

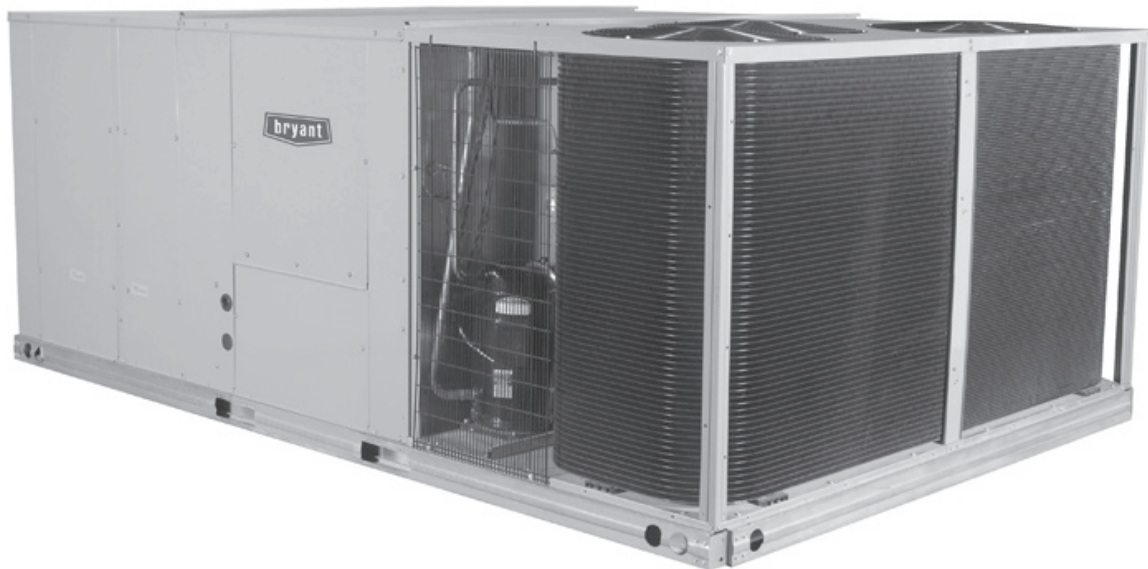
558J

COOLING ONLY/ELECTRIC HEAT PACKAGED ROOFTOP UNITS
VERTICAL MODELS, NOMINAL TONS 15, 17.5, 20, 25, 27.5
MODEL SIZES 17, 20, 24, 28, 30



Product Data

LEGACY™
LINE



C10538



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Heating & Cooling Systems

The 15 to 27.5 ton Legacy Line Bryant rooftop unit (RTU) was designed by customers for customers. With a newly designed cabinet that integrates “no-strip” screw collars, handled access panels, and more, we’ve made your unit easy to install, easy to maintain and easy to use and reliable.

Easy to install:

These Legacy Line units are designed for dedicated factory supplied vertical air flow duct configurations. No special field kits are required. Designed to fit on pre-installed curbs by other another manufacturer, these units also fit on past designed Bryant installed curbs with a new certified and authorized adapter curb. This cabinet design also integrates a large control box that gives you room to work and room to mount Bryant accessory controls.

Easy to maintain:

Easy access handles by Bryant provide quick and easy access to all major, normally serviced components. Our “no-strip” screw system has superior holding power and guides screws into position while preventing the screw from stripping the unit’s metal. Take accurate pressure readings by reading condenser pressure with panels in place as compressors are strategically located to eliminate any air bypass.

Easy to use:

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

Reliable:

Each unit comes with precision sized and tested scroll compressor that is internally protected from over temperature and pressures. In addition, each refrigerant circuit is further protected with a high pressure and low pressure switch as well as containing a liquid line filter drier. Each unit is factory tested prior to shipment to help ensure units operation once properly installed.

FEATURES AND BENEFITS

- 2-stage cooling capacity with independent circuits and control.
- Round tube/plate fin (RTPF) available on all sizes or NOVATION all aluminum condenser (outdoor) coils available on 17-28 sizes only. Special coil-coating also available for coastal and industrial environments
- EER's up to 11.0.
- IEER's up to 12.2 with single speed indoor fan motor and up to 12.9 with 2-speed/VFD indoor fan motor
- Dedicated vertical air flow duct configuration models. No field kits required.
- Utility connections through the side or bottom. Bottom connections are also in an enclosed environment to help prevent water entry. Field supplied couplings are required.
- Standardized components and control box layout. Standardized components and controls make stocking parts and service easier.
- Scroll compressors on all units. This makes service, stocking parts, replacement, and trouble-shooting easier.
- Proven Acutrol refrigerant metering system.
- Easy-adjust, belt-drive motor available. Motor assembly also contains a fan belt break protection system on all models and reliable pillow block bearing system that allows lubrication thru front of the unit.
- Capable of thru-the-base electrical routing.
- Full range of electric heaters and single point electric kits – pre-engineered and approved for field installation.
- Single-point electrical connection.
- Sloped, composite drain pan sheds water; and won't rust.
- Standardized controls and control box layout. Standardized components and controls make stocking parts and service easier.
- Clean, large, easy to use control box.
- Color-coded wiring.
- Large, laminated wiring and power wiring drawings which are affixed to unit make troubleshooting easy.
- Single, central terminal board for test and wiring connections.
- Fast-access, handled, panels for easy access on normally accessed service panels.
- “No-strip” screw system guides screws into the panel and captures them tightly without stripping the screw, the panel, or the unit.
- Mechanical cooling (115°F to 30°F / 46°C to -1°C) standard on all models. Low ambient controller allows operation down to -20°F / -29°C.
- 2-in (51mm) disposable filters on all units, with 4-in (102mm) filter track - field installed.
- Refrigerant filter-drier on each circuit.
- High and low pressure switches. Added reliability with high pressure switch and low pressure switch.
- Many factory-installed options ranging from air management economizers, 2 position dampers, manual outdoor air dampers, plus convenience outlets, disconnect switch and smoke detectors.
- Factory-installed Perfect Humidity dehumidification system. Available on 17-28 sizes with RTPF condenser coil models only.
- Standard Parts Warranty: 10 year aluminized heat exchanger, 5 year compressor, 3 year NOVATION™ condenser coil, 1 year others.
- Optional 2-Speed Indoor Fan Motor system utilizes a Variable Frequency Drive (VFD) to automatically adjust the indoor fan motor speed between cooling stages. Available on 2-stage cooling models 17-30 with electromechanical controls or RTU Open.

MODEL NUMBER NOMENCLATURE

| | | | | | | | | | | | | | | | | | |
|-----------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|
| Position: | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Example: | 5 | 5 | 8 | J | E | 1 | 7 | D | 0 | 0 | 0 | A | 1 | A | 0 | A | A |

Unit Type

558 - Cooling RTU with optional Electric Heat

Model

J - Puron® (R-410A) Refrigerant

Voltage

E = 460-3-60
P = 208/230-3-60
T = 575-3-60

Cooling Tons (Vertical Air Flow Models Only)

17 = 15 tons
20 = 17.5 tons
24 = 20 tons
28 = 25 tons
30 = 27.5 tons

Refrig. System Options

D = Two stage Cooling
K = Two stage Cooling with Perfect Humidity™
(only available on 17-28 sizes with RTPF coil models)

Heat Level

(Field installed electric heaters available)
000 = No Heat

Novation Coil Only (Outdoor - Indoor - Hail Guard)

G = Al/Al - Al/Cu
H = Al/Al - Cu/Cu
J = Al/Al - E-coat Al/Cu
K = E-coat Al/Al - Al/Cu
L = E-coat Al/Al - E-coat Al/Cu
T = Al/Al - Al/Cu — Louvered Hail Guards
U = Al/Al - Cu/Cu — Louvered Hail Guards
V = Al/Al - E-coat Al/Cu — Louvered Hail Guards
W = E-coat Al/Al - Al/Cu — Louvered Hail Guards
X = E-coat Al/Al - E-coat Al/Cu — Louvered Hail Guards

Round Tube Plate Fin (RTPF) Coil Options (Outdoor - Indoor - Hail Guard)

A = Al/Cu - Al/Cu
B = Precoat Al/Cu - Al/Cu
C = E-coat Al/Cu - Al/Cu
D = E-coat Al/Cu - E-coat Al/Cu
E = Cu/Cu - Al/Cu
F = Cu/Cu - Cu/Cu
M = Al/Cu - Al/Cu — Louvered Hail Guards
N = Precoat Al/Cu - Al/Cu — Louvered Hail Guards
P = E-coat Al/Cu - Al/Cu — Louvered Hail Guards
Q = E-coat Al/Cu - E-coat Al/Cu — Louvered Hail Guards
R = Cu/Cu - Al/Cu — Louvered Hail Guards
S = Cu/Cu - Cu/Cu — Louvered Hail Guards

Packaging & 2-Speed Indoor Fan Motor

A = Standard Packaging and electro-mechanical controls that require W7212 EconoMi\$er IV
C = Standard Packaging and electro-mechanical controls that require W7220 EconoMi\$er X
D = Standard Packaging and 2-speed indoor fan motor (VFD) Controller

Factory Installed Options

0A = None
NOTE: See the 558J 15 to 27.5 ton Price Pages for a complete list of factory installed options.

Outdoor Air Options

A = None
B = Temp Econo, Baro Relief, Standard Leak (W7212 or W7220)
D = Temp Econo, Cert Pwr Exhaust, Standard Leak (W7212 or W7220)
E = Temp Econo, Baro Relief, Standard Leak w/CO2 (W7212 or W7220)
G = Temp Econo, Cert Pwr Exhaust, Standard Leak w/CO2 (W7212 or W7220)
H = Enthalpy Econo, Baro Relief, Standard Leak (W7212 or W7220)
K = Enthalpy Econo, Cert Pwr Exhaust, Standard Leak (W7212 or W7220)
L = Enthalpy Econo, Baro Relief, Standard Leak w/CO2 (W7212 or W7220)
N = Enthalpy Econo, Cert Pwr Exhaust, Standard Leak w/CO2 (W7212 or W7220)
P = Manual Outdoor Air Damper
Q = 2 Position Damper
U = Temp Econo, Baro Relief, Ultra Low Leak, (W7220)
V = Temp Econo, Cent Pwr Exhaust, Ultra Low Leak Economizer (W7220)
W = Enthalpy Econo, Baro Relief, Ultra Low Leak (W7220)
X = Enthalpy Econo, Cent Pwr Exhaust, Ultra Low Leak (W7220)

Indoor Fan Options (Vertical Air Flow Models Only)

1 = Standard Static/Vertical Supply, Return Air Flow
2 = Medium Static/Vertical Supply, Return Air Flow
3 = High Static/Vertical Supply, Return Air Flow
B = Medium Static High Efficiency Motor/Vertical Supply, Return Air Flow
C = High Static High Efficiency Motor/Vertical Supply, Return Air Flow

C13776B

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

| CATEGORY | ITEM | FACTORY INSTALLED OPTION | FIELD INSTALLED ACCESSORY |
|--|--|--------------------------|---------------------------|
| Cabinet | Hinged Access Panels | X | |
| Coil Options | Cu/Cu (indoor) coils | X | |
| | E-coated indoor & outdoor coils | X | |
| Humidity Control | Perfect Humidity Dehumidification System (17–28 RTPF) | X | |
| Condenser Protection | Condenser coil hail guard (louvered design) | X | X |
| Controls | Thermostats, temperature sensors, and subbases | | X |
| | RTU Open protocol controller | X | |
| | Smoke detector (supply and/or return air) | X | X |
| | Time Guard II compressor delay control circuit | | X |
| | Phase Monitor | | X |
| Economizers & Outdoor Air Dampers | EconoMi\$er IV for electro–mechanical controls – Non FDD (Standard air leak damper models) ⁵ | X | X |
| | EconoMi\$er2 (for DDC controls, complies with FDD (Standard and Ultra Low Leak air damper models) ^{5,6} | X | X |
| | Motorized 2 position outdoor–air damper | X | X |
| | Manual outdoor–air damper (25%) | X | X |
| | Barometric relief ¹ | X | X |
| | Power exhaust–centrifugal blower | X | X |
| | EconoMi\$er X for electro–mechanical controls, complies with FDD. (Standard and Ultra Low Leak air damper models) ⁵ | X | X |
| Economizer Sensors & IAQ Devices | Single dry bulb temperature sensors ² | X | X |
| | Differential dry bulb temperature sensors ² | | X |
| | Single enthalpy sensors ² | X | X |
| | Differential enthalpy sensors ² | | X |
| | CO ₂ sensor (wall, duct, or unit mounted) ³ | X | X |
| Electric Heat | Electric Resistance Heaters | | X |
| | Single Point Kit | | X |
| Indoor Motor & Drive | Multiple motor and drive packages | X | |
| | 2–Speed Indoor Fan Motor system w/VFD controller (2–stage cool only with electrical mechanical and RTU Open controls) | X | |
| | Display Kit for 2–Speed Indoor Fan Motor system with VFD | | X |
| Low Ambient Control | Winter start kit ³ | | X |
| | Motormaster head pressure controller ³ | | X |
| Power Options | Convenience outlet (powered) | X | |
| | Convenience outlet (unpowered) | X | |
| | Non–fused disconnect ⁴ | 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 FLA rating exceeds 200 amps on 208/230 volt and 100 amps on 460/575 volt units. Bryant Packaged RTUBuilder selects this automatically.
5. FDD – (Fault Detection and Diagnostic) capability per California Title 24 section 120.2.
6. Models with RTU Open DDC controls comply with California Title 24 Fault Dection and Diagnostic (FDD).

FACTORY OPTIONS AND/OR ACCESSORIES

Economizer (dry-bulb or enthalpy)

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

CO₂ Sensor

Improves productivity and saves money by working with the economizer to intake only the correct amount of outside air for ventilation. As occupants fill your building, the CO₂ sensor detects their presence through increasing CO₂ levels, and opens the economizer appropriately.

When the occupants leave, the CO₂ levels decrease, and the sensor appropriately closes the economizer. This intelligent control of the ventilation air, called Demand Control Ventilation (DCV) reduces the overall load on the rooftop, saving money.

Smoke Detectors

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

Louvered Hail Guards

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

Convenience Outlet (powered or un-powered)

Reduce service and/or installation costs by including a convenience outlet in your specification. Bryant 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 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.

Power Exhaust with Barometric Relief

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

RTU Open Multi-Protocol Controller

Connect the rooftop to an existing BAS without needing complicated translators or adapter modules using the RTU Open controller. This new controller speaks the 4 most common building automation system languages (Bacnet, Modbus, N2, and Lonworks). Use this controller when you have an existing BAS.

Time Guard II Control Circuit

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

Filter or Fan Status Switches

Use these differential pressure switches to detect a filter clog or indoor fan motor failure. When used in conjunction with a compatible unit controller/thermostat, the switches will activate an alarm to warn the appropriate personnel.

Motorized 2-Position Damper

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

Manual OA Damper

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

FACTORY OPTIONS AND/OR ACCESSORIES (cont.)

Optional Perfect Humidity Dehumidification System

Bryant's Perfect Humidity dehumidification system is an all-inclusive factory installed option that can be ordered with any Legacy Line 558J*17-28 rooftop unit.

This system expands the envelope of operation of Bryant's Legacy Line rooftop products to provide unprecedented flexibility to meet year round comfort conditions.

The Perfect Humidity dehumidification system has the industry's only dual dehumidification mode setting. The Perfect Humidity system includes two new modes of operation.

The Legacy Line 558J17-28 rooftop coupled with the Perfect Humidity system is capable of operating in normal design cooling mode, subcooling mode, and hot gas reheat mode. Normal design cooling mode is when the unit will operate under its normal sequence of operation by cycling compressors to maintain comfort conditions.

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

Two-Speed Indoor Fan Speed System

Bryant'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 standard section 6.4.3.10.b, during the first stage of cooling operation the VFD will adjust the fan motor to provide 2/3rd of the total cfm established for the unit. When a call for the second stage of cooling is required, the VFD will allow the total cfm for the unit established (100%). During the heating mode the VFD will allow total design cfm (100%) operation and during the ventilation mode the VFD will allow operation to 2/3rd of total cfm.

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

The VFD used in Bryant'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 or RTU Open, Multi Protocol 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.

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

Motormaster Head Pressure Controller

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

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

Winter Start Kit

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

Alternate Motors and Drives

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

Thru-the-Base Connections

Thru-the-base provisions/connection points are available as standard with every unit. When bottom connections are required, field furnished couplings are required.

FACTORY OPTIONS AND/OR ACCESSORIES (cont.)

Hinged Access Panels

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

Electric Heaters / Single Point Kit

Bryant offers a full-line of field-installed accessory heaters and single point kits when required. The heaters are very easy to use, install and are all pre-engineered and certified.

Table 2 – AHRI COOLING RATING TABLE 2-STAGE COOLING

| UNIT | COOLING STAGES | NOM. CAPACITY (TONS) | NET COOLING CAPACITY (MBH) | TOTAL POWER (kW) | EER | IEER WITH SINGLE SPEED INDOOR MOTOR | IEER WITH 2-SPEED INDOOR MOTOR |
|------|----------------|----------------------|----------------------------|------------------|------|-------------------------------------|--------------------------------|
| 17 | 2 | 15 | 202.0 | 18.4 | 11.0 | 12.2 | 12.9 |
| 20 | 2 | 17.5 | 208.0 | 18.9 | 11.0 | 11.9 | 12.9 |
| 24 | 2 | 20 | 242.0 | 24.2 | 10.0 | 10.8 | 11.9 |
| 28 | 2 | 25 | 280.0 | 28.0 | 10.0 | 10.6 | 11.7 |
| 30 | 2 | 27.5 | 330.0 | 31.7 | 10.4 | 10.6 | 11.7 |

LEGEND

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



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



NOTES

1. Rated and certified under AHRI Standard 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 various load capacities.
3. All 558J units comply with ASHRAE 90.1 Energy Standard for minimum EER and IEER requirements.
4. Where appropriate, 558J units comply with US Energy Policy Act. Refer to state and local codes or visit the following website: <http://bcap-energy.org> to determine if compliance with this standard pertains to your state, territory, or municipality.

Table 3 – MINIMUM - MAXIMUM AIRFLOWS (CFM) COOLING AND ELECTRIC HEAT

| Model Size | COOLING | | Electric Heaters | | Nominal KW |
|------------|---------|---------|------------------|---------|------------|
| | Minimum | Maximum | Minimum | Maximum | |
| 17 | 4500 | 7500 | 4500 | 7500 | 25 |
| | | | | | 50 |
| | | | | | 75 |
| 20 | 5250 | 9000 | 5200 | 9000 | 25 |
| | | | | | 50 |
| | | | | | 75 |
| 24 | 6000 | 10000 | 6000 | 10000 | 25 |
| | | | | | 50 |
| | | | | | 75 |
| 28 | 7500 | 12500 | 7000 | 12500 | 25 |
| | | | | | 50 |
| | | | | | 75 |
| 30 | 8250 | 13750 | 8500 | 13750 | 25 |
| | | | | | 50 |
| | | | | | 75 |

Table 4 – SOUND PERFORMANCE TABLE

| MODE SIZE | CLG STAGES | OUTDOOR SOUND (dB) | | | | | | | | | |
|-----------|------------|--------------------|-----------------|------|------|------|------|------|------|------|------|
| | | A-Wgt | AHRI 370 Rating | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| 17 | 2 | 84.1 | 84 | 92.2 | 83.9 | 80.4 | 81.8 | 78.7 | 76.5 | 72.2 | 65.4 |
| 20 | 2 | 84.1 | 84 | 92.2 | 83.9 | 80.4 | 81.8 | 78.7 | 76.5 | 72.2 | 65.4 |
| 24 | 2 | 86.5 | 87 | 95.6 | 87.5 | 84.2 | 84.2 | 81.7 | 77.9 | 73.2 | 66.3 |
| 28 | 2 | 85.9 | 86 | 97.1 | 88.3 | 84.4 | 83.3 | 80.7 | 77.4 | 73.4 | 67.3 |
| 30 | 2 | 85.9 | 86 | 97.1 | 88.3 | 84.4 | 83.3 | 80.7 | 77.4 | 73.4 | 67.3 |

LEGEND

dB – Decibel



NOTES:

1. Outdoor sound data is measure in accordance with AHRI standard 270–2008.
2. Measurements are expressed in terms of sound power. Do not compare these values to sound pressure values because sound pressure depends on specific environmental factors which normally do not match individual applications. Sound power values are independent of the environment and therefore more accurate.
3. A-weighted sound ratings filter out very high and very low frequencies, to better approximate the response of “average” human ear. A-weighted measurements for Bryant units are taken in accordance with AHRI standard 270–2008.

**Table 5 – PHYSICAL DATA
RTPF (Round Tube/Plate Fin Coil Design)**

(COOLING)

15-27.5 TONS

| | | 558J-17D | 558J-17E | 558J-20D | 558J-20E |
|---|------------------------------------|-----------------|-----------------|--------------------|--------------------|
| Refrigeration System | | RTPF | RTPF | RTPF | RTPF |
| # Circuits / # Comp. / Type | | 2 / 2 / Scroll | 2 / 2 / Scroll | 2 / 2 / Scroll | 2 / 2 / Scroll |
| R-410a charge A/B (lbs) | | 16.3/17.5 | 25.9/25.7 | 16.3/17.5 | 25.9/25.7 |
| Metering device | | Acutrol | TXV | Acutrol | TXV |
| High–press. Trip / Reset (psig) | | 630 / 505 | 630 / 505 | 630 / 505 | 630 / 505 |
| Low–press. Trip / Reset (psig) | | 54 / 117 | 27 / 44 | 54 / 117 | 27 / 44 |
| Evap. Coil | | | | | |
| Material | | Cu / Al | Cu / Al | Cu / Al | Cu / Al |
| Tube Diameter | | 3/8" | 3/8" | 3/8" | 3/8" |
| Rows / FPI | | 4 / 15 | 4 / 15 | 4 / 15 | 4 / 15 |
| total face area (ft ²) | | 22.00 | 22.00 | 22.00 | 22.00 |
| Condensate drain conn. size | | 3/4" | 3/4" | 3/4" | 3/4" |
| Humidimizer Coil | | | | | |
| Material | | n/a | Cu / Al | n/a | Cu / Al |
| Tube Diameter | | n/a | 3/8" | n/a | 3/8" |
| Rows / FPI | | n/a | 1 / 17 | n/a | 1 / 17 |
| total face area (ft ²) | | n/a | 22.00 | n/a | 22.00 |
| Evap. fan and motor | | | | | |
| VERTICAL | | | | | |
| Standard Static | Motor Qty / Belt Qty / Driver Type | 1 / 1 / Belt | 1 / 1 / Belt | 1 / 1 / Belt | 1 / 1 / Belt |
| | Max BHP | 2.2 | 2.2 | 3.3 | 3.3 |
| | RPM range | 514–680 | 514–680 | 622–822 | 622–822 |
| | motor frame size | 56 | 56 | 56 | 56 |
| | Fan Qty / Type | 2 / Centrifugal | 2 / Centrifugal | 2 / Centrifugal | 2 / Centrifugal |
| | Fan Diameter (in) | 15 x 15 | 15 x 15 | 15 x 15 | 15 x 15 |
| Medium Static | Motor Qty / Belt Qty / Driver Type | 1 / 1 / Belt | 1 / 1 / Belt | 1 / 1 / Belt | 1 / 1 / Belt |
| | Max BHP | 3.3 | 3.3 | 4.9 | 4.9 |
| | RPM range | 679–863 | 679–863 | 713–879 | 713–879 |
| | motor frame size | 56 | 56 | 56 | 56 |
| | Fan Qty / Type | 2 / Centrifugal | 2 / Centrifugal | 2 / Centrifugal | 2 / Centrifugal |
| | Fan Diameter (in) | 15 x 15 | 15 x 15 | 15 x 15 | 15 x 15 |
| High Static | Motor Qty / Belt Qty / Driver Type | 1 / 1 / Belt | 1 / 1 / Belt | n/a | n/a |
| | Max BHP | 4.9 | 4.9 | n/a | n/a |
| | RPM range | 826–1009 | 826–1009 | n/a | n/a |
| | motor frame size | 56 | 56 | n/a | n/a |
| | Fan Qty / Type | 2 / Centrifugal | 2 / Centrifugal | n/a | n/a |
| | Fan Diameter (in) | 15 x 15 | 15 x 15 | n/a | n/a |
| High Static– High Efficiency | Motor Qty / Belt Qty / Driver Type | n/a | n/a | 1 / 1 / Belt | 1 / 1 / Belt |
| | Max BHP (208/230/460/575v) | n/a | n/a | 6.5/ 6.9/ 7.0/ 8.3 | 6.5/ 6.9/ 7.0/ 8.3 |
| | RPM range | n/a | n/a | 882–1078 | 882–1078 |
| | motor frame size | n/a | n/a | 184T | 184T |
| | Fan Qty / Type | n/a | n/a | 2 / Centrifugal | 2 / Centrifugal |
| | Fan Diameter (in) | n/a | n/a | 15 x 15 | 15 x 15 |

**Table 5 PHYSICAL DATA (cont.)
RTPF (Round Tube/Plate Fin Coil Design)**

(COOLING)

15-27.5 TONS

| | | 558J-24D | 558J-24E | 558J-28D | 558J-28E | 558J-30D |
|------------------------------------|------------------------------------|--------------------|--------------------|--------------------|--------------------|---------------------|
| Refrigeration System | | RTPF | RTPF | RTPF | RTPF | RTPF |
| # Circuits / # Comp. / Type | | 2 / 2 / Scroll | 2 / 2 / Scroll | 2 / 2 / Scroll | 2 / 2 / Scroll | 2 / 2 / Scroll |
| R-410a charge A/B (lbs) | | 20.6/14.7 | 27.9/20.5 | 19.8/ 20.4 | 27.9/ 28.9 | 27.0/ 28.5 |
| Metering device | | Acutrol | TXV | Acutrol | TXV | Acutrol |
| High-press. Trip / Reset (psig) | | 630 / 505 | 630 / 505 | 630 / 505 | 630 / 505 | 630 / 505 |
| Low-press. Trip / Reset (psig) | | 54 / 117 | 27 / 44 | 54 / 117 | 27 / 44 | 54 / 117 |
| Evap. Coil | | | | | | |
| Material | | Cu / Al | Cu / Al | Cu / Al | Cu / Al | Cu / Al |
| Tube Diameter | | 3/8" | 3/8" | 3/8" | 3/8" | 3/8" |
| Rows / FPI | | 4 / 15 | 4 / 15 | 4 / 15 | 4 / 15 | 4 / 15 |
| total face area (ft ²) | | 22.00 | 22.00 | 23.11 | 23.11 | 26 |
| Condensate drain conn. size | | 3/4" | 3/4" | 3/4" | 3/4" | 3/4" |
| Humidimizer Coil | | | | | | |
| Material | | n/a | Cu / Al | n/a | Cu / Al | n/a |
| Tube Diameter | | n/a | 3/8" | n/a | 3/8" | n/a |
| Rows / FPI | | n/a | 1 / 17 | n/a | 1 / 17 | n/a |
| total face area (ft ²) | | n/a | 22.00 | n/a | 23.11 | n/a |
| Evap. fan and motor | | | | | | |
| VERTICAL | | | | | | |
| Standard Static | Motor Qty / Belt Qty / Driver Type | 1 / 1 / Belt | 1 / 1 / Belt | 1 / 1 / Belt | 1 / 1 / Belt | n/a |
| | Max BHP | 4.9 | 4.9 | 4.9 | 4.9 | n/a |
| | RPM range | 690-863 | 690-863 | 717-911 | 717-911 | n/a |
| | motor frame size | 56 | 56 | 56 | 56 | n/a |
| | Fan Qty / Type | 2 / Centrifugal | 2 / Centrifugal | 2 / Centrifugal | 2 / Centrifugal | n/a |
| | Fan Diameter (in) | 15 x 15 | 15 x 15 | 15 x 15 | 15 x 15 | n/a |
| Standard Static - High Efficiency | Motor Qty / Belt Qty / Driver Type | n/a | n/a | n/a | n/a | 1 / 1 / Belt |
| | Max BHP | n/a | n/a | n/a | n/a | 6.5/ 6.9/ 7.0/ 8.3 |
| | RPM range | n/a | n/a | n/a | n/a | 751-954 |
| | motor frame size | n/a | n/a | n/a | n/a | 184T |
| | Fan Qty / Type | n/a | n/a | n/a | n/a | 2 / Centrifugal |
| | Fan Diameter (in) | n/a | n/a | n/a | n/a | 15 x 15 |
| Medium Static - High Efficiency | Motor Qty / Belt Qty / Driver Type | 1 / 1 / Belt | 1 / 1 / Belt | 1 / 1 / Belt | 1 / 1 / Belt | 1 / 1 / Belt |
| | Max BHP (208/230/460/575v) | 6.5/ 6.9/ 7.0/ 8.3 | 6.5/ 6.9/ 7.0/ 8.3 | 6.5/ 6.9/ 7.0/ 8.3 | 6.5/ 6.9/ 7.0/ 8.3 | 10.5/11.9/11.9/11 |
| | RPM range | 835-1021 | 835-1021 | 913-1116 | 913-1116 | 920-1190 |
| | motor frame size | 184T | 184T | 184T | 184T | 213T |
| | Fan Qty / Type | 2 / Centrifugal | 2 / Centrifugal | 2 / Centrifugal | 2 / Centrifugal | 2 / Centrifugal |
| | Fan Diameter (in) | 15 x 15 | 15 x 15 | 15 x 15 | 15 x 15 | 15 x 15 |
| High Static - High Efficiency | Motor Qty / Belt Qty / Driver Type | 1 / 1 / Belt | 1 / 1 / Belt | 1 / 1 / Belt | 1 / 1 / Belt | 1 / 2 Belt |
| | Max BHP (208/230/460/575v) | 10.5/11.9/11.9/11 | 10.5/11.9/11.9/11 | 10.5/11.9/11.9/11 | 10.5/11.9/11.9/11 | 11.9/12.9/12.9/14.1 |
| | RPM range | 941-1176 | 941-1176 | 941-1176 | 941-1176 | 1116-1400 |
| | motor frame size | 213T | 213T | 213T | 213T | 215T |
| | Fan Qty / Type | 2 / Centrifugal | 2 / Centrifugal | 2 / Centrifugal | 2 / Centrifugal | 2 / Centrifugal |
| | Fan Diameter (in) | 15 x 15 | 15 x 15 | 15 x 15 | 15 x 15 | 15 x 15 |

**Table 5 PHYSICAL DATA (cont.)
RTPF (Round Tube/Plate Fin Coil Design)**

(COOLING)

15-27.5 TONS

| | 558J-17D | 558J-17E | 558J-20D | 558J-20E | 558J-24D | 558J-24E | 558J-28D | 558J-28E | 558J-30D |
|-------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Cond. Coil (Circuit A) | | | | | | | | | |
| Coil type | RTPF | RTPF | RTPF | RTPF | RTPF | RTPF | RTPF | RTPF | RTPF |
| Coil Length (in) | 70 | 70 | 70 | 70 | 82 | 82 | 75 | 75 | 95 |
| Coil Height (in) | 44 | 44 | 44 | 44 | 44 | 44 | 52 | 52 | 52 |
| Rows / FPI | 2 / 17 | 2 / 17 | 2 / 17 | 2 / 17 | 2 / 17 | 2 / 17 | 2 / 17 | 2 / 17 | 2 / 17 |
| total face area (ft2) | 21.4 | 21.4 | 21.4 | 21.4 | 25.1 | 25.1 | 27.1 | 27.1 | 34.3 |
| Cond. Coil (Circuit B) | | | | | | | | | |
| Coil type | RTPF | RTPF | RTPF | RTPF | RTPF | RTPF | RTPF | RTPF | RTPF |
| Coil Length (in) | 70 | 70 | 70 | 70 | 57 | 57 | 75 | 75 | 95 |
| Coil Height (in) | 44 | 44 | 44 | 44 | 44 | 44 | 52 | 52 | 52 |
| Rows / FPI | 2 / 17 | 2 / 17 | 2 / 17 | 2 / 17 | 2 / 17 | 2 / 17 | 2 / 17 | 2 / 17 | 2 / 17 |
| total face area (ft2) | 21.4 | 21.4 | 21.4 | 21.4 | 17.4 | 17.4 | 27.1 | 27.1 | 34.3 |
| Cond. fan / motor | | | | | | | | | |
| Qty / Motor drive type | 3 / direct | 3 / direct | 3 / direct | 3 / direct | 4 / direct | 4 / direct | 4 / direct | 4 / direct | 6 / direct |
| Motor HP / RPM | 1/4 / 1100 | 1/4 / 1100 | 1/4 / 1100 | 1/4 / 1100 | 1/4 / 1100 | 1/4 / 1100 | 1/4 / 1100 | 1/4 / 1100 | 1/4 / 1100 |
| Fan diameter (in) | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 |
| Filters | | | | | | | | | |
| RA Filter # / size (in) | 6 / 20 x 25 x 2 | 6 / 20 x 25 x 2 | 6 / 20 x 25 x 2 | 6 / 20 x 25 x 2 | 6 / 20 x 25 x 2 | 6 / 20 x 25 x 2 | 9 / 16 x 25 x 2 | 9 / 16 x 25 x 2 | 9 / 16 x 25 x 2 |
| OA inlet screen # / size (in) | 4 / 16 x 25 x 1 | 4 / 16 x 25 x 1 | 4 / 16 x 25 x 1 | 4 / 16 x 25 x 1 | 4 / 16 x 25 x 1 | 4 / 16 x 25 x 1 | 4 / 16 x 25 x 1 | 4 / 16 x 25 x 1 | 4 / 16 x 25 x 1 |

Table 6 – PHYSICAL DATA
Novation - All Aluminum Coil Design

(COOLING)

15-27.5 TONS

| | | 558J*17 | 558J*20 | 558J*24 | 558J*28 |
|------------------------------------|------------------------------------|-----------------|--------------------|--------------------|--------------------|
| Refrigeration System | | MCHX | MCHX | MCHX | MCHX |
| # Circuits / # Comp. / Type | | 2 / 2 / Scroll | 2 / 2 / Scroll | 2 / 2 / Scroll | 2 / 2 / Scroll |
| R-410a charge A/B (lbs) | | 9.5/12.0 | 9.5/12.0 | 14.4/12.5 | 12.5/13.0 |
| Metering device | | Acutrol | Acutrol | Acutrol | Acutrol |
| High–press. Trip / Reset (psig) | | 630 / 505 | 630 / 505 | 630 / 505 | 630 / 505 |
| Low–press. Trip / Reset (psig) | | 54 / 117 | 54 / 117 | 54 / 117 | 54 / 117 |
| Evap. Coil | | | | | |
| Material | | Cu / Al | Cu / Al | Cu / Al | Cu / Al |
| Tube Diameter | | 3/8" | 3/8" | 3/8" | 3/8" |
| Rows / FPI | | 4 / 15 | 4 / 15 | 4 / 15 | 4 / 15 |
| total face area (ft ²) | | 19.56 | 19.56 | 22.00 | 23.11 |
| Condensate drain conn. size | | 3/4" | 3/4" | 3/4" | 3/4" |
| Evap. fan and motor | | | | | |
| VERTICAL | | | | | |
| Standard Static | Motor Qty / Belt Qty / Driver Type | 1 / 1 Belt | 1 / 1 Belt | 1 / 1 Belt | 1 / 1 Belt |
| | Max BHP | 2.2 | 3.3 | 4.9 | 4.9 |
| | RPM range | 514–680 | 622–822 | 690–863 | 717–911 |
| | motor frame size | 56 | 56 | 56 | 56 |
| | Fan Qty / Type | 2 / Centrifugal | 2 / Centrifugal | 2 / Centrifugal | 2 / Centrifugal |
| | Fan Diameter (in) | 15 x 15 | 15 x 15 | 15 x 15 | 15 x 15 |
| Medium Static | Motor Qty / Belt Qty / Driver Type | 1 / 1 Belt | 1 / 1 Belt | 1 / 1 Belt | 1 / 1 Belt |
| | Max BHP | 3.3 | 4.9 | 6.5 | 6.5 |
| | RPM range | 679–863 | 713–879 | 835–1021 | 913–1116 |
| | motor frame size | 56 | 56 | 184T | 184T |
| | Fan Qty / Type | 2 / Centrifugal | 2 / Centrifugal | 2 / Centrifugal | 2 / Centrifugal |
| | Fan Diameter (in) | 15 x 15 | 15 x 15 | 15 x 15 | 15 x 15 |
| High Static | Motor Qty / Belt Qty / Driver Type | 1 / 1 Belt | 1 / 1 Belt | 1 / 1 Belt | 1 / 1 Belt |
| | Max BHP | 4.9 | 6.5 | 8.7 | 8.7 |
| | RPM range | 826–1009 | 882–1078 | 941–1176 | 941–1176 |
| | motor frame size | 56 | 184T | 213T | 213T |
| | Fan Qty / Type | 2 / Centrifugal | 2 / Centrifugal | 2 / Centrifugal | 2 / Centrifugal |
| | Fan Diameter (in) | 15 x 15 | 15 x 15 | 15 x 15 | 15 x 15 |
| Medium Static – High Efficiency | Motor Qty / Belt Qty / Driver Type | n/a | n/a | 1 / 1 Belt | 1 / 1 Belt |
| | Max BHP (208/230/460/575v) | n/a | n/a | 6.5/ 6.9/ 7.0/ 8.3 | 6.5/ 6.9/ 7.0/ 8.3 |
| | RPM range | n/a | n/a | 835–1021 | 913–1116 |
| | motor frame size | n/a | n/a | 184T | 184T |
| | Fan Qty / Type | n/a | n/a | 2 / Centrifugal | 2 / Centrifugal |
| | Fan Diameter (in) | n/a | n/a | 15 x 15 | 15 x 15 |
| High Static– High Efficiency | Motor Qty / Belt Qty / Driver Type | n/a | 1 / 1 Belt | 1 / 1 Belt | 1 / 1 Belt |
| | Max BHP (208/230/460/575v) | n/a | 6.5/ 6.9/ 7.0/ 8.3 | 10.5/11.9/11.9/11 | 10.5/11.9/11.9/11 |
| | RPM range | n/a | 882–1078 | 941–1176 | 941–1176 |
| | motor frame size | n/a | 184T | 213T | 213T |
| | Fan Qty / Type | n/a | 2 / Centrifugal | 2 / Centrifugal | 2 / Centrifugal |
| | Fan Diameter (in) | n/a | 15 x 15 | 15 x 15 | 15 x 15 |

Table 6 PHYSICAL DATA (cont.)
Novation - All Aluminum Coil Design

(COOLING)

15-27.5 TONS

| | 558J*17 | 558J*20 | 558J*24 | 558J*28 |
|----------------------------------|-----------------|-----------------|-----------------|-----------------|
| Cond. Coil (Circuit A) | | | | |
| Coil type | Novation | Novation | Novation | Novation |
| Coil Length (in) | 70 | 70 | 82 | 75 |
| Coil Height (in) | 44 | 44 | 44 | 52 |
| Number of Passes Rows / FPI | 2 | 2 | 2 | 2 |
| total face area (ft2) | 21.4 | 21.4 | 25.1 | 27.1 |
| Cond. Coil (Circuit B) | | | | |
| Coil type | Novation | Novation | Novation | Novation |
| Coil Length (in) | 70 | 70 | 57 | 75 |
| Coil Height (in) | 44 | 44 | 44 | 52 |
| Rows / FPI | 2 | 2 | 2 | 2 |
| total face area (ft2) | 21.4 | 21.4 | 17.4 | 27.1 |
| Cond. fan / motor | | | | |
| Qty / Motor drive type | 3 / direct | 3 / direct | 4 / direct | 4 / direct |
| Motor HP / RPM | 1/4 / 1100 | 1/4 / 1100 | 1/4 / 1100 | 1/4 / 1100 |
| Fan diameter (in) | 22 | 22 | 22 | 22 |
| Filters | | | | |
| RA Filter # / size (in) | 6 / 20 x 25 x 2 | 6 / 20 x 25 x 2 | 6 / 20 x 25 x 2 | 9 / 16 x 25 x 2 |
| OA inlet screen # / size (in) | 4 / 16 x 25 x 1 | 4 / 16 x 25 x 1 | 4 / 16 x 25 x 1 | 4 / 16 x 25 x 1 |

DIMENSIONS

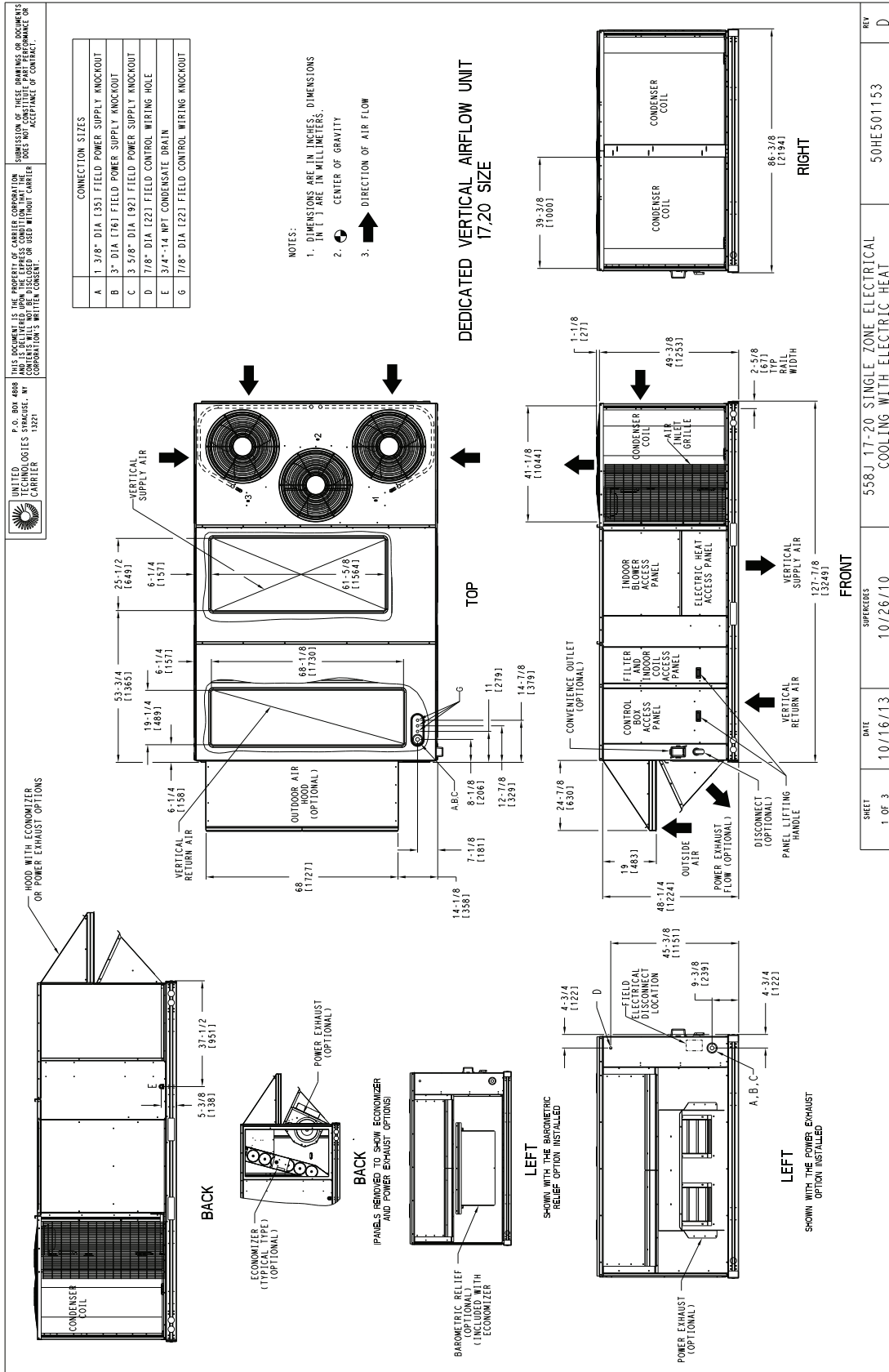


Fig. 1 - Unit Dimensional Drawing – 17 and 20 Size Units

C13748

| | | | | | |
|-------|--------|------|----------|--------|---|
| SHEET | 1 OF 3 | DATE | 10/16/13 | SERIES | 558 J 17-20 SINGLE ZONE ELECTRICAL COOLING WITH ELECTRIC HEAT |
| REV | | | | | |
| | | | | | 50HE501153 |
| | | | | | D |

DIMENSIONS (cont.)

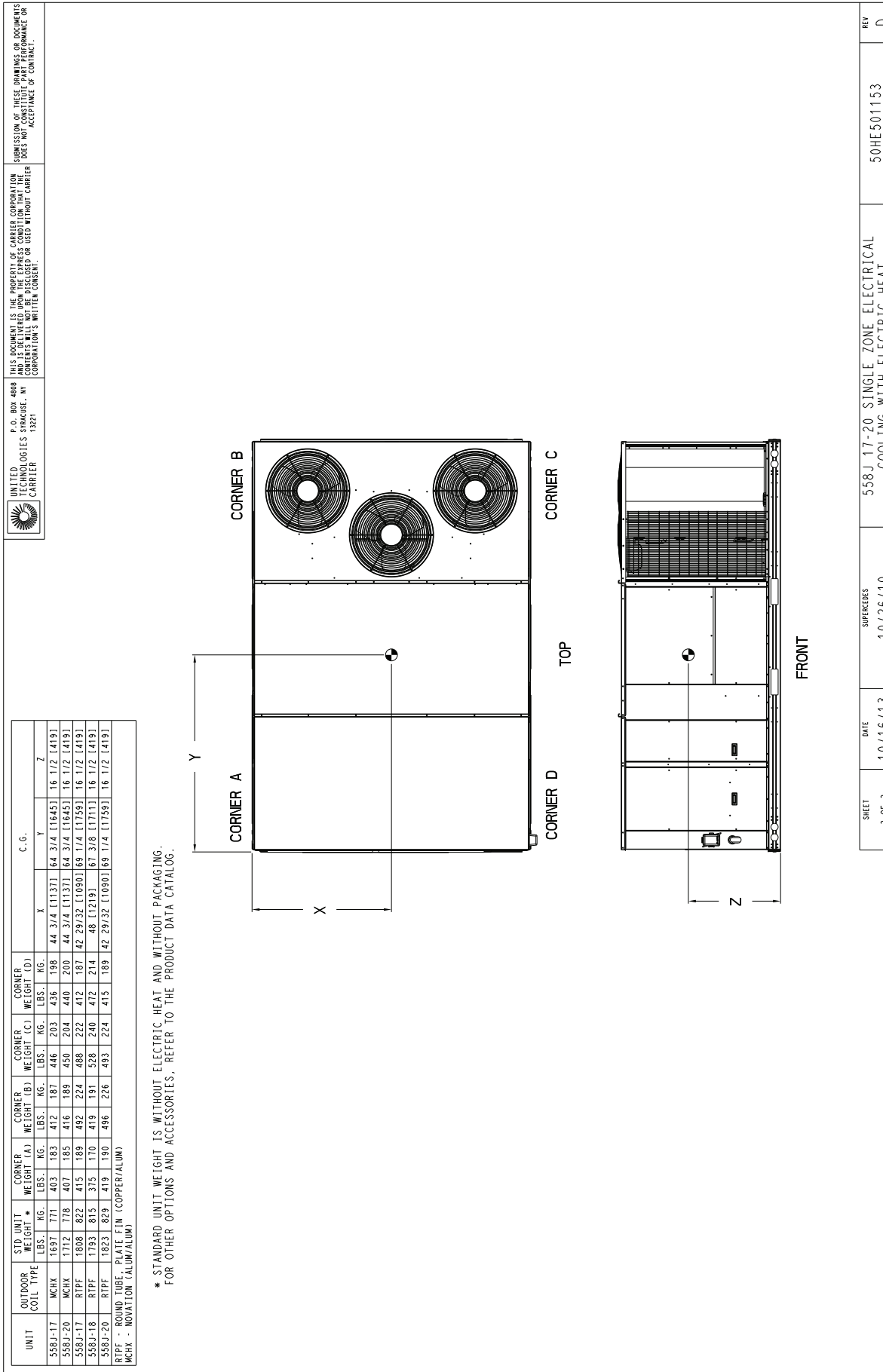


Fig. 1 - Unit Dimensional Drawing – 17 and 20 Size Units (cont.)

