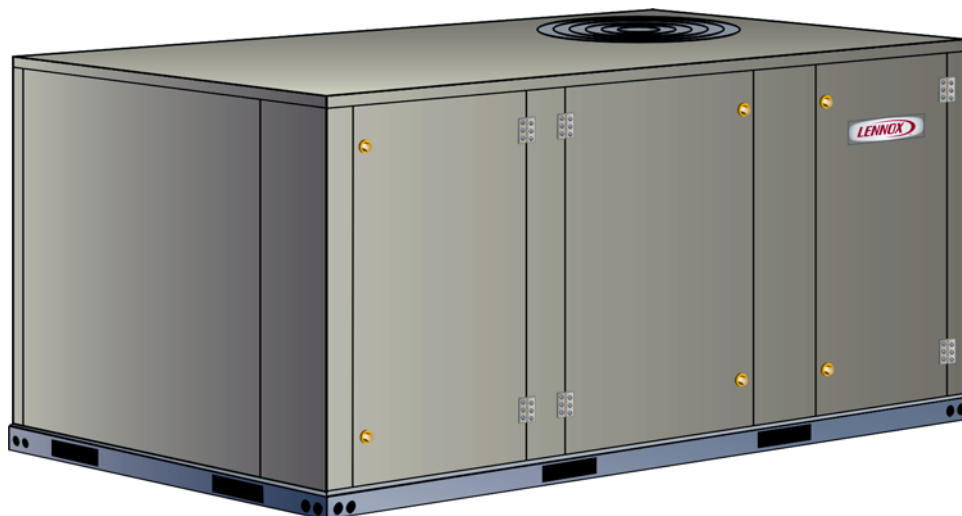


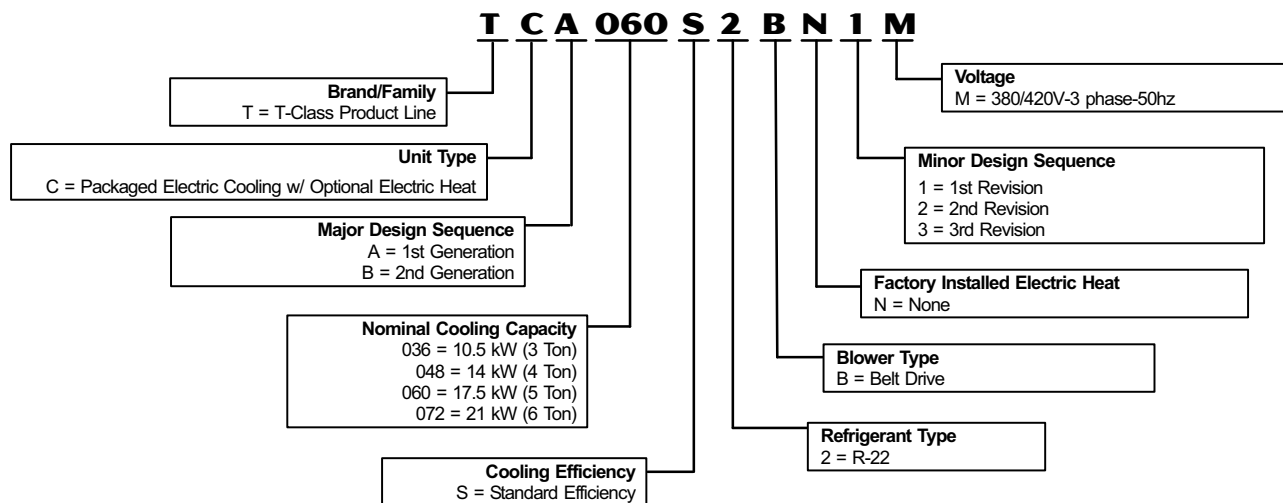


Bulletin No. 490113
February 2009
Supersedes August 2008



10.5 to 21 kW (3 to 6 Tons)
Net Cooling Capacity - 9.6 to 19.1 kW (32 800 to 65 000 Btuh)
Optional Electric Heat - 5.2 to 20.8 kW

MODEL NUMBER IDENTIFICATION



CONTENTS

Accessory Air Resistance	Page 15
Blower Performance	Pages 10-15
Cooling Ratings	Page 9
Dimensions	Pages 20-26
Electric Heat / Electrical Data	Page 16
Features and Benefits	Pages 2-4
Model Number Identification	Page 1
Options / Accessories	Pages 5-7
Specifications	Page 8
Sound Data	Page 15
Temperature Control Systems	Page 18
Unit Clearances	Page 17
Weights	Page 19

FEATURES AND BENEFITS

APPROVALS

Components bonded for grounding to meet safety standards for servicing required by Underwriters Laboratories (UL) and the International Electrotechnical Commission (IEC). Cooling performance is rated at test conditions included in Air-Conditioning and Refrigeration Institute (ARI) Standard 210/240-2005 while operating at rated voltage and air volumes. 21.0 kW (6 ton) models cooling performance is rated at test conditions included in Air-Conditioning and Refrigeration Institute (ARI) Standard 340/360-2004 while operating at rated voltage and air volumes. International Organization for Standardization (ISO) 9001 Registered Manufacturing Quality System.

CABINET

1 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 shipped in down-flow (vertical) configuration, can be field converted to horizontal air flow configuration without the need of a kit.

2 Power Entry

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

3 Exterior Panels

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

4 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 economizer/filter section, heating/blower section, and the compressor/controls section.

OPTIONS/ACCESSORIES

Factory Installed

Corrosion Protection

Polymeric epoxy coating that is deposited by electrical transport (electrophoresis), using a process known as electrocoat (e-coat). Available for enhanced coil corrosion protection.

5 Hinged Access Panels

Large access panels are hinged and have quarter-turn, latching handles for quick and easy access to maintenance areas (economizer / filter, compressor / controls, heating / blower).

Field Installed

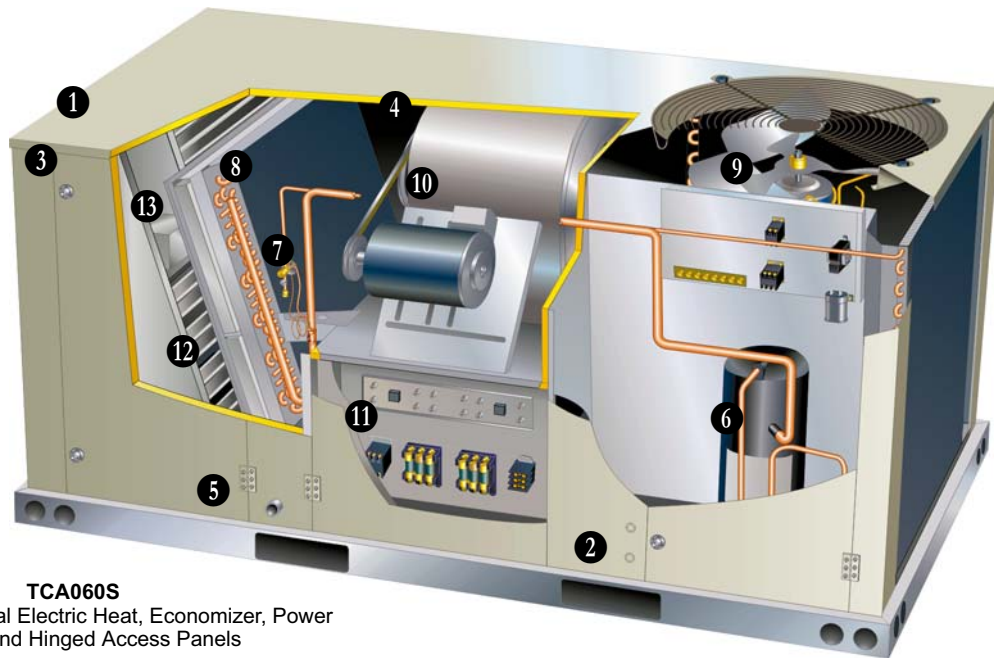
Coil Guards

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.

FEATURES AND BENEFITS



TCA060S

Shown With Optional Electric Heat, Economizer, Power Exhaust and Hinged Access Panels

COOLING SYSTEM

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

System can operate from -1°C to 52°C without any additional controls.

6 Compressor

Resiliently mounted on rubber grommets for quiet operation. Scroll compressors all models for high performance, reliability and quiet operation.

7 Thermal Expansion Valve

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

Filter/Drier

High capacity filter/drier protects the system from dirt and moisture.

Freezestat

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

8 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.

Condenser Coil

Two independent formed coils allow separation for cleaning.

Condensate Drain Pan

Plastic pan, sloped to meet drainage requirements of American Society of Heating Refrigeration and Air Conditioning Engineers Standard 62.1. Side or bottom drain connections. Reversible to allow connection at back of unit.

9 Outdoor Coil Fan Motor

Thermal overload protected, totally enclosed, permanently lubricated sleeve (036 and 048 models) or ball bearings (060 and 072 models), shaft up, wire basket mount.

Outdoor Coil Fan

Polyvinyl chloride (PVC) coated fan guard furnished.

REQUIRED SELECTIONS

Cooling Capacity

Specify nominal cooling capacity of the unit.

OPTIONS/ACCESSORIES

Field Installed

Condensate Drain Trap

Field installed only.

Available in copper or polyvinyl chloride (PVC).

Compressor Crankcase Heater

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

High Pressure Switch

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

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 -18°C (0°C). A crankcase heater must be installed on the compressor.

FEATURES AND BENEFITS

CONTROLS

UNIT CONTROL

All control voltage is provided via a 24V (secondary) transformer with built-in circuit breaker protection.

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

Low Voltage Terminal Block - Provides screw terminal connections for thermostat or controller wiring.

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

OPTIONS / ACCESSORIES

Field Installed

Dirty Filter Switch

Senses static pressure increase indicating dirty filter condition.

Smoke Detector

Photoelectric type, installed in supply or return air section

Thermostats

Control system and thermostat options. Aftermarket unit controller options. See Page 18.

10 BLOWER

A wide selection of supply air blower options are available to meet a variety of air flow requirements.

Motor

Externally overload protected

Equipped with ball bearings.

Belt drive motors are offered on all models.

Supply Air Blower

Forward curved blades, blower wheel is statically and dynamically balanced.

Motors have adjustable pulley for speed change.

Ordering Information

Specify drive kit number when base unit is ordered.

REQUIRED SELECTIONS

Supply Air Blower

Order one drive kit (See Blower Data Table for specifications)

INDOOR AIR QUALITY

Air Filters

Disposable 51 mm (2 inch) filters furnished as standard.

OPTIONS/ACCESSORIES

Field Installed

Indoor Air Quality (CO₂) Sensor

Monitors CO₂ levels adjusts economizer dampers as needed for Demand Control Ventilation.

ELECTRICAL

OPTIONS/ACCESSORIES

Field Installed

11 Electric Heat

Helix wound nichrome elements, individual element limit controls, wiring harness. Unit Fuse Block must be ordered extra. See Electrical/Electric Heat tables for ordering information, Page 16.

Disconnect Switch up to 150 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. See Electrical/Electric Heat tables for ordering information, Page 16.

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.

Blower Access

Supply air blower parts are located near the access door for easy servicing and adjustment.

Thermal Expansion Valves

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

Removable element head allows change out of element and bulb without removing the thermal expansion valve.

Coil Cleaning

Independently formed condenser coils allow separation for easier cleaning.

Compressor Compartment

Compressor is located near the perimeter of the unit for easier access. Compressor is isolated from the condenser air flow allowing system operation checks to be done without changing the air flow across the outdoor coils.

ECONOMIZER/OUTDOOR AIR/EXHAUST OPTIONS

Factory or Field Installed

12 Economizer, Down-Flow

Parallel gear-driven action return air and outdoor air dampers, plug-in connections to unit, nylon bearings, neoprene seals, 24-volt, fully-modulating, spring return motor, adjustable minimum damper position. Economizer includes barometric relief dampers.

Barometric Relief Dampers allow relief of excess air, aluminum blade dampers prevent blow back and outdoor air infiltration during off cycle, bird screen furnished.

Outdoor Air Hoods are included.

Choice of single (factory installed) or differential (optional) enthalpy economizer control is available.

Horizontal conversion kit available for field installation.

Single Enthalpy Control

Outdoor air enthalpy sensor enables economizer if the outdoor enthalpy is less than the setpoint of the board. Furnished with Economizer.

Field Installed

Outdoor Air Damper - Manual

Two sliding dampers provide 0 to 35% outdoor air, installs internal to unit. Includes Outdoor Air Hood.

Outdoor Air Damper Motorized Kit

Used to convert Manual Outdoor Air Dampers to motorized dampers. Kit includes linked mechanical dampers and spring return damper motor with plug-in connection.

Differential Enthalpy Control

An optional, return air, solid-state enthalpy sensor can be ordered extra for field installation. Allows the economizer control board to select between outdoor air or return air, whichever has lower enthalpy. Field installed.

Economizer Temperature Control - Single

An optional, solid-state temperature sensor can be ordered extra for field installation. Enables the economizer when the outdoor air temperature is below the configured setpoint.

Economizer Temperature Control - Differential

Order two, single-temperature control kits. One is field installed in the return air section, the other in the outdoor air section. Allows the economizer control board to select between outdoor air or return air, whichever has lower temperature.

13 Power Exhaust Fan

Installs internal to unit for down-flow applications only with economizer option. Provides exhaust air pressure relief. Interlocked to run when supply air blower is operating, fan runs when outdoor air dampers are 50% open (adjustable), motor is overload protected. Requires Economizer and Outdoor Air Hood (ordered separately). Fan is 406 mm (16 inches) diameter with 4 fan blades (T1PWRE10A) or 508 mm (20 inches) diameter with 5 blades (T1PWRE10N). Both include a 560 (3/4 hp) watts motor.

