Carrier

Turn to the experts

Product Data

WeatherExpert® Gas Heat/Electric Cooling Multi Zone VAV Packaged Rooftop Units

12.5 to 23 Nominal Tons

WeatherExpert™

Unit shown with economizer and power exhaust

48LCB Sizes 14-26
Single Packaged Multi Zone VAV Rooftop Units with Gas Heat/Electric Cooling

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Features/Benefits

Carrier's new Multi Zone - Variable Air Volume (MZ-VAV) Gas Heat / Electric Cooling WeatherExpert® 48LC*B 12.5 to 23 ton Package Rooftop models are designed to help provide total low cost of ownership by providing some of the highest cooling efficiencies in the industry with low installation costs, low maintenance costs, and high reliability.

These MZ-VAV models not only provide comfort control to multi zone applications, but also provide high IEERs (Integrated Energy Efficiency Ratios), which are a measurement of cooling part load performance and are the range where actual buildings operate nearly all of the time. These high part load values are achieved by using Carrier's strategically designed compressor staging, indoor fan motor, and condenser fan motor speed control. These models are in addition to 6 to 10 ton (MZ-VAV) models with IEERs up to 20.8 to provide a full range of offerings.

Ultra high efficiency

With IEERs up to 19.1, these new WeatherExpert MZ-VAV models well exceed the latest efficiency standards for ASHRAE 90.1, well exceed Energy Star[1], and exceeds Consortium for Energy Efficiency (CEE) Tier 2 performance criteria. These models help to contribute in LEED[2] credits and help qualify for rebates. The high IEER efficiencies are achieved by utilizing a proven staged compressor design on a single refrigerant circuit that provides 3 stages of cooling capacity control. The indoor fan motors are high efficiency belt drive and controlled by a VFD (Variable Frequency Drive) system that adjusts speed based on the duct static pressure sensor to match the cooling capacity stages for optimum comfort and efficient control.

Gas heat is provided with efficiencies up to 82% and 2 stages of operation to better match building loads. Models also have multiple heat capacities for each size and use an induced draft combustion system.

Easy to install

Units are designed for dedicated factory-supplied vertical or horizontal air flow duct configuration. No special field kits are required. Designed to fit on pre-installed curbs by another manufacturer, these units also fit on past designed Carrier installed curbs with an authorized adapter curb. The cabinet design also integrates a large control box that gives you room to work and room to mount Carrier accessory controls. Units come with installed supply air temperature sensor, return air temperature sensor, outdoor air temperature sensor, and duct static pressure sensor located in the control box for remote positioning in the field.

Easy to maintain

Easy access door handles by Carrier provide quick 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. Units come with accessible 2 in. filter that have a dedicated access door for easy replacement. Optional hinged panels allow easy access with pull tabs and quarter turn latches. Units come with installed supply air temperature sensor, return air temperature sensor, and duct static pressure sensor located in the control box for remote positioning in the field.

Reliable

Carrier conducts rigorous testing to ensure your unit will perform as designed. Extensive rain testing is conducted in special designed test areas and under conditions that simulate actual job sites. In addition, units are both shake tested and driven around the country to make sure not only the packaging but also the unit components within hold up. Condensate pans are made of non corrosive, composite material, motors are permanently lubricated, and compressors use crankcase heaters, all to further strengthen the unit's reliability.

Unit features

- Three stage cooling capacity control with staged scroll compressors design. Each cooling stage is different in capacity output to better match typical building load profiles.
- Single refrigerant circuit design with precision-sized multi TXV refrigerant metering devices to provide optimum operation through the entire operating range.
- Single fully activated evaporator coil for full surface utilization, even at part load operation. This allows for better dehumidification than split face coils and helps eliminate the need for additional dehumidification packages.
- Three stage cooling capacity control with staged scroll compressors design. Each cooling stage is different in capacity output to better match typical building load profiles.
- Single refrigerant circuit design with precision-sized multi TXV refrigerant metering devices to provide optimum operation through the entire operating range.

Table of contents

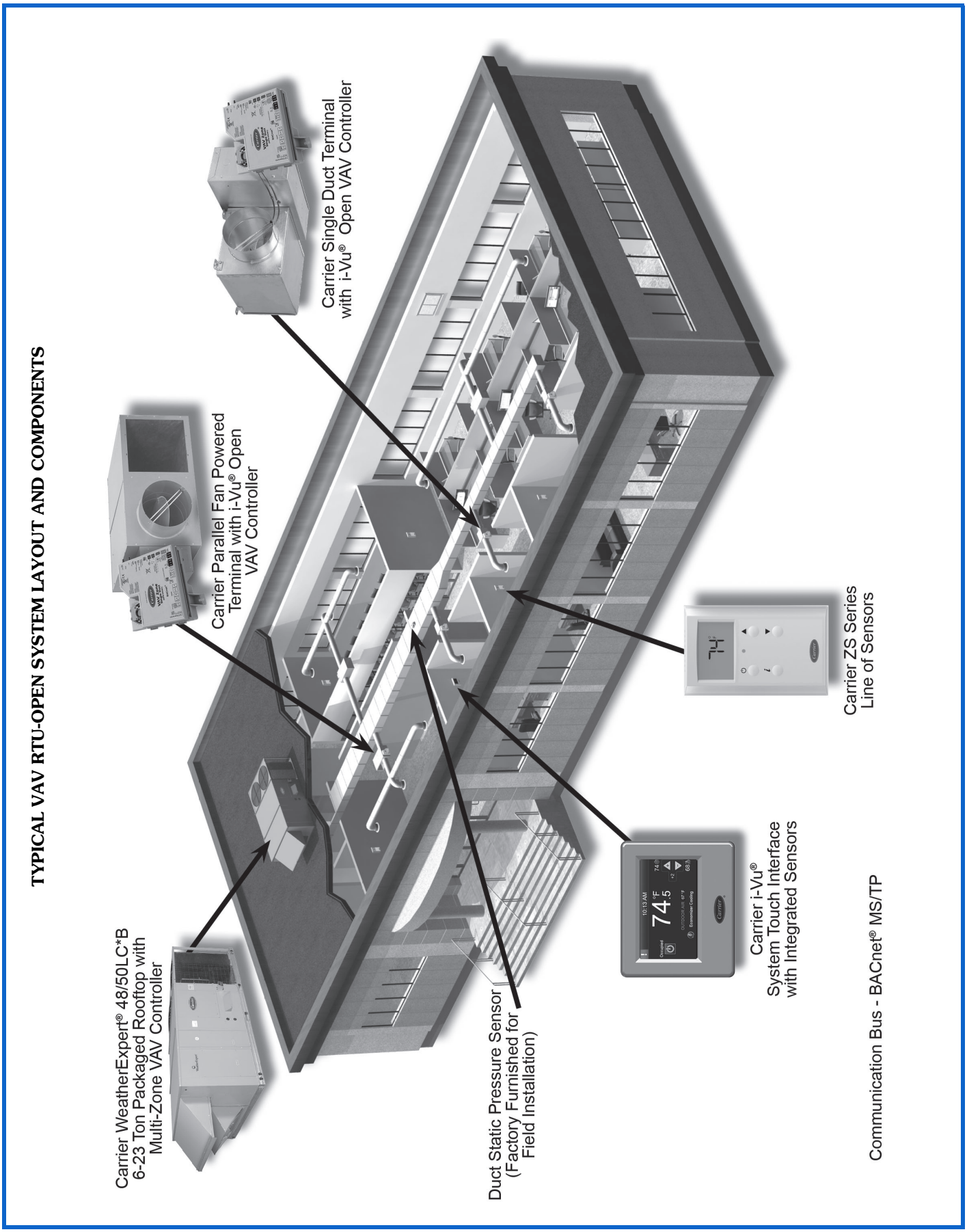
1. Energy Star is a registered trademark of the U.S. Environmental Protection Agency.
2. LEED is a registered trademark of the U.S. Green Building Council.

Features/Benefits (cont)

- Single fully activated evaporator coil for full surface utilization, even at part load operation. This allows for better dehumidification than split face coils and helps eliminate the need for additional dehumidification packages.
- Integrated economizer in either standard low leak or ultra-low leak versions to properly help supplement compressor unloading in all operating conditions.
- Crankcase heater on each compressor designed to cycle off during the on cycle.
- IEER up to 19.1 and EERs up to 12.5.
- High efficiency permanently lubricated belt driven evaporator-fan motor with VFD (Variable Frequency Drive) controller.
- VAV-RTU Open controller provides:
  - Integrated system control to required Carrier i-Vu® VAV zoning controls for single duct and fan terminals using BACnet[1] MS/TP protocol.
  - Unit control of all stages of cooling in order to maintain the desired supply air temperature setting.
  - Supply air temperature control including reset algorithm will calculate a proportional reset value between occupied cooling setpoint and 1°F above the occupied heating setpoint. The amount of reset is user configurable.
  - Control for morning warm–up cycle the first time of transition from unoccupied to occupied periods.
  - Linkage from rooftop unit to VAV terminals in morning warm up cycle to ensure sufficient airflow while in the heating mode.
  - Optional selected "occupied" heating which will allow heating whenever required during the occupied period.
  - Configurable setpoint differential between heating and cooling to prevent the unit from prematurely entering the opposite mode.
  - The ability to utilize outdoor air for maintaining the supply air setpoint by using the outdoor air temperature, return air temperature.
  - BACnet test points to activate specific test models that can be used to commission the rooftop and the system. Tests shall include fan test, heat test, cooling test, power exhaust test, and economizer test.
  - Linkage to required Carrier i-Vu VAV zoning controls for single duct and fan terminals using BACnet MS/TP protocol.
  - Standalone BACnet MS/TP or BAS network capabilities.
  - Two economizer minimum position settings to accommodate both minimum and maximum air flow settings.
  - Indoor fan motor modulation
  - Field and factory wiring connections
  - Outdoor fan motor staging
  - Crankcase heater control
- Sound levels as low as 84 dB.
- Non-corrosive composite condensate pan in accordance with ASHRAE 62 Standard, sloping design; side or bottom drain.
- Morning warm up or optional on-demand heating capabilities
- Multiple gas heat sizes with heating efficiencies up to 82%.
- Induced draft combustion design.
- Redundant gas valve, with up to 2 stages of heating.
- Pre-painted exterior panels and primer-coated interior panels tested to 500 hours salt spray protection.
- Fully insulated with foil faced insulation throughout the entire cabinet.
- Exclusive IGC solid-state control for on-board diagnostics with LED error code designation, burner control logic and energy saving indoor fan motor delay.
- High ambient cooling operation and ratings up to 125°F (52°C).
- Low ambient mechanical cooling operation down to 45°F (7°C). An economizer shall be the source of cooling in low ambient conditions. When the outside air temperature is below 45°F (7°C), to improve system reliability, reduce energy usage, and improve system efficiency: mechanical cooling shall not be utilized.
- Access panels with easy grip handles.
- Innovative, easy starting, no-strip screw feature on unit access panels.
- 2 in. disposable return air filters.
- Tool-less filter access door.
- Dedicated vertical and horizontal airflow models available ordered as factory option. No special kits required.
- Provisions for thru-the-bottom power entry capability as standard.
- Single point gas and electric connections.
- Full perimeter base rail with built-in rigging adapters and fork truck slots.
- 24-volt control circuit protected with resettable circuit breaker.
- Totally enclosed high efficiency ECM outdoor fan motor with permanently lubricated bearings.
- Low-pressure switch and high-pressure switch protection.
- Evaporator Coil Freeze Protection
- Solid-state electronic direct spark ignition system.
- Flame roll-out safety protector.
- High capacity liquid line filter drier.
- Standard Limited Parts Warranty: 10 yr. aluminized heat exchanger, 15 yr. stainless steel heat exchanger, 5 yr. compressor, 1 yr. parts.

1. BACnet is a trademark of ASHRAE.

Feature/Benefits (cont)



Model number nomenclature

MODEL NUMBER NOMENCLATURE

Position:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Example:	4	8	L	C	D	B	2	4	A	1	A	5	-	1	N	0	A	0

Unit Heat Type
48 - Gas Heat Packaged Rooftop

Model Series - WeatherExpert®
LC - Ultra High Efficiency

Heat Options
D = Low Gas Heat
E = Medium Gas Heat
F = High Gas Heat
S = Low Heat w/ Stainless Steel Exchanger
R = Medium Heat w/ Stainless Steel Exchanger
T = High Heat w/ Stainless Steel Exchanger

Refrigerant System
B = Three stage cooling capacity control with multi-zone VAV operation

Cooling Tons
14 - 12.5 ton
17 - 15 ton
20 - 17.5 ton
24 - 20 ton
26 - 23 ton

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

Indoor Fan Motor Options
1 = Standard Static / Vertical Supply, Return Air Flow
2 = Medium Static / Vertical Supply, Return Air Flow
3 = High Static / Vertical Supply, Return Air Flow
4 = Ultra High Static / Vertical Supply, Return Air Flow
5 = Standard Static / Horizontal Supply, Return Air Flow
6 = Medium Static / Horizontal Supply, Return Air Flow
7 = High Static / Horizontal Supply, Return Air Flow
8 = Ultra High Static / Horizontal Supply, Return Air Flow

Coil Options: Fin/Tube (Condenser – Evaporator – 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

Voltage
1 = 575/3/60
5 = 208-230/3/60
6 = 460/3/60

Design Revision
- = Factory Design Revision

Base Unit Controls
1 = VAV-RTU Open Controller (required on each model)

Intake / Exhaust Options (required on each unit)
B = Temperature Low Leak Economizer with Barometric Relief
C = Temperature Low Leak Economizer with Centrifugal Power Exhaust - Vertical Only
E = Enthalpy Low Leak Economizer with Barometric Relief
F = Enthalpy Low Leak Economizer with Centrifugal Power Exhaust - Vertical Only
N = Temperature Ultra Low Leak Economizer with Barometric Relief
P = Temperature Ultra Low Leak Economizer with Centrifugal Power Exhaust - Vertical Only
R = Enthalpy Ultra Low Leak Economizer with Barometric Relief
S = Enthalpy Ultra Low Leak Economizer with Centrifugal Power Exhaust - Vertical Only

Service Options
0 = None
1 = Unpowered Convenience Outlet
2 = Powered Convenience Outlet
3 = Hinged Panels
4 = Hinged Panels and Unpowered Convenience Outlet
5 = Hinged Panels and Powered Convenience Outlet

Electrical Options
A = None
B = HACR Circuit Breaker
C = Non-Fused Disconnect

Packaging
0 = Standard
1 = LTL

NOTE: Not all possible options can be displayed above. Refer to other support material or your local Carrier Expert.

Options and accessories

FACTORY-INSTALLED OPTIONS AND FIELD-INSTALLED ACCESSORIES

CATEGORY	ITEM	FACTORY-INSTALLED OPTION	FIELD-INSTALLED ACCESSORY
Cabinet	Thru-the-base electrical or gas-line connections	X	X
	Hinged access panels	X	
Coil options	Cu/Cu indoor and/or outdoor coils	X	
	Pre-coated outdoor coils	X	
	Premium, E-coated outdoor coils	X	
Condenser protection	Condenser coil hail guard (louvered design)	X	X
Controls	VAV-RTU Open	Standard	
	Smoke detector (supply and/or return air)	X	X
	Time Guard II compressor delay control circuit		X
	Phase Monitor		X
	i-Vu® Equipment Touch; Carrier brand 4.3 in. color touch screen zone sensor and local user interface for a single Open (BACnet MS/TP) equipment controller. Includes built-in temperature and humidity sensor.		X
	i-Vu System Touch; Carrier brand 4.3 in. color touch screen user interface connects to a network of up to 60 Open (BACnet MS/TP) equipment controllers. Includes built- in temperature and humidity sensor.		X
Economizers and outdoor-air dampers	EconoMi$er 2 for VAV-RTU Open controls, complies with FDD. (Standard and Ultra Low Leak air damper models)[5]	Standard	
	Barometric relief[1]	X	X
	Power exhaust (Propeller design)		X
Zone air terminal sensors	Full range of Carrier zone air terminal space sensors are available with capabilities of combining: space temperature, sensors with communication ports, sensors with CO_2 sensing, sensors with LCD display, sensors with local override and indicating light.		X
VAV Zone air terminals	A full range of zone air terminals shall be a i-Vu VAV Zone Single Duct and Fan Terminal type for optimum integrated system solution. This includes: • 35E – Single Duct Air Terminals • 45J – Series Fan Powered Air Terminals • 45K – Quiet Series Fan Powered Air Terminals • 45M – Parallel Fan Powered Air Terminals • 45N – Quiet Parallel Fan Powered Air Terminals • 45Q – Low Profile Series Fan Powered Air Terminals • 45R – Low Profile Parallel Fan Powered Air Terminals • 35J – Single Duct Retrofit Air Terminals		X
Economizer sensors and IAQ devices	Single dry bulb temperature sensors[2]	X	X
	Differential dry bulb temperature sensors[2]		X
	Single enthalpy sensors[2]	X	X
	Differential enthalpy sensors[2]		X
	Wall or duct mounted CO_2 sensor[2]		X
	Unit mounted CO_2 sensor[2]	X	
Gas heat	Propane conversion kit		X
	Stainless steel heat exchanger	X	
	High altitude conversion kit		X
	Flue discharge deflector		X
Indoor motor and drive	Multiple motor and drive packages	X	
Power options	Convenience outlet (powered)	X	
	Convenience outlet (unpowered)	X	
	HACR circuit breaker[3,4]	X	
	Non-fused disconnect[4]	X	
Roof curbs	Roof curb 14 in. (356mm)		X
	Roof curb 24 in. (610mm)		X

NOTES:
1. Included with economizer.
2. Sensors used to optimize economizer performance.
3. On 575v applications, HACR breaker can only be used with WYE power distribution systems. Using on Delta power distribution systems is prohibited.
4. When selecting a factory installed HACR breaker or non-fused disconnect, note they are sized for the unit as ordered from the factory. The sizing of these do not accommodate any field items such as power exhaust devices etc.
5. FDD (Fault Detection and Diagnostic) capability per California Title 24 section 120.2.

Options and accessories (cont)

Economizer (Required on all models)

Economizers save energy and money while improving comfort levels in the conditioned space. They bring in fresh, outside air for ventilation and provide cool outside air to cool your building. This also is the preferred method of low ambient cooling. When integrated with CO_2 sensors, economizers can provide even more savings by coupling the ventilation air to only that amount required based on space occupancy.

Economizers are available, installed and tested by the factory, with either enthalpy or temperature dry-bulb inputs. Additional sensors are available as accessories to optimize the economizer.

Economizers include gravity-controlled barometric relief that helps equalize building pressure and ambient air pressures. This can be a cost effective solution to prevent building pressurization. Economizers are available in ultra low leak and standard low leak versions.

Ultra Low Leak Economizer

This meets low leak requirements for ASHRAE 90.1 and CA Title 24 standards (4 cfm/ft at 1 in. wg outdoor air, 10 cfm/ft at 1 in. wg return air). This option allows 100% outdoor air supply from 0 to 100% modulating dampers and is standard with barometric relief. It can be paired with powered exhaust for additional building pressure relief.

Fault Detection and Diagnostics (FDD)

This offering meets the mandatory requirement of CA Title 24 of fully configurable diagnostics allowing fault history and reading fault codes at the unit. This option provides detection of the following faults: air temperature sensor failure/fault and notification of acceptable economizer mode. The FDD system shall be certified by the Energy Commission as meeting the requirements.

CO_2 Sensor

Improves productivity and saves money by working with the economizer to intake only the correct amount of outside air for ventilation. As occupants fill your building, the CO_2 sensor detects their presence through increasing CO_2 levels, and opens the economizer appropriately. When the occupants leave, the CO_2 levels decrease, and the sensor appropriately closes the economizer. This intelligent control of the ventilation air, called Demand Controlled Ventilation (DCV) reduces the overall load on the rooftop, saving money.

Smoke Detectors

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

Louvered Hail Guards

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

Convenience Outlet (powered or un-powered)

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

Non-fused Disconnect

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

When selecting a factory installed non-fused disconnect, note they are sized for unit as ordered from the factory. The sizing of these do not accommodate any power exhaust devices, etc.

Power Exhaust

Superior internal building pressure control. This field-installed accessory may eliminate the need for costly, external pressure control fans coordinating with economizer position and supply fan system airflow.

Time Guard II Control Circuit

This device is used on constant volume units to prevent the compressor from short-cycling by providing a 5 minute delay (±2 minutes) before restarting a compressor after shutdown for any reason. Not required if built into building management system.

Hinged Access Panels

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

Propane Heating

Convert your gas heat rooftop from standard natural gas operation to propane using this field-installed kit.

High Altitude Heating

High altitudes have less oxygen, which means heat exchangers need less fuel. The new gas orifices in this field-installed kit make the necessary adjustment for high altitude applications. They restore the optimal fuel to air mixture and maintain healthy combustion at altitudes above 2000 ft (610m). Kits may not be required in all areas.

Flue Discharge Deflector

The flue discharge deflector is a useful accessory when flue gas recirculation is a concern. By venting the flue discharge upwards, the deflector minimizes the chance for a neighboring unit to intake the flue exhaust.

Optional Stainless Steel Heat Exchanger

The stainless steel heat exchanger option provides the tubular heat exchanger be made out of a minimum 20 gauge type 409 stainless steel for applications where the mixed air to the heat exchanger is expected to drop below 45°F (7°C). Stainless steel may be specified on applications where the presence of airborne contaminants require its use (applications such as paper mills) or in area with very high outdoor humidity that may result in severe condensation in the heat exchanger during cooling operation.

HACR Breaker

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

When selecting a factory installed non-fused disconnect, note they are sized for unit as ordered from the factory.

Options and accessories (cont)

The sizing of these do not accommodate any power exhaust devices, etc.

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

Alternate Motors and Drives

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

Thru-the-Base Connections

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

Zone Terminal Sensors

A full range of Carrier zone air terminal space sensors are available with capabilities of combining:

- Space temperature sensing
- Sensors with communication ports
- Sensors with CO_2 sensing
- Sensors with LCD display
- Sensors with local override and indicating light
- Sensors with humidity sensing

Plus compatibility with:

- i-Vu® Equipment Touch™; Carrier brand 4.3 in. color touch screen zone sensor and local user interface for a single Open (BACnet MS/TP) equipment controller. Includes built-in temperature and humidity sensor.
- i-Vu System Touch™; Carrier brand 4.3 in. color touch screen user interface connects to a network of up to 60 Open (BACnet MS/TP) equipment controllers. Includes built-in temperature and humidity sensor.

VAV Zone Air Terminals

A full range of zone air terminals shall be a i-Vu VAV Zone Single Duct and Fan Terminal type for optimum integrated system solution. This includes:

- 35E – Single Duct Air Terminals
- 45J – Series Fan Powered Air Terminals
- 45K – Quiet Series Fan Powered Air Terminals
- 45M – Parallel Fan Powered Air Terminals
- 45N – Quiet Parallel Fan Powered Air Terminals
- 45Q – Low Profile Series Fan Powered Air Terminals
- 45R – Low Profile Parallel Fan Powered Air Terminals
- 35J – Single Duct Retrofit Air Terminals

Options and accessories (cont)

OPTIONS AND ACCESSORY WEIGHTS

OPTION/ACCESSORY	WEIGHT IN lbs				
	48LC*B14	48LC*B17	48LC*B20	48LC*B24	48LC*B26
Medium Gas Heat	90	90	90	90	90
High Gas Heat	113	113	113	113	113
Medium Heat with Stainless Steel Exchanger	90	90	90	90	90
High Heat with Stainless Steel Exchanger	113	113	113	113	113
Return Smoke Detector	5	5	5	5	5
Supply Smoke Detector	5	5	5	5	5
RA and SA Smoke Detector	10	10	10	10	10
CO_2 sensor	5	5	5	5	5
RA Smoke Detector and CO_2	10	10	10	10	10
SA Smoke Detector and CO_2	10	10	10	10	10
RA and SA Smoke Detector and CO_2	15	15	15	15	15
Medium Static Belt Drive	5	6	6	10	10
High Static Belt Drive	11	16	16	20	20
Cu/Cu Cond and Al/Cu Evap	28	34	34	34	34
Cu/Cu Cond and Cu/Cu Evap	53	64	64	64	64
Al/Cu Cond and Al/Cu Evap + Hail Guard	60	150	150	150	150
Precoat Al/Cu Cond and Al/Cu Evap + Hail Guard	60	150	150	150	150
Ecoat Al/Cu Cond and Al/Cu Evap + Hail Guard	60	150	150	150	150
Ecoat Al/Cu Cond and Ecoat Al/Cu Evap + Hail Guard	60	150	150	150	150
Cu/Cu Cond and Al/Cu Evap + Hail Guard	88	184	184	184	184
Cu/Cu Cond and Cu/Cu Evap + Hail Guard	113	214	214	214	214
Temp Ultra Low Leak Econo with Baro Relief	246	246	246	246	246
Temp Ultra Low Leak Econo with PE (cent) Power Exhaust	371	371	371	371	371
Enthalpy Ultra Low Leak Econo with Baro Relief	246	246	246	246	246
Enthalpy Ultra Low Leak Econo with PE (cent) Power Exhaust	371	371	371	371	371
Unpowered Convenience Outlet	5	5	5	5	5
Powered Convenience Outlet	35	35	35	35	35
Hinged Panels	5	5	5	5	5
Hinged Panels with Unpowered Convenience Outlet	10	10	10	10	10
Hinged Panels with Powered Convenience Outlet	40	40	40	40	40
HACR Breaker	10	10	10	10	10
Non-Fused Disconnect	15	15	15	15	15
Thru the base	4	4	4	4	4
HACR Breaker with Thru Base Connections	14	14	14	14	14
Non-Fused Disconnect + Thru the Base	19	19	19	19	19

AHRI capacity ratings

COOLING RATING, 208V

48LC*B UNIT	COOLING STAGES	HEATING OPTION	MOTOR OPTION	NOMINAL CAPACITY	NOM COOLING CAPACITY	CONFIG	TOTAL POWER (kW)	EER	IEER	RATED INDOOR AIRFLOW (CFM)
14	3	All	1,3,4	12.5	146.0	VERTICAL	11.8	12.4	19.1	4,375
		All	2	12.5	146.0	VERTICAL	11.9	12.3	18.9	4,375
		All	5,7,8	12.5	146.0	HORIZONTAL	12.2	12.0	18.3	4,375
		All	6	12.5	146.0	HORIZONTAL	12.4	11.8	18.1	4,375
17	3	All	—	15.0	172.0	VERTICAL	13.8	12.5	18.4	4,875
		All	—	15.0	170.0	HORIZONTAL	14.4	11.8	17.2	4,875
20	3	All	—	17.5	192.0	VERTICAL	16.0	12.0	17.7	5,690
		All	—	17.5	190.0	HORIZONTAL	17.0	11.2	16.8	5,690
24	3	All	—	20.0	230.0	VERTICAL	19.2	12.0	18.0	6,500
		All	—	20.0	228.0	HORIZONTAL	20.8	10.9	17.1	6,500
26	3	All	—	23.0	272.0	VERTICAL	24.5	11.1	17.8	7,500
		All	—	23.0	266.0	HORIZONTAL	26.3	10.1	16.1	7,500

COOLING RATING, 230/460/575V

48LC*B UNIT	COOLING STAGES	HEATING OPTION	MOTOR OPTION	NOMINAL CAPACITY	NOM COOLING CAPACITY	CONFIG	TOTAL POWER (kW)	EER	IEER	RATED INDOOR AIRFLOW (CFM)
14	3	All	1,3,4	12.5	146.0	VERTICAL	11.8	12.4	19.1	4,375
		All	2	12.5	146.0	VERTICAL	11.9	12.3	18.9	4,375
		All	5,7,8	12.5	146.0	HORIZONTAL	12.2	12.0	18.3	4,375
		All	6	12.5	146.0	HORIZONTAL	12.4	11.8	18.1	4,375
17	3	All	—	15.0	174.0	VERTICAL	13.9	12.5	18.4	4,875
		All	—	15.0	172.0	HORIZONTAL	14.6	11.8	17.2	4,875
20	3	All	—	17.5	192.0	VERTICAL	16.2	12.0	17.5	5,690
		All	—	17.5	190.0	HORIZONTAL	17.1	11.2	16.6	5,690
24	3	All	—	20.0	232.0	VERTICAL	19.3	12.0	18.0	6,500
		All	—	20.0	230.0	HORIZONTAL	21.0	10.9	17.1	6,500
26	3	All	—	23.0	272.0	VERTICAL	24.5	11.1	17.8	7,500
		All	—	23.0	266.0	HORIZONTAL	26.3	10.1	16.1	7,500

LEGEND

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

NOTES:

1. Rated in accordance with AHRI Standards.
2. Ratings are based on:
   Cooling Standard: 80°F (27°C) db, 67°F (19°C) wb indoor air temp and 95°F (35°C) db outdoor air temp.
3. All 48LC*B units comply with ASHRAE 90.1 Energy Star and CEE Energy Standard for minimum IEER and EER requirements.
4. 48LC*B units comply with US Energy Policy Act. To evaluate code compliance requirements, refer to state and local codes.

COOLING MINIMUM/MAXIMUM AIRFLOW RATINGS

48LC*B UNIT SIZE	COOLING STAGE	MAX CFM	MIN CFM
14	Stage-3	6,250	2,500
	Stage-2	3,750	1,500
	Stage-1	2,500	1,000
17	Stage-3	7,500	3,000
	Stage-2	4,500	1,900
	Stage-1	3,000	1,250
20	Stage-3	8,750	3,500
	Stage-2	5,400	1,600
	Stage-1	4,600	1,400
24	Stage-3	10,000	4,000
	Stage-2	5,700	1,950
	Stage-1	4,300	1,550
26	Stage-3	11,250	4,500
	Stage-2	8,100	2,400
	Stage-1	6,750	2,100

AHRI capacity ratings (cont)

HEATING MINIMUM/MAXIMUM AIRFLOW RATINGS

48LC*B UNIT SIZE	HEAT SIZE	MIN AIRFLOW		MAX AIRFLOW	
		cfm	cfm/ton	cfm	cfm/ton
14	LOW	2640	210	6600	530
	MED	3000	240	8250	660
	HIGH	3880	310	7750	620
17	LOW	3000	200	8250	550
	MED	3880	260	7750	520
	HIGH	4620	310	8570	570
20	LOW	3000	170	8250	470
	MED	3880	220	7750	440
	HIGH	4620	260	8570	490
24	LOW	3000	150	8250	410
	MED	3880	190	7750	390
	HIGH	4620	230	8570	430
26	LOW	2960	130	8150	350
	MED	3880	170	7750	340
	HIGH	4620	200	8570	370

SOUND PERFORMANCE

48LC*B UNIT	COOLING STAGES	OUTDOOR SOUND (DB) AT 60 HZ								
		A-WEIGHTED	63	125	250	500	1000	2000	4000	8000
14	3	84	92.6	92.2	83.9	80.4	81.8	78.7	76.5	72.2
17		86	101.3	97.1	88.3	84.4	83.3	80.7	77.4	73.4
20		86	101.3	97.1	88.3	84.4	83.3	80.7	77.4	73.4
24		86	101.3	97.1	88.3	84.4	83.3	80.7	77.4	73.4
26		86	101.3	97.1	88.3	84.4	83.3	80.7	77.4	73.4

LEGEND

dB — Decibel

NOTES:

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

Physical data

PHYSICAL DATA (COOLING) 12.5-23 TONS

		48LC*14	48LC*17	48LC*20	48LC*24	48LC*26
REFRIGERATION SYSTEM						
	# Circuits / # Comp. / Type	1 / 2 / Scroll	1 / 2 / Scroll	1 / 2 / Scroll	1 / 2 / Scroll	1 / 2 / Scroll
	RTPF models R-410A charge A/B (lbs-oz)	32-0	33-6	35-6	40-10	43-4
	Metering device	TXV	TXV	TXV	TXV	TXV
	High-press. Trip / Reset (psig)	630 / 505	630 / 505	630 / 505	630 / 505	630 / 505
	Low-press. Trip / Reset (psig)	54 / 117	54 / 117	54/117	54 / 117	54 / 117
	Loss of charge Trip/Reset (psig)	N/A	N/A	N/A	N/A	N/A
EVAP. COIL						
	Material	Cu / Al	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	5/16 in. RTPF
	Coil Length (in.)	72	72	72	72	72
	Coil Height (in.)	44	52	52	52	52
	Rows / FPI	4 /15	4 /15	4 /15	4 /15	4 /15
	Total face area (ft^2)	22.0	26.0	26.0	26.0	26.0
	Condensate drain conn. size (in.)	3/4 in.	3/4 in.	3/4 in.	3/4 in.	3/4 in.
EVAPORATOR FAN AND MOTOR, VERTICAL						
STANDARD STATIC 3 PHASE	Motor Qty. / Belt Qty. / Drive Type	1 / 1 Belt	1 / 1 Belt	1 / 1 Belt	1 / 1 Belt	1 / 1 Belt
	Max Bhp	2.9	2.9	2.9	7.4	7.4
	Rpm range	498-676	555-753	676-854	707-888	707-888
	Motor frame size	56	56	56HZ	184T	184T
	Fan Qty. / Type	2 / Centrifugal	2 / Centrifugal	2 / Centrifugal	2 / Centrifugal	2 / Centrifugal
	Fan Diameter (in.)	15 x 15 / 15 X 15	15 x 15 / 15 X 15	15 x 15 / 15 X 15	15 x 15 / 15 X 15	15 x 15 / 15 X 15
MEDIUM STATIC 3 PHASE	Motor Qty. / Belt Qty. / Drive Type	1 / 1 Belt	1 / 1 Belt	1 / 1 Belt	1 / 1 Belt	1 / 1 Belt
	Max Bhp	4.9	7.4	7.4	9.9	9.9
	Rpm range	682-861	707-888	782-963	872-1053	872-1053
	Motor frame size	145TZ	184T	184T	213T	213T
	Fan Qty. / Type	2 / Centrifugal	2 / Centrifugal	2 / Centrifugal	2 / Centrifugal	2 / Centrifugal
	Fan Diameter (in.)	15 x 15 / 15 X 15	15 x 15 / 15 X 15	15 x 15 / 15 X 15	15 x 15 / 15 X 15	15 x 15 / 15 X 15
HIGH STATIC 3 PHASE	Motor Qty. / Belt Qty. / Drive Type	1 / 1 Belt	1 / 1 Belt	1 / 1 Belt	1 / 2 Belt	1 / 2 Belt
	Max Bhp	7.4	9.9	9.9	13.6	13.6
	Rpm range	782-963	872-1053	933-1113	1049-1291	1049-1291
	Motor frame size	184T	213T	213T	215T	215T
	Fan Qty. / Type	2 / Centrifugal	2 / Centrifugal	2 / Centrifugal	2 / Centrifugal	2 / Centrifugal
	Fan Diameter (in.)	15 x 15 / 15 X 15	15 x 15 / 15 X 15	15 x 15 / 15 X 15	15 x 15 / 15 X 15	15 x 15 / 15 X 15
SUPER STATIC 3 PHASE	Motor Qty. / Belt Qty. / Drive Type	1 / 1 Belt	1 / 2 Belt	1 / 2 Belt	N/A	N/A
	Max Bhp (208/230/460/575v)	9.9	13.6	13.6	N/A	N/A
	Rpm range	933-1113	1049-1291	1049-1291	N/A	N/A
	Motor frame size	213T	215T	215T	N/A	N/A
	Fan Qty. / Type	2 / Centrifugal	2 / Centrifugal	2 / Centrifugal	N/A	N/A
	Fan Diameter (in.)	15 x 15 / 15 X 15	15 x 15 / 15 X 15	15 x 15 / 15 X 15	N/A	N/A

Physical data (cont)

Carrier

PHYSICAL DATA (COOLING) 12.5-23 TONS (cont)

		48LC*14	48LC*17	48LC*20	48LC*24	48LC*26
EVAPORATOR FAN AND MOTOR, HORIZONTAL						
STANDARD STATIC 3 PHASE	Motor Qty. / Belt Qty. / Drive Type	1 / 1 Belt	1 / 1 Belt	1 / 1 Belt	1 / 1 Belt	1 / 1 Belt
	Max Bhp	2.9	2.9	2.9	7.4	7.4
	Rpm range	498-676	525-713	555-753	707-888	707-888
	Motor frame size	56	56	56HZ	184T	184T
	Fan Qty. / Type	2 / Centrifugal	2 / Centrifugal	2 / Centrifugal	2 / Centrifugal	2 / Centrifugal
	Fan Diameter (in.)	18 x 15 / 15 X 11	18 x 15 / 15 X 11	18 x 15 / 15 X 11	18 x 15 / 15 X 11	18 x 15 / 15 X 11
MEDIUM STATIC 3 PHASE	Motor Qty. / Belt Qty. / Drive Type	1 / 1 Belt	1 / 1 Belt	1 / 1 Belt	1 / 1 Belt	1 / 1 Belt
	Max Bhp	4.9	7.4	7.4	9.9	9.9
	Rpm range	644-808	707-888	707-888	859-1026	859-1026
	Motor frame size	145TZ	184T	184T	213T	213T
	Fan Qty. / Type	2 / Centrifugal	2 / Centrifugal	2 / Centrifugal	2 / Centrifugal	2 / Centrifugal
	Fan Diameter (in.)	18 x 15 / 15 X 11	18 x 15 / 15 X 11	18 x 15 / 15 X 11	18 x 15 / 15 X 11	18 x 15 / 15 X 11
HIGH STATIC 3 PHASE	Motor Qty. / Belt Qty. / Drive Type	1 / 1 Belt	1 / 1 Belt	1 / 1 Belt	1 / 2 Belt	1 / 2 Belt
	Max Bhp	7.4	9.9	9.9	13.6	13.6
	Rpm range	782-963	872-1053	872-1053	948-1190	948-1190
	Motor frame size	184T	213T	213T	215T	215T
	Fan Qty. / Type	2 / Centrifugal	2 / Centrifugal	2 / Centrifugal	2 / Centrifugal	2 / Centrifugal
	Fan Diameter (in.)	18 x 15 / 15 X 11	18 x 15 / 15 X 11	18 x 15 / 15 X 11	18 x 15 / 15 X 11	18 x 15 / 15 X 11
SUPER STATIC 3 PHASE	Motor Qty. / Belt Qty. / Drive Type	1 / 1 Belt	1 / 2 Belt	1 / 2 Belt	N/A	N/A
	Max Bhp (208/230/460/575v)	9.9	13.6	13.6	N/A	N/A
	Rpm range	933-1113	948-1190	948-1190	N/A	N/A
	Motor frame size	213T	215T	215T	N/A	N/A
	Fan Qty. / Type	2 / Centrifugal	2 / Centrifugal	2 / Centrifugal	N/A	N/A
	Fan Diameter (in.)	18 x 15 / 15 X 11	18 x 15 / 15 X 11	18 x 15 / 15 X 11	N/A	N/A
COND. COIL 1						
	Material	Cu / Al	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	5/16 in. RTPF
	Coil Length (in.)	68	82	82	98	98
	Coil Height (in.)	44	52	52	52	52
	Rows / FPI	2/18	2 / 18	2/18	2 / 18	2 / 18
	Total face area (ft^2)	20.8	29.6	29.6	35.4	35.4
COND. COIL 2						
	Material	Cu / Al	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	5/16 in. RTPF
	Coil Length (in.)	68	82	82	98	98
	Coil Height (in.)	44	52	52	52	52
	Rows / FPI	2/18	2 / 18	2/18	2 / 18	2 / 18
	Total face area (ft^2)	20.8	29.6	29.6	35.4	35.4
COND. FAN / MOTOR						
	Qty. / Motor Drive Type	3 / direct	4 / direct	4 / direct	6 / direct	6 / Direct
	Motor HP / Rpm	1/3 / 1000	1/3 / 1000	1/3 / 1000	1/3 / 1000	1/3 / 1000
	Fan Diameter (in.)	22	22	22	22	22
FILTERS						
	RA Filter # / size (in.)	6 / 20 x 25 x 2	9/16x25x2	9/16x25x2	9/16x25x2	9 / 16x25x2
	OA inlet screen # / size (in.)	4 / 16 x 25 x 1	4/16x25x1	4/16x25x1	4/16x25x1	4 / 16x25x1

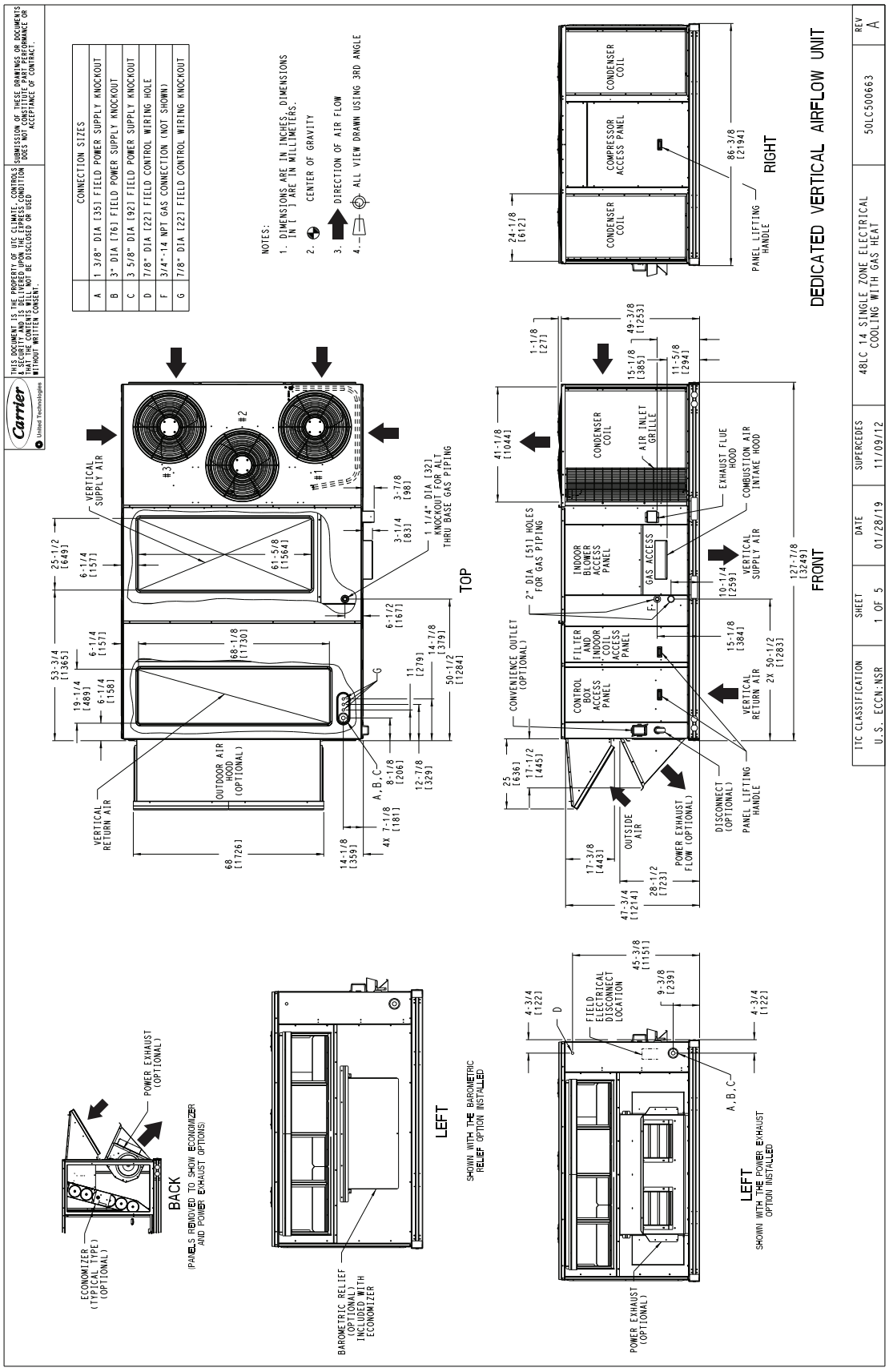
Physical data (cont)

PHYSICAL DATA (HEATING) 12.5 TO 23 TONS

		48LC*B14	48LC*B17	48LC*B20	48LC*B24	48LC*B26
GAS CONNECTION						
	# of gas valves	1	1	1	1	1
	Natural gas supply line press (in. wg)/(psig)	4 -13 / 0.18 - 0.47	4 -13 / 0.18 - 0.47	4 -13 / 0.18 - 0.47	4 -13 / 0.18 - 0.47	4 -13 / 0.18 - 0.47
	Propane supply line press (in. wg)/(psig)	11 -13 / 0.40 - 0.47	11 -13 / 0.40 - 0.47	11 -13 / 0.40 - 0.47	11 -13 / 0.40 - 0.47	11 -13 / 0.40 - 0.47
HEAT ANTICIPATOR SETTING (AMPS)						
	First stage	0.14	0.14	0.14	0.14	0.14
	Second stage	0.14	0.14	0.14	0.14	0.14
NATURAL GAS HEAT						
LOW	# of stages / # of burners (total)	1 or 2 / 4	1 or 2 / 5	1 or 2 / 5	1 or 2 / 5	1 or 2 / 5
	Connection size	3/4 in. NPT	3/4 in. NPT	3/4 in. NPT	3/4 in. NPT	3/4 in. NPT
	Rollout switch opens/closes (°F)	195 / 115	195 / 115	195 / 115	195 / 115	195 / 115
	Temperature rise range (°F)	20 - 50	20 - 55	20 - 55	20 - 55	20 - 55
MED	# of stages / # of burners (total)	1 or 2 / 5	1 or 2 / 7	1 or 2 / 7	1 or 2 / 7	1 or 2 / 7
	Connection size	3/4 in. NPT	3/4 in. NPT	3/4 in. NPT	3/4 in. NPT	3/4 in. NPT
	Rollout switch opens/closes (°F)	195 / 115	195 / 115	195 / 115	195 / 115	195 / 115
	Temperature rise range (°F)	20 - 55	30 - 60	30 - 60	30 - 60	30 - 60
HIGH	# of stages / # of burners (total)	1 or 2 / 7	1 or 2 / 9	1 or 2 / 9	1 or 2 / 9	1 or 2 / 9
	Connection size	3/4 in. NPT	3/4 in. NPT	3/4 in. NPT	3/4 in. NPT	3/4 in. NPT
	Rollout switch opens/closes (°F)	195 / 115	195 / 115	195 / 115	195 / 115	195 / 115
	Temperature rise range (°F)	30 - 60	35 - 65	35 - 65	35 - 65	35 - 65
LIQUID PROPANE HEAT						
LOW	# of stages / # of burners (total)	1 or 2 / 4	1 or 2 / 5	1 or 2 / 5	1 or 2 / 5	1 or 2 / 5
	Connection size	3/4 in. NPT	3/4 in. NPT	3/4 in. NPT	3/4 in. NPT	3/4 in. NPT
	Rollout switch opens/closes (°F)	195 / 115	195 / 115	195 / 115	195 / 115	195 / 115
	Temperature rise range (°F)	20 - 50	20 - 55	20 - 55	20 - 55	20 - 55
MED	# of stages / # of burners (total)	1 or 2 / 5	1 or 2 / 7	1 or 2 / 7	1 or 2 / 7	1 or 2 / 7
	Connection size	3/4 in. NPT	3/4 in. NPT	3/4 in. NPT	3/4 in. NPT	3/4 in. NPT
	Rollout switch opens/closes (°F)	195 / 115	195 / 115	195 / 115	195 / 115	195 / 115
	Temperature rise range (°F)	20 - 55	30 - 60	30 - 60	30 - 60	30 - 60
HIGH	# of stages / # of burners (total)	1 or 2 / 7	1 or 2 / 9	1 or 2 / 9	1 or 2 / 9	1 or 2 / 9
	Connection size	3/4 in. NPT	3/4 in. NPT	3/4 in. NPT	3/4 in. NPT	3/4 in. NPT
	Rollout switch opens/closes (°F)	195 / 115	195 / 115	195 / 115	195 / 115	195 / 115
	Temperature rise range (°F)	30 - 60	35 - 65	35 - 65	35 - 65	35 - 65

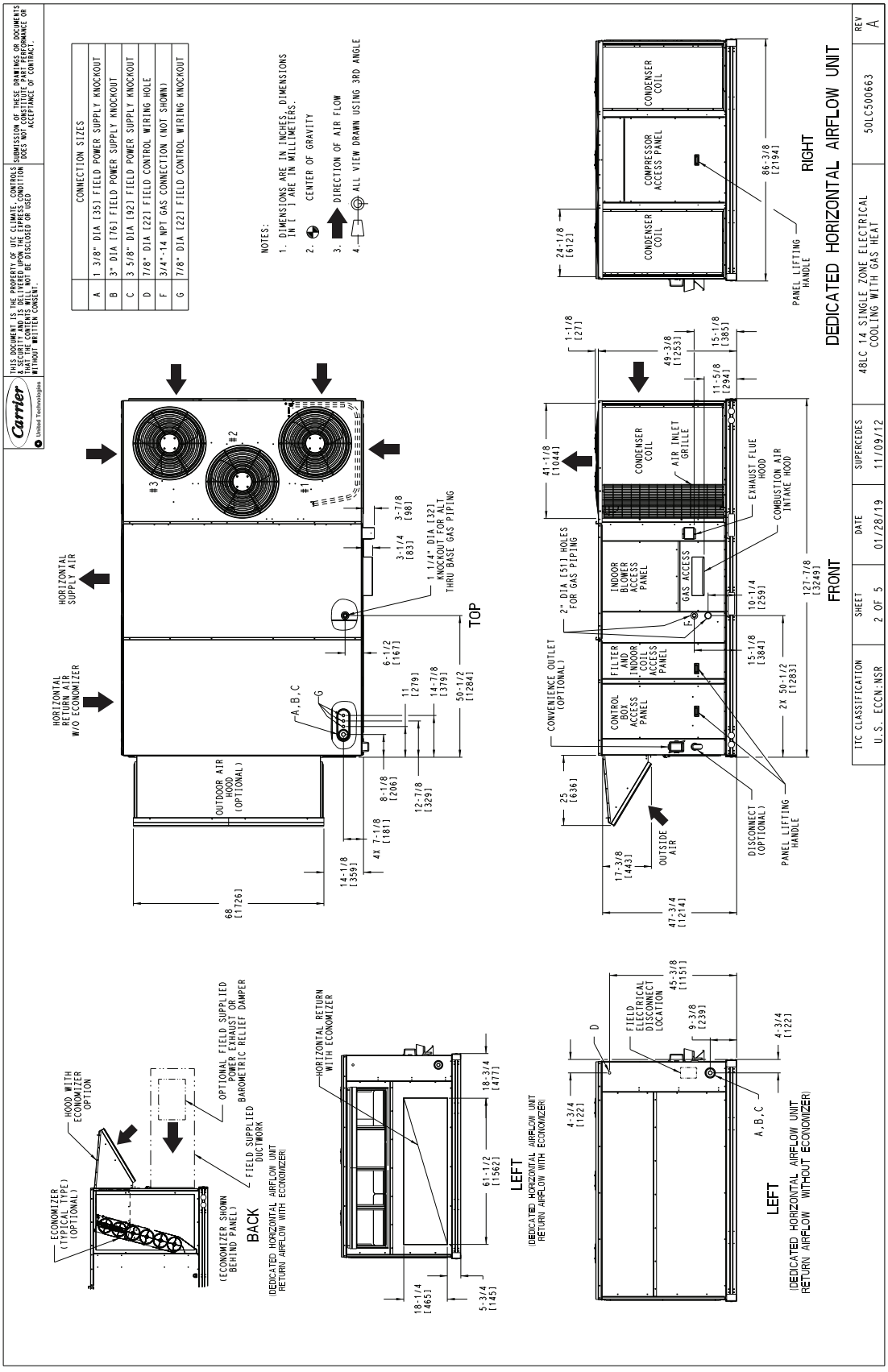
Dimensions

48LC*B14 VERTICAL AIRFLOW



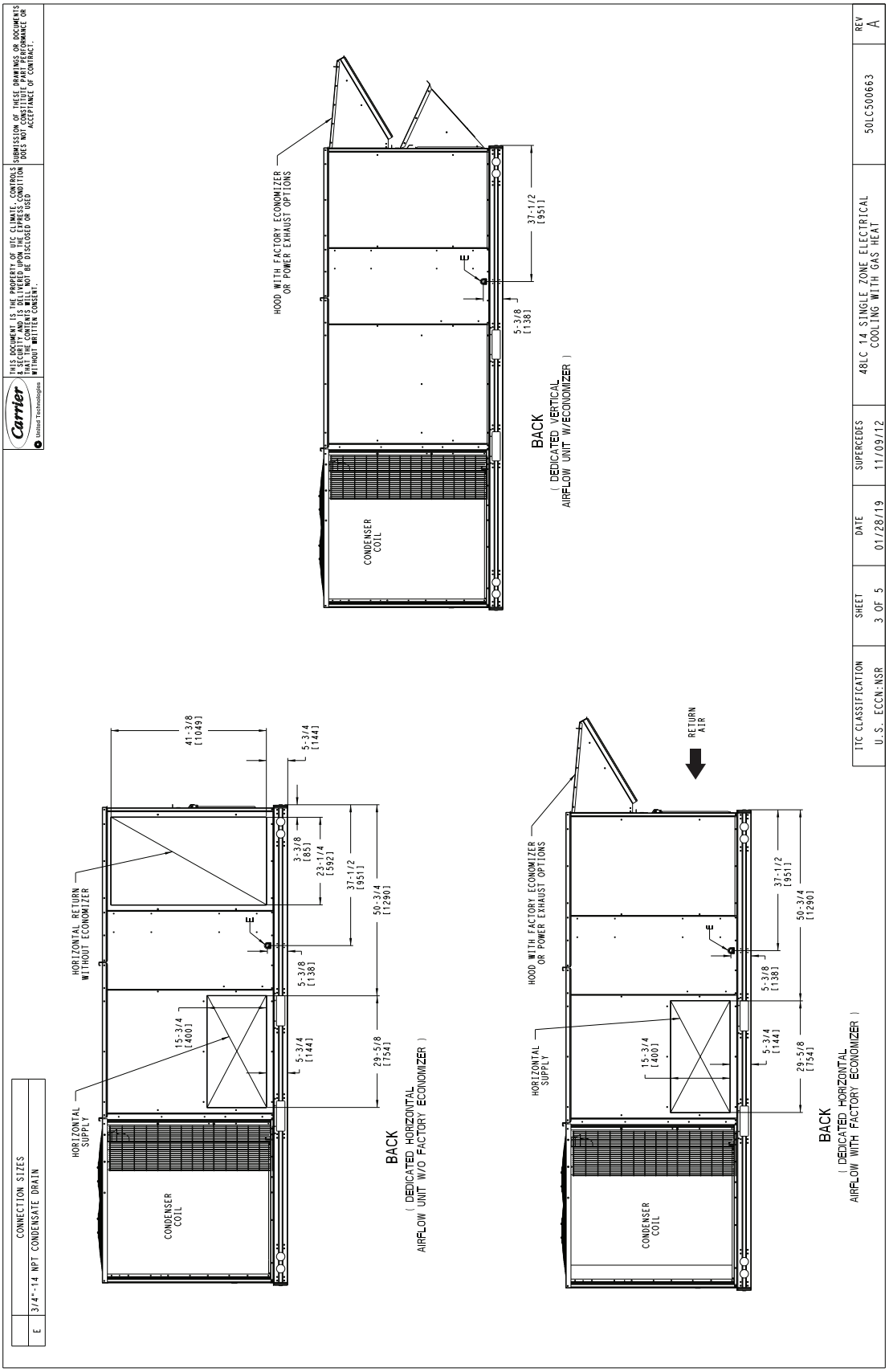
Dimensions (cont)

48LC*B14 HORIZONTAL AIRFLOW



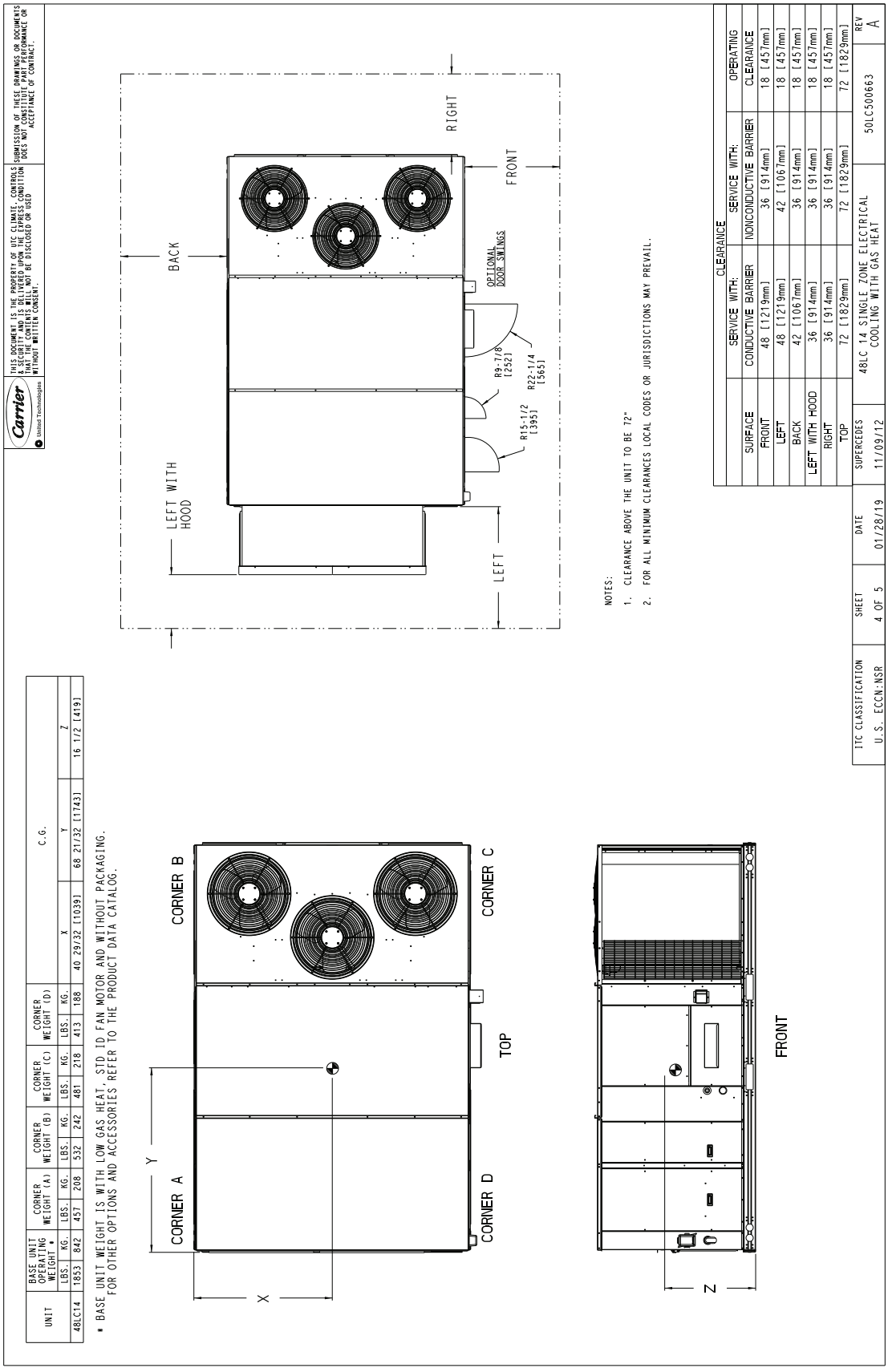
Dimensions (cont)

48LC*B14 BACK VIEW AND CONDENSATE DRAIN LOCATION



Dimensions (cont)

48LC*B14 CORNER WEIGHTS AND CLEARANCES



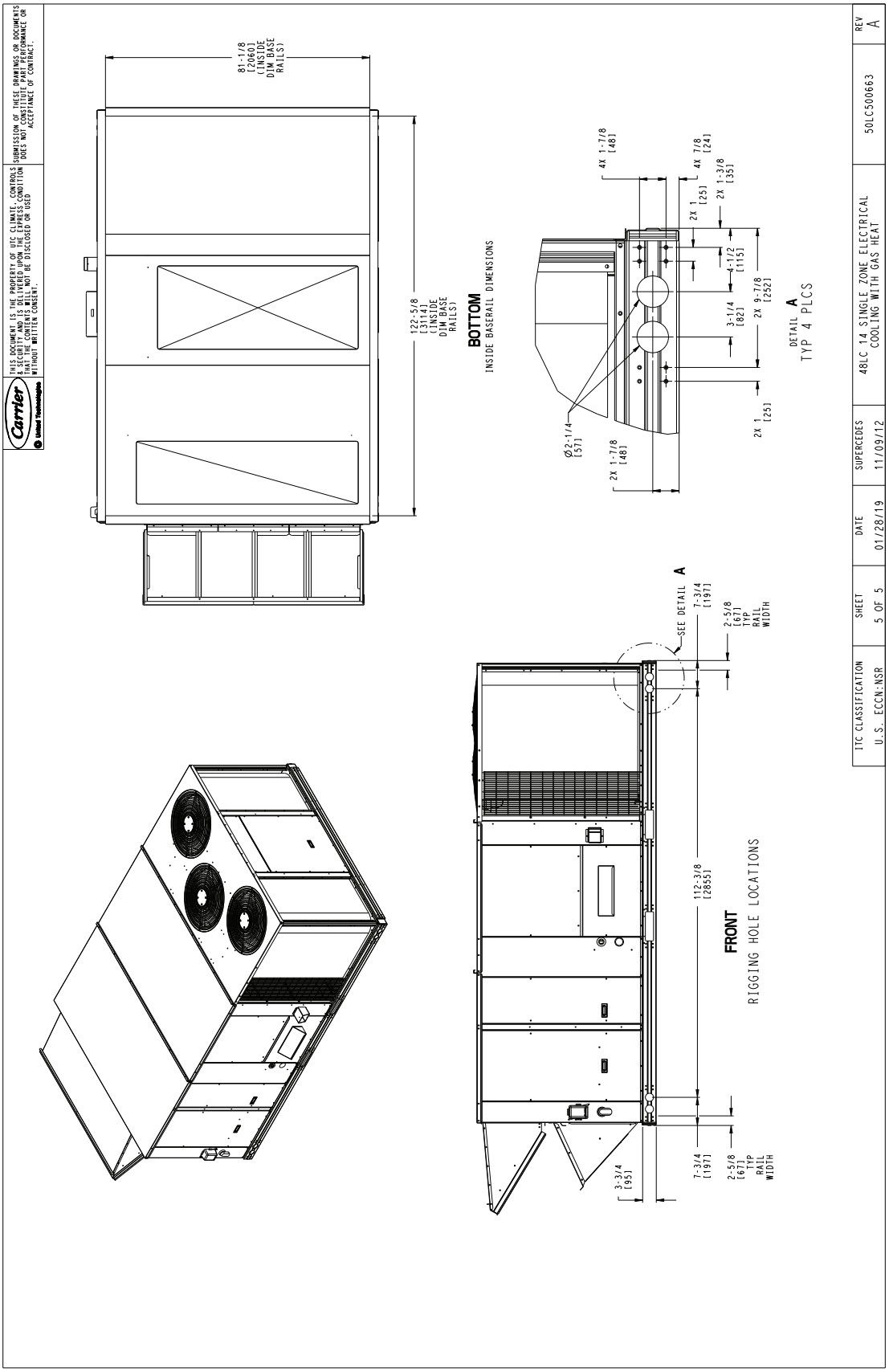
UNIT	BASE UNIT OPERATING WEIGHT *		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.		
	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z
48LC14	1853	842	457	208	532	242	481	218	413	188	40 29/32 [1039]	68 21/32 [1743]	16 1/2 [419]

* BASE UNIT WEIGHT IS WITH LOW GAS HEAT, STD ID FAN MOTOR AND WITHOUT PACKAGING. FOR OTHER OPTIONS AND ACCESSORIES REFER TO THE PRODUCT DATA CATALOG.

