	0.35	0.39
	1500	0.23	0.37
5	900	1.24	0.51
	975	1.19	0.52
	1050	1.24	0.54
	1125	1.24	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

## FAN PERFORMANCE (cont)

**Table 41 – RHH048  
4 TON HORIZONTAL UNIT DIRECT DRIVE**

Speed (Torque) tap	CFM	ESP	BHP
1	1200	0.93	0.48
	1300	0.80	0.46
	1400	0.66	0.44
	1500	0.51	0.41
	1600	0.36	0.39
	1700	0.22	0.36
	1800	0.08	0.33
	1900	-	-
	2000	-	-
2	1200	1.04	0.53
	1300	0.91	0.51
	1400	0.76	0.48
	1500	0.61	0.46
	1600	0.45	0.43
	1700	0.30	0.40
	1800	0.16	0.38
	1900	0.04	0.35
	2000	-	-
3	1200	1.18	0.58
	1300	1.09	0.59
	1400	0.98	0.60
	1500	0.86	0.60
	1600	0.72	0.57
	1700	0.57	0.54
	1800	0.42	0.51
	1900	0.28	0.48
	2000	0.15	0.45
4	1200	1.24	0.60
	1300	1.18	0.63
	1400	1.12	0.66
	1500	1.04	0.71
	1600	0.95	0.70
	1700	0.85	0.71
	1800	0.73	0.71
	1900	0.60	0.69
	2000	0.45	0.65
5	1200	1.25	0.61
	1300	1.20	0.65
	1400	1.12	0.68
	1500	1.04	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

**Table 42 – RHH048  
4 TON VERTICAL UNIT DIRECT DRIVE**

Speed (Torque) tap	CFM	ESP	BHP
1	1200	0.87	0.43
	1300	0.73	0.41
	1400	0.59	0.39
	1500	0.43	0.37
	1600	0.27	0.34
	1700	0.12	0.33
	1800	-	-
	1900	-	-
	2000	-	-
2	1200	0.96	0.48
	1300	0.84	0.46
	1400	0.69	0.44
	1500	0.53	0.41
	1600	0.37	0.39
	1700	0.21	0.36
	1800	0.06	0.34
	1900	-	-
	2000	-	-
3	1200	1.13	0.53
	1300	1.06	0.53
	1400	0.98	0.54
	1500	0.88	0.56
	1600	0.76	0.54
	1700	0.62	0.52
	1800	0.47	0.50
	1900	0.31	0.47
	2000	0.15	0.45
4	1200	1.16	0.57
	1300	1.12	0.59
	1400	1.07	0.62
	1500	1.00	0.67
	1600	0.91	0.66
	1700	0.80	0.67
	1800	0.67	0.67
	1900	0.52	0.63
	2000	0.35	0.61
5	1200	1.16	0.59
	1300	1.11	0.63
	1400	1.01	0.67
	1500	0.91	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

## FAN PERFORMANCE (cont)

**Table 43 – RHH060  
5 TON HORIZONTAL UNIT DIRECT DRIVE**

Speed (Torque) tap	CFM	ESP	BHP
1	1500	0.37	0.35
	1625	0.22	0.33
	1750	0.08	0.31
	1875	-	-
	2000	-	-
	2125	-	-
	2250	-	-
	2375	-	-
	2500	-	-
2	1500	0.54	0.44
	1625	0.37	0.41
	1750	0.20	0.38
	1875	0.04	0.35
	2000	-	-
	2125	-	-
	2250	-	-
	2375	-	-
	2500	-	-
3	1500	1.28	0.83
	1625	1.10	0.81
	1750	0.90	0.78
	1875	0.68	0.74
	2000	0.47	0.70
	2125	0.27	0.66
	2250	0.10	0.62
	2375	-	-
	2500	-	-
4	1500	1.46	0.94
	1625	1.32	0.92
	1750	1.16	0.96
	1875	0.96	0.95
	2000	0.76	0.91
	2125	0.54	0.86
	2250	0.33	0.82
	2375	0.14	0.78
	2500	0.00	0.72
5	1500	1.52	0.97
	1625	1.42	1.01
	1750	1.16	1.05
	1875	0.96	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 44 – RHH060  
5 TON VERTICAL UNIT DIRECT DRIVE**

Speed (Torque) tap	CFM	ESP	BHP
1	1500	0.27	0.32
	1625	0.13	0.30
	1750	-	-
	1875	-	-
	2000	-	-
	2125	-	-
	2250	-	-
	2375	-	-
	2500	-	-
2	1500	0.42	0.40
	1625	0.25	0.37
	1750	0.08	0.34
	1875	-	-
	2000	-	-
	2125	-	-
	2250	-	-
	2375	-	-
	2500	-	-
3	1500	1.11	0.79
	1625	0.91	0.76
	1750	0.70	0.74
	1875	0.50	0.70
	2000	0.30	0.67
	2125	0.12	0.63
	2250	-	-
	2375	-	-
	2500	-	-
4	1500	1.29	0.90
	1625	1.13	0.88
	1750	0.95	0.91
	1875	0.74	0.88
	2000	0.52	0.84
	2125	0.30	0.80
	2250	0.11	0.77
	2375	-	-
	2500	-	-
5	1500	1.36	0.94
	1625	1.24	0.99
	1750	0.95	1.02
	1875	0.74	1.05
	2000	0.74	1.03
	2125	0.53	0.99
	2250	0.31	0.94
	2375	0.08	0.90
	2500	-0.14	0.86

## FAN PERFORMANCE (cont)

**Table 45 – RHH036**

**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

Med Static Motor and Drive - 819-1251 RPM, Max BHP 1.5 (motor is new 1.7 HP)

High Static Motor and Drive - 1035-1466 RPM, Max BHP 2.0 (motor is 2.4 HP)

**Table 46 – RHH036**

**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	<b>1511</b>	<b>1.70</b>
975	1186	0.89	1275	1.08	1358	1.29	1437	1.51	<b>1513</b>	<b>1.74</b>
1050	1194	0.92	1281	1.12	1363	1.32	1441	1.54	<b>1516</b>	<b>1.78</b>
1125	1204	0.97	1289	1.16	1370	1.37	1447	1.59	<b>1520</b>	<b>1.82</b>
1200	1215	1.01	1298	1.21	1378	1.42	1454	1.64	<b>1526</b>	<b>1.87</b>
1275	1227	1.06	1309	1.26	1387	1.47	1462	1.69	<b>1533</b>	<b>1.92</b>
1350	1240	1.12	1321	1.32	1397	1.53	<b>1471</b>	<b>1.75</b>	<b>1541</b>	<b>1.99</b>
1425	1254	1.18	1333	1.38	1409	1.59	<b>1481</b>	<b>1.82</b>	-	-
1500	1270	1.24	1347	1.45	1421	1.66	<b>1492</b>	<b>1.89</b>	-	-

Med Static Motor and Drive - 819-1251 RPM, Max BHP 1.5 (motor is new 1.7 HP)

High Static Motor and Drive - 1035-1466 RPM, Max BHP 2.0

**Boldface** - Field-supplied drive recommended using fan pulley (KR11AZ606), motor pulley (KR11HY191), and belt (KR29AF043)

# FAN PERFORMANCE (cont)

**Table 47 – RHH048**

**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	630	0.20	755	0.31	859	0.43	949	0.56	1030	0.70
1300	659	0.24	781	0.36	883	0.48	972	0.61	1052	0.76
1400	689	0.28	808	0.40	908	0.53	995	0.67	1075	0.82
1500	720	0.33	836	0.46	933	0.59	1020	0.74	1098	0.89
1600	752	0.38	864	0.52	960	0.66	1044	0.81	1121	0.97
1700	784	0.44	893	0.58	986	0.73	1070	0.89	1146	1.05
1800	816	0.50	922	0.65	1014	0.81	1096	0.97	1171	1.14
1900	849	0.58	952	0.73	1042	0.90	1122	1.07	1196	1.24
2000	882	0.66	982	0.82	1070	0.99	1149	1.17	1222	1.35

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	1104	0.84	1173	0.99	1237	1.15	1298	1.32	1356	1.49
1300	1125	0.91	1194	1.06	1258	1.23	1318	1.40	1375	1.58
1400	1147	0.98	1215	1.14	1278	1.31	1338	1.48	1395	1.67
1500	1170	1.05	1237	1.22	1299	1.39	1359	1.57	1416	1.76
1600	1193	1.13	1259	1.31	1321	1.49	1380	1.67	1437	1.86
1700	1216	1.22	1282	1.40	1344	1.59	1402	1.78	1458	1.97
1800	1240	1.32	1305	1.50	1366	1.69	1424	1.89	1480	2.09
1900	1265	1.43	1329	1.61	1390	1.81	1447	2.01	1502	2.22
2000	1290	1.54	1353	1.73	1413	1.93	1470	2.14	1525	2.35

*Italics* - Field-supplied motor and drive required recommended using motor (HD58FE651-230/460V or HD58FE576-575V), fan pulley (KR11AZ606), motor pulley (KR11HY213), and belt (KR29AF043)

Med Static - 920-1303 RPM, Max BHP 1.5 (motor new 1.7 HP)

High Static - 1035-1466 RPM, Max BHP 2.0 (motor 2.4 HP)

**Table 48 – RHH048**

**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	682	0.25	800	0.36	897	0.48	982	0.61	1058	0.75
1300	717	0.29	832	0.42	928	0.55	1011	0.68	1086	0.82
1400	753	0.34	865	0.48	958	0.61	1041	0.76	1115	0.91
1500	789	0.40	898	0.54	990	0.69	1071	0.84	1144	1.00
1600	826	0.47	932	0.62	1022	0.77	1102	0.93	1174	1.09
1700	863	0.54	966	0.70	1055	0.86	1133	1.03	1205	1.20
1800	901	0.62	1001	0.79	1088	0.96	1165	1.13	1235	1.31
1900	939	0.71	1037	0.89	1121	1.07	1197	1.25	1267	1.44
2000	978	0.81	1073	0.99	1156	1.18	1230	1.37	1299	1.57

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
1200	1128	0.89	1192	1.03	1252	1.18	1309	1.34	1363	1.50
1300	1155	0.97	1219	1.12	1279	1.28	1336	1.44	1389	1.61
1400	1183	1.06	1247	1.22	1306	1.38	1362	1.55	1416	1.72
1500	1212	1.16	1275	1.32	1334	1.49	1389	1.67	1443	1.85
1600	1241	1.26	1303	1.43	1362	1.61	1417	1.79	1470	1.98
1700	1271	1.37	1332	1.55	1390	1.74	1445	1.93	1498	2.12
1800	1301	1.50	1362	1.68	1419	1.87	1474	2.07	1526	2.27
1900	1331	1.63	1392	1.82	1449	2.02	1503	2.22	-	-
2000	1362	1.77	1422	1.97	1478	2.18	1532	2.38	-	-

*Italics* - Field-supplied motor and drive required recommended using motor (HD58FE651-230/460V or HD58FE576-575V), fan pulley (KR11AD561), motor pulley (KR11HY184), and belt (KR29AF041)

Med Static - 920-1303 RPM, Max BHP 1.5 (motor new 1.7 HP)

High Static - 1035-1466 RPM, Max BHP 2.0 (motor 2.4 HP)

# FAN PERFORMANCE (cont)

**Table 49 – RHH060**

**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	-	-
2250	1359	1.87	1420	2.08	1479	2.29	1534	2.51	-	-
2375	1393	2.05	1453	2.27	1511	2.49	-	-	-	-
2500	1427	2.24	1487	2.47	1543	2.70	-	-	-	-

Med Static - 1066-1380 RPM, Max BHP 2.0 (motor is new 2.4 HP)

High Static - 1208-1550 RPM, Max BHP 2.9 (motor is 2.9 HP)

**Table 50 – RHH060**

**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	-	-
2125	1406	1.97	1464	2.18	1520	2.40	-	-	-	-
2250	1446	2.18	1504	2.40	-	-	-	-	-	-
2375	1487	2.40	1544	2.63	-	-	-	-	-	-
2500	1529	2.64	-	-	-	-	-	-	-	-

Med Static - 1066-1380 RPM, Max BHP 2.0 (motor is new 2.4 HP)

High Static - 1208-1550 RPM, Max BHP 2.9 (motor is 2.9 HP)



# FAN PERFORMANCE (cont)

**Table 51 – RHH072/073**

**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

Std Static - 489-747 RPM, Max BHP 1.2 (motor is 1.7 HP)

Med Static - 733-949 RPM, Max BHP 2.9 (motor is 2.9 HP)

High Static - 909-1102 RPM, Max BHP 4.0 (motor is 4.9 HP)

**Table 52 – RHH072/073**

**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

Std Static - 489-747 RPM, Max BHP 1.2 (motor is 1.7 HP)

Med Static - 733-949 RPM, Max BHP 2.9 (motor is 2.9 HP)

High Static - 909-1102 RPM, Max BHP 4.0 (motor is 4.9 HP)

# FAN PERFORMANCE (cont)

**Table 53 – RHH090**

**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

Std Static - 518-733 RPM, Max BHP 1.2 (motor is 1.7 HP)

Med Static - 690-936 RPM, Max BHP 1.7 (motor is 2.4 HP)

High Static - 838-1084 RPM, Max BHP 2.8 (motor is 3.7 HP)

**Table 54 – RHH090**

**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	457	0.32	536	0.44	604	0.55	664	0.67	719	0.79
2438	481	0.39	557	0.51	623	0.64	682	0.77	735	0.89
2625	505	0.47	578	0.60	642	0.73	700	0.87	753	1.00
2813	530	0.55	601	0.70	663	0.84	719	0.98	771	1.13
3000	556	0.65	623	0.80	684	0.95	738	1.11	789	1.26
3188	582	0.76	647	0.92	705	1.08	759	1.25	808	1.41
3375	608	0.88	671	1.05	727	1.22	779	1.40	828	1.57
3563	634	1.01	695	1.19	750	1.38	801	1.56	848	1.74
3750	661	1.16	719	1.35	773	1.54	822	1.73	869	1.93

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	770	0.91	817	1.03	861	1.15	903	1.28	943	1.40
2438	785	1.02	832	1.15	876	1.28	917	1.41	957	1.55
2625	802	1.14	847	1.28	891	1.42	932	1.56	971	1.70
2813	819	1.27	864	1.42	907	1.57	947	1.72	986	1.87
3000	836	1.42	881	1.57	923	1.73	963	1.89	1001	2.05
3188	855	1.57	898	1.74	940	1.90	979	2.07	1017	2.24
3375	873	1.74	916	1.91	957	2.09	996	2.26	1034	2.44
3563	893	1.92	935	2.11	975	2.29	1014	2.47	1051	2.66
3750	912	2.12	954	2.31	994	2.50	1031	2.70	1068	2.89

Std Static Motor and Drive - 518-733 RPM, Max BHP 1.2

Med Static Motor and Drive - 690-936 RPM, Max BHP 1.7

High Static Motor and Drive - 838-1084 RPM, Max BHP 2.8

# FAN PERFORMANCE (cont)

**Table 55 – RHH102**
**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
2550	468	0.39	546	0.52	618	0.66	684	0.80	747	0.96
2763	493	0.47	567	0.61	635	0.76	699	0.91	760	1.07
2975	520	0.57	589	0.72	654	0.87	716	1.03	774	1.20
3188	547	0.68	613	0.83	675	1.00	733	1.17	789	1.34
3400	575	0.80	637	0.96	696	1.14	752	1.31	806	1.50
3613	603	0.94	662	1.11	719	1.29	773	1.48	824	1.67
3825	631	1.09	688	1.27	742	1.46	794	1.66	843	1.86
4038	660	1.26	714	1.45	766	1.65	816	1.85	864	2.06
4250	689	1.45	741	1.65	790	1.86	838	2.07	885	2.29

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
2550	806	1.11	863	1.28	916	1.45	968	1.62	1018	1.80
2763	817	1.24	871	1.41	924	1.59	974	1.77	1022	1.95
2975	829	1.37	882	1.55	932	1.74	981	1.93	1028	2.12
3188	843	1.53	894	1.71	943	1.90	990	2.10	1036	2.30
3400	858	1.69	907	1.88	955	2.09	1001	2.29	1046	2.50
3613	874	1.87	922	2.07	968	2.28	1013	2.49	1057	2.71
3825	891	2.07	938	2.28	983	2.49	1027	2.71	-	-
4038	910	2.28	955	2.50	999	2.72	-	-	-	-
4250	930	2.51	973	2.74	-	-	-	-	-	-

Std static - 440-609 RPM, Max BHP 1.7 (motor is 2.4 HP)

Med static - 591-838 RPM, Max BHP 2.9 (motor is 2.9 HP)

High static - 838-1084 RPM, Max BHP 2.8 (motor is 3.7 HP)

**Table 56 – RHH102**
**8.5 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
2550	495	0.43	570	0.56	634	0.70	693	0.83	746	0.96
2763	524	0.53	595	0.67	657	0.81	714	0.95	766	1.09
2975	552	0.63	620	0.79	681	0.94	736	1.09	787	1.24
3188	582	0.76	647	0.92	705	1.08	759	1.25	808	1.41
3400	611	0.89	674	1.07	730	1.24	782	1.42	831	1.59
3613	641	1.05	701	1.23	756	1.42	806	1.60	854	1.79
3825	672	1.22	729	1.42	782	1.61	831	1.81	877	2.00
4038	702	1.41	758	1.62	809	1.83	857	2.03	901	2.24
4250	733	1.62	787	1.84	836	2.06	883	2.28	926	2.49

