



**PRODUCT SPECIFICATIONS**

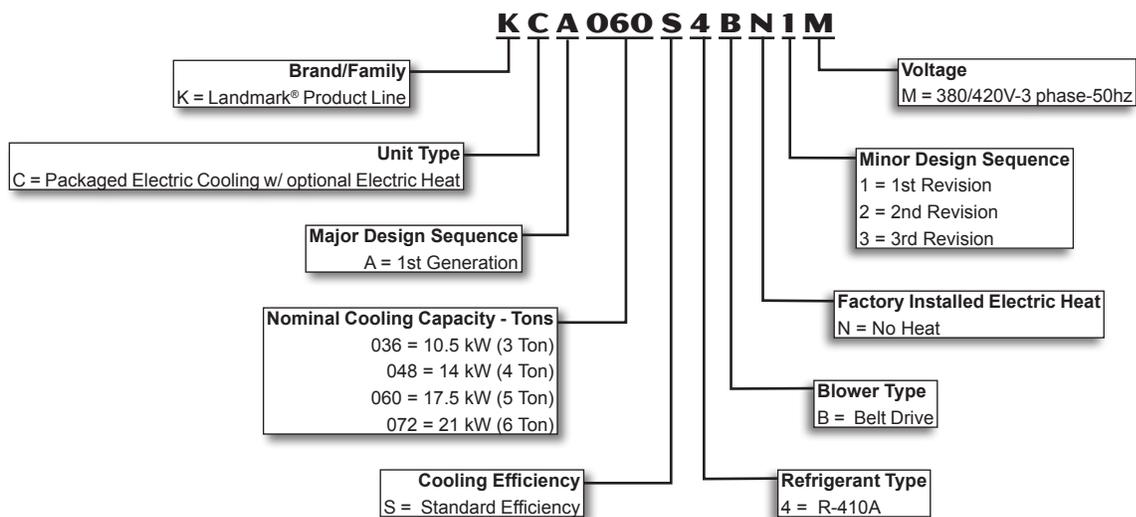
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**LANDMARK®**  
Performance Marked by Flexibility™

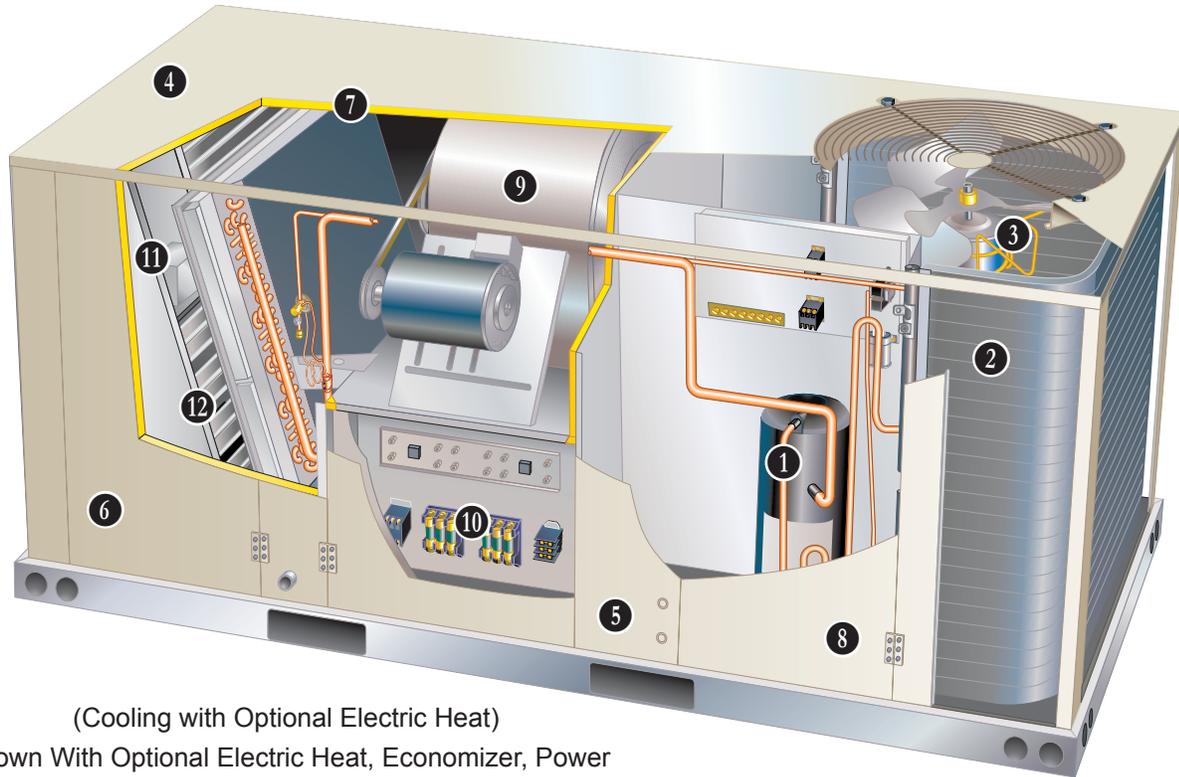


**Nominal Capacity - 10.5 to 21 kW (3 to 6 Tons)**  
**Net Cooling Capacity - 9.1 to 17.4 kW (31 000 to 59 400 Btuh)**  
**Optional Electric Heat - 5.7 to 23 kW**

**MODEL NUMBER IDENTIFICATION**



## FEATURES AND BENEFITS



(Cooling with Optional Electric Heat)

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

Landmark® rooftop units from Lennox are the new standard for reliable, efficient rooftop units built for long-lasting performance that can significantly improve indoor environments. Landmark® rooftop units feature:

