Preferred™ Series 549K*07-12
Single Package Heat Pump Rooftop
6 to 10 Nominal Tons

bryant®

Product Data

Preferred™ SERIES

with Axion™ Fan Technology

549K*07, 08, 09, 12
Single-Packaged Heat Pump with Optional Electric Heat and Puron® Refrigerant (R-410A)

Features/Benefits

The New Bryant Preferred™ Series packaged heat pump rooftop units (RTU) with Axion™ Fan Technology were designed by customers with integrated new technology to provide value added benefits never seen in this type of equipment before.

New major design features include:

- Patented, industry's first efficient indoor fan system using Vane Axial fan with electronically commutated variable speed motor. As compared to todays typically used belt drive with forward curve fans, system provides reliable operation with:
  - 75% fewer moving parts
  - No fan belts, pulleys, shaft, and shaft bearings
  - 40% more efficient than traditional belt drive forward curve fans
  - Slow ramp up capability for better sound and comfort control
  - Internal protection from phase reversal and phase loss situations
  - High external static capability
  - Slide out blower assembly design
- Reliable 2 stage cooling with tandem scroll compressors technology, fully active evaporator coil, and mixed air temperature protection on all models
- New unit control board with intuitive indoor fan adjustment that uses simple dial and switch adjustments
- Reliable copper tube/aluminum fin condenser coil with 5/16 in. tubing to help reduce refrigerant charge and reduce weight versus prior designs

549K Preferred™ Series units up to 10 tons are specifically designed to fit on Bryant roof curbs that were installed back to 1989, which makes replacement easy and eliminates the need for curb adapters, changing utility connections or supporting curb overhang situations.

The Vane Axial 2-Speed Indoor Fan Motor System speed control helps deliver IEERs up to 17.6.

Size 07-09 models are capable of either vertical or horizontal airflow without dedicated models or field-installed kits. Size 12 models require a field installed supply air kit.

With "no-strip" screw collars, handled access panels, and more, the unit is easy to install, easy to maintain, and easy to use. Your new 6 to 10 ton Bryant Preferred™ Series rooftop unit (RTU) provides optimum comfort and control from a packaged rooftop.

Value-added features include:

- Single point electrical connections
- Use of fixed TXV refrigerant metering devices
- Scroll compressors with internal line-break overload protection
- Units come with an easy access tool-less filter door. Filter track tilts out for filter removal and replacement. All filters are the same size in each unit

Installation ease

All Preferred™ Series units are field-convertible to horizontal airflow, which makes it easy to adjust to unexpected job-site complications. Lighter units make for easy replacement and aid in the structural approval process. Units have simple, fast plug-in connections to the standard integrated unit control board (UCB). Clearly labeled connections points to reduce installation time. Also, a large control box provides room to work and room to mount Bryant accessory controls.

Easy to maintain

With the new Axion Vane Axial fan system and direct drive ECM motor, there is no longer a need to adjust or replace belts or pulleys as in past designs. This frees up maintenance, installation and commissioning time.

Table of contents

Features/Benefits (cont)

Easy access handles by Bryant provide quick and easy access to all normally serviced components. Our “no-strip” screw system has superior holding power and guides screws into position while preventing the screw from stripping the unit’s metal.

Sloped, corrosion resistant composite drain pan sheds water and won’t rust.

Easy to use

The newly re-designed Unit Control Board by Bryant puts all connections and troubleshooting points in one convenient place. Most low voltage connections are made to the same board and make it easy to access it. Setting up the fan is simple by an intuitive switch and rotary dial arrangement.

Bryant rooftops have high and low pressure switches, a new mixed air temperature switch, a filter drier and 2-in. filters standard.

Axion™ Fan Technology

Direct drive Axion™ Fan Technology indoor fan system uses Vane Axial fan design and electronically commutated motors.

This new Vane Axial design over past belt drive systems has 75% fewer moving parts, uses up to 40% less energy and has no fan belts, blower bearings and shaft. Full fan and motor assembly also slides out for easier maintenance and service.

Streamlined control and integration

Bryant controllers make connecting Preferred™ Series rooftop heat pump units into existing building automation systems easy. The units are compatible with conventional thermostat controls for greater comfort, diagnostics and building network integration.

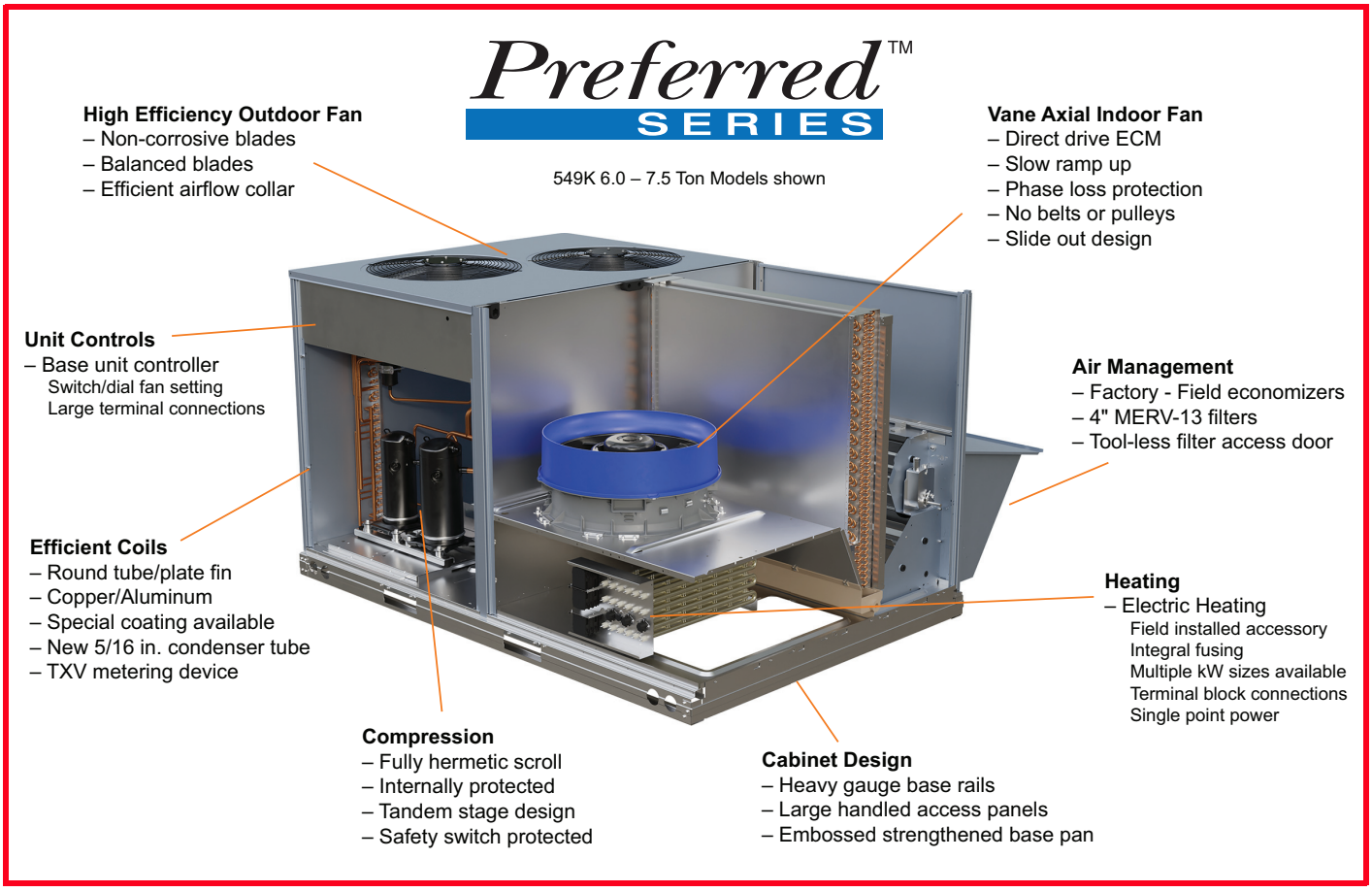
Operating efficiency and flexibility

These 549K packaged rooftops meet the Department of Energy (DOE) 2023 efficiency standard, as well as the latest ASHRAE (American Society of Heating, Refrigerating, and Air-Conditioning Engineers) 90.1 and IECC®[1] (International Energy Conservation Code) minimum IEER efficiency requirements.

Field convertible airflow

All Preferred™ Series 6 to 10 ton units are field-convertible to horizontal airflow, which makes it easy to adjust to unexpected job-site complications. 10 ton models require a simple supply duct cover kit to field convert from factory vertical to horizontal.

1. Third-party trademarks and logos are the property of their respective owners.



Model number nomenclature

549K 07-12 Model Number Nomenclature

Position:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Example:	5	4	9	K	E	0	7	N	0	0	0	A	2	A	0	A	A

Unit Type
549 = Heat Pump RTU

Model
K = Puron® (R-410A) Refrigerant with Axion™ Fan Technology

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

Cooling Tons
07 = 6.0 tons
08 = 7.5 tons
09 = 8.5 tons
12 = 10.0 tons

Refrig. System/Gas Heat Options
N = Two-Stage Cooling, Single Circuit

Heat Level Input (Btuh)
000 = No Heat

Coil Options (RTPF) (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 Guard
N = Precoat Al/Cu — Al/Cu — Louvered Hail Guard
P = E-coat Al/Cu — Al/Cu — Louvered Hail Guard
Q = E-coat Al/Cu — E-coat Al/Cu — Louvered Hail Guard
R = Cu/Cu — Al/Cu — Louvered Hail Guard
S = Cu/Cu — Cu/Cu — Louvered Hail Guard

Axion — Vane Axial — Indoor Fan Motor and Airflow Options
2 = Standard/Medium Static Motor
3 = High Static Motor
5 = Standard/Medium Static Motor — Filter Status Switch
6 = High Static Motor — Filter Status Switch

Outdoor Air Options
A = Electromechanical controls. Allows for use of all field-installed economizers and dampers
B = Low Leak Temperature Economizer with Barometric Relief
E = Low Leak Temperature Economizer with Barometric Relief and CO_2 Sensor
H = Low Leak Enthalpy Economizer with Barometric Relief
L = Low Leak Enthalpy Economizer with Barometric Relief and CO_2 Sensor
U = ULTRA Low Leak Temperature Economizer with Barometric Relief
W = ULTRA Low Leak Enthalpy Economizer with Barometric Relief

Factory Installed Options
0A = None
Note: See the 549K 6 to 10 ton Price Pages for a complete list of factory installed options.

Packaging and Contol
A = Standard Packaging, electromechanical controls, no intake or exhaust option. Allows for use of all field-installed economizers, manual or two-position damper.
G = Standard Packaging, electromechanical controls that require POL224 EconomizerONE.

Capacity ratings

549K AHRI Ratings

COOLING MODE							
UNIT	Cooling Stages	Nominal Capacity (tons)	Net Cooling Capacity (Btuh)	Total Power (kW)	EER	IEER with 2-Speed Indoor Fan Motor	AHRI Rating cfm
549K*07N	2	6.0	72,000	5.7	12.60	17.6	2400
549K*08N	2	7.5	90,000	7.4	12.20	17.0	3000
549K*09N	2	8.5	100,000	8.3	12.00	17.6	3400
549K*12N	2	10.0	116,000	9.8	11.80	16.8	4400

HEATING MODE					
UNIT	Heating, Low 17°F(–8°C) Ambient		Heating, High 47°F (8°C) Ambient		AHRI Rating cfm
	Net Capacity (Btuh)	COP	Net Capacity (Btuh)	COP	
549K*07N	38,000	2.40	72,000	3.70	2400
549K*08N	46,000	2.40	88,000	3.60	3000
549K*09N	54,000	2.35	94,000	3.50	3400
549K*12N	60,000	2.30	106,000	3.50	4400

NOTE(S):

1. Rated in accordance with AHRI Standards 340/360.
2. Rating are based on:
   Cooling Standard: 80°F (27°C) db, 67°F (19°C) wb indoor air temperature and 95°F (35°C) db outdoor air temperature.
   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 549K units comply with ASHRAE 90.1-2019 (American Society of Heating, Refrigerating, and Air-Conditioning Engineers) and DOE-2023 (Department of Energy) Energy Standard for minimum IEER requirements.

LEGEND

AHRI — Air-Conditioning, Heating and Refrigeration Institute
COP — Coefficient of Performance
EER — Energy Efficiency Ratio
IEER — Integrated Energy Efficiency Ratio

Capacity ratings (cont)

Sound Ratings

549K UNIT	COOLING STATES	OUTDOOR SOUND (dB) AT 60 Hz[a,b]								
		A-WEIGHTED[c]	63	125	250	500	1000	2000	4000	8000
***07N**	2	81	86.7	82.7	79.1	78.4	75.4	71.2	67.8	62.9
***08N**	2	83	87.3	81.6	79.7	80.6	79.0	73.5	69.2	66.1
***09N**	2	87	61.7	74.7	77.4	82.6	84.9	81.9	78.8	75.9
***12N**	2	83	61.0	67.3	75.1	77.7	78.1	75.5	71.2	66.7

NOTE(S):
a. Outdoor sound data is measured in accordance with AHRI.
b. 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.
c. 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.

LEGEND

dB — Decibel

Minimum - Maximum Airflow Ratings (cfm) — Cooling Units and Accessory Electric Heat

UNIT	COOLING			ELECTRIC HEAT[a]	
	MINIMUM 2-SPEED AIRFLOW (LOW SPEED)	MINIMUM 2-SPEED AIRFLOW (HIGH SPEED)	MAXIMUM AIRFLOW CFM	MINIMUM AIRFLOW CFM	MINIMUM AIRFLOW CFM
549K*07N	900	1800	3000	1800	3000
549K*08N	1125	2250	3750	2250	3750
549K*09N	1275	2550	4250	2550	4250
549K*12N	1800	3000	5000	3000	5000

NOTE(S):
a. Electric heat modules and single point kits are available as field-installed accessories for 549K units.

Physical data

549K 07 to 12 Physical Data

549K UNIT	549K*07N	549K*08N	549K*09N	549K*12N
NOMINAL TONS	6.0	7.5	8.5	10.0
BASE UNIT OPERATING WT (lb)[a]	805	812	955	1250
REFRIGERATION SYSTEM				
No. Circuits / No. Compressors / Type	1 / 2 / Scroll	1 / 2 / Scroll	1 / 2 / Scroll	1 / 2 / Scroll
Puron® (R-410A) Charge (lb-oz)	17-8	19-10	22-6	22-0
Cooling Metering Device	TXV	TXV	TXV	TXV
Heating Metering Device	TXV	TXV	TXV	TXV
High-Pressure Trip / Reset (psig)	630 / 505	630 / 505	630 / 505	630 / 505
Loss of Charge Trip / Reset (psig)	27 / 44	27 / 44	27 / 44	27 / 44
EVAPORATOR COIL				
Material (Tube / Fin)	Cu / Al	Cu / Al	Cu / Al	Cu / Al
Coil Type	3/8 in. RTPF	3/8 in. RTPF	3/8 in. RTPF	3/8 in. RTPF
Rows / FPI	3 / 15	4 / 15	4 / 15	3 / 15
Total Face Area (ft^2)	11.1	11.1	11.1	17.5
Condensate Drain Connection Size	3/4 in.	3/4 in.	3/4 in.	3/4 in.
CONDENSER COIL				
Material (Tube / Fin)	Cu / Al	Cu / Al	Cu / Al	Cu / Al
Coil Type	5/16 in. RTPF	5/16 in. RTPF	5/16 in. RTPF	5/16 in. RTPF
Rows / FPI	2 / 18	2 / 18	3 / 18	2 / 18
Total Face Area (ft^2)	25.1	25.1	25.1	36.1
EVAPORATOR FAN AND MOTOR				
Standard/Medium Static 3 Phase				
Motor Qty / Drive Type	1 / Direct	1 / Direct	1 / Direct	1 / Direct
Max Cont bhp	2.4	2.4	2.4	2.4
Range (rpm)	250-2000	250-2000	250-2000	250-2000
Fan Qty / Type	1 / Vane Axial	1 / Vane Axial	1 / Vane Axial	1 / Vane Axial
Fan Diameter (in.)	22	22	22	22
High Static 3 Phase				
Motor Qty / Drive Type	1 / Direct	1 / Direct	1 / Direct	1 / Direct
Max Cont bhp	3	3	3	5
Range (rpm)	250-2200	250-2200	250-2200	250-2200
Fan Qty / Type	1 / Vane Axial	1 / Vane Axial	1 / Vane Axial	1 / Vane Axial
Fan Diameter (in.)	22	22	22	22
CONDENSER FAN AND MOTOR				
Qty / Motor Drive Type	2 / Direct	2 / Direct	1 / Direct	3 / Direct
Motor hp / rpm	1/4 / 1100	1/4 / 1100	1 / Multiple Speeds[b]	1/4 / 1100
Fan Diameter (in.)	22	22	30	22
FILTERS				
RA Filter Qty / Size (in.)	4 / 20x20x2	4 / 20x20x2	4 / 20x20x2	6 / 18x24x2
OA Inlet Screen Qty / Size (in.)	1 / 20x24x1	1 / 20x24x1	1 / 20x24x1	Vertical: 2 / 24x27x1 Horizontal: 1 / 30x39x1

NOTE(S):
a. Base unit operating weight does not include weight of options.
b. Multiple speeds: 1050/770/450/350/265 rpm

LEGEND

bhp — Brake Horsepower
FPI — Fins Per Inch
OA — Outdoor Air
RA — Return Air

Options and accessories

ITEM	OPTION[a]	ACCESSORY[b]
ELECTRIC HEAT		
Electric Resistance Heaters		X
Single Point Kits		X
CABINET		
Hinged Access Panels	X	
MERV-13, 4 in. Filters		X
MERV-13, 2 in. Filters		X
MERV-8, 2 in. Filters		X
4 in. Filter Rack (filters not included)		X
Louvered hail guard	X	X
COIL OPTIONS		
Cu/Cu indoor and/or outdoor coils	X	
Pre-coated outdoor coils	X	
Premium, E-coated outdoor coils	X	
CONTROLS		
Thermostats, temperature sensors, and subbases		X
Smoke detector (supply and/or return air)	X	X
Horn Strobe Annunciator[c]		X
Time Guard II compressor delay control circuit		X
Phase Monitor	X	X
ECONOMIZERS AND OUTDOOR AIR DAMPERS		
EconomizerONE for electro-mechanical controls, complies with FDD (Standard and Ultra Low Leak damper models)[d]	X	X
Wi-Fi Stick for EconomizerONE (optional)		X
Motorized 2-position outdoor-air damper		X
Manual outdoor-air damper (25% and 50%)		X
Barometric relief[e]	X	X
Power exhaust - prop design		X
Condensate Overflow switch	X	X

ITEM	OPTION[a]	ACCESSORY[b]
ECONOMIZER SENSORS AND IAQ DEVICES		
Single dry bulb temperature sensors[f]	X	X
Differential dry bulb temperature sensors[f]		X
Single enthalpy sensors[f]	X	X
Differential enthalpy sensors[f]		X
CO_2 sensor (wall, duct, or unit mounted)[f]	X	X
INDOOR MOTOR AND DRIVE		
Multiple motor and drive packages	X	
LOW AMBIENT CONTROLS		
Winter start kit[g]		X
Low Ambient controller to 0°F (–18°C)[g]		X
POWER OPTIONS		
Convenience outlet (powered)	X	
Convenience outlet (unpowered)	X	
Convenience outlet, 20 amp (unpowered)		X
Non-fused disconnect[h]	X	
ROOF CURBS		
Roof curb 14 in. (356 mm)		X
Roof curb 24 in. (610 mm)		X

NOTE(S):
a. Factory-installed option.
b. Field-installed accessory.
c. Requires a field-supplied 24V transformer for each application. See price pages for details.
d. FDD (Fault Detection and Diagnostic) capability per California Title 24 section 120.2.
e. Included with economizer.
f. Sensors used to optimize economizer performance.
g. See application data for assistance.
h. Non-fused disconnect switch cannot be used when unit FLA electrical rating exceeds –
   Sizes 07-09: 80 amps, all voltages.
   Size 12: 100 amps, all voltages.

Options and accessories (cont)

Factory-installed options

Economizer (dry-bulb or enthalpy)

Economizers save money. They bring in fresh, outside air for ventilation; and provide cool, outside air to cool your building. This is the preferred method of low-ambient cooling. When coupled to CO_2 sensors, economizers can provide even more savings by coupling the ventilation air to only that amount required.

Economizers are available, installed and tested by the factory, with either enthalpy or dry-bulb temperature inputs. Additional sensors are available as accessories to optimize the economizers. Economizers include a powered exhaust system to help equalize building pressures.

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. Economizers can be factory-installed or easily field-installed.

Unit mounted CO_2 sensor

The CO_2 sensor works with the economizer to intake only the correct amount of outside air for ventilation. As occupants fill your building, the CO_2 sensor detects their presence through increasing CO_2 levels, and opens the economizer appropriately. When the occupants leave, the CO_2 levels decrease, and the sensor appropriately closes the economizer. This intelligent control of the ventilation air, called demand controlled ventilation (DCV), reduces the overall load on the rooftop, saving money. It is also available as a field-installed accessory.

Smoke detector (supply and/or return air)

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.

Thru-the-base connections

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

Hinged access panels

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

Cu/Cu (indoor) coils

Copper fins and copper tubes are mechanically bonded to copper tubes and copper tube sheets. A polymer strip prevents coil assembly from contacting the sheet metal coil pan to minimize potential for galvanic corrosion between coil and pan.

E-coated (outdoor and indoor) coils

A flexible epoxy polymer coating uniformly applied to all coil surface areas without material bridging between fins. Coating process shall ensure complete coil encapsulation of tubes, fins and headers.

Pre-coated outdoor coils

A durable epoxy-phenolic coating to provide protection in mildly corrosive coastal environments. The coating minimizes galvanic action between dissimilar metals. Coating is applied to the aluminum fin stock prior to the fin stamping process to create an inert barrier between the aluminum fin and copper tube.

Condenser coil hail guard

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 or load side as required by code. The "unpowered" option is to be powered from a separate 115/120v power source.

The unpowered convenience outlet is available as a 15 amp factory-installed option or a 20 amp field-installed accessory.

Non-fused disconnect

This OSHA-compliant, factory-installed, safety switch allows a service technician to locally secure power to the rooftop. When selecting a factory-installed non-fused disconnect, note they are sized for the unit as ordered from the factory. The sizing of these do not accommodate field-installed items such as power exhaust devices, etc. If field installing electric heat with factory-installed non-fused disconnect switch, a single point kit may or may not be required.

Condensate overflow switch

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

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

Options and accessories (cont)

Field-installed accessories

Filter maintenance indicator

When the optional factory-installed filter maintenance indicator is used, a factory-installed differential pressure switch measures pressure drop across the outside air filter and activates a field-supplied dry contact indicator when the pressure differential exceeds the adjustable switch setpoint.

Condenser coil hail guard

Sleek, louvered panels protect the condenser coil from hail damage, foreign objects, and incidental contact. This can be purchased as a factory-installed option or as a field-installed accessory.

Differential enthalpy sensor

The differential enthalpy sensor is comprised of an outdoor and return air enthalpy sensors to provide differential enthalpy control. The sensor allows the unit to determine if outside air is suitable for free cooling.

Wall or duct mounted CO_2 sensor

The IAQ sensor shall be available in duct or wall mount. The sensor provides demand ventilation indoor air quality (IAQ) control.

4 in. filter rack kit

The 4 in. filter rack accessory kit is designed to hold 4 in. MERV-8 or MERV-13 filters. Filters not included in kit.

MERV-13 2 in. return air filters

This kit includes MERV-13 2 in. filters (qty 4) to accommodate unit filter rack size. Kit available through RDC (Replacement Components Division).

MERV-8 2 in. return air filters

This kit includes MERV-8 2 in. filters (qty 4) to accommodate unit filter rack size. Kit available through RCD.

Phase monitor protection

The Phase Monitor Control will monitor the sequence of three phase electrical system to provide a phase reversal protection; and monitor the three phase voltage inputs to provide a phase loss protection for the three phase device. It will work on either a Delta or Wye power connection.

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.

Low ambient controller

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

NOTE: 0°F (–18°C) is standard on size 09 models.

Roof curb (14 in./356 mm or 24 in./610 mm)

Full perimeter roof curb with exhaust capability provides separate air streams for energy recovery from the exhaust air without supply air contamination.

Filter status indicator accessory

Monitors static pressure across supply and exhaust filters and provides indication when filters become clogged.

Power exhaust

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

Manual OA damper

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

NOTE: See application tip "ROOFTOP-18-01" prior to use of this damper on 07-12 size models.

Motorized 2-Position damper

The 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.

NOTE: See application tip "ROOFTOP-18-01" prior to use of this damper on 07-12 size models.

Electric heaters

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

Time Guard II control circuit

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

Disconnect switch bracket

Provides a pre-engineered and sized mounting bracket for applications requiring a unit mounted fused and non-fused disconnect of greater than 100 amps. Bracket assures that no damage will occur to coils when mounting with screws and other fasteners (12 size only).

Wi-Fi Stick for EconomizerONE (optional)

The accessory Wi-Fi/WLAN stick can be connected to the EconomizerONE POL224 economizer controller via the USB host interface. The Wi-Fi stick enables a wireless connection to be made between a smartphone and the economizer controller via the Climatix™[1] mobile app for commissioning, troubleshooting, and maintenance operations. The Wi-Fi stick is required to utilize the mobile app.

Climatix™ Mobile application

The Climatix™ mobile app offers a best-in-class user interface and a simple step-by-step commissioning workflow using a mobile device. The user interface walks users through the setup of the controller and allows users to view the operating mode and parameters. Users can adjust setpoints, initiate damper tests, and save the final configuration as a favorite to expedite setup in the future.

The application is available on Android™[1] and Apple iOS®[1] platforms. The Wi-Fi stick for the EconomizerONE is required to join the Siemens-WiFi-Stick network and setup the controller on a smartphone.

1. Third-party trademarks and logos are the property of their respective owners.

Options and accessories (cont)

Options and Accessory Weights[a]

OPTION / ACCESSORY NAME	549K UNIT WEIGHT							
	07		08		09		12	
	lb	kg	lb	kg	lb	kg	lb	kg
Power Exhaust - Vertical	55	25	55	25	55	25	85	39
Power Exhaust - Horizontal	55	25	55	25	55	25	85	39
EconomizerONE	75	34	75	34	75	34	78	35
2-Position Damper	58	26	58	26	58	26	65	29
Manual Damper	18	8	18	8	18	8	25	11
Hail Guard (louvered)	17	8	17	8	17	8	17	8
Cu/Cu Condenser Coil	100	45	100	45	150	68	120	55
Cu/Cu Evaporator Coil	80	36	100	45	100	45	120	55
Roof Curb (14 in. curb)	143	65	143	65	143	65	180	82
Roof Curb (24 in. curb)	245	112	245	112	245	112	255	116
CO_2 Sensor	2	1	2	1	2	1	2	1
Optional Indoor Motor[b]	30	14	30	14	30	14	0	0
Low Ambient Controller	9	4	9	4	N/A	N/A	9	4
Winter Start Kit	5	2	5	2	5	2	5	2
Return Air Smoke Detector	7	3	7	3	7	3	7	3
Supply Air Smoke Detector	7	3	7	3	7	3	7	3
Fan Filter Switch	2	1	2	1	2	1	2	1
Non-Fused Disconnect	15	7	15	7	15	7	15	7
Powered Convenience Outlet[c]	36	16	36	16	36	16	36	16
Unpowered Convenience Outlet	4	2	4	2	4	2	4	2
Enthalpy Sensor	2	1	2	1	2	1	2	1
Differential Enthalpy Sensor	3	1	3	1	3	1	3	1

NOTE(S):
a. Where multiple variations are available, the heaviest combination is listed.
b. Add the Optional Indoor Motor weight to the weight of the base unit.
c. Combined weight of Convenience Outlet and Transformer.

549K*07-08 Base Unit Dimensions

NOTES:

1. DIMENSIONS ARE IN INCHES, DIMENSIONS IN [ ] ARE IN MILLIMETERS.
2. CENTER OF GRAVITY
3. DIRECTION OF AIR FLOW
4. ALL VIEW DRAWN USING 3RD ANGLE

UNIT	OUTDOOR COIL TYPE	J	K	H
549K-07	RTPF	49 3/8 [1253]	36 3/8 [925]	15 7/8 [403]
549K-08	RTPF	49 3/8 [1253]	36 3/8 [925]	15 7/8 [403]
RTPF - ROUND TUBE, PLATE FIN (COPPER/ALUM)				

CONNECTION SIZES	
A	1 3/8" [35] DIA FIELD POWER SUPPLY HOLE
B	2 1/2" [64] DIA POWER SUPPLY KNOCKOUT
C	1 3/4" [51] DIA GAUGE ACCESS PLUG
D	7/8" [22] DIA FIELD CONTROL WIRING HOLE
E	3/4"-14 NPT CONDENSATE DRAIN
G	2 " [51] DIA POWER SUPPLY KNOCK-OUT

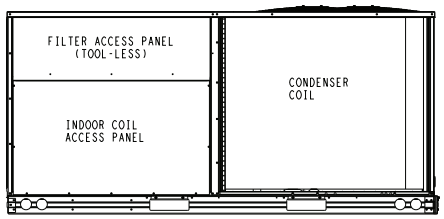
THRU-THE-BASE CHART (FIELD INST)

THESE HOLES REQUIRED FOR USE WITH ACCY KITS: CRBTMPWR002A01

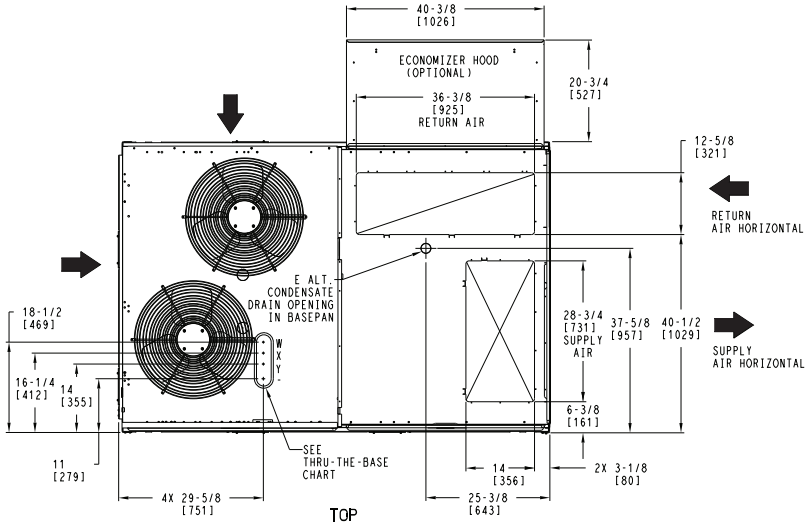
	THREADED CONDUIT SIZE	WIRE USE	REQ'D HOLE SIZES (MAX.)
W	1/2"	ACC.	7/8" [22.2]
X	1/2"	24V	7/8" [22.2]
Y	1 1/4" (002)	POWER	1 3/4" [44.4]

THRU-THE-BASE CHART (FIOP)

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



BACK



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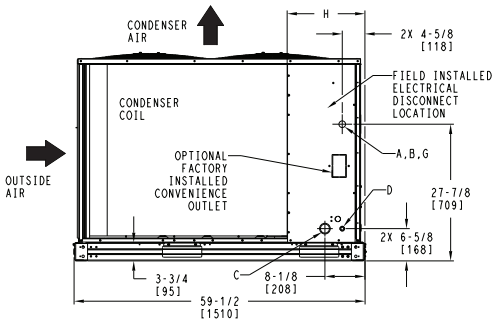

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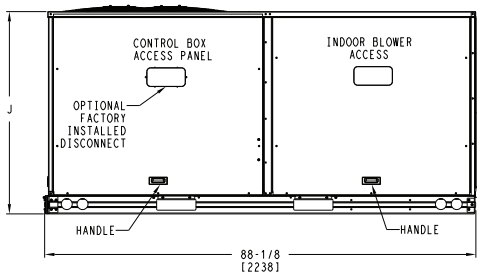

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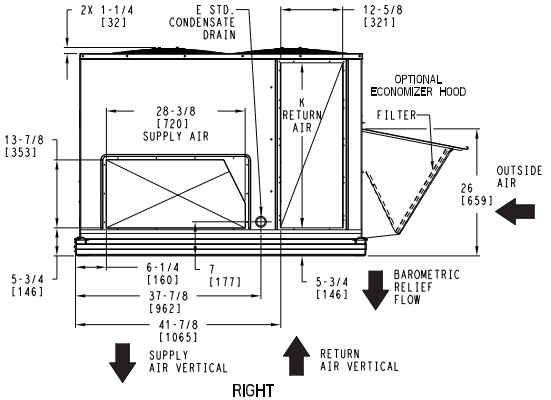


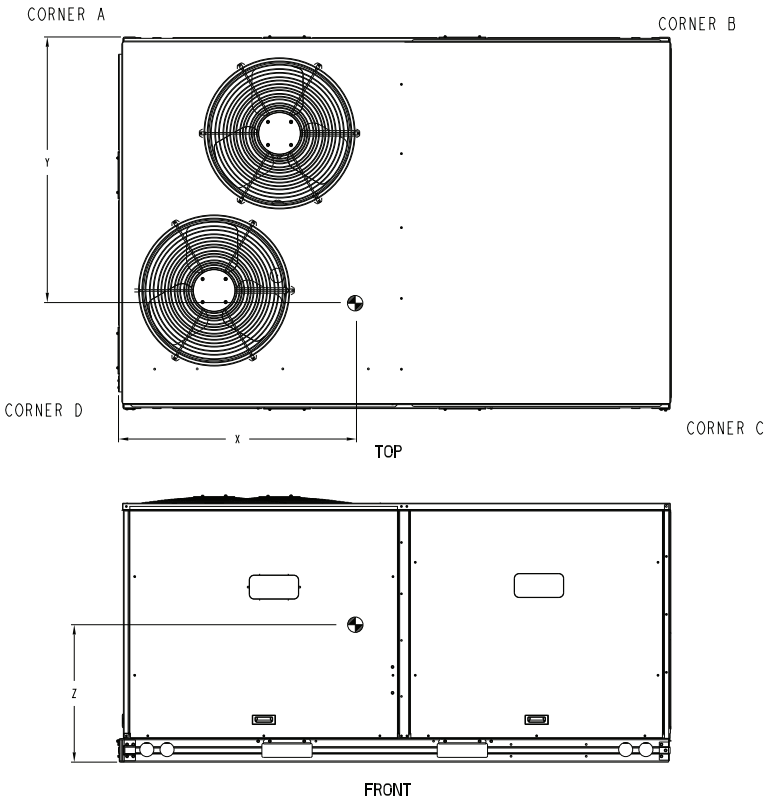
RIGHT

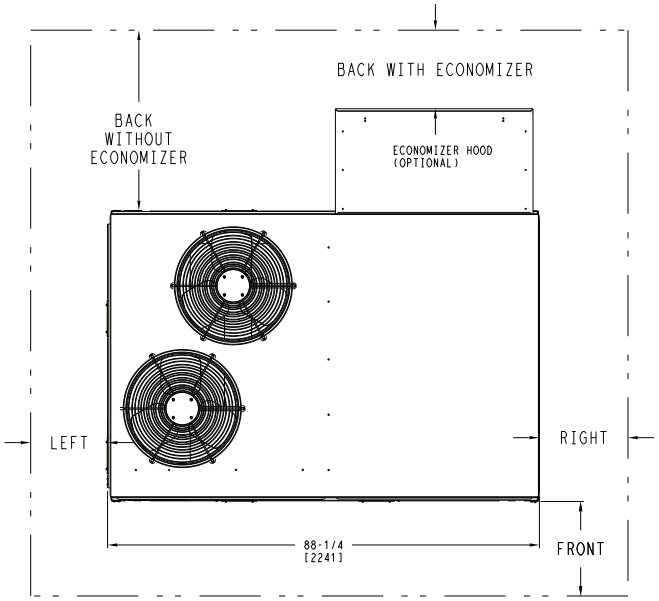
ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES			REV
U.S. ECCN:NSR	1 OF 3	9/19/23	-	549K 07,08 SINGLE ZONE ELECTRICAL HEAT PUMP	48TM009369	-

549K*07-08 Base Unit Dimensions (cont)

UNIT	OUTDOOR COIL TYPE	STD. UNIT WEIGHT ***		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.		
		LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z
549K-07	RTPF	805	365	163	74	209	95	243	110	190	86	38 5/8 [981]	32 [813]	19 1/8 [486]
549K-08	RTPF	812	368	164	75	211	96	245	111	191	87	38 5/8 [981]	32 [813]	19 1/8 [486]
RTPF - ROUND TUBE, PLATE FIN (COPPER/ALUM)														

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





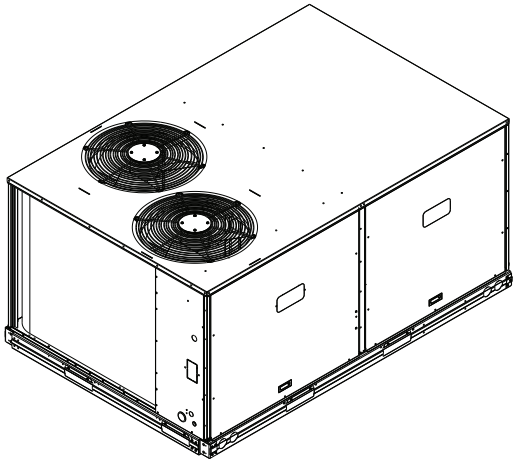
NOTE:

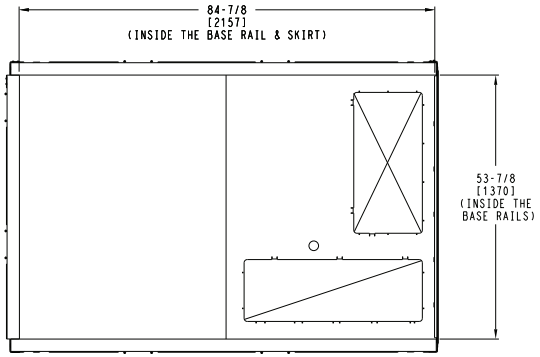
1. FOR ALL MINIMUM CLEARANCES LOCAL CODES OR JURISDICTIONS MAY PREVAIL.