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
2550	795	1.09	841	1.23	885	1.36	926	1.50	965	1.64
2763	814	1.24	859	1.38	902	1.53	943	1.68	982	1.82
2975	834	1.40	878	1.55	921	1.71	961	1.86	999	2.02
3188	855	1.57	898	1.74	940	1.90	979	2.07	1017	2.24
3400	876	1.76	919	1.94	960	2.12	998	2.29	1036	2.47
3613	898	1.97	940	2.16	980	2.34	1018	2.53	1055	2.72
3825	921	2.20	962	2.40	1001	2.59	1039	2.79	-	-
4038	944	2.45	984	2.65	-	-	-	-	-	-
4250	968	2.71	1007	2.93	-	-	-	-	-	-

Std static - 440-609 RPM, Max BHP 1.7 (motor is 2.4 HP)

Med static - 591-838 RPM, Max BHP 2.9 (motor is 2.9 HP)

High static - 838-1084 RPM, Max BHP 2.8 (motor is 3.7 HP)

# FAN PERFORMANCE (cont)

**Table 57 – RHH120**

**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	<b>335</b>	<b>0.32</b>	<b>421</b>	<b>0.51</b>	500	0.74	572	1.00	637	1.29
3250	<b>350</b>	<b>0.38</b>	<b>430</b>	<b>0.58</b>	505	0.81	575	1.08	640	1.37
3500	<b>365</b>	<b>0.45</b>	441	0.65	512	0.89	579	1.16	642	1.46
3750	<b>381</b>	<b>0.53</b>	452	0.74	520	0.98	584	1.26	645	1.56
4000	<b>397</b>	<b>0.61</b>	464	0.83	529	1.08	590	1.36	650	1.67
4250	<b>413</b>	<b>0.70</b>	477	0.93	538	1.19	598	1.47	655	1.78
4500	<b>429</b>	<b>0.81</b>	491	1.05	549	1.31	606	1.60	661	1.91
4750	445	0.92	505	1.17	561	1.44	615	1.73	667	2.05
5000	462	1.04	519	1.30	573	1.58	625	1.88	675	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
3000	697	1.59	751	1.91	801	2.24	847	2.59	891	2.94
3250	699	1.68	753	2.01	803	2.35	850	2.71	895	3.08
3500	701	1.78	755	2.12	806	2.47	853	2.84	898	3.22
3750	703	1.88	757	2.23	808	2.59	855	2.97	900	3.36
4000	706	2.00	759	2.35	809	2.72	857	3.11	902	3.51
4250	709	2.12	761	2.48	811	2.86	858	3.25	903	3.66
4500	714	2.25	765	2.62	813	3.00	860	3.40	905	3.82
4750	719	2.40	768	2.77	816	3.15	862	3.56	906	3.99
5000	725	2.55	773	2.93	820	3.32	865	3.73	908	4.16

\* Notes same as Vertical - see below

**Table 58 – RHH120**

**10 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	<b>383</b>	<b>0.39</b>	470	0.60	549	0.85	620	1.13	684	1.42
3250	<b>402</b>	<b>0.47</b>	483	0.68	559	0.94	629	1.22	692	1.53
3500	<b>421</b>	<b>0.55</b>	498	0.78	570	1.04	637	1.33	699	1.65
3750	441	0.65	513	0.88	582	1.15	647	1.45	707	1.78
4000	461	0.75	529	0.99	594	1.27	657	1.58	716	1.91
4250	481	0.87	545	1.12	608	1.41	668	1.72	725	2.06
4500	502	1.01	563	1.26	622	1.55	680	1.88	735	2.22
4750	522	1.15	581	1.42	637	1.72	693	2.05	746	2.40
5000	543	1.31	599	1.59	653	1.90	706	2.23	<i>758</i>	<i>2.59</i>

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	742	1.73	795	2.05	845	2.38	891	2.73	935	3.08
3250	749	1.85	802	2.19	852	2.54	899	2.89	943	3.26
3500	756	1.98	809	2.33	859	2.69	906	3.06	950	3.45
3750	764	2.12	816	2.48	866	2.86	912	3.24	956	3.64
4000	771	2.27	824	2.64	873	3.03	919	3.42	963	3.83
4250	780	2.43	831	2.81	880	3.21	926	3.62	<i>970</i>	<i>4.04</i>
4500	788	2.60	839	2.99	887	3.40	933	3.82	<i>976</i>	<i>4.25</i>
4750	798	2.78	847	3.18	895	3.60	940	4.03	<i>983</i>	<i>4.47</i>
5000	808	2.98	856	3.38	903	3.81	947	4.25	<i>990</i>	<i>4.71</i>

- Std Static - 440-609 RPM, Max BHP 1.9 (motor is 2.4 HP)
- Med Static - 547-757 RPM, Max BHP 2.9 (motor is 2.9 HP)
- High Static - 762-963 RPM, Max BHP 6.5<sup>‡</sup> (motor is 5.0 HP)

**Boldface** - Field-supplied drive (motor pulley = KR11HY151, use belt and blower pulley from standard static), rpm range = 338-507  
*Italics* - Field-supplied drive (motor pulley = KR11HY186, blower pulley = KR51BJ413, belt = KR30BE072, use medium static motor), rpm range = 684-864  
Underline - Field-supplied (motor pulley = KR11HY194, blower pulley = KR51BJ413, belt = KR30BE072, use high static motor), rpm range = 846-1061

<sup>‡</sup> On RHH120 units, Max BHP for the High-Static High-Efficiency motor varies with the motor's voltage; see the table below.

Voltage	BHP
208	6.5
230	6.9
460	7.0
575	8.3

## FAN PERFORMANCE (cont)

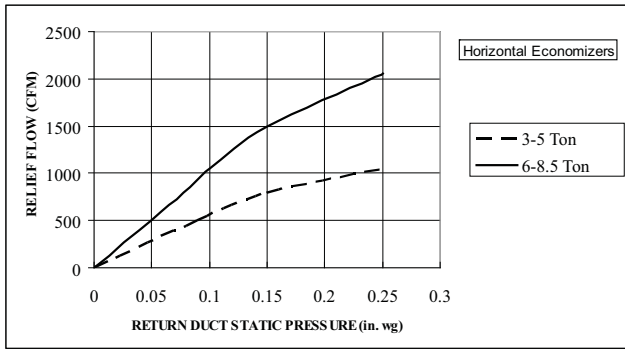
**Table 59 – PULLEY ADJUSTMENT - BELT DRIVE**

RHH Unit Size		Motor/Drive Combo	Motor Pulley turns open										
			0	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5
036	3 phase	Medium Static	1251	1208	1165	1121	1078	1035	992	949	905	862	819
		High Static	1466	1423	1380	1337	1294	1251	1207	1164	1121	1078	1035
048	3 phase	Medium Static	1303	1265	1226	1188	1150	1112	1073	1035	997	958	920
		High Static	1466	1423	1380	1337	1294	1251	1207	1164	1121	1078	1035
060	3 phase	Medium Static	1380	1349	1317	1286	1254	1223	1192	1160	1129	1097	1066
		High Static	1639	1596	1553	1510	1467	1424	1380	1337	1294	1251	1208
072/ 073	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
090	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
102	3 phase	Standard Static	652	633	614	594	575	556	537	518	498	479	460
		Medium Static	838	813	789	764	739	715	690	665	640	616	591
		High Static	1084	1059	1035	1010	986	961	936	912	887	863	838
120	3 phase	Standard Static	609	592	575	558	541	525	508	491	474	457	440
		Medium Static	757	736	715	694	673	652	631	610	589	568	547
		High Static	963	943	923	903	883	863	842	822	802	782	762

**NOTE:** Do not adjust pulley further than 5 turns open.

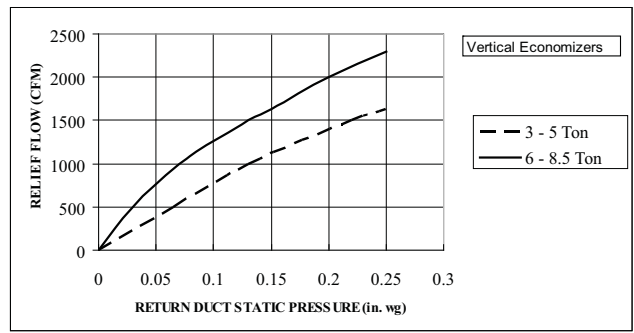
■ - Factory settings

# ECONOMIZER, BAROMETRIC RELIEF AND PE PERFORMANCE



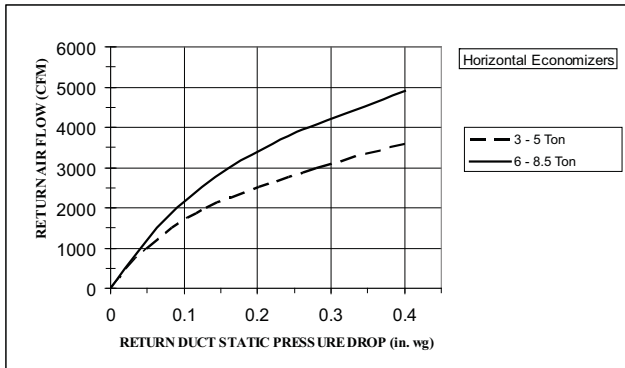
C10612

**Fig. 16 - Barometric Relief Flow Capacity**



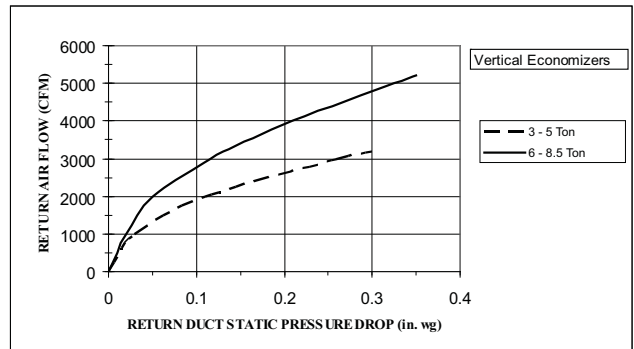
C10616

**Fig. 19 - Barometric Relief Flow Capacity**



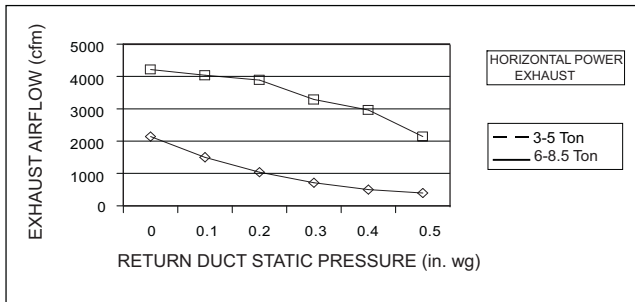
C10614

**Fig. 17 - Return Air Pressure Drop**



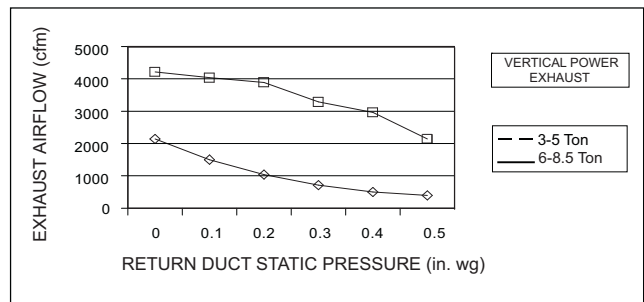
C10618

**Fig. 20 - Return Air Pressure Drop**



C10615

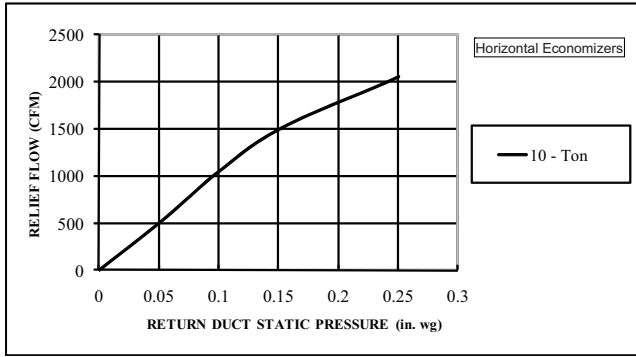
**Fig. 18 - Horizontal Power Exhaust Performance**



C10619

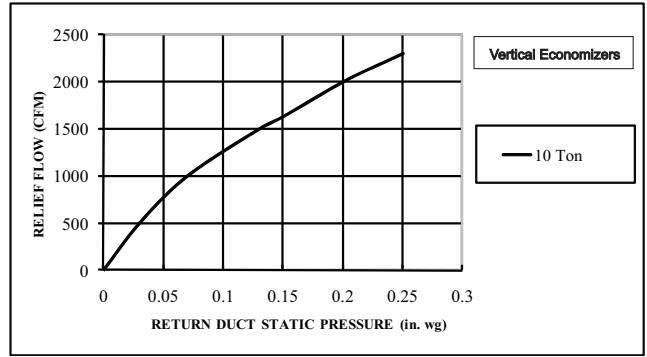
**Fig. 21 - Vertical Power Exhaust Performance**

# ECONOMIZER, BAROMETRIC RELIEF AND PE PERFORMANCE (cont)



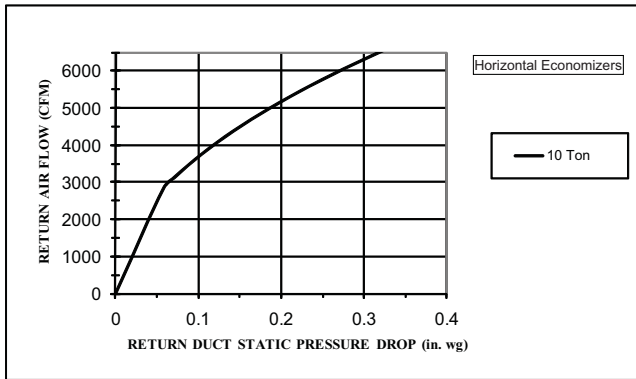
C101018

**Fig. 22 - Barometric Relief Flow Capacity**



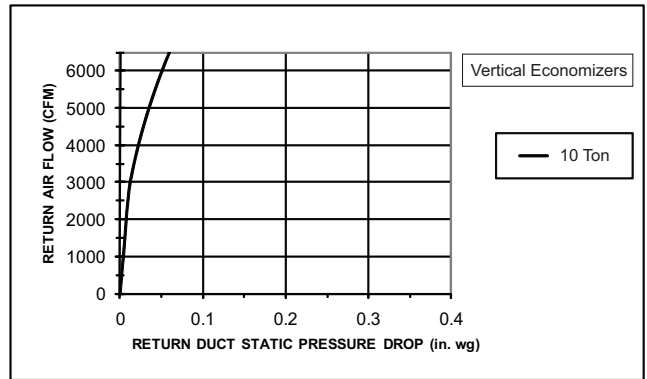
C101020

**Fig. 25 - Barometric Relief Flow Capacity**



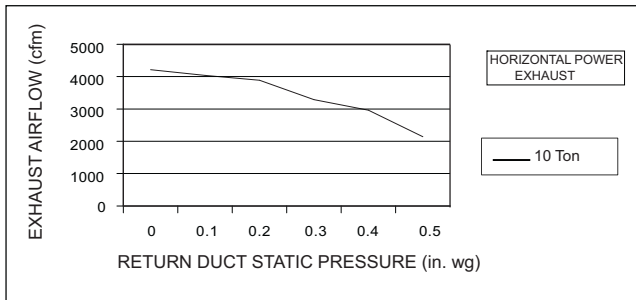
C101019

**Fig. 23 - Return Air Pressure Drop**



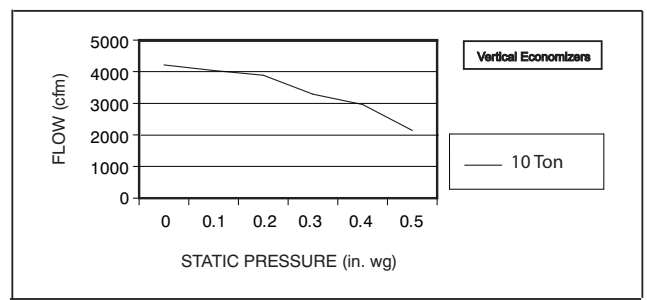
C101021

**Fig. 26 - Return Air Pressure Drop**



C101022

**Fig. 24 - Horizontal Power Exhaust Performance**



C101027

**Fig. 27 - Vertical Power Exhaust Performance**

# ELECTRICAL INFORMATION

**Table 60 – RHH036**
**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
230-1-60	187	253	16.6	79	190	1.0	DD-STD	78%	7.4
208-3-60	187	253	10.4	73	190	1.0	DD-STD	78%	7.4
							MED	87%	5.2
							HIGH	89%	8.4
230-3-60	187	253	10.4	73	190	1.0	DD-STD	78%	7.4
							MED	87%	4.9
							HIGH	89%	8.3
460-3-60	414	506	5.8	38	190	0.5	DD-STD	78%	4.0
							MED	87%	2.5
							HIGH	89%	4.2
575-3-60	518	633	3.8	37	190	0.5	DD-STD	78%	4.0
							MED	72%	1.6
							HIGH	78%	2.0