CEILING DIFFUSERS

Ceiling Diffusers (Flush and Step-Down)

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 CURB

Roof Curb, Down-Flow

Nailer strip furnished, mates to unit, US National Roofing Contractors Approved, shipped knocked down. Available in 203, 356, 457 and 610 mm (8, 14, 18 and 24 in.) heights. Hinged curb corners fasten together with furnished hinge pins. Standard roof curb corners fasten together with furnished hardware.

OPTIONS / ACCESSORIES

Item	Catalog No.	036	048	060	072	
COOLING SYSTEM						
Condensate Drain Trap	Polyvinyl Chloride (PVC) - LTACDKP03/07	37K69	x	x	x	x
	Copper - LTACDKC03/07	45K67	x	x	x	x
Compressor Crankcase Heater	K1CCHT02A-1G	39W05	x			
	T1CCHT01AN1G	95M08		x	x	x
Efficiency	Standard	Factory	○	○	○	○
High Pressure Switch	T1SNSR11A-2	43W02	x	x	x	x
Low Ambient Kit	T1SNSR12AN2	43W08	x	x	x	x
Refrigerant Type	R-22	Factory	○	○	○	○
BLOWER - SUPPLY AIR						
Motor	Belt Drive - 1.5 kW (2 hp) Standard Efficiency	Factory	○	○	○	○
Drive Kits See Blower Data Tables for selection	Drive Kit 1 - T1DRKT001-1 - 561 - 842 rev/min	20W81	⊗			
	Drive Kit 2 - T1DRKT002-1 - 621 - 931 rev/min	20W82		⊗		
	Drive Kit 3 - T1DRKT003-1 - 694 - 1042 rev/min	20W83			⊗	
	Drive Kit 4 - T1DRKT004-1 - 807 - 1117 rev/min	20W84				⊗
	Drive Kit 5 - T1DRKT005-1 - 748 - 1142 rev/min	20W85	⊗			
	Drive Kit 6 - T1DRKT006-1 - 893 - 1191 rev/min	20W86		⊗		
	Drive Kit 7 - T1DRKT007-1 - 1010 - 1290 rev/min	20W87			⊗	
	Drive Kit 8 - T1DRKT008-1 - 994 - 1326 rev/min	20W88				⊗
CABINET						
Coil Guards	T1GARD20A-1	17W87	x	x	x	
	T1GARD20N-1	17W88				x
Corrosion Protection		Factory	○	○	○	○
Hail Guards	T1GARD10A-1	17W89	x	x	x	
	T1GARD10N-1	17W90				x
Hinged Access Panels		Factory	○	○	○	○
CONTROLS						
Dirty Filter Switch	COSWCH00AE1-	30K48	x	x	x	x
Smoke Detector - Supply and Return (order 2)	T1SNSR41AN1	39W16	x	x	x	x
INDOOR AIR QUALITY						
Sensors						
Sensor - white case CO ₂ display	C0SNSR50AE1L	77N39	x	x	x	x
Sensor - duct-mount, black case, no display	C0SNSR53AE1L	87N54	x	x	x	x
CO ₂ Sensor Duct Mounting Kit	C0MISC19AE1-	85L43	x	x	x	x
ELECTRICAL						
Disconnect	See Electric Data Tables for usage		x	x	x	x
Voltage - 50 hz	380/420V - 3 phase with neutral	Factory	○	○	○	○
Unit Fuse Block	See Electric Data Tables for usage		x	x	x	x
ELECTRIC HEAT						
5.2 kW	T1EH0075AN1	14W39	x	x	x	x
10.4 kW	T1EH0150AN1	14W40	x	x	x	x
15.6 kW	T1EH0225AN1	14W41			x	x
20.8 kW	T1EH0300N-1	14W42				x

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

¹ Nominal kW at 400V-3ph-50hz. Electric heat model numbers are based on nominal kW for US applications.

⊗ - Field Installed or Configure to Order (factory installed)

○ - Configure to Order (Factory Installed)

X - Field Installed.

OPTIONS / ACCESSORIES

Item	Catalog No.	036	048	060	072
ECONOMIZER					
Economizer					
Economizer, Single Enthalpy Control Includes Outdoor Air Hood and Barometric Relief Dampers	T1ECON30A-1 T1ECON30N-1	36W96 36W97	⊗ ⊗	⊗ ⊗	⊗ ⊗
Horizontal Economizer Conversion Kit	T1HECK00AN1	17W45	x	x	x
Economizer Controls					
Differential Enthalpy Sensor	T1SNSR60AN1	17W71	x	x	x
Single Temperature Control	TASEK10/15	76M37	x	x	x
Differential Temperature Control	Order 2 - TASEK10/15	76M37	x	x	x
OUTDOOR AIR					
Outdoor Air Dampers					
Damper Section - Manual, Includes Outdoor Air Hood	T1DAMP11A-1 T1DAMP11N-1	16W88 16W91	x x	x x	x x
Damper Motorized Kit - Order Manual Outdoor Air Damper Separately	T1DAMP21AN1	16W92	x	x	x
Power Exhaust					
Standard Static 380/420V	380/420V - T1PWRE10A-1G 380/420V - T1PWRE10N-1G	17W40 17W43	x x	x x	x x
ROOF CURBS - DOWN-FLOW					
Hinged					
203 mm (8 in.) height	T1CURB30AN1	17W46	x	x	x
457 mm (18 in.) height	T1CURB32AN1	17W47	x	x	x
610 mm (24 in.) height	T1CURB33AN1	17W48	x	x	x
Standard					
356 mm (14 in.) height	T1CURB10AN1	13W27	x	x	x
CEILING DIFFUSERS					
Step-Down - Order one	RTD9-65 RTD11-95	27G87 29G04	x x	x x	x x
Flush - Order one	FD9-65 FD11-95	27G86 29G08	x x	x x	x x
Transitions (Supply and Return) - Order one	T1TRAN10AN1 T1TRAN20N-1	17W53 17W54	x x	x x	x x

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

⊗ - Field Installed or Configure to Order (factory installed)

X - Field Installed.

SPECIFICATIONS - BELT DRIVE BLOWER

General Data		Nominal kW	10.5 kW	14.0 kW	17.5 kW	21 kW
	Model No.		TCA036S2B	TCA048S2B	TCA060S2B	TCA072S2B
	Efficiency Type		Standard	Standard	Standard	Standard
Cooling Performance	Gross Cooling Capacity - kW (Btuh)		10.2 (34 900)	14.0 (47 800)	16.5 (56 400)	20.0 (68 200)
	¹ Net Cooling Capacity - kW (Btuh)		9.8 (33 600)	13.5 (46 000)	15.7 (53 500)	19.0 (65 000)
	Rated Air Flow - L/s (cfm)		565 (1200)	755 (1600)	945 (2000)	1060 (2250)
	² Sound Rating Number (dB)		75	75	82	82
	Total Unit Power - kW		2.8	4.1	4.7	6.2
	¹ Energy Efficiency Ratio (Btuh/Watts)		12.0	11.3	11.3	10.5
	Coefficient of Performance (output/input)		3.51	3.31	3.31	308
Refrigerant	Type		R-22	R-22	R-22	R-22
	Charge Furnished		3.51 kg (7 lbs. 12 oz.)	4.42 kg (9 lbs. 12 oz.)	5.13 kg (11 lbs. 5 oz.)	5.10 kg (11 lbs. 4 oz.)
Compressor Type (no.)			Scroll (1)	Scroll (1)	Scroll (1)	Scroll (1)
Outdoor Coil	Net face area - m ² (sq. ft.)		1.45 (15.6)	1.45 (15.6)	1.45 (15.6)	1.79 (19.27)
	Tube diameter - mm (in.)		9.5 (3/8)	9.5 (3/8)	9.5 (3/8)	9.5 (3/8)
	Number of rows		1.5	2.0	2.0	1.4
	Fins per meter (Fins per inch)		788 (20)	788 (20)	788 (20)	788 (20)
Outdoor Coil Fan	Motor W (hp)		560 (1/4)	560 (1/4)	248 (1/3)	248 (1/3)
	Motor rev/min		690	690	900	900
	Total motor watts		190	190	280	310
	Diameter - mm (in.) / No. of blades		610 (24) - 3	610 (24) - 3	610 (24) - 3	610 (24) - 3
	Total air volume - L/s (cfm)		1370 (2900)	1320 (2800)	1700 (3600)	1885 (4000)
Indoor Coil	Net face area - m ² (sq. ft.)		0.72 (7.78)	0.72 (7.78)	0.72 (7.78)	0.90 (9.7)
	Tube diameter - mm (in.)		9.5 (3/8)	9.5 (3/8)	9.5 (3/8)	9.5 (3/8)
	Number of rows		3	3	4	3
	Fins per meter (Fins per inch)		551 (14)	551 (14)	551 (14)	551 (14)
	Drain Connection (no. and size) - in.		(1) 3/4 NPT	(1) 3/4 NPT	(1) 3/4 NPT	(1) 3/4 NPT
Expansion device type		Balanced Port Thermostatic Expansion Valve, removeable power head				
³ Indoor Blower & Drive Selection	Nominal Motor Size		1.5 kW (2 hp)	1.5 kW (2 hp)	1.5 kW (2 hp)	1.5 kW (2 hp)
	Maximum Usable Motor Size		1.7 kW (2.3 hp)	1.7 kW (2.3 hp)	1.7 kW (2.3 hp)	1.7 kW (2.3 hp)
	Available Drive Kits		kit #1 - 561 - 842 rev/min kit #5 - 748 - 1122 rev/min	kit #2 - 621 - 931 rev/min kit #6 - 893 - 1191 rev/min	kit #3 - 694- 1042 rev/min kit #7 - 1010 - 1290 rev/min	kit #4 807 - 1117 rev/min kit #8 994 -1326 rev/min
	Wheel nominal diameter x width - mm (in.)		254 x 254 (10 x 10)			
	Filters	Type	Disposable			
	Number and size - mm (in.)	(4) 406 x 508 x 51 (16 x 20 x 2)				(4) 508 x 508x 51 (20 x 20 x2)
Electrical Characteristics - 50 Hz		380/420V - 3 phase with neutral				

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

¹ Tested at conditions included in the USE certification program, which is based on ARI Standard 210/240; 35°C (95°F) outdoor air temperature and 27°C (80°F) db/19°C (67°F) wb entering evaporator air; minimum external duct static pressure while operating at rated voltage and air volumes.

² Sound Rating Number rated in accordance with test conditions included in ARI Standard 270.

³ Using total air volume and system static pressure requirements determine from blower performance tables rev/min and motor size required. Maximum usable size of motors furnished is shown. If motors of comparable size are used, be sure to keep within the service factor limitations outlined on the motor nameplate.

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.

10.5 kW (3 TON) STANDARD EFFICIENCY - COOLING CAPACITY

TCA036S2

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			27°C (80°F)						35°C (95°F)						43°C (110°F)						52°C (125°F)					
			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		
			kW	kBtu/h		24°C 75°F	27°C 80°F	29°C 85°F	kW	kBtu/h		24°C 75°F	27°C 80°F	29°C 85°F	kW	kBtu/h		24°C 75°F	27°C 80°F	29°C 85°F	kW	kBtu/h		24°C 75°F	27°C 80°F	29°C 85°F
17°C (63°F)	.45	960	9.8	33.5	1.83	.71	.86	1.00	9.3	31.7	2.20	.72	.89	1.00	8.7	29.7	2.63	.75	.92	1.00	8.1	27.7	3.14	.77	.96	1.00
	.56	1200	10.2	34.9	1.84	.76	.95	1.00	9.7	33.0	2.20	.79	.98	1.00	9.1	31.1	2.64	.82	1.00	1.00	8.6	29.2	3.15	.86	1.00	1.00
	.68	1440	10.6	36.3	1.84	.83	1.00	1.00	10.1	34.5	2.21	.86	1.00	1.00	9.6	32.6	2.65	.90	1.00	1.00	8.9	30.5	3.16	.94	1.00	1.00
19°C (67°F)	.45	960	10.5	35.8	1.84	.55	.68	.82	9.9	33.8	2.21	.56	.70	.85	9.3	31.7	2.65	.57	.72	.88	8.6	29.4	3.16	.59	.75	.92
	.56	1200	10.9	37.1	1.85	.58	.74	.91	10.2	34.9	2.22	.60	.76	.94	9.6	32.7	2.65	.61	.79	.98	8.9	30.3	3.17	.63	.83	1.00
	.68	1440	11.1	37.9	1.85	.62	.80	.98	10.5	35.8	2.22	.64	.83	1.00	9.8	33.4	2.66	.66	.87	1.00	9.1	31.1	3.18	.68	.91	1.00
22°C (71°F)	.45	960	11.3	38.4	1.85	.41	.53	.66	10.6	36.2	2.23	.41	.54	.67	9.9	33.9	2.66	.42	.56	.69	9.2	31.5	3.18	.42	.57	.72
	.56	1200	11.6	39.6	1.86	.42	.57	.72	10.9	37.3	2.23	.43	.58	.74	10.2	34.9	2.67	.43	.60	.77	9.5	32.3	3.19	.44	.62	.80
	.68	1440	11.8	40.4	1.87	.44	.61	.78	11.2	38.1	2.24	.44	.62	.81	10.4	35.5	2.68	.45	.65	.85	9.6	32.9	3.20	.46	.67	.89