CLEARANCE			
	SERVICE WITH:	SERVICE WITH:	OPERATING
SURFACE	CONDUCTIVE BARRIER	NONCONDUCTIVE BARRIER	CLEARANCE
FRONT	48 [1219mm]	36 [914mm]	18 [457mm]
LEFT	48 [1219mm]	42 [1067mm]	18 [457mm]
BACK	42 [1067mm]	36 [914mm]	18 [457mm]
LEFT WITH HOOD	36 [914mm]	36 [914mm]	18 [457mm]
RIGHT	36 [914mm]	36 [914mm]	18 [457mm]
TOP	72 [1829mm]	72 [1829mm]	72 [1829mm]

Dimensions (cont)

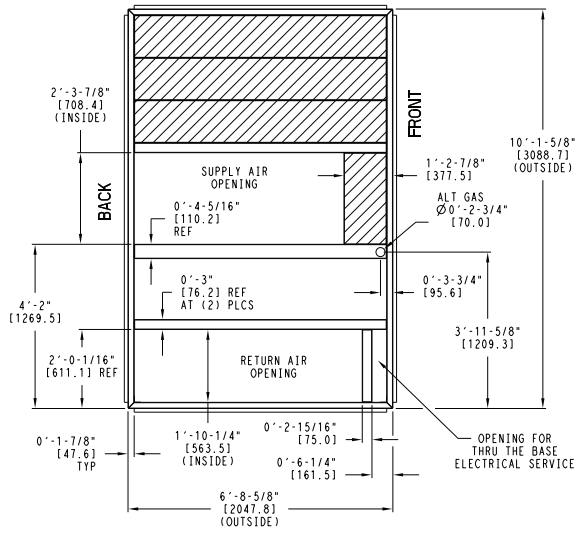
48LC*B14 BOTTOM VIEW



Dimensions (cont)

48LC*B14 ROOF CURB DETAILS

UNIT SIZE	"A"	ROOF CURB ACCESSORY
14	1′-2" [356.0] 2′-0" [610.0]	CRRFCURB045A00 CRRFCURB046A00



NOTES:

1 ROOF CURB ACCESSORY IS SHIPPED UNASSEMBLED.

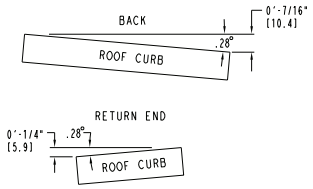
2 DIMENSIONS IN [ ] ARE IN MILLIMETERS.

3 ROOF CURB GALVANIZED STEEL.

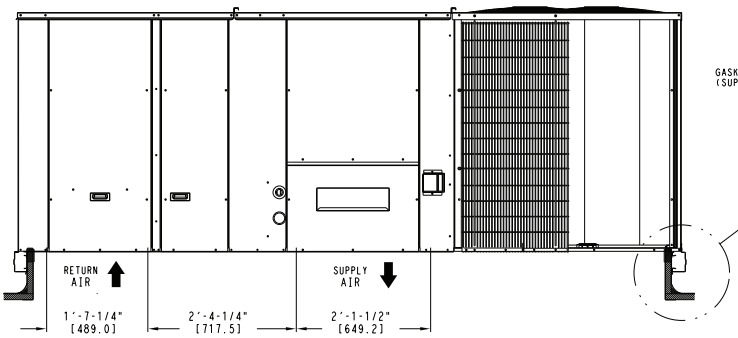
4 ATTACH DUCTWORK TO CURB (FLANGES ON DUCT REST ON CURB)

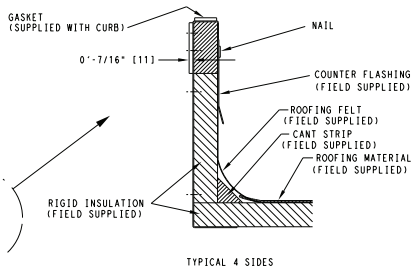
5 SERVICE CLEARANCE 4 ft ON EACH SIDE

➡ DIRECTION OF AIR FLOW

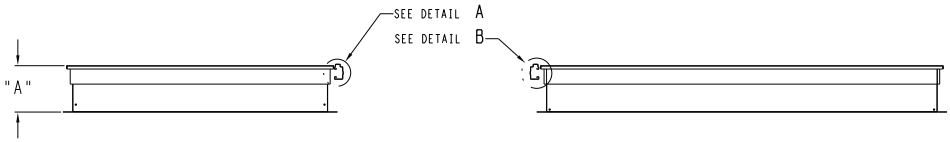


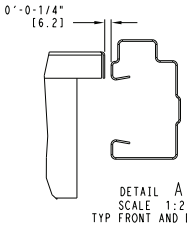
MAX CURB LEVELING TOLERANCES

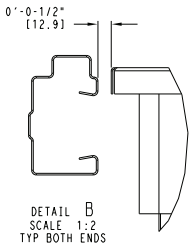


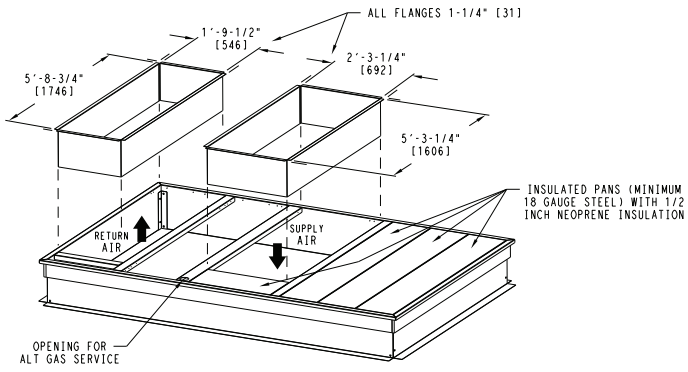


TYPICAL 4 SIDES



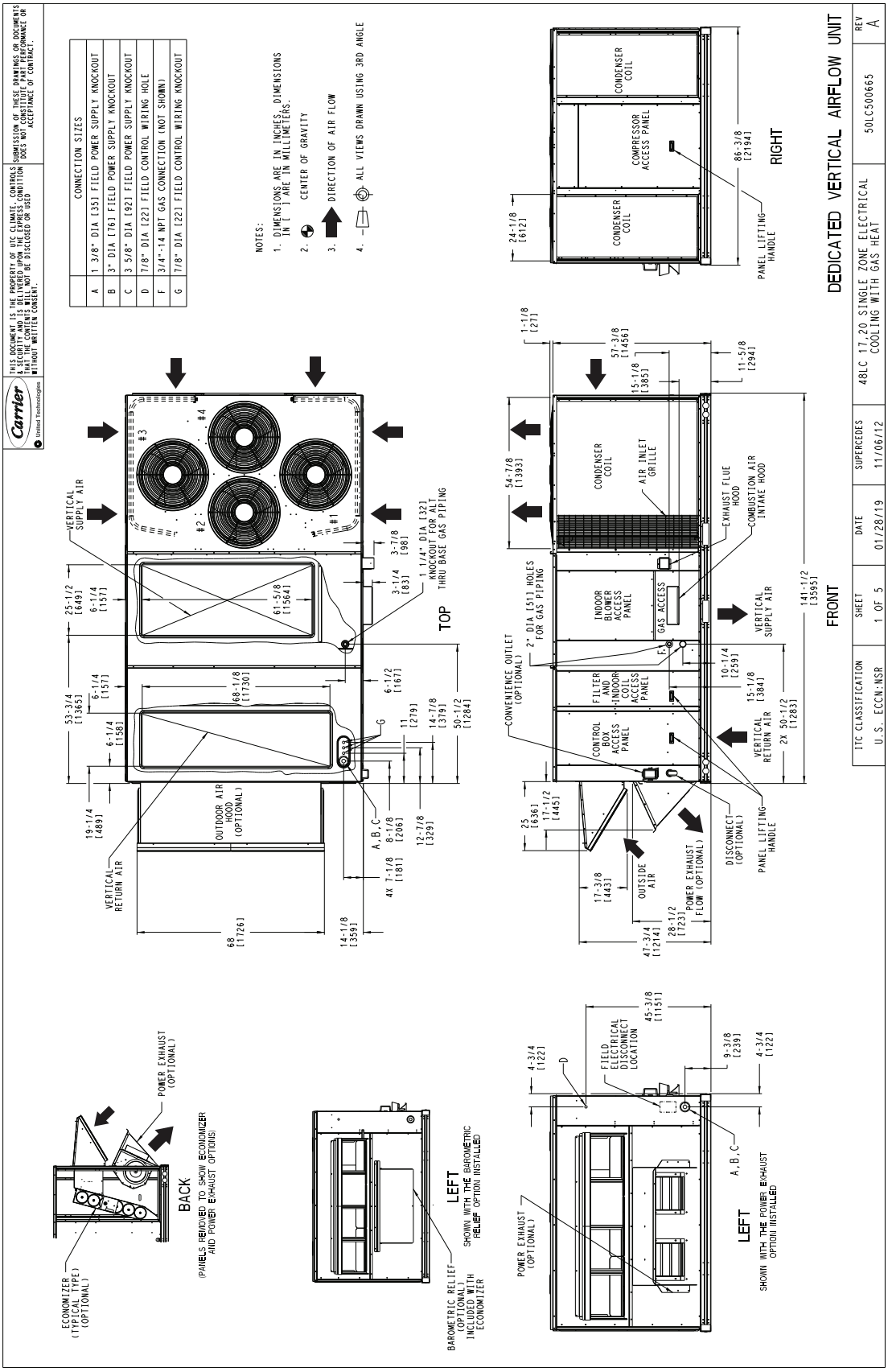






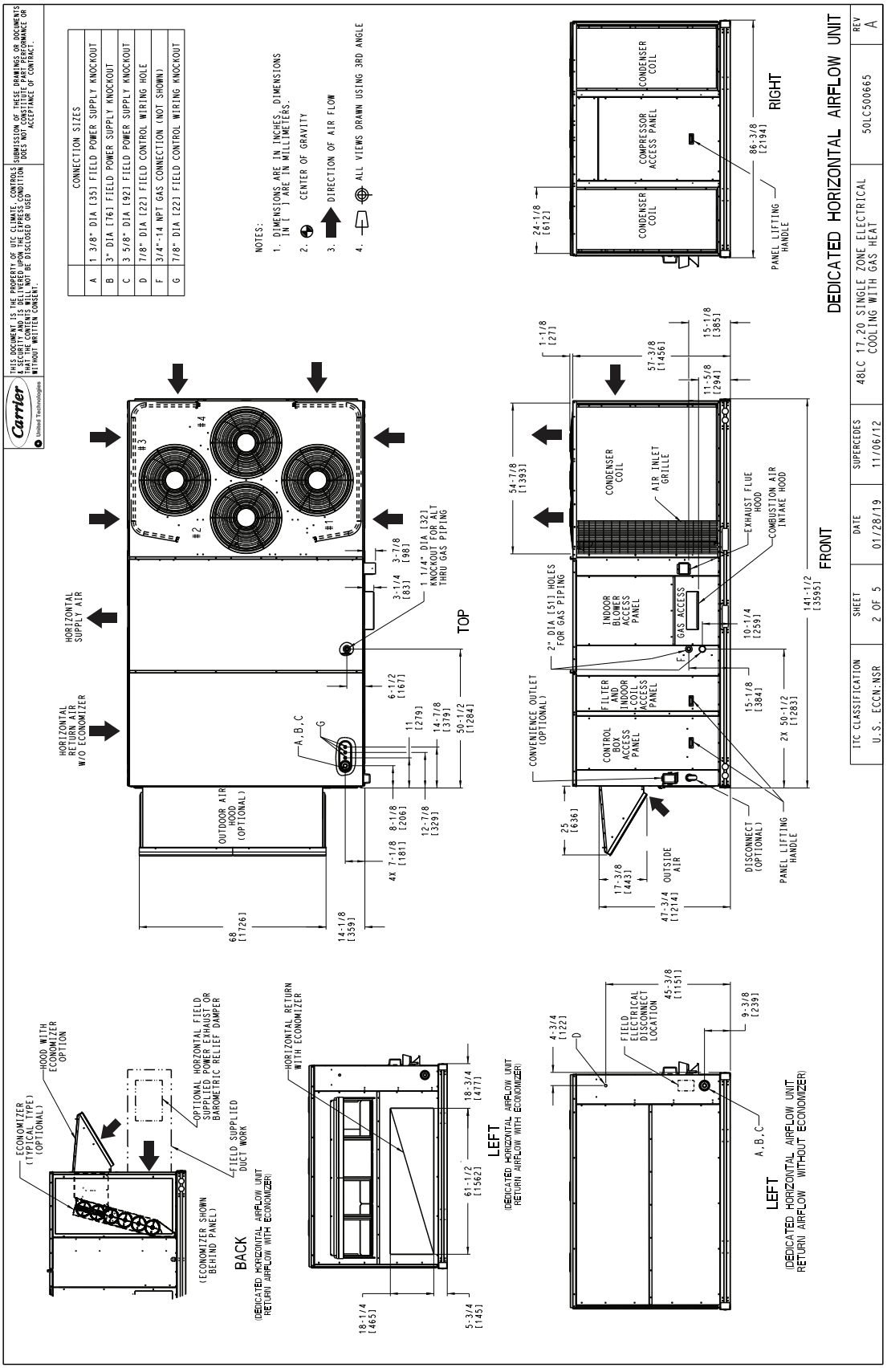
Dimensions (cont)

48LC*B17-20 VERTICAL AIRFLOW



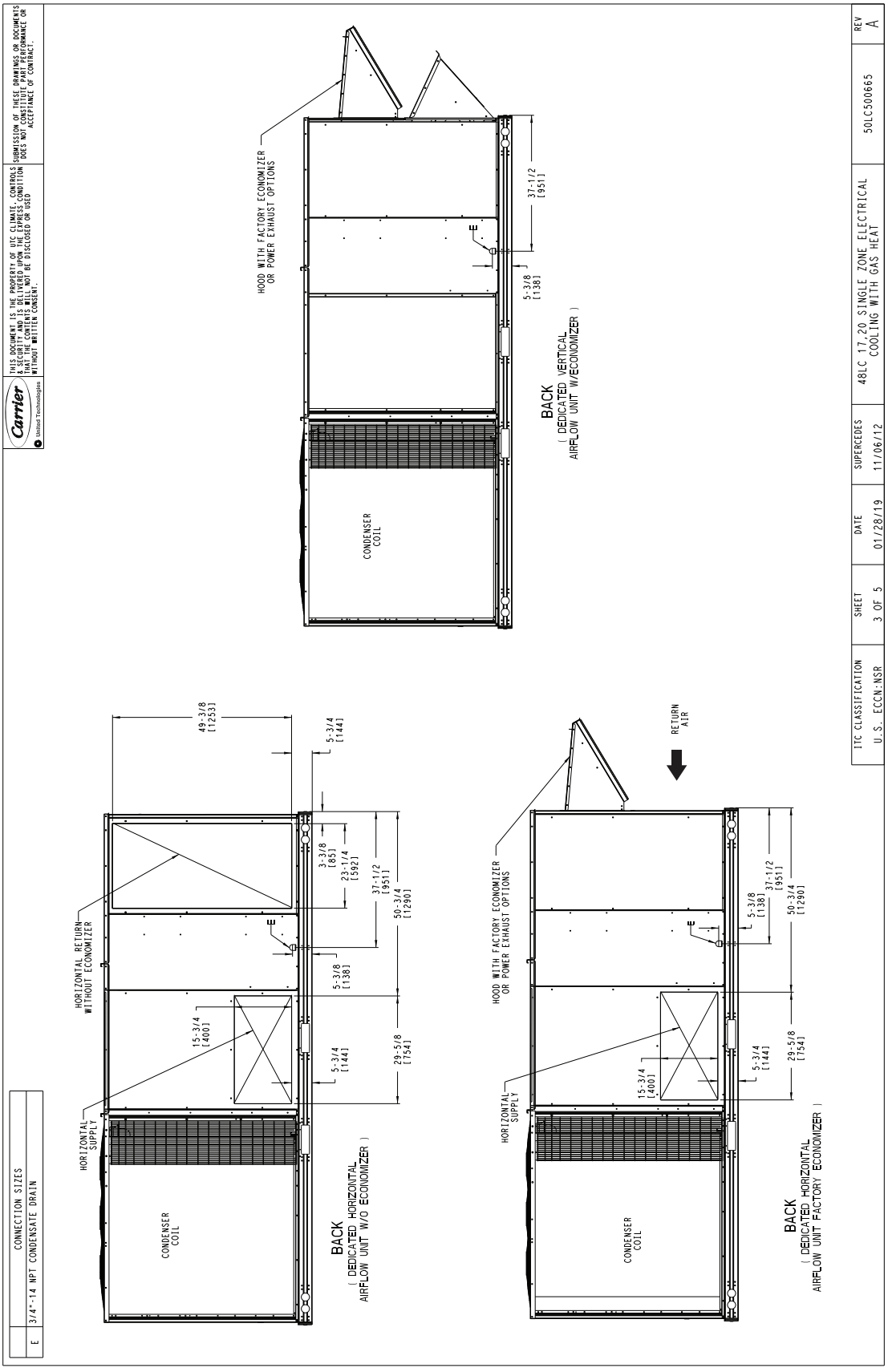
Dimensions (cont)

48LC*B17-20 HORIZONTAL AIRFLOW



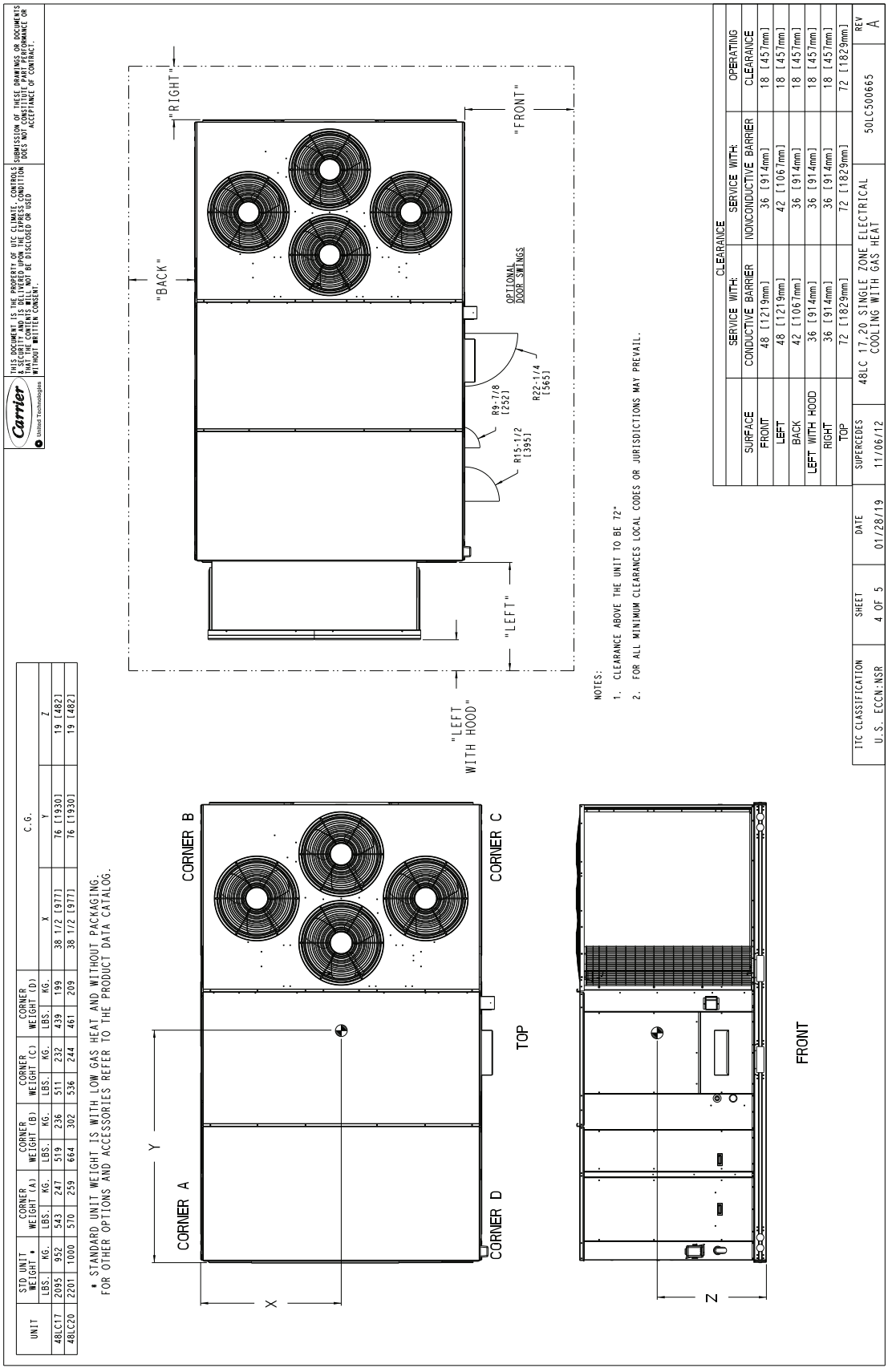
Dimensions (cont)

48LC*B17-20 BACK VIEW AND CONDENSATE DRAIN LOCATION



Dimensions (cont)

48LC*B17-20 CORNER WEIGHTS AND CLEARANCES



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
48LC17	2095	952	543	247	519	236	511	232	439 199	38 1/2 [977]	76 [1930]	19 [482]
48LC20	2201	1000	570	259	664	302	536	244	461 209	38 1/2 [977]	76 [1930]	19 [482]

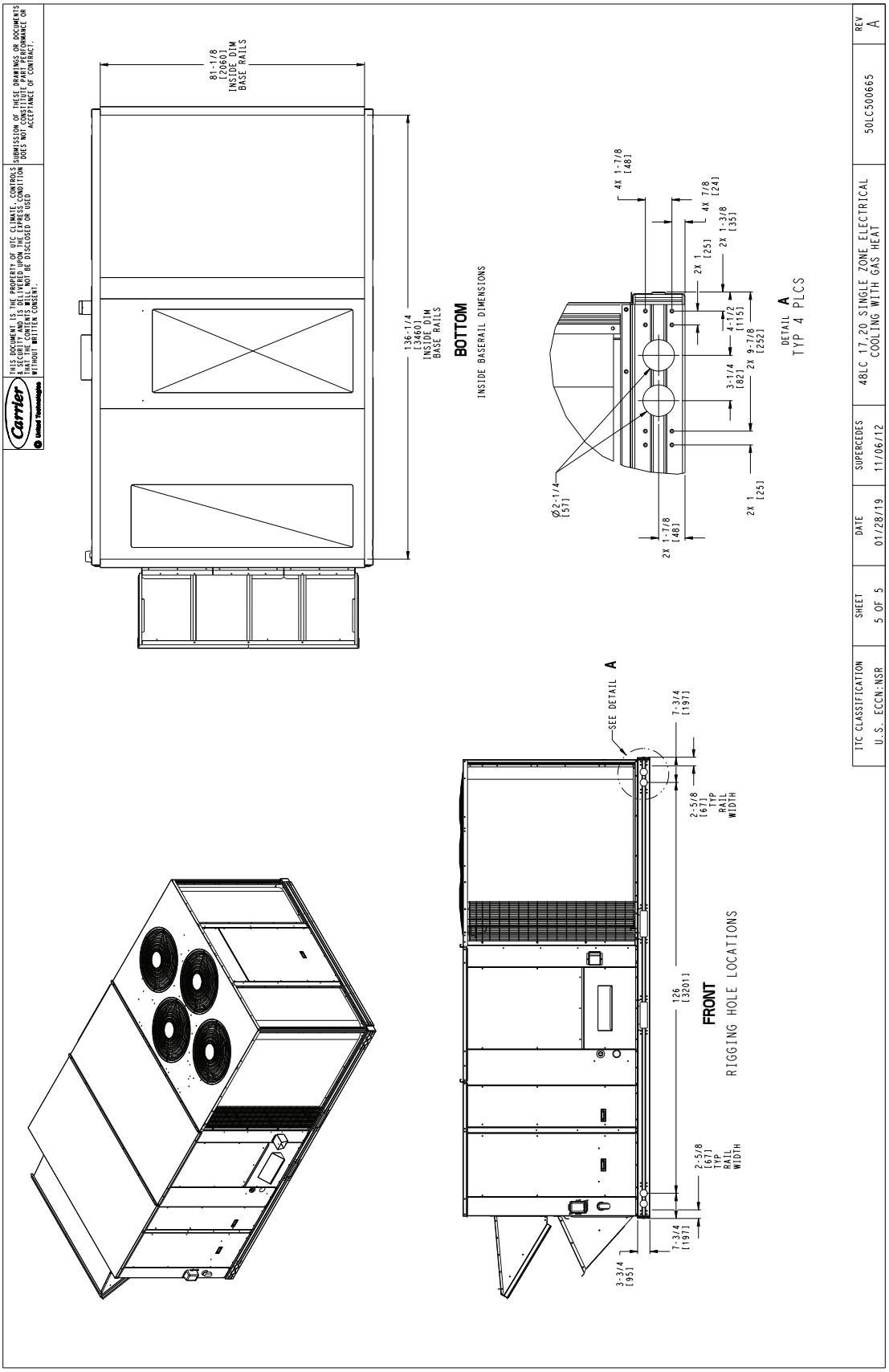
* STANDARD UNIT WEIGHT IS WITH LOW GAS HEAT AND WITHOUT PACKAGING. FOR OTHER OPTIONS AND ACCESSORIES REFER TO THE PRODUCT DATA CATALOG.

CLEARANCE

SURFACE	SERVICE WITH: CONDUCTIVE BARRIER	SERVICE WITH: NONCONDUCTIVE BARRIER	OPERATING CLEARANCE
FRONT	48 [1219mm]	36 [914mm]	18 [457mm]
LEFT	48 [1219mm]	42 [1067mm]	18 [457mm]
BACK	42 [1067mm]	36 [914mm]	18 [457mm]
LEFT WITH HOOD	36 [914mm]	36 [914mm]	18 [457mm]
RIGHT	36 [914mm]	36 [914mm]	18 [457mm]
TOP	72 [1829mm]	72 [1829mm]	72 [1829mm]

Dimensions (cont)

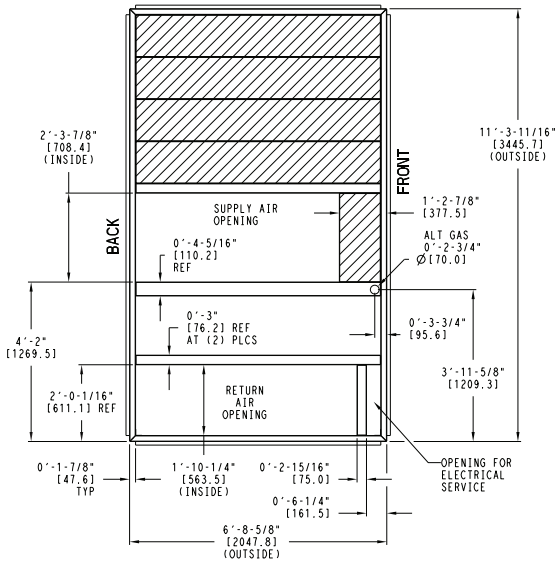
48LC*B17-20 BOTTOM VIEW



Dimensions (cont)

48LC*B17-20 ROOF CURB DETAILS

UNIT SIZE	"A"	ROOF CURB ACCESSORY
17, 20	1′-2" [356.0] 2′-0" [610.0]	CRRFCURB047A00 CRRFCURB048A00



NOTES:

1 ROOF CURB ACCESSORY IS SHIPPED UNASSEMBLED.

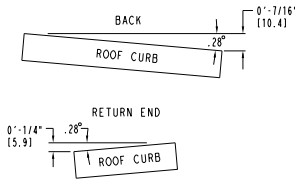
2 DIMENSIONS IN [ ] ARE IN MILLIMETERS.

3 ROOF CURB GALVANIZED STEEL.

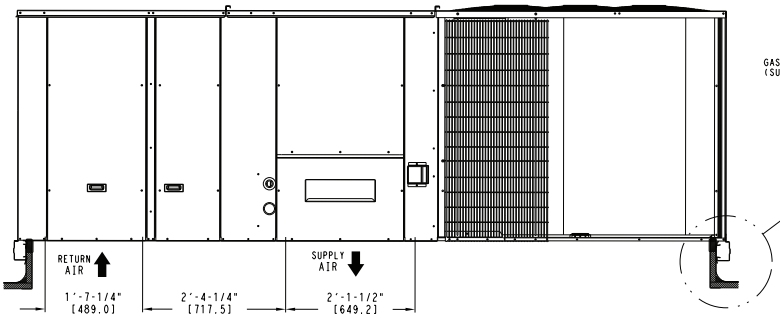
4 ATTACH DUCTWORK TO CURB (FLANGES ON DUCT REST ON CURB)

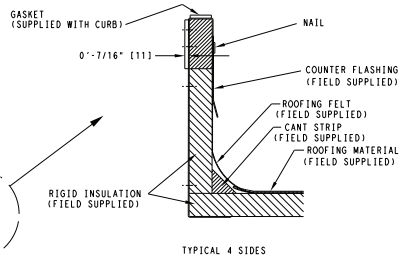
5 SERVICE CLEARANCE 4 ft ON EACH SIDE

➡ DIRECTION OF AIR FLOW

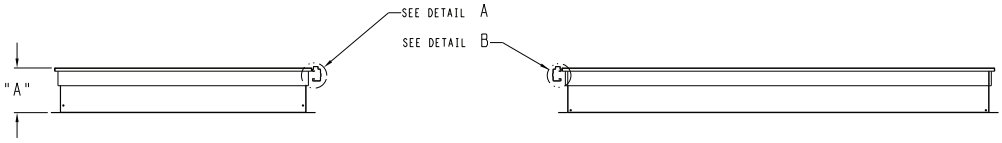


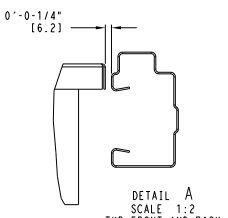
MAX CURB LEVELING TOLERANCES



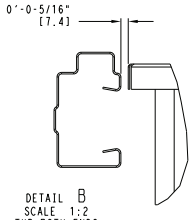


TYPICAL 4 SIDES

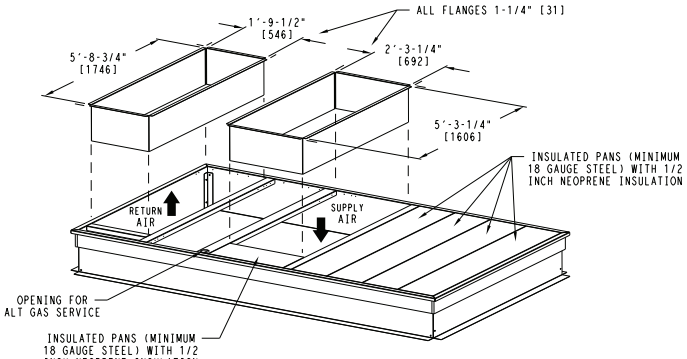




DETAIL A
SCALE 1:2
TYP FRONT AND BACK

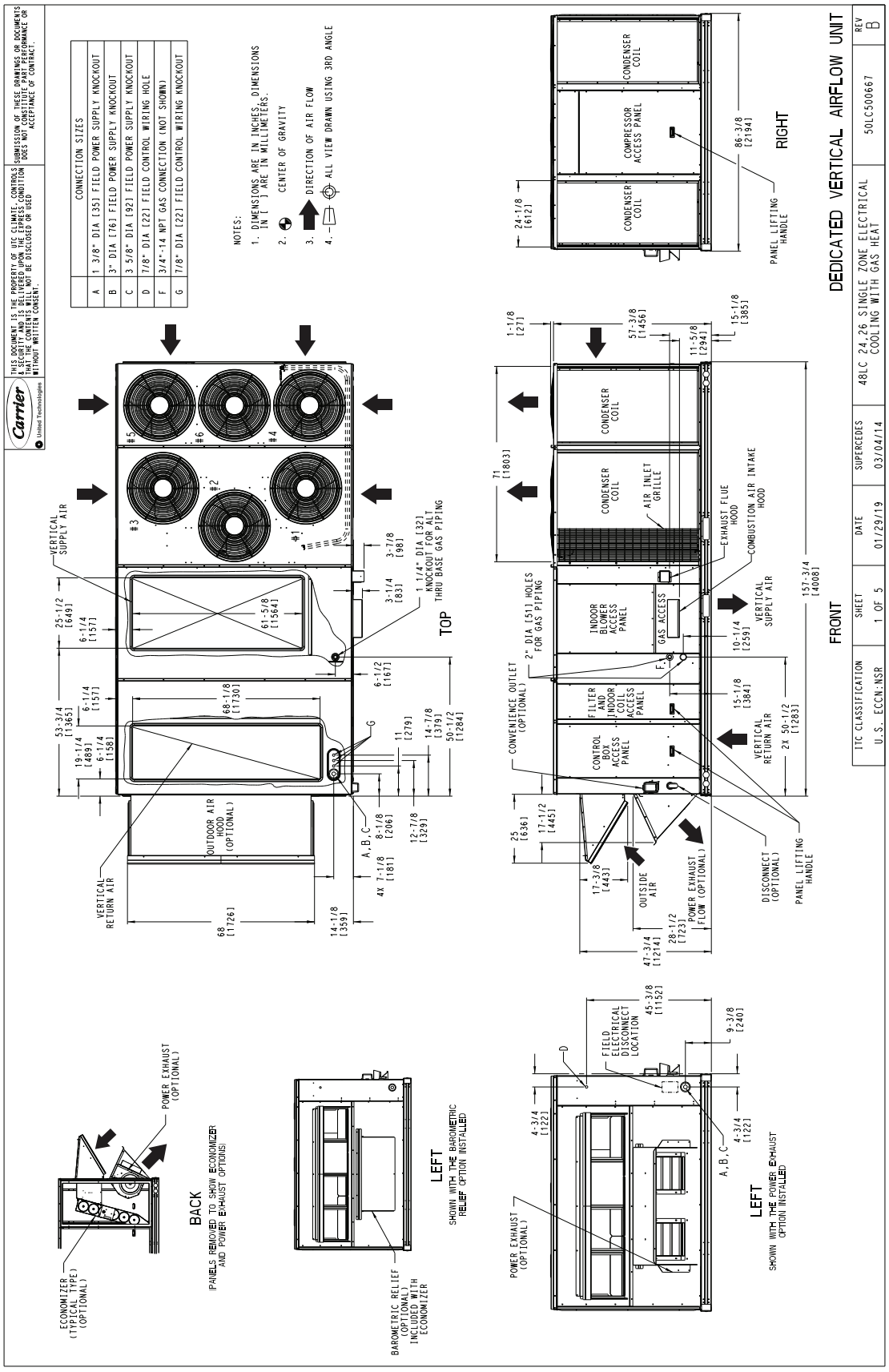


DETAIL B
SCALE 1:2
TYP BOTH ENDS



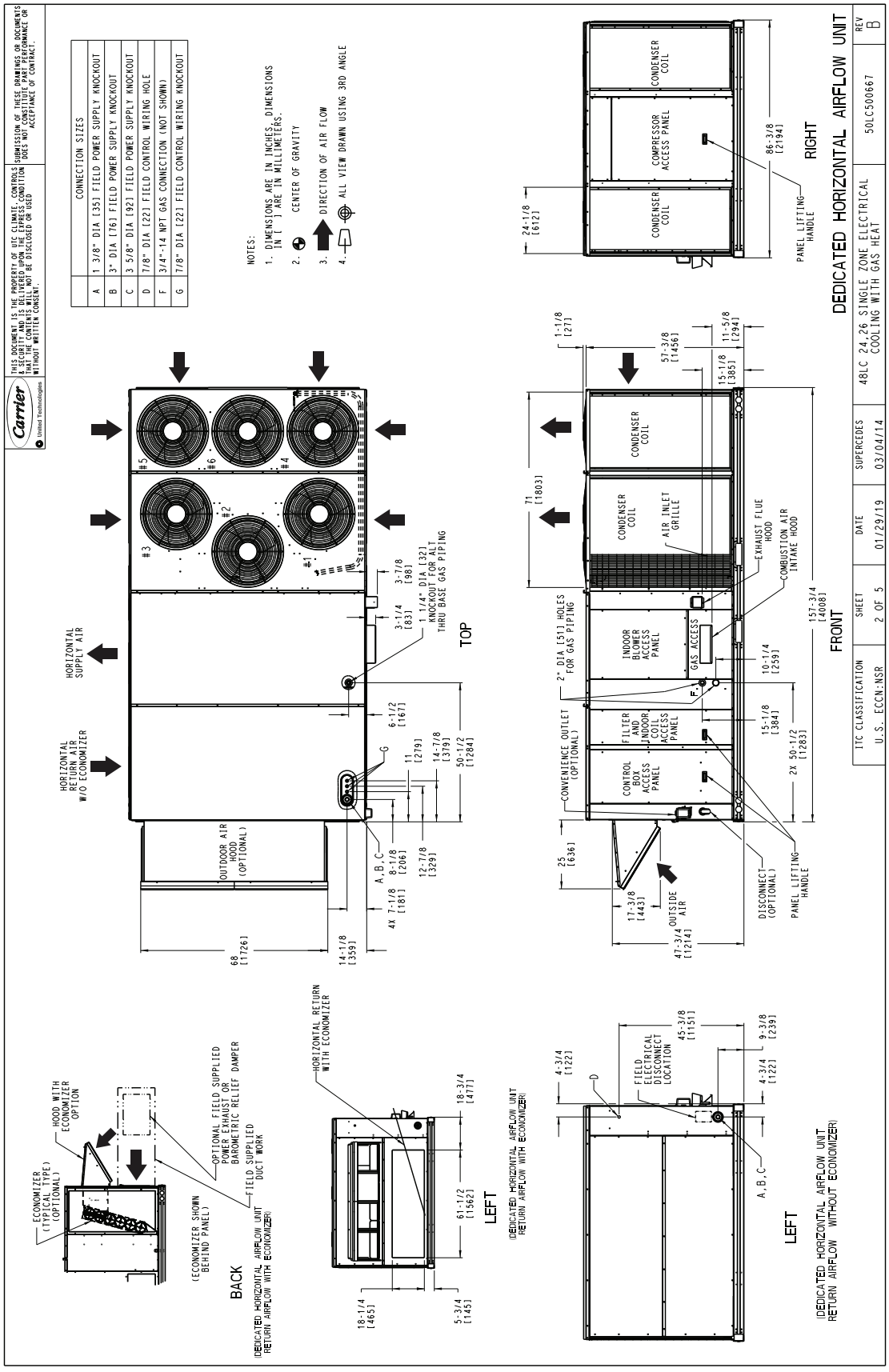
Dimensions (cont)

48LC*B24-26 VERTICAL AIRFLOW



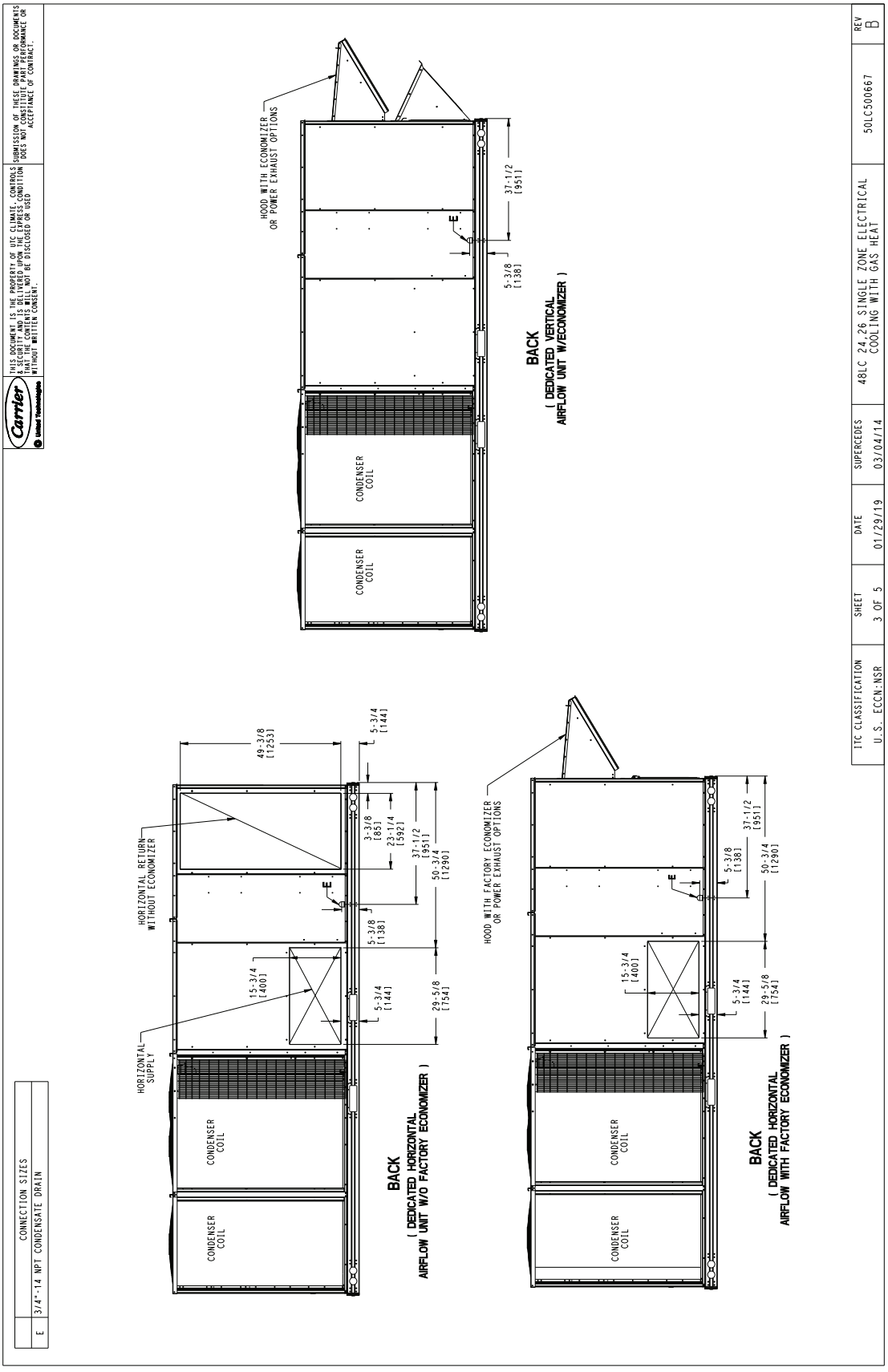
Dimensions (cont)

48LC*B24-26 HORIZONTAL AIRFLOW



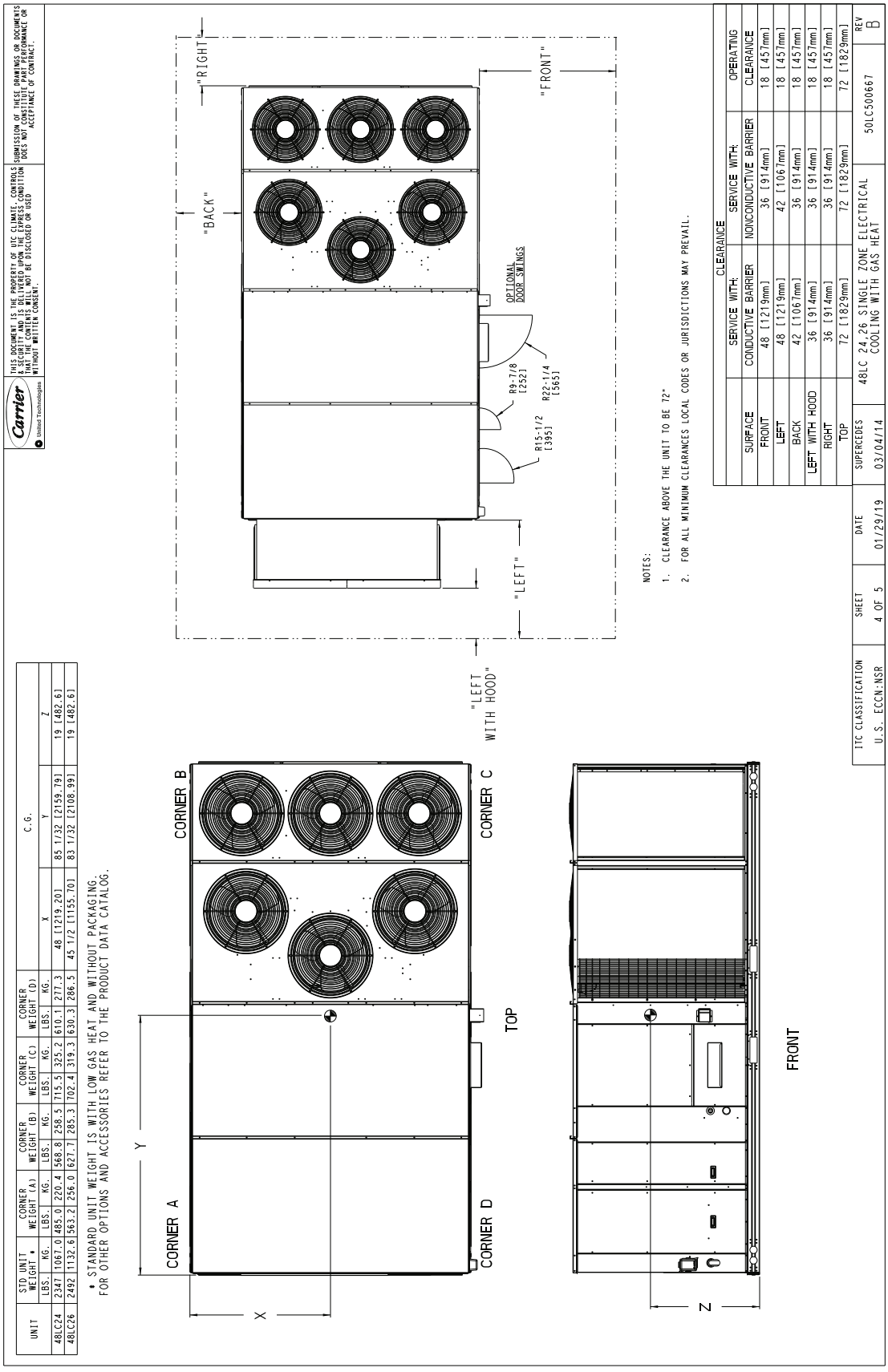
Dimensions (cont)

48LC*B24-26 BACK VIEW AND CONDENSATE DRAIN LOCATION



Dimensions (cont)

48LC*B24-26 CORNER WEIGHTS AND CLEARANCES



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
48LC24	2347	1067.0	485.0	220.4	568.8	258.5	715.5	325.2	610.1	277.3	48 [1219.20]	85 1/32 [2159.79]	19 [482.6]
48LC26	2492	1132.6	563.2	256.0	627.7	285.3	702.4	319.3	630.3	286.5	45 1/2 [1155.70]	83 1/32 [2108.99]	19 [482.6]

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

NOTES:
1. CLEARANCE ABOVE THE UNIT TO BE 72"
2. FOR ALL MINIMUM CLEARANCES LOCAL CODES OR JURISDICTIONS MAY PREVAIL.

CLEARANCE			
	SERVICE WITH:	SERVICE WITH:	OPERATING
SURFACE	CONDUCTIVE BARRIER	NONCONDUCTIVE BARRIER	CLEARANCE
FRONT	48 [1219mm]	36 [914mm]	18 [457mm]
LEFT	48 [1219mm]	42 [1067mm]	18 [457mm]
BACK	42 [1067mm]	36 [914mm]	18 [457mm]
LEFT WITH HOOD	36 [914mm]	36 [914mm]	18 [457mm]
RIGHT	36 [914mm]	36 [914mm]	18 [457mm]
TOP	72 [1829mm]	72 [1829mm]	72 [1829mm]

Carrier Global Corporation
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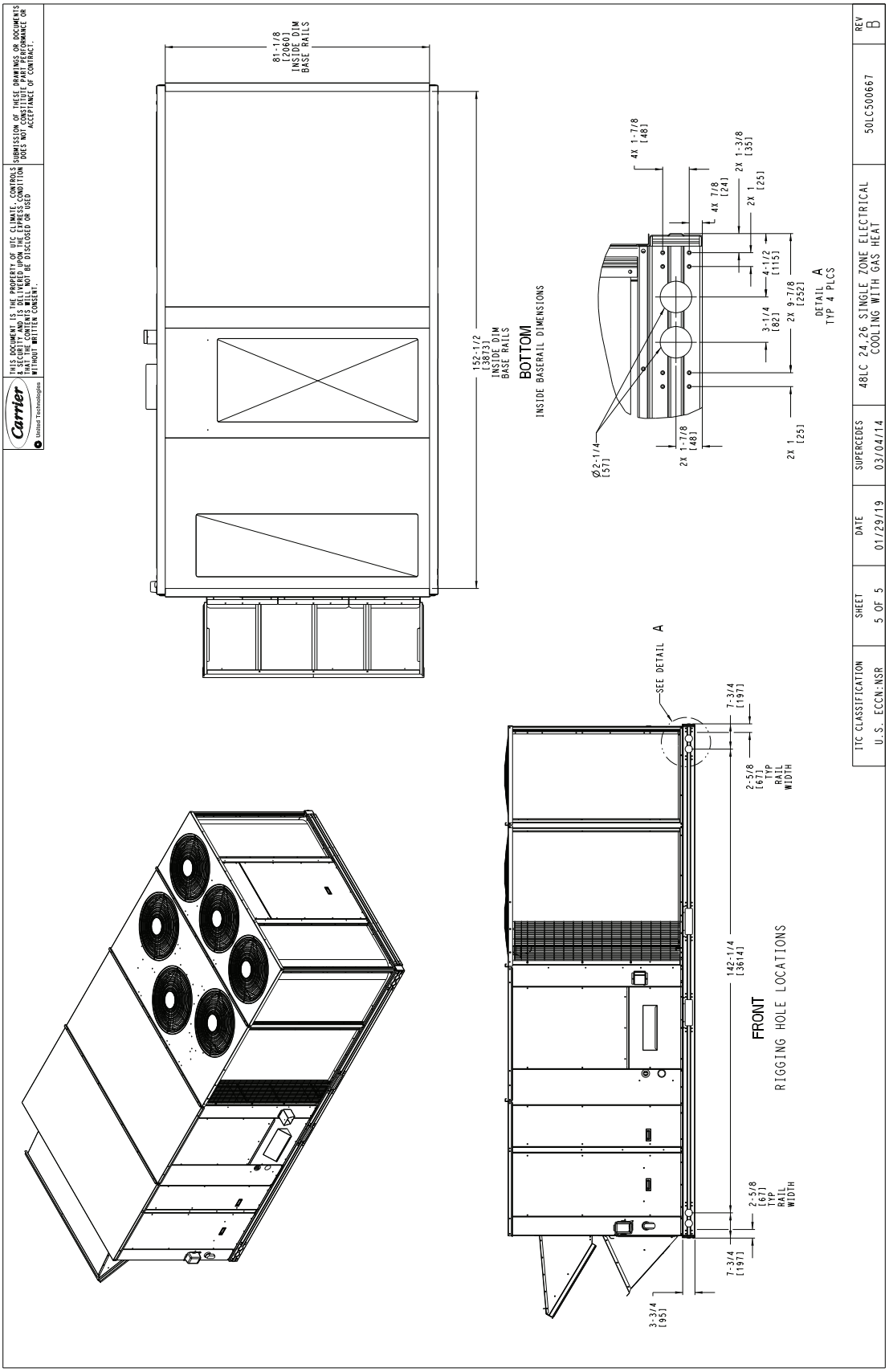
ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	48LC 24,26 SINGLE ZONE ELECTRICAL COOLING WITH GAS HEAT	50LC500667	REV
U.S. ECCN:NSR	4 OF 5	01/29/19	03/04/14			B

Dimensions (cont)

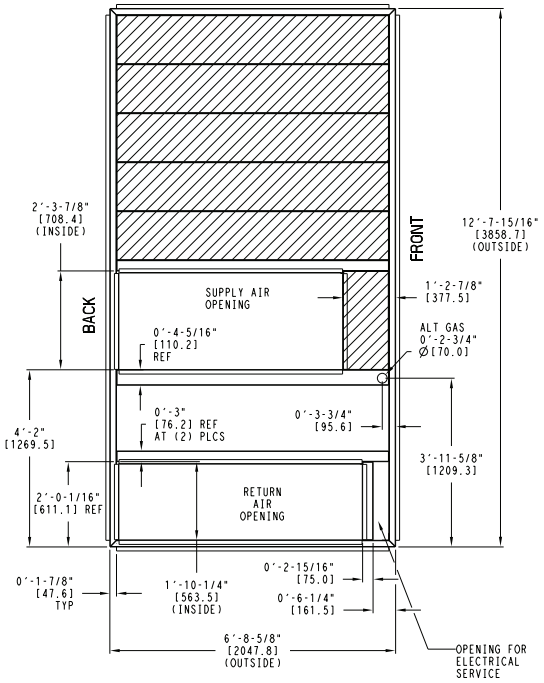
48LC*B24-26 BOTTOM VIEW



Dimensions (cont)

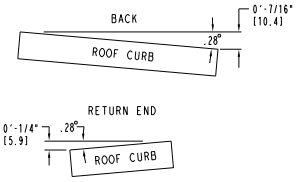
48LC*B24-26 ROOF CURB DETAILS

UNIT SIZE	"A"	ROOF CURB ACCESSORY
24, 26	1′-2" [356.0] 2′-0" [610.0]	CRRFCURB049A00 CRRFCURB050A00

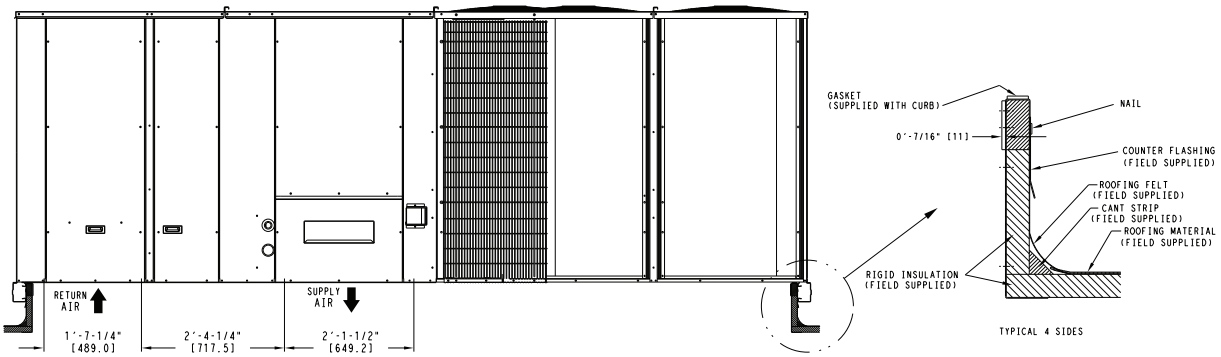


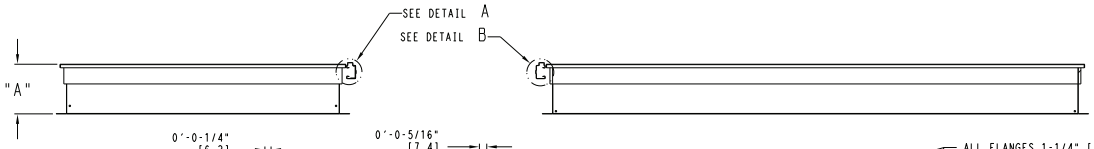
NOTES:
1 ROOF CURB ACCESSORY IS SHIPPED UNASSEMBLED.
2 BOLT HEADS TO BE ON INSIDE OF FLANGE. CLEARANCE IS [11] 0-0-7/16" TYP ALL CORNERS.
3 DIMENSIONS IN [ ] ARE IN MILLIMETERS.
4 ROOF CURB GALVANIZED STEEL.
5 ATTACH DUCTWORK TO CURB (FLANGES ON DUCT REST ON CURB)
6 SERVICE CLEARANCE 4 ft ON EACH SIDE
7 GAS SERVICE PLATE IS PART OF A SEPARATELY SHIPPED ACCESSORY PACKAGE.
8 GAS SERVICE PLATE CAN BE USED WITH EITHER ACCESSORY ROOFCURB.

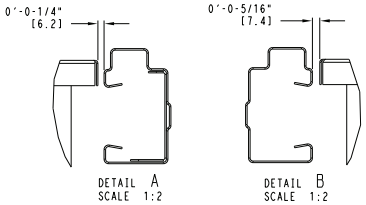
➡ DIRECTION OF AIR FLOW

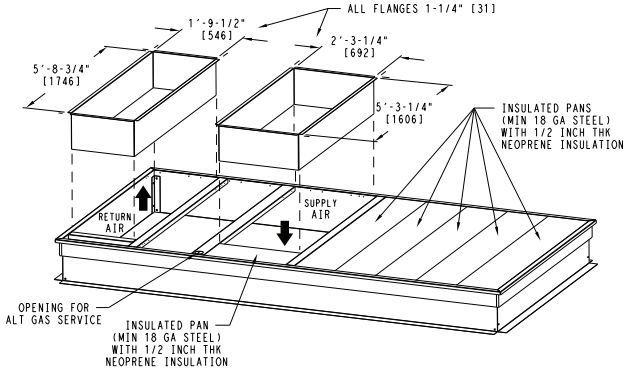


MAX CURB LEVELING TOLERANCES









Application data

Min operating ambient temp (cooling)

In mechanical cooling mode, your Carrier rooftop unit can safely operate down to an outdoor ambient temperature of 45°F (7°C).

An economizer shall be the source of cooling in low ambient conditions. When the outside air temperature is below 45°F (7°C), to improve system reliability, reduce energy usage, and improve system efficiency: mechanical cooling shall not be utilized. Therefore, an economizer shall be used in these conditions to provide efficient low ambient cooling. Using an economizer for low ambient cooling merely requires fan energy to satisfy space requirements. The compressors shall not be required to run, which will provide exceptional energy savings due to less power draw, improved system reliability due to fewer compressor run hours, improved reliability through fewer starts/stops, and lower life cycle costs due to reduced compressor maintenance.

Max operating ambient temp (cooling)

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

Min mixed air temp (heating)

Using the factory settings, the minimum temperatures for the mixed air (the combined temperature of the warm return air and the cold outdoor air) entering the dimpled, gas heat exchangers are:

ALUMINIZED	STAINLESS STEEL
50°F (10°C) continuous	45°F (7°C) continuous
40°F (4°C) intermittent	35°F (2°C) intermittent

Operating at lower mixed-air temperatures may be possible, if a field-supplied, outdoor air thermostat initiates both heat stages when the temperature is less than the minimum temperatures listed above. Please contact your local Carrier representative for assistance.

Min and max 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 maximum may cause blow-off, undesired airflow noise, or airflow related problems with the rooftop unit. Operating below the minimum may cause problems with coil freeze-up and unsafe heating operation. For proper minimum and maximum cfm values, see the tables on pages 10-11.

Heating-to-cooling changeover

Your unit will automatically change from heating to cooling mode when using a thermostat or sensor with an auto-change-over 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. Consider the various economizer control methods and their benefits, as well as sensors required to accomplish your application goals. Please contact your local Carrier representative for assistance.

Motor limits, break horsepower (Bhp)

Due to internal design of Carrier units, the air path, and specially designed motors, the full horsepower (maximum continuous bhp) band, as listed in the physical data table on page 12, can be used with the utmost confidence. There is no need for extra safety factors, as Carrier motors are designed and rigorously tested to use the entire, listed bhp range without either nuisance tripping or premature motor failure.

Propane heating

Propane has different physical qualities than natural gas. As a result, propane requires different fuel to air mixture. To optimize the fuel/air mixture for propane, Carrier sells different burner orifices in an easy to install accessory kit. To select the correct burner orifices or determine the heat capacity for an propane application, use either the selection software, or the unit's service manual.

High altitude heating

High altitudes have less oxygen, which affects the fuel/air mixture in heat exchangers. In order to maintain a proper fuel/air mixture, heat exchangers operating in altitudes above 2000 ft (610 m) require different orifices. To select the correct burner orifices or determine the heat capacity for a high altitude application, use either the selection software, or the unit's service manual.

High altitudes have less oxygen, which means heat exchangers need less fuel. The new gas orifices in this field-installed kit make the necessary adjustment for high altitude applications. They restore the optimal fuel to air mixture and maintain healthy combustion on altitudes above 2000 ft (610 m).

NOTE: Typical natural gas heating value ranges from 975 to 1050 Btu/ft^3 at sea level nationally. The heating value goes down approximately 1.7% per every thousand feet elevation. Standard factory orifices can typically be used up to 2000 ft (610m) elevation without any operational issues.

NOTE: For installations in Canada, the input rating should be derated by 10% for altitudes from 2000 ft (610m) to 4500 ft (1372m) above sea level.

Sizing a rooftop

Bigger isn't necessarily better. While an air conditioner needs to have enough capacity to meet the design loads, it doesn't 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 and 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 undersize 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 Carrier representative for assistance.