**Table 61 – RHH048**
**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	19.8	109	325	1.4	DD-STD	78%	7.4
230-1-60	187	253	19.8	109	325	1.4	DD-STD	78%	7.4
208-3-60	187	253	13.1	83	325	1.4	DD-STD	78%	7.4
							MED	87%	5.2
							HIGH	89%	8.4
230-3-60	187	253	13.1	83	325	1.4	DD-STD	78%	7.4
							MED	87%	4.9
							HIGH	89%	8.3
460-3-60	414	506	6.1	41	325	0.8	DD-STD	78%	4.0
							MED	87%	2.5
							HIGH	89%	4.2
575-3-60	518	633	4.4	33	325	0.8	DD-STD	78%	4.0
							MED	72%	1.6
							HIGH	78%	2.0

**Table 62 – RHH060**
**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
230-1-60	187	253	25.0	134	325	1.4	DD-STD	78%	7.4
208-3-60	187	253	15.9	110	325	1.4	DD-STD	78%	7.4
							MED	89%	8.4
							HIGH	89%	8.4
230-3-60	187	253	15.9	110	325	1.4	DD-STD	78%	7.4
							MED	89%	8.3
							HIGH	89%	8.3
460-3-60	414	506	7.0	52	325	0.8	DD-STD	78%	4.0
							MED	89%	4.2
							HIGH	89%	4.2
575-3-60	518	633	5.1	40	325	0.8	DD-STD	78%	4.0
							MED	78%	2.0
							HIGH	77%	2.8



## ELECTRICAL INFORMATION (cont)

**Table 63 – RHH072**
**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	19.6	136	325	1.5	STD	75%	5.2
							MED	79%	7.5
							HIGH	83%	13.6
230-3-60	187	253	19.6	136	325	1.5	STD	75%	5.2
							MED	79%	7.5
							HIGH	83%	12.7
460-3-60	414	506	8.2	66	325	0.8	STD	75%	2.6
							MED	79%	3.4
							HIGH	83%	6.4
575-3-60	518	633	6.6	55	325	0.6	STD	72%	1.6
							MED	77%	2.8
							HIGH	81%	5.6

**Table 64 – RHH073**
**2-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	18.9	136	325	1.5	STD	75%	5.2
							MED	79%	7.5
							HIGH	83%	13.6
230-3-60	187	253	18.9	136	325	1.5	STD	75%	5.2
							MED	79%	7.5
							HIGH	83%	12.7
460-3-60	414	506	9.7	66	325	0.8	STD	75%	2.6
							MED	79%	3.4
							HIGH	83%	6.4
575-3-60	518	633	7.7	55	325	0.6	STD	72%	1.6
							MED	77%	2.8
							HIGH	81%	5.6

**Table 65 – RHH073**
**2-STAGE COOLING WITH 2-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	18.9	136	325	1.5	STD	84%	5.8
							MED	85%	8.6
							HIGH	84%	13.6
230-3-60	187	253	18.9	136	325	1.5	STD	84%	5.6
							MED	85%	7.8
							HIGH	84%	12.7
460-3-60	414	506	9.7	66	325	0.8	STD	79%	2.9
							MED	85%	3.8
							HIGH	84%	6.4
575-3-60	518	633	7.7	55	325	0.6	STD	81%	2.8
							MED	84%	4.5
							HIGH	83%	6.2

## ELECTRICAL INFORMATION (cont)

**Table 66 – RHH090**
**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	13.1	83	13.1	83	325	1.5	STD MED HIGH	75% 87% 87%	5.2 6.9 10.6
230-3-60	187	253	13.1	83	13.1	83	325	1.5	STD MED HIGH	75% 87% 87%	5.2 6.7 10.6
460-3-60	414	506	6.1	41	6.1	41	325	0.8	STD MED HIGH	75% 87% 87%	2.6 3.4 5.3
575-3-60	518	633	4.4	33	4.4	33	325	0.6	STD MED HIGH	72% 78% 77%	1.6 2.0 2.8

**Table 67 – RHH090**
**2-STAGE COOLING WITH 2-SPEED INDOOR FAN MOTOR**

V-Ph-Hz	VOLTAGE RANGE		COMP 1		COMP 2		OFM (ea)		IFM		
	MIN	MAX	RLA	LRA	RLA	LRA	WATTS	FLA	TYPE	EFF at Full Load	FLA
208-3-60	187	253	13.1	83	13.1	83	325	1.5	STD MED HIGH	84% 77% 82%	5.8 7.1 10.8
230-3-60	187	253	13.1	83	13.1	83	325	1.5	STD MED HIGH	84% 77% 82%	5.6 6.8 9.8
460-3-60	414	506	6.1	41	6.1	41	325	0.8	STD MED HIGH	79% 77% 82%	2.9 3.4 4.9
575-3-60	518	633	4.4	33	4.4	33	325	0.6	STD MED HIGH	81% 80% 84%	2.8 3.5 4.5

## ELECTRICAL INFORMATION (cont)

**Table 68 – RHH102**
**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	16.0	91	13.7	83	1070	6.2	STD MED HIGH	69% 89% 87%	5.2 8.4 10.6
230-3-60	187	253	16.0	91	13.7	83	1070	6.2	STD MED HIGH	69% 89% 87%	5.2 8.3 10.6
460-3-60	414	506	7.0	46	6.2	41	1070	3.1	STD MED HIGH	69% 89% 87%	2.6 4.2 5.3
575-3-60	518	633	5.6	37	4.8	33	1070	2.5	STD MED HIGH	78% 77% 77%	2.0 2.8 2.8

**Table 69 – RHH102**
**2-STAGE COOLING WITH 2-SPEED INDOOR FAN MOTOR**

V-Ph-Hz	VOLTAGE RANGE		COMP 1		COMP 2		OFM (ea)		IFM		
	MIN	MAX	RLA	LRA	RLA	LRA	WATTS	FLA	TYPE	EFF at Full Load	FLA
208-3-60	187	253	16.0	91	13.7	83	1070	6.2	STD MED HIGH	77% 85% 82%	7.1 8.6 10.8
230-3-60	187	253	16.0	91	13.7	83	1070	6.2	STD MED HIGH	77% 85% 82%	6.8 7.8 9.8
460-3-60	414	506	7.0	46	6.2	41	1070	3.1	STD MED HIGH	77% 85% 82%	3.4 3.8 4.9
575-3-60	518	633	5.6	37	4.8	33	1070	2.5	STD MED HIGH	80% 84% 84%	3.5 4.5 4.5

# ELECTRICAL INFORMATION (cont)

**Table 70 – RHH120**

**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	15.6	110	15.9	110	280	1.5	STD MED HIGH	69% 89% 90%	5.2 8.4 20.4
230-3-60	187	253	15.6	110	15.9	110	280	1.5	STD MED HIGH	69% 89% 90%	5.2 8.3 20.4
460-3-60	414	506	7.7	52	7.7	52	280	0.8	STD MED HIGH	69% 89% 90%	2.6 4.2 10.2
575-3-60	518	633	5.8	39	5.7	39	280	0.7	STD MED HIGH	78% 77% 94%	2.0 2.8 9.0

**Table 71 – RHH120**

**2-STAGE COOLING WITH 2-SPEED INDOOR FAN MOTOR**

V-Ph-Hz	VOLTAGE RANGE		COMP 1		COMP 2		OFM (ea)		IFM		
	MIN	MAX	RLA	LRA	RLA	LRA	WATTS	FLA	TYPE	EFF at Full Load	FLA
208-3-60	187	253	15.6	110	15.9	110	280	1.5	STD MED HIGH	77% 85% 90%	7.1 8.6 20.4
230-3-60	187	253	15.6	110	15.9	110	280	1.5	STD MED HIGH	77% 85% 90%	6.8 7.8 20.4
460-3-60	414	506	7.7	52	7.7	52	280	0.8	STD MED HIGH	77% 85% 90%	3.4 3.8 10.2
575-3-60	518	633	5.8	39	5.7	39	280	0.7	STD MED HIGH	80% 84% 94%	3.5 4.5 9.0

**Legend and Notes for Tables 72-83**

**LEGEND:**

- BRKR - Circuit breaker
- C.O. - Convenience outlet
- DD - Direct Drive
- DISC. - Disconnect
- FLA - Full load amps
- LRA - Locked rotor amps
- MCA - Minimum circuit amps
- PE. - Power exhaust
- Pwrdr fr/ unit - Powered from unit
- PWRD C.O. - Powered convenience outlet
- UNPWR C.O. - Unpowered convenience 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. For 208/230 v units, where one value is shown it is the same for either 208 or 230 volts.
3. **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

$$\begin{aligned} \text{Average Voltage} &= \frac{(224 + 231 + 226)}{3} = \frac{681}{3} \\ &= 227 \end{aligned}$$

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.

$$\begin{aligned} \% \text{ Voltage Imbalance} &= 100 \times \frac{4}{227} \\ &= 1.76\% \end{aligned}$$

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.

# ELECTRICAL INFORMATION (cont)

**Table 72 – RHH036 UNIT WIRE/FUSE OR HACR BREAKER SIZING DATA - SINGLE STAGE COOLING WITH SINGLE SPEED INDOOR FAN MOTOR**

UNIT	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.						NO P.E.						w/ PWRD C.O.					
		CRHEATER***00	Nom (kW)	FLA	NO P.E.			w/ P.E. (pwrd fr/unit)			NO P.E.			w/ P.E. (pwrd fr/unit)			NO P.E.			w/ P.E. (pwrd fr/unit)		
					MCA	MAX FUSE or HACR BRKR	DISC. SIZE FLA LRA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE FLA LRA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE FLA LRA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE FLA LRA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE FLA LRA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE FLA LRA
RHH036	208-230-1-60	NONE	-	-	30	45	29	88	32	45	31	90	34	50	34	93	36	50	36	50	36	95
		101A	3.3/4.4	15.9/18.3	49/52	60/60	47/50	104/106	51/54	60/60	49/52	106/108	54/57	60/60	60/60	53/55	109/111	56/59	60/60	60/60	55/58	111/113
		102A	4.9/6.5	23.5/27.1	59/63	60/70	56/60	112/115	61/65	70/70	58/62	114/117	64/68	70/70	70/70	61/65	117/120	66/70	70/70	70/70	63/68	119/122
		103B	6.5/8.7	31.4/36.3	69/75	70/80	65/70	119/124	71/77	80/80	67/73	121/126	74/80	80/80	80/80	70/76	124/129	76/82	80/90	80/90	73/78	126/131
		104B	7.9/10.5	37.9/43.8	77/84	80/90	72/79	126/132	79/86	80/90	75/81	128/134	82/89	90/90	90/90	78/85	131/137	84/91	90/100	90/100	80/87	133/139
	208-230-3-60	102A+102A	9.8/13.0	46.9/54.2	88/97	90/100	83/91	182/196	90/99	90/100	85/93	184/198	93/102	100/110	100/110	88/97	187/201	95/104	100/110	90/99	90/99	189/203
		NONE	-	-	22	30	22	82	24	30	24	84	27	30	27	87	29	35	29	35	29	89
		101A	3.3/4.4	9.2/10.6	33/35	40/40	32/34	91/93	35/37	40/40	34/36	93/95	38/40	45/45	45/45	38/39	96/98	40/42	45/45	40/42	45/45	98/100
		102A	4.9/6.5	13.6/15.6	39/41	45/45	37/40	96/98	41/43	45/45	39/42	98/100	44/46	50/50	50/50	43/45	101/103	46/48	50/50	45/47	50/50	103/105
		103B	6.5/8.7	18.1/20.9	44/48	45/50	42/46	100/103	46/50	50/50	45/48	102/105	49/53	50/60	50/60	48/51	105/108	51/55	60/60	50/53	60/60	107/110
	460-3-60	104B	7.9/10.5	21.9/25.3	49/53	50/60	47/51	104/107	51/55	60/60	49/53	106/109	54/58	60/60	60/60	52/56	109/112	56/60	60/60	55/58	60/60	111/114
		105A	12.0/16.0	33.4/38.5	64/70	70/70	60/66	115/121	66/72	70/80	62/68	117/123	68/75	70/80	70/80	66/71	120/126	70/77	70/80	68/74	70/80	122/128
		NONE	-	-	20/19	25/25	19/19	111	22/21	30/30	21/21	113	24/24	30/30	30/30	25/24	116	26/26	30/30	27/26	30/30	118
		101A	3.3/4.4	9.2/10.6	30/31	35/35	30/31	120/122	33/35	40/40	36/37	122/124	36/37	40/40	45/45	35/36	125/127	38/39	45/45	37/39	45/45	127/129
		102A	4.9/6.5	13.6/15.6	37/39	40/40	35/37	125/127	39/41	45/45	37/39	127/129	41/44	45/45	45/45	40/42	130/132	43/46	45/50	42/44	45/50	132/134
575-3-60	103B	6.5/8.7	18.1/20.9	42/45	45/50	40/43	129/132	44/47	45/50	42/45	131/134	47/50	50/50	50/50	45/48	134/137	49/52	50/60	48/50	50/50	136/139	
	104B	7.9/10.5	21.9/25.3	47/51	50/60	44/48	133/136	49/53	50/60	46/50	135/138	52/56	60/60	60/60	50/53	138/141	54/58	60/60	52/56	60/60	140/143	
	105A	12.0/16.0	33.4/38.5	61/67	70/70	58/63	144/150	63/69	70/70	60/65	146/152	66/72	70/80	70/80	63/69	149/155	68/74	70/80	65/71	70/80	151/157	
	NONE	-	-	23/23	30/30	23/23	147	25/25	30/30	25/25	149	28/28	30/30	30/30	28/28	152	30/29	35/35	30/30	30/30	154	
	101A	3.3/4.4	9.2/10.6	40/42	45/45	33/35	156/158	36/38	40/45	36/37	158/160	39/41	45/45	45/45	39/40	161/163	41/43	45/45	41/43	45/45	163/165	
RHH036	DD-STD	102A	4.9/6.5	13.6/15.6	40/42	45/45	38/41	161/163	42/44	45/50	41/43	163/165	45/47	50/50	44/46	166/168	47/49	50/50	46/48	50/50	46/48	168/170
		103B	6.5/8.7	18.1/20.9	45/49	50/50	44/47	165/168	47/51	50/60	46/49	167/170	50/54	50/60	49/52	170/173	52/56	60/60	51/54	60/60	51/54	172/175
		104B	7.9/10.5	21.9/25.3	48/52	50/60	48/52	169/172	52/56	60/60	50/54	171/174	55/59	60/60	60/60	53/57	174/177	57/61	60/70	56/59	60/70	176/179
		105A	12.0/16.0	33.4/38.5	65/71	70/80	61/67	180/186	67/73	70/80	63/69	182/188	69/75	70/80	70/80	67/72	185/191	71/78	80/80	69/75	80/80	187/193
		NONE	-	-	12	15	12	43	13	15	13	44	14	20	20	14	45	15	20	16	20	46
	460-3-60	106A	6.0	7.2	21	25	20	50	22	25	21	51	23	25	23	52	24	25	24	25	24	53
		107A	8.8	10.6	25	25	24	54	26	30	25	55	28	30	27	56	29	30	28	30	28	57
		108A	11.5	13.8	29	30	28	57	30	30	29	58	32	35	35	59	33	35	31	35	31	60
		109A	14.0	16.8	33	35	31	60	34	35	32	61	35	35	35	62	36	40	35	40	35	63
		NONE	-	-	11	15	10	57	12	15	11	58	13	15	15	13	59	14	15	14	15	60
	575-3-60	106A	6.0	7.2	20	20	18	64	21	25	20	65	22	25	21	66	23	25	22	25	22	67
		107A	8.8	10.6	24	25	22	68	25	25	23	69	26	30	25	70	27	30	26	30	26	71
		108A	11.5	13.8	28	30	26	71	29	30	27	72	30	30	30	73	31	35	30	35	30	74
		109A	14.0	16.8	32	35	29	74	33	35	31	75	34	35	35	76	35	35	33	35	33	77
		NONE	-	-	12	15	12	75	13	15	13	76	15	20	20	15	77	16	20	16	20	78
DD-STD	106A	6.0	7.2	21	25	20	82	22	25	22	83	24	25	23	84	25	25	24	25	24	85	
	107A	8.8	10.6	26	30	24	86	27	30	25	87	28	30	27	88	29	30	28	30	28	89	
	108A	11.5	13.8	30	30	28	89	31	35	29	90	32	35	35	91	33	35	32	35	32	92	
	109A	14.0	16.8	33	35	31	93	34	35	33	93	36	40	40	94	37	40	35	40	35	95	
	NONE	-	-	10	15	10	42	12	15	12	44	11	15	15	12	44	13	15	14	15	46	
MED	297A	10.0	9.6	22	25	21	52	24	25	23	54	26	25	23	54	28	25	25	25	25	56	
	298A	15.0	14.4	28	30	26	56	30	30	28	58	29	30	30	58	31	35	30	35	30	60	
	NONE	-	-	7	15	7	45	9	15	9	47	9	15	15	9	47	11	15	11	15	49	
	297A	10.0	9.6	19	20	18	55	21	25	20	57	21	25	25	20	57	23	25	22	25	59	
	298A	15.0	14.4	25	25	23	59	27	30	26	61	27	30	30	25	61	29	30	27	30	63	
HIGH	NONE	-	-	8	15	7	49	10	15	9	51	9	15	9	51	11	15	11	15	11	53	
	297A	10.0	9.6	20	20	18	59	22	25	20	61	21	25	25	20	61	23	25	22	25	63	
	298A	15.0	14.4	26	30	24	63	28	30	26	65	27	30	30	26	65	29	30	28	30	67	

See: "Legend and Notes for Tables 72 - 83" on page 76.