14 kW (4 TON) STANDARD EFFICIENCY - COOLING CAPACITY

TCA048S2

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			27°C (80°F)						35°C (95°F)						43°C (110°F)						52°C (125°F)					
			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		
			kW	kBtu/h		24°C 75°F	27°C 80°F	29°C 85°F	kW	kBtu/h		24°C 75°F	27°C 80°F	29°C 85°F	kW	kBtu/h		24°C 75°F	27°C 80°F	29°C 85°F	kW	kBtu/h		24°C 75°F	27°C 80°F	29°C 85°F
17°C (63°F)	.60	1280	13.5	46.0	2.69	.68	.83	.99	12.7	43.5	3.22	.70	.86	1.00	11.9	40.6	3.86	.72	.90	1.00	11.0	37.5	4.61	.75	.95	1.00
	.75	1600	14.0	47.8	2.71	.74	.93	1.00	13.2	45.2	3.24	.76	.96	1.00	12.4	42.3	3.88	.80	.99	1.00	11.6	39.5	4.63	.84	1.00	1.00
	.90	1920	14.5	49.5	2.72	.80	.99	1.00	13.8	47.0	3.25	.83	1.00	1.00	13.0	44.2	3.89	.87	1.00	1.00	12.1	41.2	4.65	.92	1.00	1.00
19°C (67°F)	.60	1280	14.4	49.0	2.72	.53	.66	.79	13.5	46.2	3.25	.54	.68	.82	12.7	43.2	3.88	.55	.70	.86	11.7	39.8	4.64	.57	.73	.91
	.75	1600	14.9	50.7	2.74	.56	.71	.89	14.0	47.8	3.27	.58	.73	.92	13.0	44.5	3.90	.59	.77	.96	12.0	41.0	4.66	.61	.81	1.00
	.90	1920	15.2	51.9	2.75	.60	.77	.97	14.3	48.8	3.28	.61	.81	.99	13.3	45.5	3.91	.63	.85	1.00	12.3	41.9	4.67	.66	.90	1.00
22°C (71°F)	.60	1280	15.4	52.4	2.75	.40	.52	.63	14.5	49.4	3.29	.40	.53	.65	13.5	46.2	3.92	.41	.54	.67	12.5	42.6	4.68	.41	.56	.70
	.75	1600	15.8	54.0	2.77	.41	.55	.69	14.9	50.9	3.30	.42	.56	.71	13.9	47.4	3.93	.42	.58	.74	12.8	43.7	4.69	.43	.60	.79
	.90	1920	16.1	55.1	2.78	.42	.59	.75	15.2	51.8	3.31	.43	.60	.78	14.1	48.2	3.94	.44	.62	.82	13.0	44.4	4.71	.45	.65	.87

17.5 kW (5 TON) STANDARD EFFICIENCY - COOLING CAPACITY

TCA060S2

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			27°C (80°F)						35°C (95°F)						43°C (110°F)						52°C (125°F)					
			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		
			kW	kBtu/h		24°C 75°F	27°C 80°F	29°C 85°F	kW	kBtu/h		24°C 75°F	27°C 80°F	29°C 85°F	kW	kBtu/h		24°C 75°F	27°C 80°F	29°C 85°F	kW	kBtu/h		24°C 75°F	27°C 80°F	29°C 85°F
17°C (63°F)	.75	1600	16.3	55.5	3.04	.72	.88	1.00	15.4	52.4	3.63	.74	.91	1.00	14.4	49.2	4.34	.76	.95	1.00	13.5	45.9	5.19	.79	.98	1.00
	.94	2000	16.9	57.8	3.07	.78	.97	1.00	16.0	54.7	3.66	.81	1.00	1.00	15.2	51.7	4.37	.84	1.00	1.00	14.2	48.6	5.22	.88	1.00	1.00
	1.13	2400	17.6	60.2	3.10	.85	1.00	1.00	16.7	57.1	3.69	.89	1.00	1.00	15.8	54.0	4.40	.92	1.00	1.00	14.9	50.7	5.25	.96	1.00	1.00
19°C (67°F)	.75	1600	17.3	59.0	3.08	.56	.70	.84	16.3	55.6	3.67	.57	.72	.87	15.3	52.2	4.38	.58	.74	.91	14.2	48.5	5.23	.60	.77	.95
	.94	2000	17.8	60.9	3.11	.60	.76	.94	16.8	57.3	3.70	.61	.79	.97	15.7	53.7	4.40	.63	.82	1.00	14.7	50.0	5.25	.65	.86	1.00
	1.13	2400	18.2	62.2	3.13	.64	.83	1.00	17.2	58.6	3.72	.65	.86	1.00	16.1	54.9	4.42	.68	.90	1.00	15.0	51.3	5.26	.70	.94	1.00
22°C (71°F)	.75	1600	18.4	62.9	3.14	.41	.54	.67	17.4	59.3	3.72	.42	.56	.69	16.3	55.6	4.43	.42	.57	.72	15.2	51.9	5.27	.43	.59	.74
	.94	2000	18.9	64.6	3.16	.43	.59	.74	17.8	60.8	3.75	.43	.60	.76	16.7	57.0	4.45	.44	.62	.79	15.6	53.1	5.29	.45	.64	.83
	1.13	2400	19.3	65.8	3.18	.44	.63	.81	18.1	61.9	3.77	.45	.65	.84	17.0	57.9	4.47	.46	.67	.88	15.8	54.0	5.30	.47	.70	.92

21 kW (6 TON) STANDARD EFFICIENCY - COOLING CAPACITY

TCA072S2

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			27°C (80°F)						35°C (95°F)						43°C (110°F)						52°C (125°F)					
			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		
			kW	kBtu/h		24°C 75°F	27°C 80°F	29°C 85°F	kW	kBtu/h		24°C 75°F	27°C 80°F	29°C 85°F	kW	kBtu/h		24°C 75°F	27°C 80°F	29°C 85°F	kW	kBtu/h		24°C 75°F	27°C 80°F	29°C 85°F
17°C (63°F)	.90	1920	19.5	66.5	4.19	.67	.83	1.00	18.4	62.9	4.95	.68	.87	1.00	17.3	59.0	5.90	.70	.91	1.00	15.9	54.4	7.10	.74	.97	1.00
	1.13	2400	20.3	69.1	4.26	.72	.94	1.00	19.2	65.4	5.01	.75	.98	1.00	18.1	61.6	5.96	.79	1.00	1.00	16.8	57.4	7.17	.84	1.00	1.00
	1.36	2880	21.0	71.5	4.31	.80	1.00	1.00	20.0	68.1	5.07	.83	1.00	1.00	18.8	64.3	6.03	.88	1.00	1.00	17.5	59.7	7.24	.93	1.00	1.00
19°C (67°F)	.90	1920	20.7	70.6	4.29	.52	.64	.79	19.6	66.8	5.05	.53	.66	.82	18.3	62.6	5.99	.54	.68	.87	16.9	57.6	7.18	.56	.71	.92
	1.13	2400	21.3	72.8	4.34	.55	.70	.90	20.2	68.8	5.09	.56	.72	.94	18.8	64.3	6.04	.58	.76	.98	17.3	59.2	7.24	.60	.81	1.00
	1.36	2880	21.8	74.4	4.38	.58	.77	.98	20.6	70.2	5.13	.60	.81	1.00	19.3	65.7	6.08	.62	.85	1.00	17.7	60.5	7.28	.65	.91	1.00
22°C (71°F)	.90	1920	22.1	75.3	4.40	.39	.50	.62	20.9	71.3	5.16	.39	.51	.64	19.6	66.8	6.11	.39	.53	.66	18.0	61.4	7.31	.40	.55	.69
	1.13	2400	22.7	77.4	4.45	.40	.54	.68	21.4	73.1	5.20	.40	.55	.70	20.0	68.3	6.15	.41	.57	.73	18.4	62.8	7.35	.42	.59	.78
	1.36	2880	23.1	78.8	4.49	.41	.58	.74	21.8	74.4	5.24	.42	.59	.78	20.3	69.4	6.19	.43	.61	.82	18.7	63.8	7.39	.44	.64	.88

BLOWER DATA - BELT DRIVE

10.5 kW

Blower tables include resistance for base unit with wet indoor coil & 51 mm (2 in.) disposable air filters in place.

FOR ALL UNITS ADD:

1 - Any factory installed options air resistance (electric heat, etc.) See page 15

2 - Any field installed accessories air resistance (economizer, duct resistance, diffuser, etc.) See page 15

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

50 to 200 Pa 10.5 kW (3 Ton) Standard Efficiency (Down-Flow) TCA036S

Air Volume		External Static - Pa (in.w.g.)											
		50 (0.20)			100 (0.40)			150 (0.60)			200 (0.80)		
L/s	cfm	rev/min	BHP	kW	rev/min	BHP	kW	rev/min	BHP	kW	rev/min	BHP	kW
Low Static - Drive Kit #1						High Static - Drive Kit #5							
425	900	595	0.15	0.11	780	0.30	0.22	930	0.50	0.37	1065	0.75	0.56
470	1000	615	0.20	0.15	790	0.35	0.26	945	0.55	0.41	1075	0.75	0.56
520	1100	640	0.20	0.15	805	0.35	0.26	955	0.55	0.41	1085	0.80	0.60
565	1200	665	0.25	0.19	825	0.40	0.30	965	0.60	0.45	1095	0.85	0.63
615	1300	695	0.30	0.22	845	0.45	0.34	980	0.65	0.48	1105	0.90	0.67
660	1400	730	0.35	0.26	865	0.50	0.37	995	0.70	0.52	1120	0.95	0.71
705	1500	760	0.40	0.30	890	0.55	0.41	1015	0.75	0.56	1135	1.00	0.75

250 to 400 Pa 10.5 kW (3 Ton) Standard Efficiency (Down-Flow) TCA036S

Air Volume		External Static - Pa (in.w.g.)											
		250 (1.00)			300 (1.20)			350 (1.40)			400 (1.60)		
L/s	cfm	rev/min	BHP	kW	rev/min	BHP	kW	rev/min	BHP	kW	rev/min	BHP	kW
Field Furnished													
425	900	1180	1.00	0.75	1285	1.25	0.93	1380	1.50	1.12	1465	1.80	1.34
470	1000	1190	1.00	0.75	1295	1.30	0.97	1390	1.60	1.19	1475	1.85	1.38
520	1100	1200	1.05	0.78	1300	1.35	1.01	1400	1.65	1.23	1485	1.95	1.45
565	1200	1210	1.10	0.82	1310	1.40	1.04	1410	1.70	1.27	1495	2.00	1.49
615	1300	1220	1.15	0.86	1320	1.45	1.08	1415	1.75	1.31	1505	2.05	1.53
660	1400	1230	1.20	0.90	1330	1.50	1.12	1425	1.80	1.34	1515	2.15	1.60
705	1500	1240	1.25	0.93	1345	1.55	1.16	1435	1.90	1.42	1525	2.20	1.64

50 to 200 Pa 10.5 kW (3 Ton) Standard Efficiency (Horizontal) TCA036S

Air Volume		External Static - Pa (in.w.g.)											
		50 (0.20)			100 (0.40)			150 (0.60)			200 (0.80)		
L/s	cfm	rev/min	BHP	kW	rev/min	BHP	kW	rev/min	BHP	kW	rev/min	BHP	kW
Low Static - Drive Kit #1						High Static - Drive Kit #5							
425	900	570	0.15	0.11	735	0.30	0.22	875	0.45	0.34	1000	0.65	0.48
470	1000	595	0.15	0.11	750	0.30	0.22	890	0.50	0.37	1010	0.70	0.52
520	1100	625	0.20	0.15	765	0.35	0.26	900	0.50	0.37	1020	0.75	0.56
565	1200	660	0.25	0.19	790	0.40	0.30	915	0.55	0.41	1030	0.75	0.56
615	1300	690	0.30	0.22	810	0.40	0.30	930	0.60	0.45	1045	0.80	0.60
660	1400	730	0.35	0.26	840	0.50	0.37	950	0.65	0.48	1060	0.85	0.63
705	1500	765	0.40	0.30	870	0.55	0.41	970	0.70	0.52	1075	0.95	0.71

250 to 400 Pa 10.5 kW (3 Ton) Standard Efficiency (Horizontal) TCA036S

Air Volume		External Static - Pa (in.w.g.)											
		250 (1.00)			300 (1.20)			350 (1.40)			400 (1.60)		
L/s	cfm	rev/min	BHP	kW	rev/min	BHP	kW	rev/min	BHP	kW	rev/min	BHP	kW
High Static - Drive Kit #5						Field Furnished							
425	900	1105	0.90	0.67	1200	1.10	0.82	1285	1.35	1.01	1365	1.60	1.19
470	1000	1115	0.90	0.67	1210	1.15	0.86	1300	1.40	1.04	1380	1.70	1.27
520	1100	1125	0.95	0.71	1220	1.20	0.90	1310	1.50	1.12	1395	1.75	1.31
565	1200	1135	1.00	0.75	1235	1.25	0.93	1320	1.55	1.16	1405	1.85	1.38
615	1300	1145	1.05	0.78	1245	1.30	0.97	1330	1.60	1.19	1415	1.90	1.42
660	1400	1160	1.10	0.82	1255	1.40	1.04	1340	1.65	1.23	1425	1.95	1.45
705	1500	1175	1.15	0.86	1265	1.45	1.08	1355	1.75	1.31	1435	2.05	1.53

BLOWER DATA - BELT DRIVE

14.0 KW

Blower tables include resistance for base unit with wet indoor coil & 51 mm (2 in.) disposable air filters in place.