- **R-410A Refrigerant** - Environmentally friendly.
- **Single Speed Scroll Compressor** - Furnished on all models.
- **Lennox' Environ™ Coil System (072 models only)** - Smaller, lighter condenser coil.
- **High Pressure Switches** - Protect compressor.
- **Isolated Compressor Compartment** - Allows performance check during normal compressor operation without disrupting airflow.
- **Belt Drive Blower Motors** - Belt drive motors to maximize air performance.
- **Independent Motor Mounts** - Allows for easy and efficient service access without removing the top panel.
- **Downflow or Horizontal Airflow** - Easy field conversion.
- **Two Fork Lift Slots on Three Sides** - Easy to pick up and transport units from almost any angle.
- **Corrosion-Resistant Removable, Reversible Drain Pan** - Provides application flexibility, durability and improved serviceability.
- **Common Components** - Many maintenance items are standard throughout the entire product line, reducing the need to carry different parts to the job or maintain in inventory.

## FEATURES AND BENEFITS

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### TESTING

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, Heating and Refrigeration Institute (AHRI) Standard 210/240-2008 while operating at rated voltage and air volumes.

International Organization for Standardization (ISO) 9001 Registered Manufacturing Quality System.

### COOLING SYSTEM

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

System can operate from  $-1^{\circ}\text{C}$  to  $52^{\circ}\text{C}$  without any additional controls.

#### R-410A Refrigerant

Non-chlorine, ozone friendly, R-410A.



Unit pre-charged with refrigerant. See Specification table.

#### 1 Scroll Compressor

Scroll compressors for high performance, reliability and quiet operation.

Resiliently mounted on rubber grommets for quiet operation.

#### Compressor Crankcase Heater (072 Models)

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

#### Refrigerant Metering Orifice

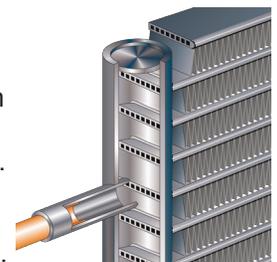
Accurately meters refrigerant in system.

Refrigerant control is accomplished by exact sizing of refrigerant metering orifice.

#### 2 Lennox' Environ™ Coil System (072 Models)

Condenser coil features lightweight, all aluminum brazed fin construction.

Constructed of three components:



a flat extrusion tubes, fins in-between the flat extrusion tubes and two refrigerant manifolds.

Environ™ Coil System Features:

- Improved heat transfer performance due to high primary surface area (flat tubes) versus secondary surface (fins).
- Smaller internal volume (reduced refrigerant charge).
- High durability (all aluminum construction).
- Fewer brazed joints.
- Compact design (reduces unit weight).
- Easy maintenance/cleaning.

Mounting brackets with rubber inserts secure coil to unit providing vibration dampening and corrosion protection.

## FEATURES AND BENEFITS

### **COOLING SYSTEM** **(continued)**

#### **Conventional Fin/Tube Coil (Condenser Coil for 036 thru 060 models) and Evaporator Coil (all models)**

Copper tube construction, enhanced rippled-edge aluminum fins, flared shoulder tubing connections, silver soldered construction for improved heat transfer. Factory leak tested. Cross row circuiting optimizes both sensible and latent cooling capacity.

#### **High Pressure Switch**

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

#### **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.

#### **Condensate Drain Pan**

Plastic pan, sloped to meet drainage requirements of American Society of Heating Refrigeration and Air Conditioning Engineers 62.1.

Side or bottom drain connections. Reversible to allow connection at back of unit.

#### **3 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 (Optional for 036 thru 060 Models)**

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

##### **Drain Pan Overflow Switch**

Monitors condensate level in drain pan, shuts down unit if drain becomes clogged.

##### **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  $-18^{\circ}\text{C}$ . A crankcase heater must be installed on the compressor.

### **CABINET**

#### **4 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.

#### **Airflow Choice**

Units are shipped in downflow (vertical) configuration, can be field converted to horizontal air flow configuration without the need of a kit.

#### **5 Power Entry**

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

#### **6 Exterior Panels**

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

#### **7 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.

*NOTE - 072 models include a filler panel for proper cabinet fit for optional accessories (Economizers, Power Exhaust, Outdoor Air Dampers and Barometric Relief Dampers).*

### **Options/Accessories**

#### **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.

Indoor Corrosion Protection:

- Coated coil
- Painted blower housing
- Painted base

Outdoor Corrosion Protection:

- Coated coil
- Painted base

## FEATURES AND BENEFITS

### **CABINET (continued)**

#### **8 Hinged Access Panels**

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

#### **Field Installed**

#### **Combination Coil/Hail Guards**

Heavy gauge steel frame painted to match cabinet with expanded metal mesh to protect the outdoor coil from damage.

### **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**

#### **Smoke Detector**

Photoelectric type, installed in supply air section, return air section or both sections. Available with power board and single sensor (supply or return) or power board and two sensors (supply and return). Power board located in unit control compartment.

#### **Thermostats**

Control system and thermostat options, see page 29.

Aftermarket unit controller options, see Options/Accessories table.

#### **9 BLOWER**

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

#### **Motor**

Overload protected, equipped with ball bearings.

Single Speed belt drive motors are offered on all models and are available in several different sizes to maximize air performance.

#### **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 Drive Kit Specifications Table.

### **INDOOR AIR QUALITY**

#### **Air Filters**

Disposable 51 mm filters furnished as standard.

#### **Options/Accessories**

#### **Field Installed**

#### **Healthy Climate® High Efficiency Air Filters**

Disposable MERV 8 or MERV 13 (Minimum Efficiency Reporting Value based on ASHRAE 52.2) efficiency 51 mm pleated filters.