DIMENSIONS (cont.)

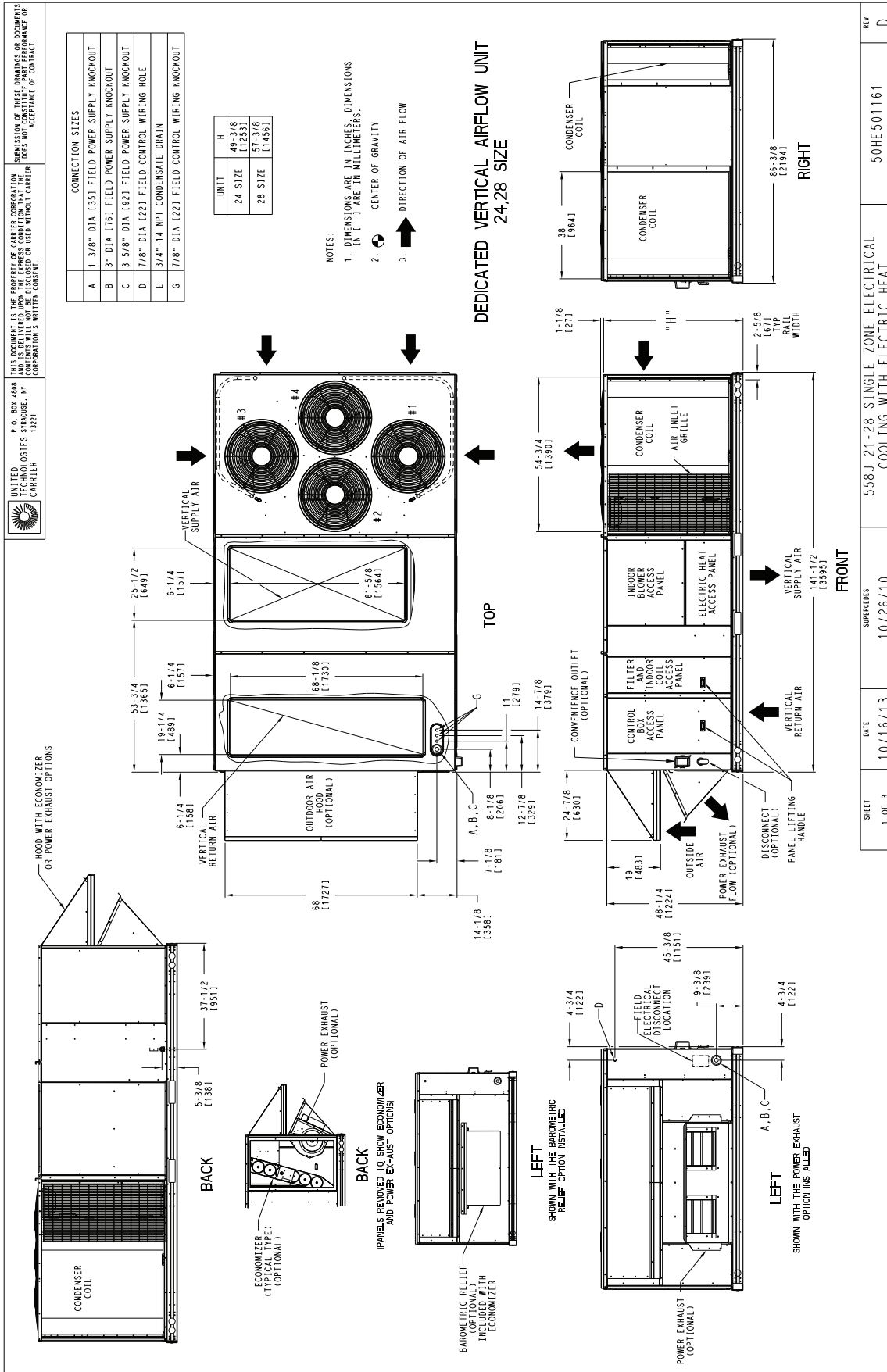


Fig. 2 - Unit Dimensional Drawing – 24 and 28 Size Units

| | | | | | |
|-----------------|------------------|------------------------|--|------------|----------|
| SHEET 1 OF 3 | DATE 10/16/13 | SUPERSEDES 10/26/10 | 558J 21-28 SINGLE ZONE ELECTRICAL COOLING WITH ELECTRIC HEAT | 50HE501161 | REV D |
|-----------------|------------------|------------------------|--|------------|----------|

DIMENSIONS (cont.)

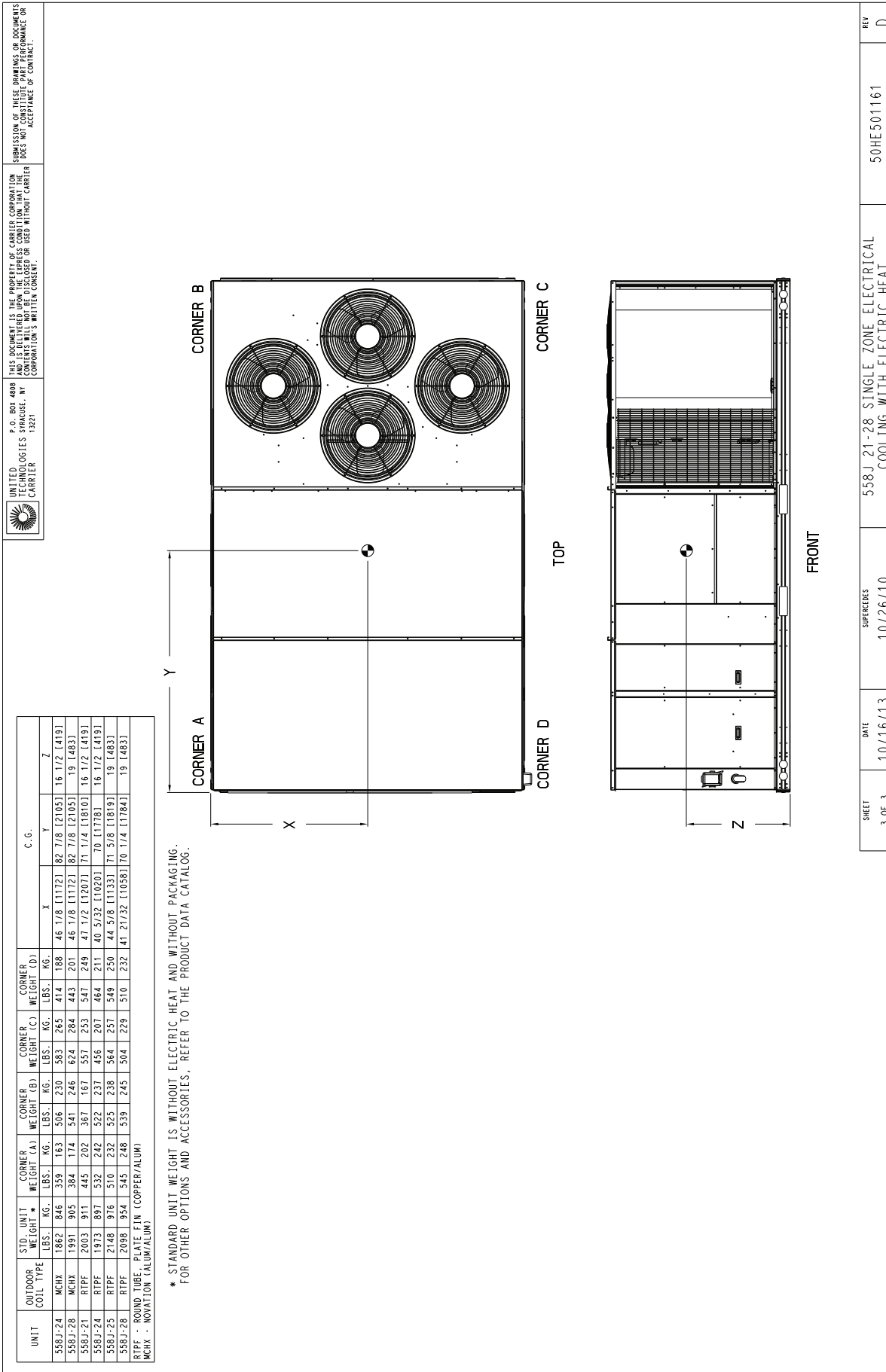


Fig. 2 - Unit Dimensional Drawing – 24 and 28 Size Units (cont.)

DIMENSIONS (cont.)

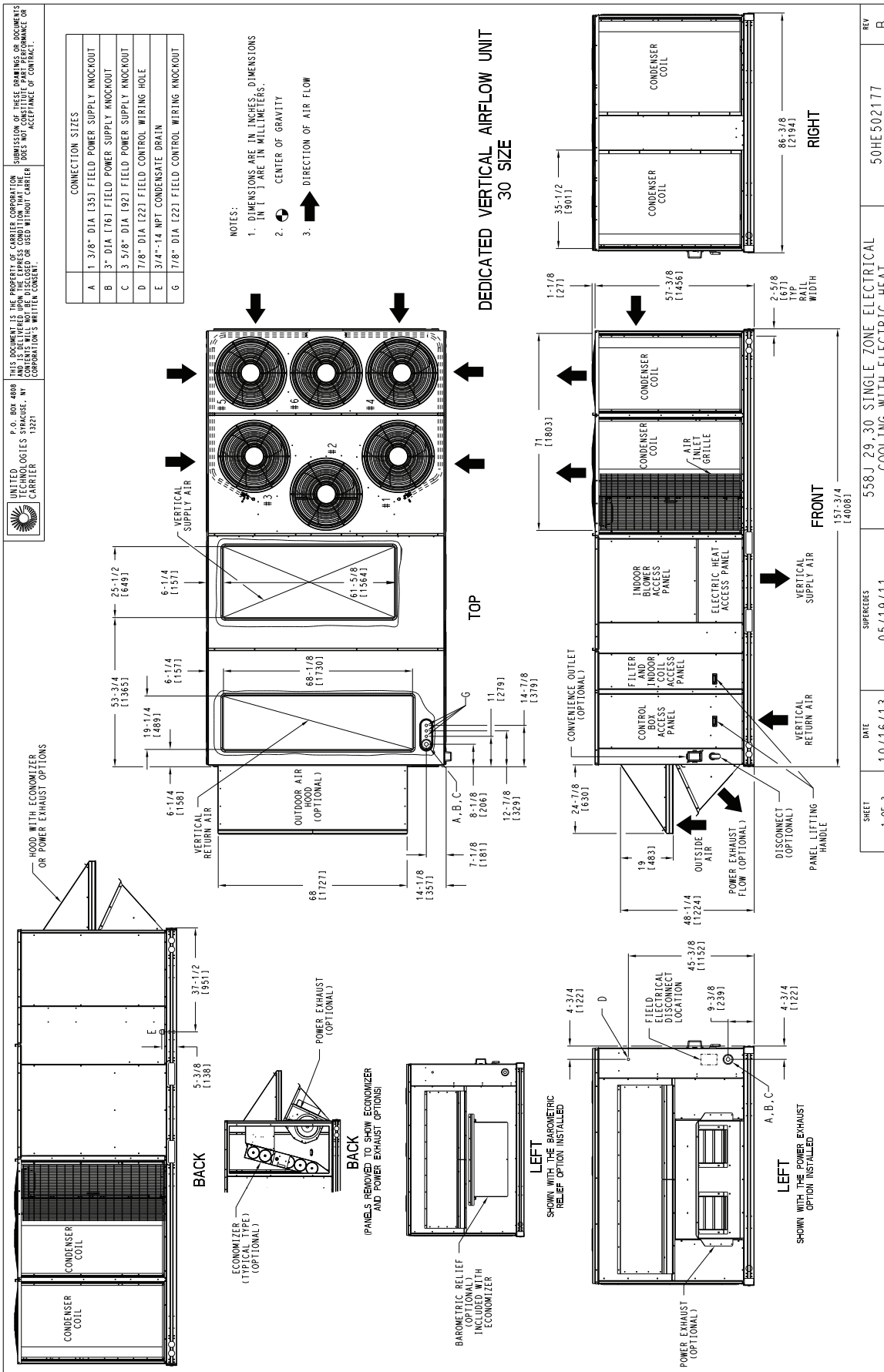


Fig. 3 - Unit Dimensional Drawing – 30 Size Units

C13760

| | | | | |
|-----------------|------------------|------------------------|---|----------|
| SHEET 1 OF 3 | DATE 10/16/13 | SUPERCEDES 05/19/11 | 558 J 29, 30 SINGLE ZONE ELECTRICAL COOLING WITH ELECTRIC HEAT | REV B |
| 50HE502177 | | | | |

DIMENSIONS (cont.)

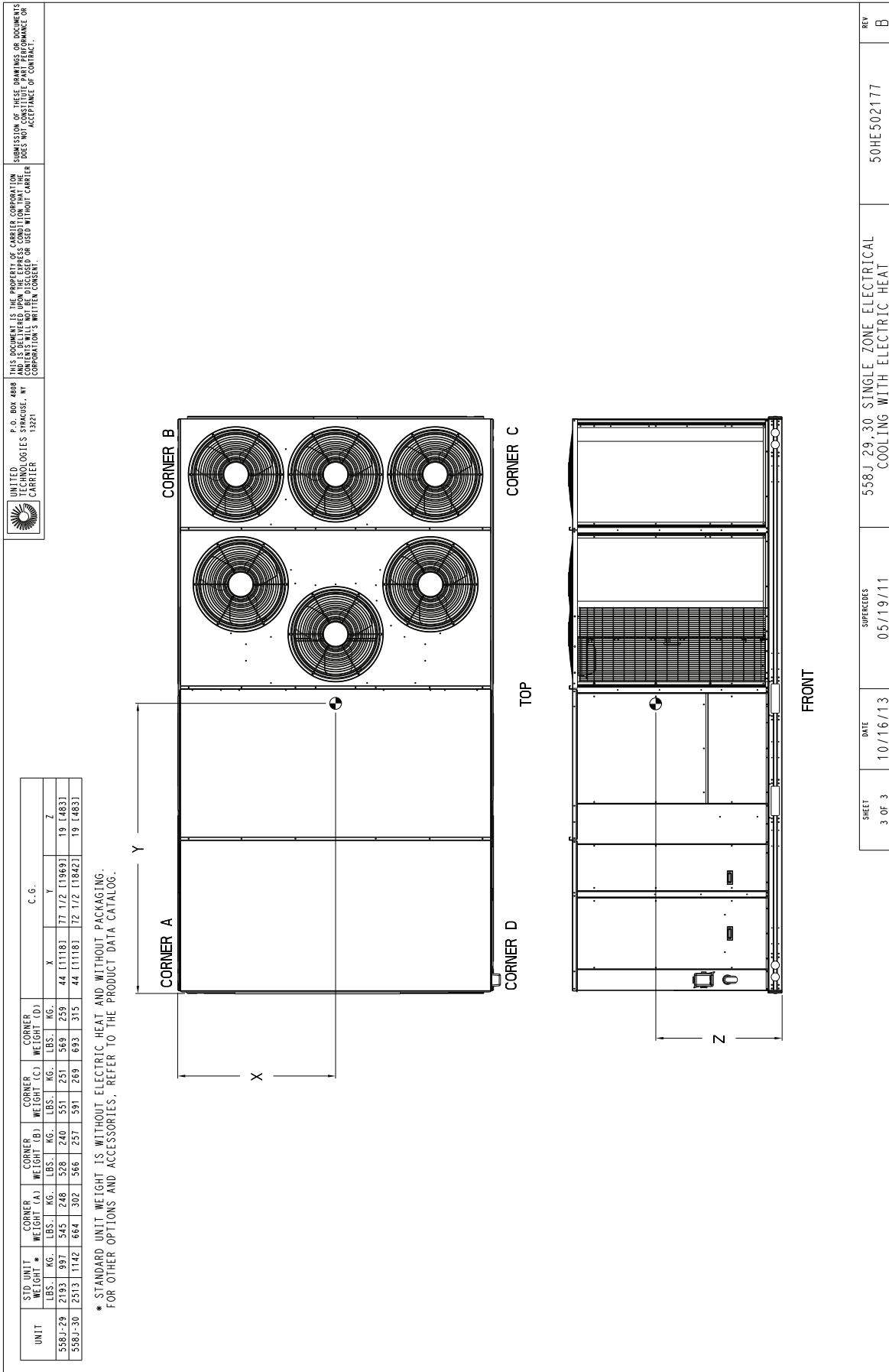
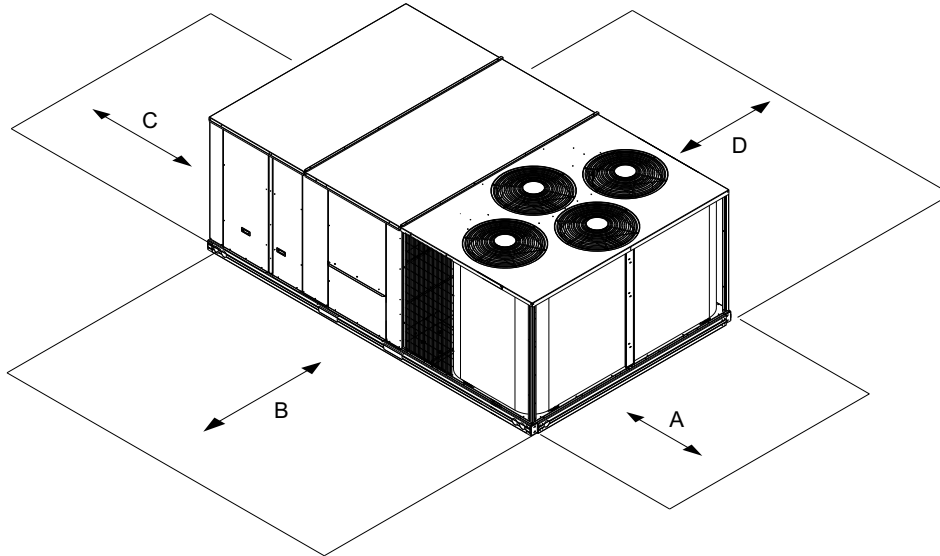


Fig. 3 - Unit Dimensional Drawing – 30 Size Units (cont.)

DIMENSIONS (cont.)



C12392

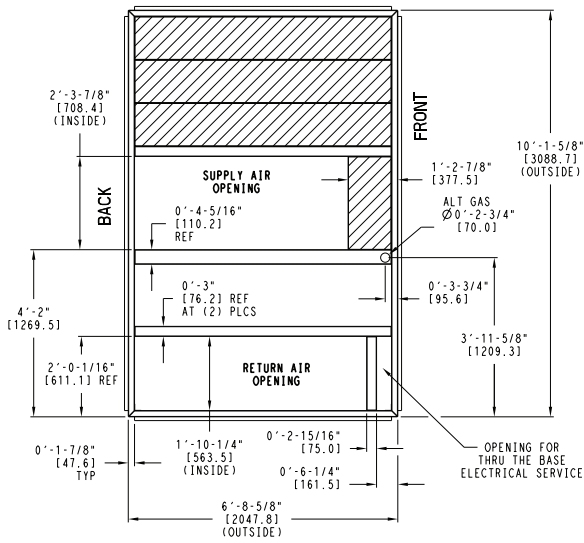
| LOCATION | DIMENSION | CONDITION |
|----------|-----------------|---|
| A | 36-in (914 mm) | <ul style="list-style-type: none"> Recommended clearance for air flow and service |
| B | 42-in (1067 mm) | <ul style="list-style-type: none"> Recommended clearance for air flow and service |
| C | 18-in (457 mm) | <ul style="list-style-type: none"> No Convenience Outlet No Economizer No field installed disconnect on economizer hood side (Factory-installed disconnect installed). |
| | 36-in (914 mm) | <ul style="list-style-type: none"> Convenience Outlet installed. Vertical surface behind servicer is electrically non-conductive (e.g.: wood, fiberglass). |
| | 42-in (1067 mm) | <ul style="list-style-type: none"> Convenience Outlet installed. Vertical surface behind servicer is electrically conductive (e.g.: metal, masonry). |
| | 96-in (2438 mm) | <ul style="list-style-type: none"> Economizer and/or Power Exhaust installed. Check for sources of flue products with 10 feet (3 meters) of economizer fresh air intake. |
| D | 42-in (1067 mm) | <ul style="list-style-type: none"> Recommended clearance for service. |

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

Fig. 4 - Service Clearance Dimensional Drawing

DIMENSIONS (cont.)

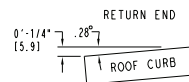
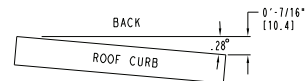
| UNIT SIZE | "A" | ROOF CURB ACCESSORY |
|-----------|--------------------------------|----------------------------------|
| 17, 20 | 1'-2" [356.0] 2'-0" [610.0] | CRRFCURB045A00 CRRFCURB046A00 |



NOTES:

- 1 ROOF CURB ACCESSORY IS SHIPPED UNASSEMBLED.
- 2 DIMENSIONS IN [] ARE IN MILLIMETERS.
- 3 ROOF CURB GALVANIZED STEEL.
- 4 ATTACH DUCTWORK TO CURB (FLANGES ON DUCT REST ON CURB)
- 5 SERVICE CLEARANCE 4 FT ON EACH SIDE

➔ DIRECTION OF AIR FLOW



MAX CURB LEVELING TOLERANCES

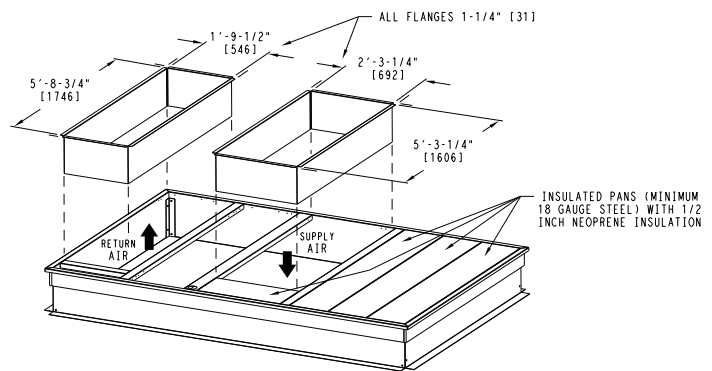
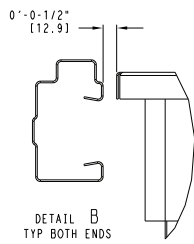
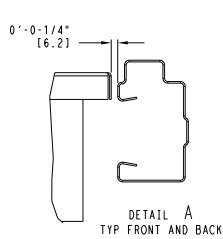
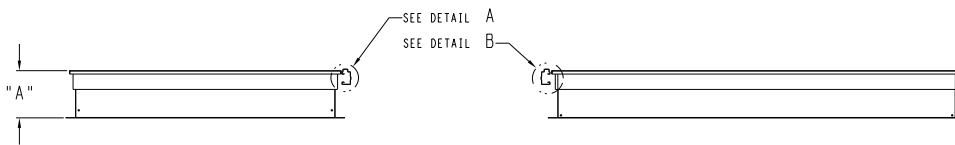
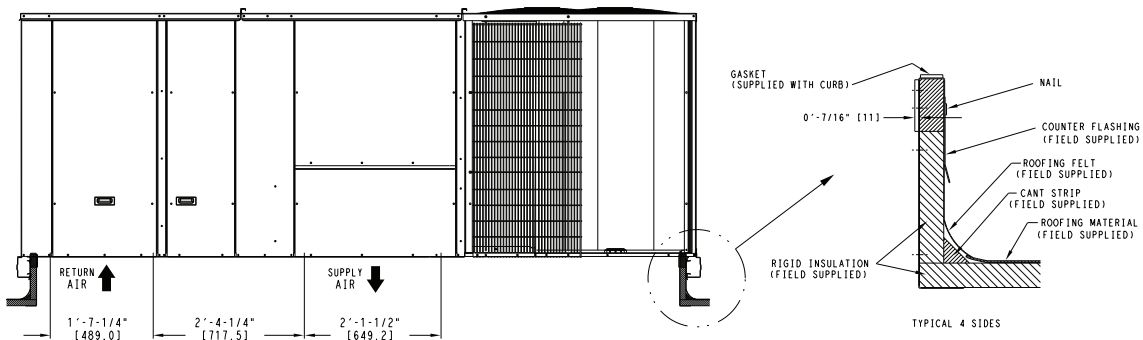
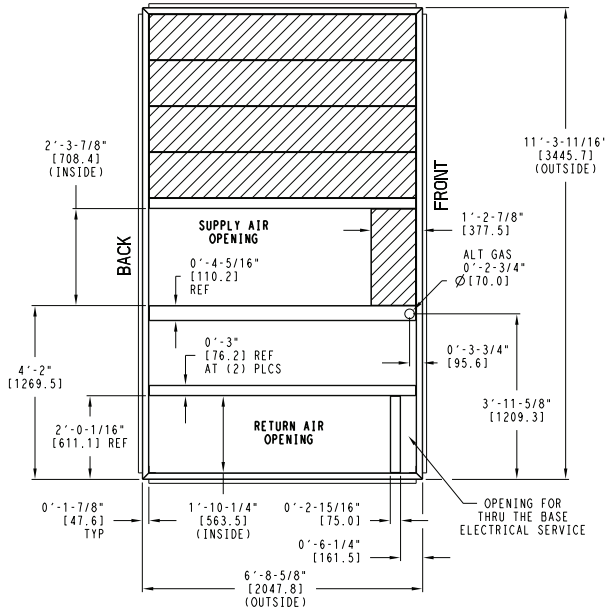


Fig. 5 - Roof Curb Details - 17 and 20 Size Units

C09139A

DIMENSIONS (cont.)

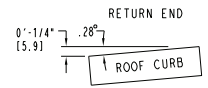
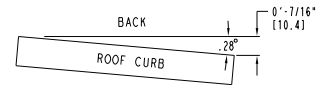
| UNIT SIZE | "A" | ROOF CURB ACCESSORY |
|-----------|--------------------------------|----------------------------------|
| 24, 28 | 1'-2" [356.0] 2'-0" [610.0] | CRRFCURB047A00 CRRFCURB048A00 |



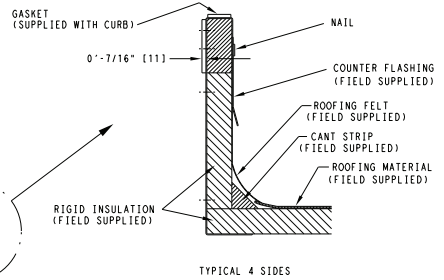
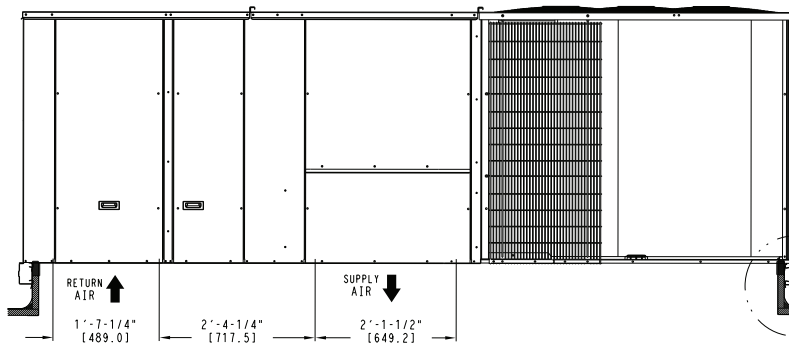
NOTES:

- 1 ROOF CURB ACCESSORY IS SHIPPED UNASSEMBLED.
- 2 DIMENSIONS IN [] ARE IN MILLIMETERS.
- 3 ROOF CURB GALVANIZED STEEL.
- 4 ATTACH DUCTWORK TO CURB (FLANGES ON DUCT REST ON CURB)
- 5 SERVICE CLEARANCE 4 FT ON EACH SIDE

➔ DIRECTION OF AIR FLOW



MAX CURB LEVELING TOLERANCES



TYPICAL 4 SIDES

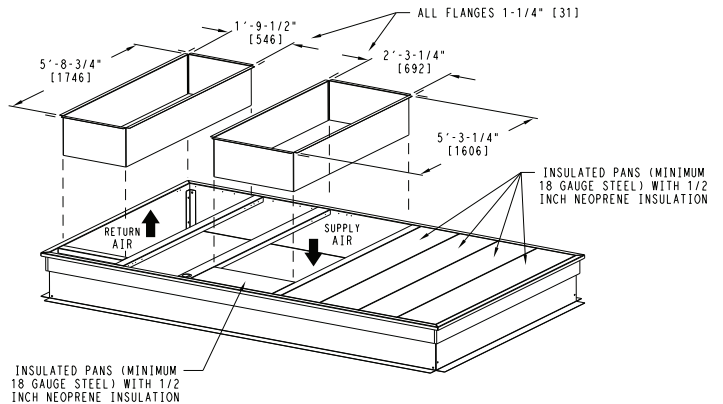
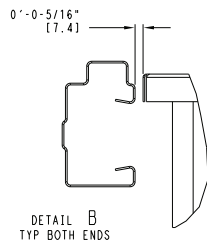
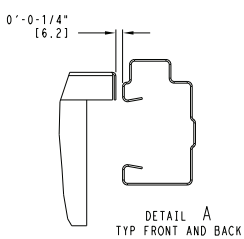
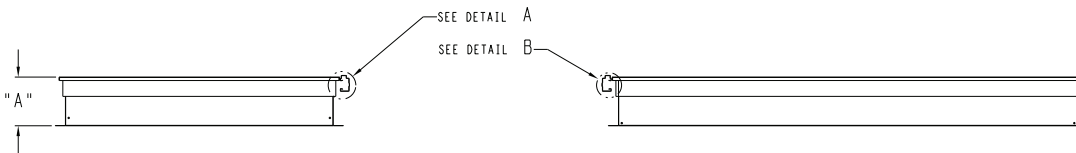
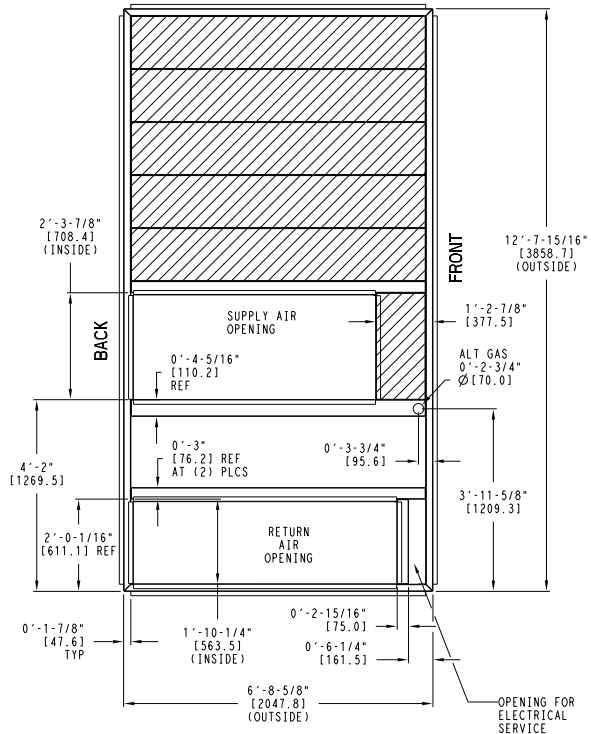


Fig. 6 - Roof Curb Details – 24 and 28 Size Units

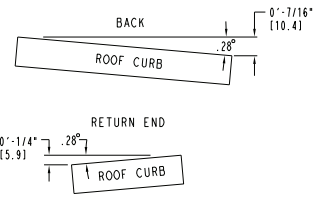
C09140A

DIMENSIONS (cont.)

| UNIT SIZE | "A" | ROOF CURB ACCESSORY |
|-----------|--------------------------------|----------------------------------|
| 30 | 1'-2" [356.0] 2'-0" [610.0] | CRRFCURB049A00 CRRFCURB050A00 |



- NOTES:
- 1 ROOF CURB ACCESSORY IS SHIPPED UNASSEMBLED.
 - 2 BOLT HEADS TO BE ON INSIDE OF FLANGE. CLEARANCE IS [11] 0'-0-7/16" TYP ALL CORNERS.
 - 3 DIMENSIONS IN [] ARE IN MILLIMETERS.
 - 4 ROOF CURB GALVANIZED STEEL.
 - 5 ATTACH DUCTWORK TO CURB (FLANGES ON DUCT REST ON CURB)
 - 6 SERVICE CLEARANCE 4 ft ON EACH SIDE
- ➔ DIRECTION OF AIR FLOW



MAX CURB LEVELING TOLERANCES

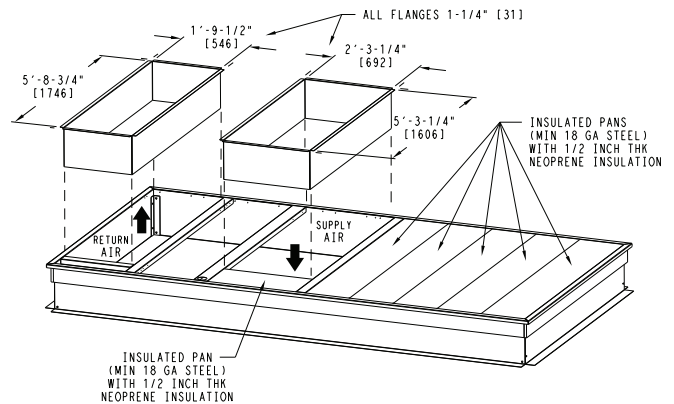
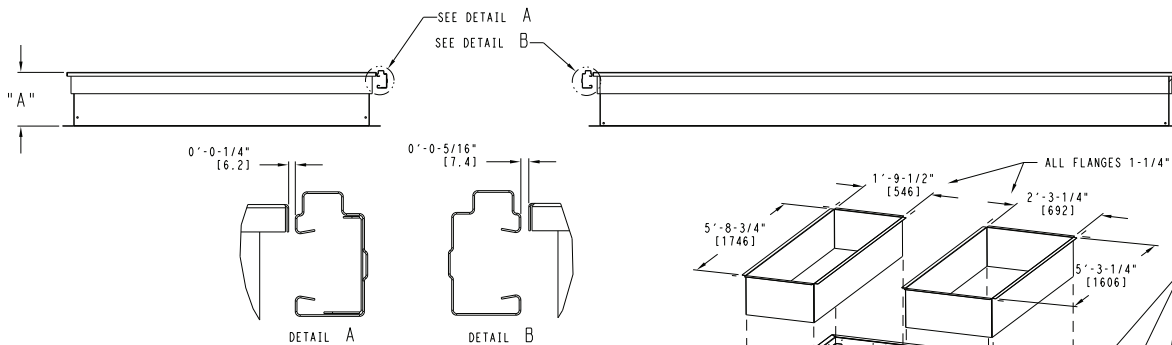
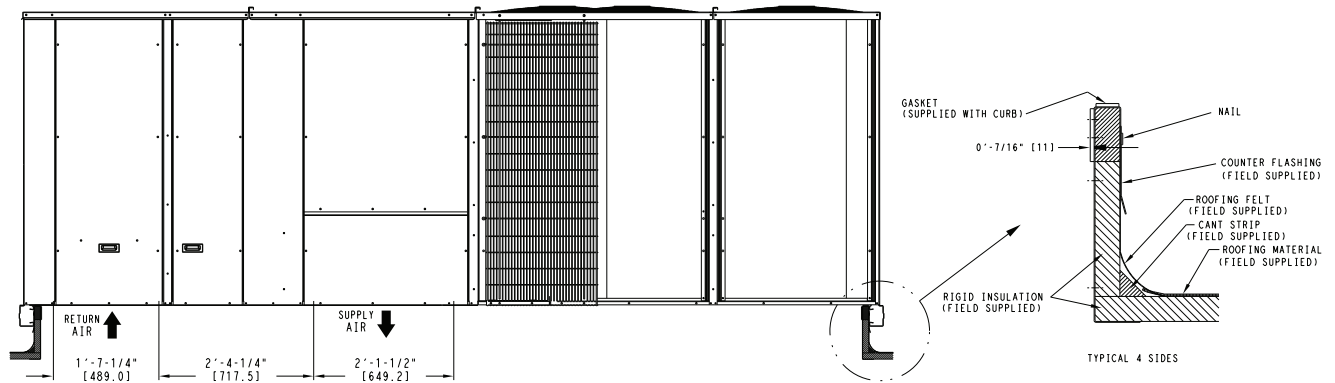


Fig. 7 - Roof Curb Details – 30 Size Unit

C11251

OPTIONS AND ACCESSORIES WEIGHT ADDERS

| BASE UNIT WITH OPTIONS AND ACCESSORIES (Weight Adders) | MAX WEIGHT ADDER | | | | | | | | | |
|--|------------------|-----|---------|-----|---------|-----|---------|-----|---------|-----|
| | 558J*17 | | 558J*20 | | 558J*24 | | 558J*28 | | 558J*30 | |
| | lb | kg | lb | kg | lb | kg | lb | kg | lb | kg |
| Perfect Humidity ¹ | 110 | 50 | 110 | 50 | 120 | 55 | 120 | 55 | --- | --- |
| Power Exhaust | 125 | 57 | 125 | 57 | 125 | 57 | 125 | 57 | 125 | 57 |
| EconoMi\$er (IV, X, or 2) | 246 | 112 | 246 | 112 | 246 | 112 | 246 | 112 | 246 | 112 |
| Cu/Cu Condenser Coil ² | 28 | 13 | 28 | 13 | 30 | 14 | 34 | 15 | 34 | 15 |
| Cu/Cu Condenser and Evaporator Coils ² | 53 | 24 | 53 | 24 | 58 | 26 | 64 | 29 | 64 | 29 |
| Roof Curb 14-in (356mm) | 240 | 109 | 240 | 109 | 255 | 116 | 255 | 116 | 255 | 116 |
| Roof Curb 24-in (610mm) | 340 | 154 | 340 | 154 | 355 | 161 | 355 | 161 | 355 | 161 |
| Louvered Hail Guard | 60 | 27 | 60 | 27 | 120 | 54 | 150 | 68 | 150 | 68 |
| CO2 sensor | 5 | 2 | 5 | 2 | 5 | 2 | 5 | 2 | 5 | 2 |
| Return Smoke Detector | 5 | 2 | 5 | 2 | 5 | 2 | 5 | 2 | 5 | 2 |
| Supply Smoke Detector | 5 | 2 | 5 | 2 | 5 | 2 | 5 | 2 | 5 | 2 |
| Fan/Filter Status Switch | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 |
| Non-Fused Disconnect | 15 | 7 | 15 | 7 | 15 | 7 | 15 | 7 | 15 | 7 |
| Powered Convenience Outlet | 35 | 16 | 35 | 16 | 35 | 16 | 35 | 16 | 35 | 16 |
| Non-Powered Convenience Outlet | 5 | 2 | 5 | 2 | 5 | 2 | 5 | 2 | 5 | 2 |
| Enthalpy Sensor | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 |
| Differential Enthalpy Sensor | 3 | 1 | 3 | 1 | 3 | 1 | 3 | 1 | 3 | 1 |
| Two Position Motorized Damper | 50 | 23 | 50 | 23 | 50 | 23 | 65 | 29 | 65 | 29 |
| Manual Damper | 35 | 16 | 35 | 16 | 35 | 16 | - | - | - | - |
| Field Filter Track 4-in (102mm) | 22 | 10 | 22 | 10 | 22 | 10 | 22 | 10 | 22 | 10 |
| MotorMaster Controller | 35 | 16 | 35 | 16 | 35 | 16 | 35 | 16 | 35 | 16 |
| Medium Static Motor/Drive | 5 | 2 | 6 | 3 | 6 | 3 | 6 | 3 | 10 | 5 |
| High Static Motor/Drive | 11 | 5 | 12 | 5 | 16 | 7 | 16 | 7 | 20 | 9 |
| Two-Speed Indoor Fan Motor System with VFD | 20 | 9 | 20 | 9 | 20 | 9 | 20 | 9 | 20 | 9 |

1 For Perfect Humidity add MotorMaster Controller

2 Where available.

--- Not Available

APPLICATION/SELECTION DATA

Min operating ambient temp (cooling):

In mechanical cooling mode, your Bryant 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 temperatures by using less outside air, economizers, and/or accessory low ambient kits.

Max operating ambient temp (cooling):

The maximum operating ambient temperature for cooling mode is 115°F (46°C). While cooling operation above 115°F (46°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 Bryant representative for assistance.

Motor limits, break horsepower (BHP):

Due to Bryant's internal unit design, air path, and specially designed motors, the full horsepower (maximum continuous BHP) band, as listed in Table 5, can be used with the utmost confidence. There is no need for extra safety factors, as Bryant'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 Bryant 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 Bryant rooftop can operate to ambient temperatures down to -20°F (-29°C) using the recommended accessory Motormaster low ambient controller.

Winter start

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

Application/Selection Option

Selection software by Bryant saves time by performing many of the steps above. Contact your Bryant sales representative for assistance.