FOR ALL UNITS ADD:

1 - Any factory installed options air resistance (electric heat, etc.) See page 15

2 - Any field installed accessories air resistance (economizer, duct resistance, diffuser, etc.) See page 15

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

50 to 200 Pa 14 kW (4 Ton) Standard Efficiency (Down-Flow) TCA048S

Air Volume		External Static - Pa (in.w.g.)											
		50 (0.20)			100 (0.40)			150 (0.60)			200 (0.80)		
L/s	cfm	rev/min	BHP	kW	rev/min	BHP	kW	rev/min	BHP	kW	rev/min	BHP	kW
		Low Static - Drive Kit #2						High Static - Drive Kit #6					
565	1200	660	0.20	0.15	815	0.35	0.26	955	0.55	0.41	1075	0.70	0.52
615	1300	690	0.25	0.19	835	0.40	0.30	970	0.55	0.41	1090	0.75	0.56
660	1400	720	0.30	0.22	855	0.45	0.34	985	0.60	0.45	1105	0.85	0.63
705	1500	755	0.35	0.26	880	0.50	0.37	1005	0.65	0.48	1120	0.90	0.67
755	1600	790	0.40	0.30	910	0.55	0.41	1025	0.75	0.56	1135	0.95	0.71
800	1700	825	0.45	0.34	935	0.60	0.45	1045	0.80	0.60	1155	1.00	0.75
850	1800	860	0.55	0.41	965	0.70	0.52	1070	0.85	0.63	1175	1.10	0.82
895	1900	895	0.60	0.45	995	0.75	0.56	1095	0.95	0.71	1195	1.15	0.86
945	2000	935	0.70	0.52	1030	0.85	0.63	1125	1.05	0.78	1220	1.25	0.93

250 to 400 Pa 14 kW (4 Ton) Standard Efficiency (Down-Flow) TCA048S

Air Volume		External Static - Pa (in.w.g.)											
		250 (1.00)			300 (1.20)			350 (1.40)			400 (1.60)		
L/s	cfm	rev/min	BHP	kW	rev/min	BHP	kW	rev/min	BHP	kW	rev/min	BHP	kW
		High Static - Drive Kit #6						Field Furnished					
565	1200	1185	0.95	0.71	1285	1.15	0.86	1380	1.45	1.08	1465	1.70	1.27
615	1300	1200	1.00	0.75	1300	1.25	0.93	1390	1.50	1.12	1475	1.75	1.31
660	1400	1210	1.05	0.78	1310	1.30	0.97	1400	1.55	1.16	1490	1.85	1.38
705	1500	1225	1.10	0.82	1320	1.35	1.01	1415	1.60	1.19	1500	1.90	1.42
755	1600	1240	1.20	0.90	1335	1.40	1.04	1425	1.70	1.27	1510	1.95	1.45
800	1700	1255	1.25	0.93	1350	1.50	1.12	1440	1.80	1.34	1520	2.05	1.53
850	1800	1270	1.30	0.97	1365	1.60	1.19	1450	1.85	1.38	1535	2.15	1.60
895	1900	1290	1.40	1.04	1380	1.65	1.23	1465	1.95	1.45	1550	2.25	1.68
945	2000	1310	1.50	1.12	1395	1.75	1.31	1480	2.05	1.53	1565	2.35	1.75

50 to 200 Pa 14 kW (4 Ton) Standard Efficiency (Horizontal) TCA048S

Air Volume		External Static - Pa (in.w.g.)											
		50 (0.20)			100 (0.40)			150 (0.60)			200 (0.80)		
L/s	cfm	rev/min	BHP	kW	rev/min	BHP	kW	rev/min	BHP	kW	rev/min	BHP	kW
		Low Static - Drive Kit #2						High Static - Drive Kit #6					
565	1200	655	0.20	0.15	780	0.35	0.26	900	0.50	0.37	1015	0.65	0.48
615	1300	685	0.25	0.19	805	0.35	0.26	920	0.50	0.37	1030	0.70	0.52
660	1400	725	0.30	0.22	830	0.40	0.30	940	0.55	0.41	1045	0.75	0.56
705	1500	760	0.35	0.26	860	0.50	0.37	960	0.60	0.45	1060	0.80	0.60
755	1600	800	0.45	0.34	890	0.55	0.41	985	0.70	0.52	1080	0.85	0.63
800	1700	840	0.50	0.37	925	0.60	0.45	1015	0.75	0.56	1100	0.95	0.71
850	1800	880	0.60	0.45	960	0.70	0.52	1040	0.85	0.63	1125	1.00	0.75
895	1900	920	0.65	0.48	995	0.80	0.60	1070	0.95	0.71	1150	1.10	0.82
945	2000	960	0.75	0.56	1030	0.90	0.67	1105	1.05	0.78	1180	1.20	0.90

250 to 400 Pa 14 kW (4 Ton) Standard Efficiency (Horizontal) TCA048S

Air Volume		External Static - Pa (in.w.g.)											
		250 (1.00)			300 (1.20)			350 (1.40)			400 (1.60)		
L/s	cfm	rev/min	BHP	kW	rev/min	BHP	kW	rev/min	BHP	kW	rev/min	BHP	kW
		High Static - Drive Kit #6						Field Furnished					
565	1200	1115	0.85	0.63	1210	1.05	0.78	1295	1.30	0.97	1375	1.50	1.12
615	1300	1130	0.90	0.67	1220	1.10	0.82	1305	1.35	1.01	1385	1.60	1.19
660	1400	1140	0.95	0.71	1235	1.15	0.86	1320	1.40	1.04	1400	1.65	1.23
705	1500	1155	1.00	0.75	1245	1.20	0.90	1330	1.45	1.08	1410	1.70	1.27
755	1600	1170	1.05	0.78	1260	1.30	0.97	1345	1.55	1.16	1420	1.80	1.34
800	1700	1190	1.15	0.86	1275	1.35	1.01	1355	1.60	1.19	1435	1.85	1.38
850	1800	1210	1.20	0.90	1290	1.45	1.08	1370	1.70	1.27	1450	1.95	1.45
895	1900	1230	1.30	0.97	1310	1.55	1.16	1390	1.80	1.34	1465	2.05	1.53
945	2000	1255	1.40	1.04	1330	1.65	1.23	1405	1.85	1.38	1480	2.15	1.60

BLOWER DATA - BELT DRIVE

17.5 kW

Blower tables include resistance for base unit with wet indoor coil & 51 mm (2 in.) disposable air filters in place.

FOR ALL UNITS ADD:

1 - Any factory installed options air resistance (electric heat, etc.) See page 15

2 - Any field installed accessories air resistance (economizer, duct resistance, diffuser, etc.) See page 15

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

50 to 200 Pa 17.5 kW (5 Ton) Standard Efficiency (Down-Flow) TCA060S

Air Volume		External Static - Pa (in.w.g.)											
		50 (0.20)			100 (0.40)			150 (0.60)			200 (0.80)		
L/s	cfm	rev/min	BHP	kW	rev/min	BHP	kW	rev/min	BHP	kW	rev/min	BHP	kW
Low Static - Drive Kit #3											High Static - Drive Kit #7		
755	1600	790	0.35	0.26	895	0.45	0.34	995	0.55	0.41	1090	0.70	0.52
800	1700	830	0.45	0.34	925	0.55	0.41	1020	0.65	0.48	1110	0.75	0.56
850	1800	865	0.50	0.37	960	0.60	0.45	1050	0.70	0.52	1135	0.85	0.63
895	1900	905	0.60	0.45	990	0.70	0.52	1075	0.80	0.60	1160	0.95	0.71
945	2000	945	0.65	0.48	1025	0.75	0.56	1110	0.90	0.67	1190	1.05	0.78
990	2100	985	0.75	0.56	1060	0.85	0.63	1140	1.00	0.75	1215	1.10	0.82
1040	2200	1025	0.85	0.63	1100	1.00	0.75	1170	1.10	0.82	1245	1.25	0.93
1085	2300	1065	1.00	0.75	1135	1.10	0.82	1205	1.20	0.90	1275	1.35	1.01
1130	2400	1105	1.10	0.82	1170	1.20	0.90	1240	1.35	1.01	1310	1.50	1.12

250 to 400 Pa 17.5 kW (5 Ton) Standard Efficiency (Down-Flow) TCA060S

Air Volume		External Static - Pa (in.w.g.)											
		250 (1.00)			300 (1.20)			350 (1.40)			400 (1.60)		
L/s	cfm	rev/min	BHP	kW	rev/min	BHP	kW	rev/min	BHP	kW	rev/min	BHP	kW
High Static - Drive Kit #7								Field Furnished					
755	1600	1180	0.85	0.63	1265	0.95	0.71	1345	1.15	0.86	1425	1.30	0.97
800	1700	1200	0.90	0.67	1280	1.05	0.78	1360	1.20	0.90	1440	1.40	1.04
850	1800	1220	1.00	0.75	1300	1.10	0.82	1380	1.30	0.97	1455	1.45	1.08
895	1900	1240	1.05	0.78	1320	1.20	0.90	1395	1.35	1.01	1470	1.55	1.16
945	2000	1265	1.15	0.86	1340	1.30	0.97	1415	1.45	1.08	1485	1.65	1.23
990	2100	1290	1.25	0.93	1365	1.40	1.04	1435	1.60	1.19	1505	1.75	1.31
1040	2200	1320	1.40	1.04	1390	1.55	1.16	1460	1.70	1.27	1525	1.85	1.38
1085	2300	1345	1.50	1.12	1415	1.65	1.23	1480	1.85	1.38	1550	2.00	1.49
1130	2400	1375	1.65	1.23	1440	1.80	1.34	1505	1.95	1.45	1570	2.15	1.60

50 to 200 Pa 17.5 kW (5 Ton) Standard Efficiency (Horizontal) TCA060S

Air Volume		External Static - Pa (in.w.g.)											
		50 (0.20)			100 (0.40)			150 (0.60)			200 (0.80)		
L/s	cfm	rev/min	BHP	kW	rev/min	BHP	kW	rev/min	BHP	kW	rev/min	BHP	kW
Low Static - Drive Kit #3											High Static - Drive Kit #7		
755	1600	805	0.40	0.30	900	0.50	0.37	1000	0.65	0.48	1100	0.80	0.60
800	1700	845	0.50	0.37	930	0.55	0.41	1025	0.70	0.52	1120	0.85	0.63
850	1800	885	0.55	0.41	965	0.65	0.48	1055	0.80	0.60	1145	0.95	0.71
895	1900	925	0.65	0.48	1000	0.75	0.56	1085	0.90	0.67	1170	1.05	0.78
945	2000	965	0.75	0.56	1040	0.85	0.63	1115	0.95	0.71	1195	1.15	0.86
990	2100	1010	0.85	0.63	1075	0.95	0.71	1145	1.05	0.78	1225	1.25	0.93
1040	2200	1050	0.95	0.71	1115	1.05	0.78	1180	1.20	0.90	1250	1.35	1.01
1085	2300	1095	1.10	0.82	1155	1.20	0.90	1215	1.30	0.97	1285	1.50	1.12
1130	2400	1135	1.25	0.93	1190	1.35	1.01	1255	1.45	1.08	1315	1.60	1.19

250 to 400 Pa 17.5 kW (5 Ton) Standard Efficiency (Horizontal) TCA060S

Air Volume		External Static - Pa (in.w.g.)											
		250 (1.00)			300 (1.20)			350 (1.40)			400 (1.60)		
L/s	cfm	rev/min	BHP	kW	rev/min	BHP	kW	rev/min	BHP	kW	rev/min	BHP	kW
High Static - Drive Kit #7								Field Furnished					
755	1600	1195	1.00	0.75	1285	1.20	0.90	1370	1.40	1.04	1445	1.60	1.19
800	1700	1215	1.05	0.78	1300	1.25	0.93	1385	1.50	1.12	1460	1.70	1.27
850	1800	1230	1.15	0.86	1320	1.35	1.01	1400	1.55	1.16	1475	1.80	1.34
895	1900	1255	1.20	0.90	1335	1.40	1.04	1415	1.65	1.23	1495	1.90	1.42
945	2000	1275	1.30	0.97	1355	1.50	1.12	1435	1.75	1.31	1510	2.00	1.49
990	2100	1300	1.40	1.04	1375	1.60	1.19	1450	1.85	1.38	1525	2.10	1.57
1040	2200	1325	1.55	1.16	1400	1.75	1.31	1470	1.95	1.45	1545	2.20	1.64
1085	2300	1355	1.65	1.23	1425	1.85	1.38	1495	2.10	1.57	1565	2.30	1.72
1130	2400	1380	1.80	1.34	1450	2.00	1.49	1515	2.20	1.64	1585	2.45	1.83

BLOWER DATA - BELT DRIVE

21.0 KW

Blower tables include resistance for base unit with wet indoor coil & 51 mm (2 in.) disposable air filters in place.