#### **Healthy Climate® UVC Germicidal Lamps**



Helps eliminate mold and bacterial growth on the evaporator and drain pans. Improves indoor air quality and maintains efficiency of system by reducing fouling of evaporator coil.

#### **Indoor Air Quality (CO<sub>2</sub>) Sensor**

Monitors CO<sub>2</sub> levels adjusts economizer dampers as needed for Demand Control Ventilation.

### **ELECTRICAL**

#### **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.

#### **Unit Sub-Fuse Blocks**

Furnished as standard on all units.

#### **Required Selections**

#### **Voltage Choice**

Specify when ordering base unit.

#### **Options/Accessories**

#### **Field Installed**

#### **10 Electric Heat**

Electric Heat is CE marked.

Helix wound nichrome elements, individual element limit controls, wiring harness. Unit fuse block is furnished as standard.

**ECONOMIZER OPTIONS**

**Factory or Field Installed**

**11 Economizer (Standard and High Performance Common Features)**

Outdoor Air Hood is furnished.

Factory installed Economizer can be ordered with two exhaust options:

- Barometric Relief Dampers and Exhaust Hood.
- No Exhaust.

Field installed Economizer includes Barometric Relief Dampers with Exhaust Hood.

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

Occupied/Unoccupied mode with field furnished setback thermostat.

Demand Control Ventilation (DCV) ready using optional CO<sub>2</sub> sensors.

Mixed Air Sensor is furnished for field installation in the rooftop unit. Sensor is factory installed when Economizers are factory installed.

Single sensible sensor is furnished with Economizer and enables economizer operation if the outdoor temperature is less than the setpoint of the control.

Horizontal Economizer Conversion kit is available for field installation.

**Standard Economizer Features**

Gear-driven action, return air and outdoor air dampers, plug-in connections to unit, neoprene seals, 24-volt, fully-modulating spring return motor.

**Standard Economizer Control Module**

The Standard Economizer Control Module can be adjusted to operate based on outdoor air temperatures.



**Economizer Controls:**

- Damper Minimum Position - Can be set lower than traditional minimum air requirements resulting in cost savings.
- IAQ Sensor - Signals dampers to modulate and maintain 13°C when CO<sub>2</sub> is higher than the CO<sub>2</sub> setpoint.
- Demand Control Ventilation (DCV) LED - A steady green Demand Control Ventilation LED indicates the IAQ reading is higher than setpoint and requires more fresh air.
- Free Cool LED - A steady green LED indicates outdoor air is suitable for free cooling.

Free Cooling runs when outdoor air temperature is lower than the set temperature on the economizer control.

*NOTE: The Free Cooling default setting for outdoor air temperature sensor is 13°C.*

**High Performance Economizer Features**

Gear-driven action, high torque 24-volt fully-modulating spring return damper motor, return air and outdoor air dampers, plug-in connections to unit, nylon bearings, enhanced neoprene blade edge seals and flexible stainless steel jamb seals to minimize air leakage.

**High Performance Economizer Control Module**

Module provides inputs and outputs to control economizer based on parameter settings.



Module automatically detects sensors by polling to determine which sensors are installed in system.

Module displays any alarm messages (fault detection and diagnostics) as an aid in troubleshooting.

Non-volatile memory retains parameter settings in case of power failure.

Keypad with four navigation buttons and LCD screen is furnished for setting economizer parameters.

- Menu Up/Exit (↑) button returns to the main menu.
- Arrow Up (▲) button moves to the previous or next parameter within the selected menu.
- Arrow Down (▼) button moves to the next parameter within the selected menu.
- Select (enter) (↵) button confirms parameter selection.

**Main Menu Structure:**

- STATUS (economizer and system operation status)
- SETPOINTS (settings for various setpoint parameters)
- SYSTEM SETUP (settings/information about the system)
- ADVANCED SETUP (freeze protection, CO<sub>2</sub> settings, stage 3 delay and additional calibration settings)
- CHECKOUT (damper positions)
- ALARMS (output signal that can be configured for remote alarm monitoring)

Refer to Installation Instructions for complete setup information and menu parameters available.

### **ECONOMIZER OPTIONS** **(continued)**

#### **Factory or Field Installed**

##### **Single Enthalpy Temperature Control**

Outdoor air enthalpy sensor enables Economizer if the outdoor enthalpy is less than the setpoint of the control.

#### **Field Installed**

##### **Differential Enthalpy Control**

Order two Single Enthalpy Controls. 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 enthalpy.

##### **Horizontal Economizer Conversion Kit**

Insulated panel covers the bottom return air opening on the unit base to convert downflow Economizer to horizontal airflow.

### **EXHAUST OPTIONS**

#### **Field Installed**

##### **12 Power Exhaust Fan**

Installs internal to unit for downflow 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.

Fan is 406 mm diameter with 4 fan blades and a 0.25 kW motor.

*NOTE - If Power Exhaust is field installed with a factory installed Economizer, the Economizer must be ordered with the "No Exhaust" option and the Barometric Relief Dampers with Exhaust Hood must also be ordered separately for field installation.*

### **OUTDOOR AIR OPTIONS**

#### **Factory or Field Installed**

##### **Outdoor Air Dampers - Downflow or Horizontal**

Single blade damper, 0 to 25% (fixed) outdoor air adjustable, installs in unit.

Automatic model features fully modulating spring return damper motor with plug-in connection.

Manual model features a slide damper. Maximum mixed air temperature in cooling mode: 38°C.

Outdoor Air Hood is furnished.

### **ROOF CURBS**

Nailer strip furnished, mates to unit, US National Roofing Contractors Approved, shipped knocked down.