# ELECTRICAL INFORMATION (cont)

**Table 73 – RHH048 UNIT WIRE/FUSE OR HACR BREAKER SIZING DATA - SINGLE STAGE COOLING WITH SINGLE SPEED INDOOR FAN MOTOR**

UNIT	IFM TYPE	ELEC. HTR				NO C.O. or UNPWR C.O.						w/ PWRD C.O.										
		CRHEATER***00	Nom (kW)	FLA	NO P.E.			w/ P.E. (pwrd fr/unit)			NO P.E.			w/ P.E. (pwrd fr/unit)								
					MCA	MAX FUSE or HACR BRKR	DISC. SIZE FLA LRA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE FLA LRA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE FLA LRA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE FLA LRA						
RHH048	DD-STD	NONE	-	-	34	50	33	119	36	50	35	121	39	50	38	124	41	60	41	60	41	126
		101A	3.3/4.4	15.9/18.3	54/57	60/60	51/54	135/137	56/59	60/60	53/56	137/139	59/62	60/70	60/70	57/59	140/142	61/64	70/70	70/70	59/62	142/144
		103B	6.5/8.7	31.4/36.3	73/79	80/80	69/75	150/155	75/81	80/90	71/77	152/157	78/84	80/90	80/90	75/80	155/160	80/86	80/90	80/90	77/82	157/162
		102A+102A	9.8/13.0	46.9/54.2	93/102	100/110	87/95	213/227	95/104	100/110	89/97	215/229	97/107	100/110	100/110	92/101	218/232	99/108	100/110	100/110	95/103	220/234
		103B+103B	13.1/17.4	62.8/72.5	113/125	125/125	105/116	245/264	114/127	123/150	107/118	247/266	117/129	125/150	125/150	111/122	250/269	119/131	125/150	125/150	113/124	252/271
		104B+104B	15.8/21.0	75.8/87.5	129/143	150/150	120/134	271/294	131/145	150/150	122/136	273/296	134/148	150/150	150/150	126/139	276/299	135/150	150/150	150/150	128/141	278/301
	MED	NONE	-	-	26	30	25	93	28	40	27	95	30	40	31	98	32	40	40	33	33	100
		102A	4.9/6.5	13.6/15.6	43/45	50/50	41/43	107/109	45/47	50/50	43/45	109/111	47/50	50/50	50/50	46/49	112/114	49/52	50/60	50/60	49/51	114/116
		103B	6.5/8.7	18.1/20.9	48/52	50/60	46/49	111/114	50/54	50/60	48/51	113/116	53/57	60/60	60/60	52/55	116/119	55/58	60/60	60/60	54/57	118/121
		105A	12.0/16.0	33.4/38.5	67/74	70/80	64/69	126/132	69/76	70/80	66/72	128/134	72/79	80/80	80/80	69/75	131/137	74/80	80/80	80/80	71/77	133/139
		104B+104B	15.8/21.0	43.8/50.5	80/89	80/90	76/83	181/194	82/91	90/100	78/85	183/196	85/94	90/100	90/100	81/89	186/199	87/95	90/100	90/100	83/91	188/201
		105A	12.0/16.0	33.4/38.5	65/71	70/80	61/67	155/161	67/73	70/80	63/69	157/163	70/76	70/80	70/80	67/72	160/166	72/78	80/80	80/80	69/74	162/168
HIGH	NONE	-	-	27/27	30/30	26/26	158	29/28	40/40	29/28	160	31/31	40/40	40/40	32/32	163	33/33	45/45	34/34	165		
	102A	4.9/6.5	13.6/15.6	44/46	50/50	42/44	172/174	46/48	50/50	44/46	174/176	48/51	50/60	50/60	47/50	177/179	50/53	60/60	60/60	50/52	179/181	
	103B	6.5/8.7	18.1/20.9	49/53	50/60	47/50	176/179	51/55	60/60	49/52	178/181	54/57	60/60	60/60	53/56	181/184	56/59	60/60	60/60	55/58	183/186	
	105A	12.0/16.0	33.4/38.5	68/75	70/80	65/70	191/197	70/77	70/80	67/73	193/199	73/79	80/80	80/80	70/76	196/202	75/81	80/90	80/90	72/78	198/204	
	104B+104B	15.8/21.0	43.8/50.5	81/90	90/90	77/84	246/259	83/92	90/100	79/86	248/261	86/94	90/100	90/100	82/90	251/264	88/96	90/100	90/100	84/92	253/266	
	106A	6.0	7.2	22	25	21	54	23	25	22	55	24	25	25	23	56	25	25	25	24	57	
460-3-60	DD-STD	108A	11.5	13.8	30	30	28	61	31	35	30	62	32	35	31	63	33	35	35	32	64	
		109A	14.0	16.8	34	35	32	64	35	35	33	65	36	40	34	66	37	40	40	36	67	
		108A+108A	23.0	27.7	48	50	44	102	49	50	46	103	50	50	47	104	51	60	60	48	105	
		NONE	-	-	11	15	13	47	14	15	14	48	15	20	15	49	16	20	20	16	50	
		106A	6.0	7.2	22	25	21	54	23	25	22	55	24	25	25	23	56	25	25	24	57	
		108A	11.5	13.8	30	30	29	61	31	35	30	62	32	35	35	31	63	33	35	35	32	64
575-3-60	MED	109A	14.0	16.8	32	35	30	78	33	35	31	79	35	35	33	80	36	40	40	36	69	
		108A+108A	23.0	27.7	46	50	43	116	47	50	44	117	48	50	45	118	49	60	60	46	119	
		NONE	-	-	13	15	13	47	14	15	14	48	15	20	15	49	16	20	20	16	50	
		106A	6.0	7.2	22	25	21	54	23	25	22	55	24	25	25	23	56	25	25	24	57	
		108A	11.5	13.8	30	30	29	61	31	35	30	62	32	35	35	31	63	33	35	35	32	64
		109A	14.0	16.8	34	35	32	64	35	35	33	65	36	40	34	66	37	40	40	36	67	
575-3-60	DD-STD	108A+108A	23.0	27.7	48	50	45	134	49	50	46	135	50	50	47	136	51	60	60	48	137	
		NONE	-	-	11	15	11	39	13	15	13	41	12	15	13	41	14	20	20	15	43	
		106A	6.0	7.2	22	25	22	49	25	25	24	51	24	25	25	24	51	26	30	30	25	53
		108A	11.5	13.8	30	30	29	61	31	35	30	62	32	35	35	31	63	33	35	35	32	64
		109A	14.0	16.8	34	35	32	64	35	35	33	65	36	40	34	66	37	40	40	36	67	
		108A+108A	23.0	27.7	46	50	43	116	47	50	44	117	48	50	45	118	49	60	60	48	119	
575-3-60	MED	108A	11.5	13.8	30	30	29	61	31	35	30	62	32	35	31	63	33	35	35	32	64	
		109A	14.0	16.8	34	35	32	64	35	35	33	65	36	40	34	66	37	40	40	36	67	
		108A+108A	23.0	27.7	46	50	43	116	47	50	44	117	48	50	45	118	49	60	60	48	119	
		NONE	-	-	8	10	8	42	10	10	10	44	10	15	10	44	12	15	15	12	46	
		106A	6.0	7.2	22	25	21	54	23	25	22	55	24	25	25	24	51	26	30	30	25	53
		108A	11.5	13.8	30	30	29	61	31	35	30	62	32	35	35	31	63	33	35	35	32	64
575-3-60	HIGH	109A	14.0	16.8	32	35	30	78	33	35	31	79	35	35	33	80	36	40	40	36	69	
		108A+108A	23.0	27.7	46	50	43	116	47	50	44	117	48	50	45	118	49	60	60	48	119	
		NONE	-	-	9	10	8	46	11	10	10	48	10	15	10	48	12	15	15	12	46	
		106A	6.0	7.2	22	25	21	54	23	25	22	55	24	25	25	24	51	26	30	30	25	53
		108A	11.5	13.8	30	30	29	61	31	35	30	62	32	35	35	31	63	33	35	35	32	64
		109A	14.0	16.8	34	35	32	64	35	35	33	65	36	40	34	66	37	40	40	36	67	

See: "Legend and Notes for Tables 72 - 83" on page 76.

# ELECTRICAL INFORMATION (cont)

**Table 74 – RHH060 UNIT WIRE/FUSE OR HACR BREAKER SIZING DATA - SINGLE STAGE COOLING WITH SINGLE SPEED INDOOR FAN MOTOR**

UNIT	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.						w/ PWRD C.O.										
		CRHEATER***00	Nom (kW)	FLA	NO P.E.			NO P.E.			NO P.E.			NO P.E.							
					MCA	MAX FUSE or HACR BRKR	DISC. SIZE FLA LRA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE FLA LRA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE FLA LRA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE FLA LRA					
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	70/74	80/80	66/70	168/171	72/76	80/80	68/72	170/173	46/49	51/53	60/60	50/52	139/141	53/55	60/60	52/54	141/143
		103B	6.5/8.7	31.4/36.3	80/86	80/100	75/81	175/180	82/88	90/100	77/83	177/182	56/60	61/66	70/70	59/63	147/150	63/67	70/70	61/65	149/152
		102A+102A	9.8/13.0	46.9/54.2	99/108	100/110	93/101	238/252	101/110	100/110	95/103	240/254	69/75	76/82	80/90	72/78	158/164	78/84	80/90	75/80	160/166
	DD-STD	103B+103B	13.1/17.4	62.8/72.5	119/131	125/150	116/122	270/289	121/133	125/150	113/124	272/291	81/89	89/97	90/100	84/92	213/226	91/99	100/100	86/94	215/228
		104B+104B	15.8/21.0	75.8/87.5	135/150	150/150	126/139	296/319	137/152	150/175	128/142	298/321	94/104	105/114	110/125	97/107	235/253	105/116	110/125	100/109	237/255
		NONE	-	-	29	40	28	120	31	45	31	122	34	45	45	34	125	36	50	36	127
		102A	4.9/6.5	13.6/15.6	46/49	50/60	44/46	134/136	48/51	60/60	46/49	136/138	46/49	51/53	60/60	50/52	139/141	53/55	60/60	52/54	141/143
	MED	104B	7.9/10.5	21.9/25.3	57/61	60/70	54/58	142/145	58/63	60/70	56/60	144/147	61/66	70/70	60/60	59/63	147/150	63/67	70/70	61/65	149/152
		105A	12.0/16.0	33.4/38.5	71/77	80/80	67/73	153/159	73/79	80/80	69/75	155/161	76/82	80/90	72/78	158/164	78/84	80/90	75/80	160/166	
		104B+104B	15.8/21.0	43.8/50.5	84/92	90/100	79/86	208/221	86/94	90/100	81/89	210/223	89/97	90/100	84/92	213/226	91/99	100/100	86/94	215/228	
		104B+106A	19.9/26.5	55.2/63.8	98/109	100/110	92/102	230/248	100/111	100/125	94/104	232/250	104/114	105/114	110/125	97/107	235/253	105/116	110/125	100/109	237/255
HIGH	102A	4.9/6.5	13.6/15.6	47/50	50/60	45/47	199/201	49/51	60/60	47/50	201/203	48/51	52/54	60/60	51/53	204/206	54/56	60/60	53/55	206/208	
	104B	7.9/10.5	21.9/25.3	58/62	60/70	55/59	207/210	59/64	60/70	57/61	209/212	62/66	70/70	60/60	59/63	212/215	64/68	70/70	62/66	214/217	
	105A	12.0/16.0	33.4/38.5	72/78	80/80	68/74	218/224	74/80	80/80	70/76	220/226	77/83	80/90	73/79	223/229	79/85	80/90	76/81	225/231		
	104B+104B	15.8/21.0	43.8/50.5	85/93	90/100	80/88	273/286	87/95	90/100	82/90	275/288	90/98	90/98	90/100	85/93	278/291	92/100	100/100	88/95	280/293	
RHH060	104B+106A	19.9/26.5	55.2/63.8	99/110	100/110	93/103	295/313	101/112	110/125	95/105	297/315	104/114	104/114	110/125	99/108	300/318	106/116	110/125	101/111	302/320	
	NONE	-	-	14	20	14	58	15	20	15	59	16	20	17	61	17	20	20	17	61	
	106A	6.0	7.2	23	25	22	65	24	25	23	66	25	25	25	24	67	26	30	26	68	
	108A	11.5	13.8	31	35	29	72	32	35	31	73	33	33	35	32	74	34	35	33	75	
460-3-60	DD-STD	109A	14.0	16.8	35	35	75	36	40	34	76	37	37	40	35	77	38	40	37	78	
	108A+108A	23.0	27.7	49	50	45	113	50	50	47	114	51	51	60	48	115	52	60	49	116	
	108A+109A	25.5	30.7	52	60	49	119	53	60	50	120	55	55	60	51	121	56	60	53	122	
	NONE	-	-	14	20	14	90	15	20	15	91	16	20	20	16	92	17	20	17	93	
575-3-60	MED	106A	6.0	7.2	23	25	22	65	24	25	23	66	25	25	24	67	26	30	26	68	
	108A	11.5	13.8	31	35	30	104	32	35	31	105	33	35	35	32	106	35	35	33	107	
	109A	14.0	16.8	35	35	33	107	36	40	34	108	37	37	40	36	109	38	40	37	110	
	108A+108A	23.0	27.7	49	50	46	145	50	50	47	146	51	51	60	48	147	52	60	49	148	
DD-STD	108A+109A	25.5	30.7	53	60	49	151	54	60	50	152	55	55	60	52	153	56	60	53	154	
	NONE	-	-	12	15	11	46	14	15	14	48	15	15	15	13	48	15	20	16	50	
	298A	15.0	14.4	28	30	28	60	32	35	30	62	33	35	35	30	62	33	35	32	64	
	301A	25.0	24.1	42	45	39	94	44	45	41	96	43	45	45	41	96	45	45	43	98	
HIGH	NONE	-	-	10	15	9	53	12	15	11	55	11	15	11	55	13	15	15	13	57	
	298A	15.0	14.4	28	30	26	67	30	30	29	69	31	30	30	28	69	31	30	29	69	
	301A	25.0	24.1	40	40	37	101	42	45	39	103	41	45	45	39	103	43	45	41	105	
	NONE	-	-	10	15	10	64	12	15	12	66	12	15	15	12	66	14	15	14	68	
DD-STD	298A	15.0	14.4	28	30	27	78	30	30	29	80	30	30	30	29	80	30	30	31	82	
	301A	25.0	24.1	41	45	38	112	42	45	40	114	42	45	45	40	114	44	45	42	116	

See: "Legend and Notes for Tables 72 - 83" on page 76.

# ELECTRICAL INFORMATION (cont)

**Table 75 – RHH072 UNIT WIRE/FUSE OR HACR BREAKER SIZING DATA - SINGLE STAGE COOLING WITH SINGLE SPEED INDOOR FAN MOTOR**