FOR ALL UNITS ADD:

1 - Any factory installed options air resistance (electric heat, etc.) See page 15

2 - Any field installed accessories air resistance (economizer, duct resistance, diffuser, etc.) See page 15

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

Air Volume		External Static - Pa (in.w.g.)									TCA072S		
		50 (0.20)			100 (0.40)			150 (0.60)			200 (0.80)		
		rev/min	BHP	kW	rev/min	BHP	kW	rev/min	BHP	kW	rev/min	BHP	kW
L/s	cfm	Low Static - Drive Kit #4											
895	1900	810	0.50	0.37	905	0.60	0.45	1000	0.75	0.56	1095	0.90	0.67
945	2000	845	0.60	0.45	935	0.70	0.52	1025	0.85	0.63	1115	1.00	0.75
990	2100	875	0.65	0.48	965	0.80	0.60	1050	0.90	0.67	1135	1.10	0.82
1040	2200	910	0.75	0.56	995	0.90	0.67	1075	1.00	0.75	1160	1.20	0.90
1085	2300	945	0.85	0.63	1025	0.95	0.71	1105	1.10	0.82	1180	1.30	0.97
1130	2400	980	0.95	0.71	1055	1.10	0.82	1130	1.25	0.93	1205	1.40	1.04
1180	2500	1010	1.05	0.78	1085	1.20	0.90	1160	1.35	1.01	1230	1.50	1.12
1225	2600	1045	1.15	0.86	1115	1.30	0.97	1190	1.50	1.12	1260	1.65	1.23
1275	2700	1080	1.30	0.97	1150	1.45	1.08	1220	1.60	1.19	1285	1.80	1.34
1320	2800	1115	1.45	1.08	1180	1.60	1.19	1250	1.75	1.31	1315	1.95	1.45
1370	2900	1155	1.60	1.19	1215	1.75	1.31	1280	1.90	1.42	1340	2.10	1.57

Air Volume		External Static - Pa (in.w.g.)									TCA072S		
		250 (1.00)			300 (1.20)			350 (1.40)			400 (1.60)		
		rev/min	BHP	kW	rev/min	BHP	kW	rev/min	BHP	kW	rev/min	BHP	kW
L/s	cfm	High Static - Drive Kit #8						Field Furnished					
895	1900	1180	1.10	0.82	1265	1.25	0.93	1345	1.45	1.08	1420	1.65	1.23
945	2000	1200	1.15	0.86	1280	1.35	1.01	1360	1.55	1.16	1435	1.75	1.31
990	2100	1220	1.25	0.93	1300	1.45	1.08	1375	1.65	1.23	1450	1.85	1.38
1040	2200	1240	1.35	1.01	1315	1.55	1.16	1390	1.75	1.31	1460	1.95	1.45
1085	2300	1260	1.45	1.08	1335	1.65	1.23	1405	1.85	1.38	1480	2.10	1.57
1130	2400	1280	1.55	1.16	1355	1.80	1.34	1425	2.00	1.49	1495	2.20	1.64
1180	2500	1305	1.70	1.27	1375	1.90	1.42	1445	2.10	1.57	1510	2.30	1.72
1225	2600	1330	1.85	1.38	1395	2.05	1.53	1465	2.25	1.68	1530	2.45	1.83
1275	2700	1355	2.00	1.49	1420	2.20	1.64	1485	2.40	1.79	1550	2.60	1.94
1320	2800	1380	2.15	1.60	1445	2.35	1.75	1505	2.55	1.90	1570	2.80	2.09
1370	2900	1405	2.30	1.72	1470	2.50	1.87	1530	2.70	2.01	1590	2.95	2.20

BLOWER DATA - BELT DRIVE

21.0 kW

Blower tables include resistance for base unit with wet indoor coil, & 51 mm (2 in.) disposable air filters in place.

FOR ALL UNITS ADD:

1 - Any factory installed options air resistance (electric heat, etc.) See page 15

2 - Any field installed accessories air resistance (economizer, duct resistance, diffuser, etc.) See page 15

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

50 to 200 Pa

21 kW (6 Ton) Standard Efficiency (Horizontal)

TCA072S

Air Volume		External Static - Pa (in.w.g.)											
		50 (0.20)			100 (0.40)			150 (0.60)			200 (0.80)		
L/s	cfm	rev/min	BHP	kW	rev/min	BHP	kW	rev/min	BHP	kW	rev/min	BHP	kW
		Low Static - Drive Kit #4						High Static - Drive Kit #8					
895	1900	940	0.60	0.45	1035	0.75	0.56	1125	0.90	0.67	1205	1.00	0.75
945	2000	980	0.70	0.52	1070	0.85	0.63	1155	1.00	0.75	1235	1.10	0.82
990	2100	1020	0.80	0.60	1110	0.95	0.71	1190	1.10	0.82	1265	1.25	0.93
1040	2200	1060	0.90	0.67	1145	1.05	0.78	1225	1.20	0.90	1300	1.35	1.01
1085	2300	1100	1.05	0.78	1180	1.20	0.90	1260	1.35	1.01	1330	1.50	1.12
1130	2400	1140	1.15	0.86	1220	1.30	0.97	1295	1.50	1.12	1365	1.65	1.23
1180	2500	1180	1.30	0.97	1260	1.45	1.08	1330	1.65	1.23	1400	1.80	1.34
1225	2600	1225	1.45	1.08	1295	1.60	1.19	1365	1.80	1.34	1435	1.95	1.45
1275	2700	1265	1.60	1.19	1335	1.80	1.34	1405	1.95	1.45	1470	2.15	1.60
1320	2800	1305	1.80	1.34	1375	1.95	1.45	1440	2.15	1.60	1505	2.35	1.75
1370	2900	1350	1.95	1.45	1415	2.15	1.60	1480	2.35	1.75	1540	2.55	1.90

250 to 400 Pa

21 kW (6 Ton) Standard Efficiency (Horizontal)

TCA072S

Air Volume		External Static - Pa (in.w.g.)											
		250 (1.00)			300 (1.20)			350 (1.40)			400 (1.60)		
L/s	cfm	rev/min	BHP	kW	rev/min	BHP	kW	rev/min	BHP	kW	rev/min	BHP	kW
		High Static - Drive Kit #8						Field Furnished					
895	1900	1285	1.15	0.86	1355	1.30	0.97	1430	1.45	1.08	1495	1.60	1.19
945	2000	1310	1.25	0.93	1385	1.40	1.04	1455	1.55	1.16	1520	1.70	1.27
990	2100	1340	1.40	1.04	1410	1.55	1.16	1480	1.70	1.27	1545	1.85	1.38
1040	2200	1370	1.50	1.12	1440	1.65	1.23	1505	1.85	1.38	1570	2.00	1.49
1085	2300	1400	1.65	1.23	1470	1.80	1.34	1530	1.95	1.45	1595	2.15	1.60
1130	2400	1435	1.80	1.34	1500	1.95	1.45	1560	2.15	1.60	1620	2.30	1.72
1180	2500	1465	1.95	1.45	1530	2.15	1.60	1590	2.30	1.72	1650	2.50	1.87
1225	2600	1500	2.15	1.60	1560	2.30	1.72	1620	2.50	1.87	1680	2.70	2.01
1275	2700	1530	2.30	1.72	1595	2.50	1.87	1650	2.70	2.01	1710	2.90	2.16
1320	2800	1565	2.50	1.87	1625	2.70	2.01	1685	2.90	2.16	1740	3.10	2.31
1370	2900	1600	2.75	2.05	1660	2.95	2.20	1715	3.10	2.31	1770	3.30	2.46

BLOWER DATA

FACTORY INSTALLED BELT DRIVE KIT SPECIFICATIONS

Nominal		Maximum		rev/min Range							
kW	hp	kW	hp	Drive 1	Drive 2	Drive 3	Drive 4	Drive 5	Drive 6	Drive 7	Drive 8
1.5	2	1.7	2.3	561 - 842	621 - 931	694 - 1042	807 - 1117	748 - 1142	893 - 1191	1010 - 1290	994 - 1326

*Using total air volume and system static pressure requirements determine from blower performance tables rev/min and motor kW required. Maximum usable kW of motors furnished by Lennox are shown. If motors of comparable kW are used, be sure to keep within the service factor limitations outlined on the motor nameplate.

BLOWER DATA

POWER EXHAUST FANS PERFORMANCE

Return Air System Static Pressure		Air Volume Exhausted											
		T1PWRE10A						T1PWRE10N					
		Low		Medium		High		Low		Medium		High	
Pa	in. w.g.	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm
0	0	510	1085	515	1085	510	1080	1525	3235	1625	3445	1705	3615
25	0.1	410	865	415	875	415	880	1280	2710	1395	2960	1475	3130
50	0.2	315	670	320	675	320	675	855	1810	1185	2510	1275	2700
75	0.3	235	495	230	490	230	485	865	1835	9985	2085	1090	2310
100	0.4	160	335	155	335	160	340	665	1405	790	1675	915	1935
125	0.5	95	200	100	210	120	250	440	935	595	1260	740	1570
150	0.6	35	75	65	135	115	240	185	390	390	825	360	760

OPTIONS / ACCESSORIES AIR RESISTANCE

Air Volume		Economizer		Electric Heat	
L/s	cfm	Pa	in. w.g.	Pa	in. w.g.
470	1000	10	0.04	7	0.03
565	1200	10	0.04	15	0.06
660	1400	10	0.04	22	0.09
755	1600	10	0.04	30	0.12
850	1800	12	0.05	37	0.15
945	2000	12	0.05	45	0.18
1040	2200	12	0.05	50	0.20
1130	2400	12	0.05	55	0.22
1225	2600	15	0.06	60	0.24
1320	2800	15	0.06	65	0.26
1415	3000	15	0.06	70	0.28

CEILING DIFFUSER AIR THROW DATA

Air Volume Model No.		¹ Effective Throw			
		RTD9-65		FD9-65	
L/s	cfm	m	ft.	m	ft.
470	1000	3 - 5	10 - 17	5 - 6	15 - 20
565	1200	3 - 5	11 - 18	5 - 7	16 - 22
660	1400	4 - 6	12 - 19	5 - 7	17 - 24
755	1600	4 - 6	12 - 20	5 - 8	18 - 25
850	1800	4 - 6	13 - 21	6 - 9	20 - 28
945	2000	4 - 7	14 - 23	6 - 9	21 - 29
1040	2200	5 - 8	16 - 25	7 - 9	22 - 30
Model No.		RTD11-95		FD11-95	
1225	2600	7 - 9	24 - 29	6 - 7	19 - 24
1320	2800	8 - 9	25 - 30	6 - 9	20 - 28
1415	3000	8 - 10	27 - 33	6 - 9	21 - 29

¹ Effective throw based on terminal velocities of 23 m per minute (75 ft. per minute).

CEILING DIFFUSERS AIR RESISTANCE

Air Volume		RTD9-65 Step-Down Diffuser			FD9-65 Flush Diffuser	RTD11-95 Step-Down Diffuser			FD11-95 Flush Diffuser								
		2 Ends Open		1 Side & 2 Ends Open		All Ends & Sides Open	2 Ends Open			1 Side & 2 Ends Open	All Ends & Sides Open						
L/s	cfm	Pa	in. w.g.	Pa	in. w.g.	Pa	in. w.g.	Pa	in. w.g.	Pa	in. w.g.	Pa	in. w.g.				
470	1000	47	0.19	40	0.16	35	0.14	35	0.14	---	---	---	---				
565	1200	62	0.25	50	0.20	42	0.17	42	0.17	---	---	---	---				
660	1400	82	0.33	65	0.26	50	0.20	50	0.20	---	---	---	---				
755	1600	107	0.43	80	0.32	50	0.20	50	0.24	---	---	---	---				
850	1800	139	0.56	99	0.40	75	0.30	75	0.30	32	0.13	27	0.11	22	0.09	22	0.09
945	2000	182	0.73	124	0.50	90	0.36	90	0.36	37	0.15	32	0.13	27	0.11	25	0.10
1040	2200	236	0.95	157	0.63	109	0.44	109	0.44	45	0.18	37	0.15	30	0.12	30	0.12
1130	2400	---	---	---	---	---	---	---	---	52	0.21	45	0.18	37	0.15	35	0.14
1225	2600	---	---	---	---	---	---	---	---	60	0.24	52	0.21	45	0.18	42	0.17
1320	2800	---	---	---	---	---	---	---	---	67	0.27	60	0.24	52	0.21	50	0.20
1415	3000	---	---	---	---	---	---	---	---	80	0.32	72	0.29	62	0.25	62	0.25

OUTDOOR SOUND DATA

¹ Unit Model No.	Octave Band Sound Power Levels dBA, re 10 ⁻¹² Watts - Center Frequency - HZ							Sound Rating Number (dB)
	125	250	500	1000	2000	4000	8000	
036	66	73	73	74	70	67	63	81
048	63	66	70	71	68	62	53	75
060 and 072	67	72	77	76	73	68	61	82

NOTE - The octave sound power data shown does not include tonal correction.

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

ELECTRIC HEAT CAPACITIES

Input Voltage	5.2 kW			10.4 kW			15.6 kW			20.8 kW		
	No of Steps	kW input	Btuh Output	No of Steps	kW input	Btuh Output	No of Steps	kW input	Btuh Output	No of Steps	kW input	Btuh Output
380	1	4.7	16,100	1	9.4	32,100	1	14.1	48,200	1	18.8	64,200
400	1	5.2	17,800	1	10.4	35,500	1	15.6	53,300	1	20.8	71,400
420	1	5.7	19,500	1	11.5	39,300	1	17.2	58,800	1	23.0	78,500

ELECTRICAL/ELECTRIC HEAT DATA

STANDARD EFFICIENCY (R-22)	TCA036S2	TCA048S2	TCA060S2	TCA072S2
----------------------------	----------	----------	----------	----------

ELECTRICAL DATA

¹ Voltage - 50hz with neutral	380/420V - 3 Ph	380/420V - 3 Ph	380/420V - 3 Ph	380/420V - 3 Ph	
Compressor	Rated Load Amps	5.1	7.1	6.7	9
	Locked Rotor Amps	39	50	49.5	75
Outdoor Fan Motor - Full Load Amps	1.1	1.1	1.3	1.3	
Power Exhaust (1) 0.56 kW - Full Load Amps	2.2	2.2	2.2	2.2	
Indoor Blower Motor	kW	1.5	1.5	1.5	1.5
	Full Load Amps	3.5	3.5	3.5	3.5
² Maximum Overcurrent Protection	Unit Only	15	20	15	25
	With Power Exhaust	15	20	20	25
³ Minimum Circuit Ampacity	Unit Only	11	14	14	17
	With Power Exhaust	14	16	16	19

ELECTRIC HEAT DATA

Electric Heat Voltage	380/420	380/420	380/420	380/420		
² Maximum Overcurrent Protection	Unit+ ⁵ Electric Heat	5.2 kW	15	20	15	25
		10.4 kW	25	25	25	25
		15.6 kW	---	---	35	35
		20.8 kW	---	---	---	45
	Unit+ ⁵ Electric Heat and (1) 0.56 kW Power Exhaust	5.2 kW	20	20	20	25
		10.4 kW	30	30	30	30
		15.6 kW	---	---	40	40
		20.8 kW	---	---	---	50
³ Minimum Circuit Ampacity	Unit+ ⁵ Electric Heat	5.2 kW	15	15	15	17
		10.4 kW	25	25	25	25
		15.6 kW	---	---	34	34
		20.8 kW	---	---	---	44
	Unit+ ⁵ Electric Heat and (1) 0.56 kW Power Exhaust	5.2 kW	17	17	17	19
		10.4 kW	27	27	27	27
		15.6 kW	---	---	37	37
		20.8 kW	---	---	---	47

