

ASHRAE 90.1
COMPLIANT



15 to 25 Tons
Net Cooling Capacity - 180,000 to 286,000 Btuh
Gas Input Heat Capacity - 260,000 to 480,000 Btuh

MODEL NUMBER IDENTIFICATION

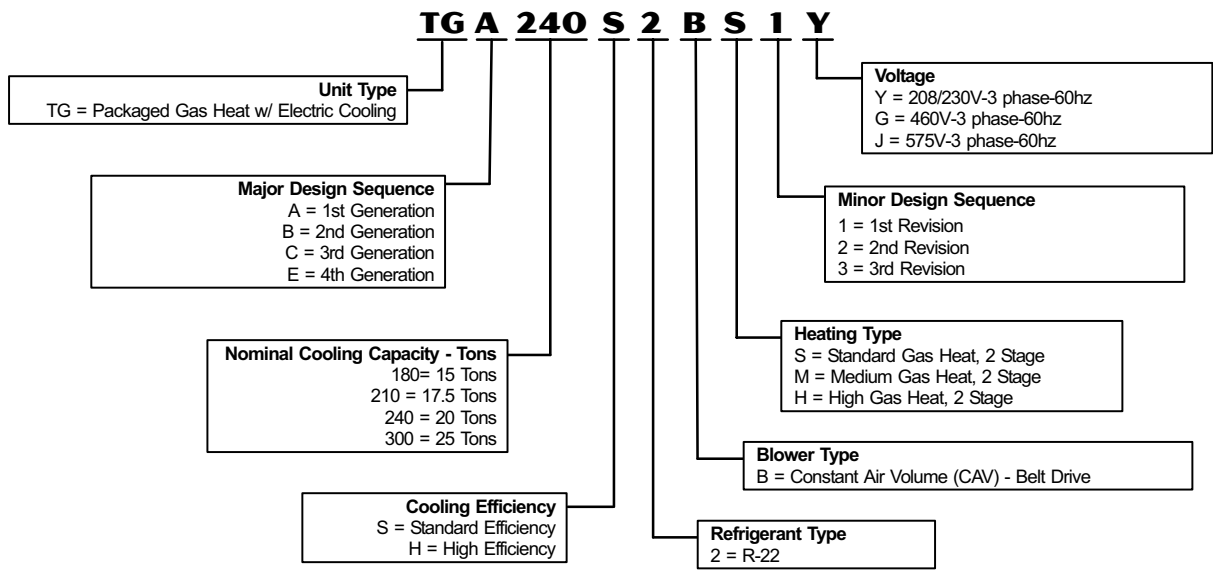


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FEATURES AND BENEFITS

CERTIFICATIONS

ETL and CSA listed.

Heating efficiency ratings verified by CSA.

180 thru 240 models are certified in accordance with the ULE certification program, which is based on ARI Standard 340/360-2000.

300S models are tested at conditions included in ARI Standard 340/360-2000.

Components bonded for grounding to meet safety standards for servicing required by UL, CSA and Nation

ENERGY STAR® certified units are designed to use less energy, help save money on utility bills, and help protect the environment.

WARRANTY

Limited ten years aluminized heat exchanger, limited fifteen years optional stainless steel heat exchanger.

Limited five years on compressors.

Limited one year all other covered components.

HEATING SYSTEM

- 1 Aluminized steel inshot burners, direct spark ignition, electronic flame sensor, combustion air inducer, redundant automatic dual-stage gas valve with manual shut-off.

Heat Exchanger

Tubular, dimpled design (patent pending), construction, aluminized steel, life cycle tested.

Stainless Steel Heat Exchanger is required if mixed air temperature is less than 45°F.

Fan & Limit Controls

Factory installed with fixed temperature setting.

Heat limit controls protect against overheating.

Safety Switches

Flame roll-out switches, flame sensors and combustion air inducer proving switches protect system operation. All safety switches are monitored by the ignition control board.

Electronic Ignition

Solid-state electronic spark igniter provides positive direct ignition of burners on each operating cycle. The system permits main gas valve to stay open only when the burners are proven to be lit. Should a loss of flame occur, the gas valve closes, shutting off the gas to the burners. Ignition module has LED to indicate status and aid in troubleshooting.

Watchguard circuit on module automatically resets ignition controls after one hour of continuous thermostat demand after unit lockout, eliminating nuisance service calls. Ignition control is factory installed in the controls section.

REQUIRED SELECTIONS

Gas Input - Order one:

169,000 / 260,000 Btuh low/high fire - Standard Heat Gas Input.

234,000 / 360,000 Btuh low/high fire - Medium Gas Heat Input.

312,000 / 480,000 Btuh low/high fire - High Gas Heat Input

OPTIONS - Factory Installed

Stainless Steel Heat Exchanger

Required if mixed air temperature is below 45°F.

ACCESSORIES - Field Installed

Combustion Air Intake Extensions

Recommended for use with existing flue extension kits in areas where high snow drifts can block intake air.

LPG/Propane Kits

Conversion kit to field change over units from Natural Gas to LPG/Propane.

Vertical Vent Extension Kit

Exhausts flue gases vertically above unit.

COOLING SYSTEM

Designed to maximize sensible and latent cooling performance at design conditions.

Two efficiency levels provide flexibility. System can operate from 30°F to 125°F without any additional controls.

2 Compressors

Resiliently mounted on rubber grommets for quiet operation.

Copeland Scroll™ compressors on all models for high performance, reliability and quiet operation.

3 Thermal Expansion Valves

Assures optimal performance throughout the application range. Removable element head.

4 Filter/Driers

High capacity filter/driers protect the system from dirt and moisture.

Freezestats

Protects the evaporator coil from damaging ice build-up due to conditions such as low/no air flow, or low/no refrigerant charge.

5 Coil Construction

Copper tube construction, enhanced rippled-edge aluminum fins, flared shoulder tubing connections, silver soldered construction for improved heat transfer. Factory leak tested.

Evaporator Coil

Cross row circuiting with rifled copper tubing optimizes both sensible and latent cooling capacity. Low fin per inch count minimizes air pressure drop. Face-split evaporator coils are designed to keep condensate water off of an inactive part of the coil so the condensate will not re-enter the air stream.

Condenser Coil

Formed type coil.

Condensate Drain Pan

Painted, galvanized pan with positive slope.

Drain connection extends outside unit.

Outdoor Coil Fan Motors

Thermal overload protected, totally enclosed, permanently lubricated ball bearings, shaft up, independent motor mount.

Outdoor Coil Fan

PVC coated fan guard furnished.

REQUIRED SELECTIONS

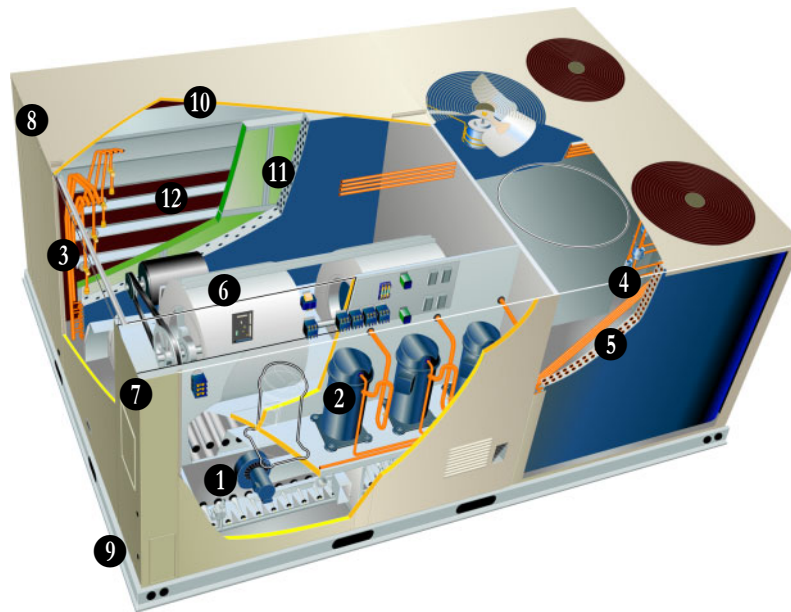
Cooling Capacity

Specify the nominal cooling capacity of the unit.

Cooling Efficiency

Specify either standard or high efficiency.

FEATURES AND BENEFITS



COOLING - CONTINUED

ACCESSORIES - Field Installed

Condensate Drain Trap

Available in copper or PVC.

Compressor Crankcase Heaters

Protects against refrigerant migration that can occur during low ambient operation.

High Pressure Switches

Protects the compressor from overload conditions such as dirty condenser coils, blocked refrigerant flow, or loss of outdoor fan operation. Manual reset.

Low Ambient Kit

Cycles the outdoor fan while allowing compressor operation in the cooling cycle. This intermittent fan operation allows the system to operate without icing the evaporator coil and losing capacity. Designed for use in ambient temperatures no lower than 0°F (-17.8°C).

6 BLOWER

Supply air fan provides a wide range of air flow capability. Stocked models (units typically in-stock at warehouses) are equipped with standard static motor/drive combinations. Special order high and low static motor and drive options are available CTO (configure to order) offering an even wider range of capability.

Supply Air Motor

Overload protected with permanently lubricated ball bearings ensures durable operation. Belt drive motors that meet EPACT efficiency requirements maximize air performance and save energy. Special order high and low static motors provide a higher level of air performance for demanding applications.

Supply Air Blower

A double inlet wheel with forward curve blades provide maximum air performance and quiet operation. Dynamically balanced with permanently lubricated ball bearings assure long, reliable operation. Adjustable pulleys allow air to be precisely tuned to the needs of the application.

REQUIRED SELECTIONS

Supply Air Blower

Specify Blower motor and drive kit (See Blower Data Table for specifications).

ELECTRICAL

REQUIRED SELECTIONS

Voltage Choice

Specify 208/230V, 460V or 575V 3-phase-60hz when ordering base unit.

ACCESSORIES - Field Installed

7 Circuit Breakers up to 175 Amp

HACR circuit breaker without power distribution lugs. Accessible from outside of unit, spring-loaded weatherproof cover furnished. Main power to the unit is field connected to the circuit breaker which allows all power to be shutoff for service. Circuit breaker is sized to the unit maximum overcurrent protection (MOCP) size.

Disconnect Switch up to 250 Amp

Accessible from outside of unit, spring loaded weatherproof cover furnished. Main power to the unit is field connected to the disconnect which allows all power to be shut off for service.

GFI Service Outlets (2)

115v ground fault circuit interrupter (GFCI) type, field wired.

FEATURES AND BENEFITS

CONTROLS

Unit Controller

Solid-state microprocessor-based control board that provides flexible control of cooling functions. All control voltage is provided via a 24V (secondary) transformer with built-in circuit breaker protection. Built-in functions include:

Blower On/Off Delay - Time delay between blower on and off cycles provides a more even supply air temperature during heating.

Built-in Control Parameters - Saves installation time as no programming is required.

Minimum Compressor Run Time - Ensures proper oil return to the compressor.

Night Setback Mode - Saves energy by closing outdoor air dampers and operating supply fan on thermostat demand only.

Heat/Cool Staging - Capable of up to 2 heat / 2 cool staging with a third party DDC control system or compatible thermostat.

Thermostat Bounce Delay - Protects compressor from short cycling when a mechanical thermostat is used.

ACCESSORIES - Field Installed

Blower Proving Switch

Uses a static pressure sensor to monitor blower operation and shuts down unit if blower fails.

Control Systems

See Page 23.

Dirty Filter Switch

Senses static pressure increase indicating dirty filter condition.

Smoke Detector

Photoelectric type, installed in supply air section or return air section or both sections

CABINET

8 Construction

Heavy-gauge steel panels and full perimeter heavy-gauge galvanized steel base rail provides structural integrity for transportation, handling, and installation.

Base rails have rigging holes. Three sides of the base rail have fork slots.

Raised edges around duct and power entry openings in the bottom of the unit provide additional protection against water entering the building.

Air-Flow Choice

Units are available in down-flow (vertical) or horizontal return air flow configuration.

Horizontal air flow requires Horizontal Roof Curb.

Horizontal Return Air Panel Kit is also required if converting a down-flow configured unit to horizontal air flow.

9 Power/Gas Entry

Electrical and gas lines can be brought through the unit base or through horizontal access knock-outs.

Exterior Panels

Constructed of heavy-gauge, galvanized steel with a two-layer enamel paint finish.

10 Insulation

All panels adjacent to conditioned air are fully insulated with non-hygroscopic fiberglass insulation.

Unit base is fully insulated. The insulation also serves as an air seal to the roof curb, eliminating the need to add a seal during installation.

Access Panels

Access panels are provided for the compressor/controls/heating section and the blower access and air filter/economizer section.

REQUIRED SELECTIONS

Air Flow Configuration

Specify horizontal or down-flow (vertical).

OPTIONS - Factory Installed

Corrosion Protection

A completely flexible immersed coating with an electrodeposited dry film process. (AST ElectroFin E-Coat) Meets Mil Spec MIL-P-53084, ASTM B117 Standard Method Salt Spray Testing, ASTM 1153 Standard Specification for Methyl Isobutyl Ketone.

ACCESSORIES - Field Installed

Coil Guards

Painted, galvanized steel wire guards to protect outdoor coil. Not used with Hail Guards.

Hail Guards

Constructed of heavy gauge steel, painted to match cabinet, helps protect outdoor coils from hail damage. Not used with Coil Guards.

Horizontal Return Air Panel Kit

Required for horizontal applications with Horizontal Roof Curb, contains panel with return air opening for field replacement of existing unit panel and panel to cover bottom return air opening in unit, see dimension drawings.

11 AIR FILTERS

Disposable 2 inch (51 mm) filters furnished as standard

ACCESSORIES - Field Installed

Replaceable Media

Permanent, metal frame filters with 2 inch polyester replaceable media.

SERVICEABILITY

Designed to streamline general maintenance and decrease troubleshooting time.

Marked & Color-Coded Wiring

All electrical wiring is color-coded and marked to identify which components it is connecting.

Electrical Plugs

Positive connection electrical plugs are used to connect common accessories or maintenance parts for easy removal or installation.

Access Panels

Large access panels are provided for quick and easy access to maintenance areas.

Blower Access

Blower assembly slides out of the unit for easy access.

TXV Access

Thermal expansion valves are located near the perimeter of the unit for easier access.

Thermal Expansion Valves

Removable element head allows change out of element and bulb without removing the TXV.

Coil Cleaning

Independently formed condenser coils allow separation for easier cleaning.

Standard Components

A large number of common maintenance parts are standard throughout the entire range of sizes (15 - 25 tons), reducing the need to carry a lot of different parts to the job or in inventory.

Compressor Access

Compressors are located near the perimeter of the unit for easier access.

Compressor Compartment

Compressors are isolated from the condenser air flow allowing system operation checks to be done without changing the air flow across the outdoor coils.

OPTIONS / ACCESSORIES

ECONOMIZER/OUTDOOR AIR/EXHAUST ACCESSORIES

Factory or Field Installed

12 Economizer

Parallel, gear-driven action return air and outdoor air dampers, plug-in connections to unit, nylon bearings, neoprene seals, 24 volt, spring return motor, adjustable minimum damper position, damper assembly slides in unit, outdoor air hood must be ordered separately, choice of economizer controls. Economizer modulates dampers to maintain a 55°F (13°C) discharge air temperature.

Economizer Enthalpy Control

Senses outdoor air enthalpy and enables economizer if the enthalpy is less than the setpoint of the control.

Down-Flow Barometric Relief Dampers

Allows relief of excess return air static when economizer is near full open. Aluminum blade dampers prevent blow back and outdoor air infiltration during off cycle. Bird screen furnished.

Outdoor Air Damper Section

25% Manual Outdoor Air Dampers - Parallel blade dampers are manually adjustable to a fixed position.
25% Automatic Outdoor Air Damper - Parallel blade, gear-driven dampers are automatically adjusted with a two-position damper motor.

Economizer and Outdoor Air Damper

Application Note - Minimum mixed air temperature in heating mode 30°F (-1°C)
Maximum mixed air temperature in cooling mode: 90°F (32°C)

Indoor Air Quality (CO₂) Sensor

Monitors CO₂ levels.

Power Exhaust Fans

C1PWRE20C-1 models have two, 1/3 hp motors with 20 in., five blade propeller-type fans with a total power input of 750 Watts and a total air volume of 8630 cfm at 0 in. w.g..

Motor is inherently protected and enclosed for maximum protection from weather, dust and corrosion. Installs internal to unit for down-flow applications only with economizer option, provides exhaust air pressure relief, interlocked to run when return air dampers are closed and supply air blower is operating, fan runs when outdoor air dampers are 50% open (adjustable), motor is overload protected, steel cabinet and hood painted to match unit, requires optional Down-flow Economizer Barometric Relief Dampers.

See Power Exhaust Blower Tables.

Field Installed

Economizer Control

Sensible Control - Senses outdoor air temperature and enables the economizer if the temperature is less than the set point of the control.

Differential Sensible Control - Two temperature sensors allow the control to select between outdoor air or return air, whichever has lower temperature.

Enthalpy Control - Senses outdoor air enthalpy and enables economizer if the enthalpy is less than the setpoint of the control.

Differential Enthalpy Control - Two solid-state enthalpy sensors allow the control to select between outdoor air or return air, whichever has lower enthalpy.