UNIT	ELEC. HTR			NO C.O. or UNPWR C.O.						w/ PWRD C.O.													
	IFM TYPE	CRHEATER**00	Nom (kW)	FLA	NO P.E.			NO P.E.			NO P.E.			NO P.E.									
					MCA	MAX FUSE or HACR BRKR	DISC. SIZE FLA LRA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE FLA LRA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE FLA LRA	MCA	MAX FUSE or HACR BRKR	DISC. SIZE FLA LRA							
RHH072	STD	NONE	-	-	33	50	32	161	37	50	36	165	38	50	37	166	42	60	42	60	45	170	
		264A	4.9/6.5	13.6/15.6	50/53	48/50	52/55	175/177	54/56	60/60	52/54	179/181	55/57	179/181	59/61	60/60	180/182	59/61	60/70	59/61	60/62	184/186	
		117A	7.8/10.4	21.7/25.0	60/64	57/61	63/67	183/186	64/68	70/80	61/65	187/190	65/69	188/191	69/73	70/80	188/191	69/73	80/80	69/73	80/80	67/71	192/195
		110A	12.0/16.0	33.4/38.5	75/81	70/76	77/84	194/200	79/85	80/90	75/81	198/204	80/86	198/204	84/90	80/90	199/205	84/90	90/90	84/90	90/90	80/86	203/209
		117A+117A	15.8/21.0	43.8/50.5	88/96	82/90	90/99	249/262	92/100	100/100	87/94	253/266	93/101	253/266	97/105	100/110	254/267	97/105	100/110	97/105	100/110	92/100	258/271
		110A+117A	19.9/26.5	55.2/63.8	102/113	95/105	106/117	271/289	106/117	110/125	100/110	275/293	107/118	275/293	111/122	110/125	276/294	111/122	125/125	105/115	105/115	105/115	280/298
		NONE	-	-	35	50	35	198	39	50	39	202	40	203	44	50	203	44	60	45	60	45	207
		264A	4.9/6.5	13.6/15.6	52/55	50/53	56/59	212/214	56/59	60/60	55/57	216/218	57/60	216/218	61/64	60/70	217/219	61/64	70/70	60/62	70/70	60/62	221/223
		117A	7.8/10.4	21.7/25.0	63/67	60/63	66/71	220/223	66/71	80/80	64/68	224/227	67/72	225/228	71/75	80/80	225/228	71/75	80/80	69/73	80/80	69/73	229/232
		110A	12.0/16.0	33.4/38.5	77/84	73/79	81/87	231/237	81/87	90/90	77/83	235/241	82/88	236/242	86/92	90/90	236/242	86/92	90/100	83/89	90/100	83/89	240/246
117A+117A	15.8/21.0	43.8/50.5	90/99	85/93	94/102	286/299	94/102	100/110	89/97	290/303	95/103	291/304	99/107	100/110	291/304	99/107	100/110	95/103	100/110	95/103	295/308		
110A+117A	19.9/26.5	55.2/63.8	104/115	98/108	108/119	308/326	108/119	110/125	102/112	312/330	109/120	313/331	113/124	110/125	313/331	113/124	125/125	108/118	108/118	108/118	317/335		
RHH072	HIGH	NONE	-	-	42/41	20	14	79	16	20	15	81	17	20	17	81	19	25	19	25	19	83	
		264A	4.9/6.5	13.6/15.6	59/60	57/59	62/64	244/246	62/64	70/70	62/63	248/250	63/65	248/251	67/69	70/80	249/251	67/69	80/80	67/68	80/80	253/255	
		117A	7.8/10.4	21.7/25.0	69/72	67/69	72/76	252/255	72/76	80/80	71/74	256/259	73/77	257/260	77/81	80/80	257/260	77/81	80/90	76/79	80/90	261/264	
		110A	12.0/16.0	33.4/38.5	83/89	80/85	87/93	263/269	87/93	90/100	84/89	267/273	88/94	268/274	92/97	90/100	268/274	92/97	100/100	90/95	100/100	90/95	272/278
		117A+117A	15.8/21.0	43.8/50.5	96/104	92/99	100/108	318/331	100/108	100/110	96/103	322/335	101/109	323/336	105/112	110/110	323/336	105/112	110/125	102/109	102/109	327/340	
		110A+117A	19.9/26.5	55.2/63.8	111/120	105/114	114/124	340/358	114/124	125/125	109/118	344/362	115/125	345/363	119/129	125/125	345/363	119/129	125/150	115/124	115/124	349/367	
		NONE	-	-	15	20	14	79	16	20	15	81	17	81	17	20	17	81	19	25	19	25	83
		265A	6.0	7.2	24	23	26	86	26	30	25	88	26	88	28	30	25	88	28	30	27	30	90
		266A	11.5	13.8	32	30	34	93	34	35	32	95	34	95	36	35	33	95	36	40	35	35	97
		267A	14.0	16.8	36	34	38	96	38	40	36	98	38	98	40	40	36	98	40	40	38	40	100
268A	23.0	27.7	50	46	50	107	50	50	48	109	52	109	54	60	50	109	54	60	51	60	111		
269A	25.5	30.7	53	50	55	110	55	60	52	112	55	112	57	60	52	112	57	60	54	60	114		
RHH072	MED	NONE	-	-	16	20	15	98	18	25	17	100	18	25	18	100	20	25	20	25	20	102	
		265A	6.0	7.2	25	23	27	105	27	30	26	107	27	107	29	30	26	107	29	30	28	109	
		266A	11.5	13.8	33	31	35	112	35	35	33	114	35	114	37	35	34	114	37	40	36	116	
		267A	14.0	16.8	37	35	39	115	39	40	37	117	39	117	41	45	39	117	41	45	39	119	
		268A	23.0	27.7	50	47	52	126	52	60	49	128	53	128	54	60	50	128	54	60	52	130	
		269A	25.5	30.7	54	50	56	129	56	60	53	131	56	131	58	60	53	131	58	60	55	133	
		NONE	-	-	19	19	21	114	21	25	21	116	21	116	23	25	21	116	23	30	23	30	118
		265A	6.0	7.2	28	27	30	121	30	30	29	123	30	123	32	35	29	123	32	35	32	35	125
		266A	11.5	13.8	36	35	38	128	38	40	37	130	38	130	40	40	37	130	40	40	39	40	132
		267A	14.0	16.8	40	38	42	131	42	45	40	133	42	133	44	45	40	133	44	45	43	45	135
268A	23.0	27.7	53	50	55	142	55	60	53	144	56	144	57	60	53	144	57	60	55	60	146		
269A	25.5	30.7	57	54	59	145	59	60	56	147	59	147	61	70	56	147	61	70	59	60	149		
RHH072	STD	NONE	-	-	12	15	11	66	15	20	15	70	13	15	13	68	17	20	17	20	17	72	
		118A	18.0	17.3	33	31	33	83	33	35	35	87	35	87	35	35	85	39	40	37	37	89	
		299A	28.0	26.9	45	42	49	93	49	50	46	97	47	97	51	50	44	95	51	60	48	99	
		NONE	-	-	13	12	17	81	17	20	17	85	14	83	18	20	14	83	18	20	19	87	
		118A	18.0	17.3	34	32	35	98	38	40	36	102	36	102	40	40	34	100	40	40	38	104	
		299A	28.0	26.9	46	43	50	108	50	50	47	112	48	110	52	50	48	110	52	60	49	114	
		NONE	-	-	16	15	19	95	19	25	20	98	17	97	21	25	17	97	21	25	22	101	
		118A	18.0	17.3	37	35	41	112	41	45	40	116	39	114	43	45	37	114	43	45	42	118	
		299A	28.0	26.9	49	46	53	122	53	60	51	126	51	126	55	60	48	124	55	60	53	128	

See: "Legend and Notes for Tables 72 - 83" on page 76.



## ELECTRICAL INFORMATION (cont)

**Table 76 – RHH073 UNIT WIRE/FUSE OR HACR BREAKER SIZING DATA - 2-STAGE COOLING WITH SINGLE SPEED INDOOR FAN MOTOR**

UNIT	IFM TYPE	ELEC. HTR			NO C.O. or UNPWR C.O.						NO P.E.						w/ PWRD C.O.					
		CRHEATER***00	Nom (kW)	FLA	NO P.E.		w/ P.E. (pwrd fr/unit)		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	FUSE or BRKR	FLA	LRA			MCA	FUSE or BRKR			FLA	LRA			MCA	FUSE or BRKR	FLA	LRA
208/230-3-60	STD	NONE	-	-	32	50	37	161	36	50	36	165	37	50	37	166	41	50	41	50	41	170
		264A	4.9/6.5	13.6/15.6	49/52	60/60	41/49	175/177	53/56	60/60	51/53	179/181	54/57	60/60	52/55	180/182	58/60	60/70	57/59	60/70	57/59	184/186
		117A	7.8/10.4	21.7/25.0	59/64	60/70	56/60	183/186	63/67	70/70	61/63	187/190	64/68	70/80	62/65	188/191	68/72	80/80	66/70	80/80	66/70	192/195
		110A	12.0/16.0	33.4/38.5	74/80	80/80	70/75	194/200	78/84	80/90	74/80	198/204	79/85	80/90	75/81	199/205	83/89	90/90	79/85	90/90	79/85	203/209
		117A+117A	15.8/21.0	43.8/50.5	87/95	90/100	82/89	249/262	91/99	100/100	86/94	253/266	92/100	100/100	87/95	254/267	96/104	100/110	91/99	100/110	91/99	258/271
		110A+117A	19.9/26.5	55.2/63.8	101/112	110/125	95/105	271/289	105/116	110/125	99/109	275/293	106/117	110/125	100/110	276/294	110/121	110/125	105/114	110/125	105/114	280/298
	MED	NONE	-	-	35	50	34	198	38	50	38	202	39	50	39	203	43	60	44	60	44	207
		264A	4.9/6.5	13.6/15.6	52/54	60/60	49/52	212/214	55/58	60/60	54/56	216/218	56/59	60/60	55/57	217/219	60/63	70/70	59/62	70/70	59/62	221/223
		117A	7.8/10.4	21.7/25.0	62/66	70/70	59/63	220/223	66/70	70/80	63/67	224/227	67/71	70/80	64/68	225/228	70/74	80/80	69/72	80/80	69/72	229/232
		110A	12.0/16.0	33.4/38.5	76/83	80/90	72/78	231/237	80/87	80/90	77/82	235/241	81/88	90/90	78/84	236/242	85/91	90/100	82/88	90/100	82/88	240/246
		117A+117A	15.8/21.0	43.8/50.5	89/98	90/100	84/92	266/299	93/102	100/110	89/96	290/303	94/103	100/110	90/97	291/304	98/106	100/110	94/102	100/110	94/102	295/308
		110A+117A	19.9/26.5	55.2/63.8	104/114	110/125	97/107	308/326	107/118	110/125	102/112	312/330	108/119	110/125	103/113	313/331	112/123	125/125	107/117	110/125	107/117	317/335
460-3-60	HIGH	NONE	-	-	41/40	50/50	230	44/44	60/60	45/44	234	45/45	60/60	46/45	235	49/48	60/60	51/50	60/60	51/50	239	
		264A	4.9/6.5	13.6/15.6	59/59	60/60	56/58	244/246	61/63	70/70	61/62	248/250	62/64	70/70	62/63	249/251	66/68	80/80	66/68	80/80	66/68	253/255
		117A	7.8/10.4	21.7/25.0	68/71	80/80	66/69	252/255	72/75	80/80	70/73	256/259	73/76	80/80	71/74	257/260	76/80	80/80	76/78	80/80	76/78	261/264
		110A	12.0/16.0	33.4/38.5	82/88	90/90	79/84	263/269	86/92	90/100	84/88	267/273	87/93	90/100	85/90	268/274	91/97	100/100	89/94	100/100	89/94	272/278
		117A+117A	15.8/21.0	43.8/50.5	95/103	100/110	91/98	318/331	99/107	100/110	96/102	322/335	100/108	100/110	97/103	323/336	104/112	110/125	101/108	110/125	101/108	327/340
		110A+117A	19.9/26.5	55.2/63.8	110/120	110/125	104/113	340/358	113/123	123/125	109/118	344/362	114/124	125/125	110/119	345/363	118/128	125/150	114/123	118/128	114/123	349/367
	STD	NONE	-	-	17	25	16	79	19	25	18	81	19	25	19	81	21	30	21	30	21	83
		265A	6.0	7.2	26	30	24	86	28	30	26	88	28	30	27	88	30	30	29	30	29	90
		266A	11.5	13.8	34	35	32	93	36	40	34	95	36	40	34	95	38	40	36	40	36	97
		267A	14.0	16.8	38	40	35	96	40	40	37	98	40	45	38	98	42	45	40	45	40	100
		268A	23.0	27.7	51	60	48	107	53	60	50	109	54	60	50	109	55	60	52	60	52	111
		269A	25.5	30.7	55	60	51	110	57	60	53	112	57	60	54	112	59	60	56	60	56	114
MED	NONE	-	-	18	25	17	98	19	25	19	100	20	25	19	100	22	30	22	30	22	102	
	265A	6.0	7.2	27	30	25	105	28	30	27	107	29	30	28	107	31	35	30	35	30	109	
	266A	11.5	13.8	35	40	33	112	37	40	35	114	37	40	35	114	39	40	37	40	37	116	
	267A	14.0	16.8	39	40	36	115	40	45	38	117	41	45	39	117	43	45	41	45	41	119	
	268A	23.0	27.7	52	60	49	126	54	60	51	128	54	60	51	128	56	60	53	60	53	130	
	269A	25.5	30.7	56	60	52	129	58	60	54	131	58	60	55	131	60	60	57	60	57	133	
HIGH	NONE	-	-	21	25	20	114	22	30	22	116	23	30	23	116	25	30	25	30	25	118	
	265A	6.0	7.2	30	30	29	121	31	35	31	123	32	35	31	123	34	40	33	40	33	125	
	266A	11.5	13.8	38	40	36	128	40	45	38	130	40	45	39	130	42	45	41	45	41	132	
	267A	14.0	16.8	42	45	40	131	43	45	42	133	44	45	42	133	46	50	44	45	44	135	
	268A	23.0	27.7	55	60	52	142	57	60	54	144	57	60	54	144	59	60	57	60	57	146	
	269A	25.5	30.7	59	60	56	145	61	70	58	147	61	70	58	147	63	70	60	60	60	149	
STD	NONE	-	-	13	20	12	66	17	20	16	70	15	20	14	68	18	25	18	25	18	72	
	118A	18.0	17.3	35	35	32	83	38	40	36	87	36	40	34	85	40	40	38	40	38	79	
	299A	28.0	26.9	47	50	43	93	50	50	47	97	48	50	45	95	52	60	49	60	49	99	
MED	NONE	-	-	14	20	13	81	18	25	18	85	16	20	15	83	20	25	20	25	20	87	
	118A	18.0	17.3	36	40	33	98	40	40	38	102	37	40	35	100	41	45	40	45	40	104	
	299A	28.0	26.9	48	50	44	108	52	40	49	112	49	50	46	114	53	60	51	60	51	114	
HIGH	NONE	-	-	17	20	17	95	21	25	21	99	19	25	19	97	22	25	22	25	23	101	
	118A	18.0	17.3	39	40	37	112	42	45	41	116	40	40	39	114	44	45	43	45	43	118	
	299A	28.0	26.9	51	60	48	122	54	60	52	126	52	60	50	124	56	60	54	60	54	128	

See: "Legend and Notes for Tables 72 - 83" on page 76.

# ELECTRICAL INFORMATION (cont)

**Table 77 – RHH090 UNIT WIRE/FUSE OR HACR BREAKER SIZING DATA - TWO STAGE COOLING WITH SINGLE SPEED INDOOR FAN MOTOR**

UNIT	ELEC. HTR				NO C.O. or UNPWR C.O.				NO P.E.				w/ PWRD C.O.				
	IFM TYPE	CR/HEATER***00	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		
							FLA	LRA			FLA	LRA			FLA	LRA	FLA
RHH090	STD	NONE	-	-	38	50	40	191	42	50	44	195	43	50	45	196	
		117A	7.8/10.4	21.7/25.0	65/69	70/70	69/73	69/73	213/216	69/73	70/80	69/73	217/220	70/74	70/80	70/74	218/221
		110A	12.0/16.0	33.4/38.5	80/86	80/80	84/90	84/90	224/230	84/90	90/90	82/88	228/234	85/91	90/100	83/89	229/235
		111A	18.6/24.8	51.7/59.7	103/113	110/125	107/117	99/108	243/251	107/117	110/125	103/113	247/255	108/118	110/125	105/114	248/256
		112A	24.0/32.0	66.7/77.0	122/134	125/150	116/128	116/128	258/268	125/138	125/138	121/132	262/272	126/139	150/150	122/134	263/273
		112A+117A	31.8/42.4	88.4/102.0	149/166	150/175	141/157	368/395	368/395	152/169	175/175	146/161	372/399	153/170	175/175	147/162	373/400
	MED	NONE	-	-	40/40	50/50	42/41	229	44/43	50/50	46/46	233	45/44	50/50	47/47	234	
		117A	7.8/10.4	21.7/25.0	67/71	70/80	66/70	251/254	71/75	80/80	71/74	255/258	72/76	80/80	72/76	256/259	
		110A	12.0/16.0	33.4/38.5	82/88	90/90	80/86	262/268	85/92	90/100	84/90	266/272	86/93	90/100	85/91	267/273	
		111A	18.6/24.8	51.7/59.7	104/114	110/125	101/110	281/289	108/118	110/125	105/114	285/293	109/119	110/125	106/115	286/294	
		112A	24.0/32.0	66.7/77.0	123/136	125/150	118/130	296/306	127/140	150/150	123/134	300/310	128/141	150/150	124/135	301/311	
		112A+117A	31.8/42.4	88.4/102.0	150/167	150/175	143/159	406/433	154/171	175/175	148/163	410/437	155/172	175/175	149/164	411/438	
460-3-60	STD	NONE	-	-	44	50	46	258	47	60	50	262	48	60	51	263	
		117A	7.8/10.4	21.7/25.0	71/75	80/80	71/75	280/283	74/79	80/80	75/79	284/287	75/80	80/80	76/80	285/288	
		110A	12.0/16.0	33.4/38.5	85/92	90/100	84/90	291/297	89/95	90/100	89/94	295/301	90/96	90/100	90/96	296/302	
		111A	18.6/24.8	51.7/59.7	108/118	110/125	105/114	310/318	112/122	125/125	110/119	314/322	113/123	125/125	111/120	315/323	
		112A	24.0/32.0	66.7/77.0	127/140	150/150	122/134	325/335	131/144	150/150	127/139	329/339	132/145	150/150	128/140	330/340	
		112A+117A	31.8/42.4	88.4/102.0	154/171	175/175	147/163	435/462	158/175	175/175	152/167	439/466	159/176	175/200	153/169	440/467	
	MED	NONE	-	-	18	20	19	95	20	25	21	97	21	25	21	97	
		116B	13.9	16.7	39	40	38	112	41	45	40	114	41	45	41	114	
		113B	16.5	19.8	43	45	42	115	45	45	44	117	45	45	44	117	
		114B	27.8	33.4	60	60	57	128	62	70	59	130	62	70	60	130	
		115B	33.0	39.7	68	70	65	135	70	70	67	137	72	80	67	137	
		115B+117A	33.0	39.7	68	70	65	135	71	80	68	137	72	80	68	137	
575-3-60	STD	NONE	-	-	19	25	20	114	21	25	22	116	21	25	22		
		116B	13.9	16.7	40	40	39	131	42	45	41	133	42	45	42		
		113B	16.5	19.8	44	45	43	134	46	50	45	136	46	50	45		
		114B	27.8	33.4	61	70	58	147	63	70	60	149	63	70	61		
		115B	33.0	39.7	69	70	65	154	71	80	68	156	71	80	68		
		115B+117A	33.0	39.7	69	70	65	154	71	80	68	156	71	80	68		
	MED	NONE	-	-	21	25	22	129	23	25	24	131	23	25	24		
		116B	13.9	16.7	42	45	41	146	44	45	43	148	44	45	44		
		113B	16.5	19.8	46	50	45	149	48	50	47	151	48	50	47		
		114B	27.8	33.4	63	70	60	162	65	70	62	164	65	70	63		
		115B	33.0	39.7	71	80	68	169	73	80	70	171	73	80	70		
		115B+117A	33.0	39.7	71	80	68	169	73	80	70	171	73	80	70		
RHH090	STD	NONE	-	-	13	15	13	77	17	20	18	81	15	20	15		
		118A	18.0	17.3	35	35	33	94	39	40	38	94	36	40	35		
		119A	36.0	34.6	56	60	53	112	60	60	58	116	58	60	55		
		118A	18.0	17.3	35	35	34	98	39	40	38	102	37	40	36		
		119A	36.0	34.6	57	60	54	116	61	70	58	120	59	60	56		
		119A	36.0	34.6	57	60	54	116	61	70	58	120	59	60	56		
	MED	NONE	-	-	14	15	14	81	17	20	18	85	15	20	16		
		118A	18.0	17.3	35	35	34	98	39	40	38	102	37	40	36		
		119A	36.0	34.6	57	60	54	116	61	70	58	120	59	60	56		
		118A	18.0	17.3	35	35	34	98	39	40	38	102	37	40	36		
		119A	36.0	34.6	57	60	54	116	61	70	58	120	59	60	56		
		119A	36.0	34.6	57	60	54	116	61	70	58	120	59	60	56		
HIGH	NONE	-	-	14	20	15	92	18	20	19	96	16	20	17			
	118A	18.0	17.3	36	40	35	109	40	40	39	113	38	40	37			
	119A	36.0	34.6	58	60	55	127	61	70	59	131	59	60	56			
	118A	18.0	17.3	36	40	35	109	40	40	39	113	38	40	37			
	119A	36.0	34.6	58	60	55	127	61	70	59	131	59	60	56			
	119A	36.0	34.6	58	60	55	127	61	70	59	131	59	60	56			

See: "Legend and Notes for Tables 72 - 83" on page 76.