Application data (cont)

SYSTEM OVERVIEW

	STANDALONE NO BAS	CARRIER I-VU® BAS	THIRD PARTY BAS
VAV-RTU Open Controller Accessible points	X	X	Limited, See Controls, Start-up, Operation and Troubleshooting manual
Average Space Temperature	X	X	X
Supply Air Temperature	X	X	X
Return Air Temperature	Monitor Only	Monitor Only	Monitor Only
Duct Static Pressure	X	X	X
Zone Setpoints	X	X	N/A
i-Vu VAV Zone space/CO_2/RH	X	X	N/A
System Touch	X	X	N/A
Equipment Touch	X	X	N/A

COOLING CAPACITIES — FIRST STAGE, PART LOAD (12.5 TONS)

48LC*B SIZE 14				AMBIENT TEMPERATURE (°F)																				
				65			75			85			95			105			115			125		
				EAT (db)			EAT (db)			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	75	80	85	75	80	85
1000 CFM	EAT (wb)	58	TC	53.5	53.5	53.7	51.8	51.8	52.7	49.8	49.8	51.7	47.9	47.9	50.5	45.7	45.7	49.3	43.4	43.4	48.1	41.0	41.0	46.3
			SHC	43.1	48.4	53.7	42.0	47.4	52.7	41.0	46.3	51.7	39.9	45.2	50.5	38.7	44.0	49.3	37.3	42.7	48.1	35.9	41.0	46.3
		62	TC	58.0	58.0	58.0	56.1	56.1	56.1	54.0	54.0	54.0	51.9	51.9	51.9	49.6	49.6	49.6	47.1	47.1	47.1	44.4	44.4	44.4
			SHC	39.2	44.6	49.9	38.2	43.6	48.9	37.1	42.5	47.9	36.0	41.3	46.7	34.8	40.2	45.5	33.5	38.9	44.3	32.2	37.5	42.9
		67	TC	64.3	64.3	64.3	62.1	62.1	62.1	59.9	59.9	59.9	57.5	57.5	57.5	55.0	55.0	55.0	52.3	52.3	52.3	49.3	49.3	49.3
			SHC	34.3	39.7	45.0	33.2	38.6	44.0	32.2	37.5	42.9	31.0	36.4	41.7	29.8	35.2	40.6	28.6	33.9	39.3	27.3	32.7	38.0
		72	TC	71.2	71.2	71.2	68.8	68.8	68.8	66.3	66.3	66.3	63.8	63.8	63.8	61.0	61.0	61.0	58.1	58.1	58.1	54.9	54.9	54.9
			SHC	29.3	34.6	40.0	28.2	33.5	38.9	27.1	32.5	37.8	25.9	31.3	36.7	24.8	30.1	35.5	23.5	28.9	34.2	22.2	27.6	33.0
		76	TC	—	77.2	77.2	—	74.7	74.7	—	72.1	72.1	—	69.2	69.2	—	66.3	66.3	—	63.1	63.1	—	59.7	59.7
			SHC	—	30.5	35.9	—	29.4	34.8	—	28.3	33.6	—	27.2	32.6	—	25.9	31.3	—	24.8	30.1	—	23.4	28.8
1350 CFM	EAT (wb)	58	TC	58.9	58.9	64.8	56.8	56.8	63.6	55.4	55.4	60.9	53.0	53.0	59.8	51.0	51.0	57.4	48.8	48.8	55.0	46.5	46.5	52.4
			SHC	50.6	57.7	64.8	49.3	56.5	63.6	47.5	54.2	60.9	46.3	53.0	59.8	44.6	51.0	57.4	42.6	48.8	55.0	40.6	46.5	52.4
		62	TC	63.7	63.7	63.7	61.3	61.3	61.3	59.0	59.0	59.0	56.5	56.5	56.5	53.7	53.7	54.8	50.9	50.9	53.4	47.8	47.8	52.0
			SHC	45.2	52.5	59.7	44.2	51.3	58.5	42.9	50.1	57.3	41.7	48.9	56.1	40.5	47.6	54.8	39.1	46.2	53.4	37.6	44.8	52.0
		67	TC	70.4	70.4	70.4	67.9	67.9	67.9	65.2	65.2	65.2	62.4	62.4	62.4	59.5	59.5	59.5	56.4	56.4	56.4	52.9	52.9	52.9
			SHC	38.5	45.7	52.9	37.3	44.6	51.8	36.2	43.4	50.6	34.9	42.1	49.3	33.6	40.9	48.1	32.3	39.5	46.7	30.9	38.1	45.3
		72	TC	77.9	77.9	77.9	75.1	75.1	75.1	72.1	72.1	72.1	69.0	69.0	69.0	65.8	65.8	65.8	62.4	62.4	62.4	58.8	58.8	58.8
			SHC	31.6	38.8	46.0	30.4	37.6	44.9	29.2	36.5	43.7	28.0	35.2	42.4	26.7	33.9	41.1	25.4	32.6	39.9	24.0	31.2	38.4
		76	TC	—	84.3	84.3	—	81.3	81.3	—	78.1	78.1	—	74.8	74.8	—	71.4	71.4	—	67.7	67.7	—	63.9	63.9
			SHC	—	33.1	40.4	—	31.9	39.2	—	30.7	37.9	—	29.4	36.8	—	28.2	35.5	—	26.9	34.1	—	25.5	32.8
1700 CFM	EAT (wb)	58	TC	60.8	60.8	68.9	57.4	57.4	65.3	53.9	53.9	61.5	50.3	50.3	57.6	46.6	46.6	53.6	42.7	42.7	49.4	38.7	38.7	45.0
			SHC	52.7	60.8	68.9	49.5	57.4	65.3	46.3	53.9	61.5	43.0	50.3	57.6	39.5	46.6	53.6	36.0	42.7	49.4	32.3	38.7	45.0
		62	TC	64.6	64.6	65.8	60.5	60.5	63.1	56.3	56.3	60.3	52.0	52.0	57.4	47.6	47.6	54.5	43.1	43.1	51.3	38.7	38.7	47.3
			SHC	47.9	56.8	65.8	45.0	54.1	63.1	42.3	51.3	60.3	39.5	48.5	57.4	36.6	45.5	54.5	33.5	42.4	51.3	30.1	38.7	47.3
		67	TC	72.3	72.3	72.3	68.0	68.0	68.0	63.5	63.5	63.5	58.9	58.9	58.9	54.1	54.1	54.1	49.2	49.2	49.2	44.1	44.1	44.1
			SHC	40.1	49.1	58.2	37.3	46.4	55.4	34.5	43.6	52.7	31.7	40.8	49.8	28.9	37.9	46.9	25.9	35.0	44.0	23.0	32.0	41.0
		72	TC	80.9	80.9	80.9	76.2	76.2	76.2	71.5	71.5	71.5	66.6	66.6	66.6	61.5	61.5	61.5	56.4	56.4	56.4	50.9	50.9	50.9
			SHC	32.1	41.2	50.3	29.3	38.4	47.6	26.6	35.7	44.8	23.8	32.9	41.9	21.0	30.0	39.1	18.0	27.1	36.2	15.1	24.2	33.2
		76	TC	—	88.4	88.4	—	83.5	83.5	—	78.4	78.4	—	73.2	73.2	—	67.9	67.9	—	62.4	62.4	—	56.6	56.6
			SHC	—	34.7	43.8	—	32.0	41.0	—	29.2	38.3	—	26.3	35.5	—	23.5	32.7	—	20.7	29.7	—	17.7	26.8
2000 CFM	EAT (wb)	58	TC	65.3	65.3	74.0	61.7	61.7	70.1	58.0	58.0	66.0	54.1	54.1	61.9	50.2	50.2	57.6	46.0	46.0	53.1	41.7	41.7	48.6
			SHC	56.6	65.3	74.0	53.3	61.7	70.1	49.9	58.0	66.0	46.3	54.1	61.9	42.7	50.2	57.6	38.9	46.0	53.1	35.0	41.7	48.6
		62	TC	67.4	67.4	73.4	63.1	63.1	70.5	58.8	58.8	67.6	54.4	54.4	64.4	50.3	50.3	60.3	46.1	46.1	55.7	41.8	41.8	50.9
			SHC	52.5	63.0	73.4	49.6	60.1	70.5	46.7	57.1	67.6	43.7	54.0	64.4	40.3	50.3	60.3	36.7	46.1	55.7	32.8	41.8	50.9
		67	TC	75.1	75.1	75.1	70.5	70.5	70.5	65.8	65.8	65.8	60.9	60.9	60.9	56.1	56.1	56.1	50.9	50.9	50.9	45.6	45.6	46.8
			SHC	43.2	53.8	64.4	40.4	51.0	61.5	37.5	48.1	58.7	34.7	45.2	55.8	31.8	42.3	52.8	28.8	39.3	49.8	25.7	36.3	46.8
		72	TC	83.9	83.9	83.9	79.0	79.0	79.0	73.9	73.9	73.9	68.8	68.8	68.8	63.6	63.6	63.6	58.1	58.1	58.1	52.5	52.5	52.5
			SHC	33.7	44.4	55.0	30.9	41.5	52.2	28.1	38.7	49.3	25.2	35.8	46.4	22.3	32.9	43.5	19.3	29.9	40.6	16.4	26.9	37.5
		76	TC	—	91.4	91.4	—	86.2	86.2	—	80.9	80.9	—	75.5	75.5	—	69.9	69.9	—	64.2	64.2	—	58.2	58.2
			SHC	—	36.7	47.4	—	33.8	44.6	—	31.0	41.7	—	28.1	38.8	—	25.3	35.9	—	22.2	33.0	—	19.3	29.9
2350 CFM	EAT (wb)	58	TC	69.7	69.7	78.8	65.8	65.8	74.6	61.8	61.8	70.4	57.8	57.8	66.0	53.6	53.6	61.4	49.2	49.2	56.7	44.7	44.7	51.8
			SHC	60.5	69.7	78.8	56.9	65.8	74.6	53.3	61.8	70.4	49.6	57.8	66.0	45.7	53.6	61.4	41.7	49.2	56.7	37.6	44.7	51.8
		62	TC	70.1	70.1	81.3	65.9	65.9	77.7	61.9	61.9	73.3	57.9	57.9	68.8	53.7	53.7	64.2	49.3	49.3	59.3	44.8	44.8	54.2
			SHC	57.3	69.3	81.3	54.1	65.9	77.7	50.6	61.9	73.3	46.9	57.9	68.8	43.2	53.7	64.2	39.3	49.3	59.3	35.3	44.8	54.2
		67	TC	77.5	77.5	77.5	72.6	72.6	72.6	67.8	67.8	67.8	62.8	62.8	62.8	57.7	57.7	59.4	52.5	52.5	56.4	47.0	47.0	53.1
			SHC	46.6	58.9	71.2	43.7	56.0	68.3	40.8	53.0	65.3	37.8	50.1	62.4	34.9	47.1	59.4	31.9	44.1	56.4	28.8	41.0	53.1
		72	TC	86.3	86.3	86.3	81.2	81.2	81.2	76.1	76.1	76.1	70.7	70.7	70.7	65.2	65.2	65.2	59.6	59.6	59.6	53.7	53.7	53.7
			SHC	35.3	47.7	60.1	32.5	44.9	57.2	29.5	41.9	54.3	26.6	39.0	51.4	23.7	36.1	48.4	20.8	33.1	45.4	17.6	30.0	42.3
		76	TC	—	93.9	93.9	—	88.5	88.5	—	83.1	83.1	—	77.4	77.4	—	71.7	71.7	—	65.7	65.7	—	59.6	59.6
			SHC	—	38.6	51.1	—	35.8	48.3	—	32.9	45.3	—	29.9	42.4	—	27.0	39.4	—	24.0	36.4	—	21	33.3
2700 CFM	EAT (wb)	58	TC	73.3	73.3	82.8	69.2	69.2	78.4	65.0	65.0	73.9	60.8	60.8	69.3	56.5	56.5	64.5	51.9	51.9	59.6	47.1	47.1	54.4
			SHC	63.8	73.3	82.8	60	69.2	78.4	56.2	65.0	73.9	52.3	60.8	69.3	48.3	56.5	64.5	44.1	51.9	59.6	39.8	47.1	54.4
		62	TC	73.4	73.4	86.1	69.3	69.3	81.6	65.1	65.1	77.0	60.8	60.8	72.2	56.5	56.5	67.4	51.9	51.9	62.3	47.2	47.2	56.9
			SHC	60.6	73.4	86.1	57.0	69.3	81.6	53.3	65.1	77.0	49.5	60.8	72.2	45.6	56.5	67.4	41.5	51.9	62.3	37.3	47.2	56.9
		67	TC	79.3	79.3	79.3	74.3	74.3	74.7	69.3	69.3	71.8	64.3	64.3	68.7	59.0	59.0	65.6	53.6	53.6	62.4	48.2	48.2	59.1
			SHC	49.7	63.7	77.7	46.8	60.7	74.7	43.8	57.8	71.8	40.9	54.8	68.7	37.8	51.7	65.6	34.7	48.6	62.4	31.5	45.2	59.1
		72	TC	88.2	88.2	88.2	83.0	83.0	83.0	77.6	77.6	77.6	72.1	72.1	72.1	66.5	66.5	66.5	60.7	60.7	60.7	54.7	54.7	54.7
			SHC	36.8	50.9	64.9	33.8	48.0	62.0	30.9	45.0	59.1	28.0	42.0	56.1	25.0	39.0	53.0	21.9	36.0	50.0	18.9	32.9	46.9
		76	TC	—	95.8	95.8	—	90.3	90.3	—	84.6	84.6	—	78.8	78.8	—	72.9	72.9	—	66.9	66.9	—	60.5	60.5
			SHC	—	40.4	54.6	—	37.4	51.7	—	34.5	48.7	—	31.6	45.7	—	28.6	42.7	—	25.5	39.7	—	22.4	36.5

Performance data (cont)

COOLING CAPACITIES — FIRST STAGE, PART LOAD (12.5 TONS) (cont)

48LC*B SIZE 14				AMBIENT TEMPERATURE (°F)																				
				65			75			85			95			105			115			125		
				EAT (db)			EAT (db)			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	75	80	85	75	80	85
3050 CFM	EAT (wb)	58	TC	76.3	76.3	86.2	72.1	72.1	81.6	67.8	67.8	76.9	63.3	63.3	72.2	58.8	58.8	67.2	54.0	54.0	62.0	49.0	49.0	56.6
			SHC	66.4	76.3	86.2	62.5	72.1	81.6	58.6	67.8	76.9	54.5	63.3	72.2	50.3	58.8	67.2	46.0	54.0	62.0	41.5	49.0	56.6
		62	TC	76.4	76.4	89.6	72.2	72.2	84.8	67.9	67.9	80.0	63.4	63.4	75.2	58.8	58.8	70.1	54.1	54.1	64.7	49.1	49.1	59.3
			SHC	63.2	76.4	89.6	59.4	72.2	84.8	55.6	67.9	80.0	51.7	63.4	75.2	47.6	58.8	70.1	43.4	54.1	64.7	39.0	49.1	59.3
		67	TC	80.7	80.7	83.9	75.8	75.8	80.8	70.6	70.6	77.8	65.4	65.4	74.7	60.2	60.2	71.4	54.8	54.8	68.0	49.4	49.4	63.7
			SHC	52.7	68.3	83.9	49.6	65.2	80.8	46.7	62.2	77.8	43.7	59.2	74.7	40.6	56.0	71.4	37.3	52.7	68.0	33.8	48.8	63.7
		72	TC	89.6	89.6	89.6	84.2	84.2	84.2	78.8	78.8	78.8	73.2	73.2	73.2	67.5	67.5	67.5	61.5	61.5	61.5	55.5	55.5	55.5
			SHC	38.1	53.8	69.5	35.1	50.9	66.6	32.2	47.9	63.7	29.3	44.9	60.6	26.2	41.8	57.5	23.1	38.8	54.5	20.0	35.7	51.3
		76	TC	—	97.3	97.3	—	91.7	91.7	—	85.9	85.9	—	80.0	80.0	—	73.9	73.9	—	67.7	67.7	—	61.3	61.3
			SHC	—	42.0	57.8	—	39.1	54.9	—	36.1	51.9	—	33.2	48.8	—	30.1	45.8	—	27.0	42.7	—	23.9	39.6
3350 CFM	EAT (wb)	58	TC	78.6	78.6	88.6	74.2	74.2	83.9	69.7	69.7	79.1	65.1	65.1	74.2	60.5	60.5	69.0	55.6	55.6	63.8	50.5	50.5	58.3
			SHC	68.4	78.6	88.6	64.4	74.2	83.9	60.4	69.7	79.1	56.2	65.1	74.2	51.9	60.5	69.0	47.4	55.6	63.8	42.8	50.5	58.3
		62	TC	78.6	78.6	92.1	74.3	74.3	87.3	69.8	69.8	82.4	65.2	65.2	77.3	60.5	60.5	72.1	55.7	55.7	66.6	50.6	50.6	60.9
			SHC	65.1	78.6	92.1	61.2	74.3	87.3	57.2	69.8	82.4	53.2	65.2	77.3	49.0	60.5	72.1	44.8	55.7	66.6	40.3	50.6	60.9
		67	TC	81.8	81.8	88.9	76.7	76.7	85.9	71.6	71.6	82.7	66.4	66.4	79.5	61.1	61.1	75.9	55.9	55.9	71.8	50.7	50.7	66.2
			SHC	55.0	72.0.	88.9	52.1	68.9	85.9	48.9	65.8	82.7	45.9	62.7	79.5	42.7	59.3	75.9	39.3	55.6	71.8	35.2	50.7	66.2
		72	TC	90.6	90.6	90.6	85.1	85.1	85.1	79.6	79.6	79.6	73.9	73.9	73.9	68.2	68.2	68.2	62.1	62.1	62.1	56.0	56.0	56.0
			SHC	39.1	56.3	73.4	36.2	53.3	70.4	33.2	50.3	67.4	30.2	47.3	64.4	27.1	44.2	61.2	24.1	41.1	58.1	21.0	37.9	54.9
		76	TC	—	98.4	98.4	—	92.6	92.6	—	86.8	86.8	—	80.7	80.7	—	74.6	74.6	—	68.3	68.3	—	61.8	61.8
			SHC	—	43.3	60.5	—	40.4	57.6	—	37.3	54.5	—	34.3	51.5	—	31.3	48.4	—	28.2	45.2	—	25.1	42.0

LEGEND

— — Do not operate
CFM — Cubic feet per minute (supply air)
EAT (db) — Entering air temperature (dry bulb) (°F)
EAT (wb) — Entering air temperature (wet bulb) (°F)
SHC — Sensible heat capacity (1000 Btuh) Gross
TC — Total capacity (1000 Btuh) Gross

Performance data (cont)

COOLING CAPACITIES — SECOND STAGE, PART LOAD (12.5 TONS)

48LC*B SIZE 14				AMBIENT TEMPERATURE (°F)																				
				65			75			85			95			105			115			125		
				EAT (db)			EAT (db)			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	75	80	85	75	80	85
1500 CFM	EAT (wb)	58	TC	77.0	77.0	78.8	74.4	74.4	77.3	71.8	71.8	75.9	68.8	68.8	74.2	65.8	65.8	72.5	63.7	63.7	68.6	59.9	59.9	67.5
			SHC	62.8	70.8	78.8	61.3	69.3	77.3	59.8	67.8	75.9	58.2	66.2	74.2	56.6	64.5	72.5	53.8	61.2	68.6	52.3	59.9	67.5
		62	TC	83.3	83.3	83.3	80.4	80.4	80.4	77.5	77.5	77.5	74.4	74.4	74.4	71.1	71.1	71.1	67.6	67.6	67.6	63.8	63.8	63.8
			SHC	56.8	64.8	72.8	55.4	63.4	71.4	53.8	61.8	69.9	52.2	60.3	68.3	50.5	58.6	66.6	48.8	56.8	64.8	46.9	55.0	63.0
		67	TC	91.8	91.8	91.8	88.7	88.7	88.7	85.5	85.5	85.5	82.1	82.1	82.1	78.5	78.5	78.5	74.6	74.6	74.6	70.5	70.5	70.5
			SHC	49.2	57.3	65.3	47.8	55.8	63.9	46.2	54.3	62.3	44.6	52.7	60.6	42.9	51.0	59.0	41.1	49.2	57.2	39.3	47.4	55.4
		72	TC	101.5	101.5	101.5	98.1	98.1	98.1	94.6	94.6	94.6	90.8	90.8	90.8	86.8	86.8	86.8	82.5	82.5	82.5	77.9	77.9	77.9
			SHC	41.5	49.5	57.6	40.0	48.1	56.1	38.4	46.5	54.5	36.9	44.9	52.9	35.2	43.2	51.3	33.3	41.4	49.4	31.5	39.6	47.6
		76	TC	—	109.9	109.9	—	106.3	106.3	—	102.4	102.4	—	98.3	98.3	—	94.0	94.0	—	89.4	89.4	—	84.4	84.4
			SHC	—	43.2	51.3	—	41.7	49.7	—	40.2	48.3	—	38.5	46.6	—	36.9	44.9	—	35.1	43.2	—	33.2	41.3
2000 CFM	EAT (wb)	58	TC	85.1	85.1	92.3	81.5	81.5	91.8	79.0	79.0	88.9	76.2	76.2	85.9	73.3	73.3	82.6	70.2	70.2	79.1	66.9	66.9	75.4
			SHC	72.2	82.3	92.3	71.2	81.5	91.8	68.9	79.0	88.9	66.5	76.2	85.9	64.0	73.3	82.6	61.3	70.2	79.1	58.4	66.9	75.4
		62	TC	90.4	90.4	90.4	87.2	87.2	87.2	83.7	83.7	83.7	80.0	80.0	81.5	76.2	76.2	79.7	72.2	72.2	77.8	68.0	68.0	75.8
			SHC	65.1	75.9	86.5	63.6	74.2	84.9	61.9	72.5	83.3	60.2	70.8	81.5	58.3	69.0	79.7	56.5	67.1	77.8	54.5	65.1	75.8
		67	TC	99.6	99.6	99.6	96.0	96.0	96.0	92.2	92.2	92.2	88.2	88.2	88.2	84.0	84.0	84.0	79.6	79.6	79.6	74.9	74.9	74.9
			SHC	54.9	65.6	76.3	53.3	64.1	74.7	51.7	62.3	73.0	49.9	60.6	71.3	48.1	58.8	69.5	46.2	56.9	67.6	44.3	54.9	65.6
		72	TC	109.8	109.8	109.8	105.9	105.9	105.9	101.8	101.8	101.8	97.4	97.4	97.4	92.7	92.7	92.7	87.8	87.8	87.8	82.7	82.7	82.7
			SHC	44.5	55.2	65.9	42.9	53.6	64.4	41.1	51.9	62.6	39.5	50.2	60.9	37.6	48.4	59.1	35.8	46.5	57.2	33.8	44.6	55.3
		76	TC	—	118.6	118.6	—	114.5	114.5	—	110.0	110.0	—	105.3	105.3	—	100.3	100.3	—	95.1	95.1	—	89.5	89.5
			SHC	—	46.6	57.3	—	45.0	55.8	—	43.4	54.1	—	41.6	52.4	—	39.9	50.6	—	38.0	48.8	—	36.1	46.8
2500 CFM	EAT (wb)	58	TC	83.4	83.4	95.0	76.5	76.5	87.8	69.7	69.7	80.6	62.7	62.7	73.2	55.6	55.6	65.6	48.2	48.2	57.8	40.7	40.7	49.8
			SHC	71.7	83.4	95.0	65.3	76.5	87.8	58.8	69.7	80.6	52.3	62.7	73.2	45.4	55.6	65.6	38.6	48.2	57.8	31.5	40.7	49.8
		62	TC	87.9	87.9	91.9	80.2	80.2	86.1	72.3	72.3	80.2	64.4	64.4	74.2	56.3	56.3	68.1	48.4	48.4	61.2	40.8	40.8	52.9
			SHC	65.4	78.7	91.9	59.7	72.9	86.1	53.7	67.0	80.2	47.9	61.0	74.2	41.8	55.0	68.1	35.5	48.4	61.2	28.6	40.8	52.9
		67	TC	99.5	99.5	99.5	91.5	91.5	91.5	83.2	83.2	83.2	74.7	74.7	74.7	66.0	66.0	66.0	57.1	57.1	57.1	48.0	48.0	48.0
			SHC	54.9	68.2	81.5	49.0	62.4	75.7	43.2	56.5	69.8	37.2	50.6	63.9	31.3	44.6	57.9	25.3	38.5	51.8	19.1	32.4	45.6
		72	TC	112.3	112.3	112.3	103.9	103.9	103.9	95.3	95.3	95.3	86.4	86.4	86.4	77.2	77.2	77.2	67.9	67.9	67.9	58.2	58.2	58.2
			SHC	44.0	57.4	70.8	38.2	51.6	65.0	32.4	45.7	59.2	26.4	39.9	53.2	20.5	33.8	47.3	14.4	27.8	41.2	8.4	21.7	35.1
		76	TC	—	123.2	123.2	—	114.7	114.7	—	105.6	105.6	—	96.3	96.3	—	86.9	86.9	—	77.0	77.0	—	67.0	67.0
			SHC	—	48.6	61.9	—	42.8	56.2	—	37.0	50.4	—	31.0	44.5	—	25.1	38.5	—	19.1	32.5	—	13.0	26.3
3000 CFM	EAT (wb)	58	TC	91.0	91.0	103.4	83.9	83.9	95.8	76.5	76.5	88.1	69.1	69.1	80.2	61.5	61.5	72.2	53.7	53.7	63.9	45.6	45.6	55.3
			SHC	78.6	91.0	103.4	71.8	83.9	95.8	64.9	76.5	88.1	57.9	69.1	80.2	50.8	61.5	72.2	43.5	53.7	63.9	36.0	45.6	55.3
		62	TC	92.5	92.5	104.8	84.6	84.6	98.7	76.6	76.6	92.1	69.2	69.2	84.1	61.6	61.6	75.9	53.8	53.8	67.5	45.7	45.7	58.7
			SHC	73.4	89.1	104.8	67.4	83.0	98.7	61.2	76.6	92.1	54.3	69.2	84.1	47.3	61.6	75.9	40.2	53.8	67.5	32.9	45.7	58.7
		67	TC	103.9	103.9	103.9	95.5	95.5	95.5	86.9	86.9	86.9	78.0	78.0	78.0	68.9	68.9	68.9	59.7	59.7	61.6	50.2	50.2	55.3
			SHC	60.3	76.1	92.0	54.3	70.2	86.1	48.4	64.3	80.0	42.2	58.1	74.0	36.1	52.0	67.9	29.9	45.7	61.6	23.6	39.5	55.3
		72	TC	116.8	116.8	116.8	108.1	108.1	108.1	99.1	99.1	99.1	89.8	89.8	89.8	80.2	80.2	80.2	70.5	70.5	70.5	60.5	60.5	60.5
			SHC	46.9	62.9	78.9	41.0	56.9	72.9	35.0	51.0	67.0	29.0	44.9	60.8	22.8	38.8	54.7	16.7	32.6	48.5	10.4	26.3	42.2
		76	TC	—	127.9	127.9	—	119.0	119.0	—	109.5	109.5	—	99.8	99.8	—	90.0	90.0	—	79.8	79.8	—	69.2	69.2
			SHC	—	52.0	68.1	—	46.1	62.2	—	40.2	56.3	—	34.1	50.2	—	28.0	44.1	—	21.8	37.8	—	15.5	31.6
3500 CFM	EAT (wb)	58	TC	97.2	97.2	110.2	89.7	89.7	102.3	82.1	82.1	94.3	74.3	74.3	86.0	66.3	66.3	77.5	58.1	58.1	68.7	49.7	49.7	59.8
			SHC	84.1	97.2	110.2	77.1	89.7	102.3	69.9	82.1	94.3	62.6	74.3	86.0	55.1	66.3	77.5	47.5	58.1	68.7	39.6	49.7	59.8
		62	TC	97.3	97.3	114.8	89.8	89.8	106.7	82.2	82.2	98.5	74.4	74.4	90.0	66.4	66.4	81.3	58.2	58.2	72.4	49.8	49.8	63.3
			SHC	80.0	97.3	114.8	73.0	89.8	106.7	66.0	82.2	98.5	58.8	74.4	90.0	51.5	66.4	81.3	44.0	58.2	72.4	36.3	49.8	63.3
		67	TC	107.1	107.1	107.1	98.5	98.5	98.5	89.6	89.6	89.8	80.4	80.4	83.6	71.2	71.2	77.3	61.7	61.7	70.9	52.0	52.0	64.4
			SHC	65.3	83.7	102.1	59.3	77.6	95.9	53.1	71.5	89.8	46.9	65.2	83.6	40.7	59.0	77.3	34.3	52.7	70.9	27.9	46.1	64.4
		72	TC	120.1	120.1	120.1	111.2	111.2	111.2	101.8	101.8	101.8	92.2	92.2	92.2	82.5	82.5	82.5	72.3	72.3	72.3	62.0	62.0	62.0
			SHC	49.3	67.9	86.4	43.4	61.9	80.3	37.3	55.8	74.2	31.1	49.6	68.1	24.9	43.4	61.8	18.6	37.1	55.5	12.3	30.6	49.0
		76	TC	—	131.2	131.2	—	122.1	122.1	—	112.4	112.4	—	102.4	102.4	—	92.2	92.2	—	81.7	81.7	—	70.9	70.9
			SHC	—	55.0	73.6	—	49.0	67.7	—	43.0	61.6	—	36.8	55.4	—	30.6	49.1	—	24.3	42.8	—	17.9	36.4
4000 CFM	EAT (wb)	58	TC	102.3	102.3	115.8	94.6	94.6	107.6	86.7	86.7	99.3	78.6	78.6	90.7	70.3	70.3	81.9	61.8	61.8	72.7	53.0	53.0	63.4
			SHC	88.7	102.3	115.8	81.5	94.6	107.6	74.1	86.7	99.3	66.5	78.6	90.7	58.7	70.3	81.9	50.8	61.8	72.7	42.6	53.0	63.4
		62	TC	102.5	102.5	120.5	94.7	94.7	112.2	86.8	86.8	103.6	78.7	78.7	94.9	70.4	70.4	85.9	61.9	61.9	76.6	53.1	53.1	67.0
			SHC	84.3	102.5	120.5	77.2	94.7	112.2	69.9	86.8	103.6	62.5	78.7	94.9	54.9	70.4	85.9	47.2	61.9	76.6	39.2	53.1	67.0
		67	TC	109.6	109.6	111.5	100.8	100.8	105.3	91.7	91.7	99.2	82.5	82.5	92.7	73.0	73.0	86.3	63.4	63.4	79.6	53.6	53.6	72.5
			SHC	69.9	90.8	111.5	63.8	84.5	105.3	57.6	78.4	99.2	51.3	72.1	92.7	44.9	65.6	86.3	38.5	59.0	79.6	31.9	52.2	72.5
		72	TC	122.6	122.6	122.6	113.4	113.4	113.4	103.9	103.9	103.9	94.1	94.1	94.1	84.1	84.1	84.1	73.8	73.8	73.8	63.3	63.3	63.3
			SHC	51.6	72.5	93.5	45.5	66.5	87.4	39.4	60.3	81.2	33.2	54.0	75.0	26.8	47.7	68.6	20.5	41.3	62.2	13.9	34.8	55.7
		76	TC	—	133.8	133.8	—	124.4	124.4	—	114.6	114.6	—	104.3	104.3	—	93.9	93.9	—	83.2	83.2	—	72.2	72.2
			SHC	—	57.7	78.8	—	51.7	72.7	—	45.5	66.6	—	39.3	60.4	—	33.0	53.9	—	26.5	47.5	—	20.1	41.0

Performance data (cont)

COOLING CAPACITIES — SECOND STAGE, PART LOAD (12.5 TONS) (cont)

48LC*B SIZE 14				AMBIENT TEMPERATURE (°F)																				
				65			75			85			95			105			115			125		
				EAT (db)			EAT (db)			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	75	80	85	75	80	85
4500 CFM	EAT (wb)	58	TC	106.7	106.7	120.6	98.7	98.7	112.2	90.6	90.6	103.5	82.2	82.2	94.7	73.6	73.6	85.5	64.8	64.8	76.1	55.8	55.8	66.5
			SHC	92.6	106.7	120.6	85.2	98.7	112.2	77.5	90.6	103.5	69.7	82.2	94.7	61.7	73.6	85.5	53.5	64.8	76.1	45.0	55.8	66.5
		62	TC	106.8	106.8	125.5	98.9	98.9	116.9	90.7	90.7	108.0	82.3	82.3	99.0	73.7	73.7	89.6	64.9	64.9	80.0	55.9	55.9	70.1
			SHC	88.0	106.8	125.5	80.7	98.9	116.9	73.3	90.7	108.0	65.6	82.3	99.0	57.8	73.7	89.6	49.8	64.9	80.0	41.5	55.9	70.1
		67	TC	111.7	111.7	120.7	102.8	102.8	114.4	93.6	93.6	107.9	84.2	84.2	101.3	74.8	74.8	94.5	65.3	65.3	87.0	56.2	56.2	76.8
			SHC	74.3	97.5	120.7	68.2	91.3	114.4	61.8	84.9	107.9	55.4	78.4	101.3	48.9	71.8	94.5	42.1	64.5	87.0	34.4	55.6	76.8
		72	TC	124.5	124.5	124.5	115.2	115.2	115.2	105.5	105.5	105.5	95.6	95.6	95.6	85.4	85.4	85.4	74.9	74.9	74.9	64.3	64.3	64.3
			SHC	53.6	76.9	100.3	47.5	70.8	94.2	41.2	64.5	87.9	34.9	58.2	81.5	28.6	51.9	75.2	22.1	45.3	68.6	15.6	38.8	62.0
		76	TC	—	135.8	135.8	—	126.3	126.3	—	116.2	116.2	—	105.9	105.9	—	95.2	95.2	—	84.2	84.2	—	73.0	73.0
			SHC	—	60.2	83.7	—	54.1	77.6	—	47.9	71.3	—	41.5	64.9	—	35.2	58.5	—	28.8	52.0	—	22.1	45.3
4950 CFM	EAT (wb)	58	TC	110.0	110.0	124.3	101.9	101.9	115.7	93.5	93.5	106.9	84.9	84.9	97.7	76.2	76.2	88.3	67.2	67.2	78.8	57.9	57.9	68.8
			SHC	95.6	110.0	124.3	88.0	101.9	115.7	80.2	93.5	106.9	72.2	84.9	97.7	64.1	76.2	88.3	55.7	67.2	78.8	47.0	57.9	68.8
		62	TC	110.1	110.1	129.2	102.0	102.0	120.5	93.6	93.6	111.4	85.1	85.1	102.1	76.3	76.3	92.5	67.3	67.3	82.7	58.0	58.0	72.5
			SHC	91.0	110.1	129.2	83.6	102.0	120.5	75.9	93.6	111.4	68.1	85.1	102.1	60.1	76.3	92.5	51.9	67.3	82.7	43.4	58.0	72.5
		67	TC	113.3	113.3	128.4	104.3	104.3	122.0	95.2	95.2	115.3	85.8	85.8	108.4	76.4	76.4	100.8	67.6	67.6	89.9	58.1	58.1	80.0
			SHC	78.1	103.3	128.4	71.8	96.9	122.0	65.4	90.4	115.3	58.9	83.7	108.4	52.1	76.4	100.8	44.1	67.0	89.9	36.3	58.1	80.0
		72	TC	125.9	125.9	125.9	116.5	116.5	116.5	106.7	106.7	106.7	96.6	96.6	96.6	86.3	86.3	86.3	75.8	75.8	75.8	64.9	64.9	67.6
			SHC	55.3	80.7	106.2	49.1	74.6	100.0	42.9	68.3	93.7	36.5	61.9	87.3	30.1	55.5	80.8	23.6	48.9	74.3	17.1	42.3	67.6
		76	TC	—	137.3	137.3	—	127.6	127.6	—	117.4	117.4	—	107.0	107.0	—	96.1	96.1	—	85.1	85.1	—	73.7	73.7
			SHC	—	62.3	87.9	—	56.2	81.7	—	49.9	75.4	—	43.5	69.0	—	37.1	62.5	—	30.5	55.9	—	24.0	49.1

LEGEND

— — Do not operate
CFM — Cubic feet per minute (supply air)
EAT (db) — Entering air temperature (dry bulb) (°F)
EAT (wb) — Entering air temperature (wet bulb) (°F)
SHC — Sensible heat capacity (1000 Btuh) Gross
TC — Total capacity (1000 Btuh) Gross

Performance data (cont)

COOLING CAPACITIES — THIRD STAGE, FULL LOAD (12.5 TONS)

48LC*B SIZE 14				AMBIENT TEMPERATURE (°F)																					
				65			75			85			95			105			115			125		
				EAT (db)			EAT (db)			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	75	80	85	75	80	85
2500 CFM	EAT (wb)	58	TC	128.2	128.2	130.7	123.9	123.9	128.3	119.3	119.3	125.7	114.5	114.5	122.9	109.3	109.3	120.0	104.7	104.7	115.2	99.1	99.1	111.6
			SHC	104.2	117.5	130.7	101.8	115.1	128.3	99.3	112.4	125.7	96.5	109.7	122.9	93.6	106.9	120.0	89.9	102.6	115.2	86.5	99.1	111.6
		62	TC	138.2	138.2	138.2	133.5	133.5	133.5	128.6	128.6	128.6	123.3	123.3	123.3	117.8	117.8	117.8	111.7	111.7	111.7	105.4	105.4	105.4
			SHC	94.3	107.5	120.9	91.7	105.1	118.4	89.2	102.5	115.8	86.5	99.8	113.1	83.7	97.0	110.3	80.7	94.0	107.3	77.6	90.9	104.1
		67	TC	152.0	152.0	152.0	147.0	147.0	147.0	141.7	141.7	141.7	135.9	135.9	135.9	129.9	129.9	129.9	123.4	123.4	123.4	116.4	116.4	116.4
			SHC	81.5	94.9	108.2	79.1	92.4	105.8	76.5	89.9	103.2	73.8	87.2	100.5	71.1	84.3	97.7	68.1	81.4	94.8	65.0	78.3	91.7
		72	TC	167.3	167.3	167.3	161.9	161.9	161.9	156.0	156.0	156.0	149.8	149.8	149.8	143.1	143.1	143.1	136.1	136.1	136.1	128.6	128.6	128.6
			SHC	68.3	81.8	95.2	66.0	79.4	92.8	63.4	76.8	90.2	60.7	74.2	87.6	58.0	71.4	84.8	55.1	68.5	81.9	52.1	65.4	78.9
		76	TC	—	180.3	180.3	—	174.4	174.4	—	168.2	168.2	—	161.7	161.7	—	154.5	154.5	—	147.0	147.0	—	139.0	139.0
			SHC	—	70.9	84.2	—	68.4	81.9	—	66.0	79.4	—	63.4	76.8	—	60.6	74.0	—	57.8	71.2	—	54.8	68.2
2800 CFM	EAT (wb)	58	TC	132.8	132.8	140.1	128.2	128.2	137.5	123.4	123.4	134.7	118.5	118.5	131.7	115.0	115.0	124.8	108.7	108.7	122.6	103.6	103.6	116.8
			SHC	110.6	125.3	140.1	107.9	122.8	137.5	105.3	120.0	134.7	102.4	117.1	131.7	97.6	111.2	124.8	95.0	108.7	122.6	90.5	103.6	116.8
		62	TC	142.8	142.8	142.8	137.9	137.9	137.9	132.6	132.6	132.6	127.0	127.0	127.0	121.2	121.2	121.2	115.0	115.0	115.0	108.2	108.2	111.7
			SHC	99.3	114.1	128.9	96.7	111.5	126.4	94.1	108.9	123.7	91.3	106.1	120.9	88.3	103.2	118.0	85.3	100.1	115.0	82.1	96.9	111.7
		67	TC	157.0	157.0	157.0	151.6	151.6	151.6	146.0	146.0	146.0	139.9	139.9	139.9	133.5	133.5	133.5	126.7	126.7	126.7	119.4	119.4	119.4
			SHC	84.9	99.8	114.7	82.4	97.3	112.1	79.8	94.7	109.5	77.0	91.8	106.8	74.1	89.0	103.9	71.2	86.0	100.9	68.0	82.9	97.7
		72	TC	172.5	172.5	172.5	166.7	166.7	166.7	160.5	160.5	160.5	154.0	154.0	154.0	146.9	146.9	146.9	139.5	139.5	139.5	131.7	131.7	131.7
			SHC	70.1	85.1	100.1	67.6	82.6	97.6	65.0	80.0	95.1	62.3	77.3	92.3	59.5	74.5	89.4	56.6	71.5	86.5	53.4	68.3	83.4
		76	TC	—	185.6	185.6	—	179.5	179.5	—	172.9	172.9	—	165.9	165.9	—	158.5	158.5	—	150.6	150.6	—	142.3	142.3
			SHC	—	72.8	87.8	—	70.4	85.4	—	67.9	82.9	—	65.2	80.2	—	62.4	77.4	—	59.5	74.5	—	56.5	71.5
3150 CFM	EAT (wb)	58	TC	131.9	131.9	144.9	125.1	125.1	139.9	118.3	118.3	134.5	111.8	111.8	127.4	105.1	105.1	120.1	98.0	98.0	112.4	90.6	90.6	104.3
			SHC	111.9	128.4	144.9	107.1	123.5	139.9	102.0	118.3	134.5	96.1	111.8	127.4	90.0	105.1	120.1	83.6	98.0	112.4	76.8	90.6	104.3
		62	TC	142.6	142.6	142.6	135.3	135.3	135.3	127.7	127.7	127.7	119.7	119.7	119.7	111.4	111.4	113.6	102.8	102.8	108.3	93.8	93.8	103.0
			SHC	100.1	116.7	133.4	95.4	112.0	128.6	90.5	107.2	123.7	85.5	102.2	118.8	80.4	97.0	113.6	75.3	91.7	108.3	69.8	86.4	103.0
		67	TC	158.3	158.3	158.3	150.5	150.5	150.5	142.4	142.4	142.4	133.9	133.9	133.9	124.9	124.9	124.9	115.7	115.7	115.7	106.0	106.0	106.0
			SHC	85.1	101.8	118.5	80.4	97.1	113.8	75.6	92.2	108.9	70.7	87.3	103.9	65.5	82.2	98.9	60.4	77.0	93.7	55.1	71.8	88.3
		72	TC	175.1	175.1	175.1	166.9	166.9	166.9	158.2	158.2	158.2	149.3	149.3	149.3	139.7	139.7	139.7	130.0	130.0	130.0	119.5	119.5	119.5
			SHC	69.6	86.5	103.3	64.9	81.8	98.6	60.2	77.0	93.8	55.3	72.1	88.9	50.3	67.1	83.9	45.1	61.9	78.7	39.9	56.6	73.4
		76	TC	—	189.4	189.4	—	180.9	180.9	—	171.8	171.8	—	162.3	162.3	—	152.4	152.4	—	142.1	142.1	—	131.1	131.1
			SHC	—	73.6	90.6	—	69.0	85.9	—	64.4	81.2	—	59.5	76.3	—	54.5	71.5	—	49.5	66.4	—	44.3	61.1
3750 CFM	EAT (wb)	58	TC	140.9	140.9	159.3	134.5	134.5	152.4	127.7	127.7	145.1	120.8	120.8	137.6	113.6	113.6	129.6	106.0	106.0	121.3	98.0	98.0	112.6
			SHC	122.4	140.9	159.3	116.5	134.5	152.4	110.4	127.7	145.1	104.0	120.8	137.6	97.5	113.6	129.6	90.6	106.0	121.3	83.5	98.0	112.6
		62	TC	149.5	149.5	149.5	141.7	141.7	143.9	133.7	133.7	138.8	125.3	125.3	133.7	116.6	116.6	128.3	107.6	107.6	122.8	98.9	98.9	116.2
			SHC	109.5	129.2	148.8	104.7	124.3	143.9	99.6	119.2	138.8	94.6	114.1	133.7	89.3	108.8	128.3	83.9	103.4	122.8	78.1	97.1	116.2
		67	TC	165.2	165.2	165.2	156.9	156.9	156.9	148.2	148.2	148.2	139.2	139.2	139.2	129.8	129.8	129.8	120.1	120.1	120.1	110.0	110.0	110.0
			SHC	91.5	111.2	130.8	86.6	106.3	126.0	81.6	101.3	121.0	76.5	96.2	115.9	71.4	91.1	110.8	66.1	85.8	105.4	60.6	80.3	99.9
		72	TC	182.1	182.1	182.1	173.5	173.5	173.5	164.3	164.3	164.3	154.8	154.8	154.8	144.9	144.9	144.9	134.6	134.6	134.6	123.6	123.6	123.6
			SHC	72.8	92.6	112.5	68.1	87.8	107.7	63.2	83.0	102.9	58.2	78.0	97.8	53.1	72.9	92.6	47.9	67.7	87.5	42.5	62.3	82.0
		76	TC	—	196.6	196.6	—	187.5	187.5	—	177.9	177.9	—	168.0	168.0	—	157.7	157.7	—	146.6	146.6	—	—	—
			SHC	—	77.4	97.5	—	72.7	92.8	—	68.0	88.0	—	63.1	83.2	—	58.0	78.1	—	52.8	72.9	—	—	—
4400 CFM	EAT (wb)	58	TC	150.2	150.2	169.7	143.3	143.3	162.2	136.2	136.2	154.5	128.8	128.8	146.4	121.1	121.1	138.0	113.0	113.0	129.1	104.5	104.5	119.8
			SHC	130.6	150.2	169.7	124.3	143.3	162.2	117.9	136.2	154.5	111.2	128.8	146.4	104.1	121.1	138.0	96.8	113.0	129.1	89.1	104.5	119.8
		62	TC	155.1	155.1	164.4	147.1	147.1	159.3	138.8	138.8	154.1	130.3	130.3	148.6	121.9	121.9	142.2	113.1	113.1	134.7	104.6	104.6	125.2
			SHC	119.0	141.7	164.4	114.0	136.7	159.3	108.9	131.5	154.1	103.5	126.1	148.6	97.9	120.0	142.2	91.6	113.1	134.7	84.1	104.6	125.2
		67	TC	170.4	170.4	170.4	161.9	161.9	161.9	152.9	152.9	152.9	143.5	143.5	143.5	133.8	133.8	133.8	123.6	123.6	123.6	113.1	113.1	113.1
			SHC	97.6	120.4	143.3	92.7	115.5	138.5	87.7	110.5	133.4	82.5	105.4	128.2	77.2	100.0	122.9	71.9	94.7	117.5	66.4	89.1	111.9
		72	TC	187.6	187.6	187.6	178.6	178.6	178.6	169.1	169.1	169.1	159.2	159.2	159.2	148.9	148.9	148.9	138.2	138.2	138.2	126.8	126.8	126.8
			SHC	75.8	98.8	121.8	71.0	94.0	117.0	66.0	89.0	111.9	60.9	83.9	106.9	55.8	78.7	101.7	50.5	73.4	96.3	45.0	68.0	90.9
		76	TC	—	202.0	202.0	—	192.7	192.7	—	182.8	182.8	—	172.5	172.5	—	161.8	161.8	—	150.5	150.5	—	—	—
			SHC	—	81.0	104.6	—	76.3	99.8	—	71.5	94.9	—	66.4	89.8	—	61.3	84.6	—	56.1	79.4	—	—	—
5000 CFM	EAT (wb)	58	TC	157.3	157.3	177.7	150.2	150.2	169.9	142.6	142.6	161.8	134.8	134.8	153.2	126.8	126.8	144.3	118.3	118.3	135.0	109.4	109.4	125.3
			SHC	136.9	157.3	177.7	130.4	150.2	169.9	123.6	142.6	161.8	116.5	134.8	153.2	109.2	126.8	144.3	101.5	118.3	135.0	93.5	109.4	125.3
		62	TC	159.6	159.6	177.9	151.5	151.5	172.6	143.2	143.2	166.7	135.0	135.0	159.5	126.9	126.9	150.4	118.5	118.5	140.8	109.6	109.6	130.8
			SHC	127.1	152.5	177.9	122.0	147.2	172.6	116.6	141.7	166.7	110.5	135.0	159.5	103.4	126.9	150.4	96.0	118.5	140.8	88.3	109.6	130.8
		67	TC	174.2	174.2	174.2	165.4	165.4	165.4	156.1	156.1	156.1	146.5	146.5	146.5	136.5	136.5	136.5	126.3	126.3	128.1	115.4	115.4	122.4
			SHC	102.9	128.6	154.3	97.9	123.6	149.4	92.8	118.6	144.3	87.7	113.4	139.0	82.3	107.9	133.7	76.8	102.5	128.1	71.3	96.8	122.4
		72	TC	191.4	191.4	191.4	182.1	182.1	182.1	172.4	172.4	172.4	162.2	162.2	162.2	151.6	151.6	151.6	140.6	140.6	140.6	129.1	129.1	129.1
			SHC	78.2	104.0	129.9	73.3	99.2	125.0	68.3	94.2	120.0	63.2	89.0	114.9	58.0	83.8	109.6	52.7	78.4	104.1	47.1	72.8	98.6
		76	TC	—	205.9	205.9	—	196.4	196.4	—	186.2	186.2	—	175.7	175.7	—	164.7	164.7	—	153.2	153.2	—	—	—
			SHC	—	84.0	110.4	—	79.3	105.5	—	74.3	100.5	—	69.3	95.5	—	64.2	90.2	—	58.8	84.9	—	—	—

Performance data (cont)

COOLING CAPACITIES — THIRD STAGE, FULL LOAD (12.5 TONS) (cont)

48LC*B SIZE 14				AMBIENT TEMPERATURE (°F)																				
				65			75			85			95			105			115			125		
				EAT (db)			EAT (db)			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	75	80	85	75	80	85
5650 CFM	EAT (wb)	58	TC	163.8	163.8	185.0	156.3	156.3	176.8	148.5	148.5	168.3	140.3	140.3	159.3	131.9	131.9	150.1	123.0	123.0	140.4	113.9	113.9	130.3
			SHC	142.6	163.8	185.0	135.8	156.3	176.8	128.8	148.5	168.3	121.4	140.3	159.3	113.7	131.9	150.1	105.8	123.0	140.4	97.4	113.9	130.3
		62	TC	164.2	164.2	190.9	156.5	156.5	183.9	148.7	148.7	175.1	140.5	140.5	165.8	132.0	132.0	156.3	123.2	123.2	146.3	114.0	114.0	135.9
			SHC	135.0	163.0	190.9	129.2	156.5	183.9	122.3	148.7	175.1	115.1	140.5	165.8	107.7	132.0	156.3	100.0	123.2	146.3	92.0	114.0	135.9
		67	TC	177.5	177.5	177.5	168.5	168.5	168.5	159.0	159.0	159.0	149.3	149.3	150.2	139.0	139.0	144.8	128.5	128.5	139.1	117.6	117.6	133.2
			SHC	108.3	137.1	165.8	103.4	132.0	160.8	98.2	126.9	155.6	92.9	121.6	150.2	87.6	116.1	144.8	82.0	110.6	139.1	76.3	104.8	133.2
		72	TC	194.7	194.7	194.7	185.3	185.3	185.3	175.2	175.2	175.2	164.8	164.8	164.8	154.1	154.1	154.1	142.7	142.7	142.7	130.9	130.9	130.9
			SHC	80.5	109.4	138.3	75.7	104.5	133.4	70.6	99.5	128.3	65.5	94.3	123.1	60.3	89.0	117.8	54.8	83.6	112.3	49.2	78.0	106.7
		76	TC	—	209.3	209.3	—	199.5	199.5	—	189.2	189.2	—	178.3	178.3	—	167.1	167.1	—	155.4	155.4	—	—	—
			SHC	—	87.0	116.3	—	82.2	111.4	—	77.2	106.5	—	72.2	101.3	—	67.0	96.0	—	61.6	90.7	—	—	—
6250 CFM	EAT (wb)	58	TC	168.9	168.9	190.5	161.2	161.2	182.1	153.1	153.1	173.4	144.7	144.7	164.2	135.9	135.9	154.5	126.8	126.8	144.6	117.3	117.3	134.1
			SHC	147.1	168.9	190.5	140.1	161.2	182.1	132.8	153.1	173.4	125.2	144.7	164.2	117.3	135.9	154.5	109.0	126.8	144.6	100.4	117.3	134.1
		62	TC	169.1	169.1	198.0	161.3	161.3	189.4	153.2	153.2	180.3	144.9	144.9	170.9	136.0	136.0	161.0	126.9	126.9	150.6	117.4	117.4	139.8
			SHC	140.0	169.1	198.0	133.2	161.3	189.4	126.2	153.2	180.3	118.9	144.9	170.9	111.2	136.0	161.0	103.3	126.9	150.6	95.0	117.4	139.8
		67	TC	180.0	180.0	180.0	170.8	170.8	171.0	161.3	161.3	165.8	151.3	151.3	160.3	141.0	141.0	154.6	130.4	130.4	148.8	119.4	119.4	142.5
			SHC	113.1	144.6	176.1	108.1	139.5	171.0	103.0	134.4	165.8	97.6	129.0	160.3	92.1	123.4	154.6	86.6	117.7	148.8	80.7	111.6	142.5
		72	TC	197.1	197.1	197.1	187.5	187.5	187.5	177.4	177.4	177.4	166.8	166.8	166.8	155.8	155.8	155.8	144.3	144.3	144.3	132.3	132.3	132.3
			SHC	82.6	114.2	145.9	77.7	109.3	140.9	72.6	104.2	135.8	67.5	99.0	130.6	62.2	93.7	125.2	56.7	88.1	119.6	51.1	82.6	114.0
		76	TC	—	211.9	211.9	—	201.9	201.9	—	191.4	191.4	—	180.4	180.4	—	169.0	169.0	—	157.1	157.1	—	—	—
			SHC	—	89.6	121.7	—	84.8	116.8	—	79.9	111.7	—	74.7	106.6	—	69.4	101.3	—	64.1	95.8	—	—	—

LEGEND

— — Do not operate
CFM — Cubic feet per minute (supply air)
EAT (db) — Entering air temperature (dry bulb) (°F)
EAT (wb) — Entering air temperature (wet bulb) (°F)
SHC — Sensible heat capacity (1000 Btuh) Gross
TC — Total capacity (1000 Btuh) Gross

Performance data (cont)

COOLING CAPACITIES — FIRST STAGE, PART LOAD (15 TONS)

48LC*B SIZE 17				AMBIENT TEMPERATURE (°F)																				
				65			75			85			95			105			115			125		
				EAT (db)			EAT (db)			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	75	80	85	75	80	85
1250 CFM	EAT (wb)	58	TC	61.3	61.3	62.6	59.7	59.7	61.6	57.7	57.7	60.6	55.4	55.4	59.4	52.8	52.8	58.0	50.8	50.8	55.2	47.4	47.4	53.7
			SHC	49.1	55.9	62.6	48.3	55.0	61.6	47.2	53.9	60.6	46.0	52.7	59.4	44.7	51.3	58.0	42.6	48.8	55.2	41.0	47.4	53.7
		62	TC	67.1	67.1	67.1	65.3	65.3	65.3	63.2	63.2	63.2	60.8	60.8	60.8	58.0	58.0	58.0	54.9	54.9	54.9	51.5	51.5	51.5
			SHC	44.8	51.5	58.1	43.9	50.5	57.2	42.8	49.4	56.2	41.5	48.3	55.0	40.3	46.9	53.6	38.7	45.4	52.2	37.1	43.8	50.5
		67	TC	75.2	75.2	75.2	73.2	73.2	73.2	70.9	70.9	70.9	68.3	68.3	68.3	65.3	65.3	65.3	62.0	62.0	62.0	58.2	58.2	58.2
			SHC	39.1	45.8	52.6	38.2	44.9	51.6	37.1	43.9	50.5	36.0	42.6	49.3	34.6	41.3	48.0	33.2	39.9	46.5	31.6	38.2	44.9
		72	TC	84.0	84.0	84.0	81.9	81.9	81.9	79.5	79.5	79.5	76.5	76.5	76.5	73.3	73.3	73.3	69.7	69.7	69.7	65.7	65.7	65.7
			SHC	33.3	40.1	46.7	32.4	39.1	45.8	31.4	38.0	44.8	30.2	36.9	43.6	28.9	35.6	42.3	27.4	34.1	40.9	25.8	32.6	39.3
		76	TC	—	91.9	91.9	—	89.6	89.6	—	86.9	86.9	—	83.9	83.9	—	80.4	80.4	—	76.5	76.5	—	72.2	72.2
			SHC	—	35.3	42.0	—	34.4	41.1	—	33.3	40.1	—	32.2	38.9	—	30.9	37.6	—	29.4	36.2	—	27.9	34.6
1750 CFM	EAT (wb)	58	TC	69.5	69.5	75.4	66.8	66.8	75.7	65.0	65.0	73.6	62.9	62.9	71.2	60.5	60.5	68.5	57.9	57.9	65.5	55.0	55.0	62.2
			SHC	58.5	67.0	75.4	58.0	66.8	75.7	56.4	65.0	73.6	54.6	62.9	71.2	52.6	60.5	68.5	50.3	57.9	65.5	47.7	55.0	62.2
		62	TC	74.5	74.5	74.5	72.3	72.3	72.3	69.8	69.8	69.8	67.0	67.0	67.7	63.7	63.7	66.2	60.2	60.2	64.5	56.2	56.2	62.7
			SHC	53.0	62.1	71.2	52.0	61.0	70.2	50.8	59.9	69.0	49.4	58.6	67.7	48.0	57.0	66.2	46.3	55.5	64.5	44.6	53.6	62.7
		67	TC	83.2	83.2	83.2	80.8	80.8	80.8	78.0	78.0	78.0	74.9	74.9	74.9	71.5	71.5	71.5	67.5	67.5	67.5	63.2	63.2	63.2
			SHC	44.9	54.1	63.2	44.0	53.0	62.2	42.8	51.9	61.0	41.4	50.6	59.7	40.0	49.0	58.2	38.4	47.5	56.6	36.7	45.7	54.9
		72	TC	92.8	92.8	92.8	90.2	90.2	90.2	87.2	87.2	87.2	83.9	83.9	83.9	80.0	80.0	80.0	75.8	75.8	75.8	71.1	71.1	71.1
			SHC	36.8	45.9	55.0	35.8	44.9	54.0	34.6	43.7	52.8	33.3	42.4	51.6	31.9	41.0	50.1	30.3	39.4	48.6	28.6	37.7	46.8
		76	TC	—	101.0	101.0	—	98.4	98.4	—	95.2	95.2	—	91.6	91.6	—	87.5	87.5	—	83.0	83.0	—	78.0	78.0
			SHC	—	39.2	48.3	—	38.2	47.3	—	37.1	46.2	—	35.8	44.9	—	34.3	43.5	—	32.8	41.9	—	31.1	40.3
2100 CFM	EAT (wb)	58	TC	75.6	75.6	85.4	72.6	72.6	82.2	69.4	69.4	78.7	65.8	65.8	74.9	62.0	62.0	70.7	57.8	57.8	66.1	53.3	53.3	61.2
			SHC	65.7	75.6	85.4	63.0	72.6	82.2	60.1	69.4	78.7	56.8	65.8	74.9	53.3	62.0	70.7	49.6	57.8	66.1	45.5	53.3	61.2
		62	TC	79.2	79.2	82.3	75.7	75.7	80.0	71.8	71.8	77.6	67.5	67.5	75.0	62.9	62.9	72.2	58.0	58.0	69.0	53.4	53.4	64.0
			SHC	59.9	71.1	82.3	57.6	68.8	80.0	55.3	66.4	77.6	52.7	63.9	75.0	49.9	61.0	72.2	46.9	58.0	69.0	43.0	53.4	64.0
		67	TC	88.1	88.1	88.1	84.3	84.3	84.3	80.1	80.1	80.1	75.6	75.6	75.6	70.6	70.6	70.6	65.2	65.2	65.2	59.4	59.4	59.4
			SHC	49.7	61.0	72.2	47.5	58.8	70.0	45.1	56.4	67.6	42.6	53.8	65.0	39.9	51.1	62.3	37.1	48.3	59.5	34.0	45.2	56.5
		72	TC	98.0	98.0	98.0	94.1	94.1	94.1	89.6	89.6	89.6	84.7	84.7	84.7	79.5	79.5	79.5	73.7	73.7	73.7	67.5	67.5	67.5
			SHC	39.4	50.7	61.9	37.2	48.5	59.8	34.8	46.1	57.3	32.3	43.6	54.8	29.6	41.0	52.2	26.8	38.1	49.3	23.9	35.2	46.4
		76	TC	—	106.5	106.5	—	102.5	102.5	—	97.9	97.9	—	92.7	92.7	—	87.2	87.2	—	81.1	81.1	—	74.5	74.5
			SHC	—	42.2	53.4	—	40.1	51.3	—	37.7	48.9	—	35.2	46.5	—	32.6	43.9	—	29.8	41.0	—	26.9	38.1
2550 CFM	EAT (wb)	58	TC	81.7	81.7	92.3	78.6	78.6	88.9	75.1	75.1	88.1	71.3	71.3	80.9	67.2	67.2	76.3	62.7	62.7	71.5	57.8	57.8	66.1
			SHC	71.2	81.7	92.3	68.3	78.6	88.9	62.0	75.1	88.1	61.6	71.3	80.9	57.9	67.2	76.3	53.8	62.7	71.5	49.4	57.8	66.1
		62	TC	82.9	82.9	93.6	79.3	79.3	91.2	75.3	75.3	88.4	71.4	71.4	84.2	67.3	67.3	79.6	62.8	62.8	74.5	57.9	57.9	69.0
			SHC	66.7	80.1	93.6	64.4	77.8	91.2	61.7	75.1	88.4	58.5	71.4	84.2	54.9	67.3	79.6	51.0	62.8	74.5	46.8	57.9	69.0
		67	TC	91.7	91.7	91.7	87.8	87.8	87.8	83.4	83.4	83.4	78.5	78.5	78.5	73.3	73.3	73.3	67.7	67.7	68.4	61.5	61.5	65.3
			SHC	54.3	67.9	81.5	52.0	65.6	79.2	49.5	63.2	76.7	47.0	60.5	74.1	46.6	58.6	70.6	41.3	54.9	68.4	38.2	51.8	65.3
		72	TC	101.8	101.8	101.8	97.7	97.7	97.7	93.0	93.0	93.0	87.8	87.8	87.8	82.3	82.3	82.3	76.2	76.2	76.2	69.7	69.7	69.7
			SHC	41.5	55.3	68.9	39.4	53.0	66.7	37.0	50.6	64.3	34.3	48.0	61.7	31.7	45.3	59.0	28.8	42.4	56.1	25.7	39.4	53.0
		76	TC	—	110.3	110.3	—	106.3	106.3	—	101.4	101.4	—	96.0	96.0	—	90.2	90.2	—	83.9	83.9	—	76.9	76.9
			SHC	—	44.9	58.5	—	42.7	56.4	—	40.3	54.0	—	37.7	51.5	—	35.1	48.8	—	32.3	45.9	—	29.3	42.9
2950 CFM	EAT (wb)	58	TC	86.2	86.2	97.3	82.9	82.9	93.7	79.2	79.2	89.7	75.2	75.2	85.3	70.8	70.8	86.7	66.1	66.1	75.3	60.9	60.9	76.6
			SHC	75.2	86.2	97.3	72.1	82.9	93.7	68.7	79.2	89.7	65.0	75.2	85.3	55.0	70.8	86.7	56.8	66.1	75.3	45.2	60.9	76.6
		62	TC	86.4	86.4	101.2	83.0	83.0	97.5	79.3	79.3	93.3	75.3	75.3	88.8	70.9	70.9	83.9	66.2	66.2	78.5	61.0	61.0	72.6
			SHC	71.6	86.4	101.2	68.5	83.0	97.5	65.3	79.3	93.3	61.8	75.3	88.8	58.0	70.9	83.9	53.8	66.2	78.5	49.4	61.0	72.6
		67	TC	94.1	94.1	94.1	90.0	90.0	90.0	85.4	85.4	85.4	80.4	80.4	81.8	75.1	75.1	79.1	69.2	69.2	76.1	63.0	63.0	72.8
			SHC	58.0	73.7	89.3	55.8	71.4	87.1	53.2	68.9	84.5	50.6	66.2	81.8	47.9	63.5	79.1	44.9	60.5	76.1	41.7	57.3	72.8
		72	TC	104.1	104.1	104.1	100.0	100.0	100.0	95.2	95.2	95.2	89.9	89.9	89.9	84.0	84.0	84.0	77.9	77.9	77.9	71.1	71.1	71.1
			SHC	43.3	59.0	74.8	41.0	56.7	72.5	38.6	54.3	70.1	36.0	51.7	67.5	33.2	48.9	64.6	30.3	46.0	61.8	27.3	43.0	58.7
		76	TC	—	112.8	112.8	—	108.6	108.6	—	103.7	103.7	—	98.2	98.2	—	92.0	92.0	—	85.5	85.5	—	78.4	78.4
			SHC	—	46.9	62.8	—	44.9	60.6	—	42.4	58.2	—	39.9	55.7	—	37.1	52.9	—	34.3	50.1	—	31.3	47.1
3400 CFM	EAT (wb)	58	TC	90.5	90.5	102.1	87.0	87.0	98.3	83.1	83.1	94.0	78.9	78.9	89.4	74.3	74.3	84.3	69.3	69.3	78.9	63.9	63.9	72.9
			SHC	78.9	90.5	102.1	75.7	87.0	98.3	72.2	83.1	94.0	68.3	78.9	89.4	64.2	74.3	84.3	59.7	69.3	78.9	54.9	63.9	72.9
		62	TC	90.6	90.6	106.1	87.1	87.1	102.2	83.2	83.2	97.8	79.0	79.0	93.0	74.4	74.4	87.8	69.3	69.3	82.2	64.0	64.0	76.1
			SHC	75.1	90.6	106.1	72.0	87.1	102.2	68.5	83.2	97.8	64.8	79.0	93.0	60.8	74.4	87.8	56.6	69.3	82.2	51.9	64.0	76.1
		67	TC	96.1	96.1	97.9	91.9	91.9	95.6	87.3	87.3	92.9	82.2	82.2	90.2	76.7	76.7	87.3	70.8	70.8	84.1	64.5	64.5	80.6
			SHC	62.1	80.0	97.9	59.8	77.6	95.6	57.2	75.1	92.9	54.5	72.3	90.2	51.7	69.5	87.3	48.7	66.4	84.1	45.4	63.0	80.6
		72	TC	106.2	106.2	106.2	102.0	102.0	102.0	97.0	97.0	97.0	91.6	91.6	91.6	85.6	85.6	85.6	79.3	79.3	79.3	72.3	72.3	72.3
			SHC	45.0	63.1	81.1	42.8	60.8	78.9	40.4	58.3	76.3	37.7	55.7	73.7	34.9	52.9	70.9	32.0	50.0	68.0	28.9	46.9	64.8
		76	TC	—	115.0	115.0	—	110.7	110.7	—	105.6	105.6	—	99.9	99.9	—	93.7	93.7	—	87.0	87.0	—	79.7	79.7
			SHC	—	49.2	67.4	—	47.1	65.2	—	44.7	62.9	—	42.0	60.3	—	39.3	57.4	—	36.4	54.5	—	33.3	51.5

Performance data (cont)

COOLING CAPACITIES — FIRST STAGE, PART LOAD (15 TONS) (cont)