Outdoor Air Hood

Required with Economizer, Outdoor Air Damper Sections, cleanable aluminum mesh fresh air filters furnished.

Down-Flow Barometric Relief

Damper Hood

Protects exhaust air from recirculating into outdoor air stream.

Horizontal Barometric Relief Dampers

Allows relief of excess air when economizer is near full open. Aluminum blade dampers prevent blow back and outdoor air infiltration during off cycle. Field installed in return air duct. Bird screen furnished.

CEILING DIFFUSERS

ACCESSORIES - Field Installed

Ceiling Diffusers

Aluminum grilles, large center grille, insulated diffuser box with flanges, hanging rings furnished, interior transition (even air flow), internally sealed (prevents recirculation), adapts to T-bar ceiling grids or plaster ceilings.

Transitions (Supply and Return) - Used with diffusers, installs in roof curb, galvanized steel construction, flanges furnished for duct connection to diffusers, fully insulated.

ROOF CURBS

ACCESSORIES - Field Installed

Nailer strip furnished, mates to unit, shipped knocked down.

Standard Down-Flow

US National Roofing Contractors Approved, available in 14 inch and 24 inch heights

Horizontal

Converts unit from down-flow to horizontal (side) air flow, return air is on unit, supply air is on curb, see dimension drawings. Curbs for rooftop applications meet National Roofing Code requirements. Requires Horizontal Return Air Panel. Available in 26 inch, 30 inch, 37 inch and 41 inch heights. Optional Insulation Kit is available to help prevent sweating.

Cliplock 1000 Full Perimeter

Down-Flow

Available in 14 inch, 18 inch and 24 inch heights.

OPTIONS / ACCESSORIES

Item	180	210	240	300S	
COOLING SYSTEM					
Compressor Crankcase Heater	208/230V - T1CCHT01CD1Y	x	x	x	x
	460V - T1CCHT01CD1G	x	x	x	x
	575V - T1CCHT01CD1J	x	x	x	x
Condensate Drain Trap	PVC - LTACDKP09/36	x	x	x	x
	Copper - LTACDKC09/36	x	x	x	x
Corrosion Protection		○	○	○	○
Efficiency	Standard	○	○	○	○
	High	○	○	○	
High Pressure Switch	T1SNSR11C-1	x	x	x	x
Low Ambient Kit	T1SNSR12C-1	x	x	x	x
HEATING SYSTEM					
Cold Weather Kit	208/230V - LTACWK10/15-Y	x	x	x	x
	575V - LTACWK10/15-J	x	x	x	x
Combustion Air Intake Extensions	LTACA1K10/15	¹ x	¹ x	¹ x	¹ x
Gas Heat Input	Standard - 169/260 kBtuh input	○	○	○	○
	Medium - 234/360 kBtuh input	○	○	○	○
	High - 312/480 kBtuh input	○	○	○	○
Gas Piping Kit	Thru unit base - C1GPKT01C-1	x	x	x	x
LPG/Propane Conversion Kits	Standard - LTALPGK-130	¹ x	¹ x	¹ x	¹ x
	Medium - LTALPGK-180	¹ x	¹ x	¹ x	¹ x
	High - LTALPGK-240	¹ x	¹ x	¹ x	¹ x
Stainless Steel Heat Exchanger		○	○	○	○
Vertical Vent Extension	LTAWEK10/15	¹ x	¹ x	¹ x	¹ x
AIR FILTERS					
Replaceable Media Filter Kit with Frame	24 x 24 x 2 order 6 per unit - C1FLTR30C-1	x	x	x	x
BLOWER - SUPPLY AIR - See Blower Data Tables for Specifications					
	Low Static Motor/Drive Combination	○	○	○	○
	Standard Static Motor/Drive Combination (stock unit)	○	○	○	○
	High Static Motor/Drive Combination	○	○	○	○
	² Standard to Low Static Conversion Kit - Drive Kit #A - C1DRKT044-1	x			
	² Standard to Low Static Conversion Kit - Drive Kit #2 - C1DRKT004-1		x		
	² Standard to Low Static Conversion Kit - Drive Kit #9 - C1DRKT045-1			x	
	² Standard to Low Static Conversion Kit - Drive Kit #7 - C1DRKT042-1				x
	³ High to Standard Static Conversion Kit - Drive Kit #3 - C1DRKT038-1	x			
	³ High to Standard Static Conversion Kit - Drive Kit #7 - C1DRKT042-1		x		
CABINET					
Coil Guards	C1GARD20C-1	x	x	x	x
Hail Guards	C1GARD10C-1	x	x	x	x
Horizontal Return Air Panel Kit	C1HRAP10C-1	x	x	x	x
CONTROLS					
Control Systems	See Page 23	x	x	x	x
Blower Proving Switch	LTABPSK	x	x	x	x
Dirty Filter Switch	LTADFSK	x	x	x	x
Smoke Detector - Supply	LTASASDK10/36	x	x	x	x
Smoke Detector - Return	LTARASDK10/30	x	x	x	x
Indoor Air Quality (CO₂) Sensors					
CO ₂ Sensor Duct Mounting Kit	LTIAQSDMK03/36	x	x	x	x
Sensor - white case CO ₂ display	LTIAQSWDK03/36	x	x	x	x
Sensor - white case no display	LTIAQSWN03/36	x	x	x	x
Sensor - black case CO ₂ display	LTIAQSDND03/36	x	x	x	x
Sensor - black case, no display	LTIAQSDMBN03/36	x	x	x	x
Aspiration Box for duct mounting	LTIAQABD03/36	x	x	x	x
Handheld CO ₂ Monitor	LTIAQSHM03/36	x	x	x	x

NOTE - The catalog and part numbers that appear here are for ordering field installed accessories only.

○ - Configure to Order (Factory Installed). Factory installed items are special order with extended lead times and must be ordered with the unit.

x - Field Installed

¹ Order two each

² Standard static drive can be converted to low static drive with field installed kit.

³ High static drive can be converted to standard static drive with field installed kit.

OPTIONS / ACCESSORIES

Item		180	210	240	300S
ELECTRICAL					
Voltage 60 hz	208/230V - 3 phase	○	○	○	○
	460V - 3 phase	○	○	○	○
	575V - 3 phase	○	○	○	○
HACR Circuit Breakers	T1HACR***-1 (indicate size)	x	x	x	x
Disconnect Switch	80 Amp - T1DISC080-1 - For 460/575V models	x	x	x	x
	150 Amp - T1DISC150-1 - For 208/230V-3ph models	x	x	x	x
GFI Service Outlets	LTAGFIK10/15	x	x	x	x
ECONOMIZER / OUTDOOR AIR					
Economizer - Order Hood Separately	T1ECON10C-1	⊗	⊗	⊗	⊗
Economizer Controls					
Differential Enthalpy	C1SNSR07AE1-	x	x	x	x
Single Enthalpy	C1SNSR06AE1-	⊗	⊗	⊗	⊗
Sensible	TASEK03/36	x	x	x	x
Differential Sensible	TASEK03/36	1x	1x	1x	1x
Barometric Relief					
Down-Flow Barometric Relief Dampers - Order Hood Separately	LAGED18/24	⊗	⊗	⊗	⊗
Hood for Down-Flow LAGED	C1HOOD20C-1	x	x	x	x
Horizontal Barometric Relief Dampers - Hood Furnished	LAGEDH18/24	x	x	x	x
Outdoor Air Dampers					
Damper Section (down-flow) - Automatic - Order Hood Separately	T1DAMP20C-1	⊗	⊗	⊗	⊗
Damper Section (down-flow) - Manual - Order Hood Separately	LAOAD18/24	⊗	⊗	⊗	⊗
Outdoor Air Hoods					
Outdoor Air Hood (down-flow) includes 3 - 16 x 25 x 1 in. filters	C1HOOD10C-1	⊗	⊗	⊗	⊗
Power Exhaust					
Standard Static	208/230V - C1PWRE20C-1Y	x	x	x	x
	460V - C1PWRE20C-1G	x	x	x	x
	575V - C1PWRE20C-1J	x	x	x	x
ROOF CURBS - CLIPLOCK 1000					
Down-Flow					
14 in. (356 mm) height	LARMF18/30S-14	x	x	x	x
18 in. (457 mm) height	LARMF18/30S-18	x	x	x	x
24 in. (610 mm) height	LARMF18/30S-24	x	x	x	x
Horizontal					
26 in. (660 mm) height	LARMFH18/24S-26	x	x	x	x
37 in. (940 mm) height	LARMFH18/24S-37	x	x	x	x
ROOF CURBS - STANDARD					
Down-Flow					
14 in. (356 mm) height	LARMF18/36-14	x	x	x	x
24 in. (610 m) height	LARMF18/36-24	x	x	x	x
Horizontal					
26 in. (660 mm) height	LARMFH18/24-26	x	x	x	x
37 in. (940 mm) height	LARMFH18/24-37	x	x	x	x
Insulation Kits for Standard Horizontal Roof Curbs					
for LARMFH18/24-26	C1INSU11C-1	x	x	x	x
for LARMFH18/24-37	C1INSU13C-1	x	x	x	x
CEILING DIFFUSERS					
Step-Down Order one	RTD11-185(S)	x			
	RTD11-275(S)		x	x	x
Flush Order one	FD11-150/180S or FD11-185	x			
	FD11-275(S)		x	x	x
Transitions - (Supply and Return) Order one	LASRT18(S)	x			
	LASRT21/24(S)		x	x	x

NOTE - The catalog and part numbers that appear here are for ordering field installed accessories only.

⊗ - Field Installed or Configure to Order (factory installed). Factory installed items are special order with extended lead times and must be ordered with the unit.

x - Field Installed.

¹ - Order two each

SPECIFICATIONS

15 - 17.5 TON

General Data		Nominal Tonnage Model No.	15 Ton TGA180S2B Standard	15 Ton TGA180H2B High	17.5 Ton TGA210S2B Standard	17.5 Ton TGA210H2B High
Cooling Performance	Gross Cooling Capacity - Btuh (kW)		186,000 (54.5)	186,000 (54.5)	218,000 (63.8)	219,000 (64.1)
	¹ Net Cooling Capacity - Btuh (kW)		180,000 (52.7)	180,000 (52.7)	210,000 (61.5)	210,000 (61.5)
	ARI Rated Air Flow - cfm (L/s)		6000 (2830)	6000 (2830)	6700 (3160)	7000 (3305)
	Total Unit Power - kW		18.6	16.7	22.1	19.4
	¹ EER (Btuh/Watt)		9.7	10.8	9.5	10.8
	² Integrated Part Load Value (Btuh/Watt)		10.1	11.2	9.9	11.2
	Refrigerant Type		R-22	R-22	R-22	R-22
	Refrigerant Charge	Circuit 1	9 lbs. 0 oz. (4.08 kg)	11 lbs. 8 oz. (5.22 kg)	8 lbs. 0 oz. (3.63 kg)	11 lbs. 0 oz. (4.99 kg)
	Furnished	Circuit 2	9 lbs. 0 oz. (4.08 kg)	11 lbs. 8 oz. (5.22 kg)	8 lbs. 0 oz. (3.63 kg)	11 lbs. 0 oz. (4.99 kg)
		Circuit 3	9 lbs. 0 oz. (4.08 kg)	11 lbs. 8 oz. (5.22 kg)	8 lbs. 0 oz. (3.63 kg)	11 lbs. 0 oz. (4.99 kg)
	Circuit 4	---	---	---	11 lbs. 0 oz. (4.99 kg)	
Gas Heating Options - See Table Below			Standard (2 Stage) - Medium (2 Stage) - High (2 Stage)			
Compressor Type (no.)			Scroll (3)	Scroll (3)	Scroll (3)	Scroll (4)
Outdoor Coils	Net face area - sq. ft. (m ²) total		56.0 (5.2)	56.0 (5.2)	56.0 (5.2)	56.0 (5.2)
	Tube diameter - in. (mm)		3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)
	Number of rows		1	2	1	2
	Fins per inch (m)		20 (787)	20 (787)	20 (787)	20 (787)
Outdoor Coil Fans	Motor horsepower (W)		(4) 1/3 (249)	(4) 1/3 (249)	(4) 1/2 (373)	(4) 1/3 (249)
	Motor rpm		1075	1075	1075	1075
	Total Motor watts		1370	1395	1800	1395
	Diameter - in. (mm) - No. of blades		(4) 24 (610) - 3	(4) 24 (610) - 3	(4) 24 (610) - 3	(4) 24 (610) - 3
	Total Air volume - cfm (L/s)		15,850 (7480)	15,450 (7290)	16,000 (7550)	15,450 (7290)
Indoor Coils	Net face area - sq. ft. (m ²) total		22.3 (2.07)	22.3 (2.07)	22.3 (2.07)	22.3 (2.07)
	Tube diameter - in. (mm)		3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)
	No. of rows		3	3	3	4
	Fins per inch (m)		14 (551)	14 (551)	14 (551)	14 (551)
	Drain connection - number and size		(1) 1 in. NPT coupling		(1) 1 in. NPT coupling	
Expansion device type			Balanced Port Thermostatic Expansion Valve, removeable power head			
^{3,4} Indoor Blower and Drive Selection	Nominal motor HP	Low Static	3 hp (2.2 kW)	3 hp (2.2 kW)	5 hp (3.7 kW)	5 hp (3.7 kW)
		Standard Static	3 hp (2.2 kW)	3 hp (2.2 kW)	5 hp (3.7 kW)	5 hp (3.7 kW)
		High Static	5 hp (3.7 kW)	5 hp (3.7 kW)	7.5 hp (5.6 kW)	7.5 hp (5.6 kW)
	Max. usable motor output (US Only)	Low Static	3.45 hp (2.6 kW)	3.45 hp (2.6 kW)	5.75 hp (4.3 kW)	5.75 hp (4.3 kW)
		Standard Static	3.45 hp (2.6 kW)	3.45 hp (2.6 kW)	5.75 hp (4.3 kW)	5.75 hp (4.3 kW)
		High Static	5.75 hp (4.3 kW)	5.75 hp (4.3 kW)	8.63 hp (6.4 kW)	8.63 hp (6.4 kW)
	Drive Kit	Low Static	#A - 535-725 rpm	#A - 535-725 rpm	#2 - 685-865 rpm	#2 - 685-865 rpm
		Standard Static	#1 - 710-965 rpm	#1 - 710-965 rpm	#3 - 850-1045 rpm	#3 - 850-1045 rpm
		High Static	#4 - 945-1185 rpm	#4 - 945-1185 rpm	#6 - 1045-1285 rpm	#6 - 1045-1285 rpm
	Field Installed Drive Kits	Standard to Low Static	#A - 535-725 rpm	#A - 535-725 rpm	#2 - 685-865 rpm	#2 - 685-865 rpm
High to Standard Static		#3 - 850-1045 rpm	#3 - 850-1045 rpm	#7 - 850-1045 rpm	#7 - 850-1045 rpm	
Blower wheel nominal diameter x width			(2) 15 x 15 in. (381 x 381 mm)			
Filters	Type of filter		Disposable			
	No. and size - in. (mm)		(6) 24 x 24 x 2 (610 x 610 x 51)			
Electrical characteristics			208/230V, 460V or 575V - 60 hertz - 3 phase			

NOTE - Net capacity includes evaporator blower motor heat deduction. Gross capacity does not include evaporator blower motor heat deduction.

¹ Certified in accordance with the ULE certification program, which is based on ARI Standard 340/360; 95°F (35°C) outdoor air temperature and 80°F (27°C) db/67°F (19°C) wb entering evaporator air; minimum external duct static pressure.

² Integrated Part Load Value tested at 80°F (27°C) outdoor air temperature.

³ Using total air volume and system static pressure requirements determine from blower performance tables rpm and motor output required. Maximum usable output of motors furnished are shown. In Canada, nominal motor output is also maximum usable motor output. If motors of comparable output are used, be sure to keep within the service factor limitations outlined on the motor nameplate.

⁴ Stocked models are available with standard static drives. High static drives are factory installed (configure to order). Low static drive can be factory installed (configure to order) or standard static drives can be converted to low static with field installed kit. High static models can be converted to standard static with field installed kit.