# ELECTRICAL INFORMATION (cont)

**Table 78 – RHH102 UNIT WIRE/FUSE OR HACR BREAKER SIZING DATA - TWO STAGE COOLING WITH SINGLE SPEED INDOOR FAN MOTOR**

UNIT	ELEC. HTR			NO C.O. or UNPWR C.O.						NO P.E.						w/ PWRD C.O.							
	IFM TYPE	CR/HEATER***00	Nom (kW)	FLA	NO P.E.			w/ P.E. (pwrd fr/unit)			NO P.E.			w/ P.E. (pwrd fr/unit)			NO P.E.			w/ P.E. (pwrd fr/unit)			
					MCA	FUSE or HACR BRKR	DISC. SIZE FLA LRA	MCA	FUSE or HACR BRKR	DISC. SIZE FLA LRA	MCA	FUSE or HACR BRKR	DISC. SIZE FLA LRA	MCA	FUSE or HACR BRKR	DISC. SIZE FLA LRA	MCA	FUSE or HACR BRKR	DISC. SIZE FLA LRA				
208/230-3-60	STD	NONE	-	-	46	60	47	236	49	60	52	240	50	60	53	241	54	60	57	245	61/61	287	
		117A	7.8/10.4	21.7/25.0	73/77	80/80	72/76	258/261	76/81	80/90	77/80	262/265	77/82	80/90	78/82	263/266	81/85	90/90	82/86	267/270	86/89	309/312	
		110A	12.0/16.0	33.4/38.5	87/94	90/100	86/92	269/275	91/97	100/100	90/96	273/279	92/98	100/100	91/97	274/280	96/102	100/110	96/101	278/284	99/105	320/326	
		111A	18.6/24.8	51.7/59.7	110/120	110/125	107/116	288/296	114/124	125/125	111/120	292/300	115/125	125/125	100/110	112/121	293/301	119/129	125/150	117/126	297/305	120/129	339/347
		112A	24.0/32.0	66.7/77.0	129/142	150/150	124/136	303/313	133/146	150/150	128/140	307/317	134/147	150/150	129/141	308/318	138/150	150/150	134/146	312/322	138/149	354/364	
		112A+117A	31.8/42.4	88.4/102.0	156/173	175/175	149/165	413/440	160/177	175/200	153/169	417/444	161/178	175/200	154/170	418/445	165/182	175/200	159/174	422/449	168/185	464/491	
	MED	NONE	-	-	49/49	60/60	51/51	278	53/52	60/60	55/55	282	54/53	60/60	56/56	283	57/57	70/70	61/61	287	70/70	61/61	287
		117A	7.8/10.4	21.7/25.0	76/80	80/80	76/80	300/303	80/84	80/90	80/84	304/307	81/85	90/90	81/85	305/308	84/89	90/90	86/89	309/312	86/89	309/312	
		110A	12.0/16.0	33.4/38.5	91/97	100/100	89/95	311/317	94/101	100/110	94/99	315/321	95/102	100/110	95/101	316/322	99/105	100/110	99/105	320/326	99/105	320/326	
		111A	18.6/24.8	51.7/59.7	113/123	125/125	110/119	330/338	117/127	125/150	115/124	334/342	118/128	125/150	116/125	335/343	122/132	125/150	120/129	339/347	122/132	339/347	
		112A	24.0/32.0	66.7/77.0	132/145	150/150	128/139	345/355	136/149	150/150	132/144	349/359	137/150	150/150	133/145	350/360	141/154	150/175	138/149	354/364	141/154	354/364	
		112A+117A	31.8/42.4	88.4/102.0	159/176	175/200	153/168	455/482	163/180	175/200	157/173	459/486	164/181	175/200	158/174	460/487	168/185	175/200	162/178	464/491	168/185	464/491	
460-3-60	STD	NONE	-	-	51	60	53	292	55	60	58	296	56	60	59	297	60	70	63	301	60	301	
		117A	7.8/10.4	21.7/25.0	78/82	80/90	78/82	314/317	82/86	90/90	83/87	318/321	83/87	90/90	84/88	319/322	87/91	90/100	88/92	323/326	87/91	323/326	
		110A	12.0/16.0	33.4/38.5	93/99	100/100	92/98	325/331	97/103	100/110	96/102	329/335	98/104	100/110	97/103	330/336	101/108	110/110	102/108	334/340	101/108	334/340	
		111A	18.6/24.8	51.7/59.7	116/126	125/150	113/122	344/352	119/129	125/150	117/127	348/356	120/130	125/150	118/128	349/357	124/134	125/150	123/132	353/361	124/134	353/361	
		112A	24.0/32.0	66.7/77.0	134/147	150/150	130/142	359/369	138/151	150/175	135/146	363/373	139/152	150/175	136/148	364/374	143/156	150/175	140/152	368/378	143/156	368/378	
		112A+117A	31.8/42.4	88.4/102.0	161/178	175/200	155/171	489/496	165/182	175/200	160/175	493/500	166/183	175/200	161/176	494/501	170/187	175/200	165/181	478/505	170/187	478/505	
	MED	NONE	-	-	21	25	22	118	23	25	24	120	23	25	24	120	25	30	26	122	26	122	
		116B	13.9	16.7	42	45	41	135	44	45	43	137	44	45	43	137	46	50	46	139	46	139	
		113B	16.5	19.8	46	50	47	138	48	50	47	140	48	50	47	140	50	50	49	140	50	140	
		114B	27.8	33.4	63	70	60	151	65	70	62	153	65	70	63	153	67	70	65	155	67	155	
		115B	33.0	39.7	71	80	67	158	73	80	69	160	73	80	70	160	75	80	72	162	75	162	
		115B	33.0	39.7	71	80	69	158	74	80	71	161	75	80	72	161	76	80	74	163	76	163	
HIGH	NONE	-	-	23	25	24	139	25	30	26	141	25	30	26	141	27	30	28	143	27	143		
	116B	13.9	16.7	44	45	43	156	45	45	45	158	46	50	45	158	48	50	47	160	48	160		
	113B	16.5	19.8	47	50	48	159	49	50	48	161	50	50	49	161	51	60	51	163	51	163		
	114B	27.8	33.4	64	70	62	172	66	70	64	174	67	70	65	174	68	70	68	176	68	176		
	115B	33.0	39.7	72	80	69	179	74	80	71	181	75	80	72	181	76	80	74	183	76	183		
	115B	33.0	39.7	72	80	69	179	74	80	71	181	75	80	72	181	76	80	74	183	76	183		
575-3-60	STD	NONE	-	-	17	20	17	97	21	25	22	101	18	20	19	99	22	25	23	103	22	103	
		118A	18.0	17.3	38	40	37	114	42	45	41	118	40	40	39	116	44	45	43	116	44	116	
		119A	36.0	34.6	60	60	57	132	64	70	61	136	62	70	59	134	66	70	63	138	66	138	
		NONE	-	-	18	20	18	108	21	25	22	112	19	25	20	110	23	25	24	114	23	114	
		118A	18.0	17.3	39	40	38	125	43	45	42	129	41	45	40	127	45	45	44	131	45	131	
		119A	36.0	34.6	61	70	58	143	65	70	62	147	63	70	60	145	66	70	64	149	66	149	
	HIGH	NONE	-	-	18	20	18	108	21	25	22	112	19	25	20	110	23	25	24	114	23	114	
		118A	18.0	17.3	39	40	38	125	43	45	42	129	41	45	40	127	45	45	44	131	45	131	
		119A	36.0	34.6	61	70	58	143	65	70	62	147	63	70	60	145	66	70	64	149	66	149	
		NONE	-	-	18	20	18	108	21	25	22	112	19	25	20	110	23	25	24	114	23	114	
		118A	18.0	17.3	39	40	38	125	43	45	42	129	41	45	40	127	45	45	44	131	45	131	
		119A	36.0	34.6	61	70	58	143	65	70	62	147	63	70	60	145	66	70	64	149	66	149	

See: "Legend and Notes for Tables 72 - 83" on page 76.

# ELECTRICAL INFORMATION (cont)

Table 79 – RHH120 UNIT WIRE/FUSE OR HACR BREAKER SIZING DATA - TWO STAGE COOLING WITH SINGLE SPEED INDOOR FAN MOTOR

UNIT	IFM TYPE	ELEC. HTR					NO C.O. or UNPWR C.O.					NO P.E.					w/ PWRD C.O.				
		ORHEATER***00	Nom (kW)	FLA	MCA	MAX FUSE or HACR BRKR	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	
									FLA	LRA			FLA	LRA			FLA	LRA			FLA
RHH120	STD	NONE	7.5/10.0	20.9/24.1	46	60	49	60	60	52	266	50	60	53	267	54	60	57	60	57	
		288A	12.4/16.5	34.4/39.7	72/76	80/80	76/80	80/80	80/80	76/79	287/290	77/81	80/90	77/81	288/291	80/84	80/90	81/85	80/90	81/85	
		294A	25.2/33.5	69.9/80.6	89/95	90/100	92/99	100/100	100/100	91/97	300/306	300/306	93/100	100/100	301/307	97/104	100/110	97/103	100/110	97/103	
		288A+294A	32.7/43.5	90.7/104.7	133/146	150/150	133/146	150/150	150/150	132/144	336/347	336/347	138/151	150/175	337/348	142/155	150/175	138/150	150/175	138/150	
	291A+294A	37.6/50.0	104.3/120.3	159/177	175/200	144/171	175/200	200/175	156/172	447/475	447/475	164/181	175/200	448/476	168/185	175/200	162/178	175/200	162/178		
	NONE	7.5/10.0	20.9/24.1	49/49	60/60	53/53	60/60	60/60	55/55	308	308	54/54	60/60	309	57/57	70/70	61/61	70/70	61/61		
	288A	12.4/16.5	34.4/39.7	79/79	80/80	79/83	80/90	80/90	79/83	329/332	329/332	80/84	80/90	330	81/84	80/90	85/89	80/90	85/89		
	294A	25.2/33.5	69.9/80.6	92/98	100/100	96/102	100/110	100/110	95/101	342/344	342/344	97/103	100/110	343/349	100/107	100/110	101/106	100/110	101/106		
	288A+294A	32.7/43.5	90.7/104.7	136/149	150/150	136/148	150/175	150/175	137/148	378/389	378/389	141/154	150/175	379/390	145/158	150/175	141/154	150/175	141/154		
	291A+294A	37.6/50.0	104.3/120.3	179/189	200/175	166/183	175/200	200/200	160/176	489/517	489/517	167/184	175/200	490/518	171/188	175/200	165/181	175/200	165/181		
	NONE	7.5/10.0	20.9/24.1	62	80	66	80	80	69	328	328	67	80	329	71	80	75	80	75		
	288A	12.4/16.5	34.4/39.7	88/92	100/100	89/93	100/100	100/100	89/97	362/368	362/368	93/97	100/100	363/369	97/101	100/110	99/102	100/110	99/102		
294A	25.2/33.5	69.9/80.6	105/112	110/125	109/115	110/125	110/125	109/115	394/405	394/405	110/116	110/125	395/410	114/120	125/125	114/120	114/120	114/120			
288A+294A	32.7/43.5	90.7/104.7	149/163	150/175	153/167	175/175	175/175	150/162	509/537	509/537	154/168	175/175	510/538	158/171	175/175	155/167	175/175	155/167			
291A+294A	37.6/50.0	104.3/120.3	175/193	200/200	179/197	200/200	200/200	174/190	537/569	537/569	180/198	200/200	538/570	184/201	200/225	179/195	200/225	179/195			
NONE	10.0	12.0	23	30	25	30	30	26	127	127	25	30	127	27	30	28	30	28			
288A	16.5	19.9	38	40	37	40	40	39	139	139	40	40	139	42	45	42	45	42			
295A	33.5	40.3	73	80	72	80	80	72	167	167	75	80	167	77	80	74	80	74			
288A+295A	43.5	52.3	88	90	84	90	90	86	232	232	90	90	232	92	100	88	100	88			
292A+295A	50.0	60.2	83	90	93	90	90	95	247	247	85	90	247	87	90	97	90	97			
NONE	10.0	12.0	24	30	25	30	30	27	148	148	26	30	148	28	30	30	30	30			
288A	16.5	19.9	39	40	38	40	40	39	158	158	41	45	158	43	45	44	45	44			
295A	33.5	40.3	75	80	72	80	80	74	188	188	77	80	188	79	80	76	80	76			
288A+295A	43.5	52.3	90	90	85	90	90	88	253	253	92	100	253	94	100	90	100	90			
292A+295A	50.0	60.2	85	90	95	90	90	97	268	268	86	90	268	89	100	99	100	99			
NONE	10.0	12.0	31	40	32	40	40	34	158	158	33	40	158	35	40	37	40	37			
288A	16.5	19.9	46	50	46	50	50	48	170	170	48	50	170	50	50	51	50	51			
295A	33.5	40.3	81	90	79	90	90	81	198	198	84	90	198	85	90	83	90	83			
288A+295A	43.5	52.3	96	100	92	100	100	94	263	263	99	100	263	100	100	97	100	97			
292A+295A	50.0	60.2	81	90	101	90	90	104	276	276	93	100	276	95	100	106	100	106			
NONE	10.0	12.0	18	20	18	20	20	18	95	95	19	25	97	23	25	24	25	24			
290A	16.5	15.9	37	40	36	40	40	36	111	111	31	35	107	35	35	35	35	35			
296A	33.5	32.2	58	60	55	60	60	59	131	131	59	60	129	63	70	61	70	61			
280A+296A	43.5	41.9	70	70	66	70	70	68	183	183	72	80	181	75	80	72	80	72			
293A+296A	50.0	48.1	66	70	73	70	70	78	195	195	67	70	193	71	80	80	80	80			
NONE	10.0	12.0	18	20	19	20	20	19	106	106	22	25	108	24	25	25	25	25			
290A	16.5	15.9	38	40	37	40	40	37	122	122	34	35	118	36	40	36	40	36			
296A	33.5	32.2	59	60	56	60	60	57	138	138	62	70	142	64	70	62	70	62			
280A+296A	43.5	41.9	71	80	67	80	80	71	194	194	72	80	192	76	80	73	80	73			
293A+296A	50.0	48.1	66	70	74	70	70	79	202	202	70	80	200	72	80	81	80	81			
NONE	10.0	12.0	25	30	26	30	30	26	118	118	27	30	120	31	35	32	35	32			
290A	16.5	15.9	37	40	37	40	40	37	128	128	41	45	132	43	45	43	45	43			
296A	33.5	32.2	66	70	63	70	70	63	150	150	69	70	154	71	80	69	70	69			
280A+296A	43.5	41.9	78	80	74	80	80	79	202	202	81	90	206	83	90	81	90	81			
293A+296A	50.0	48.1	73	80	81	80	80	86	214	214	77	80	216	79	80	88	80	88			

See: "Legend and Notes for Tables 72 - 83" on page 76.