##### **Hybrid Roof Curbs, Downflow**

Roof curb can be assembled using interlocking tabs to fasten corners together. No tools required.

Curb can also be fastened together with furnished hardware.

Available in 203, 356, 457, and 610 mm heights.

##### **Adjustable Pitch Curb**

Fully adjustable pitch curb provides a level platform for rooftop units allowing flexible installations on roofs with uneven or sloped angles.

Maximum slope is 19 mm per 300 mm in any direction.

Uses interlocking tabs to fasten corners together. No tools required.

Hardware is furnished to connect upper curb with lower curb.

Available in 356 mm height.

##### **Adaptor Curbs (not shown)**

Curbs are regionally sourced. Dimensions will vary based upon the source. Contact your local sales representative for a detailed cut sheet with applicable dimensions.

### **CEILING DIFFUSERS**

##### **Ceiling Diffusers (Flush and Step-Down)**

Diffuser face and grilles with white powder coat finish, insulated (UL listed duct liner), diffuser box with collars for duct connection, fixed blades (flush diffusers) and double deflection blades (step-down diffusers), provisions for suspending, internally sealed (prevents recirculation), removable return air grille, 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.

## OPTIONS / ACCESSORIES

Item	Model No.	Catalog No.	Unit Model Number			
			KCA 036	KCA 048	KCA 060	KCA 072
<b>COOLING SYSTEM</b>						
Compressor Crankcase Heater	380/420V-3ph - K1CCHT012A-2G	<b>14D87</b>	X	X		
	380/420V-3ph - T1CCHT01AN2G	<b>14D84</b>			X	
Condensate Drain Trap	Polyvinyl Chloride (PVC) - C1TRAP20AD2	<b>76W26</b>	X	X	X	X
	Copper - C1TRAP10AD2	<b>76W27</b>	X	X	X	X
Drain Pan Overflow Switch	K1SNSR71AB1-	<b>74W42</b>	X	X	X	X
Low Ambient Kit	K1SNSR33AN2	<b>14D89</b>	X	X	X	X
Efficiency		Standard	O	O	O	O
Refrigerant Type		R-410A	O	O	O	O
<b>BLOWER - SUPPLY AIR</b>						
Motors	Belt Drive - 1.5 kW Standard Efficiency	Factory	O	O	O	<sup>1</sup> O
Drive Kits See Blower Data Tables for selection	Kit A01 - T1DRKT001-1 - 561 - 842 rev/min	Factory	O			
	Kit A02 - T1DRKT002-1 - 621 - 931 rev/min	Factory		O		
	Kit A03 - T1DRKT003-1 - 694 - 1042 rev/min	Factory			O	
	Kit A04 - T1DRKT004-1 - 804-1117 rev/min	Factory				<sup>1</sup> O
	Kit A05 - T1DRKT005-1 - 748 - 1122 rev/min	Factory	O			
	Kit A06 - T1DRKT006-1 - 893 - 1191 rev/min	Factory		O		
	Kit A07 - T1DRKT007-1 - 1010 - 1290 rev/min	Factory			O	
	Kit A08 - T1DRKT008-1 - 994 - 1326 rev/min	Factory				<sup>1</sup> O
	Kit A09 - T1DRKT009-1 - 1193 - 1594 rev/min	Factory				<sup>1</sup> O
	Kit AA02 - T1DRKT002AP1 - 527 -729 rev/min	Factory				<sup>2</sup> O
Kit AA03 - T1DRKT003AP1 - 665 - 921 rev/min	Factory				<sup>2</sup> O	
Kit AA04 - T1DRKT004AP1 - 768 - 1023 rev/min	Factory				<sup>2</sup> O	
<b>CABINET</b>						
Hinged Access Panels		Factory	O	O	O	O
Combination Coil/Hail Guards	C1GARD51A-1	<b>13R98</b>	X	X	X	
	C1GARD51AT1	<b>13T03</b>				X
Corrosion Protection		Factory	O	O	O	O
<b>CONTROLS</b>						
BACnet®	K0CTRL31A-2	<b>16X70</b>	OX	OX	OX	OX
BACnet® Thermostat with Display	K0SNSR01FF1	<b>97W23</b>	X	X	X	X
BACnet® Thermostat without Display	K0SNSR00FF1	<b>97W24</b>	X	X	X	X
Novar® 2051	K0CTRL30A-1	<b>96W11</b>	OX	OX	OX	
	K0CTRL30AP1	<b>12B98</b>				OX
Plenum Cable - 23 m	K0MISC00FF1	<b>97W25</b>	X	X	X	X
Smoke Detector - Supply or Return (Power board and one sensor)	C1SNSR44AP1	<b>53W78</b>	X	X	X	X
Smoke Detector - Supply and Return (Power board and two sensors)	C1SNSR43AP1	<b>53W79</b>	X	X	X	X

<sup>1</sup> 072S Single Speed Belt Drive models only.

<sup>2</sup> 072H Single Speed Belt Drive.

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

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

O - Configure to Order (Factory Installed)

X - Field Installed.