SPECIFICATIONS - GAS HEAT

15 - 17.5 TON

Usage Data		Model No.	TGA180S2B, TGA180H2B, TGA210S2B, or TGA210H2B		
Gas Heating Performance	Heat Input Type	Standard (2 Stage)	Standard (2 Stage)	Medium (2 Stage)	High (2 Stage)
		First Stage	169,000 (49.5)	234,000 (68.6)	312,000 (91.4)
		Second Stage	260,000 (76.2)	360,000 (105.5)	480,000 (140.6)
	Output - Btuh (kW)	Second Stage	208,000 (60.9)	288,000 (84.4)	384,000 (112.5)
		CSA Thermal Efficiency	80.0%		
Gas Supply Connections		1 in. NPT			
Recommended Gas Supply Pressure - Natural / LPG/Propane		7 in. w.g. (1.7 kPa) / 10.8 in. w.g. (2.7 kPa)			

SPECIFICATIONS

20 - 25 TON

General Data		Nominal Tonnage Model No.	20 Ton TGA240S2B Standard	20 Ton TGA240H2B High	25 Ton TGA300S2B Standard
Cooling Performance	Gross Cooling Capacity - Btuh (kW)		243,000 (71.2)	251,000 (73.5)	302,000 (88.4)
	Net Cooling Capacity - Btuh (kW)		232,000 (67.9)	240,000 (70.3)	286,000 (83.7)
	ARI Rated Air Flow - cfm (L/s)		8000 (3775)	7500 (3540)	9000 (4245)
	Total Unit Power - kW		24.4	22.2	30.1
	¹ EER (Btuh/Watt)		9.5	10.8	9.5
³ Integrated Part Load Value (Btuh/Watt)		9.9	11.2	9.7	
Refrigerant Type			R-22	R-22	R-22
Refrigerant Charge Furnished	Circuit 1		11 lbs. 8 oz. (5.22 kg)	11 lbs. 8 oz. (5.22 kg)	11 lbs. 0 oz. (4.99 kg)
	Circuit 2		11 lbs. 8 oz. (5.22 kg)	11 lbs. 8 oz. (5.22 kg)	11 lbs. 0 oz. (4.99 kg)
	Circuit 3		11 lbs. 8 oz. (5.22 kg)	11 lbs. 8 oz. (5.22 kg)	11 lbs. 0 oz. (4.99 kg)
	Circuit 4		- - -	11 lbs. 8 oz. (5.22 kg)	11 lbs. 0 oz. (4.99 kg)
Gas Heating Options - See Table below			Standard (2 Stage) - Medium (2 Stage) - High (2 Stage)		
Compressor Type (no.)			Scroll (3)	Scroll (4)	Scroll (4)
Outdoor Coils	Net face area - sq. ft. (m ²) total		56.0 (5.2)	56.0 (5.2)	56.0 (5.2)
	Tube diameter - in. (mm)		3/8 (9.5)	3/8 (9.5)	3/8 (9.5)
	Number of rows		2	2	2
	Fins per inch (m)		20 (787)	20 (787)	20 (787)
Outdoor Coil Fans	Motor horsepower (W)		(4) 1/3 (249)	(4) 1/3 (249)	(4) 1/2 (373)
	Motor rpm		1075	1075	1075
	Total Motor watts		1395	1395	1800
	Diameter - in. (mm) - No. of blades		(4) 24 (610) - 3	(4) 24 (610) - 3	(4) 24 (610) - 3
	Total Air volume - cfm (L/s)		15,450 (7290)	15,450 (7290)	16,000 (7550)
Indoor Coils	Net face area - sq. ft. (m ²) total		22.3 (2.07)	22.3 (2.07)	22.3 (2.07)
	Tube diameter - in. (mm)		3/8 (9.5)	3/8 (9.5)	3/8 (9.5)
	No. of rows		3	4	4
	Fins per inch (m)		14 (551)	14 (551)	14 (551)
	Drain connection - no. and size		(1) 1 in. NPT coupling	(1) 1 in. NPT coupling	(1) 1 in. NPT coupling
Expansion device type			Balanced Port Thermostatic Expansion Valve, removeable power head		
4, 5 Indoor Blower and Drive Selection	Nominal motor HP	Low Static	5 hp (3.7 kW)	5 hp (3.7 kW)	7.5 hp (5.6 kW)
		Standard Static	7.5 hp (5.6 kW)	7.5 hp (5.6 kW)	10 hp (7.5 kW)
		High Static	10 hp (7.5 kW)	10 hp (7.5 kW)	N/A
	Max. usable motor output (US Only)	Low Static	5.75 hp (4.3 kW)	5.75 hp (4.3 kW)	8.63 hp (6.4 kW)
		Standard Static	8.63 hp (6.4 kW)	8.63 hp (6.4 kW)	11.5 hp (8.6 kW)
		High Static	11.5 hp (8.6 kW)	11.5 hp (8.6 kW)	N/A
	Drive Kit	Low Static	#2 - 685- 865 rpm	#2 - 685-865 rpm	#7 - 850-1045 rpm
		Standard Static	#7 - 850-1045 rpm	#7 - 850-1045 rpm	#6 - 1045-1285 rpm
		High Static	#6 - 1045-1285 rpm	#6 - 1045-1285 rpm	N/A
Field Installed Low Static Drive Kit		#9 - 685-865 rpm	#9 - 685-865 rpm	#7 - 850-1045 rpm	
Blower wheel nominal diameter x width			(2) 15 x 15 in. (381 x 381 mm)		
Filters	Type of filter		Disposable		
	No. and size - in. (mm)		(6) 24 x 24 x 2 (610 x 610 x 51)		
Electrical characteristics			208/230V, 460V or 575V - 60 hertz - 3 phase		

NOTE - Net capacity includes evaporator blower motor heat deduction. Gross capacity does not include evaporator blower motor heat deduction.
¹ Certified in accordance with the ULE certification program, which is based on ARI Standard 340/360; 95°F (35°C) outdoor air temperature and 80°F (27°C) db/67°F (19°C) wb entering evaporator air; minimum external duct static pressure.
² Tested at conditions included in with ARI Standard 340/360; 95°F (35°C) outdoor air temperature and 80°F (27°C) db/67°F (19°C) wb entering evaporator air; minimum external duct static pressure.
³ Integrated Part Load Value tested at 80°F (27°C) outdoor air temperature.
⁴ Using total air volume and system static pressure requirements determine from blower performance tables rpm and motor output required. Maximum usable output of motors furnished are shown. In Canada, nominal motor output is also maximum usable motor output. If motors of comparable output are used, be sure to keep within the service factor limitations outlined on the motor nameplate.
⁵ Stocked models are available with standard static drives. High static drives are factory installed (configure to order). Low static drive can be factory installed (configure to order) or standard static drives can be converted to low static with field installed kit.

SPECIFICATIONS - GAS HEAT

20 - 25 TON

Usage Data		Model No.	TGA240S2B, TGA240H2B, or TGA300S2B		
Gas Heating Performance	Input - Btuh (KW)	Heat Input Type	Standard (2 Stage)	Medium (2 Stage)	High (2 Stage)
		First Stage	169,000 (49.5)	234,000 (68.6)	312,000 (91.4)
	Output - Btuh (kW)	Second Stage	260,000 (76.2)	360,000 (105.5)	480,000 (140.6)
		Second Stage	208,000 (60.9)	288,000 (84.4)	384,000 (112.5)
CSA Thermal Efficiency			80.0%		
Gas Supply Connections			1 in. NPT		
Recommended Gas Supply Pressure - Natural / LPG/Propane			7 in. w.g. (1.7 kPa) / 11 in. w.g. (2.7 kPa)		

COOLING RATINGS

NOTE - For Temperatures and Capacities not shown in tables, see bulletin — Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.

15 TON STANDARD EFFICIENCY - TWO COMPRESSORS OPERATING

TGA180S

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			65°F (18°C)						75°F (24°C)						85°F (29°C)						95°F (35°C)					
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb		
			kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	4800	2265	126.5	37.1	7.26	.67	.81	.95	123.2	36.1	7.97	.68	.82	.96	119.3	35.0	8.79	.69	.84	.97	114.9	33.7	9.73	.70	.85	.99
	6000	2830	131.3	38.5	7.36	.72	.89	1.00	127.9	37.5	8.06	.73	.90	1.00	123.9	36.3	8.89	.74	.91	1.00	119.3	35.0	9.83	.76	.94	1.00
	7200	3400	135.1	39.6	7.43	.78	.95	1.00	131.7	38.6	8.15	.79	.96	1.00	127.7	37.4	8.97	.80	.98	1.00	123.2	36.1	9.92	.82	.99	1.00
67°F (19°C)	4800	2265	134.4	39.4	7.42	.53	.65	.77	130.9	38.4	8.13	.53	.66	.79	126.9	37.2	8.95	.54	.66	.80	122.2	35.8	9.90	.54	.67	.82
	6000	2830	138.6	40.6	7.51	.56	.70	.85	135.0	39.6	8.22	.56	.71	.86	130.7	38.3	9.04	.57	.72	.88	126.0	36.9	9.99	.58	.73	.90
	7200	3400	141.6	41.5	7.58	.59	.75	.92	138.0	40.4	8.28	.59	.76	.94	133.6	39.2	9.11	.60	.78	.95	128.6	37.7	10.06	.61	.80	.97
71°F (22°C)	4800	2265	142.9	41.9	7.61	.40	.51	.63	139.3	40.8	8.31	.40	.52	.63	135.1	39.6	9.13	.41	.52	.64	133.2	38.2	10.09	.41	.53	.65
	6000	2830	147.0	43.1	7.70	.41	.54	.68	143.4	42.0	8.40	.41	.55	.68	139.0	40.7	9.23	.41	.56	.69	134.0	39.3	10.18	.42	.56	.71
	7200	3400	149.8	43.9	7.77	.42	.57	.73	146.2	42.8	8.46	.42	.58	.74	141.6	41.5	9.28	.43	.59	.75	136.4	40.0	10.25	.43	.60	.77

15 TON STANDARD EFFICIENCY - ALL COMPRESSORS OPERATING

TGA180S

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb		
			kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	4800	2265	176.1	51.6	13.42	.70	.85	.98	169.6	49.7	14.86	.71	.86	.99	163.0	47.8	16.48	.73	.88	1.00	156.3	45.8	18.34	.74	.90	1.00
	6000	2830	182.9	53.6	13.58	.76	.92	1.00	176.1	51.6	15.02	.77	.94	1.00	169.3	49.6	16.67	.79	.96	1.00	162.3	47.6	18.54	.81	.98	1.00
	7200	3400	188.5	55.2	13.70	.81	.98	1.00	181.9	53.3	15.16	.83	1.00	1.00	175.3	51.4	16.82	.85	1.00	1.00	168.6	49.4	18.72	.87	1.00	1.00
67°F (19°C)	4800	2265	187.3	54.9	13.67	.55	.68	.81	180.4	52.9	15.13	.56	.69	.83	173.2	50.8	16.78	.56	.70	.84	166.0	48.6	18.65	.57	.71	.87
	6000	2830	193.0	56.6	13.81	.58	.73	.89	186.0	54.5	15.27	.59	.75	.91	178.4	52.3	16.94	.60	.76	.93	170.7	50.0	18.82	.61	.78	.95
	7200	3400	197.3	57.8	13.92	.61	.79	.99	189.9	55.7	15.38	.62	.81	.98	182.2	53.4	17.03	.63	.83	.99	174.3	51.1	18.93	.65	.85	1.00
71°F (22°C)	4800	2265	199.4	58.4	13.95	.41	.53	.65	192.3	56.4	15.43	.42	.54	.66	184.7	54.1	17.10	.42	.55	.68	177.0	51.9	18.99	.42	.56	.69
	6000	2830	205.2	60.1	14.10	.42	.57	.71	197.8	58.0	15.56	.43	.58	.72	189.9	55.7	17.23	.43	.58	.74	181.6	53.2	19.17	.44	.60	.76
	7200	3400	209.1	61.3	14.19	.44	.60	.77	201.4	59.0	15.67	.44	.61	.78	193.4	56.7	17.34	.45	.62	.80	184.7	54.1	19.25	.45	.64	.83

15 TON HIGH EFFICIENCY - TWO COMPRESSORS OPERATING

TGA180H

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			65°F (18°C)						75°F (24°C)						85°F (29°C)						95°F (35°C)					
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb		
			kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	4800	2265	124.8	36.6	6.64	.67	.81	.94	122.3	35.8	7.24	.67	.81	.95	118.9	34.8	7.96	.68	.83	.97	114.9	33.7	8.79	.69	.84	.98
	6000	2830	129.5	38.0	6.73	.71	.88	1.00	126.9	37.2	7.33	.72	.89	1.00	123.4	36.2	8.04	.73	.91	1.00	119.3	35.0	8.86	.75	.92	1.00
	7200	3400	133.2	39.0	6.80	.77	.95	1.00	130.6	38.3	7.39	.78	.96	1.00	127.2	37.3	8.10	.79	.97	1.00	123.1	36.1	8.93	.81	.99	1.00
67°F (19°C)	4800	2265	132.5	38.8	6.79	.52	.64	.77	129.9	38.1	7.38	.53	.65	.78	126.5	37.1	8.09	.53	.65	.79	122.2	35.8	8.91	.54	.66	.80
	6000	2830	136.6	40.0	6.88	.55	.69	.85	134.0	39.3	7.46	.56	.70	.86	130.4	38.2	8.16	.56	.71	.87	126.0	36.9	8.98	.57	.72	.89
	7200	3400	139.5	40.9	6.94	.58	.75	.92	136.9	40.1	7.51	.58	.75	.93	133.2	39.0	8.21	.59	.77	.94	128.8	37.7	9.03	.60	.78	.96
71°F (22°C)	4800	2265	140.7	41.2	6.96	.40	.51	.62	138.3	40.5	7.54	.40	.51	.62	134.7	39.5	8.24	.40	.52	.63	130.3	38.2	9.06	.40	.52	.64
	6000	2830	144.8	42.4	7.05	.41	.54	.67	142.2	41.7	7.62	.41	.54	.67	138.6	40.6	8.31	.41	.55	.68	134.0	39.3	9.14	.41	.55	.69
	7200	3400	147.6	43.3	7.11	.42	.57	.72	145.0	42.5	7.68	.42	.57	.73	141.2	41.4	8.36	.42	.58	.74	136.6	40.0	9.18	.43	.59	.76

15 TON HIGH EFFICIENCY - ALL COMPRESSORS OPERATING

TGA180H

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb		
			kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	4800	2265	175.6	51.5	11.96	.70	.85	.98	169.6	49.7	13.21	.71	.86	1.00	162.9	47.7	14.64	.72	.88	1.00	156.2	45.8	16.25	.74	.90	1.00
	6000	2830	182.3	53.4	12.08	.75	.93	1.00	176.1	51.6	13.32	.77	.94	1.00	169.4	49.6	14.75	.79	.96	1.00	162.4	47.6	16.39	.80	.98	1.00
	7200	3400	188.0	55.1	12.17	.81	.99	1.00	181.8	53.3	13.43	.83	1.00	1.00	175.5	51.4	14.86	.85	1.00	1.00	168.9	49.5	16.52	.87	1.00	1.00
67°F (19°C)	4800	2265	186.8	54.7	12.16	.55	.68	.81	180.4	52.9	13.40	.56	.69	.83	173.4	50.8	14.84	.56	.70	.84	166.1	48.7	16.46	.57	.71	.86
	6000	2830	192.6	56.4	12.27	.58	.73	.89	186.0	54.5	13.51	.59	.74	.91	178.9	52.4	14.93	.60	.76	.93	171.1	50.1	16.59	.61	.78	.95
	7200	3400	196.8	57.7	12.34	.61	.79	.99	190.2	55.7	13.58	.62	.80	.98	182.7	53.5	15.02	.63	.82	.99	174.7	51.2	16.68	.64	.85	1.00
71°F (22°C)	4800	2265	199.0	58.3	12.39	.41	.53	.65	192.5	56.4	13.62	.42	.54	.66	185.2	54.3	15.07	.42	.55	.67	177.4	52.0	16.73	.42	.55	.69
	6000	2830	204.8	60.0	12.49	.42	.57	.71	197.9	58.0	13.74	.43	.57	.72	190.4	55.8	15.17	.43	.58	.73	182.3	53.4	16.82	.43	.59	.75
	7200	3400	208.7	61.2	12.57	.44	.60	.77	201.8	59.1	13.81	.44	.61	.78	194.0	56.9	15.24	.44	.62	.80	185.6	54.4	16.90	.45	.63	.82

COOLING RATINGS

NOTE - For Temperatures and Capacities not shown in tables, see bulletin — Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.