Table 7 – COOLING CAPACITIES

2-STAGE COOLING

15 TONS

| 558J-17D | | | AMBIENT TEMPERATURE | | | | | | | | | | | | |
|----------|----------|----|---------------------|-------|-------|----------|-------|-------|----------|-------|-------|----------|-------|-------|-------|
| | | | 85 | | | 95 | | | 105 | | | 115 | | | |
| | | | EAT (db) | | | EAT (db) | | | EAT (db) | | | EAT (db) | | | |
| | | | 75 | 80 | 85 | 75 | 80 | 85 | 75 | 80 | 85 | 75 | 80 | 85 | |
| 4500 CFM | EAT (wb) | 58 | TC | 159.6 | 159.1 | 163.4 | 148.7 | 148.4 | 155.2 | 136.1 | 137.1 | 146.0 | 122.4 | 127.2 | 136.2 |
| | | | SHC | 132.6 | 149.6 | 163.4 | 127.0 | 143.9 | 155.2 | 120.7 | 137.1 | 146.0 | 113.9 | 127.2 | 136.2 |
| | | 62 | TC | 173.9 | 173.6 | 173.3 | 163.1 | 162.6 | 162.2 | 150.5 | 150.2 | 149.9 | 136.8 | 136.2 | 136.9 |
| | | | SHC | 119.4 | 136.8 | 153.9 | 114.1 | 131.5 | 148.6 | 108.2 | 125.7 | 142.6 | 101.9 | 119.2 | 135.8 |
| | | 67 | TC | 193.4 | 193.0 | 192.5 | 182.5 | 182.1 | 181.7 | 169.9 | 169.5 | 169.1 | 156.0 | 155.5 | 155.2 |
| | | | SHC | 102.3 | 119.7 | 137.0 | 97.3 | 114.8 | 132.3 | 91.7 | 109.4 | 126.9 | 85.7 | 103.5 | 121.1 |
| | | 72 | TC | 213.7 | 213.2 | 212.6 | 203.5 | 203.0 | 202.5 | 191.0 | 190.5 | 189.9 | 177.1 | 176.6 | 176.1 |
| | | | SHC | 84.0 | 101.7 | 119.2 | 79.7 | 97.4 | 115.0 | 74.6 | 92.4 | 109.9 | 69.1 | 86.9 | 104.6 |
| 76 | TC | - | 227.8 | 228.5 | - | 219.6 | 219.1 | - | 207.9 | 207.4 | - | 194.1 | 193.5 | | |
| | SHC | - | 89.9 | 103.7 | - | 82.5 | 100.2 | - | 78.1 | 95.8 | - | 73.0 | 97.2 | | |
| 5250 CFM | EAT (wb) | 58 | TC | 168.7 | 168.5 | 176.4 | 157.0 | 158.2 | 167.7 | 143.9 | 148.2 | 158.0 | 129.5 | 137.5 | 147.4 |
| | | | SHC | 161.3 | 163.9 | 176.4 | 138.9 | 157.2 | 167.7 | 132.4 | 148.2 | 158.0 | 125.4 | 137.5 | 147.4 |
| | | 62 | TC | 184.2 | 183.8 | 183.2 | 172.3 | 171.8 | 171.5 | 159.1 | 158.5 | 159.3 | 144.4 | 143.8 | 147.8 |
| | | | SHC | 129.4 | 149.6 | 168.9 | 123.9 | 144.0 | 163.5 | 117.9 | 137.9 | 156.4 | 111.4 | 131.3 | 147.8 |
| | | 67 | TC | 204.7 | 204.0 | 203.5 | 193.1 | 192.6 | 192.2 | 179.7 | 179.2 | 178.7 | 164.8 | 164.3 | 163.6 |
| | | | SHC | 109.3 | 129.5 | 149.6 | 104.3 | 124.7 | 144.9 | 98.6 | 119.1 | 139.4 | 92.5 | 113.1 | 133.3 |
| | | 72 | TC | 224.6 | 224.1 | 223.6 | 214.4 | 213.7 | 213.1 | 202.0 | 201.4 | 200.7 | 187.0 | 186.4 | 185.8 |
| | | | SHC | 87.5 | 107.9 | 128.2 | 83.4 | 103.9 | 124.3 | 78.6 | 99.2 | 119.6 | 72.9 | 93.6 | 114.1 |
| 76 | TC | - | 239.1 | 239.6 | - | 230.6 | 230.1 | - | 218.4 | 217.7 | - | 204.4 | 203.7 | | |
| | SHC | - | 92.6 | 110.2 | - | 86.4 | 107.0 | - | 82.0 | 102.6 | - | 77.1 | 97.8 | | |
| 6000 CFM | EAT (wb) | 58 | TC | 176.9 | 178.5 | 188.9 | 164.3 | 168.9 | 179.6 | 150.3 | 158.4 | 169.1 | 136.1 | 146.9 | 157.7 |
| | | | SHC | 157.4 | 178.5 | 188.9 | 151.1 | 168.9 | 179.6 | 144.3 | 158.4 | 169.1 | 136.1 | 146.9 | 157.7 |
| | | 62 | TC | 193.2 | 192.7 | 192.2 | 180.4 | 179.7 | 180.7 | 166.2 | 165.6 | 170.1 | 150.5 | 150.0 | 158.1 |
| | | | SHC | 140.2 | 162.8 | 184.2 | 134.4 | 156.9 | 177.8 | 128.1 | 150.6 | 168.9 | 121.3 | 143.5 | 158.1 |
| | | 67 | TC | 214.4 | 213.7 | 213.0 | 202.1 | 201.6 | 201.0 | 187.7 | 187.1 | 186.4 | 171.8 | 171.1 | 170.4 |
| | | | SHC | 117.3 | 140.3 | 163.0 | 112.1 | 135.3 | 158.2 | 106.2 | 129.4 | 152.2 | 99.8 | 123.1 | 145.9 |
| | | 72 | TC | 234.9 | 234.6 | 234.2 | 224.0 | 223.3 | 222.5 | 210.9 | 210.1 | 209.3 | 194.9 | 194.1 | 193.4 |
| | | | SHC | 92.7 | 115.9 | 139.1 | 88.4 | 111.8 | 134.8 | 83.4 | 106.8 | 130.0 | 77.5 | 101.0 | 124.3 |
| 76 | TC | - | 250.7 | 250.9 | - | 240.9 | 240.1 | - | 227.5 | 226.7 | - | 212.7 | 211.8 | | |
| | SHC | - | 95.7 | 118.9 | - | 92.1 | 115.3 | - | 87.4 | 110.8 | - | 82.4 | 105.8 | | |
| 6750 CFM | EAT (wb) | 58 | TC | 182.5 | 187.4 | 198.5 | 169.3 | 177.4 | 188.7 | 156.0 | 166.4 | 177.8 | 142.9 | 154.4 | 165.9 |
| | | | SHC | 167.5 | 187.4 | 198.5 | 161.2 | 177.4 | 188.7 | 153.0 | 166.4 | 177.8 | 142.9 | 154.4 | 165.9 |
| | | 62 | TC | 199.3 | 198.7 | 199.6 | 186.0 | 185.2 | 188.9 | 171.2 | 170.5 | 208.4 | 154.7 | 155.5 | 166.2 |
| | | | SHC | 148.6 | 173.7 | 196.6 | 142.8 | 167.6 | 188.9 | 136.4 | 161.1 | 208.4 | 115.2 | 152.6 | 166.2 |
| | | 67 | TC | 220.4 | 219.6 | 218.8 | 208.2 | 207.4 | 206.6 | 193.2 | 192.5 | 191.7 | 176.8 | 176.1 | 175.2 |
| | | | SHC | 122.6 | 148.2 | 173.6 | 117.6 | 143.4 | 168.7 | 111.6 | 137.6 | 162.9 | 97.2 | 131.3 | 156.3 |
| | | 72 | TC | 241.2 | 240.5 | 240.2 | 229.8 | 228.9 | 228.1 | 216.3 | 215.4 | 214.6 | 200.2 | 199.4 | 198.6 |
| | | | SHC | 95.1 | 120.9 | 146.6 | 90.8 | 116.8 | 142.6 | 85.8 | 111.9 | 137.8 | 80.0 | 106.2 | 118.0 |
| 76 | TC | - | 257.2 | 256.7 | - | 246.6 | 245.9 | - | 233.0 | 232.1 | - | 217.6 | 216.7 | | |
| | SHC | - | 98.4 | 124.2 | - | 94.8 | 120.7 | - | 90.2 | 116.3 | - | 85.1 | 111.3 | | |
| 7500 CFM | EAT (wb) | 58 | TC | 187.3 | 195.3 | 206.8 | 174.4 | 184.9 | 196.8 | 161.5 | 173.5 | 185.5 | 148.9 | 161.1 | 173.2 |
| | | | SHC | 177.5 | 195.3 | 206.8 | 169.9 | 184.9 | 196.8 | 161.5 | 173.5 | 185.5 | 148.9 | 161.1 | 173.2 |
| | | 62 | TC | 204.3 | 203.5 | 207.1 | 190.6 | 189.9 | 197.1 | 175.1 | 175.4 | 185.7 | 158.4 | 161.2 | 173.5 |
| | | | SHC | 156.5 | 183.9 | 207.1 | 150.7 | 177.9 | 197.1 | 144.1 | 170.2 | 185.7 | 137.1 | 161.2 | 173.5 |
| | | 67 | TC | 225.2 | 224.4 | 223.4 | 213.1 | 212.2 | 211.3 | 197.8 | 197.0 | 196.2 | 180.8 | 179.9 | 179.1 |
| | | | SHC | 127.5 | 155.8 | 183.5 | 122.8 | 151.2 | 178.9 | 116.8 | 145.5 | 173.1 | 110.3 | 139.0 | 166.3 |
| | | 72 | TC | 246.1 | 245.5 | 244.9 | 234.5 | 233.6 | 232.8 | 220.6 | 219.7 | 218.6 | 204.7 | 203.7 | 202.7 |
| | | | SHC | 97.1 | 125.6 | 153.8 | 92.9 | 121.6 | 150.1 | 87.9 | 116.8 | 145.3 | 82.3 | 111.2 | 139.9 |
| 76 | TC | - | 262.3 | 261.6 | - | 251.3 | 250.5 | - | 237.3 | 236.3 | - | 221.6 | 220.6 | | |
| | SHC | - | 100.9 | 129.2 | - | 97.3 | 125.8 | - | 92.8 | 121.5 | - | 87.7 | 116.6 | | |

Note: See Minimum–Maximum Airflow Ratings in Table 3. Do not operate outside these limits.

LEGEND:

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

| 558J*17E (15 TONS) – UNIT WITH PERFECT HUMIDITY IN SUBCOOLING MODE | | | | | | | | | | |
|--|-----|------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Temp (F) Air Entering Condenser (Edb) | | AIR ENTERING EVAPORATOR – CFM | | | | | | | | |
| | | 4,500 | | | 6,000 | | | 7,500 | | |
| | | Air Entering Evaporator -- Ewb (F) | | | | | | | | |
| 75 | TC | 208.5 | 190.6 | 172.6 | 229.2 | 208.6 | 188.1 | 247.8 | 224.9 | 202.0 |
| | SHC | 94.0 | 114.5 | 135.0 | 104.5 | 125.2 | 145.9 | 113.0 | 133.8 | 154.6 |
| | kW | 13.42 | 13.05 | 12.70 | 13.60 | 13.21 | 12.80 | 13.82 | 13.36 | 13.15 |
| 85 | TC | 198.3 | 180.7 | 163.0 | 214.9 | 194.8 | 174.6 | 229.8 | 207.4 | 185.1 |
| | SHC | 74.1 | 99.6 | 125.1 | 85.2 | 110.9 | 136.7 | 94.1 | 120.0 | 145.9 |
| | kW | 14.79 | 14.42 | 14.10 | 14.97 | 14.58 | 14.20 | 15.19 | 14.73 | 14.51 |
| 95 | TC | 188.2 | 170.8 | 153.4 | 200.6 | 180.9 | 161.1 | 211.9 | 190.0 | 168.1 |
| | SHC | 54.4 | 84.8 | 115.3 | 65.9 | 96.7 | 127.5 | 75.1 | 106.2 | 137.2 |
| | kW | 16.23 | 15.86 | 15.50 | 16.41 | 16.02 | 15.60 | 16.63 | 16.17 | 15.95 |
| 105 | TC | 178.1 | 160.9 | 143.8 | 186.4 | 167.0 | 147.7 | 193.9 | 172.5 | 151.2 |
| | SHC | 34.6 | 70.0 | 105.4 | 46.5 | 82.4 | 118.2 | 56.1 | 92.3 | 128.5 |
| | kW | 17.47 | 17.10 | 16.80 | 17.65 | 17.26 | 16.90 | 17.87 | 17.41 | 17.25 |
| 115 | TC | 167.9 | 151.1 | 134.2 | 172.1 | 153.2 | 134.2 | 175.9 | 155.1 | 134.5 |
| | SHC | 14.8 | 55.2 | 95.6 | 27.2 | 68.1 | 109.0 | 37.1 | 78.5 | 119.8 |
| | kW | 18.87 | 18.50 | 18.20 | 19.05 | 18.66 | 18.30 | 19.27 | 18.81 | 18.55 |

| 558J*17E (15 TONS) – UNIT WITH PERFECT HUMIDITY IN HOT GAS REHEAT MODE | | | | | | | | | | |
|--|-----|-----------------------------------|--------------|--------------|----------------|--------------|--------------|----------------|--------------|---------------|
| Temp (F) Air Entering Condenser (Edb) | | AIR ENTERING EVAPORATOR – Ewb (F) | | | | | | | | |
| | | 75 Dry Bulb | | | 75 Dry Bulb | | | 75 Dry Bulb | | |
| | | 62.5 Wet Bulb | | | 64 Wet Bulb | | | 65.3 Wet Bulb | | |
| | | (50% Relative) | | | (56% Relative) | | | (60% Relative) | | |
| | | Air Entering Evaporator – Cfm | | | | | | | | |
| | | 4,500 | 6,000 | 7,500 | 4,500 | 6,000 | 7,500 | 4,500 | 6,000 | 7,500 |
| 80 | TC | 80.10 | 85.50 | 91.30 | 82.70 | 90.90 | 97.10 | 86.00 | 95.40 | 100.50 |
| | SHC | 12.70 | 22.30 | 34.20 | 5.10 | 12.10 | 21.20 | -2.10 | 4.20 | 10.50 |
| | kW | 12.44 | 12.67 | 12.78 | 12.55 | 12.88 | 13.10 | 12.65 | 13.02 | 13.12 |
| 75 | TC | 82.30 | 87.60 | 93.40 | 84.70 | 93.00 | 99.20 | 88.10 | 97.30 | 102.50 |
| | SHC | 14.30 | 24.20 | 36.00 | 6.70 | 13.70 | 23.10 | -0.50 | 5.80 | 12.60 |
| | kW | 12.38 | 12.62 | 12.73 | 12.50 | 12.83 | 13.05 | 12.62 | 12.98 | 13.07 |
| 70 | TC | 84.40 | 89.60 | 94.70 | 87.00 | 95.10 | 101.30 | 90.30 | 99.50 | 104.60 |
| | SHC | 16.10 | 25.70 | 37.30 | 8.20 | 15.80 | 24.50 | 1.10 | 7.50 | 13.70 |
| | kW | 12.34 | 12.58 | 12.69 | 12.47 | 12.78 | 13.03 | 12.59 | 12.93 | 13.02 |
| 60 | TC | 88.50 | 93.90 | 99.80 | 91.20 | 99.40 | 105.50 | 94.40 | 103.70 | 108.90 |
| | SHC | 19.40 | 29.20 | 40.70 | 11.50 | 18.60 | 27.80 | 4.60 | 10.50 | 16.90 |
| | kW | 12.28 | 12.52 | 12.63 | 12.41 | 12.73 | 12.97 | 12.53 | 12.84 | 12.94 |
| 50 | TC | 92.80 | 98.10 | 104.80 | 95.40 | 103.60 | 110.50 | 98.80 | 108.00 | 113.90 |
| | SHC | 22.70 | 32.20 | 43.80 | 14.80 | 22.10 | 31.30 | 7.70 | 13.90 | 20.50 |
| | kW | 12.21 | 12.45 | 12.56 | 12.34 | 12.68 | 12.91 | 12.46 | 12.75 | 12.85 |
| 40 | TC | 97.10 | 102.50 | 108.50 | 99.60 | 108.00 | 114.30 | 103.00 | 112.40 | 117.70 |
| | SHC | 26.00 | 35.40 | 46.90 | 17.90 | 25.30 | 34.40 | 10.80 | 17.10 | 23.80 |
| | kW | 12.14 | 12.38 | 12.49 | 12.27 | 12.60 | 12.84 | 12.40 | 12.70 | 12.80 |

LEGEND

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

NOTES:

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

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

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

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

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

Table 7 - COOLING CAPACITIES (cont.)

2-STAGE COOLING

17.5 TONS

| 558J*20D | | | | AMBIENT TEMPERATURE | | | | | | | | | | | |
|----------|----------|----|-----|---------------------|-------|-------|----------|-------|-------|----------|-------|-------|----------|-------|-------|
| | | | | 85 | | | 95 | | | 105 | | | 115 | | |
| | | | | EAT (db) | | | EAT (db) | | | EAT (db) | | | EAT (db) | | |
| | | | | 75 | 80 | 85 | 75 | 80 | 85 | 75 | 80 | 85 | 75 | 80 | 85 |
| 5250 CFM | EAT (wb) | 58 | TC | 180.4 | 185.6 | 196.3 | 167.7 | 176.1 | 186.9 | 154.7 | 165.3 | 176.6 | 142.2 | 153.6 | 164.9 |
| | | | SHC | 166.5 | 185.6 | 196.3 | 160.6 | 176.1 | 186.9 | 152.7 | 165.3 | 176.6 | 142.2 | 153.6 | 164.9 |
| | | 62 | TC | 196.2 | 195.5 | 196.9 | 183.6 | 182.9 | 187.2 | 169.3 | 168.7 | 176.9 | 153.4 | 154.1 | 165.2 |
| | | | SHC | 146.8 | 172.1 | 194.7 | 141.4 | 166.6 | 187.2 | 135.4 | 160.5 | 176.9 | 128.6 | 152.5 | 165.2 |
| | | 67 | TC | 216.7 | 215.9 | 215.2 | 204.9 | 204.1 | 203.1 | 190.6 | 189.7 | 189.0 | 174.8 | 174.0 | 173.3 |
| | | | SHC | 120.0 | 146.1 | 171.8 | 115.4 | 141.5 | 167.1 | 109.8 | 136.1 | 161.7 | 103.8 | 130.2 | 155.6 |
| | | 72 | TC | 237.4 | 236.8 | 236.0 | 226.0 | 225.1 | 224.2 | 212.8 | 211.9 | 211.0 | 197.3 | 196.4 | 195.5 |
| | | | SHC | 92.0 | 118.3 | 144.3 | 87.8 | 114.3 | 140.4 | 83.0 | 109.6 | 135.8 | 77.6 | 104.2 | 130.6 |
| | | 76 | TC | - | 252.9 | 253.0 | - | 242.5 | 241.6 | - | 229.1 | 228.2 | - | 214.1 | 213.1 |
| | | | SHC | - | 95.1 | 121.4 | - | 91.7 | 118.0 | - | 87.3 | 113.8 | - | 82.5 | 107.1 |
| 6125 CFM | EAT (wb) | 58 | TC | 188.8 | 198.5 | 209.3 | 176.5 | 188.2 | 200.2 | 164.5 | 176.7 | 189.0 | 151.9 | 164.2 | 176.7 |
| | | | SHC | 180.4 | 198.5 | 209.3 | 174.4 | 188.2 | 200.2 | 164.5 | 176.7 | 189.0 | 151.9 | 164.2 | 176.7 |
| | | 62 | TC | 205.2 | 204.6 | 209.6 | 191.8 | 191.5 | 200.4 | 176.6 | 177.6 | 189.2 | 159.9 | 164.2 | 176.9 |
| | | | SHC | 159.9 | 188.7 | 209.6 | 154.2 | 183.0 | 200.4 | 147.9 | 174.8 | 189.2 | 141.0 | 164.2 | 176.9 |
| | | 67 | TC | 225.5 | 224.5 | 223.5 | 213.5 | 212.5 | 211.7 | 199.1 | 198.3 | 197.4 | 182.3 | 181.4 | 180.9 |
| | | | SHC | 128.3 | 158.4 | 187.8 | 123.8 | 154.1 | 183.5 | 118.4 | 148.9 | 178.1 | 112.2 | 142.7 | 171.6 |
| | | 72 | TC | 245.6 | 245.3 | 244.6 | 234.7 | 233.6 | 232.6 | 220.9 | 219.9 | 218.8 | 205.5 | 204.4 | 203.4 |
| | | | SHC | 95.4 | 125.9 | 155.7 | 91.7 | 122.2 | 152.4 | 86.9 | 117.7 | 148.1 | 81.7 | 112.5 | 143.1 |
| | | 76 | TC | - | 262.0 | 261.2 | - | 250.7 | 250.1 | - | 237.3 | 236.2 | - | 221.6 | 220.6 |
| | | | SHC | - | 99.5 | 129.4 | - | 95.9 | 126.2 | - | 91.8 | 122.4 | - | 87.0 | 117.8 |
| 7000 CFM | EAT (wb) | 58 | TC | 197.4 | 209.8 | 221.3 | 186.1 | 199.1 | 211.7 | 173.8 | 186.9 | 200.1 | 160.3 | 173.5 | 186.9 |
| | | | SHC | 196.8 | 209.8 | 221.3 | 186.1 | 199.1 | 211.7 | 173.8 | 186.9 | 200.1 | 160.3 | 173.5 | 186.9 |
| | | 62 | TC | 212.7 | 212.4 | 221.5 | 198.4 | 199.8 | 212.0 | 182.3 | 186.9 | 200.3 | 164.7 | 173.8 | 187.1 |
| | | | SHC | 173.4 | 205.1 | 221.5 | 167.4 | 197.4 | 212.0 | 160.8 | 186.8 | 200.3 | 153.4 | 173.8 | 187.1 |
| | | 67 | TC | 233.7 | 232.5 | 231.4 | 220.8 | 219.8 | 218.9 | 205.6 | 204.5 | 204.1 | 187.8 | 186.8 | 188.0 |
| | | | SHC | 138.0 | 172.0 | 205.0 | 133.4 | 167.6 | 200.4 | 127.8 | 162.0 | 194.4 | 121.3 | 155.6 | 185.6 |
| | | 72 | TC | 254.3 | 253.3 | 252.8 | 242.7 | 241.5 | 240.3 | 228.0 | 226.8 | 225.7 | 211.8 | 210.6 | 209.3 |
| | | | SHC | 101.3 | 135.4 | 169.2 | 97.3 | 131.8 | 165.9 | 92.3 | 127.2 | 161.5 | 86.9 | 121.8 | 156.3 |
| | | 76 | TC | - | 270.7 | 269.9 | - | 259.0 | 258.1 | - | 245.0 | 243.6 | - | 228.5 | 227.1 |
| | | | SHC | - | 106.1 | 140.0 | - | 102.4 | 136.5 | - | 98.2 | 132.7 | - | 93.2 | 127.9 |
| 7875 CFM | EAT (wb) | 58 | TC | 205.0 | 217.2 | 229.1 | 193.4 | 206.9 | 219.3 | 180.6 | 194.3 | 207.9 | 166.6 | 180.5 | 194.5 |
| | | | SHC | 205.0 | 217.2 | 229.1 | 193.4 | 206.9 | 219.3 | 180.6 | 194.3 | 207.9 | 166.6 | 180.5 | 194.5 |
| | | 62 | TC | 216.7 | 217.4 | 229.4 | 202.5 | 207.1 | 219.6 | 185.9 | 194.5 | 208.4 | 168.4 | 180.7 | 194.7 |
| | | | SHC | 183.9 | 217.4 | 229.4 | 178.2 | 207.1 | 219.6 | 171.5 | 194.5 | 208.4 | 141.2 | 180.7 | 194.7 |
| | | 67 | TC | 237.8 | 236.7 | 235.7 | 224.7 | 223.5 | 223.0 | 209.5 | 208.3 | 209.2 | 191.5 | 190.3 | 195.0 |
| | | | SHC | 144.6 | 182.4 | 219.3 | 140.3 | 178.2 | 213.7 | 134.9 | 172.7 | 205.9 | 113.6 | 166.2 | 195.0 |
| | | 72 | TC | 258.6 | 257.5 | 256.5 | 246.8 | 245.7 | 244.3 | 231.8 | 230.5 | 229.2 | 215.3 | 213.9 | 212.5 |
| | | | SHC | 103.9 | 141.8 | 179.2 | 100.0 | 138.3 | 176.1 | 95.1 | 133.9 | 172.1 | 89.7 | 128.6 | 142.0 |
| | | 76 | TC | - | 275.4 | 274.2 | - | 262.7 | 261.8 | - | 248.7 | 247.6 | - | 231.9 | 230.5 |
| | | | SHC | - | 109.5 | 147.0 | - | 105.7 | 143.6 | - | 101.5 | 139.9 | - | 96.6 | 135.4 |
| 8750 CFM | EAT (wb) | 58 | TC | 211.3 | 223.6 | 235.9 | 199.7 | 213.4 | 225.7 | 186.4 | 200.7 | 214.3 | 172.1 | 186.5 | 200.9 |
| | | | SHC | 211.3 | 223.6 | 235.9 | 199.7 | 213.4 | 225.7 | 186.4 | 200.7 | 214.3 | 172.1 | 186.5 | 200.9 |
| | | 62 | TC | 220.0 | 223.7 | 236.3 | 206.0 | 213.6 | 226.1 | 189.3 | 200.9 | 214.5 | 172.2 | 186.7 | 201.2 |
| | | | SHC | 194.0 | 223.7 | 236.3 | 188.5 | 213.6 | 226.1 | 181.3 | 200.9 | 214.5 | 172.2 | 186.7 | 201.2 |
| | | 67 | TC | 241.1 | 240.1 | 239.7 | 227.9 | 226.6 | 226.9 | 212.7 | 211.4 | 214.9 | 194.4 | 193.0 | 201.4 |
| | | | SHC | 151.0 | 192.1 | 230.2 | 146.9 | 188.3 | 225.2 | 141.6 | 182.9 | 214.8 | 135.3 | 176.3 | 201.4 |
| | | 72 | TC | 262.2 | 261.0 | 259.7 | 250.0 | 248.8 | 247.7 | 235.0 | 233.5 | 232.1 | 218.1 | 216.6 | 215.2 |
| | | | SHC | 106.5 | 148.1 | 189.0 | 102.5 | 144.5 | 186.0 | 97.8 | 140.4 | 182.1 | 92.4 | 135.3 | 177.1 |
| | | 76 | TC | - | 278.9 | 277.4 | - | 266.0 | 264.8 | - | 251.5 | 250.6 | - | 234.7 | 233.0 |
| | | | SHC | - | 112.7 | 153.7 | - | 108.9 | 150.4 | - | 104.7 | 146.7 | - | 100.0 | 142.4 |

Note: See Minimum-Maximum Airflow Ratings in Table 3. Do not operate outside these limits.

LEGEND:

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

Table 7 - COOLING CAPACITIES (cont.) 2-STAGE COOLING

17.5 TONS

| 558J*20E (17.5 TONS) – UNIT WITH PERFECT HUMIDITY IN SUBCOOLING MODE | | | | | | | | | | |
|--|-----|-----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Temp (F) Air Entering Condenser (Edb) | | AIR ENTERING EVAPORATOR – CFM | | | | | | | | |
| | | 5,250 | | | 7,000 | | | 8,750 | | |
| | | Air Entering Evaporator – Ewb (F) | | | | | | | | |
| | | 72 | 67 | 62 | 72 | 67 | 62 | 72 | 67 | 62 |
| 75 | TC | 218.7 | 199.6 | 180.5 | 241.4 | 219.4 | 197.4 | 261.7 | 237.2 | 212.7 |
| | SHC | 99.9 | 123.9 | 147.8 | 112.7 | 136.9 | 161.1 | 122.9 | 147.3 | 171.7 |
| | kW | 11.81 | 11.56 | 11.20 | 13.81 | 13.48 | 13.16 | 14.82 | 14.58 | 14.16 |
| 85 | TC | 206.6 | 187.9 | 169.1 | 224.9 | 203.4 | 181.9 | 241.3 | 217.3 | 193.4 |
| | SHC | 78.9 | 108.4 | 137.9 | 92.2 | 122.1 | 152.0 | 103.0 | 133.1 | 163.3 |
| | kW | 13.18 | 12.53 | 12.53 | 15.18 | 14.85 | 14.52 | 16.21 | 15.85 | 15.54 |
| 95 | TC | 194.7 | 176.2 | 157.8 | 208.4 | 187.4 | 166.4 | 220.8 | 197.4 | 174.1 |
| | SHC | 57.8 | 92.9 | 128.0 | 71.7 | 107.3 | 142.9 | 83.0 | 118.9 | 154.9 |
| | kW | 14.56 | 14.21 | 13.88 | 16.56 | 16.21 | 15.87 | 17.56 | 17.22 | 16.01 |
| 105 | TC | 182.7 | 164.5 | 146.4 | 191.9 | 171.4 | 150.8 | 200.3 | 177.6 | 154.8 |
| | SHC | 36.8 | 77.4 | 118.1 | 51.3 | 92.5 | 133.8 | 63.0 | 104.7 | 146.4 |
| | kW | 15.93 | 15.58 | 15.20 | 17.94 | 17.58 | 17.22 | 18.95 | 18.59 | 18.24 |
| 115 | TC | 170.6 | 152.8 | 135.0 | 175.4 | 155.4 | 135.3 | 179.8 | 157.7 | 135.5 |
| | SHC | 15.7 | 62.0 | 108.2 | 30.8 | 77.8 | 124.7 | 43.0 | 90.5 | 128.0 |
| | kW | 17.31 | 16.95 | 16.58 | 19.32 | 18.95 | 18.58 | 20.32 | 19.96 | 19.59 |

| 558J*20E (17.5 TONS) – UNIT WITH PERFECT HUMIDITY IN HOT GAS REHEAT MODE | | | | | | | | | | |
|--|-----|-----------------------------------|--------|--------|----------------|--------|--------|----------------|--------|--------|
| Temp (F) Air Entering Condenser (Edb) | | AIR ENTERING EVAPORATOR – Ewb (F) | | | | | | | | |
| | | 75 Dry Bulb | | | 75 Dry Bulb | | | 75 Dry Bulb | | |
| | | 62.5 Wet Bulb | | | 64 Wet Bulb | | | 65.3 Wet Bulb | | |
| | | (50% Relative) | | | (56% Relative) | | | (60% Relative) | | |
| | | Air Entering Evaporator – Cfm | | | | | | | | |
| | | 5,250 | 7,000 | 8,750 | 5,250 | 7,000 | 8,750 | 5,250 | 7,000 | 8,750 |
| 80 | TC | 82.20 | 90.50 | 92.40 | 86.70 | 96.40 | 97.80 | 91.60 | 99.80 | 101.20 |
| | SHC | 18.20 | 29.40 | 41.60 | 8.60 | 17.20 | 27.50 | 0.50 | 9.30 | 13.20 |
| | kW | 12.64 | 12.73 | 12.88 | 12.78 | 13.06 | 13.15 | 12.96 | 13.07 | 13.22 |
| 75 | TC | 84.40 | 92.70 | 94.40 | 88.80 | 98.60 | 99.70 | 93.70 | 102.00 | 103.40 |
| | SHC | 19.70 | 31.30 | 43.50 | 10.10 | 18.80 | 29.20 | 12.10 | 10.80 | 15.30 |
| | kW | 12.60 | 12.71 | 12.85 | 12.75 | 13.02 | 13.12 | 12.93 | 13.03 | 13.19 |
| 70 | TC | 86.70 | 94.90 | 96.60 | 91.00 | 100.70 | 102.00 | 95.90 | 104.10 | 105.40 |
| | SHC | 21.30 | 32.80 | 44.80 | 11.60 | 20.40 | 30.70 | 3.80 | 12.30 | 16.50 |
| | kW | 12.56 | 12.66 | 12.82 | 12.70 | 12.99 | 13.08 | 12.89 | 13.00 | 13.14 |
| 60 | TC | 90.90 | 99.10 | 100.80 | 95.20 | 105.00 | 106.30 | 100.20 | 108.30 | 109.70 |
| | SHC | 24.80 | 36.00 | 48.20 | 14.90 | 23.90 | 35.90 | 7.20 | 15.60 | 19.60 |
| | kW | 12.49 | 12.60 | 12.75 | 12.64 | 12.92 | 13.02 | 12.83 | 12.93 | 13.09 |
| 50 | TC | 95.00 | 103.40 | 105.10 | 99.50 | 109.40 | 110.50 | 104.40 | 112.50 | 113.90 |
| | SHC | 28.10 | 39.30 | 51.30 | 18.20 | 27.20 | 37.40 | 10.30 | 18.90 | 23.20 |
| | kW | 12.43 | 12.53 | 12.67 | 12.57 | 12.86 | 12.95 | 12.76 | 12.87 | 13.02 |
| 40 | TC | 99.20 | 107.70 | 109.30 | 103.70 | 113.70 | 114.70 | 108.60 | 116.70 | 118.10 |
| | SHC | 31.40 | 42.50 | 54.40 | 21.30 | 30.40 | 40.50 | 13.40 | 22.00 | 26.50 |
| | kW | 12.35 | 12.45 | 12.61 | 12.50 | 12.79 | 12.87 | 12.68 | 12.80 | 12.94 |

LEGEND

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

NOTES:

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

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

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

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

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

| 558J-24D | | | | AMBIENT TEMPERATURE | | | | | | | | | | | | |
|------------|----------|----------|-------|---------------------|-------|-------|---------|-------|-------|---------|-------|-------|---------|-------|-------|-------|
| | | | | 85 | | | 95 | | | 105 | | | 115 | | | |
| | | | | EA (db) | | | EA (db) | | | EA (db) | | | EA (db) | | | |
| | | | | 75 | 80 | 85 | 75 | 80 | 85 | 75 | 80 | 85 | 75 | 80 | 85 | |
| 6000 CFM | EAT (wb) | 58 | TC | 213.1 | 217.2 | 228.7 | 199.9 | 207.5 | 219.4 | 184.8 | 195.8 | 208.4 | 169.6 | 182.6 | 195.6 | |
| | | | SHC | 194.3 | 217.2 | 228.7 | 188.0 | 207.5 | 219.4 | 179.0 | 195.8 | 208.4 | 169.6 | 182.6 | 195.6 | |
| | | 62 | TC | 230.0 | 229.4 | 230.4 | 217.5 | 217.0 | 219.7 | 202.5 | 201.9 | 208.8 | 184.9 | 184.9 | 195.9 | |
| | | | SHC | 170.0 | 199.9 | 225.9 | 164.6 | 194.5 | 219.7 | 158.3 | 187.8 | 208.8 | 150.9 | 178.7 | 195.9 | |
| | | 67 | TC | 251.5 | 251.1 | 250.6 | 239.4 | 238.7 | 238.1 | 225.4 | 224.7 | 224.0 | 208.8 | 208.2 | 207.4 | |
| | | | SHC | 137.5 | 168.1 | 198.4 | 132.9 | 163.4 | 193.7 | 127.5 | 158.1 | 188.2 | 121.1 | 151.9 | 181.9 | |
| | 72 | TC | 274.0 | 273.8 | 273.5 | 262.3 | 261.7 | 261.0 | 248.2 | 247.4 | 246.6 | 232.2 | 231.3 | 230.5 | | |
| | | SHC | 104.3 | 135.1 | 165.6 | 100.1 | 130.9 | 161.4 | 95.1 | 125.9 | 156.6 | 89.6 | 120.5 | 151.3 | | |
| | 76 | TC | - | 292.9 | 292.2 | - | 280.5 | 279.9 | - | 266.3 | 265.6 | - | 250.6 | 249.8 | | |
| | | SHC | - | 108.1 | 138.6 | - | 104.1 | 134.9 | - | 99.6 | 130.4 | - | 94.6 | 125.5 | | |
| | 7000 CFM | EAT (wb) | 58 | TC | 220.8 | 229.7 | 241.7 | 208.4 | 219.7 | 232.2 | 194.3 | 208.1 | 221.0 | 180.1 | 194.2 | 207.9 |
| | | | | SHC | 211.0 | 229.7 | 241.7 | 203.1 | 219.7 | 232.2 | 194.3 | 208.1 | 221.0 | 180.1 | 194.2 | 207.9 |
| 62 | | | TC | 237.8 | 237.3 | 241.9 | 225.1 | 224.6 | 232.3 | 209.6 | 210.2 | 221.3 | 191.3 | 196.0 | 208.2 | |
| | | | SHC | 183.3 | 217.8 | 241.9 | 178.2 | 212.1 | 232.3 | 171.8 | 203.8 | 221.3 | 164.3 | 196.0 | 208.2 | |
| 67 | | | TC | 260.0 | 259.2 | 258.5 | 247.2 | 246.4 | 245.7 | 232.7 | 231.9 | 231.7 | 215.8 | 215.0 | 214.3 | |
| | | | SHC | 146.0 | 181.0 | 215.7 | 141.3 | 176.5 | 211.2 | 136.0 | 171.3 | 206.3 | 129.8 | 165.3 | 199.4 | |
| 72 | | TC | 283.3 | 282.5 | 281.8 | 270.6 | 269.8 | 268.9 | 255.9 | 255.0 | 254.1 | 240.0 | 238.9 | 238.0 | | |
| | | SHC | 107.9 | 143.2 | 178.1 | 103.6 | 139.0 | 174.1 | 98.6 | 134.2 | 169.5 | 93.2 | 129.0 | 164.4 | | |
| 76 | | TC | - | 302.3 | 301.6 | - | 289.1 | 288.4 | - | 274.4 | 273.6 | - | 257.9 | 256.8 | | |
| | | SHC | - | 112.3 | 147.5 | - | 108.3 | 143.7 | - | 103.9 | 139.4 | - | 98.9 | 134.5 | | |
| 8000 CFM | | EAT (wb) | 58 | TC | 232.1 | 243.6 | 256.1 | 219.8 | 233.4 | 246.0 | 206.9 | 221.3 | 234.5 | 192.1 | 206.8 | 221.2 |
| | | | | SHC | 227.5 | 243.6 | 256.1 | 219.8 | 233.4 | 246.0 | 206.9 | 221.3 | 234.5 | 192.1 | 206.8 | 221.2 |
| | 62 | | TC | 247.8 | 247.1 | 256.4 | 234.7 | 235.5 | 246.2 | 218.7 | 221.1 | 234.7 | 199.5 | 207.0 | 221.4 | |
| | | | SHC | 199.5 | 236.7 | 256.4 | 194.3 | 229.1 | 246.2 | 187.8 | 221.1 | 234.7 | 179.9 | 207.0 | 221.4 | |
| | 67 | | TC | 270.2 | 269.3 | 268.3 | 257.0 | 256.1 | 255.2 | 242.1 | 241.0 | 240.3 | 224.5 | 223.5 | 223.1 | |
| | | | SHC | 157.6 | 197.1 | 235.6 | 152.7 | 192.6 | 231.0 | 147.3 | 187.2 | 225.3 | 141.0 | 181.0 | 215.6 | |
| | 72 | TC | 294.1 | 293.1 | 292.2 | 280.7 | 279.7 | 278.4 | 265.9 | 264.7 | 263.8 | 248.9 | 247.6 | 246.6 | | |
| | | SHC | 114.8 | 154.6 | 193.9 | 110.3 | 150.4 | 190.0 | 105.4 | 145.6 | 185.5 | 99.7 | 140.1 | 180.2 | | |
| | 76 | TC | - | 313.1 | 312.3 | - | 299.3 | 298.2 | - | 283.8 | 282.8 | - | 266.7 | 265.4 | | |
| | | SHC | - | 120.2 | 159.6 | - | 116.0 | 155.9 | - | 111.4 | 151.5 | - | 106.2 | 146.6 | | |
| | 9000 CFM | EAT (wb) | 58 | TC | 238.5 | 252.5 | 266.0 | 226.8 | 241.6 | 255.6 | 213.1 | 228.2 | 243.0 | 197.5 | 213.0 | 229.2 |
| | | | | SHC | 238.5 | 252.5 | 266.0 | 226.8 | 241.6 | 255.6 | 213.1 | 228.2 | 243.0 | 197.5 | 213.0 | 229.2 |
| 62 | | | TC | 253.0 | 254.1 | 266.3 | 238.6 | 241.6 | 255.7 | 221.0 | 228.4 | 243.3 | 201.1 | 213.2 | 229.4 | |
| | | | SHC | 211.9 | 249.1 | 266.3 | 206.2 | 241.6 | 255.7 | 199.2 | 228.4 | 243.3 | 164.2 | 213.2 | 229.4 | |
| 67 | | | TC | 276.9 | 275.8 | 274.8 | 263.0 | 261.8 | 261.0 | 246.5 | 245.2 | 246.6 | 228.2 | 225.9 | 229.6 | |
| | | | SHC | 165.6 | 209.9 | 252.2 | 160.7 | 205.1 | 247.0 | 154.9 | 199.3 | 238.5 | 132.3 | 192.7 | 229.6 | |
| 72 | | TC | 302.2 | 301.0 | 299.7 | 287.9 | 286.6 | 285.4 | 272.3 | 270.9 | 269.6 | 254.3 | 252.9 | 251.6 | | |
| | | SHC | 118.2 | 162.8 | 206.8 | 113.5 | 158.4 | 202.9 | 108.5 | 153.4 | 198.0 | 102.7 | 147.8 | 165.1 | | |
| 76 | | TC | - | 322.0 | 320.8 | - | 307.7 | 306.1 | - | 291.4 | 289.9 | - | 275.1 | 272.5 | | |
| | | SHC | - | 124.5 | 168.7 | - | 120.4 | 164.9 | - | 115.6 | 160.5 | - | 110.9 | 155.3 | | |
| 10,000 CFM | | EAT (wb) | 58 | TC | 245.7 | 259.8 | 273.9 | 233.8 | 248.7 | 263.2 | 219.8 | 235.3 | 250.5 | 203.7 | 219.8 | 236.5 |
| | | | | SHC | 245.7 | 259.8 | 273.9 | 233.8 | 248.7 | 263.2 | 219.8 | 235.3 | 250.5 | 203.7 | 219.8 | 236.5 |
| | 62 | | TC | 256.8 | 260.7 | 274.2 | 242.2 | 249.0 | 263.3 | 224.6 | 235.6 | 250.6 | 205.6 | 220.0 | 236.8 | |
| | | | SHC | 223.8 | 258.4 | 274.2 | 218.1 | 249.0 | 263.3 | 211.0 | 235.6 | 250.6 | 199.3 | 220.0 | 236.8 | |
| | 67 | | TC | 280.8 | 279.6 | 266.3 | 266.6 | 265.4 | 265.8 | 249.9 | 248.6 | 251.0 | 231.4 | 229.8 | 237.3 | |
| | | | SHC | 173.2 | 221.8 | 266.3 | 168.3 | 217.0 | 258.7 | 162.6 | 211.4 | 250.7 | 156.4 | 204.7 | 237.3 | |
| | 72 | TC | 306.4 | 305.0 | 274.8 | 292.1 | 290.6 | 289.3 | 276.0 | 274.3 | 273.0 | 257.5 | 256.0 | 254.6 | | |
| | | SHC | 121.2 | 170.1 | 252.2 | 116.6 | 165.9 | 214.8 | 111.5 | 161.0 | 210.0 | 105.7 | 155.4 | 204.5 | | |
| | 76 | TC | - | 326.2 | 299.7 | - | 311.4 | 310.0 | - | 295.2 | 293.2 | - | 277.0 | 275.3 | | |
| | | SHC | - | 128.2 | 206.8 | - | 124.0 | 172.9 | - | 119.5 | 168.9 | - | 114.3 | 163.8 | | |

Note: See Minimum-Maximum Airflow Ratings in Table 3. Do not operate outside these limits.

LEGEND:

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

| 558J*24E (20 TONS) – UNIT WITH PERFECT HUMIDITY IN SUBCOOLING MODE | | | | | | | | | | |
|--|-----|-----------------------------------|-------|-------|-------|-------|-------|--------|-------|-------|
| Temp (F) Air Entering Condenser (Edb) | | AIR ENTERING EVAPORATOR – CFM | | | | | | | | |
| | | 6,000 | | | 8,000 | | | 10,000 | | |
| | | Air Entering Evaporator – Ewb (F) | | | | | | | | |
| | | 72 | 67 | 62 | 72 | 67 | 62 | 72 | 67 | 62 |
| 75 | TC | 263.0 | 240.4 | 217.7 | 301.0 | 274.0 | 246.9 | 336.9 | 305.6 | 274.4 |
| | SHC | 125.3 | 151.6 | 178.0 | 144.4 | 171.1 | 198.0 | 160.0 | 186.9 | 213.9 |
| | kW | 15.63 | 15.20 | 14.65 | 15.91 | 15.62 | 14.98 | 16.26 | 15.92 | 15.21 |
| 85 | TC | 248.2 | 226.1 | 204.0 | 279.2 | 252.9 | 226.6 | 308.4 | 278.2 | 248.0 |
| | SHC | 98.9 | 131.7 | 164.5 | 118.6 | 152.0 | 185.3 | 134.6 | 168.4 | 202.2 |
| | kW | 17.50 | 17.04 | 16.50 | 17.74 | 17.51 | 16.75 | 18.08 | 17.73 | 17.03 |
| 95 | TC | 233.4 | 211.8 | 190.2 | 257.3 | 231.8 | 206.4 | 279.8 | 250.7 | 221.5 |
| | SHC | 72.4 | 111.8 | 151.1 | 92.7 | 132.8 | 172.9 | 109.3 | 149.9 | 190.6 |
| | kW | 19.36 | 18.96 | 18.35 | 19.61 | 19.37 | 18.67 | 20.02 | 19.62 | 18.97 |
| 105 | TC | 218.6 | 197.5 | 176.5 | 235.4 | 210.7 | 186.1 | 251.3 | 223.2 | 195.1 |
| | SHC | 46.0 | 91.8 | 137.7 | 66.9 | 113.6 | 160.4 | 83.9 | 131.4 | 178.9 |
| | kW | 21.23 | 20.76 | 20.18 | 21.53 | 21.22 | 20.52 | 21.91 | 21.52 | 20.77 |
| 115 | TC | 203.7 | 183.3 | 162.8 | 213.5 | 189.7 | 165.8 | 222.7 | 195.7 | 168.7 |
| | SHC | 19.5 | 71.9 | 124.2 | 41.0 | 94.4 | 147.9 | 58.5 | 112.9 | 157.2 |
| | kW | 23.02 | 22.58 | 22.02 | 23.42 | 23.02 | 22.38 | 23.73 | 23.41 | 22.57 |

| 558J*24E (20 TONS) – UNIT WITH PERFECT HUMIDITY IN HOT GAS REHEAT MODE | | | | | | | | | | |
|--|-----|-----------------------------------|--------|--------|----------------|--------|--------|----------------|--------|--------|
| Temp (F) Air Entering Condenser (Edb) | | AIR ENTERING EVAPORATOR – Ewb (F) | | | | | | | | |
| | | 75 Dry Bulb | | | 75 Dry Bulb | | | 75 Dry Bulb | | |
| | | 62.5 Wet Bulb | | | 64 Wet Bulb | | | 65.3 Wet Bulb | | |
| | | (50% Relative) | | | (56% Relative) | | | (60% Relative) | | |
| | | Air Entering Evaporator – Cfm | | | | | | | | |
| | | 6,000 | 8,000 | 10,000 | 6,000 | 8,000 | 10,000 | 6,000 | 8,000 | 10,000 |
| 80 | TC | 91.50 | 100.80 | 109.50 | 95.80 | 105.70 | 112.40 | 102.30 | 110.80 | 118.60 |
| | SHC | 12.30 | 31.20 | 44.50 | 0.90 | 15.10 | 25.70 | -6.50 | 3.60 | 13.90 |
| | kW | 14.82 | 15.01 | 15.24 | 15.35 | 15.45 | 15.52 | 15.56 | 15.65 | 15.73 |
| 75 | TC | 94.00 | 103.40 | 112.00 | 98.70 | 108.10 | 115.10 | 104.70 | 113.10 | 121.10 |
| | SHC | 13.60 | 32.40 | 45.70 | 2.00 | 16.00 | 26.60 | -5.60 | 4.70 | 15.10 |
| | kW | 14.90 | 15.07 | 15.33 | 15.43 | 15.56 | 15.64 | 15.69 | 15.77 | 15.85 |
| 70 | TC | 96.50 | 106.00 | 114.30 | 100.90 | 110.60 | 117.20 | 107.20 | 115.80 | 123.50 |
| | SHC | 14.50 | 33.20 | 45.70 | 3.30 | 17.30 | 28.00 | -4.00 | 5.90 | 16.20 |
| | kW | 14.97 | 15.17 | 15.41 | 15.50 | 15.66 | 15.75 | 15.80 | 15.87 | 15.94 |
| 60 | TC | 101.80 | 111.30 | 119.30 | 106.20 | 115.60 | 122.20 | 112.60 | 119.40 | 128.00 |
| | SHC | 16.70 | 35.50 | 48.60 | 5.60 | 19.40 | 30.30 | -1.80 | 8.20 | 18.50 |
| | kW | 15.14 | 15.32 | 15.58 | 15.66 | 15.88 | 15.97 | 16.05 | 16.10 | 16.19 |
| 50 | TC | 107.20 | 116.40 | 124.30 | 111.50 | 120.70 | 127.30 | 117.70 | 125.20 | 132.90 |
| | SHC | 18.60 | 37.60 | 50.70 | 8.00 | 22.00 | 32.70 | 0.50 | 10.50 | 21.00 |
| | kW | 15.27 | 15.46 | 15.76 | 15.81 | 16.10 | 16.23 | 16.27 | 16.34 | 16.41 |
| 40 | TC | 112.20 | 121.80 | 129.20 | 116.60 | 125.70 | 132.00 | 123.20 | 130.00 | 138.00 |
| | SHC | 21.80 | 39.50 | 52.90 | 10.20 | 24.40 | 35.20 | 2.90 | 13.00 | 23.40 |
| | kW | 15.42 | 15.63 | 15.93 | 15.96 | 16.32 | 16.44 | 16.52 | 16.57 | 16.65 |

LEGEND

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

NOTES:

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

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

$$t_{lwb} = \text{Wet-bulb temperature corresponding to enthalpy of air leaving evaporator coil } (h_{lwb})$$

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$
 Where: h_{ewb} = Enthalpy of air entering evaporator coil

Table 7 - COOLING CAPACITIES (cont.)