## OPTIONS / ACCESSORIES

Item	Model No.	Catalog No.	Unit Model Number			
			KCA 036	KCA 048	KCA 060	KCA 072
<b>ECONOMIZER</b>						
<b>Standard Economizer With Outdoor Air Hood (Sensible Control)</b>						
Standard Economizer - Includes Barometric Relief Dampers and Exhaust Hood	K1ECON30A-3-	14D90	OX	OX	OX	OX
Standard Economizer - No Exhaust		Factory	O	O	O	O
<b>Standard Economizer Controls</b>						
Single Enthalpy Control	C1SNSR64FF1	53W64	OX	OX	OX	OX
Differential Enthalpy Control (order 2)	C1SNSR64FF1	53W64	X	X	X	X
<b>High Performance Economizer With Outdoor Air Hood</b>						
High Performance Economizer - Includes Barometric Relief Dampers and Exhaust Hood	K1ECON32A-3	16X75	OX	OX	OX	OX
<b>High Performance Economizer Controls</b>						
Single Enthalpy Control	C1SNSR60FF1	10Z75	OX	OX	OX	OX
Differential Enthalpy Control (order 2)	C1SNSR60FF1	10Z75	X	X	X	X
<b>Economizer Accessories</b>						
Horizontal Economizer Conversion Kit	T1HECK00AN1	17W45	X	X	X	X
<b>OUTDOOR AIR</b>						
<b>Outdoor Air Dampers With Outdoor Air Hood</b>						
Motorized	C1DAMP21A-1	15D17	OX	OX	OX	OX
Manual	C1DAMP11A-2	15D18	OX	OX	OX	OX
<b>POWER EXHAUST FAN</b>						
Standard Static <i>NOTE - Order Barometric Relief Dampers with Exhaust Hood below if unit is ordered with factory installed Standard Economizer with "No Exhaust" option</i>	380/420V-3ph - C1PWRE10A-1M	79W93	X	X	X	X
<b><sup>1</sup> BAROMETRIC RELIEF</b>						
Barometric Relief Dampers with Exhaust Hood	C1DAMP50A-1-	74W38	X	X	X	X
<b>ELECTRICAL</b>						
Voltage 50 hz with neutral	380/420V - 3 phase		O	O	O	O
<b><sup>2</sup> ELECTRIC HEAT</b>						
5.7 kW	K1EH0057AN1M	67W92	X	X	X	X
11.5 kW	K1EH0115AN1M	67W93	X	X	X	X
17.2 kW	K1EH0172AN1M	67W94			X	X
23 kW	K1EH0230N-1M	67W95				X

<sup>1</sup> Required when Economizer is factory installed (no exhaust option) with field installed Power Exhaust Fan option.

<sup>2</sup> Nominal kW at 420V-3ph-50hz.

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## OPTIONS / ACCESSORIES

Item	Model No.	Catalog No.	Unit Model Number			
			KCA 036	KCA 048	KCA 060	KCA 072
<b>INDOOR AIR QUALITY</b>						
<b>Air Filters</b>						
Healthy Climate® High Efficiency Air Filters Order 4 per unit	MERV 8 (406 x 508 x 51) - C1FLTR15A-1-	<b>54W20</b>	X	X	X	
	MERV 13 (406 x 508 x 51) - T1FLTR40A-1-	<b>52W37</b>	X	X	X	
	MERV 8 (508 x 508 x 51) - C1FLTR15D-1-	<b>54W21</b>				X
	MERV 13 (508 x 508 x 51) - C1FLTR40D-1-	<b>52W39</b>				X
<b>Indoor Air Quality (CO<sub>2</sub>) Sensors</b>						
Sensor - Wall-mount, off-white plastic cover with LCD display	C0SNSR50AE1L	<b>77N39</b>	X	X	X	X
Sensor - Wall-mount, black plastic case, no display, rated for plenum mounting	C0SNSR53AE1L	<b>87N54</b>	X	X	X	X
CO <sub>2</sub> Sensor Duct Mounting Kit - for downflow applications	C0MISC19AE1-	<b>85L43</b>	X	X	X	X
Aspiration Box - for duct mounting non-plenum rated CO <sub>2</sub> sensor ( <b>77N39</b> )	C0MISC16AE1-	<b>90N43</b>	X	X	X	X
<b>UVC Germicidal Lamps</b>						
<sup>1</sup> Healthy Climate® UVC Light Kit (220V-1ph)	E1UVCL10AN1-	<b>50W90</b>	X	X	X	X
<b>ROOF CURBS</b>						
<b>Hybrid Roof Curbs, Downflow</b>						
203 mm height	C1CURB70A-1	<b>11F50</b>	X	X	X	X
356 mm height	C1CURB71A-1	<b>11F51</b>	X	X	X	X
457 mm height	C1CURB72A-1	<b>11F52</b>	X	X	X	X
610 mm height	C1CURB73A-1	<b>11F53</b>	X	X	X	X
<b>Adjustable Pitch Curb, Downflow</b>						
356 mm height	C1CURB55AT1	<b>43W27</b>	X	X	X	X
<b>CEILING DIFFUSERS</b>						
Step-Down - Order one	RTD9-65S	<b>13K60</b>	X	X	X	
	RTD11-95S	<b>13K61</b>				X
Flush - Order one	FD9-65S	<b>13K55</b>	X	X	X	
	FD11-95S	<b>13K56</b>				X
Transitions (Supply and Return) - Order one	T1TRAN10AN1	<b>17W53</b>	X	X	X	
	T1TRAN20N-1	<b>17W54</b>				X

<sup>1</sup> Lamps operate on 110-230V single-phase power supply. Step-down transformer may be ordered separately for 380/420V primary to 220V secondary units. Alternately, 220V power supply may be used to directly power the UVC ballast(s).

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

OX - Field Installed or Configure to Order (Factory installed)

O - Configure to Order (Factory Installed)

X - Field Installed.