17.5 TON STANDARD EFFICIENCY - TWO COMPRESSORS OPERATING

TGA210S

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			65°F (18°C)						75°F (24°C)						85°F (29°C)						95°F (35°C)					
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb		
			kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	5600	2645	150.4	44.1	8.18	.65	.79	.92	146.0	42.8	9.15	.66	.80	.93	141.5	41.5	10.23	.66	.81	.95	136.6	40.0	11.45	.67	.83	.96
	7000	3305	155.8	45.7	8.28	.69	.86	.99	151.2	44.3	9.27	.70	.87	.99	146.5	42.9	10.35	.72	.89	1.00	141.5	41.5	11.59	.73	.91	1.00
	8400	3965	160.1	46.9	8.37	.74	.92	1.00	155.4	45.5	9.37	.76	.94	1.00	150.5	44.1	10.45	.77	.95	1.00	145.4	42.6	11.69	.79	.97	1.00
67°F (19°C)	5600	2645	159.6	46.8	8.35	.52	.63	.75	154.9	45.4	9.35	.52	.63	.76	150.0	44.0	10.43	.52	.64	.78	144.7	42.4	11.65	.53	.65	.79
	7000	3305	164.5	48.2	8.45	.54	.67	.82	159.5	46.7	9.45	.54	.68	.84	154.3	45.2	10.54	.55	.69	.85	148.8	43.6	11.77	.56	.71	.87
	8400	3965	168.0	49.2	8.52	.56	.72	.89	162.7	47.7	9.52	.57	.73	.90	157.4	46.1	10.63	.58	.75	.92	151.7	44.5	11.86	.58	.76	.94
71°F (22°C)	5600	2645	169.5	49.7	8.55	.39	.50	.60	164.5	48.2	9.56	.39	.50	.61	159.3	46.7	10.67	.39	.51	.62	153.7	45.0	11.91	.40	.51	.63
	7000	3305	174.5	51.1	8.64	.40	.52	.65	169.1	49.6	9.67	.40	.53	.66	163.5	47.9	10.79	.40	.54	.67	157.7	46.2	12.03	.41	.54	.68
	8400	3965	177.8	52.1	8.71	.41	.55	.70	172.3	50.5	9.74	.41	.56	.71	166.5	48.8	10.87	.41	.57	.72	160.4	47.0	12.12	.42	.58	.74

17.5 TON STANDARD EFFICIENCY - ALL COMPRESSORS OPERATING

TGA210S

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb		
			kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	5600	2645	208.5	61.1	15.55	.69	.83	.96	201.3	59.0	17.41	.70	.85	.98	193.4	56.7	19.51	.71	.87	.99	184.8	54.2	21.92	.72	.89	1.00
	7000	3305	215.9	63.3	15.74	.74	.90	1.00	208.5	61.1	17.62	.75	.92	1.00	200.2	58.7	19.73	.77	.94	1.00	191.3	56.1	22.17	.79	.96	1.00
	8400	3965	221.9	65.0	15.90	.79	.97	1.00	214.3	62.8	17.78	.81	.98	1.00	206.1	60.4	19.93	.83	1.00	1.00	197.4	57.9	22.35	.85	1.00	1.00
67°F (19°C)	5600	2645	221.0	64.8	15.86	.54	.67	.80	213.2	62.5	17.72	.55	.68	.81	204.8	60.0	19.85	.55	.69	.83	195.5	57.3	22.26	.56	.70	.85
	7000	3305	227.3	66.6	16.04	.57	.72	.87	219.2	64.2	17.90	.58	.73	.89	210.3	61.6	20.03	.59	.75	.91	200.4	58.7	22.47	.60	.77	.94
	8400	3965	231.8	67.9	16.17	.60	.77	.94	223.4	65.5	18.04	.61	.79	.96	214.3	62.8	20.18	.62	.81	.97	204.2	59.8	22.63	.63	.83	.99
71°F (22°C)	5600	2645	234.7	68.8	16.24	.41	.53	.64	226.4	66.4	18.13	.41	.53	.65	217.5	63.7	20.29	.41	.54	.66	207.5	60.8	22.72	.42	.55	.68
	7000	3305	240.9	70.6	16.42	.42	.56	.69	232.2	68.1	18.31	.42	.56	.71	222.8	65.3	20.47	.42	.57	.72	212.4	62.2	22.92	.43	.59	.74
	8400	3965	245.2	71.9	16.54	.43	.59	.75	236.2	69.2	18.45	.43	.60	.76	226.4	66.4	20.59	.44	.61	.78	215.6	63.2	23.07	.44	.62	.81

17.5 TON HIGH EFFICIENCY - TWO COMPRESSORS OPERATING

TGA210H

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			65°F (18°C)						75°F (24°C)						85°F (29°C)						95°F (35°C)					
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb		
			kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	5600	2645	111.0	32.5	5.36	.60	.76	.93	107.4	31.5	5.94	.61	.78	.95	103.8	30.4	6.58	.62	.80	.97	100.0	29.3	7.32	.63	.82	.99
	7000	3305	115.4	33.8	5.42	.65	.86	1.00	111.8	32.8	6.00	.67	.88	1.00	108.0	31.7	6.66	.68	.90	1.00	104.2	30.5	7.40	.70	.93	1.00
	8400	3965	119.2	34.9	5.48	.72	.95	1.00	115.6	33.9	6.06	.74	.96	1.00	111.8	32.8	6.72	.76	.99	1.00	108.0	31.7	7.46	.78	1.00	1.00
67°F (19°C)	5600	2645	118.2	34.6	5.46	.48	.58	.71	114.4	33.5	6.04	.48	.59	.73	110.6	32.4	6.70	.48	.60	.75	106.4	31.2	7.44	.49	.61	.77
	7000	3305	122.2	35.8	5.54	.50	.63	.81	118.4	34.7	6.10	.50	.63	.83	114.2	33.5	6.76	.51	.65	.86	110.0	32.2	7.52	.52	.67	.88
	8400	3965	125.2	36.7	5.58	.53	.69	.90	121.2	35.5	6.16	.53	.71	.93	117.0	34.3	6.82	.54	.73	.95	112.4	32.9	7.56	.55	.75	.98
71°F (22°C)	5600	2645	126.2	37.0	5.60	.36	.46	.56	122.2	35.8	6.18	.36	.46	.57	118.0	34.6	6.84	.36	.47	.57	113.8	33.4	7.60	.36	.47	.58
	7000	3305	130.2	38.2	5.66	.37	.49	.61	126.0	36.9	6.24	.37	.49	.61	121.6	35.6	6.90	.37	.50	.63	117.2	34.3	7.64	.38	.51	.64
	8400	3965	133.0	39.0	5.70	.38	.52	.66	128.6	37.7	6.30	.38	.52	.68	124.2	36.4	6.94	.38	.53	.70	119.4	35.0	7.70	.39	.54	.72

17.5 TON HIGH EFFICIENCY - ALL COMPRESSORS OPERATING

TGA210H

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb		
			kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	5600	2645	206.6	60.5	13.42	.69	.85	1.00	199.2	58.4	14.94	.70	.87	1.00	191.2	56.0	16.68	.71	.89	1.00	182.8	53.6	18.68	.73	.92	1.00
	7000	3305	215.0	63.0	13.58	.75	.94	1.00	207.4	60.8	15.10	.76	.96	1.00	199.2	58.4	16.84	.78	.99	1.00	190.4	55.8	18.84	.81	1.00	1.00
	8400	3965	222.4	65.2	13.70	.81	1.00	1.00	215.0	63.0	15.22	.83	1.00	1.00	207.2	60.7	17.00	.86	1.00	1.00	198.8	58.3	19.00	.89	1.00	1.00
67°F (19°C)	5600	2645	220.2	64.5	13.66	.54	.67	.80	211.8	62.1	15.18	.55	.68	.82	203.6	59.7	16.92	.55	.69	.85	194.4	57.0	18.92	.56	.71	.87
	7000	3305	227.4	66.6	13.80	.57	.72	.90	219.0	64.2	15.34	.58	.74	.92	210.0	61.5	17.08	.59	.76	.95	200.4	58.7	19.06	.60	.78	.98
	8400	3965	232.8	68.2	13.90	.61	.79	.99	223.8	65.6	15.42	.62	.81	1.00	214.6	62.9	17.18	.63	.83	1.00	204.6	60.0	19.14	.64	.86	1.00
71°F (22°C)	5600	2645	235.0	68.9	13.94	.41	.52	.64	226.6	66.4	15.48	.41	.53	.65	217.4	63.7	17.22	.41	.54	.67	207.6	60.8	19.20	.41	.55	.68
	7000	3305	242.2	71.0	14.08	.42	.56	.70	233.4	68.4	15.60	.42	.57	.71	223.4	65.5	17.38	.42	.58	.73	213.2	62.5	19.34	.43	.59	.75
	8400	3965	247.2	72.4	14.16	.43	.59	.76	237.8	69.7	15.70	.43	.61	.78	227.8	66.8	17.44	.44	.62	.81	217.2	63.7	19.42	.44	.63	.83

COOLING RATINGS

NOTE - For Temperatures and Capacities not shown in tables, see bulletin — Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.

20 TON STANDARD EFFICIENCY - TWO COMPRESSORS OPERATING

TGA240S

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			65°F (18°C)						75°F (24°C)						85°F (29°C)						95°F (35°C)					
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb		
			kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	6400	3020	169.4	49.6	8.96	.65	.79	.93	164.6	48.2	9.99	.66	.81	.94	159.6	46.8	11.15	.66	.82	.96	154.1	45.2	12.48	.67	.84	.97
	8000	3775	175.6	51.5	9.07	.69	.86	.99	170.5	50.0	10.09	.70	.88	1.00	165.3	48.4	11.27	.72	.89	1.00	159.6	46.8	12.59	.73	.91	1.00
	9600	4530	180.3	52.8	9.17	.75	.93	1.00	175.1	51.3	10.19	.76	.94	1.00	169.9	49.8	11.37	.77	.96	1.00	164.3	48.2	12.70	.79	.97	1.00
67°F (19°C)	6400	3020	179.9	52.7	9.15	.51	.63	.75	174.7	51.2	10.17	.52	.63	.77	169.2	49.6	11.33	.52	.64	.78	163.4	47.9	12.67	.53	.65	.80
	8000	3775	185.3	54.3	9.26	.54	.67	.83	179.8	52.7	10.28	.54	.68	.84	174.1	51.0	11.44	.55	.69	.86	168.0	49.2	12.77	.55	.71	.88
	9600	4530	189.1	55.4	9.34	.56	.72	.90	183.5	53.8	10.36	.57	.73	.91	177.5	52.0	11.52	.58	.75	.93	171.2	50.2	12.86	.58	.77	.95
71°F (22°C)	6400	3020	191.3	56.1	9.38	.39	.50	.60	185.8	54.5	10.40	.39	.50	.61	179.9	52.7	11.56	.39	.51	.62	173.8	50.9	12.91	.39	.51	.63
	8000	3775	196.7	57.6	9.49	.40	.52	.65	190.9	55.9	10.50	.40	.53	.66	184.8	54.2	11.67	.40	.53	.67	178.3	52.3	13.01	.40	.54	.68
	9600	4530	200.4	58.7	9.56	.41	.55	.70	194.4	57.0	10.58	.41	.56	.71	188.1	55.1	11.75	.41	.56	.73	181.2	53.1	13.09	.42	.57	.74

20 TON STANDARD EFFICIENCY - ALL COMPRESSORS OPERATING

TGA240S

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb		
			kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	6400	3020	230.9	67.7	16.79	.70	.85	.98	223.0	65.4	18.80	.71	.86	1.00	214.7	62.9	21.07	.72	.88	1.00	205.9	60.3	23.66	.73	.90	1.00
	8000	3775	239.1	70.1	16.97	.75	.92	1.00	231.1	67.7	18.96	.76	.94	1.00	222.5	65.2	21.28	.78	.96	1.00	213.2	62.5	23.88	.80	.98	1.00
	9600	4530	245.8	72.0	17.12	.80	.98	1.00	237.7	69.7	19.12	.82	1.00	1.00	229.0	67.1	21.44	.84	1.00	1.00	220.1	64.5	24.08	.86	1.00	1.00
67°F (19°C)	6400	3020	244.8	71.7	17.07	.55	.67	.81	236.4	69.3	19.08	.55	.68	.83	227.6	66.7	21.34	.56	.69	.84	217.9	63.9	23.95	.57	.71	.87
	8000	3775	251.8	73.8	17.22	.58	.72	.89	243.0	71.2	19.23	.58	.74	.91	233.7	68.5	21.52	.59	.75	.93	223.6	65.5	24.13	.60	.77	.95
	9600	4530	256.8	75.3	17.34	.60	.78	.95	247.7	72.6	19.35	.61	.80	.97	238.1	69.8	21.65	.62	.82	.99	227.9	66.8	24.27	.64	.84	1.00
71°F (22°C)	6400	3020	260.4	76.3	17.41	.41	.53	.65	251.6	73.7	19.43	.41	.54	.66	241.9	70.9	21.75	.42	.54	.67	231.7	67.9	24.39	.42	.55	.69
	8000	3775	267.4	78.4	17.56	.42	.56	.70	258.0	75.6	19.59	.42	.57	.71	247.8	72.6	21.91	.43	.58	.73	237.2	69.5	24.57	.43	.59	.75
	9600	4530	272.1	79.7	17.68	.43	.59	.76	262.3	76.9	19.71	.44	.60	.77	252.0	73.9	22.03	.44	.61	.79	241.0	70.6	24.67	.45	.63	.82

20 TON HIGH EFFICIENCY - TWO COMPRESSORS OPERATING

TGA240H

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			65°F (18°C)						75°F (24°C)						85°F (29°C)						95°F (35°C)					
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb		
			kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	6400	3020	130.0	38.1	6.04	.59	.74	.92	126.2	37.0	6.78	.60	.76	.93	122.2	35.8	7.64	.61	.78	.95	118.0	34.6	8.62	.61	.80	.97
	8000	3775	135.0	39.6	6.10	.64	.84	1.00	131.0	38.4	6.82	.65	.86	1.00	127.0	37.2	7.68	.67	.88	1.00	122.4	35.9	8.68	.68	.90	1.00
	9600	4530	139.2	40.8	6.12	.70	.93	1.00	135.2	39.6	6.86	.72	.95	1.00	130.8	38.3	7.72	.74	.97	1.00	126.4	37.0	8.72	.76	.99	1.00
67°F (19°C)	6400	3020	138.0	40.4	6.12	.47	.57	.70	134.0	39.3	6.86	.47	.58	.72	129.6	38.0	7.72	.47	.58	.73	125.0	36.6	8.72	.48	.59	.75
	8000	3775	142.6	41.8	6.16	.49	.61	.79	138.4	40.6	6.92	.50	.62	.81	133.8	39.2	7.76	.50	.64	.84	129.0	37.8	8.76	.51	.65	.86
	9600	4530	146.0	42.8	6.20	.52	.67	.89	141.6	41.5	6.94	.52	.69	.91	136.8	40.1	7.80	.53	.71	.93	131.8	38.6	8.80	.54	.73	.95
71°F (22°C)	6400	3020	147.0	43.1	6.20	.36	.45	.55	142.8	41.9	6.94	.36	.46	.55	138.0	40.4	7.82	.36	.46	.56	133.2	39.0	8.82	.36	.47	.57
	8000	3775	151.6	44.4	6.24	.36	.48	.59	147.0	43.1	7.00	.36	.48	.60	142.2	41.7	7.86	.37	.49	.61	137.0	40.2	8.86	.37	.50	.62
	9600	4530	154.8	45.4	6.28	.37	.51	.65	150.0	44.0	7.04	.38	.51	.66	144.8	42.4	7.90	.38	.52	.68	139.4	40.9	8.90	.38	.53	.70

20 TON HIGH EFFICIENCY - TGA240H - ALL COMPRESSORS OPERATING

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb		
			kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	6400	3020	240.0	70.3	15.38	.69	.84	1.00	231.6	67.9	17.36	.70	.86	1.00	222.6	65.2	19.62	.71	.88	1.00	213.2	62.5	22.22	.72	.91	1.00
	8000	3775	249.4	73.1	15.46	.74	.93	1.00	240.4	70.5	17.48	.76	.96	1.00	231.0	67.7	19.74	.78	.98	1.00	221.6	64.9	22.32	.80	1.00	1.00
	9600	4530	257.0	75.3	15.56	.81	1.00	1.00	248.2	72.7	17.56	.83	1.00	1.00	239.2	70.1	19.86	.85	1.00	1.00	230.0	67.4	22.44	.88	1.00	1.00
67°F (19°C)	6400	3020	254.6	74.6	15.56	.54	.67	.80	245.4	71.9	17.56	.55	.68	.82	236.0	69.2	19.82	.55	.69	.84	225.8	66.2	22.40	.56	.70	.87
	8000	3775	262.8	77.0	15.64	.57	.72	.90	253.2	74.2	17.64	.58	.73	.92	243.0	71.2	19.94	.59	.75	.94	232.6	68.2	22.52	.60	.77	.97
	9600	4530	268.6	78.7	15.72	.60	.78	.98	258.8	75.8	17.72	.61	.80	1.00	248.2	72.7	20.02	.62	.83	1.00	237.2	69.5	22.62	.64	.85	1.00
71°F (22°C)	6400	3020	271.0	79.4	15.74	.41	.52	.64	261.4	76.6	17.76	.41	.53	.65	251.0	73.6	20.02	.41	.54	.66	240.4	70.5	22.62	.41	.55	.68
	8000	3775	279.2	81.8	15.82	.42	.56	.70	269.0	78.8	17.84	.42	.57	.71	258.0	75.6	20.14	.42	.58	.73	246.6	72.3	22.76	.43	.59	.75
	9600	4530	284.4	83.3	15.92	.43	.59	.76	273.8	80.2	17.92	.43	.60	.78	262.8	77.0	20.22	.44	.61	.80	251.0	73.6	22.80	.44	.63	.82

COOLING RATINGS

NOTE - For Temperatures and Capacities not shown in tables, see bulletin — Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.