48LC*B SIZE 17				AMBIENT TEMPERATURE (°F)																				
				65			75			85			95			105			115			125		
				EAT (db)			EAT (db)			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	75	80	85	75	80	85
3800 CFM	EAT (wb)	58	TC	93.6	93.6	105.6	90.0	90.0	101.6	86.0	86.0	97.2	81.6	81.6	92.4	76.8	76.8	87.3	71.7	71.7	81.5	66.1	66.1	75.4
			SHC	81.6	93.6	105.6	78.3	90.0	101.6	74.7	86.0	97.2	70.7	81.6	92.4	66.4	76.8	87.3	61.8	71.7	81.5	56.7	66.1	75.4
		62	TC	93.7	93.7	109.7	90.1	90.1	105.7	86.1	86.1	101.1	81.7	81.7	96.2	76.9	76.9	90.8	71.8	71.8	84.9	66.2	66.2	78.6
			SHC	77.7	93.7	109.7	74.5	90.1	105.7	71.0	86.1	101.1	67.2	81.7	96.2	63.0	76.9	90.8	58.6	71.8	84.9	53.7	66.2	78.6
		67	TC	97.6	97.6	105.2	93.4	93.4	102.8	88.6	88.6	100.1	83.5	83.5	97.3	78.0	78.0	94.2	72.2	72.2	90.7	66.3	66.3	84.6
			SHC	65.5	85.3	105.2	63.2	83.0	102.8	60.5	80.3	100.1	57.8	77.6	97.3	54.9	74.6	94.2	51.8	71.2	90.7	47.6	66.1	84.6
		72	TC	107.5	107.5	107.5	103.3	103.3	103.3	98.3	98.3	98.3	92.7	92.7	92.7	86.7	86.7	86.7	80.1	80.1	80.1	73.1	73.1	73.1
			SHC	46.4	66.5	86.5	44.3	64.3	84.3	41.7	61.8	81.8	39.1	59.1	79.2	36.3	56.4	76.3	33.3	53.3	73.3	30.2	50.2	70.2
		76	TC	—	116.2	116.2	—	112.0	112.0	—	107.0	107.0	—	101.2	101.2	—	94.9	94.9	—	87.9	87.9	—	80.5	80.5
			SHC	—	51.0	71.3	—	48.9	69.1	—	46.5	66.7	—	43.9	64.1	—	41.1	61.3	—	38.2	58.3	—	35.1	55.3
4250 CFM	EAT (wb)	58	TC	96.6	96.6	108.9	92.9	92.9	104.9	88.7	88.7	100.3	84.2	84.2	95.4	79.3	79.3	90.0	73.9	73.9	84.0	68.2	68.2	77.7
			SHC	84.3	96.6	108.9	80.9	92.9	104.9	77.1	88.7	100.3	73.0	84.2	95.4	68.6	79.3	90.0	63.9	73.9	84.0	58.6	68.2	77.7
		62	TC	96.7	96.7	113.2	93.0	93.0	109.0	88.8	88.8	104.3	84.3	84.3	99.3	79.4	79.4	93.6	74.0	74.0	87.6	68.3	68.3	81.0
			SHC	80.2	96.7	113.2	77.0	93.0	109.0	73.3	88.8	104.3	69.4	84.3	99.3	65.1	79.4	93.6	60.5	74.0	87.6	55.5	68.3	81.0
		67	TC	99.1	99.1	113.0	94.8	94.8	110.6	90.1	90.1	107.7	84.9	84.9	104.6	79.6	79.6	100.7	74.1	74.1	94.4	68.3	68.3	87.5
			SHC	69.1	91.1	113.0	66.8	88.6	110.6	64.2	86.0	107.7	61.3	83.0	104.6	58.1	79.5	100.7	53.8	74.1	94.4	49.2	68.3	87.5
		72	TC	108.7	108.7	108.7	104.4	104.4	104.4	99.4	99.4	99.4	93.7	93.7	93.7	87.7	87.7	87.7	81.0	81.0	81.0	73.9	73.9	76.1
			SHC	48.0	70.2	92.5	45.7	68.1	90.3	43.3	65.5	87.8	40.7	62.9	85.1	37.8	60.1	82.3	34.8	57.0	79.3	31.7	53.8	76.1
		76	TC	—	117.5	117.5	—	113.3	113.3	—	108.1	108.1	—	102.3	102.3	—	95.8	95.8	—	88.8	88.8	—	81.3	81.3
			SHC	—	53.0	75.5	—	50.9	73.3	—	48.6	70.9	—	45.9	68.3	—	43.1	65.5	—	40.2	62.5	—	37.1	59.4

LEGEND

— — Do not operate
CFM — Cubic feet per minute (supply air)
EAT (db) — Entering air temperature (dry bulb) (°F)
EAT (wb) — Entering air temperature (wet bulb) (°F)
SHC — Sensible heat capacity (1000 Btuh) Gross
TC — Total capacity (1000 Btuh) Gross

Performance data (cont)

COOLING CAPACITIES — SECOND STAGE, PART LOAD (15 TONS)

48LC*B SIZE 17				AMBIENT TEMPERATURE (°F)																				
				65			75			85			95			105			115			125		
				EAT (db)			EAT (db)			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	75	80	85	75	80	85
1900 CFM	EAT (wb)	58	TC	96.9	96.9	99.5	92.9	92.9	97.2	89.2	89.2	95.2	85.5	85.5	93.1	81.7	81.7	91.0	78.1	78.1	87.9	74.4	74.4	83.9
			SHC	79.2	89.3	99.5	76.9	87.1	97.2	74.8	84.9	95.2	72.8	83.0	93.1	70.7	80.8	91.0	68.2	78.1	87.9	64.9	74.4	83.9
		62	TC	105.0	105.0	105.0	100.5	100.5	100.5	96.4	96.4	96.4	92.3	92.3	92.3	88.2	88.2	88.2	83.9	83.9	83.9	79.0	79.0	79.0
			SHC	71.8	81.9	92.1	69.4	79.6	89.8	67.3	77.4	87.7	65.2	75.4	85.6	63.2	73.3	83.5	60.9	71.2	81.3	58.6	68.7	79.0
		67	TC	116.2	116.2	116.2	111.2	111.2	111.2	106.6	106.6	106.6	102.0	102.0	102.0	97.4	97.4	97.4	92.6	92.6	92.6	87.4	87.4	87.4
			SHC	62.4	72.5	82.8	60.0	70.1	80.3	57.7	68.0	78.1	55.6	65.8	76.0	53.5	63.7	73.9	51.3	61.5	71.7	49.0	59.2	69.4
		72	TC	128.6	128.6	128.6	123.0	123.0	123.0	117.9	117.9	117.9	112.8	112.8	112.8	107.6	107.6	107.6	102.4	102.4	102.4	96.6	96.6	96.6
			SHC	52.7	62.9	73.0	50.2	60.4	70.6	48.0	58.1	68.3	45.8	56.0	66.2	43.7	53.8	64.1	41.4	51.7	61.8	39.2	49.3	59.6
		76	TC	—	139.5	139.5	—	133.4	133.4	—	127.7	127.7	—	122.2	122.2	—	116.6	116.6	—	110.9	110.9	—	104.7	104.7
			SHC	—	54.9	65.1	—	52.5	62.6	—	50.1	60.4	—	48.0	58.1	—	45.8	56.0	—	43.6	53.8	—	41.3	51.5
2500 CFM	EAT (wb)	58	TC	105.8	105.8	118.3	101.6	101.6	114.5	98.0	98.0	110.4	94.5	94.5	106.5	90.9	90.9	102.4	87.0	87.0	98.0	82.8	82.8	93.2
			SHC	91.8	105	118.3	88.7	101.6	114.5	85.6	98.0	110.4	82.5	94.5	106.5	79.4	90.9	102.4	76.0	87.0	98.0	72.2	82.8	93.2
		62	TC	113.9	113.9	113.9	108.6	108.6	108.6	103.7	103.7	103.7	99.1	99.1	101.4	94.3	94.3	99.1	89.3	89.3	96.7	83.9	83.9	94.2
			SHC	81.9	95.3	108.6	79.4	92.6	106.0	76.9	90.3	103.6	74.7	88.0	101.4	72.4	85.8	99.1	70.1	83.5	96.7	67.7	80.9	94.2
		67	TC	125.9	125.9	125.9	119.9	119.9	119.9	114.4	114.4	114.4	109.1	109.1	109.1	103.8	103.8	103.8	98.4	98.4	98.4	92.4	92.4	92.4
			SHC	69.3	82.7	96.0	66.6	80.0	93.4	64.3	77.6	91.0	61.9	75.3	88.6	59.7	73.0	86.4	57.3	70.7	84.0	54.9	68.3	81.6
		72	TC	138.9	138.9	138.9	132.4	132.4	132.4	126.3	126.3	126.3	120.4	120.4	120.4	114.6	114.6	114.6	108.5	108.5	108.5	102.1	102.1	102.1
			SHC	56.4	69.7	83.2	53.6	67.1	80.4	51.2	64.5	78.0	48.8	62.3	75.7	46.6	60.0	73.4	44.3	57.7	71.1	41.9	55.3	68.7
		76	TC	—	150.3	150.3	—	143.2	143.2	—	136.6	136.6	—	130.2	130.2	—	123.8	123.8	—	117.4	117.4	—	110.5	110.5
			SHC	—	59.1	72.4	—	56.4	69.8	—	53.9	67.4	—	51.6	65.0	—	49.3	62.8	—	47.1	60.5	—	44.7	58.1
3100 CFM	EAT (wb)	58	TC	113.4	113.4	128.0	108.2	108.2	122.3	103.4	103.4	116.8	98.5	98.5	111.4	93.7	93.7	106.1	88.6	88.6	100.5	83.2	83.2	94.5
			SHC	98.9	113.4	128.0	94.2	108.2	122.3	89.8	103.4	116.8	85.6	98.5	111.4	81.2	93.7	106.1	76.7	88.6	100.5	71.9	83.2	94.5
		62	TC	118.7	118.7	122.7	112.0	112.0	119.0	105.9	105.9	115.7	100.0	100.0	112.5	94.3	94.3	109.2	88.7	88.7	104.6	83.3	83.3	98.4
			SHC	89.8	106.2	122.7	86.3	102.7	119.0	83.0	99.4	115.7	79.9	96.1	112.5	76.6	92.9	109.2	72.8	88.7	104.6	68.3	83.3	98.4
		67	TC	131.1	131.1	131.1	123.8	123.8	123.8	117.0	117.0	117.0	110.5	110.5	110.5	103.9	103.9	103.9	97.3	97.3	97.3	90.2	90.2	90.2
			SHC	74.4	90.9	107.3	70.8	87.4	103.8	67.6	84.0	100.5	64.4	80.8	97.3	61.2	77.7	94.2	58.1	74.6	91.1	54.8	71.3	87.8
		72	TC	145.1	145.1	145.1	137.1	137.1	137.1	129.7	129.7	129.7	122.5	122.5	122.5	115.3	115.3	115.3	108.1	108.1	108.1	100.4	100.4	100.4
			SHC	58.6	75.3	91.8	55.1	71.7	88.2	51.8	68.3	84.9	48.6	65.2	81.8	45.5	62.1	78.6	42.3	58.9	75.5	39.1	55.7	72.2
		76	TC	—	157.0	157.0	—	148.6	148.6	—	140.5	140.5	—	132.8	132.8	—	125.2	125.2	—	117.4	117.4	—	109.3	109.3
			SHC	—	62.3	78.9	—	58.8	75.5	—	55.5	72.2	—	52.4	68.9	—	49.2	65.8	—	46.1	62.7	—	42.9	59.6
3700 CFM	EAT (wb)	58	TC	121.4	121.4	136.9	115.6	115.6	130.6	110.2	110.2	124.5	104.9	104.9	118.7	99.6	99.6	112.8	94.2	94.2	106.7	88.3	88.3	100.2
			SHC	105.8	121.4	136.9	100.7	115.6	130.6	95.8	110.2	124.5	91.2	104.9	118.7	86.5	99.6	112.8	81.6	94.2	106.7	76.4	88.3	100.2
		62	TC	123.4	123.4	137.3	116.6	116.6	133.4	110.4	110.4	129.5	105.1	105.1	123.4	99.7	99.7	117.4	94.3	94.3	111.1	88.4	88.4	104.3
			SHC	98.6	117.9	137.3	94.8	114.1	133.4	91.3	110.4	129.5	86.7	105.1	123.4	82.2	99.7	117.4	77.5	94.3	111.1	72.5	88.4	104.3
		67	TC	135.7	135.7	135.7	128.0	128.0	128.0	120.7	120.7	120.7	113.8	113.8	113.8	107.0	107.0	107.0	100.0	100.0	102.4	92.6	92.6	99.0
			SHC	80.0	99.6	119.2	76.4	96.0	115.6	73.0	92.6	112.1	69.8	89.3	108.9	66.6	86.2	105.7	63.4	82.9	102.4	60.1	79.6	99.0
		72	TC	149.9	149.9	149.9	141.4	141.4	141.4	133.5	133.5	133.5	125.9	125.9	125.9	118.5	118.5	118.5	110.9	110.9	110.9	102.9	102.9	102.9
			SHC	61.2	80.9	100.6	57.6	77.3	97.0	54.2	73.9	93.6	51.0	70.7	90.3	47.8	67.5	87.1	44.7	64.3	83.9	41.3	60.9	80.6
		76	TC	—	161.9	161.9	—	153.0	153.0	—	144.5	144.5	—	136.4	136.4	—	128.3	128.3	—	120.2	120.2	—	111.8	111.8
			SHC	—	65.5	85.4	—	62.0	81.8	—	58.6	78.5	—	55.4	75.3	—	52.3	72.1	—	49.0	68.8	—	45.8	65.5
4300 CFM	EAT (wb)	58	TC	127.9	127.9	144.2	121.7	121.7	137.3	115.8	115.8	130.8	110.2	110.2	124.5	104.4	104.4	118.2	98.6	98.6	111.7	92.4	92.4	104.8
			SHC	111.5	127.9	144.2	106.0	121.7	137.3	100.8	115.8	130.8	95.7	110.2	124.5	90.8	104.4	118.2	85.5	98.6	111.7	80.0	92.4	104.8
		62	TC	128.0	128.0	149.9	121.8	121.8	142.7	115.9	115.9	136.0	110.3	110.3	129.5	104.6	104.6	122.9	98.8	98.8	116.2	92.5	92.5	109.1
			SHC	106.2	128.0	149.9	100.9	121.8	142.7	95.9	115.9	136.0	91.1	110.3	129.5	86.2	104.6	122.9	81.2	98.8	116.2	76.0	92.5	109.1
		67	TC	139.1	139.1	139.1	131.0	131.0	131.0	123.5	123.5	123.5	116.3	116.3	120.0	109.3	109.3	116.7	102.1	102.1	113.3	94.6	94.6	109.7
			SHC	85.4	108.0	130.7	81.7	104.3	126.8	78.3	100.8	123.3	75.0	97.5	120.0	71.7	94.2	116.7	68.4	90.9	113.3	64.9	87.4	109.7
		72	TC	153.3	153.3	153.3	144.5	144.5	144.5	136.3	136.3	136.3	128.4	128.4	128.4	120.6	120.6	120.6	112.8	112.8	112.8	104.6	104.6	104.6
			SHC	63.6	86.3	109.0	59.9	82.6	105.3	56.5	79.2	101.9	53.1	75.9	98.5	49.9	72.6	95.3	46.7	69.3	92.0	43.4	66.0	88.6
		76	TC	—	165.5	165.5	—	156.2	156.2	—	147.4	147.4	—	139.0	139.0	—	130.7	130.7	—	122.4	122.4	—	113.7	113.7
			SHC	—	68.5	91.5	—	64.9	87.8	—	61.5	84.4	—	58.2	81.0	—	55.0	77.8	—	51.8	74.6	—	48.5	71.2
4900 CFM	EAT (wb)	58	TC	133.3	133.3	150.3	126.7	126.7	142.9	120.4	120.4	136.0	114.5	114.5	129.4	108.4	108.4	122.7	102.3	102.3	115.8	95.7	95.7	108.5
			SHC	116.3	133.3	150.3	110.5	126.7	142.9	104.9	120.4	136.0	99.5	114.5	129.4	94.2	108.4	122.7	88.7	102.3	115.8	83.0	95.7	108.5
		62	TC	133.5	133.5	156.2	126.8	126.8	148.6	120.6	120.6	141.4	114.6	114.6	134.5	108.5	108.5	127.5	102.4	102.4	120.5	95.8	95.8	112.9
			SHC	110.8	133.5	156.2	105.1	126.8	148.6	99.8	120.6	141.4	94.7	114.6	134.5	89.5	108.5	127.5	84.3	102.4	120.5	78.8	95.8	112.9
		67	TC	141.8	141.8	141.8	133.5	133.5	137.7	125.7	125.7	134.1	118.4	118.4	130.7	111.2	111.2	127.1	103.9	103.9	123.4	96.4	96.4	119.3
			SHC	90.6	116.0	141.6	86.8	112.2	137.7	83.3	108.7	134.1	79.9	105.2	130.7	76.5	101.8	127.1	73.1	98.3	123.4	69.5	94.5	119.3
		72	TC	155.9	155.9	155.9	146.8	146.8	146.8	138.5	138.5	138.5	130.3	130.3	130.3	122.3	122.3	122.3	114.3	114.3	114.3	105.9	105.9	105.9
			SHC	65.7	91.4	117.0	62.0	87.7	113.3	58.5	84.1	109.8	55.2	80.8	106.5	52.0	77.5	103.2	48.7	74.3	99.8	45.3	70.9	96.4
		76	TC	—	168.2	168.2	—	158.7	158.7	—	149.7	149.7	—	141.0	141.0	—	132.4	132.4	—	123.8	123.8	—	115.0	115.0
			SHC	—	71.3	97.2	—	67.7	93.5	—	64.2	90.0	—	60.8	86.7	—	57.6	83.4	—	54.3	80.0	—	51.0	76.7

Performance data (cont)

COOLING CAPACITIES — SECOND STAGE, PART LOAD (15 TONS) (cont)

48LC*B SIZE 17				AMBIENT TEMPERATURE (°F)																				
				65			75			85			95			105			115			125		
				EAT (db)			EAT (db)			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	75	80	85	75	80	85
5550 CFM	EAT (wb)	58	TC	138.3	138.3	155.8	131.2	131.2	148.1	124.7	124.7	140.8	118.4	118.4	133.7	112.0	112.0	126.7	105.6	105.6	119.5	98.8	98.8	111.9
			SHC	120.6	138.3	155.8	114.5	131.2	148.1	108.6	124.7	140.8	103.0	118.4	133.7	97.4	112.0	126.7	91.7	105.6	119.5	85.6	98.8	111.9
		62	TC	138.4	138.4	161.9	131.4	131.4	153.9	124.8	124.8	146.3	118.5	118.5	138.9	112.1	112.1	131.7	105.7	105.7	124.3	98.9	98.9	116.4
			SHC	114.9	138.4	161.9	108.9	131.4	153.9	103.4	124.8	146.3	97.9	118.5	138.9	92.5	112.1	131.7	87.1	105.7	124.3	81.2	98.9	116.4
		67	TC	144.1	144.1	153.0	135.6	135.6	149.0	127.7	127.7	145.2	120.3	120.3	141.4	113.0	113.0	137.5	106.0	106.0	132.8	99.2	99.2	124.5
			SHC	95.8	124.4	153.0	91.9	120.4	149.0	88.3	116.8	145.2	84.8	113.1	141.4	81.4	109.4	137.5	77.5	105.2	132.8	72.3	98.4	124.5
		72	TC	158.0	158.0	158.0	148.9	148.9	148.9	140.2	140.2	140.2	131.8	131.8	131.8	123.6	123.6	123.6	115.4	115.4	115.4	107.0	107.0	107.0
			SHC	67.9	96.6	125.5	64.2	92.9	121.7	60.6	89.4	118.2	57.2	86.0	114.8	54.0	82.7	111.3	50.7	79.4	108.0	47.3	76.0	104.6
		76	TC	—	170.5	170.5	—	160.8	160.8	—	151.5	151.5	—	142.6	142.6	—	133.9	133.9	—	125.1	125.1	—	116.1	116.1
			SHC	—	74.1	103.1	—	70.4	99.5	—	67.0	95.8	—	63.6	92.4	—	60.3	89.1	—	56.9	85.8	—	53.6	82.4
6150 CFM	EAT (wb)	58	TC	142.1	142.1	160.2	134.8	134.8	152.1	128.0	128.0	144.4	121.4	121.4	137.1	114.9	114.9	129.8	108.1	108.1	122.4	101.1	101.1	114.6
			SHC	124.0	142.1	160.2	117.6	134.8	152.1	111.5	128.0	144.4	105.6	121.4	137.1	99.8	114.9	129.8	93.9	108.1	122.4	87.7	101.1	114.6
		62	TC	142.3	142.3	166.3	134.9	134.9	158.0	128.1	128.1	150.1	121.5	121.5	142.4	115.0	115.0	134.9	108.2	108.2	127.2	101.2	101.2	119.1
			SHC	118.1	142.3	166.3	111.9	134.9	158.0	106.1	128.1	150.1	100.4	121.5	142.4	94.9	115.0	134.9	89.2	108.2	127.2	83.2	101.2	119.1
		67	TC	146.0	146.0	163.0	137.4	137.4	158.7	129.5	129.5	154.6	122.1	122.1	150.3	115.2	115.2	144.2	108.5	108.5	136.0	101.3	101.3	128.2
			SHC	100.4	131.7	163.0	96.5	127.6	158.7	92.7	123.7	154.6	89.1	119.7	150.3	84.7	114.5	144.2	79.6	107.7	136.0	74.4	101.3	128.2
		72	TC	159.6	159.6	159.6	150.2	150.2	150.2	141.5	141.5	141.5	133.0	133.0	133.0	124.7	124.7	124.7	116.4	116.4	116.4	107.7	107.7	111.9
			SHC	69.8	101.4	133.0	66.0	97.6	129.2	62.5	94.1	125.6	59.1	90.7	122.2	55.8	87.3	118.8	52.5	83.9	115.4	49.1	80.5	111.9
		76	TC	—	172.2	172.2	—	162.3	162.3	—	152.9	152.9	—	143.8	143.8	—	134.9	134.9	—	126.1	126.1	—	116.9	116.9
			SHC	—	76.5	108.4	—	72.9	104.6	—	69.3	101.1	—	66.0	97.6	—	62.7	94.3	—	59.3	90.9	—	56.0	87.5

LEGEND

— — Do not operate
CFM — Cubic feet per minute (supply air)
EAT (db) — Entering air temperature (dry bulb) (°F)
EAT (wb) — Entering air temperature (wet bulb) (°F)
SHC — Sensible heat capacity (1000 Btuh) Gross
TC — Total capacity (1000 Btuh) Gross

Performance data (cont)

COOLING CAPACITIES — THIRD STAGE, FULL LOAD (15 TONS)

48LC*B SIZE 17				AMBIENT TEMPERATURE (°F)																				
				65			75			85			95			105			115			125		
				EAT (db)			EAT (db)			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	75	80	85	75	80	85
3000 CFM	EAT (wb)	58	TC	156.8	156.8	158.7	151.3	151.3	155.7	145.9	145.9	152.6	140.0	140.0	149.3	133.7	133.7	145.7	126.8	126.8	141.7	120.2	120.2	135.4
			SHC	126.8	142.8	158.7	123.7	139.7	155.7	120.6	136.6	152.6	117.4	133.3	149.3	113.9	129.8	145.7	110.0	125.9	141.7	104.9	120.2	135.4
		62	TC	169.1	169.1	169.1	163.2	163.2	163.2	157.3	157.3	157.3	151.0	151.0	151.0	144.2	144.2	144.2	136.7	136.7	136.7	128.4	128.4	128.4
			SHC	115.0	130.9	146.9	111.8	127.8	143.8	108.7	124.7	140.6	105.4	121.4	137.4	102.0	118.0	134.0	98.2	114.2	130.2	94.2	110.1	126.1
		67	TC	186.3	186.3	186.3	179.9	179.9	179.9	173.4	173.4	173.4	166.5	166.5	166.5	159.2	159.2	159.2	151.1	151.1	151.1	142.4	142.4	142.4
			SHC	99.7	115.8	131.8	96.6	112.7	128.7	93.5	109.5	125.6	90.3	106.3	122.3	86.8	102.9	118.9	83.2	99.2	115.1	79.2	95.2	111.2
		72	TC	205.3	205.3	205.3	198.3	198.3	198.3	191.1	191.1	191.1	183.6	183.6	183.6	175.5	175.5	175.5	166.9	166.9	166.9	157.4	157.4	157.4
			SHC	84.1	100.2	116.3	81.0	97.1	113.2	77.8	93.9	110.0	74.6	90.7	106.8	71.2	87.3	103.4	67.6	83.7	99.7	63.7	79.8	95.8
		76	TC	—	221.6	221.6	—	214.0	214.0	—	206.2	206.2	—	198.1	198.1	—	189.5	189.5	—	180.3	180.3	—	170.2	170.2
			SHC	—	87.2	103.3	—	84.0	100.1	—	80.9	97.0	—	77.7	93.8	—	74.4	90.5	—	70.8	86.9	—	67.0	83.1
3400 CFM	EAT (wb)	58	TC	163.1	163.1	171.4	157.4	157.4	168.1	151.5	151.5	164.8	145.5	145.5	161.3	140.9	140.9	153.5	133.2	133.2	150.1	126.6	126.6	142.6
			SHC	135.3	153.4	171.4	132.1	150.2	168.1	128.9	146.8	164.8	125.5	143.3	161.3	120.0	136.7	153.5	116.3	133.2	150.1	110.5	126.6	142.6
		62	TC	175.6	175.6	175.6	169.4	169.4	169.4	162.9	162.9	162.9	156.2	156.2	156.2	149.0	149.0	149.0	141.1	141.1	141.1	132.5	132.5	136.3
			SHC	121.7	139.7	157.9	118.5	136.5	154.6	115.2	133.3	151.3	111.8	129.9	148.0	108.3	126.4	144.4	104.4	122.5	140.5	100.3	118.4	136.3
		67	TC	193.3	193.3	193.3	186.4	186.4	186.4	179.4	179.4	179.4	172.1	172.1	172.1	164.3	164.3	164.3	155.8	155.8	155.8	146.4	146.4	146.4
			SHC	104.4	122.6	140.6	101.2	119.2	137.4	97.9	116.0	134.2	94.6	112.6	130.7	91.1	109.1	127.2	87.3	105.4	123.4	83.2	101.3	119.4
		72	TC	212.6	212.6	212.6	205.1	205.1	205.1	197.4	197.4	197.4	189.4	189.4	189.4	180.9	180.9	180.9	171.7	171.7	171.7	161.7	161.7	161.7
			SHC	86.5	104.7	122.9	83.3	101.5	119.7	80.0	98.3	116.5	76.6	94.9	113.1	73.2	91.5	109.7	69.5	87.8	106.0	65.6	83.8	102.0
		76	TC	—	229.2	229.2	—	221.0	221.0	—	212.7	212.7	—	204.2	204.2	—	195.1	195.1	—	185.3	185.3	—	174.7	174.7
			SHC	—	89.9	108.1	—	86.7	104.9	—	83.5	101.7	—	80.1	98.4	—	76.7	95.0	—	73.1	91.4	—	69.2	87.5
3750 CFM	EAT (wb)	58	TC	161.4	161.4	175.4	153.1	153.1	169.6	144.7	144.7	163.5	136.8	136.8	155.9	128.8	128.8	147.2	120.3	120.3	137.9	111.2	111.2	127.8
			SHC	135.9	155.7	175.4	130.2	149.9	169.6	124.3	143.9	163.5	117.7	136.8	155.9	110.5	128.8	147.2	102.8	120.3	137.9	94.5	111.2	127.8
		62	TC	174.9	174.9	174.9	165.8	165.8	165.8	156.7	156.7	156.7	147.3	147.3	147.3	137.4	137.4	138.2	126.8	126.8	131.8	115.6	115.6	125.2
			SHC	121.9	141.8	161.7	116.1	136.0	155.9	110.4	130.3	150.2	104.5	124.4	144.2	98.5	118.4	138.2	92.2	112.0	131.8	85.6	105.4	125.2
		67	TC	194.2	194.2	194.2	184.6	184.6	184.6	174.7	174.7	174.7	164.7	164.7	164.7	154.1	154.1	154.1	142.8	142.8	142.8	130.8	130.8	130.8
			SHC	104.0	124.0	143.9	98.4	118.3	138.2	92.5	112.5	132.4	86.8	106.7	126.6	80.7	100.6	120.5	74.5	94.4	114.3	68.1	87.9	107.8
		72	TC	215.2	215.2	215.2	204.8	204.8	204.8	194.3	194.3	194.3	183.5	183.5	183.5	172.2	172.2	172.2	160.3	160.3	160.3	147.5	147.5	147.5
			SHC	85.6	105.8	125.9	79.9	100.0	120.1	74.2	94.3	114.4	68.3	88.4	108.5	62.4	82.5	102.5	56.4	76.3	96.3	49.9	69.9	89.9
		76	TC	—	233.0	233.0	—	222.1	222.1	—	211.0	211.0	—	199.6	199.6	—	187.7	187.7	—	175.1	175.1	—	161.7	161.7
			SHC	—	90.5	110.6	—	84.8	104.9	—	79.1	99.3	—	73.3	93.4	—	67.5	87.6	—	61.4	81.5	—	55.1	75.2
4500 CFM	EAT (wb)	58	TC	172.6	172.6	195.2	164.8	164.8	186.6	156.8	156.8	177.9	148.6	148.6	169.1	139.9	139.9	159.6	130.7	130.7	149.5	120.9	120.9	138.7
			SHC	150.0	172.6	195.2	142.8	164.8	186.6	135.6	156.8	177.9	128.1	148.6	169.1	120.3	139.9	159.6	111.9	130.7	149.5	103.1	120.9	138.7
		62	TC	183.9	183.9	183.9	174.3	174.3	175.3	164.6	164.6	169.4	154.6	154.6	163.2	144.2	144.2	157.0	133.3	133.3	150.3	121.8	121.8	143.0
			SHC	134.0	157.7	181.3	128.1	151.7	175.3	122.2	145.8	169.4	116.1	139.7	163.2	109.9	133.4	157.0	103.4	126.8	150.3	96.5	119.7	143.0
		67	TC	203.5	203.5	203.5	193.1	193.1	193.1	182.6	182.6	182.6	171.8	171.8	171.8	160.6	160.6	160.6	148.7	148.7	148.7	136.1	136.1	136.1
			SHC	112.2	136.0	159.7	106.4	130.1	153.8	100.4	124.1	147.8	94.4	118.1	141.8	88.2	111.9	135.6	81.9	105.5	129.2	75.3	98.9	122.6
		72	TC	224.6	224.6	224.6	213.6	213.6	213.6	202.4	202.4	202.4	191.0	191.0	191.0	179.0	179.0	179.0	166.4	166.4	166.4	153.0	153.0	153.0
			SHC	89.9	113.8	137.7	83.9	107.8	131.8	78.1	102.0	125.9	72.2	96.0	119.8	66.1	89.9	113.8	59.9	83.7	107.4	53.3	77.1	100.9
		76	TC	—	242.8	242.8	—	231.1	231.1	—	219.3	219.3	—	207.1	207.1	—	194.5	194.5	—	181.2	181.2	—	167.1	167.1
			SHC	—	95.5	119.5	—	89.6	113.8	—	83.8	107.9	—	77.9	102.0	—	71.9	96.0	—	65.6	89.8	—	59.3	83.5
5250 CFM	EAT (wb)	58	TC	183.9	183.9	207.8	175.5	175.5	198.6	166.9	166.9	189.3	158.1	158.1	179.8	149.0	149.0	169.7	139.2	139.2	159.0	128.8	128.8	147.5
			SHC	159.9	183.9	207.8	152.3	175.5	198.6	144.6	166.9	189.3	136.6	158.1	179.8	128.3	149.0	169.7	119.5	139.2	159.0	110.1	128.8	147.5
		62	TC	190.9	190.9	199.8	180.9	180.9	193.6	170.8	170.8	187.4	160.6	160.6	181.0	150.1	150.1	174.1	139.4	139.4	165.8	129.0	129.0	154.0
			SHC	145.2	172.5	199.8	139.1	166.3	193.6	133.0	160.2	187.4	126.8	153.9	181.0	120.3	147.2	174.1	113.1	139.4	165.8	103.9	129.0	154.0
		67	TC	210.2	210.2	210.2	199.3	199.3	199.3	188.4	188.4	188.4	177.2	177.2	177.2	165.4	165.4	165.4	153.1	153.1	153.1	140.0	140.0	140.0
			SHC	119.6	147.0	174.4	113.6	141.0	168.4	107.5	134.9	162.3	101.4	128.8	156.2	95.2	122.6	149.9	88.6	116.0	143.4	81.9	109.2	136.6
		72	TC	231.6	231.6	231.6	220.1	220.1	220.1	208.4	208.4	208.4	196.4	196.4	196.4	184.0	184.0	184.0	170.8	170.8	170.8	157.0	157.0	157.0
			SHC	93.4	121.1	148.7	87.5	115.1	142.6	81.5	109.1	136.6	75.5	103.0	130.6	69.3	96.8	124.3	62.9	90.4	117.9	56.4	83.8	111.2
		76	TC	—	249.8	249.8	—	237.5	237.5	—	225.1	225.1	—	212.6	212.6	—	199.5	199.5	—	185.5	185.5	—	170.9	170.9
			SHC	—	99.7	127.9	—	93.9	122.1	—	87.9	116.1	—	81.9	110.0	—	75.9	103.7	—	69.4	97.3	—	62.9	90.7
6000 CFM	EAT (wb)	58	TC	193.3	193.3	218.3	184.5	184.5	208.7	175.4	175.4	198.8	166.2	166.2	188.7	156.5	156.5	178.0	146.2	146.2	166.7	135.2	135.2	154.7
			SHC	168.3	193.3	218.3	160.2	184.5	208.7	152.1	175.4	198.8	143.7	166.2	188.7	134.9	156.5	178.0	125.7	146.2	166.7	115.7	135.2	154.7
		62	TC	196.9	196.9	217.1	186.5	186.5	210.7	176.5	176.5	204.0	166.3	166.3	196.4	156.7	156.7	185.4	146.3	146.3	173.8	135.4	135.4	161.4
			SHC	155.7	186.4	217.1	149.5	180.1	210.7	143.0	173.6	204.0	136.3	166.3	196.4	127.8	156.7	185.4	119.0	146.3	173.8	109.4	135.4	161.4
		67	TC	215.3	215.3	215.3	204.0	204.0	204.0	192.8	192.8	192.8	181.3	181.3	181.3	169.2	169.2	169.2	156.6	156.6	156.9	143.2	143.2	150.0
			SHC	126.4	157.5	188.5	120.3	151.3	182.3	114.2	145.2	176.2	108.0	138.9	169.9	101.6	132.6	163.5	95.1	126.0	156.9	88.2	119.1	150.0
		72	TC	236.9	236.9	236.9	224.9	224.9	224.9	212.8	212.8	212.8	200.5	200.5	200.5	187.7	187.7	187.7	174.2	174.2	174.2	159.9	159.9	159.9
			SHC	96.6	127.8	159.0	90.6	121.8	153.0	84.5	115.7	146.8	78.4	109.5	140.7	72.2	103.3	134.4	65.7	96.7	127.8	59.1	90.0	121.0
		76	TC	—	255.1	255.1	—	242.5	242.5	—	229.7	229.7	—	216.6	216.6	—	203.3	203.3	—	189.2	189.2	—	173.8	173.8
			SHC	—	103.7	135.6	—	97.7	129.5	—	91.7	123.3	—	85.6	117.1	—	79.4	110.9	—	72.9	104.3	—	66.2	97.5

Performance data (cont)

COOLING CAPACITIES — THIRD STAGE, FULL LOAD (15 TONS) (cont)

48LC*B SIZE 17				AMBIENT TEMPERATURE (°F)																				
				65			75			85			95			105			115			125		
				EAT (db)			EAT (db)			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	75	80	85	75	80	85
6750 CFM	EAT (wb)	58	TC	201.2	201.2	227.2	192.0	192.0	217.0	182.5	182.5	206.7	172.8	172.8	196.1	162.6	162.6	185.0	152.0	152.0	173.3	140.6	140.6	160.7
			SHC	175.3	201.2	227.2	166.9	192.0	217.0	158.3	182.5	206.7	149.6	172.8	196.1	140.4	162.6	185.0	130.7	152.0	173.3	120.5	140.6	160.7
		62	TC	202.2	202.2	233.0	192.1	192.1	225.5	182.7	182.7	215.1	173.0	173.0	204.1	162.8	162.8	192.7	152.2	152.2	180.5	140.8	140.8	167.6
			SHC	165.4	199.2	233.0	158.6	192.1	225.5	150.4	182.7	215.1	142.0	173.0	204.1	133.1	162.8	192.7	123.8	152.2	180.5	114.0	140.8	167.6
		67	TC	219.4	219.4	219.4	207.9	207.9	207.9	196.4	196.4	196.4	184.5	184.5	184.5	172.3	172.3	176.7	159.4	159.4	169.8	145.8	145.8	162.7
			SHC	132.9	167.4	202.0	126.7	161.3	195.8	120.5	155.0	189.5	114.2	148.7	183.1	107.8	142.3	176.7	101.2	135.5	169.8	94.3	128.5	162.7
		72	TC	241.0	241.0	241.0	228.7	228.7	228.7	216.4	216.4	216.4	203.7	203.7	203.7	190.6	190.6	190.6	176.8	176.8	176.8	162.2	162.2	162.2
			SHC	99.5	134.3	169.0	93.4	128.1	162.8	87.3	122.0	156.6	81.1	115.7	150.3	74.8	109.4	143.9	68.3	102.8	137.3	61.5	96.0	130.5
		76	TC	—	259.3	259.3	—	246.3	246.3	—	233.3	233.3	—	220.0	220.0	—	206.1	206.1	—	191.7	191.7	—	176.1	176.1
			SHC	—	107.3	142.5	—	101.2	136.4	—	95.1	130.3	—	88.9	123.9	—	82.7	117.6	—	76.1	111.0	—	69.3	103.9
7500 CFM	EAT (wb)	58	TC	208.0	208.0	234.7	198.3	198.3	224.1	188.5	188.5	213.3	178.4	178.4	202.4	167.9	167.9	190.8	156.9	156.9	178.6	145.1	145.1	165.7
			SHC	181.3	208.0	234.7	172.5	198.3	224.1	163.6	188.5	213.3	154.5	178.4	202.4	145.1	167.9	190.8	135.1	156.9	178.6	124.5	145.1	165.7
		62	TC	208.3	208.3	243.9	198.5	198.5	233.0	188.7	188.7	221.9	178.6	178.6	210.6	168.1	168.1	198.7	157.1	157.1	186.1	145.3	145.3	172.8
			SHC	172.5	208.3	243.9	164.1	198.5	233.0	155.5	188.7	221.9	146.7	178.6	210.6	137.6	168.1	198.7	127.9	157.1	186.1	117.8	145.3	172.8
		67	TC	222.9	222.9	222.9	211.1	211.1	211.1	199.3	199.3	202.5	187.3	187.3	196.0	174.8	174.8	189.2	161.9	161.9	182.2	148.2	148.2	174.7
			SHC	139.0	177.2	215.2	132.8	170.8	208.8	126.6	164.5	202.5	120.2	158.1	196.0	113.7	151.5	189.2	107.0	144.6	182.2	99.8	137.3	174.7
		72	TC	244.4	244.4	244.4	231.9	231.9	231.9	219.2	219.2	219.2	206.3	206.3	206.3	193.0	193.0	193.0	178.9	178.9	178.9	164.1	164.1	164.1
			SHC	102.2	140.4	178.6	96.0	134.2	172.4	89.9	128.0	166.0	83.7	121.7	159.7	77.3	115.2	153.3	70.8	108.6	146.5	64.0	101.8	139.6
		76	TC	—	262.7	262.7	—	249.5	249.5	—	236.1	236.1	—	222.6	222.6	—	208.6	208.6	—	193.8	193.8	—	177.8	177.8
			SHC	—	110.6	149.4	—	104.5	143.1	—	98.4	136.9	—	92.1	130.5	—	85.8	124.0	—	79.3	117.3	—	72.3	110.2

LEGEND

— — Do not operate
CFM — Cubic feet per minute (supply air)
EAT (db) — Entering air temperature (dry bulb) (°F)
EAT (wb) — Entering air temperature (wet bulb) (°F)
SHC — Sensible heat capacity (1000 Btuh) Gross
TC — Total capacity (1000 Btuh) Gross

Performance data (cont)

COOLING CAPACITIES — FIRST STAGE, PART LOAD (17.5 TONS)

48LC*B SIZE 20				AMBIENT TEMPERATURE (°F)																				
				65			75			85			95			105			115			125		
				EAT (db)			EAT (db)			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	75	80	85	75	80	85
1450 CFM	EAT (wb)	58	TC	81.1	81.1	81.1	78.8	78.8	78.8	76.1	76.1	76.1	73.3	73.3	74.4	70.2	70.2	72.6	66.9	66.9	70.7	63.3	63.3	68.6
			SHC	64.1	71.5	79.0	62.7	70.1	77.6	61.1	68.5	76.1	59.5	66.9	74.4	57.7	65.1	72.6	55.8	63.3	70.7	53.8	61.2	68.6
		62	TC	87.4	87.4	87.4	84.9	84.9	84.9	82.2	82.2	82.2	79.2	79.2	79.2	75.9	75.9	75.9	72.3	72.3	72.3	68.4	68.4	68.4
			SHC	58.4	65.9	73.4	57.1	64.5	72.1	55.6	63.1	70.5	53.9	61.4	68.8	52.2	59.7	67.1	50.3	57.8	65.2	48.4	55.8	63.3
		67	TC	96.0	96.0	96.0	93.4	93.4	93.4	90.5	90.5	90.5	87.3	87.3	87.3	83.8	83.8	83.8	79.9	79.9	79.9	75.8	75.8	75.8
			SHC	51.3	58.8	66.3	50.0	57.4	64.9	48.5	56.0	63.5	46.9	54.4	61.8	45.1	52.7	60.2	43.3	50.8	58.3	41.3	48.8	56.4
		72	TC	105.7	105.7	105.7	103.0	103.0	103.0	99.8	99.8	99.8	96.3	96.3	96.3	92.5	92.5	92.5	88.3	88.3	88.3	83.9	83.9	83.9
			SHC	44.0	51.5	59.0	42.7	50.2	57.7	41.2	48.8	56.3	39.6	47.1	54.6	37.9	45.4	52.9	36.1	43.6	51.1	34.2	41.7	49.2
		76	TC	—	114.2	114.2	—	111.2	111.2	—	107.9	107.9	—	104.2	104.2	—	100.2	100.2	—	95.7	95.7	—	91.0	91.0
			SHC	—	45.4	52.9	—	44.2	51.7	—	42.7	50.2	—	41.1	48.7	—	39.5	47.0	—	37.7	45.2	—	35.8	43.3
1850 CFM	EAT (wb)	58	TC	88.5	88.5	93.2	85.9	85.9	91.7	83.0	83.0	90.0	79.8	79.8	88.0	76.8	76.8	84.6	73.1	73.1	82.4	69.8	69.8	78.7
			SHC	73.7	83.5	93.2	72.2	82.0	91.7	70.5	80.2	90.0	68.6	78.4	88.0	66.0	75.3	84.6	64.0	73.1	82.4	61.0	69.8	78.7
		62	TC	95.3	95.3	95.3	92.4	92.4	92.4	89.2	89.2	89.2	85.7	85.7	85.7	81.9	81.9	81.9	77.9	77.9	77.9	73.5	73.5	75.0
			SHC	66.2	76.1	85.9	64.7	74.6	84.4	63.2	72.9	82.8	61.4	71.2	81.0	59.5	69.3	79.1	57.5	67.3	77.1	55.4	65.2	75.0
		67	TC	104.5	104.5	104.5	101.6	101.6	101.6	98.2	98.2	98.2	94.4	94.4	94.4	90.4	90.4	90.4	85.9	85.9	85.9	81.2	81.2	81.2
			SHC	56.6	66.5	76.3	55.3	65.1	75.0	53.7	63.6	73.4	52.0	61.8	71.7	50.1	60.0	69.8	48.2	58.0	67.9	46.1	56.0	65.7
		72	TC	114.8	114.8	114.8	111.6	111.6	111.6	108.0	108.0	108.0	104.0	104.0	104.0	99.6	99.6	99.6	94.9	94.9	94.9	89.8	89.8	89.8
			SHC	46.9	56.7	66.7	45.5	55.5	65.3	44.0	53.9	63.9	42.3	52.3	62.2	40.6	50.4	60.4	38.6	48.5	58.4	36.6	46.5	56.4
		76	TC	—	123.6	123.6	—	120.4	120.4	—	116.6	116.6	—	112.4	112.4	—	107.7	107.7	—	102.7	102.7	—	97.1	97.1
			SHC	—	48.7	58.6	—	47.4	57.3	—	45.9	55.9	—	44.3	54.2	—	42.5	52.5	—	40.7	50.6	—	38.6	48.6
2300 CFM	EAT (wb)	58	TC	92.0	92.0	103.9	89.2	89.2	100.7	86.1	86.1	97.3	82.8	82.8	93.6	79.2	79.2	89.6	75.4	75.4	85.3	71.3	71.3	80.8
			SHC	80.1	92.0	103.9	77.6	89.2	100.7	74.9	86.1	97.3	71.9	82.8	93.6	68.7	79.2	89.6	65.3	75.4	85.3	61.7	71.3	80.8
		62	TC	98.7	98.7	98.7	95.2	95.2	95.2	91.3	91.3	91.4	87.1	87.1	89.1	82.5	82.5	86.7	77.7	77.7	84.0	72.6	72.6	81.3
			SHC	71.3	83.4	95.5	69.3	81.4	93.5	67.2	79.3	91.4	64.9	77.0	89.1	62.6	74.6	86.7	60.1	72.1	84.0	57.3	69.3	81.3
		67	TC	108.5	108.5	108.5	104.8	104.8	104.8	100.7	100.7	100.7	96.1	96.1	96.1	91.4	91.4	91.4	86.1	86.1	86.1	80.5	80.5	80.5
			SHC	59.7	71.8	83.9	57.8	69.9	82.0	55.7	67.9	80.0	53.5	65.6	77.7	51.2	63.3	75.4	48.8	60.8	72.9	46.1	58.2	70.4
		72	TC	119.3	119.3	119.3	115.5	115.5	115.5	111.2	111.2	111.2	106.4	106.4	106.4	101.1	101.1	101.1	95.6	95.6	95.6	89.6	89.6	89.6
			SHC	47.7	60.0	72.2	45.9	58.1	70.4	44.0	56.2	68.3	41.8	54.0	66.2	39.5	51.7	63.9	37.1	49.2	61.4	34.6	46.7	58.9
		76	TC	—	128.6	128.6	—	124.8	124.8	—	120.2	120.2	—	115.1	115.1	—	109.6	109.6	—	103.6	103.6	—	97.3	97.3
			SHC	—	50.1	62.5	—	48.5	60.8	—	46.5	58.9	—	44.5	56.7	—	42.1	54.5	—	39.8	52.2	—	37.3	49.6
2750 CFM	EAT (wb)	58	TC	98.4	98.4	111.1	95.5	95.5	107.7	92.1	92.1	104.1	88.5	88.5	100.0	84.6	84.6	95.7	80.4	80.4	91.1	76.0	76.0	86.1
			SHC	85.8	98.4	111.1	83.1	95.5	107.7	80.1	92.1	104.1	76.9	88.5	100.0	73.5	84.6	95.7	69.8	80.4	91.1	65.8	76.0	86.1
		62	TC	102.7	102.7	106.3	99.0	99.0	104.2	95.0	95.0	102.0	90.5	90.5	99.5	85.8	85.8	96.9	80.9	80.9	93.9	76.1	76.1	89.6
			SHC	77.7	92.0	106.3	75.8	90.0	104.2	73.5	87.8	102.0	71.2	85.4	99.5	68.6	82.8	96.9	65.9	80.0	93.9	62.5	76.1	89.6
		67	TC	112.5	112.5	112.5	108.7	108.7	108.7	104.3	104.3	104.3	99.5	99.5	99.5	94.4	94.4	94.4	88.8	88.8	88.8	83.1	83.1	83.1
			SHC	63.9	78.2	92.6	62.0	76.3	90.7	59.9	74.2	88.6	57.6	72.0	86.3	55.3	69.6	83.9	52.7	67.1	81.4	50.1	64.4	78.8
		72	TC	123.5	123.5	123.5	119.6	119.6	119.6	115.1	115.1	115.1	109.9	109.9	109.9	104.4	104.4	104.4	98.5	98.5	98.5	92.2	92.2	92.2
			SHC	49.7	64.2	78.6	47.9	62.4	76.8	45.9	60.4	74.8	43.7	58.1	72.5	41.3	55.8	70.2	38.9	53.3	67.7	36.4	50.7	65.1
		76	TC	—	133.0	133.0	—	129.0	129.0	—	124.1	124.1	—	118.8	118.8	—	112.9	112.9	—	106.7	106.7	—	99.9	99.9
			SHC	—	52.7	67.4	—	51.0	65.7	—	49	63.8	—	46.8	61.5	—	44.5	59.2	—	42.1	56.6	—	39.5	54.1
3250 CFM	EAT (wb)	58	TC	104.2	104.2	117.6	101.1	101.1	114.1	97.5	97.5	110.2	93.7	93.7	105.9	89.5	89.5	101.2	85.0	85.0	96.2	80.2	80.2	90.9
			SHC	90.9	104.2	117.6	88.0	101.1	114.1	84.9	97.5	110.2	81.4	93.7	105.9	77.8	89.5	101.2	73.8	85.0	96.2	69.6	80.2	90.9
		62	TC	106.2	106.2	117.4	102.5	102.5	115.1	98.3	98.3	112.6	94.0	94.0	109.6	89.6	89.6	105.2	85.1	85.1	100.0	80.3	80.3	94.6
			SHC	84.3	100.8	117.4	82.3	98.8	115.1	80.0	96.3	112.6	77.2	93.4	109.6	73.9	89.6	105.2	70.1	85.1	100.0	66.1	80.3	94.6
		67	TC	115.7	115.7	115.7	111.8	111.8	111.8	107.3	107.3	107.3	102.3	102.3	102.3	96.9	96.9	96.9	91.2	91.2	91.2	85.1	85.1	87.6
			SHC	68.3	84.9	101.7	66.3	83.1	99.8	64.2	80.9	97.7	61.9	78.6	95.4	59.5	76.1	92.9	56.9	73.6	90.3	54.2	70.9	87.6
		72	TC	126.8	126.8	126.8	122.9	122.9	122.9	118.1	118.1	118.1	112.8	112.8	112.8	107.1	107.1	107.1	100.9	100.9	100.9	94.3	94.3	94.3
			SHC	51.6	68.4	85.3	49.8	66.7	83.6	47.8	64.6	81.4	45.6	62.4	79.2	43.2	60.0	76.7	40.8	57.5	74.2	38.1	54.9	71.6
		76	TC	—	136.4	136.4	—	132.3	132.3	—	127.3	127.3	—	121.7	121.7	—	115.5	115.5	—	109.1	109.1	—	102.1	102.1
			SHC	—	55.1	72.2	—	53.3	70.5	—	51.4	68.4	—	49.1	66.2	—	46.8	63.8	—	44.4	61.2	—	41.7	58.6
3700 CFM	EAT (wb)	58	TC	108.6	108.6	122.5	105.3	105.3	118.9	101.6	101.6	114.7	97.5	97.5	110.2	93.1	93.1	105.3	88.4	88.4	100.0	83.4	83.4	94.4
			SHC	94.7	108.6	122.5	91.7	105.3	118.9	88.4	101.6	114.7	84.8	97.5	110.2	80.9	93.1	105.3	76.7	88.4	100.0	72.3	83.4	94.4
		62	TC	109.1	109.1	126.2	105.4	105.4	123.5	101.7	101.7	119.1	97.6	97.6	114.5	93.2	93.2	109.5	88.4	88.4	104.0	83.5	83.5	98.2
			SHC	89.6	107.8	126.2	87.3	105.4	123.5	84.1	101.7	119.1	80.6	97.6	114.5	76.9	93.2	109.5	72.9	88.4	104.0	68.7	83.5	98.2
		67	TC	118.0	118.0	118.0	113.9	113.9	113.9	109.3	109.3	109.3	104.1	104.1	104.1	98.7	98.7	100.5	92.8	92.8	97.8	86.6	86.6	95.0
			SHC	71.9	90.7	109.6	70.0	88.8	107.6	67.9	86.7	105.5	65.5	84.3	103.1	63.1	81.8	100.5	60.5	79.1	97.8	57.7	76.3	95.0
		72	TC	129.1	129.1	129.1	125.1	125.1	125.1	120.2	120.2	120.2	114.7	114.7	114.7	108.8	108.8	108.8	102.5	102.5	102.5	95.7	95.7	95.7
			SHC	53.2	72.2	91.1	51.4	70.3	89.2	49.3	68.3	87.2	47.1	66.0	84.8	44.8	63.6	82.4	42.2	61.0	79.9	39.6	58.4	77.1
		76	TC	—	138.8	138.8	—	134.6	134.6	—	129.5	129.5	—	123.6	123.6	—	117.4	117.4	—	110.7	110.7	—	103.5	103.5
			SHC	—	57.0	76.2	—	55.4	74.5	—	53.3	72.4	—	51.1	70.2	—	48.8	67.7	—	46.2	65.1	—	43.6	62.4

Performance data (cont)

COOLING CAPACITIES — FIRST STAGE, PART LOAD (17.5 TONS) (CONT)

48LC*B SIZE 20				AMBIENT TEMPERATURE (°F)																				
				65			75			85			95			105			115			125		
				EAT (db)			EAT (db)			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	75	80	85	75	80	85
4150 CFM	EAT (wb)	58	TC	112.2	112.2	126.7	108.8	108.8	122.9	105.0	105.0	118.6	100.7	100.7	113.8	96.1	96.1	108.7	91.3	91.3	103.3	86.0	86.0	97.4
			SHC	97.9	112.2	126.7	94.9	108.8	122.9	91.5	105.0	118.6	87.7	100.7	113.8	83.7	96.1	108.7	79.3	91.3	103.3	74.7	86.0	97.4
		62	TC	112.4	112.4	131.5	109.0	109.0	127.6	105.1	105.1	123.1	100.8	100.8	118.3	96.2	96.2	113.0	91.4	91.4	107.3	86.1	86.1	101.3
			SHC	93.2	112.4	131.5	90.3	109.0	127.6	87.0	105.1	123.1	83.4	100.8	118.3	79.6	96.2	113.0	75.4	91.4	107.3	71.0	86.1	101.3
		67	TC	119.7	119.7	119.7	115.6	115.6	115.6	111.0	111.0	112.9	105.7	105.7	110.5	100.1	100.1	107.8	94.2	94.2	105.0	87.9	87.9	102.0
			SHC	75.4	96.2	117.1	73.4	94.3	115.1	71.3	92.1	112.9	68.9	89.7	110.5	66.4	87.2	107.8	63.8	84.3	105.0	60.9	81.4	102.0
		72	TC	130.9	130.9	130.9	126.8	126.8	126.8	121.8	121.8	121.8	116.2	116.2	116.2	110.2	110.2	110.2	103.7	103.7	103.7	96.8	96.8	96.8
			SHC	54.6	75.6	96.5	52.8	73.8	94.8	50.8	71.8	92.6	48.6	69.4	90.3	46.1	67.0	87.8	43.6	64.4	85.2	41.0	61.7	82.5
		76	TC	—	140.8	140.8	—	136.4	136.4	—	131.1	131.1	—	125.2	125.2	—	118.8	118.8	—	111.9	111.9	—	104.6	104.6
			SHC	—	59.0	80.1	—	57.2	78.4	—	55.2	76.2	—	52.9	73.9	—	50.5	71.5	—	48.0	68.8	—	45.2	66.1
4600 CFM	EAT (wb)	58	TC	115.4	115.4	130.2	111.9	111.9	126.3	107.9	107.9	121.9	103.5	103.5	117.0	98.8	98.8	111.6	93.7	93.7	106.0	88.3	88.3	99.9
			SHC	100.6	115.4	130.2	97.6	111.9	126.3	94.0	107.9	121.9	90.2	103.5	117.0	85.9	98.8	111.6	81.4	93.7	106.0	76.6	88.3	99.9
		62	TC	115.5	115.5	135.2	112.0	112.0	131.2	108.0	108.0	126.7	103.6	103.6	121.6	98.9	98.9	116.0	93.8	93.8	110.2	88.3	88.3	103.9
			SHC	95.8	115.5	135.2	92.8	112.0	131.2	89.5	108.0	126.7	85.7	103.6	121.6	81.7	98.9	116.0	77.4	93.8	110.2	72.8	88.3	103.9
		67	TC	121.2	121.2	124.3	117.1	117.1	122.3	112.3	112.3	120.0	107.1	107.1	117.5	101.4	101.4	114.7	95.5	95.5	111.7	89.2	89.2	108.2
			SHC	78.7	101.5	124.3	76.7	99.5	122.3	74.6	97.3	120.0	72.2	94.9	117.5	69.6	92.1	114.7	66.9	89.3	111.7	63.9	86.1	108.2
		72	TC	132.3	132.3	132.3	128.2	128.2	128.2	123.1	123.1	123.1	117.4	117.4	117.4	111.2	111.2	111.2	104.7	104.7	104.7	97.7	97.7	97.7
			SHC	56.1	78.9	101.8	54.3	77.1	100.0	52.2	75.1	97.9	49.9	72.7	95.6	47.5	70.2	93.0	44.9	67.7	90.4	42.2	64.9	87.6
		76	TC	—	142.3	142.3	—	137.9	137.9	—	132.5	132.5	—	126.5	126.5	—	119.9	119.9	—	112.9	112.9	—	105.5	105.5
			SHC	—	60.7	83.9	—	59.0	82.0	—	56.9	80.0	—	54.6	77.5	—	52.2	75.0	—	49.6	72.3	—	46.9	69.5

LEGEND

— — Do not operate
CFM — Cubic feet per minute (supply air)
EAT (db) — Entering air temperature (dry bulb) (°F)
EAT (wb) — Entering air temperature (wet bulb) (°F)
SHC — Sensible heat capacity (1000 Btuh) Gross
TC — Total capacity (1000 Btuh) Gross

Performance data (cont)

COOLING CAPACITIES — SECOND STAGE, PART LOAD (17.5 TONS)