2-STAGE COOLING

25 TONS

| 558J-28D | | | | AMBIENT TEMPERATURE | | | | | | | | | | | | |
|------------|------------|----------|-------|---------------------|-------|-------|---------|-------|-------|---------|-------|-------|---------|-------|-------|-------|
| | | | | 85 | | | 95 | | | 105 | | | 115 | | | |
| | | | | EA (db) | | | EA (db) | | | EA (db) | | | EA (db) | | | |
| | | | | 75 | 80 | 85 | 75 | 80 | 85 | 75 | 80 | 85 | 75 | 80 | 85 | |
| 7,500 CFM | EAT (wb) | 58 | TC | 257.3 | 266.5 | 279.6 | 247.5 | 255.4 | 269.0 | 231.5 | 243.3 | 257.2 | 214.3 | 229.2 | 243.7 | |
| | | | SHC | 247.5 | 266.5 | 279.6 | 231.1 | 255.4 | 269.0 | 223.5 | 243.3 | 257.2 | 213.2 | 229.2 | 243.7 | |
| | | 62 | TC | 281.4 | 280.5 | 280.6 | 267.5 | 267.0 | 269.3 | 251.3 | 251.0 | 257.6 | 232.7 | 232.5 | 244.1 | |
| | | | SHC | 208.2 | 244.0 | 278.0 | 202.3 | 238.4 | 269.3 | 195.8 | 231.5 | 257.6 | 188.1 | 223.4 | 244.1 | |
| | | 67 | TC | 307.4 | 306.4 | 305.7 | 293.0 | 292.2 | 291.4 | 276.9 | 276.2 | 275.4 | 259.7 | 259.2 | 258.8 | |
| | | | SHC | 168.7 | 205.7 | 242.3 | 163.2 | 200.3 | 236.9 | 157.1 | 194.4 | 230.7 | 150.6 | 188.4 | 224.8 | |
| | 72 | TC | 333.9 | 333.2 | 332.5 | 320.1 | 319.3 | 318.6 | 304.5 | 303.7 | 302.7 | 287.2 | 285.3 | 284.5 | | |
| | | SHC | 128.1 | 165.4 | 202.3 | 123.1 | 160.6 | 197.8 | 117.6 | 155.1 | 192.5 | 111.5 | 149.0 | 186.6 | | |
| | 76 | TC | - | 356.0 | 355.2 | - | 342.0 | 341.2 | - | 326.0 | 325.2 | - | 308.0 | 307.4 | | |
| | | SHC | - | 132.7 | 169.9 | - | 128.1 | 165.6 | - | 123.0 | 160.7 | - | 117.3 | 154.5 | | |
| | 8,750 CFM | EAT (wb) | 58 | TC | 269.8 | 280.2 | 294.4 | 255.3 | 268.9 | 283.2 | 241.1 | 256.1 | 270.7 | 225.5 | 241.3 | 257.3 |
| | | | | SHC | 257.9 | 280.2 | 294.4 | 250.4 | 268.9 | 283.2 | 241.1 | 256.1 | 270.7 | 225.5 | 241.3 | 257.3 |
| 62 | | | TC | 289.9 | 289.3 | 294.6 | 275.3 | 274.9 | 283.6 | 258.7 | 258.2 | 271.0 | 238.8 | 241.6 | 257.6 | |
| | | | SHC | 224.2 | 265.0 | 294.6 | 218.6 | 258.6 | 283.6 | 212.0 | 251.7 | 271.0 | 203.9 | 241.6 | 257.6 | |
| 67 | | | TC | 316.2 | 315.7 | 314.5 | 301.7 | 300.8 | 299.8 | 285.1 | 284.2 | 283.4 | 266.7 | 266.0 | 265.2 | |
| | | | SHC | 179.0 | 221.6 | 263.1 | 173.5 | 216.4 | 257.9 | 167.5 | 210.5 | 251.9 | 161.0 | 204.5 | 245.1 | |
| 72 | | TC | 343.7 | 342.7 | 341.6 | 315.3 | 327.9 | 327.0 | 313.1 | 311.4 | 310.4 | 294.3 | 293.2 | 292.2 | | |
| | | SHC | 132.4 | 175.4 | 217.7 | 127.6 | 170.7 | 213.3 | 122.0 | 165.3 | 208.3 | 115.6 | 159.2 | 202.5 | | |
| 76 | | TC | - | 366.0 | 364.9 | - | 351.2 | 350.1 | - | 334.2 | 333.2 | - | 315.4 | 314.3 | | |
| | | SHC | - | 138.0 | 180.7 | - | 133.4 | 176.5 | - | 128.2 | 171.6 | - | 122.5 | 166.1 | | |
| 10,000 CFM | | EAT (wb) | 58 | TC | 277.1 | 291.8 | 306.8 | 264.9 | 280.2 | 295.3 | 251.2 | 267.0 | 282.3 | 235.1 | 252.2 | 268.1 |
| | | | | SHC | 275.3 | 291.8 | 306.8 | 264.9 | 280.2 | 295.3 | 251.2 | 267.0 | 282.3 | 235.1 | 252.2 | 268.1 |
| | 62 | | TC | 296.8 | 296.0 | 307.2 | 281.8 | 281.8 | 295.6 | 264.7 | 267.1 | 282.6 | 244.9 | 252.4 | 268.4 | |
| | | | SHC | 239.8 | 283.9 | 307.2 | 234.0 | 276.8 | 295.6 | 227.5 | 267.1 | 282.6 | 219.4 | 252.4 | 268.4 | |
| | 67 | | TC | 323.5 | 322.6 | 321.4 | 308.5 | 307.4 | 306.5 | 291.3 | 290.2 | 289.3 | 272.5 | 271.5 | 270.8 | |
| | | | SHC | 188.8 | 236.9 | 282.9 | 183.5 | 231.9 | 277.4 | 177.5 | 226.1 | 271.2 | 171.2 | 219.7 | 264.3 | |
| | 72 | TC | 351.8 | 350.5 | 349.2 | 336.6 | 335.4 | 334.1 | 319.7 | 318.3 | 317.1 | 300.2 | 298.9 | 297.8 | | |
| | | SHC | 136.6 | 185.1 | 232.8 | 131.6 | 180.4 | 228.6 | 126.0 | 175.1 | 223.7 | 119.7 | 169.1 | 217.9 | | |
| | 76 | TC | - | 374.2 | 372.8 | - | 358.6 | 357.3 | - | 340.9 | 339.7 | - | 321.3 | 320.1 | | |
| | | SHC | - | 143.1 | 191.2 | - | 138.5 | 187.1 | - | 133.3 | 182.3 | - | 127.6 | 176.8 | | |
| | 11,250 CFM | EAT (wb) | 58 | TC | 285.8 | 301.5 | 317.0 | 273.8 | 289.0 | 305.1 | 259.8 | 276.1 | 291.7 | 244.0 | 260.9 | 277.4 |
| | | | | SHC | 285.8 | 301.5 | 317.0 | 273.8 | 289.0 | 305.1 | 259.8 | 276.1 | 291.7 | 244.0 | 260.9 | 277.4 |
| 62 | | | TC | 302.2 | 302.3 | 317.4 | 286.3 | 289.5 | 305.4 | 269.6 | 276.4 | 208.4 | 249.3 | 261.1 | 277.6 | |
| | | | SHC | 254.3 | 300.2 | 317.4 | 245.8 | 289.5 | 305.4 | 242.1 | 276.4 | 208.4 | 201.5 | 261.1 | 277.6 | |
| 67 | | | TC | 328.7 | 327.7 | 326.7 | 313.5 | 312.2 | 311.1 | 296.0 | 294.8 | 294.3 | 277.5 | 275.7 | 277.9 | |
| | | | SHC | 197.9 | 251.1 | 301.0 | 192.8 | 246.4 | 295.4 | 187.0 | 240.4 | 288.0 | 160.9 | 234.6 | 277.9 | |
| 72 | | TC | 357.4 | 355.9 | 354.4 | 341.8 | 340.3 | 339.0 | 324.4 | 322.8 | 321.6 | 304.8 | 303.2 | 302.0 | | |
| | | SHC | 140.2 | 193.9 | 246.7 | 135.2 | 189.4 | 242.8 | 129.7 | 184.3 | 238.2 | 123.5 | 178.4 | 198.1 | | |
| 76 | | TC | - | 379.7 | 378.2 | - | 363.9 | 362.3 | - | 345.7 | 344.2 | - | 327.5 | 324.0 | | |
| | | SHC | - | 147.6 | 200.8 | - | 143.1 | 196.9 | - | 138.0 | 192.3 | - | 132.9 | 187.1 | | |
| 12,500 CFM | | EAT (wb) | 58 | TC | 293.7 | 309.8 | 325.6 | 280.3 | 297.3 | 313.5 | 267.0 | 283.5 | 299.8 | 250.8 | 268.3 | 284.8 |
| | | | | SHC | 293.7 | 309.8 | 325.6 | 280.3 | 297.3 | 313.5 | 267.0 | 283.5 | 299.8 | 250.8 | 268.3 | 284.8 |
| | 62 | | TC | 310.5 | 310.2 | 326.1 | 290.7 | 297.6 | 313.9 | 273.7 | 283.7 | 300.1 | 253.1 | 268.5 | 285.0 | |
| | | | SHC | 264.9 | 310.1 | 326.1 | 262.1 | 297.6 | 313.9 | 255.7 | 283.7 | 300.1 | 246.9 | 268.5 | 285.0 | |
| | 67 | | TC | 333.1 | 331.7 | 330.9 | 317.5 | 316.2 | 315.9 | 299.8 | 298.7 | 300.3 | 280.7 | 279.6 | 285.5 | |
| | | | SHC | 206.6 | 264.7 | 317.6 | 201.9 | 260.2 | 311.0 | 196.2 | 254.9 | 300.3 | 190.0 | 248.1 | 285.5 | |
| | 72 | TC | 362.1 | 360.3 | 358.7 | 346.0 | 344.3 | 343.0 | 328.2 | 326.6 | 325.1 | 308.4 | 306.6 | 305.3 | | |
| | | SHC | 143.6 | 202.4 | 260.2 | 138.7 | 198.1 | 256.5 | 133.2 | 193.2 | 252.1 | 127.1 | 187.5 | 246.5 | | |
| | 76 | TC | - | 384.3 | 382.5 | - | 368.1 | 366.3 | - | 349.5 | 347.8 | - | 331.0 | 328.7 | | |
| | | SHC | - | 151.9 | 210.1 | - | 147.5 | 206.4 | - | 142.5 | 201.9 | - | 137.4 | 195.2 | | |

Note: See Minimum-Maximum Airflow Ratings in Table 3. Do not operate outside these limits.

LEGEND:

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

| 558J*28E (25 TONS) – UNIT WITH PERFECT HUMIDITY IN SUBCOOLING MODE | | | | | | | | | | |
|--|-----|------------------------------------|-------|-------|--------|-------|-------|--------|-------|-------|
| Temp (F) Air Entering Condenser (Edb) | | AIR ENTERING EVAPORATOR – CFM | | | | | | | | |
| | | 7,500 | | | 10,000 | | | 12,500 | | |
| | | Air Entering Evaporator -- Ewb (F) | | | | | | | | |
| | | 72 | 67 | 62 | 72 | 67 | 62 | 72 | 67 | 62 |
| 75 | TC | 335.3 | 305.5 | 275.8 | 368.3 | 334.4 | 300.5 | 398.1 | 360.5 | 322.9 |
| | SHC | 149.6 | 181.7 | 213.7 | 172.8 | 205.5 | 238.2 | 191.7 | 224.9 | 258.2 |
| | kW | 19.50 | 18.70 | 17.70 | 19.50 | 18.70 | 17.70 | 19.70 | 18.80 | 17.90 |
| 85 | TC | 316.3 | 287.0 | 257.7 | 341.5 | 308.4 | 275.3 | 364.3 | 327.8 | 291.2 |
| | SHC | 120.8 | 160.5 | 200.2 | 144.6 | 185.2 | 225.8 | 164.0 | 205.4 | 246.7 |
| | kW | 21.90 | 21.30 | 20.10 | 22.30 | 21.30 | 20.30 | 22.50 | 21.70 | 20.60 |
| 95 | TC | 297.3 | 268.5 | 239.6 | 314.7 | 282.4 | 250.1 | 330.5 | 295.0 | 259.5 |
| | SHC | 92.1 | 139.4 | 186.7 | 116.4 | 164.9 | 213.5 | 136.3 | 185.8 | 235.3 |
| | kW | 24.30 | 23.50 | 22.50 | 24.40 | 23.50 | 22.60 | 24.40 | 23.60 | 22.50 |
| 105 | TC | 278.2 | 249.9 | 221.6 | 287.9 | 256.4 | 224.9 | 296.7 | 262.3 | 227.8 |
| | SHC | 63.3 | 118.2 | 173.2 | 88.3 | 144.7 | 201.1 | 108.7 | 166.3 | 223.9 |
| | kW | 26.70 | 26.00 | 25.00 | 27.30 | 26.00 | 25.00 | 27.30 | 26.10 | 25.10 |
| 115 | TC | 259.2 | 231.4 | 203.5 | 261.1 | 230.4 | 199.7 | 262.9 | 229.5 | 196.1 |
| | SHC | 34.5 | 97.1 | 159.7 | 60.1 | 124.4 | 188.7 | 81.0 | 146.7 | 191.2 |
| | kW | 28.70 | 28.00 | 27.10 | 29.30 | 28.10 | 26.90 | 29.10 | 27.90 | 27.20 |

| 558J*28E (25 TONS) – UNIT WITH PERFECT HUMIDITY IN HOT GAS REHEAT MODE | | | | | | | | | | |
|--|-----|-----------------------------------|--------|--------|----------------|--------|--------|----------------|--------|--------|
| Temp (F) Air Entering Condenser (Edb) | | AIR ENTERING EVAPORATOR – Ewb (F) | | | | | | | | |
| | | 75 Dry Bulb | | | 75 Dry Bulb | | | 75 Dry Bulb | | |
| | | 62.5 Wet Bulb | | | 64 Wet Bulb | | | 65.3 Wet Bulb | | |
| | | (50% Relative) | | | (56% Relative) | | | (60% Relative) | | |
| | | Air Entering Evaporator – Cfm | | | | | | | | |
| | | 7,500 | 10,000 | 12,500 | 7,500 | 10,000 | 12,500 | 7,500 | 10,000 | 12,500 |
| 80 | TC | 132.40 | 136.80 | 148.40 | 138.20 | 142.40 | 154.60 | 144.30 | 146.40 | 162.50 |
| | SHC | 37.80 | 61.50 | 85.50 | 21.80 | 44.40 | 52.40 | 16.10 | 32.10 | 48.90 |
| | kW | 17.90 | 18.15 | 18.21 | 18.05 | 18.33 | 18.43 | 18.26 | 18.55 | 18.62 |
| 75 | TC | 138.00 | 142.20 | 154.10 | 143.50 | 148.00 | 160.30 | 148.90 | 151.00 | 167.10 |
| | SHC | 44.20 | 68.00 | 91.80 | 28.10 | 51.50 | 58.80 | 22.70 | 38.20 | 56.00 |
| | kW | 17.77 | 18.00 | 18.07 | 17.92 | 18.19 | 18.29 | 18.14 | 18.40 | 18.48 |
| 70 | TC | 143.80 | 148.10 | 160.00 | 149.30 | 154.00 | 165.90 | 155.50 | 157.60 | 173.80 |
| | SHC | 50.50 | 73.80 | 98.10 | 34.20 | 56.50 | 65.30 | 28.30 | 44.00 | 62.30 |
| | kW | 17.63 | 17.86 | 17.93 | 17.78 | 18.04 | 18.14 | 18.03 | 18.26 | 18.34 |
| 60 | TC | 154.80 | 159.50 | 171.10 | 160.20 | 165.20 | 177.20 | 166.70 | 168.80 | 185.10 |
| | SHC | 63.10 | 84.50 | 110.10 | 46.50 | 69.50 | 75.70 | 41.40 | 56.50 | 74.30 |
| | kW | 17.35 | 17.58 | 17.65 | 17.50 | 17.76 | 17.85 | 17.70 | 17.97 | 18.04 |
| 50 | TC | 166.30 | 170.50 | 181.20 | 171.30 | 176.40 | 188.40 | 178.00 | 180.00 | 196.40 |
| | SHC | 75.80 | 96.50 | 122.20 | 58.30 | 79.80 | 87.80 | 53.70 | 69.10 | 85.90 |
| | kW | 17.06 | 17.30 | 17.37 | 17.22 | 17.46 | 17.56 | 17.42 | 17.69 | 17.76 |
| 40 | TC | 177.50 | 181.70 | 192.30 | 182.40 | 187.60 | 199.70 | 189.30 | 191.20 | 207.70 |
| | SHC | 85.70 | 109.80 | 134.30 | 71.50 | 92.30 | 100.50 | 66.10 | 79.50 | 97.90 |
| | kW | 16.76 | 17.01 | 17.09 | 16.93 | 17.18 | 17.28 | 17.14 | 17.41 | 17.47 |

LEGEND

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

NOTES:

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

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

$$t_{lwb} = \text{Wet-bulb temperature corresponding to enthalpy of air leaving evaporator coil } (h_{lwb})$$

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

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

| 558J*30D | | | Ambient Temperature | | | | | | | | | | | |
|------------|----|-----|---------------------|-------|-------|---------|-------|-------|---------|-------|-------|---------|-------|-------|
| | | | 85 | | | 95 | | | 105 | | | 115 | | |
| | | | EA (dB) | | | EA (dB) | | | EA (dB) | | | EA (dB) | | |
| | | | 75 | 80 | 85 | 75 | 80 | 85 | 75 | 80 | 85 | 75 | 80 | 85 |
| 7,500 CFM | 58 | THC | 298 | 298 | 336.8 | 285.3 | 285.3 | 322.4 | 270.1 | 270.1 | 305.3 | 253.5 | 253.5 | 286.5 |
| | | SHC | 259.2 | 298 | 336.8 | 248.2 | 285.3 | 322.4 | 235 | 270.1 | 305.3 | 220.5 | 253.5 | 286.5 |
| | 62 | THC | 318.3 | 318.3 | 318.3 | 301.9 | 301.9 | 309 | 282.4 | 282.4 | 299.5 | 260.5 | 260.5 | 288.5 |
| | | SHC | 233.5 | 275.2 | 316.9 | 225.8 | 267.4 | 309 | 216.6 | 258.1 | 299.5 | 206.1 | 247.3 | 288.5 |
| | 67 | THC | 352.3 | 352.3 | 352.3 | 335.9 | 335.9 | 335.9 | 317.1 | 317.1 | 317.1 | 294 | 294 | 294 |
| | | SHC | 193.3 | 235 | 276.8 | 186.4 | 228.3 | 270.1 | 178.7 | 220.5 | 262.4 | 169.3 | 211.1 | 252.9 |
| | 72 | THC | 383.6 | 383.6 | 383.6 | 368.5 | 368.5 | 368.5 | 350.7 | 350.7 | 350.7 | 329.6 | 329.6 | 329.6 |
| | | SHC | 149.7 | 191.9 | 234.2 | 144 | 186.2 | 228.4 | 137.3 | 179.5 | 221.7 | 129.6 | 171.7 | 213.8 |
| | 76 | THC | - | 404 | 404 | - | 390.3 | 390.3 | - | 373.1 | 373.1 | - | 353.4 | 353.4 |
| | | SHC | - | 154.8 | 200.2 | - | 150.2 | 195.6 | - | 144.5 | 189.9 | - | 138 | 183.2 |
| 8,750 CFM | 58 | THC | 315.7 | 315.7 | 356.8 | 302.4 | 302.4 | 341.8 | 286.8 | 286.8 | 324.1 | 269.2 | 269.2 | 304.3 |
| | | SHC | 274.6 | 315.7 | 356.8 | 263 | 302.4 | 341.8 | 249.4 | 286.8 | 324.1 | 234.2 | 269.2 | 304.3 |
| | 62 | THC | 329.7 | 329.7 | 346.7 | 312.7 | 312.7 | 338.3 | 293 | 293 | 328 | 271.1 | 271.1 | 314.6 |
| | | SHC | 251.3 | 299 | 346.7 | 243.3 | 290.8 | 338.3 | 233.7 | 280.9 | 328 | 222 | 268.3 | 314.6 |
| | 67 | THC | 363.1 | 363.1 | 363.1 | 346.4 | 346.4 | 346.4 | 327.1 | 327.1 | 327.1 | 303.7 | 303.7 | 303.7 |
| | | SHC | 204.4 | 252.2 | 299.9 | 197.8 | 245.7 | 293.6 | 190.2 | 238.3 | 286.3 | 181 | 229.1 | 277.2 |
| | 72 | THC | 392.4 | 392.4 | 392.4 | 377.4 | 377.4 | 377.4 | 359.5 | 359.5 | 359.5 | 338.6 | 338.6 | 338.6 |
| | | SHC | 153.8 | 201.6 | 249.3 | 148.4 | 196.3 | 244.3 | 141.9 | 190 | 238 | 134.5 | 182.7 | 230.8 |
| | 76 | THC | - | 410.9 | 410.9 | - | 397.4 | 397.4 | - | 380 | 380 | - | 359.9 | 359.9 |
| | | SHC | - | 160.7 | 213.6 | - | 156.2 | 208.9 | - | 150.1 | 201.8 | - | 143.2 | 194.1 |
| 10,000 CFM | 58 | THC | 330.4 | 330.4 | 373.4 | 316.6 | 316.6 | 357.8 | 300.7 | 300.7 | 339.9 | 282.3 | 282.3 | 319 |
| | | SHC | 287.4 | 330.4 | 373.4 | 275.4 | 316.6 | 357.8 | 261.6 | 300.7 | 339.9 | 245.6 | 282.3 | 319 |
| | 62 | THC | 338.9 | 338.9 | 373.5 | 321.8 | 321.8 | 364.5 | 301.9 | 301.9 | 354.3 | 282.6 | 282.6 | 331.6 |
| | | SHC | 267.2 | 320.3 | 373.5 | 258.9 | 311.7 | 364.5 | 249.5 | 301.9 | 354.3 | 233.5 | 282.6 | 331.6 |
| | 67 | THC | 371.1 | 371.1 | 371.1 | 354.3 | 354.3 | 354.3 | 334.7 | 334.7 | 334.7 | 310.9 | 310.9 | 310.9 |
| | | SHC | 214.5 | 267.9 | 321.3 | 208.2 | 262 | 315.7 | 200.9 | 254.9 | 308.9 | 191.9 | 246 | 300.1 |
| | 72 | THC | 398.6 | 398.6 | 398.6 | 383.8 | 383.8 | 383.8 | 365.7 | 365.7 | 365.7 | 344.9 | 344.9 | 344.9 |
| | | SHC | 157.3 | 210.1 | 262.8 | 152.2 | 205.4 | 258.7 | 145.8 | 199.4 | 252.9 | 138.7 | 192.5 | 246.3 |
| | 76 | THC | - | 415.7 | 415.7 | - | 402.3 | 402.3 | - | 384.9 | 384.9 | - | 364.5 | 364.5 |
| | | SHC | - | 165.2 | 223.6 | - | 160.5 | 218 | - | 154.6 | 211.3 | - | 147.8 | 203.9 |
| 11,250 CFM | 58 | THC | 342.7 | 342.7 | 387.3 | 328.7 | 328.7 | 371.4 | 312.7 | 312.7 | 353.3 | 293.5 | 293.5 | 331.7 |
| | | SHC | 298.1 | 342.7 | 387.3 | 285.9 | 328.7 | 371.4 | 272 | 312.7 | 353.3 | 255.3 | 293.5 | 331.7 |
| | 62 | THC | 346.8 | 346.8 | 396.7 | 329.7 | 329.7 | 387 | 313 | 313 | 367.3 | 293.8 | 293.8 | 344.8 |
| | | SHC | 281.1 | 338.9 | 396.7 | 272.5 | 329.7 | 387 | 258.6 | 313 | 367.3 | 242.8 | 293.8 | 344.8 |
| | 67 | THC | 377.2 | 377.2 | 377.2 | 360.4 | 360.4 | 360.4 | 340.7 | 340.7 | 340.7 | 316.6 | 316.6 | 321.8 |
| | | SHC | 223.7 | 282.5 | 341.2 | 217.9 | 277.2 | 336.5 | 210.8 | 270.5 | 330.2 | 202.1 | 261.9 | 321.8 |
| | 72 | THC | 403.1 | 403.1 | 403.1 | 388.6 | 388.6 | 388.6 | 370.3 | 370.3 | 370.3 | 349.5 | 349.5 | 349.5 |
| | | SHC | 160.3 | 217.7 | 275.1 | 155.5 | 213.7 | 271.9 | 149.3 | 208 | 266.7 | 142.4 | 201.4 | 260.5 |
| | 76 | THC | - | 419.3 | 419.3 | - | 406 | 406 | - | 388.5 | 388.5 | - | 367.8 | 367.8 |
| | | SHC | - | 168.8 | 231.3 | - | 164.4 | 226.3 | - | 158.6 | 220 | - | 151.9 | 212.8 |
| 12,500 CFM | 58 | THC | 353 | 353 | 398.9 | 338.8 | 338.8 | 382.9 | 322.5 | 322.5 | 364.5 | 303.1 | 303.1 | 342.5 |
| | | SHC | 307.1 | 353 | 398.9 | 294.7 | 338.8 | 382.9 | 280.6 | 322.5 | 364.5 | 263.7 | 303.1 | 342.5 |
| | 62 | THC | 353.9 | 353.9 | 415.3 | 339.1 | 339.1 | 397.9 | 322.8 | 322.8 | 378.9 | 303.4 | 303.4 | 356 |
| | | SHC | 292.4 | 353.9 | 415.3 | 280.2 | 339.1 | 397.9 | 266.8 | 322.8 | 378.9 | 250.7 | 303.4 | 356 |
| | 67 | THC | 381.9 | 381.9 | 381.9 | 365.2 | 365.2 | 365.2 | 345.3 | 345.3 | 350.4 | 321.3 | 321.3 | 342.2 |
| | | SHC | 232.3 | 296.1 | 360 | 227 | 291.6 | 356.3 | 220.1 | 285.2 | 350.4 | 211.5 | 276.8 | 342.2 |
| | 72 | THC | 406.6 | 406.6 | 406.6 | 392.2 | 392.2 | 392.2 | 373.9 | 373.9 | 373.9 | 352.9 | 352.9 | 352.9 |
| | | SHC | 163.1 | 224.8 | 286.6 | 158.5 | 221.4 | 284.3 | 152.5 | 216.1 | 279.6 | 145.7 | 209.8 | 273.9 |
| | 76 | THC | - | 422.1 | 422.1 | - | 408.9 | 408.9 | - | 391.2 | 391.2 | - | 370.3 | 370.3 |
| | | SHC | - | 172.2 | 238.5 | - | 167.9 | 234 | - | 162.3 | 228.1 | - | 155.7 | 221.2 |

NOTES: 1. See Minimum–Maximum Airflow Ratings in Table 3. Do not operate outside these limits.
 2. PERFECT HUMIDITY not available for 27.5 ton units.

LEGEND:

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

Table 8 – STATIC PRESSURE ADDERS (IN. WG) - FACTORY OPTIONS AND/OR ACCESSORIES

Economizer - Vertical Duct Configuration

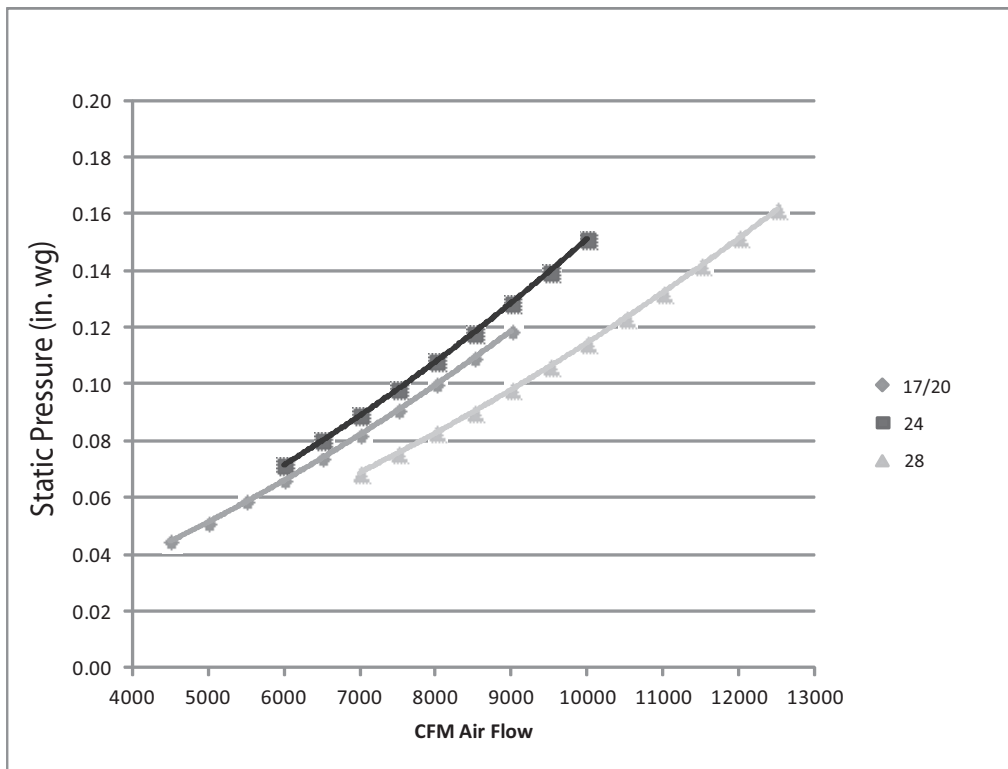
| MODEL SIZES 17 – 30 | | | | | | | | |
|--------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| CFM | 4500 | 5000 | 5500 | 6000 | 6500 | 7000 | 7500 | 8000 |
| Static Pressure Adder (in. wg) | 0.047 | 0.052 | 0.057 | 0.062 | 0.067 | 0.072 | 0.077 | 0.082 |

| MODEL SIZES 17 – 30 | | | | | | | | | |
|--------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| CFM | 8500 | 9000 | 9500 | 10000 | 10500 | 11000 | 11500 | 12000 | 12500 |
| Static Pressure Adder (in. wg) | 0.088 | 0.093 | 0.098 | 0.103 | 0.109 | 0.114 | 0.119 | 0.125 | 0.131 |

Electric Heaters - Vertical Duct Configuration

| MODEL SIZES 17 – 30 | | | | | | | | |
|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| CFM | 4800 | 5000 | 6000 | 7000 | 8000 | 9000 | 10000 | 11500 |
| 25 kW Heater | 0.010 | 0.010 | 0.020 | 0.030 | 0.040 | 0.050 | 0.060 | 0.090 |
| 50 kW Heater | 0.020 | 0.020 | 0.040 | 0.060 | 0.080 | 0.100 | 0.130 | 0.180 |
| 75 kW Heater | 0.030 | 0.040 | 0.060 | 0.080 | 0.120 | 0.150 | 0.200 | 0.270 |

Perfect Humidity Coil



C11175A

DAMPER, BAROMETRIC RELIEF AND PE PERFORMANCE

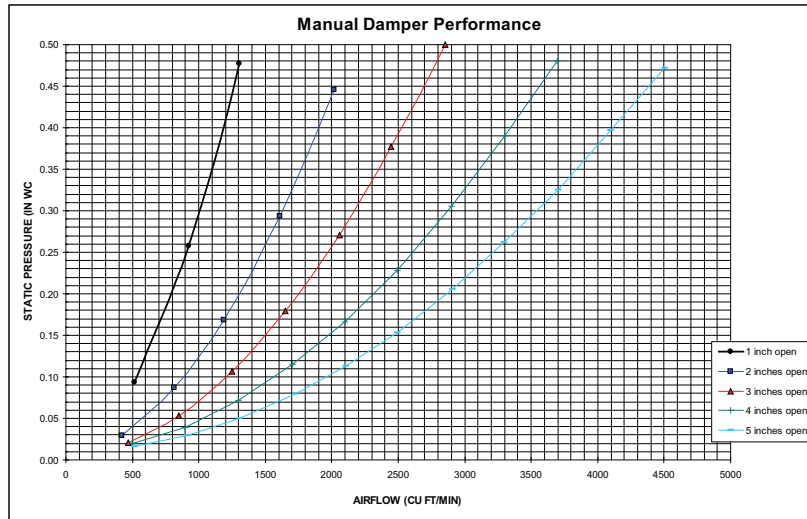


Fig. 8 - Manual Damper Performance

C09264

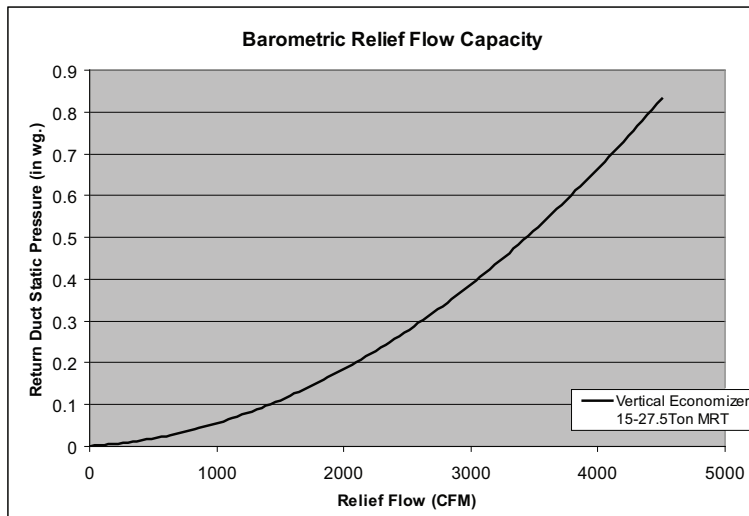


Fig. 9 - Barometric Relief Flow Capacity

C11307

Power Exhaust Fan Performance

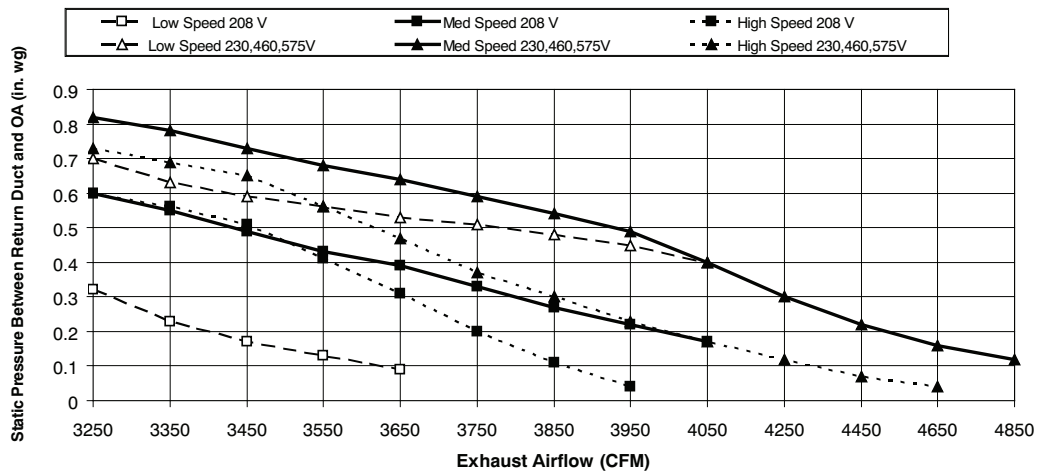


Fig. 10 - Power Exhaust Fan Performance

C11308

GENERAL FAN PERFORMANCE NOTES:

1. Interpolation is permissible. Do not extrapolate.
2. External static pressure is the static pressure difference between the return duct and the supply duct plus the static pressure caused by any FIOPs or accessories.
3. Tabular data accounts for pressure loss due to clean filters, unit casing, and wet coils. Factory options and accessories may add static pressure losses. Selection software is available, through your salesperson, to help you select the best motor/drive combination for your application.
4. The Fan Performance tables offer motor/drive recommendations. In cases when two motor/drive combinations would work, Bryant recommended the lower horsepower option.
5. For information on the electrical properties of Bryant motors, please see the Electrical information section of this book.
6. For more information on the performance limits of Bryant motors, see the application data section of this book.

FAN PERFORMANCE

Table 9 – 558J-17D

VERTICAL SUPPLY / RETURN

15 TON

| 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 |
| 4500 | 436 | 0.60 | 530 | 0.90 | 611 | 1.22 | 684 | 1.57 | 751 | 1.94 |
| 4900 | 456 | 0.71 | 546 | 1.03 | 625 | 1.37 | 695 | 1.73 | 760 | 2.12 |
| 5250 | 473 | 0.83 | 560 | 1.16 | 637 | 1.51 | 706 | 1.89 | 770 | 2.30 |
| 5600 | 491 | 0.95 | 575 | 1.30 | 650 | 1.67 | 717 | 2.07 | 780 | 2.48 |
| 6000 | 513 | 1.11 | 593 | 1.48 | 665 | 1.87 | 731 | 2.28 | 792 | 2.71 |
| 6400 | 534 | 1.29 | 611 | 1.68 | 681 | 2.09 | 745 | 2.52 | 805 | 2.97 |
| 6750 | 553 | 1.46 | 628 | 1.87 | 696 | 2.29 | 758 | 2.74 | 817 | 3.20 |
| 7100 | 573 | 1.65 | 645 | 2.07 | 711 | 2.51 | 772 | 2.98 | 829 | 3.46 |
| 7500 | 595 | 1.88 | 665 | 2.33 | 729 | 2.79 | 788 | 3.27 | 844 | 3.77 |
| 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 |
| 4500 | 812 | 2.33 | 869 | 2.74 | 924 | 3.17 | 975 | 3.62 | 1024 | 4.08 |
| 4900 | 821 | 2.53 | 877 | 2.95 | 931 | 3.40 | 981 | 3.86 | 1030 | 4.34 |
| 5250 | 829 | 2.72 | 885 | 3.16 | 938 | 3.61 | 988 | 4.09 | 1036 | 4.57 |
| 5600 | 838 | 2.92 | 893 | 3.37 | 945 | 3.84 | 994 | 4.33 | 1042 | 4.83 |
| 6000 | 849 | 3.17 | 903 | 3.63 | 954 | 4.12 | 1003 | 4.62 | <i>1050</i> | <i>5.14</i> |
| 6400 | 861 | 3.43 | 914 | 3.92 | 964 | 4.42 | 1012 | 4.94 | <i>1058</i> | <i>5.47</i> |
| 6750 | 872 | 3.69 | 924 | 4.18 | 973 | 4.70 | <i>1021</i> | <i>5.23</i> | <i>1066</i> | <i>5.78</i> |
| 7100 | 883 | 3.95 | 934 | 4.47 | 983 | 5.00 | 1030 | 5.54 | ---- | ---- |
| 7500 | 897 | 4.28 | 947 | 4.81 | 995 | 5.36 | 1041 | 5.92 | ---- | ---- |
| Std Static Motor and Drive – 514–680 RPM, Max BHP 2.29 | | | | | Medium Static Motor and Drive – 679–863 RPM, Max BHP 3.3 | | | | | |
| High Static Motor and Drive – 826–1009 RPM, Max BHP 4.9 | | | | | ---- Outside operating range | | | | | |
| Boldface – Field Supplied Drive | | | | | <i>ITALIC</i> – Field Supplied Motor and Drive | | | | | |

Table 9 - 558J-20D

VERTICAL SUPPLY / RETURN

17.5 TON

| 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 |
| 5250 | 541 | 1.08 | 618 | 1.42 | 688 | 1.79 | 754 | 2.19 | 817 | 2.62 |
| 5700 | 573 | 1.31 | 645 | 1.67 | 712 | 2.06 | 775 | 2.48 | 835 | 2.93 |
| 6100 | 602 | 1.55 | 670 | 1.93 | 734 | 2.34 | 795 | 2.77 | 852 | 3.23 |
| 6500 | 631 | 1.81 | 696 | 2.21 | 757 | 2.64 | 815 | 3.09 | 871 | 3.57 |
| 7000 | 668 | 2.19 | 729 | 2.61 | 787 | 3.06 | 843 | 3.53 | 896 | 4.03 |
| 7500 | 706 | 2.62 | 763 | 3.06 | 819 | 3.54 | 871 | 4.03 | 922 | 4.55 |
| 7900 | 736 | 3.00 | 791 | 3.47 | 844 | 3.96 | 895 | 4.47 | 944 | 5.00 |
| 8300 | 767 | 3.42 | 819 | 3.90 | 870 | 4.41 | 919 | 4.94 | 967 | 5.49 |
| 8750 | 801 | 3.94 | 852 | 4.44 | 900 | 4.97 | 948 | 5.52 | 993 | 6.09 |
| 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 |
| 5250 | 876 | 3.08 | 932 | 3.56 | 986 | 4.07 | 1038 | 4.60 | 1088 | 5.15 |
| 5700 | 892 | 3.40 | 946 | 3.90 | 998 | 4.42 | 1049 | 4.96 | 1097 | 5.52 |
| 6100 | 907 | 3.72 | 960 | 4.23 | 1011 | 4.76 | 1060 | 5.31 | 1107 | 5.89 |
| 6500 | 924 | 4.07 | 975 | 4.59 | 1025 | 5.13 | 1072 | 5.70 | 1119 | 6.28 |
| 7000 | 947 | 4.55 | 996 | 5.09 | 1044 | 5.65 | 1090 | 6.23 | <i>1135</i> | <i>6.83</i> |
| 7500 | 971 | 5.08 | 1019 | 5.64 | 1064 | 6.22 | <i>1109</i> | <i>6.82</i> | <i>1152</i> | <i>7.44</i> |
| 7900 | 992 | 5.55 | 1038 | 6.13 | <i>1082</i> | <i>6.72</i> | <i>1126</i> | <i>7.34</i> | ---- | ---- |
| 8300 | 1013 | 6.06 | <i>1057</i> | <i>6.65</i> | <i>1101</i> | <i>7.26</i> | ---- | ---- | ---- | ---- |
| 8750 | <i>1038</i> | <i>6.68</i> | <i>1081</i> | <i>7.29</i> | ---- | ---- | ---- | ---- | ---- | ---- |
| Std Static Motor and Drive – 622–822 RPM, Max BHP 3.3 | | | | | Medium Static Motor and Drive – 713–879 RPM, Max BHP 4.9 | | | | | |
| High Static Motor and Drive – 882–1078 RPM, Max BHP 6.5 | | | | | ---- Outside operating range | | | | | |
| Boldface – Field Supplied Drive | | | | | <i>ITALIC</i> – Field Supplied Motor and Drive | | | | | |

FAN PERFORMANCE (cont.)

Table 9 - 558J-24D

VERTICAL SUPPLY / RETURN

20 TON

| 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 |
| 6000 | 506 | 1.12 | 593 | 1.43 | 668 | 1.74 | 736 | 2.07 | 798 | 2.40 |
| 6500 | 533 | 1.36 | 616 | 1.70 | 689 | 2.04 | 754 | 2.39 | 815 | 2.74 |
| 7000 | 561 | 1.64 | 640 | 2.01 | 710 | 2.37 | 774 | 2.74 | 833 | 3.11 |
| 7500 | 588 | 1.96 | 664 | 2.35 | 732 | 2.74 | 795 | 3.13 | 852 | 3.53 |
| 8000 | 617 | 2.32 | 689 | 2.74 | 755 | 3.15 | 816 | 3.57 | 872 | 3.99 |
| 8500 | 645 | 2.73 | 715 | 3.17 | 779 | 3.60 | 837 | 4.04 | 892 | 4.49 |
| 9000 | 674 | 3.18 | 741 | 3.64 | 803 | 4.10 | 860 | 4.57 | 913 | 5.04 |
| 9500 | 703 | 3.67 | 767 | 4.16 | 827 | 4.65 | 883 | 5.14 | 935 | 5.64 |
| 10000 | 732 | 4.22 | 794 | 4.74 | 852 | 5.25 | 906 | 5.77 | 957 | 6.29 |
| 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 |
| 6000 | 855 | 2.75 | 909 | 3.11 | 959 | 3.47 | 1008 | 3.85 | 1054 | 4.24 |
| 6500 | 871 | 3.11 | 924 | 3.48 | 974 | 3.87 | 1022 | 4.26 | 1067 | 4.67 |
| 7000 | 888 | 3.50 | 940 | 3.89 | 989 | 4.30 | 1036 | 4.71 | 1081 | 5.13 |
| 7500 | 906 | 3.94 | 957 | 4.35 | 1005 | 4.77 | 1052 | 5.20 | 1096 | 5.64 |
| 8000 | 925 | 4.42 | 975 | 4.85 | 1022 | 5.29 | 1068 | 5.74 | 1111 | 6.20 |
| 8500 | 944 | 4.94 | 993 | 5.40 | 1040 | 5.86 | 1084 | 6.33 | 1127 | 6.81 |
| 9000 | 964 | 5.51 | 1012 | 5.99 | 1058 | 6.48 | 1102 | 6.97 | 1144 | 7.46 |
| 9500 | 984 | 6.13 | 1032 | 6.64 | 1077 | 7.14 | 1120 | 7.65 | 1161 | 8.17 |
| 10000 | 1006 | 6.81 | 1052 | 7.33 | 1096 | 7.86 | 1138 | 8.40 | ---- | ---- |
| Std Static Motor and Drive – 690–863 RPM, Max BHP 4.9 | | | | | Medium Static Motor and Drive – 835–1021 RPM, Max BHP 6.5 | | | | | |
| High Static Motor and Drive – 941–1176 RPM, Max BHP 8.7 | | | | | ---- Outside operating range | | | | | |
| Boldface – Field Supplied Drive | | | | | | | | | | |

Table 9 - 558J-28D

VERTICAL SUPPLY / RETURN

25 TON

| 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 |
| 7500 | 541 | 1.50 | 636 | 1.88 | 716 | 2.27 | 787 | 2.66 | 850 | 3.06 |
| 8000 | 563 | 1.76 | 656 | 2.17 | 735 | 2.58 | 804 | 3.00 | 867 | 3.42 |
| 8500 | 585 | 2.05 | 676 | 2.50 | 753 | 2.93 | 822 | 3.37 | 884 | 3.81 |
| 9000 | 608 | 2.37 | 697 | 2.85 | 772 | 3.31 | 840 | 3.77 | 901 | 4.24 |
| 9500 | 631 | 2.73 | 717 | 3.24 | 791 | 3.73 | 858 | 4.21 | 918 | 4.70 |
| 10000 | 654 | 3.12 | 738 | 3.66 | 811 | 4.18 | 876 | 4.69 | 936 | 5.20 |
| 10500 | 678 | 3.56 | 759 | 4.12 | 831 | 4.67 | 895 | 5.21 | 954 | 5.74 |
| 11000 | 701 | 4.02 | 781 | 4.62 | 851 | 5.20 | 914 | 5.76 | 972 | 6.33 |
| 11500 | 725 | 4.53 | 802 | 5.16 | 871 | 5.77 | 933 | 6.36 | 991 | 6.95 |
| 12000 | 748 | 5.09 | 824 | 5.75 | 892 | 6.38 | 953 | 7.00 | 1010 | 7.62 |
| 12500 | 772 | 5.68 | 846 | 6.38 | 912 | 7.04 | 973 | 7.69 | 1029 | 8.34 |
| 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 |
| 7500 | 909 | 3.47 | 963 | 3.89 | 1014 | 4.32 | 1062 | 4.77 | 1108 | 5.23 |
| 8000 | 925 | 3.85 | 978 | 4.29 | 1029 | 4.74 | 1077 | 5.20 | 1122 | 5.68 |
| 8500 | 941 | 4.26 | 994 | 4.72 | 1044 | 5.19 | 1092 | 5.67 | 1137 | 6.16 |
| 9000 | 957 | 4.71 | 1010 | 5.19 | 1060 | 5.67 | 1107 | 6.17 | 1152 | 6.68 |
| 9500 | 974 | 5.19 | 1027 | 5.69 | 1076 | 6.20 | 1123 | 6.72 | 1167 | 7.24 |
| 10000 | 991 | 5.72 | 1043 | 6.24 | 1092 | 6.77 | 1138 | 7.30 | ---- | ---- |
| 10500 | 1009 | 6.28 | 1060 | 6.83 | 1109 | 7.37 | 1155 | 7.93 | ---- | ---- |
| 11000 | 1026 | 6.89 | 1077 | 7.46 | 1125 | 8.03 | 1171 | 8.60 | ---- | ---- |
| 11500 | 1044 | 7.54 | 1095 | 8.13 | 1142 | 8.72 | ---- | ---- | ---- | ---- |
| 12000 | 1062 | 8.23 | 1112 | 8.85 | ---- | ---- | ---- | ---- | ---- | ---- |
| 12500 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| Std Static Motor and Drive – 717–911 RPM, Max BHP 4.9 | | | | | Medium Static Motor and Drive – 913–1116 RPM, Max BHP 6.5 | | | | | |
| High Static Motor and Drive – 941–1176 RPM, Max BHP 8.7 | | | | | ---- Outside operating range | | | | | |
| Boldface – Field Supplied Drive | | | | | | | | | | |

FAN PERFORMANCE (cont.)