25 TON STANDARD EFFICIENCY - TWO COMPRESSORS OPERATING

TGA300S

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			65°F (18°C)						75°F (24°C)						85°F (29°C)						95°F (35°C)					
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb		
						75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C
cfm	L/s	kBtuh	kW				kBtuh	kW				kBtuh	kW				kBtuh	kW				kBtuh	kW			
63°F (17°C)	8000	3775	149.4	43.8	8.28	.57	.74	.93	144.8	42.4	9.28	.58	.76	.95	140.0	41.0	10.36	.59	.78	.97	135.0	39.6	11.58	.60	.81	.99
	10000	4720	155.2	45.5	8.38	.62	.85	1.00	150.2	44.0	9.40	.64	.87	1.00	145.2	42.6	10.48	.66	.90	1.00	140.0	41.0	11.70	.68	.93	1.00
	12000	5665	159.8	46.8	8.46	.69	.94	1.00	154.8	45.4	9.48	.71	.97	1.00	149.8	43.9	10.58	.74	.98	1.00	144.8	42.4	11.82	.76	1.00	1.00
67°F (19°C)	8000	3775	158.4	46.4	8.42	.45	.55	.69	153.4	45.0	9.44	.45	.56	.71	148.2	43.4	10.54	.46	.57	.73	142.8	41.9	11.76	.46	.58	.76
	10000	4720	163.4	47.9	8.52	.47	.60	.80	158.0	46.3	9.54	.48	.60	.82	152.6	44.7	10.66	.49	.62	.85	146.8	43.0	11.88	.49	.64	.88
	12000	5665	167.0	48.9	8.58	.50	.66	.90	161.4	47.3	9.62	.51	.68	.93	155.8	45.7	10.72	.51	.71	.95	149.8	43.9	11.96	.52	.73	.97
71°F (22°C)	8000	3775	168.6	49.4	8.60	.34	.44	.53	163.2	47.8	9.66	.34	.44	.54	157.6	46.2	10.78	.34	.45	.55	151.6	44.4	12.00	.34	.45	.56
	10000	4720	173.4	50.8	8.70	.35	.46	.58	167.6	49.1	9.74	.35	.47	.59	161.8	47.4	10.86	.35	.48	.60	155.6	45.6	12.12	.35	.48	.61
	12000	5665	176.6	51.8	8.76	.36	.49	.63	170.6	50.0	9.80	.36	.50	.66	164.6	48.2	10.94	.36	.51	.68	158.2	46.4	12.20	.37	.52	.70

25 TON STANDARD EFFICIENCY - ALL COMPRESSORS OPERATING

TGA300S

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb		
						75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C
cfm	L/s	kBtuh	kW				kBtuh	kW				kBtuh	kW				kBtuh	kW				kBtuh	kW			
63°F (17°C)	8000	3775	291.6	85.5	20.84	.69	.85	1.00	281.2	82.4	23.30	.70	.87	1.00	270.0	79.1	26.04	.71	.90	1.00	257.8	75.6	29.16	.73	.92	1.00
	10000	4720	302.4	88.6	21.08	.74	.95	1.00	291.8	85.5	23.54	.76	.97	1.00	280.2	82.1	26.32	.78	1.00	1.00	268.0	78.5	29.46	.81	1.00	1.00
	12000	5665	311.8	91.4	21.28	.81	1.00	1.00	301.4	88.3	23.78	.84	1.00	1.00	290.0	85.0	26.60	.86	1.00	1.00	278.0	81.5	29.80	.89	1.00	1.00
67°F (19°C)	8000	3775	308.6	90.4	21.22	.54	.67	.81	297.4	87.2	23.68	.54	.68	.83	285.2	83.6	26.48	.55	.69	.85	272.0	79.7	29.60	.56	.70	.88
	10000	4720	317.8	93.1	21.46	.57	.72	.91	306.0	89.7	23.92	.58	.73	.93	293.2	85.9	26.68	.59	.76	.96	279.4	81.9	29.88	.60	.78	.99
	12000	5665	324.6	95.1	21.58	.60	.79	.99	312.4	91.6	24.06	.61	.81	1.00	299.2	87.7	26.90	.62	.83	1.00	285.0	83.5	30.10	.64	.87	1.00
71°F (22°C)	8000	3775	328.2	96.2	21.68	.40	.52	.64	316.0	92.6	24.16	.40	.53	.65	303.0	88.8	27.00	.41	.54	.67	288.8	84.6	30.22	.41	.55	.68
	10000	4720	337.0	98.8	21.86	.41	.56	.70	324.2	95.0	24.40	.42	.57	.71	310.6	91.0	27.22	.42	.58	.73	295.8	86.7	30.40	.43	.59	.75
	12000	5665	342.8	100.5	22.02	.43	.59	.76	329.6	96.6	24.54	.43	.60	.78	315.6	92.5	27.38	.44	.62	.81	300.2	88.0	30.58	.44	.63	.84

SPECIFICATIONS - GAS HEAT**15 - 17.5 TON**

Usage Data		Model No.	TGA180S2B, TGA180H2B, TGA210S2B, or TGA210H2B		
Gas Heating Performance	Input - Btuh	Heat Input Type	Standard (2 Stage)	Medium (2 Stage)	High (2 Stage)
		First Stage	169,000	234,000	312,000
	Output - Btuh	Second Stage	260,000	360,000	480,000
		Second Stage	208,000	288,000	384,000
		CSA Thermal Efficiency	80.0%		
		Gas Supply Connections	1 in. NPT		
		Recommended Gas Supply Pressure - Natural / LPG/Propane	7 in. w.g. / 10.8 in. w.g.		

SPECIFICATIONS - GAS HEAT**20 - 25 TON**

Usage Data		Model No.	TGA240S2B, TGA240H2B, or TGA300S2B		
Gas Heating Performance	Input - Btuh (KW)	Heat Input Type	Standard (2 Stage)	Medium (2 Stage)	High (2 Stage)
		First Stage	169,000 (49.5)	234,000 (68.6)	312,000 (91.4)
	Output - Btuh (kW)	Second Stage	260,000 (76.2)	360,000 (105.5)	480,000 (140.6)
		Second Stage	208,000 (60.9)	288,000 (84.4)	384,000 (112.5)
		CSA Thermal Efficiency	80.0%		
		Gas Supply Connections	1 in. NPT		
		Recommended Gas Supply Pressure - Natural / LPG/Propane	7 in. w.g. (1.7 kPa) / 11 in. w.g. (2.7 kPa)		

HIGH ALTITUDE DERATE

NOTE - Units may be installed at altitudes up to 2000 ft. above sea level without any modifications.
 At altitudes above 2000 ft. units must be derated to match information in the table shown.
 At altitudes above 4500 ft. unit must be derated 2% for each 1000 ft. above sea level.
 NOTE - This is the only permissible derate for these units.

Heat Input Type	Altitude Feet	Gas Manifold Pressure in. w.g.		Input Rate (Btuh)
		Natural Gas	LPG/Propane	
Standard (2 stage)	2001 - 4500	3.4/1.6	9.6/5.5	249,000/ 169,000
Medium (2 stage)	2001 - 4500	3.4/1.6	9.6/5.5	345,000/ 230,000
High (2 stage)	2001 - 4500	3.4/1.6	9.6/5.5	460,000/ 312,000

BLOWER DATA

15 TON

BLOWER TABLE INCLUDES RESISTANCE FOR BASE UNIT WITH STANDARD GAS HEAT, WET INDOOR COIL & AIR FILTERS IN PLACE.

FOR ALL UNITS ADD:

1 - Any factory installed options air resistance (high gas heat, economizer, etc.). See table below

2 - Any field installed accessories air resistance (duct resistance, diffuser, etc.). See page 18

Then determine from table the blower motor output and drive required.

0.30 to 1.40 in. w.g.

TGA180

Air Volume cfm	External Static (in. w.g.)																									
	0.30		0.40		0.50		0.60		0.70		0.80		0.90		1.00		1.10		1.20		1.30		1.40			
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Low Static - 3 HP, Drive Kit A												Standard Static - 3 HP, Drive Kit 1													
4800	577	1.13	620	1.31	662	1.48	702	1.66	742	1.83	777	2.01	811	2.18	842	2.36	872	2.54	902	2.72	932	2.89	960	3.07		
5000	585	1.25	628	1.43	670	1.60	710	1.78	750	1.95	783	2.13	815	2.30	848	2.50	880	2.70	910	2.88	940	3.05	968	3.23		
5500	605	1.45	648	1.65	690	1.85	728	2.05	765	2.25	800	2.45	835	2.65	865	2.85	895	3.05	925	3.25	955	3.45	983	3.65		
6000	630	1.75	670	1.95	710	2.15	748	2.38	785	2.60	818	2.83	850	3.05	880	3.25	910	3.45	940	3.68	970	3.90	998	4.13		
6500	650	2.05	690	2.28	730	2.50	768	2.75	805	3.00	838	3.23	870	3.45	900	3.70	930	3.95	958	4.18	985	4.40	1013	4.63		
7000	675	2.35	715	2.63	755	2.90	790	3.15	825	3.40	858	3.68	890	3.95	920	4.20	950	4.45	978	4.70	1005	4.95	1030	5.18		
7200	687	2.55	725	2.81	763	3.06	798	3.33	833	3.60	866	3.86	898	4.11	926	4.36	954	4.61	984	4.90	1013	5.19	1038	5.44		

NOTE - Bold - To operate in this range, unit must be ordered with High Static Drive and drive kit #3 must be ordered separately for field installation.

1.50 to 2.50 in. w.g.

TGA180

Air Volume cfm	External Static (in. w.g.)																							
	1.50		1.60		1.70		1.80		1.90		2.00		2.10		2.20		2.30		2.40		2.50			
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	High Static - 5 HP, Drive Kit 4												Field Furnished Drive											
4800	987	3.24	1014	3.42	1041	3.60	1064	3.78	1087	3.95	1112	4.13	1136	4.30	1159	4.50	1181	4.70	1204	4.88	1226	5.06		
5000	995	3.40	1020	3.60	1045	3.80	1070	3.98	1095	4.15	1118	4.33	1140	4.50	1163	4.70	1185	4.90	1208	5.10	1230	5.30		
5500	1010	3.85	1035	4.05	1060	4.25	1085	4.48	1110	4.70	1133	4.90	1155	5.10	1178	5.30	1200	5.50	1220	5.70	1240	5.90		
6000	1025	4.35	1050	4.58	1075	4.80	1098	5.00	1120	5.20	1145	5.43	1170	5.65	1193	5.88	1215	6.10	1235	6.33	1255	6.55		
6500	1040	4.85	1065	5.10	1090	5.35	1115	5.60	1140	5.85	1163	6.08	1185	6.30	1205	6.53	1225	6.75	1248	7.00	1270	7.25		
7000	1055	5.40	1080	5.68	1105	5.95	1130	6.20	1155	6.45	1178	6.70	1200	6.95	1220	7.20	1240	7.45	1263	7.73	1285	8.00		
7200	1063	5.68	1088	5.94	1113	6.19	1136	6.44	1159	6.69	1182	6.96	1204	7.23	1226	7.50	1248	7.77	1269	8.03	1289	8.28		

NOTE - Bold, italics - drive is capable of the values noted but will exceed motor horsepower.

AIR RESISTANCE (in. w.g.) - Factory Installed Options

Air Volume - cfm	Gas Heat Exchanger		Economizer	Horizontal Roof Curb
	Med. Heat	High Heat		
4800	.08	.10	---	.08
5000	.09	.11	---	.08
5500	.10	.13	---	.10
6000	.12	.15	---	.11
6500	.13	.17	.02	.13
7000	.15	.19	.04	.15
7200	.16	.20	.05	.16

BLOWER DATA

17.5 TON

BLOWER TABLE INCLUDES RESISTANCE FOR BASE UNIT WITH STANDARD GAS HEAT, WET INDOOR COIL & AIR FILTERS IN PLACE.

FOR ALL UNITS ADD:

1 - Any factory installed options air resistance (high gas heat, economizer, etc.). See table below

2 - Any field installed accessories air resistance (duct resistance, diffuser, etc.). See page 18

Then determine from table the blower motor output and drive required.

0.20 to 1.20 in. w.g.

TGA210

Air Volume cfm	External Static (in. w.g.)																					
	0.20		0.30		0.40		0.50		0.60		0.70		0.80		0.90		1.00		1.10		1.20	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Field Furnished				Low Static - 5 HP, Drive Kit 2						Standard Static - 5 HP, Drive Kit 3											
5600	609	1.51	652	1.71	694	1.91	732	2.12	769	2.33	803	2.53	837	2.73	868	2.93	899	3.13	928	3.33	957	3.53
6000	630	1.75	670	1.95	710	2.15	748	2.38	785	2.60	818	2.83	850	3.05	880	3.25	910	3.45	940	3.68	970	3.90
6500	650	2.05	690	2.28	730	2.50	768	2.75	805	3.00	838	3.23	870	3.45	900	3.70	930	3.95	958	4.18	985	4.40
7000	675	2.35	715	2.63	755	2.90	790	3.15	825	3.40	858	3.68	890	3.95	920	4.20	950	4.45	978	4.70	1005	4.95
7500	700	2.75	738	3.03	775	3.30	810	3.58	845	3.85	878	4.15	910	4.45	938	4.70	965	4.95	993	5.23	1020	5.50
8000	725	3.20	763	3.50	800	3.80	833	4.08	865	4.35	898	4.65	930	4.95	958	5.23	985	5.50	1013	5.80	1040	6.10
8400	746	3.55	783	3.87	819	4.18	853	4.49	886	4.80	916	5.12	946	5.43	974	5.73	1001	6.03	1029	6.35	1056	6.66

NOTE - Bold - To operate in this range, unit must be ordered with High Static Drive and drive kit #7 must be ordered separately for field installation.

1.30 to 2.40 in. w.g.

TGA210

Air Volume cfm	External Static (in. w.g.)																							
	1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00		2.10		2.20		2.30		2.40	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Standard Static - 5 HP, Drive Kit 3						High Static - 7.5 HP, Drive Kit 6																	
5600	985	3.74	1012	3.95	1037	4.15	1062	4.35	1087	4.58	1112	4.80	1135	5.00	1157	5.20	1180	5.41	1202	5.62	1223	5.83	1244	6.04
6000	998	4.13	1025	4.35	1050	4.58	1075	4.80	1098	5.00	1120	5.20	1145	5.43	1170	5.65	1193	5.88	1215	6.10	1235	6.33	1255	6.55
6500	1013	4.63	1040	4.85	1065	5.10	1090	5.35	1115	5.60	1140	5.85	1163	6.08	1185	6.30	1205	6.53	1225	6.75	1248	7.00	1270	7.25
7000	1030	5.18	1055	5.40	1080	5.68	1105	5.95	1130	6.20	1155	6.45	1178	6.70	1200	6.95	1220	7.20	1240	7.45	1263	7.73	1285	8.00
7500	1048	5.78	1075	6.05	1100	6.33	1125	6.60	1148	6.88	1170	7.15	1193	7.40	1215	7.65	1238	7.95	1260	8.25	1280	8.50	1300	8.75
8000	1065	6.40	1090	6.70	1115	6.98	1140	7.25	1163	7.55	1185	7.85	1208	8.13	1230	8.40	1253	8.70	1275	9.00	1295	9.30	1315	9.60
8400	1081	6.96	1106	7.26	1131	7.58	1156	7.89	1179	8.19	1201	8.49	1224	8.79	1246	9.09	1266	9.38	1286	9.67	1307	9.98	1328	10.29

NOTE - Bold, italics - drive is capable of the values noted but will exceed motor horsepower.
Italics - field furnished drive

AIR RESISTANCE (in. w.g.) - Factory Installed Options

Air Volume - cfm	Gas Heat Exchanger		Economizer	Horizontal Roof Curb
	Med. Heat	High Heat		
5600	.10	.13	---	.10
6000	.12	.15	---	.11
6500	.13	.17	.02	.13
7000	.15	.19	.04	.15
7500	.17	.21	.06	.17
8000	.19	.24	.09	.19
8400	.20	.26	.11	.21

BLOWER DATA

20 TON

BLOWER TABLE INCLUDES RESISTANCE FOR BASE UNIT WITH STANDARD GAS HEAT, WET INDOOR COIL & AIR FILTERS IN PLACE.

FOR ALL UNITS ADD:

1 - Any factory installed options air resistance (high gas heat, economizer, etc.). See table below

2 - Any field installed accessories air resistance (duct resistance, diffuser, etc.). See page 18

Then determine from table the blower motor output and drive required.

0.20 to 1.10 in. w.g.

TGA240

Air Volume cfm	External Static (in. w.g.)																							
	.20		0.30		0.40		0.50		0.60		0.70		0.80		0.90		1.00		1.10		1.20			
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Low Static - 5 HP, Drive Kit 2										Standard Static - 7.5 HP, Drive Kit 7													
6400	648	1.99	688	2.22	727	2.46	764	2.69	801	2.92	834	3.15	866	3.39	896	3.62	926	3.85	954	4.08	981	4.30		
7000	675	2.35	715	2.63	755	2.90	790	3.15	825	3.40	858	3.68	890	3.95	920	4.20	950	4.45	978	4.70	1005	4.95		
7500	700	2.75	738	3.03	775	3.30	810	3.58	845	3.85	878	4.15	910	4.45	938	4.70	965	4.95	993	5.23	1020	5.50		
8000	725	3.20	763	3.50	800	3.80	833	4.08	865	4.35	898	4.65	930	4.95	958	5.23	985	5.50	1013	5.80	1040	6.10		
8500	750	3.65	788	3.98	825	4.30	858	4.60	890	4.90	920	5.23	950	5.55	978	5.85	1005	6.15	1033	6.48	1060	6.80		
9000	780	4.20	815	4.53	850	4.85	880	5.18	910	5.50	940	5.83	970	6.15	998	6.48	1025	6.80	1053	7.15	1080	7.50		
9600	811	4.87	845	5.22	879	5.57	910	5.94	941	6.31	970	6.67	999	7.02	1027	7.38	1054	7.74	1079	8.08	1104	8.41		

1.30 to 2.40 in. w.g.