<b>SPECIFICATIONS</b>		<b>10.5 - 21 kW</b>				
<b>General Data</b>		<b>Nominal Size</b>	<b>10.5 kW (3 Ton)</b>	<b>14.0 kW (4 Ton)</b>	<b>17.5 kW (5 Ton)</b>	<b>21 kW (6 Ton)</b>
		<b>Model No.</b>	<b>KCA036S4B</b>	<b>KCA048S4B</b>	<b>KCA060S4B</b>	<b>KCA072S4B</b>
		<b>Efficiency Type</b>	<b>Standard</b>	<b>Standard</b>	<b>Standard</b>	<b>Standard</b>
		<b>Blower Type</b>	Single Speed Belt Drive	Single Speed Belt Drive	Single Speed Belt Drive	Single Speed Belt Drive
<b>Cooling Performance</b>	Gross Cooling Capacity - kW (Btuh)		9.5 (32 500)	12.7 (43 300)	15.8 (53 900)	18.4 (62 500)
	<sup>1</sup> Net Cooling Capacity - kW (Btuh)		9.1 (31 000)	12.1 (41 200)	15.0 (51 100)	17.4 (59 400)
	Rated Air Flow - L/s (cfm)		565 (1200)	755 (1600)	850 (1800)	1156 (2450)
	<sup>3</sup> Sound Rating Number (dB)		75	75	82	79
	Total Unit Power - kW		3	3.9	4.7	5.2
	<sup>1</sup> SEER (Btuh/Watt)		13.0	13.0	13.0	11.3
	<sup>1</sup> EER (Btuh/Watt) at 35°C (95°F)		10.9	11.1	11.3	8.3
	<sup>2</sup> EER (Btuh/Watt) at 46°C (115°F)		8.5	8.7	9.6	12.3
<b>Refrigerant</b>	Type		R-410A	R-410A	R-410A	R-410A
	Charge Furnished		3.52 kg (7 lbs. 12 oz.)	3.97 kg (8 lbs. 12 oz.)	5.67 kg (12 lbs. 8 oz.)	3.20 kg (7 lbs. 1 oz.)
<b>Compressor Type (one per unit)</b>			Scroll	Scroll	Scroll	Scroll
<b>Outdoor Coil</b>	Net face area - m <sup>2</sup> (sq. ft.)		1.45 (15.6)	1.45 (15.6)	1.45 (15.6)	1.65 (17.8)
	Tube diameter - mm (in.)		9.5 (3/8)	9.5 (3/8)	9.5 (3/8)	1
	Number of rows		1	1.5	2	---
	Fins per meter (Fins per inch)		788 (20)	788 (20)	788 (20)	905 (23)
<b>Outdoor Coil Fan</b>	Motor W (hp)		187 (1/4)	187 (1/4)	249 (1/3)	249 (1/3)
	Motor rev/min		690	690	900	900
	Total motor watts		190	190	280	280
	Diameter - mm (in.) / No. of blades		610 (24) - 3	610 (24) - 3	610 (24) - 3	610 (24) - 3
	Total air volume - L/s (cfm)		1465 (3100)	1370 (2900)	1700 (3600)	1850 (3920)
<b>Indoor Coil</b>	Net face area - m <sup>2</sup> (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	4
	Fins per meter (Fins per inch)		551 (14)	551 (14)	551 (14)	551 (14)
	Drain Connection (no. and size) - in.		(1) 1 NPT	(1) 1 NPT	(1) 1 NPT	(1) 1 NPT
	Expansion device type		Refrigerant Metering Orifice (RFC)			
<sup>4</sup> <b>Indoor Blower &amp; Drive Selection</b>	Nominal Motor Size kW (HP)		1.5 (2)	1.5 (2)	1.5 (2)	1.5 (2)
	Maximum Usable Motor Size kW (HP)		1.7 (2.3)	1.7 (2.3)	1.7 (2.3)	1.7 (2.3)
	Drive Kit (rev/min range)		A01 - (561 - 842) A05 - (748 - 1122)	A02 - (621 - 931) A06 - (893 - 1191)	A03 (694 - 1042) A07 (1010 - 1290)	A08 (994 - 1326) A09 (1193 - 1594)
	Wheel nominal diameter x width - mm (in.)		254 x 254 (10 x 10)	254 x 254 (10 x 10)	254 x 254 (10 x 10)	254 x 254 (10 x 10)
<b>Filters</b>	Type		Disposable	Disposable	Disposable	Disposable
	Number and size - mm (in.)		(4) 406 x 508 x 51 (16 x 20 x 2)	(4) 406 x 508 x 51 (16 x 20 x 2)	(4) 406 x 508 x 51 (16 x 20 x 2)	(4) 508 x 508 x 51 (20 x 20 x 2)
<b>Electrical Characteristics - 50 Hz</b>			380/420V - 50 hertz - 3 phase with neutral			

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

<sup>1</sup> Tested at conditions which are based on AHRI Standard 210/240; 35°C (95°F) outdoor air temperature and 27°C (80°F) dry bulb/19°C (67°F) wet bulb entering evaporator air; minimum external duct static pressure while operating at rated voltage and air volumes.

<sup>2</sup> Rated at 46°C (115°F) outdoor air temperature and 27°C (80°F) db/19°C (67°F) wb entering evaporator air (T3 Conditions).

<sup>3</sup> Sound Rating Number rated in accordance with test conditions included in AHRI Standard 270.

<sup>4</sup> 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.