Table 9 - 558J-30D

VERTICAL SUPPLY / RETURN

27.5 TON

| 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 |
| 8250 | 620 | 1.85 | 705 | 2.31 | 778 | 2.77 | 843 | 3.22 | 903 | 3.68 |
| 8800 | 650 | 2.18 | 731 | 2.67 | 802 | 3.16 | 866 | 3.64 | 925 | 4.13 |
| 9350 | 679 | 2.54 | 758 | 3.07 | 828 | 3.59 | 890 | 4.10 | 948 | 4.62 |
| 9900 | 710 | 2.95 | 786 | 3.51 | 853 | 4.06 | 915 | 4.60 | 971 | 5.15 |
| 10450 | 740 | 3.40 | 814 | 3.99 | 879 | 4.57 | 939 | 5.15 | 995 | 5.73 |
| 11000 | 771 | 3.90 | 842 | 4.52 | 906 | 5.14 | 965 | 5.75 | 1020 | 6.35 |
| 11550 | 802 | 4.45 | 871 | 5.10 | 933 | 5.75 | 991 | 6.39 | 1044 | 7.03 |
| 12100 | 833 | 5.04 | 900 | 5.73 | 961 | 6.41 | 1017 | 7.09 | 1070 | 7.76 |
| 12650 | 865 | 5.70 | 930 | 6.42 | 989 | 7.13 | 1044 | 7.84 | 1095 | 8.54 |
| 13200 | 897 | 6.40 | 959 | 7.16 | 1017 | 7.90 | 1071 | 8.64 | 1121 | 9.38 |
| 13750 | 929 | 7.17 | 990 | 7.96 | 1046 | 8.74 | 1098 | 9.51 | 1148 | 10.27 |
| 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 |
| 8250 | 959 | 4.14 | 1011 | 4.61 | 1059 | 5.08 | 1106 | 5.56 | 1150 | 6.05 |
| 8800 | 980 | 4.62 | 1031 | 5.11 | 1080 | 5.61 | 1126 | 6.12 | 1169 | 6.63 |
| 9350 | 1002 | 5.14 | 1052 | 5.66 | 1100 | 6.18 | 1146 | 6.72 | 1189 | 7.25 |
| 9900 | 1024 | 5.70 | 1074 | 6.25 | 1121 | 6.80 | 1166 | 7.36 | 1209 | 7.92 |
| 10450 | 1047 | 6.30 | 1096 | 6.88 | 1143 | 7.47 | 1187 | 8.05 | 1230 | 8.64 |
| 11000 | 1071 | 6.96 | 1119 | 7.57 | 1165 | 8.18 | 1209 | 8.79 | 1251 | 9.41 |
| 11550 | 1095 | 7.66 | 1142 | 8.30 | 1188 | 8.94 | 1231 | 9.58 | 1273 | 10.23 |
| 12100 | 1119 | 8.42 | 1166 | 9.09 | 1211 | 9.76 | 1253 | 10.43 | 1295 | 11.10 |
| 12650 | 1144 | 9.24 | 1190 | 9.93 | 1234 | 10.63 | 1276 | 11.33 | ----- | ----- |
| 13200 | 1169 | 10.10 | 1215 | 10.83 | 1258 | 11.56 | <i>1300</i> | <i>12.29</i> | ----- | ----- |
| 13750 | 1195 | 11.03 | 1240 | 11.79 | 1282 | 12.55 | ----- | ----- | ----- | ----- |
| Std Static Motor and Drive – 751–954 RPM, Max BHP 6.5 | | | | | Medium Static Motor and Drive – 920–1190 RPM, Max BHP 10.5 | | | | | |
| High Static Motor & Drive – 1116–1400 RPM, Max BHP 11.9 | | | | | ----- Outside operating range | | | | | |
| Boldface – Field Supplied Drive | | | | | <i>ITALIC</i> – Field Supplied Motor | | | | | |

FAN PERFORMANCE (cont.)

Table 10 – PULLEY ADJUSTMENT - VERTICAL

| UNIT | MOTOR/DRIVE COMBO | MOTOR PULLEY TURNS OPEN | | | | | | | | | | |
|------|-------------------|-------------------------|------|------|------|------|------|------|------|------|------|------|
| | | 0 | 0.5 | 1 | 1.5 | 2 | 2.5 | 3 | 3.5 | 4 | 4.5 | 5 |
| 17 | Standard Static | 680 | 663 | 647 | 630 | 614 | 597 | 580 | 564 | 547 | 531 | 514 |
| | Medium Static | 863 | 845 | 826 | 808 | 789 | 771 | 753 | 734 | 716 | 697 | 679 |
| | High Static | 1009 | 991 | 972 | 954 | 936 | 918 | 899 | 881 | 863 | 844 | 826 |
| 20 | Standard Static | 822 | 802 | 782 | 762 | 742 | 722 | 702 | 682 | 662 | 642 | 622 |
| | Medium Static | 879 | 862 | 846 | 829 | 813 | 796 | 779 | 763 | 746 | 730 | 713 |
| | High Static | 1078 | 1058 | 1039 | 1019 | 1000 | 980 | 960 | 941 | 921 | 902 | 882 |
| 24 | Standard Static | 863 | 846 | 828 | 811 | 794 | 777 | 759 | 742 | 725 | 707 | 690 |
| | Medium Static | 1021 | 1002 | 984 | 965 | 947 | 928 | 909 | 891 | 872 | 854 | 835 |
| | High Static | 1176 | 1153 | 1129 | 1106 | 1082 | 1059 | 1035 | 1012 | 988 | 965 | 941 |
| 28 | Standard Static | 911 | 892 | 872 | 853 | 833 | 814 | 795 | 775 | 756 | 736 | 717 |
| | Medium Static | 1116 | 1096 | 1075 | 1055 | 1035 | 1015 | 994 | 974 | 954 | 933 | 913 |
| | High Static | 1176 | 1153 | 1129 | 1106 | 1082 | 1059 | 1035 | 1012 | 988 | 965 | 941 |
| 30 | Standard Static | 954 | 934 | 913 | 893 | 873 | 853 | 832 | 812 | 792 | 771 | 751 |
| | Medium Static | 1190 | 1163 | 1136 | 1109 | 1082 | 1055 | 1028 | 1001 | 974 | 947 | 920 |
| | High Static | 1400 | 1372 | 1343 | 1315 | 1286 | 1258 | 1230 | 1201 | 1173 | 1144 | 1116 |

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

■ – Factory settings

Legend and Notes

LEGEND:

- BRKR – Circuit breaker
- CO – Convenience outlet
- DISC – Disconnect
- FLA – Full load amps
- LRA – Locked rotor amps
- MCA – Minimum circuit amps
- PE – Power exhaust
- PWRD CO – Powered convenient outlet
- UNPWR CO – Unpowered convenient outlet



Example: Supply voltage is 230-3-60



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

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

Determine maximum deviation from average voltage.

(AB) 227 – 224 = 3 v

(BC) 231 – 227 = 4 v

(AC) 227 – 226 = 1 v

Maximum deviation is 4 v.

Determine percent of voltage imbalance.

$$\% \text{ Voltage Imbalance} = 100 \times \frac{4}{227} = 1.76\%$$

This amount of phase imbalance is satisfactory as it is below the maximum allowable 2%.

IMPORTANT: If the supply voltage phase imbalance is more than 2%, contact your local electric utility company immediately.

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

ELECTRICAL INFORMATION

Table 11 – 2-STAGE COOLING WITH SINGLE SPEED INDOOR FAN MOTOR

15 - 27.5 TONS

| UNIT | V-Ph-Hz | VOLTAGE RANGE | | COMP 1 | | COMP 2 | | OFM (ea) | | IFM | | |
|---------|----------|---------------|-----|--------|-----|--------|-----|----------|-----|----------------|------------------|------|
| | | | | RLA | LRA | RLA | LRA | WATTS | FLA | TYPE | EFF at Full Load | FLA |
| | | MIN | MAX | | | | | | | | | |
| 558J*17 | 208-3-60 | 187 | 253 | 29.5 | 195 | 30.1 | 225 | 350 | 1.5 | STD | 88.6% | 8.4 |
| | | | | | | | | | | MED | 87.0% | 10.6 |
| | | | | | | | | | | HIGH | 82.9% | 13.6 |
| | 230-3-60 | 187 | 253 | 29.5 | 195 | 30.1 | 225 | 350 | 1.5 | STD | 88.6% | 8.3 |
| | | | | | | | | | | MED | 87.0% | 10.6 |
| | | | | | | | | | | HIGH | 82.9% | 12.7 |
| | 460-3-60 | 414 | 506 | 14.7 | 95 | 16.7 | 114 | 277 | 0.9 | STD | 88.6% | 4.2 |
| | | | | | | | | | | MED | 87.0% | 5.3 |
| | | | | | | | | | | HIGH | 82.9% | 6.4 |
| | 575-3-60 | 518 | 633 | 12.2 | 80 | 12.2 | 80 | 397 | 0.6 | STD | 81.1% | 2.8 |
| | | | | | | | | | | MED | 81.1% | 2.8 |
| | | | | | | | | | | HIGH | 83.6% | 5.6 |
| 558J*20 | 208-3-60 | 187 | 253 | 29.5 | 195 | 30.1 | 225 | 350 | 1.5 | STD | 87.0% | 10.6 |
| | | | | | | | | | | MED | 82.9% | 13.6 |
| | | | | | | | | | | HIGH-High Eff. | 89.5% | 17.1 |
| | 230-3-60 | 187 | 253 | 29.5 | 195 | 30.1 | 225 | 350 | 1.5 | STD | 87.0% | 10.6 |
| | | | | | | | | | | MED | 82.9% | 12.7 |
| | | | | | | | | | | HIGH-High Eff. | 89.5% | 17.1 |
| | 460-3-60 | 414 | 506 | 14.7 | 95 | 16.7 | 114 | 277 | 0.9 | STD | 87.0% | 5.3 |
| | | | | | | | | | | MED | 82.9% | 6.4 |
| | | | | | | | | | | HIGH-High Eff. | 89.5% | 8.6 |
| | 575-3-60 | 518 | 633 | 12.2 | 80 | 12.2 | 80 | 397 | 0.6 | STD | 81.1% | 2.8 |
| | | | | | | | | | | MED | 83.6% | 5.6 |
| | | | | | | | | | | HIGH-High Eff. | 89.5% | 7.6 |
| 558J*24 | 208-3-60 | 187 | 253 | 48.1 | 245 | 29.5 | 195 | 350 | 1.5 | STD | 82.9% | 13.6 |
| | | | | | | | | | | MED-High Eff. | 89.5% | 17.1 |
| | | | | | | | | | | HIGH-High Eff. | 91.7% | 28.5 |
| | 230-3-60 | 187 | 253 | 48.1 | 245 | 29.5 | 195 | 350 | 1.5 | STD | 82.9% | 12.7 |
| | | | | | | | | | | MED-High Eff. | 89.5% | 17.1 |
| | | | | | | | | | | HIGH-High Eff. | 91.7% | 28.5 |
| | 460-3-60 | 414 | 506 | 18.6 | 125 | 14.7 | 95 | 277 | 0.9 | STD | 82.9% | 6.4 |
| | | | | | | | | | | MED-High Eff. | 89.5% | 8.6 |
| | | | | | | | | | | HIGH-High Eff. | 91.7% | 14.3 |
| | 575-3-60 | 518 | 633 | 14.7 | 100 | 12.2 | 80 | 397 | 0.6 | STD | 83.6% | 5.6 |
| | | | | | | | | | | MED-High Eff. | 89.5% | 7.6 |
| | | | | | | | | | | HIGH-High Eff. | 91.7% | 9.5 |

See: "Legend and Notes" on page 42

ELECTRICAL INFORMATION cont.

Table 11 - 2-STAGE COOLING WITH SINGLE INDOOR FAN MOTOR

15 - 27.5 TONS (CONTINUED)

| UNIT | V-Ph-Hz | VOLTAGE RANGE | | COMP 1 | | COMP 2 | | OFM (ea) | | IFM | | |
|---------|----------|---------------|-----|--------|-----|--------|-----|----------|-----|----------------|------------------|------|
| | | | | RLA | LRA | RLA | LRA | WATTS | FLA | TYPE | EFF at Full Load | FLA |
| | | MIN | MAX | | | | | | | | | |
| 558J*28 | 208-3-60 | 187 | 253 | 48.1 | 245 | 48.1 | 245 | 350 | 1.5 | STD | 82.9% | 13.6 |
| | | | | | | | | | | MED-High Eff. | 89.5% | 17.1 |
| | | | | | | | | | | HIGH-High Eff. | 91.7% | 28.5 |
| | 230-3-60 | 187 | 253 | 48.1 | 245 | 48.1 | 245 | 350 | 1.5 | STD | 82.9% | 12.7 |
| | | | | | | | | | | MED-High Eff. | 89.5% | 17.1 |
| | | | | | | | | | | HIGH-High Eff. | 91.7% | 28.5 |
| | 460-3-60 | 414 | 506 | 18.6 | 125 | 18.6 | 125 | 277 | 0.9 | STD | 82.9% | 6.4 |
| | | | | | | | | | | MED-High Eff. | 89.5% | 8.6 |
| | | | | | | | | | | HIGH-High Eff. | 91.7% | 14.3 |
| | 575-3-60 | 518 | 633 | 14.7 | 100 | 14.7 | 100 | 397 | 0.6 | STD | 83.6% | 5.6 |
| | | | | | | | | | | MED-High Eff. | 89.5% | 7.6 |
| | | | | | | | | | | HIGH-High Eff. | 91.7% | 9.5 |
| 558J*30 | 208-3-60 | 187 | 253 | 51.3 | 300 | 51.3 | 300 | 350 | 1.5 | STD | 89.5% | 17.1 |
| | | | | | | | | | | MED-High Eff. | 91.7% | 28.5 |
| | | | | | | | | | | HIGH-High Eff. | 91.7% | 30.4 |
| | 230-3-60 | 187 | 253 | 51.3 | 300 | 51.3 | 300 | 350 | 1.5 | STD | 89.5% | 17.1 |
| | | | | | | | | | | MED-High Eff. | 91.7% | 28.5 |
| | | | | | | | | | | HIGH-High Eff. | 91.7% | 30.4 |
| | 460-3-60 | 414 | 506 | 23.1 | 150 | 23.1 | 150 | 277 | 0.9 | STD | 89.5% | 8.6 |
| | | | | | | | | | | MED-High Eff. | 91.7% | 14.3 |
| | | | | | | | | | | HIGH-High Eff. | 91.7% | 15.2 |
| | 575-3-60 | 518 | 633 | 19.9 | 109 | 19.9 | 109 | 397 | 0.6 | STD | 89.5% | 7.6 |
| | | | | | | | | | | MED-High Eff. | 91.7% | 9.5 |
| | | | | | | | | | | HIGH-High Eff. | 91.7% | 12.4 |

See: "Legend and Notes" on page 42

ELECTRICAL INFORMATION cont.

Table 12 – 2-STAGE COOLING WITH 2-SPEED INDOOR FAN MOTOR

15 - 27.5 TONS

| UNIT | 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 |
| 558J*17 | 208-3-60 | 187 | 253 | 29.5 | 195 | 30.1 | 225 | 350 | 1.5 | STD | 85.0% | 8.6 |
| | | | | | | | | | | MED | 81.5% | 10.8 |
| | | | | | | | | | | HIGH | 83.6% | 13.6 |
| | 230-3-60 | 187 | 253 | 29.5 | 195 | 30.1 | 225 | 350 | 1.5 | STD | 85.0% | 7.8 |
| | | | | | | | | | | MED | 81.5% | 9.8 |
| | | | | | | | | | | HIGH | 83.6% | 12.7 |
| | 460-3-60 | 414 | 506 | 14.7 | 95 | 16.7 | 114 | 277 | 0.9 | STD | 85.0% | 3.8 |
| | | | | | | | | | | MED | 81.5% | 4.9 |
| | | | | | | | | | | HIGH | 83.6% | 6.4 |
| | 575-3-60 | 518 | 633 | 12.2 | 80 | 12.2 | 80 | 397 | 0.6 | STD | 81.1% | 4.5 |
| | | | | | | | | | | MED | 81.1% | 4.5 |
| | | | | | | | | | | HIGH | 83.6% | 6.2 |
| 558J*20 | 208-3-60 | 187 | 253 | 29.5 | 195 | 30.1 | 225 | 350 | 1.5 | STD | 81.5% | 10.8 |
| | | | | | | | | | | MED | 83.6% | 13.6 |
| | | | | | | | | | | HIGH | 89.5% | 17.1 |
| | 230-3-60 | 187 | 253 | 29.5 | 195 | 30.1 | 225 | 350 | 1.5 | STD | 81.5% | 9.8 |
| | | | | | | | | | | MED | 83.6% | 12.7 |
| | | | | | | | | | | HIGH | 89.5% | 17.1 |
| | 460-3-60 | 414 | 506 | 14.7 | 95 | 16.7 | 114 | 277 | 0.9 | STD | 81.5% | 4.9 |
| | | | | | | | | | | MED | 83.6% | 6.4 |
| | | | | | | | | | | HIGH | 89.5% | 8.6 |
| | 575-3-60 | 518 | 633 | 12.2 | 80 | 12.2 | 80 | 397 | 0.6 | STD | 81.1% | 4.5 |
| | | | | | | | | | | MED | 83.6% | 6.2 |
| | | | | | | | | | | HIGH | 89.5% | 7.6 |
| 558J*24 | 208-3-60 | 187 | 253 | 48.1 | 245 | 29.5 | 195 | 350 | 1.5 | STD | 83.6% | 13.6 |
| | | | | | | | | | | MED | 89.5% | 17.1 |
| | | | | | | | | | | HIGH | 91.7% | 28.5 |
| | 230-3-60 | 187 | 253 | 48.1 | 245 | 29.5 | 195 | 350 | 1.5 | STD | 83.6% | 12.7 |
| | | | | | | | | | | MED | 89.5% | 17.1 |
| | | | | | | | | | | HIGH | 91.7% | 28.5 |
| | 460-3-60 | 414 | 506 | 18.6 | 125 | 14.7 | 95 | 277 | 0.9 | STD | 83.6% | 6.4 |
| | | | | | | | | | | MED | 89.5% | 8.6 |
| | | | | | | | | | | HIGH | 91.7% | 14.3 |
| | 575-3-60 | 518 | 633 | 14.7 | 100 | 12.2 | 80 | 397 | 0.6 | STD | 83.6% | 6.2 |
| | | | | | | | | | | MED | 89.5% | 7.6 |
| | | | | | | | | | | HIGH | 91.7% | 9.5 |
| 558J*28 | 208-3-60 | 187 | 253 | 48.1 | 245 | 48.1 | 245 | 350 | 1.5 | STD | 83.6% | 13.6 |
| | | | | | | | | | | MED | 89.5% | 17.1 |
| | | | | | | | | | | HIGH | 91.7% | 28.5 |
| | 230-3-60 | 187 | 253 | 48.1 | 245 | 48.1 | 245 | 350 | 1.5 | STD | 83.6% | 12.7 |
| | | | | | | | | | | MED | 89.5% | 17.1 |
| | | | | | | | | | | HIGH | 91.7% | 28.5 |
| | 460-3-60 | 414 | 506 | 18.6 | 125 | 18.6 | 125 | 277 | 0.9 | STD | 83.6% | 6.4 |
| | | | | | | | | | | MED | 89.5% | 8.6 |
| | | | | | | | | | | HIGH | 91.7% | 14.3 |
| | 575-3-60 | 518 | 633 | 14.7 | 100 | 14.7 | 100 | 397 | 0.6 | STD | 83.6% | 6.2 |
| | | | | | | | | | | MED | 89.5% | 7.6 |
| | | | | | | | | | | HIGH | 91.7% | 9.5 |
| 558J*30 | 208-3-60 | 187 | 253 | 51.3 | 300 | 51.3 | 300 | 350 | 1.5 | STD | 89.5% | 17.1 |
| | | | | | | | | | | MED | 91.7% | 28.5 |
| | | | | | | | | | | HIGH | 91.7% | 30.4 |
| | 230-3-60 | 187 | 253 | 51.3 | 300 | 51.3 | 300 | 350 | 1.5 | STD | 89.5% | 17.1 |
| | | | | | | | | | | MED | 91.7% | 28.5 |
| | | | | | | | | | | HIGH | 91.7% | 30.4 |
| | 460-3-60 | 414 | 506 | 23.1 | 150 | 23.1 | 150 | 277 | 0.9 | STD | 89.5% | 8.6 |
| | | | | | | | | | | MED | 91.7% | 14.3 |
| | | | | | | | | | | HIGH | 91.7% | 15.2 |
| | 575-3-60 | 518 | 633 | 19.9 | 109 | 19.9 | 109 | 397 | 0.6 | STD | 89.5% | 7.6 |
| | | | | | | | | | | MED | 91.7% | 9.5 |
| | | | | | | | | | | HIGH | 91.7% | 12.4 |

See: "Legend and Notes" on page 42

ELECTRIC HEAT - ELECTRICAL INFORMATION cont.

Table 13 – 558J*17

1-SPEED INDOOR FAN MOTOR

| Model Number 558J* | NOM. V-Ph-Hz | IFM TYPE | Electric Heater Part Number CRHEATERXXXXX | Nominal (kW) | Application (kW) | Application Output (MBH) | Single Point or Junction Kit Part Number CRSINGLEXXXXA00 | | | |
|-----------------------|-----------------|-------------|---|-----------------|---------------------|-----------------------------|---|------------------------------|-------------|------------------------------|
| | | | | | | | NO C.O. Or Unpowered C.O. | | w/PWRD C.O. | |
| | | | | | | | NO P.E. | w/ P.E. (pwrd fr/unit) | NO P.E. | w/ P.E. (pwrd fr/unit) |
| 17 | 208/230-3-60 | STD | 279A00 | 25.0 | 18.8/23.0 | 64.1/78.3 | - | - | - | - |
| | | | 280A00 | 50.0 | 37.6/45.9 | 128.1/156.7 | 056 | 056 | 056 | 056 |
| | | | 281A00 | 75.0 | 56.3/68.9 | 192.2/235.0 | 056 | 056 | 056 | 056 |
| | | MED | 279A00 | 25.0 | 18.8/23.0 | 64.1/78.3 | - | - | - | - |
| | | | 280A00 | 50.0 | 37.6/45.9 | 128.1/156.7 | 056 | 056 | 056 | 056 |
| | | | 281A00 | 75.0 | 56.3/68.9 | 192.2/235.0 | 056 | 056 | 056 | 056 |
| | | HIGH | 279A00 | 25.0 | 18.8/23.0 | 64.1/78.3 | - | - | - | - |
| | | | 280A00 | 50.0 | 37.6/45.9 | 128.1/156.7 | 056 | 056 | 056 | 056 |
| | | | 281A00 | 75.0 | 56.3/68.9 | 192.2/235.0 | 056 | 056 | 056 | 056 |
| | 460-3-60 | STD | 282A00 | 25.0 | 23.0 | 78.3 | - | - | - | - |
| | | | 283A00 | 50.0 | 45.9 | 156.7 | - | 057 | 057 | 057 |
| | | | 284A00 | 75.0 | 68.9 | 235.0 | 057 | 057 | 057 | 057 |
| | | MED | 282A00 | 25.0 | 23.0 | 78.3 | - | - | - | - |
| | | | 283A00 | 50.0 | 45.9 | 156.7 | 057 | 057 | 057 | 057 |
| | | | 284A00 | 75.0 | 68.9 | 235.0 | 057 | 057 | 057 | 057 |
| | | HIGH | 282A00 | 25.0 | 23.0 | 78.3 | - | - | - | - |
| | | | 283A00 | 50.0 | 45.9 | 156.7 | 057 | 057 | 057 | 057 |
| | | | 284A00 | 75.0 | 68.9 | 235.0 | 057 | 057 | 057 | 057 |
| | 575-3-60 | STD | 285A00 | 24.8 | 22.8 | 77.7 | - | - | - | - |
| | | | 286A00 | 49.6 | 45.6 | 155.4 | - | - | - | 057 |
| | | | 287A00 | 74.4 | 68.3 | 233.1 | 057 | 057 | 057 | 057 |
| | | MED | 285A00 | 24.8 | 22.8 | 77.7 | - | - | - | - |
| | | | 286A00 | 49.6 | 45.6 | 155.4 | - | - | - | 057 |
| | | | 287A00 | 74.4 | 68.3 | 233.1 | 057 | 057 | 057 | 057 |
| | | HIGH | 285A00 | 24.8 | 22.8 | 77.7 | - | - | - | - |
| | | | 286A00 | 49.6 | 45.6 | 155.4 | - | 057 | - | 057 |
| | | | 287A00 | 74.4 | 68.3 | 233.1 | 057 | 057 | 057 | 057 |

See: "Legend and Notes" on page 42

ELECTRIC HEAT - ELECTRICAL INFORMATION cont.

Table 14 – 558J*20

1-SPEED INDOOR FAN MOTOR

| Model Number 558J* | NOM. V-Ph-Hz | IFM TYPE | Electric Heater Part Number CRHEATERXXXXX | Nominal (kW) | Application (kW) | Application Output (MBH) | Single Point or Junction Kit Part Number CRSINGLEXXXXA00 | | | |
|-----------------------|-----------------|--------------------|---|-----------------|---------------------|-----------------------------|---|------------------------------|-------------|------------------------------|
| | | | | | | | NO C.O. Or Unpowered C.O. | | w/PWRD C.O. | |
| | | | | | | | NO P.E. | w/ P.E. (pwrd fr/unit) | NO P.E. | w/ P.E. (pwrd fr/unit) |
| 20 | 208/230-3-60 | STD | 279A00 | 25.0 | 18.8/23.0 | 64.1/78.3 | - | - | - | - |
| | | | 280A00 | 50.0 | 37.6/45.9 | 128.1/156.7 | 056 | 056 | 056 | 056 |
| | | | 281A00 | 75.0 | 56.3/68.9 | 192.2/235.0 | 056 | 056 | 056 | 056 |
| | | MED | 279A00 | 25.0 | 18.8/23.0 | 64.1/78.3 | - | - | - | - |
| | | | 280A00 | 50.0 | 37.6/45.9 | 128.1/156.7 | 056 | 056 | 056 | 056 |
| | | | 281A00 | 75.0 | 56.3/68.9 | 192.2/235.0 | 056 | 056 | 056 | 056 |
| | | HIGH- High Eff. | 279A00 | 25.0 | 18.8/23.0 | 64.1/78.3 | - | - | - | - |
| | | | 280A00 | 50.0 | 37.6/45.9 | 128.1/156.7 | 056 | 056 | 056 | 056 |
| | | | 281A00 | 75.0 | 56.3/68.9 | 192.2/235.0 | 056 | 056 | 056 | 056 |
| | 460-3-60 | STD | 282A00 | 25.0 | 23.0 | 78.3 | - | - | - | - |
| | | | 283A00 | 50.0 | 45.9 | 156.7 | 057 | 057 | 057 | 057 |
| | | | 284A00 | 75.0 | 68.9 | 235.0 | 057 | 057 | 057 | 057 |
| | | MED | 282A00 | 25.0 | 23.0 | 78.3 | - | - | - | - |
| | | | 283A00 | 50.0 | 45.9 | 156.7 | 057 | 057 | 057 | 057 |
| | | | 284A00 | 75.0 | 68.9 | 235.0 | 057 | 057 | 057 | 057 |
| | | HIGH- High Eff. | 282A00 | 25.0 | 23.0 | 78.3 | - | - | - | - |
| | | | 283A00 | 50.0 | 45.9 | 156.7 | 057 | 057 | 057 | 057 |
| | | | 284A00 | 75.0 | 68.9 | 235.0 | 057 | 057 | 057 | 057 |
| | 575-3-60 | STD | 285A00 | 24.8 | 22.8 | 77.7 | - | - | - | - |
| | | | 286A00 | 49.6 | 45.6 | 155.4 | - | - | - | 057 |
| | | | 287A00 | 74.4 | 68.3 | 233.1 | 057 | 057 | 057 | 057 |
| | | MED | 285A00 | 24.8 | 22.8 | 77.7 | - | - | - | - |
| | | | 286A00 | 49.6 | 45.6 | 155.4 | - | 057 | - | 057 |
| | | | 287A00 | 74.4 | 68.3 | 233.1 | 057 | 057 | 057 | 057 |
| | | HIGH- High Eff. | 285A00 | 24.8 | 22.8 | 77.7 | - | - | - | - |
| | | | 286A00 | 49.6 | 45.6 | 155.4 | - | 057 | 057 | 057 |
| | | | 287A00 | 74.4 | 68.3 | 233.1 | 057 | 057 | 057 | 057 |

See: "Legend and Notes" on page 42

ELECTRIC HEAT - ELECTRICAL INFORMATION cont.

Table 15 – 558J*24

1-SPEED INDOOR FAN MOTOR

| Model Number 558J* | NOM. V-Ph-Hz | IFM TYPE | Electric Heater Part Number CRHEATERXXXXX | Nominal (kW) | Application (kW) | Application Output (MBH) | Single Point or Junction Kit Part Number CRSINGLEXXXX00 | | | |
|-----------------------|-----------------|--------------------|---|-----------------|---------------------|-----------------------------|--|------------------------------|-------------|------------------------------|
| | | | | | | | NO C.O. Or Unpowered C.O. | | w/PWRD C.O. | |
| | | | | | | | NO P.E. | w/ P.E. (pwrd fr/unit) | NO P.E. | w/ P.E. (pwrd fr/unit) |
| 24 | 208/203-3-60 | STD | 279A00 | 25.0 | 18.8/23.0 | 64.1/78.3 | 056 | 056 | 056 | 056 |
| | | | 280A00 | 50.0 | 37.6/45.9 | 128.1/156.7 | 056 | 056 | 056 | 056 |
| | | | 281A00 | 75.0 | 56.3/68.9 | 192.2/235.0 | 056 | 056 | 056 | 056 |
| | | MED- High Eff. | 279A00 | 25.0 | 18.8/23.0 | 64.1/78.3 | 056 | 056 | 056 | 056 |
| | | | 280A00 | 50.0 | 37.6/45.9 | 128.1/156.7 | 056 | 056 | 056 | 056 |
| | | | 281A00 | 75.0 | 56.3/68.9 | 192.2/235.0 | 056 | 056 | 056 | 056 |
| | | HIGH- High Eff. | 279A00 | 25.0 | 18.8/23.0 | 64.1/78.3 | 056 | 056 | 056 | 056 |
| | | | 280A00 | 50.0 | 37.6/45.9 | 128.1/156.7 | 056 | 056 | 056 | 056 |
| | | | 281A00 | 75.0 | 56.3/68.9 | 192.2/235.0 | 056 | 056 | 056 | 056 |
| | 460-3-60 | STD | 282A00 | 25.0 | 23.0 | 78.3 | - | - | - | - |
| | | | 283A00 | 50.0 | 45.9 | 156.7 | 057 | 057 | 057 | 057 |
| | | | 284A00 | 75.0 | 68.9 | 235.0 | 057 | 057 | 057 | 057 |
| | | MED- High Eff. | 282A00 | 25.0 | 23.0 | 78.3 | - | - | - | - |
| | | | 283A00 | 50.0 | 45.9 | 156.7 | 057 | 057 | 057 | 057 |
| | | | 284A00 | 75.0 | 68.9 | 235.0 | 057 | 057 | 057 | 057 |
| | | HIGH- High Eff. | 282A00 | 25.0 | 23.0 | 78.3 | - | 057 | - | 057 |
| | | | 283A00 | 50.0 | 45.9 | 156.7 | 057 | 057 | 057 | 057 |
| | | | 284A00 | 75.0 | 68.9 | 235.0 | 057 | 057 | 057 | 057 |
| | 575-3-60 | STD | 285A00 | 24.8 | 22.8 | 77.7 | - | - | - | - |
| | | | 286A00 | 49.6 | 45.6 | 155.4 | - | 057 | - | 057 |
| | | | 287A00 | 74.4 | 68.3 | 233.1 | 057 | 057 | 057 | 057 |
| | | MED- High Eff. | 285A00 | 24.8 | 22.8 | 77.7 | - | - | - | - |
| | | | 286A00 | 49.6 | 45.6 | 155.4 | - | 057 | 057 | 057 |
| | | | 287A00 | 74.4 | 68.3 | 233.1 | 057 | 057 | 057 | 057 |
| | | HIGH- High Eff. | 285A00 | 24.8 | 22.8 | 77.7 | - | - | - | - |
| | | | 286A00 | 49.6 | 45.6 | 155.4 | 057 | 057 | 057 | 057 |
| | | | 287A00 | 74.4 | 68.3 | 233.1 | 057 | 057 | 057 | 057 |

See: "Legend and Notes" on page 42

ELECTRIC HEAT - ELECTRICAL INFORMATION cont.

Table 16 – 558J*28

1-SPEED INDOOR FAN MOTOR

| Model Number 558J* | NOM. V-Ph-Hz | IFM TYPE | Electric Heater Part Number CRHEATERXXXXX | Nominal (kW) | Application (kW) | Application Output (MBH) | Single Point or Junction Kit Part Number CRSINGLEXXXXA00 | | | |
|-----------------------|-----------------|--------------------|---|-----------------|---------------------|-----------------------------|---|------------------------------|-------------|------------------------------|
| | | | | | | | NO C.O. Or Unpowered C.O. | | w/PWRD C.O. | |
| | | | | | | | NO P.E. | w/ P.E. (pwrd fr/unit) | NO P.E. | w/ P.E. (pwrd fr/unit) |
| 28 | 208/230-3-60 | STD | 279A00 | 25.0 | 18.8/23.0 | 64.1/78.3 | 056 | 056 | 056 | 056 |
| | | | 280A00 | 50.0 | 37.6/45.9 | 128.1/156.7 | 056 | 056 | 056 | 056 |
| | | | 281A00 | 75.0 | 56.3/68.9 | 192.2/235.0 | 056 | 056 | 056 | 056 |
| | | MED- High Eff. | 279A00 | 25.0 | 18.8/23.0 | 64.1/78.3 | 056 | 056 | 056 | 056 |
| | | | 280A00 | 50.0 | 37.6/45.9 | 128.1/156.7 | 056 | 056 | 056 | 056 |
| | | | 281A00 | 75.0 | 56.3/68.9 | 192.2/235.0 | 056 | 056 | 056 | 056 |
| | | HIGH- High Eff. | 279A00 | 25.0 | 18.8/23.0 | 64.1/78.3 | 056 | 056 | 056 | 056 |
| | | | 280A00 | 50.0 | 37.6/45.9 | 128.1/156.7 | 056 | 056 | 056 | 056 |
| | | | 281A00 | 75.0 | 56.3/68.9 | 192.2/235.0 | 056 | 056 | 056 | 056 |
| | 460-3-60 | STD | 282A00 | 25.0 | 23.0 | 78.3 | - | - | - | - |
| | | | 283A00 | 50.0 | 45.9 | 156.7 | 057 | 057 | 057 | 057 |
| | | | 284A00 | 75.0 | 68.9 | 235.0 | 057 | 057 | 057 | 057 |
| | | MED- High Eff. | 282A00 | 25.0 | 23.0 | 78.3 | - | - | - | 057 |
| | | | 283A00 | 50.0 | 45.9 | 156.7 | 057 | 057 | 057 | 057 |
| | | | 284A00 | 75.0 | 68.9 | 235.0 | 057 | 057 | 057 | 057 |
| | | HIGH- High Eff. | 282A00 | 25.0 | 23.0 | 78.3 | - | 057 | 057 | 057 |
| | | | 283A00 | 50.0 | 45.9 | 156.7 | 057 | 057 | 057 | 057 |
| | | | 284A00 | 75.0 | 68.9 | 235.0 | 057 | 057 | 057 | 057 |
| | 575-3-60 | STD | 285A00 | 24.8 | 22.8 | 77.7 | - | - | - | - |
| | | | 286A00 | 49.6 | 45.6 | 155.4 | - | 057 | - | 057 |
| | | | 287A00 | 74.4 | 68.3 | 233.1 | 057 | 057 | 057 | 057 |
| | | MED- High Eff. | 285A00 | 24.8 | 22.8 | 77.7 | - | - | - | - |
| | | | 286A00 | 49.6 | 45.6 | 155.4 | - | 057 | 057 | 057 |
| | | | 287A00 | 74.4 | 68.3 | 233.1 | 057 | 057 | 057 | 057 |
| | | HIGH- High Eff. | 285A00 | 24.8 | 22.8 | 77.7 | - | - | - | - |
| | | | 286A00 | 49.6 | 45.6 | 155.4 | 057 | 057 | 057 | 057 |
| | | | 287A00 | 74.4 | 68.3 | 233.1 | 057 | 057 | 057 | 057 |

See: "Legend and Notes" on page 42

ELECTRIC HEAT - ELECTRICAL INFORMATION cont.

Table 17 – 558J*30

1-SPEED INDOOR FAN MOTOR

| Model Number 558J* | NOM. V-Ph-Hz | IFM TYPE | Electric Heater Part Number CRHEATERXXXXX | Nominal (kW) | Application (kW) | Application Output (MBH) | Single Point or Junction Kit Part Number CRSINGLEXXXXA00 | | | | |
|-----------------------|--------------------|--------------------|---|-----------------|---------------------|-----------------------------|---|------------------------------|-------------|------------------------------|-----|
| | | | | | | | NO C.O. Or Unpowered C.O. | | w/PWRD C.O. | | |
| | | | | | | | NO P.E. | w/ P.E. (pwrd fr/unit) | NO P.E. | w/ P.E. (pwrd fr/unit) | |
| 25 | 208/203-3-60 | STD | 270A00 | 25.0 | 18.8/23.0 | 64.1/78.3 | - | - | - | - | |
| | | | 271A00 | 50.0 | 37.6/45.9 | 128.1/156.7 | 056 | 056 | 056 | 056 | |
| | | | 272A00 | 75.0 | 56.3/68.9 | 192.2/235.0 | 056 | 056 | 056 | 056 | |
| | | MED- High Eff. | 270A00 | 25.0 | 18.8/23.0 | 64.1/78.3 | - | - | - | - | |
| | | | 271A00 | 50.0 | 37.6/45.9 | 128.1/156.7 | 056 | 056 | 056 | 056 | |
| | | | 272A00 | 75.0 | 56.3/68.9 | 192.2/235.0 | 056 | 056 | 056 | 056 | |
| | | HIGH- High Eff. | 270A00 | 25.0 | 18.8/23.0 | 64.1/78.3 | - | 056 | - | 056 | |
| | | | 271A00 | 50.0 | 37.6/45.9 | 128.1/156.7 | 056 | 056 | 056 | 056 | |
| | | | 272A00 | 75.0 | 56.3/68.9 | 192.2/235.0 | 056 | 056 | 056 | 056 | |
| | | 460-3-60 | STD | 273A00 | 25.0 | 23.0 | 78.3 | - | - | - | - |
| | | | | 274A00 | 50.0 | 45.9 | 156.7 | 057 | 057 | 057 | 057 |
| | | | | 275A00 | 75.0 | 68.9 | 235.0 | 057 | 057 | 057 | 057 |
| | MED- High Eff. | | 273A00 | 25.0 | 23.0 | 78.3 | - | - | - | - | |
| | | | 274A00 | 50.0 | 45.9 | 156.7 | 057 | 057 | 057 | 057 | |
| | | | 275A00 | 75.0 | 68.9 | 235.0 | 057 | 057 | 057 | 057 | |
| | HIGH- High Eff. | | 273A00 | 25.0 | 23.0 | 78.3 | - | - | - | 057 | |
| | | | 274A00 | 50.0 | 45.9 | 156.7 | 057 | 057 | 057 | 057 | |
| | | | 275A00 | 75.0 | 68.9 | 235.0 | 057 | 057 | 057 | 057 | |
| | 575-3-60 | | STD | 276A00 | 24.8 | 22.8 | 77.7 | - | - | - | - |
| | | | | 277A00 | 49.6 | 45.6 | 155.4 | - | 057 | - | 057 |
| | | | | 278A00 | 74.4 | 68.3 | 233.1 | 057 | 057 | 057 | 057 |
| | | MED- High Eff. | 276A00 | 24.8 | 22.8 | 77.7 | - | - | - | - | |
| | | | 277A00 | 49.6 | 45.6 | 155.4 | - | 057 | 057 | 057 | |
| | | | 278A00 | 74.4 | 68.3 | 233.1 | 057 | 057 | 057 | 057 | |
| | | HIGH- High Eff. | 276A00 | 24.8 | 22.8 | 77.7 | - | - | - | - | |
| | | | 277A00 | 49.6 | 45.6 | 155.4 | 057 | 057 | 057 | 057 | |
| | | | 278A00 | 74.4 | 68.3 | 233.1 | 057 | 057 | 057 | 057 | |

See: "Legend and Notes" on page 42

ELECTRIC HEAT - ELECTRICAL INFORMATION cont.

Table 18 – 558J*17

2-SPEED INDOOR FAN MOTOR

| Model Number 558J* | NOM. V-Ph-Hz | IFM TYPE | Electric Heater Part Number CRHEATERXXXXXX | Nominal (kW) | Application (kW) | Application Output (MBH) | Single Point or Junction Kit Part Number CRSINGLEXXXXA00 | | | |
|-----------------------|-----------------|-------------|--|-----------------|---------------------|-----------------------------|--|------------------------------|-------------|------------------------------|
| | | | | | | | NO C.O. Or Unpowered C.O. | | w/PWRD C.O. | |
| | | | | | | | NO P.E. | w/ P.E. (pwrd fr/unit) | NO P.E. | w/ P.E. (pwrd fr/unit) |
| 17 | 208/230-3-60 | STD | 279A00 | 25.0 | 18.8/23.0 | 64.1/78.3 | - | - | - | - |
| | | | 280A00 | 50.0 | 37.6/45.9 | 128.1/156.7 | 056 | 056 | 056 | 056 |
| | | | 281A00 | 75.0 | 56.3/68.9 | 192.2/235.0 | 056 | 056 | 056 | 056 |
| | | MED | 279A00 | 25.0 | 18.8/23.0 | 64.1/78.3 | - | - | - | - |
| | | | 280A00 | 50.0 | 37.6/45.9 | 128.1/156.7 | 056 | 056 | 056 | 056 |
| | | | 281A00 | 75.0 | 56.3/68.9 | 192.2/235.0 | 056 | 056 | 056 | 056 |
| | | HIGH | 279A00 | 25.0 | 18.8/23.0 | 64.1/78.3 | - | - | - | - |
| | | | 280A00 | 50.0 | 37.6/45.9 | 128.1/156.7 | 056 | 056 | 056 | 056 |
| | | | 281A00 | 75.0 | 56.3/68.9 | 192.2/235.0 | 056 | 056 | 056 | 056 |
| | 460-3-60 | STD | 282A00 | 25.0 | 23.0 | 78.3 | - | - | - | - |
| | | | 283A00 | 50.0 | 45.9 | 156.7 | - | 057 | 057 | 057 |
| | | | 284A00 | 75.0 | 68.9 | 235.0 | 057 | 057 | 057 | 057 |
| | | MED | 282A00 | 25.0 | 23.0 | 78.3 | - | - | - | - |
| | | | 283A00 | 50.0 | 45.9 | 156.7 | 057 | 057 | 057 | 057 |
| | | | 284A00 | 75.0 | 68.9 | 235.0 | 057 | 057 | 057 | 057 |
| | | HIGH | 282A00 | 25.0 | 23.0 | 78.3 | - | - | - | - |
| | | | 283A00 | 50.0 | 45.9 | 156.7 | 057 | 057 | 057 | 057 |
| | | | 284A00 | 75.0 | 68.9 | 235.0 | 057 | 057 | 057 | 057 |
| | 575-3-60 | STD | 285A00 | 24.8 | 22.8 | 77.7 | - | - | - | - |
| | | | 286A00 | 49.6 | 45.6 | 155.4 | - | - | - | 057 |
| | | | 287A00 | 74.4 | 68.3 | 233.1 | 057 | 057 | 057 | 057 |
| | | MED | 285A00 | 24.8 | 22.8 | 77.7 | - | - | - | - |
| | | | 286A00 | 49.6 | 45.6 | 155.4 | - | - | - | 057 |
| | | | 287A00 | 74.4 | 68.3 | 233.1 | 057 | 057 | 057 | 057 |
| | | HIGH | 285A00 | 24.8 | 22.8 | 77.7 | - | - | - | - |
| | | | 286A00 | 49.6 | 45.6 | 155.4 | - | 057 | - | 057 |
| | | | 287A00 | 74.4 | 68.3 | 233.1 | 057 | 057 | 057 | 057 |

See: "Legend and Notes" on page 42

ELECTRIC HEAT - ELECTRICAL INFORMATION cont.

Table 19 – 558J*20

2-SPEED INDOOR FAN MOTOR

| Model Number 558J* | NOM. V-Ph-Hz | IFM TYPE | Electric Heater Part Number CRHEATERXXXXXX | Nominal (kW) | Application (kW) | Application Output (MBH) | Single Point or Junction Kit Part Number CRSINGLEXXXXA00 | | | |
|-----------------------|-----------------|--------------------|--|-----------------|---------------------|-----------------------------|--|------------------------------|-------------|------------------------------|
| | | | | | | | NO C.O. Or Unpowered C.O. | | w/PWRD C.O. | |
| | | | | | | | NO P.E. | w/ P.E. (pwrd fr/unit) | NO P.E. | w/ P.E. (pwrd fr/unit) |
| 20 | 208/230-3-60 | STD | 279A00 | 25.0 | 18.8/23.0 | 64.1/78.3 | - | - | - | - |
| | | | 280A00 | 50.0 | 37.6/45.9 | 128.1/156.7 | 056 | 056 | 056 | 056 |
| | | | 281A00 | 75.0 | 56.3/68.9 | 192.2/235.0 | 056 | 056 | 056 | 056 |
| | | MED | 279A00 | 25.0 | 18.8/23.0 | 64.1/78.3 | - | - | - | - |
| | | | 280A00 | 50.0 | 37.6/45.9 | 128.1/156.7 | 056 | 056 | 056 | 056 |
| | | | 281A00 | 75.0 | 56.3/68.9 | 192.2/235.0 | 056 | 056 | 056 | 056 |
| | | HIGH- High Eff. | 279A00 | 25.0 | 18.8/23.0 | 64.1/78.3 | - | - | - | - |
| | | | 280A00 | 50.0 | 37.6/45.9 | 128.1/156.7 | 056 | 056 | 056 | 056 |
| | | | 281A00 | 75.0 | 56.3/68.9 | 192.2/235.0 | 056 | 056 | 056 | 056 |
| | 460-3-60 | STD | 282A00 | 25.0 | 23.0 | 78.3 | - | - | - | - |
| | | | 283A00 | 50.0 | 45.9 | 156.7 | 057 | 057 | 057 | 057 |
| | | | 284A00 | 75.0 | 68.9 | 235.0 | 057 | 057 | 057 | 057 |
| | | MED | 282A00 | 25.0 | 23.0 | 78.3 | - | - | - | - |
| | | | 283A00 | 50.0 | 45.9 | 156.7 | 057 | 057 | 057 | 057 |
| | | | 284A00 | 75.0 | 68.9 | 235.0 | 057 | 057 | 057 | 057 |
| | | HIGH- High Eff. | 282A00 | 25.0 | 23.0 | 78.3 | - | - | - | - |
| | | | 283A00 | 50.0 | 45.9 | 156.7 | 057 | 057 | 057 | 057 |
| | | | 284A00 | 75.0 | 68.9 | 235.0 | 057 | 057 | 057 | 057 |
| | 575-3-60 | STD | 285A00 | 24.8 | 22.8 | 77.7 | - | - | - | - |
| | | | 286A00 | 49.6 | 45.6 | 155.4 | - | - | - | 057 |
| | | | 287A00 | 74.4 | 68.3 | 233.1 | 057 | 057 | 057 | 057 |
| | | MED | 285A00 | 24.8 | 22.8 | 77.7 | - | - | - | - |
| | | | 286A00 | 49.6 | 45.6 | 155.4 | - | 057 | - | 057 |
| | | | 287A00 | 74.4 | 68.3 | 233.1 | 057 | 057 | 057 | 057 |
| | | HIGH- High Eff. | 285A00 | 24.8 | 22.8 | 77.7 | - | - | - | - |
| | | | 286A00 | 49.6 | 45.6 | 155.4 | - | 057 | 057 | 057 |
| | | | 287A00 | 74.4 | 68.3 | 233.1 | 057 | 057 | 057 | 057 |

See: "Legend and Notes" on page 42

ELECTRIC HEAT - ELECTRICAL INFORMATION cont.