48LC*B SIZE 20				AMBIENT TEMPERATURE (°F)																				
				65			75			85			95			105			115			125		
				EAT (db)			EAT (db)			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	75	80	85	75	80	85
1600 CFM	EAT (wb)	58	TC	90.2	90.2	90.2	86.7	86.7	86.7	83.5	83.5	84.6	80.1	80.1	82.8	76.8	76.8	80.8	73.1	73.1	78.8	69.0	69.0	76.4
			SHC	71.5	80.0	88.5	69.4	78.0	86.5	67.6	76.1	84.6	65.7	74.2	82.8	63.9	72.3	80.8	61.8	70.3	78.8	59.5	68.0	76.4
		62	TC	97.7	97.7	97.7	93.9	93.9	93.9	90.3	90.3	90.3	86.8	86.8	86.8	83.1	83.1	83.1	79.2	79.2	79.2	74.8	74.8	74.8
			SHC	65.4	73.9	82.5	63.3	71.9	80.3	61.3	69.9	78.5	59.5	68.1	76.5	57.5	66.1	74.7	55.6	64.1	72.6	53.3	61.8	70.4
		67	TC	108.1	108.1	108.1	103.8	103.8	103.8	99.8	99.8	99.8	95.8	95.8	95.8	91.8	91.8	91.8	87.6	87.6	87.6	82.9	82.9	82.9
			SHC	57.6	66.2	74.8	55.5	64.0	72.5	53.4	62.0	70.6	51.5	60.1	68.6	49.5	58.1	66.7	47.6	56.1	64.6	45.3	53.9	62.5
		72	TC	119.7	119.7	119.7	115.0	115.0	115.0	110.4	110.4	110.4	106.0	106.0	106.0	101.6	101.6	101.6	96.8	96.8	96.8	91.7	91.7	91.7
			SHC	49.5	58.1	66.7	47.3	55.9	64.4	45.2	53.8	62.4	43.3	51.9	60.5	41.3	49.9	58.5	39.3	47.9	56.5	37.1	45.7	54.3
		76	TC	—	130.0	130.0	—	124.6	124.6	—	119.6	119.6	—	114.9	114.9	—	110.0	110.0	—	104.9	104.9	—	99.5	99.5
			SHC	—	51.5	60.1	—	49.2	57.8	—	47.1	55.7	—	45.1	53.7	—	43.2	51.8	—	41.1	49.7	—	39.0	47.6
2150 CFM	EAT (wb)	58	TC	99.5	99.5	106.1	95.3	95.3	103.6	91.5	91.5	101.4	88.4	88.4	97.3	84.5	84.5	95.3	81.1	81.1	91.5	77.3	77.3	87.1
			SHC	83.5	94.8	106.1	81.1	92.3	103.6	78.9	90.1	101.4	75.9	86.6	97.3	73.8	84.5	95.3	70.8	81.1	91.5	67.5	77.3	87.1
		62	TC	107.4	107.4	107.4	102.8	102.8	102.8	98.5	98.5	98.5	94.2	94.2	94.2	89.9	89.9	89.9	85.4	85.4	86.9	80.4	80.4	84.4
			SHC	75.1	86.5	97.9	72.6	84.0	95.5	70.5	81.9	93.3	68.4	79.8	91.2	66.3	77.7	89.0	64.2	75.5	86.9	61.7	73.1	84.4
		67	TC	118.8	118.8	118.8	113.5	113.5	113.5	108.6	108.6	108.6	103.9	103.9	103.9	99.2	99.2	99.2	94.2	94.2	94.2	88.8	88.8	88.8
			SHC	64.4	75.8	87.3	61.9	73.3	84.7	59.7	71.1	82.5	57.5	68.9	80.3	55.5	66.9	78.3	53.2	64.6	76.1	50.9	62.3	73.7
		72	TC	131.3	131.3	131.3	125.4	125.4	125.4	119.9	119.9	119.9	114.7	114.7	114.7	109.4	109.4	109.4	103.9	103.9	103.9	98.1	98.1	98.1
			SHC	53.3	64.8	76.3	50.8	62.4	73.9	48.6	60.1	71.6	46.4	57.9	69.4	44.3	55.8	67.3	42.1	53.6	65.1	39.9	51.3	62.8
		76	TC	—	142.2	142.2	—	135.7	135.7	—	129.7	129.7	—	123.9	123.9	—	118.2	118.2	—	112.3	112.3	—	106.0	106.0
			SHC	—	55.8	67.3	—	53.2	64.7	—	50.9	62.4	—	48.8	60.3	—	46.6	58.1	—	44.5	56.0	—	42.2	53.7
2700 CFM	EAT (wb)	58	TC	104.3	104.3	117.9	99.4	99.4	112.4	94.7	94.7	107.3	90.0	90.0	102.2	85.3	85.3	97.0	80.4	80.4	91.7	75.2	75.2	85.8
			SHC	90.7	104.3	117.9	86.3	99.4	112.4	82.0	94.7	107.3	77.9	90.0	102.2	73.6	85.3	97.0	69.2	80.4	91.7	64.4	75.2	85.8
		62	TC	111.9	111.9	111.9	105.5	105.5	105.9	99.5	99.5	102.5	93.8	93.8	99.1	88.0	88.0	95.6	82.1	82.1	92.1	75.9	75.9	88.2
			SHC	81.3	95.5	109.6	77.6	91.7	105.9	74.2	88.3	102.5	70.9	84.9	99.1	67.6	81.6	95.6	64.2	78.1	92.1	60.5	74.4	88.2
		67	TC	124.2	124.2	124.2	117.2	117.2	117.2	110.6	110.6	110.6	104.2	104.2	104.2	97.9	97.9	97.9	91.4	91.4	91.4	84.4	84.4	84.4
			SHC	68.3	82.6	96.7	64.6	78.9	93.0	61.2	75.4	89.6	57.8	72.1	86.2	54.5	68.7	82.9	51.2	65.3	79.6	47.7	61.9	76.1
		72	TC	137.8	137.8	137.8	130.1	130.1	130.1	122.9	122.9	122.9	115.9	115.9	115.9	109.0	109.0	109.0	102.0	102.0	102.0	94.5	94.5	94.5
			SHC	55.1	69.4	83.8	51.4	65.6	80.0	47.9	62.2	76.4	44.6	58.8	73.0	41.2	55.5	69.7	37.8	52.2	66.4	34.4	48.7	62.9
		76	TC	—	149.4	149.4	—	141.2	141.2	—	133.4	133.4	—	125.9	125.9	—	118.4	118.4	—	110.9	110.9	—	103.0	103.0
			SHC	—	58.5	72.9	—	54.8	69.2	—	51.3	65.7	—	47.9	62.4	—	44.6	59.1	—	41.2	55.8	—	37.8	52.3
3250 CFM	EAT (wb)	58	TC	112.5	112.5	127.0	107.0	107.0	121.0	101.8	101.8	115.2	96.7	96.7	109.7	91.7	91.7	104.0	86.3	86.3	98.2	80.5	80.5	91.8
			SHC	97.9	112.5	127.0	93.0	107.0	121.0	88.3	101.8	115.2	83.8	96.7	109.7	79.2	91.7	104.0	74.4	86.3	98.2	69.2	80.5	91.8
		62	TC	117.0	117.0	122.9	110.3	110.3	119.0	103.9	103.9	115.2	97.9	97.9	111.5	92.0	92.0	107.5	86.4	86.4	102.3	80.6	80.6	95.7
			SHC	89.3	106.1	122.9	85.5	102.2	119.0	81.9	98.6	115.2	78.4	95.0	111.5	74.7	91.2	107.5	70.5	86.4	102.3	65.5	80.6	95.7
		67	TC	129.4	129.4	129.4	121.8	121.8	121.8	114.8	114.8	114.8	108.0	108.0	108.0	101.3	101.3	101.3	94.4	94.4	94.4	87.2	87.2	87.2
			SHC	73.7	90.6	107.4	69.8	86.8	103.6	66.3	83.2	100.0	62.8	79.7	96.6	59.5	76.3	93.2	56.0	72.8	89.7	52.5	69.2	86.1
		72	TC	143.2	143.2	143.2	134.9	134.9	134.9	127.2	127.2	127.2	119.8	119.8	119.8	112.5	112.5	112.5	105.1	105.1	105.1	97.3	97.3	97.3
			SHC	57.6	74.7	91.7	53.8	70.9	87.8	50.2	67.2	84.2	46.8	63.8	80.7	43.4	60.4	77.3	40.0	56.9	73.8	36.5	53.3	70.3
		76	TC	—	154.9	154.9	—	146.2	146.2	—	137.8	137.8	—	129.8	129.8	—	122.0	122.0	—	114.1	114.1	—	105.7	105.7
			SHC	—	61.6	79.1	—	57.8	75.3	—	54.2	71.6	—	50.7	68.0	—	47.3	64.5	—	43.9	61.0	—	40.4	57.4
3800 CFM	EAT (wb)	58	TC	119.1	119.1	134.6	113.2	113.2	128.0	107.6	107.6	121.8	102.1	102.1	115.7	96.6	96.6	109.7	91.0	91.0	103.4	84.9	84.9	96.7
			SHC	103.8	119.1	134.6	98.5	113.2	128.0	93.4	107.6	121.8	88.5	102.1	115.7	83.6	96.6	109.7	78.5	9.01	103.4	73.0	84.9	96.7
		62	TC	121.2	121.2	135.0	114.3	114.3	130.7	107.9	107.9	126.2	102.3	102.3	120.4	96.7	96.7	114.2	91.1	91.1	107.7	85.0	85.0	100.8
			SHC	96.6	115.8	135.0	92.5	111.5	130.7	88.5	107.3	126.2	84.0	102.3	120.4	79.3	96.7	114.2	74.4	91.1	107.7	69.2	85.0	100.8
		67	TC	133.1	133.1	133.1	125.2	125.2	125.2	117.8	117.8	117.8	110.8	110.8	110.8	103.7	103.7	103.7	96.6	96.6	99.3	89.2	89.2	95.5
			SHC	78.5	98.0	117.6	74.6	94.1	113.6	71.0	90.5	109.9	67.5	86.9	106.4	64.0	83.4	102.9	60.5	79.9	99.3	56.8	76.1	95.5
		72	TC	147.1	147.1	147.1	138.5	138.5	138.5	130.5	130.5	130.5	122.7	122.7	122.7	115.1	115.1	115.1	107.3	107.3	107.3	99.3	99.3	99.3
			SHC	59.9	79.5	99.1	56.0	75.6	95.2	52.4	71.9	91.5	48.8	68.3	87.8	45.3	64.8	84.3	41.9	61.3	80.8	38.3	57.7	77.2
		76	TC	—	159.0	159.0	—	149.8	149.8	—	141.0	141.0	—	132.7	132.7	—	124.5	124.5	—	116.2	116.2	—	107.6	107.6
			SHC	—	64.4	84.4	—	60.5	80.4	—	56.7	76.6	—	53.2	73.0	—	49.7	69.4	—	46.2	65.9	—	42.7	62.2
4300 CFM	EAT (wb)	58	TC	124.3	124.3	140.3	118.0	118.0	133.3	112.0	112.0	126.7	106.2	106.2	120.3	100.4	100.4	114.0	94.5	94.5	107.3	88.1	88.1	100.3
			SHC	108.3	124.3	140.3	102.7	118.0	133.3	97.3	112.0	126.7	92.1	106.2	120.3	87.0	100.4	114.0	81.6	94.5	107.3	76.0	88.1	100.3
		62	TC	124.8	124.8	144.6	118.1	118.1	138.5	112.1	112.1	131.7	106.3	106.3	125.2	100.5	100.5	118.6	94.6	94.6	111.7	88.2	88.2	104.5
			SHC	102.5	123.5	144.6	97.6	118.1	138.5	92.4	112.1	131.7	87.5	106.3	125.2	82.5	100.5	118.6	77.3	94.6	111.7	72.0	88.2	104.5
		67	TC	135.7	135.7	135.7	127.6	127.6	127.6	120.0	120.0	120.0	112.7	112.7	114.8	105.6	105.6	111.2	98.4	98.4	107.4	90.8	90.8	103.5
			SHC	82.7	104.4	126.3	78.7	100.4	122.3	75.0	96.7	118.5	71.4	93.1	114.8	67.9	89.5	111.2	64.3	85.8	107.4	60.5	82.0	103.5
		72	TC	149.9	149.9	149.9	141.0	141.0	141.0	132.6	132.6	132.6	124.6	124.6	124.6	116.8	116.8	116.8	108.9	108.9	108.9	100.6	100.6	100.6
			SHC	61.7	83.6	105.5	57.7	79.7	101.5	54.0	75.9	97.7	50.5	72.2	94.1	47.0	68.7	90.5	43.5	65.2	86.9	39.9	61.5	83.2
		76	TC	—	161.8	161.8	—	152.3	152.3	—	143.2	143.2	—	134.6	134.6	—	126.2	126.2	—	117.7	117.7	—	109.0	109.0
			SHC	—	66.7	88.9	—	62.7	84.8	—	58.9	81.0	—	55.3	77.3	—	51.8	73.6	—	48.2	70.0	—	44.6	66.2

Performance data (cont)

COOLING CAPACITIES — SECOND STAGE, PART LOAD (17.5 TONS) (cont)

48LC*B SIZE 20				AMBIENT TEMPERATURE (°F)																				
				65			75			85			95			105			115			125		
				EAT (db)			EAT (db)			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	75	80	85	75	80	85
4850 CFM	EAT (wb)	58	TC	129.1	129.1	145.7	122.4	122.4	138.3	116.1	116.1	131.3	110.0	110.0	124.6	103.9	103.9	117.9	97.7	97.7	111.0	91.1	91.1	103.6
			SHC	112.5	129.1	145.7	106.6	122.4	138.3	100.9	116.1	131.3	95.5	110.0	124.6	90.0	103.9	117.9	84.4	97.7	111.0	78.6	91.1	103.6
		62	TC	129.2	129.2	151.3	122.6	122.6	143.7	116.2	116.2	136.5	110.1	110.1	129.6	104.0	104.0	122.7	97.8	97.8	115.5	91.2	91.2	107.9
			SHC	107.1	129.2	151.3	101.3	122.6	143.7	95.9	116.2	136.5	90.7	110.1	129.6	85.4	104.0	122.7	80.0	97.8	115.5	74.4	91.2	107.9
		67	TC	138.2	138.2	138.2	129.8	129.8	131.3	122.0	122.0	127.4	114.6	114.6	123.6	107.3	107.3	119.8	99.9	99.9	115.9	92.3	92.3	111.6
			SHC	87.0	111.2	135.4	82.9	107.1	131.3	79.1	103.3	127.4	75.5	99.5	123.6	71.9	95.8	119.8	68.2	92.0	115.9	64.4	87.9	111.6
		72	TC	152.3	152.3	152.3	143.1	143.1	143.1	134.6	134.6	134.6	126.4	126.4	126.4	118.3	118.3	118.3	110.3	110.3	110.3	101.8	101.8	101.8
			SHC	63.6	87.8	112.1	59.6	83.9	108.1	55.8	80.0	104.2	52.2	76.3	100.5	48.7	72.7	96.9	45.0	69.2	93.3	41.4	65.4	89.5
		76	TC	—	164.3	164.3	—	154.4	154.4	—	145.2	145.2	—	136.3	136.3	—	127.7	127.7	—	119.0	119.0	—	110.1	110.1
			SHC	—	68.9	93.6	—	64.9	89.5	—	61.1	85.5	—	57.4	81.7	—	53.8	78.0	—	50.2	74.3	—	46.5	70.4
5400 CFM	EAT (wb)	58	TC	133.2	133.2	150.2	126.2	126.2	142.4	119.6	119.6	135.2	113.2	113.2	128.2	107.0	107.0	121.2	100.4	100.4	114.1	93.6	93.6	106.5
			SHC	116.1	133.2	150.2	109.9	126.2	142.4	103.9	119.6	135.2	98.3	113.2	128.2	92.6	107.0	121.2	86.9	100.4	114.1	80.7	93.6	106.5
		62	TC	133.3	133.3	156.1	126.3	126.3	148.1	119.7	119.7	140.6	113.3	113.3	133.3	107.1	107.1	126.1	100.5	100.5	118.7	93.7	93.7	110.9
			SHC	110.5	133.3	156.1	104.5	126.3	148.1	98.9	119.7	140.6	93.4	113.3	133.3	87.9	107.1	126.1	82.4	100.5	118.7	76.5	93.7	110.9
		67	TC	140.1	140.1	144.2	131.6	131.6	139.9	123.7	123.7	135.8	116.2	116.2	131.8	108.8	108.8	127.9	101.5	101.5	123.5	94.1	94.1	118.1
			SHC	91.0	117.6	144.2	86.9	113.4	139.9	83.1	109.5	135.8	79.3	105.6	131.8	75.6	101.8	127.9	71.8	97.7	123.5	67.5	92.7	118.1
		72	TC	154.1	154.1	154.1	144.8	144.8	144.8	136.0	136.0	136.0	127.7	127.7	127.7	119.5	119.5	119.5	111.3	111.3	111.3	102.8	102.8	102.8
			SHC	65.2	91.8	118.6	61.2	87.8	114.5	57.4	83.9	110.6	53.7	80.2	106.8	50.2	76.6	103.1	46.6	73.0	99.4	42.9	69.2	95.6
		76	TC	—	166.2	166.2	—	156.2	156.2	—	146.6	146.6	—	137.7	137.7	—	128.9	128.9	—	120.0	120.0	—	111.0	111.0
			SHC	—	71.1	98.0	—	67.0	93.8	—	63.1	89.8	—	59.4	86.0	—	55.8	82.2	—	52.1	78.3	—	48.4	74.4

LEGEND

— — Do not operate
CFM — Cubic feet per minute (supply air)
EAT (db) — Entering air temperature (dry bulb) (°F)
EAT (wb) — Entering air temperature (wet bulb) (°F)
SHC — Sensible heat capacity (1000 Btuh) Gross
TC — Total capacity (1000 Btuh) Gross

Performance data (cont)

COOLING CAPACITIES — THIRD STAGE, FULL LOAD (17.5 TONS)

48LC*B SIZE 20				AMBIENT TEMPERATURE (°F)																				
				65			75			85			95			105			115			125		
				EAT (db)			EAT (db)			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	75	80	85	75	80	85
3500 CFM	EAT (wb)	58	TC	176.5	176.5	180.7	170.6	170.6	177.3	164.5	164.5	173.7	158.0	158.0	170.1	151.3	151.3	166.1	145.2	145.2	159.4	137.3	137.3	154.6
			SHC	143.8	162.2	180.7	140.5	158.9	177.3	137.1	155.4	173.7	133.5	151.8	170.1	129.6	147.9	166.1	124.3	141.9	159.4	119.8	137.3	154.6
		62	TC	189.4	189.4	189.4	183.1	183.1	183.1	176.5	176.5	176.5	169.6	169.6	169.6	162.1	162.1	162.1	154.1	154.1	154.1	145.5	145.5	145.5
			SHC	129.7	148.1	166.5	126.3	144.8	163.2	122.9	141.3	159.8	119.3	137.8	156.2	115.5	134.0	152.5	111.6	130.1	148.5	107.3	125.8	144.2
		67	TC	207.8	207.8	207.8	200.9	200.9	200.9	193.5	193.5	193.5	186.0	186.0	186.0	178.0	178.0	178.0	169.4	169.4	169.4	160.1	160.1	160.1
			SHC	111.6	130.2	148.7	108.2	126.8	145.3	104.8	123.3	141.9	101.3	119.8	138.3	97.6	116.1	134.6	93.7	112.2	130.7	89.5	108.0	126.6
		72	TC	227.4	227.4	227.4	219.9	219.9	219.9	212.1	212.1	212.1	203.9	203.9	203.9	195.2	195.2	195.2	185.8	185.8	185.8	175.9	175.9	175.9
			SHC	92.7	111.4	130.3	89.4	108.2	126.9	86.1	104.8	123.5	82.6	101.3	120.0	79.0	97.7	116.4	75.2	93.9	112.5	71.2	89.9	108.5
		76	TC	—	244.1	244.1	—	236.1	236.1	—	227.9	227.9	—	219.2	219.2	—	209.8	209.8	—	199.9	199.9	—	189.3	189.3
			SHC	—	95.8	114.7	—	92.6	111.3	—	89.3	108.1	—	86.0	104.7	—	82.4	101.2	—	78.7	97.4	—	74.8	93.6
3950 CFM	EAT (wb)	58	TC	182.8	182.8	194.0	176.7	176.7	190.4	170.3	170.3	186.6	165.8	165.8	178.2	159.4	159.4	172.3	150.7	150.7	169.9	143.7	143.7	161.9
			SHC	152.8	173.4	194.0	149.3	169.8	190.4	145.7	166.1	186.6	139.8	159.0	178.2	134.9	153.7	172.3	131.6	150.7	169.9	125.5	143.7	161.9
		62	TC	195.8	195.8	195.8	189.0	189.0	189.0	182.0	182.0	182.0	174.7	174.7	174.7	166.9	166.9	166.9	158.5	158.5	159.5	149.6	149.6	155.1
			SHC	136.7	157.4	178.1	133.2	154.0	174.6	129.7	150.4	171.1	126.1	146.7	167.4	122.3	142.9	163.6	118.2	138.8	159.5	113.9	134.5	155.1
		67	TC	214.3	214.3	214.3	206.9	206.9	206.9	199.2	199.2	199.2	191.3	191.3	191.3	182.7	182.7	182.7	173.7	173.7	173.7	163.9	163.9	163.9
			SHC	116.2	137.1	157.9	112.8	133.6	154.3	109.3	130.1	150.8	105.7	126.5	147.2	101.9	122.7	143.4	97.9	118.7	139.4	93.7	114.5	135.1
		72	TC	234.1	234.1	234.1	226.1	226.1	226.1	217.9	217.9	217.9	209.3	209.3	209.3	200.2	200.2	200.2	190.3	190.3	190.3	180.0	180.0	180.0
			SHC	95.0	116.0	137.1	91.7	112.6	133.7	88.2	109.2	130.3	84.7	105.7	126.7	81.0	102.0	122.9	77.1	98.1	119.0	73.1	94.0	114.9
		76	TC	—	251.2	251.2	—	242.7	242.7	—	233.9	233.9	—	224.8	224.8	—	214.8	214.8	—	204.5	204.5	—	193.6	193.6
			SHC	—	98.5	119.7	—	95.3	116.4	—	91.9	113.1	—	88.4	109.7	—	84.8	106.0	—	81.0	102.2	—	77.1	98.3
4400 CFM	EAT (wb)	58	TC	182.5	182.5	200.4	173.8	173.8	194.0	165.1	165.1	187.4	157.0	157.0	178.6	148.4	148.4	169.2	139.3	139.3	159.3	129.8	129.8	148.7
			SHC	155.0	177.6	200.4	148.9	171.5	194.0	142.6	165.1	187.4	135.3	157.0	178.6	127.5	148.4	169.2	119.3	139.3	159.3	110.8	129.8	148.7
		62	TC	196.1	196.1	196.1	186.5	186.5	186.5	176.9	176.9	176.9	166.8	166.8	166.8	156.4	156.4	159.6	145.4	145.4	153.1	133.9	133.9	146.2
			SHC	138.2	161.1	184.0	132.2	155.1	178.0	126.3	149.2	172.1	120.1	143.0	165.9	113.9	136.8	159.6	107.3	130.2	153.1	100.6	123.3	146.2
		67	TC	216.0	216.0	216.0	205.8	205.8	205.8	195.4	195.4	195.4	184.7	184.7	184.7	173.5	173.5	173.5	161.7	161.7	161.7	149.3	149.3	149.3
			SHC	116.6	139.6	162.6	110.8	133.8	156.8	104.8	127.8	150.7	98.8	121.8	144.7	92.5	115.5	138.5	86.1	109.1	132.0	79.6	102.5	125.4
		72	TC	237.3	237.3	237.3	226.6	226.6	226.6	215.7	215.7	215.7	204.4	204.4	204.4	192.4	192.4	192.4	179.8	179.8	179.8	166.7	166.7	166.7
			SHC	94.5	117.8	141.0	88.7	111.9	135.1	82.9	106.1	129.3	76.9	100.1	123.2	70.8	93.9	117.1	64.4	87.6	110.7	58.0	81.1	104.2
		76	TC	—	255.6	255.6	—	244.4	244.4	—	232.9	232.9	—	221.0	221.0	—	208.2	208.2	—	195.1	195.1	—	181.5	181.5
			SHC	—	99.5	123.1	—	93.8	117.4	—	88.0	111.6	—	82.2	105.8	—	76.1	99.7	—	69.9	93.5	—	63.7	87.3
5250 CFM	EAT (wb)	58	TC	194.2	194.2	219.6	185.8	185.8	210.5	177.4	177.4	201.2	168.6	168.6	191.6	159.3	159.3	181.4	149.7	149.7	170.8	139.3	139.3	159.4
			SHC	168.9	194.2	219.6	161.3	185.8	210.5	153.6	177.4	201.2	145.6	168.6	191.6	137.2	159.3	181.4	128.5	149.7	170.8	119.1	139.3	159.4
		62	TC	204.6	204.6	204.6	194.5	194.5	198.3	184.4	184.4	192.2	173.9	173.9	185.7	163.0	163.0	179.1	151.7	151.7	172.2	140.0	140.0	164.5
			SHC	150.6	177.5	204.6	144.4	171.4	198.3	138.4	165.3	192.2	132.0	158.9	185.7	125.6	152.4	179.1	118.9	145.5	172.2	111.7	138.1	164.5
		67	TC	224.3	224.3	224.3	213.6	213.6	213.6	202.7	202.7	202.7	191.4	191.4	191.4	179.6	179.6	179.6	167.2	167.2	167.2	154.2	154.2	154.2
			SHC	124.8	151.8	178.9	118.8	145.9	172.9	112.7	139.7	166.8	106.5	133.6	160.6	100.2	127.2	154.2	93.6	120.6	147.6	87.0	113.9	140.9
		72	TC	246.0	246.0	246.0	234.7	234.7	234.7	223.1	223.1	223.1	211.2	211.2	211.2	198.6	198.6	198.6	185.4	185.4	185.4	171.8	171.8	171.8
			SHC	98.5	125.8	153.1	92.5	119.8	147.1	86.6	113.9	141.1	80.5	107.7	135.0	74.3	101.5	128.7	67.9	95.1	122.2	61.3	88.4	115.5
		76	TC	—	264.4	264.4	—	252.6	252.6	—	240.5	240.5	—	228.1	228.1	—	215.0	215.0	—	200.9	200.9	—	186.7	186.7
			SHC	—	104.4	132.6	—	98.7	126.8	—	92.8	121.0	—	86.9	115.0	—	80.7	108.7	—	74.3	102.1	—	67.8	95.6
6150 CFM	EAT (wb)	58	TC	205.8	205.8	232.5	197.0	197.0	222.9	187.8	187.8	212.8	178.4	178.4	202.6	168.6	168.6	191.8	158.2	158.2	180.5	147.4	147.4	168.5
			SHC	179.0	205.8	232.5	171.0	197.0	222.9	162.7	187.8	212.8	154.2	178.4	202.6	145.4	168.6	191.8	136.1	158.2	180.5	126.4	147.4	168.5
		62	TC	211.7	211.7	224.8	201.3	201.3	218.4	190.8	190.8	211.8	180.2	180.2	205.0	169.3	169.3	197.5	158.5	158.5	188.2	147.6	147.6	175.7
			SHC	162.7	193.8	224.8	156.5	187.5	218.4	150.1	181.0	211.8	143.6	174.3	205.0	136.7	167.1	197.5	128.9	158.5	188.2	119.4	147.6	175.7
		67	TC	230.7	230.7	230.7	219.6	219.6	219.6	208.3	208.3	208.3	196.5	196.5	196.5	184.3	184.3	184.3	171.5	171.5	171.5	158.2	158.2	158.2
			SHC	132.6	163.8	195.1	126.5	157.7	189.0	120.3	151.5	182.7	114.1	145.3	176.5	107.6	138.8	170.0	101.0	132.1	163.3	94.2	125.3	156.4
		72	TC	252.6	252.6	252.6	240.8	240.8	240.8	228.8	228.8	228.8	216.5	216.5	216.5	203.3	203.3	203.3	189.8	189.8	189.8	175.8	175.8	175.8
			SHC	102.1	133.5	165.0	96.0	127.5	158.9	90.1	121.5	152.9	83.9	115.2	146.6	77.5	108.8	140.2	71.1	102.4	133.6	64.4	95.6	126.8
		76	TC	—	271.2	271.2	—	259.0	259.0	—	246.4	246.4	—	233.5	233.5	—	220.0	220.0	—	205.3	205.3	—	190.6	190.6
			SHC	—	109.0	141.5	—	103.1	135.4	—	97.1	129.4	—	91.1	123.1	—	84.8	116.8	—	78.3	110.1	—	71.7	103.4
7000 CFM	EAT (wb)	58	TC	214.6	214.6	242.4	205.3	205.3	232.2	195.8	195.8	221.7	186.0	186.0	211.0	175.7	175.7	199.7	164.9	164.9	187.8	153.6	153.6	175.3
			SHC	186.8	214.6	242.4	178.4	205.3	232.2	169.7	195.8	221.7	161.0	186.0	211.0	151.7	175.7	199.7	142.0	164.9	187.8	131.7	153.6	175.3
		62	TC	217.3	217.3	242.5	206.9	206.9	235.6	196.4	196.4	228.2	186.1	186.1	219.6	175.9	175.9	208.0	165.1	165.1	195.7	153.8	153.8	182.8
			SHC	173.3	207.9	242.5	166.8	201.2	235.6	160.0	194.1	228.2	152.7	186.1	219.6	143.8	175.9	208.0	134.5	165.1	195.7	124.6	153.8	182.8
		67	TC	235.4	235.4	235.4	224.0	224.0	224.0	212.4	212.4	212.4	200.4	200.4	200.4	187.9	187.9	187.9	174.8	174.8	177.5	161.2	161.2	170.3
			SHC	139.4	174.5	209.6	133.3	168.4	203.4	127.1	162.1	197.2	120.8	155.8	190.8	114.3	149.3	184.3	107.5	142.4	177.5	100.7	135.5	170.3
		72	TC	257.4	257.4	257.4	245.3	245.3	245.3	233.0	233.0	233.0	220.4	220.4	220.4	206.8	206.8	206.8	193.0	193.0	193.0	178.6	178.6	178.6
			SHC	105.1	140.4	175.7	99.1	134.4	169.6	93.0	128.2	163.4	86.9	122.0	157.1	80.3	115.4	150.5	73.8	108.8	143.8	67.2	102.1	137.1
		76	TC	—	276.2	276.2	—	263.6	263.6	—	250.8	250.8	—	237.4	237.4	—	223.2	223.2	—	208.7	208.7	—	193.5	193.5
			SHC	—	112.8	149.0	—	106.9	142.9	—	100.8	136.8	—	94.7	130.6	—	88.2	124.0	—	81.8	117.4	—	75.2	110.6

Performance data (cont)

COOLING CAPACITIES — THIRD STAGE, FULL LOAD (17.5 TONS) (cont)

48LC*B SIZE 20				AMBIENT TEMPERATURE (°F)																				
				65			75			85			95			105			115			125		
				EAT (db)			EAT (db)			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	75	80	85	75	80	85
7900 CFM	EAT (wb)	58	TC	222.4	222.4	251.1	212.7	212.7	240.4	202.8	202.8	229.6	192.7	192.7	218.4	181.9	181.9	206.7	170.7	170.7	194.3	158.9	158.9	181.4
			SHC	193.7	222.4	251.1	185.0	212.7	240.4	176.0	202.8	229.6	166.8	192.7	218.4	157.2	181.9	206.7	147.1	170.7	194.3	136.5	158.9	181.4
		62	TC	222.9	222.9	258.8	212.9	212.9	250.0	203.1	203.1	238.9	192.9	192.9	227.3	182.1	182.1	215.2	170.8	170.8	202.4	159.0	159.0	189.0
			SHC	183.2	220.9	258.8	175.8	212.9	250.0	167.2	203.1	238.9	158.3	192.9	227.3	149.1	182.1	215.2	139.3	170.8	202.4	129.1	159.0	189.0
		67	TC	239.5	239.5	239.5	227.8	227.8	227.8	215.9	215.9	215.9	203.7	203.7	205.4	190.9	190.9	198.7	177.6	177.6	191.6	163.9	163.9	184.2
			SHC	146.4	185.5	224.5	140.2	179.3	218.3	134.0	173.0	212.0	127.6	166.5	205.4	121.0	159.8	198.7	114.2	152.9	191.6	107.2	145.7	184.2
		72	TC	261.5	261.5	261.5	249.1	249.1	249.1	236.6	236.6	236.6	223.7	223.7	223.7	209.7	209.7	209.7	195.6	195.6	195.6	181.0	181.0	181.0
			SHC	108.1	147.3	186.5	102.0	141.2	180.4	95.9	135.0	174.1	89.7	128.7	167.8	83.1	122.1	161.1	76.5	115.4	154.3	69.8	108.6	147.4
		76	TC	—	280.5	280.5	—	267.5	267.5	—	254.1	254.1	—	240.5	240.5	—	226.3	226.3	—	211.5	211.5	—	196.0	196.0
			SHC	—	116.6	156.7	—	110.6	150.5	—	104.4	144.3	—	98.2	138.0	—	91.8	131.4	—	85.3	124.7	—	78.5	117.7
8750 CFM	EAT (wb)	58	TC	228.6	228.6	258.1	218.6	218.6	247.1	208.5	208.5	236.0	197.9	197.9	224.3	187.0	187.0	212.3	175.3	175.3	199.4	163.2	163.2	186.1
			SHC	199.3	228.6	258.1	190.2	218.6	247.1	181.1	208.5	236.0	171.5	197.9	224.3	161.7	187.0	212.3	151.1	175.3	199.4	140.3	163.2	186.1
		62	TC	228.9	228.9	268.2	218.9	218.9	256.9	208.7	208.7	245.4	198.1	198.1	233.4	187.1	187.1	220.9	175.4	175.4	207.7	163.3	163.3	193.9
			SHC	189.5	228.9	268.2	180.9	218.9	256.9	172.0	208.7	245.4	162.8	198.1	233.4	153.3	187.1	220.9	143.2	175.4	207.7	132.7	163.3	193.9
		67	TC	242.6	242.6	242.6	230.7	230.7	231.8	218.7	218.7	225.2	206.3	206.3	218.5	193.4	193.4	211.6	180.0	180.0	204.2	166.1	166.1	196.4
			SHC	152.7	195.4	238.1	146.4	189.1	231.8	140.1	182.7	225.2	133.7	176.1	218.5	126.9	169.3	211.6	120.0	162.0	204.2	112.8	154.5	196.4
		72	TC	264.6	264.6	264.6	252.0	252.0	252.0	239.3	239.3	239.3	226.1	226.1	226.1	212.4	212.4	212.4	197.5	197.5	197.5	182.8	182.8	182.8
			SHC	110.7	153.6	196.4	104.6	147.4	190.1	98.5	141.2	183.9	92.1	134.8	177.5	85.7	128.3	170.8	79.0	121.4	163.9	72.2	114.6	156.9
		76	TC	—	283.6	283.6	—	270.4	270.4	—	256.9	256.9	—	243.1	243.1	—	228.5	228.5	—	213.5	213.5	—	197.8	197.8
			SHC	—	119.9	163.6	—	113.9	157.4	—	107.7	151.1	—	101.5	144.7	—	95.0	138.1	—	88.3	131.2	—	81.6	124.1

LEGEND

— — Do not operate
CFM — Cubic feet per minute (supply air)
EAT (db) — Entering air temperature (dry bulb) (°F)
EAT (wb) — Entering air temperature (wet bulb) (°F)
SHC — Sensible heat capacity (1000 Btuh) Gross
TC — Total capacity (1000 Btuh) Gross

Performance data (cont)

COOLING CAPACITIES — FIRST STAGE, PART LOAD (20 TONS)

48LC*B SIZE 24				AMBIENT TEMPERATURE (°F)																				
				65			75			85			95			105			115			125		
				EAT (db)			EAT (db)			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	75	80	85	75	80	85
1550 CFM	EAT (wb)	58	TC	90.2	90.2	90.2	87.0	87.0	87.0	83.8	83.8	83.9	80.5	80.5	82.0	77.2	77.2	80.0	73.6	73.6	78.0	69.7	69.7	75.9
			SHC	71.0	79.3	87.6	69.1	77.4	85.7	67.3	75.6	83.9	65.4	73.7	82.0	63.5	71.8	80.0	61.5	69.7	78.0	59.3	67.6	75.9
		62	TC	97.6	97.6	97.6	94.1	94.1	94.1	90.7	90.7	90.7	87.2	87.2	87.2	83.6	83.6	83.6	79.7	79.7	79.7	75.5	75.5	75.5
			SHC	65.0	73.3	81.6	63.1	71.4	79.7	61.2	69.5	77.8	59.4	67.7	76.0	57.4	65.7	74.0	55.4	63.7	72.0	53.2	61.5	69.8
		67	TC	107.9	107.9	107.9	104.0	104.0	104.0	100.3	100.3	100.3	96.4	96.4	96.4	92.4	92.4	92.4	88.1	88.1	88.1	83.5	83.5	83.5
			SHC	57.5	65.8	74.1	55.5	63.8	72.2	53.5	61.9	70.2	51.7	60.0	68.3	49.7	58.0	66.3	47.7	56.0	64.3	45.4	53.7	62.0
		72	TC	119.4	119.4	119.4	115.2	115.2	115.2	111.1	111.1	111.1	106.8	106.8	106.8	102.4	102.4	102.4	97.6	97.6	97.6	92.4	92.4	92.4
			SHC	49.6	58.0	66.3	47.7	56.0	64.3	45.7	54.0	62.3	43.8	52.1	60.4	41.8	50.1	58.4	39.7	48.1	56.4	37.5	45.8	54.1
		76	TC	—	129.7	129.7	—	125.1	125.1	—	120.5	120.5	—	115.9	115.9	—	111.1	111.1	—	106.0	106.0	—	100.3	100.3
			SHC	—	51.6	59.9	—	49.5	57.9	—	47.6	55.9	—	45.6	53.9	—	43.7	52.0	—	41.5	49.9	—	39.4	47.7
2100 CFM	EAT (wb)	58	TC	100.0	100.0	105.7	96.1	96.1	103.4	92.3	92.3	101.3	89.7	89.7	96.7	85.1	85.1	95.8	81.7	81.7	92.0	77.9	77.9	87.8
			SHC	83.4	94.5	105.7	81.1	92.3	103.4	79.1	90.2	101.3	75.9	86.3	96.7	74.3	85.1	95.8	71.3	81.7	92.0	68.1	77.9	87.8
		62	TC	108.1	108.1	108.1	103.8	103.8	103.8	99.6	99.6	99.6	95.5	95.5	95.5	91.1	91.1	91.1	86.5	86.5	86.7	81.5	81.5	84.2
			SHC	75.1	86.3	97.4	72.8	84.0	95.3	70.7	81.9	93.1	68.6	79.9	91.0	66.5	77.7	88.8	64.3	75.5	86.7	61.9	73.0	84.2
		67	TC	119.4	119.4	119.4	114.7	114.7	114.7	110.1	110.1	110.1	105.4	105.4	105.4	100.6	100.6	100.6	95.6	95.6	95.6	90.0	90.0	90.0
			SHC	64.5	75.8	87.0	62.3	73.5	84.7	60.2	71.4	82.6	58.0	69.2	80.4	55.9	67.1	78.3	53.6	64.8	76.1	51.3	62.5	73.7
		72	TC	132.0	132.0	132.0	126.8	126.8	126.8	121.7	121.7	121.7	116.5	116.5	116.5	111.2	111.2	111.2	105.6	105.6	105.6	99.5	99.5	99.5
			SHC	53.7	64.9	76.2	51.5	62.7	74.0	49.3	60.5	71.9	47.2	58.4	69.7	45.0	56.3	67.6	42.8	54.0	65.3	40.4	51.7	62.9
		76	TC	—	142.9	142.9	—	137.4	137.4	—	131.8	131.8	—	126.3	126.3	—	120.5	120.5	—	114.5	114.5	—	107.9	107.9
			SHC	—	56.1	67.3	—	53.8	65.1	—	51.7	63.0	—	49.6	60.8	—	47.4	58.7	—	45.1	56.5	—	42.8	54.1
2600 CFM	EAT (wb)	58	TC	94.9	94.9	108.4	86.9	86.9	99.9	78.9	78.9	91.6	70.9	70.9	83.1	62.7	62.7	74.5	54.4	54.4	65.6	45.8	45.8	56.6
			SHC	81.3	94.9	108.4	73.8	86.9	99.9	66.2	78.9	91.6	58.7	70.9	83.1	51.0	62.7	74.5	43.2	54.4	65.6	35.1	45.8	56.6
		62	TC	104.6	104.6	104.6	95.2	95.2	95.2	85.8	85.8	86.7	76.4	76.4	79.8	66.9	66.9	72.7	57.2	57.2	65.6	47.2	47.2	58.3
			SHC	73.2	87.0	100.7	66.1	80.0	93.7	59.2	72.9	86.7	52.2	66.0	79.8	45.2	59.0	72.7	38.1	51.9	65.6	30.9	44.7	58.3
		67	TC	119.0	119.0	119.0	109.0	109.0	109.0	99.2	99.2	99.2	89.2	89.2	89.2	79.2	79.2	79.2	68.8	68.8	68.8	58.2	58.2	58.2
			SHC	62.6	76.4	90.3	55.6	69.4	83.3	48.6	62.4	76.2	41.6	55.4	69.2	34.6	48.5	62.2	27.5	41.3	55.2	20.4	34.1	48.0
		72	TC	134.7	134.7	134.7	124.3	124.3	124.3	113.9	113.9	113.9	103.4	103.4	103.4	92.8	92.8	92.8	81.9	81.9	81.9	70.7	70.7	70.7
			SHC	51.8	65.7	79.7	44.8	58.7	72.6	37.7	51.7	65.6	30.8	44.7	58.6	23.8	37.7	51.6	16.7	30.6	44.5	9.6	23.4	37.3
		76	TC	—	148.2	148.2	—	137.4	137.4	—	126.6	126.6	—	115.6	115.6	—	104.6	104.6	—	93.2	93.2	—	81.4	81.4
			SHC	—	56.8	70.8	—	49.8	63.8	—	42.8	56.7	—	35.9	49.8	—	28.9	42.8	—	21.8	35.8	—	14.6	28.6
3150 CFM	EAT (wb)	58	TC	105.1	105.1	119.7	96.5	96.5	110.6	87.9	87.9	101.5	79.4	79.4	92.4	70.7	70.7	83.3	61.7	61.7	73.7	52.6	52.6	64.0
			SHC	90.5	105.1	119.7	82.4	96.5	110.6	74.4	87.9	101.5	66.3	79.4	92.4	58.1	70.7	83.3	49.7	61.7	73.7	41.1	52.6	64.0
		62	TC	111.1	111.1	115.6	101.1	101.1	108.3	91.3	91.3	101.0	81.4	81.4	93.7	71.6	71.6	86.2	61.9	61.9	77.9	52.7	52.7	67.9
			SHC	82.6	99.1	115.6	75.3	91.7	108.3	68.1	84.5	101.0	60.8	77.2	93.7	53.5	69.8	86.2	45.8	61.9	77.9	37.4	52.7	67.9
		67	TC	125.6	125.6	125.6	115.1	115.1	115.1	104.6	104.6	104.6	94.1	94.1	94.1	83.5	83.5	83.5	72.6	72.6	72.6	61.4	61.4	61.4
			SHC	69.2	85.9	102.5	61.9	78.6	95.2	54.7	71.4	87.9	47.5	64.2	80.7	40.3	56.9	73.5	33.0	49.6	66.2	25.5	42.2	58.8
		72	TC	141.7	141.7	141.7	130.7	130.7	130.7	119.6	119.6	119.6	108.6	108.6	108.6	97.4	97.4	97.4	86.0	86.0	86.0	74.1	74.1	74.1
			SHC	55.6	72.3	89.1	48.4	65.0	81.8	41.1	57.8	74.6	33.9	50.6	67.4	26.7	43.4	60.2	19.4	36.2	52.8	12.1	28.8	45.4
		76	TC	—	155.4	155.4	—	144.0	144.0	—	132.6	132.6	—	121.1	121.1	—	109.4	109.4	—	97.4	97.4	—	85.0	85.0
			SHC	—	61.1	78.1	—	54.0	70.9	—	46.8	63.7	—	39.6	56.6	—	32.4	49.3	—	25.2	42.0	—	17.7	34.6
3650 CFM	EAT (wb)	58	TC	112.8	112.8	128.2	103.7	103.7	118.6	94.8	94.8	109.0	85.7	85.7	99.5	76.5	76.5	89.7	67.2	67.2	79.8	57.5	57.5	69.4
			SHC	97.4	112.8	128.2	88.9	103.7	118.6	80.4	94.8	109.0	72.0	85.7	99.5	63.4	76.5	89.7	54.7	67.2	79.8	45.6	57.5	69.4
		62	TC	115.8	115.8	128.2	105.6	105.6	120.5	95.6	95.6	112.7	85.9	85.9	104.2	76.7	76.7	94.3	67.4	67.4	84.1	57.6	57.6	73.5
			SHC	90.4	109.3	128.2	82.9	101.7	120.5	75.4	94.1	112.7	67.6	85.9	104.2	59.2	76.7	94.3	50.6	67.4	84.1	41.7	57.6	73.5
		67	TC	130.1	130.1	130.1	119.1	119.1	119.1	108.2	108.2	108.2	97.4	97.4	97.4	86.5	86.5	86.5	75.3	75.3	75.8	63.8	63.8	68.2
			SHC	74.6	93.7	112.9	67.2	86.3	105.4	59.8	78.9	98.0	52.5	71.6	90.7	45.0	64.2	83.3	37.6	56.6	75.8	30.0	49.1	68.2
		72	TC	146.3	146.3	146.3	134.8	134.8	134.8	123.4	123.4	123.4	112.0	112.0	112.0	100.5	100.5	100.5	88.6	88.6	88.6	76.4	76.4	76.4
			SHC	58.5	77.7	96.9	51.1	70.3	89.6	43.7	63.0	82.2	36.4	55.6	74.9	29.1	48.3	67.5	21.5	40.8	60.0	14.0	33.2	52.5
		76	TC	—	160.2	160.2	—	148.4	148.4	—	136.5	136.5	—	124.7	124.7	—	112.6	112.6	—	100.2	100.2	—	87.5	87.5
			SHC	—	64.6	84.1	—	57.2	76.7	—	49.9	69.4	—	42.6	62.1	—	35.3	54.7	—	27.9	47.2	—	20.3	39.7
4200 CFM	EAT (wb)	58	TC	119.9	119.9	136.0	110.4	110.4	125.9	101.0	101.0	115.9	91.6	91.6	105.9	82.0	82.0	95.7	72.2	72.2	85.3	62.1	62.1	74.5
			SHC	103.8	119.9	136.0	94.9	110.4	125.9	86.1	101.0	115.9	77.2	91.6	105.9	68.3	82.0	95.7	59.2	72.2	85.3	49.7	62.1	74.5
		62	TC	120.5	120.5	140.6	110.6	110.6	131.3	101.2	101.2	121.1	91.7	91.7	110.9	82.2	82.2	100.5	72.3	72.3	89.8	62.2	62.2	78.8
			SHC	98.2	119.3	140.6	89.9	110.6	131.3	81.2	101.2	121.1	72.5	91.7	110.9	63.9	82.2	100.5	54.9	72.3	89.8	45.6	62.2	78.8
		67	TC	133.9	133.9	133.9	122.6	122.6	122.6	111.4	111.4	111.4	100.2	100.2	101.0	89.0	89.0	93.4	77.6	77.6	85.8	65.8	65.8	77.9
			SHC	80.0	101.9	123.7	72.4	94.3	116.1	64.9	86.8	108.5	57.5	79.3	101.0	50.0	71.8	93.4	42.4	64.2	85.8	34.7	56.4	77.9
		72	TC	150.2	150.2	150.2	138.5	138.5	138.5	126.8	126.8	126.8	115.0	115.0	115.0	103.1	103.1	103.1	90.9	90.9	90.9	78.3	78.3	78.3
			SHC	61.2	83.2	105.1	53.7	75.7	97.6	46.2	68.2	90.1	38.8	60.7	82.6	31.3	53.2	75.2	23.8	45.6	67.6	16.1	38.0	59.9
		76	TC	—	164.2	164.2	—	152.1	152.1	—	139.9	139.9	—	127.7	127.7	—	115.2	115.2	—	102.6	102.6	—	89.4	89.4
			SHC	—	67.9	90.1	—	60.5	82.7	—	53.0	75.2	—	45.6	67.8	—	38.1	60.3	—	30.6	52.7	—	22.9	44.9

Performance data (cont)

COOLING CAPACITIES — FIRST STAGE, PART LOAD (20 TONS) (cont)

48LC*B SIZE 24				AMBIENT TEMPERATURE (°F)																				
				65			75			85			95			105			115			125		
				EAT (db)			EAT (db)			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	75	80	85	75	80	85
4700 CFM	EAT (wb)	58	TC	125.4	125.4	142.1	115.5	115.5	131.6	105.9	105.9	121.3	96.1	96.1	110.9	86.2	86.2	100.3	76.1	76.1	89.5	65.6	65.6	78.3
			SHC	108.7	125.4	142.1	99.5	115.5	131.6	90.5	105.9	121.3	81.3	96.1	110.9	72.1	86.2	100.3	62.6	76.1	89.5	52.8	65.6	78.3
		62	TC	125.6	125.6	147.8	115.7	115.7	137.2	106.0	106.0	126.7	96.2	96.2	116.0	86.4	86.4	105.2	76.1	76.1	94.2	65.7	65.7	82.8
			SHC	103.4	125.6	147.8	94.4	115.7	137.2	85.4	106.0	126.7	76.4	96.2	116.0	67.5	86.4	105.2	58.2	76.1	94.2	48.7	65.7	82.8
		67	TC	136.6	136.6	136.6	125.2	125.2	125.4	113.8	113.8	117.7	102.5	102.5	110.0	91.1	91.1	102.3	79.4	79.4	94.4	67.5	67.5	86.3
			SHC	84.7	108.9	133.1	77.0	101.2	125.4	69.4	93.6	117.7	61.8	85.9	110.0	54.2	78.3	102.3	46.5	70.5	94.4	38.7	62.5	86.3
		72	TC	153.0	153.0	153.0	141.0	141.0	141.0	129.0	129.0	129.0	117.0	117.0	117.0	104.9	104.9	104.9	92.4	92.4	92.4	79.7	79.7	79.7
			SHC	63.5	87.8	112.1	55.9	80.2	104.5	48.4	72.6	97.0	40.9	65.1	89.4	33.2	57.5	81.8	25.6	49.8	74.1	17.8	42.1	66.4
		76	TC	—	167.0	167.0	—	154.7	154.7	—	142.4	142.4	—	129.9	129.9	—	117.2	117.2	—	104.2	104.2	—	90.9	90.9
			SHC	—	70.6	95.3	—	63.1	87.7	—	55.6	80.1	—	48.1	72.6	—	40.6	65.0	—	32.9	57.3	—	25.2	49.5
5250 CFM	EAT (wb)	58	TC	130.6	130.6	147.8	120.5	120.5	137.0	110.5	110.5	126.3	100.3	100.3	115.5	90.2	90.2	104.7	79.7	79.7	93.5	68.9	68.9	82.0
			SHC	113.4	130.6	147.8	103.9	120.5	137.0	94.6	110.5	126.3	85.1	100.3	115.5	75.7	90.2	104.7	65.9	79.7	93.5	55.9	68.9	82.0
		62	TC	130.7	130.7	153.8	120.6	120.6	142.7	110.6	110.6	131.8	100.5	100.5	120.8	90.3	90.3	109.7	79.9	79.9	98.3	69.0	69.0	86.5
			SHC	107.7	130.7	153.8	98.6	120.6	142.7	89.4	110.6	131.8	80.1	100.5	120.8	70.9	90.3	109.7	61.3	79.9	98.3	51.6	69.0	86.5
		67	TC	139.2	139.2	142.9	127.5	127.5	135.1	115.9	115.9	127.3	104.5	104.5	119.4	92.9	92.9	111.4	81.2	81.2	103.2	69.7	69.7	93.6
			SHC	89.5	116.2	142.9	81.8	108.4	135.1	74.1	100.7	127.3	66.4	92.9	119.4	58.7	85.0	111.4	50.7	76.9	103.2	42.4	68.0	93.6
		72	TC	155.4	155.4	155.4	143.2	143.2	143.2	131.0	131.0	131.0	118.9	118.9	118.9	106.5	106.5	106.5	93.9	93.9	93.9	80.8	80.8	80.8
			SHC	65.7	92.6	119.5	58.1	85.0	111.8	50.5	77.3	104.2	42.9	69.7	96.5	35.2	62.1	88.9	27.5	54.3	81.1	19.7	46.5	73.2
		76	TC	—	169.6	169.6	—	157.1	157.1	—	144.4	144.4	—	131.7	131.7	—	118.9	118.9	—	105.7	105.7	—	92.1	92.1
			SHC	—	73.4	100.6	—	65.8	93.0	—	58.2	85.3	—	50.7	77.7	—	43.0	70.1	—	35.3	62.3	—	27.5	54.5

LEGEND

— — Do not operate
CFM — Cubic feet per minute (supply air)
EAT (db) — Entering air temperature (dry bulb) (°F)
EAT (wb) — Entering air temperature (wet bulb) (°F)
SHC — Sensible heat capacity (1000 Btuh) Gross
TC — Total capacity (1000 Btuh) Gross

Performance data (cont)

COOLING CAPACITIES - SECOND STAGE, PART LOAD (20 TONS)

48LC*B SIZE 24				AMBIENT TEMPERATURE (°F)																				
				65			75			85			95			105			115			125		
				EAT (db)			EAT (db)			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	75	80	85	75	80	85
1950 CFM	EAT (wb)	58	TC	116.3	116.3	116.3	113.6	113.6	113.6	109.9	109.9	109.9	105.6	105.6	105.6	100.8	100.8	102.7	95.4	95.4	99.6	89.3	89.3	96.2
			SHC	91.0	101.3	111.7	89.3	99.7	110.2	87.2	97.6	108.0	84.6	95.1	105.5	81.9	92.3	102.7	78.8	89.2	99.6	75.5	85.8	96.2
		62	TC	126.1	126.1	126.1	122.7	122.7	122.7	118.8	118.8	118.8	114.3	114.3	114.3	109.1	109.1	109.1	103.4	103.4	103.4	97.0	97.0	97.0
			SHC	83.8	94.2	104.5	81.8	92.2	102.6	79.6	90.0	100.4	77.1	87.6	98.0	74.4	84.7	95.2	71.3	81.7	92.1	68.0	78.4	88.8
		67	TC	138.8	138.8	138.8	135.1	135.1	135.1	130.9	130.9	130.9	126.2	126.2	126.2	120.8	120.8	120.8	114.7	114.7	114.7	107.8	107.8	107.8
			SHC	73.9	84.3	94.8	72.0	82.5	92.9	69.8	80.2	90.7	67.4	77.8	88.3	64.7	75.2	85.6	61.7	72.2	82.6	58.5	68.9	79.4
		72	TC	153.1	153.1	153.1	149.1	149.1	149.1	144.6	144.6	144.6	139.5	139.5	139.5	133.7	133.7	133.7	127.1	127.1	127.1	119.7	119.7	119.7
			SHC	63.8	74.3	84.7	61.9	72.3	82.9	59.8	70.2	80.7	57.4	67.9	78.3	54.8	65.2	75.7	51.9	62.3	72.7	48.7	59.1	69.5
		76	TC	—	165.5	165.5	—	161.4	161.4	—	156.5	156.5	—	151.1	151.1	—	144.9	144.9	—	138.0	138.0	—	130.2	130.2
			SHC	—	65.9	76.4	—	64.1	74.6	—	62.0	72.4	—	59.7	70.1	—	57.0	67.5	—	54.2	64.6	—	51.1	61.5
2600 CFM	EAT (wb)	58	TC	128.8	128.8	133.5	125.0	125.0	131.3	120.7	120.7	128.9	115.8	115.8	126.1	110.4	110.4	122.9	104.9	104.9	118.3	99.4	99.4	112.0
			SHC	105.9	119.6	133.5	103.7	117.5	131.3	101.3	115.1	128.9	98.6	112.3	126.1	95.6	109.2	122.9	91.7	104.9	118.3	86.8	99.4	112.0
		62	TC	138.6	138.6	138.6	134.6	134.6	134.6	130.0	130.0	130.0	124.8	124.8	124.8	118.9	118.9	118.9	112.3	112.3	112.3	105.0	105.0	106.1
			SHC	95.4	109.2	123.0	93.3	107.1	120.9	90.9	104.7	118.6	88.2	102.1	115.9	85.3	99.2	112.9	82.0	95.8	109.7	78.5	92.3	106.1
		67	TC	152.5	152.5	152.5	148.1	148.1	148.1	143.1	143.1	143.1	137.6	137.6	137.6	131.3	131.3	131.3	124.2	124.2	124.2	116.3	116.3	116.3
			SHC	82.1	95.9	109.8	80.0	93.9	107.7	77.6	91.6	105.4	75.1	88.9	102.8	72.2	86.0	99.9	69.0	82.9	96.7	65.5	79.4	93.2
		72	TC	167.7	167.7	167.7	163.0	163.0	163.0	157.8	157.8	157.8	151.7	151.7	151.7	145.0	145.0	145.0	137.4	137.4	137.4	129.0	129.0	129.0
			SHC	68.3	82.3	96.2	66.3	80.2	94.2	64.1	78.0	91.9	61.5	75.5	89.4	58.7	72.6	86.6	55.6	69.5	83.5	52.3	66.2	80.1
		76	TC	—	181.0	181.0	—	176.0	176.0	—	170.4	170.4	—	164.1	164.1	—	156.9	156.9	—	148.8	148.8	—	139.8	139.8
			SHC	—	71.0	84.9	—	69.0	83.0	—	66.8	80.7	—	64.4	78.3	—	61.6	75.6	—	58.5	72.4	—	55.3	69.2
3250 CFM	EAT (wb)	58	TC	131.4	131.4	146.6	125.0	125.0	141.9	118.9	118.9	135.2	112.2	112.2	128.1	105.0	105.0	120.3	97.3	97.3	111.8	89.0	89.0	102.8
			SHC	112.7	129.7	146.6	108.0	124.9	141.9	102.4	118.9	135.2	96.3	112.2	128.1	89.8	105.0	120.3	82.8	97.3	111.8	75.3	89.0	102.8
		62	TC	142.1	142.1	142.1	135.2	135.2	135.2	127.8	127.8	127.8	119.7	119.7	120.3	111.0	111.0	115.0	101.6	101.6	109.2	91.5	91.5	103.1
			SHC	100.6	117.8	134.9	96.0	113.2	130.4	91.2	108.3	125.5	86.1	103.3	120.3	80.6	97.8	115.0	75.0	92.0	109.2	69.0	86.0	103.1
		67	TC	157.7	157.7	157.7	150.5	150.5	150.5	142.7	142.7	142.7	134.2	134.2	134.2	124.9	124.9	124.9	114.9	114.9	114.9	104.0	104.0	104.0
			SHC	85.2	102.4	119.6	80.6	97.9	115.1	75.9	93.1	110.3	70.8	88.0	105.2	65.4	82.7	99.8	59.9	77.0	94.3	54.0	71.2	88.3
		72	TC	174.8	174.8	174.8	167.3	167.3	167.3	159.1	159.1	159.1	150.2	150.2	150.2	140.4	140.4	140.4	129.8	129.8	129.8	118.4	118.4	118.4
			SHC	69.3	86.8	104.1	64.9	82.3	99.6	60.2	77.5	94.9	55.2	72.5	89.8	49.9	67.3	84.5	44.5	61.7	79.1	38.6	56.0	73.2
		76	TC	—	189.5	189.5	—	181.8	181.8	—	173.3	173.3	—	163.8	163.8	—	153.6	153.6	—	142.4	142.4	—	130.5	130.5
			SHC	—	73.7	91.2	—	69.3	86.8	—	64.6	82.1	—	59.7	77.1	—	54.5	72.0	—	49.0	66.5	—	43.4	60.7
3900 CFM	EAT (wb)	58	TC	141.5	141.5	160.1	135.4	135.4	153.5	128.8	128.8	146.4	121.7	121.7	138.6	114.1	114.1	130.4	105.8	105.8	121.3	96.9	96.9	111.5
			SHC	122.9	141.5	160.1	117.3	135.4	153.5	111.2	128.8	146.4	104.7	121.7	138.6	97.8	114.1	130.4	90.3	105.8	121.3	82.2	96.9	111.5
		62	TC	148.9	148.9	151.5	141.8	141.8	146.8	134.0	134.0	141.8	125.6	125.6	136.5	116.5	116.5	130.7	106.8	106.8	124.5	97.0	97.0	116.6
			SHC	110.8	131.1	151.5	106.1	126.5	146.8	101.1	121.4	141.8	95.8	116.1	136.5	90.3	110.5	130.7	84.3	104.4	124.5	77.4	97.0	116.6
		67	TC	164.6	164.6	164.6	157.1	157.1	157.1	148.8	148.8	148.8	139.8	139.8	139.8	130.1	130.1	130.1	119.5	119.5	119.5	108.2	108.2	108.2
			SHC	91.9	112.5	133.0	87.4	107.8	128.3	82.5	103.0	123.4	77.3	97.8	118.3	71.9	92.3	112.8	66.1	86.6	107.1	60.1	80.5	101.0
		72	TC	182.0	182.0	182.0	174.2	174.2	174.2	165.6	165.6	165.6	156.1	156.1	156.1	145.9	145.9	145.9	134.6	134.6	134.6	122.7	122.7	122.7
			SHC	72.8	93.5	114.2	68.3	88.9	109.6	63.5	84.1	104.7	58.4	79.0	99.6	53.0	73.6	94.2	47.4	68.0	88.5	41.4	62.0	82.6
		76	TC	—	197.0	197.0	—	188.8	188.8	—	179.7	179.7	—	169.8	169.8	—	159.1	159.1	—	147.5	147.5	—	134.8	134.8
			SHC	—	77.8	98.8	—	73.3	94.3	—	68.5	89.5	—	63.6	84.4	—	58.3	79.2	—	52.7	73.6	—	46.9	67.7
4500 CFM	EAT (wb)	58	TC	149.7	149.7	169.2	143.3	143.3	162.3	136.4	136.4	154.8	129.0	129.0	146.7	120.9	120.9	138.0	112.1	112.1	128.4	102.8	102.8	118.1
			SHC	130.2	149.7	169.2	124.2	143.3	162.3	118.0	136.4	154.8	111.2	129.0	146.7	103.8	120.9	138.0	95.9	112.1	128.4	87.5	102.8	118.1
		62	TC	154.0	154.0	165.9	146.5	146.5	16.01	138.6	138.6	155.8	130.2	130.2	150.1	121.0	121.0	143.8	112.3	112.3	134.1	103.0	103.0	123.4
			SHC	119.4	142.6	165.9	114.7	137.9	161.0	109.5	132.7	155.8	104.0	127.0	150.1	98.2	121.0	143.8	90.7	112.3	134.1	82.5	103.0	123.4
		67	TC	169.4	169.4	169.4	161.6	161.6	161.6	153.0	153.0	153.0	143.7	143.7	143.7	133.7	133.7	133.7	122.9	122.9	122.9	111.2	111.2	112.1
			SHC	97.7	121.2	144.6	93.0	116.4	139.9	88.0	111.4	134.9	82.8	106.3	129.7	77.3	100.7	124.1	71.5	94.9	118.3	65.4	88.7	112.1
		72	TC	187.0	187.0	187.0	178.9	178.9	178.9	169.9	169.9	169.9	160.2	160.2	160.2	149.5	149.5	149.5	138.0	138.0	138.0	125.5	125.5	125.5
			SHC	75.6	99.2	122.8	71.0	94.6	118.2	66.1	89.7	113.3	60.9	84.5	108.1	55.5	79.1	102.6	49.8	73.3	96.8	43.8	67.4	90.9
		76	TC	—	201.8	201.8	—	193.4	193.4	—	184.1	184.1	—	173.9	173.9	—	162.8	162.8	—	150.8	150.8	—	137.9	137.9
			SHC	—	81.2	105.2	—	76.6	100.6	—	71.9	95.7	—	66.7	90.6	—	61.3	85.2	—	55.8	79.6	—	49.8	73.6
5150 CFM	EAT (wb)	58	TC	157.2	157.2	177.5	150.5	150.5	170.3	143.3	143.3	162.5	135.5	135.5	154.1	127.0	127.0	144.8	118.0	118.0	134.8	108.1	108.1	124.0
			SHC	136.7	157.2	177.5	130.7	150.5	170.3	124.0	143.3	162.5	117.0	135.5	154.1	109.3	127.0	144.8	101.0	118.0	134.8	92.1	108.1	124.0
		62	TC	158.6	158.6	180.3	151.3	151.3	175.0	143.4	143.4	169.2	135.7	135.7	160.5	127.2	127.2	151.0	118.1	118.1	140.7	108.2	108.2	129.5
			SHC	128.1	154.1	180.3	123.1	149.1	175.0	117.7	143.4	169.2	110.9	135.7	160.5	103.4	127.2	151.0	95.6	118.1	140.7	87.0	108.2	129.5
		67	TC	173.4	173.4	173.4	165.4	165.4	165.4	156.6	156.6	156.6	147.0	147.0	147.0	136.8	136.8	136.8	125.7	125.7	129.9	113.7	113.7	123.5
			SHC	103.4	130.1	156.6	98.8	125.3	151.9	93.8	120.3	146.8	88.4	115.0	141.5	82.9	109.4	135.9	77.0	103.4	129.9	70.8	97.2	123.5
		72	TC	191.1	191.1	191.1	182.7	182.7	182.7	173.6	173.6	173.6	163.4	163.4	163.4	152.5	152.5	152.5	140.6	140.6	140.6	127.8	127.8	127.8
			SHC	78.3	105.0	131.7	73.6	100.3	127.0	68.6	95.4	122.1	63.5	90.1	116.8	58.0	84.6	111.3	52.2	78.8	105.5	46.1	72.7	99.4
		76	TC	—	205.9	205.9	—	197.3	197.3	—	187.8	187.8	—	177.3	177.3	—	165.9	165.9	—	153.7	153.7	—	140.3	140.3
			SHC	—	84.4	111.5	—	79.9	107.0	—	75.0	102.1	—	69.8	96.8	—	64.4	91.4	—	58.8	85.7	—	52.7	79.7

Performance data (cont)

COOLING CAPACITIES - SECOND STAGE, PART LOAD (20 TONS) (cont)

48LC*B SIZE 24				AMBIENT TEMPERATURE (°F)																				
				65			75			85			95			105			115			125		
				EAT (db)			EAT (db)			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	75	80	85	75	80	85
5800 CFM	EAT (wb)	58	TC	163.5	163.5	184.6	156.6	156.6	177.2	149.2	149.2	169.1	141.1	141.1	160.2	132.3	132.3	150.6	122.8	122.8	140.2	112.5	112.5	129.0
			SHC	142.4	163.5	184.6	136.0	156.6	177.2	129.2	149.2	169.1	121.9	141.1	160.2	113.9	132.3	150.6	105.3	122.8	140.2	96.1	112.5	129.0
		62	TC	163.7	163.7	191.9	156.8	156.8	184.3	149.3	149.3	175.9	141.2	141.2	166.8	132.4	132.4	157.0	122.9	122.9	146.3	112.7	112.7	134.6
			SHC	135.4	163.7	191.9	129.3	156.8	184.3	122.7	149.3	175.9	115.5	141.2	166.8	107.9	132.4	157.0	99.6	122.9	146.3	90.7	112.7	134.6
		67	TC	176.5	176.5	176.5	168.4	168.4	168.4	159.4	159.4	159.4	149.8	149.8	152.9	139.2	139.2	147.1	127.9	127.9	141.0	115.8	115.8	134.5
			SHC	109.0	138.5	168.2	104.2	133.8	163.4	99.2	128.7	158.2	93.8	123.3	152.9	88.1	117.6	147.1	82.2	111.6	141.0	75.9	105.2	134.5
		72	TC	194.2	194.2	194.2	185.7	185.7	185.7	176.3	176.3	176.3	165.9	165.9	165.9	154.8	154.8	154.8	142.7	142.7	142.7	129.8	129.8	129.8
			SHC	80.6	110.4	140.1	76.0	105.7	135.4	71.0	100.7	130.5	65.7	95.5	125.2	60.3	89.9	119.6	54.4	84.0	113.7	48.3	77.9	107.5
		76	TC	—	209.1	209.1	—	200.4	200.4	—	190.6	190.6	—	179.9	179.9	—	168.3	168.3	—	155.8	155.8	—	142.3	142.3
			SHC	—	87.5	117.6	—	82.9	112.9	—	77.9	108.0	—	72.7	102.8	—	67.3	97.3	—	61.6	91.6	—	55.6	85.4
6450 CFM	EAT (wb)	58	TC	168.9	168.9	190.6	161.9	161.9	183.0	154.1	154.1	174.6	145.8	145.8	165.6	136.7	136.7	155.6	126.9	126.9	144.9	116.3	116.3	133.2
			SHC	147.1	168.9	190.6	140.7	161.9	183.0	133.7	154.1	174.6	126.1	145.8	165.6	117.9	136.7	155.6	109.0	126.9	144.9	99.5	116.3	133.2
		62	TC	169.1	169.1	198.1	161.9	161.9	190.2	154.3	154.3	181.6	146.0	146.0	172.3	136.9	136.9	162.1	127.0	127.0	151.0	116.5	116.5	139.0
			SHC	140.0	169.1	198.1	133.7	161.9	190.2	126.9	154.3	181.6	119.5	146.0	172.3	111.6	136.9	162.1	103.2	127.0	151.0	93.9	116.5	139.0
		67	TC	179.2	179.2	179.3	170.9	170.9	174.4	161.9	161.9	169.3	152.0	152.0	163.7	141.5	141.5	157.9	130.1	130.1	151.4	117.9	117.9	144.4
			SHC	114.2	146.7	179.3	109.4	141.9	174.4	104.3	136.8	169.3	98.9	131.3	163.7	93.2	125.5	157.9	87.2	119.3	151.4	80.6	112.5	144.4
		72	TC	196.8	196.8	196.8	188.1	188.1	188.1	178.5	178.5	178.5	168.0	168.0	168.0	156.7	156.7	156.7	144.4	144.4	144.4	131.1	131.1	131.1
			SHC	82.9	115.6	148.3	78.2	110.9	143.6	73.2	105.9	138.5	67.9	100.5	133.2	62.3	95.0	127.6	56.5	89.1	121.7	50.3	82.9	115.4
		76	TC	—	211.7	211.7	—	202.8	202.8	—	192.9	192.9	—	182.0	182.0	—	170.2	170.2	—	157.5	157.5	—	143.8	143.8
			SHC	—	90.2	123.3	—	85.6	118.7	—	80.7	113.7	—	75.5	108.5	—	70.0	103.0	—	64.3	97.1	—	58.2	91.1