ELECTRICAL ACCESSORIES

Unit Fuse Block	Unit Only	18W06	18W07	18W06	18W08
	with exhaust fan	18W06	18W07	18W07	18W08
Disconnect	Hinged Access Panel	20W15	20W15	20W21	20W24
	Standard Access Panel	20W21	20W21	20W15	20W18

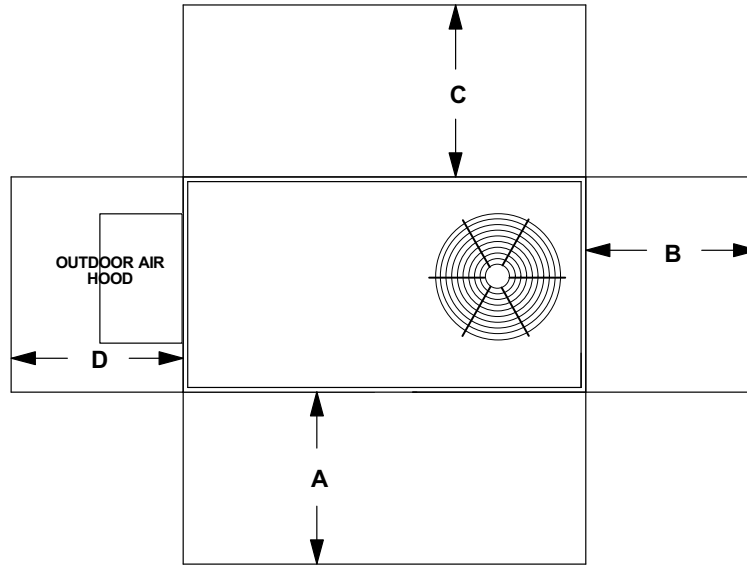
¹ Extremes of operating range are plus and minus 10% of line voltage.

² Heating, Air Conditioning, Refrigeration type breaker or fuse.

³ Refer to local electrical code to determine wire, fuse and disconnect size requirements.

⁵ Nominal kW based on 400V-3ph-50hz.

UNIT CLEARANCES - MM (INCHES)



¹ Unit Clearance	A		B		C		D		Top Clearance
	mm	in.	mm	in.	mm	in.	mm	in.	
Service Clearance	1219	48	914	36	934	36	914	36	Unobstructed
Minimum Operation Clearance	914	36	914	36	914	36	914	36	

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

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

Minimum Operation Clearance - Required clearance for proper unit operation.

OPTIONAL CONVENTIONAL TEMPERATURE CONTROL SYSTEMS - FIELD INSTALLED

COMMERCIAL TOUCHSCREEN THERMOSTAT



Intuitive Touchscreen Interface - **Two Stage Heating / Two Stage Cooling Conventional or Heat Pump** - Seven Day Programmable - Four Time Periods/Day - Economizer Output - Title 24 Compliant - ENERGY STAR® Qualified - Backlit Display - Automatic Changeover

C0STAT02AE1
L



Sensors For Touchscreen Thermostat

¹ Remote non-adjustable wall mount 20k temperature sensor

C0SNZN01AE1
-

¹ Remote non-adjustable wall mount 10k averaging temperature sensor

C0SNZN73AE1
-

¹ Remote non-adjustable duct mount temperature sensor

C0SNDC00AE
1-

Outdoor temperature sensor

C0SNSR03AE
1-

Accessories For Touchscreen Thermostat

Locking cover (clear)

C0MISC15AE1
-

¹ Remote sensors for C0STAT02AE1L can be applied in the following combinations:

(1)

C0SNZN01AE1-, (2) C0SNZN73AE1-, (2) C0SNZN01AE1- and (1) C0SNZN73AE1-,

(4)

C0SNZN01AE1-, (3) C0SNZN01AE1- and (2) C0SNZN73AE1.

DIGITAL NON-PROGRAMMABLE THERMOSTATS



Intuitive Interface - Automatic Changeover - Simple Up and Down Temperature Control

Two-stage heating / cooling conventional systems

C0STAT10AE1
L

Sensor For Digital Non-Programmable Thermostats Above

Remote wall mounted temperature sensor

C0SNZN00AE1
-



Intuitive Interface - Automatic Changeover - Backlit Display - Simple Up and Down Temperature Control

One-stage heating / cooling conventional systems

C0STAT12AE1
L

Sensor For Digital Non-Programmable Thermostats Above

Outdoor temperature sensor

C0SNSR04AE
1-

Accessories For Digital Non-Programmable Thermostats Above

Optional wall mounting plate

C0MISC17AE1
-

WEIGHT DATA

Model Number	Net				Shipping			
	Base		Maximum		Base		Maximum	
	kg	lbs.	kg	lbs.	kg	lbs.	kg	lbs.
036S	232	511	283	623	259	571	314	692
048S	248	547	299	659	275	607	330	728
060S	256	564	308	680	283	624	340	749
072S	286	631	333	734	313	691	366	806

OPTIONS / ACCESSORIES

		Shipping Weights	
		kg	lbs.
ECONOMIZER			
Economizer			
Economizer	T1ECON30A-1	56	123
	T1ECON30N-1	64	142
ELECTRIC HEAT			
Electric Heat	5.2 kW - T1EH0075AN1	14	31
	10.4 kW - T1EH0150AN1	14	31
	15.6 kW - T1EH0225AN1	16	35
	20.9 kW - T1EH0300N-1	16	35
OUTDOOR AIR			
Outdoor Air Dampers			
Outdoor Air Damper Motorized Kit	T1DAMP11A-1	12	25
	T1DAMP11N-1	14	29
Damper Section Manual	T1DAMP21AN1	9	18
Power Exhaust			
Standard Static	T1PWRE10A-1	17	35
	T1PWRE10N-1	19	39
ROOF CURBS - DOWN-FLOW			
Hinged			
203 mm (8 in.) height	T1CURB30AN1	35	78
457 mm (18 in.) height	T1CURB32AN1	49	108
610 mm (24 in.) height	T1CURB33AN1	57	126
Standard			
356 mm (14 in.) height	T1CURB10AN1	44	96
CEILING DIFFUSERS			
Step-Down	RTD9-65	30	67
	RTD11-95	40	88
Flush	FD9-65	17	37
	FD11-95	34	75
Transitions (Supply and Return)	T1TRAN10AN1	10	22
	T1TRAN20N-1	10	21

Base Unit - The unit with NO OPTIONS.

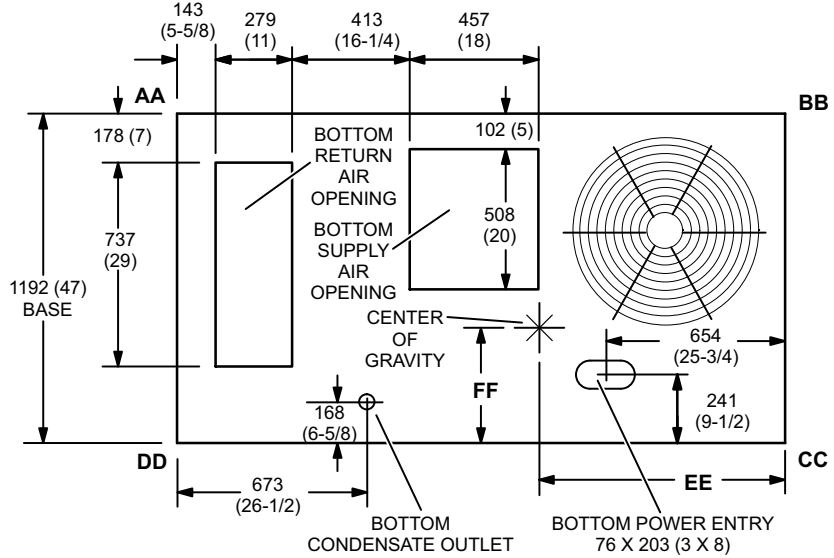
Max. Unit - The unit with ALL OPTIONS installed (Economizer, etc.).

DIMENSIONS - MM (INCHES)

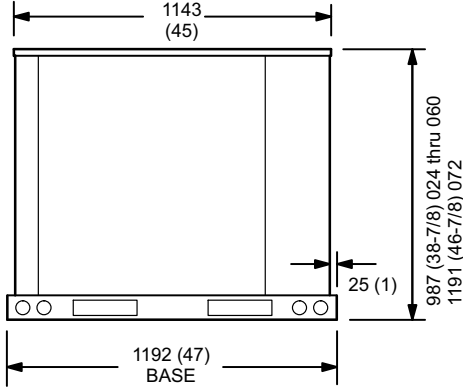
Model No.	CORNER WEIGHTS								CENTER OF GRAVITY															
	AA		BB		CC		DD		EE		FF		Base	Maximum	Base	Maximum								
	Base	Maximum	Base	Maximum	Base	Maximum	Base	Maximum	Base	Maximum	Base	Maximum												
kg	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	mm	in.	mm	in.	mm	in.	mm	in.							
036	40	88	51	113	49	108	57	125	79	174	92	202	64	141	83	183	965	38	1029	40-1/2	457	18	457	18
048	43	94	54	120	53	116	60	133	84	186	97	214	69	152	87	192	965	38	1029	40-1/2	457	18	457	18
060	44	97	56	124	54	119	52	137	87	192	100	220	71	156	90	199	965	38	1029	40-1/2	457	18	457	18
072	49	109	61	135	60	132	66	146	97	213	107	235	80	176	99	218	978	38-1/2	1041	41	457	18	457	18

Base Unit - The unit with NO OPTIONS.

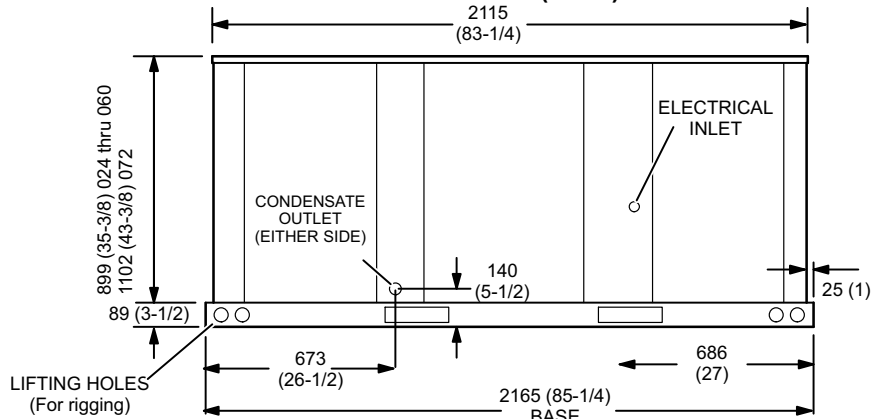
Max. Unit - The unit with ALL OPTIONS Installed. (Electric Heat, Economizer, etc.)



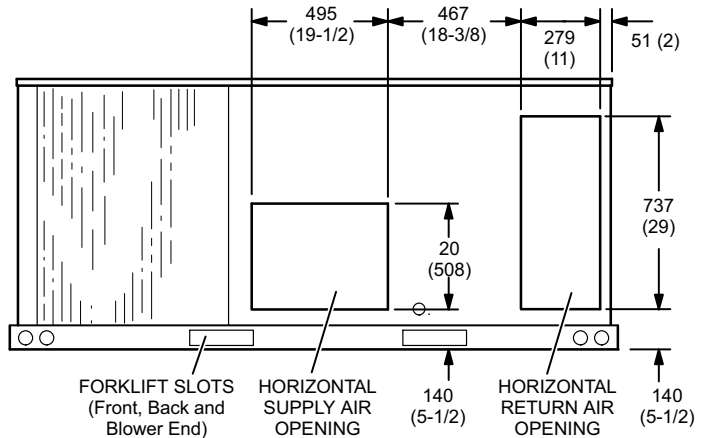
TOP VIEW (Base)



END VIEW



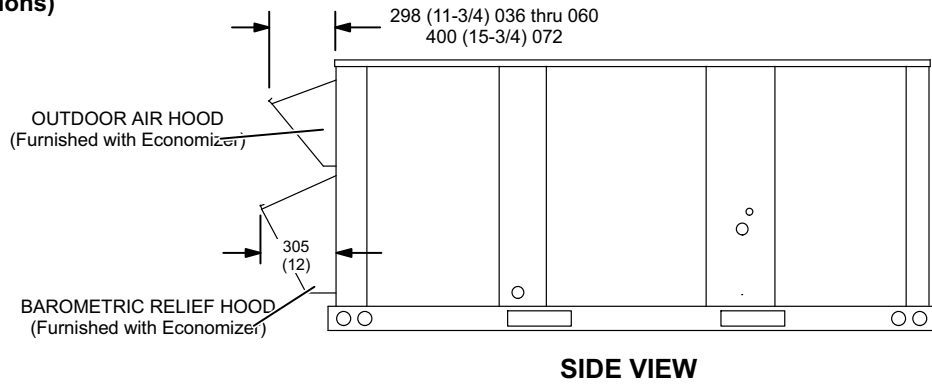
SIDE VIEW



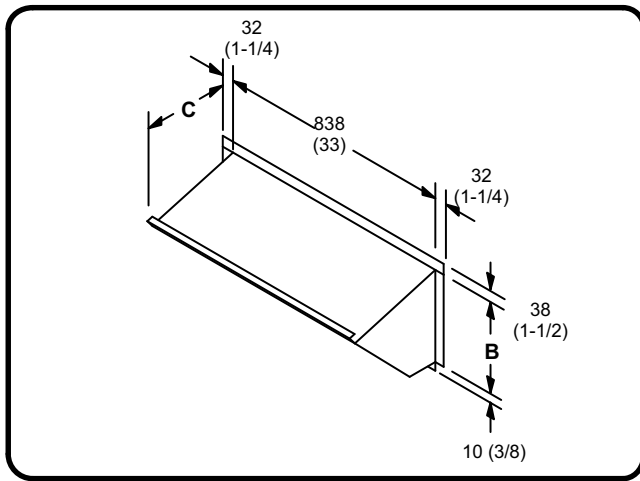
BACK VIEW

ACCESSORY DIMENSIONS - MM (INCHES)