TGA240

Air Volume cfm	External Static (in. w.g.)																									
	1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00		2.10		2.20		2.30		2.40			
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Standard Static						High Static - 10 HP, Drive Kit 6																			
6400	1008	4.53	1035	4.75	1060	4.98	1085	5.22	1110	5.45	1135	5.68	1157	5.91	1180	6.15	1202	6.40	1225	6.65	1246	6.88	1268	7.11		
7000	1030	5.18	1055	5.40	1080	5.68	1105	5.95	1130	6.20	1155	6.45	1178	6.70	1200	6.95	1220	7.20	1240	7.45	1263	7.73	1285	8.00		
7500	1048	5.78	1075	6.05	1100	6.33	1125	6.60	1148	6.88	1170	7.15	1193	7.40	1215	7.65	1238	7.95	1260	8.25	1280	8.50	1300	8.75		
8000	1065	6.40	1090	6.70	1115	6.98	1140	7.25	1163	7.55	1185	7.85	1208	8.13	1230	8.40	1253	8.70	1275	9.00	1295	9.30	1315	9.60		
8500	1085	7.10	1110	7.40	1135	7.73	1160	8.05	1183	8.35	1205	8.65	1228	8.95	1250	9.25	1270	9.55	1290	9.85	1310	10.15	1330	10.45		
9000	1105	7.83	1130	8.15	1153	8.45	1175	8.75	1198	9.08	1220	9.40	1243	9.75	1265	10.10	1288	10.45	1310	10.80	1330	11.10	1350	11.40		
9600	1129	8.77	1154	9.13	1177	9.46	1199	9.78	1222	10.14	1244	10.50	1267	10.87	1289	11.23	---	---	---	---	---	---	---	---		

NOTE - *italics* - field furnished drive.

AIR RESISTANCE (in. w.g.) - Factory Installed Options

Air Volume - cfm	Gas Heat Exchanger		Economizer	Horizontal Roof Curb
	Med. Heat	High Heat		
6400	.13	.17	.02	.13
7000	.15	.19	.04	.15
7500	.17	.21	.06	.17
8000	.19	.24	.09	.19
8500	.20	.26	.11	.21
9000	.23	.29	.14	.24
9600	.25	.32	.16	.26

BLOWER DATA

STANDARD 25 TON

BLOWER TABLE INCLUDES RESISTANCE FOR BASE UNIT WITH STANDARD GAS HEAT, WET INDOOR COIL & AIR FILTERS IN PLACE.

FOR ALL UNITS ADD:

1 - Any factory installed options air resistance (high gas heat, economizer, etc.). See table below

2 - Any field installed accessories air resistance (duct resistance, diffuser, etc.). See page 18

Then determine from table the blower motor output and drive required.

0.00 to 1.00 in. w.g.

TGA300S

Air Volume cfm	External Static (in. w.g.)																						
	0.00		0.10		0.20		0.30		0.40		0.50		0.60		0.70		0.80		0.90		1.00		
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
	Low Static - 7.5 HP, Drive Kit 7																						
8000	725	3.20	763	3.50	800	3.80	833	4.08	865	4.35	898	4.65	930	4.95	958	5.23	985	5.50	1013	5.80	1040	6.10	
8500	750	3.65	788	3.98	825	4.30	858	4.60	890	4.90	920	5.23	950	5.55	978	5.85	1005	6.15	1033	6.48	1060	6.80	
9250	790	4.45	825	4.80	860	5.15	893	5.50	925	5.85	955	6.20	985	6.55	1013	6.88	1040	7.20	1065	7.53	1090	7.85	
10000	835	5.40	868	5.78	900	6.15	930	6.50	960	6.85	988	7.23	1015	7.60	1043	7.98	1070	8.35	1095	8.70	1120	9.05	
10750	875	6.40	908	6.83	940	7.25	970	7.65	1000	8.05	1028	8.45	1055	8.85	1080	9.25	1105	9.65	1130	10.05	1155	10.45	
11500	915	7.40	948	7.88	980	8.35	1010 8.80	1040 9.25	1068	9.68	1095	10.10	1118	10.53	1140	10.95	1165	11.40	1190 11.85				

NOTE - *Bold, italics* - drive is capable of the values noted but will exceed motor horsepower.

1.10 to 2.20 in. w.g.

TGA300S

Air Volume cfm	External Static (in. w.g.)																							
	1.10		1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00		2.10		2.20	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Standard Static - 10 HP, Drive Kit 6																				Field Furnished Drive			
8000	1065	6.40	1090	6.70	1115	6.98	1140	7.25	1163	7.55	1185	7.85	1208	8.13	1230	8.40	1253	8.70	1275	9.00	1295	9.30	1315	9.60
8500	1085	7.10	1110	7.40	1135	7.73	1160	8.05	1183	8.35	1205	8.65	1228	8.95	1250	9.25	1270	9.55	1290	9.85	1310	10.15	1330	10.45
9250	1115	8.20	1140	8.55	1163	8.88	1185	9.20	1208	9.53	1230	9.85	1253	10.20	1275	10.55	1295	10.88	1315	11.20	---	---	---	---
10000	1145	9.43	1170	9.80	1193	10.15	1215	10.50	1238	10.88	1260	11.25	1283	11.62	---	---	---	---	---	---	---	---	---	---
10750	1178	10.83	1200	11.20	1222	11.57	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
11500	1210 12.23	1230 12.60	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

NOTE - *Bold, italics* - drive is capable of the values noted but will exceed motor horsepower.

AIR RESISTANCE (in. w.g.) - Factory Installed Options

Air Volume - cfm	Gas Heat Exchanger		Economizer	Horizontal Roof Curb
	Med. Heat	High Heat		
8000	.19	.24	.09	.13
8500	.20	.26	.11	.15
9250	.24	.30	.15	.18
10,000	.27	.35	.19	.21

BLOWER DATA

CEILING DIFFUSER AIR RESISTANCE

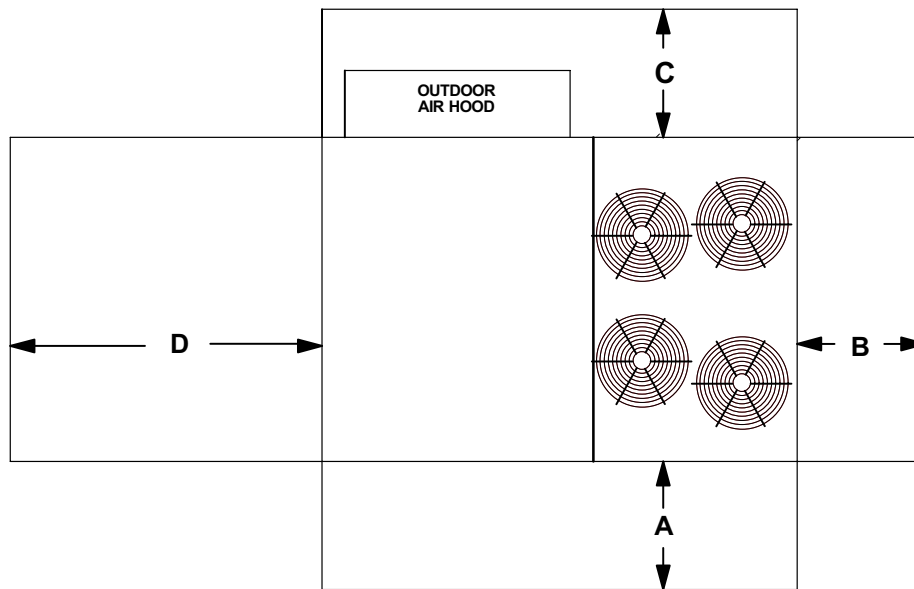
Air Volume		Step-Down Diffuser												Flush Diffuser			
		RTD11-185						RTD11-275						FD11-185		FD11-275	
		2 Ends Open		1 Side/2 Ends Open		All Ends & Sides Open		2 Ends Open		1 Side/2 Ends Open		All Ends & Sides Open		in. w.g.	Pa	in. w.g.	Pa
cfm	L/s	in. w.g.	Pa	in. w.g.	Pa	in. w.g.	Pa	in. w.g.	Pa	in. w.g.	Pa	in. w.g.	Pa	in. w.g.	Pa		
5000	2360	.51	127	.44	109	.39	97	---	---	---	---	---	---	.27	67	---	---
5200	2455	.56	139	.48	119	.42	104	---	---	---	---	---	---	.30	75	---	---
5400	2550	.61	152	.52	129	.45	112	---	---	---	---	---	---	.33	82	---	---
5600	2645	.66	164	.56	139	.48	119	---	---	---	---	---	---	.36	90	---	---
5800	2735	.71	177	.59	147	.51	127	---	---	---	---	---	---	.39	97	---	---
6000	2830	.76	189	.63	157	.55	137	.36	90	.31	77	.27	67	.42	104	.29	72
6200	2925	.80	199	.68	169	.59	147	---	---	---	---	---	---	.46	114	---	---
6400	3020	.86	214	.72	179	.63	157	---	---	---	---	---	---	.50	124	---	---
6500	3065	---	---	---	---	---	---	.42	104	.36	90	.31	77	---	---	.34	85
6600	3115	.92	229	.77	191	.67	167	---	---	---	---	---	---	.54	134	---	---
6800	3210	.99	246	.83	206	.72	174	---	---	---	---	---	---	.58	144	---	---
7000	3305	1.03	256	.87	216	.76	189	.49	122	.41	102	.36	90	.62	154	.40	99
7200	3400	1.09	271	.92	229	.80	199	---	---	---	---	---	---	.66	164	---	---
7400	3490	1.15	286	.97	241	.84	209	---	---	---	---	---	---	.70	174	---	---
7500	3540	---	---	---	---	---	---	.51	127	.46	114	.41	102	---	---	.45	112
7600	3585	1.20	301	1.02	254	.88	219	---	---	---	---	---	---	.74	184	---	---
8000	3775	---	---	---	---	---	---	.59	147	.49	122	.43	107	---	---	.50	124
8500	4010	---	---	---	---	---	---	.69	172	.58	144	.50	124	---	---	.57	142
9000	4245	---	---	---	---	---	---	.79	196	.67	167	.58	144	---	---	.66	164
9500	4485	---	---	---	---	---	---	.89	221	.75	186	.65	162	---	---	.74	184
10,000	4720	---	---	---	---	---	---	1.00	249	.84	209	.73	182	---	---	.81	201
10,500	4955	---	---	---	---	---	---	1.10	273	.92	229	.80	199	---	---	.89	221
11,000	5190	---	---	---	---	---	---	1.21	301	1.01	251	.88	219	---	---	.96	239

BLOWER DATA

CEILING DIFFUSER AIR THROW DATA

Model No.	Air Volume		¹ Effective Throw Range				Model No.	Air Volume		¹ Effective Throw Range			
	cfm	L/s	Step-Down		Flush			cfm	L/s	Step-Down		Flush	
			ft.	m	ft.	m			ft.	m	ft.	m	
180 Models	Diffuser Model		RTD11-185		FD11-185		210, 240, 300S Models	Diffuser Model		RTD11-275		FD11-275	
	5600	2645	39 - 49	12 - 15	28 - 37	9 - 11		7200	3400	33 - 38	10 - 12	26 - 35	8 - 11
	5800	2740	42 - 51	13 - 16	29 - 38	9 - 12		7400	3490	35 - 40	11 - 12	28 - 37	9 - 11
	6000	2830	44 - 54	13 - 17	40 - 50	12 - 15		7600	3585	36 - 41	11 - 13	29 - 38	9 - 12
	6200	2925	45 - 55	14 - 17	42 - 51	13 - 16		7800	3680	38 - 43	11 - 13	40 - 50	12 - 15
	6400	3020	46 - 55	14 - 17	53 - 52	13 - 16		8000	3775	39 - 44	12 - 13	42 - 51	13 - 16
	6600	3115	57 - 56	14 - 17	45 - 56	14 - 17		8200	3870	41 - 46	12 - 14	43 - 52	13 - 16
						8400	3965	43 - 49	13 - 15	44 - 54	13 - 17		
						8600	4060	44 - 50	13 - 15	46 - 57	14 - 17		
						8800	4155	47 - 55	14 - 17	48 - 59	15 - 18		

UNIT CLEARANCES - INCHES (MM)



¹ Unit Clearance	A		B		C		D		Top Clearance
	in.	mm	in.	mm	in.	mm	in.	mm	
Service Clearance	60	1524	36	914	36	914	66	1676	Unobstructed
Clearance to Combustibles	36	914	1	25	1	25	1	25	
Minimum Operation Clearance	45	1143	36	914	36	914	41	1041	

NOTE - Entire perimeter of unit base requires support when elevated above the mounting surface.

¹ **Service Clearance** - Required for removal of serviceable parts.

Clearance to Combustibles - Required clearance to combustible material.

Minimum Operation Clearance - Required clearance for proper unit operation.

OUTDOOR SOUND DATA

Unit Model No.	Octave Band Sound Power Levels dBa, re 10 ⁻¹² Watts							¹ Sound Rating Number (dB)
	Center Frequency - HZ							
	125	250	500	1000	2000	4000	8000	
180	97	92	91	88	83	79	72	93
210, 240	94	91	90	87	83	79	72	92
300S	96	93	90	87	82	76	65	93

¹ Tested according to ARI Standard 270-95 test conditions and ANSI Standard S1.32-1981.

ELECTRICAL DATA**15 TON****15 TON STANDARD EFFICIENCY (R-22)****TGA180S2**

Voltage - 60hz - 3 phase		208/230V			460V			575V		
Compressors (3)	Rated Load Amps (total)	15.6 (46.8)			7.5 (22.5)			6 (18)		
	Locked Rotor Amps (total)	124 (372)			59.6 (178.8)			49.4 (148.2)		
Outdoor Fan Motors (4)	Full Load Amps (total)	2.4 (9.6)			1.3 (5.2)			1 (4)		
	Locked Rotor Amps (total)	4.7 (18.8)			2.4 (9.6)			1.9 (7.6)		
Standard PEF (2)	Horsepower (W)	1/3 (249)			1/3 (249)			1/3 (249)		
	Full Load Amps (total)	4.8 (9.6)			2.6 (5.2)			2 (4)		
	Locked Rotor Amps (total)	9.4 (18.8)			4.8 (9.6)			3.8 (7.6)		
Service Outlet 115V GFI		15 Amps			15 Amps			15 Amps		
Indoor Blower Motor	Horsepower	3	5	7.5	3	5	7.5	3	5	7.5
	Rated Load Amps	10.6	16.7	24.2	4.8	7.6	11	3.9	6.1	9
	Locked Rotor Amps	66	105	152	26.8	45.6	66	23.4	36.6	54
¹ Minimum Circuit Ampacity	with power exhaust	76	82	90	37	40	44	30	32	35
	without power exhaust	71	77	85	35	38	41	28	30	33
² Maximum Over-current Protection	with power exhaust	90	90	110	40	45	50	35	35	40
	without power exhaust	80	90	110	40	40	50	30	35	40
Disconnect		84M14			84M13			84M13		

15 TON HIGH EFFICIENCY (R-22)**TGA180H2**

Voltage - 60hz - 3 phase		208/230V			460V			575V		
Compressors (3)	Rated Load Amps (total)	15.4 (46.2)			7.4 (22.2)			5.9 (17.7)		
	Locked Rotor Amps (total)	124 (372)			59.6 (178.8)			49.4 (148.2)		
Outdoor Fan Motors (4)	Full Load Amps (total)	2.4 (9.6)			1.3 (5.2)			1 (4)		
	Locked Rotor Amps (total)	4.7 (18.8)			2.4 (9.6)			1.9 (7.6)		
Standard PEF (2)	Horsepower (W)	1/3 (249)			1/3 (249)			1/3 (249)		
	Full Load Amps (total)	4.8 (9.6)			2.6 (5.2)			2 (4)		
	Locked Rotor Amps (total)	9.4 (18.8)			4.8 (9.6)			3.8 (7.6)		
Service Outlet 115V GFI		15 Amps			15 Amps			15 Amps		
Indoor Blower Motor	Horsepower	3	5	7.5	3	5	7.5	3	5	7.5
	Rated Load Amps	10.6	16.7	24.2	4.8	7.6	11	3.9	6.1	9
	Locked Rotor Amps	66	105	152	26.8	45.6	66	23.4	36.6	54
¹ Minimum Circuit Ampacity	with power exhaust	76	82	89	37	40	43	30	32	35
	without power exhaust	71	77	84	35	37	41	28	30	33
² Maximum Over-current Protection	with power exhaust	90	90	110	40	45	50	35	35	40
	without power exhaust	80	90	110	40	40	50	30	35	40
Disconnect		84M14			84M13			84M13		

NOTE - Extremes of operating range are plus and minus 10% of line voltage.

¹ HACR type breaker or fuse.² Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.