CLEARANCE		
	SERVICE WITH:	SERVICE WITH:
SURFACE	CONDUCTIVE BARRIER	NONCONDUCTIVE BARRIER
FRONT	48 [1219mm]	36 [914mm]
LEFT	48 [1219mm]	42 [1067mm]
BACK W/O ECON	48 [1219mm]	42 [1067mm]
BACK W/ECON	36 [914mm]	36 [914mm]
RIGHT	36 [914mm]	36 [914mm]
TOP	72 [1829mm]	72 [1829mm]

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES			REV
U.S. ECCN:NSR	2 OF 3	9/19/23	-	549K 07,08 SINGLE ZONE ELECTRICAL HEAT PUMP	48TM009369	-

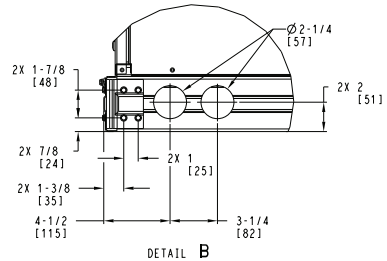
549K*07-08 Base Unit Dimensions (cont)



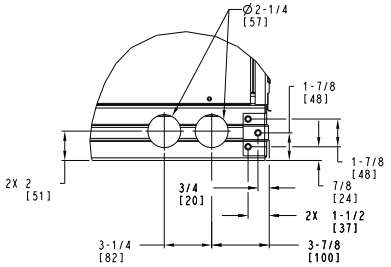


INSIDE BASERAIL DIMENSIONS

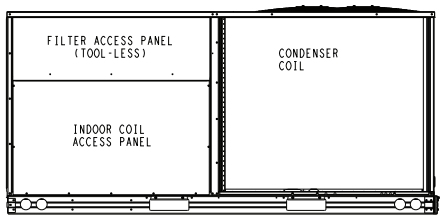
BOTTOM



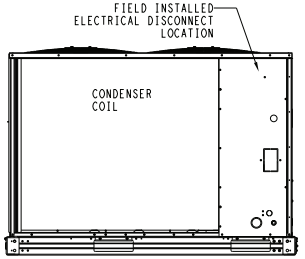
DETAIL B
AT 2 PLCS



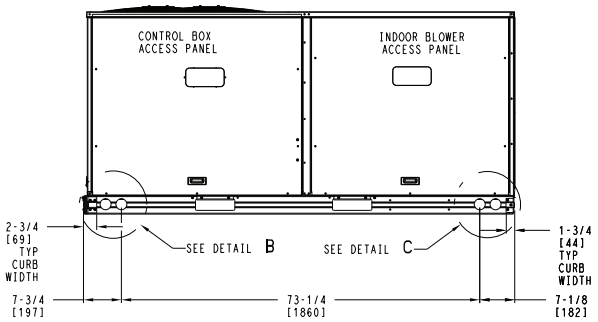
DETAIL C
AT 2 PLCS



BACK



LEFT



FRONT

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES			REV
U.S. ECCN:NSR	3 OF 3	9/19/23	-	549K 07,08 SINGLE ZONE ELECTRICAL HEAT PUMP	48TM009369	-

549K*09 Base Unit Dimensions

NOTES:

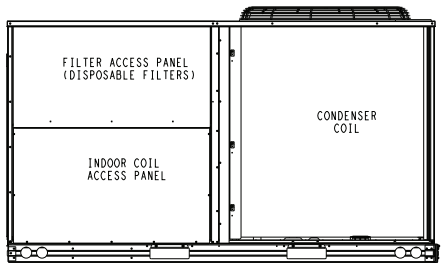
1. DIMENSIONS ARE IN INCHES, DIMENSIONS IN [ ] ARE IN MILLIMETERS.
2. CENTER OF GRAVITY
3. DIRECTION OF AIR FLOW
4. ALL VIEW DRAWN USING 3RD ANGLE

UNIT	OUTDOOR COIL TYPE	H
549K-09	RTPF	15 7/8 [403]
RTPF - ROUND TUBE, PLATE FIN (COPPER/ALUM)		

	CONNECTION SIZES
A	1 3/8" [35] DIA FIELD POWER SUPPLY HOLE
B	2 1/2" [64] DIA POWER SUPPLY KNOCKOUT
C	1 3/4" [51] DIA GAUGE ACCESS PLUG
D	7/8" [22] DIA FIELD CONTROL WIRING HOLE
E	3/4"-14 NPT CONDENSATE DRAIN
G	2" [51] DIA POWER SUPPLY KNOCK-OUT

THRU-THE-BASE CHART
THESE HOLES REQUIRED FOR USE CRBTMPWR002A01

	THREADED CONDUIT SIZE	WIRE USE	REQ'D HOLE SIZES (MAX.)
W	1/2"	ACC.	7/8" [22.2]
X	1/2"	24V	7/8" [22.2]
Y	1 1/4" (002)	POWER	1 3/4" [44.4]
	FOR "THRU-THE-BASEPAN" FACTORY OPTION, FITTINGS FOR ONLY X & Y ARE PROVIDED		



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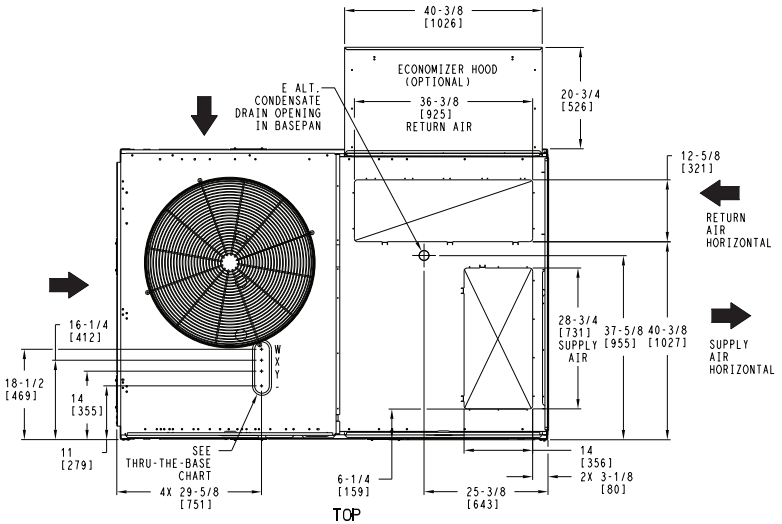
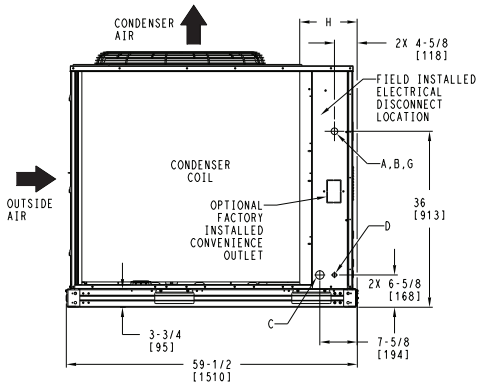


TOP



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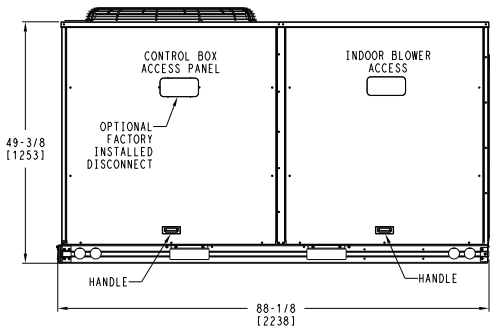
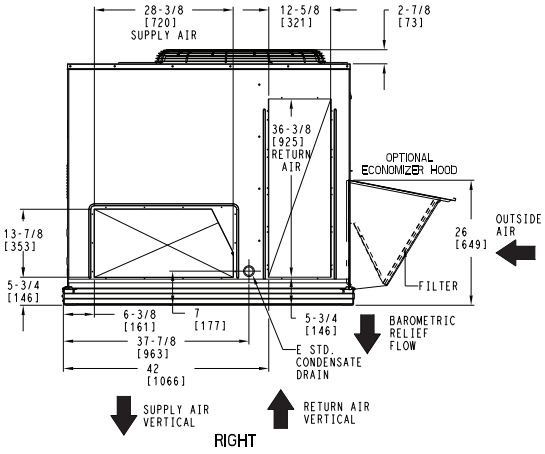


FRONT



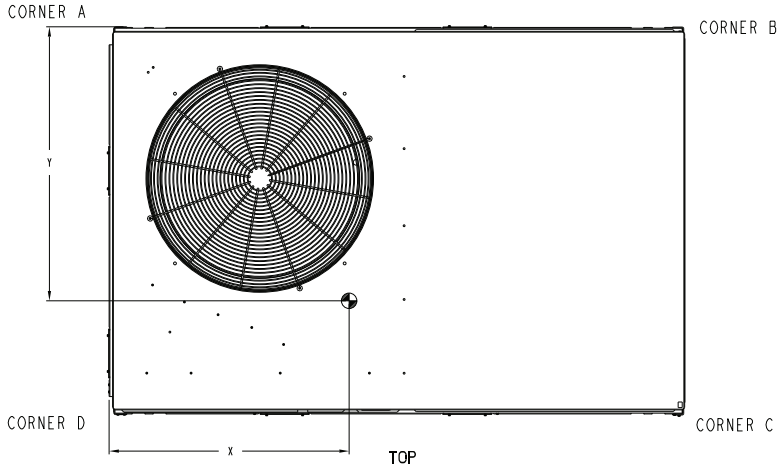
RIGHT

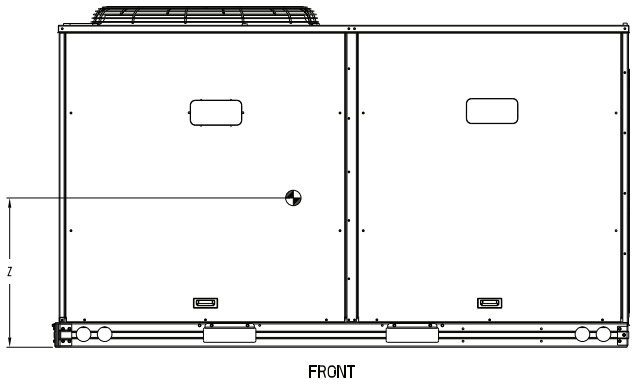
ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES			REV
U.S. ECCN:NSR	1 OF 3	9/19/23	-	549K 09 SINGLE ZONE ELECTRICAL HEAT PUMP	48TM009372	-

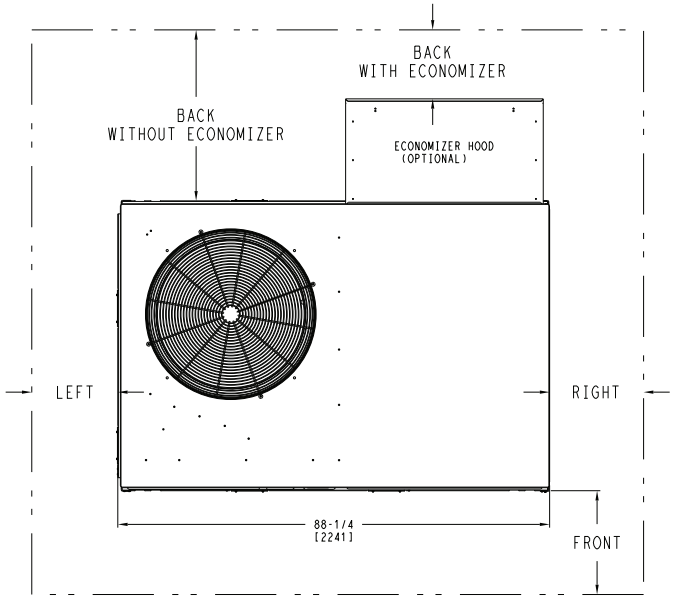
549K*09 Base Unit Dimensions (cont)

UNIT	OUTDOOR COIL TYPE	STD. UNIT WEIGHT***		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.		
		LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z
549K-09	RTPF	955	433	190	86	243	110	293	133	229	104	38 5/8 [981]	32 1/2 [826]	19 1/8 [486]
RTPF - ROUND TUBE, PLATE FIN (COPPER/ALUM)														

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







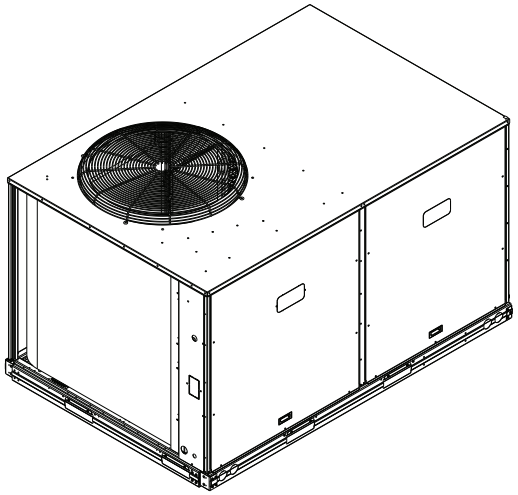
NOTE:

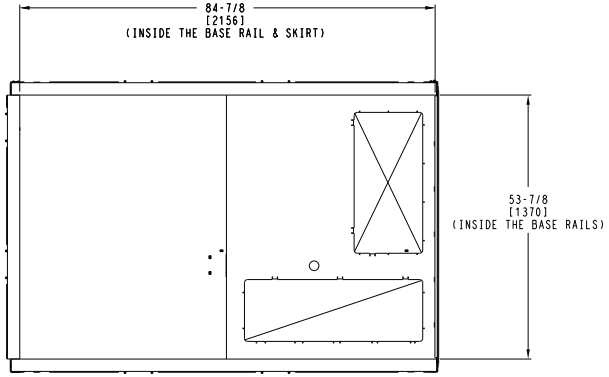
1. FOR ALL MINIMUM CLEARANCES LOCAL CODES OR JURISDICTIONS MAY PREVAIL.

CLEARANCE		
	SERVICE WITH:	SERVICE WITH:
SURFACE	CONDUCTIVE BARRIER	NONCONDUCTIVE BARRIER
FRONT	48 [1219mm]	36 [914mm]
LEFT	48 [1219mm]	42 [1067mm]
BACK W/O ECON	48 [1219mm]	42 [1067mm]
BACK W/ECON	36 [914mm]	36 [914mm]
RIGHT	36 [914mm]	36 [914mm]
TOP	72 [1829mm]	72 [1829mm]

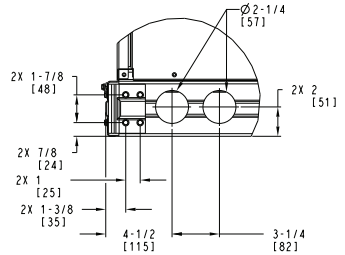
ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES			REV
U.S. ECCN:NSR	2 OF 3	9/19/23	-	549K 09 SINGLE ZONE ELECTRICAL HEAT PUMP	48TM009372	-

549K*09 Base Unit Dimensions (cont)

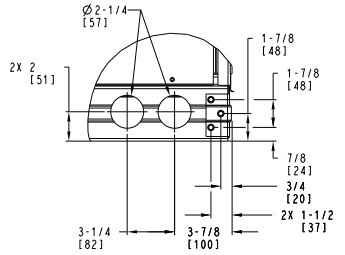




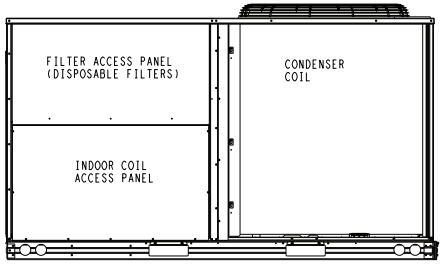
INSIDE BASERAIL DIMENSIONS
BOTTOM



DETAIL B
TYP 2 PLCS



DETAIL C
TYP 2 PLCS



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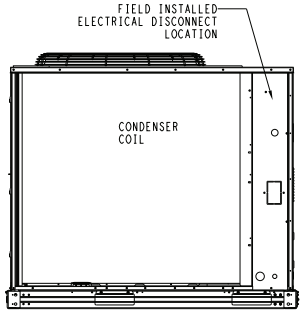
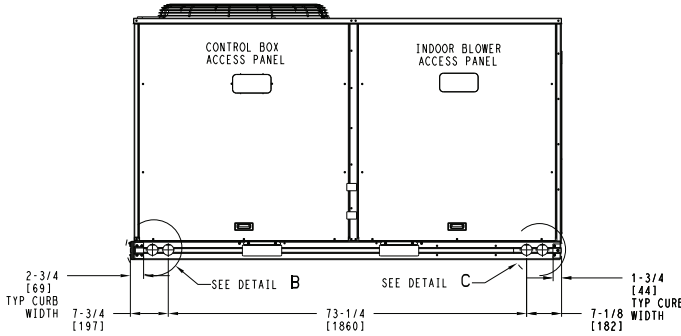


LEFT



FRONT

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES			REV
U.S. ECCN:NSR	3 OF 3	9/19/23	-	549K 09 SINGLE ZONE ELECTRICAL HEAT PUMP	48TM009372	-

549K*12 Base Unit Dimensions

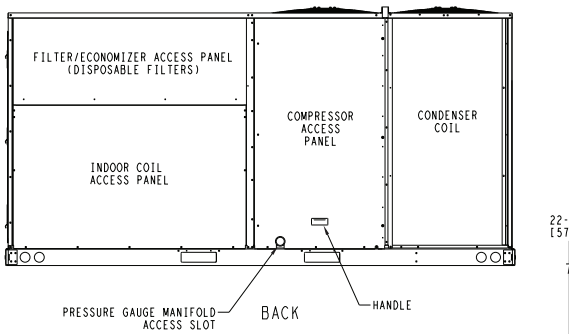
NOTES:

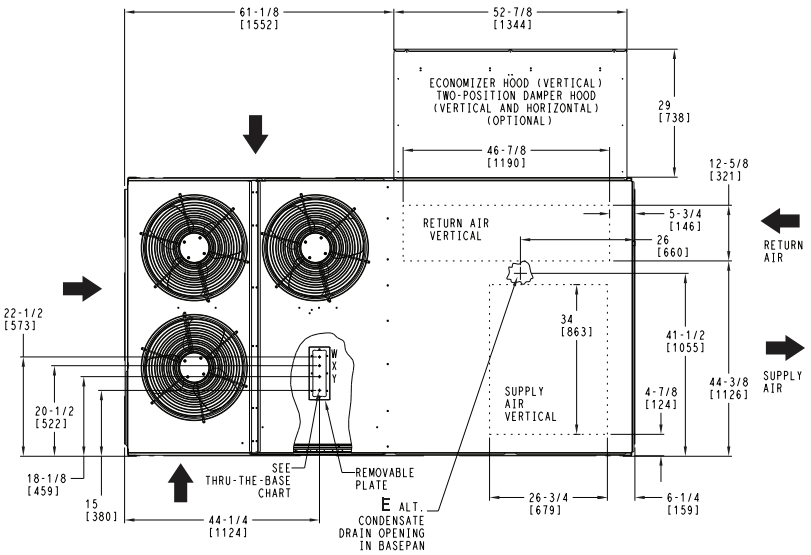
1. DIMENSIONS ARE IN INCHES. DIMENSIONS IN [ ] ARE IN MILLIMETERS.
2. ⊕ CENTER OF GRAVITY
3. ➡ DIRECTION OF AIR FLOW

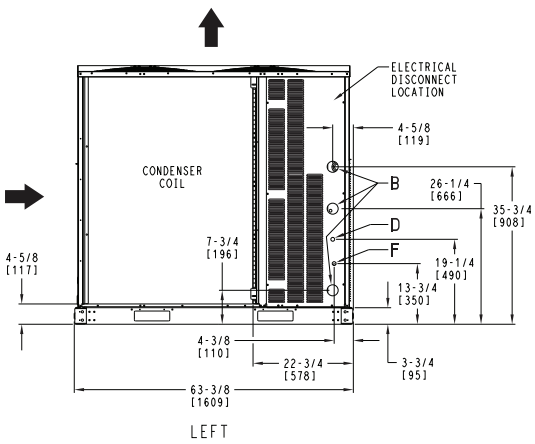
	CONNECTION SIZES
B	2 1/2" [64] DIA POWER SUPPLY HOLE
D	7/8" [22] DIA FIELD CONTROL WIRING HOLE
E	3/4"-14 NPT CONDENSATE DRAIN
F	7/8" [22] DIA FIELD CONVENIENCE OUTLET HOLE

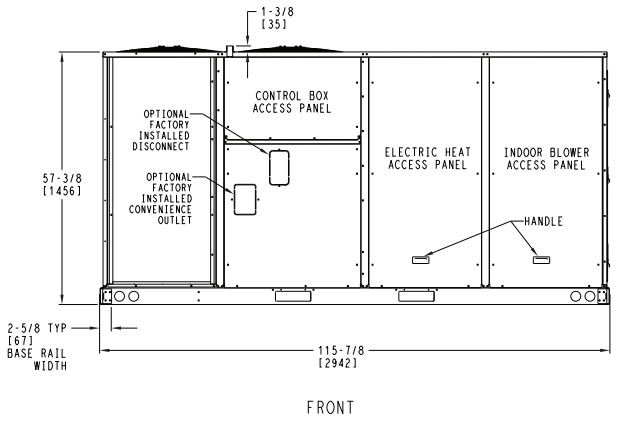
THRU-THE-BASE CHART
THESE HOLES REQUIRED FOR USE
CRBTMPWR005A00,006A00,007A00

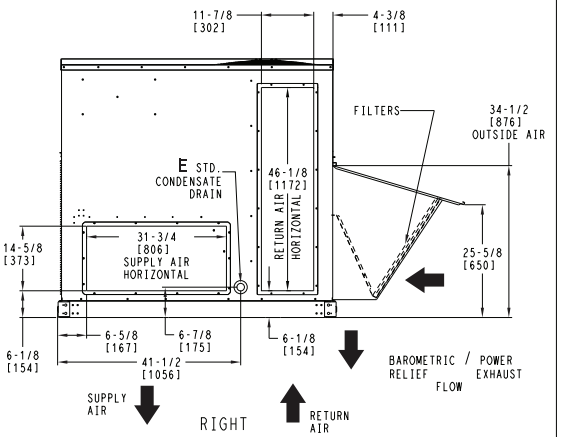
ACCESSORY NO.		THREADED CONDUIT SIZE	WIRE USE	REQ'D HOLE SIZES (MAX.)
005	W	1/2"	ACC.	7/8" [22.2]
	X	1/2"	24V	7/8" [22.2]
	Y	1 1/4"	POWER	1 1/2" [38.1]
006	W	1/2"	ACC.	7/8" [22.2]
	X	1/2"	24V	7/8" [22.2]
	Y	1 1/2"	POWER	2" [50.8]
007	W	1/2"	ACC.	7/8" [22.2]
	X	1/2"	24V	7/8" [22.2]
	Y	2"	POWER	2 1/2" [63.5]
	FOR "THRU-THE-BASEPAN" FACTORY OPTION, FITTINGS FOR X & Y ARE PROVIDED AS SPECIFIED ON "006".			









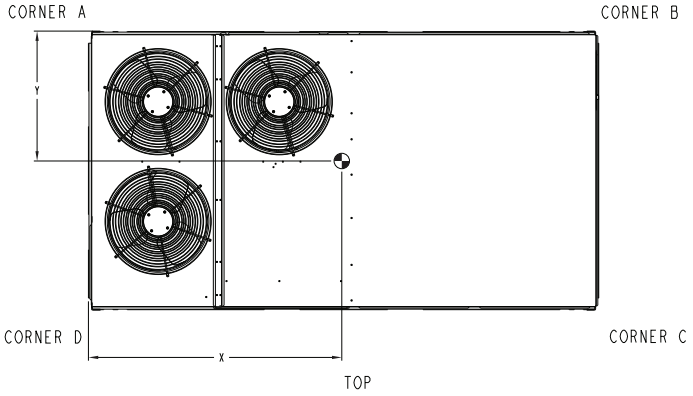


ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES		
U.S. ECCN:NSR	1 OF 2	9/21/23	-	549K 12 SINGLE ZONE ELECTRICAL HEAT PUMP	50TM003292	REV -

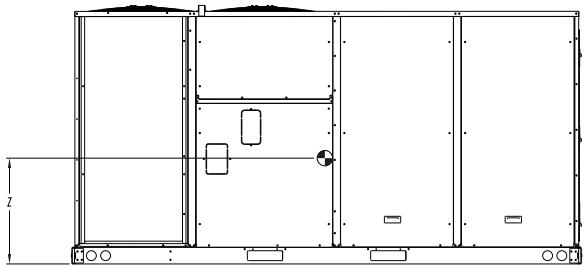
549K*12 Base Unit Dimensions (cont)

UNIT	STD UNIT WEIGHT		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.		
	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z
549K 12	1250	567	350	159	338	153	277	126	286	130	57 [1448]	28 1/2 [724]	24 [610]

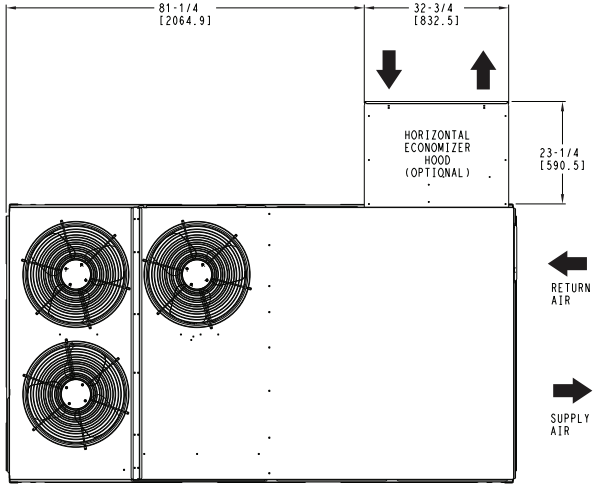
STANDARD UNIT WEIGHT IS WITHOUT ELECTRIC HEAT & WITHOUT PACKAGING.
FOR OPTIONS & ACCESSORIES, REFER TO THE PRODUCT DATA CATALOG.

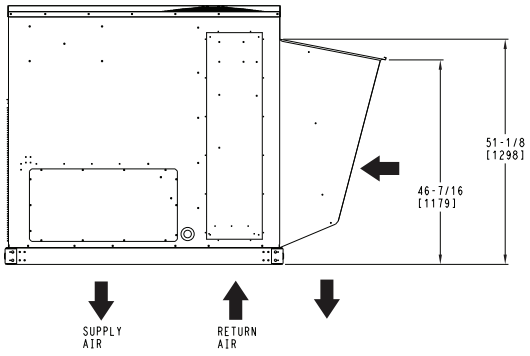


TOP



FRONT



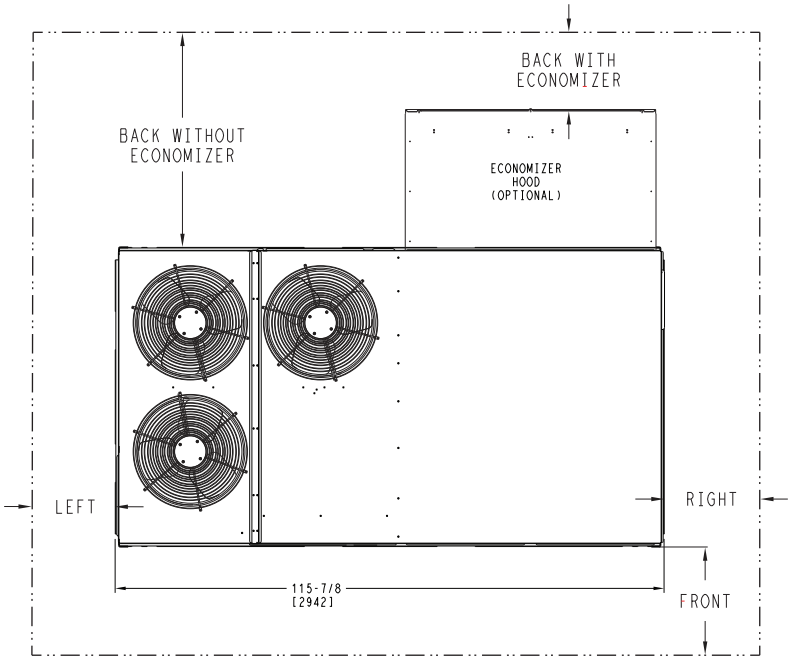


HORIZONTAL ECONOMIZER

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES			REV
U.S. ECCN:NSR	2 OF 2	9/21/23	-	549K 12 SINGLE ZONE ELECTRICAL HEAT PUMP	50TM003292	-

Base unit dimensions (cont)

549K*12 Base Unit Dimensions – Clearances



CLEARANCE[a, b]			
SURFACE	**Service with Conductive Barrier**	**Service with Non-conductive Barrier**	**Operating Clearance**
FRONT	48 in. (1219 mm)	36 in. (914 mm)	18 in. (457 mm)
LEFT	48 in. (1219 mm)	42 in. (1067 mm)	18 in. (457 mm)
BACK W/O ECONOMIZER	48 in. (1219 mm)	42 in. (1067 mm)	18 in. (457 mm)
BACK W/ ECONOMIZER	36 in. (914 mm)	36 in. (914 mm)	18 in. (457 mm)
RIGHT	36 in. (914 mm)	36 in. (914 mm)	18 in. (457 mm)
LEFT	72 in. (1829 mm)	72 in. (1829 mm)	72 in. (1829 mm)

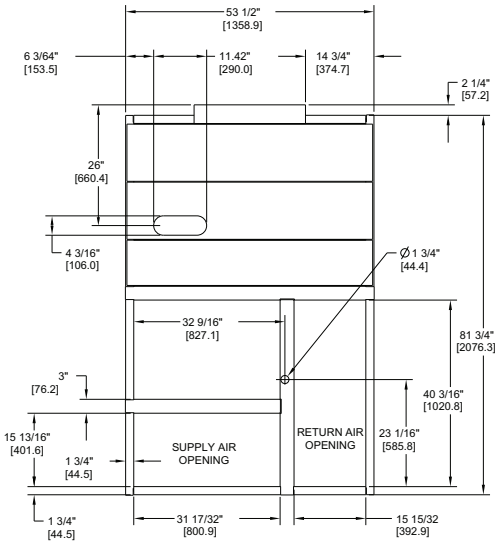
NOTE(S):
a. For all minimum clearances local codes or jurisdictions may prevail.
b. See page 13 for 549K*08-09 clearances. See page 16 for 549K*12 clearances.

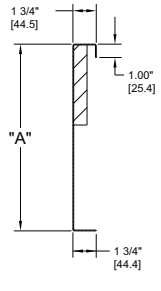
Roof Curb Dimensions — 549K*07-09

ROOF CURB ACCESSORY #	A
CRRFCURB003A01	14" [356]
CRRFCURB004A01	24" [610]

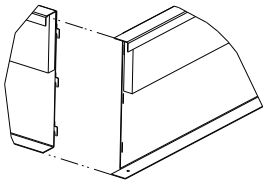
NOTES:
1. ROOFCURB ACCESSORY IS SHIPPED DISASSEMBLED.
2. INSULATED PANELS: 25.4 [1"] THK. POLYURETHANE FOAM, 44.5 [1-3/4] # DENSITY.
3. DIMENSIONS IN [ ] ARE IN MILLIMETERS.
4. ROOFCURB: 18 GAGE STEEL.
5. ATTACH DUCTWORK TO CURB. (FLANGES OF DUCT REST ON CURB).
6. SERVICE CLEARANCE 4 FEET ON EACH SIDE.
7. ▨ DIRECTION OF AIR FLOW.
8. CONNECTOR PACKAGE CRBTMPWR002A01 IS FOR THRU-THE-CURB GAS TYPE PACKAGE CRBTMPWR004A01 IS FOR THRU-THE-BOTTOM TYPE GAS CONNECTIONS.

CONNECTOR PKG. ACC.	GAS CONNECTION TYPE	GAS FITTING	POWER WIRING FITTING	CONTROL WIRING FITTING	ACCESSORY CONVENIENCE OUTLET WIRING CONNECTOR
CRBTMPWR002A01	THRU THE CURB	3/4" [19] NPT	1 1/4" [31.7] NPT	1/2" [12.7] NPT	1/2" [12.7] NPT
CRBTMPWR004A01	THRU THE BOTTOM				

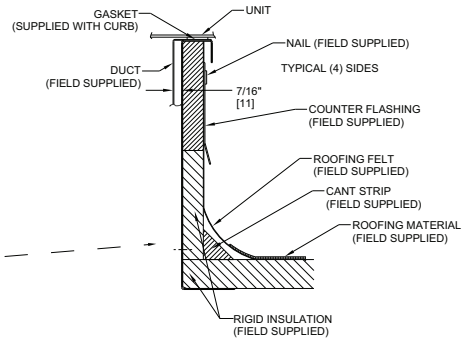


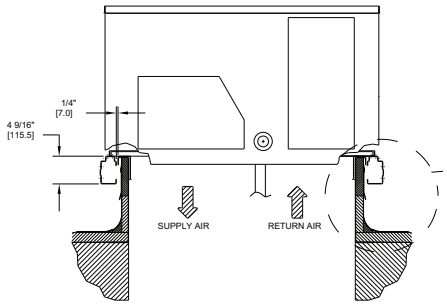


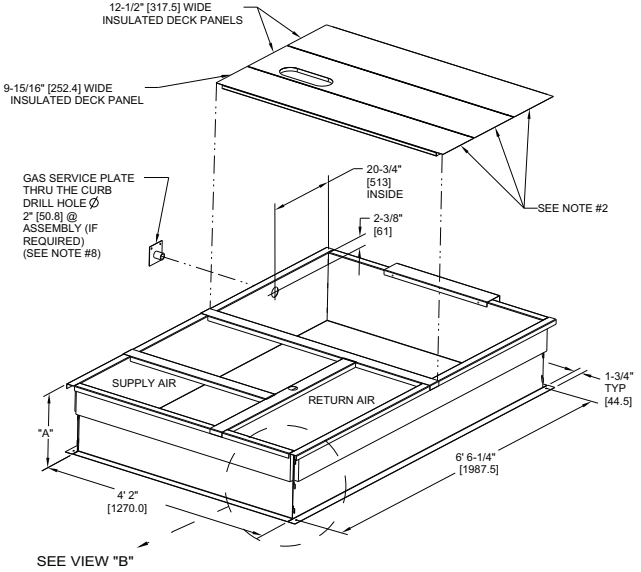
SECTION THRU SIDE



VIEW "B"
CORNER DETAIL







CERTIFIED DRAWING

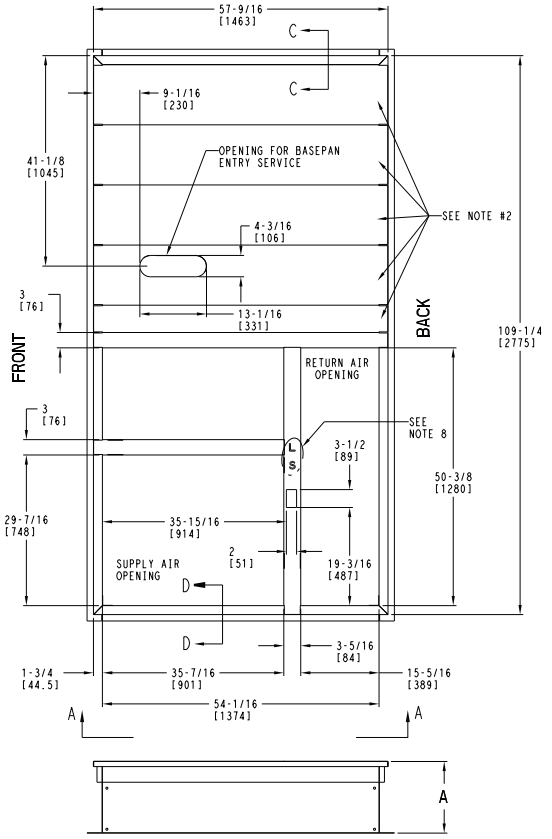
REV	REVISION RECORD	DATE	BY	CHK'D	APP'D	ECN NO.
C	6' 61/4" WAS 6' 7 1/6", 4'2' WAS 4' 2 13/16"; 18 GA WAS 16 GA.; 15 13/16" WAS 15 15/16"; NAIL FIELD SUPPLIED WAS WITH CURB	4/22/13	MMC	-	-	1067898

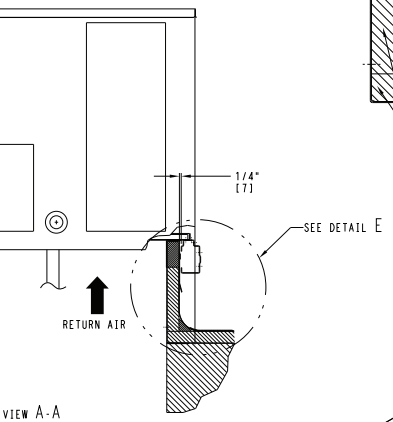
DRAWING RELEASE LEVEL: PRODUCTION			
THIRD ANGLE PROJECTION	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: 1 DEC ± - 2 DEC ± - 3 DEC ± - ANG ± -		THIS DOCUMENT AND THE INFORMATION CONTAINED THEREIN IS PROPRIETARY TO CARRIER CORPORATION AND SHALL NOT BE USED OR DISCLOSED TO OTHERS, IN WHOLE OR IN PART, WITHOUT THE WRITTEN AUTHORIZATION OF CARRIER CORPORATION.
MATERIAL - - -	AUTHORIZATION NUMBER 1029120		TITLE: CURB ASY, ROOF
ENGINEERING REQUIREMENTS: T-005, Y-002	ENGINEERING - - MANUFACTURING - -		SIZE: D DRAWING NUMBER: 50HJ405012 SHEET 5 OF 5 REV: C
WEIGHT: -	DRAFTER MMC 12/16/09 CHECKER - -		
SURFACE FINISH: - MFG/PURCH: PURCH	MODEL (INTERNAL USE ONLY)	NEXT DRAWING: - SCALE: N/A	DISTRIBUTION: -

Roof Curb Dimensions — 549K*12

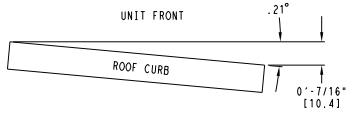
ROOF CURB ACCESSORY #	A
CRRFCURB074A00	14" [356]
CRRFCURB075A00	24" [610]

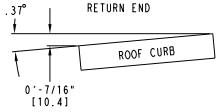
NOTES:
1. ROOFCURB ACCESSORY IS SHIPPED DISASSEMBLED.
2. INSULATED PANELS: 1/2" THK. NEOPRENE FOAM, 1.0# DENSITY.
3. DIMENSIONS IN [ ] ARE IN MILLIMETERS.
4. ROOFCURB SIDEWALLS: 16 GAGE STEEL.
5. ATTACH DUCTWORK TO CURB. (FLANGES OF DUCT REST ON CURB).
6. SERVICE CLEARANCE 4 FT ON EACH SIDE.
7. ➡ DIRECTION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