# ELECTRICAL INFORMATION (cont)

**Table 81 – RHH090 UNIT WIRE/FUSE OR HACR BREAKER SIZING DATA - TWO STAGE COOLING WITH TWO SPEED INDOOR FAN MOTOR**

UNIT	IFM TYPE	ELEC. HTR				NO C.O. or UNPWR C.O.																		
		CR/HEATER***00	Nom (kW)	FLA	NO P.E.				w/ P.E. (pwrd fr/unit)				NO P.E.				w/ PWRD C.O.							
					MCA	MAX FUSE or HACR BRKR	FLA	DISC. SIZE	MCA	MAX FUSE or HACR BRKR	FLA	DISC. SIZE	MCA	MAX FUSE or HACR BRKR	FLA	DISC. SIZE	MCA	MAX FUSE or HACR BRKR	FLA	DISC. SIZE				
208/230-3-60	STD	NONE	-	-	39/39	50/50	40/40	195	43/42	50/50	45/44	199	44/43	50/50	46/46	200	47/47	60/60	50/50	204	49/48	60/60	52/51	208
		117A	7.8/10.4	21.7/25.0	66/70	70/70	65/68	217/220	70/74	70/80	70/73	221/224	71/75	71/75	80/80	71/74	222/225	74/78	80/80	75/79	226/229	80/80	77/80	230/233
		110A	12.0/16.0	33.4/38.5	80/87	90/90	79/84	228/234	84/90	90/90	83/89	232/238	85/91	84/90	90/100	84/90	233/239	89/95	90/100	89/94	237/243	90/100	90/100	241/247
		111A	18.6/24.8	51.7/59.7	103/113	110/125	100/109	247/255	107/117	110/125	104/113	251/259	108/118	110/125	110/125	105/114	252/260	112/122	125/125	110/119	256/264	125/125	111/120	260/268
		112A	24.0/32.0	66.7/77.0	122/135	125/150	117/129	262/272	126/139	150/150	121/133	266/276	127/140	127/140	150/150	122/134	267/277	131/143	150/150	127/138	271/281	150/150	127/138	275/285
		112A+117A	31.8/42.4	88.4/102.0	149/166	150/175	142/157	372/399	153/170	175/175	146/162	376/403	154/171	154/171	175/175	147/163	377/404	158/175	175/175	152/167	381/408	158/175	152/167	381/408
	MED	NONE	-	-	40/40	50/50	42/41	199	44/44	50/50	46/46	203	45/45	50/50	47/47	204	49/48	60/60	52/51	208	52/51	60/60	52/51	208
		117A	7.8/10.4	21.7/25.0	67/71	70/80	67/70	221/224	71/75	80/80	71/75	225/228	72/76	72/76	80/80	72/76	226/229	76/80	80/80	77/80	230/233	80/80	77/80	234/237
		110A	12.0/16.0	33.4/38.5	82/88	90/90	80/86	232/238	86/92	90/100	85/90	236/242	87/93	87/93	90/100	86/91	237/243	90/96	90/100	90/96	241/247	90/100	90/96	245/249
		111A	18.6/24.8	51.7/59.7	105/114	110/125	101/110	251/259	108/118	110/125	106/114	255/263	109/119	110/125	110/125	107/116	256/264	113/123	125/125	111/120	260/268	125/125	111/120	264/268
		112A	24.0/32.0	66.7/77.0	123/136	125/150	118/130	266/276	127/140	150/150	123/134	270/280	128/141	128/141	150/150	124/135	271/281	132/145	150/150	128/140	275/285	150/150	128/140	279/283
		112A+117A	31.8/42.4	88.4/102.0	151/167	175/175	143/159	376/403	154/171	175/175	148/162	380/407	155/172	155/172	175/175	149/164	381/408	159/176	175/200	153/169	385/412	175/200	153/169	389/412
460-3-60	STD	NONE	-	-	19	20	97	20	20	21	99	21	21	25	22	99	21	25	24	101	25	24	101	
		116B	13.9	16.7	40	40	38	114	41	45	40	116	42	45	41	116	44	45	43	118	45	43	118	
		113B	16.5	19.8	43	45	42	117	45	45	44	119	46	46	50	45	119	47	50	47	121	47	49	121
		114B	27.8	33.4	60	60	58	130	62	70	60	132	63	63	70	60	132	64	70	62	134	64	70	134
		115B	33.0	39.7	68	70	65	137	70	70	67	139	71	71	80	67	139	72	80	69	141	72	80	141
		NONE	-	-	19	25	20	100	21	25	22	102	21	21	25	22	102	23	25	24	104	25	24	104
	MED	116B	13.9	16.7	40	40	39	117	42	45	41	119	42	45	42	119	44	45	44	121	45	44	121	
		113B	16.5	19.8	44	45	43	120	46	50	45	122	46	50	45	122	48	50	47	124	47	49	124	
		114B	27.8	33.4	61	70	58	133	63	70	60	135	63	70	61	135	65	70	63	137	65	70	137	
		115B	33.0	39.7	69	70	65	140	71	80	68	142	71	71	80	68	142	73	80	70	144	73	80	144
		NONE	-	-	21	25	22	125	22	25	24	127	23	23	25	24	127	25	25	24	129	25	24	129
		116B	13.9	16.7	42	45	41	142	44	45	43	144	44	44	45	43	144	46	50	45	146	46	45	146
HIGH	113B	16.5	19.8	45	45	44	145	47	50	46	147	48	50	47	147	49	50	49	149	49	49	149		
	114B	27.8	33.4	62	70	60	158	64	70	62	160	65	70	62	160	66	70	65	162	66	70	162		
	115B	33.0	39.7	70	70	67	165	72	80	69	167	73	73	80	69	167	74	80	72	169	74	80	169	
	NONE	-	-	14	20	15	79	18	20	19	83	16	16	20	17	81	20	25	21	85	20	21	85	
	118A	18.0	17.3	36	40	35	96	40	40	39	100	38	40	40	39	98	41	45	41	102	41	45	102	
	119A	36.0	34.6	58	60	55	114	61	70	59	118	59	59	60	56	116	63	70	61	120	63	70	120	
575-3-60	MED	NONE	-	-	15	20	83	19	20	20	87	17	17	20	17	85	21	25	22	89	21	25	89	
		118A	18.0	17.3	37	40	35	100	40	40	104	38	40	40	37	102	42	45	42	106	42	45	106	
		119A	36.0	34.6	58	60	55	118	62	70	60	122	60	60	60	57	120	64	70	62	124	64	70	124
		NONE	-	-	16	20	17	92	20	20	21	96	18	18	20	19	94	22	25	23	98	22	25	98
		118A	18.0	17.3	38	40	37	109	42	45	41	113	39	40	40	39	111	43	45	43	115	43	45	115
		119A	36.0	34.6	59	60	56	127	63	70	61	131	61	61	70	58	129	65	70	63	133	65	70	133

See: "Legend and Notes for Tables 72 - 83" on page 76.

# ELECTRICAL INFORMATION (cont)

**Table 82 – RHH102 UNIT WIRE/FUSE OR HACR BREAKER SIZING DATA - TWO STAGE COOLING WITH TWO SPEED INDOOR FAN MOTOR**

UNIT	ELEC. HTR				NO C.O. or UNPWR C.O.															
	IFM TYPE	CR/HEATER****00	Nom (kW)	FLA	NO P.E.				NO P.E.				NO P.E.				w/ PWRD C.O.			
					MCA	MAX FUSE or HACR BRKR	FLA	DISC. SIZE	MCA	MAX FUSE or HACR BRKR	FLA	DISC. SIZE	MCA	MAX FUSE or HACR BRKR	FLA	DISC. SIZE	MCA	MAX FUSE or HACR BRKR	FLA	DISC. SIZE
208/230-3-60	STD	NONE	-	-	47/47	60/60	49/49	233	51/51	60/60	54/53	237	52/52	60/60	55/55	238	56/56	60/60	59/59	242
		117A	7.8/10.4	21.7/25.0	75/78	80/80	74/78	255/258	78/82	80/90	79/82	259/262	79/83	80/90	80/83	260/263	83/87	90/90	84/88	264/267
		110A	12.0/16.0	33.4/38.5	89/95	90/100	88/93	266/272	93/99	100/100	92/98	270/276	94/100	100/100	93/99	271/277	98/104	100/110	98/103	275/281
		111A	18.6/24.8	51.7/59.7	112/122	125/125	109/118	285/293	116/126	125/150	113/122	289/297	117/127	125/150	114/123	290/298	121/130	125/150	119/128	294/302
		112A	24.0/32.0	66.7/77.0	131/143	150/150	126/138	300/310	135/147	150/150	131/142	304/314	136/148	150/150	132/143	305/315	139/152	150/175	136/148	309/319
		112A+117A	31.8/42.4	88.4/102.0	158/175	175/175	151/166	410/437	162/178	175/200	155/171	414/441	163/179	175/200	157/172	415/442	167/183	175/200	161/176	419/446
	MED	NONE	-	-	49/48	60/60	51/50	259	53/52	60/60	56/55	263	54/53	60/60	57/56	264	58/57	70/70	61/60	288
		117A	7.8/10.4	21.7/25.0	76/79	80/80	76/79	281/284	80/83	80/90	81/83	285/288	81/84	80/90	82/85	286/289	85/88	90/90	86/89	290/293
		110A	12.0/16.0	33.4/38.5	91/96	100/100	90/95	292/298	95/100	100/100	94/99	296/302	96/101	100/110	95/100	297/303	99/105	100/110	99/104	301/307
		111A	18.6/24.8	51.7/59.7	114/123	125/125	111/119	311/319	117/127	125/150	115/123	315/323	118/128	125/150	116/124	316/324	122/131	125/150	121/129	320/328
		112A	24.0/32.0	66.7/77.0	132/144	150/150	128/139	326/336	136/148	150/150	132/143	330/340	137/149	150/150	133/144	331/341	141/153	150/175	138/149	335/345
		112A+117A	31.8/42.4	88.4/102.0	159/176	175/200	153/168	436/463	163/179	175/200	157/172	440/467	164/180	175/200	158/172	441/468	168/184	175/200	163/177	445/472
460-3-60	STD	NONE	-	-	51/50	60/60	54/53	283	55/54	60/60	58/57	287	56/55	60/60	59/58	288	60/59	70/70	64/62	282
		117A	7.8/10.4	21.7/25.0	78/81	80/90	79/81	305/308	82/85	90/90	81/83	309/312	83/86	90/90	84/87	310/313	87/90	89/91	314/317	
		110A	12.0/16.0	33.4/38.5	93/98	100/100	92/97	316/322	97/102	100/110	96/101	320/326	98/103	100/110	98/102	321/327	102/107	110/110	102/107	325/331
		111A	18.6/24.8	51.7/59.7	116/125	125/125	113/121	335/343	120/129	125/150	118/126	339/347	121/130	125/150	119/127	340/348	124/133	125/150	123/131	344/352
		112A	24.0/32.0	66.7/77.0	135/146	150/150	130/141	350/360	138/150	150/150	135/145	354/364	139/151	150/175	136/147	355/365	143/155	150/175	140/151	359/369
		112A+117A	31.8/42.4	88.4/102.0	162/178	175/200	155/170	460/487	165/181	175/200	160/174	464/491	166/182	175/200	161/175	465/492	170/186	175/200	165/180	469/496
	MED	NONE	-	-	22	25	23	117	24	30	25	119	24	30	25	119	26	30	27	121
		116B	13.9	16.7	43	45	42	134	45	45	44	136	45	45	44	136	47	50	46	138
		113B	16.5	19.8	47	50	45	137	48	50	43	139	49	50	43	139	51	60	48	141
		114B	27.8	33.4	64	70	61	150	65	70	63	152	66	70	64	152	68	70	66	154
		115B	33.0	39.7	72	80	68	157	73	80	70	159	74	80	71	159	76	80	73	161
		NONE	-	-	22	25	23	130	24	30	25	132	25	30	26	132	26	30	28	134
HIGH	116B	13.9	16.7	43	45	42	147	45	45	44	149	45	45	44	149	47	50	47	151	
	113B	16.5	19.8	47	50	46	150	49	50	48	152	49	50	48	152	51	60	50	154	
	114B	27.8	33.4	64	70	62	163	66	70	64	165	66	70	64	165	68	70	66	167	
	115B	33.0	39.7	72	80	69	170	74	80	71	172	74	80	71	172	76	80	73	174	
	NONE	-	-	23	25	24	142	25	30	26	144	26	30	27	144	27	30	29	146	
	116B	13.9	16.7	44	45	44	159	46	50	46	161	46	50	46	161	48	50	48	150	
575-3-60	STD	NONE	-	-	18	20	19	99	22	25	23	103	20	25	21	101	24	25	25	105
		118A	18.0	17.3	40	40	39	116	44	45	43	120	42	45	41	118	45	45	122	
		119A	36.0	34.6	62	70	59	134	65	70	63	138	63	70	61	136	67	70	65	140
		NONE	-	-	19	25	20	108	23	25	24	112	21	25	22	110	25	30	26	114
		118A	18.0	17.3	41	45	40	125	45	45	44	129	43	45	42	127	46	50	46	131
		119A	36.0	34.6	63	70	60	143	66	70	64	147	64	70	62	145	68	70	66	149
HIGH	NONE	-	-	19	25	20	108	23	25	24	112	21	25	22	110	25	30	26	114	
	118A	18.0	17.3	41	45	40	125	45	45	44	129	43	45	42	127	46	50	46	131	
	119A	36.0	34.6	63	70	60	143	66	70	64	147	64	70	62	145	68	70	66	149	
	NONE	-	-	19	25	20	108	23	25	24	112	21	25	22	110	25	30	26	114	
	118A	18.0	17.3	41	45	40	125	45	45	44	129	43	45	42	127	46	50	46	131	
	119A	36.0	34.6	63	70	60	143	66	70	64	147	64	70	62	145	68	70	66	149	

See: "Legend and Notes for Tables 72 - 83" on page 76.

# ELECTRICAL INFORMATION (cont)

**Table 83 – RHH120 UNIT WIRE/FUSE OR HACR BREAKER SIZING DATA - TWO STAGE COOLING WITH TWO SPEED INDOOR FAN MOTOR**

UNIT	NOM. V-PH-HZ	ELEC. HTR										NO C.O. or UNPWR C.O.										w/ PWRD C.O.									
		IFM TYPE	ORHEATER****00	Nom (kW)	FLA	NO P.E.			w/ P.E. (pwrd fr/unit)			NO P.E.			w/ P.E. (pwrd fr/unit)			NO P.E.			w/ P.E. (pwrd fr/unit)										
						MCA	FUSE or HACR BRKR	DISC. SIZE FLA LRA	MCA	FUSE or HACR BRKR	DISC. SIZE FLA LRA	MCA	FUSE or HACR BRKR	DISC. SIZE FLA LRA	MCA	FUSE or HACR BRKR	DISC. SIZE FLA LRA	MCA	FUSE or HACR BRKR	DISC. SIZE FLA LRA											
RHH120	208/230-3-60	STD	NONE	48/47	60/60	50/49	259	51/51	60/60	54/54	263	52/52	60/60	55/55	264	56/56	60/60	59/59	268	59/59	60/60	55/55	264	56/56	60/60	59/59	268				
			288A	74/77	80/80	74/77	280/293	77/81	80/80	74/77	284/287	78/82	80/80	74/77	285/288	78/82	80/80	74/77	285/288	78/82	80/80	74/77	285/288	78/82	80/80	74/77	285/288	78/82			
			291A	91/97	100/100	89/95	293/299	94/101	100/100	89/95	297/303	95/102	100/100	89/95	299/304	95/102	100/100	89/95	299/304	95/102	100/100	89/95	299/304	95/102	100/100	89/95	299/304	95/102	100/100		
			288A+294A	135/148	150/150	130/142	329/340	139/152	150/175	134/146	333/344	140/153	150/175	134/146	335/344	140/153	150/175	134/146	335/344	140/153	150/175	134/146	335/344	140/153	150/175	134/146	335/344	140/153	150/175		
			291A+294A	161/178	175/200	154/170	440/468	165/182	175/200	158/174	444/472	168/183	175/200	158/174	444/472	168/183	175/200	158/174	444/472	168/183	175/200	158/174	444/472	168/183	175/200	158/174	444/472	168/183	175/200		
			288A+294A	178/168	200/175	170/188	468/500	182/171	200/175	174/192	472/504	183/172	200/200	176/193	498/530	184/173	200/200	176/193	498/530	184/173	200/200	176/193	498/530	184/173	200/200	176/193	498/530	184/173	200/200	176/193	
	460-3-60	STD	NONE	49/48	60/60	51/50	285	53/52	60/60	56/55	289	54/53	60/60	57/56	290	58/57	60/60	57/56	290	58/57	60/60	57/56	290	58/57	60/60	57/56	290	58/57			
			288A	75/78	80/80	75/78	306/309	79/82	80/80	75/78	310/313	80/83	80/80	75/78	311/314	80/83	80/80	75/78	311/314	80/83	80/80	75/78	311/314	80/83	80/80	75/78	311/314	80/83			
			291A	92/98	100/100	91/96	319/325	96/102	100/110	95/100	323/329	97/103	100/110	95/100	324/330	97/103	100/110	95/100	324/330	97/103	100/110	95/100	324/330	97/103	100/110	95/100	324/330	97/103	100/110		
			288A+294A	136/149	150/150	132/143	355/366	140/153	150/175	136/147	359/370	141/154	150/175	136/147	360/371	141/154	150/175	136/147	360/371	141/154	150/175	136/147	360/371	141/154	150/175	136/147	360/371	141/154	150/175		
			291A+294A	162/179	175/200	156/171	466/494	166/183	175/200	160/175	470/498	167/184	175/200	160/175	471/499	167/184	175/200	160/175	471/499	167/184	175/200	160/175	471/499	167/184	175/200	160/175	471/499	167/184	175/200		
			288A+294A	179/169	200/175	171/189	494/526	183/172	200/200	176/193	498/530	184/173	200/200	176/193	498/530	184/173	200/200	176/193	498/530	184/173	200/200	176/193	498/530	184/173	200/200	176/193	498/530	184/173	200/200	176/193	
RHH120	460-3-60	MED	NONE	62	80	65	324	66	80	69	328	67	80	70	67	80	70	67	80	70	67	80	70	67	80	70	67	80			
			288A	88/92	100/100	88/93	345/348	92/96	100/100	88/93	349/352	93/97	100/100	88/93	350/353	93/97	100/100	88/93	350/353	93/97	100/100	88/93	350/353	93/97	100/100	88/93	350/353	93/97			
			291A	105/112	110/125	104/111	358/364	109/115	110/125	109/115	362/368	110/116	110/125	109/115	363/369	110/116	110/125	109/115	363/369	110/116	110/125	109/115	363/369	110/116	110/125	109/115	363/369	110/116	110/125		
			288A+294A	149/163	150/175	145/158	394/405	153/167	175/175	151/163	398/409	154/168	175/175	151/163	399/410	154/168	175/175	151/163	399/410	154/168	175/175	151/163	399/410	154/168	175/175	151/163	399/410	154/168	175/175		
			291A+294A	175/193	175/200	169/185	505/533	179/197	200/200	174/190	509/537	180/198	200/200	174/190	510/538	180/198	200/200	174/190	510/538	180/198	200/200	174/190	510/538	180/198	200/200	174/190	510/538	180/198	200/200		
			288A+294A	192/182	200/200	185/203	533/565	196/186	200/200	189/208	537/569	197/187	200/200	189/208	537/569	197/187	200/200	189/208	537/569	197/187	200/200	189/208	537/569	197/187	200/200	189/208	537/569	197/187	200/200		
	575-3-60	STD	NONE	24	30	24	124	25	30	26	126	26	30	27	126	26	30	27	126	26	30	27	126	26	30	27	126	26			
			288A	39	40	38	136	40	40	138	40	138	40	40	138	40	40	138	40	40	138	40	40	138	40	40	138	40			
			292A	47	50	46	144	48	50	146	48	146	48	50	146	48	50	146	48	50	146	48	50	146	48	50	146	48			
			288A+295A	74	80	74	164	76	80	73	166	76	80	73	166	76	80	73	166	76	80	73	166	76	80	73	166	76	80		
			292A+295A	89	90	85	229	91	90	87	231	91	90	87	231	91	90	87	231	91	90	87	231	91	90	87	231	91	90		
			288A+295A	84	84	84	244	86	84	246	86	246	86	84	246	86	84	246	86	84	246	86	84	246	86	84	246	86	84		

See: "Legend and Notes for Tables 72 - 83" on page 76.