Table 20 – 558J*24

2-SPEED INDOOR FAN MOTOR

| Model Number 558J* | NOM. V-Ph-Hz | IFM TYPE | Electric Heater Part Number CRHEATERXXXXXX | Nominal (kW) | Application (kW) | Application Output (MBH) | Single Point or Junction Kit Part Number CRSINGLEXXXXA00 | | | |
|-----------------------|-----------------|--------------------|--|-----------------|---------------------|-----------------------------|--|------------------------------|-------------|------------------------------|
| | | | | | | | NO C.O. Or Unpowered C.O. | | w/PWRD C.O. | |
| | | | | | | | NO P.E. | w/ P.E. (pwrd fr/unit) | NO P.E. | w/ P.E. (pwrd fr/unit) |
| 24 | 208/203-3-60 | STD | 279A00 | 25.0 | 18.8/23.0 | 64.1/78.3 | 056 | 056 | 056 | 056 |
| | | | 280A00 | 50.0 | 37.6/45.9 | 128.1/156.7 | 056 | 056 | 056 | 056 |
| | | | 281A00 | 75.0 | 56.3/68.9 | 192.2/235.0 | 056 | 056 | 056 | 056 |
| | | MED- High Eff. | 279A00 | 25.0 | 18.8/23.0 | 64.1/78.3 | 056 | 056 | 056 | 056 |
| | | | 280A00 | 50.0 | 37.6/45.9 | 128.1/156.7 | 056 | 056 | 056 | 056 |
| | | | 281A00 | 75.0 | 56.3/68.9 | 192.2/235.0 | 056 | 056 | 056 | 056 |
| | | HIGH- High Eff. | 279A00 | 25.0 | 18.8/23.0 | 64.1/78.3 | 056 | 056 | 056 | 056 |
| | | | 280A00 | 50.0 | 37.6/45.9 | 128.1/156.7 | 056 | 056 | 056 | 056 |
| | | | 281A00 | 75.0 | 56.3/68.9 | 192.2/235.0 | 056 | 056 | 056 | 056 |
| | 460-3-60 | STD | 282A00 | 25.0 | 23.0 | 78.3 | - | - | - | - |
| | | | 283A00 | 50.0 | 45.9 | 156.7 | 057 | 057 | 057 | 057 |
| | | | 284A00 | 75.0 | 68.9 | 235.0 | 057 | 057 | 057 | 057 |
| | | MED- High Eff. | 282A00 | 25.0 | 23.0 | 78.3 | - | - | - | - |
| | | | 283A00 | 50.0 | 45.9 | 156.7 | 057 | 057 | 057 | 057 |
| | | | 284A00 | 75.0 | 68.9 | 235.0 | 057 | 057 | 057 | 057 |
| | | HIGH- High Eff. | 282A00 | 25.0 | 23.0 | 78.3 | - | 057 | - | 057 |
| | | | 283A00 | 50.0 | 45.9 | 156.7 | 057 | 057 | 057 | 057 |
| | | | 284A00 | 75.0 | 68.9 | 235.0 | 057 | 057 | 057 | 057 |
| | 575-3-60 | STD | 285A00 | 24.8 | 22.8 | 77.7 | - | - | - | - |
| | | | 286A00 | 49.6 | 45.6 | 155.4 | - | 057 | - | 057 |
| | | | 287A00 | 74.4 | 68.3 | 233.1 | 057 | 057 | 057 | 057 |
| | | MED- High Eff. | 285A00 | 24.8 | 22.8 | 77.7 | - | - | - | - |
| | | | 286A00 | 49.6 | 45.6 | 155.4 | - | 057 | 057 | 057 |
| | | | 287A00 | 74.4 | 68.3 | 233.1 | 057 | 057 | 057 | 057 |
| | | HIGH- High Eff. | 285A00 | 24.8 | 22.8 | 77.7 | - | - | - | - |
| | | | 286A00 | 49.6 | 45.6 | 155.4 | 057 | 057 | 057 | 057 |
| | | | 287A00 | 74.4 | 68.3 | 233.1 | 057 | 057 | 057 | 057 |

See: "Legend and Notes" on page 42

ELECTRIC HEAT - ELECTRICAL INFORMATION cont.

Table 21 – 558J*28

2-SPEED INDOOR FAN MOTOR

| Model Number 558J* | NOM. V-Ph-Hz | IFM TYPE | Electric Heater Part Number CRHEATERXXXXXX | Nominal (kW) | Application (kW) | Application Output (MBH) | Single Point or Junction Kit Part Number CRSINGLEXXXXA00 | | | |
|-----------------------|-----------------|--------------------|--|-----------------|---------------------|-----------------------------|--|------------------------------|-------------|------------------------------|
| | | | | | | | NO C.O. Or Unpowered C.O. | | w/PWRD C.O. | |
| | | | | | | | NO P.E. | w/ P.E. (pwrd fr/unit) | NO P.E. | w/ P.E. (pwrd fr/unit) |
| 28 | 208/230-3-60 | STD | 279A00 | 25.0 | 18.8/23.0 | 64.1/78.3 | 056 | 056 | 056 | 056 |
| | | | 280A00 | 50.0 | 37.6/45.9 | 128.1/156.7 | 056 | 056 | 056 | 056 |
| | | | 281A00 | 75.0 | 56.3/68.9 | 192.2/235.0 | 056 | 056 | 056 | 056 |
| | | MED- High Eff. | 279A00 | 25.0 | 18.8/23.0 | 64.1/78.3 | 056 | 056 | 056 | 056 |
| | | | 280A00 | 50.0 | 37.6/45.9 | 128.1/156.7 | 056 | 056 | 056 | 056 |
| | | | 281A00 | 75.0 | 56.3/68.9 | 192.2/235.0 | 056 | 056 | 056 | 056 |
| | | HIGH- High Eff. | 279A00 | 25.0 | 18.8/23.0 | 64.1/78.3 | 056 | 056 | 056 | 056 |
| | | | 280A00 | 50.0 | 37.6/45.9 | 128.1/156.7 | 056 | 056 | 056 | 056 |
| | | | 281A00 | 75.0 | 56.3/68.9 | 192.2/235.0 | 056 | 056 | 056 | 056 |
| | 460-3-60 | STD | 282A00 | 25.0 | 23.0 | 78.3 | - | - | - | - |
| | | | 283A00 | 50.0 | 45.9 | 156.7 | 057 | 057 | 057 | 057 |
| | | | 284A00 | 75.0 | 68.9 | 235.0 | 057 | 057 | 057 | 057 |
| | | MED- High Eff. | 282A00 | 25.0 | 23.0 | 78.3 | - | - | - | 057 |
| | | | 283A00 | 50.0 | 45.9 | 156.7 | 057 | 057 | 057 | 057 |
| | | | 284A00 | 75.0 | 68.9 | 235.0 | 057 | 057 | 057 | 057 |
| | | HIGH- High Eff. | 282A00 | 25.0 | 23.0 | 78.3 | - | 057 | 057 | 057 |
| | | | 283A00 | 50.0 | 45.9 | 156.7 | 057 | 057 | 057 | 057 |
| | | | 284A00 | 75.0 | 68.9 | 235.0 | 057 | 057 | 057 | 057 |
| | 575-3-60 | STD | 285A00 | 24.8 | 22.8 | 77.7 | - | - | - | - |
| | | | 286A00 | 49.6 | 45.6 | 155.4 | - | 057 | - | 057 |
| | | | 287A00 | 74.4 | 68.3 | 233.1 | 057 | 057 | 057 | 057 |
| | | MED- High Eff. | 285A00 | 24.8 | 22.8 | 77.7 | - | - | - | - |
| | | | 286A00 | 49.6 | 45.6 | 155.4 | - | 057 | 057 | 057 |
| | | | 287A00 | 74.4 | 68.3 | 233.1 | 057 | 057 | 057 | 057 |
| | | HIGH- High Eff. | 285A00 | 24.8 | 22.8 | 77.7 | - | - | - | - |
| | | | 286A00 | 49.6 | 45.6 | 155.4 | 057 | 057 | 057 | 057 |
| | | | 287A00 | 74.4 | 68.3 | 233.1 | 057 | 057 | 057 | 057 |

See: "Legend and Notes" on page 42

ELECTRIC HEAT - ELECTRICAL INFORMATION cont.

Table 22 – 558J*30

2-SPEED INDOOR FAN MOTOR

| Model Number 558J* | NOM. V-Ph-Hz | IFM TYPE | Electric Heater Part Number CRHEATERXXXXXX | Nominal (kW) | Application (kW) | Application Output (MBH) | Single Point or Junction Kit Part Number CRSINGLEXXXXA00 | | | |
|-----------------------|-----------------|--------------------|--|-----------------|---------------------|-----------------------------|--|------------------------------|-------------|------------------------------|
| | | | | | | | NO C.O. or Un- powered C.O. | | w/PWRD C.O. | |
| | | | | | | | NO P.E. | w/ P.E. (pwrd fr/unit) | NO P.E. | w/ P.E. (pwrd fr/unit) |
| 30 | 208/230-3-60 | STD | 279A00 | 25.0 | 18.8/23.0 | 64.1/78.3 | 056 | 056 | 056 | 056 |
| | | | 280A00 | 50.0 | 37.6/45.9 | 128.1/156.7 | 056 | 056 | 056 | 056 |
| | | | 281A00 | 75.0 | 56.3/68.9 | 192.2/235.0 | 056 | 056 | 056 | 056 |
| | | MED- High Eff. | 279A00 | 25.0 | 18.8/23.0 | 64.1/78.3 | 056 | 056 | 056 | 056 |
| | | | 280A00 | 50.0 | 37.6/45.9 | 128.1/156.7 | 056 | 056 | 056 | 056 |
| | | | 281A00 | 75.0 | 56.3/68.9 | 192.2/235.0 | 056 | 056 | 056 | 056 |
| | | HIGH- High Eff. | 279A00 | 25.0 | 18.8/23.0 | 64.1/78.3 | 056 | 056 | 056 | 056 |
| | | | 280A00 | 50.0 | 37.6/45.9 | 128.1/156.7 | 056 | 056 | 056 | 056 |
| | | | 281A00 | 75.0 | 56.3/68.9 | 192.2/235.0 | 056 | 056 | 056 | 056 |
| | 460-3-60 | STD | 282A00 | 25.0 | 23.0 | 78.3 | 057 | 057 | 057 | 057 |
| | | | 283A00 | 50.0 | 45.9 | 156.7 | 057 | 057 | 057 | 057 |
| | | | 284A00 | 75.0 | 68.9 | 235.0 | 057 | 057 | 057 | 057 |
| | | MED- High Eff. | 282A00 | 25.0 | 23.0 | 78.3 | 057 | 057 | 057 | 057 |
| | | | 283A00 | 50.0 | 45.9 | 156.7 | 057 | 057 | 057 | 057 |
| | | | 284A00 | 75.0 | 68.9 | 235.0 | 057 | 057 | 057 | 057 |
| | | HIGH- High Eff. | 282A00 | 25.0 | 23.0 | 78.3 | 057 | 057 | 057 | 057 |
| | | | 283A00 | 50.0 | 45.9 | 156.7 | 057 | 057 | 057 | 057 |
| | | | 284A00 | 75.0 | 68.9 | 235.0 | 057 | 057 | 057 | 057 |
| | 575-3-60 | STD | 285A00 | 24.8 | 22.8 | 77.7 | - | 057 | - | 057 |
| | | | 286A00 | 49.6 | 45.6 | 155.4 | - | 057 | 057 | 057 |
| | | | 287A00 | 74.4 | 68.3 | 233.1 | 057 | 057 | 057 | 057 |
| | | MED- High Eff. | 285A00 | 24.8 | 22.8 | 77.7 | - | 057 | - | 057 |
| | | | 286A00 | 49.6 | 45.6 | 155.4 | 057 | 057 | 057 | 057 |
| | | | 287A00 | 74.4 | 68.3 | 233.1 | 057 | 057 | 057 | 057 |
| | | HIGH- High Eff. | 285A00 | 24.8 | 22.8 | 77.7 | 057 | 057 | 057 | 057 |
| | | | 286A00 | 49.6 | 45.6 | 155.4 | 057 | 057 | 057 | 057 |
| | | | 287A00 | 74.4 | 68.3 | 233.1 | 057 | 057 | 057 | 057 |

See: "Legend and Notes" on page 42

ELECTRICAL INFORMATION cont.

Table 23 – Unit Wire/Fuse or HACR Breaker Sizing Data with Single Speed Indoor Fan Motor

| UNIT | IFM TYPE | ELEC. HTR | | | | NO C.O. or UNPWR C.O. | | | | w/ PWRD C.O. | | | | | | | | |
|----------|----------|---------------|-----------|-------------|---------|-----------------------|------------------------|---------|---------|-----------------------|------------------------|---------|---------|-----------------------|-------------|---------|---------|---------|
| | | CRHEATER***** | Nom (kW) | FLA | NO P.E. | | w/ P.E. (pwrd fr/unit) | | NO P.E. | | w/ P.E. (pwrd fr/unit) | | | | | | | |
| | | | | | MCA | MAX FUSE OF HACR BRKR | FLA | LRA | MCA | MAX FUSE OF HACR BRKR | FLA | LRA | MCA | MAX FUSE OF HACR BRKR | FLA | LRA | | |
| 558J*17 | STD | NONE | – | – | 83/83 | 501 | 91.8/91.7 | 100/100 | 97/97 | 521 | 84.8/84.7 | 100/100 | 89/89 | 506 | 96.6/96.5 | 125/125 | 102/102 | 526 |
| | | 279A00 | 18.8/25.0 | 52.1/60.1 | 83/83 | 501/501 | 91.8/100.3 | 100/110 | 97/97 | 521/521 | 84.8/91.5 | 100/100 | 89/89 | 508/506 | 96.6/106.3 | 125/125 | 102/102 | 526/526 |
| | | 280A00 | 37.6/50.0 | 104.2/120.3 | 129/148 | 501/501 | 155.5/145.4 | 175/175 | 149/161 | 521/521 | 146.8/136.7 | 150/150 | 135/153 | 508/506 | 161.5/151.4 | 175/175 | 149/167 | 526/526 |
| | | 281A00 | 56.3/75.0 | 156.4/180.4 | 190/217 | 501/501 | 181.7/205.5 | 200/225 | 203/231 | 521/521 | 172.9/196.8 | 200/225 | 195/223 | 508/506 | 187.7/211.5 | 200/225 | 209/236 | 526/526 |
| | MED | NONE | – | – | 86 | 515 | 94.0 | 110 | 99 | 535 | 87.0 | 100 | 91 | 520 | 98.8 | 125 | 105 | 540 |
| | | 279A00 | 18.8/25.0 | 52.1/60.1 | 86/86 | 515/515 | 94.0/103.1 | 110/110 | 99/99 | 535/535 | 87.0/94.4 | 100/100 | 91/91 | 520/520 | 99.1/109.1 | 125/125 | 105/105 | 540/540 |
| | | 280A00 | 37.6/50.0 | 104.2/120.3 | 132/151 | 515/515 | 158.3/148.3 | 175/175 | 146/164 | 535/535 | 149.5/139.6 | 150/150 | 138/156 | 520/520 | 164.3/154.3 | 175/175 | 151/170 | 540/540 |
| | | 281A00 | 56.3/75.0 | 156.4/180.4 | 192/220 | 515/515 | 184.4/208.4 | 200/225 | 206/233 | 535/535 | 175.7/199.7 | 200/225 | 198/225 | 520/520 | 190.4/214.4 | 200/225 | 211/239 | 540/540 |
| | HIGH | NONE | – | – | 89/88 | 517 | 97.0/96.1 | 125/125 | 103/102 | 537 | 90.0/89.1 | 100/100 | 95/94 | 522 | 101.8/100.9 | 125/125 | 108/107 | 542 |
| | | 279A00 | 18.8/25.0 | 52.1/60.1 | 89/88 | 517/517 | 97.0/105.8 | 125/125 | 103/102 | 537/537 | 90.0/99.1 | 100/100 | 95/94 | 522/522 | 102.9/111.8 | 125/125 | 108/107 | 542/542 |
| | | 280A00 | 37.6/50.0 | 104.2/120.3 | 135/153 | 517/517 | 162.0/150.9 | 175/175 | 149/167 | 537/537 | 153.3/142.2 | 175/175 | 141/158 | 522/522 | 168.0/156.9 | 175/175 | 155/172 | 542/542 |
| | | 281A00 | 56.3/75.0 | 156.4/180.4 | 196/222 | 517/517 | 188.2/211.0 | 200/225 | 209/236 | 537/537 | 179.4/202.3 | 200/225 | 201/228 | 522/522 | 194.2/217.0 | 200/250 | 215/241 | 542/542 |
| 460-3-60 | STD | 25 | 30.1 | 44 | 251 | 48.7 | 60 | 51 | 263 | 44.7 | 60 | 47 | 253 | 50.9 | 60 | 54 | 265 | |
| | 282A00 | 25 | 30.1 | 44 | 251 | 50.6 | 60 | 51 | 263 | 45.6 | 60 | 47 | 253 | 53.4 | 60 | 54 | 265 | |
| | 283A00 | 50 | 60.1 | 74 | 251 | 73.1 | 80 | 81 | 263 | 68.1 | 80 | 76 | 253 | 75.9 | 80 | 84 | 265 | |
| | 284A00 | 75 | 90.2 | 109 | 251 | 103.2 | 110 | 116 | 263 | 98.2 | 100 | 111 | 253 | 106 | 110 | 118 | 265 | |
| MED | NONE | – | – | 45 | 258 | 49.8 | 60 | 52 | 270 | 45.8 | 60 | 48 | 260 | 52.0 | 60 | 55 | 272 | |
| | 282A00 | 25 | 30.1 | 45 | 258 | 52 | 60 | 52 | 270 | 47 | 60 | 48 | 260 | 54.8 | 60 | 55 | 272 | |
| | 283A00 | 50 | 60.1 | 75 | 258 | 74.5 | 80 | 82 | 270 | 69.5 | 80 | 78 | 260 | 77.2 | 80 | 85 | 272 | |
| | 284A00 | 75 | 90.2 | 110 | 258 | 104.6 | 110 | 117 | 270 | 99.6 | 110 | 112 | 260 | 107.3 | 125 | 119 | 272 | |
| HIGH | NONE | – | – | 47 | 259 | 50.9 | 60 | 54 | 271 | 46.9 | 60 | 49 | 261 | 53.1 | 60 | 56 | 273 | |
| | 282A00 | 25 | 30.1 | 47 | 259 | 53.4 | 60 | 54 | 271 | 48.4 | 60 | 49 | 261 | 56.1 | 60 | 56 | 273 | |
| | 283A00 | 50 | 60.1 | 76 | 259 | 75.9 | 80 | 84 | 271 | 70.9 | 80 | 79 | 261 | 78.6 | 80 | 86 | 273 | |
| | 284A00 | 75 | 90.2 | 111 | 259 | 106 | 125 | 118 | 271 | 101 | 110 | 114 | 261 | 108.7 | 125 | 121 | 273 | |
| 575-3-60 | STD | – | – | 33 | 188 | 36.9 | 45 | 39 | 196 | 33.8 | 45 | 35 | 190 | 38.6 | 50 | 41 | 198 | |
| | 285A00 | 24.8 | 23.9 | 33 | 188 | 39.4 | 45 | 39 | 196 | 35.5 | 45 | 35 | 190 | 41.5 | 50 | 41 | 198 | |
| | 286A00 | 49.6 | 47.7 | 58 | 188 | 69.1 | 70 | 64 | 196 | 65.3 | 70 | 60 | 190 | 71.3 | 80 | 66 | 198 | |
| | 287A00 | 74.4 | 71.6 | 86 | 188 | 81.1 | 90 | 91 | 196 | 77.2 | 80 | 88 | 190 | 83.2 | 90 | 93 | 198 | |
| MED | NONE | – | – | 33 | 188 | 36.9 | 45 | 39 | 196 | 33.8 | 45 | 35 | 190 | 38.6 | 50 | 41 | 198 | |
| | 285A00 | 24.8 | 23.9 | 33 | 188 | 39.4 | 45 | 39 | 196 | 35.5 | 45 | 35 | 190 | 41.5 | 50 | 41 | 198 | |
| | 286A00 | 49.6 | 47.7 | 58 | 188 | 69.1 | 70 | 64 | 196 | 65.3 | 70 | 60 | 190 | 71.3 | 80 | 66 | 198 | |
| | 287A00 | 74.4 | 71.6 | 86 | 188 | 81.1 | 90 | 91 | 196 | 77.2 | 80 | 88 | 190 | 83.2 | 90 | 93 | 198 | |
| HIGH | NONE | – | – | 37 | 202 | 39.7 | 50 | 42 | 210 | 36.6 | 45 | 39 | 204 | 41.4 | 50 | 44 | 212 | |
| | 285A00 | 24.8 | 23.9 | 37 | 202 | 42.9 | 50 | 42 | 210 | 39 | 45 | 39 | 204 | 45 | 50 | 44 | 212 | |
| | 286A00 | 49.6 | 47.7 | 61 | 202 | 72.6 | 80 | 67 | 210 | 68.8 | 70 | 63 | 204 | 74.8 | 80 | 69 | 212 | |
| | 287A00 | 74.4 | 71.6 | 89 | 202 | 84.6 | 90 | 94 | 210 | 80.7 | 90 | 91 | 204 | 86.7 | 90 | 96 | 212 | |

See: "Legend and Notes" on page 42

ELECTRICAL INFORMATION cont.

Table 23 - Unit Wire/Fuse or HACR Breaker Sizing Data with Single Speed Indoor Fan Motor (cont)

| UNIT | NO M, V-Ph-HZ | ELEC. HTR | | | NO P.E. | | | NO C.O. or UNPWR C.O. | | | w/ PE. (pwrld fr/unit) | | | NO P.E. | | | w/ PWRD C.O. | | | w/ PE. (pwrld fr/unit) | | | |
|--------------|---------------|------------------|---------------|-----------|-------------|-------------|------------------|-----------------------|-------------|-------------|------------------------|------------------|---------|-------------|-------------|-------------|------------------|---------|-------------|------------------------|------------------|---------|---------|
| | | IFM TYPE | CRHEATER***** | Nom (kW) | FLA | MCA | MAX FUSE or BRKR | FLA | LRA | MCA | MCA | MAX FUSE or BRKR | FLA | LRA | MCA | MCA | MAX FUSE or BRKR | FLA | LRA | MCA | MAX FUSE or BRKR | FLA | LRA |
| 558&20 | | STD | NONE | - | - | 100 | 86 | 515 | 94.0 | 94.0 | 110 | 99 | 535 | 87.0 | 87.0 | 100 | 91 | 520 | 98.8 | 98.8 | 125 | 105 | 540 |
| | | | 279A00 | 18.8/25.0 | 52.1/60.1 | 82.2/88.4 | 100/100 | 86/86 | 515/515 | 94.0/103.1 | 94.0/103.1 | 110/110 | 99/99 | 535/535 | 87.0/94.4 | 87.0/94.4 | 100/100 | 91/91 | 520/520 | 99.1/109.1 | 99.1/109.1 | 125/125 | 105/105 |
| 208/230-3-60 | | MED | 280A00 | 37.6/50.0 | 104.2/120.3 | 143.5/133.6 | 132/151 | 515/515 | 158.3/148.3 | 158.3/148.3 | 175/175 | 146/164 | 535/535 | 149.5/139.6 | 149.5/139.6 | 150/150 | 138/156 | 520/520 | 164.3/154.3 | 164.3/154.3 | 175/175 | 151/170 | 540/540 |
| | | | 281A00 | 56.3/75.0 | 156.4/180.4 | 169.7/193.7 | 200/225 | 192/220 | 515/515 | 184.4/208.4 | 184.4/208.4 | 200/225 | 206/233 | 535/535 | 175.7/199.7 | 175.7/199.7 | 200/225 | 198/225 | 520/520 | 190.4/214.4 | 190.4/214.4 | 200/225 | 211/239 |
| 208/230-3-60 | | HIGH - High Eff. | NONE | - | - | 100/100 | 89/88 | 517 | 97.0/96.1 | 97.0/96.1 | 125/125 | 103/102 | 537 | 90.0/89.1 | 90.0/89.1 | 100/100 | 95/94 | 522 | 101.8/100.9 | 101.8/100.9 | 125/125 | 108/107 | 542 |
| | | | 279A00 | 18.8/25.0 | 52.1/60.1 | 85.2/91.0 | 100/100 | 89/88 | 517/517 | 97.0/105.8 | 97.0/105.8 | 125/125 | 103/102 | 537/537 | 90.0/97.0 | 90.0/97.0 | 100/100 | 95/94 | 522/522 | 102.9/111.8 | 102.9/111.8 | 125/125 | 108/107 |
| 460-3-60 | | MED | 280A00 | 37.6/50.0 | 104.2/120.3 | 147.3/136.2 | 135/153 | 517/517 | 162.0/150.9 | 162.0/150.9 | 175/175 | 149/167 | 537/537 | 153.3/142.2 | 153.3/142.2 | 175/175 | 141/158 | 522/522 | 168.0/156.9 | 168.0/156.9 | 175/175 | 155/172 | 542/542 |
| | | | 281A00 | 56.3/75.0 | 156.4/180.4 | 173.4/196.3 | 200/225 | 196/222 | 517/517 | 188.2/211.0 | 188.2/211.0 | 200/225 | 209/236 | 537/537 | 179.4/202.3 | 179.4/202.3 | 200/225 | 201/228 | 522/522 | 194.2/217.0 | 194.2/217.0 | 200/250 | 215/241 |
| 575-3-60 | | STD | NONE | - | - | 100 | 93 | 513 | 100.5 | 100.5 | 125 | 107 | 533 | 93.5 | 93.5 | 110 | 99 | 518 | 105.3 | 105.3 | 125 | 112 | 538 |
| | | | 279A00 | 18.8/25.0 | 52.1/60.1 | 88.7/96.5 | 100/100 | 93/93 | 513/513 | 101.3/111.3 | 101.3/111.3 | 125/125 | 107/107 | 533/533 | 93.5/102.5 | 93.5/102.5 | 110/110 | 99/99 | 518/518 | 107.3/117.3 | 107.3/117.3 | 125/125 | 112/112 |
| 575-3-60 | | MED | 280A00 | 37.6/50.0 | 104.2/120.3 | 151.6/141.7 | 139/158 | 513/513 | 166.4/156.4 | 166.4/156.4 | 175/175 | 159/172 | 533/533 | 157.6/147.7 | 157.6/147.7 | 175/175 | 145/164 | 518/518 | 172.4/162.4 | 172.4/162.4 | 175/175 | 159/177 | 538/538 |
| | | | 281A00 | 56.3/75.0 | 156.4/180.4 | 177.8/201.8 | 200/225 | 200/227 | 513/513 | 192.5/216.5 | 192.5/216.5 | 200/250 | 213/241 | 533/533 | 183.8/207.8 | 183.8/207.8 | 200/225 | 205/233 | 518/518 | 198.5/222.5 | 198.5/222.5 | 200/250 | 219/246 |
| 575-3-60 | | HIGH - High Eff. | NONE | - | - | 60 | 45 | 258 | 49.8 | 49.8 | 60 | 52 | 270 | 45.8 | 45.8 | 60 | 48 | 260 | 52.0 | 52.0 | 60 | 55 | 272 |
| | | | 282A00 | 25 | 30.1 | 44.3 | 60 | 45 | 258 | 52 | 52 | 60 | 52 | 270 | 47 | 47 | 60 | 48 | 260 | 54.8 | 54.8 | 60 | 55 |
| 575-3-60 | | MED | 283A00 | 50 | 60.1 | 66.7 | 75 | 258 | 74.5 | 74.5 | 80 | 82 | 270 | 69.5 | 69.5 | 80 | 78 | 260 | 77.2 | 77.2 | 80 | 85 | 272 |
| | | | 284A00 | 75 | 90.2 | 96.8 | 100 | 110 | 258 | 104.6 | 104.6 | 110 | 117 | 270 | 99.6 | 99.6 | 110 | 112 | 260 | 107.3 | 107.3 | 125 | 125 |
| 575-3-60 | | HIGH - High Eff. | NONE | - | - | 60 | 47 | 259 | 50.9 | 50.9 | 60 | 54 | 271 | 46.9 | 46.9 | 60 | 49 | 261 | 53.1 | 53.1 | 60 | 56 | 273 |
| | | | 282A00 | 25 | 30.1 | 45.6 | 60 | 47 | 259 | 53.4 | 53.4 | 60 | 54 | 271 | 48.4 | 48.4 | 60 | 49 | 261 | 56.1 | 56.1 | 60 | 56 |
| 575-3-60 | | STD | 283A00 | 50 | 60.1 | 70.9 | 76 | 259 | 75.9 | 75.9 | 80 | 84 | 271 | 70.9 | 70.9 | 80 | 79 | 261 | 78.6 | 78.6 | 80 | 86 | 273 |
| | | | 284A00 | 75 | 90.2 | 98.2 | 100 | 111 | 259 | 106 | 106 | 125 | 118 | 271 | 101 | 101 | 110 | 114 | 261 | 108.7 | 108.7 | 125 | 121 |
| 575-3-60 | | MED | NONE | - | - | 40 | 33 | 188 | 36.9 | 36.9 | 45 | 39 | 196 | 33.8 | 33.8 | 45 | 35 | 190 | 38.6 | 38.6 | 50 | 41 | 198 |
| | | | 285A00 | 24.8 | 23.9 | 33.4 | 40 | 33 | 188 | 39.4 | 39.4 | 45 | 39 | 196 | 35.5 | 35.5 | 45 | 35 | 190 | 41.5 | 41.5 | 50 | 41 |
| 575-3-60 | | HIGH - High Eff. | 286A00 | 49.6 | 47.7 | 63.1 | 58 | 188 | 69.1 | 69.1 | 70 | 64 | 196 | 65.3 | 65.3 | 70 | 60 | 190 | 71.3 | 71.3 | 80 | 66 | 198 |
| | | | 287A00 | 74.4 | 71.6 | 75.1 | 80 | 86 | 188 | 81.1 | 81.1 | 90 | 91 | 196 | 77.2 | 77.2 | 80 | 88 | 190 | 83.2 | 83.2 | 90 | 93 |
| 575-3-60 | | STD | NONE | - | - | 45 | 37 | 202 | 39.7 | 39.7 | 50 | 42 | 210 | 36.6 | 36.6 | 45 | 39 | 204 | 41.4 | 41.4 | 50 | 44 | 212 |
| | | | 285A00 | 24.8 | 23.9 | 36.9 | 45 | 37 | 202 | 42.9 | 42.9 | 50 | 42 | 210 | 39 | 39 | 45 | 39 | 204 | 45 | 45 | 50 | 44 |
| 575-3-60 | | MED | 286A00 | 49.6 | 47.7 | 66.6 | 70 | 202 | 72.6 | 72.6 | 80 | 67 | 210 | 68.8 | 68.8 | 70 | 63 | 204 | 74.8 | 74.8 | 80 | 69 | 212 |
| | | | 287A00 | 74.4 | 71.6 | 78.6 | 90 | 89 | 202 | 84.6 | 84.6 | 90 | 94 | 210 | 80.7 | 80.7 | 90 | 91 | 204 | 86.7 | 86.7 | 90 | 96 |
| 575-3-60 | | HIGH - High Eff. | NONE | - | - | 45 | 39 | 200 | 41.7 | 41.7 | 50 | 44 | 208 | 38.6 | 38.6 | 50 | 41 | 202 | 43.4 | 43.4 | 50 | 46 | 210 |
| | | | 285A00 | 24.8 | 23.9 | 39.4 | 45 | 39 | 200 | 45.4 | 45.4 | 50 | 44 | 208 | 41.5 | 41.5 | 50 | 41 | 202 | 47.5 | 47.5 | 50 | 46 |
| 575-3-60 | | HIGH - High Eff. | 286A00 | 49.6 | 47.7 | 69.1 | 64 | 200 | 75.1 | 75.1 | 80 | 69 | 208 | 71.3 | 71.3 | 80 | 66 | 202 | 77.3 | 77.3 | 80 | 71 | 210 |
| | | | 287A00 | 74.4 | 71.6 | 81.1 | 90 | 91 | 200 | 87.1 | 87.1 | 90 | 97 | 208 | 83.2 | 83.2 | 90 | 93 | 202 | 89.2 | 89.2 | 90 | 99 |

See: "Legend and Notes" on page 42

ELECTRICAL INFORMATION cont.

Table 23 - Unit Wire/Fuse or HACR Breaker Sizing Data with Single Speed Indoor Fan Motor (cont)

| UNIT | NO M. V-PH-HZ | ELEC. HTR | | | | NO C.O. or UNPWR C.O. | | | | | | | | w/ PWRD C.O. | | | | | | | |
|--------------------------|---------------|---------------|-----------|-------------|-------------|-----------------------|---------|------------|-----------------------|-----------------------|-------------|------------|---------|-----------------------|-------------|------------|-----------------------|-----------------------|-----|------------|--|
| | | CRHEATER***** | Nom (kW) | FLA | NO PE. | | | | w/ PE. (pwrd fr/unit) | | | | NO PE. | | | | w/ PE. (pwrd fr/unit) | | | | |
| | | | | | 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 | |
| STD | | NONE | - | - | 109.2/108.3 | 150/150 | 112/111 | 540 | 125/124 | 560 | 114.0/113.1 | 150/150 | 117/116 | 545 | 125.8/124.9 | 150/150 | 131/130 | 565 | | | |
| | | 279A00 | 18.8/25.0 | 52.1/60.1 | 109.2/108.3 | 150/150 | 112/111 | 540/540 | 125/124 | 560/560 | 114.0/113.1 | 150/150 | 117/116 | 545/545 | 125.5/124.9 | 150/150 | 131/130 | 565/565 | | | |
| | | 280A00 | 37.6/50.0 | 104.2/120.3 | 147.3/136.2 | 150/150 | 135/153 | 540/540 | 149/167 | 560/560 | 153.3/142.2 | 175/175 | 141/158 | 545/545 | 168.0/156.9 | 175/175 | 155/172 | 565/565 | | | |
| | | 281A00 | 56.3/75.0 | 156.4/180.4 | 173.4/196.3 | 200/225 | 196/222 | 540/540 | 209/236 | 560/560 | 179.4/202.3 | 200/225 | 201/228 | 545/545 | 194.2/17.0 | 200/250 | 215/241 | 565/565 | | | |
| MED - High Eff. | 208/230-3-60 | NONE | - | - | 112.7 | 150 | 116 | 536 | 129 | 556 | 117.5 | 150 | 121 | 541 | 129.3 | 175 | 135 | 561 | | | |
| | | 279A00 | 18.8/25.0 | 52.1/60.1 | 112.7/112.7 | 150/150 | 116/116 | 536/536 | 129/129 | 556/556 | 117.5/117.5 | 150/150 | 121/121 | 541/541 | 129.3/129.3 | 175/175 | 135/135 | 561/561 | | | |
| | | 280A00 | 37.6/50.0 | 104.2/120.3 | 151.6/141.7 | 175/175 | 139/158 | 536/536 | 153/172 | 556/556 | 157.6/147.7 | 175/175 | 145/164 | 541/541 | 172.4/162.4 | 175/175 | 159/177 | 561/561 | | | |
| | | 281A00 | 56.3/75.0 | 156.4/180.4 | 177.8/201.8 | 200/225 | 200/227 | 536/536 | 213/241 | 556/556 | 183.8/207.8 | 200/225 | 205/233 | 541/541 | 196.5/222.5 | 200/250 | 219/246 | 561/561 | | | |
| HIGH | 460-3-60 | NONE | - | - | 124.1 | 150 | 129 | 615 | 142 | 635 | 128.9 | 175 | 134 | 620 | 140.7 | 175 | 148 | 640 | | | |
| | | 279A00 | 18.8/25.0 | 52.1/60.1 | 124.1/124.1 | 150/150 | 129/129 | 615/615 | 142/142 | 635/635 | 128.9/128.9 | 175/175 | 134/134 | 620/620 | 140.7/140.7 | 175/175 | 148/148 | 640/640 | | | |
| | | 280A00 | 37.6/50.0 | 104.2/120.3 | 165.9/155.9 | 175/175 | 153/171 | 615/615 | 166/185 | 635/635 | 171.9/161.9 | 175/175 | 158/177 | 620/620 | 186.6/176.7 | 200/200 | 172/190 | 640/640 | | | |
| | | 281A00 | 56.3/75.0 | 156.4/180.4 | 192.0/216.0 | 200/250 | 213/240 | 615/615 | 226/254 | 635/635 | 198.0/222.0 | 225/250 | 218/246 | 620/620 | 212.8/236.8 | 225/250 | 232/259 | 640/640 | | | |
| STD | | NONE | - | - | 48.0 | 60 | 50 | 272 | 57 | 284 | 50.2 | 60 | 52 | 274 | 56.4 | 70 | 59 | 286 | | | |
| | | 282A00 | 25 | 30.1 | 48 | 60 | 50 | 272 | 57 | 284 | 50.2 | 60 | 52 | 274 | 56.4 | 70 | 59 | 286 | | | |
| | | 283A00 | 50 | 60.1 | 68.1 | 80 | 76 | 272 | 84 | 284 | 70.9 | 80 | 79 | 274 | 78.6 | 80 | 86 | 286 | | | |
| | | 284A00 | 75 | 90.2 | 98.2 | 100 | 111 | 272 | 118 | 284 | 101 | 110 | 114 | 274 | 108.7 | 125 | 121 | 286 | | | |
| MED - High Eff. | 558/1*24 | NONE | - | - | 50.2 | 60 | 52 | 270 | 59 | 282 | 52.4 | 60 | 55 | 272 | 58.6 | 70 | 62 | 284 | | | |
| | | 282A00 | 25 | 30.1 | 50.2 | 60 | 52 | 270 | 59 | 282 | 52.4 | 60 | 55 | 272 | 58.9 | 70 | 62 | 284 | | | |
| | | 283A00 | 50 | 60.1 | 70.9 | 80 | 79 | 270 | 86 | 282 | 73.6 | 80 | 82 | 272 | 81.4 | 90 | 89 | 284 | | | |
| | | 284A00 | 75 | 90.2 | 101 | 110 | 114 | 270 | 121 | 282 | 103.7 | 125 | 116 | 272 | 111.5 | 125 | 123 | 284 | | | |
| HIGH | 575-3-60 | NONE | - | - | 55.9 | 70 | 59 | 310 | 66 | 322 | 58.1 | 70 | 61 | 312 | 64.3 | 80 | 69 | 324 | | | |
| | | 282A00 | 25 | 30.1 | 55.9 | 70 | 59 | 310 | 66 | 322 | 58.3 | 70 | 61 | 312 | 66 | 80 | 69 | 324 | | | |
| | | 283A00 | 50 | 60.1 | 78 | 80 | 86 | 310 | 93 | 322 | 80.7 | 90 | 88 | 312 | 88.5 | 100 | 95 | 324 | | | |
| | | 284A00 | 75 | 90.2 | 108.1 | 125 | 120 | 310 | 127 | 322 | 110.8 | 125 | 123 | 312 | 118.6 | 125 | 130 | 324 | | | |
| STD | | NONE | - | - | 38.6 | 50 | 40 | 224 | 46 | 232 | 40.3 | 50 | 42 | 226 | 45.1 | 50 | 48 | 234 | | | |
| | | 285A00 | 24.8 | 23.9 | 38.6 | 50 | 40 | 224 | 46 | 232 | 40.3 | 50 | 42 | 226 | 45.1 | 50 | 48 | 234 | | | |
| | | 286A00 | 49.6 | 47.7 | 66.6 | 70 | 61 | 224 | 67 | 232 | 68.8 | 70 | 63 | 226 | 74.8 | 80 | 69 | 234 | | | |
| | | 287A00 | 74.4 | 71.6 | 78.6 | 90 | 89 | 224 | 94 | 232 | 80.7 | 90 | 91 | 226 | 86.7 | 90 | 96 | 234 | | | |
| MED - High Eff. | 575-3-60 | NONE | - | - | 40.6 | 50 | 42 | 222 | 48 | 230 | 42.3 | 50 | 44 | 224 | 47.1 | 60 | 50 | 232 | | | |
| | | 285A00 | 24.8 | 23.9 | 40.6 | 50 | 42 | 222 | 48 | 230 | 42.3 | 50 | 44 | 224 | 47.5 | 60 | 50 | 232 | | | |
| | | 286A00 | 49.6 | 47.7 | 69.1 | 70 | 64 | 222 | 69 | 230 | 71.3 | 80 | 66 | 224 | 77.3 | 80 | 71 | 232 | | | |
| | | 287A00 | 74.4 | 71.6 | 81.1 | 90 | 91 | 222 | 97 | 230 | 83.2 | 90 | 93 | 224 | 89.2 | 90 | 99 | 232 | | | |
| HIGH | | NONE | - | - | 42.5 | 50 | 45 | 249 | 50 | 257 | 44.2 | 50 | 47 | 251 | 49.0 | 60 | 52 | 259 | | | |
| | | 285A00 | 24.8 | 23.9 | 42.5 | 50 | 45 | 249 | 50 | 257 | 44.2 | 50 | 47 | 251 | 49.9 | 60 | 52 | 259 | | | |
| | | 286A00 | 49.6 | 47.7 | 71.5 | 80 | 66 | 249 | 71 | 257 | 73.6 | 80 | 68 | 251 | 79.6 | 80 | 73 | 259 | | | |
| | | 287A00 | 74.4 | 71.6 | 83.5 | 90 | 93 | 249 | 99 | 257 | 85.6 | 90 | 95 | 251 | 91.6 | 100 | 101 | 259 | | | |

See: "Legend and Notes" on page 42

ELECTRICAL INFORMATION cont.