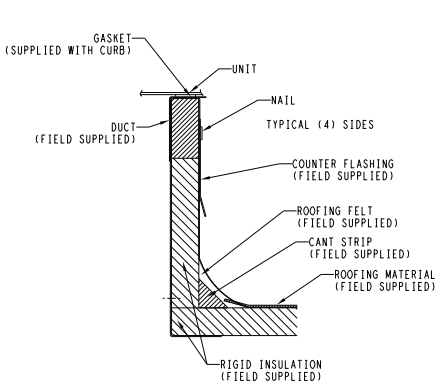


VIEW A-A

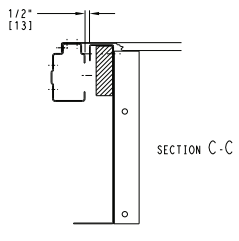


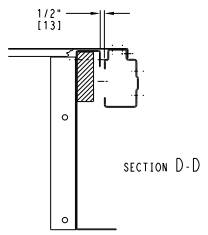


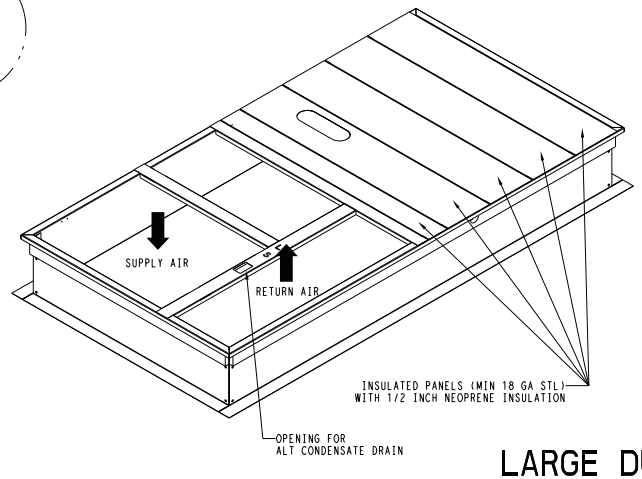
MAX CURB LEVELING TOLERANCES



DETAIL E







LARGE DUCT OPENINGS

50TM500780	REV B

Performance data

549K*07N Two Stage Cooling Capacities

549K*07N				AMBIENT TEMPERATURE (°F)															
				85			95			105			115			125		
				EAT (db)			EAT (db)			EAT (db)			EAT (db)			EAT (db)		
				75	80	85	75	80	85	75	80	85	75	80	85	75	80	85
1800 cfm	EAT (wb)	58	TC	63.4	63.4	72.1	59.6	59.6	68.0	55.7	55.7	63.7	51.6	51.6	59.2	47.3	47.3	54.6
			SHC	54.7	63.4	72.1	51.3	59.6	68.0	47.7	55.7	63.7	44.0	51.6	59.2	40.1	47.3	54.6
		62	TC	67.0	67.0	68.6	62.4	62.4	65.8	57.6	57.6	62.9	52.7	52.7	59.8	47.7	47.7	56.6
			SHC	49.2	58.9	68.6	46.4	56.1	65.8	43.5	53.2	62.9	40.6	50.2	59.8	37.5	47.1	56.6
		67	TC	74.8	74.8	74.8	69.8	69.8	69.8	64.7	64.7	64.7	59.4	59.4	59.4	53.8	53.8	53.8
			SHC	40.4	50.1	59.9	37.6	47.3	57.0	34.7	44.5	54.2	31.8	41.5	51.2	28.8	38.6	48.3
		72	TC	83.4	83.4	83.4	78.2	78.2	78.2	72.7	72.7	72.7	67.0	67.0	67.0	61.1	61.1	61.1
			SHC	31.4	41.2	51.0	28.6	38.4	48.2	25.8	35.5	45.3	22.9	32.6	42.4	19.9	29.7	39.4
		76	TC	—	90.9	90.9	—	85.3	85.3	—	79.5	79.5	—	73.6	73.6	—	—	—
			SHC	—	33.8	43.7	—	31.1	41.0	—	28.2	38.1	—	25.4	35.3	—	—	—
2100 cfm	EAT (wb)	58	TC	67.7	67.7	77.0	63.7	63.7	72.6	59.5	59.5	68.0	55.2	55.2	63.2	50.6	50.6	58.3
			SHC	58.5	67.7	77.0	54.9	63.7	72.6	51.1	59.5	68.0	47.1	55.2	63.2	43.0	50.6	58.3
		62	TC	69.6	69.6	76.1	64.8	64.8	73.1	60.0	60.0	70.0	55.3	55.3	66.0	50.7	50.7	60.9
			SHC	53.8	65.0	76.1	50.9	62.0	73.1	47.9	58.9	70.0	44.5	55.3	66.0	40.5	50.7	60.9
		67	TC	77.3	77.3	77.3	72.1	72.1	72.1	66.8	66.8	66.8	61.2	61.2	61.2	55.5	55.5	55.5
			SHC	43.4	54.6	65.8	40.5	51.7	63.0	37.6	48.8	60.1	34.6	45.9	57.1	31.6	42.8	54.1
		72	TC	86.1	86.1	86.1	80.6	80.6	80.6	74.9	74.9	74.9	69.0	69.0	69.0	—	—	—
			SHC	32.8	44.1	55.4	30.0	41.3	52.6	27.1	38.4	49.6	24.1	35.4	46.7	—	—	—
		76	TC	—	93.6	93.6	—	87.8	87.8	—	81.8	81.8	—	75.5	75.5	—	—	—
			SHC	—	35.5	47.1	—	32.7	44.2	—	29.8	41.3	—	26.9	38.3	—	—	—
2400 cfm	EAT (wb)	58	TC	71.4	71.4	81.0	67.1	67.1	76.3	62.7	62.7	71.5	58.1	58.1	66.5	53.3	53.3	61.3
			SHC	61.8	71.4	81.0	57.9	67.1	76.3	53.9	62.7	71.5	49.7	58.1	66.5	45.4	53.3	61.3
		62	TC	71.9	71.9	83.0	67.9	67.9	77.5	62.8	62.8	74.6	58.2	58.2	69.4	53.8	53.8	62.9
			SHC	58.0	70.5	83.0	54.0	65.8	77.5	51.0	62.8	74.6	47.0	58.2	69.4	42.3	52.6	62.9
		67	TC	79.2	79.2	79.2	73.9	73.9	73.9	68.4	68.4	68.4	62.7	62.7	62.7	56.8	56.8	59.6
			SHC	46.1	58.8	71.6	43.2	55.9	68.6	40.3	53.0	65.7	37.3	50.0	62.7	34.2	46.9	59.6
		72	TC	88.1	88.1	88.1	82.4	82.4	82.4	76.5	76.5	76.5	70.4	70.4	70.4	—	—	—
			SHC	34.0	46.8	59.6	31.1	43.9	56.7	28.2	41.0	53.7	25.2	38.0	50.7	—	—	—
		76	TC	—	95.7	95.7	—	89.7	89.7	—	83.5	83.5	—	—	—	—	—	—
			SHC	—	37.0	50.0	—	34.1	47.1	—	31.2	44.1	—	—	—	—	—	—
2700 cfm	EAT (wb)	58	TC	74.3	74.3	84.3	69.9	69.9	79.5	65.3	65.3	74.4	60.5	60.5	69.2	55.6	55.6	63.8
			SHC	64.4	74.3	84.3	60.4	69.9	79.5	56.2	65.3	74.4	51.9	60.5	69.2	47.4	55.6	63.8
		62	TC	75.6	75.6	84.3	70.0	70.0	82.8	65.4	65.4	77.6	60.6	60.6	72.2	55.7	55.7	66.6
			SHC	59.5	71.9	84.3	57.2	70.0	82.8	53.2	65.4	77.6	49.0	60.6	72.2	44.7	55.7	66.6
		67	TC	80.7	80.7	80.7	75.3	75.3	75.3	69.7	69.7	71.0	63.8	63.8	68.0	57.9	57.9	64.8
			SHC	48.7	62.9	77.0	45.8	59.9	74.0	42.8	56.9	71.0	39.8	53.9	68.0	36.7	50.8	64.8
		72	TC	89.7	89.7	89.7	83.8	83.8	83.8	77.8	77.8	77.8	71.6	71.6	71.6	—	—	—
			SHC	35.1	49.3	63.5	32.2	46.4	60.6	29.2	43.4	57.6	26.2	40.4	54.6	—	—	—
		76	TC	—	97.3	97.3	—	91.1	91.1	—	—	—	—	—	—	—	—	—
			SHC	—	38.3	52.7	—	35.4	49.8	—	—	—	—	—	—	—	—	—
3000 cfm	EAT (wb)	58	TC	76.9	76.9	87.2	72.3	72.3	82.2	67.6	67.6	77.0	62.6	62.6	71.5	57.5	57.5	65.9
			SHC	66.7	76.9	87.2	62.5	72.3	82.2	58.2	67.6	77.0	53.7	62.6	71.5	49.1	57.5	65.9
		62	TC	77.0	77.0	90.7	72.4	72.4	85.6	67.7	67.7	80.2	62.7	62.7	74.6	57.6	57.6	68.8
			SHC	63.3	77.0	90.7	59.3	72.4	85.6	55.1	67.7	80.2	50.8	62.7	74.6	46.3	57.6	68.8
		67	TC	82.0	82.0	82.2	76.5	76.5	79.2	70.8	70.8	76.2	64.9	64.9	73.0	58.8	58.8	69.7
			SHC	51.2	66.7	82.2	48.2	63.7	79.2	45.2	60.7	76.2	42.2	57.6	73.0	39.1	54.4	69.7
		72	TC	91.0	91.0	91.0	85.0	85.0	85.0	78.8	78.8	78.8	72.5	72.5	72.5	—	—	—
			SHC	36.1	51.7	67.3	33.2	48.7	64.3	30.2	45.7	61.3	27.2	42.7	58.2	—	—	—
		76	TC	—	98.6	98.6	—	—	—	—	—	—	—	—	—	—	—	—
			SHC	—	39.5	55.3	—	—	—	—	—	—	—	—	—	—	—	—

LEGEND

— — Do Not Operate
cfm — Cubic Feet Per Minute (Supply Air)
EAT (db) — Entering Air Temperature (dry bulb)
EAT (wb) — Entering Air Temperature (wet bulb)
SHC — Sensible Heat Capacity (1000 Btuh) Gross
TC — Total Capacity (1000 Btuh) Gross

NOTE: See minimum-maximum airflow ratings on page 6.

Performance data (cont)

549K*07N Single Stage Cooling Capacities

549K*07N				AMBIENT TEMPERATURE (°F)															
				85			95			105			115			125		
				EAT (db)			EAT (db)			EAT (db)			EAT (db)			EAT (db)		
				75	80	85	75	80	85	75	80	85	75	80	85	75	80	85
1080 cfm	EAT (wb)	58	TC	36.6	36.6	45.5	33.9	33.9	42.4	31.1	31.1	39.2	28.2	28.2	35.9	25.1	25.1	32.5
			SHC	27.8	36.6	45.5	25.4	33.9	42.4	22.9	31.1	39.2	20.4	28.2	35.9	17.8	25.1	32.5
		62	TC	39.1	39.1	44.0	35.8	35.8	41.8	32.4	32.4	39.6	28.9	28.9	37.3	25.3	25.3	34.9
			SHC	24.3	34.1	44.0	22.1	32.0	41.8	19.9	29.7	39.6	17.7	27.5	37.3	15.4	25.1	34.9
		67	TC	44.3	44.3	44.3	40.8	40.8	40.8	37.2	37.2	37.2	33.4	33.4	33.4	29.5	29.5	30.0
			SHC	19.2	29.1	39.0	17.0	26.9	36.8	14.8	24.7	34.6	12.6	22.4	32.3	10.3	20.2	30.0
		72	TC	49.9	49.9	49.9	46.2	46.2	46.2	42.3	42.3	42.3	38.3	38.3	38.3	34.2	34.2	34.2
			SHC	14.0	23.9	33.7	11.8	21.7	31.6	9.6	19.5	29.4	7.4	17.3	27.2	5.1	15.0	24.9
		76	TC	—	54.7	54.7	—	50.8	50.8	—	46.7	46.7	—	—	—	—	—	—
			SHC	—	19.6	29.5	—	17.5	27.4	—	15.3	25.2	—	—	—	—	—	—
1260 cfm	EAT (wb)	58	TC	39.5	39.5	48.9	36.6	36.6	45.6	33.6	33.6	42.2	30.5	30.5	38.7	27.3	27.3	35.0
			SHC	30.1	39.5	48.9	27.6	36.6	45.6	25.0	33.6	42.2	22.3	30.5	38.7	19.6	27.3	35.0
		62	TC	40.8	40.8	49.5	37.4	37.4	47.2	33.9	33.9	44.8	30.6	30.6	41.5	27.3	27.3	37.7
			SHC	26.6	38.0	49.5	24.4	35.8	47.2	22.1	33.4	44.8	19.6	30.6	41.5	17.0	27.3	37.7
		67	TC	46.0	46.0	46.0	42.3	42.3	42.3	38.5	38.5	39.0	34.6	34.6	36.7	30.6	30.6	34.4
			SHC	20.5	32.0	43.5	18.3	29.8	41.3	16.1	27.5	39.0	13.8	25.2	36.7	11.4	22.9	34.4
		72	TC	51.7	51.7	51.7	47.8	47.8	47.8	43.8	43.8	43.8	39.6	39.6	39.6	35.4	35.4	35.4
			SHC	14.3	25.8	37.4	12.1	23.6	35.2	9.9	21.4	32.9	7.6	19.1	30.6	5.3	16.8	28.3
		76	TC	—	56.5	56.5	—	—	—	—	—	—	—	—	—	—	—	—
			SHC	—	20.8	32.3	—	—	—	—	—	—	—	—	—	—	—	—
1440 cfm	EAT (wb)	58	TC	41.9	41.9	51.7	38.9	38.9	48.3	35.7	35.7	44.7	32.5	32.5	41.0	29.1	29.1	37.2
			SHC	32.1	41.9	51.7	29.5	38.9	48.3	26.7	35.7	44.7	23.9	32.5	41.0	21.0	29.1	37.2
		62	TC	42.2	42.2	54.6	38.9	38.9	51.5	35.8	35.8	47.8	32.5	32.5	43.9	29.1	29.1	39.9
			SHC	28.8	41.7	54.6	26.3	38.9	51.5	23.8	35.8	47.8	21.1	32.5	43.9	18.4	29.1	39.9
		67	TC	47.3	47.3	47.9	43.5	43.5	45.6	39.6	39.6	43.3	35.6	35.6	41.0	31.4	31.4	38.6
			SHC	21.8	34.8	47.9	19.5	32.6	45.6	17.2	30.2	43.3	14.9	27.9	41.0	12.5	25.6	38.6
		72	TC	53.1	53.1	53.1	49.0	49.0	49.0	44.9	44.9	44.9	40.6	40.6	40.6	36.2	36.2	36.2
			SHC	14.6	27.7	40.8	12.3	25.4	38.5	10.0	23.1	36.3	7.7	20.8	33.9	5.4	18.5	31.6
		76	TC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
			SHC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1620 cfm	EAT (wb)	58	TC	44.0	44.0	54.2	40.8	40.8	50.6	37.5	37.5	46.8	34.1	34.1	43.0	30.6	30.6	39.0
			SHC	33.8	44.0	54.2	31.0	40.8	50.6	28.2	37.5	46.8	25.3	34.1	43.0	22.3	30.6	39.0
		62	TC	44.1	44.1	57.7	40.9	40.9	53.9	37.6	37.6	50.0	34.2	34.2	46.0	30.7	30.7	41.8
			SHC	30.4	44.1	57.7	27.8	40.9	53.9	25.1	37.6	50.0	22.4	34.2	46.0	19.5	30.7	41.8
		67	TC	48.4	48.4	52.1	44.5	44.5	49.8	40.5	40.5	47.5	36.3	36.3	45.1	32.1	32.1	42.7
			SHC	22.9	37.5	52.1	20.6	35.2	49.8	18.3	32.9	47.5	15.9	30.5	45.1	13.6	28.1	42.7
		72	TC	54.1	54.1	54.1	50.0	50.0	50.0	45.7	45.7	45.7	41.3	41.3	41.3	—	—	—
			SHC	14.7	29.4	44.1	12.4	27.1	41.9	10.1	24.8	39.5	7.8	22.5	37.1	—	—	—
		76	TC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
			SHC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1800 cfm	EAT (wb)	58	TC	45.8	45.8	56.3	42.5	42.5	52.6	39.1	39.1	48.7	35.5	35.5	44.6	31.9	31.9	40.5
			SHC	35.3	45.8	56.3	32.4	42.5	52.6	29.5	39.1	48.7	26.4	35.5	44.6	23.3	31.9	40.5
		62	TC	45.9	45.9	59.9	42.6	42.6	56.0	39.1	39.1	52.0	35.6	35.6	47.8	32.0	32.0	43.4
			SHC	31.8	45.9	59.9	29.1	42.6	56.0	26.3	39.1	52.0	23.4	35.6	47.8	20.5	32.0	43.4
		67	TC	49.2	49.2	56.2	45.2	45.2	53.9	41.2	41.2	51.5	37.0	37.0	49.1	32.7	32.7	46.5
			SHC	23.9	40.1	56.2	21.6	37.8	53.9	19.3	35.4	51.5	16.9	33.0	49.1	14.5	30.5	46.5
		72	TC	55.0	55.0	55.0	50.7	50.7	50.7	46.4	46.4	46.4	—	—	—	—	—	—
			SHC	14.8	31.1	47.3	12.5	28.8	45.0	10.2	26.4	42.6	—	—	—	—	—	—
		76	TC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
			SHC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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 (1000 Btuh) Gross
TC — Total Capacity (1000 Btuh) Gross

NOTE: See minimum-maximum airflow ratings on page 6.

Performance data (cont)

549K*08N Two Stage Cooling Capacities

549K*08N				AMBIENT TEMPERATURE (°F)															
				85			95			105			115			125		
				EAT (db)			EAT (db)			EAT (db)			EAT (db)			EAT (db)		
				75	80	85	75	80	85	75	80	85	75	80	85	75	80	85
2250 cfm	EAT (wb)	58	TC	80.6	80.6	109.8	77.8	77.8	106.0	74.6	74.6	101.7	71.0	71.0	96.8	66.8	66.8	91.1
			SHC	51.4	80.6	109.8	49.6	77.8	106.0	47.5	74.6	101.7	45.2	71.0	96.8	42.5	66.8	91.1
		62	TC	85.5	85.5	106.5	81.7	81.7	104.7	77.5	77.5	102.7	72.8	72.8	100.4	67.6	67.6	97.6
			SHC	42.4	74.4	106.5	40.7	72.7	104.7	38.9	70.8	102.7	36.8	68.6	100.4	34.5	66.1	97.6
		67	TC	95.0	95.0	95.2	90.8	90.8	93.4	86.2	86.2	91.6	81.0	81.0	89.5	75.2	75.2	87.1
			SHC	30.9	63.1	95.2	29.2	61.3	93.4	27.3	59.4	91.6	25.2	57.3	89.5	23.0	55.0	87.1
		72	TC	105.4	105.4	105.4	100.9	100.9	100.9	95.9	95.9	95.9	90.3	90.3	90.3	84.0	84.0	84.0
			SHC	19.1	51.5	83.9	17.4	49.8	82.1	15.6	47.9	80.2	13.5	45.8	78.1	11.3	43.5	75.8
		76	TC	—	114.4	114.4	—	109.6	109.6	—	104.2	104.2	—	98.2	98.2	—	91.5	91.5
			SHC	—	42.0	75.0	—	40.3	73.3	—	38.5	71.5	—	36.5	69.5	—	34.2	67.1
2650 cfm	EAT (wb)	58	TC	86.1	86.1	116.7	83.0	83.0	112.5	79.5	79.5	107.9	75.5	75.5	102.5	71.0	71.0	96.4
			SHC	55.4	86.1	116.7	53.4	83.0	112.5	51.1	79.5	107.9	48.6	75.5	102.5	45.6	71.0	96.4
		62	TC	88.8	88.8	119.2	84.8	84.8	117.2	80.5	80.5	114.8	76.5	76.5	108.3	71.1	71.1	105.1
			SHC	45.4	82.3	119.2	43.7	80.4	117.2	41.7	78.3	114.8	39.5	73.9	108.3	37.2	71.1	105.1
		67	TC	98.3	98.3	106.2	94.0	94.0	104.5	89.1	89.1	102.5	83.6	83.6	100.3	77.4	77.4	97.9
			SHC	31.8	69.0	106.2	30.1	67.3	104.5	28.1	65.3	102.5	26.0	63.2	100.3	23.7	60.8	97.9
		72	TC	109.0	109.0	109.0	104.3	104.3	104.3	99.0	99.0	99.0	93.0	93.0	93.0	86.4	86.4	86.4
			SHC	17.9	55.4	92.9	16.2	53.7	91.1	14.3	51.7	89.1	12.2	49.6	86.9	10.0	47.2	84.5
		76	TC	—	118.2	118.2	—	113.1	113.1	—	107.4	107.4	—	101.0	101.0	—	93.9	93.9
			SHC	—	44.4	82.9	—	42.6	81.0	—	40.7	78.9	—	38.6	76.6	—	36.3	74.1
3000 cfm	EAT (wb)	58	TC	90.1	90.1	122.3	86.8	86.8	117.8	83.1	83.1	112.8	78.9	78.9	107.1	74.0	74.0	100.6
			SHC	57.8	90.1	122.3	55.7	86.8	117.8	53.3	83.1	112.8	50.6	78.9	107.1	47.5	74.0	100.6
		62	TC	91.3	91.3	130.1	88.2	88.2	123.0	83.8	83.8	120.4	78.9	78.9	116.8	74.1	74.1	109.7
			SHC	47.2	88.7	130.1	45.3	84.1	123.0	43.3	81.9	120.4	41.1	78.9	116.8	38.6	74.1	109.7
		67	TC	100.6	100.6	116.3	96.1	96.1	114.5	91.0	91.0	112.4	85.3	85.3	110.2	78.9	78.9	107.6
			SHC	31.8	74.0	116.3	30.0	72.2	114.5	28.1	70.2	112.4	25.9	68.0	110.2	23.5	65.6	107.6
		72	TC	111.5	111.5	111.5	106.5	106.5	106.5	101.0	101.0	101.0	94.8	94.8	95.0	87.9	87.9	92.6
			SHC	16.2	58.7	101.1	14.4	56.9	99.3	12.5	54.9	97.3	10.4	52.7	95.0	8.1	50.3	92.6
		76	TC	—	120.7	120.7	—	115.4	115.4	—	109.5	109.5	—	102.9	102.9	—	—	—
			SHC	—	46.2	89.6	—	44.4	87.6	—	42.4	85.5	—	40.3	83.2	—	—	—
3400 cfm	EAT (wb)	58	TC	94.1	94.1	127.3	90.5	90.5	122.5	86.5	86.5	117.2	82.1	82.1	111.1	77.0	77.0	104.3
			SHC	60.8	94.1	127.3	58.5	90.5	122.5	55.9	86.5	117.2	53.0	82.1	111.1	49.7	77.0	104.3
		62	TC	95.1	95.1	134.6	90.6	90.6	133.4	86.6	86.6	127.6	82.2	82.2	121.0	77.1	77.1	113.6
			SHC	49.6	92.1	134.6	47.8	90.6	133.4	45.7	86.6	127.6	43.3	82.2	121.0	40.6	77.1	113.6
		67	TC	102.7	102.7	126.6	98.0	98.0	124.7	92.7	92.7	122.6	86.9	86.9	120.2	80.3	80.3	117.4
			SHC	32.4	79.5	126.6	30.6	77.7	124.7	28.6	75.6	122.6	26.4	73.3	120.2	24.1	70.8	117.4
		72	TC	113.7	113.7	113.7	108.5	108.5	108.5	102.8	102.8	105.6	96.4	96.4	103.3	89.3	89.3	100.8
			SHC	14.8	62.2	109.5	13.0	60.3	107.6	11.1	58.3	105.6	8.9	56.1	103.3	6.6	53.7	100.8
		76	TC	—	123.0	123.0	—	117.5	117.5	—	111.4	111.4	—	—	—	—	—	—
			SHC	—	48.1	96.3	—	46.3	94.3	—	44.3	92.1	—	—	—	—	—	—
3750 cfm	EAT (wb)	58	TC	97.0	97.0	131.4	93.3	93.3	126.5	89.2	89.2	120.9	84.5	84.5	114.6	79.2	79.2	107.4
			SHC	62.6	97.0	131.4	60.2	93.3	126.5	57.5	89.2	120.9	54.4	84.5	114.6	51.0	79.2	107.4
		62	TC	97.1	97.1	143.1	93.4	93.4	137.7	89.3	89.3	131.7	84.6	84.6	124.8	79.3	79.3	117.0
			SHC	51.1	97.1	143.1	49.1	93.4	137.7	46.9	89.3	131.7	44.4	84.6	124.8	41.6	79.3	117.0
		67	TC	104.2	104.2	136.0	99.3	99.3	134.0	94.0	94.0	131.8	88.0	88.0	129.2	81.4	81.4	126.2
			SHC	32.2	84.1	136.0	30.4	82.2	134.0	28.4	80.1	131.8	26.2	77.7	129.2	23.9	75.0	126.2
		72	TC	115.2	115.2	117.3	109.9	109.9	115.4	104.1	104.1	113.3	97.6	97.6	111.0	90.3	90.3	108.4
			SHC	12.9	65.1	117.3	11.1	63.3	115.4	9.2	61.2	113.3	7.0	59.0	111.0	4.7	56.5	108.4
		76	TC	—	124.7	124.7	—	119.0	119.0	—	—	—	—	—	—	—	—	—
			SHC	—	49.7	102.6	—	47.9	100.6	—	—	—	—	—	—	—	—	—

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 (1000 Btuh) Gross
TC — Total Capacity (1000 Btuh) Gross

NOTE: See minimum-maximum airflow ratings on page 6.

Performance data (cont)

549K*08N Single Stage Cooling Capacities

549K*08N				AMBIENT TEMPERATURE (°F)															
				85			95			105			115			125		
				EAT (db)			EAT (db)			EAT (db)			EAT (db)			EAT (db)		
				75	80	85	75	80	85	75	80	85	75	80	85	75	80	85
1350 cfm	EAT (wb)	58	TC	49.5	49.5	80.5	47.9	47.9	77.9	46.1	46.1	75.0	44.0	44.0	71.7	41.5	41.5	67.7
			SHC	18.4	49.5	80.5	17.8	47.9	77.9	17.1	46.1	75.0	16.3	44.0	71.7	15.3	41.5	67.7
		62	TC	53.5	53.5	77.4	51.3	51.3	76.4	48.9	48.9	75.3	46.0	46.0	74.0	42.7	42.7	72.5
			SHC	12.4	44.9	77.4	11.4	43.9	76.4	10.3	42.8	75.3	9.1	41.5	74.0	7.7	40.1	72.5
		67	TC	60.1	60.1	70.7	57.7	57.7	69.7	55.0	55.0	68.6	51.9	51.9	67.4	48.3	48.3	65.9
			SHC	5.5	38.1	70.7	4.5	37.1	69.7	3.4	36.0	68.6	2.2	34.8	67.4	0.7	33.3	65.9
		72	TC	67.4	67.4	67.4	64.7	64.7	64.7	61.8	61.8	62.0	58.5	58.5	60.7	54.5	54.5	59.3
			SHC	–1.6	31.3	64.1	–2.6	30.3	63.1	–3.7	29.2	62.0	–4.9	27.9	60.7	–6.3	26.5	59.3
		76	TC	—	73.7	73.7	—	70.9	70.9	—	67.8	67.8	—	64.1	64.1	—	59.9	59.9
			SHC	—	25.7	58.7	—	24.7	57.7	—	23.6	56.6	—	22.4	55.4	—	20.9	53.9
1590 cfm	EAT (wb)	58	TC	53.4	53.4	86.1	51.6	51.6	83.3	49.6	49.6	80.1	47.3	47.3	76.5	44.6	44.6	72.1
			SHC	20.6	53.4	86.1	19.9	51.6	83.3	19.1	49.6	80.1	18.2	47.3	76.5	17.1	44.6	72.1
		62	TC	56.0	56.0	87.8	53.6	53.6	86.7	51.0	51.0	85.5	48.0	48.0	84.0	44.7	44.7	81.1
			SHC	12.3	50.1	87.8	11.3	49.0	86.7	10.2	47.9	85.5	9.0	46.5	84.0	7.9	44.5	81.1
		67	TC	62.7	62.7	79.9	60.1	60.1	78.9	57.2	57.2	77.7	53.9	53.9	76.4	50.0	50.0	74.9
			SHC	4.1	42.0	79.9	3.1	41.0	78.9	2.0	39.9	77.7	0.7	38.6	76.4	–0.8	37.1	74.9
		72	TC	70.1	70.1	72.1	67.3	67.3	71.0	64.2	64.2	69.9	60.6	60.6	68.5	56.4	56.4	67.0
			SHC	–4.3	33.9	72.1	–5.3	32.9	71.0	–6.4	31.7	69.9	–7.6	30.4	68.5	–9.1	29.0	67.0
		76	TC	—	76.6	76.6	—	73.6	73.6	—	70.3	70.3	—	66.4	66.4	—	61.9	61.9
			SHC	—	27.3	65.8	—	26.3	64.8	—	25.1	63.6	—	23.9	62.4	—	22.4	60.9
1800 cfm	EAT (wb)	58	TC	56.3	56.3	90.9	54.4	54.4	87.8	52.3	52.3	84.4	49.8	49.8	80.5	46.9	46.9	75.8
			SHC	21.7	56.3	90.9	20.9	54.4	87.8	20.1	52.3	84.4	19.1	49.8	80.5	17.9	46.9	75.8
		62	TC	57.7	57.7	97.3	55.3	55.3	96.0	52.6	52.6	94.4	49.9	49.9	90.9	46.9	46.9	85.7
			SHC	11.6	54.4	97.3	10.6	53.3	96.0	9.5	52.0	94.4	8.8	49.9	90.9	8.2	46.9	85.7
		67	TC	64.5	64.5	88.4	61.8	61.8	87.4	58.7	58.7	86.2	55.3	55.3	84.8	51.2	51.2	83.2
			SHC	2.2	45.3	88.4	1.1	44.2	87.4	0.0	43.1	86.2	–1.3	41.7	84.8	–2.8	40.2	83.2
		72	TC	72.1	72.1	79.4	69.1	69.1	78.3	65.8	65.8	77.2	62.1	62.1	75.8	57.7	57.7	74.2
			SHC	–7.3	36.1	79.4	–8.4	35.0	78.3	–9.5	33.8	77.2	–10.8	32.5	75.8	–12.3	31.0	74.2
		76	TC	—	78.6	78.6	—	75.4	75.4	—	71.9	71.9	—	67.9	68.9	—	63.2	67.2
			SHC	—	28.6	72.6	—	27.5	71.5	—	26.4	70.3	—	25.0	68.9	—	23.5	67.2
2040 cfm	EAT (wb)	58	TC	59.2	59.2	95.0	57.1	57.1	91.7	54.9	54.9	88.1	52.2	52.2	83.9	49.1	49.1	79.0
			SHC	23.3	59.2	95.0	22.5	57.1	91.7	21.6	54.9	88.1	20.5	52.2	83.9	19.2	49.1	79.0
		62	TC	59.5	59.5	106.3	57.2	57.2	103.3	54.9	54.9	99.5	52.3	52.3	94.7	49.1	49.1	89.1
			SHC	11.5	58.9	106.3	10.9	57.1	103.3	10.4	54.9	99.5	9.8	52.3	94.7	9.2	49.1	89.1
		67	TC	66.1	66.1	97.2	63.2	63.2	96.1	60.1	60.1	94.8	56.5	56.5	93.4	52.3	52.3	91.8
			SHC	0.6	48.9	97.2	–0.5	47.8	96.1	–1.6	46.6	94.8	–2.9	45.2	93.4	–4.4	43.7	91.8
		72	TC	73.8	73.8	86.9	70.7	70.7	85.8	67.3	67.3	84.6	63.4	63.4	83.2	58.8	58.8	81.6
			SHC	–10.1	38.4	86.9	–11.2	37.3	85.8	–12.4	36.1	84.6	–13.7	34.8	83.2	–15.2	33.2	81.6
		76	TC	—	80.4	80.4	—	77.1	78.0	—	73.5	76.7	—	69.3	75.2	—	64.3	73.4
			SHC	—	29.9	79.2	—	28.8	78.0	—	27.6	76.7	—	26.3	75.2	—	24.7	73.4
2250 cfm	EAT (wb)	58	TC	61.4	61.4	98.6	59.2	59.2	95.1	56.8	56.8	91.4	54.0	54.0	86.9	50.8	50.8	81.7
			SHC	24.1	61.4	98.6	23.2	59.2	95.1	22.3	56.8	91.4	21.1	54.0	86.9	19.8	50.8	81.7
		62	TC	61.5	61.5	111.3	59.3	59.3	107.4	56.9	56.9	103.1	54.1	54.1	98.1	50.8	50.8	92.2
			SHC	11.6	61.5	111.3	11.2	59.3	107.4	10.7	56.9	103.1	10.1	54.1	98.1	9.4	50.8	92.2
		67	TC	67.2	67.2	105.4	64.3	64.3	104.2	61.1	61.1	102.9	57.4	57.4	101.4	53.1	53.1	99.7
			SHC	–1.5	52.0	105.4	–2.5	50.8	104.2	–3.7	49.6	102.9	–5.0	48.2	101.4	–6.5	46.6	99.7
		72	TC	75.0	75.0	94.1	71.8	71.8	92.9	68.3	68.3	91.6	64.3	64.3	90.2	59.6	59.6	88.6
			SHC	–13.3	40.4	94.1	–14.4	39.3	92.9	–15.5	38.1	91.6	–16.8	36.7	90.2	–18.3	35.1	88.6
		76	TC	—	81.7	85.3	—	78.3	84.1	—	74.5	82.8	—	70.2	81.2	—	65.1	79.3
			SHC	—	31.0	85.3	—	29.9	84.1	—	28.7	82.8	—	27.3	81.2	—	25.7	79.3

LEGEND

— — Do Not Operate
cfm — Cubic Feet Per Minute (Supply Air)
EAT (db) — Entering Air Temperature (dry bulb)
EAT (wb) — Entering Air Temperature (wet bulb)
SHC — Sensible Heat Capacity (1000 Btuh) Gross
TC — Total Capacity (1000 Btuh) Gross

NOTE: See minimum-maximum airflow ratings on page 6.

Performance data (cont)

549K*09N Two Stage Cooling Capacities

549K*09N				AMBIENT TEMPERATURE (°F)															
				85			95			105			115			125		
				EAT (db)			EAT (db)			EAT (db)			EAT (db)			EAT (db)		
				75	80	85	75	80	85	75	80	85	75	80	85	75	80	85
2550 cfm	EAT (wb)	58	TC	86.2	86.2	97.9	81.2	81.2	92.5	76.0	76.0	86.8	70.5	70.5	80.9	64.8	64.8	74.6
			SHC	74.4	86.2	97.9	69.8	81.2	92.5	65.1	76.0	86.8	60.1	70.5	80.9	55.0	64.8	74.6
		62	TC	91.1	91.1	93.5	85.0	85.0	89.7	78.7	78.7	85.8	72.2	72.2	81.6	65.5	65.5	77.1
			SHC	67.2	80.4	93.5	63.5	76.6	89.7	59.6	72.7	85.8	55.6	68.6	81.6	51.4	64.3	77.1
		67	TC	101.5	101.5	101.5	95.0	95.0	95.0	88.3	88.3	88.3	81.2	81.2	81.2	73.9	73.9	73.9
			SHC	55.1	68.3	81.5	51.3	64.6	77.8	47.5	60.8	74.0	43.7	56.9	70.1	39.7	52.9	66.1
		72	TC	112.8	112.8	112.8	106.0	106.0	106.0	98.8	98.8	98.8	91.3	91.3	91.3	83.5	83.5	83.5
			SHC	42.5	55.9	69.3	38.9	52.2	65.5	35.1	48.4	61.7	31.2	44.5	57.8	27.3	40.6	53.8
		76	TC	—	122.4	122.4	—	115.2	115.2	—	107.6	107.6	—	99.8	99.8	—	91.5	91.5
			SHC	—	45.8	59.9	—	42.2	56.1	—	38.4	52.3	—	34.6	48.3	—	30.6	44.3
3000 cfm	EAT (wb)	58	TC	91.9	91.9	104.4	86.7	86.7	98.6	81.1	81.1	92.6	75.3	75.3	86.2	69.3	69.3	79.6
			SHC	79.5	91.9	104.4	74.7	86.7	98.6	69.7	81.1	92.6	64.4	75.3	86.2	58.9	69.3	79.6
		62	TC	94.6	94.6	103.8	88.4	88.4	99.7	82.0	82.0	95.3	75.5	75.5	90.0	69.4	69.4	83.2
			SHC	73.5	88.6	103.8	69.6	84.6	99.7	65.4	80.4	95.3	60.9	75.5	90.0	55.6	69.4	83.2
		67	TC	105.1	105.1	105.1	98.3	98.3	98.3	91.3	91.3	91.3	83.9	83.9	83.9	76.2	76.2	76.2
			SHC	59.2	74.6	90.0	55.5	70.8	86.2	51.6	66.9	82.3	47.7	63.0	78.3	43.6	58.9	74.2
		72	TC	116.6	116.6	116.6	109.4	109.4	109.4	101.9	101.9	101.9	94.1	94.1	94.1	86.0	86.0	86.0
			SHC	44.5	59.9	75.4	40.7	56.2	71.6	36.9	52.3	67.8	33.0	48.4	63.8	29.0	44.3	59.7
		76	TC	—	126.3	126.3	—	118.7	118.7	—	110.9	110.9	—	102.6	102.6	—	94.0	94.0
			SHC	—	48.1	64.1	—	44.3	60.3	—	40.5	56.4	—	36.6	52.4	—	32.5	48.3
3400 cfm	EAT (wb)	58	TC	96.3	96.3	109.2	90.8	90.8	103.2	85.0	85.0	96.9	78.9	78.9	90.2	72.6	72.6	83.3
			SHC	83.4	96.3	109.2	78.4	90.8	103.2	73.1	85.0	96.9	67.6	78.9	90.2	61.9	72.6	83.3
		62	TC	97.4	97.4	111.9	92.2	92.2	103.5	85.1	85.1	101.0	79.0	79.0	94.1	72.7	72.7	87.0
			SHC	78.4	95.2	111.9	72.5	88.0	103.5	69.2	85.1	101.0	63.9	79.0	94.1	58.4	72.7	87.0
		67	TC	107.5	107.5	107.5	100.6	100.6	100.6	93.3	93.3	93.3	85.7	85.7	85.7	77.9	77.9	81.1
			SHC	62.7	79.9	97.1	58.9	76.1	93.3	55.0	72.1	89.3	51.0	68.1	85.2	46.9	64.0	81.1
		72	TC	119.1	119.1	119.1	111.8	111.8	111.8	104.0	104.0	104.0	96.0	96.0	96.0	87.6	87.6	87.6
			SHC	45.9	63.3	80.6	42.2	59.4	76.7	38.3	55.5	72.8	34.3	51.5	68.7	30.3	47.4	64.6
		76	TC	—	128.9	128.9	—	121.1	121.1	—	113.0	113.0	—	104.6	104.6	—	95.7	95.7
			SHC	—	49.8	67.6	—	46.0	63.8	—	42.1	59.8	—	38.2	55.7	—	34.1	51.5
3850 cfm	EAT (wb)	58	TC	100.5	100.5	113.9	94.7	94.7	107.6	88.7	88.7	101.0	82.3	82.3	94.0	75.7	75.7	86.8
			SHC	87.1	100.5	113.9	81.8	94.7	107.6	76.4	88.7	101.0	70.6	82.3	94.0	64.7	75.7	86.8
		62	TC	100.6	100.6	118.5	94.8	94.8	112.0	88.8	88.8	105.2	82.4	82.4	98.1	75.8	75.8	90.6
			SHC	82.7	100.6	118.5	77.7	94.8	112.0	72.3	88.8	105.2	66.8	82.4	98.1	61.0	75.8	90.6
		67	TC	109.7	109.7	109.7	102.6	102.6	102.6	95.1	95.1	96.9	87.4	87.4	92.7	79.4	79.4	88.3
			SHC	66.4	85.6	104.8	62.5	81.7	100.9	58.6	77.7	96.9	54.5	73.6	92.7	50.4	69.3	88.3
		72	TC	121.4	121.4	121.4	113.8	113.8	113.8	105.9	105.9	105.9	97.7	97.7	97.7	89.1	89.1	89.1
			SHC	47.4	66.8	86.1	43.6	62.9	82.2	39.7	58.9	78.2	35.7	54.9	74.1	31.6	50.8	69.9
		76	TC	—	131.2	131.2	—	123.2	123.2	—	114.9	114.9	—	106.3	106.3	—	—	—
			SHC	—	51.6	71.3	—	47.7	67.4	—	43.8	63.4	—	39.7	59.2	—	—	—
4250 cfm	EAT (wb)	58	TC	103.7	103.7	117.4	97.7	97.7	110.9	91.4	91.4	104.0	84.9	84.9	96.9	78.1	78.1	89.5
			SHC	89.9	103.7	117.4	84.5	97.7	110.9	78.8	91.4	104.0	72.9	84.9	96.9	66.8	78.1	89.5
		62	TC	103.8	103.8	122.1	97.8	97.8	115.4	91.5	91.5	108.4	85.0	85.0	101.0	78.2	78.2	93.3
			SHC	85.4	103.8	122.1	80.2	97.8	115.4	74.7	91.5	108.4	69.0	85.0	101.0	63.1	78.2	93.3
		67	TC	111.3	111.3	111.4	104.0	104.0	107.4	96.4	96.4	103.3	88.6	88.6	99.0	80.5	80.5	94.4
			SHC	69.5	90.5	111.4	65.6	86.5	107.4	61.6	82.4	103.3	57.5	78.2	99.0	53.3	73.8	94.4
		72	TC	123.1	123.1	123.1	115.4	115.4	115.4	107.3	107.3	107.3	98.9	98.9	98.9	90.2	90.2	90.2
			SHC	48.6	69.7	90.8	44.8	65.8	86.8	40.8	61.8	82.8	36.8	57.7	78.7	32.7	53.6	74.5
		76	TC	—	132.9	132.9	—	124.8	124.8	—	116.3	116.3	—	—	—	—	—	—
			SHC	—	52.9	74.4	—	49.1	70.4	—	45.1	66.4	—	—	—	—	—	—

LEGEND

— — Do Not Operate
cfm — Cubic Feet Per Minute (Supply Air)
EAT (db) — Entering Air Temperature (dry bulb)
EAT (wb) — Entering Air Temperature (wet bulb)
SHC — Sensible Heat Capacity (1000 Btuh) Gross
TC — Total Capacity (1000 Btuh) Gross

NOTE: See minimum-maximum airflow ratings on page 6.