LEGEND

— — Do not operate
CFM — Cubic feet per minute (supply air)
EAT (db) — Entering air temperature (dry bulb) (°F)
EAT (wb) — Entering air temperature (wet bulb) (°F)
SHC — Sensible heat capacity (1000 Btuh) Gross
TC — Total capacity (1000 Btuh) Gross

Performance data (cont)

COOLING CAPACITIES — THIRD STAGE, FULL LOAD (20 TONS)

48LC*B SIZE 24				AMBIENT TEMPERATURE (°F)																				
				65			75			85			95			105			115			125		
				EAT (db)			EAT (db)			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	75	80	85	75	80	85
4000 CFM	EAT (wb)	58	TC	209.8	209.8	210.9	203.2	203.2	207.0	196.0	196.0	202.9	188.3	188.3	198.4	179.8	179.8	193.6	170.6	170.6	188.1	162.5	162.5	178.4
			SHC	168.9	189.9	210.9	165.1	186.0	207.0	161.0	181.9	202.9	156.6	177.5	198.4	151.8	172.7	193.6	146.5	167.3	188.1	139.2	158.8	178.4
		62	TC	225.5	225.5	225.5	218.3	218.3	218.3	210.6	210.6	210.6	202.2	202.2	202.2	193.1	193.1	193.1	182.9	182.9	182.9	172.0	172.0	172.0
			SHC	152.9	173.8	194.9	149.0	170.0	191.0	144.9	165.9	186.9	140.5	161.6	182.5	135.8	156.9	177.8	130.7	151.8	172.8	125.3	146.3	167.3
		67	TC	247.5	247.5	247.5	239.7	239.7	239.7	231.4	231.4	231.4	222.2	222.2	222.2	212.4	212.4	212.4	201.4	201.4	201.4	189.6	189.6	189.6
			SHC	132.5	153.6	174.7	128.6	149.8	170.8	124.6	145.7	166.8	120.2	141.3	162.4	115.6	136.7	157.8	110.6	131.7	152.8	105.2	126.3	147.4
		72	TC	271.3	271.3	271.3	263.1	263.1	263.1	253.8	253.8	253.8	244.0	244.0	244.0	233.4	233.4	233.4	221.9	221.9	221.9	209.1	209.1	209.1
			SHC	111.1	132.5	154.0	107.3	128.8	150.2	103.4	124.8	146.2	99.2	120.5	141.9	94.7	116.0	137.3	89.8	111.2	132.4	84.6	105.9	127.1
		76	TC	—	292.1	292.1	—	283.3	283.3	—	273.8	273.8	—	263.2	263.2	—	251.8	251.8	—	239.5	239.5	—	225.9	225.9
			SHC	—	114.9	136.3	—	111.2	132.7	—	107.4	128.9	—	103.3	124.7	—	98.8	120.2	—	94.0	115.4	—	88.9	110.4
4500 CFM	EAT (wb)	58	TC	217.6	217.6	225.9	210.6	210.6	221.9	203.0	203.0	217.5	194.9	194.9	212.7	186.3	186.3	207.5	180.0	180.0	194.7	168.7	168.7	190.1
			SHC	179.1	202.5	225.9	175.1	198.5	221.9	170.8	194.2	217.5	166.2	189.5	212.7	161.3	184.4	207.5	152.5	173.6	194.7	147.2	168.7	190.1
		62	TC	233.1	233.1	233.1	225.5	225.5	225.5	217.3	217.3	217.3	208.5	208.5	208.5	198.8	198.8	198.8	188.3	188.3	188.3	176.8	176.8	179.5
			SHC	160.8	184.3	207.8	156.9	180.4	203.9	152.7	176.2	199.7	148.2	171.7	195.2	143.3	166.8	190.3	138.2	161.7	185.2	132.6	156.1	179.5
		67	TC	255.5	255.5	255.5	247.4	247.4	247.4	238.5	238.5	238.5	228.8	228.8	228.8	218.3	218.3	218.3	206.9	206.9	206.9	194.5	194.5	194.5
			SHC	137.8	161.4	185.0	133.9	157.5	181.1	129.8	153.4	176.9	125.3	148.9	172.5	120.5	144.1	167.7	115.4	139.0	162.5	110.0	133.6	157.1
		72	TC	279.8	279.8	279.8	271.1	271.1	271.1	261.7	261.7	261.7	251.0	251.0	251.0	239.8	239.8	239.8	227.7	227.7	227.7	214.2	214.2	214.2
			SHC	113.8	137.9	161.9	110.1	134.1	158.0	106.1	130.0	153.9	101.6	125.5	149.4	97.1	120.9	144.7	92.1	115.9	139.7	86.9	110.6	134.4
		76	TC	—	301.0	301.0	—	291.4	291.4	—	281.5	281.5	—	270.5	270.5	—	258.5	258.5	—	245.4	245.4	—	231.4	231.4
			SHC	—	118.1	142.2	—	114.3	138.5	—	110.4	134.6	—	106.2	130.4	—	101.7	125.9	—	96.9	121.0	—	91.7	115.9
5000 CFM	EAT (wb)	58	TC	221.0	221.0	236.9	212.5	212.5	231.4	203.6	203.6	225.5	194.0	194.0	219.5	185.2	185.2	209.7	175.4	175.4	198.9	165.0	165.0	187.2
			SHC	185.3	211.2	236.9	180.0	205.7	231.4	174.3	199.9	225.5	168.5	194.0	219.5	160.7	185.2	209.7	152.0	175.4	198.9	142.6	165.0	187.2
		62	TC	236.8	236.8	236.8	227.6	227.6	227.6	217.8	217.8	217.8	207.3	207.3	207.3	196.0	196.0	196.0	183.8	183.8	188.1	170.8	170.8	181.1
			SHC	165.6	191.6	217.5	160.3	186.2	212.2	154.8	180.8	206.7	149.0	174.9	200.9	142.8	168.8	194.6	136.3	162.1	188.1	129.4	155.2	181.1
		67	TC	260.1	260.1	260.1	250.3	250.3	250.3	239.7	239.7	239.7	228.3	228.3	228.3	216.2	216.2	216.2	203.1	203.1	203.1	189.0	189.0	189.0
			SHC	140.7	166.7	192.8	135.5	161.6	187.6	130.0	156.0	182.0	124.2	150.2	176.3	118.2	144.1	170.1	111.7	137.8	163.7	105.0	130.9	157.0
		72	TC	285.6	285.6	285.6	275.1	275.1	275.1	264.0	264.0	264.0	251.6	251.6	251.6	238.7	238.7	238.7	224.7	224.7	224.7	209.6	209.6	209.6
			SHC	115.0	141.4	167.8	109.9	136.3	162.6	104.6	130.9	157.3	98.9	125.1	151.4	92.9	119.1	145.5	86.7	112.9	139.1	80.1	106.3	132.5
		76	TC	—	307.3	307.3	—	296.4	296.4	—	284.6	284.6	—	272.0	272.0	—	258.2	258.2	—	243.4	243.4	—	227.4	227.4
			SHC	—	120.1	146.9	—	115.2	142.1	—	110.0	136.8	—	104.5	131.3	—	98.7	125.5	—	92.5	119.3	—	86.1	112.9
6000 CFM	EAT (wb)	58	TC	233.5	233.5	263.5	225.8	225.8	255.0	217.4	217.4	245.6	208.3	208.3	235.6	198.5	198.5	224.7	188.0	188.0	213.0	176.6	176.6	200.3
			SHC	203.6	233.5	263.5	196.7	225.8	255.0	189.2	217.4	245.6	181.1	208.3	235.6	172.4	198.5	224.7	163.0	188.0	213.0	152.9	176.6	200.3
		62	TC	247.5	247.5	247.5	237.7	237.7	237.7	227.3	227.3	230.2	216.2	216.2	224.2	204.4	204.4	217.6	191.7	191.7	210.8	178.2	178.2	203.0
			SHC	180.1	210.8	241.5	174.6	205.3	236.0	169.0	199.6	230.2	162.9	193.5	224.2	156.6	187.1	217.6	149.9	180.4	210.8	142.6	172.9	203.0
		67	TC	270.8	270.8	270.8	260.3	260.3	260.3	248.8	248.8	248.8	236.8	236.8	236.8	224.1	224.1	224.1	210.2	210.2	210.2	195.4	195.4	195.4
			SHC	150.2	181.0	211.8	144.8	175.6	206.4	139.0	169.8	200.7	133.2	164.0	194.7	127.0	157.8	188.6	120.5	151.2	182.0	113.7	144.4	175.1
		72	TC	296.8	296.8	296.8	285.5	285.5	285.5	273.6	273.6	273.6	260.9	260.9	260.9	247.1	247.1	247.1	232.2	232.2	232.2	216.4	216.4	216.4
			SHC	119.6	150.7	181.8	114.4	145.5	176.6	108.9	140.0	171.0	103.3	134.3	165.3	97.1	128.1	159.1	90.8	121.7	152.7	84.0	115.0	145.9
		76	TC	—	319.0	319.0	—	307.4	307.4	—	294.8	294.8	—	281.4	281.4	—	266.8	266.8	—	251.1	251.1	—	234.3	234.3
			SHC	—	126.0	158.1	—	120.9	153.1	—	115.5	147.7	—	110.0	142.2	—	103.9	135.9	—	97.7	129.4	—	91.1	122.7
7000 CFM	EAT (wb)	58	TC	247.0	247.0	278.6	238.4	238.4	269.2	229.4	229.4	259.1	219.7	219.7	248.3	209.2	209.2	236.7	198.0	198.0	224.2	185.9	185.9	210.7
			SHC	215.3	247.0	278.6	207.7	238.4	269.2	199.7	229.4	259.1	191.1	219.7	248.3	181.7	209.2	236.7	171.8	198.0	224.2	161.1	185.9	210.7
		62	TC	255.8	255.8	263.9	245.6	245.6	258.3	234.9	234.9	252.1	223.4	223.4	245.7	211.3	211.3	238.8	199.3	199.3	229.8	186.2	186.2	219.4
			SHC	193.5	228.7	263.9	188.0	223.1	258.3	182.0	217.1	252.1	175.8	210.8	245.7	169.3	204.0	238.8	161.7	195.7	229.8	153.1	186.2	219.4
		67	TC	278.8	278.8	278.8	267.8	267.8	267.8	256.2	256.2	256.2	243.2	243.2	243.2	229.8	229.8	229.8	215.6	215.6	215.6	200.3	200.3	200.3
			SHC	158.8	194.2	229.6	153.4	188.8	224.2	147.7	183.1	218.5	141.6	177.0	212.3	135.3	170.6	206.0	128.7	164.1	199.4	121.8	157.1	192.4
		72	TC	304.9	304.9	304.9	293.4	293.4	293.4	281.0	281.0	281.0	267.6	267.6	267.6	253.2	253.2	253.2	237.7	237.7	237.7	221.3	221.3	221.3
			SHC	123.5	159.3	195.0	118.4	154.1	189.7	112.8	148.5	184.2	107.1	142.6	178.2	100.8	136.4	172.0	94.4	129.9	165.4	87.6	123.0	158.5
		76	TC	—	327.7	327.7	—	315.5	315.5	—	302.4	302.4	—	288.3	288.3	—	273.1	273.1	—	256.7	256.7	—	239.4	239.4
			SHC	—	131.0	168.1	—	125.9	162.8	—	120.4	157.2	—	114.7	151.3	—	108.6	145.1	—	102.2	138.5	—	95.5	131.6
8000 CFM	EAT (wb)	58	TC	257.7	257.7	290.7	248.8	248.8	280.8	239.2	239.2	270.1	228.9	228.9	258.8	217.9	217.9	246.5	206.2	206.2	233.4	193.5	193.5	219.3
			SHC	224.7	257.7	290.7	216.8	248.8	280.8	208.3	239.2	270.1	199.2	228.9	258.8	189.4	217.9	246.5	179.0	206.2	233.4	167.8	193.5	219.3
		62	TC	262.8	262.8	285.0	252.4	252.4	278.9	241.3	241.3	272.3	229.9	229.9	265.0	218.1	218.1	256.1	206.6	206.6	242.9	193.7	193.7	228.1
			SHC	206.0	245.5	285.0	200.3	239.6	278.9	194.0	233.1	272.3	187.4	226.2	265.0	180.0	218.1	256.1	170.1	206.5	242.9	159.3	193.7	228.1
		67	TC	285.0	285.0	285.0	273.7	273.7	273.7	261.6	261.6	261.6	248.2	248.2	248.2	234.5	234.5	234.5	219.8	219.8	219.8	204.0	204.0	208.7
			SHC	166.9	206.8	246.8	161.5	201.3	241.2	155.7	195.6	235.5	149.5	189.3	229.2	143.1	183.0	222.8	136.5	176.4	216.2	129.4	169.1	208.7
		72	TC	311.5	311.5	311.5	299.5	299.5	299.5	286.7	286.7	286.7	272.9	272.9	272.9	258.0	258.0	258.0	242.1	242.1	242.1	225.0	225.0	225.0
			SHC	127.2	167.5	207.7	122.0	162.1	202.3	116.4	156.5	196.7	110.5	150.5	190.7	104.2	144.3	184.4	97.7	137.7	177.6	90.8	130.7	170.6
		76	TC	—	334.4	334.4	—	321.8	321.8	—	308.3	308.3	—	293.8	293.8	—	278.1	278.1	—	261.1	261.1	—	243.3	243.3
			SHC	—	135.6	177.0	—	130.4	171.6	—	124.9	166.0	—	119.0	160.1	—	112.9	153.8	—	106.4	147.1	—	99.6	140.2

Performance data (cont)

COOLING CAPACITIES — THIRD STAGE, FULL LOAD (20 TONS) (cont)

48LC*B SIZE 24				AMBIENT TEMPERATURE (°F)																				
				65			75			85			95			105			115			125		
				EAT (db)			EAT (db)			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	75	80	85	75	80	85
9000 CFM	EAT (wb)	58	TC	266.9	266.9	300.9	257.5	257.5	290.6	247.4	247.4	279.2	236.7	236.7	267.4	225.3	225.3	254.8	213.0	213.0	241.1	199.9	199.9	226.4
			SHC	232.7	266.9	300.9	224.4	257.5	290.6	215.4	247.4	279.2	206.0	236.7	267.4	195.9	225.3	254.8	185.1	213.0	241.1	173.4	199.9	226.4
		62	TC	268.9	268.9	304.0	258.7	258.7	297.3	247.7	247.7	290.4	236.9	236.9	278.0	225.5	225.5	264.8	213.2	213.2	250.7	200.1	200.1	235.5
			SHC	217.4	260.7	304.0	211.3	254.3	297.3	205.0	247.7	290.4	195.9	236.9	278.0	186.2	225.5	264.8	175.8	213.2	250.7	164.7	200.1	235.5
		67	TC	289.9	289.9	289.9	278.4	278.4	278.4	266.1	266.1	266.1	252.2	252.2	252.2	238.3	238.3	239.0	223.3	223.3	232.0	207.2	207.2	224.3
			SHC	174.5	218.9	263.2	169.1	213.3	257.6	163.4	207.6	251.8	157.1	201.2	245.4	150.6	194.8	239.0	143.9	187.9	232.0	136.7	180.5	224.3
		72	TC	316.7	316.7	316.7	304.4	304.4	304.4	291.1	291.1	291.1	277.0	277.0	277.0	261.8	261.8	261.8	245.4	245.4	245.4	228.1	228.1	228.1
			SHC	130.6	175.2	219.8	125.3	169.8	214.3	119.6	164.1	208.7	113.7	158.1	202.6	107.3	151.8	196.2	100.7	145.1	189.3	93.8	138.1	182.3
		76	TC	—	339.7	339.7	—	326.8	326.8	—	313.0	313.0	—	298.1	298.1	—	281.9	281.9	—	264.6	264.6	—	246.3	246.3
			SHC	—	139.8	185.4	—	134.6	180.2	—	129.0	174.4	—	123.1	168.5	—	116.9	162.1	—	110.4	155.4	—	103.5	148.4
10,000 CFM	EAT (wb)	58	TC	274.7	274.7	309.7	265.0	265.0	299.0	254.8	254.8	287.6	243.4	243.4	275.0	231.6	231.6	261.8	218.8	218.8	247.6	205.1	205.1	232.2
			SHC	239.7	274.7	309.7	231.1	265.0	299.0	222.0	254.8	287.6	211.9	243.4	275.0	201.4	231.6	261.8	190.1	218.8	247.6	177.9	205.1	232.2
		62	TC	274.7	274.7	321.5	265.3	265.3	310.7	255.1	255.1	298.9	243.6	243.6	285.8	231.8	231.8	272.1	219.0	219.0	257.4	205.2	205.2	241.5
			SHC	228.0	274.7	321.5	220.0	265.3	310.7	211.2	255.1	298.9	201.4	243.6	285.8	191.5	231.8	272.1	180.7	219.0	257.4	169.1	205.2	241.5
		67	TC	294.0	294.0	294.0	282.3	282.3	282.3	269.3	269.3	269.3	255.9	255.9	261.1	241.5	241.5	254.3	226.2	226.2	247.0	210.1	210.1	239.0
			SHC	181.9	230.5	279.0	176.5	224.9	273.5	170.4	218.9	267.3	164.3	212.7	261.1	157.8	206.0	254.3	150.8	198.9	247.0	143.4	191.2	239.0
		72	TC	320.9	320.9	320.9	308.3	308.3	308.3	294.7	294.7	294.7	280.4	280.4	280.4	264.8	264.8	264.8	248.0	248.0	248.0	230.4	230.4	230.4
			SHC	133.8	182.5	231.4	128.3	177.2	225.9	122.7	171.4	220.2	116.7	165.4	214.0	110.4	158.9	207.6	103.6	152.2	200.8	96.7	145.1	193.5
		76	TC	—	344.1	344.1	—	330.9	330.9	—	316.8	316.8	—	301.5	301.5	—	285.1	285.1	—	267.4	267.4	—	248.7	248.7
			SHC	—	143.8	193.7	—	138.5	188.4	—	133.0	182.6	—	127.0	176.6	—	120.8	170.1	—	114.2	163.4	—	107.3	156.3

LEGEND

— — Do not operate
CFM — Cubic feet per minute (supply air)
EAT (db) — Entering air temperature (dry bulb) (°F)
EAT (wb) — Entering air temperature (wet bulb) (°F)
SHC — Sensible heat capacity (1000 Btuh) Gross
TC — Total capacity (1000 Btuh) Gross

Performance data (cont)

COOLING CAPACITIES — FIRST STAGE, PART LOAD (23 TONS)

48LC*B SIZE 26				AMBIENT TEMPERATURE (°F)																				
				65			75			85			95			105			115			125		
				EAT (db)			EAT (db)			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	75	80	85	75	80	85
2100 CFM	EAT (wb)	58	TC	106.4	106.4	108.5	103.1	103.1	106.6	99.5	99.5	104.6	95.8	95.8	102.5	91.9	91.9	100.0	87.9	87.9	96.9	84.0	84.0	91.7
			SHC	86.5	97.5	108.5	84.6	95.6	106.6	82.6	93.6	104.6	80.5	91.5	102.5	78.2	89.1	100.0	75.6	86.2	96.9	71.6	81.6	91.7
		62	TC	114.8	114.8	114.8	111.2	111.2	111.2	107.3	107.3	107.3	103.4	103.4	103.4	99.0	99.0	99.0	94.3	94.3	94.3	88.9	88.9	88.9
			SHC	78.3	89.4	100.4	76.4	87.5	98.5	74.4	85.5	96.5	72.3	83.4	94.5	70.1	81.2	92.2	67.8	78.8	89.8	65.1	76.1	87.2
		67	TC	126.5	126.5	126.5	122.6	122.6	122.6	118.4	118.4	118.4	114.0	114.0	114.0	109.2	109.2	109.2	104.0	104.0	104.0	98.3	98.3	98.3
			SHC	67.9	79.0	90.0	65.9	77.0	88.1	64.0	75.0	86.1	61.8	72.9	84.0	59.7	70.7	81.8	57.2	68.3	79.5	54.7	65.7	76.8
		72	TC	139.5	139.5	139.5	135.1	135.1	135.1	130.6	130.6	130.6	125.8	125.8	125.8	120.5	120.5	120.5	114.9	114.9	114.9	108.6	108.6	108.6
			SHC	57.0	68.3	79.6	55.1	66.3	77.6	53.1	64.4	75.6	51.0	62.3	73.5	48.8	60.1	71.3	46.5	57.7	68.8	44.0	55.1	66.3
		76	TC	—	150.9	150.9	—	146.2	146.2	—	141.3	141.3	—	136.0	136.0	—	130.4	130.4	—	124.2	124.2	—	117.5	117.5
			SHC	—	59.3	70.6	—	57.3	68.6	—	55.4	66.7	—	53.3	64.5	—	51.2	62.4	—	48.8	60.1	—	46.3	57.5
2800 CFM	EAT (wb)	58	TC	115.7	115.7	128.1	112.2	112.2	125.4	109.8	109.8	119.0	106.4	106.4	114.8	101.3	101.3	114.1	97.1	97.1	109.4	92.5	92.5	104.2
			SHC	99.7	113.9	128.1	97.3	111.3	125.4	93.2	106.1	119.0	90.0	102.4	114.8	88.4	101.3	114.1	84.8	97.1	109.4	80.7	92.5	104.2
		62	TC	123.9	123.9	123.9	119.7	119.7	119.7	115.4	115.4	115.4	110.9	110.9	111.4	105.9	105.9	109.0	100.5	100.5	106.4	94.8	94.8	103.4
			SHC	89.0	103.5	118.0	87.0	101.4	115.8	84.8	99.3	113.7	82.6	97.0	111.4	80.1	94.6	109.0	77.6	91.9	106.4	74.8	89.1	103.4
		67	TC	136.4	136.4	136.4	131.8	131.8	131.8	126.9	126.9	126.9	122.0	122.0	122.0	116.5	116.5	116.5	110.6	110.6	110.6	104.1	104.1	104.1
			SHC	75.1	89.6	104.1	73.0	87.6	102.1	70.9	85.4	99.9	68.6	83.2	97.7	66.3	80.8	95.3	63.8	78.3	92.7	61.0	75.6	90.0
		72	TC	150.2	150.2	150.2	145.1	145.1	145.1	139.8	139.8	139.8	134.3	134.3	134.3	128.3	128.3	128.3	121.9	121.9	121.9	114.9	114.9	114.9
			SHC	60.8	75.5	90.2	58.7	73.4	88.0	56.6	71.3	85.9	54.4	69.0	83.7	52.1	66.7	81.3	49.6	64.2	78.8	46.9	61.5	76.1
		76	TC	—	162.1	162.1	—	156.6	156.6	—	150.9	150.9	—	144.9	144.9	—	138.5	138.5	—	131.5	131.5	—	123.9	123.9
			SHC	—	63.8	78.8	—	61.7	76.7	—	59.6	74.6	—	57.4	72.4	—	55.1	70.1	—	52.7	67.7	—	50.0	64.9
3400 CFM	EAT (wb)	58	TC	123.7	123.7	139.4	121.4	121.4	136.7	119.0	119.0	133.8	116.3	116.3	130.7	113.3	113.3	127.0	109.9	109.9	123.1	106.0	106.0	118.6
			SHC	107.9	123.7	139.4	106.2	121.4	136.7	104.1	119.0	133.8	102.0	116.3	130.7	99.5	113.3	127.0	96.7	109.9	123.1	93.5	106.0	118.6
		62	TC	129.3	129.3	131.3	126.1	126.1	130.4	122.8	122.8	129.4	119.0	119.0	128.1	115.1	115.1	126.8	111.0	111.0	124.9	106.3	106.3	122.4
			SHC	96.9	114.1	131.3	95.9	113.2	130.4	95.1	112.2	129.4	93.9	111.1	128.1	92.6	109.7	126.8	91.2	108.0	124.9	89.1	105.7	122.4
		67	TC	141.3	141.3	141.3	137.5	137.5	137.5	133.6	133.6	133.6	129.5	129.5	129.5	124.9	124.9	124.9	119.8	119.8	119.8	114.3	114.3	114.3
			SHC	79.5	96.8	114.2	78.6	95.9	113.2	77.7	95.0	112.3	76.6	94.0	111.2	75.5	92.8	110.1	74.2	91.5	108.7	72.6	89.9	107.2
		72	TC	154.7	154.7	154.7	150.5	150.5	150.5	146.1	146.1	146.1	141.4	141.4	141.4	136.3	136.3	136.3	130.7	130.7	130.7	124.5	124.5	124.5
			SHC	61.6	79.2	96.6	60.8	78.3	95.7	59.9	77.3	94.8	58.9	76.3	93.8	57.8	75.2	92.6	56.6	73.9	91.3	55.0	72.3	89.7
		76	TC	—	166.3	166.3	—	161.7	161.7	—	156.8	156.8	—	151.6	151.6	—	146.1	146.1	—	139.9	139.9	—	133.2	133.2
			SHC	—	64.7	83.0	—	63.9	82.1	—	63.0	81.1	—	62.0	80.0	—	60.8	78.8	—	59.6	77.4	—	58.1	75.9
4050 CFM	EAT (wb)	58	TC	130.7	130.7	147.3	128.0	128.0	144.2	125.3	125.3	141.0	122.3	122.3	137.4	118.9	118.9	133.4	115.1	115.1	129.0	110.8	110.8	123.9
			SHC	114.0	130.7	147.3	111.8	128.0	144.2	109.6	125.3	141.0	107.2	122.3	137.4	104.3	118.9	133.4	101.1	115.1	129.0	97.5	110.8	123.9
		62	TC	133.6	133.6	144.6	130.2	130.2	143.4	126.7	126.7	142.1	122.9	122.9	140.4	119.0	119.0	138.5	115.1	115.1	133.8	110.9	110.9	128.5
			SHC	104.6	124.6	144.6	103.5	123.5	143.4	102.4	122.3	142.1	101.1	120.7	140.4	99.5	119.0	138.5	96.5	115.1	133.8	93.2	110.9	128.5
		67	TC	145.3	145.3	145.3	141.3	141.3	141.3	137.1	137.1	137.1	132.6	132.6	132.6	127.7	127.7	127.7	122.4	122.4	122.4	116.5	116.5	117.5
			SHC	84.4	104.6	124.9	83.5	103.7	123.9	82.5	102.7	122.9	81.4	101.6	121.8	80.1	100.4	120.6	78.8	99.0	119.1	77.2	97.3	117.5
		72	TC	159.1	159.1	159.1	154.5	154.5	154.5	149.9	149.9	149.9	144.8	144.8	144.8	139.3	139.3	139.3	133.4	133.4	133.4	126.8	126.8	126.8
			SHC	63.7	84.0	104.4	62.8	83.2	103.5	61.8	82.2	102.5	60.8	81.1	101.4	59.7	80.0	100.2	58.3	78.6	98.8	56.7	77.0	97.2
		76	TC	—	170.9	170.9	—	165.9	165.9	—	160.7	160.7	—	155.1	155.1	—	149.2	149.2	—	142.7	142.7	—	135.6	135.6
			SHC	—	67.4	88.4	—	66.5	87.5	—	65.5	86.4	—	64.4	85.2	—	63.3	84.0	—	62.0	82.6	—	60.5	81.0
4750 CFM	EAT (wb)	58	TC	136.9	136.9	154.3	133.9	133.9	150.9	130.8	130.8	147.2	127.4	127.4	143.2	123.7	123.7	138.9	119.5	119.5	134.1	114.9	114.9	128.6
			SHC	119.3	136.9	154.3	116.9	133.9	150.9	114.4	130.8	147.2	111.5	127.4	143.2	108.5	123.7	138.9	105.0	119.5	134.1	101.0	114.9	128.6
		62	TC	137.7	137.7	157.3	134.3	134.3	155.4	130.9	130.9	152.9	127.5	127.5	148.7	123.8	123.8	144.1	119.6	119.6	139.0	114.9	114.9	133.3
			SHC	112.0	134.6	157.3	110.7	133.1	155.4	108.9	130.9	152.9	106.4	127.5	148.7	103.4	123.8	144.1	100.2	119.6	139.0	96.5	114.9	133.3
		67	TC	148.6	148.6	148.6	144.2	144.2	144.2	139.8	139.8	139.8	135.1	135.1	135.1	130.1	130.1	131.2	124.5	124.5	129.7	118.5	118.5	127.8
			SHC	89.3	112.6	135.8	88.3	111.5	134.8	87.4	110.6	133.8	86.2	109.4	132.6	84.9	108.1	131.2	83.5	106.6	129.7	81.8	104.8	127.8
		72	TC	162.5	162.5	162.5	157.8	157.8	157.8	152.8	152.8	152.8	147.4	147.4	147.4	141.8	141.8	141.8	135.5	135.5	135.5	128.7	128.7	128.7
			SHC	65.7	89.0	112.4	64.7	88.0	111.4	63.8	87.1	110.4	62.7	85.9	109.2	61.4	84.7	107.9	60.1	83.3	106.5	58.5	81.6	104.8
		76	TC	—	174.5	174.5	—	169.3	169.3	—	163.7	163.7	—	158.0	158.0	—	151.7	151.7	—	144.9	144.9	—	137.5	137.5
			SHC	—	70.0	93.9	—	69.0	92.9	—	68.1	91.8	—	67.0	90.7	—	65.7	89.4	—	64.4	87.9	—	62.8	86.2
5400 CFM	EAT (wb)	58	TC	141.7	141.7	159.8	138.5	138.5	156.0	135.0	135.0	152.1	131.4	131.4	147.8	127.4	127.4	143.1	122.9	122.9	138.0	118.0	118.0	132.1
			SHC	123.4	141.7	159.8	120.8	138.5	156.0	118.1	135.0	152.1	115.1	131.4	147.8	111.7	127.4	143.1	107.9	122.9	138.0	103.7	118.0	132.1
		62	TC	141.8	141.8	166.0	138.5	138.5	162.0	135.1	135.1	157.9	131.5	131.5	153.4	127.5	127.5	148.5	123.0	123.0	143.0	118.0	118.0	137.0
			SHC	117.5	141.8	166.0	115.1	138.5	162.0	112.4	135.1	157.9	109.6	131.5	153.4	106.5	127.5	148.5	103.0	123.0	143.0	99.1	118.0	137.0
		67	TC	150.8	150.8	150.8	146.4	146.4	146.4	141.9	141.9	143.3	137.0	137.0	142.0	131.8	131.8	140.6	126.2	126.2	138.8	120.0	120.0	136.7
			SHC	93.7	119.5	145.5	92.6	118.6	144.4	91.7	117.5	143.3	90.4	116.2	142.0	89.1	114.9	140.6	87.7	113.2	138.8	85.8	111.2	136.7
		72	TC	165.0	165.0	165.0	160.0	160.0	160.0	154.8	154.8	154.8	149.3	149.3	149.3	143.4	143.4	143.4	137.0	137.0	137.0	130.0	130.0	130.0
			SHC	67.4	93.4	119.3	66.4	92.4	118.4	65.4	91.4	117.3	64.3	90.2	116.0	63.0	88.9	114.8	61.6	87.5	113.2	60.1	85.8	111.5
		76	TC	—	177.1	177.1	—	171.6	171.6	—	165.9	165.9	—	159.9	159.9	—	153.4	153.4	—	146.4	146.4	—	138.8	138.8
			SHC	—	72.2	98.8	—	71.3	97.8	—	70.2	96.6	—	69.1	95.4	—	67.9	94.1	—	66.4	92.5	—	64.8	90.8

Performance data (cont)

COOLING CAPACITIES — FIRST STAGE, PART LOAD (23 TONS) (cont)

48LC*B SIZE 26				AMBIENT TEMPERATURE (°F)																				
				65			75			85			95			105			115			125		
				EAT (db)			EAT (db)			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	75	80	85	75	80	85
6100 CFM	EAT (wb)	58	TC	146.0	146.0	164.8	142.5	142.5	160.7	138.9	138.9	156.5	135.0	135.0	151.9	130.7	130.7	146.9	126.1	126.1	141.5	120.7	120.7	135.3
			SHC	127.2	146.0	164.8	124.4	142.5	160.7	121.4	138.9	156.5	118.2	135.0	151.9	114.6	130.7	146.9	110.7	126.1	141.5	106.2	120.7	135.3
		62	TC	146.2	146.2	171.2	142.6	142.6	166.9	139.0	139.0	162.4	135.1	135.1	157.7	130.8	130.8	152.5	126.1	126.1	146.7	120.8	120.8	140.3
			SHC	121.0	146.2	171.2	118.4	142.6	166.9	115.5	139.0	162.4	112.6	135.1	157.7	109.2	130.8	152.5	105.5	126.1	146.7	101.3	120.8	140.3
		67	TC	153.0	153.0	155.4	148.4	148.4	154.2	143.7	143.7	153.1	138.7	138.7	151.6	133.5	133.5	150.1	127.7	127.7	148.0	121.6	121.6	145.4
			SHC	98.1	126.8	155.4	97.1	125.7	154.2	95.9	124.5	153.1	94.8	123.2	151.6	93.4	121.7	150.1	91.7	119.8	148.0	89.7	117.6	145.4
		72	TC	167.1	167.1	167.1	161.9	161.9	161.9	156.6	156.6	156.6	150.8	150.8	150.8	144.8	144.8	144.8	138.3	138.3	138.3	131.0	131.0	131.0
			SHC	69.0	97.8	126.6	68.1	96.8	125.5	67.1	95.6	124.3	65.9	94.5	123.1	64.6	93.2	121.7	63.2	91.7	120.1	61.6	90.0	118.4
		76	TC	—	179.3	179.3	—	173.6	173.6	—	167.8	167.8	—	161.6	161.6	—	154.9	154.9	—	147.8	147.8	—	139.9	139.9
			SHC	—	74.5	103.7	—	73.5	102.7	—	72.4	101.5	—	71.3	100.2	—	70.0	98.9	—	68.5	97.3	—	66.9	95.4
6750 CFM	EAT (wb)	58	TC	149.4	149.4	168.6	145.8	145.8	164.4	142.0	142.0	159.9	137.9	137.9	155.1	133.4	133.4	150.0	128.4	128.4	144.2	122.9	122.9	137.8
			SHC	130.2	149.4	168.6	127.1	145.8	164.4	124.0	142.0	159.9	120.6	137.9	155.1	116.9	133.4	150.0	112.7	128.4	144.2	108.0	122.9	137.8
		62	TC	149.5	149.5	175.2	145.9	145.9	170.7	142.1	142.1	166.0	138.0	138.0	161.0	133.5	133.5	155.6	128.5	128.5	149.6	122.9	122.9	142.8
			SHC	123.8	149.5	175.2	121.0	145.9	170.7	118.1	142.1	166.0	114.9	138.0	161.0	111.3	133.5	155.6	107.4	128.5	149.6	103.1	122.9	142.8
		67	TC	154.6	154.6	164.3	150.1	150.1	163.0	145.2	145.2	161.6	140.2	140.2	160.0	134.8	134.8	158.0	129.2	129.2	155.5	123.1	123.1	151.9
			SHC	102.1	133.2	164.3	101.0	132.0	163.0	99.8	130.7	161.6	98.5	129.3	160.0	97.0	127.5	158.0	95.2	125.4	155.5	92.7	122.4	151.9
		72	TC	168.7	168.7	168.7	163.4	163.4	163.4	157.9	157.9	157.9	152.1	152.1	152.1	145.9	145.9	145.9	139.1	139.1	139.1	131.8	131.8	131.8
			SHC	70.6	101.8	133.0	69.6	100.7	131.9	68.5	99.6	130.7	67.4	98.4	129.4	66.1	97.0	127.9	64.6	95.5	126.4	63.0	93.8	124.5
		76	TC	—	181.0	181.0	—	175.2	175.2	—	169.2	169.2	—	162.7	162.7	—	156.0	156.0	—	148.7	148.7	—	140.7	140.7
			SHC	—	76.5	108.2	—	75.5	107.1	—	74.4	105.9	—	73.2	104.6	—	71.9	103.2	—	70.4	101.5	—	68.7	99.5

LEGEND

— — Do not operate
CFM — Cubic feet per minute (supply air)
EAT (db) — Entering air temperature (dry bulb) (°F)
EAT (wb) — Entering air temperature (wet bulb) (°F)
SHC — Sensible heat capacity (1000 Btuh) Gross
TC — Total capacity (1000 Btuh) Gross

Performance data (cont)

COOLING CAPACITIES — SECOND STAGE, PART LOAD (23 TONS)

48LC*B SIZE 26				AMBIENT TEMPERATURE (°F)																					
				65			75			85			95			105			115			125		
				EAT (db)			EAT (db)			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	75	80	85	75	80	85
2400 CFM	EAT (wb)	58	TC	—	—	—	—	—	—	133.4	133.4	133.4	128.6	128.6	128.6	123.4	123.4	124.9	117.7	117.7	121.6	111.2	111.2	117.8
			SHC	—	—	—	—	—	—	105.7	118.3	130.8	102.9	115.4	128.0	99.8	112.4	124.9	96.5	109.0	121.6	92.8	105.3	117.8
		62	TC	153.3	153.3	153.3	148.7	148.7	148.7	143.9	143.9	143.9	138.8	138.8	138.8	133.2	133.2	133.2	126.9	126.9	126.9	119.9	119.9	119.9
			SHC	101.8	114.4	126.9	99.2	111.7	124.3	96.4	109.0	121.6	93.6	106.2	118.8	90.6	103.2	115.7	87.3	99.8	112.3	83.6	96.1	108.7
		67	TC	169.0	169.0	169.0	163.9	163.9	163.9	158.6	158.6	158.6	153.0	153.0	153.0	146.7	146.7	146.7	139.9	139.9	139.9	132.3	132.3	132.3
			SHC	90.1	102.7	115.3	87.4	100.0	112.6	84.6	97.3	109.9	81.8	94.4	107.1	78.7	91.3	103.9	75.4	87.9	100.5	71.7	84.2	96.9
		72	TC	186.4	186.4	186.4	180.8	180.8	180.8	174.9	174.9	174.9	168.7	168.7	168.7	161.9	161.9	161.9	154.2	154.2	154.2	145.9	145.9	145.9
			SHC	77.7	90.6	103.4	75.0	87.8	100.7	72.2	85.1	98.0	69.3	82.2	95.1	66.2	79.1	91.9	62.9	75.8	88.6	59.4	72.2	84.9
		76	TC	—	201.6	201.6	—	195.5	195.5	—	189.0	189.0	—	182.1	182.1	—	174.6	174.6	—	166.5	166.5	—	157.5	157.5
			SHC	—	80.3	93.2	—	77.6	90.5	—	74.8	87.7	—	71.9	84.7	—	68.7	81.6	—	65.4	78.3	—	61.8	74.7
3200 CFM	EAT (wb)	58	TC	156.1	156.1	160.3	151.0	151.0	157.3	145.9	145.9	154.2	140.3	140.3	150.9	134.5	134.5	147.4	129.7	129.7	138.9	123.6	123.6	131.6
			SHC	127.5	143.9	160.3	124.6	141.0	157.3	121.6	138.0	154.2	118.5	134.7	150.9	115.1	131.2	147.4	109.1	124.0	138.9	103.5	117.6	131.6
		62	TC	168.0	168.0	168.0	162.4	162.4	162.4	156.7	156.7	156.7	150.6	150.6	150.6	144.0	144.0	144.0	136.8	136.8	136.8	128.7	128.7	128.7
			SHC	115.1	131.6	148.0	112.2	128.7	145.1	109.2	125.7	142.2	106.2	122.6	139.0	102.8	119.2	135.6	99.2	115.6	132.0	95.3	111.6	128.0
		67	TC	185.0	185.0	185.0	178.8	178.8	178.8	172.5	172.5	172.5	165.7	165.7	165.7	158.4	158.4	158.4	150.4	150.4	150.4	141.7	141.7	141.7
			SHC	99.5	116.0	132.5	96.5	113.0	129.5	93.5	110.0	126.6	90.3	106.9	123.3	87.0	103.4	119.9	83.4	99.8	116.3	79.5	95.9	112.4
		72	TC	203.6	203.6	203.6	196.8	196.8	196.8	189.7	189.7	189.7	182.0	182.0	182.0	174.0	174.0	174.0	165.3	165.3	165.3	155.6	155.6	155.6
			SHC	83.1	99.9	116.9	80.1	97.0	113.9	77.1	93.9	110.8	73.9	90.7	107.4	70.6	87.3	103.9	67.0	83.7	100.3	63.1	79.8	96.4
		76	TC	—	219.4	219.4	—	212.0	212.0	—	204.3	204.3	—	196.2	196.2	—	187.4	187.4	—	177.9	177.9	—	167.5	167.5
			SHC	—	86.2	103.4	—	83.3	100.4	—	80.2	97.4	—	77.1	94.3	—	73.7	90.9	—	70.2	87.4	—	66.4	83.6
4050 CFM	EAT (wb)	58	TC	161.9	161.9	177.5	154.2	154.2	171.8	146.4	146.4	166.1	139.1	139.1	158.2	131.4	131.4	149.9	123.2	123.2	140.8	114.3	114.3	131.0
			SHC	137.6	157.6	177.5	132.1	151.9	171.8	126.7	146.4	166.1	120.0	139.1	158.2	113.1	131.4	149.9	105.6	123.2	140.8	97.5	114.3	131.0
		62	TC	174.1	174.1	174.1	165.7	165.7	165.7	157.1	157.1	157.1	148.1	148.1	148.1	138.6	138.6	141.7	128.6	128.6	135.5	117.8	117.8	129.0
			SHC	123.0	143.4	163.8	117.8	138.1	158.4	112.3	132.7	153.0	106.9	127.1	147.4	101.1	121.4	141.7	95.2	115.3	135.5	88.7	108.9	129.0
		67	TC	193.0	193.0	193.0	183.8	183.8	183.8	174.4	174.4	174.4	164.7	164.7	164.7	154.4	154.4	154.4	143.4	143.4	143.4	131.5	131.5	131.5
			SHC	104.5	125.0	145.4	99.2	119.6	140.0	93.8	114.2	134.6	88.2	108.6	129.0	82.5	102.9	123.2	76.5	96.9	117.3	70.3	90.7	111.0
		72	TC	213.2	213.2	213.2	203.4	203.4	203.4	193.2	193.2	193.2	182.5	182.5	182.5	171.4	171.4	171.4	159.6	159.6	159.6	146.9	146.9	146.9
			SHC	85.3	106.1	126.8	80.0	100.6	121.3	74.6	95.2	115.8	69.0	89.6	110.2	63.3	83.9	104.4	57.4	77.9	98.5	51.2	71.7	92.2
		76	TC	—	230.4	230.4	—	220.0	220.0	—	209.1	209.1	—	197.8	197.8	—	186.0	186.0	—	173.5	173.5	—	160.0	160.0
			SHC	—	90.2	111.9	—	84.9	106.7	—	79.6	101.3	—	74.1	95.8	—	68.4	90.0	—	62.5	83.9	—	56.4	77.5
4850 CFM	EAT (wb)	58	TC	172.4	172.4	194.8	165.0	165.0	186.7	157.5	157.5	178.5	149.6	149.6	169.9	141.2	141.2	160.8	132.3	132.3	151.0	122.7	122.7	140.4
			SHC	150.0	172.4	194.8	143.2	165.0	186.7	136.4	157.5	178.5	129.3	149.6	169.9	121.7	141.2	160.8	113.7	132.3	151.0	105.0	122.7	140.4
		62	TC	182.0	182.0	182.0	173.1	173.1	176.1	164.0	164.0	170.5	154.5	154.5	164.7	144.7	144.7	158.5	134.4	134.4	151.9	123.3	123.3	144.5
			SHC	134.1	157.9	181.7	128.6	152.4	176.1	123.0	146.7	170.5	117.3	141.0	164.7	111.3	134.9	158.5	105.0	128.4	151.9	98.3	121.4	144.5
		67	TC	200.9	200.9	200.9	191.3	191.3	191.3	181.1	181.1	181.1	170.7	170.7	170.7	159.8	159.8	159.8	148.2	148.2	148.2	135.8	135.8	135.8
			SHC	111.9	135.8	159.7	106.5	130.4	154.2	100.8	124.6	148.5	95.1	119.0	142.8	89.2	113.1	136.9	83.1	107.0	130.7	76.7	100.5	124.3
		72	TC	221.3	221.3	221.3	210.9	210.9	210.9	200.2	200.2	200.2	189.0	189.0	189.0	177.2	177.2	177.2	164.8	164.8	164.8	151.4	151.4	151.4
			SHC	89.1	113.3	137.4	83.7	107.7	131.9	78.1	102.2	126.3	72.4	96.5	120.5	66.5	90.6	114.7	60.5	84.5	108.5	54.2	78.1	102.1
		76	TC	—	238.7	238.7	—	227.6	227.6	—	216.2	216.2	—	204.3	204.3	—	191.9	191.9	—	178.6	178.6	—	164.6	164.6
			SHC	—	94.8	120.4	—	89.3	114.8	—	83.8	109.0	—	78.1	103.2	—	72.3	97.2	—	66.2	91.0	—	60.0	84.5
5700 CFM	EAT (wb)	58	TC	183.0	183.0	206.6	175.1	175.1	198.0	167.0	167.0	189.2	158.5	158.5	179.9	149.7	149.7	170.1	140.1	140.1	159.6	129.8	129.8	148.3
			SHC	159.3	183.0	206.6	152.2	175.1	198.0	144.8	167.0	189.2	137.2	158.5	179.9	129.1	149.7	170.1	120.5	140.1	159.6	111.2	129.8	148.3
		62	TC	188.7	188.7	199.2	179.4	179.4	193.3	170.0	170.0	187.4	160.4	160.4	181.1	150.4	150.4	174.2	140.2	140.2	166.3	130.0	130.0	154.6
			SHC	144.7	172.0	199.2	139.0	166.2	193.3	133.3	160.3	187.4	127.2	154.1	181.1	121.0	147.6	174.2	114.1	140.2	166.3	105.2	130.0	154.6
		67	TC	207.2	207.2	207.2	197.0	197.0	197.0	186.5	186.5	186.5	175.4	175.4	175.4	164.1	164.1	164.1	152.1	152.1	152.1	139.2	139.2	139.2
			SHC	118.9	146.3	173.7	113.2	140.7	168.1	107.5	134.9	162.3	101.7	129.0	156.4	95.6	123.0	150.4	89.5	116.8	144.2	83.0	110.3	137.6
		72	TC	227.8	227.8	227.8	216.7	216.7	216.7	205.5	205.5	205.5	193.9	193.9	193.9	181.6	181.6	181.6	168.7	168.7	168.7	154.9	154.9	154.9
			SHC	92.4	120.1	147.8	86.9	114.6	142.2	81.2	108.8	136.5	75.5	103.1	130.7	69.5	97.0	124.6	63.4	90.9	118.4	56.9	84.4	111.8
		76	TC	—	245.2	245.2	—	233.6	233.6	—	221.7	221.7	—	209.3	209.3	—	196.5	196.5	—	182.6	182.6	—	168.1	168.1
			SHC	—	98.9	127.6	—	93.3	122.0	—	87.7	116.2	—	81.9	110.3	—	76.0	104.2	—	69.8	98.0	—	63.5	91.5
6500 CFM	EAT (wb)	58	TC	191.2	191.2	215.9	182.9	182.9	206.8	174.4	174.4	197.4	165.5	165.5	187.7	156.0	156.0	177.3	146.0	146.0	166.2	135.1	135.1	154.3
			SHC	166.6	191.2	215.9	159.1	182.9	206.8	151.3	174.4	197.4	143.3	165.5	187.7	134.7	156.0	177.3	125.7	146.0	166.2	116.0	135.1	154.3
		62	TC	194.1	194.1	214.3	184.7	184.7	208.1	175.2	175.2	201.4	165.5	165.5	195.1	156.2	156.2	184.6	146.1	146.1	173.2	135.3	135.3	160.9
			SHC	153.9	184.1	214.3	148.0	178.0	208.1	142.0	171.7	201.4	135.9	165.5	195.1	127.8	156.2	184.6	119.0	146.1	173.2	109.7	135.3	160.9
		67	TC	211.6	211.6	211.6	201.0	201.0	201.0	190.1	190.1	190.1	178.8	178.8	178.8	167.2	167.2	167.2	154.9	154.9	156.0	141.9	141.9	149.4
			SHC	124.8	155.4	186.0	119.1	149.7	180.3	113.3	143.9	174.4	107.3	137.9	168.5	101.3	131.8	162.4	95.1	125.6	156.0	88.5	119.0	149.4
		72	TC	232.3	232.3	232.3	221.0	221.0	221.0	209.4	209.4	209.4	197.4	197.4	197.4	184.9	184.9	184.9	171.5	171.5	171.5	157.4	157.4	157.4
			SHC	95.3	126.1	156.9	89.6	120.4	151.2	83.9	114.7	145.4	78.0	108.7	139.4	72.0	102.7	133.4	65.8	96.4	127.0	59.3	89.9	120.4
		76	TC	—	249.8	249.8	—	237.9	237.9	—	225.7	225.7	—	213.0	213.0	—	199.8	199.8	—	185.4	185.4	—	170.6	170.6
			SHC	—	102.2	134.1	—	96.6	128.3	—	90.9	122.6	—	85.1	116.6	—	79.1	110.6	—	72.8	104.1	—	66.4	97.6

Performance data (cont)

COOLING CAPACITIES — SECOND STAGE, PART LOAD (23 TONS) (cont)

48LC*B SIZE 26				AMBIENT TEMPERATURE (°F)																				
				65			75			85			95			105			115			125		
				EAT (db)			EAT (db)			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	75	80	85	75	80	85
7300 CFM	EAT (wb)	58	TC	198.1	198.1	223.5	189.4	189.4	214.0	180.5	180.5	204.3	171.0	171.0	193.8	161.2	161.2	183.0	150.7	150.7	171.6	139.5	139.5	159.2
			SHC	172.7	198.1	223.5	164.8	189.4	214.0	156.8	180.5	204.3	148.2	171.0	193.8	139.3	161.2	183.0	130.0	150.7	171.6	119.9	139.5	159.2
		62	TC	199.1	199.1	227.8	189.3	189.3	222.2	180.7	180.7	212.4	171.2	171.2	201.6	161.4	161.4	190.5	150.9	150.9	178.7	139.6	139.6	165.8
			SHC	162.1	195.0	227.8	156.6	189.3	222.2	148.9	180.7	212.4	140.7	171.2	201.6	132.2	161.4	190.5	123.1	150.9	178.7	113.4	139.6	165.8
		67	TC	215.2	215.2	215.2	204.3	204.3	204.3	193.2	193.2	193.2	181.7	181.7	181.7	170.0	170.0	173.7	157.4	157.4	167.4	144.1	144.1	160.4
			SHC	130.6	164.2	197.9	124.7	158.4	192.1	119.0	152.6	186.2	112.9	146.5	180.2	106.8	140.2	173.7	100.4	134.0	167.4	93.7	127.0	160.4
		72	TC	236.0	236.0	236.0	224.4	224.4	224.4	212.6	212.6	212.6	200.3	200.3	200.3	187.4	187.4	187.4	173.8	173.8	173.8	159.4	159.4	159.4
			SHC	97.8	131.7	165.7	92.0	126.0	159.9	86.3	120.2	154.1	80.4	114.3	148.0	74.3	108.1	141.9	68.1	101.8	135.4	61.5	95.2	128.8
		76	TC	—	253.6	253.6	—	241.4	241.4	—	228.9	228.9	—	216.1	216.1	—	202.5	202.5	—	187.8	187.8	—	172.7	172.7
			SHC	—	105.4	140.3	—	99.7	134.6	—	94.0	128.7	—	88.1	122.8	—	82.1	116.6	—	75.8	110.1	—	69.3	103.5
8100 CFM	EAT (wb)	58	TC	204.0	204.0	230.1	194.9	194.9	220.2	185.6	185.6	209.9	175.8	175.8	199.2	165.7	165.7	188.0	154.8	154.8	176.1	143.2	143.2	163.3
			SHC	177.9	204.0	230.1	169.7	194.9	220.2	161.3	185.6	209.9	152.4	175.8	199.2	143.3	165.7	188.0	133.6	154.8	176.1	123.1	143.2	163.3
		62	TC	204.1	204.1	238.9	195.1	195.1	228.7	185.8	185.8	218.3	176.0	176.0	207.2	165.8	165.8	195.7	154.9	154.9	183.4	143.3	143.3	170.1
			SHC	169.2	204.1	238.9	161.4	195.1	228.7	153.3	185.8	218.3	144.7	176.0	207.2	135.9	165.8	195.7	126.6	154.9	183.4	116.5	143.3	170.1
		67	TC	218.1	218.1	218.1	207.1	207.1	207.1	195.9	195.9	197.6	184.3	184.3	191.3	172.2	172.2	185.0	159.5	159.5	178.1	146.2	146.2	170.6
			SHC	135.9	172.6	209.3	130.1	166.8	203.6	124.2	160.9	197.6	118.1	154.7	191.3	111.9	148.5	185.0	105.4	141.8	178.1	98.6	134.6	170.6
		72	TC	239.1	239.1	239.1	227.4	227.4	227.4	215.2	215.2	215.2	202.6	202.6	202.6	189.5	189.5	189.5	175.7	175.7	175.7	161.0	161.0	161.0
			SHC	100.1	137.1	174.0	94.4	131.3	168.2	88.6	125.5	162.3	82.7	119.4	156.2	76.5	113.3	150.1	70.2	106.9	143.5	63.6	100.2	136.8
		76	TC	—	256.7	256.7	—	244.3	244.3	—	231.7	231.7	—	218.5	218.5	—	204.7	204.7	—	189.7	189.7	—	174.4	174.4
			SHC	—	108.3	146.3	—	102.7	140.4	—	96.9	134.6	—	91.0	128.6	—	84.9	122.4	—	78.5	115.8	—	72.0	109.2

LEGEND

— — Do not operate
CFM — Cubic feet per minute (supply air)
EAT (db) — Entering air temperature (dry bulb) (°F)
EAT (wb) — Entering air temperature (wet bulb) (°F)
SHC — Sensible heat capacity (1000 Btuh) Gross
TC — Total capacity (1000 Btuh) Gross

Performance data (cont)

COOLING CAPACITIES — THIRD STAGE, FULL LOAD (23 TONS)

48LC*B SIZE 26				AMBIENT TEMPERATURE (°F)																					
				65			75			85			95			105			115			125		
				EAT (db)			EAT (db)			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	75	80	85	75	80	85
4500 CFM	EAT (wb)	58	TC	—	—	—	—	—	—	222.4	222.4	225.8	214.3	214.3	221.0	205.5	205.5	215.9	195.9	195.9	210.1	185.3	185.3	203.5
			SHC	—	—	—	—	—	—	180.3	203.0	225.8	175.6	198.3	221.0	170.6	193.2	215.9	165.0	187.6	210.1	158.7	181.2	203.5
		62	TC	254.4	254.4	254.4	246.7	246.7	246.7	238.5	238.5	238.5	229.7	229.7	229.7	220.1	220.1	220.1	209.4	209.4	209.4	197.6	197.6	197.6
			SHC	171.3	194.0	216.8	167.1	189.8	212.6	162.6	185.4	208.3	158.0	180.8	203.5	152.9	175.7	198.5	147.4	170.2	193.0	141.5	164.3	187.0
		67	TC	278.8	278.8	278.8	270.3	270.3	270.3	261.3	261.3	261.3	251.7	251.7	251.7	241.4	241.4	241.4	230.0	230.0	230.0	217.4	217.4	217.4
			SHC	149.1	172.0	195.0	144.8	167.7	190.7	140.4	163.3	186.2	135.7	158.6	181.5	130.7	153.7	176.6	125.4	148.3	171.2	119.6	142.4	165.4
		72	TC	305.6	305.6	305.6	295.8	295.8	295.8	286.3	286.3	286.3	275.9	275.9	275.9	264.7	264.7	264.7	252.3	252.3	252.3	238.7	238.7	238.7
			SHC	125.2	149.4	173.5	120.9	144.9	168.9	116.8	140.6	164.4	112.4	136.0	159.6	107.6	131.1	154.6	102.5	125.8	149.2	96.8	120.0	143.3
		76	TC	—	328.6	328.6	—	318.8	318.8	—	308.5	308.5	—	297.3	297.3	—	285.0	285.0	—	271.7	271.7	—	257.0	257.0
			SHC	—	129.4	153.5	—	125.4	149.5	—	121.2	145.3	—	116.7	140.9	—	111.9	136.1	—	106.9	130.9	—	101.3	125.4
5100 CFM	EAT (wb)	58	TC	245.9	245.9	250.9	238.4	238.4	246.5	230.6	230.6	241.9	222.1	222.1	236.8	212.9	212.9	231.3	203.1	203.1	224.9	192.7	192.7	217.0
			SHC	200.1	225.4	250.9	195.7	221.1	246.5	191.2	216.5	241.9	186.3	211.6	236.8	181.1	206.1	231.3	175.1	200.1	224.9	168.2	192.7	217.0
		62	TC	263.3	263.3	263.3	255.1	255.1	255.1	246.3	246.3	246.3	236.9	236.9	236.9	226.8	226.8	226.8	215.7	215.7	215.7	203.5	203.5	203.5
			SHC	180.1	205.5	231.1	175.7	201.2	226.7	171.1	196.7	222.1	166.3	191.8	217.2	161.2	186.6	212.1	155.6	181.1	206.5	149.7	175.0	200.5
		67	TC	288.0	288.0	288.0	279.0	279.0	279.0	269.5	269.5	269.5	259.4	259.4	259.4	248.6	248.6	248.6	236.5	236.5	236.5	223.3	223.3	223.3
			SHC	154.9	180.6	206.2	150.5	176.2	201.8	146.1	171.7	197.3	141.3	166.9	192.6	136.3	161.9	187.5	130.7	156.4	181.9	124.9	150.4	176.0
		72	TC	315.8	315.8	315.8	305.6	305.6	305.6	295.4	295.4	295.4	284.3	284.3	284.3	272.4	272.4	272.4	259.3	259.3	259.3	244.8	244.8	244.8
			SHC	128.8	155.4	181.9	124.4	150.8	177.3	120.1	146.4	172.8	115.4	141.7	167.8	110.5	136.6	162.7	105.1	131.1	157.2	99.4	125.3	151.2
		76	TC	—	339.3	339.3	—	329.0	329.0	—	317.9	317.9	—	306.0	306.0	—	293.0	293.0	—	278.9	278.9	—	263.4	263.4
			SHC	—	133.3	160.6	—	129.2	156.5	—	124.9	152.2	—	120.3	147.7	—	115.4	142.7	—	110.2	137.6	—	104.6	131.9
5650 CFM	EAT (wb)	58	TC	245.1	245.1	257.2	234.2	234.2	249.4	222.8	222.8	241.3	211	211	232.7	198.7	198.7	223.4	186.0	186.0	212.6	173.2	173.2	198.5
			SHC	201.7	229.5	257.2	194.0	221.7	249.4	186.1	213.7	241.3	177.8	205.3	232.7	169.1	196.3	223.4	159.4	186.0	212.6	147.8	173.2	198.5
		62	TC	263.5	263.5	263.5	251.6	251.6	251.6	239.3	239.3	239.3	226.3	226.3	226.3	212.6	212.6	212.6	197.9	197.9	197.9	182.2	182.2	186.4
			SHC	181.0	208.8	236.7	173.3	201.1	229.0	165.4	193.2	221.1	157.3	185.2	213.0	148.9	176.8	204.7	140.1	167.9	195.8	130.8	158.6	186.4
		67	TC	290.6	290.6	290.6	277.5	277.5	277.5	264.5	264.5	264.5	250.8	250.8	250.8	236.2	236.2	236.2	220.5	220.5	220.5	203.3	203.3	203.3
			SHC	155.2	183.3	211.4	147.3	175.4	203.4	139.5	167.6	195.6	131.5	159.5	187.5	123.1	151.1	179.1	114.5	142.4	170.3	105.2	133.1	161.0
		72	TC	319.9	319.9	319.9	306.5	306.5	306.5	292.6	292.6	292.6	277.9	277.9	277.9	262.1	262.1	262.1	245.2	245.2	245.2	227.1	227.1	227.1
			SHC	128.2	157.0	185.7	120.7	149.4	178.1	113.0	141.7	170.2	105.1	133.6	162.1	96.7	125.2	153.7	88.1	116.5	144.9	79.1	107.3	135.6
		76	TC	—	345.7	345.7	—	331.6	331.6	—	316.8	316.8	—	301.1	301.1	—	284.3	284.3	—	266.4	266.4	—	247.1	247.1
			SHC	—	134.8	165.1	—	127.4	157.8	—	119.8	150.2	—	111.9	142.3	—	103.7	134.1	—	95.3	125.6	—	86.4	116.7
6750 CFM	EAT (wb)	58	TC	259.0	259.0	284.5	247.7	247.7	275.9	236.0	236.0	267.5	224.8	224.8	255.5	212.8	212.8	242.3	200.0	200.0	228.2	186.1	186.1	212.9
			SHC	220.6	252.5	284.5	212.5	244.1	275.9	204.3	236.0	267.5	194.3	224.8	255.5	183.4	212.8	242.3	171.8	200.0	228.2	159.3	186.1	212.9
		62	TC	275.4	275.4	275.4	262.9	262.9	262.9	249.9	249.9	249.9	236.2	236.2	236.6	222.1	222.1	228.0	206.8	206.8	218.7	190.5	190.5	208.8
			SHC	196.0	228.4	261.0	188.1	220.5	253.1	180.1	212.6	245.0	171.7	204.2	236.6	163.1	195.6	228.0	154.1	186.4	218.7	144.5	176.7	208.8
		67	TC	303.3	303.3	303.3	289.2	289.2	289.2	275.4	275.4	275.4	260.8	260.8	260.8	245.4	245.4	245.4	228.7	228.7	228.7	210.9	210.9	210.9
			SHC	165.5	198.1	230.8	157.3	189.9	222.6	149.4	181.9	214.6	141.1	173.6	206.3	132.5	165.1	197.6	123.5	156.1	188.6	114.1	146.6	179.1
		72	TC	333.4	333.4	333.4	319.1	319.1	319.1	304.3	304.3	304.3	288.6	288.6	288.6	271.7	271.7	271.7	254.1	254.1	254.1	234.9	234.9	234.9
			SHC	133.9	167.2	200.5	126.2	159.4	192.7	118.3	151.4	184.6	110.1	143.2	176.3	101.5	134.6	167.6	92.7	125.7	158.5	83.5	116.3	149.2
		76	TC	—	359.5	359.5	—	344.5	344.5	—	328.7	328.7	—	312.0	312.0	—	294.3	294.3	—	275.2	275.2	—	255.1	255.1
			SHC	—	141.9	178.0	—	134.3	170.4	—	126.5	162.7	—	118.4	154.2	—	109.8	145.3	—	100.9	135.9	—	91.7	126.4
7900 CFM	EAT (wb)	58	TC	272.4	272.4	307.7	261.4	261.4	295.6	249.9	249.9	283.1	237.8	237.8	269.9	225.1	225.1	256.0	211.5	211.5	241.0	196.9	196.9	224.9
			SHC	237.1	272.4	307.7	227.1	261.4	295.6	216.6	249.9	283.1	205.7	237.8	269.9	194.3	225.1	256.0	181.9	211.5	241.0	168.8	196.9	224.9
		62	TC	285.3	285.3	285.3	272.2	272.2	276.6	258.9	258.9	268.2	244.8	244.8	259.5	230.2	230.2	250.4	214.6	214.6	240.4	198.1	198.1	229.5
			SHC	210.4	247.7	284.8	202.3	239.5	276.6	194.1	231.2	268.2	185.6	222.6	259.5	176.8	213.5	250.4	167.3	203.9	240.4	157.2	193.3	229.5
		67	TC	313.6	313.6	313.6	298.9	298.9	298.9	284.4	284.4	284.4	269.0	269.0	269.0	252.8	252.8	252.8	235.5	235.5	235.5	216.8	216.8	216.8
			SHC	175.2	212.5	249.8	166.9	204.3	241.5	158.7	196.1	233.3	150.2	187.5	224.7	141.6	178.7	216.0	132.4	169.6	206.7	122.8	159.9	197.0
		72	TC	344.1	344.1	344.1	329.2	329.2	329.2	313.6	313.6	313.6	297.1	297.1	297.1	279.6	279.6	279.6	261.0	261.0	261.0	241.1	241.1	241.1
			SHC	138.9	176.9	214.7	131.0	168.9	206.7	122.9	160.8	198.5	114.7	152.3	190.0	105.9	143.5	181.2	96.9	134.5	172.0	87.5	124.9	162.3
		76	TC	—	370.5	370.5	—	354.7	354.7	—	338.2	338.2	—	320.7	320.7	—	302.2	302.2	—	282.4	282.4	—	261.4	261.4
			SHC	—	148.1	189.2	—	140.2	181.0	—	132.1	172.5	—	123.7	163.8	—	115.1	154.8	—	106.0	145.5	—	96.6	135.8
9000 CFM	EAT (wb)	58	TC	284.3	284.3	321.0	272.6	272.6	308.2	260.7	260.7	295.1	248.1	248.1	281.5	234.9	234.9	266.9	220.4	220.4	251.1	205.1	205.1	234.1
			SHC	247.7	284.3	321.0	237.0	272.6	308.2	226.2	260.7	295.1	214.9	248.1	281.5	202.9	234.9	266.9	189.9	220.4	251.1	176.1	205.1	234.1
		62	TC	293.8	293.8	306.2	279.7	279.7	297.4	266.1	266.1	288.6	251.9	251.9	279.4	237.0	237.0	269.4	221.2	221.2	258.1	205.2	205.2	244.0
			SHC	223.5	264.8	306.2	214.9	256.1	297.4	206.5	247.6	288.6	197.6	238.6	279.4	188.4	228.8	269.4	178.2	218.1	258.1	166.5	205.2	244.0
		67	TC	320.6	320.6	320.6	306.2	306.2	306.2	291.0	291.0	291.0	275.2	275.2	275.2	258.3	258.3	258.3	240.4	240.4	240.4	221.2	221.2	221.2
			SHC	183.4	225.0	266.6	175.3	216.8	258.5	167.0	208.6	250.1	158.4	199.9	241.4	149.5	190.9	232.3	140.2	181.5	223.0	130.5	171.8	213.1
		72	TC	352.1	352.1	352.1	336.7	336.7	336.7	320.5	320.5	320.5	303.5	303.5	303.5	285.4	285.4	285.4	266.1	266.1	266.1	245.6	245.6	245.6
			SHC	143.1	185.3	227.5	135.1	177.3	219.3	126.9	169.0	211.0	118.5	160.4	202.3	109.6	151.5	193.3	100.4	142.3	184.0	90.9	132.5	174.1
		76	TC	—	378.7	378.7	—	362.4	362.4	—	345.2	345.2	—	327.2	327.2	—	308.0	308.0	—	287.6	287.6	—	266.1	266.1
			SHC	—	153.1	198.0	—	145.1	189.7	—	136.9	181.3	—	128.4	172.5	—	119.6	163.4	—	110.5	154.0	—	100.9	144.2