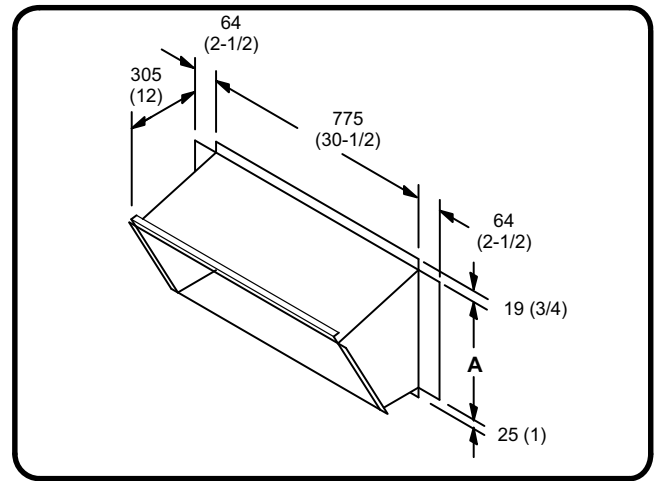
OUTDOOR AIR HOOD DETAIL FOR OPTIONAL ECONOMIZER (Down-Flow Applications)



OUTDOOR AIR HOOD FOR ECONOMIZER (Furnished with Economizer)

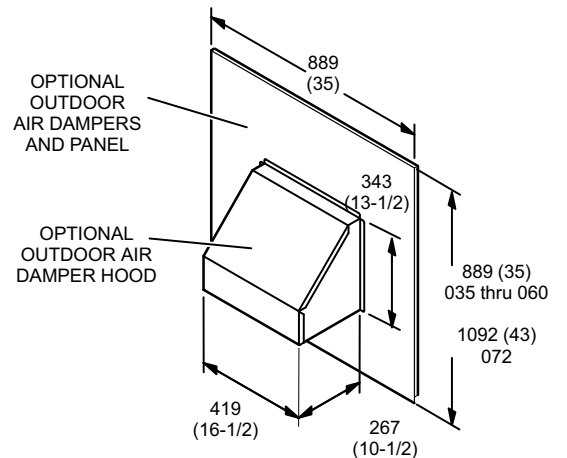
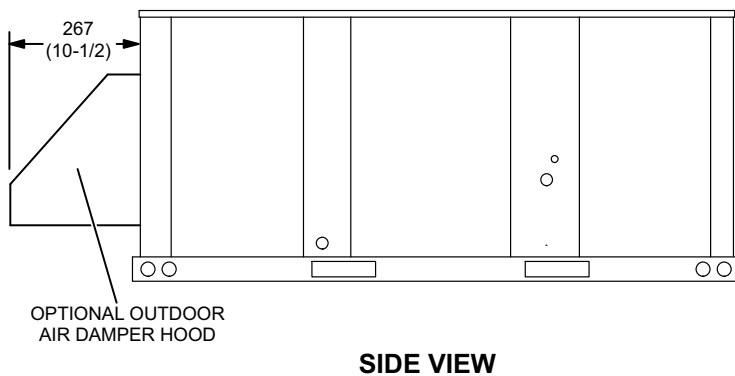


BAROMETRIC RELIEF HOOD FOR ECONOMIZER (Furnished with Economizer)



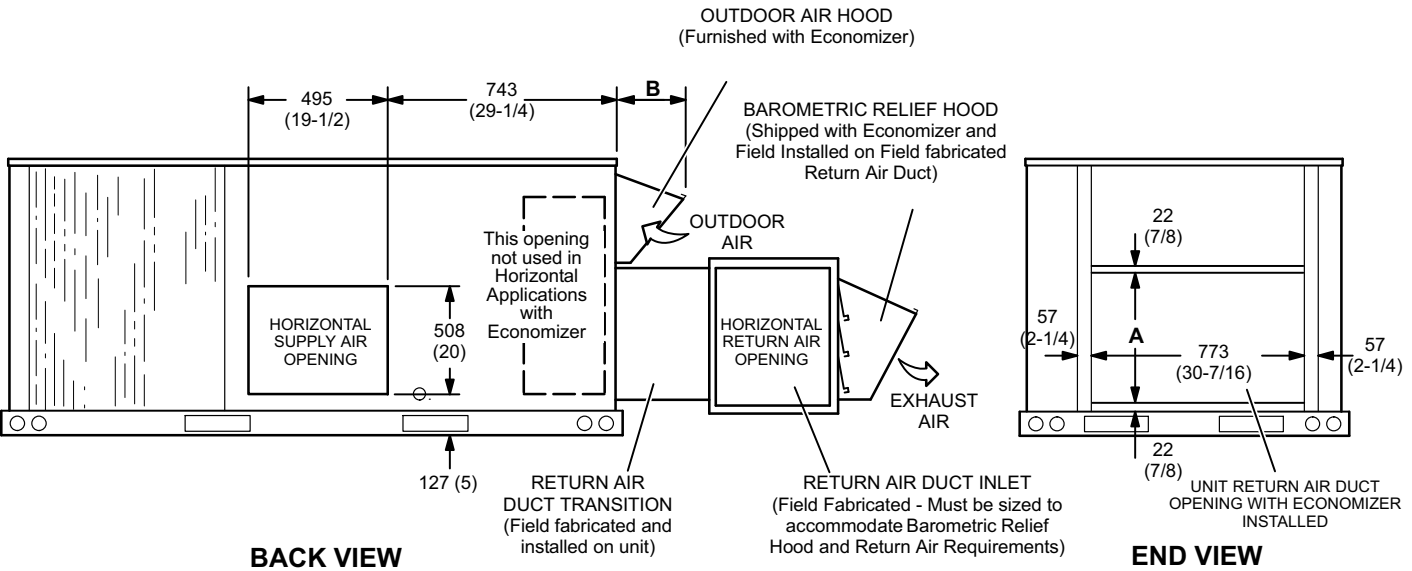
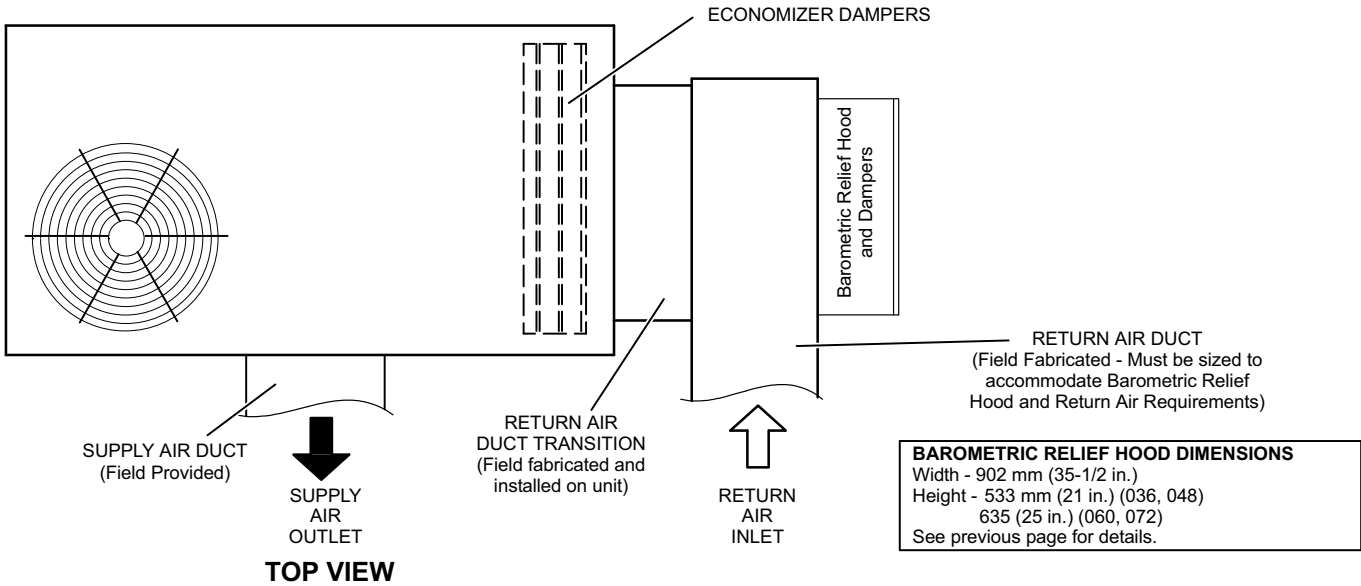
Model No.	A		B		C	
	mm	in.	mm	in.	mm	in.
036, 048	489	19-1/4	330	13	298	11-3/4
060, 072	591	23-1/4	432	17	400	15-3/4

OPTIONAL OUTDOOR AIR DAMPER HOOD DETAIL FOR MANUAL OR MOTORIZED OUTDOOR AIR DAMPERS (Down-Flow or Horizontal Applications)



ACCESSORY DIMENSIONS - MM (INCHES)

OUTDOOR AIR HOOD DETAIL FOR OPTIONAL ECONOMIZER AND BAROMETRIC RELIEF DAMPERS (Horizontal Applications)

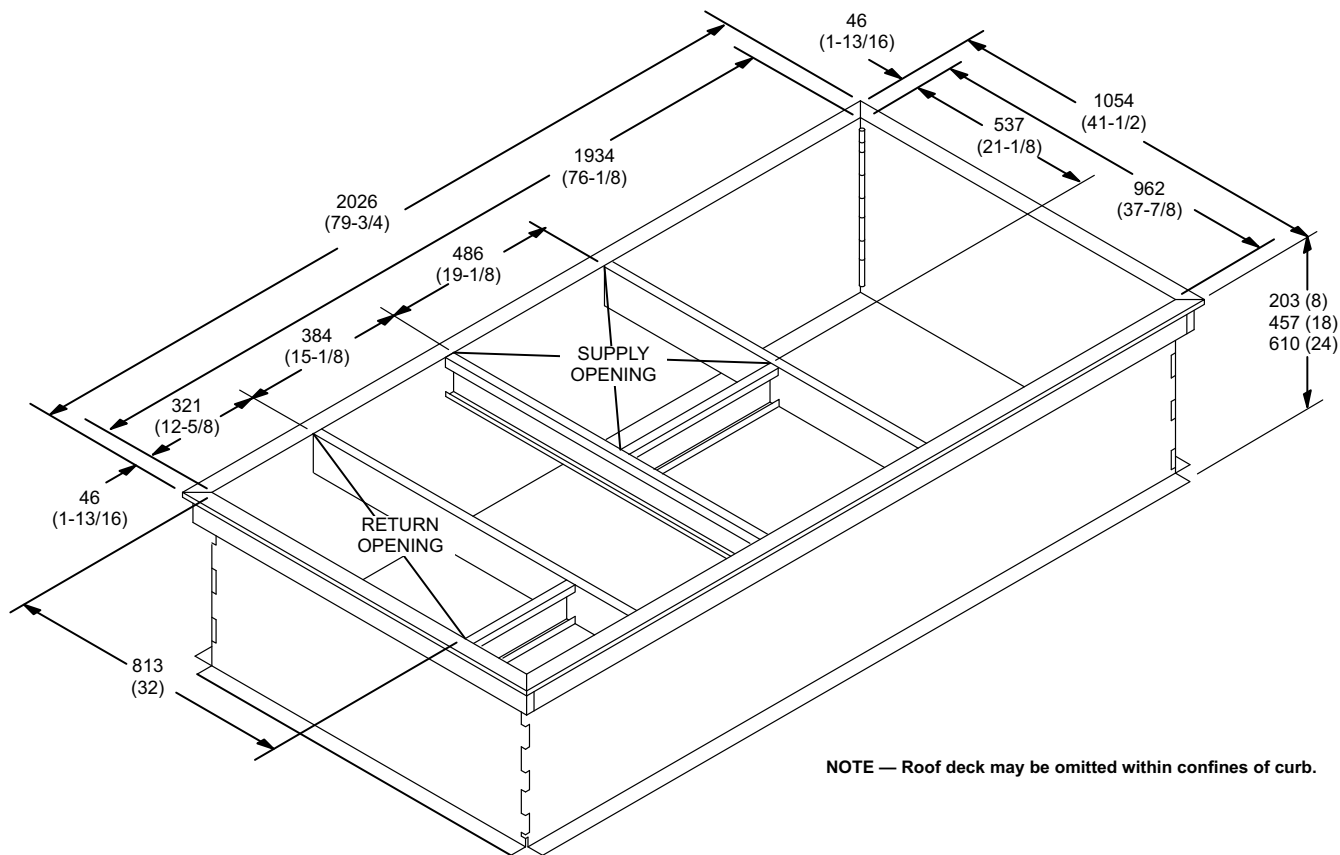


NOTE - Return Air Duct and Transition must be supported.