Performance data (cont)

549K*09N Single Stage Cooling Capacities

549K*09N				AMBIENT TEMPERATURE (°F)															
				85			95			105			115			125		
				EAT (db)			EAT (db)			EAT (db)			EAT (db)			EAT (db)		
				75	80	85	75	80	85	75	80	85	75	80	85	75	80	85
1300 cfm	EAT (wb)	58	TC	45.2	45.2	51.5	42.4	42.4	48.5	39.5	39.5	45.4	36.4	36.4	42.0	33.2	33.2	38.5
			SHC	38.9	45.2	51.5	36.3	42.4	48.5	33.6	39.5	45.4	30.8	36.4	42.0	27.9	33.2	38.5
		62	TC	48.0	48.0	49.1	44.7	44.7	46.9	41.1	41.1	44.7	37.4	37.4	42.3	33.5	33.5	39.8
			SHC	35.1	42.1	49.1	32.9	39.9	46.9	30.7	37.7	44.7	28.4	35.3	42.3	25.9	32.9	39.8
		67	TC	54.0	54.0	54.0	50.5	50.5	50.5	46.7	46.7	46.7	42.7	42.7	42.7	38.5	38.5	38.5
			SHC	29.0	36.0	43.0	26.8	33.8	40.8	24.6	31.6	38.6	22.3	29.3	36.3	19.9	26.9	33.9
		72	TC	60.6	60.6	60.6	56.9	56.9	56.9	52.9	52.9	52.9	48.6	48.6	48.6	44.1	44.1	44.1
			SHC	22.7	29.8	36.8	20.6	27.6	34.7	18.3	25.4	32.5	16.1	23.1	30.2	13.7	20.8	27.8
		76	TC	—	66.3	66.3	—	62.4	62.4	—	58.2	58.2	—	53.7	53.7	—	—	—
			SHC	—	24.6	31.8	—	22.5	29.7	—	20.3	27.5	—	18.1	25.2	—	—	—
1500 cfm	EAT (wb)	58	TC	48.2	48.2	54.9	45.3	45.3	51.7	42.2	42.2	48.4	39.0	39.0	44.9	35.5	35.5	41.1
			SHC	41.6	48.2	54.9	38.9	45.3	51.7	36.1	42.2	48.4	33.1	39.0	44.9	30.0	35.5	41.1
		62	TC	49.9	49.9	54.3	46.4	46.4	52.0	42.8	42.8	49.6	39.3	39.3	46.4	35.6	35.6	43.0
			SHC	38.2	46.3	54.3	36.0	44.0	52.0	33.7	41.7	49.6	31.0	38.7	46.4	28.2	35.6	43.0
		67	TC	56.0	56.0	56.0	52.3	52.3	52.3	48.3	48.3	48.3	44.2	44.2	44.2	39.8	39.8	39.8
			SHC	31.1	39.2	47.2	28.9	37.0	45.0	26.6	34.7	42.8	24.3	32.4	40.4	21.9	29.9	38.0
		72	TC	62.7	62.7	62.7	58.8	58.8	58.8	54.6	54.6	54.6	50.2	50.2	50.2	45.5	45.5	45.5
			SHC	23.8	31.9	40.0	21.6	29.7	37.8	19.4	27.5	35.6	17.0	25.1	33.2	14.6	22.7	30.8
		76	TC	—	68.5	68.5	—	64.3	64.3	—	—	—	—	—	—	—	—	—
			SHC	—	26.0	34.2	—	23.8	32.1	—	—	—	—	—	—	—	—	—
1700 cfm	EAT (wb)	58	TC	50.8	50.8	57.8	47.8	47.8	54.5	44.6	44.6	51.0	41.2	41.2	47.3	37.5	37.5	43.3
			SHC	43.9	50.8	57.8	41.1	47.8	54.5	38.1	44.6	51.0	35.0	41.2	47.3	31.7	37.5	43.3
		62	TC	51.5	51.5	59.1	48.3	48.3	55.8	44.6	44.6	53.2	41.2	41.2	49.4	37.6	37.6	45.4
			SHC	41.2	50.2	59.1	38.5	47.2	55.8	36.1	44.6	53.2	33.0	41.2	49.4	29.9	37.6	45.4
		67	TC	57.5	57.5	57.5	53.7	53.7	53.7	49.6	49.6	49.6	45.3	45.3	45.3	40.8	40.8	41.9
			SHC	33.1	42.2	51.3	30.9	40.0	49.1	28.6	37.7	46.8	26.2	35.3	44.4	23.8	32.8	41.9
		72	TC	64.3	64.3	64.3	60.2	60.2	60.2	56.0	56.0	56.0	51.4	51.4	51.4	46.6	46.6	46.6
			SHC	24.8	33.9	43.1	22.6	31.7	40.9	20.3	29.4	38.5	17.9	27.1	36.2	15.5	24.6	33.7
		76	TC	—	70.2	70.2	—	—	—	—	—	—	—	—	—	—	—	—
			SHC	—	27.2	36.4	—	—	—	—	—	—	—	—	—	—	—	—
1950 cfm	EAT (wb)	58	TC	53.7	53.7	60.9	50.4	50.4	57.4	47.0	47.0	53.7	43.5	43.5	49.8	39.7	39.7	45.7
			SHC	46.4	53.7	60.9	43.4	50.4	57.4	40.3	47.0	53.7	37.1	43.5	49.8	33.6	39.7	45.7
		62	TC	53.7	53.7	63.4	50.5	50.5	59.8	47.1	47.1	56.1	43.5	43.5	52.1	39.7	39.7	47.8
			SHC	44.0	53.7	63.4	41.2	50.5	59.8	38.2	47.1	56.1	35.0	43.5	52.1	31.7	39.7	47.8
		67	TC	59.0	59.0	59.0	55.0	55.0	55.0	50.9	50.9	51.6	46.4	46.4	49.2	41.8	41.8	46.6
			SHC	35.5	45.9	56.2	33.2	43.6	54.0	30.9	41.3	51.6	28.5	38.8	49.2	26.0	36.3	46.6
		72	TC	65.9	65.9	65.9	61.7	61.7	61.7	57.3	57.3	57.3	52.6	52.6	52.6	47.6	47.6	47.6
			SHC	25.9	36.3	46.7	23.6	34.0	44.5	21.3	31.7	42.1	18.9	29.3	39.7	16.5	26.9	37.2
		76	TC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
			SHC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2150 cfm	EAT (wb)	58	TC	55.6	55.6	63.0	52.2	52.2	59.4	48.7	48.7	55.6	45.1	45.1	51.6	41.1	41.1	47.3
			SHC	48.1	55.6	63.0	45.0	52.2	59.4	41.9	48.7	55.6	38.5	45.1	51.6	34.9	41.1	47.3
		62	TC	55.6	55.6	65.6	52.3	52.3	61.9	48.8	48.8	58.0	45.1	45.1	53.9	41.2	41.2	49.5
			SHC	45.6	55.6	65.6	42.7	52.3	61.9	39.6	48.8	58.0	36.3	45.1	53.9	32.9	41.2	49.5
		67	TC	60.0	60.0	60.0	55.9	55.9	57.7	51.7	51.7	55.3	47.2	47.2	52.8	42.5	42.5	50.2
			SHC	37.3	48.7	60.0	35.0	46.4	57.7	32.7	44.0	55.3	30.2	41.5	52.8	27.7	38.9	50.2
		72	TC	66.9	66.9	66.9	62.6	62.6	62.6	58.1	58.1	58.1	53.3	53.3	53.3	—	—	—
			SHC	26.7	38.1	49.5	24.4	35.9	47.3	22.1	33.5	44.9	19.7	31.1	42.5	—	—	—
		76	TC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
			SHC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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 (1000 Btuh) Gross
TC — Total Capacity (1000 Btuh) Gross

NOTE: See minimum-maximum airflow ratings on page 6.

Performance data (cont)

549K*12N Two Stage Cooling Capacities

549K*12N				AMBIENT TEMPERATURE (°F)															
				85			95			105			115			125		
				EAT (db)			EAT (db)			EAT (db)			EAT (db)			EAT (db)		
				75	80	85	75	80	85	75	80	85	75	80	85	75	80	85
3000 cfm	EAT (wb)	58	TC	102.4	102.4	116.6	96.1	96.1	109.8	89.4	89.4	102.6	82.4	82.4	94.9	74.9	74.9	86.8
			SHC	88.2	102.4	116.6	82.4	96.1	109.8	76.3	89.4	102.6	69.9	82.4	94.9	63.1	74.9	86.8
		62	TC	109.5	109.5	109.8	101.8	101.8	104.9	93.7	93.7	99.8	85.3	85.3	94.4	76.3	76.3	88.6
			SHC	79.0	94.4	109.8	74.1	89.5	104.9	69.0	84.4	99.8	63.8	79.1	94.4	58.2	73.4	88.6
		67	TC	122.2	122.2	122.2	114.1	114.1	114.1	105.5	105.5	105.5	96.4	96.4	96.4	86.8	86.8	86.8
			SHC	64.5	80.0	95.5	59.6	75.1	90.6	54.6	70.1	85.5	49.4	64.9	80.3	44.1	59.5	74.9
		72	TC	136.1	136.1	136.1	127.5	127.5	127.5	118.3	118.3	118.3	108.7	108.7	108.7	98.4	98.4	98.4
			SHC	49.8	65.4	81.1	44.9	60.6	76.2	39.9	55.5	71.1	34.7	50.3	65.9	29.4	44.9	60.5
		76	TC	—	147.8	147.8	—	138.8	138.8	—	129.3	129.3	—	119.1	119.1	—	108.3	108.3
			SHC	—	53.6	70.1	—	48.8	65.2	—	43.8	60.0	—	38.6	54.7	—	33.2	49.3
3500 cfm	EAT (wb)	58	TC	109.3	109.3	124.3	102.6	102.6	117.0	95.6	95.6	109.4	88.1	88.1	101.3	80.2	80.2	92.6
			SHC	94.3	109.3	124.3	88.2	102.6	117.0	81.7	95.6	109.4	74.9	88.1	101.3	67.7	80.2	92.6
		62	TC	113.7	113.7	121.6	105.8	105.8	116.4	97.5	97.5	110.9	90.3	90.3	100.0	81.2	81.2	94.2
			SHC	86.2	103.9	121.6	81.2	98.8	116.4	75.9	93.4	110.9	68.0	84.0	100.0	62.4	78.3	94.2
		67	TC	126.5	126.5	126.5	118.0	118.0	118.0	109.0	109.0	109.0	99.6	99.6	99.6	89.6	89.6	89.6
			SHC	69.5	87.3	105.2	64.5	82.3	100.1	59.4	77.2	95.0	54.1	71.9	89.7	48.7	66.5	84.3
		72	TC	140.5	140.5	140.5	131.5	131.5	131.5	122.1	122.1	122.1	112.0	112.0	112.0	101.3	101.3	101.3
			SHC	52.3	70.3	88.3	47.4	65.3	83.3	42.3	60.2	78.2	37.0	54.9	72.8	31.6	49.4	67.3
		76	TC	—	152.5	152.5	—	143.1	143.1	—	133.1	133.1	—	122.6	122.6	—	111.3	111.3
			SHC	—	56.6	75.3	—	51.6	70.2	—	46.5	65.0	—	41.3	59.7	—	35.8	54.1
4000 cfm	EAT (wb)	58	TC	115.1	115.1	130.7	108.1	108.1	123.1	100.7	100.7	115.0	92.8	92.8	106.5	84.5	84.5	97.4
			SHC	99.5	115.1	130.7	93.0	108.1	123.1	86.3	100.7	115.0	79.1	92.8	106.5	71.6	84.5	97.4
		62	TC	117.2	117.2	132.3	110.9	110.9	120.3	102.6	102.6	113.9	94.0	94.0	107.6	84.6	84.6	101.9
			SHC	92.8	112.6	132.3	84.5	102.4	120.3	78.7	96.3	113.9	72.9	90.2	107.6	67.3	84.6	101.9
		67	TC	129.9	129.9	129.9	120.9	120.9	120.9	111.8	111.8	111.8	102.0	102.0	102.0	91.7	91.7	93.1
			SHC	74.1	94.2	114.4	69.0	89.1	109.3	63.8	84.0	104.1	58.5	78.6	98.7	53.0	73.0	93.1
		72	TC	144.0	144.0	144.0	134.7	134.7	134.7	125.0	125.0	125.0	114.6	114.6	114.6	103.6	103.6	103.6
			SHC	54.5	74.8	95.1	49.5	69.8	90.1	44.4	64.6	84.9	39.1	59.3	79.5	33.5	53.7	73.9
		76	TC	—	156.1	156.1	—	146.4	146.4	—	136.1	136.1	—	125.2	125.2	—	113.6	113.6
			SHC	—	59.2	80.1	—	54.2	75.0	—	49.1	69.8	—	43.7	64.4	—	38.2	58.7
4500 cfm	EAT (wb)	58	TC	120.0	120.0	136.2	112.7	112.7	128.2	105.0	105.0	119.8	96.8	96.8	110.9	88.2	88.2	101.5
			SHC	103.8	120.0	136.2	97.1	112.7	128.2	90.1	105.0	119.8	82.7	96.8	110.9	74.8	88.2	101.5
		62	TC	122.5	122.5	133.1	114.3	114.3	127.9	105.1	105.1	124.9	96.9	96.9	115.8	88.3	88.3	106.1
			SHC	94.5	113.8	133.1	89.3	108.6	127.9	85.2	105.1	124.9	78.0	96.9	115.8	70.5	88.3	106.1
		67	TC	132.6	132.6	132.6	123.6	123.6	123.6	113.9	113.9	113.9	104.0	104.0	107.3	93.4	93.4	101.5
			SHC	78.4	100.9	123.3	73.4	95.8	118.2	68.1	90.4	112.8	62.6	85.0	107.3	57.0	79.3	101.5
		72	TC	146.8	146.8	146.8	137.3	137.3	137.3	127.2	127.2	127.2	116.6	116.6	116.6	105.3	105.3	105.3
			SHC	56.6	79.2	101.7	51.5	74.1	96.6	46.3	68.8	91.3	41.0	63.4	85.9	35.4	57.8	80.2
		76	TC	—	159.0	159.0	—	149.0	149.0	—	138.5	138.5	—	127.4	127.4	—	115.5	115.5
			SHC	—	61.7	84.8	—	56.6	79.7	—	51.4	74.4	—	46.0	68.9	—	40.4	63.1
5000 cfm	EAT (wb)	58	TC	124.2	124.2	140.9	116.6	116.6	132.6	108.6	108.6	123.9	100.2	100.2	114.8	91.3	91.3	105.0
			SHC	107.6	124.2	140.9	100.6	116.6	132.6	93.4	108.6	123.9	85.7	100.2	114.8	77.6	91.3	105.0
		62	TC	124.5	124.5	146.8	116.7	116.7	138.1	108.8	108.8	129.2	100.4	100.4	119.7	91.4	91.4	109.7
			SHC	102.3	124.5	146.8	95.4	116.7	138.1	88.4	108.8	129.2	81.0	100.4	119.7	73.1	91.4	109.7
		67	TC	134.7	134.7	134.7	125.5	125.5	126.5	115.7	115.7	121.0	105.6	105.6	115.3	94.8	94.8	109.2
			SHC	82.5	107.1	131.8	77.4	102.0	126.5	72.0	96.5	121.0	66.5	90.9	115.3	60.7	85.0	109.2
		72	TC	149.0	149.0	149.0	139.3	139.3	139.3	129.1	129.1	129.1	118.2	118.2	118.2	106.7	106.7	106.7
			SHC	58.5	83.2	108.0	53.4	78.1	102.8	48.1	72.8	97.5	42.7	67.3	92.0	37.1	61.7	86.3
		76	TC	—	161.3	161.3	—	151.1	151.1	—	140.4	140.4	—	129.0	129.0	—	116.9	116.9
			SHC	—	64.0	89.2	—	58.9	84.0	—	53.6	78.7	—	48.2	73.1	—	42.5	67.4

LEGEND

— — Do Not Operate
cfm — Cubic Feet Per Minute (Supply Air)
EAT (db) — Entering Air Temperature (dry bulb)
EAT (wb) — Entering Air Temperature (wet bulb)
SHC — Sensible Heat Capacity (1000 Btuh) Gross
TC — Total Capacity (1000 Btuh) Gross

NOTE: See minimum-maximum airflow ratings on page 6.

Performance data (cont)

549K*12N Single Stage Cooling Capacities

549K*12N				AMBIENT TEMPERATURE (°F)															
				85			95			105			115			125		
				EAT (db)			EAT (db)			EAT (db)			EAT (db)			EAT (db)		
				75	80	85	75	80	85	75	80	85	75	80	85	75	80	85
1800 cfm	EAT (wb)	58	TC	59.2	59.2	67.9	54.5	54.5	62.9	49.7	49.7	57.7	44.6	44.6	52.3	39.3	39.3	46.5
			SHC	50.5	59.2	67.9	46.2	54.5	62.9	41.6	49.7	57.7	36.9	44.6	52.3	32.0	39.3	46.5
		62	TC	63.7	63.7	64.0	58.1	58.1	60.2	52.4	52.4	56.2	46.3	46.3	52.2	40.0	40.0	47.9
			SHC	45.0	54.5	64.0	41.1	50.6	60.2	37.2	46.7	56.2	33.2	42.7	52.2	29.1	38.5	47.9
		67	TC	72.2	72.2	72.2	66.4	66.4	66.4	60.3	60.3	60.3	53.9	53.9	53.9	47.2	47.2	47.2
			SHC	36.3	45.9	55.5	32.5	42.0	51.6	28.5	38.1	47.6	24.5	34.0	43.6	20.3	29.9	39.4
		72	TC	81.5	81.5	81.5	75.4	75.4	75.4	69.0	69.0	69.0	62.3	62.3	62.3	55.1	55.1	55.1
			SHC	27.6	37.3	46.9	23.7	33.4	43.0	19.8	29.4	39.1	15.7	25.3	35.0	11.5	21.1	30.7
		76	TC	—	89.4	89.4	—	83.1	83.1	—	76.4	76.4	—	69.3	69.3	—	61.9	61.9
			SHC	—	30.2	40.1	—	26.4	36.3	—	22.3	32.0	—	18.3	28.2	—	14.1	23.9
2100 cfm	EAT (wb)	58	TC	63.9	63.9	73.0	58.9	58.9	67.8	53.8	53.8	62.3	48.5	48.5	56.6	42.8	42.8	50.5
			SHC	54.7	63.9	73.0	50.1	58.9	67.8	45.3	53.8	62.3	40.4	48.5	56.6	35.2	42.8	50.5
		62	TC	66.5	66.5	71.8	60.8	60.8	67.8	54.8	54.8	63.7	48.6	48.6	59.4	42.9	42.9	53.1
			SHC	49.8	60.8	71.8	45.9	56.8	67.8	41.9	52.8	63.7	37.7	48.6	59.4	32.7	42.9	53.1
		67	TC	75.1	75.1	75.1	69.0	69.0	69.0	62.7	62.7	62.7	56.1	56.1	56.1	49.0	49.0	49.0
			SHC	39.7	50.7	61.8	35.7	46.8	57.9	31.7	42.8	53.8	27.6	38.7	49.7	23.4	34.4	45.5
		72	TC	84.5	84.5	84.5	78.2	78.2	78.2	71.5	71.5	71.5	64.5	64.5	64.5	57.1	57.1	57.1
			SHC	29.4	40.5	51.7	25.4	36.6	47.7	21.4	32.5	43.7	17.3	28.4	39.5	13.0	24.1	35.2
		76	TC	—	92.5	92.5	—	85.9	85.9	—	78.9	78.9	—	71.6	71.6	—	63.9	63.9
			SHC	—	32.3	43.8	—	28.3	39.8	—	24.3	35.6	—	20.1	31.4	—	15.8	27.1
2400 cfm	EAT (wb)	58	TC	67.8	67.8	77.4	62.6	62.6	71.9	57.3	57.3	66.2	51.7	51.7	60.1	45.8	45.8	53.7
			SHC	58.2	67.8	77.4	53.4	62.6	71.9	48.4	57.3	66.2	43.2	51.7	60.1	37.8	45.8	53.7
		62	TC	68.9	68.9	78.9	63.0	63.0	74.6	57.5	57.5	69.0	51.8	51.8	63.0	45.8	45.8	56.5
			SHC	54.2	66.6	78.9	50.1	62.4	74.6	45.4	57.2	69.0	40.5	51.8	63.0	35.2	45.8	56.5
		67	TC	77.4	77.4	77.4	71.1	71.1	71.1	64.6	64.6	64.6	57.7	57.7	57.7	50.4	50.4	51.3
			SHC	42.8	55.3	67.8	38.8	51.3	63.8	34.7	47.2	59.8	30.5	43.1	55.6	26.3	38.8	51.3
		72	TC	86.9	86.9	86.9	80.3	80.3	80.3	73.4	73.4	73.4	66.2	66.2	66.2	58.6	58.6	58.6
			SHC	30.9	43.6	56.2	26.9	39.6	52.2	22.9	35.5	48.1	18.7	31.3	43.9	14.3	26.9	39.5
		76	TC	—	95.0	95.0	—	88.1	88.1	—	80.9	80.9	—	73.4	73.4	—	65.4	65.4
			SHC	—	34.1	47.0	—	30.1	42.9	—	26.0	38.8	—	21.7	34.5	—	17.4	30.1
2700 cfm	EAT (wb)	58	TC	71.1	71.1	81.1	65.8	65.8	75.4	60.2	60.2	69.4	54.4	54.4	63.2	48.3	48.3	56.5
			SHC	61.2	71.1	81.1	56.2	65.8	75.4	51.1	60.2	69.4	45.7	54.4	63.2	40.0	48.3	56.5
		62	TC	71.2	71.2	84.6	65.9	65.9	78.7	60.3	60.3	72.6	54.5	54.5	66.2	48.4	48.4	59.4
			SHC	57.9	71.2	84.6	53.1	65.9	78.7	48.1	60.3	72.6	42.8	54.5	66.2	37.3	48.4	59.4
		67	TC	79.1	79.1	79.1	72.7	72.7	72.7	66.0	66.0	66.0	59.0	59.0	61.2	51.6	51.6	56.9
			SHC	45.7	59.7	73.7	41.6	55.6	69.6	37.5	51.5	65.5	33.3	47.3	61.2	29.1	43.0	56.9
		72	TC	88.8	88.8	88.8	82.0	82.0	82.0	75.0	75.0	75.0	67.5	67.5	67.5	59.7	59.7	59.7
			SHC	32.4	46.4	60.5	28.3	42.4	56.4	24.2	38.2	52.3	19.9	34.0	48.0	15.6	29.6	43.6
		76	TC	—	96.9	96.9	—	89.8	89.8	—	82.5	82.5	—	74.8	74.8	—	66.6	66.6
			SHC	—	35.7	50.0	—	31.7	45.9	—	27.5	41.7	—	23.3	37.4	—	18.9	33.0
3000 cfm	EAT (wb)	58	TC	74.0	74.0	84.3	68.5	68.5	78.4	62.8	62.8	72.3	56.8	56.8	65.8	50.4	50.4	58.9
			SHC	63.7	74.0	84.3	58.6	68.5	78.4	53.3	62.8	72.3	47.8	56.8	65.8	42.0	50.4	58.9
		62	TC	74.1	74.1	87.9	68.6	68.6	81.8	62.9	62.9	75.5	56.9	56.9	68.9	50.5	50.5	61.8
			SHC	60.4	74.1	87.9	55.4	68.6	81.8	50.2	62.9	75.5	44.9	56.9	68.9	39.2	50.5	61.8
		67	TC	80.6	80.6	80.6	74.0	74.0	75.2	67.2	67.2	71.0	60.1	60.1	66.6	52.6	52.6	62.1
			SHC	48.4	63.9	79.3	44.4	59.8	75.2	40.3	55.6	71.0	36.0	51.3	66.6	31.6	46.8	62.1
		72	TC	90.3	90.3	90.3	83.4	83.4	83.4	76.2	76.2	76.2	68.6	68.6	68.6	60.7	60.7	60.7
			SHC	33.7	49.2	64.6	29.6	45.1	60.5	25.4	40.9	56.3	21.2	36.6	52.0	16.8	32.2	47.6
		76	TC	—	98.4	98.4	—	91.2	91.2	—	83.8	83.8	—	75.9	75.9	—	67.6	67.6
			SHC	—	37.3	53.0	—	33.2	48.9	—	29.0	44.6	—	24.7	40.3	—	20.2	35.7

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 (1000 Btuh) Gross
TC — Total Capacity (1000 Btuh) Gross

NOTE: See minimum-maximum airflow ratings on page 6.

Performance data (cont)

549K*07N Heating Capacities

549K*07N (6 Tons)											
Return Air (°F db)	CFM (Standard Air)		Temperature Air Entering Outdoor Coil (°F db at 70% rh)								
			–10	0	10	17	30	40	47	50	60
55	1800	Capacity	25.1	31.0	39.7	44.8	54.9	65.7	72.7	75.0	85.0
		Int. Cap.	23.2	28.6	36.4	40.8	48.1	65.7	72.7	75.0	85.0
	2400	Capacity	25.3	31.3	40.1	45.8	55.8	66.9	74.4	76.8	87.7
		Int. Cap.	23.4	28.8	36.8	41.7	48.9	66.9	74.4	76.8	87.7
	3000	Capacity	25.5	31.5	40.2	46.0	56.4	67.6	75.4	77.9	89.3
		Int. Cap.	23.6	29.0	36.9	42.0	49.4	67.6	75.4	77.9	89.3
70	1800	Capacity	23.9	29.5	38.1	42.9	53.3	63.5	69.7	72.3	81.2
		Int. Cap.	22.1	27.1	34.9	39.1	46.7	63.5	69.7	72.3	81.2
	2400	Capacity	23.6	29.8	38.4	43.5	53.9	64.5	71.3	73.6	83.8
		Int. Cap.	21.8	27.4	35.3	39.6	47.3	64.5	71.3	73.6	83.8
	3000	Capacity	24.4	30.1	38.7	43.9	54.6	65.1	72.2	74.6	85.4
		Int. Cap.	22.6	27.7	35.5	40.0	47.9	65.1	72.2	74.6	85.4
80	1800	Capacity	23.0	28.3	37.0	41.6	51.1	62.4	67.8	70.7	78.8
		Int. Cap.	21.3	26.0	33.9	37.9	44.8	62.4	67.8	70.7	78.8
	2400	Capacity	23.3	28.7	37.3	42.0	51.8	63.3	69.2	72.1	81.2
		Int. Cap.	21.6	26.4	34.3	38.3	45.4	63.3	69.2	72.1	81.2
	3000	Capacity	23.6	28.9	37.6	42.4	52.9	63.6	70.2	72.7	82.7
		Int. Cap.	21.8	26.6	34.5	38.7	46.3	63.6	70.2	72.7	82.7

LEGEND

— Indicates standard rating point
Capacity — Instantaneous Capacity (1000 Btuh) - includes indoor fan motor heat at AHRI static conditions
Int. Cap. — Integrated Capacity = instantaneous capacity minus the effects of frost on the OD coil and the heat required to defrost it
rh — Relative Humidity
db — Dry Bulb

549K*08N Heating Capacities

549K*08N (7.5 Tons)											
Return Air (°F db)	CFM (Standard Air)		Temperature Air Entering Outdoor Coil (°F db at 70% rh)								
			–10	0	10	17	30	40	47	50	60
55	2250	Capacity	29.3	38.5	47.7	54.5	68.5	79.4	88.0	91.2	104.1
		Int. Cap.	27.1	35.4	43.8	49.7	60.0	79.4	88.0	91.2	104.1
	3000	Capacity	29.9	39.4	48.7	55.9	70.5	82.3	91.6	95.0	109.1
		Int. Cap.	27.6	36.3	44.7	51.0	61.8	82.3	91.6	95.0	109.1
	3750	Capacity	30.6	40.2	49.6	57.0	71.9	84.3	93.9	97.5	112.1
		Int. Cap.	28.3	37.0	45.6	51.9	63.0	84.3	93.9	97.5	112.1
70	2250	Capacity	26.7	35.7	44.8	51.3	64.5	74.9	83.3	86.1	98.3
		Int. Cap.	24.7	32.9	41.1	46.8	56.5	74.9	83.3	86.1	98.3
	3000	Capacity	27.3	36.4	45.7	52.4	66.4	77.6	86.7	89.7	103.2
		Int. Cap.	25.2	33.5	42.0	47.8	58.2	77.6	86.7	89.7	103.2
	3750	Capacity	27.9	37.1	46.5	53.3	67.7	79.4	88.7	92.1	106.2
		Int. Cap.	25.8	34.1	42.7	48.6	59.3	79.4	88.7	92.1	106.2
80	2250	Capacity	25.3	34.1	43.0	49.4	61.9	71.9	79.9	82.7	94.3
		Int. Cap.	23.4	31.4	39.5	45.0	54.2	71.9	79.9	82.7	94.3
	3000	Capacity	25.9	34.8	43.9	50.6	63.8	74.6	83.4	86.3	99.1
		Int. Cap.	23.9	32.0	40.3	46.1	55.9	74.6	83.4	86.3	99.1
	3750	Capacity	26.5	35.4	44.6	51.2	65.1	76.3	85.5	88.6	102.2
		Int. Cap.	24.5	32.6	41.0	46.7	57.0	76.3	85.5	88.6	102.2

LEGEND

— Indicates standard rating point
Capacity — Instantaneous Capacity (1000 Btuh) - includes indoor fan motor heat at AHRI static conditions
Int. Cap. — Integrated Capacity = instantaneous capacity minus the effects of frost on the OD coil and the heat required to defrost it
rh — Relative Humidity
db — Dry Bulb

Performance data (cont)

549K*09N Heating Capacities

549K*09N (8.5 Tons)

Return Air (°F db)	CFM (Standard Air)		Temperature Air Entering Outdoor Coil (°F db at 70% rh)								
			–10	0	10	17	30	40	47	50	60
55	2550	Capacity	33.4	41.7	51.8	59.0	72.3	84.4	93.1	96.6	109.4
		Int. Cap.	30.9	38.4	47.5	53.8	63.4	84.4	93.1	96.6	109.4
	3400	Capacity	34.6	43.2	53.5	60.9	74.9	87.4	96.9	100.4	114.5
		Int. Cap.	32.0	39.7	49.1	55.6	65.6	87.4	96.9	100.4	114.5
	4250	Capacity	35.8	44.5	55.1	62.8	77.0	90.0	99.7	103.3	118.0
		Int. Cap.	33.1	41.0	50.5	57.3	67.5	90.0	99.7	103.3	118.0
70	2550	Capacity	31.6	39.5	49.5	56.0	69.4	80.7	88.8	92.9	104.2
		Int. Cap.	29.2	36.4	45.4	51.0	60.8	80.7	88.8	92.9	104.2
	3400	Capacity	32.9	41.1	51.3	58.0	71.7	83.8	92.4	96.0	108.9
		Int. Cap.	30.5	37.8	47.1	52.9	62.8	83.8	92.4	96.0	108.9
	4250	Capacity	34.2	42.6	52.9	59.8	74.8	86.4	95.3	99.0	112.4
		Int. Cap.	31.6	39.2	48.5	54.5	65.6	86.4	95.3	99.0	112.4
80	2550	Capacity	30.4	38.1	48.0	54.3	67.2	78.5	86.1	89.8	100.9
		Int. Cap.	28.1	35.1	44.0	49.5	58.9	78.5	86.1	89.8	100.9
	3400	Capacity	31.7	39.7	49.7	56.3	69.7	81.7	89.6	93.7	105.3
		Int. Cap.	29.3	36.5	45.6	51.3	61.0	81.7	89.6	93.7	105.3
	4250	Capacity	33.0	41.1	51.4	58.1	71.9	83.9	92.5	96.1	108.9
		Int. Cap.	30.5	37.8	47.1	52.9	63.0	83.9	92.5	96.1	108.9

LEGEND

	—	Indicates standard rating point
Capacity	—	Instantaneous Capacity (1000 Btuh) - includes indoor fan motor heat at AHRI static conditions
Int. Cap.	—	Integrated Capacity = instantaneous capacity minus the effects of frost on the OD coil and the heat required to defrost it
rh	—	Relative Humidity
db	—	Dry Bulb

549K*12N Heating Capacities

549K*12N (10 Tons)

Return Air (°F db)	CFM (Standard Air)		Temperature Air Entering Outdoor Coil (°F db at 70% rh)								
			0	5	10	17	30	40	47	50	60
55	3000	Capacity	—	39.6	49.6	59.4	76.0	95.0	106.7	110.8	127.3
		Int. Cap.	—	36.4	45.6	54.2	66.6	95.0	106.7	110.8	127.3
	4000	Capacity	—	42.2	51.6	62.7	79.6	98.9	111.8	116.1	134.2
		Int. Cap.	—	38.8	47.3	57.2	69.7	98.9	111.8	116.1	134.2
	5000	Capacity	—	43.2	53.2	63.3	82.3	101.9	115.5	119.8	139.0
		Int. Cap.	—	39.7	48.8	57.7	72.1	101.9	115.5	119.8	139.0
70	3000	Capacity	—	33.3	44.3	53.1	69.5	88.9	100.1	104.0	119.7
		Int. Cap.	—	30.6	40.6	48.4	60.9	88.9	100.1	104.0	119.7
	4000	Capacity	—	36.0	46.1	55.7	73.0	92.7	104.9	109.0	126.2
		Int. Cap.	—	33.1	42.3	50.8	64.0	92.7	104.9	109.0	126.2
	5000	Capacity	—	37.0	48.4	57.2	75.7	95.6	108.5	112.7	130.9
		Int. Cap.	—	34.0	44.4	52.2	66.3	95.6	108.5	112.7	130.9
80	3000	Capacity	—	28.7	40.5	49.3	65.0	84.6	95.6	99.5	114.5
		Int. Cap.	—	26.4	37.1	44.9	57.0	84.6	95.6	99.5	114.5
	4000	Capacity	—	31.3	42.3	51.8	68.5	88.6	100.3	104.3	120.8
		Int. Cap.	—	28.8	38.9	47.2	60.0	88.6	100.3	104.3	120.8
	5000	Capacity	—	32.7	48.0	53.3	71.2	91.5	103.9	108.0	125.4
		Int. Cap.	—	30.1	44.0	48.6	62.4	91.5	103.9	108.0	125.4

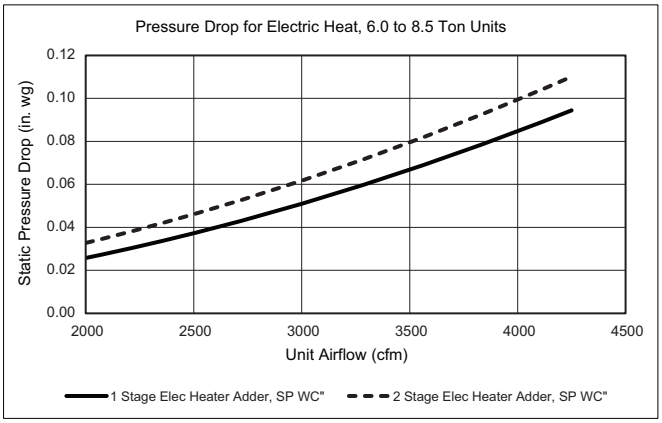
LEGEND

—	**—**	Indicates operation not permissible
Capacity	—	Instantaneous Capacity (1000 Btuh) - includes indoor fan motor heat at AHRI static conditions
Int. Cap.	—	Integrated Capacity = instantaneous capacity minus the effects of frost on the OD coil and the heat required to defrost it
rh	—	Relative Humidity
db	—	Dry Bulb

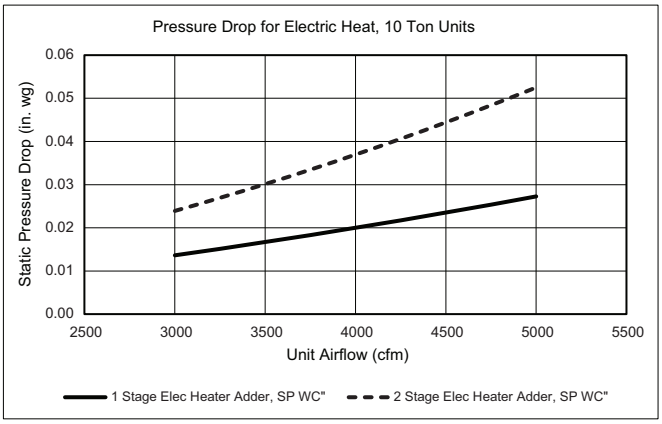
Performance data (cont)

Pressure Drop for Electric Heating Units

6 to 8.5 Ton Units



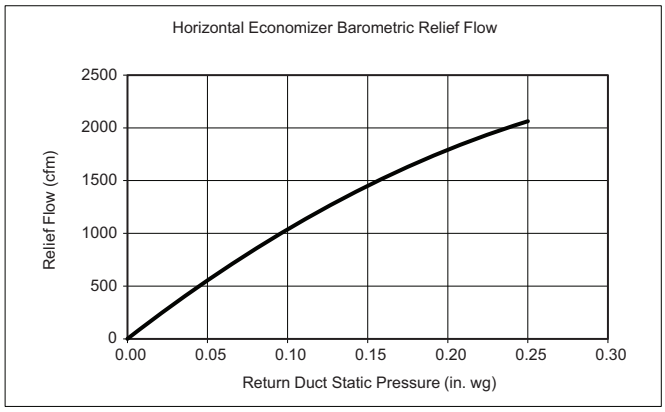
10 Ton Units



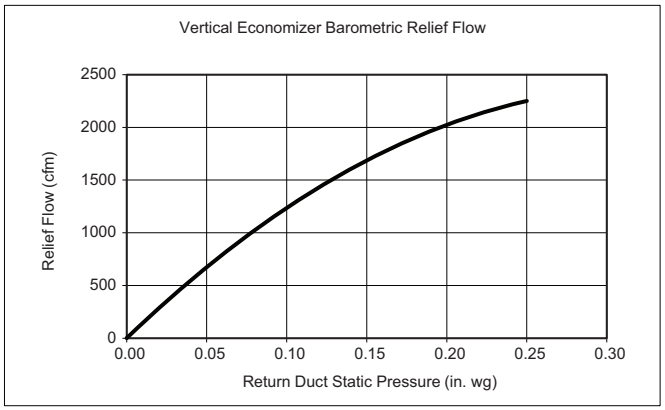
Performance data (cont)

Economizer Barometric Relief and Damper Leakage — 6.0 to 8.5 Ton Units

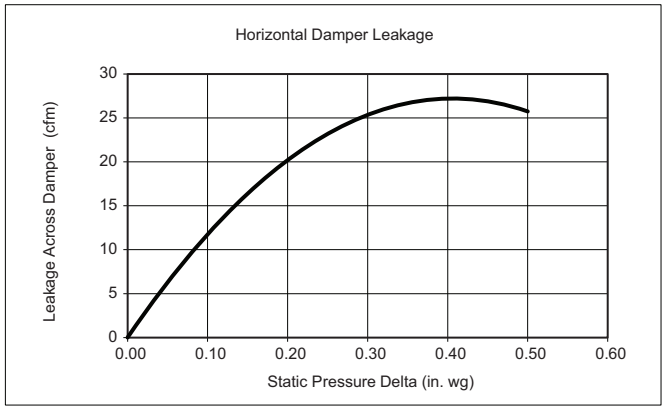
Horizontal Economizer Barometric Relief



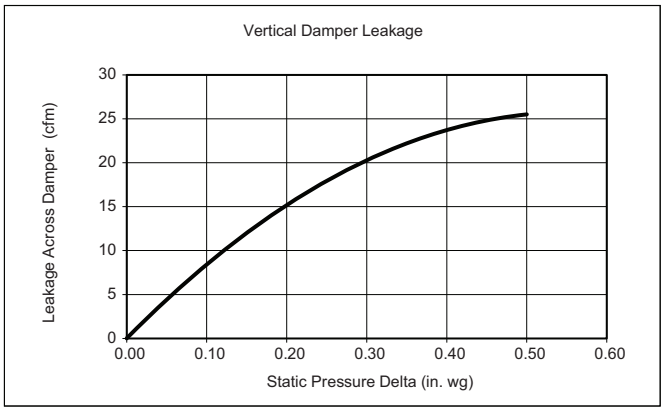
Vertical Economizer Barometric Relief



Horizontal Economizer Damper Leakage



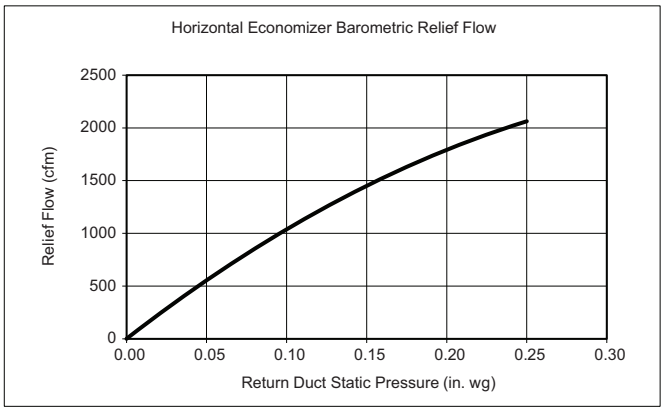
Vertical Economizer Damper Leakage



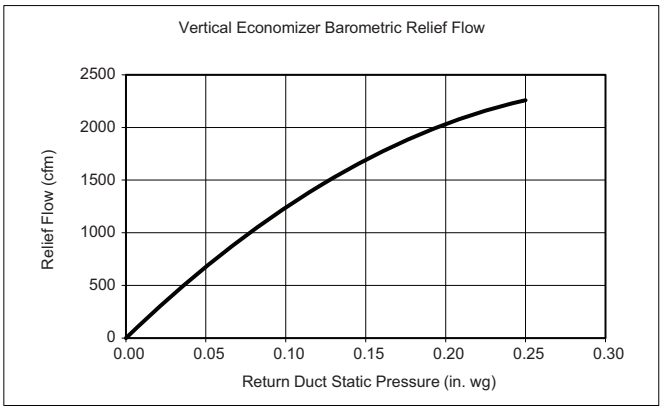
Performance data (cont)