# TYPICAL WIRING DIAGRAMS

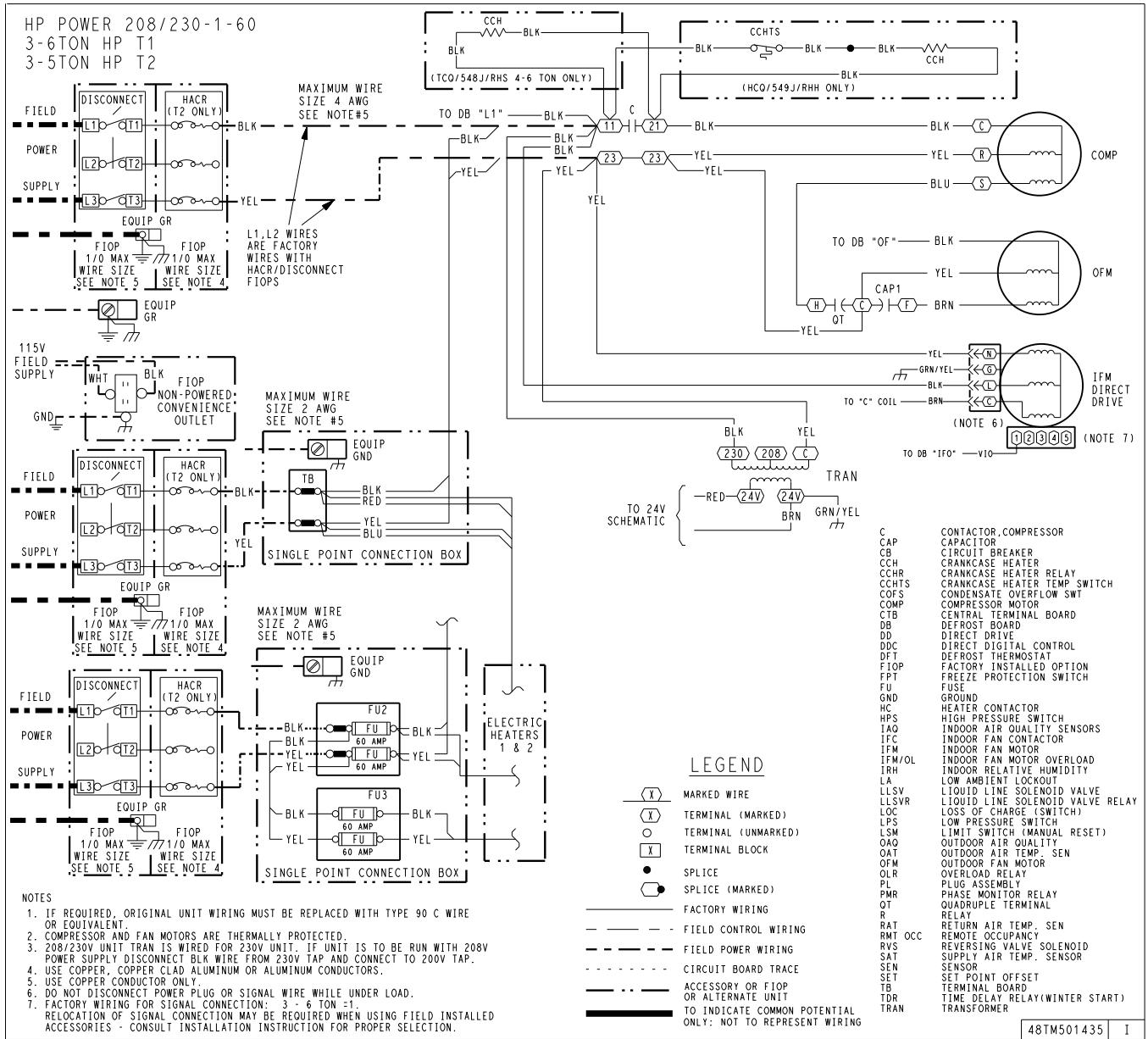


Fig. 28 - Typical Power Wiring Diagram: 1-Stage Cooling Unit Shown

NOTE: For details pertaining to a specific unit, see the Power Wiring Diagram label on the unit.

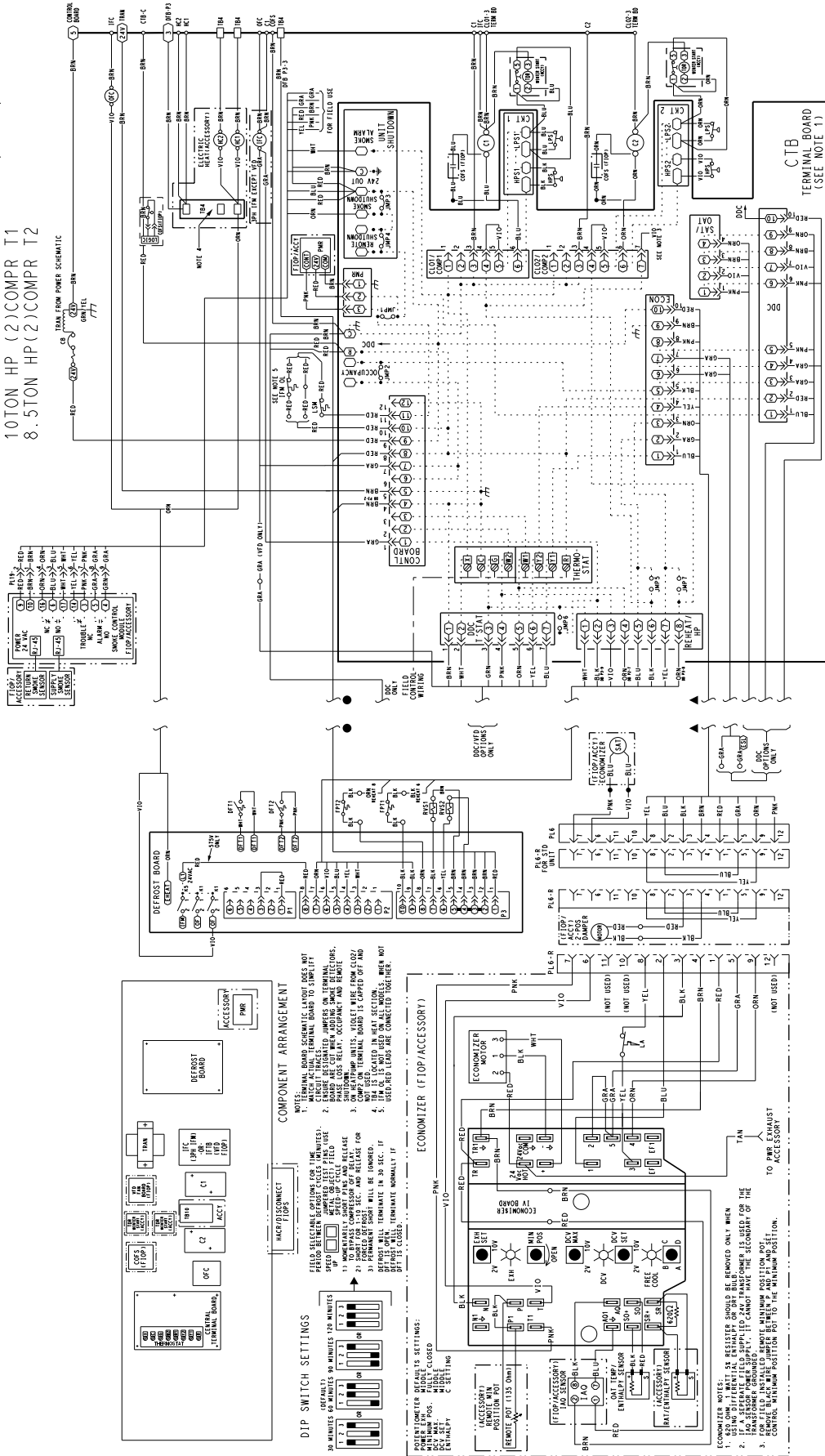
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# TYPICAL WIRING DIAGRAMS (cont.)

HEAT PUMP CONTROL 208/230V, 460V, 575V  
 10TON HP (2)COMPR T1  
 8.5TON HP(2)COMPR T2



461M012961-1

**Fig. 31 - Typical Control Wiring Diagram: 2-Stage Unit with Electro-Mechanical Control Shown**  
 NOTE: For details pertaining to a specific unit, see the Control Wiring Diagram label on the unit.

# SEQUENCE OF OPERATION

## Cooling, unit without economizer

### Cooling (Single speed indoor fan motor) —

When thermostat calls for cooling, terminals G and Y1 are energized. The indoor fan contactor (IFC), reversing valve solenoid (RVS) and compressor contactor are energized and indoor fan motor, compressor, and outdoor fan starts. On 2-Stage 073 units, Y1 allows compressor to operate unloaded at 67% of unit capacity. For all units, the outdoor fan motor runs continuously while unit is cooling.

Two-stage models: If Stage 1 cooling does not satisfy the space load, the space temperature will rise until thermostat calls for Stage 2 cooling (Y2 closes). On two compressor units, Defrost Board activates Stage 2 Compressor. Reversing valve 2 switches to Cooling position. Compressor 2 contactor is energized; Compressor 2 starts and Circuit 2 operates in Cooling mode. On 2-Stage 073 units, Y2 energizes the loader plug, allowing compressor to operate at 100% in cooling mode.

On two compressor units when Cooling Stage 2 is satisfied, thermostat Y2 opens. Compressor 2 contactor is de-energized; Compressor 2 stops. Reversing Valve 2 remains energized. On 2-Stage 073 units, the loader plug is de-energized and compressor operates at 67%. Reversing Valve remains energized.

When Cooling Stage 1 is satisfied, thermostat Y1 opens. Compressor 1 contactor is de-energized; Compressor 1 stops. Outdoor fan relay is de-energized; outdoor fans stop. After the Fan Delay period, the Indoor fan contactor is de-energized; indoor fan stops (unless Continuous Fan operation has been selected). Reversing Valve 1 remains energized.

Reversing valve solenoids are energized in Cooling modes. Each solenoid will remain energized until the next Heating mode is initiated for this circuit.

### Cooling (2-speed indoor fan motor) —

Per ASHRAE 90.1-2013 standard section 6.4.3.10.b, during the first stage of cooling operation the VFD will adjust the fan motor to provide 66% 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, unit without economizer

Upon a request for heating from the space thermostat, terminal W1 will be energized with 24V. The IFC, outdoor fan contactor (OFC), C1, and C2 will be energized. The indoor fan, outdoor fans, and compressor no. 1, and compressor no. 2 are energized and reversing valves are de-energized and switch position.

If the space temperature continues to fall while W1 is energized, W2 will be energized with 24V, and the

heater contactor(s) (HC) will be energized, which will energize the electric heater(s).

When the space thermostat is satisfied, W2 will be de-energized first, and the electric heater(s) will be de-energized.

Upon a further rise in space temperature, W1 will be de-energized.

Two compressor models: When the thermostat calls for heating, terminal W1 is energized. Defrost Board de-energizes both reversing valve solenoids and reversing valves move to Heating position. The indoor fan contactor is energized; indoor fan motor starts. Outdoor fan relay is energized; both outdoor fan motors run. Compressor contactors C1 and C2 are energized; both refrigeration circuits operate in Heating mode.

If Stage 1 heating does not satisfy the space load, the space temperature will fall until thermostat calls for Stage 2 heating (W2 closes). Terminal W2 is energized. Defrost Board issues an output at EHEAT. Heater contactor 1 and heater contactor 2 (if installed) are energized; all electric heaters are energized.

When space heating load is partially satisfied, thermostat terminal W2 is de-energized; heater contactors are de-energized and all electric heat is terminated. Stage 1 heating continues.

When the space heating load is fully satisfied, thermostat terminal W1 is also de-energized.

Reversing valve solenoids remain de-energized until the next call for Cooling mode is initiated.

## Cooling, unit with EconoMiSer® IV, X

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 EconoMiSer IV, X control to provide a 50 to 55°F (10° to 13°C) mixed air temperature into the zone. As the mixed air temperature fluctuates above 55 or below 50°F (13° to 10°C), the 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 (7°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).

If optional power exhaust is installed, as the outdoor air damper opens and closes, the power exhaust fans will be energized and de-energized.

## SEQUENCE OF OPERATION (cont)

If field-installed accessory CO<sub>2</sub> sensors are connected to the EconoMiSer® IV, X control, a demand controlled ventilation strategy will begin to operate. As the CO<sub>2</sub> level in the zone increases above the CO<sub>2</sub> setpoint, the minimum position of the damper will be increased proportionally. As the CO<sub>2</sub> level decreases because of the increase in fresh air, the outdoor air damper will be proportionally closed.

For EconoMiSer IV, 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 EconoMiSer IV, 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 EconoMiSer IV, X damper to the minimum position.

On the initial power to the EconoMiSer IV, X control, it will take the damper up to 2<sup>1</sup>/<sub>2</sub> minutes before it begins to position itself. Any change in damper position will take up to 30 seconds to initiate. Damper movement from full closed to full open (or vice versa) will take between 1<sup>1</sup>/<sub>2</sub> and 2<sup>1</sup>/<sub>2</sub> 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° to 55°F (10° to 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 EconoMiSer IV, X damper will be open at maximum position. EconoMiSer IV, 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 66% of the total cfm established.

### Heating, unit with Economizer

When the room temperature calls for heat through terminal W1, the indoor (evaporator) fan contactor (IFC) and heater contactor no. 1 (HC1) are energized and the reversing valve(s) de-energize and switches position. On units equipped for 2 stages of heat, when additional heat is needed, heater contactor no. 2 is energized through W2. The economizer damper moves to the minimum position. When the thermostat is satisfied, the damper moves to the fully closed position.

### Defrost

When the temperature of the outdoor coil drops below 28°F (-2°C) as sensed by the defrost thermostat (DFT2) and the defrost timer is at the end of a timed period (adjustable at 30, 60, 90 or 120 minutes), reversing valve solenoids (RVS1 and RVS2) are energized and the OFC is de-energized. This switches the position of the reversing valves and shuts off the outdoor fan. The electric heaters (if installed) will be energized.

The unit continues to defrost until the coil temperature as measured by DFT2 reaches 65°F (18°C), or the duration of defrost cycle completes a 10-minute period.

During the Defrost mode, if circuit 1 defrosts first, RVS1 will oscillate between Heating and Cooling modes until the Defrost mode is complete.

At the end of the defrost cycle, the electric heaters (if installed) will be de-energized; the reversing valves switch and the outdoor fan motor will be energized. The unit will now operate in the Heating mode.

If the space thermostat is satisfied during a defrost cycle, the unit will continue in the Defrost mode until the time or temperature constraints are satisfied.

### Automatic changeover

When the system selection switch is set at AUTO position, unit automatically changes from heating operation to cooling operation when the temperature of the conditioned space rises to the cooling level setting. When the temperature of the conditioned space falls to the heating level setting, unit automatically changes from cooling to heating operation (with a 3°F deadband in between).

### Continuous air circulation

Turn unit power on. Set system control at OFF position. Set fan switch at ON position. The indoor fan contactor is energized through the thermostat switch and the indoor fan runs continuously.

### Emergency heat

When the switch is on (thermostat is set to the EM HT position), compressor circuit and outdoor thermostats are bypassed, and the second stage of thermostat energizes the indoor blower and the electric resistance heaters.