ELECTRICAL DATA**17.5 TON****17.5 TON STANDARD EFFICIENCY (R-22)****TGA210S2**

Voltage - 60hz - 3 phase		208/230V			460V			575V		
Compressors (3)	Rated Load Amps (total)	20.2 (60.6)			9.7 (29.1)			8 (24)		
	Locked Rotor Amps (total)	156 (468)			75 (225)			54 (162)		
Outdoor Fan Motors (4)	Full Load Amps (total)	3 (12)			1.5 (6)			1.2 (4.8)		
	Locked Rotor Amps (total)	6 (24)			3 (12)			2.9 (11.6)		
Standard PEF (2)	Horsepower (W)	1/3 (249)			1/3 (249)			1/3 (249)		
	Full Load Amps(total)	4.8 (9.6)			2.6 (5.2)			2 (4)		
	Locked Rotor Amps (total)	9.4 (18.8)			4.8 (9.6)			3.8 (7.6)		
Service Outlet 115V GFI		15 Amps			15 Amps			15 Amps		
Indoor Blower Motor	Horsepower	3	5	7.5	3	5	7.5	3	5	7.5
	Rated Load Amps	10.6	16.7	24.2	4.8	7.6	11	3.9	6.1	9
	Locked Rotor Amps	66	105	152	26.8	45.6	66	23.4	36.6	54
¹ Minimum Circuit Ampacity	with power exhaust	94	100	107	45	48	52	37	39	42
	without power exhaust	89	95	102	43	46	49	35	37	40
² Maximum Over-current Protection	with power exhaust	110	110	125	50	50	60	40	45	50
	without power exhaust	100	110	125	50	50	50	40	40	45
Disconnect		84M14			84M13			84M13		

17.5 TON HIGH EFFICIENCY (R-22)**TGA210H2**

Voltage - 60hz - 3 phase		208/230V			460V			575V		
Compressors (4)	Rated Load Amps (total)	14.7 (58.8)			7.1 (28.4)			5.1 (20.4)		
	Locked Rotor Amps (total)	91 (364)			50 (200)			37 (148)		
Outdoor Fan Motors (4)	Full Load Amps (total)	2.4 (9.6)			1.3 (5.2)			1 (4)		
	Locked Rotor Amps (total)	4.7 (18.8)			2.4 (9.6)			1.9 (7.6)		
Standard PEF (2)	Horsepower (W)	1/3 (249)			1/3 (249)			1/3 (249)		
	Full Load Amps(total)	4.8 (9.6)			2.6 (5.2)			2 (4)		
	Locked Rotor Amps (total)	9.4 (18.8)			4.8 (9.6)			3.8 (7.6)		
Service Outlet 115V GFI		15 Amps			15 Amps			15 Amps		
Indoor Blower Motor	Horsepower	3	5	7.5	3	5	7.5	3	5	7.5
	Rated Load Amps	10.6	16.7	24.2	4.8	7.6	11	3.9	6.1	9
	Locked Rotor Amps	66	105	152	26.8	45.6	66	23.4	36.6	54
¹ Minimum Circuit Ampacity	with power exhaust	88	94	102	43	46	49	32	34	37
	without power exhaust	83	89	97	41	43	47	30	32	35
² Maximum Over-current Protection	with power exhaust	100	110	125	45	50	60	35	40	45
	without power exhaust	90	100	110	45	50	50	30	35	40
Disconnect		84M14			84M13			84M13		

NOTE - Extremes of operating range are plus and minus 10% of line voltage.

¹ HACR type breaker or fuse.² Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.

ELECTRICAL**20 TON****20 TON STANDARD EFFICIENCY (R-22)****TGA240S2**

Voltage - 60hz - 3 phase		208/230V			460V			575V		
Compressors (3)	Rated Load Amps (total)	22.4 (67.2)			10.9 (32.7)			8.3 (24.9)		
	Locked Rotor Amps (total)	164 (492)			100 (300)			78 (234)		
Outdoor Fan Motors (4)	Full Load Amps (total)	2.4 (9.6)			1.3 (5.2)			1 (4)		
	Locked Rotor Amps (total)	4.7 (18.8)			2.4 (9.6)			1.9 (7.6)		
Standard PEF (2)	Horsepower (W)	1/3 (249)			1/3 (249)			1/3 (249)		
	Full Load Amps(total)	4.8 (9.6)			2.6 (5.2)			2 (4)		
	Locked Rotor Amps (total)	9.4 (18.8)			4.8 (9.6)			3.8 (7.6)		
Service Outlet 115V GFI		15 Amps			15 Amps			15 Amps		
Indoor Blower Motor	Horsepower	5	7.5	10	5	7.5	10	5	7.5	10
	Rated Load Amps	16.7	24.2	30.8	7.6	11	14	6.1	9	11
	Locked Rotor Amps	105	152	193	45.6	66	84	36.6	54	66
¹ Minimum Circuit Ampacity	with power exhaust	104	112	118	51	55	58	40	42	44
	without power exhaust	100	107	114	49	52	55	38	40	42
² Maximum Over-current Protection	with power exhaust	125	125	150	60	60	70	45	50	50
	without power exhaust	110	125	125	50	60	60	45	45	60
Disconnect		84M14			84M13			84M13		

20 TON HIGH EFFICIENCY (R-22)**TGA240H2**

Voltage - 60hz - 3 phase		208/230V			460V			575V		
Compressors (4)	Rated Load Amps (total)	17.3 (69.2)			9 (36)			7.1 (28.4)		
	Locked Rotor Amps (total)	123 (492)			62 (248)			50 (200)		
Outdoor Fan Motors (4)	Full Load Amps (total)	2.4 (9.6)			1.3 (5.2)			1 (4)		
	Locked Rotor Amps (total)	4.7 (18.8)			2.4 (9.6)			1.9 (7.6)		
Standard PEF (2)	Horsepower (W)	1/3 (249)			1/3 (249)			1/3 (249)		
	Full Load Amps(total)	4.8 (9.6)			2.6 (5.2)			2 (4)		
	Locked Rotor Amps (total)	9.4 (18.8)			4.8 (9.6)			3.8 (7.6)		
Service Outlet 115V GFI		15 Amps			15 Amps			15 Amps		
Indoor Blower Motor	Horsepower	5	7.5	10	5	7.5	10	5	7.5	10
	Rated Load Amps	16.7	24.2	30.8	7.6	11	14	6.1	9	11
	Locked Rotor Amps	105	152	193	45.6	66	84	36.6	54	66
¹ Minimum Circuit Ampacity	with power exhaust	105	113	119	54	58	61	43	46	48
	without power exhaust	100	108	114	52	55	58	41	44	46
² Maximum Over-current Protection	with power exhaust	110	125	150	60	60	70	45	50	50
	without power exhaust	110	125	125	60	60	70	45	50	50
Disconnect		84M14			84M13			84M13		

NOTE - Extremes of operating range are plus and minus 10% of line voltage.

¹ HACR type breaker or fuse.² Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.

ELECTRICAL DATA**25 TON****25 TON STANDARD EFFICIENCY (R-22)****TGA300S2**

Voltage - 60hz - 3 phase		208/230V			460V			575V		
Compressors (4)	Rated Load Amps (total)	19.8 (79.2)			9.6 (38.4)			7.8 (31.2)		
	Locked Rotor Amps (total)	156 (624)			75 (300)			54 (216)		
Outdoor Fan Motors (4)	Full Load Amps (total)	3 (12)			1.5 (6)			1.2 (4.8)		
	Locked Rotor Amps (total)	6 (24)			3 (12)			2.9 (11.6)		
Standard PEF (2)	Horsepower (W)	1/3 (249)			1/3 (249)			1/3 (249)		
	Full Load Amps (total)	4.8 (9.6)			2.6 (5.2)			2 (4)		
	Locked Rotor Amps (total)	9.4 (18.8)			4.8 (9.6)			3.8 (7.6)		
Service Outlet 115V GFI		15 Amps			15 Amps			15 Amps		
Indoor Blower Motor	Horsepower	5	7.5	10	5	7.5	10	5	7.5	10
	Rated Load Amps	16.7	24.2	30.8	7.6	11	14	6.1	9	11
	Locked Rotor Amps	105	152	193	45.6	66	84	36.6	54	66
¹ Minimum Circuit Ampacity	with power exhaust	113	121	127	55	58	61	45	48	50
	without power exhaust	108	116	122	52	56	59	43	46	48
² Maximum Over-current Protection	with power exhaust	125	150	150	60	70	70	50	50	60
	without power exhaust	125	125	150	60	60	70	50	50	60
Disconnect		84M14			84M13			84M13		

NOTE - Extremes of operating range are plus and minus 10% of line voltage.

¹ HACR type breaker or fuse.² Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.

WEIGHT DATA

Model Number	Net		Shipping	
	lbs.	kg	lbs.	kg
180S/210S Base Unit	2251	1021	2451	1112
180S/210S Max. Unit	2441	1107	2641	1197
180H/240S Base Unit	2345	1064	2545	1154
180H/240S Max. Unit	2535	1150	2735	1241
210H/240H/300 Base Unit	2470	1120	2670	1211
210H/240H/300 Max. Unit	2660	1207	2860	1297

OPTIONS / ACCESSORIES

		Weight	
		lbs.	kg.
CEILING DIFFUSERS			
Step-Down	RTD11-185	392	178
	RTD11-275	403	183
Flush	FD11-185	289	135
	FD11-275	363	165
Transitions	LASRT18	80	36
	LASRT21/24	75	34

ECONOMIZER / OUTDOOR AIR / EXHAUST

Economizer	T1ECON10C-1	86	39
Barometric Relief			
Down-Flow Barometric Relief Dampers	LAGED18/24	30	14
Horizontal Barometric Relief Dampers	LAGEDH18/24	20	9
Outdoor Air Dampers			
Damper Section (down-flow) - Automatic	T1DAMP20C-1	52	24
Damper Section (down-flow) - Manual	LAOAD18/24	49	22
Outdoor Air Hood (down-flow)	C1HOOD10C-1	65	29
Power Exhaust	LAPEF18/24	62	28

HEAT EXCHANGER

Medium Heat Heat Exchanger		95	43
High Heat Heat Exchanger		105	48

PACKAGING

LTL Packaging (less than truck load)		280	127
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ROOF CURBS - STANDARD

Down-Flow			
14 in. (356 mm) height	LARMF18/36-14	160	73
24 in. (610 mm) height	LARMF18/36-24	220	100
Horizontal			
26 in. (660 mm) height	LARMFH18/24-26	420	191
37 in. (940 mm) height	LARMFH18/24-37	580	263

ROOF CURBS - CLIPLOCK 1000

Down-Flow			
14 in. (356 mm) height	LARMF18/30S-14	164	74
18 in. (457 mm) height	LARMF18/30S-18	187	85
24 in. (610 mm) height	LARMF18/30S-24	222	101
Horizontal			
26 in. (660 mm) height	LARMFH18/24S-26	335	152
37 in. (940 mm) height	LARMFH18/24S-37	445	202

Base Unit - The unit with low fire heat exchanger NO OPTIONS.

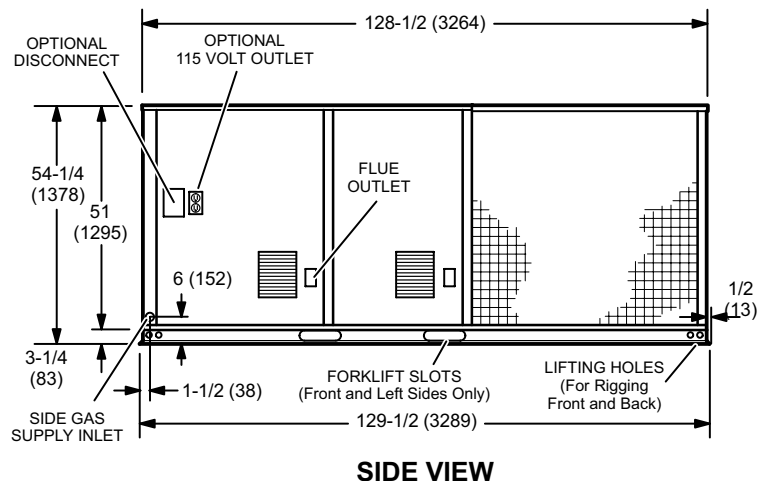
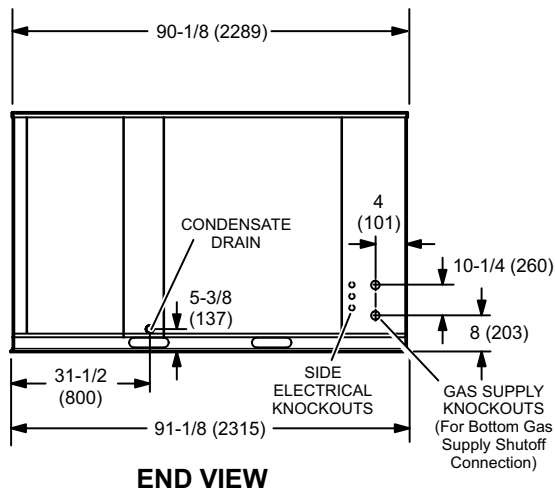
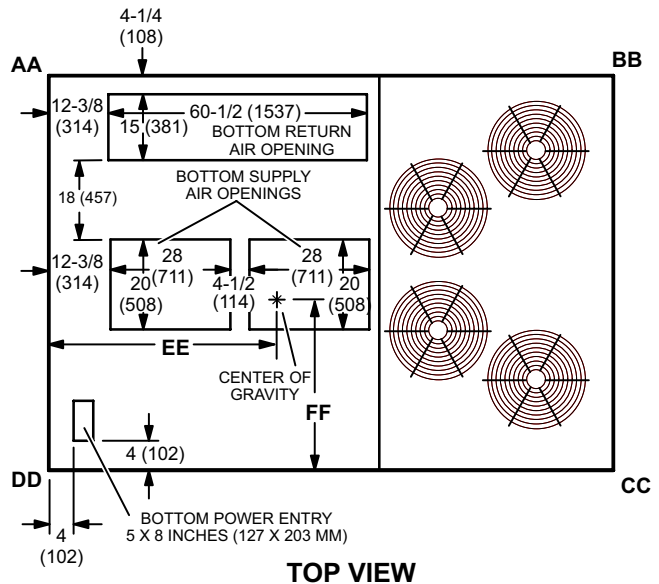
Max. Unit - The unit with ALL OPTIONS Installed. (High Input Heat Exchanger, Economizer, Power Exhaust Fans, Controls)

DIMENSIONS - INCHES (MM)

Model Number	CORNER WEIGHTS								CENTER OF GRAVITY			
	AA		BB		CC		DD		EE		FF	
	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg	inch	mm	inch	mm
180S/210S Base Unit	602	273	470	213	502	228	677	307	51-1/2	1308	39-1/2	1003
180S/210S Max. Unit	673	305	518	235	536	243	714	324	51-1/2	1308	42-1/2	1080
180H Base Unit	607	275	498	226	544	247	696	316	54	1372	38	965
180H Max. Unit	681	309	552	250	575	261	727	330	54	1372	42	1067
210H Base Unit	646	293	520	236	565	256	740	336	53	1346	38-1/4	972
210H Max. Unit	721	327	573	260	597	271	770	350	53	1346	42	1067
240S Base Unit	613	278	501	227	541	245	690	313	54	1372	39	991
240S Max. Unit	690	313	543	246	565	256	737	334	52-1/2	1334	42	1067
240H/300S Base Unit	636	288	531	241	579	262	724	328	55	1397	38-1/4	972
240H/300S Max. Unit	708	321	571	259	605	274	777	352	53-1/2	1359	40-1/2	1029

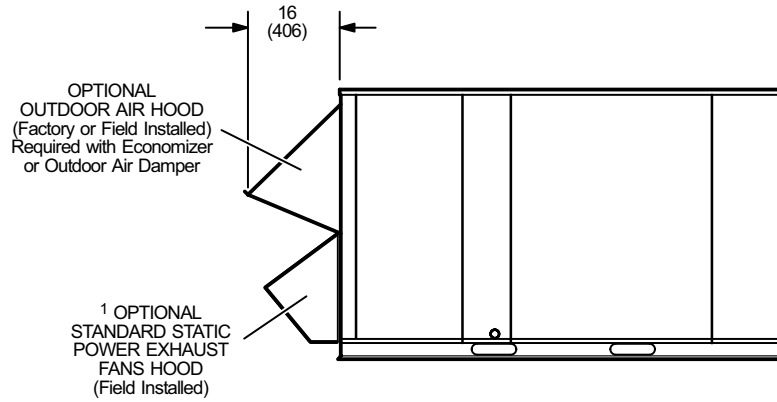
Base Unit - Unit with NO OPTIONS.

Max. Unit - Unit with ALL OPTIONS Installed. (Economizer, Power Exhaust Fans, Controls)



ACCESSORY DIMENSIONS - INCHES (MM)

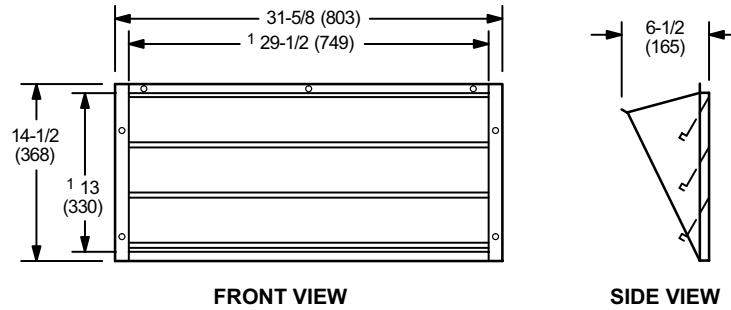
OPTIONAL OUTDOOR AIR HOOD DETAIL WITH STANDARD STATIC POWER EXHAUST FANS



¹ Field Installed in Return Air Duct for Horizontal Applications.