Economizer Barometric Relief and Damper Leakage — 10 Ton Units

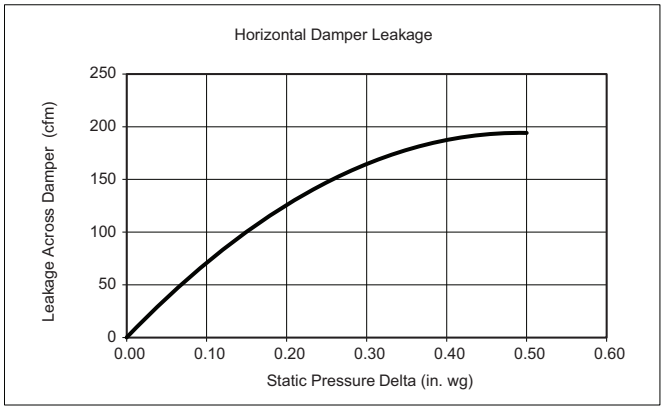
Horizontal Economizer Barometric Relief



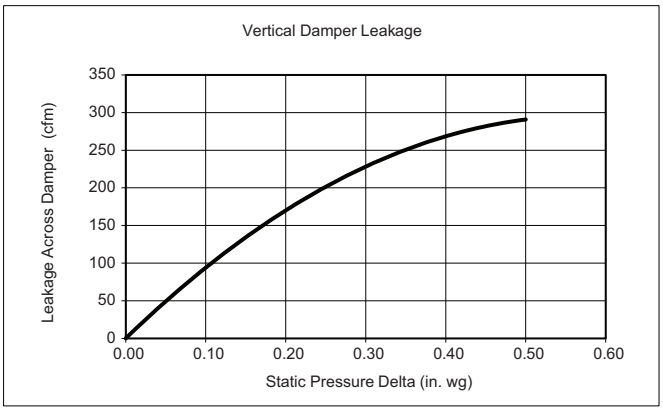
Vertical Economizer Barometric Relief



Horizontal Economizer Damper Leakage

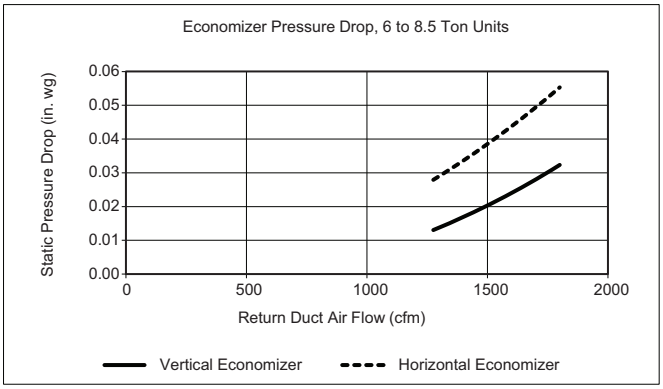


Vertical Economizer Damper Leakage

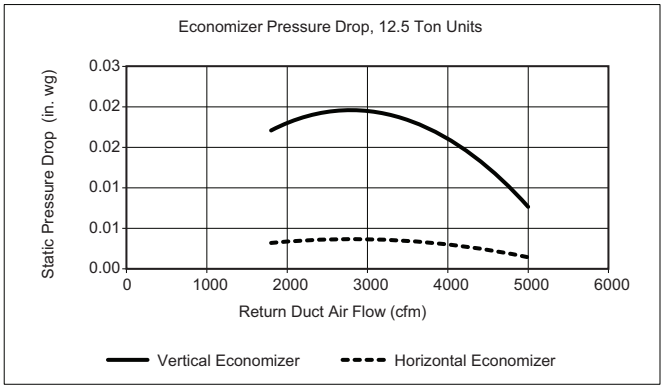


Economizer Pressure Drop

6 to 8.5 Ton Units



10 Ton Units



Fan data

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

Fan data (cont)

549K*07N — 6 Ton Vertical Supply (rpm - bhp)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1800	796	0.19	940	0.32	1064	0.46	1174	0.61	1274	0.79
1950	840	0.22	977	0.35	1097	0.50	1205	0.66	1303	0.84
2100	886	0.26	1016	0.39	1132	0.54	1237	0.71	1334	0.89
2250	932	0.30	1056	0.44	1168	0.59	1271	0.77	1365	0.95
2400	980	0.35	1098	0.49	1206	0.65	1306	0.83	1398	1.01
2550	1029	0.40	1141	0.55	1245	0.71	1342	0.89	1432	1.08
2700	1078	0.46	1185	0.61	1285	0.78	1379	0.96	1467	1.16
2850	1128	0.52	1230	0.68	1327	0.85	1418	1.04	1504	1.24
3000	1178	0.59	1276	0.75	1369	0.93	1458	1.12	1541	1.32

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1800	1365	0.97	1451	1.16	1530	1.36	1606	1.57	1678	1.80
1950	1393	1.02	1478	1.22	1557	1.43	1631	1.64	1702	1.86
2100	1423	1.08	1506	1.28	1584	1.49	1658	1.71	1728	1.94
2250	1453	1.15	1535	1.35	1612	1.56	1685	1.79	1755	2.02
2400	1484	1.21	1565	1.42	1641	1.64	1714	1.87	1783	2.10
2550	1517	1.29	1596	1.50	1671	1.72	1743	1.95	1811	2.19
2700	1550	1.36	1628	1.58	1703	1.81	1773	2.04	1841	2.29
2850	1585	1.45	1661	1.67	1735	1.90	1804	2.14	1871	2.38
3000	1620	1.53	1696	1.76	1768	1.99	1836	2.23	1902	2.48

Std/Med Static 796-2000 rpm, 2.4 Max bhp

High Static 796-2200 rpm, 3.0 Max bhp

549K*07N – Standard/Medium Static — 6 Ton Vertical Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1800	796	3.8	940	4.5	1064	5.2	1174	5.8	1274	6.3
1950	840	4.0	977	4.7	1097	5.4	1205	5.9	1303	6.4
2100	886	4.3	1016	4.9	1132	5.5	1237	6.1	1334	6.6
2250	932	4.5	1056	5.1	1168	5.7	1271	6.3	1365	6.7
2400	980	4.8	1098	5.4	1206	5.9	1306	6.4	1398	6.9
2550	1029	5.0	1141	5.6	1245	6.1	1342	6.6	1432	7.1
2700	1078	5.3	1185	5.8	1285	6.3	1379	6.8	1467	7.3
2850	1128	5.5	1230	6.0	1327	6.5	1418	7.0	1504	7.4
3000	1178	5.8	1276	6.3	1369	6.8	1458	7.2	1541	7.6

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1800	1365	6.7	1451	7.2	1530	7.6	1606	8.0	1678	8.3
1950	1393	6.9	1478	7.3	1557	7.7	1631	8.1	1702	8.5
2100	1423	7.0	1506	7.5	1584	7.9	1658	8.2	1728	8.6
2250	1453	7.2	1535	7.6	1612	8.0	1685	8.4	1755	8.7
2400	1484	7.3	1565	7.8	1641	8.2	1714	8.5	1783	8.9
2550	1517	7.5	1596	7.9	1671	8.3	1743	8.7	1811	9.0
2700	1550	7.7	1628	8.1	1703	8.5	1773	8.8	1841	9.2
2850	1585	7.9	1661	8.3	1735	8.6	1804	9.0	1871	9.3
3000	1620	8.0	1696	8.4	1768	8.8	1836	9.2	1902	9.5

Std/Med Static 796-2000 rpm

Fan data (cont)

549K*07N – High Static — 6 Ton Vertical Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1800	796	3.5	940	4.2	1064	4.8	1174	5.3	1274	5.7
1950	840	3.7	977	4.4	1097	4.9	1205	5.4	1303	5.9
2100	886	3.9	1016	4.5	1132	5.1	1237	5.6	1334	6.0
2250	932	4.1	1056	4.7	1168	5.2	1271	5.7	1365	6.1
2400	980	4.4	1098	4.9	1206	5.4	1306	5.9	1398	6.3
2550	1029	4.6	1141	5.1	1245	5.6	1342	6.0	1432	6.5
2700	1078	4.8	1185	5.3	1285	5.8	1379	6.2	1467	6.6
2850	1128	5.1	1230	5.5	1327	6.0	1418	6.4	1504	6.8
3000	1178	5.3	1276	5.7	1369	6.2	1458	6.6	1541	7.0

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1800	1365	6.1	1451	6.5	1530	6.9	1606	7.3	1678	7.6
1950	1393	6.3	1478	6.7	1557	7.0	1631	7.4	1702	7.7
2100	1423	6.4	1506	6.8	1584	7.2	1658	7.5	1728	7.8
2250	1453	6.6	1535	6.9	1612	7.3	1685	7.6	1755	7.9
2400	1484	6.7	1565	7.1	1641	7.4	1714	7.8	1783	8.1
2550	1517	6.8	1596	7.2	1671	7.6	1743	7.9	1811	8.2
2700	1550	7.0	1628	7.4	1703	7.7	1773	8.0	1841	8.3
2850	1585	7.2	1661	7.5	1735	7.9	1804	8.2	1871	8.5
3000	1620	7.3	1696	7.7	1768	8.0	1836	8.3	1902	8.6

High Static 796-2200 rpm

Fan data (cont)

549K*08N — 7.5 Ton Vertical Supply (rpm - bhp)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
2250	941	0.31	1064	0.45	1176	0.61	1279	0.79	1373	0.98
2440	1000	0.37	1116	0.52	1223	0.69	1322	0.87	1414	1.06
2625	1059	0.44	1169	0.59	1271	0.76	1366	0.95	1456	1.15
2815	1120	0.52	1224	0.68	1322	0.85	1413	1.04	1500	1.25
3000	1181	0.60	1279	0.77	1372	0.95	1461	1.14	1544	1.35
3190	1244	0.70	1337	0.87	1426	1.06	1511	1.26	1592	1.47
3375	1306	0.80	1395	0.98	1480	1.17	1561	1.37	1640	1.59
3565	1370	0.92	1455	1.10	1536	1.29	1614	1.50	1690	1.72
3750	1433	1.04	1514	1.23	1592	1.43	1667	1.64	1740	1.86

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
2250	1460	1.17	1542	1.38	1619	1.60	1692	1.83	1761	2.06
2440	1499	1.26	1580	1.48	1655	1.70	1727	1.93	1796	2.17
2625	1539	1.36	1618	1.58	1692	1.80	1763	2.04	1831	2.28
2815	1581	1.46	1658	1.68	1732	1.92	1802	2.16	1869	2.41
3000	1624	1.57	1699	1.80	1771	2.04	1840	2.29	1906	2.54
3190	1669	1.69	1743	1.93	1813	2.17	1881	2.42	1946	2.68
3375	1714	1.82	1787	2.06	1856	2.31	1922	2.56	1986	2.83
3565	1763	1.96	1833	2.20	1900	2.45	1965	2.71	2028	2.98
3750	1811	2.10	1879	2.34	1945	2.60	2008	2.86	2070	3.13

Std/Med Static 941-2000 rpm, 2.4 Max bhp

High Static 941-2200 rpm, 3.0 Max bhp

549K*08N – Standard/Medium Static — 7.5 Ton Vertical Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
2250	941	4.6	1064	5.2	1176	5.8	1279	6.3	1373	6.8
2440	1000	4.9	1116	5.5	1223	6.0	1322	6.5	1414	7.0
2625	1059	5.2	1169	5.7	1271	6.3	1366	6.7	1456	7.2
2815	1120	5.5	1224	6.0	1322	6.5	1413	7.0	1500	7.4
3000	1181	5.8	1279	6.3	1372	6.8	1461	7.2	1544	7.7
3190	1244	6.1	1337	6.6	1426	7.0	1511	7.5	1592	7.9
3375	1306	6.4	1395	6.9	1480	7.3	1561	7.7	1640	8.1
3565	1370	6.8	1455	7.2	1536	7.6	1614	8.0	1690	8.4
3750	1433	7.1	1514	7.5	1592	7.9	1667	8.3	1740	8.7

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
2250	1460	7.2	1542	7.6	1619	8.0	1692	8.4	1761	8.8
2440	1499	7.4	1580	7.8	1655	8.2	1727	8.6	1796	9.0
2625	1539	7.6	1618	8.0	1692	8.4	1763	8.8	1831	9.1
2815	1581	7.8	1658	8.2	1732	8.6	1802	9.0	1869	9.3
3000	1624	8.1	1699	8.5	1771	8.8	1840	9.2	1906	9.5
3190	1669	8.3	1743	8.7	1813	9.0	1881	9.4	—	—
3375	1714	8.5	1787	8.9	1856	9.3	—	—	—	—
3565	1763	8.8	1833	9.1	1900	9.5	—	—	—	—
3750	1811	9.0	1879	9.4	—	—	—	—	—	—

Std/Med Static 941-2000 rpm

Fan data (cont)

549K*08N – High Static — 7.5 Ton Vertical Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
2250	941	4.2	1064	4.8	1176	5.3	1279	5.7	1373	6.2
2440	1000	4.5	1116	5.0	1223	5.5	1322	5.9	1414	6.4
2625	1059	4.7	1169	5.2	1271	5.7	1366	6.2	1456	6.6
2815	1120	5.0	1224	5.5	1322	5.9	1413	6.4	1500	6.8
3000	1181	5.3	1279	5.7	1372	6.2	1461	6.6	1544	7.0
3190	1244	5.6	1337	6.0	1426	6.4	1511	6.8	1592	7.2
3375	1306	5.9	1395	6.3	1480	6.7	1561	7.1	1640	7.4
3565	1370	6.2	1455	6.6	1536	6.9	1614	7.3	1690	7.6
3750	1433	6.5	1514	6.8	1592	7.2	1667	7.5	1740	7.9

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
2250	1460	6.6	1542	7.0	1619	7.3	1692	7.7	1761	8.0
2440	1499	6.8	1580	7.1	1655	7.5	1727	7.8	1796	8.1
2625	1539	6.9	1618	7.3	1692	7.7	1763	8.0	1831	8.3
2815	1581	7.1	1658	7.5	1732	7.8	1802	8.2	1869	8.5
3000	1624	7.3	1699	7.7	1771	8.0	1840	8.3	1906	8.6
3190	1669	7.5	1743	7.9	1813	8.2	1881	8.5	1946	8.8
3375	1714	7.8	1787	8.1	1856	8.4	1922	8.7	1986	9.0
3565	1763	8.0	1833	8.3	1900	8.6	1965	8.9	2028	9.2
3750	1811	8.2	1879	8.5	1945	8.8	2008	9.1	2070	9.4

High Static 941-2200 rpm

Fan data (cont)

549K*09N — 8.5 Ton Vertical Supply (rpm - bhp)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
2550	1035	0.41	1147	0.56	1251	0.73	1348	0.91	1438	1.11
2765	1104	0.50	1209	0.65	1308	0.83	1401	1.02	1488	1.22
2975	1173	0.59	1272	0.76	1365	0.93	1454	1.13	1538	1.34
3190	1244	0.70	1337	0.87	1426	1.06	1511	1.26	1592	1.47
3400	1314	0.82	1402	0.99	1487	1.19	1568	1.39	1646	1.61
3615	1387	0.95	1470	1.13	1551	1.33	1629	1.54	1703	1.76
3825	1458	1.09	1538	1.28	1615	1.48	1689	1.69	1761	1.92
4040	1532	1.24	1608	1.44	1681	1.64	1752	1.86	1822	2.09
4250	1605	1.41	1677	1.60	1747	1.81	1815	2.03	1882	2.27

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
2550	1522	1.32	1602	1.53	1677	1.76	1749	2.00	1817	2.24
2765	1570	1.43	1647	1.65	1721	1.89	1792	2.13	1859	2.38
2975	1618	1.56	1693	1.78	1766	2.02	1835	2.27	1901	2.52
3190	1669	1.69	1743	1.93	1813	2.17	1881	2.42	1946	2.68
3400	1721	1.84	1792	2.07	1861	2.32	1927	2.58	1991	2.84
3615	1776	2.00	1845	2.24	1912	2.49	1976	2.75	2039	3.02
3825	1831	2.16	1898	2.40	1963	2.66	2026	2.92	2087	3.20
4040	1889	2.33	1954	2.58	2017	2.84	2078	3.11	—	—
4250	1947	2.51	2010	2.76	2071	3.02	—	—	—	—

Std/Med Static 1035-2000 rpm, 2.4 Max bhp

High Static 1035-2200 rpm, 3.0 Max bhp

549K*09N – Standard/Medium Static — 8.5 Ton Vertical Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
2550	1035	5.0	1147	5.6	1251	6.1	1348	6.6	1438	7.1
2765	1104	5.4	1209	5.9	1308	6.4	1401	6.9	1488	7.4
2975	1173	5.7	1272	6.3	1365	6.7	1454	7.2	1538	7.6
3190	1244	6.1	1337	6.6	1426	7.0	1511	7.5	1592	7.9
3400	1314	6.5	1402	6.9	1487	7.4	1568	7.8	1646	8.2
3615	1387	6.8	1470	7.3	1551	7.7	1629	8.1	1703	8.5
3825	1458	7.2	1538	7.6	1615	8.0	1689	8.4	1761	8.8
4040	1532	7.6	1608	8.0	1681	8.4	1752	8.7	1822	9.1
4250	1605	8.0	1677	8.3	1747	8.7	1815	9.0	1882	9.4

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
2550	1522	7.5	1602	8.0	1677	8.3	1749	8.7	1817	9.1
2765	1570	7.8	1647	8.2	1721	8.6	1792	8.9	1859	9.3
2975	1618	8.0	1693	8.4	1766	8.8	1835	9.2	1901	9.5
3190	1669	8.3	1743	8.7	1813	9.0	1881	9.4	—	—
3400	1721	8.6	1792	8.9	1861	9.3	—	—	—	—
3615	1776	8.8	1845	9.2	1912	9.5	—	—	—	—
3825	1831	9.1	1898	9.5	—	—	—	—	—	—
4040	1889	9.4	—	—	—	—	—	—	—	—
4250	1947	9.7	—	—	—	—	—	—	—	—

Std/Med Static 1035-2000 rpm

Fan data (cont)

549K*09N – High Static — 8.5 Ton Vertical Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
2550	1035	4.6	1147	5.1	1251	5.6	1348	6.1	1438	6.5
2765	1104	4.9	1209	5.4	1308	5.9	1401	6.3	1488	6.7
2975	1173	5.3	1272	5.7	1365	6.1	1454	6.6	1538	6.9
3190	1244	5.6	1337	6.0	1426	6.4	1511	6.8	1592	7.2
3400	1314	5.9	1402	6.3	1487	6.7	1568	7.1	1646	7.4
3615	1387	6.2	1470	6.6	1551	7.0	1629	7.4	1703	7.7
3825	1458	6.6	1538	6.9	1615	7.3	1689	7.6	1761	8.0
4040	1532	6.9	1608	7.3	1681	7.6	1752	7.9	1822	8.3
4250	1605	7.3	1677	7.6	1747	7.9	1815	8.2	1882	8.5

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
2550	1522	6.9	1602	7.2	1677	7.6	1749	7.9	1817	8.2
2765	1570	7.1	1647	7.4	1721	7.8	1792	8.1	1859	8.4
2975	1618	7.3	1693	7.7	1766	8.0	1835	8.3	1901	8.6
3190	1669	7.5	1743	7.9	1813	8.2	1881	8.5	1946	8.8
3400	1721	7.8	1792	8.1	1861	8.4	1927	8.7	1991	9.0
3615	1776	8.0	1845	8.4	1912	8.7	1976	9.0	2039	9.3
3825	1831	8.3	1898	8.6	1963	8.9	2026	9.2	2087	9.5
4040	1889	8.6	1954	8.9	2017	9.2	2078	9.4	—	—
4250	1947	8.8	2010	9.1	2071	9.4	—	—	—	—

High Static 1035-2200 rpm

Fan data (cont)

549K*12N — 10 Ton Vertical Supply (rpm - bhp)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
3000	1099	0.55	1202	0.72	1302	0.91	1397	1.13	1486	1.36
3250	1173	0.66	1270	0.84	1363	1.04	1453	1.26	1539	1.49
3500	1249	0.79	1339	0.97	1427	1.17	1512	1.40	1594	1.64
3750	1325	0.93	1410	1.11	1493	1.32	1573	1.55	1652	1.79
4000	1403	1.08	1482	1.27	1560	1.48	1637	1.71	1711	1.96
4250	1480	1.24	1556	1.44	1630	1.65	1702	1.88	1773	2.13
4500	1559	1.41	1630	1.61	1700	1.83	1769	2.06	1837	2.30
4750	1638	1.58	1705	1.79	1772	2.01	1838	2.24	1903	2.48
5000	1717	1.76	1781	1.97	1845	2.19	1908	2.42	1970	2.66

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
3000	1570	1.60	1649	1.86	1723	2.12	1794	2.39	1860	2.67
3250	1620	1.74	1698	2.00	1771	2.27	1841	2.55	1907	2.84
3500	1673	1.89	1748	2.16	1820	2.44	1889	2.72	1954	3.01
3750	1727	2.05	1800	2.32	1871	2.61	1938	2.90	2003	3.20
4000	1784	2.22	1855	2.49	1923	2.78	1989	3.07	2052	3.37
4250	1843	2.39	1911	2.66	1977	2.95	2041	3.24	2103	3.55
4500	1904	2.56	1969	2.84	2033	3.12	2095	3.42	2156	3.72
4750	1966	2.74	2029	3.01	2091	3.29	2151	3.59	—	—
5000	2031	2.92	2091	3.19	2150	3.46	—	—	—	—

Std/Med Static 1099-2000 rpm,2.4 Max bhp

High Static 1099-2200 rpm, 5.0 Max bhp

549K*12N – Standard/Medium Static — 10 Ton Vertical Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
3000	1099	5.4	1202	5.9	1302	6.4	1397	6.9	1486	7.4
3250	1173	5.7	1270	6.2	1363	6.7	1453	7.2	1539	7.6
3500	1249	6.1	1339	6.6	1427	7.1	1512	7.5	1594	7.9
3750	1325	6.5	1410	7.0	1493	7.4	1573	7.8	1652	8.2
4000	1403	6.9	1482	7.3	1560	7.7	1637	8.1	1711	8.5
4250	1480	7.3	1556	7.7	1630	8.1	1702	8.5	1773	8.8
4500	1559	7.7	1630	8.1	1700	8.5	1769	8.8	1837	9.2
4750	1638	8.1	1705	8.5	1772	8.8	1838	9.2	1903	9.5
5000	1717	8.5	1781	8.9	1845	9.2	1908	9.5	—	—

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
3000	1570	7.8	1649	8.2	1723	8.6	1794	8.9	—	—
3250	1620	8.0	1698	8.4	1771	8.8	—	—	—	—
3500	1673	8.3	1748	8.7	1820	9.1	—	—	—	—
3750	1727	8.6	1800	9.0	—	—	—	—	—	—
4000	1784	8.9	1855	9.3	—	—	—	—	—	—
4250	1843	9.2	—	—	—	—	—	—	—	—
4500	—	—	—	—	—	—	—	—	—	—
4750	—	—	—	—	—	—	—	—	—	—
5000	—	—	—	—	—	—	—	—	—	—

Std/Med Static 1099-2000 rpm

Fan data (cont)

549K*12N – High Static — 10 Ton Vertical Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
3000	1099	4.9	1202	5.4	1302	5.9	1397	6.3	1486	6.7
3250	1173	5.3	1270	5.7	1363	6.1	1453	6.6	1539	6.9
3500	1249	5.6	1339	6.0	1427	6.4	1512	6.8	1594	7.2
3750	1325	6.0	1410	6.4	1493	6.7	1573	7.1	1652	7.5
4000	1403	6.3	1482	6.7	1560	7.0	1637	7.4	1711	7.7
4250	1480	6.7	1556	7.0	1630	7.4	1702	7.7	1773	8.0
4500	1559	7.0	1630	7.4	1700	7.7	1769	8.0	1837	8.3
4750	1638	7.4	1705	7.7	1772	8.0	1838	8.3	1903	8.6
5000	1717	7.8	1781	8.1	1845	8.4	1908	8.7	1970	8.9

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
3000	1570	7.1	1649	7.5	1723	7.8	1794	8.1	1860	8.4
3250	1620	7.3	1698	7.7	1771	8.0	1841	8.3	1907	8.6
3500	1673	7.6	1748	7.9	1820	8.2	1889	8.6	1954	8.9
3750	1727	7.8	1800	8.2	1871	8.5	1938	8.8	2003	9.1
4000	1784	8.1	1855	8.4	1923	8.7	1989	9.0	2052	9.3
4250	1843	8.4	1911	8.7	1977	9.0	2041	9.3	2103	9.6
4500	1904	8.6	1969	8.9	2033	9.2	2095	9.5	2156	9.8
4750	1966	8.9	2029	9.2	2091	9.5	2151	9.8	—	—
5000	2031	9.2	2091	9.5	2150	9.8	—	—	—	—

High Static 1099-2200 rpm,

Fan data (cont)

549K*07N — 6 Ton Horizontal Supply (rpm - bhp)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1800	742	0.16	897	0.27	1033	0.42	1150	0.58	1255	0.75
1950	780	0.18	927	0.30	1059	0.45	1175	0.61	1279	0.79
2100	820	0.21	959	0.33	1086	0.48	1200	0.65	1303	0.83
2250	861	0.24	993	0.37	1115	0.52	1227	0.69	1329	0.88
2400	904	0.27	1028	0.40	1146	0.56	1255	0.73	1355	0.92
2550	947	0.31	1065	0.45	1178	0.60	1284	0.78	1382	0.97
2700	991	0.36	1103	0.49	1212	0.65	1314	0.83	1410	1.03
2850	1036	0.40	1143	0.54	1246	0.70	1345	0.88	1439	1.08
3000	1082	0.46	1183	0.60	1282	0.76	1378	0.94	1469	1.14

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1800	1349	0.93	1436	1.13	1518	1.33	1594	1.54	1666	1.76
1950	1373	0.98	1460	1.18	1541	1.38	1617	1.60	1689	1.82
2100	1397	1.02	1484	1.23	1565	1.44	1641	1.66	1712	1.89
2250	1422	1.07	1508	1.28	1589	1.50	1664	1.72	1736	1.95
2400	1447	1.12	1533	1.34	1613	1.56	1689	1.79	1760	2.02
2550	1473	1.18	1558	1.39	1638	1.62	1713	1.85	1784	2.09
2700	1499	1.23	1583	1.45	1663	1.68	1738	1.92	1809	2.17
2850	1527	1.29	1610	1.52	1688	1.75	1763	1.99	1834	2.24
3000	1555	1.36	1637	1.58	1715	1.82	1789	2.07	1859	2.32

Std/Med Static 742-2000 rpm, 2.4 Max bhp

High Static 742-2200 rpm, 3.9 Max bhp

549K*07N – Standard/Medium Static — 6 Ton Horizontal Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1800	742	3.5	897	4.3	1033	5.0	1150	5.6	1255	6.2
1950	780	3.7	927	4.5	1059	5.2	1175	5.8	1279	6.3
2100	820	3.9	959	4.6	1086	5.3	1200	5.9	1303	6.4
2250	861	4.1	993	4.8	1115	5.4	1227	6.0	1329	6.5
2400	904	4.4	1028	5.0	1146	5.6	1255	6.2	1355	6.7
2550	947	4.6	1065	5.2	1178	5.8	1284	6.3	1382	6.8
2700	991	4.8	1103	5.4	1212	5.9	1314	6.5	1410	7.0
2850	1036	5.0	1143	5.6	1246	6.1	1345	6.6	1439	7.1
3000	1082	5.3	1183	5.8	1282	6.3	1378	6.8	1469	7.3

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1800	1349	6.7	1436	7.1	1518	7.5	1594	7.9	1666	8.3
1950	1373	6.8	1460	7.2	1541	7.6	1617	8.0	1689	8.4
2100	1397	6.9	1484	7.3	1565	7.8	1641	8.2	1712	8.5
2250	1422	7.0	1508	7.5	1589	7.9	1664	8.3	1736	8.6
2400	1447	7.2	1533	7.6	1613	8.0	1689	8.4	1760	8.8
2550	1473	7.3	1558	7.7	1638	8.1	1713	8.5	1784	8.9
2700	1499	7.4	1583	7.9	1663	8.3	1738	8.7	1809	9.0
2850	1527	7.6	1610	8.0	1688	8.4	1763	8.8	1834	9.1
3000	1555	7.7	1637	8.1	1715	8.5	1789	8.9	1859	9.3

Std/Med Static 742-2000 rpm

Fan data (cont)

549K*07N – High Static — 6 Ton Horizontal Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1800	742	3.3	897	4.0	1033	4.6	1150	5.2	1255	5.6
1950	780	3.4	927	4.1	1059	4.7	1175	5.3	1279	5.7
2100	820	3.6	959	4.3	1086	4.9	1200	5.4	1303	5.9
2250	861	3.8	993	4.4	1115	5.0	1227	5.5	1329	6.0
2400	904	4.0	1028	4.6	1146	5.1	1255	5.6	1355	6.1
2550	947	4.2	1065	4.8	1178	5.3	1284	5.8	1382	6.2
2700	991	4.4	1103	4.9	1212	5.4	1314	5.9	1410	6.4
2850	1036	4.6	1143	5.1	1246	5.6	1345	6.1	1439	6.5
3000	1082	4.8	1183	5.3	1282	5.8	1378	6.2	1469	6.6

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
1800	1349	6.1	1436	6.5	1518	6.9	1594	7.2	1666	7.5
1950	1373	6.2	1460	6.6	1541	7.0	1617	7.3	1689	7.6
2100	1397	6.3	1484	6.7	1565	7.1	1641	7.4	1712	7.7
2250	1422	6.4	1508	6.8	1589	7.2	1664	7.5	1736	7.9
2400	1447	6.5	1533	6.9	1613	7.3	1689	7.6	1760	8.0
2550	1473	6.6	1558	7.0	1638	7.4	1713	7.8	1784	8.1
2700	1499	6.8	1583	7.2	1663	7.5	1738	7.9	1809	8.2
2850	1527	6.9	1610	7.3	1688	7.6	1763	8.0	1834	8.3
3000	1555	7.0	1637	7.4	1715	7.8	1789	8.1	1859	8.4

High Static 742-2200 rpm

Fan data (cont)

549K*08N — 7.5 Ton Horizontal Supply (rpm - bhp)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
2250	882	0.26	1014	0.39	1135	0.55	1246	0.73	1346	0.92
2440	935	0.31	1058	0.44	1174	0.61	1281	0.79	1380	0.98
2625	988	0.36	1104	0.50	1214	0.67	1318	0.85	1414	1.05
2815	1044	0.42	1153	0.57	1257	0.73	1357	0.92	1450	1.13
3000	1100	0.49	1202	0.64	1301	0.81	1397	1.00	1487	1.21
3190	1157	0.56	1254	0.72	1348	0.89	1439	1.08	1527	1.30
3375	1214	0.65	1305	0.80	1395	0.98	1483	1.18	1567	1.39
3565	1273	0.74	1359	0.90	1445	1.08	1529	1.28	1610	1.49
3750	1330	0.83	1413	1.00	1495	1.18	1575	1.38	1653	1.60

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
2250	1439	1.12	1524	1.34	1604	1.56	1679	1.79	1750	2.02
2440	1471	1.19	1556	1.41	1635	1.64	1710	1.87	1782	2.12
2625	1504	1.27	1588	1.49	1667	1.72	1741	1.96	1812	2.21
2815	1538	1.34	1621	1.57	1699	1.81	1773	2.06	1844	2.32
3000	1573	1.43	1655	1.66	1732	1.91	1805	2.16	1875	2.42
3190	1611	1.52	1690	1.76	1766	2.00	1839	2.26	1908	2.53
3375	1648	1.62	1726	1.86	1801	2.11	1872	2.37	1941	2.64
3565	1689	1.72	1764	1.96	1837	2.21	1908	2.48	1975	2.75
3750	1729	1.83	1803	2.07	1874	2.33	1943	2.59	2010	2.87

Std/Med Static 882-2000 rpm, 2.4 Max bhp

High Static 882-2200 rpm, 3.0 Max bhp

549K*08N – Standard/Medium Static — 7.5 Ton Horizontal Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
2250	882	4.3	1014	4.9	1135	5.6	1246	6.1	1346	6.6
2440	935	4.5	1058	5.2	1174	5.8	1281	6.3	1380	6.8
2625	988	4.8	1104	5.4	1214	6.0	1318	6.5	1414	7.0
2815	1044	5.1	1153	5.6	1257	6.2	1357	6.7	1450	7.2
3000	1100	5.4	1202	5.9	1301	6.4	1397	6.9	1487	7.4
3190	1157	5.7	1254	6.2	1348	6.6	1439	7.1	1527	7.6
3375	1214	6.0	1305	6.4	1395	6.9	1483	7.3	1567	7.8
3565	1273	6.3	1359	6.7	1445	7.1	1529	7.6	1610	8.0
3750	1330	6.6	1413	7.0	1495	7.4	1575	7.8	1653	8.2

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
2250	1439	7.1	1524	7.6	1604	8.0	1679	8.3	1750	8.7
2440	1471	7.3	1556	7.7	1635	8.1	1710	8.5	1782	8.9
2625	1504	7.4	1588	7.9	1667	8.3	1741	8.7	1812	9.0
2815	1538	7.6	1621	8.1	1699	8.5	1773	8.8	1844	9.2
3000	1573	7.8	1655	8.2	1732	8.6	1805	9.0	1875	9.4
3190	1611	8.0	1690	8.4	1766	8.8	1839	9.2	1908	9.5
3375	1648	8.2	1726	8.6	1801	9.0	1872	9.3	—	—
3565	1689	8.4	1764	8.8	1837	9.2	1908	9.5	—	—
3750	1729	8.6	1803	9.0	1874	9.4	—	—	—	—

Std/Med Static 882-2000 rpm

Fan data (cont)

549K*08N – High Static — 7.5 Ton Horizontal Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
2250	882	3.9	1014	4.5	1135	5.1	1246	5.6	1346	6.1
2440	935	4.2	1058	4.7	1174	5.3	1281	5.8	1380	6.2
2625	988	4.4	1104	4.9	1214	5.4	1318	5.9	1414	6.4
2815	1044	4.7	1153	5.2	1257	5.6	1357	6.1	1450	6.5
3000	1100	4.9	1202	5.4	1301	5.9	1397	6.3	1487	6.7
3190	1157	5.2	1254	5.6	1348	6.1	1439	6.5	1527	6.9
3375	1214	5.4	1305	5.9	1395	6.3	1483	6.7	1567	7.1
3565	1273	5.7	1359	6.1	1445	6.5	1529	6.9	1610	7.3
3750	1330	6.0	1413	6.4	1495	6.7	1575	7.1	1653	7.5

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
2250	1439	6.5	1524	6.9	1604	7.2	1679	7.6	1750	7.9
2440	1471	6.6	1556	7.0	1635	7.4	1710	7.7	1782	8.1
2625	1504	6.8	1588	7.2	1667	7.5	1741	7.9	1812	8.2
2815	1538	6.9	1621	7.3	1699	7.7	1773	8.0	1844	8.4
3000	1573	7.1	1655	7.5	1732	7.8	1805	8.2	1875	8.5
3190	1611	7.3	1690	7.6	1766	8.0	1839	8.3	1908	8.7
3375	1648	7.5	1726	7.8	1801	8.2	1872	8.5	1941	8.8
3565	1689	7.6	1764	8.0	1837	8.3	1908	8.7	1975	9.0
3750	1729	7.8	1803	8.2	1874	8.5	1943	8.8	2010	9.1

High Static 882-2200 rpm

Fan data (cont)

549K*09N — 8.5 Ton Horizontal Supply (rpm - bhp)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
2550	967	0.34	1085	0.48	1198	0.64	1303	0.83	1400	1.02
2765	1030	0.40	1140	0.55	1246	0.72	1346	0.90	1441	1.11
2975	1092	0.48	1195	0.63	1295	0.80	1391	0.99	1482	1.20
3190	1157	0.56	1254	0.72	1348	0.89	1439	1.08	1527	1.30
3400	1222	0.66	1312	0.81	1402	0.99	1489	1.19	1573	1.40
3615	1288	0.76	1374	0.92	1458	1.10	1541	1.30	1621	1.52
3825	1354	0.87	1435	1.04	1515	1.22	1594	1.42	1671	1.64
4040	1422	1.00	1498	1.16	1575	1.35	1650	1.55	1724	1.77
4250	1488	1.12	1561	1.29	1634	1.48	1706	1.69	1776	1.90

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
2550	1490	1.23	1575	1.46	1654	1.69	1729	1.93	1800	2.18
2765	1529	1.32	1612	1.55	1691	1.79	1765	2.04	1835	2.29
2975	1568	1.42	1650	1.65	1727	1.89	1801	2.15	1871	2.41
3190	1611	1.52	1690	1.76	1766	2.00	1839	2.26	1908	2.53
3400	1654	1.63	1731	1.87	1806	2.12	1877	2.38	1945	2.65
3615	1699	1.75	1775	1.99	1847	2.24	1917	2.51	1985	2.79
3825	1746	1.87	1819	2.12	1890	2.37	1958	2.64	2024	2.92
4040	1796	2.00	1866	2.25	1935	2.51	2001	2.77	2066	3.05
4250	1846	2.14	1914	2.38	1980	2.64	2045	2.91	2108	3.18

Std/Med Static 967-2000 rpm, 2.4 Max bhp

High Static 967-2200 rpm, 3.0 Max bhp

549K*09N – Standard/Medium Static — 8.5 Ton Horizontal Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
2550	967	4.7	1085	5.3	1198	5.9	1303	6.4	1400	6.9
2765	1030	5.0	1140	5.6	1246	6.1	1346	6.6	1441	7.1
2975	1092	5.3	1195	5.9	1295	6.4	1391	6.9	1482	7.3
3190	1157	5.7	1254	6.2	1348	6.6	1439	7.1	1527	7.6
3400	1222	6.0	1312	6.5	1402	6.9	1489	7.4	1573	7.8
3615	1288	6.3	1374	6.8	1458	7.2	1541	7.6	1621	8.1
3825	1354	6.7	1435	7.1	1515	7.5	1594	7.9	1671	8.3
4040	1422	7.0	1498	7.4	1575	7.8	1650	8.2	1724	8.6
4250	1488	7.4	1561	7.7	1634	8.1	1706	8.5	1776	8.8

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
2550	1490	7.4	1575	7.8	1654	8.2	1729	8.6	1800	9.0
2765	1529	7.6	1612	8.0	1691	8.4	1765	8.8	1835	9.2
2975	1568	7.8	1650	8.2	1727	8.6	1801	9.0	1871	9.3
3190	1611	8.0	1690	8.4	1766	8.8	1839	9.2	1908	9.5
3400	1654	8.2	1731	8.6	1806	9.0	1877	9.4	—	—
3615	1699	8.5	1775	8.8	1847	9.2	1917	9.6	—	—
3825	1746	8.7	1819	9.1	1890	9.4	—	—	—	—
4040	1796	9.0	1866	9.3	1935	9.7	—	—	—	—
4250	1846	9.2	1914	9.6	—	—	—	—	—	—