Model No.	A		B	
	mm	in.	mm	in.
036, 048	476	18-3/4	298	11-3/4
060, 072	572	22-1/2	400	15-3/4

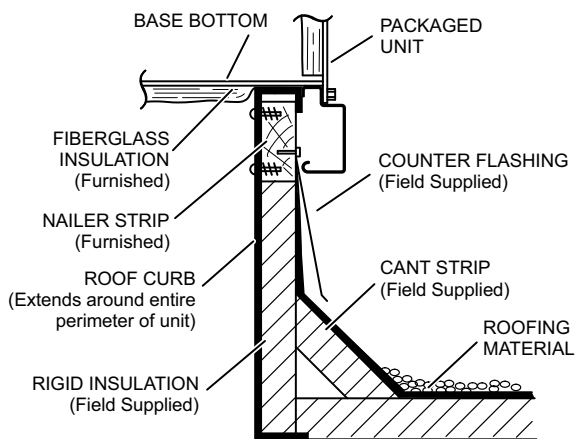
ACCESSORY DIMENSIONS - MM (INCHES)

HINGED ROOF CURBS - DOUBLE DUCT OPENING

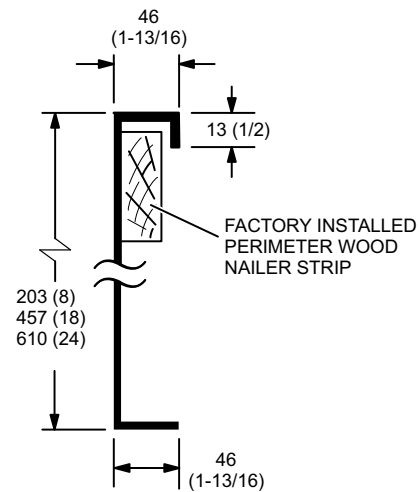


NOTE — Roof deck may be omitted within confines of curb.

TYPICAL FLASHING DETAIL FOR ROOF CURB

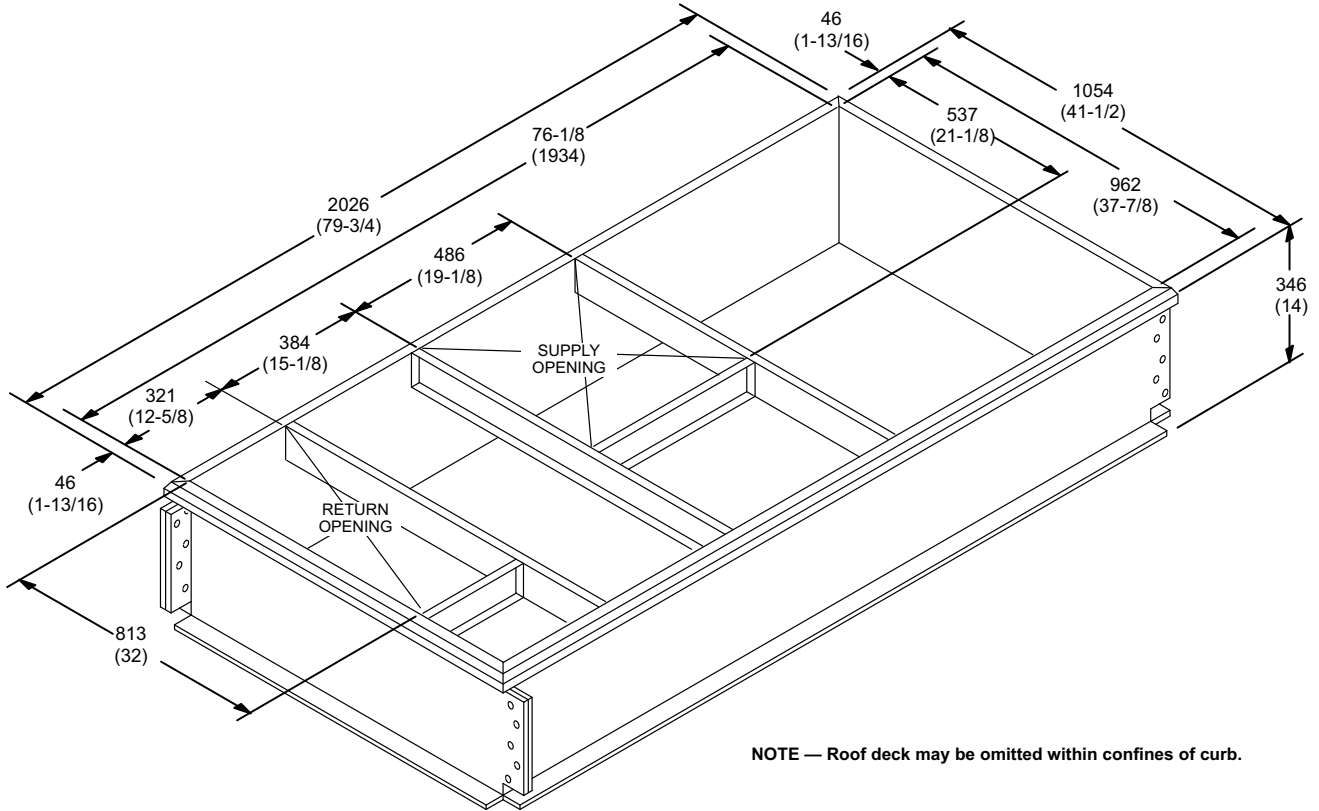


DETAIL ROOF CURB

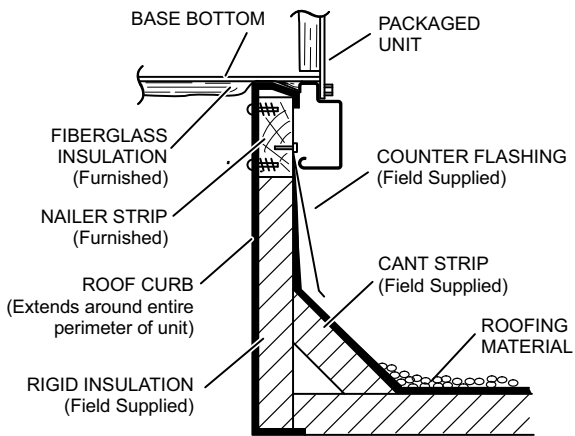


ACCESSORY DIMENSIONS - MM (INCHES)

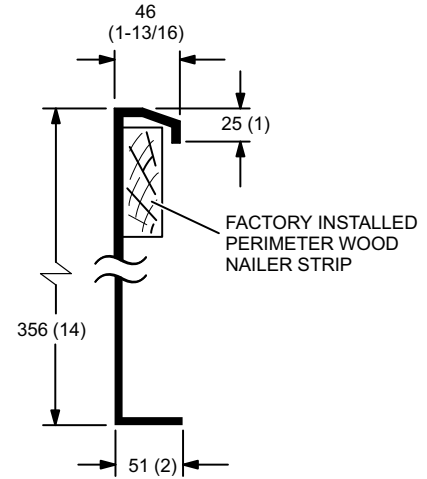
STANDARD ROOF CURBS - DOUBLE DUCT OPENING



TYPICAL FLASHING DETAIL FOR ROOF CURB

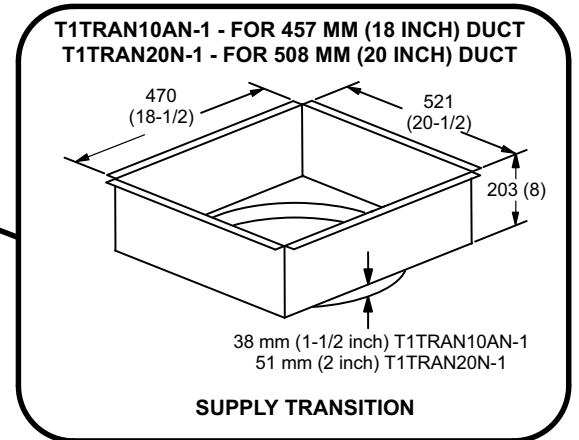
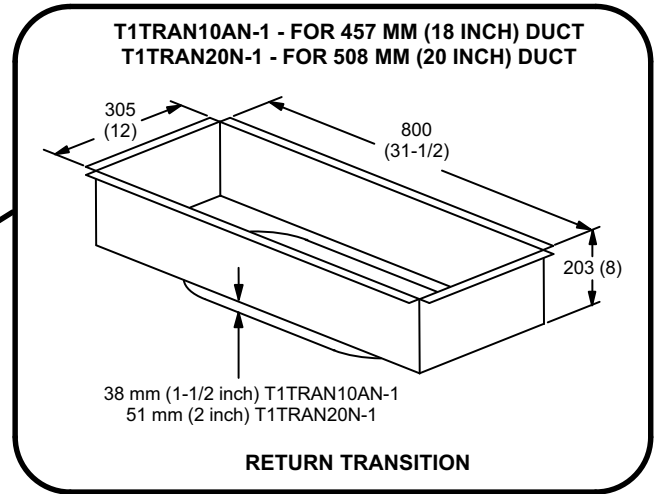
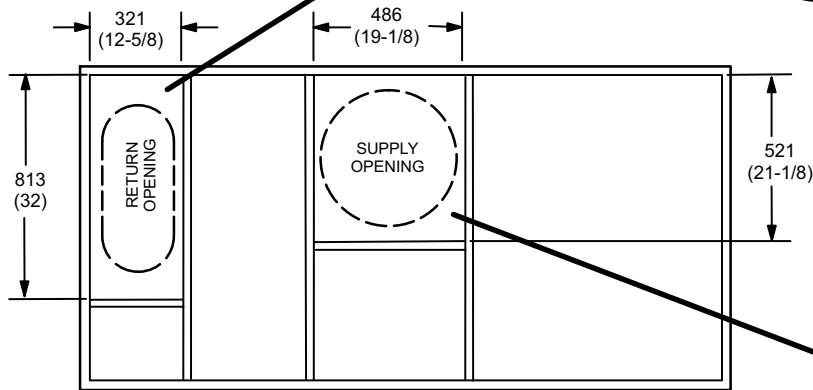


DETAIL ROOF CURB



ACCESSORY DIMENSIONS - INCHES (MM)

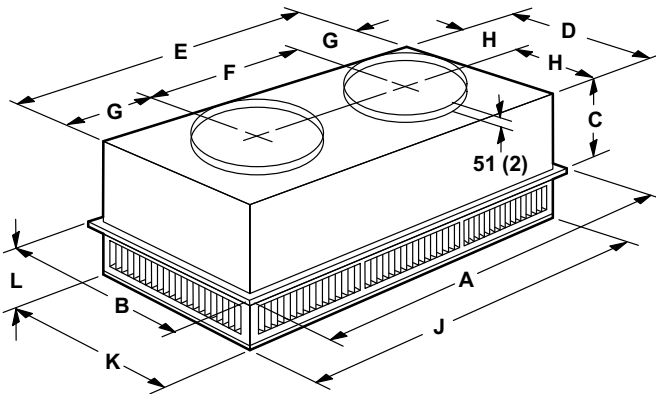
TRANSITIONS



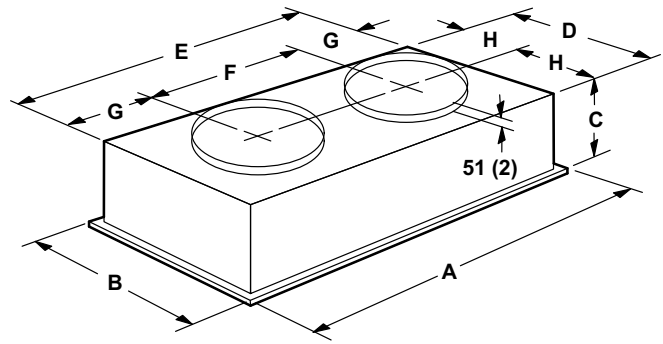
ACCESSORY DIMENSIONS - MM (INCHES)

COMBINATION CEILING SUPPLY AND RETURN DIFFUSERS

STEP-DOWN CEILING DIFFUSER



FLUSH CEILING DIFFUSER



Model Number		RTD9-65	RTD11-95
A	mm	1159	1159
	in.	47-5/8	47-5/8
B	in.	23-5/8	29-5/8
	mm	600	752
C	mm	289	365
	in.	11-3/8	14-3/8
D	mm	546	699
	in.	21-1/2	27-1/2
E	mm	1156	1158
	in.	45-1/2	45-1/2
F	mm	572	572
	in.	22-1/2	22-1/2
G	mm	292	292
	in.	11-1/2	11-1/2
H	mm	273	349
	in.	10-3/4	13-3/4
J	mm	1156	1156
	in.	45-1/2	45-1/2
K	mm	546	699
	in.	21-1/2	27-1/2
L	mm	181	206
	in.	7-1/8	8-1/8
Duct Size	mm	457 round	508 round
	in.	18 round	20 round

Model Number		FD9-65	FD11-95
A	mm	1159	1159
	in.	47-5/8	47-5/8
B	mm	600	752
	in.	23-5/8	29-5/8
C	mm	343	422
	in.	13-1/2	16-5/8
D	mm	533	686
	in.	21	27
E	mm	1143	1143
	in.	45	45
F	mm	572	572
	in.	22-1/2	22-1/2
G	mm	286	286
	in.	11-1/4	11-1/4
H	mm	267	343
	in.	10-1/2	13-1/2
Duct Size	mm	457 round	508 round
	in.	18 round	20 round

REVISIONS

Sections	Description of Change
All	Removed all Basic efficiency models
Features / Benefits	Removed Horizontal Conversion Kit
Electrical Data	Updated all



Visit us at www.lennox.com
For the latest technical information, www.lennoxcommercial.com
Contact us at 1-800-4-LENNOX

NOTE - Due to Lennox' ongoing commitment to quality, Specifications, Ratings and Dimensions subject to change without notice and without incurring liability. Improper installation, adjustment, alteration, service or maintenance can cause property damage or personal injury. Installation and service must be performed by a qualified installer and servicing agency.

©2009 Lennox Industries Inc.