# 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 - KCA036S4

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		26.7°C					35°C					43.3°C					46°C				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
L/s	kW	kW	24°C	27°C	29°C	kW	kW	24°C	27°C	29°C	kW	kW	24°C	27°C	29°C	kW	kW	24°C	27°C	29°C	
17.2°C	455	9.4	1.82	0.78	0.91	1	8.5	2.21	0.8	0.94	1	7.6	2.68	0.83	0.98	1	7.2	2.87	0.8	0.98	1
	565	9.9	1.83	0.84	0.98	1	9	2.22	0.85	1	1	8.1	2.7	0.89	1	1	7.8	2.87	0.88	1	1
	680	10.4	1.84	0.88	1	1	9.5	2.23	0.91	1	1	8.6	2.71	0.95	1	1	8.2	2.89	0.95	1	1
19.4°C	455	10	1.83	0.61	0.75	0.89	9.1	2.22	0.61	0.77	0.91	8.1	2.7	0.62	0.8	0.95	7.7	2.87	0.6	0.78	0.95
	565	10.5	1.84	0.65	0.82	0.95	9.5	2.23	0.66	0.84	0.98	8.5	2.7	0.67	0.87	1	8.1	2.88	0.65	0.86	1
	680	10.8	1.85	0.68	0.87	1	9.8	2.24	0.7	0.9	1	8.8	2.71	0.72	0.93	1	8.4	2.89	0.7	0.93	1
21.7°C	455	10.5	1.84	0.45	0.6	0.73	9.6	2.23	0.45	0.61	0.75	8.6	2.71	0.44	0.61	0.78	8.2	2.89	0.42	0.6	0.76
	565	11	1.86	0.48	0.64	0.8	10.1	2.25	0.46	0.65	0.82	9	2.72	0.46	0.66	0.86	8.6	2.89	0.45	0.65	0.84
	680	11.4	1.87	0.49	0.67	0.85	10.4	2.25	0.48	0.69	0.88	9.3	2.73	0.49	0.71	0.92	8.9	2.9	0.48	0.7	0.91
Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		48°C					50°C					51.7°C									
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)							
				Dry Bulb					Dry Bulb					Dry Bulb							
L/s	kW	kW	24°C	27°C	29°C	kW	kW	24°C	27°C	29°C	kW	kW	24°C	27°C	29°C						
17.2°C	455	7	3.01	0.84	1	1	6.7	3.17	0.86	1	1	6.5	3.31	0.87	1	1					
	565	7.5	3.02	0.91	1	1	7.3	3.17	0.93	1	1	7.1	3.32	0.94	1	1					
	680	8	3.03	0.97	1	1	7.7	3.19	0.99	1	1	7.5	3.33	0.99	1	1					
19.4°C	455	7.4	3.02	0.62	0.82	0.97	7.2	3.17	0.62	0.83	0.98	6.9	3.31	0.63	0.85	0.99					
	565	7.8	3.03	0.68	0.9	1	7.5	3.18	0.69	0.91	1	7.3	3.32	0.69	0.92	1					
	680	8.1	3.03	0.73	0.96	1	7.8	3.19	0.74	0.97	1	7.5	3.33	0.75	0.98	1					
21.7°C	455	7.9	3.03	0.43	0.62	0.8	7.6	3.18	0.43	0.62	0.8	7.4	3.32	0.43	0.62	0.82					
	565	8.3	3.04	0.45	0.68	0.88	8	3.19	0.45	0.68	0.89	7.7	3.33	0.45	0.69	0.9					
	680	8.6	3.05	0.48	0.73	0.94	8.3	3.2	0.49	0.74	0.96	8	3.34	0.49	0.75	0.96					

## RATINGS

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

### 14 KW - KCA048S4

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		26.7°C					35°C					43.3°C					46°C				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
L/s	kW	kW	24°C	27°C	29°C	kW	kW	24°C	27°C	29°C	kW	kW	24°C	27°C	29°C	kW	kW	24°C	27°C	29°C	
17.2°C	605	12.7	2.34	0.77	0.91	1	11.3	2.85	0.79	0.94	1	10	3.43	0.81	0.98	1	9.5	3.64	0.79	0.98	1
	755	13.4	2.34	0.83	0.98	1	12	2.86	0.85	1	1	10.7	3.46	0.88	1	1	10.3	3.67	0.88	1	1
	905	14	2.35	0.87	1	1	12.7	2.88	0.91	1	1	11.3	3.47	0.95	1	1	10.8	3.69	0.95	1	1
19.4°C	605	13.4	2.34	0.6	0.75	0.88	12.1	2.87	0.6	0.77	0.91	10.7	3.46	0.6	0.79	0.95	10.2	3.66	0.59	0.77	0.96
	755	14.1	2.35	0.64	0.81	0.95	12.7	2.88	0.64	0.84	0.98	11.2	3.47	0.65	0.87	1	10.7	3.68	0.64	0.86	1
	905	14.7	2.35	0.68	0.86	1	13.1	2.89	0.69	0.89	1	11.6	3.49	0.7	0.93	1	11.1	3.7	0.69	0.94	1
21.7°C	605	14.2	2.35	0.44	0.59	0.72	12.8	2.88	0.43	0.59	0.75	11.3	3.48	0.41	0.6	0.77	10.8	3.68	0.41	0.59	0.76
	755	14.9	2.35	0.47	0.63	0.79	13.5	2.9	0.46	0.64	0.82	11.8	3.49	0.43	0.65	0.85	11.4	3.7	0.43	0.64	0.84
	905	15.4	2.35	0.48	0.67	0.85	13.9	2.9	0.48	0.68	0.88	12.3	3.51	0.47	0.7	0.91	11.7	3.72	0.46	0.69	0.92
Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		48°C					50°C					51.7°C									
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)							
				Dry Bulb					Dry Bulb					Dry Bulb							
L/s	kW	kW	24°C	27°C	29°C	kW	kW	24°C	27°C	29°C	kW	kW	24°C	27°C	29°C						
17.2°C	605	9.2	3.82	0.83	1	1	8.8	4	0.84	1	1	8.6	4.16	0.85	1	1					
	755	9.9	3.84	0.9	1	1	9.6	4.02	0.92	1	1	9.3	4.18	0.93	1	1					
	905	10.5	3.86	0.97	1	1	10.1	4.04	0.98	1	1	9.8	4.2	0.99	1	1					
19.4°C	605	9.8	3.84	0.6	0.81	0.97	9.5	4.02	0.61	0.82	0.98	9.1	4.18	0.61	0.83	0.99					
	755	10.3	3.85	0.66	0.89	1	9.9	4.03	0.67	0.9	1	9.5	4.19	0.67	0.91	1					
	905	10.7	3.87	0.72	0.96	1	10.3	4.04	0.72	0.97	1	9.9	4.21	0.73	0.98	1					
21.7°C	605	10.5	3.86	0.41	0.6	0.79	10.1	4.03	0.4	0.6	0.8	9.7	4.19	0.4	0.61	0.8					
	755	11	3.88	0.44	0.66	0.87	10.6	4.05	0.43	0.67	0.88	10.2	4.21	0.43	0.67	0.9					
	905	11.3	3.89	0.46	0.72	0.94	10.9	4.06	0.46	0.72	0.96	10.5	4.22	0.46	0.73	0.97					