Std/Med Static 967-2000 rpm

Fan data (cont)

549K*09N – High Static — 8.5 Ton Horizontal Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
2550	967	4.3	1085	4.9	1198	5.4	1303	5.9	1400	6.3
2765	1030	4.6	1140	5.1	1246	5.6	1346	6.1	1441	6.5
2975	1092	4.9	1195	5.4	1295	5.8	1391	6.3	1482	6.7
3190	1157	5.2	1254	5.6	1348	6.1	1439	6.5	1527	6.9
3400	1222	5.5	1312	5.9	1402	6.3	1489	6.7	1573	7.1
3615	1288	5.8	1374	6.2	1458	6.6	1541	7.0	1621	7.3
3825	1354	6.1	1435	6.5	1515	6.8	1594	7.2	1671	7.6
4040	1422	6.4	1498	6.8	1575	7.1	1650	7.5	1724	7.8
4250	1488	6.7	1561	7.1	1634	7.4	1706	7.7	1776	8.0

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
2550	1490	6.7	1575	7.1	1654	7.5	1729	7.8	1800	8.2
2765	1529	6.9	1612	7.3	1691	7.7	1765	8.0	1835	8.3
2975	1568	7.1	1650	7.5	1727	7.8	1801	8.2	1871	8.5
3190	1611	7.3	1690	7.6	1766	8.0	1839	8.3	1908	8.7
3400	1654	7.5	1731	7.8	1806	8.2	1877	8.5	1945	8.8
3615	1699	7.7	1775	8.0	1847	8.4	1917	8.7	1985	9.0
3825	1746	7.9	1819	8.2	1890	8.6	1958	8.9	2024	9.2
4040	1796	8.1	1866	8.5	1935	8.8	2001	9.1	2066	9.4
4250	1846	8.4	1914	8.7	1980	9.0	2045	9.3	2108	9.6

High Static 967-2200 rpm

Fan data (cont)

549K*12N — 10 Ton Horizontal Supply (rpm - bhp)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
3000	1098	0.55	1200	0.72	1299	0.91	1394	1.12	1485	1.36
3250	1173	0.66	1268	0.83	1360	1.03	1450	1.25	1536	1.48
3500	1248	0.79	1337	0.97	1424	1.17	1509	1.39	1591	1.63
3750	1325	0.93	1409	1.11	1490	1.32	1571	1.54	1648	1.78
4000	1402	1.08	1481	1.27	1558	1.48	1634	1.70	1708	1.94
4250	1480	1.24	1555	1.43	1628	1.65	1699	1.87	1770	2.12
4500	1558	1.41	1629	1.61	1699	1.82	1767	2.05	1834	2.29
4750	1637	1.58	1705	1.79	1771	2.00	1836	2.23	1900	2.47
5000	1716	1.76	1781	1.97	1844	2.19	1906	2.41	1967	2.65

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
3000	1570	1.60	1651	1.86	1728	2.14	1800	2.42	1869	2.70
3250	1619	1.74	1698	2.00	1773	2.28	1844	2.57	1913	2.87
3500	1670	1.88	1747	2.15	1820	2.44	1890	2.73	1958	3.03
3750	1724	2.04	1798	2.31	1869	2.60	1937	2.89	2004	3.20
4000	1780	2.20	1851	2.48	1920	2.76	1987	3.06	2051	3.37
4250	1839	2.37	1907	2.65	1973	2.93	2038	3.23	2101	3.54
4500	1900	2.55	1965	2.82	2029	3.10	2092	3.40	2153	3.71
4750	1963	2.73	2025	2.99	2087	3.28	2147	3.57	—	—
5000	2028	2.91	2087	3.17	2146	3.44	—	—	—	—

Std/Med Static 1098-2000 rpm, 2.4 Max bhp

High Static 1098-2200 rpm, 5.0 Max bhp

549K*12N – Standard/Medium Static — 10 Ton Horizontal Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
3000	1098	5.4	1200	5.9	1299	6.4	1394	6.9	1485	7.4
3250	1173	5.7	1268	6.2	1360	6.7	1450	7.2	1536	7.6
3500	1248	6.1	1337	6.6	1424	7.0	1509	7.5	1591	7.9
3750	1325	6.5	1409	7.0	1490	7.4	1571	7.8	1648	8.2
4000	1402	6.9	1481	7.3	1558	7.7	1634	8.1	1708	8.5
4250	1480	7.3	1555	7.7	1628	8.1	1699	8.5	1770	8.8
4500	1558	7.7	1629	8.1	1699	8.5	1767	8.8	1834	9.1
4750	1637	8.1	1705	8.5	1771	8.8	1836	9.2	1900	9.5
5000	1716	8.5	1781	8.9	1844	9.2	1906	9.5	—	—

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
3000	1570	7.8	1651	8.2	1728	8.6	1800	9.0	—	—
3250	1619	8.0	1698	8.4	1773	8.8	—	—	—	—
3500	1670	8.3	1747	8.7	1820	9.1	—	—	—	—
3750	1724	8.6	1798	9.0	—	—	—	—	—	—
4000	1780	8.9	1851	9.2	—	—	—	—	—	—
4250	1839	9.2	—	—	—	—	—	—	—	—
4500	1900	9.5	—	—	—	—	—	—	—	—
4750	—	—	—	—	—	—	—	—	—	—
5000	—	—	—	—	—	—	—	—	—	—

Std/Med Static 1098-2000 rpm

Fan data (cont)

549K*12N – High Static — 10 Ton Horizontal Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
3000	1098	4.9	1200	5.4	1299	5.8	1394	6.3	1485	6.7
3250	1173	5.3	1268	5.7	1360	6.1	1450	6.5	1536	6.9
3500	1248	5.6	1337	6.0	1424	6.4	1509	6.8	1591	7.2
3750	1325	6.0	1409	6.3	1490	6.7	1571	7.1	1648	7.5
4000	1402	6.3	1481	6.7	1558	7.0	1634	7.4	1708	7.7
4250	1480	6.7	1555	7.0	1628	7.4	1699	7.7	1770	8.0
4500	1558	7.0	1629	7.4	1699	7.7	1767	8.0	1834	8.3
4750	1637	7.4	1705	7.7	1771	8.0	1836	8.3	1900	8.6
5000	1716	7.8	1781	8.1	1844	8.4	1906	8.6	1967	8.9

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
3000	1570	7.1	1651	7.5	1728	7.8	1800	8.2	1869	8.5
3250	1619	7.3	1698	7.7	1773	8.0	1844	8.4	1913	8.7
3500	1670	7.6	1747	7.9	1820	8.2	1890	8.6	1958	8.9
3750	1724	7.8	1798	8.1	1869	8.5	1937	8.8	2004	9.1
4000	1780	8.1	1851	8.4	1920	8.7	1987	9.0	2051	9.3
4250	1839	8.3	1907	8.6	1973	9.0	2038	9.3	2101	9.5
4500	1900	8.6	1965	8.9	2029	9.2	2092	9.5	2153	9.8
4750	1963	8.9	2025	9.2	2087	9.5	2147	9.8	—	—
5000	2028	9.2	2087	9.5	2146	9.8	—	—	—	—

High Static 1098-2200 rpm

Electrical data

Legend and Notes

Applicable for Electrical Data Tables on pages 54 to 70

LEGEND

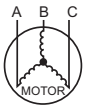
BRKR	—	Circuit Breaker
C.O.	—	Convenience Outlet
FLA	—	Full Load Amps
IFM	—	Indoor Fan Motor
LRA	—	Locked Rotor Amps
MCA	—	Minimum Circuit Amps
P.E.	—	Power Exhaust
PWRD C.O.	—	Powered Convenience Outlet
RLA	—	Rated Load Amps
SCCR	—	Short Circuit Current Rating
UNPWR C.O.	—	Unpowered Convenience Outlet

NOTE(S):

1. In compliance with NEC requirements for multi-motor and combination load equipment (refer to NEC Articles 430 and 440), the overcurrent protective device for the unit shall be fuse or HACR breaker. Canadian units may be fuse or circuit breaker.
2. For 208/230 v units, where one value is show it is the same for either 208 or 230 volts.
3. **Unbalanced 3-Phase Supply Voltage:** Never operate a motor where a phase imbalance in supply voltage is greater than 2%. Use the following formula to determine the percentage of voltage imbalance.

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

Example: Supply voltage is 230-3-60



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

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

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.

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

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.

Electrical data (cont)

549K*07-12N Cooling Electrical Data

549K UNIT SIZE	V-Ph-Hz	UNIT VOLTAGE RANGE		COMP 1		COMP 2		OFM (ea)		STD SCCR kA	IFM			POWER EXHAUST	
		MIN	MAX	RLA	LRA	RLA	LRA	WATTS	FLA		TYPE	EFFCY AT FULL LOAD	FLA	KIT QTY	FLA
*07N	208-3-60	187	253	13.5	88	8.9	58	325	1.5	5	STD/MED	90%	6.4	1	3.8
											HIGH		7.5		
	230-3-60	187	253	13.5	88	8.9	58	325	1.5	5	STD/MED	90%	6.4	1	3.8
											HIGH		7.5		
	460-3-60	414	506	6.0	44	4.2	28	325	0.8	5	STD/MED	90%	3.0	1	1.8
											HIGH		3.5		
	575-3-60	518	633	4.9	34	3.5	24	325	0.6	5	STD/MED	90%	2.5	1	3.8
											HIGH		3.0		
*08N	208-3-60	187	253	15.9	110	9.0	71	325	1.5	5	STD/MED	90%	6.4	1	3.8
											HIGH		7.5		
	230-3-60	187	253	15.9	110	9.0	71	325	1.5	5	STD/MED	90%	6.4	1	3.8
											HIGH		7.5		
	460-3-60	414	506	7.1	52	5.6	38	325	0.8	5	STD/MED	90%	3.0	1	1.8
											HIGH		3.5		
	575-3-60	518	633	5.1	40	3.8	37	325	0.6	5	STD/MED	90%	2.5	1	3.8
											HIGH		3.0		
*09N	208-3-60	187	253	15.6	110	13.5	88	1070	7.4	5	STD/MED	90%	6.4	1	3.8
											HIGH		7.5		
	230-3-60	187	253	15.6	110	13.5	88	1070	7.4	5	STD/MED	90%	6.4	1	3.8
											HIGH		7.5		
	460-3-60	414	506	7.7	52	6.0	44	1070	7.4	5	STD/MED	90%	3.0	1	1.8
											HIGH		3.5		
	575-3-60	518	633	5.8	39	4.9	34	1070	7.4	5	STD/MED	90%	2.5	1	3.8
											HIGH		3.0		
*12N	208-3-60	187	253	19.6	136	14.5	98	208	1.5	5	STD/MED	90%	6.4	1	3.8
											HIGH		12.6		
	230-3-60	187	253	19.6	136	14.5	98	208	1.5	5	STD/MED	90%	6.4	1	3.8
											HIGH		12.6		
	460-3-60	414	506	8.2	66	6.3	55	208	0.8	5	STD/MED	90%	3.0	1	1.8
											HIGH		5.6		
	575-3-60	518	633	6.6	55	6.0	41	208	0.6	5	STD/MED	90%	2.5	1	3.8
											HIGH		4.6		

Electrical data (cont)

549K*07N MCA MOCP Electrical Data

549K UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	STD SCCR kA	ELECTRIC HEATER			NO CONVENIENCE OUTLET or UNPOWERED CONVENIENCE OUTLET							
							NO POWER EXHAUST				w/ POWER EXHAUST (powered from unit)			
				CRHEATER ****00	NOM. (kW)	FLA	MCA	FUSE or HACR BRKR	DISCONNECT SIZE		MCA	FUSE or HACR BRKR	DISCONNECT SIZE	
									FLA	LRA			FLA	LRA
549K*07N	208/230-3-60	STD/MED	5	—	—	—	36	45	37	163	39	50	41	167
			5	410A	4.9/6.5	13.6/15.6	53/55	60/60	52/55	177/179	56/59	60/60	57/59	181/183
			5	411A	7.8/10.4	21.7/25.0	63/67	70/70	62/65	185/188	67/71	70/80	66/70	189/192
			5	412A	12.0/16.0	33.4/38.5	77/84	80/90	75/81	196/202	81/88	90/90	79/85	200/206
			5	413A	15.8/21.0	43.8/50.5	90/99	90/100	87/95	207/214	94/103	100/110	91/99	211/218
			5	414A	18.8/25.0	52.1/60.1	101/111	110/125	96/106	215/223	105/115	110/125	101/110	219/227
		HIGH	5	—	—	—	37	45	38	165	41	50	42	169
			5	410A	4.9/6.5	13.6/15.6	54/56	60/60	53/56	179/181	58/60	60/60	58/60	183/185
			5	411A	7.8/10.4	21.7/25.0	64/68	70/70	63/67	187/190	68/72	70/80	67/71	191/194
			5	412A	12.0/16.0	33.4/38.5	78/85	80/90	76/82	198/204	82/89	90/90	81/86	202/208
			5	413A	15.8/21.0	43.8/50.5	91/100	100/100	88/96	209/216	95/104	100/110	93/100	213/220
			5	414A	18.8/25.0	52.1/60.1	102/112	110/125	98/107	217/225	106/116	110/125	102/111	221/229
	460-3-60	STD/MED	5	—	—	—	17	20	17	80	19	20	19	82
			5	418A	6.0	7.2	26	30	25	87	28	30	27	89
			5	419A	11.5	13.8	34	35	33	94	36	40	35	96
			5	420A	15.0	18.0	39	40	38	98	41	45	40	100
			5	421A	25.0	30.1	54	60	52	110	56	60	54	112
		HIGH	5	—	—	—	17	20	18	83	19	25	20	85
			5	418A	6.0	7.2	26	30	26	90	28	30	28	92
			5	419A	11.5	13.8	35	35	33	97	36	40	36	99
			5	420A	15.0	18.0	40	40	38	101	42	45	40	103
			5	421A	25.0	30.1	55	60	52	113	57	60	54	115
	575-3-60	STD/MED	5	—	—	—	14	15	14	66	18	20	18	70
			5	425A	18.0	17.3	35	35	34	83	39	40	38	87
			5	426A	24.8	23.9	44	45	41	90	47	50	46	94
		HIGH	5	—	—	—	14	20	14	67	18	20	19	71
			5	425A	18.0	17.3	36	40	34	84	40	40	39	88
			5	426A	24.8	23.9	44	45	42	91	48	50	46	95

Electrical data (cont)

549K*07N MCA MOCP Electrical Data (cont)

549K UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	STD SCCR kA	ELECTRIC HEATER		w/ POWERED CONVENIENCE OUTLET							
				CRHEATER ****00	NOM. (kW)	NO POWER EXHAUST				w/ POWER EXHAUST (powered from unit)			
						MCA	FUSE or HACR BRKR	DISCONNECT SIZE		MCA	FUSE or HACR BRKR	DISCONNECT SIZE	
								FLA	LRA			FLA	LRA
549K*07N	208/230-3-60	STD/MED	5	—	—	40	50	42	168	44	50	46	172
			5	410A	4.9/6.5	57/60	60/60	58/60	182/184	61/64	70/70	62/64	186/188
			5	411A	7.8/10.4	68/72	70/80	67/71	190/193	71/75	80/80	71/75	194/197
			5	412A	12.0/16.0	82/89	90/90	81/86	201/207	86/92	90/100	85/91	205/211
			5	413A	15.8/21.0	95/104	100/110	92/100	212/219	99/107	100/110	97/105	216/223
			5	414A	18.8/25.0	106/116	110/125	102/111	220/228	109/119	110/125	106/116	224/232
		HIGH	5	—	—	42	50	43	170	45	50	48	174
			5	410A	4.9/6.5	59/61	60/70	59/61	184/186	62/65	70/70	63/66	188/190
			5	411A	7.8/10.4	69/73	70/80	68/72	192/195	72/77	80/80	73/76	196/199
			5	412A	12.0/16.0	83/90	90/90	82/88	203/209	87/93	90/100	86/92	207/213
			5	413A	15.8/21.0	96/105	100/110	94/101	214/221	100/108	100/110	98/106	218/225
			5	414A	18.8/25.0	107/117	110/125	103/112	222/230	110/120	110/125	108/117	226/234
	460-3-60	STD/MED	5	—	—	19	25	20	82	21	25	22	84
			5	418A	6.0	28	30	28	89	30	30	30	91
			5	419A	11.5	36	40	35	96	38	40	37	98
			5	420A	15.0	41	45	40	100	43	45	42	102
			5	421A	25.0	57	60	54	112	58	60	56	114
		HIGH	5	—	—	19	25	20	85	21	25	22	87
			5	418A	6.0	28	30	28	92	30	30	30	94
			5	419A	11.5	37	40	36	99	39	40	38	101
			5	420A	15.0	42	45	41	103	44	45	43	105
			5	421A	25.0	57	60	55	115	59	60	57	117
	575-3-60	STD/MED	5	—	—	15	20	16	68	19	25	20	72
			5	425A	18.0	37	40	36	85	41	45	40	89
			5	426A	24.8	45	45	43	92	49	50	48	96
		HIGH	5	—	—	16	20	16	69	20	25	21	73
			5	425A	18.0	38	40	36	86	41	45	41	90
			5	426A	24.8	46	50	44	93	50	50	48	97

Electrical data (cont)

549K*08N MCA MOCP Electrical Data

549K UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	STD SCCR kA	ELECTRIC HEATER			NO CONVENIENCE OUTLET or UNPOWERED CONVENIENCE OUTLET							
							NO POWER EXHAUST				w/ POWER EXHAUST (powered from unit)			
				CRHEATER ****00	NOM. (kW)	FLA	MCA	FUSE or HACR BRKR	DISCONNECT SIZE		MCA	FUSE or HACR BRKR	DISCONNECT SIZE	
									FLA	LRA			FLA	LRA
549K*08N	208/230-3-60	STD/MED	5	—	—	—	39	50	39	198	43	50	44	202
			5	411A	7.8/10.4	21.7/25.0	66/70	70/70	64/68	220/223	70/74	70/80	69/73	224/227
			5	412A	12.0/16.0	33.4/38.5	80/87	90/90	78/84	231/237	84/91	90/100	82/88	235/241
			5	414A	18.8/25.0	52.1/60.1	104/114	110/125	99/109	250/258	108/118	110/125	104/113	254/262
			5	415A	24.0/32.0	66.7/77.0	122/135	125/150	116/128	265/275	126/139	150/150	121/132	269/279
			5	416A	31.8/42.4	88.4/102.0	149/166	150/175	141/157	286/300	153/170	175/175	145/161	290/304
		HIGH	5	—	—	—	40	50	41	200	44	50	45	204
			5	411A	7.8/10.4	21.7/25.0	67/71	70/80	66/69	222/225	71/75	80/80	70/74	226/229
			5	412A	12.0/16.0	33.4/38.5	82/88	90/90	79/85	233/239	85/92	90/100	83/89	237/243
			5	414A	18.8/25.0	52.1/60.1	105/115	110/125	101/110	252/260	109/119	110/125	105/114	256/264
			5	415A	24.0/32.0	66.7/77.0	123/136	125/150	117/129	267/277	127/140	150/150	122/134	271/281
			5	416A	31.8/42.4	88.4/102.0	150/167	150/175	142/158	288/302	154/171	175/175	147/162	292/306
	460-3-60	STD/MED	5	—	—	—	20	25	20	98	21	25	22	100
			5	419A	11.5	13.8	37	40	36	112	39	40	38	114
			5	420A	15.0	18.0	42	45	41	116	44	45	43	118
			5	421A	25.0	30.1	57	60	55	128	59	60	57	130
			5	422A	33.0	39.7	69	70	66	138	71	80	68	140
			5	423A	41.7	50.2	82	90	78	148	84	90	80	150
		HIGH	5	—	—	—	20	25	20	101	22	25	23	103
			5	419A	11.5	13.8	37	40	36	115	39	40	38	117
			5	420A	15.0	18.0	43	45	41	119	44	45	43	121
			5	421A	25.0	30.1	58	60	55	131	59	60	57	133
			5	422A	33.0	39.7	70	70	66	141	71	80	68	143
			5	423A	41.7	50.2	83	90	78	151	85	90	80	153
	575-3-60	STD/MED	5	—	—	—	14	20	14	85	18	20	19	89
			5	425A	18.0	17.3	36	40	34	102	40	40	39	106
			5	427A	36.0	34.6	58	60	54	120	61	70	59	124
		HIGH	5	—	—	—	15	20	15	86	19	20	19	90
			5	425A	18.0	17.3	36	40	35	103	40	40	39	107
			5	427A	36.0	34.6	58	60	55	121	62	70	59	125

Electrical data (cont)

549K*08N MCA MOCP Electrical Data (cont)

549K UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	STD SCCR kA	ELECTRIC HEATER			w/ POWERED CONVENIENCE OUTLET							
				CRHEATER ****00	NOM. (kW)	FLA	NO POWER EXHAUST				w/ POWER EXHAUST (powered from unit)			
							MCA	FUSE or HACR BRKR	DISCONNECT SIZE		MCA	FUSE or HACR BRKR	DISCONNECT SIZE	
									FLA	LRA			FLA	LRA
549K*08N	208/230-3-60	STD/MED	5	—	—	—	44	50	45	203	47	60	49	207
			5	411A	7.8/10.4	21.7/25.0	71/75	80/80	70/74	225/228	74/79	80/80	74/78	229/232
			5	412A	12.0/16.0	33.4/38.5	85/92	90/100	83/89	236/242	89/95	90/100	88/94	240/246
			5	414A	18.8/25.0	52.1/60.1	109/119	110/125	105/114	255/263	112/122	125/125	109/118	259/267
			5	415A	24.0/32.0	66.7/77.0	127/140	150/150	122/134	270/280	131/144	150/150	126/138	274/284
			5	416A	31.8/42.4	88.4/102.0	154/171	175/175	147/162	291/305	158/175	175/175	151/167	295/309
		HIGH	5	—	—	—	45	60	46	205	48	60	51	209
			5	411A	7.8/10.4	21.7/25.0	72/76	80/80	71/75	227/230	76/80	80/80	76/79	231/234
			5	412A	12.0/16.0	33.4/38.5	86/93	90/100	85/91	238/244	90/97	90/100	89/95	242/248
			5	414A	18.8/25.0	52.1/60.1	110/120	110/125	106/115	257/265	114/124	125/125	111/120	261/269
			5	415A	24.0/32.0	66.7/77.0	128/141	150/150	123/135	272/282	132/145	150/150	127/139	276/286
			5	416A	31.8/42.4	88.4/102.0	155/172	175/175	148/164	293/307	159/176	175/200	152/168	297/311
	460-3-60	STD/MED	5	—	—	—	22	25	22	100	24	30	24	102
			5	419A	11.5	13.8	39	40	38	114	41	45	40	116
			5	420A	15.0	18.0	44	45	43	118	46	50	45	120
			5	421A	25.0	30.1	59	60	57	130	61	70	59	132
			5	422A	33.0	39.7	71	80	68	140	73	80	70	142
			5	423A	41.7	50.2	84	90	80	150	86	90	82	152
		HIGH	5	—	—	—	22	25	23	103	24	30	25	105
			5	419A	11.5	13.8	39	40	39	117	41	45	41	119
			5	420A	15.0	18.0	45	45	44	121	47	50	46	123
			5	421A	25.0	30.1	60	60	58	133	62	70	60	135
			5	422A	33.0	39.7	72	80	69	143	74	80	71	145
			5	423A	41.7	50.2	85	90	81	153	87	90	83	155
	575-3-60	STD/MED	5	—	—	—	16	20	16	87	20	25	21	91
			5	425A	18.0	17.3	38	40	36	104	41	45	41	108
			5	427A	36.0	34.6	59	60	56	122	63	70	61	126
		HIGH	5	—	—	—	17	20	17	88	20	25	21	92
			5	425A	18.0	17.3	38	40	37	105	42	45	41	109
			5	427A	36.0	34.6	60	60	57	123	64	70	61	127

Electrical data (cont)

549K*09N MCA MOCP Electrical Data

549K UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	STD SCCR kA	ELECTRIC HEATER			NO CONVENIENCE OUTLET or UNPOWERED CONVENIENCE OUTLET							
							NO POWER EXHAUST				w/ POWER EXHAUST (powered from unit)			
				CRHEATER ****00	NOM. (kW)	FLA	MCA	FUSE or HACR BRKR	DISCONNECT SIZE		MCA	FUSE or HACR BRKR	DISCONNECT SIZE	
									FLA	LRA			FLA	LRA
549K*09N	208/230-3-60	STD/MED	5	—	—	—	47	60	49	214	51	60	54	218
			5	411A	7.8/10.4	21.7/25.0	74/79	80/80	74/78	236/239	78/82	80/90	79/82	240/243
			5	412A	12.0/16.0	33.4/38.5	89/95	90/100	88/94	247/253	93/99	100/100	92/98	251/257
			5	414A	18.8/25.0	52.1/60.1	112/122	125/125	109/118	266/274	116/126	125/150	114/123	270/278
			5	415A	24.0/32.0	66.7/77.0	131/144	150/150	126/138	281/291	134/147	150/150	130/142	285/295
			5	416A	31.8/42.4	88.4/102.0	158/175	175/175	151/167	302/316	162/179	175/200	155/171	306/320
		HIGH	5	—	—	—	48	60	51	216	52	60	55	220
			5	411A	7.8/10.4	21.7/25.0	75/80	80/80	76/79	238/241	79/83	80/90	80/84	242/245
			5	412A	12.0/16.0	33.4/38.5	90/96	90/100	89/95	249/255	94/100	100/100	93/99	253/259
			5	414A	18.8/25.0	52.1/60.1	113/123	125/125	111/120	268/276	117/127	125/150	115/124	272/280
			5	415A	24.0/32.0	66.7/77.0	132/145	150/150	127/139	283/293	136/148	150/150	132/144	287/297
			5	416A	31.8/42.4	88.4/102.0	159/176	175/200	152/168	304/318	163/180	175/200	157/172	308/322
	460-3-60	STD/MED	5	—	—	—	26	30	28	107	28	30	30	109
			5	419A	11.5	13.8	44	45	44	121	46	50	46	123
			5	420A	15.0	18.0	49	50	48	125	51	60	50	127
			5	421A	25.0	30.1	64	70	62	137	66	70	64	139
			5	422A	33.0	39.7	76	80	73	147	78	80	75	149
			5	423A	41.7	50.2	89	90	85	157	91	100	88	159
		HIGH	5	—	—	—	27	30	28	110	29	35	30	112
			5	419A	11.5	13.8	44	45	44	124	46	50	46	126
			5	420A	15.0	18.0	49	50	49	128	51	60	51	130
			5	421A	25.0	30.1	65	70	63	140	66	70	65	142
			5	422A	33.0	39.7	77	80	74	150	78	80	76	152
			5	423A	41.7	50.2	90	90	86	160	92	100	88	162
	575-3-60	STD/MED	5	—	—	—	23	25	24	84	27	30	28	88
			5	425A	18.0	17.3	45	45	44	101	48	50	48	105
			5	427A	36.0	34.6	66	70	63	119	70	70	68	123
		HIGH	5	—	—	—	23	30	24	85	27	30	29	89
			5	425A	18.0	17.3	45	45	44	102	49	50	49	106
			5	427A	36.0	34.6	67	70	64	120	70	80	68	124

Electrical data (cont)

549K*09N MCA MOCP Electrical Data (cont)

549K UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	STD SCCR kA	ELECTRIC HEATER			w/ POWERED CONVENIENCE OUTLET							
				CRHEATER ****00	NOM. (kW)	FLA	NO POWER EXHAUST				w/ POWER EXHAUST (powered from unit)			
							MCA	FUSE or HACR BRKR	DISCONNECT SIZE		MCA	FUSE or HACR BRKR	DISCONNECT SIZE	
									FLA	LRA			FLA	LRA
549K*09N	208/230-3-60	STD/MED	5	—	—	—	52	60	55	219	56	60	59	223
			5	411A	7.8/10.4	21.7/25.0	79/83	80/90	80/84	241/244	83/87	90/90	84/88	245/248
			5	412A	12.0/16.0	33.4/38.5	94/100	100/100	93/99	252/258	98/104	100/110	98/104	256/262
			5	414A	18.8/25.0	52.1/60.1	117/127	125/150	115/124	271/279	121/131	125/150	119/128	275/283
			5	415A	24.0/32.0	66.7/77.0	135/148	150/150	132/143	286/296	139/152	150/175	136/148	290/300
			5	416A	31.8/42.4	88.4/102.0	163/180	175/200	157/172	307/321	166/183	175/200	161/177	311/325
		HIGH	5	—	—	—	53	60	56	221	—	—	—	—
			5	411A	7.8/10.4	21.7/25.0	80/84	80/90	81/85	243/246	—	—	—	—
			5	412A	12.0/16.0	33.4/38.5	95/101	100/110	95/100	254/260	—	—	—	—
			5	414A	18.8/25.0	52.1/60.1	118/128	125/150	116/125	273/281	—	—	—	—
			5	415A	24.0/32.0	66.7/77.0	137/149	150/150	133/145	288/298	—	—	—	—
			5	416A	31.8/42.4	88.4/102.0	164/181	175/200	158/173	309/323	—	—	—	—
	460-3-60	STD/MED	5	—	—	—	29	35	30	109	30	35	32	111
			5	419A	11.5	13.8	46	50	46	123	48	50	48	125
			5	420A	15.0	18.0	51	60	51	127	53	60	53	129
			5	421A	25.0	30.1	66	70	65	139	68	70	67	141
			5	422A	33.0	39.7	78	80	76	149	80	80	78	151
			5	423A	41.7	50.2	91	100	88	159	93	100	90	161
		HIGH	5	—	—	—	29	35	31	112	31	35	33	114
			5	419A	11.5	13.8	46	50	47	126	48	50	49	128
			5	420A	15.0	18.0	52	60	52	130	53	60	54	132
			5	421A	25.0	30.1	67	70	65	142	69	70	68	144
			5	422A	33.0	39.7	79	80	76	152	81	90	79	154
			5	423A	41.7	50.2	92	100	89	162	94	100	91	164
	575-3-60	STD/MED	5	—	—	—	25	30	26	86	28	30	30	90
			5	425A	18.0	17.3	46	50	46	103	50	50	50	107
			5	427A	36.0	34.6	68	70	65	121	72	80	70	125
		HIGH	5	—	—	—	25	30	26	87	29	35	31	91
			5	425A	18.0	17.3	47	50	46	104	51	60	50	108
			5	427A	36.0	34.6	68	70	66	122	72	80	70	126

Electrical data (cont)

549K*12N MCA MOCP Electrical Data

549K UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	STD SCCR kA	ELECTRIC HEATER			NO CONVENIENCE OUTLET or UNPOWERED CONVENIENCE OUTLET							
							NO POWER EXHAUST				w/ POWER EXHAUST (powered from unit)			
				CRHEATER ****00	NOM. (kW)	FLA	MCA	FUSE or HACR BRKR	DISCONNECT SIZE		MCA	FUSE or HACR BRKR	DISCONNECT SIZE	
									FLA	LRA			FLA	LRA
549K*12N	208/230-3-60	STD/MED	5	—	—	—	50	60	52	255	54	60	56	259
			5	411A	7.8/10.4	21.7/25.0	77/82	80/90	77/81	277/280	81/85	90/90	81/85	281/284
			5	412A	12.0/16.0	33.4/38.5	92/98	100/100	90/96	288/294	96/102	100/110	95/100	292/298
			5	415A	24.0/32.0	66.7/77.0	134/147	150/150	128/140	322/332	138/150	150/150	133/145	326/336
			5	416A	31.8/42.4	88.4/102.0	161/178	175/200	153/169	343/357	165/182	175/200	158/173	347/361
			5	417A	37.6/50.0	104.2/120.3	181/171	200/200	172/190	359/375	184/174	200/200	176/194	363/379
		HIGH	5	—	—	—	57	70	59	264	60	70	63	268
			5	411A	7.8/10.4	21.7/25.0	84/88	90/100	84/88	286/289	87/92	100/100	88/92	290/293
			5	412A	12.0/16.0	33.4/38.5	98/105	100/110	97/103	297/303	102/108	110/110	102/108	301/307
			5	415A	24.0/32.0	66.7/77.0	140/153	150/175	136/147	331/341	144/157	150/175	140/152	335/345
			5	416A	31.8/42.4	88.4/102.0	167/184	175/200	161/176	352/366	171/188	175/200	165/181	356/370
			5	417A	37.6/50.0	104.2/120.3	187/177	200/200	179/197	368/384	191/181	200/200	183/202	372/388
	460-3-60	STD/MED	5	—	—	—	22	30	23	131	24	30	25	133
			5	420A	15.0	18.0	45	45	44	149	47	50	46	151
			5	422A	33.0	39.7	72	80	69	171	74	80	71	173
			5	423A	41.7	50.2	85	90	81	181	87	90	83	183
			5	424A	50.0	60.1	83	90	92	191	84	90	94	193
		HIGH	5	—	—	—	25	30	26	135	27	30	28	137
			5	420A	15.0	18.0	48	50	47	153	49	50	49	155
			5	422A	33.0	39.7	75	80	72	175	76	80	74	177
			5	423A	41.7	50.2	88	90	84	185	90	90	86	187
			5	424A	50.0	60.1	85	90	95	195	87	90	97	197
	575-3-60	STD/MED	5	—	—	—	19	25	19	106	23	25	24	110
			5	425A	18.0	17.3	41	45	39	123	44	45	44	127
			5	427A	36.0	34.6	62	70	59	141	66	70	64	145
			5	428A	50.0	48.1	67	70	75	154	71	80	79	158
		HIGH	5	—	—	—	21	25	22	108	25	30	26	112
			5	425A	18.0	17.3	43	45	42	125	47	50	46	129
			5	427A	36.0	34.6	64	70	62	143	68	70	66	147
			5	428A	50.0	48.1	69	80	77	156	73	80	82	160

Electrical data (cont)

549K*12N MCA MOCP Electrical Data (cont)

549K UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	STD SCCR kA	ELECTRIC HEATER			w/ POWERED CONVENIENCE OUTLET							
				CRHEATER ****00	NOM. (kW)	FLA	NO POWER EXHAUST				w/ POWER EXHAUST (powered from unit)			
							MCA	FUSE or HACR BRKR	DISCONNECT SIZE		MCA	FUSE or HACR BRKR	DISCONNECT SIZE	
									FLA	LRA			FLA	LRA
549K*12N	208/230-3-60	STD/MED	5	—	—	—	55	60	57	260	59	70	62	264
			5	411A	7.8/10.4	21.7/25.0	82/86	90/90	82/86	282/285	86/90	90/100	87/90	286/289
			5	412A	12.0/16.0	33.4/38.5	97/103	100/110	96/102	293/299	101/107	110/110	100/106	297/303
			5	415A	24.0/32.0	66.7/77.0	139/151	150/175	134/146	327/337	142/155	150/175	138/150	331/341
			5	416A	31.8/42.4	88.4/102.0	166/183	175/200	159/175	348/362	169/186	175/200	163/179	352/366
			5	417A	37.6/50.0	104.2/120.3	185/175	200/200	177/196	364/380	189/179	200/200	181/200	368/384
		HIGH	5	—	—	—	61	80	64	269	65	80	69	273
			5	411A	7.8/10.4	21.7/25.0	88/93	100/100	89/93	291/294	92/96	100/100	94/98	295/298
			5	412A	12.0/16.0	33.4/38.5	103/109	110/110	103/109	302/308	107/113	110/125	107/113	306/312
			5	415A	24.0/32.0	66.7/77.0	145/158	150/175	141/153	336/346	149/161	150/175	145/157	340/350
			5	416A	31.8/42.4	88.4/102.0	172/189	175/200	166/182	357/371	176/193	200/200	170/186	361/375
			5	417A	37.6/50.0	104.2/120.3	192/182	200/200	184/203	373/389	195/185	200/200	189/207	377/393
	460-3-60	STD/MED	5	—	—	—	25	30	25	133	26	30	27	135
			5	420A	15.0	18.0	47	50	46	151	49	50	48	153
			5	422A	33.0	39.7	74	80	71	173	76	80	73	175
			5	423A	41.7	50.2	87	90	83	183	89	90	85	185
			5	424A	50.0	60.1	85	90	95	193	87	90	97	195
		HIGH	5	—	—	—	27	30	28	137	29	35	30	139
			5	420A	15.0	18.0	50	50	49	155	52	60	51	157
			5	422A	33.0	39.7	77	80	74	177	79	80	76	179
			5	423A	41.7	50.2	90	90	86	187	92	100	88	189
			5	424A	50.0	60.1	87	90	98	197	89	100	100	199
	575-3-60	STD/MED	5	—	—	—	21	25	21	108	25	30	26	112
			5	425A	18.0	17.3	42	45	41	125	46	50	46	129
			5	427A	36.0	34.6	64	70	61	143	68	70	66	147
			5	428A	50.0	48.1	69	80	77	156	73	80	81	160
		HIGH	5	—	—	—	23	25	24	110	27	30	28	114
			5	425A	18.0	17.3	44	45	44	127	48	50	48	131
			5	427A	36.0	34.6	66	70	64	145	70	70	68	149
			5	428A	50.0	48.1	71	80	79	158	75	80	83	162

Electrical data (cont)

549K*07N Electric Heat Data — Without Non-Fused Disconnect

549K UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER	NOM. (kW)	STD SCCR kA	APPLICATION (kW)	APPLICATION OUTPUT (MBH)	SINGLE POINT OR JUNCTION KIT PART NUMBER CRSINGLEXXXA00			
								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)
549K*07	208/230-3-60	STD/ MED	CRHEATER410A00	6.5	5	4.9/6.0	16.7/20.4	047	047	047	049
			CRHEATER411A00	10.4	5	7.8/9.6	26.7/32.6	049	049	049	049
			CRHEATER412A00	16	5	12.0/14.7	41.0/50.1	049	049	049	049
			CRHEATER413A00	21	5	15.8/19.3	53.8/65.8	051	051	051	051
			CRHEATER414A00	25	5	18.8/23.0	64.1/78.3	051	051	051	051
		HIGH	CRHEATER410A00	6.5	5	4.9/6.0	16.7/20.4	047	047	049	049
			CRHEATER411A00	10.4	5	7.8/9.6	26.7/32.6	049	049	049	049
			CRHEATER412A00	16	5	12.0/14.7	41.0/50.1	049	049	049	049
			CRHEATER413A00	21	5	15.8/19.3	53.8/65.8	051	051	051	051
			CRHEATER414A00	25	5	18.8/23.0	64.1/78.3	051	051	051	051
	460-3-60	STD/ MED	CRHEATER418A00	6	5	5.5	18.8	047	047	047	047
			CRHEATER419A00	11.5	5	10.6	36.0	047	047	047	047
			CRHEATER420A00	15	5	13.8	47.0	047	047	047	047
			CRHEATER421A00	25	5	23.0	78.3	047	047	047	047
		HIGH	CRHEATER418A00	6	5	5.5	18.8	047	047	047	047
			CRHEATER419A00	11.5	5	10.6	36.0	047	047	047	047
			CRHEATER420A00	15	5	13.8	47.0	047	047	047	047
			CRHEATER421A00	25	5	23.0	78.3	047	047	047	047
	575-3-60	STD/ MED	CRHEATER425A00	18	5	16.5	56.4	047	047	047	047
			CRHEATER426A00	24.8	5	22.8	77.7	047	047	047	047
		HIGH	CRHEATER425A00	18	5	16.5	56.4	047	047	047	047
			CRHEATER426A00	24.8	5	22.8	77.7	047	047	047	047

Electrical data (cont)