Performance data (cont)

COOLING CAPACITIES — THIRD STAGE, FULL LOAD (23 TONS) (cont)

48LC*B SIZE 26				AMBIENT TEMPERATURE (°F)																				
				65			75			85			95			105			115			125		
				EAT (db)			EAT (db)			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	75	80	85	75	80	85
10,150 CFM	EAT (wb)	58	TC	295.3	295.3	333.4	282.8	282.8	319.5	270.4	270.4	306.0	257.3	257.3	291.6	243.4	243.4	276.4	228.5	228.5	260.0	212.6	212.6	242.4
			SHC	257.4	295.3	333.4	246.0	282.8	319.5	234.8	270.4	306.0	223.0	257.3	291.6	210.4	243.4	276.4	197.0	228.5	260.0	182.6	212.6	242.4
		62	TC	301.0	301.0	326.6	286.7	286.7	317.2	272.9	272.9	307.7	258.6	258.6	297.6	243.4	243.4	287.3	228.8	228.8	270.9	212.7	212.7	252.6
			SHC	235.9	281.2	326.6	226.9	272.0	317.2	218.1	263.0	307.7	208.8	253.2	297.6	199.4	243.4	287.3	186.7	228.8	270.9	172.9	212.7	252.6
		67	TC	327.1	327.1	327.1	312.2	312.2	312.2	296.7	296.7	296.7	280.3	280.3	280.3	263.0	263.0	263.0	244.5	244.5	244.5	225.1	225.1	229.2
			SHC	191.6	237.5	283.4	183.4	229.3	275.1	175.0	220.8	266.7	166.3	212.1	257.9	157.3	203.0	248.7	147.8	193.5	239.3	138.1	183.6	229.2
		72	TC	358.8	358.8	358.8	342.9	342.9	342.9	326.3	326.3	326.3	308.8	308.8	308.8	290.2	290.2	290.2	270.4	270.4	270.4	249.5	249.5	249.5
			SHC	147.0	193.4	239.9	138.9	185.3	231.8	130.7	177.0	223.3	122.1	168.3	214.5	113.1	159.2	205.3	103.8	149.9	195.9	94.2	140.1	185.9
		76	TC	—	385.6	385.6	—	368.8	368.8	—	351.3	351.3	—	332.7	332.7	—	313.0	313.0	—	292.1	292.1	—	270.0	270.0
			SHC	—	157.9	206.8	—	149.8	198.5	—	141.5	189.9	—	132.9	181.2	—	123.9	172.0	—	114.8	162.5	—	105.1	152.6
11,250 CFM	EAT (wb)	58	TC	304.2	304.2	343.2	291.1	291.1	328.9	278.5	278.5	314.9	264.8	264.8	300.1	250.5	250.5	284.3	235.1	235.1	267.3	218.6	218.6	249.1
			SHC	265.2	304.2	343.2	253.4	291.1	328.9	241.9	278.5	314.9	229.6	264.8	300.1	216.6	250.5	284.3	202.8	235.1	267.3	188.0	218.6	249.1
		62	TC	307.2	307.2	344.3	293.7	293.7	334.6	278.4	278.4	327.1	264.9	264.9	311.9	250.8	250.8	295.9	235.4	235.4	278.4	218.8	218.8	259.5
			SHC	246.6	295.4	344.3	237.7	286.2	334.6	229.6	278.4	327.1	217.9	264.9	311.9	205.5	250.8	295.9	192.3	235.4	278.4	177.9	218.8	259.5
		67	TC	332.2	332.2	332.2	316.9	316.9	316.9	301.0	301.0	301.0	284.3	284.3	284.3	266.6	266.6	266.6	248.0	248.0	254.0	228.2	228.2	243.8
			SHC	199.0	248.9	298.8	190.7	240.5	290.5	182.2	232.1	281.8	173.5	223.2	272.9	164.3	214.0	263.7	154.8	204.5	254.0	144.9	194.3	243.8
		72	TC	364.2	364.2	364.2	347.9	347.9	347.9	330.8	330.8	330.8	313.0	313.0	313.0	293.9	293.9	293.9	273.8	273.8	273.8	252.4	252.4	252.4
			SHC	150.4	200.9	251.3	142.4	192.7	243.0	133.9	184.2	234.4	125.3	175.4	225.5	116.2	166.2	216.3	106.9	156.8	206.7	97.1	146.9	196.7
		76	TC	—	391.1	391.1	—	373.9	373.9	—	356.0	356.0	—	337.0	337.0	—	316.8	316.8	—	295.5	295.5	—	273.0	273.0
			SHC	—	162.0	214.8	—	154.0	206.5	—	145.6	197.9	—	136.9	189.1	—	127.9	179.8	—	118.6	170.2	—	108.8	160.3

LEGEND

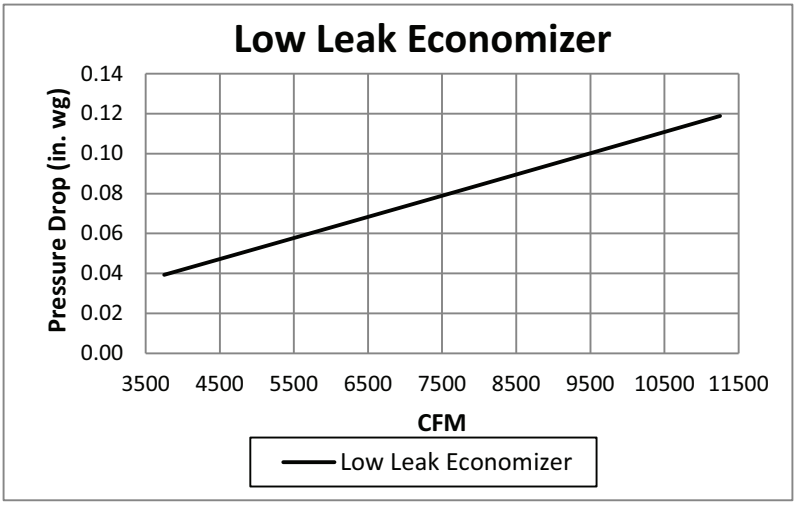
— — Do not operate
CFM — Cubic feet per minute (supply air)
EAT (db) — Entering air temperature (dry bulb) (°F)
EAT (wb) — Entering air temperature (wet bulb) (°F)
SHC — Sensible heat capacity (1000 Btuh) Gross
TC — Total capacity (1000 Btuh) Gross

Performance data (cont)

STATIC PRESSURE ADDERS (IN. WG) (FACTORY OPTIONS AND/OR ACCESSORIES)

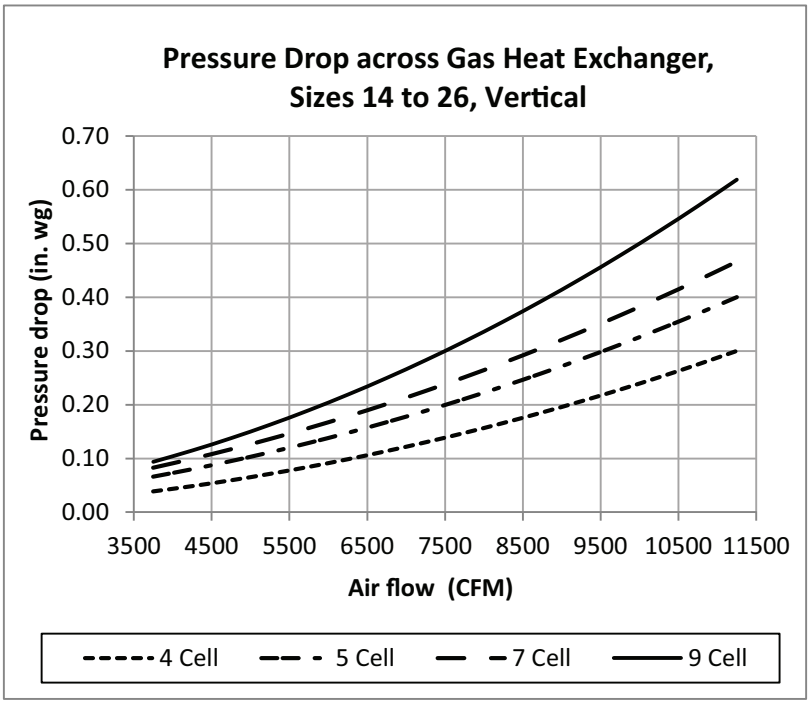
LOW LEAK ECONOMIZER PRESSURE DROP

CFM	3750	4250	4750	5250	5750	6250	6750	7250
Pressure drop (in. wg)	0.04	0.04	0.05	0.06	0.06	0.07	0.07	0.08
CFM	7750	8250	8750	9250	9750	10250	10750	11250
Pressure drop (in. wg)	0.08	0.09	0.09	0.10	0.10	0.11	0.11	0.12



PRESSURE DROP FOR GAS HEAT EXCHANGER

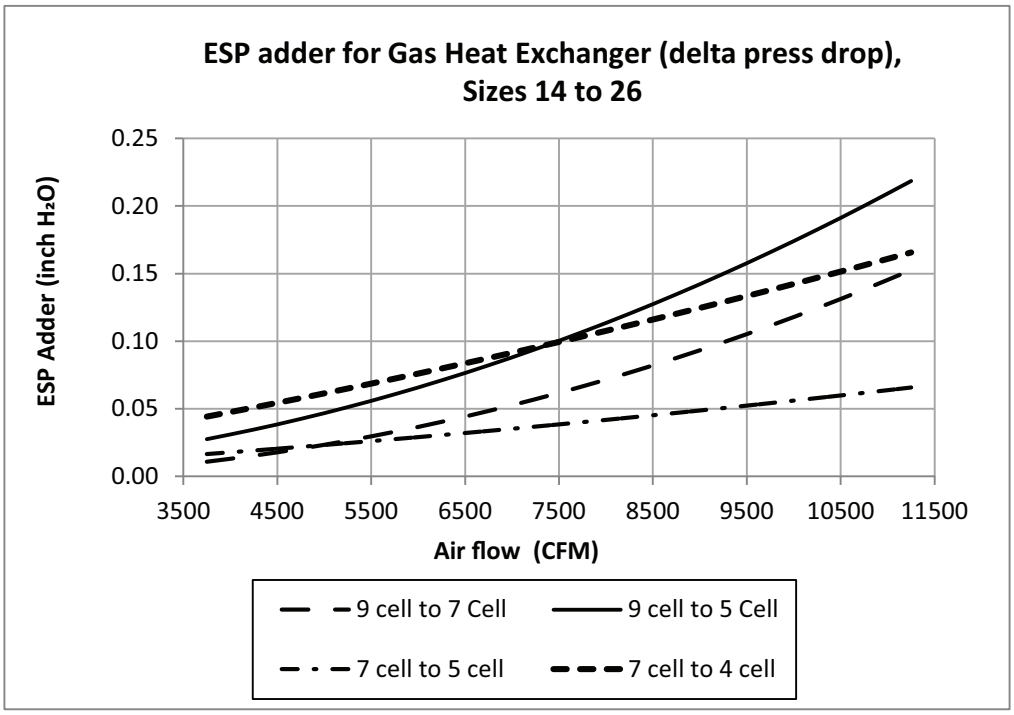
CFM	3750	4250	4750	5250	5750	6250	6750	7250	7750	8250	8750	9250	9750	10250	10750	11250
4 Cell	0.04	0.05	0.06	0.07	0.08	0.10	0.11	0.13	0.15	0.17	0.19	0.21	0.23	0.25	0.28	0.30
5 Cell	0.07	0.08	0.10	0.11	0.13	0.15	0.17	0.19	0.21	0.23	0.26	0.28	0.31	0.34	0.37	0.40
7 Cell	0.08	0.10	0.12	0.14	0.16	0.18	0.20	0.23	0.25	0.28	0.31	0.34	0.37	0.40	0.43	0.47
9 Cell	0.09	0.11	0.14	0.16	0.19	0.22	0.25	0.28	0.32	0.35	0.39	0.43	0.48	0.52	0.57	0.62



Performance data (cont)

ESP ADDER FOR GAS HEAT EXCHANGER

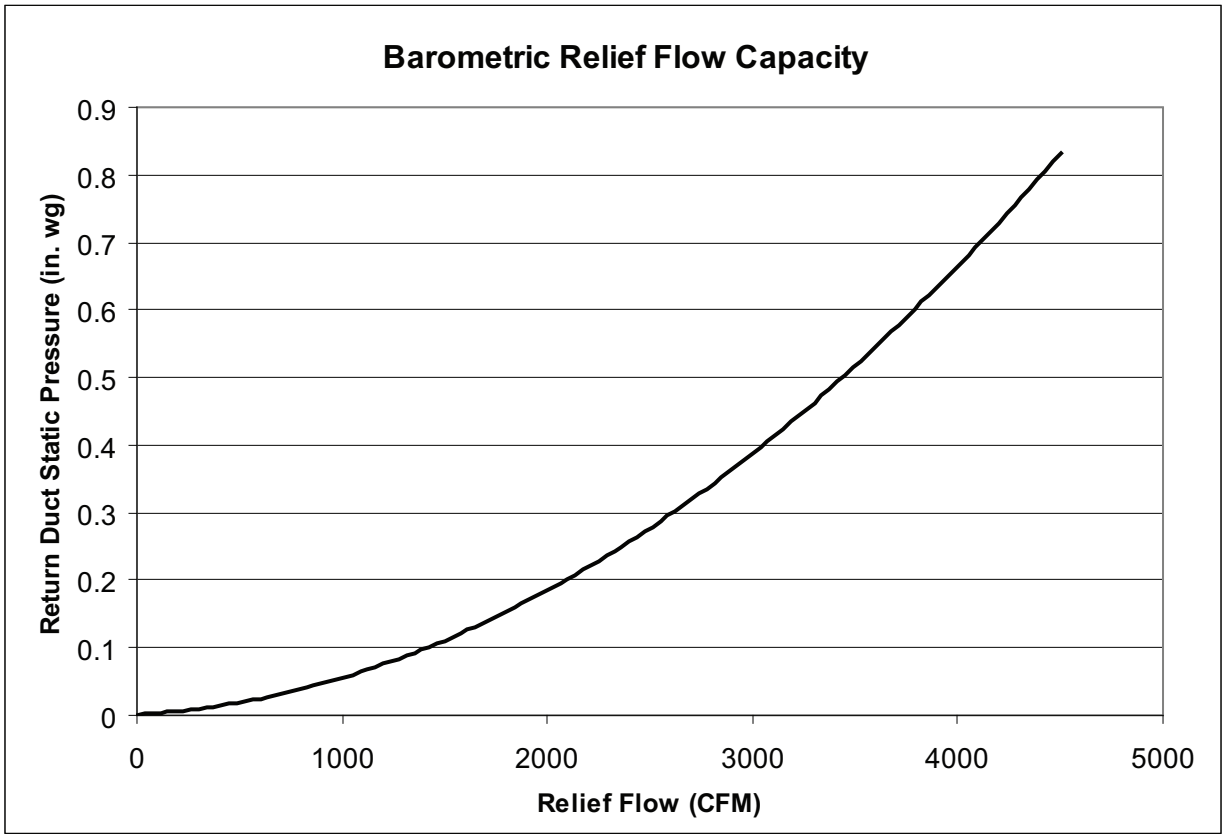
CFM	3,750	4,250	4,750	5,250	5,750	6,250	6,750	7,250	7,750	8,250	8,750	9,250	9,750	10,250	10,750	11,250
9 cell to 7 Cell	0.01	0.02	0.02	0.03	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.12	0.14	0.15
9 cell to 5 Cell	0.03	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.11	0.12	0.13	0.15	0.17	0.18	0.20	0.22
7 cell to 5 cell	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.04	0.04	0.04	0.05	0.05	0.05	0.06	0.06	0.07
7 cell to 4 cell	0.04	0.05	0.06	0.07	0.07	0.08	0.09	0.10	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17

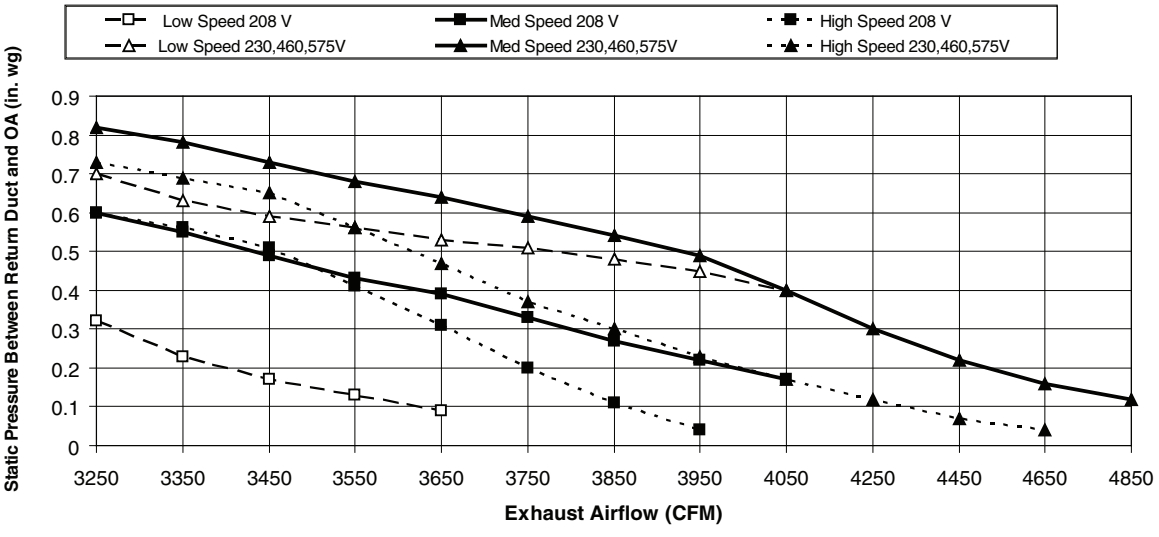


Performance data (cont)

ECONOMIZER, BAROMETRIC RELIEF, AND POWER EXHAUST PERFORMANCE

BAROMETRIC PRESSURE DROP





Performance data (cont)

POWER EXHAUST FAN PERFORMANCE

AIRFLOW	208V		230V/460V/575V	
	ESP	bhp	ESP	bhp
3850	0.600	1.845	0.730	1.99
3950	0.560	1.870	0.690	2.01
4050	0.510	1.890	0.650	2.04
4250	0.410	1.915	0.560	2.06
4450	0.310	1.965	0.470	2.12
4650	0.200	2.035	0.370	2.19
4850	0.110	2.085	0.300	2.24
5050	0.040	2.125	0.230	2.28
5250	—	—	0.170	2.33
5450	—	—	0.120	2.38
5650	—	—	0.070	2.40
5850	—	—	0.040	2.42

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. Factory options and accessories may add static pressure losses. Selection software is available, through your salesperson, to help you select the best motor/drive combination for your application.
4. The fan performance tables offer motor/drive recommendations. In cases when 2 motor/drive combinations would work, Carrier recommends the lower horsepower option.
5. For information on the electrical properties of Carrier motors, please see the Electrical information section of this book.
6. For more information on the performance limits of Carrier motors, see the application data section of this book.
7. The EPACT (Energy Policy Act) regulates energy requirements for specific types of indoor fan motors. Motors regulated by EPACT include any general purpose, T-frame (3-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.

48LC*B14 — 12.5 TON HORIZONTAL SUPPLY

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
3750	**461**	**0.76**	541	1.16	609	1.61	669	2.08	724	2.59
4063	**485**	**0.90**	562	1.32	628	1.79	687	2.28	741	2.81
4375	510	1.05	584	1.50	648	1.98	706	2.50	759	3.05
4688	535	1.23	606	1.70	669	2.20	725	2.75	777	3.32
5000	561	1.42	629	1.92	690	2.45	745	3.01	796	3.60
5313	587	1.64	652	2.16	711	2.71	765	3.30	815	3.91
5625	614	1.89	677	2.42	734	3.00	786	3.61	835	4.24
5938	641	2.16	701	2.72	756	3.32	808	3.95	855	4.60
6250	668	2.45	726	3.04	780	3.66	830	4.31	876	4.99

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
3750	774	3.12	820	3.68	864	4.26	905	4.86	944	5.49
4063	790	3.37	836	3.94	880	4.55	921	5.17	959	5.81
4375	807	3.63	853	4.23	896	4.85	936	5.50	975	6.16
4688	825	3.91	870	4.53	912	5.18	953	5.84	991	6.53
5000	843	4.22	888	4.86	930	5.53	969	6.21	1007	6.92
5313	862	4.55	906	5.21	947	5.90	986	6.61	1024	7.33
5625	881	4.91	924	5.59	965	6.30	1004	7.03	1041	7.78
5938	900	5.29	943	6.00	983	6.72	1022	7.47	1059	8.24
6250	920	5.70	962	6.43	1002	7.18	1040	7.95	1077	8.74

STD Static (498-676 rpm) 2.9 Max bhp

MID Static (644-808 rpm) 4.9 Max bhp
At 575v, HP is 4.7

HIGH Static (782-963 rpm) 7.4 Max bhp

ULTRA HIGH Static (933-1113 rpm) 9.9 Max bhp

Boldface Indicates field-supplied drive is required (Standard motor, motor pulley p/n KR11HY163, blower pulley p/n KR51BM415, belt p/n KR29AF049) for the 368-509 rpm range

Fan data (cont)

48LC*B14 — 12.5 TON VERTICAL SUPPLY

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
3750	**453**	**0.48**	547	0.69	630	0.91	704	1.13	771	1.36
4063	**474**	**0.58**	564	0.80	644	1.03	716	1.27	782	1.52
4375	**497**	**0.69**	582	0.92	659	1.16	730	1.42	794	1.68
4688	520	0.81	601	1.05	675	1.31	744	1.58	807	1.86
5000	544	0.95	620	1.21	692	1.48	759	1.76	821	2.05
5313	568	1.11	641	1.38	710	1.66	774	1.95	835	2.26
5625	593	1.29	662	1.56	728	1.86	791	2.17	850	2.48
5938	619	1.48	685	1.77	748	2.08	808	2.40	866	2.73
6250	644	1.70	707	2.00	768	2.32	826	2.65	882	2.99

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
3750	832	1.60	889	1.85	942	2.09	992	2.35	1040	2.60
4063	843	1.77	899	2.03	952	2.29	1002	2.56	1049	2.83
4375	854	1.95	910	2.22	962	2.50	1012	2.78	1059	3.07
4688	866	2.14	921	2.43	973	2.72	1022	3.02	1069	3.32
5000	878	2.35	933	2.65	984	2.96	1033	3.27	1080	3.59
5313	892	2.57	945	2.89	996	3.21	1044	3.54	1090	3.87
5625	905	2.81	958	3.14	1008	3.48	1056	3.82	1102	4.17
5938	920	3.07	972	3.41	1021	3.77	1068	4.12	*1114*	*4.48*
6250	935	3.35	986	3.71	1035	4.07	1081	4.44	*1126*	*4.82*

STD Static (498-676 rpm) 2.9 Max bhp

MID Static (682-861 rpm) 4.9 Max bhp

HIGH Static (782-963 rpm) 7.4 Max bhp

ULTRA HIGH Static (933-1113 rpm) 9.9 Max bhp

Boldface Indicates field-supplied drive is required (Standard motor, motor pulley p/n KR11HY216, blower pulley p/n KR51BM415, belt p/n KR30BE050) for the 435-570 rpm range

Italics Indicates field-supplied motor and drive is required (Super Static Motor, motor pulley p/n KR12HY167, blower pulley p/n KR52BH615, belts p/n BX41) in the 948-1190 rpm range

Fan data (cont)

48LC*B17 — 15 TON HORIZONTAL SUPPLY

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
4500	526	1.35	601	1.89	667	2.50	726	3.14	779	3.81
4875	557	1.62	628	2.19	692	2.83	749	3.50	802	4.20
5250	589	1.93	656	2.53	717	3.20	774	3.90	825	4.64
5625	621	2.28	**685**	**2.91**	744	3.61	798	4.34	849	5.12
6000	654	2.68	714	3.34	771	4.07	824	4.83	873	5.64
6375	**687**	**3.13**	745	3.82	799	4.57	850	5.37	899	6.21
6750	721	3.63	775	4.35	828	5.13	877	5.96	924	6.83
7125	755	4.19	807	4.94	857	5.75	905	6.60	951	7.50
7500	789	4.80	839	5.58	887	6.42	933	7.31	977	8.23

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
4500	828	4.50	873	5.22	915	5.95	954	6.71	992	7.48
4875	850	4.93	895	5.69	937	6.46	976	7.26	1013	8.06
5250	873	5.41	917	6.20	959	7.01	998	7.84	1035	8.68
5625	896	5.92	940	6.74	981	7.59	1020	8.46	1058	9.34
6000	920	6.47	963	7.33	1004	8.22	1043	9.12	1080	10.04
6375	944	7.08	987	7.97	1027	8.89	1066	9.83	—	—
6750	969	7.73	1011	8.65	1051	9.61	1089	10.58	—	—
7125	994	8.43	1035	9.39	1075	10.38	—	—	—	—
7500	1020	9.19	1060	10.19	1099	11.21	—	—	—	—

STD Static (525-713 rpm) 2.9 Max bhp
MID Static (707-888 rpm) 7.4 Max bhp
HIGH Static (872-1053 rpm) 9.9 Max bhp
ULTRA HIGH Static (948-1190 rpm) 13.6 Max bhp

Boldface Indicates field-supplied drive is required (Mid static motor, motor pulley p/n KR11HY232, blower pulley p/n KR51BQ415, belt p/n KR29BF059) for the 583-717 rpm range

Fan data (cont)

48LC*B17 — 15 TON VERTICAL SUPPLY

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
4500	**508**	**0.79**	603	1.12	679	1.44	745	1.76	806	2.09
4875	**532**	**0.94**	626	1.31	701	1.65	765	1.99	825	2.34
5250	556	1.11	649	1.51	723	1.89	787	2.25	845	2.62
5625	581	1.30	672	1.73	746	2.14	809	2.54	866	2.93
6000	607	1.51	695	1.98	768	2.42	831	2.85	887	3.27
6375	634	1.75	719	2.24	791	2.73	854	3.19	909	3.63
6750	662	2.02	743	2.54	815	3.05	876	3.55	932	4.03
7125	690	2.33	767	2.86	838	3.41	899	3.94	954	4.45
7500	719	2.66	791	3.20	861	3.79	922	4.35	977	4.90

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
4500	863	2.43	918	2.79	971	3.16	1022	3.55	1071	3.96
4875	880	2.70	933	3.07	984	3.46	1033	3.86	1081	4.28
5250	899	3.00	950	3.39	999	3.79	1047	4.20	1093	4.63
5625	918	3.33	968	3.73	1016	4.15	1062	4.58	1107	5.02
6000	939	3.69	988	4.11	1035	4.55	1079	4.99	1123	5.45
6375	960	4.08	1008	4.53	1054	4.98	1098	5.44	1140	5.91
6750	982	4.50	1029	4.97	1074	5.45	1117	5.93	1159	6.41
7125	1004	4.95	1051	5.45	1095	5.95	1138	6.45	—	—
7500	1027	5.43	1073	5.96	1117	6.48	1159	7.01	—	—

STD Static (555-753 rpm) 2.9 Max bhp
MID Static (707-888 rpm) 7.4 Max bhp
HIGH Static (872-1053 rpm) 9.9 Max bhp
ULTRA HIGH Static (1049-1291 rpm) 13.6 Max bhp

Boldface Indicates field-supplied drive is required (Standard motor, motor pulley p/n KR11HY216, blower pulley p/n KR51BM415, belt p/n KR30BE050) for the 435-570 rpm range

Fan data (cont)

48LC*B20 — 17.5 TON HORIZONTAL SUPPLY

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
5250	589	1.93	656	2.53	717	3.20	774	3.90	825	4.64
5688	626	2.34	**690**	**2.98**	748	3.68	803	4.42	853	5.20
6125	665	2.82	724	3.50	780	4.23	833	5.01	882	5.82
6563	**704**	**3.37**	760	4.08	813	4.84	864	5.66	911	6.51
7000	743	4.00	796	4.74	847	5.53	896	6.38	942	7.27
7438	783	4.70	833	5.47	882	6.30	928	7.18	973	8.11
7875	823	5.48	871	6.29	917	7.15	962	8.07	1005	9.03
8313	864	6.35	909	7.19	953	8.09	996	9.04	1038	10.03
8750	905	7.31	948	8.19	990	9.13	1031	10.11	1071	11.13

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
5250	873	5.41	917	6.20	959	7.01	998	7.84	1035	8.68
5688	900	6.01	944	6.84	985	7.69	1024	8.57	1061	9.46
6125	928	6.67	971	7.54	1012	8.43	1050	9.35	1087	10.29
6563	956	7.39	999	8.31	1039	9.24	1077	10.20	—	—
7000	985	8.19	1027	9.14	1067	10.12	—	—	—	—
7438	1015	9.06	1056	10.05	1095	11.06	—	—	—	—
7875	1046	10.02	1086	11.04	—	—	—	—	—	—
8313	1078	11.06	—	—	—	—	—	—	—	—
8750	—	—	—	—	—	—	—	—	—	—

STD Static (555-753 rpm) 2.9 Max bhp
MID Static (707-888 rpm) 7.4 Max bhp
HIGH Static (872-1053 rpm) 9.9 Max bhp
ULTRA HIGH Static (948-1190 rpm) 13.6 Max bhp

Boldface Indicates field-supplied drive is required (Mid static motor p/n HD60FK657, motor pulley p/n KR11HY232, blower pulley p/n KR51BQ415, belt p/n KR29BF059) for the 583-717 rpm range

Fan data (cont)

48LC*B20 — 17.5 TON VERTICAL SUPPLY

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
5250	**556**	**1.11**	**649**	**1.51**	723	1.89	787	2.25	845	2.62
5688	**586**	**1.33**	676	1.77	749	2.19	812	2.59	869	2.99
6125	**616**	**1.59**	703	2.06	776	2.52	838	2.96	894	3.39
6563	**648**	**1.89**	731	2.39	803	2.89	865	3.36	920	3.83
7000	681	2.22	759	2.75	830	3.29	892	3.80	947	4.30
7438	714	2.60	787	3.14	857	3.72	918	4.28	973	4.82
7875	*748*	*3.03*	817	3.58	884	4.20	945	4.80	1000	5.38
8313	783	3.50	847	4.07	912	4.72	972	5.36	1027	5.98
8750	819	4.03	878	4.61	941	5.28	1000	5.96	1054	6.63

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
5250	899	3.00	950	3.39	999	3.79	1047	4.20	1093	4.63
5688	922	3.39	972	3.80	1019	4.21	1065	4.64	1109	5.09
6125	946	3.81	995	4.25	1041	4.69	1085	5.14	1128	5.60
6563	971	4.28	1019	4.74	1064	5.21	1107	5.68	1149	6.16
7000	997	4.80	1044	5.28	1088	5.78	1131	6.27	1172	6.77
7438	1023	5.35	1069	5.87	1113	6.39	1155	6.91	—	—
7875	1049	5.95	1095	6.50	1139	7.05	—	—	—	—
8313	1076	6.59	1122	7.18	1165	7.76	—	—	—	—
8750	1103	7.27	1148	7.90	—	—	—	—	—	—

STD Static (676-854 rpm) 2.9 Max bhp

MID Static (782-963 rpm) 7.4 Max bhp

HIGH Static (933-1113 rpm) 9.9 Max bhp

ULTRA HIGH Static (1049-1291 rpm) 13.6 Max bhp

Boldface Indicates field-supplied drive is required (Standard motor p/n HD60FE656, motor pulley p/n KR11HY163, blower pulley p/n KR51BM615, belt p/n KR29BF042) for the 555-753 rpm range

Italics Indicate field supplied drive is required (Medium static motor p/n HD60FK657, motor pulley p/n KR11HY194, blower pulley p/n KR51BM419, belt p/n KR28BF051) in the 651-818 rpm range

Fan data (cont)

48LC*B24 — 20 TON HORIZONTAL SUPPLY

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
6,000	**654**	**2.68**	714	3.34	771	4.07	824	4.83	873	5.64
6,500	**698**	**3.29**	755	3.99	809	4.75	859	5.56	907	6.41
7,000	743	4.00	796	4.74	847	5.53	896	6.38	942	7.27
7,500	789	4.80	839	5.58	887	6.42	933	7.31	977	8.23
8,000	835	5.72	882	6.54	928	7.41	972	8.34	1014	9.31
8,500	881	6.75	926	7.61	969	8.53	1011	9.49	1052	10.49
9,000	928	7.91	970	8.81	1011	9.76	1052	10.76	1091	11.81
9,500	975	9.20	1015	10.14	1054	11.13	1093	12.17	1130	13.25
10,000	1022	10.62	1060	11.60	1098	12.64	—	—	—	—

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
6,000	920	6.47	963	7.33	1004	8.22	1043	9.12	1080	10.04
6,500	952	7.29	995	8.19	1035	9.12	1073	10.07	1110	11.04
7,000	985	8.19	1027	9.14	1067	10.12	1104	11.11	1140	12.13
7,500	1020	9.19	1060	10.19	1099	11.21	1136	12.25	1172	13.31
8,000	1055	10.31	1094	11.34	1132	12.40	1169	13.49	—	—
8,500	1092	11.53	1130	12.61	—	—	—	—	—	—
9,000	1129	12.89	—	—	—	—	—	—	—	—
9,500	—	—	—	—	—	—	—	—	—	—
10,000	—	—	—	—	—	—	—	—	—	—

STD Static (707-888 rpm) 7.4 Max bhp

MID Static (859-1026 rpm) 9.9 Max bhp

HIGH Static (948-1190 rpm) 13.6 Max bhp

Boldface Indicates field-supplied drive is required (Standard motor p/n HD60FK657, motor pulley p/n KR11HY232, blower pulley p/n KR51BQ415, belt p/n KR29BF059) for the 583-717 rpm range

Fan data (cont)

48LC*B24 — 20 TON VERTICAL SUPPLY

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
6,000	**607**	**1.51**	**695**	**1.98**	768	2.42	831	2.85	887	3.27
6,500	**643**	**1.84**	727	2.34	799	2.83	861	3.30	917	3.76
7,000	**681**	**2.22**	759	2.75	830	3.29	892	3.81	947	4.30
7,500	719	2.66	791	3.20	861	3.79	922	4.35	977	4.90
8,000	758	3.16	825	3.72	893	4.34	953	4.96	1008	5.55
8,500	798	3.72	860	4.30	924	4.95	984	5.61	1038	6.25
9,000	839	4.35	896	4.94	957	5.62	1016	6.33	1069	7.01
9,500	880	5.06	933	5.66	990	6.36	1047	7.10	1100	7.84
10,000	922	5.84	970	6.45	1025	7.17	1079	7.94	1131	8.72

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
6,000	939	3.69	988	4.11	1034	4.55	1079	4.99	1123	5.45
6,500	968	4.22	1015	4.67	1061	5.13	1104	5.60	1146	6.07
7,000	997	4.80	1044	5.28	1088	5.78	1131	6.27	1172	6.77
7,500	1027	5.43	1073	5.96	1117	6.48	1159	7.01	1199	7.54
8,000	1057	6.13	1103	6.69	1146	7.25	1187	7.81	1227	8.37
8,500	1088	6.88	1133	7.48	1176	8.08	1217	8.68	1255	9.27
9,000	1118	7.68	1164	8.34	1206	8.98	1246	9.61	1285	10.24
9,500	1149	8.56	1194	9.26	1237	9.94	1277	10.62	—	—
10,000	1180	9.49	1225	10.24	1267	10.97	—	—	—	—

STD Static (707-888 rpm) 7.4 Max bhp

MID Static (872-1053 rpm) 9.9 Max bhp

HIGH Static (1049-1291 rpm) 13.6 Max bhp

Boldface Indicates field-supplied drive is required (Standard motor p/n HD60FK657, motor pulley p/n KR11HY232, blower pulley p/n KR51BQ415, belt p/n KR29BF059) for the 583-717 rpm range

Fan data (cont)

48LC*B26 — 23 TON HORIZONTAL SUPPLY

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
6,750	719	3.61	774	4.33	826	5.10	876	5.93	923	6.79
7,313	770	4.46	821	5.22	870	6.04	918	6.91	963	7.82
7,875	822	5.45	870	6.25	916	7.12	960	8.03	1003	8.98
8,438	874	6.58	919	7.43	962	8.33	1005	9.29	1046	10.28
9,000	926	7.87	968	8.76	1010	9.71	1050	10.70	1089	11.74
9,563	979	9.31	1019	10.25	1058	11.25	1096	12.29	1133	13.37
10,125	1032	10.94	1070	11.93	1107	12.96	—	—	—	—
10,688	1085	12.75	—	—	—	—	—	—	—	—
11,250	—	—	—	—	—	—	—	—	—	—

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
6,750	967	7.69	1009	8.62	1049	9.57	1087	10.53	1124	11.52
7,313	1005	8.76	1046	9.74	1085	10.73	1123	11.76	1158	12.80
7,875	1045	9.97	1084	10.99	1122	12.03	1159	13.11	—	—
8,438	1085	11.32	1124	12.38	1160	13.48	—	—	—	—
9,000	1127	12.82	—	—	—	—	—	—	—	—
9,563	—	—	—	—	—	—	—	—	—	—
10,125	—	—	—	—	—	—	—	—	—	—
10,688	—	—	—	—	—	—	—	—	—	—
11,250	—	—	—	—	—	—	—	—	—	—

STD Static (707-888 rpm) 7.4 Max bhp
MID Static (859-1026 rpm) 9.9 Max bhp
HIGH Static (948-1190 rpm) 13.6 Max bhp

Fan data (cont)

48LC*B26 — 23 TON VERTICAL SUPPLY

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
6,750	**662**	**2.02**	743	2.54	815	3.05	876	3.55	932	4.03
7,313	**705**	**2.49**	779	3.03	849	3.60	911	4.14	966	4.67
7,875	749	3.03	817	3.59	885	4.20	945	4.80	1000	5.38
8,438	793	3.65	856	4.22	920	4.87	980	5.53	1034	6.16
9,000	839	4.35	896	4.94	957	5.62	1016	6.33	1069	7.01
9,563	885	5.15	937	5.75	995	6.46	1051	7.20	1104	7.95
10,125	932	6.05	980	6.66	1033	7.38	1088	8.17	1139	8.96
10,688	979	7.05	1023	7.67	1073	8.41	1125	9.22	1175	10.06
11,250	1026	8.16	1067	8.79	1114	9.55	1163	10.38	1211	11.26

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
6,750	982	4.50	1029	4.97	1074	5.45	1117	5.93	1159	6.41
7,313	1016	5.19	1062	5.70	1106	6.21	1148	6.72	1188	7.24
7,875	1050	5.95	1096	6.50	1139	7.05	1180	7.60	1219	8.15
8,438	1084	6.78	1129	7.38	1172	7.97	1213	8.57	1252	9.16
9,000	1118	7.68	1164	8.34	1206	8.98	1246	9.61	1285	10.24
9,563	1153	8.67	1198	9.38	1240	10.07	1280	10.75	—	—
10,125	1188	9.74	1233	10.50	1275	11.24	—	—	—	—
10,688	1223	10.89	1267	11.71	—	—	—	—	—	—
11,250	1258	12.14	—	—	—	—	—	—	—	—

STD Static (707-888 rpm) 7.4 Max bhp

MID Static (872-1053 rpm) 9.9 Max bhp

HIGH Static (1049-1291 rpm) 13.6 Max bhp

Boldface Indicates field-supplied drive is required (Standard motor p/n HD60FK657, motor pulley p/n KR11HY232, blower pulley p/n KR51BQ415, belt p/n KR29BF059) for the 583-717 rpm range

Fan data (cont)

PULLEY ADJUSTMENT (VERTICAL) – FAN RPM AT MOTOR PULLEY SETTINGS

UNIT		MOTOR/DRIVE COMBO	MOTOR PULLEY TURNS OPEN (RPM)												
			0.0	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0
14	3 phase	Standard Static	N/A	N/A	676	658	640	623	605	587	569	551	534	516	498
		Medium Static	N/A	N/A	861	843	825	807	789	772	754	736	718	700	682
		High Static	963	948	933	918	903	888	873	857	842	827	812	797	782
		Super Static	1113	1098	1083	1068	1053	1038	1023	1008	993	978	963	948	933
17	3 phase	Standard Static	N/A	N/A	753	733	713	694	674	654	634	614	595	575	555
		Medium Static	888	873	858	843	828	813	798	782	767	752	737	722	707
		High Static	1053	1038	1023	1008	993	978	963	947	932	917	902	887	872
		Super Static	1291	1271	1251	1231	1210	1190	1170	1150	1130	1110	1089	1069	1049
20	3 phase	Standard Static	N/A	N/A	854	836	818	801	783	765	747	729	712	694	676
		Medium Static	963	948	933	918	903	888	873	857	842	827	812	797	782
		High Static	1113	1098	1083	1068	1053	1038	1023	1008	993	978	963	948	933
		Super Static	1291	1271	1251	1231	1210	1190	1170	1150	1130	1110	1089	1069	1049
24	3 phase	Standard Static	888	873	858	843	828	813	798	782	767	752	737	722	707
		Medium Static	1053	1038	1023	1008	993	978	963	947	932	917	902	887	872
		High Static	1291	1271	1251	1231	1210	1190	1170	1150	1130	1110	1089	1069	1049
26	3 phase	Standard Static	888	873	858	843	828	813	798	782	767	752	737	722	707
		Medium Static	1053	1038	1023	1008	993	978	963	947	932	917	902	887	872
		High Static	1291	1271	1251	1231	1210	1190	1170	1150	1130	1110	1089	1069	1049

Factory setting

PULLEY ADJUSTMENT (HORIZONTAL) – FAN RPM AT MOTOR PULLEY SETTINGS

UNIT		MOTOR/DRIVE COMBO	MOTOR PULLEY TURNS OPEN (RPM)												
			0.0	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0
14	3 phase	Standard Static	N/A	N/A	676	658	640	623	605	587	569	551	534	516	498
		Medium Static	808	794	781	767	753	740	726	712	699	685	671	658	644
		High Static	963	948	933	918	903	888	873	857	842	827	812	797	782
		Super Static	1113	1098	1083	1068	1053	1038	1023	1008	993	978	963	948	933
17	3 phase	Standard Static	N/A	N/A	713	694	675	657	638	619	600	581	563	544	525
		Medium Static	888	873	858	843	828	813	798	782	767	752	737	722	707
		High Static	1053	1038	1023	1008	993	978	963	947	932	917	902	887	872
		Super Static	1190	1170	1150	1130	1109	1089	1069	1049	1029	1009	988	968	948
20	3 phase	Standard Static	N/A	N/A	753	733	713	694	674	654	634	614	595	575	555
		Medium Static	888	873	858	843	828	813	798	782	767	752	737	722	707
		High Static	1053	1038	1023	1008	993	978	963	947	932	917	902	887	872
		Super Static	1190	1170	1150	1130	1109	1089	1069	1049	1029	1009	988	968	948
24	3 phase	Standard Static	888	873	858	843	828	813	798	782	767	752	737	722	707
		Medium Static	1026	1012	998	984	970	956	943	929	915	901	887	873	859
		High Static	1190	1170	1150	1130	1109	1089	1069	1049	1029	1009	988	968	948
26	3 phase	Standard Static	888	873	858	843	828	813	798	782	767	752	737	722	707
		Medium Static	1026	1012	998	984	970	956	943	929	915	901	887	873	859
		High Static	1190	1170	1150	1130	1109	1089	1069	1049	1029	1009	988	968	948

Factory setting

Electrical data

ELECTRICAL INFORMATION

48LC*B UNIT	V-PH-HZ	VOLTAGE RANGE		COMP 1		COMP 2		OFM (EA)		IFM		
		MIN	MAX	RLA	LRA	RLA	LRA	WATTS	FLA	TYPE	EFF AT FULL LOAD	FLA
14	208-3-60	187	253	17.6	123	23.2	164	185	1.8	STD	85.0%	8.6
										MED	83.6%	13.6
										HIGH	89.5%	21.2
										SUPER	91.7%	28.0
	230-3-60	187	253	17.6	123	23.2	164	185	1.8	STD	85.0%	7.8
										MED	83.6%	12.7
										HIGH	89.5%	21.2
										SUPER	91.7%	28.0
	460-3-60	414	506	9.6	62	11.2	75	185	1.3	STD	85.0%	3.8
										MED	83.6%	6.4
										HIGH	89.5%	9.7
										SUPER	91.7%	13.7
	575-3-60	518	633	6.1	40	7.9	54	185	1.3	STD	81.1%	4.5
										MED	83.6%	6.2
										HIGH	89.5%	7.2
										SUPER	91.7%	8.9
17	208-3-60	187	253	19.1	123	27.6	191	185	1.8	STD	85.0%	8.6
										MED	89.5%	21.2
										HIGH	91.7%	28.0
										SUPER	91.7%	37.3
	230-3-60	187	253	19.1	123	27.6	191	185	1.8	STD	85.0%	7.8
										MED	89.5%	21.2
										HIGH	91.7%	28.0
										SUPER	91.7%	37.3
	460-3-60	414	506	9.8	62	12.8	100	185	1.3	STD	85.0%	3.8
										MED	89.5%	9.7
										HIGH	91.7%	13.7
										SUPER	91.7%	16.9
	575-3-60	518	633	7.5	50	10.2	78	185	1.3	STD	81.1%	4.5
										MED	89.5%	7.2
										HIGH	91.7%	8.9
										SUPER	91.7%	12.6
20	208-3-60	187	253	25.0	164	27.6	191	185	1.8	STD	85.0%	8.6
										MED	89.5%	21.2
										HIGH	91.7%	28.0
										SUPER	91.7%	37.3
	230-3-60	187	253	25.0	164	27.6	191	185	1.8	STD	85.0%	7.8
										MED	89.5%	21.2
										HIGH	91.7%	28.0
										SUPER	91.7%	37.3
	460-3-60	414	506	12.2	100	12.8	100	185	1.3	STD	85.0%	3.8
										MED	89.5%	9.7
										HIGH	91.7%	13.7
										SUPER	91.7%	16.9
	575-3-60	518	633	9.3	78	10.2	78	185	1.3	STD	81.1%	4.5
										MED	89.5%	7.2
										HIGH	91.7%	8.9
										SUPER	91.7%	12.6

Electrical data (cont)

ELECTRICAL INFORMATION (cont)

48LC*B UNIT	V-PH-HZ	VOLTAGE RANGE		COMP 1		COMP 2		OFM (EA)		IFM		
		MIN	MAX	RLA	LRA	RLA	LRA	WATTS	FLA	TYPE	EFF AT FULL LOAD	FLA
24	208-3-60	187	253	29.5	195	33.3	239	190	1.8	STD	89.5%	21.2
										MED	91.7%	28.0
										HIGH	91.7%	37.3
	230-3-60	187	253	29.5	195	33.3	239	190	1.8	STD	89.5%	21.2
										MED	91.7%	28.0
										HIGH	91.7%	37.3
	460-3-60	414	506	14.8	95	18.0	125	190	1.6	STD	89.5%	9.7
										MED	91.7%	13.7
										HIGH	91.7%	16.9
	575-3-60	518	633	12.2	80	12.8	80	190	1.6	STD	89.5%	7.2
										MED	91.7%	8.9
										HIGH	91.7%	12.6
26	208-3-60	187	253	30.1	225	51.2	300	190	1.8	STD	89.5%	21.2
										MED	91.7%	28.0
										HIGH	91.7%	37.3
	230-3-60	187	253	30.1	225	51.2	300	190	1.8	STD	89.5%	21.2
										MED	91.7%	28.0
										HIGH	91.7%	37.3
	460-3-60	414	506	16.7	114	23.1	150	190	1.6	STD	89.5%	9.7
										MED	91.7%	13.7
										HIGH	91.7%	16.9
	575-3-60	518	633	12.2	80	19.9	109	190	1.6	STD	89.5%	7.2
										MED	91.7%	8.9
										HIGH	91.7%	12.6

See Legend and Notes on page 88.

Electrical data (cont)

UNIT WIRE/FUSE OR HACR BREAKER SIZING DATA (12.5 to 23 TONS, NO CO)

UNIT SIZE	NOM. V-PH-HZ	IFM TYPE	NO CO OR UNPWRD CO							
			NO PE				W/ PE (PWRD FR/UNIT)			
			MCA	FUSE OR HACR BRKR	DISC. SIZE		MCA	FUSE OR HACR BRKR	DISC. SIZE	
					FLA	LRA			FLA	LRA
48LC*B14	208/230-3-60	STD	60.6/59.8	80/80	63/62	346	72.4/71.6	90/90	77/76	366
		MED	65.6/64.7	80/80	69/68	381	77.4/76.5	100/90	82/81	401
		HIGH	73.2	90	78	385	85.0	100	91	405
		SUPER	81.2	100	85	459	93.0	110	99	479
	460-3-60	STD	31.3	40	33	167	37.5	45	40	179
		MED	33.9	45	36	184	40.1	50	43	196
		HIGH	37.2	45	40	186	43.4	50	47	198
		SUPER	41.8	50	44	223	48.0	60	51	235
	575-3-60	STD	24.4	30	26	119	29.2	35	31	127
		MED	26.1	30	28	133	30.9	35	33	141
		HIGH	27.1	30	29	131	31.9	35	34	139
		SUPER	29.0	35	31	158	33.8	40	36	166
48LC*B17	208/230-3-60	STD	69.4/68.6	90/90	72/71	375	81.2/80.4	100/100	85/85	395
		MED	82.0	100	86	414	93.8	110	100	434
		HIGH	88.9	100	94	488	100.7	125	108	508
		SUPER	100.5	125	105	528	112.3	125	118	548
	460-3-60	STD	34.8	45	36	193	41.0	50	43	205
		MED	40.7	50	43	212	46.9	60	50	224
		HIGH	44.9	50	48	249	51.1	60	55	261
		SUPER	48.9	60	51	269	55.1	60	59	281
	575-3-60	STD	30.0	40	32	154	34.8	40	37	162
		MED	32.7	40	35	166	37.5	45	40	174
		HIGH	34.4	40	37	193	39.2	45	42	201
		SUPER	38.7	50	41	204	43.5	50	46	212
48LC*B20	208/230-3-60	STD	75.3/74.5	100/100	79/78	416	87.1/86.3	100/100	92/91	436
		MED	87.9	100	93	455	99.7	125	107	475
		HIGH	94.8	110	101	529	106.6	125	115	549
		SUPER	106.4	125	112	569	118.2	150	125	589
	460-3-60	STD	37.2	50	39	231	43.4	50	46	243
		MED	43.1	50	46	250	49.3	60	53	262
		HIGH	47.3	60	50	287	53.5	60	58	299
		SUPER	51.3	60	54	307	57.5	70	61	319
	575-3-60	STD	31.8	40	34	182	36.6	45	39	190
		MED	34.5	40	37	194	39.3	45	42	202
		HIGH	36.2	45	39	221	41.0	50	44	229
		SUPER	40.5	50	43	232	45.3	50	48	240
48LC*B24	208/230-3-60	STD	103.1	125	109	538	114.9	125	123	558
		MED	109.9	125	117	612	121.7	150	130	632
		HIGH	120.2	150	128	652	132.0	150	141	672
	460-3-60	STD	56.6	70	60	278	62.8	80	67	290
		MED	60.6	70	65	315	66.8	80	72	327
		HIGH	63.8	80	68	335	70.0	80	75	347
	575-3-60	STD	45.0	50	48	206	49.8	60	54	214
		MED	46.7	50	50	233	51.5	60	56	241
		HIGH	50.4	60	54	244	55.2	60	60	252
48LC*B26	208/230-3-60	STD	126.1	175	130	629	137.9	175	144	649
		MED	132.9	175	138	703	144.7	175	152	723
		HIGH	142.2	175	149	743	154.0	200	162	763
	460-3-60	STD	64.9	80	68	322	71.1	90	75	334
		MED	68.9	90	73	359	75.1	90	80	371
		HIGH	72.1	90	76	379	78.3	100	83	391
	575-3-60	STD	53.9	60	56	235	58.7	70	62	243
		MED	55.6	70	58	262	60.4	80	64	270
		HIGH	59.3	70	62	273	64.1	80	68	281

See Legend and Notes on page 88.

Electrical data (cont)

UNIT WIRE/FUSE OR HACR BREAKER SIZING DATA (12.5 to 23 TONS, WITH POWERED CO)

UNIT SIZE	NOM. V-PH-HZ	IFM TYPE	W/ PWRD CO							
			NO PE				W/ PE (PWRD FR/UNIT)			
			MCA	FUSE OR HACR BRKR	DISC. SIZE		MCA	FUSE OR HACR BRKR	DISC. SIZE	
					FLA	LRA			FLA	LRA
48LC*B14	208/230-3-60	STD	65.4/64.6	80/80	69/68	351	77.2/76.4	100/90	82/81	371
		MED	70.4/69.5	90/90	74/73	386	82.2/81.3	100/100	88/87	406
		HIGH	78.0	100	83	390	89.8	100	97	410
		SUPER	86.0	100	91	464	97.8	125	104	484
	460-3-60	STD	33.5	40	35	169	39.7	50	42	181
		MED	36.1	45	38	186	42.3	50	45	198
		HIGH	39.4	50	42	188	45.6	50	49	200
		SUPER	44.0	50	47	225	50.2	60	54	237
	575-3-60	STD	26.1	30	28	121	30.9	35	33	129
		MED	27.8	30	30	135	32.6	40	35	143
		HIGH	28.8	35	31	133	33.6	40	36	141
		SUPER	30.7	35	33	160	35.5	40	38	168
48LC*B17	208/230-3-60	STD	74.2/73.4	100/100	77/76	380	86.0/85.2	100/100	91/90	400
		MED	86.8	100	92	419	98.6	125	105	439
		HIGH	93.7	110	100	493	105.5	125	113	513
		SUPER	105.3	125	110	533	117.1	150	124	553
	460-3-60	STD	37.0	45	39	195	43.2	50	46	207
		MED	42.9	50	46	214	49.1	60	53	226
		HIGH	47.1	60	50	251	53.3	60	57	263
		SUPER	51.1	60	54	271	57.3	70	61	283
	575-3-60	STD	31.7	40	33	156	36.5	45	39	164
		MED	34.4	40	37	168	39.2	45	42	176
		HIGH	36.1	45	39	195	40.9	50	44	203
		SUPER	40.4	50	43	206	45.2	50	48	214
48LC*B20	208/230-3-60	STD	80.1/79.3	100/100	84/83	421	91.9/91.1	100/100	98/97	441
		MED	92.7	100	99	460	104.5	125	112	480
		HIGH	99.6	125	106	534	111.4	125	120	554
		SUPER	111.2	125	117	574	123.0	150	131	594
	460-3-60	STD	39.4	50	42	233	45.6	50	49	245
		MED	45.3	50	48	252	51.5	60	56	264
		HIGH	49.5	60	53	289	55.7	60	60	301
		SUPER	53.5	60	57	309	59.7	70	64	321
	575-3-60	STD	33.5	40	36	184	38.3	45	41	192
		MED	36.2	45	39	196	41.0	50	44	204
		HIGH	37.9	45	41	223	42.7	50	46	231
		SUPER	42.2	50	45	234	47.0	60	50	242
48LC*B24	208/230-3-60	STD	107.9	125	115	543	119.7	150	128	563
		MED	114.7	125	122	617	126.5	150	136	637
		HIGH	125.0	150	133	657	136.8	150	147	677
	460-3-60	STD	58.8	70	62	280	65.0	80	70	292
		MED	62.8	80	67	317	69.0	80	74	329
		HIGH	66.0	80	71	337	72.2	90	78	349
	575-3-60	STD	46.7	50	50	208	51.5	60	56	216
		MED	48.4	60	52	235	53.2	60	58	243
		HIGH	52.1	60	56	246	56.9	70	62	254
48LC*B26	208/230-3-60	STD	130.9	175	136	634	142.7	175	149	654
		MED	137.7	175	144	708	149.5	200	157	728
		HIGH	147.0	175	154	748	158.8	200	168	768
	460-3-60	STD	67.1	90	70	324	73.3	90	78	336
		MED	71.1	90	75	361	77.3	100	82	373
		HIGH	74.3	90	79	381	80.5	100	86	393
	575-3-60	STD	55.6	70	58	237	60.4	80	64	245
		MED	57.3	70	60	264	62.1	80	66	272
		HIGH	61.0	80	64	275	65.8	80	70	283

See Legend and Notes on page 88.

Electrical data (cont)

UNIT WIRE SIZING DATA WITH FACTORY-INSTALLED HACR BREAKER (12.5 to 23 TONS, NO CO)

UNIT SIZE	NOM. V-PH-HZ	IFM TYPE	NO CO OR UNPWRD CO							
			NO PE				W/ PE (PWRD FR/UNIT)			
			MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE	
					FLA	LRA			FLA	LRA
48LC*B14	208/230-3-60	STD	60.6/60.6	80/80	63/62	346	72.4/72.4	90/90	77/76	366
		MED	65.6/65.6	80/80	69/68	381	77.4/77.4	100/100	82/81	401
		HIGH	73.2	90	78	385	85.0	100	91	405
	460-3-60	STD	81.2	100	85	459	93.0	110	99	479
		MED	31.3	40	33	167	37.5	45	40	179
		HIGH	33.9	45	36	184	40.1	50	43	196
	575-3-60	STD	37.2	45	40	186	43.4	50	47	198
		MED	41.8	50	44	223	48.0	60	51	235
		HIGH	24.4	30	26	119	29.2	35	31	127
48LC*B17	208/230-3-60	STD	26.1	30	28	133	30.9	35	33	141
		MED	27.1	30	29	131	31.9	35	34	139
		HIGH	29.0	35	31	158	33.8	40	36	166
		SUPER	69.4/69.4	90/90	72/71	375	81.2/81.2	100/100	85/85	395
	460-3-60	STD	82.0	100	86	414	93.8	110	100	434
		MED	88.9	100	94	488	100.7	125	108	508
		HIGH	100.5	125	105	528	112.3	125	118	548
		SUPER	34.8	45	36	193	41.0	50	43	205
	575-3-60	STD	40.7	50	43	212	46.9	60	50	224
		MED	44.9	50	48	249	51.1	60	55	261
		HIGH	48.9	60	51	269	55.1	60	59	281
		SUPER	30.0	40	32	154	34.8	40	37	162
48LC*B20	208/230-3-60	STD	32.7	40	35	166	37.5	45	40	174
		MED	34.4	40	37	193	39.2	45	42	201
		HIGH	38.7	50	41	204	43.5	50	46	212
		SUPER	75.3/75.3	100/100	79/78	416	87.1/87.1	100/100	92/91	436
	460-3-60	STD	87.9	100	93	455	99.7	125	107	475
		MED	94.8	110	101	529	106.6	125	115	549
		HIGH	106.4	125	112	569	118.2	150	125	589
		SUPER	37.2	50	39	231	43.4	50	46	243
	575-3-60	STD	43.1	50	46	250	49.3	60	53	262
		MED	47.3	60	50	287	53.5	60	58	299
		HIGH	51.3	60	54	307	57.5	70	61	319
		SUPER	31.8	40	34	182	36.6	45	39	190
48LC*B24	208/230-3-60	STD	34.5	40	37	194	39.3	45	42	202
		MED	36.2	45	39	221	41.0	50	44	229
		HIGH	40.5	50	43	232	45.3	50	48	240
	460-3-60	STD	103.1	125	109	538	114.9	125	123	558
		MED	109.9	125	117	612	121.7	150	130	632
		HIGH	120.2	150	128	652	132.0	150	141	672
	575-3-60	STD	56.6	70	60	278	62.8	80	67	290
		MED	60.6	70	65	315	66.8	80	72	327
		HIGH	63.8	80	68	335	70.0	80	75	347
48LC*B26	208/230-3-60	STD	45.0	50	48	206	49.8	60	54	214
		MED	46.7	50	50	233	51.5	60	56	241
		HIGH	50.4	60	54	244	55.2	60	60	252
	460-3-60	STD	126.1	175	130	629	137.9	175	144	649
		MED	132.9	175	138	703	144.7	175	152	723
		HIGH	142.2	175	149	743	154.0	200	162	763
	575-3-60	STD	64.9	80	68	322	71.1	90	75	334
		MED	68.9	90	73	359	75.1	90	80	371
		HIGH	72.1	90	76	379	78.3	100	83	391

See Legend and Notes on page 88.