Table 23 - Unit Wire/Fuse or HACR Breaker Sizing Data with Single Speed Indoor Fan Motor (cont)

| UNIT | NO M, V-Ph-HZ | ELEC. HTR | | | | NO C.O. or UNPWR C.O. | | | | | | w/ PWRD C.O. | | | | | | | | |
|----------|---------------|------------------|----------|-----------|-------------|-----------------------|-----------------------|---------|---------|------------------|-----------------------|--------------|---------|------------------|-----------------------|-------------|---------|------------------|---------|-----|
| | | IFM TYPE | Nom (kW) | FLA | NO PE. | | w/ PE. (pwrd fr/unit) | | NO PE. | | w/ PE. (pwrd fr/unit) | | NO PE. | | w/ PE. (pwrd fr/unit) | | | | | |
| | | | | | MCA | MAX FUSE or BRKR | FLA | LRA | MCA | MAX FUSE or BRKR | FLA | LRA | MCA | MAX FUSE or BRKR | FLA | LRA | MCA | MAX FUSE or BRKR | FLA | LRA |
| 558/28 | 460-3-60 | STD | NONE | — | — | 127.8/126.9 | 175/175 | 133/132 | 590 | 147/146 | 610 | 132.6/131.7 | 175/175 | 139/138 | 595 | 144.4/143.5 | 175/175 | 152/151 | 615 | |
| | | | 279A00 | 18.8/25.0 | 52.1/60.1 | 127.8/126.9 | 175/175 | 133/132 | 590/590 | 147/146 | 610/610 | 132.6/131.7 | 175/175 | 139/138 | 595/595 | 144.4/143.5 | 175/175 | 152/151 | 615/615 | |
| | | | 280A00 | 37.6/50.0 | 104.2/120.3 | 147.3/136.2 | 175/175 | 135/153 | 590/590 | 149/167 | 610/610 | 153.3/142.2 | 175/175 | 141/158 | 595/595 | 168.0/156.9 | 175/175 | 155/172 | 615/615 | |
| | | | 281A00 | 56.3/75.0 | 156.4/180.4 | 173.4/196.3 | 200/225 | 196/222 | 590/590 | 209/236 | 610/610 | 179.4/202.3 | 200/225 | 201/228 | 595/595 | 194.2/217.0 | 200/250 | 215/241 | 615/615 | |
| 558/28 | 460-3-60 | MED - High Eff. | NONE | — | — | 131.3 | 175 | 137 | 586 | 151 | 606 | 136.1 | 175 | 143 | 591 | 147.9 | 175 | 156 | 611 | |
| | | | 279A00 | 18.8/25.0 | 52.1/60.1 | 131.3/131.3 | 175/175 | 137/137 | 586/586 | 151/151 | 606/606 | 136.1/136.1 | 175/175 | 143/143 | 591/591 | 147.9/147.9 | 175/175 | 156/156 | 611/611 | |
| | | | 280A00 | 37.6/50.0 | 104.2/120.3 | 151.6/141.7 | 175/175 | 139/158 | 586/586 | 159/172 | 606/606 | 157.6/147.7 | 175/175 | 145/164 | 591/591 | 172.4/162.4 | 175/175 | 159/177 | 611/611 | |
| | | | 281A00 | 56.3/75.0 | 156.4/180.4 | 177.8/201.8 | 200/225 | 200/227 | 586/586 | 213/241 | 606/606 | 183.8/207.8 | 200/225 | 205/233 | 591/591 | 198.5/222.5 | 200/250 | 219/246 | 611/611 | |
| 558/28 | 460-3-60 | HIGH - High Eff. | NONE | — | — | 142.7 | 175 | 150 | 665 | 164 | 685 | 147.5 | 175 | 156 | 670 | 159.3 | 200 | 169 | 690 | |
| | | | 279A00 | 18.8/25.0 | 52.1/60.1 | 142.7/142.7 | 175/175 | 150/150 | 665/665 | 164/164 | 685/685 | 147.5/147.5 | 175/175 | 156/156 | 670/670 | 159.3/159.3 | 200/200 | 169/169 | 690/690 | |
| | | | 280A00 | 37.6/50.0 | 104.2/120.3 | 165.9/155.9 | 175/175 | 153/171 | 665/665 | 166/185 | 685/685 | 171.9/161.9 | 175/175 | 158/177 | 670/670 | 186.6/176.7 | 200/200 | 172/190 | 690/690 | |
| | | | 281A00 | 56.3/75.0 | 156.4/180.4 | 192.0/216.0 | 200/250 | 213/240 | 665/665 | 226/254 | 685/685 | 198.0/222.0 | 225/250 | 218/246 | 670/670 | 212.8/236.8 | 225/250 | 232/259 | 690/690 | |
| 558/28 | 460-3-60 | STD | NONE | — | — | 51.9 | 60 | 54 | 302 | 61 | 314 | 54.1 | 70 | 57 | 304 | 60.3 | 70 | 64 | 316 | |
| | | | 282A00 | 25 | 30.1 | 51.9 | 60 | 54 | 302 | 61 | 314 | 54.1 | 70 | 57 | 304 | 60.3 | 70 | 64 | 316 | |
| | | | 283A00 | 50 | 60.1 | 68.2 | 80 | 76 | 302 | 84 | 314 | 70.9 | 80 | 79 | 304 | 78.6 | 80 | 86 | 316 | |
| | | | 284A00 | 75 | 90.2 | 98.2 | 100 | 111 | 302 | 118 | 314 | 101 | 110 | 114 | 304 | 108.7 | 125 | 121 | 316 | |
| 558/28 | 460-3-60 | MED - High Eff. | NONE | — | — | 54.1 | 60 | 57 | 300 | 64 | 312 | 56.3 | 70 | 59 | 302 | 62.5 | 80 | 66 | 314 | |
| | | | 282A00 | 25 | 30.1 | 54.1 | 60 | 57 | 300 | 64 | 312 | 56.3 | 70 | 59 | 302 | 62.5 | 80 | 66 | 314 | |
| | | | 283A00 | 50 | 60.1 | 70.9 | 80 | 79 | 300 | 86 | 312 | 73.6 | 80 | 82 | 302 | 81.4 | 90 | 89 | 314 | |
| | | | 284A00 | 75 | 90.2 | 101 | 110 | 114 | 300 | 121 | 312 | 103.7 | 125 | 116 | 302 | 111.5 | 125 | 123 | 314 | |
| 558/28 | 460-3-60 | HIGH - High Eff. | NONE | — | — | 59.8 | 70 | 63 | 340 | 70 | 352 | 62.0 | 80 | 66 | 342 | 68.2 | 80 | 73 | 354 | |
| | | | 282A00 | 25 | 30.1 | 59.8 | 70 | 63 | 340 | 70 | 352 | 62 | 80 | 66 | 342 | 68.2 | 80 | 73 | 354 | |
| | | | 283A00 | 50 | 60.1 | 78 | 80 | 86 | 340 | 93 | 352 | 80.7 | 90 | 88 | 342 | 88.5 | 100 | 95 | 354 | |
| | | | 284A00 | 75 | 90.2 | 108.1 | 125 | 120 | 340 | 127 | 352 | 110.8 | 125 | 123 | 342 | 118.6 | 125 | 130 | 354 | |
| 575-3-60 | 460-3-60 | STD | NONE | — | — | 41.1 | 50 | 43 | 244 | 49 | 252 | 42.8 | 60 | 45 | 246 | 47.6 | 60 | 50 | 254 | |
| | | | 285A00 | 24.8 | 23.9 | 41.1 | 50 | 43 | 244 | 49 | 252 | 42.8 | 60 | 45 | 246 | 47.6 | 60 | 50 | 254 | |
| | | | 286A00 | 49.6 | 47.7 | 66.6 | 70 | 61 | 244 | 72.6 | 67 | 252 | 68.8 | 70 | 63 | 246 | 74.8 | 80 | 69 | 254 |
| | | | 287A00 | 74.4 | 71.6 | 78.6 | 90 | 89 | 244 | 84.6 | 94 | 252 | 80.7 | 90 | 91 | 246 | 86.7 | 90 | 96 | 254 |
| 575-3-60 | 460-3-60 | MED - High Eff. | NONE | — | — | 43.1 | 50 | 45 | 242 | 51 | 250 | 44.8 | 60 | 47 | 244 | 49.6 | 60 | 53 | 252 | |
| | | | 285A00 | 24.8 | 23.9 | 43.1 | 50 | 45 | 242 | 51 | 250 | 44.8 | 60 | 47 | 244 | 49.6 | 60 | 53 | 252 | |
| | | | 286A00 | 49.6 | 47.7 | 69.1 | 80 | 64 | 242 | 75.1 | 69 | 250 | 71.3 | 80 | 66 | 244 | 77.3 | 80 | 71 | 252 |
| | | | 287A00 | 74.4 | 71.6 | 81.1 | 90 | 91 | 242 | 87.1 | 97 | 250 | 83.2 | 90 | 93 | 244 | 89.2 | 90 | 99 | 252 |
| 575-3-60 | 460-3-60 | HIGH - High Eff. | NONE | — | — | 45.0 | 50 | 47 | 269 | 53 | 277 | 46.7 | 60 | 49 | 271 | 51.5 | 60 | 55 | 279 | |
| | | | 285A00 | 24.8 | 23.9 | 45 | 50 | 47 | 269 | 53 | 277 | 46.7 | 60 | 49 | 271 | 51.5 | 60 | 55 | 279 | |
| | | | 286A00 | 49.6 | 47.7 | 71.5 | 80 | 66 | 269 | 77.5 | 71 | 277 | 73.6 | 80 | 68 | 271 | 79.6 | 80 | 73 | 279 |
| | | | 287A00 | 74.4 | 71.6 | 83.5 | 90 | 93 | 269 | 89.5 | 99 | 277 | 85.6 | 90 | 95 | 271 | 91.6 | 100 | 101 | 279 |

See: "Legend and Notes" on page 42

ELECTRICAL INFORMATION cont.

Table 24 – Unit Wire/Fuse or HACR Breaker Sizing Data with Factory Installed 2 Speed Indoor Fan Option

| UNIT | NO M, V-PH-HZ | ELEC. HTR | | | | NO C.O. or UNPWR C.O. | | | | | | | | w/ PWRD C.O. | | | | | | | |
|------|---------------|---------------|-----------|-------------|-------------|-----------------------|------------|------------------------|-------------|---------|-----------------------|------------------------|-------------|--------------|---------|------------------------|-------------|---------|---------|---------|-----------------------|
| | | CRHEATER***** | Nom (kW) | FLA | MCA | NO PE. | | w/ P.E. (pwrd fr/unit) | | NO PE. | | w/ P.E. (pwrd fr/unit) | | NO PE. | | w/ P.E. (pwrd fr/unit) | | | | | |
| | | | | | | 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 |
| STD | 208/230-3-60 | NONE | - | - | 80.2/79.4 | 100/100 | 84/83 | 482 | 82.0/81.4 | 110/110 | 100/99 | 526 | 87.2/86.2 | 100/100 | 89/88 | 487 | 96.8/96.0 | 125/125 | 103/102 | 507 | |
| | | 279A00 | 18.8/25.0 | 52.1/60.1 | 80.2/84.9 | 100/100 | 84/83 | 482/482 | 82.4/87.4 | 110/110 | 100/99 | 526/526 | 87.2/93.4 | 100/100 | 89/88 | 487/487 | 96.8/105.6 | 125/125 | 103/102 | 507/507 | |
| | | 280A00 | 37.6/50.0 | 104.2/120.3 | 141.0/130.1 | 150/150 | 130/147 | 482/482 | 143.8/132.6 | 175/175 | 146/163 | 526/526 | 149.8/138.6 | 150/150 | 135/153 | 487/487 | 161.8/150.8 | 175/175 | 149/166 | 507/507 | |
| | | 281A00 | 56.3/75.0 | 156.4/180.4 | 187.2/190.2 | 200/200 | 190/216 | 482/482 | 189.9/192.7 | 200/225 | 206/232 | 526/526 | 175.9/198.7 | 200/225 | 195/222 | 487/487 | 187.9/210.9 | 200/225 | 209/236 | 507/507 | |
| MED | 208/230-3-60 | NONE | - | - | 82.4/81.4 | 100/100 | 86/85 | 506 | 82.4/81.4 | 110/110 | 100/99 | 526 | 87.2/86.2 | 100/100 | 92/91 | 511 | 99.0/98.0 | 125/125 | 105/104 | 531 | |
| | | 279A00 | 18.8/25.0 | 52.1/60.1 | 82.4/87.4 | 100/100 | 86/85 | 506/506 | 82.4/87.4 | 110/110 | 100/99 | 526/526 | 87.2/93.4 | 100/100 | 92/91 | 511/511 | 99.4/108.1 | 125/125 | 105/104 | 531/531 | |
| | | 280A00 | 37.6/50.0 | 104.2/120.3 | 143.8/132.6 | 150/150 | 132/150 | 506/506 | 143.8/132.6 | 175/175 | 146/163 | 526/526 | 149.8/138.6 | 150/150 | 138/155 | 511/511 | 164.5/153.3 | 175/175 | 151/169 | 531/531 | |
| | | 281A00 | 56.3/75.0 | 156.4/180.4 | 189.9/192.7 | 200/225 | 192/219 | 506/506 | 189.9/192.7 | 200/225 | 206/232 | 526/526 | 175.9/198.7 | 200/225 | 198/224 | 511/511 | 190.7/213.4 | 200/225 | 211/238 | 531/531 | |
| HIGH | 208/230-3-60 | NONE | - | - | 85.2/84.3 | 100/100 | 89/88 | 517 | 85.2/84.3 | 125/125 | 103/102 | 537 | 90.0/89.0 | 100/100 | 95/94 | 522 | 101.8/100.9 | 125/125 | 108/107 | 542 | |
| | | 279A00 | 18.8/25.0 | 52.1/60.1 | 85.2/91.0 | 100/100 | 89/88 | 517/517 | 85.2/91.0 | 125/125 | 103/102 | 537/537 | 90.0/97.0 | 100/100 | 95/94 | 522/522 | 102.9/111.8 | 125/125 | 108/107 | 542/542 | |
| | | 280A00 | 37.6/50.0 | 104.2/120.3 | 147.3/136.2 | 150/150 | 135/153 | 517/517 | 147.3/136.2 | 175/175 | 149/167 | 537/537 | 153.3/142.2 | 175/175 | 141/158 | 522/522 | 168.0/156.9 | 175/175 | 155/172 | 542/542 | |
| | | 281A00 | 56.3/75.0 | 156.4/180.4 | 173.4/196.3 | 200/225 | 196/222 | 517/517 | 173.4/196.3 | 200/225 | 208/236 | 537/537 | 179.4/202.3 | 200/225 | 201/228 | 522/522 | 194.2/217.0 | 200/250 | 215/241 | 542/542 | |
| STD | 460-3-60 | NONE | - | - | 42.1 | 50 | 44 | 242 | 42.1 | 60 | 51 | 254 | 44.3 | 60 | 46 | 244 | 50.5 | 60 | 53 | 256 | |
| | | 282A00 | 25.0 | 30.1 | 42.4 | 50 | 44 | 242 | 42.4 | 60 | 51 | 254 | 45.1 | 60 | 46 | 244 | 52.9 | 60 | 53 | 256 | |
| | | 283A00 | 50.0 | 60.1 | 64.9 | 70 | 73 | 242 | 64.9 | 80 | 81 | 254 | 67.6 | 80 | 76 | 244 | 75.4 | 80 | 83 | 256 | |
| | | 284A00 | 75.0 | 90.2 | 95.0 | 100 | 108 | 242 | 95.0 | 110 | 115 | 254 | 97.7 | 100 | 111 | 244 | 105.5 | 110 | 118 | 256 | |
| MED | 460-3-60 | NONE | - | - | 43.2 | 50 | 45 | 254 | 43.2 | 60 | 52 | 266 | 45.4 | 60 | 47 | 256 | 51.6 | 60 | 55 | 268 | |
| | | 282A00 | 25.0 | 30.1 | 43.8 | 50 | 45 | 254 | 43.8 | 60 | 52 | 266 | 46.5 | 60 | 47 | 256 | 54.3 | 60 | 55 | 268 | |
| | | 283A00 | 50.0 | 60.1 | 66.2 | 80 | 75 | 254 | 66.2 | 80 | 82 | 266 | 69.0 | 80 | 77 | 256 | 76.7 | 80 | 84 | 268 | |
| | | 284A00 | 75.0 | 90.2 | 96.3 | 100 | 109 | 254 | 96.3 | 110 | 116 | 266 | 99.1 | 100 | 112 | 256 | 106.8 | 110 | 119 | 268 | |
| HIGH | 460-3-60 | NONE | - | - | 44.7 | 60 | 47 | 259 | 44.7 | 60 | 54 | 271 | 46.9 | 60 | 49 | 261 | 53.1 | 60 | 56 | 273 | |
| | | 282A00 | 25.0 | 30.1 | 45.6 | 60 | 47 | 259 | 45.6 | 60 | 54 | 271 | 48.4 | 60 | 49 | 261 | 56.1 | 60 | 56 | 273 | |
| | | 283A00 | 50.0 | 60.1 | 68.1 | 80 | 76 | 259 | 68.1 | 80 | 84 | 271 | 70.9 | 80 | 79 | 261 | 78.6 | 80 | 86 | 273 | |
| | | 284A00 | 75.0 | 90.2 | 98.2 | 100 | 111 | 259 | 98.2 | 125 | 118 | 271 | 101.0 | 110 | 114 | 261 | 108.7 | 125 | 121 | 273 | |
| STD | 575-3-60 | NONE | - | - | 33.8 | 45 | 35 | 188 | 33.8 | 50 | 41 | 196 | 35.5 | 45 | 37 | 190 | 40.3 | 43 | 198 | | |
| | | 285A00 | 24.8 | 23.9 | 35.5 | 45 | 35 | 188 | 35.5 | 50 | 41 | 196 | 37.6 | 45 | 37 | 190 | 43.6 | 50 | 43 | 198 | |
| | | 286A00 | 49.6 | 47.7 | 65.3 | 70 | 60 | 188 | 65.3 | 80 | 66 | 196 | 67.4 | 70 | 62 | 190 | 73.4 | 80 | 68 | 198 | |
| | | 287A00 | 74.4 | 71.6 | 77.2 | 90 | 88 | 188 | 77.2 | 90 | 93 | 196 | 79.4 | 90 | 89 | 190 | 85.4 | 90 | 95 | 198 | |
| MED | 575-3-60 | NONE | - | - | 33.8 | 45 | 35 | 188 | 33.8 | 50 | 41 | 196 | 35.5 | 45 | 37 | 190 | 40.3 | 43 | 198 | | |
| | | 285A00 | 24.8 | 23.9 | 35.5 | 45 | 35 | 188 | 35.5 | 50 | 41 | 196 | 37.6 | 45 | 37 | 190 | 43.6 | 50 | 43 | 198 | |
| | | 286A00 | 49.6 | 47.7 | 65.3 | 70 | 60 | 188 | 65.3 | 80 | 66 | 196 | 67.4 | 70 | 62 | 190 | 73.4 | 80 | 68 | 198 | |
| | | 287A00 | 74.4 | 71.6 | 77.2 | 90 | 88 | 188 | 77.2 | 90 | 93 | 196 | 79.4 | 90 | 89 | 190 | 85.4 | 90 | 95 | 198 | |
| HIGH | 575-3-60 | NONE | - | - | 35.5 | 45 | 37 | 202 | 35.5 | 50 | 43 | 210 | 37.2 | 45 | 39 | 204 | 42.0 | 45 | 45 | 212 | |
| | | 285A00 | 24.8 | 23.9 | 37.6 | 45 | 37 | 202 | 37.6 | 50 | 43 | 210 | 39.8 | 45 | 39 | 204 | 45.8 | 50 | 45 | 212 | |
| | | 286A00 | 49.6 | 47.7 | 67.4 | 70 | 62 | 202 | 67.4 | 80 | 68 | 210 | 69.5 | 70 | 64 | 204 | 75.5 | 80 | 69 | 212 | |
| | | 287A00 | 74.4 | 71.6 | 79.4 | 90 | 89 | 202 | 79.4 | 90 | 95 | 210 | 81.5 | 90 | 91 | 204 | 87.5 | 90 | 97 | 212 | |

See: "Legend and Notes" on page 42

ELECTRICAL INFORMATION cont.

Table 24 - Unit Wire/Fuse or HACR Breaker Sizing Data with Factory Installed 2 Speed Indoor Fan Option (cont)

| UNIT | NO M, V-Ph-HZ | ELEC. HTR | | | | | | NO C.O. or UNPWR C.O. | | | | | | w/ PWRD C.O. | | | | | | |
|------|---------------|----------------|-----------|-------------|---------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|---------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-------------|---------|---------|---------|
| | | CHRHEATER***** | Nom (kW) | FLA | NO PE. | | | w/ PE. (pwrd fr/unit) | | | NO PE. | | | w/ PE. (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 | | | | |
| STD | | NONE | - | - | 86/85 | 506 | 526 | 100/99 | 100/110 | 100/99 | 526 | 526 | 87.2/86.2 | 100/100 | 92/91 | 511 | 98.0/98.0 | 125/125 | 105/104 | 531 |
| | | 279A00 | 18.8/25.0 | 52.1/60.1 | 86/85 | 506/506 | 526/526 | 110/110 | 110/110 | 100/99 | 526/526 | 526/526 | 87.2/93.4 | 100/100 | 92/91 | 511/511 | 99.4/108.1 | 125/125 | 105/104 | 531/531 |
| | | 280A00 | 37.6/50.0 | 104.2/120.3 | 132/150 | 506/506 | 526/526 | 146/163 | 175/175 | 146/163 | 526/526 | 526/526 | 149.8/138.6 | 150/150 | 138/155 | 511/511 | 164.5/153.3 | 175/175 | 151/169 | 531/531 |
| | | 281A00 | 56.3/75.0 | 156.4/180.4 | 192/219 | 506/506 | 526/526 | 206/232 | 200/225 | 206/232 | 526/526 | 526/526 | 175.9/198.7 | 200/225 | 198/224 | 511/511 | 190.7/213.4 | 200/225 | 211/238 | 531/531 |
| MED | 208/230-3-60 | NONE | - | - | 89/88 | 517 | 537 | 103/102 | 125/125 | 103/102 | 537 | 537 | 90.0/89.1 | 100/100 | 95/94 | 522 | 101.8/100.9 | 125/125 | 108/107 | 542 |
| | | 279A00 | 18.8/25.0 | 52.1/60.1 | 89/88 | 517/517 | 537/537 | 103/102 | 125/125 | 103/102 | 537/537 | 537/537 | 90.0/97.0 | 100/100 | 95/94 | 522/522 | 102.9/111.8 | 125/125 | 108/107 | 542/542 |
| | | 280A00 | 37.6/50.0 | 104.2/120.3 | 135/153 | 517/517 | 537/537 | 149/167 | 175/175 | 149/167 | 537/537 | 537/537 | 153.3/142.2 | 175/175 | 141/158 | 522/522 | 168.0/156.9 | 175/175 | 155/172 | 542/542 |
| | | 281A00 | 56.3/75.0 | 156.4/180.4 | 196/222 | 517/517 | 537/537 | 209/236 | 200/225 | 209/236 | 537/537 | 537/537 | 179.4/202.3 | 200/225 | 201/228 | 522/522 | 194.2/217.0 | 200/250 | 215/241 | 542/542 |
| HIGH | | NONE | - | - | 93 | 513 | 107 | 125 | 107 | 107 | 533 | 93.5 | 110 | 99 | 518 | 105.3 | 125 | 112 | 538 | |
| | | 279A00 | 18.8/25.0 | 52.1/60.1 | 93/93 | 513/513 | 533/533 | 107/107 | 125/125 | 107/107 | 533/533 | 93.5/102.5 | 110/110 | 99/99 | 518/518 | 107.3/117.3 | 125/125 | 112/112 | 538/538 | |
| | | 280A00 | 37.6/50.0 | 104.2/120.3 | 139/158 | 513/513 | 533/533 | 159/172 | 175/175 | 159/172 | 533/533 | 157.6/147.7 | 175/175 | 145/164 | 518/518 | 172.4/162.4 | 175/175 | 159/177 | 538/538 | |
| | | 281A00 | 56.3/75.0 | 156.4/180.4 | 200/227 | 513/513 | 533/533 | 213/241 | 200/250 | 213/241 | 533/533 | 183.9/207.8 | 200/225 | 205/233 | 518/518 | 196.5/222.5 | 200/250 | 219/246 | 538/538 | |
| STD | 460-3-60 | NONE | - | - | 45 | 254 | 52 | 60 | 52 | 266 | 45.4 | 60 | 47 | 60 | 47 | 256 | 51.6 | 60 | 55 | 268 |
| | | 282A00 | 25.0 | 30.1 | 45 | 254 | 266 | 60 | 60 | 52 | 266 | 46.5 | 60 | 47 | 256 | 54.3 | 60 | 55 | 268 | |
| | | 283A00 | 50.0 | 60.1 | 75 | 254 | 266 | 82 | 80 | 82 | 266 | 69.0 | 80 | 77 | 256 | 76.7 | 80 | 84 | 268 | |
| | | 284A00 | 75.0 | 90.2 | 109 | 254 | 266 | 116 | 110 | 116 | 266 | 99.1 | 100 | 112 | 256 | 106.8 | 110 | 119 | 268 | |
| MED | 460-3-60 | NONE | - | - | 47 | 259 | 54 | 60 | 54 | 271 | 48.9 | 60 | 49 | 60 | 49 | 261 | 53.1 | 60 | 56 | 273 |
| | | 282A00 | 25.0 | 30.1 | 47 | 259 | 271 | 60 | 60 | 54 | 271 | 48.4 | 60 | 49 | 261 | 56.1 | 60 | 56 | 273 | |
| | | 283A00 | 50.0 | 60.1 | 76 | 259 | 271 | 84 | 80 | 84 | 271 | 70.9 | 80 | 79 | 261 | 78.6 | 80 | 86 | 273 | |
| | | 284A00 | 75.0 | 90.2 | 111 | 259 | 271 | 118 | 125 | 118 | 271 | 101.0 | 110 | 114 | 261 | 108.7 | 125 | 121 | 273 | |
| HIGH | | NONE | - | - | 49 | 257 | 56 | 60 | 56 | 269 | 49.1 | 60 | 52 | 60 | 52 | 259 | 55.3 | 60 | 59 | 271 |
| | | 282A00 | 25.0 | 30.1 | 49 | 257 | 269 | 60 | 60 | 56 | 269 | 51.1 | 60 | 52 | 259 | 58.9 | 60 | 59 | 271 | |
| | | 283A00 | 50.0 | 60.1 | 79 | 257 | 269 | 86 | 80 | 86 | 269 | 73.6 | 80 | 82 | 259 | 81.4 | 90 | 89 | 271 | |
| | | 284A00 | 75.0 | 90.2 | 114 | 257 | 269 | 121 | 125 | 121 | 269 | 103.7 | 125 | 116 | 259 | 111.5 | 125 | 123 | 271 | |
| STD | | NONE | - | - | 35 | 188 | 41 | 50 | 41 | 196 | 35.5 | 50 | 37 | 45 | 37 | 190 | 40.3 | 50 | 43 | 198 |
| | | 285A00 | 24.8 | 23.9 | 35 | 188 | 196 | 50 | 50 | 41 | 196 | 37.6 | 45 | 37 | 190 | 43.6 | 50 | 43 | 198 | |
| | | 286A00 | 49.6 | 47.7 | 60 | 188 | 196 | 66 | 80 | 66 | 196 | 67.4 | 70 | 62 | 190 | 73.4 | 80 | 68 | 198 | |
| | | 287A00 | 74.4 | 71.6 | 88 | 188 | 196 | 93 | 90 | 88 | 196 | 79.4 | 90 | 89 | 190 | 85.4 | 90 | 95 | 198 | |
| MED | 575-3-60 | NONE | - | - | 37 | 202 | 43 | 50 | 43 | 210 | 37.2 | 45 | 39 | 45 | 39 | 204 | 42.0 | 50 | 45 | 212 |
| | | 285A00 | 24.8 | 23.9 | 37 | 202 | 210 | 50 | 50 | 43 | 210 | 39.8 | 45 | 39 | 204 | 45.8 | 50 | 45 | 212 | |
| | | 286A00 | 49.6 | 47.7 | 62 | 202 | 210 | 68 | 80 | 68 | 210 | 69.5 | 70 | 64 | 204 | 75.5 | 80 | 69 | 212 | |
| | | 287A00 | 74.4 | 71.6 | 89 | 202 | 210 | 95 | 90 | 89 | 210 | 81.5 | 90 | 91 | 204 | 87.5 | 90 | 97 | 212 | |
| HIGH | | NONE | - | - | 39 | 200 | 44 | 50 | 44 | 208 | 38.6 | 50 | 41 | 202 | 43.4 | 50 | 46 | 210 | | |
| | | 285A00 | 24.8 | 23.9 | 39 | 200 | 208 | 50 | 50 | 44 | 208 | 41.5 | 50 | 41 | 202 | 47.5 | 50 | 46 | 210 | |
| | | 286A00 | 49.6 | 47.7 | 64 | 200 | 208 | 69 | 80 | 69 | 208 | 71.3 | 80 | 66 | 202 | 77.3 | 80 | 71 | 210 | |
| | | 287A00 | 74.4 | 71.6 | 91 | 200 | 208 | 97 | 90 | 91 | 208 | 83.2 | 90 | 93 | 202 | 89.2 | 90 | 99 | 210 | |

See: "Legend and Notes" on page 42

ELECTRICAL INFORMATION cont.

Table 24 - Unit Wire/Fuse or HACR Breaker Sizing Data with Factory Installed 2 Speed Indoor Fan Option (cont)

| UNIT | NO M, V-Ph-HZ | ELEC. HTR | | NO C.O. or UNPWR C.O. | | | | | | | | | | w/ PWRD C.O. | | | | | | | | | |
|----------|---------------|-------------|---------|-----------------------|------------------|-----------|-------------|---------|------------------------|------------------|---------|------------|-------------|--------------|------------------|---------|-------------|-------------|------------------------|------------------|---------|------------|--|
| | | | | NO PE. | | | | | w/ PE. (pwrdr fr/unit) | | | | | NO PE. | | | | | w/ PE. (pwrdr fr/unit) | | | | |
| | | | | MCA | MAX FUSE or BRKR | FLA | DISC. SIZE | | MCA | MAX FUSE or BRKR | FLA | DISC. SIZE | | MCA | MAX FUSE or BRKR | FLA | DISC. SIZE | | MCA | MAX FUSE or BRKR | FLA | DISC. SIZE | |
| 558J24 | 460-3-60 | NONE | - | - | 109.2/108.3 | 150/150 | 112/111 | 540 | 121.0/120.1 | 150/150 | 125/124 | 560 | 114.0/113.1 | 150/150 | 117/116 | 545 | 125.8/124.9 | 150/150 | 131/130 | 565 | | | |
| | | | | | 279A00 | 18.8/25.0 | 52.1/60.1 | 112/111 | 540/540 | 121.0/120.1 | 150/150 | 125/124 | 560/560 | 114.0/113.1 | 150/150 | 117/116 | 545/545 | 125.8/124.9 | 150/150 | 131/130 | 565/565 | | |
| | | | | | 280A00 | 37.6/50.0 | 104.2/120.3 | 135/153 | 540/640 | 162.0/150.9 | 175/175 | 149/167 | 560/560 | 153.3/142.2 | 175/175 | 141/158 | 545/545 | 168.0/156.9 | 175/175 | 155/172 | 565/565 | | |
| | | | | | 281A00 | 56.3/75.0 | 156.4/180.4 | 196/222 | 540/640 | 188.2/111.0 | 200/225 | 209/236 | 560/560 | 179.4/202.3 | 200/225 | 201/228 | 545/545 | 194.2/171.0 | 200/250 | 215/241 | 565/565 | | |
| | | | | | NONE | - | 112.7 | 536 | 124.5 | 150 | 129 | 556 | 117.5 | 150 | 121 | 541 | 129.3 | 175 | 135 | 561 | | | |
| | | | | | 279A00 | 18.8/25.0 | 52.1/60.1 | 116/116 | 536/536 | 124.5/124.5 | 150/150 | 129/129 | 556/556 | 117.5/117.5 | 150/150 | 121/121 | 541/541 | 129.3/129.3 | 175/175 | 135/135 | 561/561 | | |
| | | | | | 280A00 | 37.6/50.0 | 104.2/120.3 | 139/158 | 536/536 | 166.4/156.4 | 175/175 | 159/172 | 556/556 | 157.6/147.7 | 175/175 | 145/164 | 541/541 | 172.4/162.4 | 175/175 | 159/177 | 561/561 | | |
| | | | | | 281A00 | 56.3/75.0 | 156.4/180.4 | 200/227 | 536/536 | 192.5/216.5 | 200/250 | 213/241 | 556/556 | 183.8/207.8 | 200/225 | 205/233 | 541/541 | 198.5/222.5 | 200/250 | 219/246 | 561/561 | | |
| | | | | | NONE | - | 124.1 | 615 | 135.9 | 175 | 142 | 635 | 128.9 | 175 | 134 | 620 | 140.7 | 175 | 148 | 640 | | | |
| | | | | | 279A00 | 18.8/25.0 | 52.1/60.1 | 129/129 | 615/615 | 135.9/135.9 | 175/175 | 142/142 | 635/635 | 128.9/128.9 | 175/175 | 134/134 | 620/620 | 140.7/140.7 | 175/175 | 148/148 | 640/640 | | |
| 280A00 | 37.6/50.0 | 104.2/120.3 | 153/171 | 615/615 | 180.6/170.7 | 200/175 | 166/185 | 635/635 | 171.9/161.9 | 200/175 | 158/177 | 620/620 | 186.6/176.7 | 200/200 | 172/190 | 640/640 | | | | | | | |
| 281A00 | 56.3/75.0 | 156.4/180.4 | 213/240 | 615/615 | 206.8/230.8 | 225/250 | 226/254 | 635/635 | 198.0/222.0 | 225/250 | 218/246 | 620/620 | 212.9/236.8 | 225/250 | 232/259 | 640/640 | | | | | | | |
| 558J24 | 460-3-60 | NONE | - | - | 48.0 | 60 | 50 | 272 | 54.2 | 60 | 57 | 284 | 50.2 | 60 | 52 | 274 | 56.4 | 70 | 59 | 286 | | | |
| | | | | | 282A00 | 25.0 | 30.1 | 50 | 272 | 54.2 | 60 | 57 | 284 | 50.2 | 60 | 52 | 274 | 56.4 | 70 | 59 | 286 | | |
| | | | | | 283A00 | 50.0 | 60.1 | 76 | 272 | 75.9 | 80 | 84 | 284 | 70.9 | 80 | 79 | 274 | 78.6 | 80 | 86 | 286 | | |
| | | | | | 284A00 | 75.0 | 90.2 | 111 | 272 | 106.0 | 125 | 118 | 284 | 101.0 | 110 | 114 | 274 | 108.7 | 125 | 121 | 286 | | |
| | | | | | NONE | - | 50.2 | 270 | 56.4 | 70 | 59 | 282 | 52.4 | 60 | 55 | 272 | 58.6 | 70 | 62 | 284 | | | |
| | | | | | 282A00 | 25.0 | 30.1 | 52 | 270 | 56.4 | 70 | 59 | 282 | 52.4 | 60 | 55 | 272 | 58.9 | 70 | 62 | 284 | | |
| | | | | | 283A00 | 50.0 | 60.1 | 79 | 270 | 78.6 | 80 | 86 | 282 | 73.6 | 80 | 82 | 272 | 81.4 | 90 | 89 | 284 | | |
| | | | | | 284A00 | 75.0 | 90.2 | 114 | 270 | 108.7 | 125 | 121 | 282 | 103.7 | 125 | 116 | 272 | 111.5 | 125 | 123 | 284 | | |
| | | | | | NONE | - | 55.9 | 310 | 62.1 | 80 | 66 | 322 | 58.1 | 70 | 61 | 312 | 64.3 | 80 | 69 | 324 | | | |
| | | | | | 282A00 | 25.0 | 30.1 | 59 | 310 | 63.3 | 80 | 66 | 322 | 58.3 | 70 | 61 | 312 | 66.0 | 80 | 69 | 324 | | |
| 283A00 | 50.0 | 60.1 | 86 | 310 | 85.7 | 90 | 93 | 322 | 80.7 | 90 | 88 | 312 | 88.5 | 100 | 95 | 324 | | | | | | | |
| 284A00 | 75.0 | 90.2 | 120 | 310 | 115.8 | 125 | 127 | 322 | 110.8 | 125 | 123 | 312 | 118.6 | 125 | 125 | 324 | | | | | | | |
| 575-3-60 | 460-3-60 | NONE | - | - | 39.2 | 50 | 41 | 224 | 44.0 | 50 | 46 | 232 | 40.9 | 50 | 43 | 226 | 45.7 | 60 | 48 | 234 | | | |
| | | | | | 285A00 | 24.8 | 23.9 | 41 | 224 | 44.0 | 50 | 46 | 232 | 40.9 | 50 | 43 | 226 | 45.8 | 60 | 48 | 234 | | |
| | | | | | 286A00 | 49.6 | 47.7 | 62 | 224 | 73.4 | 80 | 68 | 232 | 69.5 | 70 | 64 | 226 | 75.5 | 80 | 69 | 234 | | |
| | | | | | 287A00 | 74.4 | 71.6 | 89 | 224 | 85.4 | 90 | 95 | 232 | 81.5 | 90 | 91 | 226 | 87.5 | 90 | 97 | 234 | | |
| | | | | | NONE | - | 40.6 | 222 | 45.4 | 60 | 48 | 230 | 42.3 | 50 | 44 | 224 | 47.1 | 60 | 50 | 232 | | | |
| | | | | | 285A00 | 24.8 | 23.9 | 42 | 222 | 45.4 | 60 | 48 | 230 | 42.3 | 50 | 44 | 224 | 47.5 | 60 | 50 | 232 | | |
| | | | | | 286A00 | 49.6 | 47.7 | 64 | 222 | 75.1 | 80 | 69 | 230 | 71.3 | 80 | 66 | 224 | 77.3 | 80 | 71 | 232 | | |
| | | | | | 287A00 | 74.4 | 71.6 | 91 | 222 | 87.1 | 90 | 97 | 230 | 83.2 | 90 | 93 | 224 | 89.2 | 90 | 99 | 232 | | |
| | | | | | NONE | - | 42.5 | 249 | 47.3 | 60 | 50 | 257 | 44.2 | 50 | 47 | 251 | 49.0 | 60 | 52 | 259 | | | |
| | | | | | 285A00 | 24.8 | 23.9 | 45 | 249 | 47.8 | 60 | 50 | 257 | 44.2 | 50 | 47 | 251 | 49.9 | 60 | 52 | 259 | | |
| 286A00 | 49.6 | 47.7 | 66 | 249 | 77.5 | 80 | 71 | 257 | 73.6 | 80 | 68 | 251 | 79.6 | 80 | 73 | 259 | | | | | | | |
| 287A00 | 74.4 | 71.6 | 93 | 249 | 89.5 | 100 | 99 | 257 | 85.6 | 100 | 95 | 251 | 91.6 | 100 | 101 | 259 | | | | | | | |

See: "Legend and Notes" on page 42

ELECTRICAL INFORMATION cont.

Table 24 - Unit Wire/Fuse or HACR Breaker Sizing Data with Factory Installed 2 Speed Indoor Fan Option (cont)

| UNIT | ELEC. HTR | | | | NO C.O. or UNPWR C.O. | | | | w/ PWRD C.O. | | | | | | | | | | | | |
|--------------|-----------|---------------|-----------|-------------|-----------------------|-----------------------|-----------------------|---------|--------------|-----------------------|-----------------------|---------|--------------|-------------|---------|---------|-------------|-------------|---------|---------|---------|
| | IFM TYPE | CRHEATER***** | Nom (kW) | FLA | MCA | MAX FUSE or HACR BRKR | DISC. SIZE FLA LRA | MCA | NO PE. | MAX FUSE or HACR BRKR | DISC. SIZE FLA LRA | MCA | w/ PWRD C.O. | | | | | | | | |
| 208/230-3-60 | STD | NONE | - | - | 127.8/126.9 | 175/175 | 133/132 | 590 | 139.6/138.7 | 175/175 | 147/146 | 610 | 132.6/131.7 | 175/175 | 139/138 | 595 | 144.4/143.5 | 175/175 | 152/151 | 615 | |
| | | 279A00 | 18.8/25.0 | 52.1/60.1 | 127.8/126.9 | 175/175 | 133/132 | 590/590 | 139.6/138.7 | 175/175 | 147/146 | 610/610 | 132.6/131.7 | 175/175 | 139/138 | 595/595 | 144.4/143.5 | 175/175 | 152/151 | 615/615 | |
| | | 280A00 | 37.6/50.0 | 104.2/120.3 | 147.3/136.2 | 175/175 | 135/153 | 590/590 | 162.0/150.9 | 182.0/150.9 | 175/175 | 149/167 | 610/610 | 153.3/142.2 | 175/175 | 141/158 | 595/595 | 168.0/156.9 | 175/175 | 155/172 | 615/615 |
| | | 281A00 | 56.3/75.0 | 156.4/180.4 | 173.4/196.3 | 200/225 | 196/222 | 590/590 | 188.2/211.0 | 200/225 | 209/236 | 610/610 | 179.4/202.3 | 200/225 | 201/228 | 595/595 | 194.2/217.0 | 200/250 | 215/241 | 615/615 | |
| 208/230-3-60 | MED | NONE | - | - | 131.3 | 175 | 137 | 586 | 143.1 | 175 | 151 | 606 | 136.1 | 175 | 143 | 591 | 147.9 | 175 | 156 | 611 | |
| | | 279A00 | 18.8/25.0 | 52.1/60.1 | 131.3/131.3 | 175/175 | 137/137 | 586/586 | 143.1/143.1 | 175/175 | 151/151 | 606/606 | 136.1/136.1 | 175/175 | 143/143 | 591/591 | 147.9/147.9 | 175/175 | 156/156 | 611/611 | |
| | | 280A00 | 37.6/50.0 | 104.2/120.3 | 151.6/141.7 | 175/175 | 139/158 | 586/586 | 166.4/156.4 | 175/175 | 153/172 | 606/606 | 157.6/147.7 | 175/175 | 145/164 | 591/591 | 172.4/162.4 | 175/175 | 159/177 | 611/611 | |
| | | 281A00 | 56.3/75.0 | 156.4/180.4 | 177.8/201.8 | 200/225 | 200/227 | 586/586 | 192.5/216.5 | 200/250 | 213/241 | 606/606 | 183.8/207.8 | 200/225 | 205/233 | 591/591 | 198.5/222.5 | 200/250 | 219/246 | 611/611 | |
| 460-3-60 | HIGH | NONE | - | - | 142.7 | 175 | 150 | 665 | 154.5 | 200 | 164 | 685 | 147.5 | 175 | 156 | 670 | 159.3 | 200 | 169 | 690 | |
| | | 279A00 | 18.8/25.0 | 52.1/60.1 | 142.7/142.7 | 175/175 | 150/150 | 665/665 | 154.5/154.5 | 200/200 | 164/164 | 685/685 | 147.5/147.5 | 175/175 | 156/156 | 670/670 | 159.3/159.3 | 200/200 | 169/169 | 690/690 | |
| | | 280A00 | 37.6/50.0 | 104.2/120.3 | 165.9/155.9 | 175/175 | 153/171 | 665/665 | 180.6/170.7 | 200/200 | 166/185 | 685/685 | 171.9/161.9 | 175/175 | 158/177 | 670/670 | 186.6/176.7 | 200/200 | 172/190 | 690/690 | |
| | | 281A00 | 56.3/75.0 | 156.4/180.4 | 192.0/216.0 | 200/250 | 213/240 | 665/665 | 206.8/230.8 | 225/250 | 226/254 | 685/685 | 198.0/222.0 | 225/250 | 218/246 | 670/670 | 212.8/236.8 | 225/250 | 232/259 | 690/690 | |
| 558J*28 | STD | NONE | - | - | 51.9 | 60 | 54 | 302 | 58.1 | 70 | 61 | 314 | 54.1 | 60 | 57 | 304 | 60.3 | 70 | 64 | 316 | |
| | | 282A00 | 25.0 | 30.1 | 51.9 | 60 | 54 | 302 | 58.1 | 70 | 61 | 314 | 54.1 | 60 | 57 | 304 | 60.3 | 70 | 64 | 316 | |
| | | 283A00 | 50.0 | 60.1 | 68.1 | 80 | 76 | 302 | 75.9 | 80 | 84 | 314 | 70.9 | 80 | 79 | 304 | 78.6 | 80 | 86 | 316 | |
| | | 284A00 | 75.0 | 90.2 | 98.2 | 100 | 111 | 302 | 106.0 | 125 | 118 | 314 | 101.0 | 110 | 114 | 304 | 108.7 | 125 | 121 | 316 | |
| 575-3-60 | MED | NONE | - | - | 54.1 | 60 | 57 | 300 | 60.3 | 70 | 64 | 312 | 56.3 | 70 | 59 | 302 | 62.5 | 80 | 66 | 314 | |
| | | 282A00 | 25.0 | 30.1 | 54.1 | 60 | 57 | 300 | 60.3 | 70 | 64 | 312 | 56.3 | 70 | 59 | 302 | 62.5 | 80 | 66 | 314 | |
| | | 283A00 | 50.0 | 60.1 | 70.9 | 80 | 79 | 300 | 78.6 | 80 | 86 | 312 | 73.6 | 80 | 82 | 302 | 81.4 | 90 | 89 | 314 | |
| | | 284A00 | 75.0 | 90.2 | 101.0 | 110 | 114 | 300 | 108.7 | 125 | 121 | 312 | 103.7 | 125 | 116 | 302 | 111.5 | 125 | 123 | 314 | |
| 575-3-60 | HIGH | NONE | - | - | 59.8 | 70 | 63 | 340 | 66.0 | 80 | 70 | 352 | 62.0 | 80 | 66 | 342 | 68.2 | 80 | 73 | 354 | |
| | | 282A00 | 25.0 | 30.1 | 59.8 | 70 | 63 | 340 | 66.0 | 80 | 70 | 352 | 62.0 | 80 | 66 | 342 | 68.2 | 80 | 73 | 354 | |
| | | 283A00 | 50.0 | 60.1 | 78.0 | 90 | 86 | 340 | 85.7 | 90 | 93 | 352 | 80.7 | 90 | 88 | 342 | 88.5 | 100 | 95 | 354 | |
| | | 284A00 | 75.0 | 90.2 | 108.1 | 125 | 120 | 340 | 115.8 | 125 | 127 | 352 | 110.8 | 125 | 123 | 342 | 118.6 | 125 | 130 | 354 | |
| 575-3-60 | STD | NONE | - | - | 41.7 | 50 | 44 | 244 | 46.5 | 60 | 49 | 252 | 43.4 | 50 | 46 | 246 | 48.2 | 60 | 51 | 254 | |
| | | 285A00 | 24.8 | 23.9 | 41.7 | 50 | 44 | 244 | 46.5 | 60 | 49 | 252 | 43.4 | 50 | 46 | 246 | 48.2 | 60 | 51 | 254 | |
| | | 286A00 | 49.6 | 47.7 | 67.4 | 70 | 62 | 244 | 73.4 | 80 | 68 | 252 | 69.5 | 70 | 64 | 246 | 75.5 | 80 | 69 | 254 | |
| | | 287A00 | 74.4 | 71.6 | 79.4 | 90 | 89 | 244 | 85.4 | 90 | 95 | 252 | 81.5 | 90 | 91 | 246 | 87.5 | 90 | 97 | 254 | |
| 575-3-60 | MED | NONE | - | - | 43.1 | 50 | 45 | 242 | 47.9 | 60 | 51 | 250 | 44.8 | 50 | 47 | 244 | 49.6 | 60 | 53 | 252 | |
| | | 285A00 | 24.8 | 23.9 | 43.1 | 50 | 45 | 242 | 47.9 | 60 | 51 | 250 | 44.8 | 50 | 47 | 244 | 49.6 | 60 | 53 | 252 | |
| | | 286A00 | 49.6 | 47.7 | 69.1 | 70 | 64 | 242 | 75.1 | 80 | 69 | 250 | 71.3 | 80 | 66 | 244 | 77.3 | 80 | 71 | 252 | |
| | | 287A00 | 74.4 | 71.6 | 81.1 | 90 | 91 | 242 | 87.1 | 90 | 97 | 250 | 83.2 | 90 | 93 | 244 | 89.2 | 90 | 99 | 252 | |
| 575-3-60 | HIGH | NONE | - | - | 45.0 | 50 | 47 | 269 | 49.8 | 60 | 53 | 277 | 46.7 | 60 | 49 | 271 | 51.5 | 60 | 55 | 279 | |
| | | 285A00 | 24.8 | 23.9 | 45.0 | 50 | 47 | 269 | 49.8 | 60 | 53 | 277 | 46.7 | 60 | 49 | 271 | 51.5 | 60 | 55 | 279 | |
| | | 286A00 | 49.6 | 47.7 | 71.5 | 80 | 66 | 269 | 77.5 | 80 | 71 | 277 | 73.6 | 80 | 68 | 271 | 79.6 | 80 | 73 | 279 | |
| | | 287A00 | 74.4 | 71.6 | 83.5 | 90 | 93 | 269 | 89.5 | 100 | 99 | 277 | 85.6 | 90 | 95 | 271 | 91.6 | 100 | 101 | 279 | |

See: "Legend and Notes" on page 42

ELECTRICAL INFORMATION cont.