549K*07N Electric Heat Data — With Non-Fused Disconnect

549K UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER	NOM. (kW)	STD SCCR kA	APPLICATION (kW)	APPLICATION OUTPUT (MBH)	SINGLE POINT OR JUNCTION KIT PART NUMBER CRSINGLEXXXA00			
								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)
549K*07	208/230-3-60	STD/ MED	CRHEATER410A00	6.5	5	4.9/6.0	16.7/20.4	047	047	047	049
			CRHEATER411A00	10.4	5	7.8/9.6	26.7/32.6	049	049	049	049
			CRHEATER412A00	16.0	5	12.0/14.7	41.0/50.1	049	049	049	049
			CRHEATER413A00	21.0	5	15.8/19.3	53.8/65.8	051	051	051	051
			CRHEATER414A00	25.0	5	18.8/23.0	64.1/78.3	051	051	051	051
		HIGH	CRHEATER410A00	6.5	5	4.9/6.0	16.7/20.4	047	047	049	049
			CRHEATER411A00	10.4	5	7.8/9.6	26.7/32.6	049	049	049	049
			CRHEATER412A00	16.0	5	12.0/14.7	41.0/50.1	049	049	049	049
			CRHEATER413A00	21.0	5	15.8/19.3	53.8/65.8	051	051	051	051
			CRHEATER414A00	25.0	5	18.8/23.0	64.1/78.3	051	051	051	051
	460-3-60	STD/ MED	CRHEATER418A00	6.0	5	5.5	18.8	047	047	047	047
			CRHEATER419A00	11.5	5	10.6	36.0	047	047	047	047
			CRHEATER420A00	15.0	5	13.8	47.0	047	047	047	047
			CRHEATER421A00	25.0	5	23.0	78.3	047	047	047	047
		HIGH	CRHEATER418A00	6.0	5	5.5	18.8	047	047	047	047
			CRHEATER419A00	11.5	5	10.6	36.0	047	047	047	047
			CRHEATER420A00	15.0	5	13.8	47.0	047	047	047	047
			CRHEATER421A00	25.0	5	23.0	78.3	047	047	047	047
	575-3-60	STD/ MED	CRHEATER425A00	18.0	5	16.5	56.4	047	047	047	047
			CRHEATER426A00	24.8	5	22.8	77.7	047	047	047	047
		HIGH	CRHEATER425A00	18.0	5	16.5	56.4	047	047	047	047
			CRHEATER426A00	24.8	5	22.8	77.7	047	047	047	047

Electrical data (cont)

549K*08N Electric Heat Data — Without Non-Fused Disconnect

549K UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER	NOM. (kW)	STD SCCR kA	APPLICATION (kW)	APPLICATION OUTPUT (MBH)	SINGLE POINT OR JUNCTION KIT PART NUMBER CRSINGLEXXXA00			
								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)
549K*08	208/230-3-60	STD/ MED	CRHEATER411A00	10.4	5	7.8/9.6	26.7/32.6	049	049	049	049
			CRHEATER412A00	16	5	12.0/14.7	41.0/50.1	049	049	049	049
			CRHEATER414A00	25	5	18.8/23.0	64.1/78.3	051	051	051	051
			CRHEATER415A00	32	5	24.0/29.4	82.0/100.3	051	051	051	051
			CRHEATER416A00	42.4	5	31.8/38.9	108.7/132.9	053	053	053	053
		HIGH	CRHEATER411A00	10.4	5	7.8/9.6	26.7/32.6	049	049	049	049
			CRHEATER412A00	16	5	12.0/14.7	41.0/50.1	049	049	049	049
			CRHEATER414A00	25	5	18.8/23.0	64.1/78.3	051	051	051	051
			CRHEATER415A00	32	5	24.0/29.4	82.0/100.3	051	051	051	051
			CRHEATER416A00	42.4	5	31.8/38.9	108.7/132.9	053	053	053	053
	460-3-60	STD/ MED	CRHEATER419A00	11.5	5	10.6	36.0	047	047	047	047
			CRHEATER420A00	15	5	13.8	47.0	047	047	047	047
			CRHEATER421A00	25	5	23.0	78.3	047	047	047	052
			CRHEATER422A00	33	5	30.3	103.4	052	052	052	052
			CRHEATER423A00	41.7	5	38.3	130.7	052	052	052	052
		HIGH	CRHEATER419A00	11.5	5	10.6	36.0	047	047	047	047
			CRHEATER420A00	15	5	13.8	47.0	047	047	047	047
			CRHEATER421A00	25	5	23.0	78.3	047	047	047	052
			CRHEATER422A00	33	5	30.3	103.4	052	052	052	052
			CRHEATER423A00	41.7	5	38.3	130.7	052	052	052	052
	575-3-60	STD/ MED	CRHEATER425A00	18	5	16.5	56.4	047	047	047	047
			CRHEATER427A00	36	5	33.1	112.8	047	052	047	052
		HIGH	CRHEATER425A00	18	5	16.5	56.4	047	047	047	047
			CRHEATER427A00	36	5	33.1	112.8	047	052	047	052

Electrical data (cont)

549K*08N Electric Heat Data — With Non-Fused Disconnect

549K UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER	NOM. (kW)	STD SCCR kA	APPLICATION (kW)	APPLICATION OUTPUT (MBH)	SINGLE POINT OR JUNCTION KIT PART NUMBER CRSINGLEXXXA00			
								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)
549K*08	208/230-3-60	STD/ MED	CRHEATER411A00	10.4	5	7.8/9.6	26.7/32.6	049	049	049	049
			CRHEATER412A00	16.0	5	12.0/14.7	41.0/50.1	049	049	049	049
			CRHEATER414A00	25.0	5	18.8/23.0	64.1/78.3	051	051	051	051
			CRHEATER415A00	32.0	5	24.0/29.4	82.0/100.3	051	051	051	051
			CRHEATER416A00	42.4	5	31.8/38.9	108.7/132.9	053	053	053	053
		HIGH	CRHEATER411A00	10.4	5	7.8/9.6	26.7/32.6	049	049	049	049
			CRHEATER412A00	16.0	5	12.0/14.7	41.0/50.1	049	049	049	049
			CRHEATER414A00	25.0	5	18.8/23.0	64.1/78.3	051	051	051	051
			CRHEATER415A00	32.0	5	24.0/29.4	82.0/100.3	051	051	051	051
			CRHEATER416A00	42.4	5	31.8/38.9	108.7/132.9	053	053	053	053
	460-3-60	STD/ MED	CRHEATER419A00	11.5	5	10.6	36.0	047	047	047	047
			CRHEATER420A00	15.0	5	13.8	47.0	047	047	047	047
			CRHEATER421A00	25.0	5	23.0	78.3	047	047	047	052
			CRHEATER422A00	33.0	5	30.3	103.4	052	052	052	052
			CRHEATER423A00	41.7	5	38.3	130.7	052	052	052	052
		HIGH	CRHEATER419A00	11.5	5	10.6	36.0	047	047	047	047
			CRHEATER420A00	15.0	5	13.8	47.0	047	047	047	047
			CRHEATER421A00	25.0	5	23.0	78.3	047	047	047	052
			CRHEATER422A00	33.0	5	30.3	103.4	052	052	052	052
			CRHEATER423A00	41.7	5	38.3	130.7	052	052	052	052
	575-3-60	STD/ MED	CRHEATER425A00	18.0	5	16.5	56.4	047	047	047	047
			CRHEATER427A00	36.0	5	33.1	112.8	047	052	047	052
		HIGH	CRHEATER425A00	18.0	5	16.5	56.4	047	047	047	047
			CRHEATER427A00	36.0	5	33.1	112.8	047	052	047	052

Electrical data (cont)

549K*09N Electric Heat Data — Without Non-Fused Disconnect

549K UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER	NOM. (kW)	STD SCCR kA	APPLICATION (kW)	APPLICATION OUTPUT (MBH)	SINGLE POINT OR JUNCTION KIT PART NUMBER CRSINGLEXXXA00			
								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)
549K*09	208/230-3-60	STD/ MED	CRHEATER411A00	10.4	5	7.8/9.6	26.7/32.6	049	049	049	049
			CRHEATER412A00	16	5	12.0/14.7	41.0/50.1	049	049	049	049
			CRHEATER414A00	25	5	18.8/23.0	64.1/78.3	051	051	051	051
			CRHEATER415A00	32	5	24.0/29.4	82.0/100.3	051	051	051	051
			CRHEATER416A00	42.4	5	31.8/38.9	108.7/132.9	053	053	053	053
		HIGH	CRHEATER411A00	10.4	5	7.8/9.6	26.7/32.6	049	049	049	051
			CRHEATER412A00	16	5	12.0/14.7	41.0/50.1	049	049	049	051
			CRHEATER414A00	25	5	18.8/23.0	64.1/78.3	051	051	051	053
			CRHEATER415A00	32	5	24.0/29.4	82.0/100.3	051	051	051	053
			CRHEATER416A00	42.4	5	31.8/38.9	108.7/132.9	053	053	053	054
	460-3-60	STD/ MED	CRHEATER419A00	11.5	5	10.6	36.0	047	047	047	047
			CRHEATER420A00	15	5	13.8	47.0	047	047	047	047
			CRHEATER421A00	25	5	23.0	78.3	052	052	052	052
			CRHEATER422A00	33	5	30.3	103.4	052	052	052	052
			CRHEATER423A00	41.7	5	38.3	130.7	052	052	052	052
		HIGH	CRHEATER419A00	11.5	5	10.6	36.0	047	047	047	047
			CRHEATER420A00	15	5	13.8	47.0	047	047	047	047
			CRHEATER421A00	25	5	23.0	78.3	052	052	052	052
			CRHEATER422A00	33	5	30.3	103.4	052	052	052	052
			CRHEATER423A00	41.7	5	38.3	130.7	052	052	052	052
	575-3-60	STD/ MED	CRHEATER425A00	18	5	16.5	56.4	047	047	047	047
			CRHEATER427A00	36	5	33.1	112.8	052	052	052	052
		HIGH	CRHEATER425A00	18	5	16.5	56.4	047	047	047	047
			CRHEATER427A00	36	5	33.1	112.8	052	052	052	052

Electrical data (cont)

549K*09N Electric Heat Data — With Non-Fused Disconnect

549K UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER	NOM. (kW)	STD SCCR kA	APPLICATION (kW)	APPLICATION OUTPUT (MBH)	SINGLE POINT OR JUNCTION KIT PART NUMBER CRSINGLEXXXA00			
								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)
549K*09	208/230-3-60	STD/ MED	CRHEATER411A00	10.4	5	7.8/9.6	26.7/32.6	049	049	049	049
			CRHEATER412A00	16.0	5	12.0/14.7	41.0/50.1	049	049	049	049
			CRHEATER414A00	25.0	5	18.8/23.0	64.1/78.3	051	051	051	051
			CRHEATER415A00	32.0	5	24.0/29.4	82.0/100.3	051	051	051	051
			CRHEATER416A00	42.4	5	31.8/38.9	108.7/132.9	053	053	053	053
		HIGH	CRHEATER411A00	10.4	5	7.8/9.6	26.7/32.6	049	049	049	051
			CRHEATER412A00	16.0	5	12.0/14.7	41.0/50.1	049	049	049	051
			CRHEATER414A00	25.0	5	18.8/23.0	64.1/78.3	051	051	051	053
			CRHEATER415A00	32.0	5	24.0/29.4	82.0/100.3	051	051	051	053
			CRHEATER416A00	42.4	5	31.8/38.9	108.7/132.9	053	053	053	054
	460-3-60	STD/ MED	CRHEATER419A00	11.5	5	10.6	36.0	047	047	047	047
			CRHEATER420A00	15.0	5	13.8	47.0	047	047	047	047
			CRHEATER421A00	25.0	5	23.0	78.3	052	052	052	052
			CRHEATER422A00	33.0	5	30.3	103.4	052	052	052	052
			CRHEATER423A00	41.7	5	38.3	130.7	052	052	052	052
		HIGH	CRHEATER419A00	11.5	5	10.6	36.0	047	047	047	047
			CRHEATER420A00	15.0	5	13.8	47.0	047	047	047	047
			CRHEATER421A00	25.0	5	23.0	78.3	052	052	052	052
			CRHEATER422A00	33.0	5	30.3	103.4	052	052	052	052
			CRHEATER423A00	41.7	5	38.3	130.7	052	052	052	052
	575-3-60	STD/ MED	CRHEATER425A00	18.0	5	16.5	56.4	047	047	047	047
			CRHEATER427A00	36.0	5	33.1	112.8	052	052	052	052
		HIGH	CRHEATER425A00	18.0	5	16.5	56.4	047	047	047	047
			CRHEATER427A00	36.0	5	33.1	112.8	052	052	052	052

Electrical data (cont)

549K*12N Electric Heat Data — Without Non-Fused Disconnect

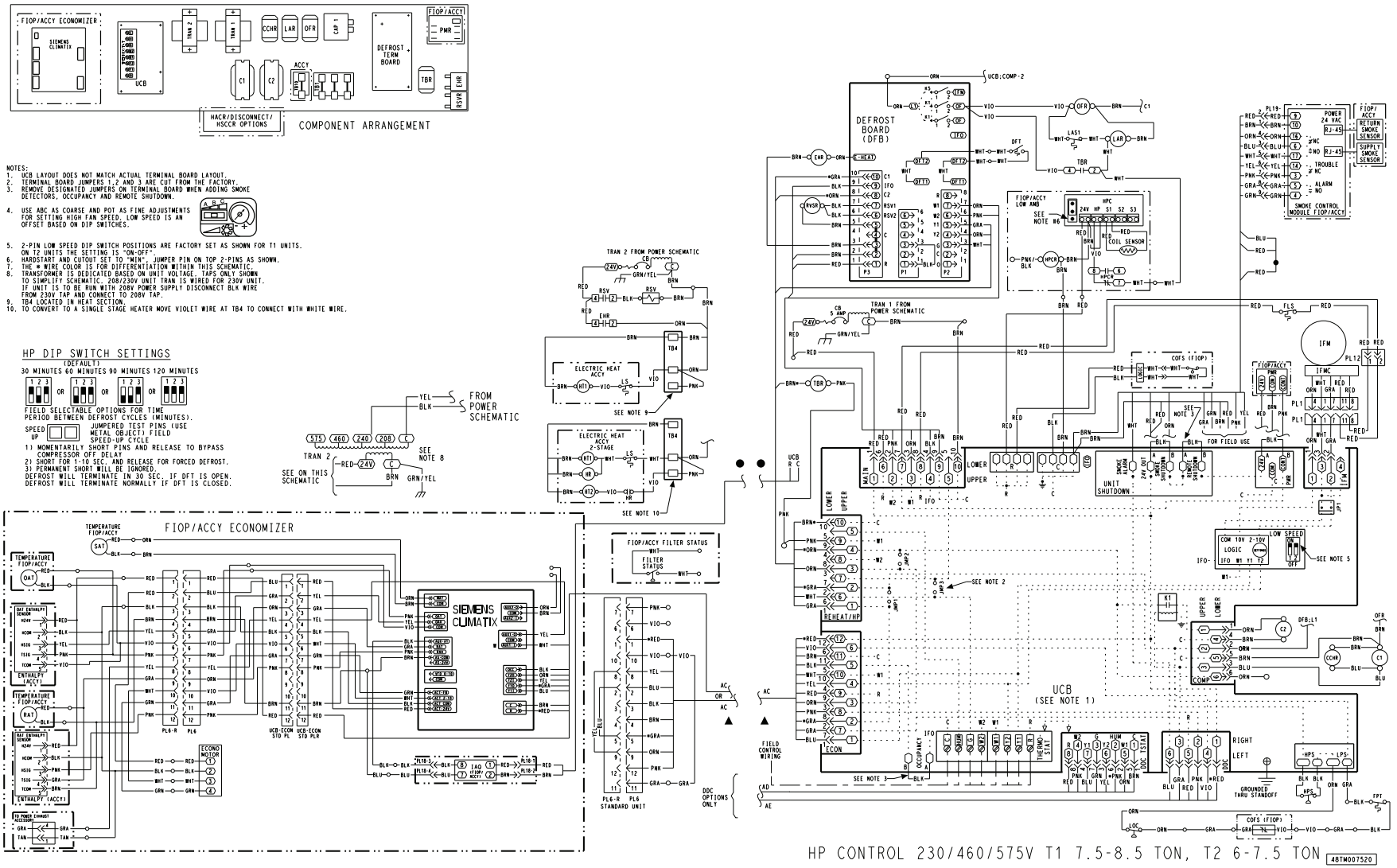
549K UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER	NOM. (kW)	STD SCCR kA	APPLICATION (kW)	APPLICATION OUTPUT (MBH)	SINGLE POINT OR JUNCTION KIT PART NUMBER CRSINGLEXXXA00			
								NO C.O. OR UNPOWERED C.O.		w/PWRD C.O.	
								NO P.E.	w/P.E. (pwrd fr/unit)	NO P.E.	w/P.E. (pwrd fr/unit)
549K*12	208/230-3-60	STD/ MED	CRHEATER411A00	10.4	5	7.8/9.6	26.7/32.6	049	049	049	051
			CRHEATER412A00	16	5	12.0/14.7	41.0/50.1	049	049	049	051
			CRHEATER415A00	32	5	24.0/29.4	82.0/100.3	051	051	051	053
			CRHEATER416A00	42.4	5	31.8/38.9	108.7/132.9	053	053	053	054
			CRHEATER417A00	50	5	37.6/45.9	128.1/156.7	053	053	053	054
		HIGH	CRHEATER411A00	10.4	5	7.8/9.6	26.7/32.6	051	051	051	051
			CRHEATER412A00	16	5	12.0/14.7	41.0/50.1	051	051	051	051
			CRHEATER415A00	32	5	24.0/29.4	82.0/100.3	053	053	053	053
			CRHEATER416A00	42.4	5	31.8/38.9	108.7/132.9	054	054	054	054
			CRHEATER417A00	50	5	37.6/45.9	128.1/156.7	054	054	054	054
	460-3-60	STD/ MED	CRHEATER420A00	15	5	13.8	47.0	047	047	047	047
			CRHEATER422A00	33	5	30.3	103.4	052	052	052	052
			CRHEATER423A00	41.7	5	38.3	130.7	052	052	052	052
			CRHEATER424A00	50	5	45.9	156.7	052	052	052	052
		HIGH	CRHEATER420A00	15	5	13.8	47.0	047	047	047	047
			CRHEATER422A00	33	5	30.3	103.4	052	052	052	052
			CRHEATER423A00	41.7	5	38.3	130.7	052	052	052	052
			CRHEATER424A00	50	5	45.9	156.7	052	052	052	052
	575-3-60	STD/ MED	CRHEATER425A00	18	5	16.5	56.4	047	047	047	047
			CRHEATER427A00	36	5	33.1	112.8	052	052	052	052
			CRHEATER428A00	50	5	45.9	156.7	052	052	052	052
		HIGH	CRHEATER425A00	18	5	16.5	56.4	047	047	047	047
			CRHEATER427A00	36	5	33.1	112.8	052	052	052	052
			CRHEATER428A00	50	5	45.9	156.7	052	052	052	052

Electrical data (cont)

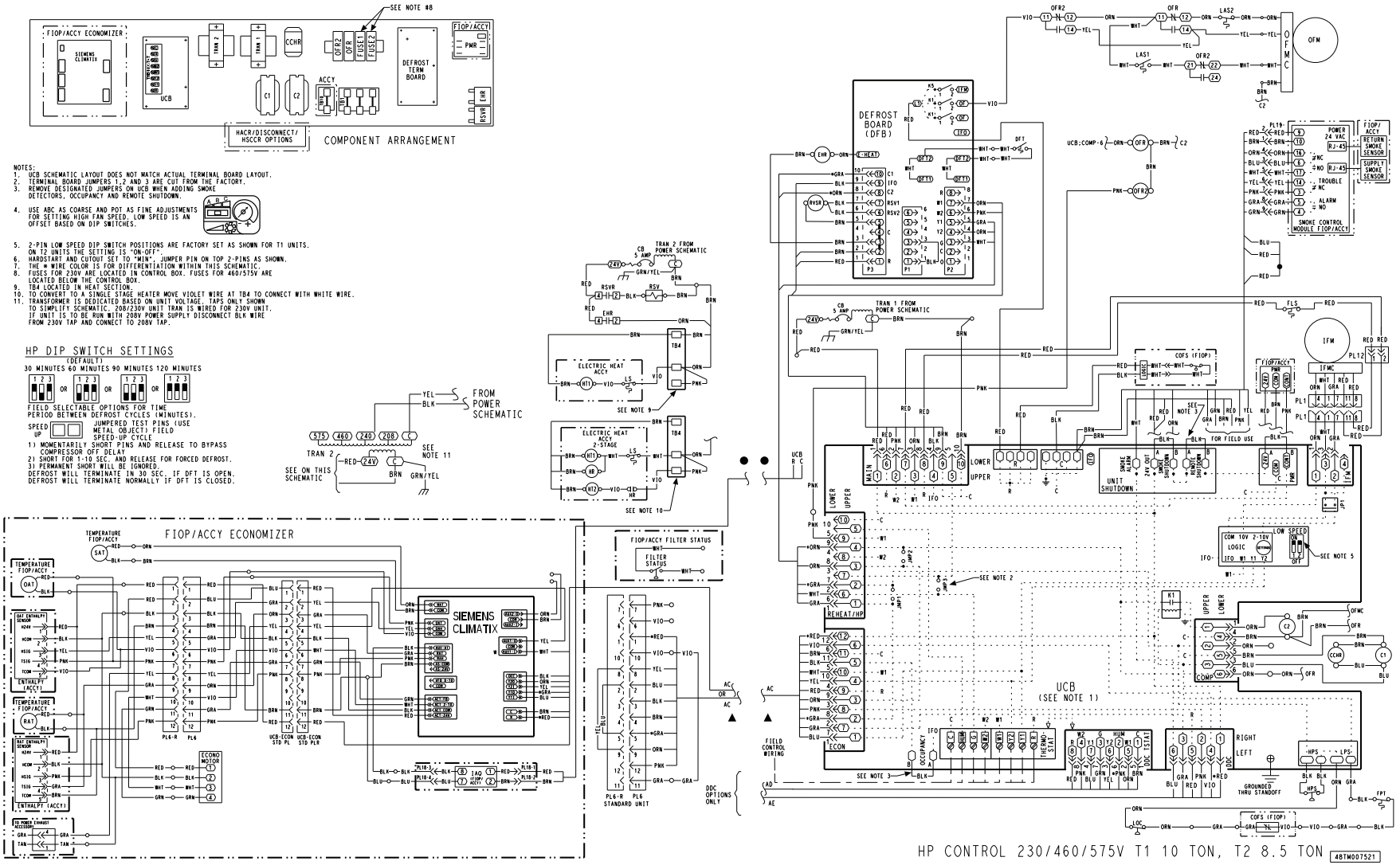
549K*12N Electric Heat Data — With Non-Fused Disconnect

549K UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER	NOM. (kW)	STD SCCR kA	APPLICATION (kW)	APPLICATION OUTPUT (MBH)	SINGLE POINT OR JUNCTION KIT PART NUMBER CRSINGLEXXXA00			
								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)
549K*12	208/230-3-60	STD/ MED	CRHEATER411A00	10.4	5	7.8/9.6	26.7/32.6	049	049	049	051
			CRHEATER412A00	16.0	5	12.0/14.7	41.0/50.1	049	049	049	051
			CRHEATER415A00	32.0	5	24.0/29.4	82.0/100.3	051	051	051	053
			CRHEATER416A00	42.4	5	31.8/38.9	108.7/132.9	053	053	053	054
			CRHEATER417A00	50.0	5	37.6/45.9	128.1/156.7	053	053	053	054
		HIGH	CRHEATER411A00	10.4	5	7.8/9.6	26.7/32.6	051	051	051	051
			CRHEATER412A00	16.0	5	12.0/14.7	41.0/50.1	051	051	051	051
			CRHEATER415A00	32.0	5	24.0/29.4	82.0/100.3	053	053	053	053
			CRHEATER416A00	42.4	5	31.8/38.9	108.7/132.9	054	054	054	054
			CRHEATER417A00	50.0	5	37.6/45.9	128.1/156.7	054	054	054	054
	460-3-60	STD/ MED	CRHEATER420A00	15.0	5	13.8	47.0	047	047	047	047
			CRHEATER422A00	33.0	5	30.3	103.4	052	052	052	052
			CRHEATER423A00	41.7	5	38.3	130.7	052	052	052	052
			CRHEATER424A00	50.0	5	45.9	156.7	052	052	052	052
		HIGH	CRHEATER420A00	15.0	5	13.8	47.0	047	047	047	047
			CRHEATER422A00	33.0	5	30.3	103.4	052	052	052	052
			CRHEATER423A00	41.7	5	38.3	130.7	052	052	052	052
			CRHEATER424A00	50.0	5	45.9	156.7	052	052	052	052
	575-3-60	STD/ MED	CRHEATER425A00	18.0	5	16.5	56.4	047	047	047	047
			CRHEATER427A00	36.0	5	33.1	112.8	052	052	052	052
			CRHEATER428A00	50.0	5	45.9	156.7	052	052	052	052
		HIGH	CRHEATER425A00	18.0	5	16.5	56.4	047	047	047	047
			CRHEATER427A00	36.0	5	33.1	112.8	052	052	052	052
			CRHEATER428A00	50.0	5	45.9	156.7	052	052	052	052

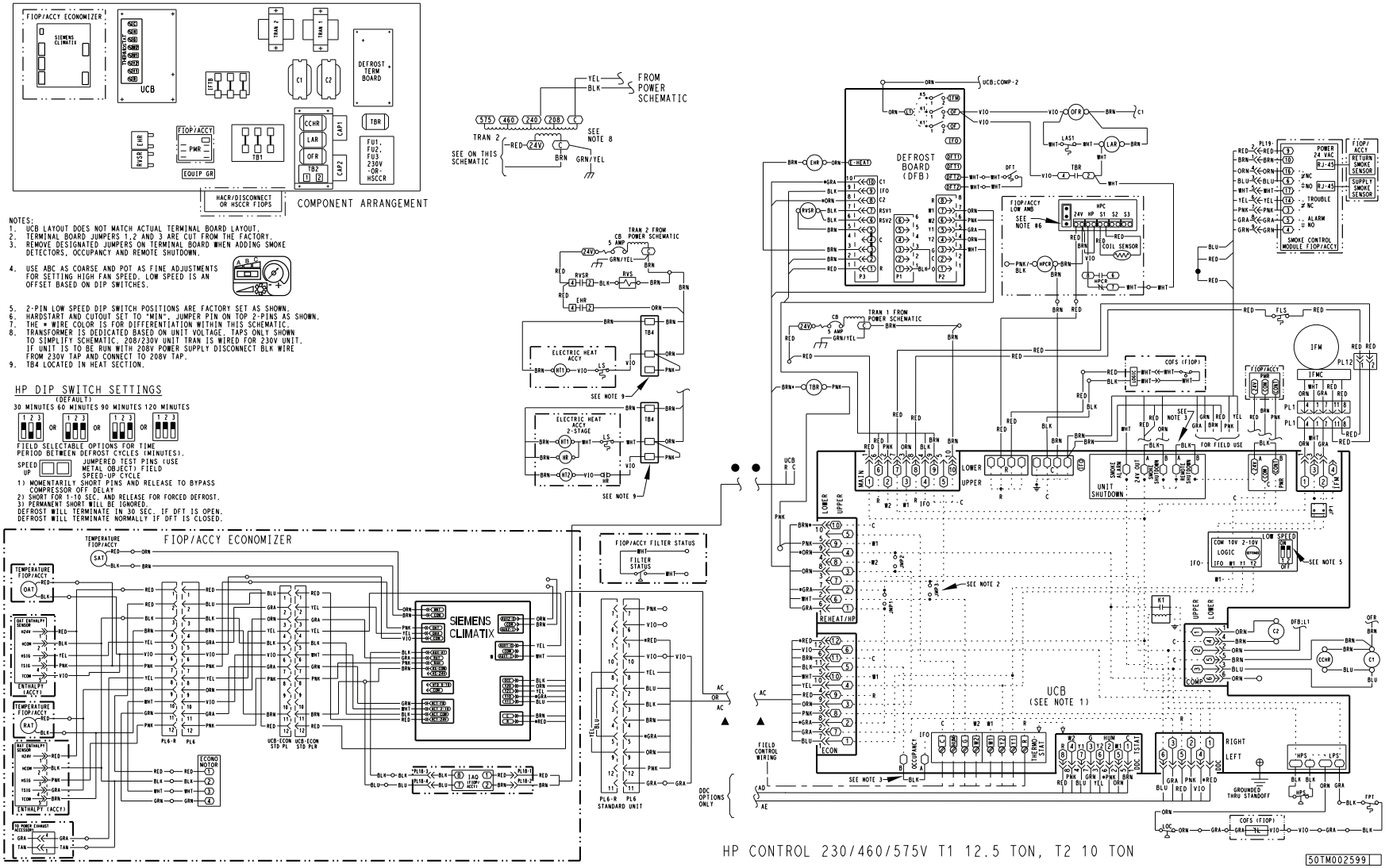
549K*07-08 Control Wiring Diagram, Electro-Mechanical with POL224 Controller



549K*09 Control Wiring Diagram, Electro-Mechanical with POL224 Controller



549K*12N Control Wiring Diagram, Electro-Mechanical with POL224 Controller



NOTES:
1. UCB LAYOUT DOES NOT MATCH ACTUAL TERMINAL BOARD LAYOUT.
2. TERMINAL BOARD JUMPERS 1,2 AND 3 ARE CUT FROM THE FACTORY.
3. REMOVE DESIGNATED JUMPERS ON TERMINAL BOARD WHEN ADDING SMOKE DETECTORS, OCCUPANCY AND REMOTE SHUTDOWN.
4. USE ABC AS COARSE AND POT AS FINE ADJUSTMENTS FOR SETTING HIGH FAN SPEED. LOW SPEED IS AN OFFSET BASED ON DIP SWITCHES.
5. 2-PIN LOW SPEED DIP SWITCH POSITIONS ARE FACTORY SET AS SHOWN.
6. HARDSTART AND CUTOUT SET TO "MIN", JUMPER PIN ON TOP 2-PINS AS SHOWN.
7. THE * WIRE COLOR IS FOR DIFFERENTIATION WITHIN THIS SCHEMATIC.
8. TRANSFORMER IS DEDICATED BASED ON UNIT VOLTAGE. TAPS ONLY SHOWN TO SIMPLIFY SCHEMATIC. 208/230V UNIT TRAN IS WIRED FOR 230V UNIT. IF UNIT IS TO BE RUN WITH 208V POWER SUPPLY DISCONNECT BLK WIRE FROM 230V TAP AND CONNECT TO 208V TAP.
9. TB4 LOCATED IN HEAT SECTION.

HP DIP SWITCH SETTINGS

(DEFAULT)

30 MINUTES 60 MINUTES 90 MINUTES 120 MINUTES

FIELD SELECTABLE OPTIONS FOR TIME PERIOD BETWEEN DEFROST CYCLES (MINUTES).

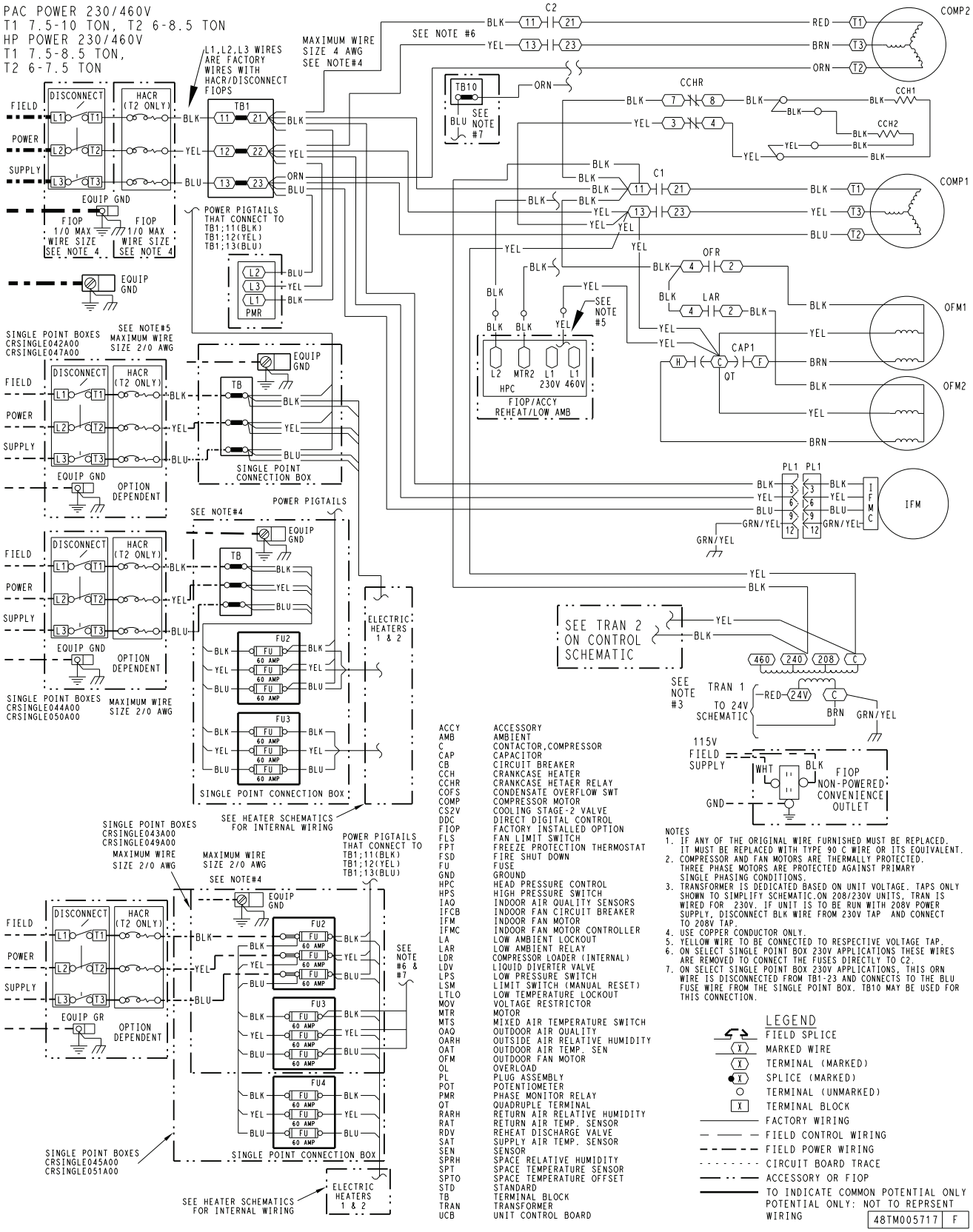
SPEED UP — JUMPERED TEST PINS (USE METAL OBJECT) FIELD SPEED-UP CYCLE

1) MOMENTARILY SHORT PINS AND RELEASE TO BYPASS COMPRESSOR OFF DELAY
2) SHORT FOR 1-10 SEC. AND RELEASE FOR FORCED DEFROST.
3) PERMANENT SHORT WILL BE IGNORED.

DEFROST WILL TERMINATE IN 30 SEC. IF DFT IS OPEN.
DEFROST WILL TERMINATE NORMALLY IF DFT IS CLOSED.

Typical wiring diagrams (cont)

549K*07-08N Power Wiring Diagram, 230/460V-3-60 Electro-Mechanical Shown



ACCY	ACCESSORY
AMB	AMBIENT
C	CONTACTOR,COMPRESSOR
CAP	CAPACITOR
CB	CIRCUIT BREAKER
CCH	CRANKCASE HEATER
CCHR	CRANKCASE HETAER RELAY
COFS	CONDENSATE OVERFLOW SWT
COMP	COMPRESSOR MOTOR
CS2V	COOLING STAGE-2 VALVE
DDC	DIRECT DIGITAL CONTROL
FIOP	FACTORY INSTALLED OPTION
FLS	FAN LIMIT SWITCH
FPT	FREEZE PROTECTION THERMOSTAT
FSD	FIRE SHUT DOWN
FU	FUSE
GND	GROUND
HPC	HEAD PRESSURE CONTROL
HPS	HIGH PRESSURE SWITCH
IAQ	INDOOR AIR QUALITY SENSORS
IFCB	INDOOR FAN CIRCUIT BREAKER
IFM	INDOOR FAN MOTOR
IFMC	INDOOR FAN MOTOR CONTROLLER
LA	LOW AMBIENT LOCKOUT
LAR	LOW AMBIENT RELAY
LDR	COMPRESSOR LOADER (INTERNAL)
LDV	LIQUID DIVERTER VALVE
LPS	LOW PRESSURE SWITCH
LSM	LIMIT SWITCH (MANUAL RESET)
LTLO	LOW TEMPERATURE LOCKOUT
MOV	VOLTAGE RESTRICTOR
MTR	MOTOR
MTS	MIXED AIR TEMPERATURE SWITCH
OAQ	OUTDOOR AIR QUALITY
OARH	OUTSIDE AIR RELATIVE HUMIDITY
OAT	OUTDOOR AIR TEMP. SEN
OFM	OUTDOOR FAN MOTOR
OL	OVERLOAD
PL	PLUG ASSEMBLY
POT	POTENTIOMETER
PMR	PHASE MONITOR RELAY
QT	QUADRUPLE TERMINAL
RARH	RETURN AIR RELATIVE HUMIDITY
RAT	RETURN AIR TEMP. SENSOR
RDV	REHEAT DISCHARGE VALVE
SAT	SUPPLY AIR TEMP. SENSOR
SEN	SENSOR
SPRH	SPACE RELATIVE HUMIDITY
SPT	SPACE TEMPERATURE SENSOR
SPTO	SPACE TEMPERATURE OFFSET
STD	STANDARD
TB	TERMINAL BLOCK
TRAN	TRANSFORMER
UCB	UNIT CONTROL BOARD

NOTES
1. IF ANY OF THE ORIGINAL WIRE FURNISHED MUST BE REPLACED, IT MUST BE REPLACED WITH TYPE 90 C WIRE OR ITS EQUIVALENT.
2. COMPRESSOR AND FAN MOTORS ARE THERMALLY PROTECTED. THREE PHASE MOTORS ARE PROTECTED AGAINST PRIMARY SINGLE PHASING CONDITIONS.
3. TRANSFORMER IS DEDICATED BASED ON UNIT VOLTAGE. TAPS ONLY SHOWN TO SIMPLIFY SCHEMATIC.ON 208/230V UNITS, TRAN IS WIRED FOR 230V. IF UNIT IS TO BE RUN WITH 208V POWER SUPPLY, DISCONNECT BLK WIRE FROM 230V TAP AND CONNECT TO 208V TAP.
4. USE COPPER CONDUCTOR ONLY.
5. YELLOW WIRE TO BE CONNECTED TO RESPECTIVE VOLTAGE TAP.
6. ON SELECT SINGLE POINT BOX 230V APPLICATIONS THESE WIRES ARE REMOVED TO CONNECT THE FUSES DIRECTLY TO C2.
7. ON SELECT SINGLE POINT BOX 230V APPLICATIONS, THIS ORN WIRE IS DISCONNECTED FROM TB1-23 AND CONNECTS TO THE BLU FUSE WIRE FROM THE SINGLE POINT BOX. TB10 MAY BE USED FOR THIS CONNECTION.