Electrical data (cont)

UNIT WIRE SIZING DATA WITH FACTORY-INSTALLED HACR BREAKER (12.5 to 23 TONS, NO CO)

UNIT SIZE	NOM. V-PH-HZ	IFM TYPE	W/ PWRD CO							
			NO PE				W/ PE (PWRD FR/UNIT)			
			MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE	
					FLA	LRA			FLA	LRA
48LC*B14	208/230-3-60	STD	65.4/65.4	80/80	69/68	351	77.2/77.2	100/100	82/81	371
		MED	70.4/70.4	90/90	74/73	386	82.2/82.2	100/100	88/87	406
		HIGH	78.0	100	83	390	89.8	100	97	410
		SUPER	86.0	100	91	464	97.8	125	104	484
	460-3-60	STD	33.5	40	35	169	39.7	50	42	181
		MED	36.1	45	38	186	42.3	50	45	198
		HIGH	39.4	50	42	188	45.6	50	49	200
		SUPER	44.0	50	47	225	50.2	60	54	237
	575-3-60	STD	26.1	30	28	121	30.9	35	33	129
		MED	27.8	30	30	135	32.6	40	35	143
		HIGH	28.8	35	31	133	33.6	40	36	141
		SUPER	30.7	35	33	160	35.5	40	38	168
48LC*B17	208/230-3-60	STD	74.2/74.2	100/100	77/76	380	86.0/86.0	100/100	91/90	400
		MED	86.8	100	92	419	98.6	125	105	439
		HIGH	93.7	110	100	493	105.5	125	113	513
		SUPER	105.3	125	110	533	117.1	150	124	553
	460-3-60	STD	37.0	45	39	195	43.2	50	46	207
		MED	42.9	50	46	214	49.1	60	53	226
		HIGH	47.1	60	50	251	53.3	60	57	263
		SUPER	51.1	60	54	271	57.3	70	61	283
	575-3-60	STD	31.7	40	33	156	36.5	45	39	164
		MED	34.4	40	37	168	39.2	45	42	176
		HIGH	36.1	45	39	195	40.9	50	44	203
		SUPER	40.4	50	43	206	45.2	50	48	214
48LC*B20	208/230-3-60	STD	80.1/80.1	100/100	84/83	421	91.9/91.9	100/100	98/97	441
		MED	92.7	100	99	460	104.5	125	112	480
		HIGH	99.6	125	106	534	111.4	125	120	554
		SUPER	111.2	125	117	574	123.0	150	131	594
	460-3-60	STD	39.4	50	42	233	45.6	50	49	245
		MED	45.3	50	48	252	51.5	60	56	264
		HIGH	49.5	60	53	289	55.7	60	60	301
		SUPER	53.5	60	57	309	59.7	70	64	321
	575-3-60	STD	33.5	40	36	184	38.3	45	41	192
		MED	36.2	45	39	196	41.0	50	44	204
		HIGH	37.9	45	41	223	42.7	50	46	231
		SUPER	42.2	50	45	234	47.0	60	50	242
48LC*B24	208/230-3-60	STD	107.9	125	115	543	119.7	150	128	563
		MED	114.7	125	122	617	126.5	150	136	637
		HIGH	125.0	150	133	657	136.8	150	147	677
	460-3-60	STD	58.8	70	62	280	65.0	80	70	292
		MED	62.8	80	67	317	69.0	80	74	329
		HIGH	66.0	80	71	337	72.2	90	78	349
	575-3-60	STD	46.7	50	50	208	51.5	60	56	216
		MED	48.4	60	52	235	53.2	60	58	243
		HIGH	52.1	60	56	246	56.9	70	62	254
48LC*B26	208/230-3-60	STD	130.9	175	136	634	142.7	175	149	654
		MED	137.7	175	144	708	149.5	200	157	728
		HIGH	147.0	175	154	748	158.8	200	168	768
	460-3-60	STD	67.1	90	70	324	73.3	90	78	336
		MED	71.1	90	75	361	77.3	100	82	373
		HIGH	74.3	90	79	381	80.5	100	86	393
	575-3-60	STD	55.6	70	58	237	60.4	80	64	245
		MED	57.3	70	60	264	62.1	80	66	272
		HIGH	61.0	80	64	275	65.8	80	70	283

See Legend and Notes on page 88.

Electrical data (cont)

3-STAGE COOLING WITH 3-SPEED INDOOR FAN MOTOR, SIZES 14-26 (12.5-23 TONS) — HIGH SCCR

48LC** UNIT	V-Ph-Hz	VOLTAGE RANGE		HIGH SCCR kA	COMP 1		COMP 2		OFM (ea)		IFM		
		MIN	MAX		RLA	LRA	RLA	LRA	WATTS	FLA	TYPE	EFF AT FULL LOAD	FLA
14	208-3-60	253	187	60	17.6	123	23.2	164	185	1.3	STD	85.0%	8.6
											MED	83.6%	13.6
											HIGH	89.5%	21.2
											SUPER	91.7%	28.0
	230-3-60	253	187	60	17.6	123	23.2	164	185	1.3	STD	85.0%	7.8
											MED	83.6%	12.7
											HIGH	89.5%	21.2
											SUPER	91.7%	28.0
	460-3-60	506	414	65	9.6	62	11.2	75	185	1.3	STD	85.0%	3.8
											MED	83.6%	6.4
											HIGH	89.5%	9.7
											SUPER	91.7%	13.7
17	208-3-60	253	187	60	19.1	123	27.6	191	185	1.3	STD	85.0%	8.6
											MED	89.5%	21.2
											HIGH	91.7%	28.0
											SUPER	91.7%	37.3
	230-3-60	253	187	60	19.1	123	27.6	191	185	1.3	STD	85.0%	7.8
											MED	89.5%	21.2
											HIGH	91.7%	28.0
											SUPER	91.7%	37.3
	460-3-60	506	414	65	9.8	62	12.8	100	185	1.3	STD	85.0%	3.8
											MED	89.5%	9.7
											HIGH	91.7%	13.7
											SUPER	91.7%	16.9
20	208-3-60	253	187	60	25.0	164	27.6	191	185	1.3	STD	85.0%	8.6
											MED	89.5%	21.2
											HIGH	91.7%	28.0
											SUPER	91.7%	37.3
	230-3-60	253	187	60	25.0	164	27.6	191	185	1.3	STD	85.0%	7.8
											MED	89.5%	21.2
											HIGH	91.7%	28.0
											SUPER	91.7%	37.3
	460-3-60	506	414	65	12.2	100	12.8	100	185	1.3	STD	85.0%	3.8
											MED	89.5%	9.7
											HIGH	91.7%	13.7
											SUPER	91.7%	16.9
24	208-3-60	253	187	60	29.5	195	33.3	239	190	1.6	STD	89.5%	21.2
											MED	91.7%	28.0
											HIGH	91.7%	37.3
	230-3-60	253	187	60	29.5	195	33.3	239	190	1.6	STD	89.5%	21.2
											MED	91.7%	28.0
											HIGH	91.7%	37.3
	460-3-60	506	414	65	14.8	95	18.0	125	190	1.6	STD	89.5%	9.7
											MED	91.7%	13.7
											HIGH	91.7%	16.9
26	208-3-60	253	187	60	30.1	225	51.2	300	190	1.6	STD	89.5%	21.2
											MED	91.7%	28.0
											HIGH	91.7%	37.3
	230-3-60	253	187	60	30.1	225	51.2	300	190	1.6	STD	89.5%	21.2
											MED	91.7%	28.0
											HIGH	91.7%	37.3
	460-3-60	506	414	65	16.7	114	23.1	150	190	1.6	STD	89.5%	9.7
											MED	91.7%	13.7
											HIGH	91.7%	16.9

See Legend and Notes on page 88.

NOTE: High SCCR is not available for units with 575v.

Electrical data (cont)

UNIT WIRE/FUSE OR HACR BREAKER SIZING DATA, 3-SPEED INDOOR FAN MOTOR, SIZES 14-26 (12.5-23 TONS) — HIGH SCCR

48LC** UNIT	NOM. V-Ph-Hz	IFM TYPE	HIGH SCCR kA	NO CO OR UNPWR CO							
				NO PE				W/ PE (PWRD FR/UNIT)			
				MCA	FUSE OR HACR BRKR	DISC. SIZE		MCA	FUSE OR HACR BRKR	DISC. SIZE	
						FLA	LRA			FLA	LRA
14	208/230-3-60	STD	60	59.1/58.3	80/80	61/60	343	70.9/70.1	90/90	75/74	363
		MED		64.1/63.2	80/80	67/66	378	75.9/75.0	90/90	81/80	398
		HIGH		71.7	90	76	382	83.5	100	89	402
		SUPER		79.7	100	84	456	91.5	100	97	476
	460-3-60	STD	65	31.3	40	33	167	37.5	45	40	179
		MED		33.9	45	36	184	40.1	50	43	196
		HIGH		37.2	45	40	186	43.4	50	47	198
		SUPER		41.8	50	44	223	48.0	60	51	235
17	208/230-3-60	STD	60	67.4/66.6	90/90	70/69	371	79.2/78.4	100/100	83/82	391
		MED		80.0	100	84	410	91.8	100	98	430
		HIGH		86.9	100	92	484	98.7	125	105	504
		SUPER		98.5	125	103	524	110.3	125	116	544
	460-3-60	STD	65	34.8	45	36	193	41.0	50	43	205
		MED		40.7	50	43	212	46.9	60	50	224
		HIGH		44.9	50	48	249	51.1	60	55	261
		SUPER		48.9	60	51	269	55.1	60	59	281
20	208/230-3-60	STD	60	73.3/72.5	100/100	76/75	412	85.1/84.3	100/100	90/89	432
		MED		85.9	100	91	451	97.7	125	104	471
		HIGH		92.8	100	99	525	104.6	125	112	545
		SUPER		104.4	125	109	565	116.2	150	123	585
	460-3-60	STD	65	37.2	50	39	231	43.4	50	46	243
		MED		43.1	50	46	250	49.3	60	53	262
		HIGH		47.3	60	50	287	53.5	60	58	299
		SUPER		51.3	60	54	307	57.5	70	61	319
24	208/230-3-60	STD	60	101.9	125	108	538	113.7	125	121	558
		MED		108.7	125	115	612	120.5	150	129	632
		HIGH		119.0	150	126	652	130.8	150	140	672
	460-3-60	STD	65	56.6	70	60	278	62.8	80	67	290
		MED		60.6	70	65	315	66.8	80	72	327
		HIGH		63.8	80	68	335	70.0	80	75	347
26	208/230-3-60	STD	60	124.9	175	129	629	136.7	175	142	649
		MED		131.7	175	137	703	143.5	175	150	723
		HIGH		141.0	175	147	743	152.8	200	161	763
	460-3-60	STD	65	64.9	80	68	322	71.1	90	75	334
		MED		68.9	90	73	359	75.1	90	80	371
		HIGH		72.1	90	76	379	78.3	100	83	391

See Legend and Notes on page 88.

NOTE: High SCCR is not available for units with 575v.

Electrical data (cont)

LEGEND AND NOTES

Applicable for Electrical Data Tables on pages 80–87.

LEGEND

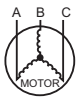
BRKR	—	Circuit Breaker
CO	—	Convenience Outlet
DISC	—	Disconnect
FLA	—	Full Load Amps
HACR	—	Heating, Air Conditioning, and Refrigeration
IFM	—	Indoor Fan Motor
LRA	—	Locked Rotor Amps
MCA	—	Minimum Circuit Amps
PE	—	Power Exhaust
pwrd fr/ unit	—	Powered from Unit
PWRD CO	—	Powered Convenience Outlet
SCCR	—	Short Circuit Current Rating
UNPWR CO	—	Unpowered Convenience Outlet

NOTES:

1. In compliance with NEC requirements for multimotor and combination load equipment (refer to NEC Articles 430 and 440), the overcurrent protective device for the unit shall be fuse or HACR breaker. Canadian units may be fuse or circuit breaker.
2. 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.

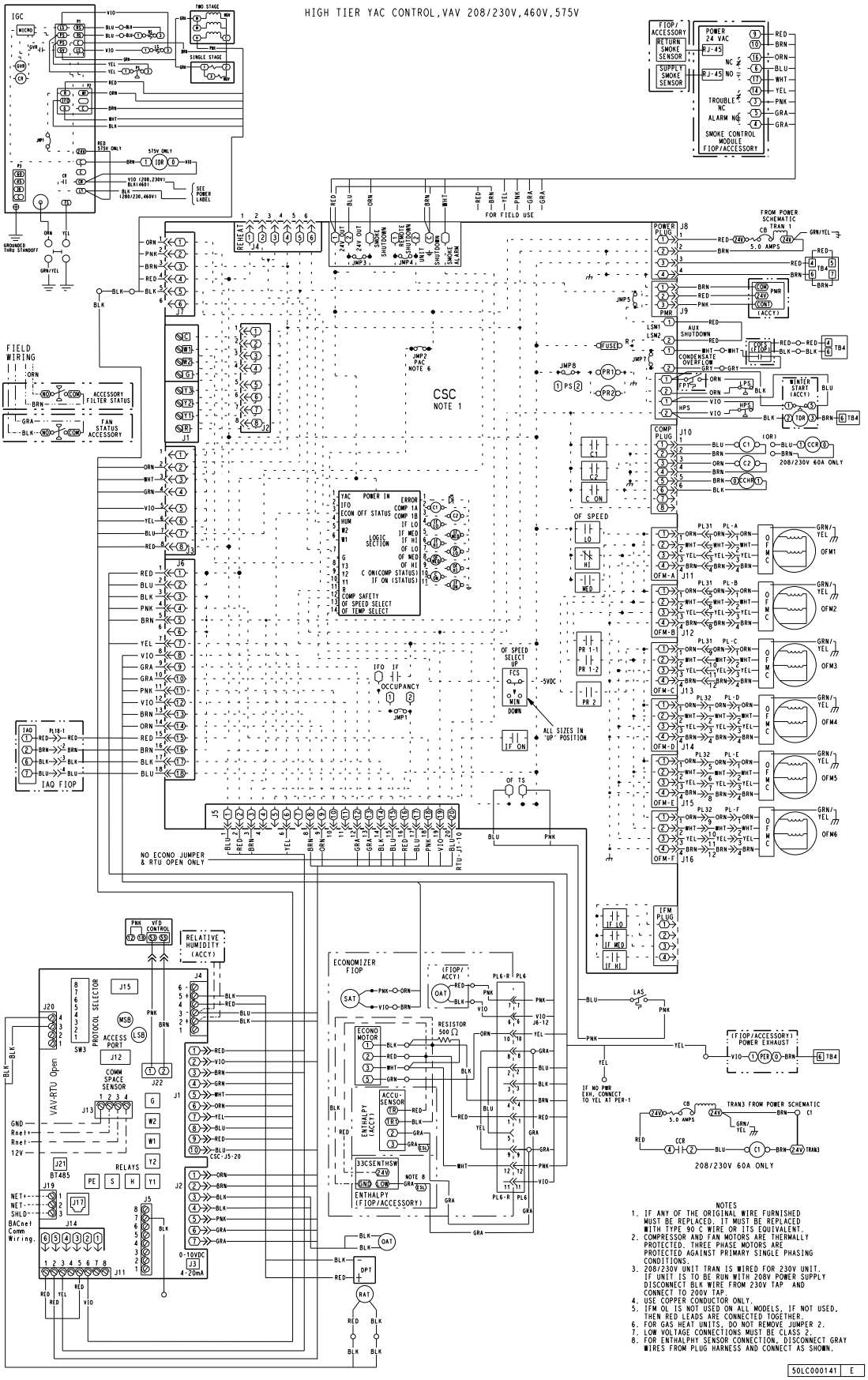
$$\text{\% Voltage Imbalance} = 100x \frac{4}{227} = 1.78\%$$

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.

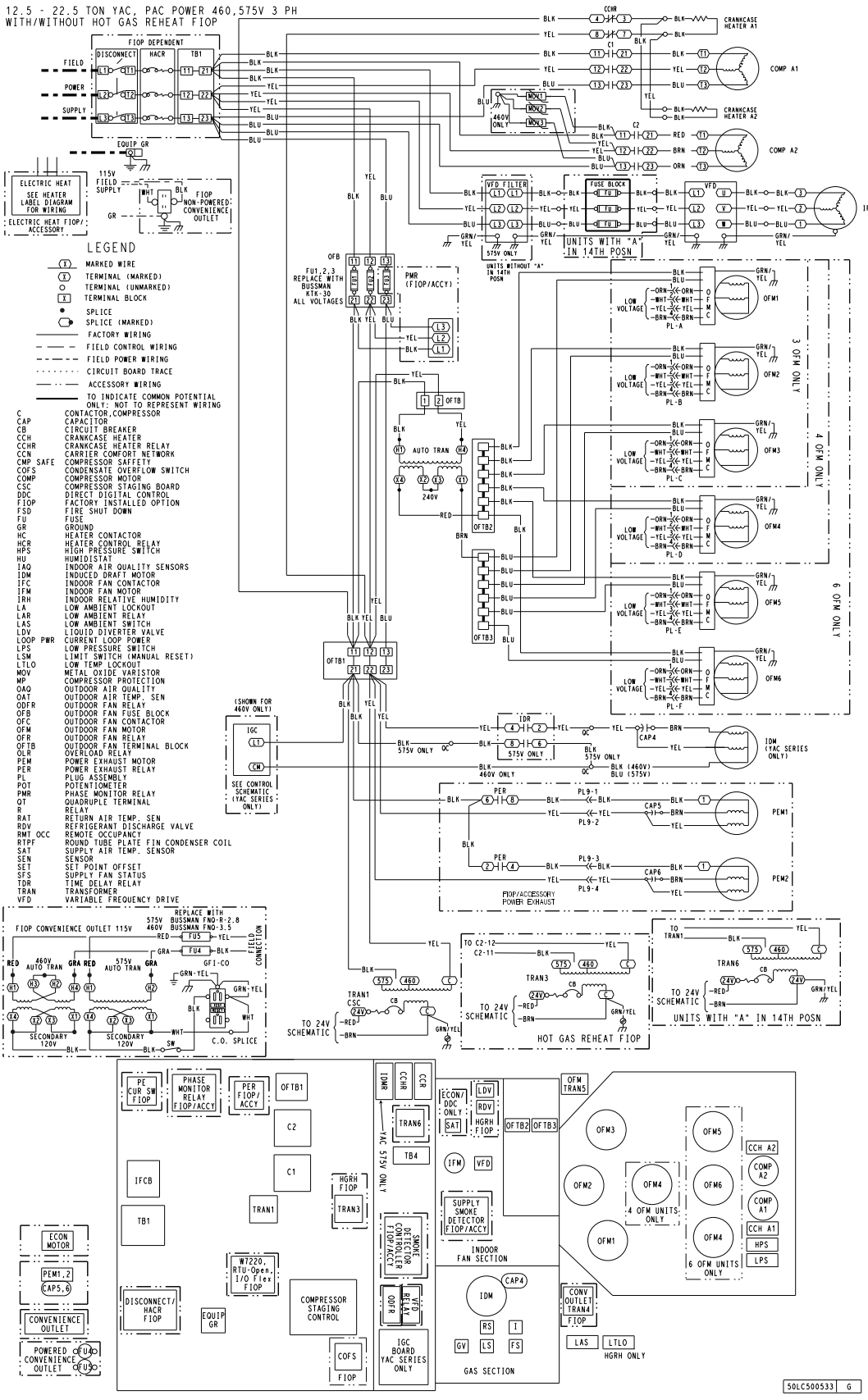
Typical wiring diagrams

48LC*B14-26 VAV-RTU OPEN CONTROL WIRING DIAGRAM



Typical wiring diagrams (cont)

48LC*B14-26 POWER CONTROL WIRING DIAGRAM



Sequence of operation

VAV-RTU Open

The VAV-RTU Open control is designed to provide VAV system operation when using a 48LC chassis small packaged rooftop and Carrier i-Vu® Open VAV terminal controls. Functionality includes:

- Duct Static Pressure Control (with optional Reset function)
- Supply Air Temperature Control (with optional Reset function)
- Morning Warm-up Cycle
- Occupied Heating (available)
- Heating and Cooling Setpoint Separation
- Economizer Cooling Cycle
- Mechanical Cooling Cycle
- Integrated Cooling Cycle
- Minimum Ventilation
- Unoccupied Free Cooling
- Demand Controlled Ventilation [DCV]
- Supply Air Tempering (Low and Medium Gas Heat only)
- Open Airside Linkage
- Field Test/Commissioning

Duct Static Pressure Control (with optional Reset function)

The supply fan/motor VFD is controlled by a VFD using a PID and an analog input from a duct static pressure transducer. The supply fan will modulate its speed to maintain the desired duct static pressure setpoint.

Supply Air Temperature Control (with optional Reset function)

The control will maintain the desired supply air temperature setpoint whenever cooling is required. A user configurable setpoint will be provided (default 53°F). The control will use the appropriate method (economizer cooling, mechanical cooling, or a combination of both) to achieve this setpoint whenever the zone temperature is greater than the current cooling setpoint (occupied or unoccupied). If Supply Air Reset is enabled, the reset algorithm will calculate a proportional reset value between the Occupied Cooling setpoint and 1°F above the Occupied Heating setpoint. The amount of reset (reset ratio and maximum reset limit value) is user configurable.

Morning Warm-up

The control will provide a Morning Warm-up cycle the first time if transition from unoccupied to occupied and if the heating is required and the unit goes into heating immediately. Whenever the unit enters the heating mode, before any heat stage is enabled, the control will provide a Linkage mode to the system that will cause the terminals to maintain sufficient airflow. The Linkage mode of Warm-up (2) will be sent to the terminal system to ensure sufficient airflow while in the heating mode but also providing a controlled warm-up cycle to prevent overheating of some zones. As a safety measure, should the heating cycle continue and the SAT approach the "Maximum Heating SAT" limit, the Linkage mode sent will change to Pressurization (6) to ensure all terminals open to their maximum airflow. The Linkage mode will remain in Pressurization until that heating cycle ends. Once the heating demand is met and the heat cycle is completed or if cooling is required, heating will be locked out until the beginning of the next occupied period.

Occupied Heating

Optionally, the user may enable occupied heating which will allow heating whenever heating is needed during the occupied period. The cycle will operate exactly the same as Morning Warm-up above, except it will not be limited by the transition into an occupied period.

Heating and Cooling Setpoint Separation

By default, the control will maintain a 5°F (configurable) separation between the heating and cooling setpoints. This will prevent the unit from prematurely entering the opposite mode.

Economizer Cooling Cycle

The VAV-RTU Open provides variable supply airflow to the VAV system and maintain constant minimum ventilation. As the supply airflow changes, the economizer minimum position is adjusted to provide a constant amount of outdoor air. The control will provide the ability to utilize outdoor air for maintaining the supply air setpoint, should the outdoor air be suitable. The economizer control will utilize an OAT temperature check, a RAT temperature check if RAT is available or a SPT temperature check comparison, and optionally, an OA enthalpy check to determine if OA conditions are suitable for economizing. Economizer operation, if available, will begin whenever cooling is required. The economizer will modulate the position of the OA damper to maintain the desired calculated economizer setpoint. The economizer will be controlled to meet CEC Title 24 requirements so that it will remain open 100% during integrated cooling and only partially close if required. The VAV-RTU Open also provides FDD (Fault Detection and Diagnostics) for economizer operation. The FDD logic will detect an economizer that fails to close, fails to open, is stuck fully open, and fails to fully open. Each condition will cause an Economizer Operation alarm to occur and the specific fault condition will be displayed.

Mechanical Cooling Cycle

The control will operate 3 stages of mechanical cooling in order to maintain the desired supply air temperature whenever economizer cooling operation is unavailable but cooling is required. This condition will be determined if the OA has high enthalpy or at a temperature above the Economizer Lockout temperature. The 2 compressors will be staged in a binary fashion so that 3 stages of cooling are provided. Mechanical cooling stages will be added as required to meet the desired SA setpoint. The number of stages will depend on the return air conditions and the system load (airflow through the coil). Stages will be added or dropped as required to maintain the setpoint while also maintaining the minimum on time and minimum off time for compressor operation. Anytime the SA falls below the desired SA setpoint, stages will be dropped until only stage 1 is operating. At that point, should the SA fall below 45°F (7°C), the economizer will modulate to increase the amount of outdoor air in order to maintain this minimum SA temperature. Should the economizer reach the maximum OA position and if the SA is still below the minimum SA temperature, the first cooling stage will be disabled and the economizer will return to the minimum position.

Integrated Cooling Cycle

If economizer cooling operation is insufficient to maintain the desired SA setpoint, mechanical cooling will be activated to supplement the free economizer cooling. This condition will be determined if the OA has low enthalpy but is at a temperature at least 5°F above the desired SA

setpoint and below the Economizer Lockout temperature. Mechanical cooling stages will be added as required to meet the desired SA setpoint. The number of stages will depend on the return air conditions and the system load (airflow through the coil). Stages will be added or dropped as required to maintain the setpoint, while also maintaining the minimum on time and minimum off time for compressor operation. Anytime the SA falls below the desired SA setpoint, stages will be dropped until only stage 1 is operating. At that point, should the SA fall below the minimum SA temperature, the economizer will modulate to increase the amount of return air in order to maintain this minimum SA temperature. Should the economizer reach the minimum OA position and if the SA is still below the minimum SA temperature, the first cooling stage will be disabled.

Minimum Ventilation

The economizer minimum position will be adjusted as required based on the supply fan speed. Two user-configurable minimum economizer positions will be provided. The economizer will be positioned at the "Low Fan Econ Min Pos" when the fan is operating at its slowest speed. When the fan is operating at its maximum speed, the economizer will be positioned at the "Vent Dmpr Pos / DCV Min Pos". For any supply fan speed between these 2 points, the economizer minimum position will be calculated proportionally.

Unoccupied Free Cooling

Unoccupied Free Cooling allows the rooftop with the economizer damper to use outdoor air for free cooling during unoccupied periods.

When the VAV-RTU Open is unoccupied and the space temperature rises at least 2°F above the Occupied Cooling Setpoint, the supply fan starts. The economizer damper opens as necessary to maintain the Supply Air Setpoint and cool the space. The VAV-RTU Open continues to operate in this mode until the space temperature drops to 1°F below the Occupied Cooling Setpoint or the outside air conditions are no longer suitable for free cooling.

Demand Controlled Ventilation [DCV]

Whenever the unit is in an occupied mode and "DCV Control" is set to enable, a unique economizer minimum position will be calculated based on the output of the DCV algorithm. The algorithm monitors the CO_2 sensor value and compares that value to the user defined setpoint. A control algorithm calculates the required minimum economizer position required to satisfy the ventilation requirements of the space. A user-adjustable DCV Max Vent Damper Position is provided to limit the maximum amount of outdoor air that can be brought into the unit due to the DCV algorithm. Demand Controlled Ventilation can be used in either a differential mode where both the indoor air and outdoor air CO_2 levels are provided to the control or it may be used in a single indoor air mode with only the indoor air CO_2 level. In the latter case, the outdoor air CO_2 level is assumed at 400 ppm.

Supply Air Tempering (Low and Medium Gas Heat only)

The VAV-RTU Open provides the capability to operate the heat to maintain a minimum supply air temperature during conditions where very cold outdoor air causes the supply air temperature to fall below the configured Supply Air (SA) Tempering Setpoint. This occurs during periods where DCV is active and increasing the amount of outdoor air or in cases where the system is operating at very low airflow and the calculated economizer position has increased to maintain a constant ventilation rate.

Heat operation is subject to anti-recycle timers to protect the equipment from short-cycling. There are fixed application specific minimum on and off times for each heating output (120 seconds on and 60 seconds off). The minimum on time required may adversely affect supply air temperatures with High Gas Heat option in some applications.

Open Airside Linkage

The control will support Airside Linkage to accommodate system operation using Carrier VAV terminal controls. The VAV-RTU Open will receive zone information (occupancy status, occupied and unoccupied zone temperatures, occupied and unoccupied heating and cooling setpoints, zone CO_2 level for DCV, and zone RH level). The VAV-RTU Open will operate in the mode required to satisfy the zones. Airside Linkage will provide operating mode information to the zones so that the system operation is fully coordinated between the rooftop and the terminal zones. The VAV air terminals offer a minimum airflow setting in AHU heating mode. This shall be configured to maintain the required airflow (cfm) whenever the VAV RTU is in a heating mode per the unit's specification. The VAV terminals will recognize the Heating or Warm-up modes as a heat mode and utilize the higher airflow minimum setpoint as configured. For heating cycles, initially utilize the Linkage Morning Warm-Up mode to open dampers on all zones below the midpoint of the occupied heating and cooling setpoints. This provides a controlled heat cycle and prevents the overheating of random zones where heating may not be required. Any zone below this middle setpoint will have its airflow at the maximum value. Further monitor the SAT of the VAV RTU to determine if the SAT is approaching the configured maximum limit. As the limit is approached, the Linkage mode is changed to Linkage Pressurization to ensure all terminals open to their maximum airflow.

Field Test/Commissioning

The control will provide BACnet test points to activate specific test modes that can be used to commission the rooftop and the system. Test modes will be available in the Service Test screen on the Property pages and shall also be available on the local Equipment Touch device for standalone commissioning. Tests include: fan test, low heat test, high heat test, cooling test, power exhaust test, and an economizer test. When any test is active, the appropriate Linkage mode will be sent to the system's terminals. This will ensure appropriate system operation and airflow during any test mode.

Note about this specification:

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

WeatherExpert® Ultra High Efficiency Gas Heat/ Electric Cooling Packaged Variable Air Volume (VAV) Rooftop

HVAC Guide Specifications:

Size Range: **12.5 to 23 Nominal Tons**

Part 1 — 23 06 80 Schedules for Packaged VAV HVAC Equipment

1.01 23 06 80.13 Unitary Packaged VAV HVAC Equipment Schedule

A. 23 06 80.13.A. Rooftop unit schedule

1. Schedule is per the project specification requirements.

Part 2 — 23 07 16 HVAC Equipment Insulation

2.01 23 07 16.13 Packaged VAV, 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 aluminum foil-faced insulation 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. Gas 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 13.23 Sensors and Zone Air Terminals

A. 23 09 13.23.A. Space terminal sensors:

1. Carrier zone air terminal space sensors shall be available with capabilities of combining:
   a. Space temperature sensing
   b. Sensors with communication port
   c. Sensors with CO_2 sensing
   d. Sensors with LCD display
   e. Sensors with Humidity sensing
   f. Sensors with local override and indicating light
2. i-Vu® Equipment Touch™; Carrier brand 4.3 in. color touch screen zone sensor and local user interface for a single Open (BACnet[1] MS/TP) equipment controller. Includes built-in temperature sensor.
3. i-Vu System Touch™; Carrier brand 4.3 in. color touch screen user interface connects to a network of up to 60 Open (BACnet MS/TP) equipment controllers. Includes built-in temperature sensor.

B. 23 09 13.23.B. Zone terminals:

1. Zone air terminals shall be a i-Vu VAV Zone Single Duct and Fan Terminal type for optimum integrated system solution. This includes:
   a. 35E – Single Duct Air Terminals
   b. 45J – Series Fan Powered Air Terminals
   c. 45K – Quiet Series Fan Powered Air Terminals
   d. 45M – Parallel Fan Powered Air Terminals
   e. 45N – Quiet Parallel Fan Powered Air Terminals
   f. 45Q – Low Profile Series Fan Powered Air Terminals
   g. 45R – Low Profile Parallel Fan Powered Air Terminals
   h. 35J – Single Duct Retrofit Air Terminals

Part 4 — 23 09 23 Integrated Staging Control (ISC) Board System for HVAC

4.01 23 09 23.13 Packaged VAV, Rooftop Units:

A. 23 09 23.13.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 an electro-mechanical control board, to conveniently and safely provide connection points for vital control functions such as: smoke detectors, phase monitor, gas controller, economizer, thermostat, and safety switches. Shall control all 3 stages of compressor logic, fully variable indoor fan motor logic, as well as staging of the outdoor fan motor. Shall also have a green LED indicator to indicate GO operation as well as a fault LED indicator for thermostat mis-wiring, no fan operation and safety switches.
4. The heat exchanger shall be controlled by an integrated gas controller (IGC) microprocessor. See heat exchanger section of this specification.

B. 23 09 23.13.B. Safeties:

1. Compressor over-temperature, over-current. High internal pressure differential.
2. Low-pressure protection 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 protection switch.
   a. High pressure switch shall use different color wire than the low pressure switch. The purpose is to assist the installer and service

1. BACnet is a trademark of ASHRAE.

technician to correctly wire and or troubleshoot the rooftop unit.

4. Automatic reset, motor thermal overload protector.
5. Heating section shall be provided with the following minimum protections:
   a. High-temperature limit switches.
   b. Induced draft motor speed sensor.
   c. Flame rollout switch.
   d. Flame proving controls.

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

5.01 23 09 93.13 Packaged VAV, Rooftop Units:

A. 23 09 93.13.A. Duct Static Pressure Control (with optional Reset function) — The supply fan/motor VFD is controlled by a VFD using a PID and an analog input from a duct static pressure transducer.The supply fan will modulate its speed to maintain the desired duct static pressure setpoint.

B. 23 09 93.13.B. Supply Air Temperature Control (with optional Reset function) — The control will maintain the desired supply air temperature setpoint whenever cooling is required. A user configurable setpoint will be provided (default 53°F). The control will use the appropriate method (economizer cooling, mechanical cooling, or a combination of both) to achieve this setpoint whenever the zone temperature is greater than the current cooling setpoint (occupied or unoccupied). If Supply Air Reset is enabled, the reset algorithm will calculate a proportional reset value between the Occupied Cooling setpoint and 1°F above the Occupied Heating setpoint. The amount of reset (reset ratio and maximum reset limit value) is user configurable.

C. 23 09 93.13.C. Morning Warm-up — The control will provide a Morning Warm-up cycle the first time if transition from unoccupied to occupied and if the heating is required and the unit goes into heating immediately. Whenever the unit enters the heating mode, before any heat stage is enabled, the control will provide a Linkage mode to the system that will cause the terminals to maintain sufficient airflow. The Linkage mode of Warm-up (2) will be sent to the terminal system to ensure sufficient airflow while in the heating mode but also providing a controlled warm-up cycle to prevent overheating of some zones. As a safety measure, should the heating cycle continue and the SAT approach the "Maximum Heating SAT" limit, the Linkage mode will change to Pressurization (6) to ensure all terminals open to their maximum airflow. The Linkage mode will remain in Pressurization until that heating cycle ends. Once the heating demand is met and the heat cycle is completed or if cooling is required, heating will be locked out until the beginning of the next occupied period.

D. 23 09 93.13.D. Occupied Heating — Optionally, the user may enable occupied heating which will allow heating whenever heating is needed during the occupied period. The cycle will operate exactly the same as Morning Warm-up above, except it will not be limited by the transition into an occupied period.

E. 23 09 93.13.E. Heating and Cooling Setpoint Separation — By default, the control will maintain a 5°F (configurable) separation between the heating and cooling setpoints. This will prevent the unit from prematurely entering the opposite mode.

F. 23 09 93.13.F. Economizer Cooling Cycle — The VAV-RTU Open provides variable supply airflow to the VAV system and maintain constant minimum ventilation. As the supply airflow changes, the economizer minimum position is adjusted to provide a constant amount of outdoor air. The control will provide the ability to utilize outdoor air for maintaining the supply air setpoint should the outdoor air be suitable. The economizer control will utilize an OAT temperature check, a RAT temperature check if RAT is available or a SPT temperature check comparison and optionally, an OA enthalpy check to determine if OA conditions are suitable for economizing. Economizer operation, if available, will begin whenever cooling is required. The economizer will modulate the position of the OA damper to maintain the desired calculated economizer setpoint. The economizer will be controlled to meet CEC Title 24 requirements so that it will remain open 100% during integrated cooling and only partially close if required. The VAV-RTU Open also provides FDD (Fault Detection and Diagnostics) for economizer operation. The FDD logic will detect an economizer that fails to close, fails to open, is stuck fully open, and fails to fully open. Each condition will cause an Economizer Operation alarm to occur and the specific fault condition will be displayed.

G. 23 09 93.13.G. Mechanical Cooling Cycle — The control will operate 3 stages of mechanical cooling in order to maintain the desired supply air temperature whenever economizer cooling operation is unavailable but cooling is required. This condition will be determined if the OA has high enthalpy or at a temperature above the Economizer Lockout temperature. The 2 compressors will be staged in a binary fashion so that 3 stages of cooling are provided. Mechanical cooling stages will be added as required to meet the desired SA setpoint. The number of stages will depend on the return air conditions and the system load (airflow through the coil). Stages will be added or dropped as required to maintain the setpoint, while also maintaining the minimum on time and minimum off time for compressor operation. Anytime the SA falls below the desired SA setpoint, stages will be dropped until only stage 1 is operating. At that point, should the SA fall below 45°F (7°C), the economizer will modulate to increase the amount of outdoor air in order to maintain this minimum SA temperature. Should the economizer reach the maximum OA position and if the SA is still below the minimum SA temperature,

the first cooling stage will be disabled and the economizer will return to the minimum position.

H. 23 09 93.13.H. Integrated Cooling Cycle — If economizer cooling operation is insufficient to maintain the desired SA setpoint, mechanical cooling will be activated to supplement the free economizer cooling. This condition will be determined if the OA has low enthalpy but is at a temperature at least 5°F above the desired SA setpoint and below the Economizer Lockout temperature. Mechanical cooling stages will be added as required to meet the desired SA setpoint. The number of stages will depend on the return air conditions and the system load (airflow through the coil). Stages will be added or dropped as required to maintain the setpoint while also maintaining the minimum on time and minimum off time for compressor operation. Anytime the SA falls below the desired SA setpoint, stages will be dropped until only stage 1 is operating. At that point, should the SA fall below the minimum SA temperature, the economizer will modulate to increase the amount of return air in order to maintain this minimum SA temperature. Should the economizer reach the minimum OA position and if the SA is still below the minimum SA temperature, the first cooling stage will be disabled.

I. 23 09 93.13.I. Minimum Ventilation — The economizer minimum position will be adjusted as required based on the supply fan speed. Two user configurable minimum economizer positions will be provided. The economizer will be positioned at the "Low Fan Econ Min Pos" when the fan is operating at its slowest speed. When the fan is operating at its maximum speed, the economizer will be positioned at the "Vent Dmpr Pos / DCV Min Pos". For any supply fan speed between these 2 points, the economizer minimum position will be calculated proportionally.

J. 23 09 93.13.J. Unoccupied Free Cooling — Unoccupied Free Cooling allows the rooftop with the economizer damper to use outdoor air for free cooling during unoccupied periods. When the VAV-RTU Open is unoccupied and the space temperature rises at least 2°F above the Occupied Cooling Setpoint, the supply fan starts. The economizer damper opens as necessary to maintain the Supply Air Setpoint and cool the space. The VAV-RTU Open continues to operate in this mode until the space temperature drops to 1°F below the Occupied Cooling Setpoint or the outside air conditions are no longer suitable for free cooling.

K. 23 09 93.13.K. Demand Controlled Ventilation [DCV] — Whenever the unit is in an occupied mode and "DCV Control" is set to enable, a unique economizer minimum position will be calculated based on the output of the DCV algorithm. The algorithm monitors the CO_2 sensor value and compares that value to the user defined setpoint. A control algorithm calculates the required minimum economizer position required to satisfy the ventilation requirements of the space. A user adjustable DCV Max Vent Damper Position is provided to limit the maximum amount of outdoor air that can be brought into the unit due to the DCV algorithm. Demand Controlled Ventilation can be used in either a differential mode where both the indoor air and outdoor air CO_2 levels are provided to the control or it may be used in a single indoor air mode with only the indoor air CO_2 level. In the latter case, the outdoor air CO_2 level is assumed at 400 ppm.

L. 23 09 93.13.L. Supply Air Tempering (Low and Medium Gas Heat only) — The VAV-RTU Open provides the capability to operate the heat to maintain a minimum supply air temperature during conditions where very cold outdoor air causes the supply air temperature to fall below the configured Supply Air (SA) Tempering Setpoint. This occurs during periods where DCV is active and increasing the amount of outdoor air or in cases where the system is operating at very low airflow and the calculated economizer position has increased to maintain a constant ventilation rate. Heat operation is subject to anti-recycle timers to protect the equipment from short-cycling. There are fixed application specific minimum on and off times for each heating output (120 seconds on and 60 seconds off). The minimum on time required may adversely affect supply air temperatures with High Gas Heat option in some applications.

M. 23 09 93.13.M. Open Airside Linkage — The control will support Airside Linkage to accommodate system operation using Carrier VAV terminal controls. The VAV-RTU Open will receive zone information (occupancy status, occupied and unoccupied zone temperatures, occupied and unoccupied heating and cooling setpoints, zone CO_2 level for DCV, and zone RH level). The VAV-RTU Open will operate in the mode required to satisfy the zones. Airside Linkage will provide operating mode information to the zones so that the system operation is fully coordinated between the rooftop and the terminal zones. The VAV air terminals offer a minimum airflow setting in AHU heating mode. This shall be configured to maintain the required airflow (cfm) whenever the VAV RTU is in a heating mode per the unit's specification. The VAV terminals will recognize the Heating or Warm-up modes as a heat mode and utilize the higher airflow minimum setpoint as configured. For heating cycles, initially utilize the Linkage Morning Warm-Up mode to open dampers on all zones below the midpoint of the occupied heating and cooling setpoints. This provides a controlled heat cycle and prevents the overheating of random zones where heating may not be required. Any zone below this middle setpoint will have its airflow at the maximum value. Further monitor the SAT of the VAV RTU to determine if the SAT is approaching the configured maximum limit. As the limit is approached, the Linkage mode is changed to Linkage Pressurization to ensure all terminals open to their maximum airflow.

N. 23 09 93.13.N. Field Test/Commissioning — The control will provide BACnet test points to activate specific test modes that can be used to commission the rooftop and the system. Test modes will be available in the Service Test screen on the Property pages and shall also be available on the local Equipment Touch device for standalone commissioning. Tests include: fan test, low heat test, high heat test, cooling test, power exhaust test, and an economizer test. When any test is active, the appropriate Linkage mode will be sent to the system's terminals. This will ensure appropriate system operation and airflow during any test mode.

Part 6 — 23 40 13 Panel Air Filters

6.01 23 40 13.13 Packaged VAV, 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.H).
4. Four inch filter capabilities shall be capable with pre-engineered and approved Carrier filter track field installed accessory. This kit requires field furnished filters.

Part 7 — 23 81 19 Self-Contained Air Conditioners

7.01 23 81 19.13 Medium-Capacity Self-Contained Air Conditioners (48LC*B14-26)

A. 23 81 19.13.A. General:

1. Outdoor, rooftop mounted, DDC electrically controlled, heating and cooling VAV unit utilizing fully hermetic scroll compressors for cooling duty and gas combustion for heating duty.
2. VAV-RTU Open - BACnet direct digital controller:
   a. Shall be ASHRAE 62-2001 compliant.
   b. Shall accept 18-30VAC, 50-60Hz, and consumer 15VA or less power.
   c. Shall have an operating temperature range from –40°F (–40°C) to 130°F (54°C), 10% to 90% RH (non-condensing).
   d. Shall include built-in protocol for BACnet MS/TP.
   e. Shall allow access of up to 62 network variables (SNVT). Shall be compatible with all open controllers
   f. Baud rate controller shall be selectable using a dipswitch.
   g. Shall have an LED display independently showing the status of serial communication, running, errors, power, all digital outputs, and all analog inputs.
   h. Shall accept the following inputs: space temperature, setpoint adjustment, outdoor air temperature, indoor air quality, outdoor air quality, compressor lock-out, fire shutdown, enthalpy switch, and fan status/filter status/ humidity/ remote occupancy.
   i. Shall provide the following outputs: Economizer, Fan Speed, Fan Start/Stop, Cooling Stage 1, Cooling Stage 2, Cooling Stage 3, Heating Stage 1, Heating Stage 2, Power Exhaust, Heat Interlock.
   j. Shall have built-in surge protection circuitry through solid state polyswitches. Polyswitches shall be used on incoming power and network connections. Polyswitches will return to normal when the "trip" condition clears.
   k. Shall have a battery back-up capable of a minimum of 10,000 hours of data and time clock retention during power outages.
   l. Shall have built-in support for Carrier technician tool.
   m. Shall include an EIA-485 protocol communication port (BACnet MS/TP only), an access port for connection of either a computer or a Carrier technician tool, an EIA-485 port for network communication to intelligent space sensors and displays.
   n. Software upgrades will be accomplished by either local or remote download. No software upgrades through chip replacements are allowed.
3. Factory assembled, single-piece heating and VAV cooling rooftop unit. Contained within the unit enclosure shall be all factory wiring, piping, controls, and special features required prior to field start-up.
   a. Return air temperature sensor to control multi stage of cooling capacity
   b. Supply air temperature sensor to control multi stage of cooling capacity
   c. Duct static pressure transducer – located in control box for remote field mounting
   d. Evaporator coil freeze protection
4. Unit shall use Puron® (R-401A) refrigerant.
5. Unit shall be installed in accordance with the manufacturer's instructions.
6. Unit must be selected and installed in compliance with local, state, and federal codes.
7. To properly control to the desired supply air temperature comfort setting, an integrated EconoMi$er2 is provided standard. Two versions shall be available: standard air leak and ultra-low leak versions.
   a. Integrated Standard Leak:
      1) Integrated, gear driven opposing modulating blade design type capable of

simultaneous economizer and compressor operation.
2) Independent modules for vertical or horizontal return configuration shall be available. Vertical return modules shall be available as a factory installed option.
3) Damper blades shall be galvanized steel with composite gears. Plastic or composite blades on intake or return shall not be acceptable.
4) Shall include all hardware and controls to provide free cooling with outdoor air when temperature and/or humidity are below setpoints.
5) Shall be equipped with gear driven dampers for both the outdoor ventilation air and the return air for positive air stream control.
6) Standard leak rate models shall be equipped with leakage dampers, not to exceed 2% leakage at 1 in. wg pressure differential.
7) Economizer controller shall be a 4 to 20mA design controlled directly by the VAV - RTU Open controller. VAV - RTU Open meets California Title 24 Fault Detection and Diagnostic (FDD) requirements.
8) Shall be capable of introducing up to 100% outdoor air.
9) 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.
10) Shall be designed to close damper(s) during loss-of-power situations with spring return built into motor.
11) Dry bulb outdoor air temperature sensor shall be provided as standard. Enthalpy sensor is also available on factory installed only. Outdoor air sensor setpoint shall be adjustable and shall range from 40°F to 100°F (4°C to 38°C). Additional sensor options shall be available as accessories.
12) The VAV-RTU Open controller shall also provide control of an accessory power exhaust unit function.
13) The economizer shall maintain minimum airflow into the building during occupied period and provide design ventilation rate for full occupancy.
14) Dampers shall be completely closed when the unit is in the unoccupied mode
15) Economizer controller shall accept a 2 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.
16) Compressor lockout temperature is adjustable from 45°F to 80°F (7°C to 27°C), set at a factory default of 45°F (7°C).
17) Actuator shall be direct coupled to economizer gear. No linkage arms or control rods shall be acceptable.
18) Economizer controller shall provide indications when in free cooling mode, in the DCV mode, or the exhaust fan contact is closed.

b. Integrated Ultra Low Leak Models
1) Integrated, gear driven opposing modulating blade design type capable of simultaneous economizer and compressor operation.
2) Independent modules for vertical or horizontal return configuration shall be available. Vertical return modules shall be available as a factory installed option.
3) Damper blades shall be galvanized steel with composite gears. Plastic or composite blades on intake or return shall not be acceptable.
4) Shall include all hardware and controls to provide free cooling with outdoor air when temperature and/or humidity are below setpoints.
5) Shall be equipped with gear driven dampers for both the outdoor ventilation air and the return air for positive air stream control.
6) Ultra Low Leak design meets California Title 24 section 140.4 and ASHRAE 90.1 requirements of 4 cfm per sq. ft. on the outside dampers and 10 cfm per sq. ft. on the return dampers.
7) Economizer controller shall be a 4 to 20mA design controlled directly by the VAV - RTU Open controller. VAV - RTU Open meets California Title 24 Fault Detection and Diagnostic (FDD) requirements.
8) Shall be capable of introducing up to 100% outdoor air.
9) 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.
10) Shall be designed to close damper(s) during loss-of-power situations with spring return built into motor.
11) Dry bulb outdoor air temperature sensor is also available on factory installed only. Outdoor air sensor setpoint 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.
12) 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%.

13) The economizer shall maintain minimum airflow into the building during occupied period and provide design ventilation rate for full occupancy.
14) Dampers shall be completely closed when the unit is in the unoccupied mode.
15) Economizer controller shall accept a 2 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.
16) Compressor lockout temperature is adjustable from 45°F to 80°F (7°C to 27°C), set at a factory default of 45°F (7°C).
17) Actuator shall be direct coupled to economizer gear. No linkage arms or control rods shall be acceptable.
18) Economizer controller shall provide indications when in free cooling mode, in the DCV mode, or the exhaust fan contact is closed.

B. 23 81 19.13.B. Quality Assurance:
1. Unit meets and exceeds ASHRAE 90.1 minimum efficiency requirements.
2. Unit meets and exceeds Energy Star and Consortium for Energy Efficiency (CEE) performance criteria.
3. Unit shall be rated in accordance with AHRI Standard 340/360.
4. Unit shall be designed to conform to ASHRAE 15.
5. Unit shall be ETL-tested and certified in accordance with ANSI Z21.47 Standards and ETL-listed and certified under Canadian standards as a total package for safety requirements.
6. Insulation and adhesive shall meet NFPA 90A requirements for flame spread and smoke generation.
7. Unit casing shall be capable of withstanding 500 hour salt spray exposure per ASTM B117 (scribed specimen).
8. Unit casing shall be capable of withstanding Federal Test Method Standard No. 141 (Method 6061) 5000 hour salt spray.
9. Unit shall be designed and manufactured in accordance with ISO 9001.
10. Roof curb shall be designed to conform to NRCA Standards.
11. 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.
12. Unit shall be designed in accordance with UL Standard 1995, ETL listed including tested to withstand rain.
13. Unit shall be constructed to prevent intrusion of snow and tested to prevent snow intrusion into the control box up to 40 mph.
14. Unit shake tested to assurance level 1, ASTM D4169 to ensure shipping reliability.
15. High Efficiency Motors listed shall meet section 313 of the Energy Independence and Security Act of 2007 (EISA 2007).

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 45°F (7°C), ambient outdoor temperatures. For lower operation, an integrated economizer shall be utilized to allow lower temperatures and accommodate indoor air quality initiatives.
3. Unit shall discharge supply air vertically or horizontally as shown on contract drawings.
4. Unit shall be factory configured and ordered for vertical supply and return configurations.
5. Unit shall be factory furnished for either vertical or horizontal configuration without the use of special conversion kits. No field conversion is possible.

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 pre-painted 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 Standard 340/360 minimum exterior sweat criteria. Interior surfaces shall be insulated with a minimum 1/2 in. thick, 1 lb density, aluminum

foil faced fiberglass insulation. Aluminum foil-faced fiberglass insulation shall also be used in the gas heat compartment.

4. Base of unit shall have a minimum of 4 locations for thru-the-base gas and electrical connections standard. Both gas and electric connections shall be internal to the cabinet to protect from environmental issues.
5. Base Rail:
   a. Unit shall have base rails on a minimum of 2 sides.
   b. Holes shall be provided in the base rails for rigging shackles to facilitate maneuvering and overhead rigging.
   c. Holes shall be provided in the base rail for moving the rooftop by fork truck.
   d. Base rail shall be a minimum of 16 gauge thickness.
6. Condensate pan and connections:
   a. Shall be a sloped condensate drain pan made of a non-corrosive material.
   b. Shall comply with ASHRAE Standard 62.
   c. Shall use a 3/4 in. 14 NPT drain connection, through the side of the drain pan. Connection shall be made per manufacturer's recommendations.
7. Top panel:
   a. Shall be a multi-piece top panel linked with watertight flanges and locking systems.
8. Gas Connections:
   a. All gas piping connecting to unit gas valve shall enter the unit cabinet at a single location on side of unit (horizontal plane).
   b. Thru-the-base capability:
      1) Standard unit shall have a thru-the-base gas-line location using a raised, embossed portion of the unit basepan.
      2) Thru-the-base provisions / connections are available as standard with every unit. When bottom connections are required, field furnished couplings are required.
      3) No basepan penetration, other than those authorized by the manufacturer, is permitted.
9. Electrical Connections:
   a. All unit power wiring shall enter unit cabinet at a single, factory-prepared, knockout location.
   b. Thru-the-base capability.
      1) Thru-the-base provisions/connections are available as standard with every unit. When bottom connections are required, field furnished couplings are required.
      2) No basepan penetration, other than those authorized by the manufacturer, is permitted.
10. 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 and filter shall have molded composite handles while the blower access door shall have an integrated flange for easy removal.
    d. Handles shall be UV modified, composite. They shall be permanently attached, and recessed into the panel.
    e. Screws on the vertical portion of all removable access panel shall engage into heat resistant, molded composite collars.
    f. Collars shall be removable and easily replaceable using manufacturer recommended parts.

H. 23 81 19.13.H. Gas Heat:
   1. General:
      a. Heat exchanger shall be an induced draft design. Positive pressure heat exchanger designs shall not be allowed.
      b. Shall incorporate a direct-spark ignition system and redundant main gas valve.
      c. Gas supply pressure at the inlet to the rooftop unit gas valve must match that required by the manufacturer.
   2. The heat exchanger shall be controlled by an integrated gas controller (IGC) microprocessor.
      a. IGC board shall notify users of fault using an LED (light-emitting diode).
      b. The LED shall be visible without removing the control box access panel.
      c. IGC board shall contain algorithms that modify evaporator-fan operation to prevent future cycling on high temperature limit switch.
      d. Unit shall be equipped with anti-cycle protection with one short cycle on unit flame rollout switch or 4 continuous short cycles on the high temperature limit switch. Fault indication shall be made using an LED.
   3. Standard Heat Exchanger construction:
      a. Heat exchanger shall be of the tubular-section type constructed of a minimum of 20 gauge steel coated with a nominal 1.2 mil aluminum-silicone alloy for corrosion resistance.
      b. Burners shall be of the in-shot type constructed of aluminum-coated steel.
      c. Burners shall incorporate orifices for rated heat output up to 2000 ft (610m) elevation. Additional accessory kits may be required for applications above 2000 ft (610m) elevation, depending on local gas supply conditions.

d. Each heat exchanger tube shall contain multiple dimples for increased heating effectiveness.

4. Optional Stainless Steel Heat Exchanger construction:
   a. Use energy saving, direct-spark ignition system.
   b. Use a redundant main gas valve.
   c. Burners shall be of the in-shot type constructed of aluminum-coated steel.
   d. All gas piping shall enter the unit cabinet at a single location on side of unit (horizontal plane).
   e. The optional stainless steel heat exchanger shall be of the tubular-section type, constructed of a minimum of 20 gauge type 409 stainless steel.
   f. Type 409 stainless steel shall be used in heat exchanger tubes and vestibule plate.
   g. Complete stainless steel heat exchanger allows for greater application flexibility.
5. Induced draft combustion motor and blower:
   a. Shall be a direct-drive, single inlet, forward-curved centrifugal type.
   b. Shall be made from steel with a corrosion-resistant finish.
   c. Shall have permanently lubricated sealed bearings.
   d. Shall have inherent thermal overload protection.
   e. Shall have an automatic reset feature.

I. 23 81 19.13.I. Coils:
1. Standard Aluminum Fin/Copper Tube Coils:
   a. Standard evaporator and condenser coils shall have aluminum lanced plate fins mechanically bonded to seamless internally grooved 5/16 in. diameter 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 in a QUV. 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).
   g. Corrosion durability shall be confirmed through testing to be no less than 1000 hours salt spray per ASTM B117-90.
3. Optional Copper-fin evaporator and condenser coils:
   a. Shall be constructed of copper fins mechanically bonded to copper tubes and copper tube sheets.
   b. Galvanized steel tube sheets shall not be acceptable.
   c. A polymer strip shall prevent coil assembly from contacting the sheet metal coil pan to minimize potential for galvanic corrosion between coil and pan.
4. Optional E-coated aluminum-fin evaporator and condenser coils:
   a. Shall have a flexible epoxy polymer coating uniformly applied to all coil surface areas without material bridging between fins.
   b. Coating process shall ensure complete coil encapsulation of tubes, fins and headers.
   c. Color shall be high gloss black with gloss per ASTM D523-89.
   d. Uniform dry film thickness from 0.8 to 1.2 mil on all surface areas including fin edges.
   e. Superior hardness characteristics of 2H per ASTM D3363-92A and cross-hatch adhesion of 4B-5B per ASTM D3359-93.
   f. Impact resistance shall be up to 160 in.-lb. (ASTM D2794-93).
   g. Humidity and water immersion resistance shall be up to minimum 1000 and 250 hours respectively (ASTM D2247-92 and ASTM D870-92).
   h. Corrosion durability shall be confirmed through testing to be no less than 1000 hours salt spray per ASTM B117-90.

J. 23 81 19.13.J. Refrigerant Components:
   1. Refrigerant circuit shall include the following control, safety, and maintenance features:
      a. Multi Thermostatic Expansion Valve (TXV) system 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 screen on the side of the unit.
      e. Single circuit design with tandem compressor and fully activated evaporator coil.
   2. Compressors:
      a. Models shall use fully hermetic tandem scroll compressors optimized for comfort staging and IEER energy savings.
      b. Models shall be available with a single refrigerant circuit and 3 stage cooling operation on all models.
      c. Compressor motors shall be cooled by refrigerant gas passing through motor windings.
      d. Compressors shall be internally protected from high discharge temperature conditions.
      e. Compressors shall be protected from an over-temperature and over-amperage conditions by an internal, motor overload device.
      f. Compressor shall be factory mounted on rubber grommets.
      g. Compressor motors shall have internal line break thermal, current overload and high pressure differential protection.
      h. Crankcase heaters shall be standard on each compressor and deactivated whenever the compressor is in operation.

K. 23 81 19.13.K. Filter Section:
   1. Filters access is specified in the unit cabinet section of this specification.
   2. Filters shall be held in place by a preformed, slide-out filter tray, facilitating easy removal and installation.
   3. Shall consist of factory-installed, low velocity, throw-away 2 in. thick fiberglass filters.
   4. Filters shall be standard, commercially available sizes.
   5. Only one size filter per unit is allowed.
   6. 4-in filter capability is possible with a field installed pre-engineered slide out filter track accessory. 4-in filters are field furnished.

L. 23 81 19.13.L. Evaporator Fan and Motor:
   1. Evaporator fan motor:
      a. Shall have permanently lubricated bearings.
      b. Shall have inherent automatic-reset thermal overload protection or circuit breaker.
      c. Shall have a maximum continuous bhp rating for continuous duty operation; no safety factors above that rating shall be required.
      d. Shall be Variable Frequency duty to match the 3 stage compression logic.
      e. Shall contain motor shaft grounding ring to prevent electrical bearing fluting damage by safely diverting harmful shaft voltages and bearing currents to ground.
   2. Variable Frequency Drive (VFD). For indoor fan motor Staged Air Volume (SAV™) operation:
      a. Shall be installed inside the unit cabinet, mounted, wired and tested.
      b. Shall contain Electromagnetic Interference (EMI) frequency protection.
      c. Insulated Gate Bi-Polar Transistors (IGBT) used to produce the output pulse width modulated (PWM) waveform, allowing for quiet motor operation.
      d. Self-diagnostics with fault and power code LED indicator. Field accessory display kit available for further diagnostics and special setup applications.
      e. RS485 capability standard.
      f. Electronic thermal overload protection.
      g. 5% swinging chokes for harmonic reduction and improved power factor.
      h. All printed circuit boards shall be conformal coated.
      i. Shall not contain visual display to adjust internal setting. Available only as field installed kit.
   3. Belt-driven Evaporator Fan:
      a. Belt drive shall include an adjustable-pitch motor pulley.
      b. Shall use sealed, permanently lubricated ball-bearing type.
      c. Blower fan shall be double-inlet type with forward-curved blades.
      d. Shall be constructed from steel with a corrosion resistant finish and dynamically balanced.

M. 23 81 19.13.M. Condenser Fans and Motors:
   1. Condenser fan motors:
      a. Shall be a totally enclosed multi speed ECM motor.

b. Shall use permanently lubricated bearings.
c. Shall have inherent thermal overload protection with an automatic reset feature.
d. Shall use a shaft-down design.

2. Condenser Fans:
a. Shall be a direct-driven propeller type fan.
b. Shall have galvanized aluminum (galvalume) blades riveted to corrosion-resistant steel spiders and shall be dynamically balanced.

N. 23 81 19.13.N. Special Features Options and Accessories:

1. Propane Conversion Kit:
a. Package shall contain all the necessary hardware and instructions to convert a standard natural gas unit for use with liquefied propane. Kits shall be available for elevations from 0 up to 14,000 ft (4,276m).

2. Condenser Coil Hail Guard Assembly:
a. Shall protect against damage from hail.
b. Shall be louvered style design.

3. Unit-Mounted, Non-Fused Disconnect Switch:
a. Switch shall be factory-installed, internally mounted.
b. National Electric Code (NEC) and ETL approved non-fused switch shall provide unit power shutoff.
c. Shall be accessible from outside the unit.
d. Shall provide local shutdown and lockout capability.
e. Sized only for the unit as ordered from the factory. Does not accommodate field installed devices.

4. HACR Breaker:
a. These manual reset devices provide overload and short circuit protection for the unit. Factory wired and mounted with the units, with access cover to help provide environmental protection. On 575v applications, HACR breaker can only be used with WYE power distribution systems. Use on Delta power distribution systems is prohibited.
b. Sized only for the unit as ordered from the factory. Does not accommodate field installed devices.

5. Convenience Outlet:
a. Powered convenience outlet.
1) Outlet shall be powered from main line power to the rooftop unit.
2) Outlet shall be powered from line side of disconnect by installing contractor, as required by code. If outlet is powered from load side of disconnect, unit electrical ratings shall be ETL certified and rated for additional outlet amperage.
3) Outlet shall be factory-installed and internally mounted with easily accessible 115-v female receptacle.
4) Outlet shall include 15 amp GFI receptacles with independent fuse protection.
5) Voltage required to operate convenience outlet shall be provided by a factory-installed step-down transformer.
6) Outlet shall be accessible from outside the unit.
b. Non-powered convenience outlet.
1) Outlet shall be powered from a separate 115/120v power source.
2) A transformer shall not be included.
3) Outlet shall be factory-installed and internally mounted with easily accessible 115-v female receptacle.
4) Outlet shall include 15 amp GFI receptacles with independent fuse protection.
5) Outlet shall be accessible from outside the unit.

6. Flue Discharge Deflector:
a. Flue discharge deflector shall direct unit exhaust vertically instead of horizontally.
b. Deflector shall be defined as a “natural draft” device by the National Fuel and Gas (NFG) code.

7. Centrifugal 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 set point on the economizer control.

8. 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.

9. High Altitude Gas Conversion Kit:
a. Package shall contain all the necessary hardware and instructions to convert a standard natural gas unit to operate from 3,000 ft to 10,000 ft (914m to 3048m) elevation and 10,001 ft to 14,000 ft (3049m to 4267m) elevation.

10. 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.
11. 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.
12. 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 set point shall have adjustment capability.
13. Smoke detectors:
    a. Shall be a 4-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 2 individual detector modules.
        5) Can be wired to up to 14 other duct smoke detectors for multiple fan shutdown applications.
14. Time Guard:
    a. Shall prevent compressor short cycling by providing a 5 minute delay (±2 minutes) before restarting a compressor after shutdown for any reason.
    b. One device shall be required per compressor.
15. Barometric Hood (Horizontal Economizer Applications):
    a. Shall be required when a horizontal economizer and barometric relief are required. Barometric relief damper must be installed in the return air (horizontal) duct work. This hood provides weather protection.
16. 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.
17. Display Kit for Variable Frequency Drive:
    a. Kit allows the ability to access the VFD controller programs to provide special setup capabilities and diagnostics.
    b. Kit contains display module, mounting bracket and communication cable.
    c. Display Kit can be permanently installed in the unit or used on any VFD controller as needed.
18. High Short Circuit Current Rating (SCCR):
    a. An optional SCCR of 65kA shall be provided for 460 volt and 60kA for 208/230 volt units.

Manufacturer reserves the right to discontinue, or change at any time, specifications or designs without notice and without incurring obligations.

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