Table 24 - Unit Wire/Fuse or HACR Breaker Sizing Data with Factory Installed 2 Speed Indoor Fan Option (cont)

| UNIT | NO M. V-PH-HZ | ELEC. HTR | | NO C.O. or UNPWR C.O. | | | | | | | | W/ PWRD C.O. | | | | | | | | | |
|------|---------------|-----------|---------------|-----------------------|-------------|---------|------------------|---------|-------------|-------------------------|------------------|--------------|-------------|---------|------------------|---------|-------------|-------------------------|------------------|---------|-----|
| | | IFM TYPE | CRHEATER***** | Nom (kW) | FLA | NO PE. | | | | w/ P.E. (pwrdr fr/unit) | | | | NO PE. | | | | w/ P.E. (pwrdr fr/unit) | | | |
| | | | | | | MCA | MAX FUSE or BRKR | FLA | LRA | MCA | MAX FUSE or BRKR | FLA | LRA | MCA | MAX FUSE or BRKR | FLA | LRA | MCA | MAX FUSE or BRKR | FLA | LRA |
| STD | | NONE | - | - | - | 141.5 | 175 | 148 | 702 | 153.3 | 200 | 162 | 722 | 146.3 | 175 | 154 | 707 | 158.1 | 200 | 167 | 727 |
| | | 279A00 | 18.8/25.0 | 52.1/60.1 | 141.5/141.5 | 175/175 | 148/148 | 702/702 | 153.3/153.3 | 200/200 | 162/162 | 722/722 | 146.3/146.3 | 175/175 | 154/154 | 707/707 | 158.1/158.1 | 200/200 | 167/167 | 727/727 | |
| | | 280A00 | 37.6/50.0 | 104.2/120.3 | 151.6/141.7 | 175/175 | 148/158 | 702/702 | 166.4/156.4 | 200/200 | 162/172 | 722/722 | 157.6/147.7 | 175/175 | 154/164 | 707/707 | 172.4/162.4 | 200/200 | 167/177 | 727/727 | |
| | | 281A00 | 56.3/75.0 | 156.4/180.4 | 177.8/201.8 | 200/225 | 200/227 | 702/702 | 192.5/216.5 | 200/250 | 213/241 | 722/722 | 183.8/207.8 | 200/225 | 205/233 | 707/707 | 198.5/222.5 | 200/250 | 219/246 | 727/727 | |
| MED | 208/230-3-60 | NONE | - | - | - | 152.9 | 200 | 161 | 781 | 164.7 | 200 | 175 | 801 | 157.7 | 200 | 167 | 786 | 169.5 | 200 | 180 | 806 |
| | | 279A00 | 18.8/25.0 | 52.1/60.1 | 152.9/152.9 | 200/200 | 161/161 | 781/781 | 164.7/164.7 | 200/200 | 175/175 | 801/801 | 157.7/157.7 | 200/200 | 167/167 | 786/786 | 169.5/169.5 | 200/200 | 180/180 | 806/806 | |
| | | 280A00 | 37.6/50.0 | 104.2/120.3 | 165.9/155.9 | 200/200 | 161/171 | 781/781 | 180.6/170.7 | 200/200 | 175/185 | 801/801 | 171.9/161.9 | 200/200 | 167/177 | 786/786 | 186.6/176.7 | 200/200 | 180/190 | 806/806 | |
| | | 281A00 | 56.3/75.0 | 156.4/180.4 | 192.0/216.0 | 200/250 | 213/240 | 781/781 | 206.8/230.8 | 225/250 | 226/254 | 801/801 | 198.0/222.0 | 225/250 | 218/246 | 786/786 | 212.8/236.8 | 225/250 | 232/259 | 806/806 | |
| HIGH | | NONE | - | - | - | 154.8 | 200 | 163 | 812 | 166.6 | 200 | 177 | 832 | 159.6 | 200 | 169 | 817 | 171.4 | 200 | 182 | 837 |
| | | 279A00 | 18.8/25.0 | 52.1/60.1 | 154.8/154.8 | 200/200 | 163/163 | 812/812 | 166.6/166.6 | 200/200 | 177/177 | 832/832 | 159.6/159.6 | 200/200 | 169/169 | 817/817 | 171.4/171.4 | 200/200 | 182/182 | 837/837 | |
| | | 280A00 | 37.6/50.0 | 104.2/120.3 | 168.3/158.3 | 200/200 | 163/173 | 812/812 | 183.0/173.1 | 200/200 | 177/187 | 832/832 | 174.3/164.3 | 200/200 | 169/179 | 817/817 | 189.0/179.1 | 200/200 | 182/192 | 837/837 | |
| | | 281A00 | 56.3/75.0 | 156.4/180.4 | 194.4/218.4 | 225/250 | 215/242 | 812/812 | 209.2/233.2 | 225/250 | 228/256 | 832/832 | 200.4/224.4 | 225/250 | 220/248 | 817/817 | 215.2/239.2 | 225/250 | 234/262 | 837/837 | |
| STD | 460-3-60 | NONE | - | - | - | 66.0 | 80 | 69 | 354 | 72.2 | 90 | 76 | 366 | 68.2 | 90 | 72 | 356 | 74.4 | 90 | 79 | 368 |
| | | 282A00 | 25.0 | 30.1 | 66.0 | 80 | 69 | 354 | 72.2 | 90 | 76 | 366 | 68.2 | 90 | 72 | 356 | 74.4 | 90 | 79 | 368 | |
| | | 283A00 | 50.0 | 60.1 | 70.9 | 80 | 79 | 354 | 78.6 | 90 | 86 | 366 | 73.6 | 90 | 82 | 356 | 81.4 | 90 | 89 | 368 | |
| | | 284A00 | 75.0 | 90.2 | 101.0 | 110 | 114 | 354 | 108.7 | 125 | 121 | 366 | 103.7 | 125 | 116 | 356 | 111.5 | 125 | 123 | 368 | |
| MED | 558J*30 | NONE | - | - | - | 71.7 | 90 | 76 | 394 | 77.9 | 100 | 83 | 406 | 73.9 | 100 | 78 | 396 | 80.1 | 100 | 85 | 408 |
| | | 282A00 | 25.0 | 30.1 | 71.7 | 90 | 76 | 394 | 77.9 | 100 | 83 | 406 | 73.9 | 100 | 78 | 396 | 80.1 | 100 | 85 | 408 | |
| | | 283A00 | 50.0 | 60.1 | 78.0 | 90 | 86 | 394 | 85.7 | 100 | 93 | 406 | 80.7 | 100 | 88 | 396 | 88.5 | 100 | 95 | 408 | |
| | | 284A00 | 75.0 | 90.2 | 108.1 | 125 | 120 | 394 | 115.8 | 125 | 127 | 406 | 110.8 | 125 | 123 | 396 | 118.6 | 125 | 130 | 408 | |
| HIGH | | NONE | - | - | - | 72.6 | 90 | 77 | 409 | 78.8 | 100 | 84 | 421 | 74.8 | 100 | 79 | 411 | 81.0 | 100 | 86 | 423 |
| | | 282A00 | 25.0 | 30.1 | 72.6 | 90 | 77 | 409 | 78.8 | 100 | 84 | 421 | 74.8 | 100 | 79 | 411 | 81.0 | 100 | 86 | 423 | |
| | | 283A00 | 50.0 | 60.1 | 79.1 | 90 | 87 | 409 | 86.9 | 100 | 94 | 421 | 81.9 | 100 | 89 | 411 | 89.6 | 100 | 96 | 423 | |
| | | 284A00 | 75.0 | 90.2 | 109.2 | 125 | 121 | 409 | 117.0 | 125 | 128 | 421 | 112.0 | 125 | 124 | 411 | 119.7 | 125 | 131 | 423 | |
| STD | | NONE | - | - | - | 56.0 | 70 | 59 | 264 | 60.8 | 80 | 64 | 272 | 57.7 | 80 | 61 | 266 | 62.5 | 80 | 66 | 274 |
| | | 285A00 | 24.8 | 23.9 | 56.0 | 70 | 59 | 264 | 60.8 | 80 | 64 | 272 | 57.7 | 80 | 61 | 266 | 62.5 | 80 | 66 | 274 | |
| | | 286A00 | 49.6 | 47.7 | 69.1 | 70 | 64 | 264 | 75.1 | 80 | 69 | 272 | 71.3 | 80 | 66 | 266 | 77.3 | 80 | 71 | 274 | |
| | | 287A00 | 74.4 | 71.6 | 81.1 | 90 | 91 | 264 | 87.1 | 90 | 97 | 272 | 83.2 | 90 | 93 | 266 | 89.2 | 90 | 99 | 274 | |
| MED | 575-3-60 | NONE | - | - | - | 57.9 | 70 | 61 | 291 | 62.7 | 80 | 66 | 299 | 59.6 | 80 | 63 | 293 | 64.4 | 80 | 68 | 301 |
| | | 285A00 | 24.8 | 23.9 | 57.9 | 70 | 61 | 291 | 62.7 | 80 | 66 | 299 | 59.6 | 80 | 63 | 293 | 64.4 | 80 | 68 | 301 | |
| | | 286A00 | 49.6 | 47.7 | 71.5 | 80 | 66 | 291 | 77.5 | 80 | 71 | 299 | 73.6 | 80 | 68 | 293 | 79.6 | 80 | 73 | 301 | |
| | | 287A00 | 74.4 | 71.6 | 83.5 | 90 | 93 | 291 | 89.5 | 100 | 99 | 299 | 85.6 | 90 | 95 | 293 | 91.6 | 100 | 101 | 301 | |
| HIGH | | NONE | - | - | - | 60.8 | 80 | 64 | 302 | 65.6 | 80 | 70 | 310 | 62.5 | 80 | 66 | 304 | 67.3 | 80 | 72 | 312 |
| | | 285A00 | 24.8 | 23.9 | 60.8 | 80 | 64 | 302 | 65.6 | 80 | 70 | 310 | 62.5 | 80 | 66 | 304 | 67.3 | 80 | 72 | 312 | |
| | | 286A00 | 49.6 | 47.7 | 75.1 | 80 | 69 | 302 | 81.1 | 90 | 75 | 310 | 77.3 | 80 | 71 | 304 | 83.3 | 90 | 77 | 312 | |
| | | 287A00 | 74.4 | 71.6 | 87.1 | 100 | 97 | 302 | 93.1 | 100 | 102 | 310 | 89.2 | 100 | 99 | 304 | 95.2 | 100 | 104 | 312 | |

See: "Legend and Notes" on page 42

SEQUENCE OF OPERATION

General

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

Electro-mechanical units with no economizer

Cooling (Single speed indoor fan motor) —

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

Cooling (2-speed indoor fan motor) —

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

Heating —

NOTE: The 558J is sold as cooling only. If electric heaters are required, use only factory-approved electric heaters. They will operate as described below.

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

Electro-mechanical units with an economizer

Cooling —

When free cooling is not available, the compressors will be controlled by the zone thermostat. When free cooling is available, the outdoor-air damper is modulated by the EconoMi\$er IV and X control to provide a 50°F (10°C) to 55°F (13°C) mixed-air temperature into the zone. As the mixed air temperature fluctuates above 55°F (13°C) or below 50°F (10°C) dampers will be modulated (open or close) to bring the mixed-air temperature back within control. If mechanical cooling is utilized with free

cooling, the outdoor-air damper will maintain its current position at the time the compressor is started. If the increase in cooling capacity causes the mixed-air temperature to drop below 45°F (9°C), then the outdoor-air damper position will be decreased to the minimum position. If the mixed-air temperature continues to fall, the outdoor-air damper will close. Control returns to normal once the mixed-air temperature rises above 48°F (9°C). The power exhaust fans will be energized and de-energized, if installed, as the outdoor-air damper opens and closes.

If field-installed accessory CO₂ sensors are connected to the EconoMi\$er IV and X control, a demand controlled ventilation strategy will begin to operate. As the CO₂ level in the zone increases above the CO₂ setpoint, the minimum position of the damper will be increased proportionally. As the CO₂ level decreases because of the increase in fresh air, the outdoor-air damper will be proportionally closed. For EconoMi\$er IV and X operation, there must be a thermostat call for the fan (G). If the unit is occupied and the fan is on, the damper will operate at minimum position. Otherwise, the damper will be closed.

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

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

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

SEQUENCE OF OPERATION (cont.)

Heating —

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

Refer to Service and Maintenance Manual for further details.

Optional Perfect Humidity Dehumidification System

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

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

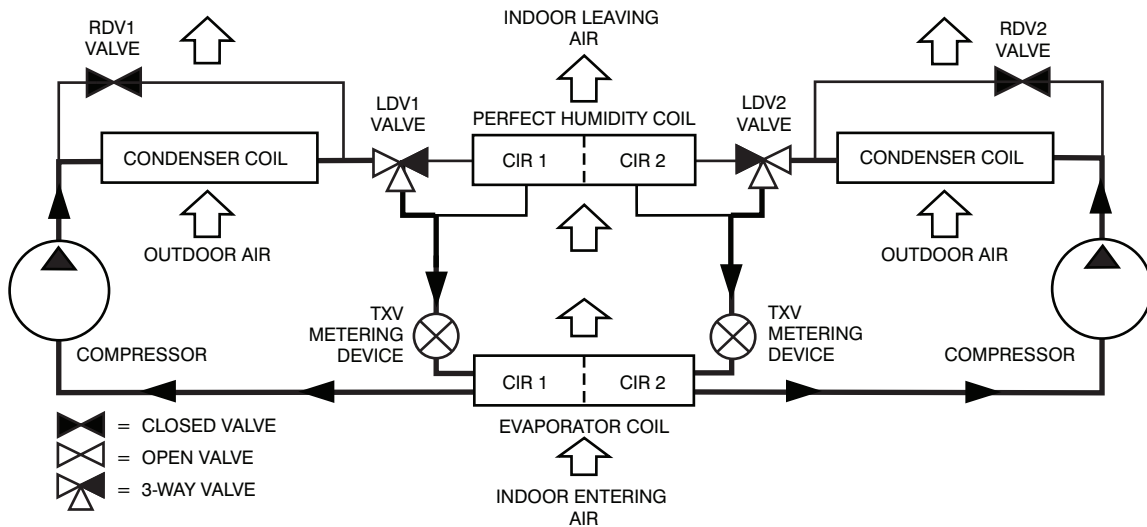
Cool mode - provides a normal ratio of Sensible and Latent Cooling effect from the evaporator coil.

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

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

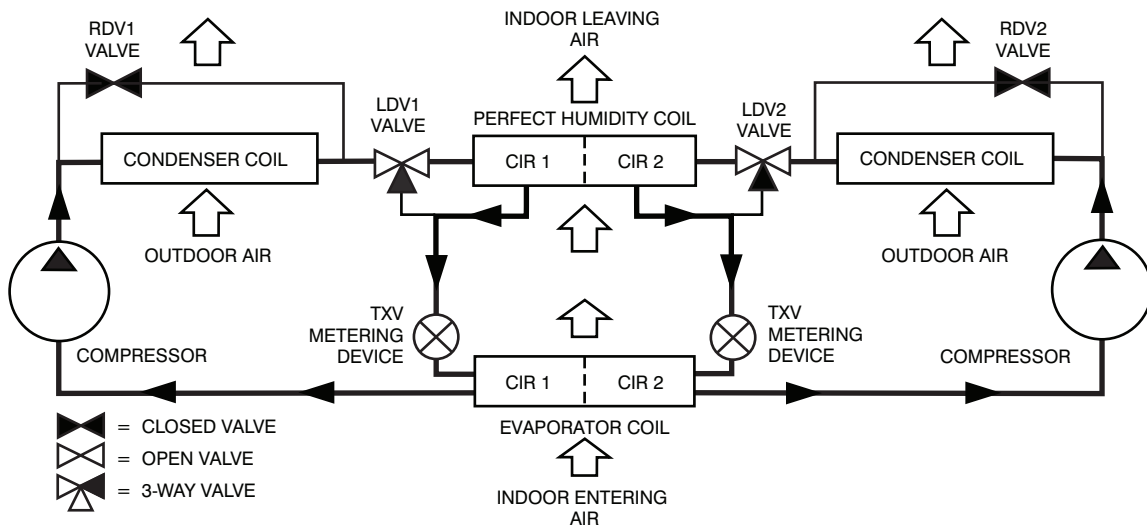
The Reheat1 and Reheat2 modes are available when the unit is not in a Heating mode and when the Low Ambient Lockout switch is closed.

SEQUENCE OF OPERATION (cont.)



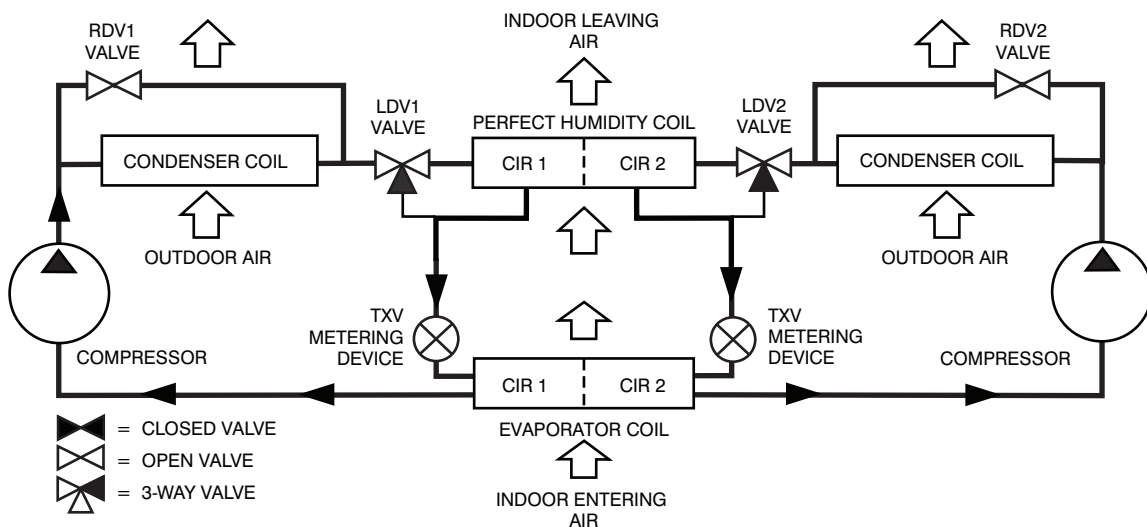
C13851

Normal Cooling Mode - Perfect Humidity System



C13852

Subcooling Mode (Reheat 1) - Perfect Humidity System



C13853

Hot Gas Reheat Mode (Reheat 2) - Perfect Humidity System

GUIDE SPECIFICATIONS - 558J-17-30D

Note about this specification:

These specifications are written in “Masterformat” as published by the Construction Specification Institute. Please feel free to copy this specification directly into your building spec.



Cooling Only/Electric Heat Packaged Rooftop HVAC Guide Specifications

Size Range: 15 to 27.5 Nominal Tons

| <u>Section</u> | <u>Description</u> |
|----------------|--------------------|
|----------------|--------------------|

| | |
|-----------------|---|
| 23 06 80 | Schedules for Decentralized HVAC Equipment |
|-----------------|---|

- | | |
|----------------|---|
| 23 06 80.13 | Decentralized Unitary HVAC Equipment Schedule |
| 23 06 80.13.A. | Rooftop unit schedule |
| 1. | Schedule is per the project specification requirements. |

| | |
|-----------------|----------------------------------|
| 23 07 16 | HVAC Equipment Insulation |
|-----------------|----------------------------------|

- | | |
|----------------|---|
| 23 07 16.13 | Decentralized, Rooftop Units: |
| 23 07 16.13.A. | Evaporator fan compartment: |
| 1. | Interior cabinet surfaces shall be insulated with a minimum 1/2-in. thick, minimum 1 1/2 lb density, flexible fiberglass insulation bonded with a phenolic binder, neoprene coated on the air side. |
| 2. | Insulation and adhesive shall meet NFPA 90A requirements for flame spread and smoke generation. |
| 23 07 16.13.B. | Electric heat compartment: |
| 1. | Aluminum foil-faced fiberglass insulation shall be used. |
| 2. | Insulation and adhesive shall meet NFPA 90A requirements for flame spread and smoke generation. |

| | |
|-----------------|---|
| 23 09 13 | Instrumentation and Control Devices for HVAC |
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- | | |
|----------------|---|
| 23 09 13.23 | Sensors and Transmitters |
| 23 09 13.23.A. | Thermostats |
| 1. | Thermostat must |
| a. | energize both “W” and “G” when calling for heat. |
| b. | have capability to energize 2 different stages of cooling, and 2 different stages of heating. |
| c. | include capability for occupancy scheduling. |

| | |
|-----------------|---|
| 23 09 23 | Direct-digital Control system for HVAC |
|-----------------|---|

- | | |
|---------------|--|
| 23 09 23.13 | Decentralized, Rooftop Units: |
| 23 09 23.13A. | RTU-Open multi-protocol, direct digital controller: |
| 1. | Shall be ASHRAE 62-2001 compliant. |
| 2. | Shall accept 18-30VAC, 50-60Hz, and consumer 15VA or less power. |
| 3. | Shall have an operating temperature range from -40°F (-40°C) to 130°F (54°C), 10% - 90% RH (non-condensing). |
| 4. | Shall include built-in protocol for BACNET (MS/TP and PTP modes), Modbus (RTU and ASCII), Johnson N2 and LonWorks. LonWorks Echelon processor required for all Lon applications shall be contained in separate communication board. |
| 5. | Shall allow access of up to 62 network variables (SNVT). Shall be compatible with all open controllers |
| 6. | Baud rate Controller shall be selectable using a dipswitch. |
| 7. | Shall have an LED display independently showing the status of serial communication, running, errors, power, all digital outputs, and all analog inputs. |
| 8. | Shall accept the following inputs: space temperature, setpoint adjustment, outdoor air temperature, indoor air quality, outdoor air quality, compressor lock-out, fire shutdown, enthalpy switch, and fan status/filter status/humidity/ remote occupancy. |
| 9. | Shall provide the following outputs: economizer, fan, cooling stage 1, cooling stage 2, heat stage 1, heat stage 2, heat stage 3/ exhaust/ reversing valve. |

10. Shall have built-in surge protection circuitry through solid state polyswitches. Polyswitches shall be used on incoming power and network connections. Polyswitches will return to normal when the “trip” condition clears.
11. Shall have a battery back-up capable of a minimum of 10,000 hours of data and time clock retention during power outages.
12. Shall have built-in support for Bryant technician tool.
13. Shall include an EIA-485 protocol communication port, an access port for connection of either a computer or a Bryant technician tool, an EIA-485 port for network communication to intelligent space sensors and displays, and a port to connect an optional LonWorks communications card.
14. Software upgrades will be accomplished by either local or remote download. No software upgrades through chip replacements are allowed.

23 09 33 Electric and Electronic Control System for HVAC

23 09 33.13 Decentralized, Rooftop Units:

23 09 33.13.A. General:

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

23 09 33.23.B. Safeties:

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

23 09 93 Sequence of Operations for HVAC Controls

23 09 93.13 Decentralized, Rooftop Units:

23 09 93.13 INSERT SEQUENCE OF OPERATION

23 40 13 Panel Air Filters

23 40 13.13 Decentralized, Rooftop Units:

23 40 13.13.A. Standard filter section

1. Shall consist of factory-installed, low velocity, throwaway 2-in. thick fiberglass filters of commercially available sizes.
2. Unit shall use only one filter size. Multiple sizes are not acceptable.
3. Filters shall be accessible through a dedicated, weather tight panel.
4. 4-in filter capabilities shall be capable with pre-engineered and approved Bryant filter track field installed accessory. This kit requires field furnished filters.

23 81 19 Self-Contained Air Conditioners

23 81 19.13 Medium-Capacity Self-Contained Air Conditioners

23 81 19.13.A. General

1. Outdoor, rooftop mounted, electrically controlled, heating and cooling unit utilizing hermetic scroll compressor(s) for cooling duty and with optional electrical heating accessories for heating duty.
2. Factory assembled, single-piece heating and cooling rooftop unit. Contained within the unit enclosure shall be all factory wiring, piping, controls, and special features required prior to field start-up.
3. Unit shall use Puron refrigerant.
4. Unit shall be installed in accordance with the manufacturer’s instructions.

5. Unit must be selected and installed in compliance with local, state, and federal codes.

23 81 19.13.B. Quality Assurance

1. Unit meets ASHRAE 90.1 minimum efficiency requirements.
2. Unit shall be rated in accordance with AHRI Standard 340/360.
3. Unit shall be designed to conform to ASHRAE 15.
4. Unit shall be ETL-tested and certified in accordance with ANSI Z21.47 Standards and ETL-listed and certified under Canadian standards as a total package for safety requirements.
5. Insulation and adhesive shall meet NFPA 90A requirements for flame spread and smoke generation.
6. Unit casing shall be capable of withstanding 500-hour salt spray exposure per ASTM B117 (scribed specimen).
7. Unit shall be designed and manufactured in accordance with ISO 9001.
8. Roof curb shall be designed to conform to NRCA Standards.
9. Unit shall be subjected to a completely automated run test on the assembly line. The data for each unit will be stored at the factory, and must be available upon request.
10. Unit shall be designed in accordance with UL Standard 1995, including tested to withstand rain.
11. Unit shall be constructed to prevent intrusion of snow and tested to prevent snow intrusion into the control box up to 40 mph.
12. Unit shake tested to assurance level 1, ASTM D4169 to ensure shipping reliability.
13. High Efficient Motors listed shall meet section 313 of the Energy Independence and Security Act of 2007 (EISA 2007).

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

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

23 81 19.13.D. Project Conditions

1. As specified in the contract.

23 81 19.13.E. Operating Characteristics

1. Unit shall be capable of starting and running at 115°F (46°C) ambient outdoor temperature, meeting maximum load criteria of AHRI Standard 340/360 at ± 10% voltage.
2. Compressor with standard controls shall be capable of operation from 30°F (-1°C) , ambient outdoor temperatures. Accessory kits are necessary if mechanically cooling at ambient temperatures below 30°F (-1°C).
3. Unit shall discharge supply air vertically as shown on contract drawings.
4. Unit shall be factory furnished for vertical configuration. No field conversion is required.

23 81 19.13.F. Electrical Requirements

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

23 81 19.13.G. Unit Cabinet

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

- c. Shall use a 3/4-in -14 NPT drain connection at the end of the drain pan. Connection shall be made per manufacturer's recommendations.
7. Top panel:
 - a. Shall be a multi-piece top panel linked with water tight flanges and interlocking systems.
 8. Electrical Connections
 - a. All unit power wiring shall enter unit cabinet at a single, factory-prepared, knockout location.
 - b. Thru-the-base capability
 - (1.) Thru-the base provisions/connections are available as standard with every unit. When bottom connections are required, field furnished couplings are required
 - (2.) No basepan penetration, other than those authorized by the manufacturer, is permitted.
 9. Component access panels (standard)
 - a. Cabinet panels shall be easily removable for servicing.
 - b. Unit shall have one factory installed, removable, filter access panel.
 - c. Panels covering control box and filters shall have molded composite handles while the blower access door shall have an integrated flange for easy removal.
 - d. Handles shall be UV modified, composite. They shall be permanently attached, and recessed into the panel.
 - e. Screws on the vertical portion of all removable access panel shall engage into heat resistant, molded composite collars.
 - f. Collars shall be removable and easily replaceable using manufacturer recommended parts.
- 23 81 19.13.H. Coils
1. Standard Aluminum fin - Copper Tube Coils:
 - a. Standard evaporator and condenser coils shall have aluminum lanced plate fins mechanically bonded to seamless internally grooved copper tubes with all joints brazed.
 - b. Evaporator coils shall be leak tested to 150 psig, pressure tested to 450 psig, and qualified to UL 1995 burst test at 1775 psig.
 - c. Condenser coils shall be leak tested to 150 psig, pressure tested to 650 psig, and qualified to UL 1995 burst test at 1980 psig.
 2. Optional Pre-coated aluminum-fin condenser coils:
 - a. Shall have a durable epoxy-phenolic coating to provide protection in mildly corrosive coastal environments.
 - b. Coating shall be applied to the aluminum fin stock prior to the fin stamping process to create an inert barrier between the aluminum fin and copper tube.
 - c. Epoxy-phenolic barrier shall minimize galvanic action between dissimilar metals.
 3. Optional Copper-fin evaporator and condenser coils:
 - a. Shall be constructed of copper fins mechanically bonded to copper tubes and copper tube sheets.
 - b. Galvanized steel tube sheets shall not be acceptable.
 - c. A polymer strip shall prevent coil assembly from contacting the sheet metal coil pan to minimize potential for galvanic corrosion between coil and pan.
 4. Optional E-coated aluminum-fin evaporator and condenser coils:
 - a. Shall have a flexible epoxy polymer coating uniformly applied to all coil surface areas without material bridging between fins.
 - b. Coating process shall ensure complete coil encapsulation of tubes, fins and headers.
 - c. Color shall be high gloss black with gloss per ASTM D523-89.
 - d. Uniform dry film thickness from 0.8 to 1.2 mil on all surface areas including fin edges.
 - e. Superior hardness characteristics of 2H per ASTM D3363-92A and cross-hatch adhesion of 4B-5B per ASTM D3359-93.
 - f. Impact resistance shall be up to 160 in.-lb (ASTM D2794-93).
 - g. Humidity and water immersion resistance shall be up to minimum 1000 and 250 hours respectively (ASTM D2247-92 and ASTM D870-92).
 - h. Corrosion durability shall be confirmed through testing to be no less than 1000 hours salt spray per ASTM B117-90.
 5. Standard All Aluminum Novation Coils:

- a. Standard condenser coils shall have all aluminum Novation Heat Exchanger Technology design consisting of aluminum multi port flat tube design and aluminum fin. Coils shall be a furnace brazed design and contain epoxy lined shrink wrap on all aluminum to copper connections.
 - b. Condenser coils shall be leak tested to 150 psig, pressure tested to 650 psig, and qualified to UL 1995 burst test at 1980 psig.
6. Optional E-coated aluminum-fin, aluminum tube condenser coils:
- a. Shall have a flexible epoxy polymer coating uniformly applied to all coil external surface areas without material bridging between fins.
 - b. Coating process shall ensure complete coil encapsulation, including all exposed fin edges.
 - c. E-coat thickness of 0.8 to 1.2 mil with top coat having a uniform dry film thickness from 1.0 to 2.0 mil on all external coil surface areas, including fin edges, shall be provided.
 - d. Shall have superior hardness characteristics of 2H per ASTM D3363-00 and cross-hatch adhesion of 4B-5B per ASTM D3359-02.
 - e. Shall have superior impact resistance with no cracking, chipping or peeling per NSF/ANSI 51-2002 Method 10.2.

23 81 19.13.I. Refrigerant Components

1. Refrigerant circuit shall include the following control, safety, and maintenance features:
 - a. Fixed orifice metering system (on non-Humidifier units) shall prevent mal-distribution of two-phase refrigerant by including multiple fixed orifice devices in each refrigeration circuit. Each orifice is to be optimized to the coil circuit it serves.
 - b. Thermostatic Expansion Valve (TXV) shall help provide optimum performance across the entire operating range. Shall contain removable power element to allow change-out of power element and bulb without removing the valve body (for Perfect Humidity units only).
 - c. Refrigerant filter drier - Solid core design.
 - d. Service gauge connections on suction and discharge lines.
 - e. Pressure gauge access through a specially designed screen on the side of the unit.
2. Compressors
 - a. Unit shall use one fully hermetic, scroll compressor for each independent refrigeration circuit.
 - b. Models shall be available with 2 compressor/2-stage cooling.
 - c. Compressor motors shall be cooled by refrigerant gas passing through motor windings.
 - d. Compressors shall be internally protected from high discharge temperature conditions.
 - e. Compressors shall be protected from an over-temperature and over-ampereage conditions by an internal, motor overload device.
 - f. Compressor shall be factory mounted on rubber grommets.
 - g. Compressor motors shall have internal line break thermal, current overload and high pressure differential protection.
 - h. Crankcase heaters shall not be required for normal operating range, unless provided by the factory.

23 81 19.13.J. Filter Section

1. Filters access is specified in the unit cabinet section of this specification.
2. Filters shall be held in place by a preformed slide out filter tray, facilitating easy removal and installation.
3. Shall consist of factory-installed, low velocity, throw-away 2-in. thick fiberglass filters.
4. Filters shall be standard, commercially available sizes.
5. Only one size filter per unit is allowed.
6. 4-in filter capability is possible with a field installed pre-engineered slide out filter track accessory. 4-in filters are field furnished.

23 81 19.13.K. Evaporator Fan and Motor

1. Evaporator fan motor:
 - a. Shall have inherent automatic-reset thermal overload protection or circuit breaker.
 - b. Shall have a maximum continuous bhp rating for continuous duty operation; no safety factors above that rating shall be required.
2. Belt-driven Evaporator Fan:
 - a. Belt drive shall include an adjustable-pitch motor pulley and belt break protection system..
 - b. Shall use rigid pillow block bearing system with lubricate fittings at are accessible or lubrication line.
 - c. Blower fan shall be double-inlet type with forward-curved blades.
 - d. Shall be constructed from steel with a corrosion resistant finish and dynamically balanced.

23 81 19.13.L. Condenser Fans and Motors

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

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

1. Two-Speed Indoor Fan Motor System for 2-stage cooling models only
 - a. Evaporator fan motor:
 - (1.) Shall have permanently lubricated bearings.
 - (2.) Shall have a maximum continuous bhp rating for continuous duty operation; no safety factors above that rating.
 - (3.) Shall be Variable Frequency duty and 2-speed control.
 - (4.) Shall contain motor shaft grounding ring to prevent electrical bearing fluting damage by safely diverting harmful shaft voltages and bearing currents to ground.
2. Variable Frequency Drive (VFD). Only available on 2-speed indoor fan motor system option:
 - a. Shall be installed inside the unit cabinet, mounted, wired and tested.
 - b. Shall contain Electromagnetic Interference (EMI) frequency protection.
 - c. Insulated Gate Bi-Polar Transistors (IGBT) used to produce the output pulse width modulated (PWM) waveform, allowing for quiet motor operation.
 - d. Self diagnostics with fault and power code LED indicator. Field accessory Display Kit available for further diagnostics and special setup applications.
 - e. RS485 capability standard.
 - f. Electronic thermal overload protection.
 - g. 5% swinging chokes for harmonic reduction and improved power factor.
 - h. All printed circuit boards shall be conformal coated.
3. Integrated EconoMiSer IV, EconoMiSer 2, and EconoMiSer X standard leak rate models. (Factory or field installed)
 - a. Integrated, gear driven opposing modulating blade design type capable of simultaneous economizer and compressor operation.
 - b. Independent modules for vertical return configuration shall be available.
 - c. Damper blades shall be galvanized steel with composite gears. Plastic or composite blades on intake or return shall not be acceptable.
 - d. Shall include all hardware and controls to provide free cooling with outdoor air when temperature and/or humidity are below setpoints.
 - e. Shall be equipped with gear driven dampers for both the outdoor ventilation air and the return air for positive air stream control.
 - f. Standard leak rate models shall be equipped with dampers not to exceed 2% leakage at 1 in. wg pressure differential.
 - g. Economizer controller on EconoMiSer IV models shall be the Honeywell W7212 that provides:
 - (1.) Combined minimum and DCV maximum damper position potentiometers with compressor staging relay.
 - (2.) Functions with solid state analog enthalpy or dry bulb changeover control sensing.
 - (3.) Contain LED indicates for: when free cooling is available, when module is in DCV mode, when exhaust fan contact is closed.
 - h. Economizer controller on EconoMiSer X models shall be the Honeywell W7220 that provides:
 - (1.) 2-line LCD interface screen for setup, configuration and troubleshooting
 - (2.) On-board Fault Detection and Diagnostics (FDD) that senses and alerts when the economizer is not operating properly, per California Title 24.
 - (3.) Sensor failure loss of communication identification
 - (4.) Automatic sensor detection
 - (5.) Capabilities for use with multiple-speed indoor fan systems

- (6.) Utilize digital sensors: Dry bulb and Enthalpy
- i. Economizer controller on EconoMiSer 2 models with PremierLink shall be 4-20mA design and controlled by the PremierLink controller. PremierLink does not comply with California Title 24 Fault Detection & Diagnostic (FDD) requirements.
- j. Economizer controller on EconoMiSer 2 models with RTU Open models shall be 4-20mA design controlled directly by the RTU Open controller. RTU Open meets California Title 24 Fault Detection & Diagnostic (FDD) requirements.
- k. Shall be capable of introducing up to 100% outdoor air.
- l. Shall be equipped with a barometric relief damper capable of relieving up to 100% return air and contain seals that meet ASHRAE 90.1 requirements.
- m. Shall be designed to close damper(s) during loss-of-power situations with spring return built into motor.
- n. Dry bulb outdoor air temperature sensor shall be provided as standard. Enthalpy sensor is also available on factory installed only. Outdoor air sensor setpoint shall be adjustable and shall range from 40 to 100°F / 4 to 38°C. Additional sensor options shall be available as accessories.
- o. The economizer controller shall also provide control of an accessory power exhaust unit function. Factory set at 100%, with a range of 0% to 100%.
- p. The economizer shall maintain minimum airflow into the building during occupied period and provide design ventilation rate for full occupancy.
- q. Dampers shall be completely closed when the unit is in the unoccupied mode.
- r. Economizer controller shall accept a 2-10 Vdc CO2 sensor input for IAQ/DCV control. In this mode, dampers shall modulate the outdoor air damper to provide ventilation based on the sensor input.
- s. Compressor lockout temperature on W7220 is adjustable from -45°F to 80°F, set at a factory default of 32°F. Others shall open at 35°F (2°C) and closes at 50°F (10°C).
- t. Actuator shall be direct coupled to economizer gear. No linkage arms or control rods shall be acceptable.
- u. Economizer controller shall provide indications when in free cooling mode, in the DCV mode, or the exhaust fan contact is closed.
- 4. Integrated EconoMiSer2, and EconoMiSer X **Ultra Low Leak rate models.** (Factory or field installed).
 - a. Integrated, gear driven opposing modulating blade design type capable of simultaneous economizer and compressor operation.
 - b. Independent modules for vertical return configuration shall be available.
 - c. Damper blades shall be galvanized steel with composite gears. Plastic or composite blades on intake or return shall not be acceptable.
 - d. Shall include all hardware and controls to provide free cooling with outdoor air when temperature and/or humidity are below setpoints.
 - e. Shall be equipped with gear driven dampers for both the outdoor ventilation air and the return air for positive air stream control.
 - f. Ultra Low Leak design meets California Title 24 section 140.4 and ASHRAE 90.1 requirements of 4 cfm per sq. ft. on the outside air dampers and 10 cfm per sq. ft. on the return dampers.
 - g. Economizer controller on EconoMiSer X models shall be the Honeywell W7220 that provides:
 - (1.) 2-line LCD interface screen for setup, configuration and troubleshooting
 - (2.) On-board Fault Detection and Diagnostics (FDD) that senses and alerts when the economizer is not operating properly, per California Title 24.
 - (3.) Sensor failure loss of communication identification
 - (4.) Automatic sensor detection
 - (5.) Capabilities for use with multiple-speed indoor fan systems
 - (6.) Utilize digital sensors: Dry bulb and Enthalpy
 - h. Economizer controller on EconoMiSer 2 models with RTU Open models shall be 4-20mA design controlled directly by the RTU Open controller. RTU Open meets California Title 24 Fault Detection & Diagnostic (FDD) requirements.
 - i. Shall be capable of introducing up to 100% outdoor air.
 - j. Shall be equipped with a barometric relief damper capable of relieving up to 100% return air and contain seals that meet ASHRAE 90.1 requirements.
 - k. Shall be designed to close damper(s) during loss-of-power situations with spring return built into motor.
 - l. Dry bulb outdoor air temperature sensor shall be provided as standard. Enthalpy sensor is also available on factory installed only. Outdoor air sensor setpoint shall be adjustable and shall range from 40 to 100°F/4 to 38°C. Additional sensor options shall be available as accessories.

- m. The economizer controller shall also provide control of an accessory power exhaust unit function. Factory set at 100%, with a range of 0% to 100%.
 - n. The economizer shall maintain minimum airflow into the building during occupied period and provide design ventilation rate for full occupancy.
 - o. Dampers shall be completely closed when the unit is in the unoccupied mode.
 - p. Economizer controller shall accept a 2-10 Vdc CO2 sensor input for IAQ/DCV control. In this mode, dampers shall modulate the outdoor air damper to provide ventilation based on the sensor input.
 - q. Compressor lockout temperature on W7220 is adjustable from -45°F to 80°F, set at a factory default of 32°F. Others shall open at 35°F (2°C) and closes at 50°F (10°C).
 - r. Actuator shall be direct coupled to economizer gear. No linkage arms or control rods shall be acceptable.
 - s. Economizer controller shall provide indications when in free cooling mode, in the DCV mode, or the exhaust fan contact is closed.
5. Two-Position Motorized Damper :
- a. Damper shall be a Two-Position Damper. Damper travel shall be from the full closed position to the field adjustable %-open setpoint.
 - b. Damper shall include adjustable damper travel from 25% to 100% (full open).
 - c. Damper shall include single or dual blade, gear driven dampers and actuator motor.
 - d. Actuator shall be direct coupled to damper gear. No linkage arms or control rods shall be acceptable.
 - e. Damper will admit up to 100% outdoor air for applicable rooftop units.
 - f. Damper shall close upon indoor (evaporator) fan shutoff and/or loss of power.
 - g. The damper actuator shall plug into the rooftop unit's wiring harness plug. No hard wiring shall be required.
 - h. Outside air hood shall include aluminum water entrainment filter
6. Manual damper
- a. Manual damper package shall consist of damper, air inlet screen, and rain hood which can be preset to admit up to 25% outdoor air for year round ventilation.
7. Perfect Humidity Dehumidification System (not available on 30 size models)
- a. The Perfect Humidity Dehumidification System shall be factory-installed in 558J*17-28 models with RTPPF (round tube plate fin) condenser coils, and shall provide greater dehumidification of the occupied space by two modes of dehumidification operations beside its normal design cooling mode:
 - (1.) Subcooling mode further subcools the hot liquid refrigerant leaving the condenser coil when both temperature and humidity in the space are not satisfied.
 - (2.) Hot gas reheat mode shall mix a portion of the hot gas from the discharge of the compressor with the hot liquid refrigerant leaving the condenser coil to create a two-phase heat transfer in the system, resulting in a neutral leaving- air temperature when only humidity in the space is not satisfied.
 - (3.) Includes Head Pressure Controller.
8. Head Pressure Control Package (MotorMaster)
- a. Controller shall control coil head pressure by condenser-fan speed modulation or condenser-fan cycling and wind baffles.
 - b. Shall consist of solid-state control and condenser-coil temperature sensor to maintain condensing temperature between 90°F (32°C) and 110°F (43°C) at outdoor ambient temperatures down to -20°F (-29°C).
9. Condenser Coil Hail Guard Assembly
- a. Shall protect against damage from hail.
 - b. Shall be louvered style design.
10. Unit-Mounted, Non-Fused Disconnect Switch:
- a. Switch shall be factory-installed, internally mounted.
 - b. National Electric Code (NEC) and ETL approved non-fused switch shall provide unit power shutoff.
 - c. Shall be accessible from outside the unit
 - d. Shall provide local shutdown and lockout capability.
11. Convenience Outlet:
- a. Powered convenience outlet.
 - (1.) Outlet shall be powered from main line power to the rooftop unit.
 - (2.) Outlet shall be powered from line side of disconnect by installing contractor, as required by code. If outlet is powered from load side of disconnect, unit electrical ratings shall be ETL certified and rated for additional outlet amperage.

- (3.) Outlet shall be factory-installed and internally mounted with easily accessible 115-v female receptacle.
- (4.) Outlet shall include 15 amp GFI receptacles with independent fuse protection.
- (5.) Voltage required to operate convenience outlet shall be provided by a factory-installed step-down transformer.
- (6.) Outlet shall be accessible from outside the unit.
- (7.) Outlet shall include a field-installed "Wet in Use" cover.
- b. Non-Powered convenience outlet.
 - (1.) Outlet shall be powered from a separate 115/120v power source.
 - (2.) A transformer shall not be included.
 - (3.) Outlet shall be factory-installed and internally mounted with easily accessible 115-v female receptacle.
 - (4.) Outlet shall include 15 amp GFI receptacles with independent fuse protection.
 - (5.) Outlet shall be accessible from outside the unit.
 - (6.) Outlet shall include a field-installed "Wet in Use" cover.
- 12. Fan/Filter Status Switch:
 - a. Switch shall provide status of indoor evaporator fan (ON/OFF) or filter (CLEAN/DIRTY).
 - b. Status shall be displayed either over communication bus (when used with direct digital controls) or with an indicator light at the thermostat.
- 13. Centrifugal Power Exhaust:
 - a. Power exhaust shall be used in conjunction with an integrated economizer.
 - b. Power exhaust shall be controlled by economizer controller operation. Exhaust fans shall be energized when dampers open past the 0-100% adjustable setpoint on the economizer control.
- 14. Roof Curbs (Vertical):
 - a. Full perimeter roof curb with exhaust capability providing separate air streams for energy recovery from the exhaust air without supply air contamination.
 - b. Formed galvanized steel with wood nailer strip and shall be capable of supporting entire unit weight.
 - c. Permits installation and securing of ductwork to curb prior to mounting unit on the curb.
- 15. High-Static Indoor Fan Motor(s) and Drive(s):
 - a. High-static motor(s) and drive(s) shall be factory-installed to provide additional performance range.
- 16. Outdoor Air Enthalpy Sensor:
 - a. The outdoor air enthalpy sensor shall be used to provide single enthalpy control. When used in conjunction with a return air enthalpy sensor, the unit will provide differential enthalpy control. The sensor allows the unit to determine if outside air is suitable for free cooling.
- 17. Return Air Enthalpy Sensor:
 - a. The return air enthalpy sensor shall be used in conjunction with an outdoor air enthalpy sensor to provide differential enthalpy control.
- 18. Indoor Air Quality (CO₂) Sensor:
 - a. Shall be able to provide demand ventilation indoor air quality (IAQ) control.
 - b. The IAQ sensor shall be available in duct mount, wall mount, or wall mount with LED display. The setpoint shall have adjustment capability.
- 19. Smoke detectors:
 - a. Shall be a Four-Wire Controller and Detector.
 - b. Shall be environmental compensated with differential sensing for reliable, stable, and drift-free sensitivity.
 - c. Shall use magnet-activated test/reset sensor switches.
 - d. Shall have tool-less connection terminal access.
 - e. Shall have a recessed momentary switch for testing and resetting the detector.
 - f. Controller shall include:
 - (1.) One set of normally open alarm initiation contacts for connection to an initiating device circuit on a fire alarm control panel.
 - (2.) Two Form-C auxiliary alarm relays for interface with rooftop unit or other equipment.
 - (3.) One Form-C supervision (trouble) relay to control the operation of the Trouble LED on a remote test/reset station.
 - (4.) Capable of direct connection to two individual detector modules.
 - (5.) Can be wired to up to 14 other duct smoke detectors for multiple fan shutdown applications.
- 20. Winter start kit
 - a. Shall contain a bypass device around the low pressure switch.

- b. Shall be required when mechanical cooling is required down to 25°F (-4°C).
 - c. Shall not be required to operate on an economizer when below an outdoor ambient of 40°F (4°C).
21. Time Guard
- a. Shall prevent compressor short cycling by providing a 5-minute delay (±2 minutes) before restarting a compressor after shutdown for any reason.
 - b. One device shall be required per compressor.
22. Electric Heat:
- a. Heating Section
 - (1.) Heater element open coil resistance wire, nickel-chrome alloy, 0.29 inches inside diameter, strung through ceramic insulators mounted on metal frame. Coil ends are staked and welded to terminal screw slots.
 - (2.) Heater assemblies are provided with integral fusing for protection of internal heater circuits not exceeding 48 amps each. Auto reset thermo limit controls, magnetic heater contactors (24 v coil) and terminal block all mounted in electric heater control box (minimum 18 ga galvanized steel) attached to end of heater assembly.
23. Display Kit for Variable Frequency Drive
- a. Kit allows the ability to access the VFD controller programs to provide special setup capabilities and diagnostics.
 - b. Kit contains display module and communication cable.
 - c. Display Kit can be permanently installed in the unit or used on any SAV system VFD controller as needed.
24. Hinged Access Panels:
- a. Shall provide easy access through hinged access doors with vinyl coated door retainers.
 - b. Shall be on major panels of – filter, control box and fan motor.