LEGEND

	FIELD SPLICE
X	MARKED WIRE
X	TERMINAL (MARKED)
X	SPLICE (MARKED)
	TERMINAL (UNMARKED)
X	TERMINAL BLOCK
	FACTORY WIRING
	FIELD CONTROL WIRING
	FIELD POWER WIRING
	CIRCUIT BOARD TRACE
	ACCESSORY OR FIOP
	TO INDICATE COMMON POTENTIAL ONLY POTENTIAL ONLY: NOT TO REPRSENT WIRING

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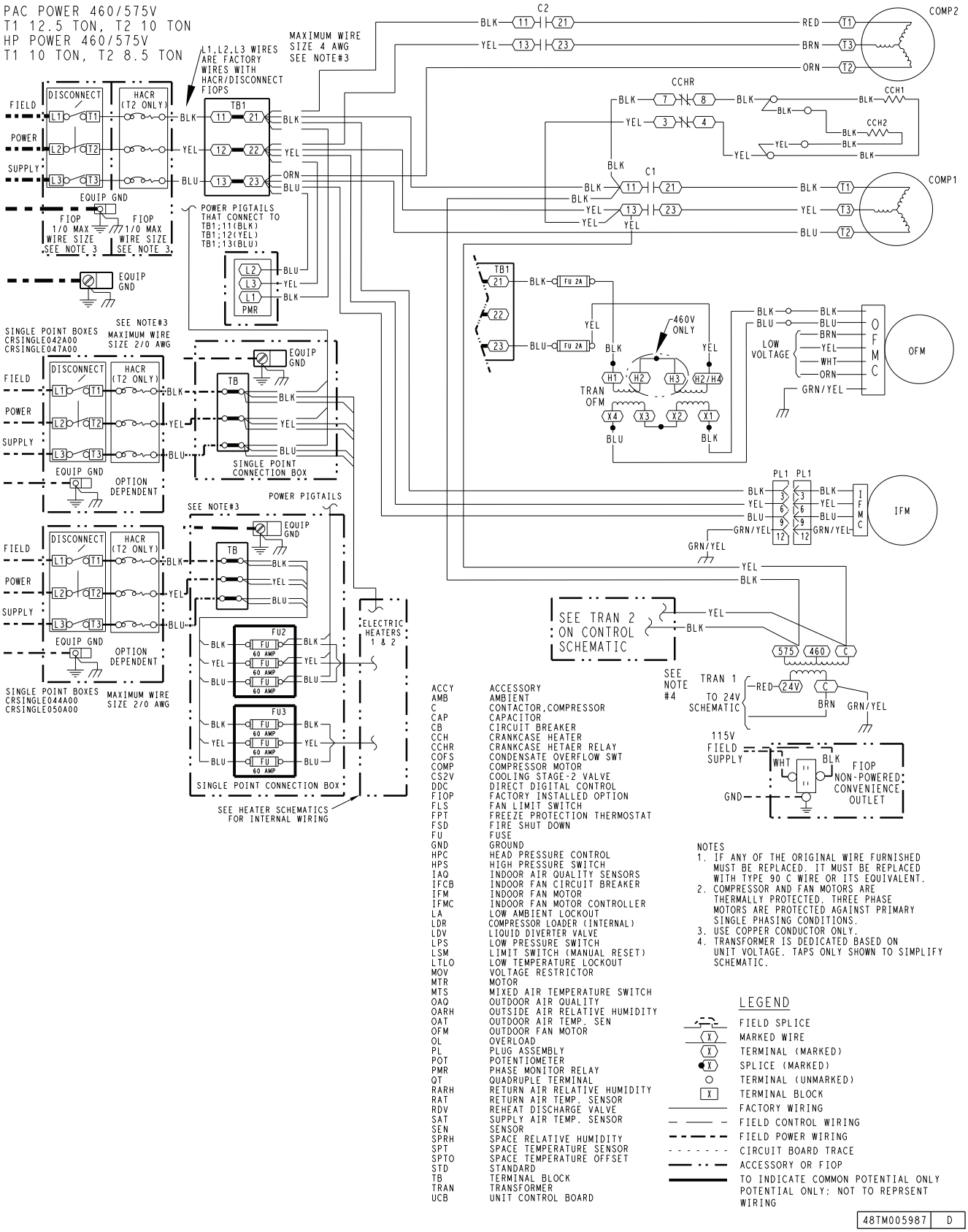
Typical wiring diagrams (cont)

549K*09N Power Wiring Diagram, 460/575V-3-60 Shown



ACCY	ACCESSORY
AMB	AMBIENT
C	CONTACTOR,COMPRESSOR
CAP	CAPACITOR
CB	CIRCUIT BREAKER
CCH	CRANKCASE HEATER
CCHR	CRANKCASE HETAER RELAY
COFS	CONDENSATE OVERFLOW SWT
COMP	COMPRESSOR MOTOR
CS2V	COOLING STAGE-2 VALVE
DDC	DIRECT DIGITAL CONTROL
FIOP	FACTORY INSTALLED OPTION
FLS	FAN LIMIT SWITCH
FPT	FREEZE PROTECTION THERMOSTAT
FSD	FIRE SHUT DOWN
FU	FUSE
GND	GROUND
HPC	HEAD PRESSURE CONTROL
HPS	HIGH PRESSURE SWITCH
IAQ	INDOOR AIR QUALITY SENSORS
IFCB	INDOOR FAN CIRCUIT BREAKER
IFM	INDOOR FAN MOTOR
IFMC	INDOOR FAN MOTOR CONTROLLER
LA	LOW AMBIENT LOCKOUT
LDR	COMPRESSOR LOADER (INTERNAL)
LDV	LIQUID DIVERTER VALVE
LPS	LOW PRESSURE SWITCH
LSM	LIMIT SWITCH (MANUAL RESET)
LTLO	LOW TEMPERATURE LOCKOUT
MOV	VOLTAGE RESTRICTOR
MTR	MOTOR
MTS	MIXED AIR TEMPERATURE SWITCH
OAQ	OUTDOOR AIR QUALITY
OARH	OUTSIDE AIR RELATIVE HUMIDITY
OAT	OUTDOOR AIR TEMP. SEN
OFM	OUTDOOR FAN MOTOR
OL	OVERLOAD
PL	PLUG ASSEMBLY
POT	POTENTIOMETER
PMR	PHASE MONITOR RELAY
QT	QUADRUPLE TERMINAL
RARH	RETURN AIR RELATIVE HUMIDITY
RAT	RETURN AIR TEMP. SENSOR
RDV	REHEAT DISCHARGE VALVE
SAT	SUPPLY AIR TEMP. SENSOR
SEN	SENSOR
SPRH	SPACE RELATIVE HUMIDITY
SPT	SPACE TEMPERATURE SENSOR
SPTO	SPACE TEMPERATURE OFFSET
STD	STANDARD
TB	TERMINAL BLOCK
TRAN	TRANSFORMER
UCB	UNIT CONTROL BOARD

NOTES
1. IF ANY OF THE ORIGINAL WIRE FURNISHED MUST BE REPLACED. IT MUST BE REPLACED WITH TYPE 90 C WIRE OR ITS EQUIVALENT.
2. COMPRESSOR AND FAN MOTORS ARE THERMALLY PROTECTED. THREE PHASE MOTORS ARE PROTECTED AGAINST PRIMARY SINGLE PHASING CONDITIONS.
3. USE COPPER CONDUCTOR ONLY.
4. TRANSFORMER IS DEDICATED BASED ON UNIT VOLTAGE. TAPS ONLY SHOWN TO SIMPLIFY SCHEMATIC.

LEGEND

	FIELD SPLICE
X	MARKED WIRE
X	TERMINAL (MARKED)
X	SPLICE (MARKED)
	TERMINAL (UNMARKED)
X	TERMINAL BLOCK
	FACTORY WIRING
	FIELD CONTROL WIRING
	FIELD POWER WIRING
	CIRCUIT BOARD TRACE
	ACCESSORY OR FIOP
	TO INDICATE COMMON POTENTIAL ONLY POTENTIAL ONLY: NOT TO REPRSENT WIRING

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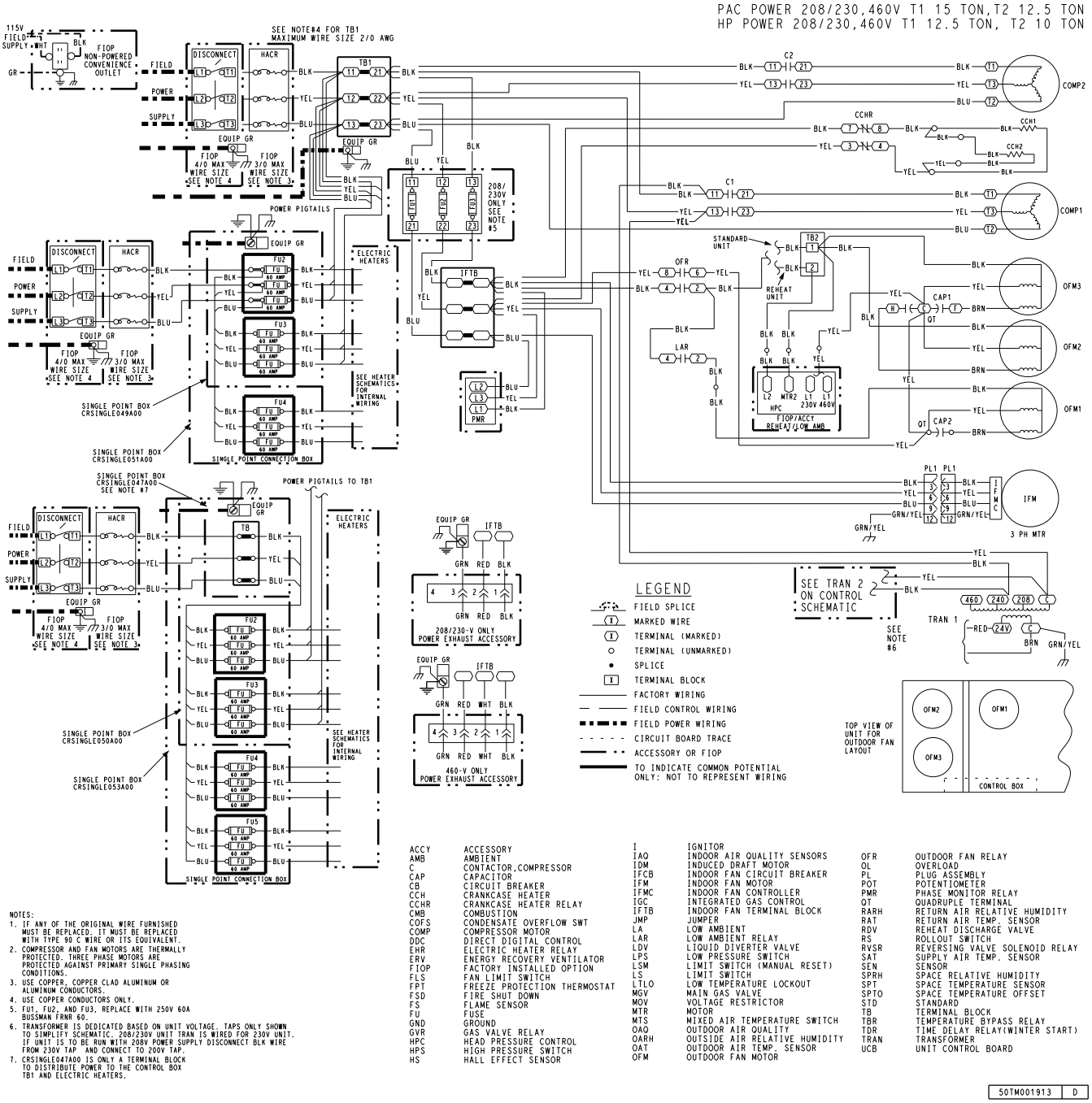
Typical wiring diagrams (cont)

549K*12N Power Wiring Diagram, 208/230, 460V-3-60 Shown



NOTES:
1. IF ANY OF THE ORIGINAL WIRE FURNISHED MUST BE REPLACED, IT MUST BE REPLACED WITH TYPE 90 C WIRE OR ITS EQUIVALENT.
2. COMPRESSOR AND FAN MOTORS ARE THERMALLY PROTECTED. THREE PHASE MOTORS ARE PROTECTED AGAINST PRIMARY SINGLE PHASING CONDITIONS.
3. USE COPPER, COPPER CLAD ALUMINUM OR ALUMINUM CONDUCTORS.
4. USE COPPER CONDUCTORS ONLY.
5. FU1, FU2, AND FU3, REPLACE WITH 250V 60A BUSSMAN FRNR 60.
6. TRANSFORMER IS DEDICATED BASED ON UNIT VOLTAGE. TAPS ONLY SHOWN TO SIMPLIFY SCHEMATIC. 208/230V UNIT TRAN IS WIRED FOR 230V UNIT. IF UNIT IS TO BE RUN WITH 208V POWER SUPPLY DISCONNECT BLK WIRE FROM 230V TAP AND CONNECT TO 200V TAP.
7. CRSINGLE047A00 IS ONLY A TERMINAL BLOCK TO DISTRIBUTE POWER TO THE CONTROL BOX TB1 AND ELECTRIC HEATERS.

ACCY	ACCESSORY
AMB	AMBIENT
C	CONTACTOR,COMPRESSOR
CAP	CAPACITOR
CB	CIRCUIT BREAKER
CCH	CRANKCASE HEATER
CCHR	CRANKCASE HEATER RELAY
CMB	COMBUSTION
COFS	CONDENSATE OVERFLOW SWT
COMP	COMPRESSOR MOTOR
DDC	DIRECT DIGITAL CONTROL
EHR	ELECTRIC HEATER RELAY
ERV	ENERGY RECOVERY VENTILATOR
FIOP	FACTORY INSTALLED OPTION
FLS	FAN LIMIT SWITCH
FPT	FREEZE PROTECTION THERMOSTAT
FSD	FIRE SHUT DOWN
FS	FLAME SENSOR
FU	FUSE
GND	GROUND
GVR	GAS VALVE RELAY
HPC	HEAD PRESSURE CONTROL
HPS	HIGH PRESSURE SWITCH
HS	HALL EFFECT SENSOR
I	IGNITOR
IAQ	INDOOR AIR QUALITY SENSORS
IDM	INDUCED DRAFT MOTOR
IFCB	INDOOR FAN CIRCUIT BREAKER
IFM	INDOOR FAN MOTOR
IFMC	INDOOR FAN CONTROLLER
IGC	INTEGRATED GAS CONTROL
IFTB	INDOOR FAN TERMINAL BLOCK
JMP	JUMPER
LA	LOW AMBIENT
LAR	LOW AMBIENT RELAY
LDV	LIQUID DIVERTER VALVE
LPS	LOW PRESSURE SWITCH
LSM	LIMIT SWITCH (MANUAL RESET)
LS	LIMIT SWITCH
LTLO	LOW TEMPERATURE LOCKOUT
MGV	MAIN GAS VALVE
MOV	VOLTAGE RESTRICTOR
MTR	MOTOR
MTS	MIXED AIR TEMPERATURE SWITCH
OAQ	OUTDOOR AIR QUALITY
OARH	OUTSIDE AIR RELATIVE HUMIDITY
OAT	OUTDOOR AIR TEMP. SENSOR
OFM	OUTDOOR FAN MOTOR
OFR	OUTDOOR FAN RELAY
OL	OVERLOAD
PL	PLUG ASSEMBLY
POT	POTENTIOMETER
PMR	PHASE MONITOR RELAY
QT	QUADRUPLE TERMINAL
RARH	RETURN AIR RELATIVE HUMIDITY
RAT	RETURN AIR TEMP. SENSOR
RDV	REHEAT DISCHARGE VALVE
RS	ROLLOUT SWITCH
RVSR	REVERSING VALVE SOLENOID RELAY
SAT	SUPPLY AIR TEMP. SENSOR
SEN	SENSOR
SPRH	SPACE RELATIVE HUMIDITY
SPT	SPACE TEMPERATURE SENSOR
SPTO	SPACE TEMPERATURE OFFSET
STD	STANDARD
TB	TERMINAL BLOCK
TBR	TEMPERATURE BYPASS RELAY
TDR	TIME DELAY RELAY(WINTER START)
TRAN	TRANSFORMER
UCB	UNIT CONTROL BOARD

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Sequence of operation

General

The sequence below describes the sequence of operation for an electromechanical unit with and without a factory-installed EconomizerONE (POL224 controller; called "economizer" in this sequence). For information regarding a direct digital controller, see the start-up, operations, and troubleshooting manual for the applicable controller.

Electromechanical units with no economizer

Cooling

When the thermostat calls for cooling, terminals G and Y1 are energized. The indoor fan will run at the low fan speed and the compressor contactor (CC) is energized causing the compressor and outdoor fan to run. The low indoor fan speed is 50% of the user set fan speed and the compressor will run at partial capacity.

If additional cooling is needed, the thermostat will add the call for Y2. This will increase the indoor fan speed to the user set fan speed and energize the compressor loader for full compressor capacity. The outdoor fan is the same speed for Y1 and Y2.

When the thermostat removes the call for Y2 but leaves the Y1, the indoor fan will reduce speed to 50% of the user set fan speed, the compressor loader will turn off, and the outdoor fan will remain on. When the thermostat removes the call for Y1 the compressor contactor will de-energize shutting down the compressor and the outdoor fan. When the thermostat removes the call for G, the indoor fan will turn off after the specific unit fan off delay.

NOTE: Per ASHRAE 90.1-2019 and IECC-2018 standards, during the first stage of cooling operation the Unit Control Board (UCB) will adjust the fan motor speed to provide 66% or less of the total cfm established for the unit.

Defrost

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

Heating

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

If the space temperature continues to fall while W1 is energized, W2 will be energized with 24V, and the heater contactor(s) (HC) will be energized, which will energize the electric heater(s).

When the space thermostat is satisfied, W2 will be de-energized first, and the electric heater(s) will be de-energized. Upon a further rise in space temperature, W1 will be de-energized.

IMPORTANT: The thermostat must be configured for Electric Heat so it will energize G with the W1 call.

Electromechanical units with factory-installed EconomizerONE

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 EconomizerONE 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 (7°C), then the outdoor-air damper position will be decreased to the minimum position. If the mixed-air temperature continues to fall, the outdoor-air damper will close. Control returns to normal once the mixed-air temperature rises above 48°F (9°C). The power exhaust fans will be energized and de-energized, if installed, as the outdoor-air damper opens and closes.

If field-installed accessory CO_2 sensors are connected to the EconomizerONE control, a demand controlled ventilation strategy will begin to operate. As the CO_2 level in the zone increases above the CO_2 set-point (on the EconomizerONE controller), the minimum position of the damper will be increased proportionally until the Maximum Ventilation setting is reached. As the CO_2 level decreases because of the increase in fresh air, the outdoor-air damper will follow the higher demand condition from either the DCV mode or from the free cooling mode. For EconomizerONE 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 EconomizerONE 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 EconomizerONE damper to the minimum position.

On the initial power to the EconomizerONE 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 90 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 (dry bulb, outdoor enthalpy, differential dry bulb, or differential enthalpy), then the control will modulate the dampers open and closed to maintain the mixed-air temperature set-point 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 set-point. The EconomizerONE damper will be open at maximum position.

Two-Speed Note: The EconomizerONE controller will adjust the damper position as the Indoor Fan Speed changes, per its configured values.

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.

Application data

Minimum operating ambient temperature (cooling)

In mechanical cooling mode, your Bryant rooftop unit can safely operate down to an outdoor ambient temperature of 40°F (4°C) [0°F (–18°C) for size 09 models]. It is possible to provide cooling at lower outdoor ambient temperatures by using less outside air, economizers, and/or accessory low ambient kits.

Maximum operating ambient temperature (cooling)

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

Multiple motor and drive packages

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 are available, factory installed, to handle nearly any application.

Minimum and maximum airflow (heating and cooling)

To maintain safe and reliable operation of your rooftop, operate within the heating airflow limits during heating mode and cooling airflow limits during cooling mode. 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 and unsafe heating operation. Heating and cooling limitations differ when evaluating operating CFM, minimum value is the HIGHER of the cooling and heating minimum CFM values published on page 6 and the maximum value is the LOWER of the cooling and heating maximum values published on page 6.

Heating-to-cooling changeover

Your unit will automatically change from heating to cooling mode when using a thermostat with an auto-changeover feature.

Airflow

All units are draw-though in cooling mode and blow-through in heating 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, brake horsepower (bhp)

Due to internal design of Bryant units, the air path, and specially designed motors, the full horsepower (maximum continuous bhp) band, as listed in the Fan Performance tables, can be used with the utmost confidence. There is no need for extra safety factors, as Bryant 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 is not necessarily better. While an air conditioner needs to have enough capacity to meet the design loads, it does not need excess capacity. In fact, 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, are all signs of oversizing air conditioners. Oversizing the air conditioner leads to poor humidity control, reduced efficiency, higher utility bills, larger indoor temperature swings, excessive noise, and increased wear and tear on the air conditioner.

Rather than oversizing an air conditioner, engineers should "right-size" or even slightly "under-size" air conditioners. Correctly sizing an air conditioner controls humidity better; promotes efficiency; reduces utility bills; extends equipment life, and maintains even, comfortable temperatures. Please contact your local Bryant representative for assistance.

Low ambient applications

The optional Bryant economizer can adequately 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 0°F (–18°C) using the recommended accessory low ambient controller.

NOTE: 0°F (–18°C) is standard on size 09 models.

Guide specifications

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

Rooftop Packaged Heat Pump

HVAC Guide Specifications

Size Range: **6 to 10 Nominal Tons**

Bryant Model Number: 549K*07-12

Part 1 — (23 06 80) Schedules for Decentralized HVAC Equipment

1.01 (23 06 80.13) Decentralized Unitary HVAC Equipment Schedule:

A. (23 06 80.13.A.) Rooftop unit (RTU) schedule:

1. Schedule is per the project specification requirements.

Part 2 — (23 07 16) HVAC equipment insulation

2.01 (23 07 16.13) Decentralized, Rooftop Units:

A. (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.

B. (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.

Part 3 — (23 09 13) Instrumentation and control devices for HVAC

3.01 (23 09 13.13) Sensors and Transmitters:

A. (23 09 13.13.A.) Thermostats:

1. Thermostat must
   a. have capability to energize 2 different stages of cooling, and 2 different stages of heating.
   b. be heat pump design and include capability for occupancy scheduling.

Part 4 — (23 09 33) Electric and Electronic Control System for HVAC

4.01 (23 09 33.13) Decentralized, Rooftop Units:

A. (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 Unit Control Board to conveniently and safely provide connection points for vital control functions such as: smoke detectors, phase monitor, economizer, thermostat, and low and high pressure switches. Controller shall also provide an intuitive means to adjust the indoor fan speed through a simple switch and pot adjustment design.
4. Unit shall include a minimum of one 8-pin screw terminal connection board for connection of control wiring.
5. Shall include integrated defrost system to prevent excessive frost accumulation during heating duty, and shall be controlled as follows:
   a. Defrost shall be initiated on the basis of time and coil temperature.
   b. A 30, 60, 90, 120 minute timer shall activate the defrost cycle only if the coil temperature is low enough to indicate a heavy frost condition.
   c. Defrost cycle shall terminate when defrost thermostat is satisfied and shall have a positive termination time of 10 minutes.
6. Defrost system shall also include:
   a. Defrost Cycle Indicator LED.
   b. Dip switch selectable defrost time between 30, 60, 90 and 120 minutes. Factory set at 30 minutes.
   c. Molded plug connection to ensure proper connection.

B. (23 09 33.13.B.) Safeties:

1. Compressor over-temperature, over-current. High internal pressure differential.
2. Low pressure switch.
   a. 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. 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.

Part 5 — (23 09 93) Sequence of Operations for HVAC Controls

5.01 (23 09 93.13) Decentralized, Rooftop Units:

A. (23 09 93.13.A.) INSERT SEQUENCE OF OPERATION

Guide specifications (cont)

Part 6 — (23 40 13) Panel Air Filters

6.01 (23 40 13.13) Decentralized, Rooftop Units:

A. (23 40 13.13.A.) Standard filter section:

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

Part 7 — (23 81 19) Self-Contained Air Conditioners

7.01 (23 81 19.13) Small-Capacity Self-Contained Air Conditioners (549K 07-12):

A. (23 81 19.13.A.) General:

1. Outdoor, rooftop mounted, electrically controlled, heating and cooling unit utilizing a fully hermetic scroll compressor(s) for cooling duty and heat pump 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® (R-410A) 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.

B. 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 Standards 340/360.
3. Unit shall be designed to conform to ASHRAE 15.
4. Unit shall be UL-tested and certified in accordance with ANSI Z21.47 Standards and UL-listed and certified under Canadian standards as a total package for safety requirements.
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 in accordance with ISO 9001, and shall be manufactured in a facility registered by ISO 9001:2015.
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.

C. (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.

D. (23 81 19.13.D.) Project Conditions:

1. As specified in the contract.

E. (23 81 19.13.E.) Operating Characteristics:

1. Unit shall be capable of starting and running at 125°F (52°C) ambient outdoor temperature meeting maximum load criteria of AHRI Standard 340/360 at ±10% voltage.
2. Compressor with standard controls shall be capable of operation down to 40°F (4°C) [0°F (–18°C) for size 12 models], ambient outdoor temperatures. Accessory winter start kit is necessary if mechanically cooling at ambient temperatures down to 25°F (–4°C) or 0°F (–18°C).
3. Unit shall discharge supply air vertically or horizontally as shown on contract drawings.
4. Unit shall be factory configured for vertical supply and return configurations.
5. Unit shall be field convertible from vertical to horizontal airflow on all models. No special kit required except on 12 size models that requires a Supply Duct Kit field installation for horizontal air flow.
6. Unit shall be capable of mixed operation: vertical supply with horizontal return or horizontal supply with vertical return.

F. (23 81 19.13.F.) Electrical Requirements:

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

G. (23 81 19.13.G.) Unit Cabinet:

1. Unit cabinet shall be constructed of galvanized steel, and shall be bonderized and coated with a prepainted baked enamel finish on all externally exposed surfaces.
2. Unit cabinet exterior paint shall be: film thickness, (dry) 0.003 in. 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.

Guide specifications (cont)

4. Base of unit shall have a minimum of four locations for thru-the-base electrical connections (factory-installed or field-installed), standard.
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 corrosion resistant material.
   b. Shall comply with ASHRAE Standard 62.
   c. Shall use a 3/4 in. 14 NPT drain connection, possible either through the bottom or side of the drain pan. Connection shall be made per manufacturer's recommendations.
7. Top panel:
   a. Shall be a single piece top panel on 07-09 models and two piece on 12 size models.
8. Electrical Connections:
   a. All unit power wiring shall enter unit cabinet at a single, factory prepared, knockout location.
   b. Thru-the-base capability.
   c. Standard unit shall have a thru-the-base electrical location(s) using a raised, embossed portion of the unit basepan.
   d. Optional, factory approved, water-tight connection method must be used for thru-the-base electrical connections.
   e. No basepan penetration, other than those authorized by the manufacturer, is permitted.
9. Component access panels (standard):
   a. Cabinet panels shall be easily removable for servicing.
   b. Unit shall have one factory installed, tool-less, removable, filter access panel.
   c. Panels covering control box, indoor fan, indoor fan motor, gas components (where applicable), and compressors shall have molded composite handles.
   d. Handles shall be UV modified, composite. 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.

H. (23 81 19.13.H.) Coils:
1. Standard industry proven 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.
   d. Corrosion durability of fin stock shall be confirmed through testing to be no less than 1000 hours salt spray per ASTM B117-90.
   e. Corrosion durability of fin stock shall be confirmed through testing to have no visible corrosion after 48 hour immersion in a room temperature solution of 5% salt, 1% acetic acid.
   f. Fin stock coating shall pass 2000 hours of the following: one week exposure in the prohesion chamber followed by one week of accelerated ultraviolet light testing. Prohesion chamber: the solution shall contain 3.5% sodium chloride and 0.35% ammonium sulfate. The exposure cycle is one hour of salt fog application at ambient followed by one hour drying at 95°F (35°C).
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.

Guide specifications (cont)

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.

I. (23 81 19.13.I.) Refrigerant Components:
1. Refrigerant circuit shall include the following control, safety, and maintenance features:
a. Thermostatic Expansion Valve (TXV) shall help provide optimum performance across the entire operating range. Shall contain removable power element to allow change out of power element and bulb without removing the valve body.
b. Refrigerant filter drier - Solid core design.
c. Service gauge connections on suction and discharge lines.
d. Pressure gauge access through a specially designed access port in the top panel of the unit.
e. Suction line accumulator to provide protection in all operating modes from cooling, heating and reverse cycle switching.
2. There shall be gauge line access port in the skin of the rooftop, covered by a black, removable plug.
a. The plug shall be easy to remove and replace.
b. When the plug is removed, the gauge access port shall enable maintenance personnel to route their pressure gauge lines.
c. This gauge access port shall facilitate correct and accurate condenser pressure readings by enabling the reading with the compressor access panel on.
d. The plug shall be made of a leak proof, UV-resistant, composite material.
3. Compressors:
a. Unit shall use two tandem scroll compressors on single independent refrigeration circuit.
b. Units shall have single circuit and two stage cooling and contain two dual stage compressors.
c. Evaporator coils shall be a full active design to help better control comfort latent removal.
d. Compressor motors shall be cooled by refrigerant gas passing through motor windings.
e. Compressors shall be internally protected from high discharge temperature conditions.
f. Compressors shall be protected from an over-temperature and over-amperage conditions by an internal, motor overload device.
g. Compressor shall be factory mounted on rubber grommets.
h. Compressor motors shall have internal line break thermal, current overload and high pressure differential protection.
i. Crankcase heaters shall not be required for normal operating range, unless required by compressor manufacturer due to refrigerant charge limits.
j. Compressors shall be a two stage cooling capacity design.

J. (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 pivoting filter tray, facilitating easy removal and installation.
3. Shall consist of factory installed, low velocity, throw-away 2-in. thick fiberglass filters.
4. Filters shall be standard, commercially available sizes.
5. Only one size filter per unit is allowed.

K. (23 81 19.13.K.) Evaporator Fan and Motor with Axion™ Fan Technology:
1. Direct Drive Evaporator fan motor:
a. Shall be a ECM motor design.
b. Shall have permanently lubricated bearings.
c. Shall have inherent automatic-reset thermal overload protection.
d. Shall have slow ramp up to speed capabilities.
e. Shall require no fan/motor belts for operation, adjustments and or initial fan speed set up.
f. Fan DC voltage set up on Unit Control Board can eliminate the need of removal of blower access door, required on conventional belt drive systems.
g. Shall be internally protected from electrical phase reversal and loss.
2. Evaporator Fan:
a. Shall be easily set with dedicated selection switch and adjustment pot on unit control board.
b. Shall provide two stage cooling capacity control, the indoor fan speed is automatically controlled to meet the code-compliant <66% low fan speed and 100% at full fan speed operation.
c. Blower fan shall be a Vane Axial fan design with 75% less moving parts than a conventional belt drive system.
d. Shall be constructed of a cast aluminum stator and high impact composite material on stator, rotor and air inlet casing.
e. Shall be a patented/pending design with a corrosion resistant material and dynamically balanced.
f. Shall have slow ramp up to speed capabilities to help reduce sound and comfort issues typically associated with single speed belt drive systems.

g. Shall be a slide out design with removal of a few support brackets.

3. Shall include an easily accessible Unit Control Board to conveniently and safely provide connection points for vital control functions such as: smoke detectors, phase monitor, economizer, thermostat, and low and high pressure switches. Controller shall also provide an intuitive means to adjust the indoor fan speed through a simple switch and pot adjustment design.

L. (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 on all sizes.
2. Condenser Fans:
   a. Shall be a direct-driven propeller type fan constructed of high impact composite material.
   b. Shall have high impact composite blades completely formed into one piece without blade fasteners or connectors and shall be dynamically balanced.

M. (23 81 19.13.M.) Special Features Options and Accessories:

1. Integrated EconomizerONE low leak rate models. (Factory-installed on 3-phase models only. Field-installed on all 3 and 1-phase models.)
   a. Integrated, gear driven opposing modulating blade design type capable of simultaneous economizer and compressor operation.
   b. Independent modules for vertical or horizontal return configuration shall be available. Vertical return modules shall be available as a factory installed option.
   c. Damper blades shall be galvanized steel with composite gears. Plastic or composite blades on intake or return shall not be acceptable.
   d. Shall include all hardware and controls to provide free cooling with outdoor air when temperature and/or humidity are below set points.
   e. Shall be equipped with gear driven dampers for both the outdoor ventilation air and the return air for positive air stream control.
   f. Low leak rate shall be equipped with dampers not to exceed 2% leakage at 1 in. wg pressure differential.
   g. Economizer controller on EconomizerONE (field-installed only) models shall be the Siemens POL224 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) LED indication for free cooling, sensor, and damper operation.
      4) One-line LCD interface screen for setup, configuration and troubleshooting.
      5) Optional configuration via WLAN stick and Siemens Climatix™[1] smartphone app for easy setup.
      6) On-board Fault Detection and Diagnostics (FDD) that senses and alerts when the economizer is not operating properly, per California Title 24, ASHRAE 90.1 and IECC®[1].
      7) Sensor failure loss of communication identification.
      8) Capabilities for use with multiple-speed or single speed indoor fan systems.
      9) Digital sensors: Dry bulb and Enthalpy.
   h. Shall be capable of introducing up to 100% outdoor air.
   i. 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.
   j. Shall be designed to close damper(s) during loss-of-power situations with spring return built into motor.
   k. Dry bulb outdoor air temperature sensor shall be provided as standard. Enthalpy sensor is also available on factory installed only. Outdoor air sensor set point shall be adjustable and shall range from 40°F to 100°F (4°C to 38°C). Additional sensor options shall be available as accessories.
   l. 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%.
   m. The economizer shall maintain minimum airflow into the building during occupied period and provide design ventilation rate for full occupancy.
   n. Dampers shall be completely closed when the unit is in the unoccupied mode.
   o. Economizer controller shall accept a 0 to 10 vdc CO_2 sensor input for IAQ/DCV control. In this mode, dampers shall modulate the outdoor air damper to provide ventilation based on the sensor input.
   p. Compressor lockout temperature on POL224 control is adjustable from –45°F to 80°F (–43 to 26°C), set at a factory default of 32°F (0°C).
   q. Actuator shall be direct coupled to economizer gear. No linkage arms or control rods shall be acceptable.
   r. Shall contain LED indication for free cooling, sensor, and damper operation.

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Guide specifications (cont)

2. Integrated EconomizerONE Ultra Low Leak rate models. (Factory installed on 3-phase models only. Field installed on all 3 and 1-phase models.)
   a. Integrated, gear driven opposing modulating blade design type capable of simultaneous economizer and compressor operation.
   b. Independent modules for vertical or horizontal return configuration shall be available. Vertical return modules shall be available as a factory-installed option.
   c. Damper blades shall be galvanized steel with composite gears. Plastic or composite blades on intake or return shall not be acceptable.
   d. Shall include all hardware and controls to provide free cooling with outdoor air when temperature and/or humidity are below set points.
   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 for 4 cfm per sq ft on the outside air dampers and 10 cfm per sq ft on the return dampers.
   g. Economizer controller on EconomizerONE models shall be the Siemens POL224 that provides:
      1) One-line LCD interface screen for setup, configuration and troubleshooting.
      2) Optional configuration via WLAN stick and Siemens Climatix™[1] smartphone app for easy setup.
      3) On-board Fault Detection and Diagnostics (FDD) that senses and alerts when the economizer is not operating properly, per California Title 24, ASHRAE 90.1 and IECC.
      4) Sensor failure loss of communication identification.
      5) Capabilities for use with multiple-speed indoor fan systems.
      6) Digital sensors: Dry bulb and Enthalpy.
   h. Shall be capable of introducing up to 100% outdoor air.
   i. 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.
   j. Shall be designed to close damper(s) during loss-of-power situations with spring return built into motor.
   k. Dry bulb outdoor air temperature sensor shall be provided as standard. Enthalpy sensor is also available on factory installed only. Outdoor air sensor set point shall be adjustable and shall range from 40°F to 100°F (4°C to 38°C). Additional sensor options shall be available as accessories.
   l. 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%.
   m. The economizer shall maintain minimum airflow into the building during occupied period and provide design ventilation rate for full occupancy.
   n. Dampers shall be completely closed when the unit is in the unoccupied mode.
   o. Economizer controller shall accept a 0 to 10 vdc CO_2 sensor input for IAQ/DCV control. In this mode, dampers shall modulate the outdoor air damper to provide ventilation based on the sensor input.
   p. Compressor lockout temperature on POL224 control is adjustable from –45°F to 80°F (–43 to 26°C), set at a factory default of 32°F (0°C).
   q. Actuator shall be direct coupled to economizer gear. No linkage arms or control rods shall be acceptable.
   r. Shall contain LED indication for free cooling, sensor, and damper operation.
3. Wi-Fi/WLAN stick for EconomizerONE POL224 (field-installed):

   This item allows use of the Siemens Climatix™ mobile application.
4. Two-Position Damper (field-installed only):
   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.
5. Manual damper (field-installed only):
   a. Manual damper package shall consist of damper, air inlet screen, and rain hood which can be preset to admit up to 25% or 50% outdoor air for year round ventilation.
6. Low Ambient Control Package:
   a. Controller shall control coil head pressure by condenser fan speed modulation or condenser fan cycling and wind baffles.

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Guide specifications (cont)

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 0°F (–18°C).

7. Condenser Coil Hail Guard Assembly:
   a. Shall protect against damage from hail.
   b. Shall be either hood style or louvered.
8. Unit-Mounted, Non-Fused Disconnect Switch (Available on 6 to 8.5 ton units with MOCPs of 80 amps or less, or 10 ton units with MOCPs of 100 amps or less):
   a. Switch shall be factory installed, internally mounted.
   b. National Electric Code (NEC) and UL 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.
   e. Sized only for the unit as ordered from the factory. Does not accommodate field-installed devices.
9. 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 or load side of disconnect by installing contractor, as required by code. If outlet is powered from load side of disconnect, unit electrical ratings shall be UL 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. Factory-Installed 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.
   c. Field-Installed 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 field-installed and internally mounted with easily accessible 115-v female receptacle.
      4) Outlet shall include 20 amp GFI receptacles. This kit provides a flexible installation method which allows code compliance for height requirements of the GFCI outlet from the finished roof surface as well as the capability to relocate the outlet to a more convenient location.
      5) Outlet shall be accessible from outside the unit.
      6) Outlet shall include a field installed “Wet in Use” cover.
10. Thru-the-Base Connectors:
    a. Kits shall provide connectors to permit electrical connections to be brought to the unit through the unit basepan.
    b. Minimum of four connection locations per unit.
11. Propeller Power Exhaust:
    a. Power exhaust shall be used in conjunction with an integrated economizer.
    b. Independent modules for vertical or horizontal return configurations shall be available.
    c. Horizontal power exhaust is shall be mounted in return ductwork.
    d. Power exhaust shall be controlled by economizer controller operation. Exhaust fans shall be energized when dampers open past the 0 to 100% adjustable setpoint on the economizer control.
12. Supply Duct Cover (size 12 only):
    a. Required when field converting the factory standard vertical duct supply to horizontal duct supply configuration. One required per unit.
13. 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.

Guide specifications (cont)

14. 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.
15. 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.
16. Indoor Air Quality (CO_2) Sensor:
    a. Shall be able to provide demand ventilation indoor air quality (IAQ) control.
    b. The IAQ sensor shall be available in duct mount, wall mount, or wall mount with LED display. The setpoint shall have adjustment capability.
17. 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.
18. 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).
19. Time Guard Control Circuit:
    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.
20. Hinged Access Panels:
    a. Shall provide easy access through integrated quarter turn latches.
    b. Shall be on major panels of: filter, control box, fan motor, and compressor.
21. Condensate Overflow Switch:
    a. This sensor and related controller monitors the condensate level in the drain pan and shuts down compression operation when overflow conditions occur. It includes:
        1) Indicator light — solid red (more than 10 seconds on water contact – compressors disabled), blinking red (sensor disconnected).
        2) 10 second delay to break — eliminates nuisance trips from splashing or waves in pan (sensor needs 10 seconds of constant water contact before tripping).
        3) Disables the compressors operation when condensate plug is detected, but still allows fans to run for Economizer.
22. 4 in. Filter RackKit:
    a. The 4 in. filter rack accessory kit is designed to hold 4 in. MERV-8 or MERV-13 filters. Filters not included in kit.
23. 2 in. MERV-13 Return Air filters:
    a. Accessory kit to field upgrade standard unit filters to 2 in. MERV-13 filters.
24. 2 in. MERV-8 Return Air filters:
    a. Accessory kit to field upgrade standard unit filters to 2 in. MERV-8 filters.

Guide specifications (cont)

25. Phase Monitor Control:
    a. Shall monitor the sequence of three phase electrical system to provide a phase reversal protection.
    b. Shall monitor the three phase voltage inputs to provide a phase loss protection for the three phase device.
    c. Shall work on either a Delta or Wye power connection.
26. Horn/Strobe Annunciator:
    a. Provides an audible/visual signaling device for use with factory-installed option or field installed accessory smoke detectors.
        1) Requires installation of a field-supplied 24-v transformer suitable for 4.2 VA (AC) or 3.0 VA (DC) per horn/strobe accessory.
        2) Requires field-supplied electrical box, North American 1-gang box, 2 in. (51 mm) x 4 in. (102 mm).
        3) Shall have a clear colored lens.
27. 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 shall be 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.

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