HORIZONTAL BAROMETRIC RELIEF DAMPERS

(Field installed in horizontal return air duct adjacent to unit)



FRONT VIEW

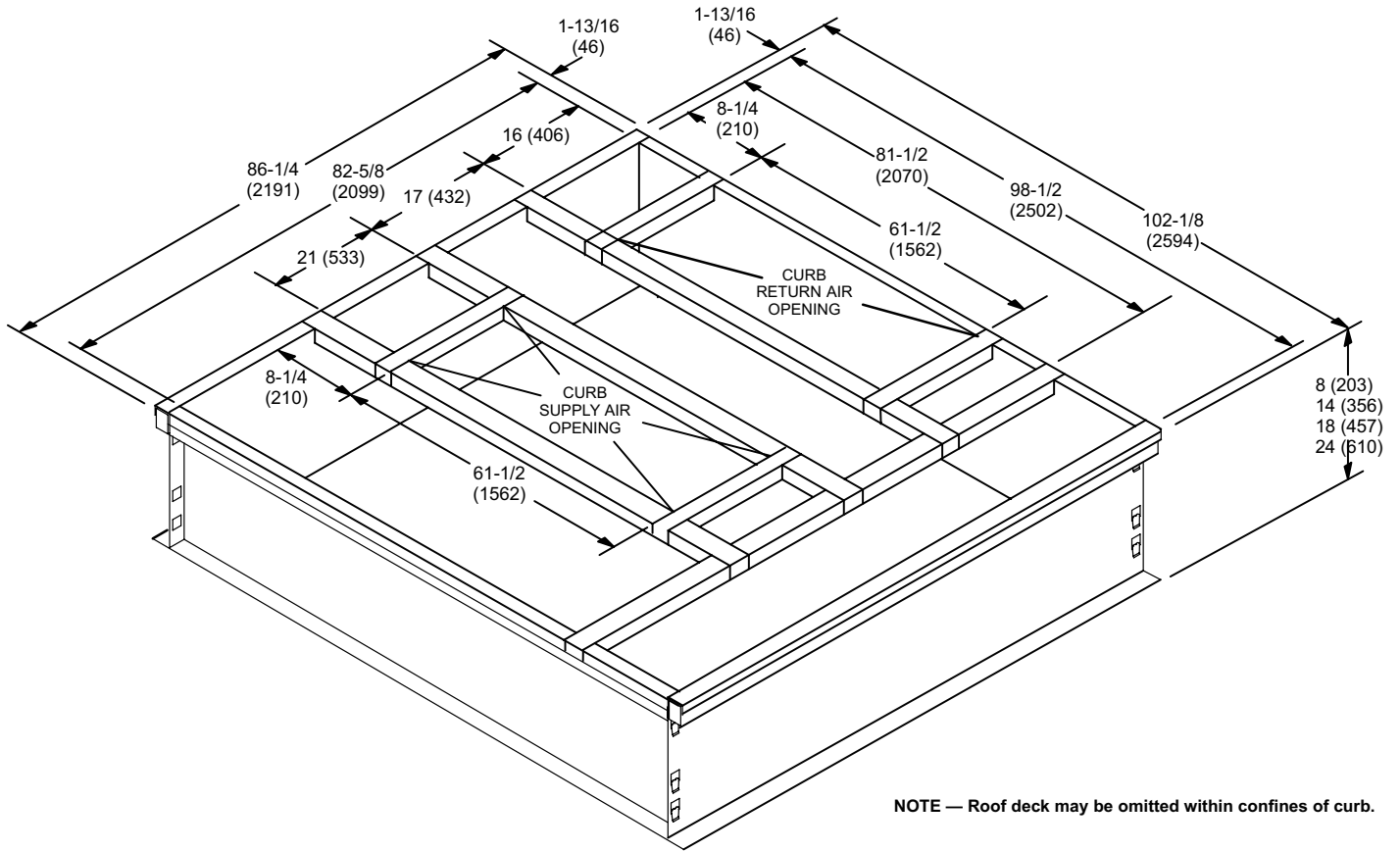
SIDE VIEW

NOTE - Two furnished per order no.

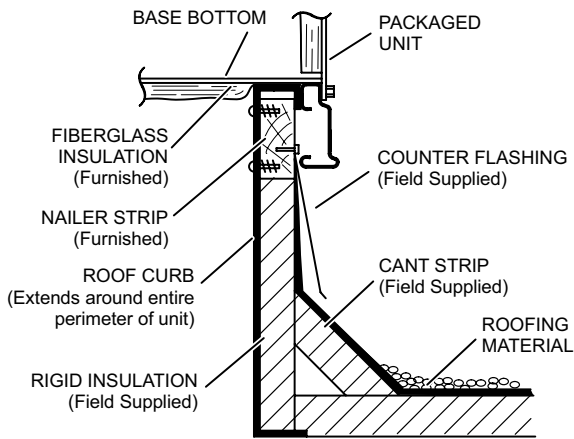
¹ NOTE - Opening size required in return air duct.

ACCESSORY DIMENSIONS - INCHES (MM)

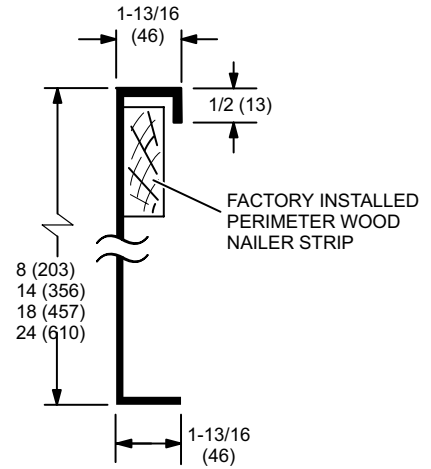
CLIPLOCK 1000 ROOF CURBS - DOUBLE DUCT OPENING



TYPICAL FLASHING DETAIL FOR ROOF CURB

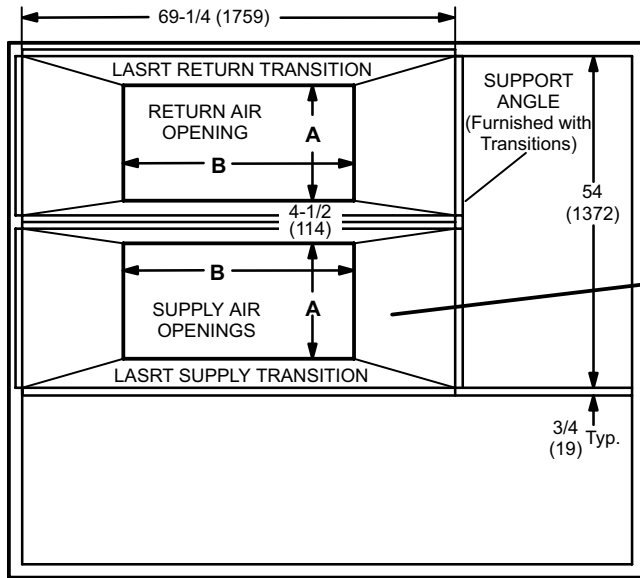


DETAIL ROOF CURB

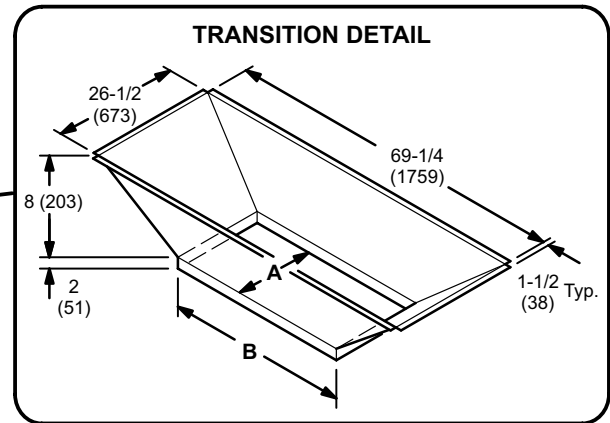


ACCESSORY DIMENSIONS - INCHES (MM)

STANDARD ROOF CURBS WITH SUPPLY & RETURN AIR TRANSITIONS FOR CEILING DIFFUSERS



TOP VIEW

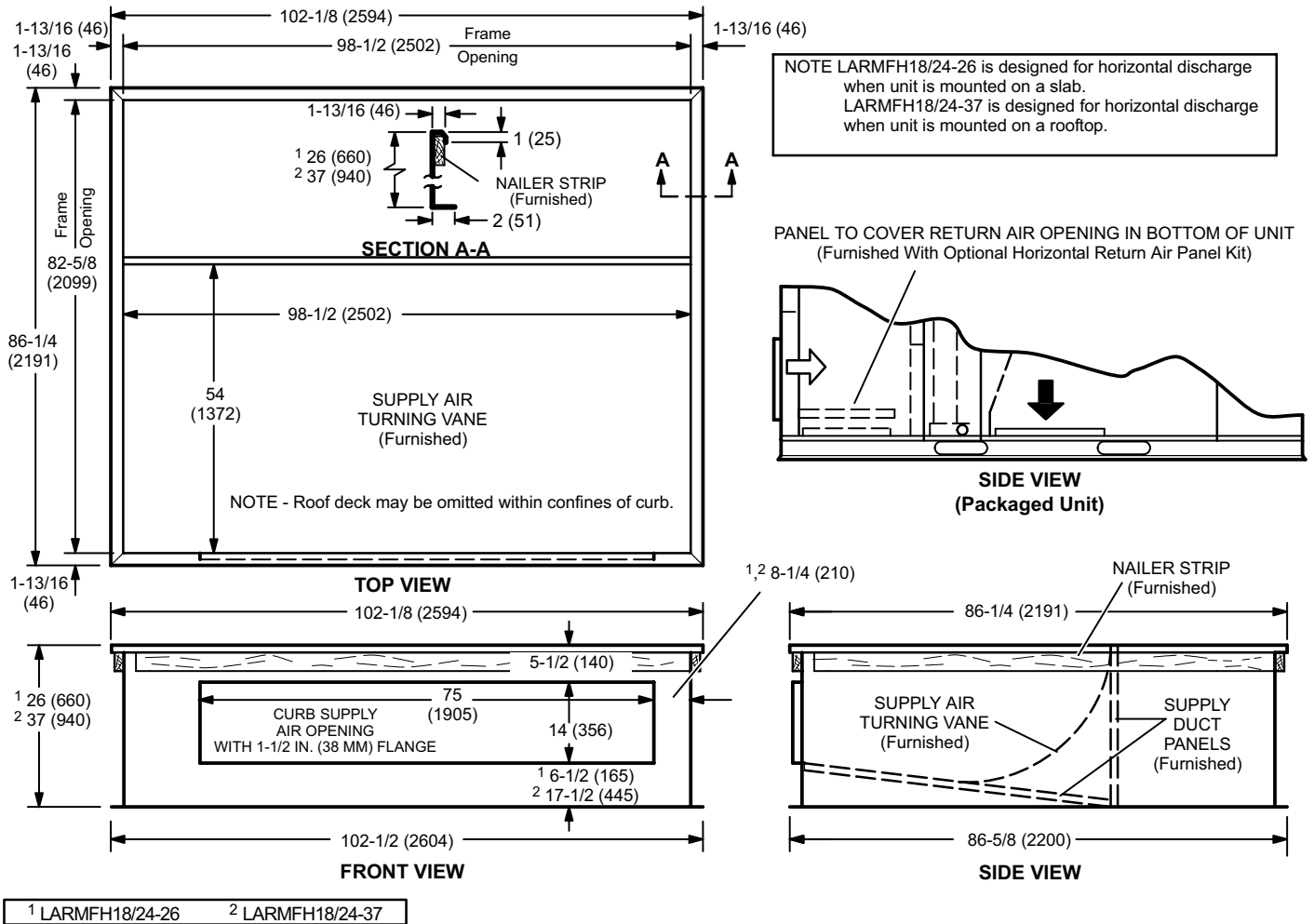


TRANSITION OPENING SIZES

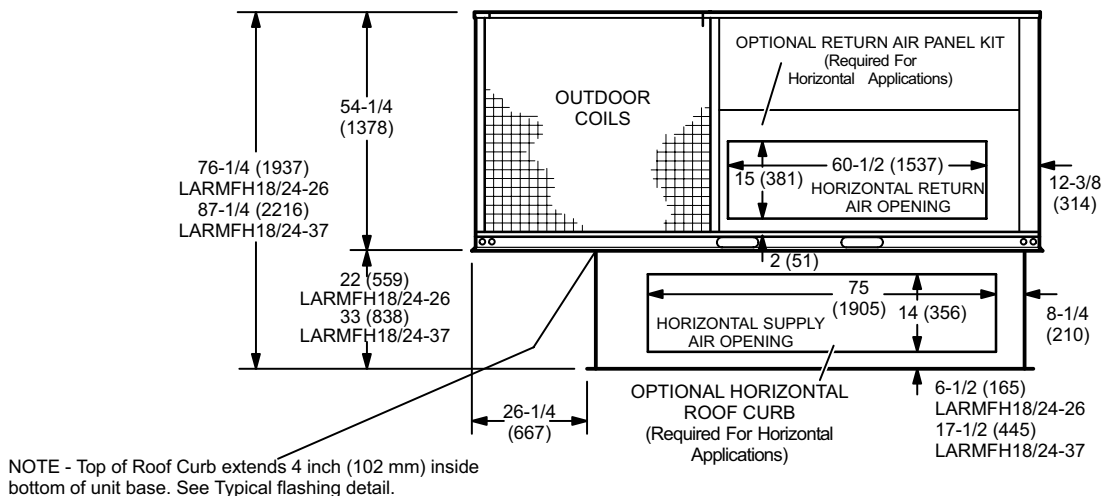
Model Number	A		B	
	inch	mm	inch	mm
LASRT18	18	457	36	914
LASRT21/24	24	610	48	1219

ACCESSORY DIMENSIONS - INCHES (MM)

HORIZONTAL ROOF CURBS - Requires Optional Horizontal Return Air Panel Kit



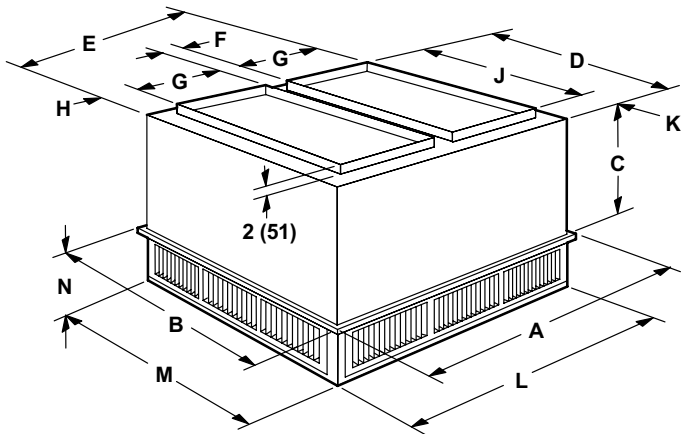
HORIZONTAL SUPPLY AND RETURN AIR OPENINGS WITH HORIZONTAL ROOF CURB



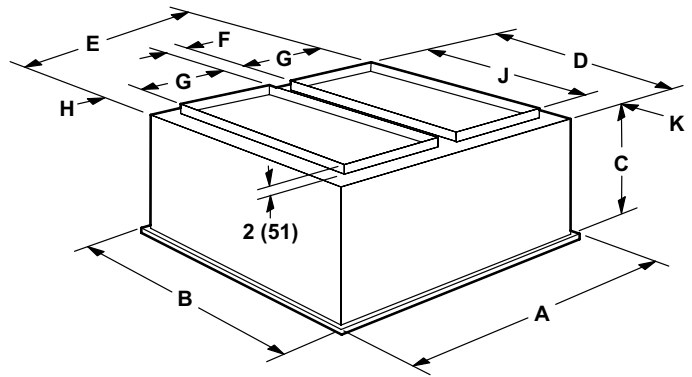
ACCESSORY DIMENSIONS - INCHES (MM)

COMBINATION CEILING SUPPLY AND RETURN DIFFUSERS

STEP-DOWN CEILING DIFFUSER



FLUSH CEILING DIFFUSER



Model Number		RTD11-185	RTD11-275
A	in.	47-5/8	59-5/8
	mm	1210	1514
B	in.	47-5/8	59-5/8
	mm	1210	1514
C	in.	24-5/8	30-5/8
	mm	625	778
D	in.	45-1/2	57-1/2
	mm	1156	1461
E	in.	45-1/2	57-1/2
	mm	1156	1461
F	in.	4-1/2	4-1/2
	mm	114	114
G	in.	18	24
	mm	457	610
H	in.	2-1/2	2-1/2
	mm	64	64
J	in.	36	48
	mm	914	1219
K	in.	4-3/4	4-3/4
	mm	121	121
L	in.	45-1/2	57-1/2
	mm	1156	1461
M	in.	45-1/2	57-1/2
	mm	1156	1461
N	in.	10-1/8	11-1/8
	mm	257	283
Duct Size	in.	18 x 36	24 x 48
	mm	457 x 914	610 x 1219

Model Number		FD11-185	FD11-275
A	in.	47-5/8	59-5/8
	mm	1210	1514
B	in.	47-5/8	59-5/8
	mm	1210	1514
C	in.	29-1/4	35-1/4
	mm	743	895
D	in.	45	57
	mm	1143	1148
E	in.	45	57
	mm	1143	1448
F	in.	4-1/2	4-1/2
	mm	114	114
G	in.	18	24
	mm	457	610
H	in.	2-1/4	2-1/4
	mm	57	57
J	in.	36	48
	mm	914	1219
K	in.	4-1/2	4-1/2
	mm	114	114
Duct Size	in.	18 x 36	24 x 48
	mm	457 x 914	610 x 1219

REVISIONS

Sections	Description of Change
Options/Accessories	Removed filter options.
High Altitude Information	Data revised.
Installation Clearances	New drawing.
Dimensions	All new drawings.



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