# 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 KW - KCA060S4

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		26.7°C					35°C					43.3°C					46°C				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
L/s	kW	kW	24°C	27°C	29°C	kW	kW	24°C	27°C	29°C	kW	kW	24°C	27°C	29°C	kW	kW	24°C	27°C	29°C	
17.2°C	755	15.9	2.72	0.72	0.9	1	14.6	3.26	0.74	0.94	1	13.2	3.92	0.76	1	1	12.8	4.16	0.82	1	1
	945	16.6	2.74	0.78	1	1	15.4	3.29	0.81	1	1	14.1	3.96	0.87	1	1	13.7	4.2	0.92	1	1
	1135	17.5	2.77	0.86	1	1	16.1	3.32	0.91	1	1	14.8	3.99	0.98	1	1	14.3	4.23	1	1	1
19.4°C	755	16.9	2.75	0.56	0.7	0.85	15.5	3.29	0.57	0.72	0.9	14	3.96	0.57	0.74	0.96	13.5	4.19	0.61	0.8	0.99
	945	17.5	2.77	0.59	0.76	0.97	16.1	3.32	0.61	0.79	1	14.6	3.98	0.62	0.84	1	14.1	4.22	0.67	0.9	1
	1135	18	2.79	0.63	0.83	1	16.5	3.34	0.65	0.88	1	15	3.99	0.67	0.95	1	14.4	4.23	0.72	0.99	1
21.7°C	755	17.8	2.79	0.42	0.55	0.67	16.4	3.33	0.41	0.56	0.7	14.9	3.99	0.41	0.57	0.72	14.4	4.23	0.42	0.6	0.78
	945	18.5	2.81	0.43	0.58	0.74	17	3.36	0.44	0.6	0.76	15.4	4.02	0.43	0.63	0.81	14.8	4.25	0.45	0.66	0.88
	1135	19	2.83	0.45	0.63	0.81	17.4	3.37	0.45	0.64	0.86	15.8	4.03	0.46	0.67	0.93	15.2	4.26	0.48	0.72	0.97

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil														
		48°C					50°C					51.7°C				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb		
L/s	kW	kW	24°C	27°C	29°C	kW	kW	24°C	27°C	29°C	kW	kW	24°C	27°C	29°C	
17.2°C	755	12.5	4.36	0.79	1	1	12.2	4.57	0.8	1	1	11.9	4.76	0.81	1	1
	945	13.3	4.4	0.91	1	1	13	4.6	0.93	1	1	12.6	4.78	0.95	1	1
	1135	14	4.43	1	1	1	13.6	4.63	1	1	1	13.2	4.81	1	1	1
19.4°C	755	13.2	4.39	0.59	0.76	1	12.8	4.59	0.6	0.78	1	12.4	4.76	0.6	0.78	1
	945	13.7	4.41	0.64	0.88	1	13.2	4.61	0.65	0.91	1	12.8	4.79	0.65	0.92	1
	1135	14	4.42	0.7	0.99	1	13.6	4.63	0.71	1	1	13.2	4.8	0.72	1	1
21.7°C	755	14	4.43	0.42	0.57	0.74	13.5	4.63	0.41	0.59	0.76	13.1	4.8	0.42	0.6	0.77
	945	14.4	4.44	0.43	0.64	0.86	14	4.64	0.45	0.64	0.88	13.6	4.82	0.45	0.65	0.9
	1135	14.8	4.46	0.46	0.7	0.98	14.3	4.66	0.47	0.71	0.99	13.9	4.84	0.47	0.72	1

## RATINGS

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

### 21 KW - KCA072S4

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		26.7°C					35°C					43.3°C					46°C				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
L/s	kW	kW	24°C	27°C	29°C	kW	kW	24°C	27°C	29°C	kW	kW	24°C	27°C	29°C	kW	kW	24°C	27°C	29°C	
17.2°C	905	18.5	3.39	0.77	0.93	1	16.4	4	0.8	0.97	1	14.2	4.76	0.84	1	1	13.6	5.05	0.84	1	1
	1135	19.5	3.42	0.84	1	1	17.5	4.04	0.88	1	1	15.4	4.81	0.92	1	1	14.7	5.1	0.94	1	1
	1360	20.6	3.46	0.91	1	1	18.4	4.08	0.94	1	1	16.2	4.85	1	1	1	15.5	5.14	1	1	1
19.4°C	905	19.8	3.43	0.6	0.75	0.9	17.5	4.04	0.61	0.78	0.94	15.2	4.81	0.61	0.81	0.99	14.5	5.09	0.61	0.82	1
	1135	20.7	3.46	0.64	0.82	0.98	18.3	4.07	0.66	0.86	1	15.8	4.84	0.67	0.9	1	15.1	5.12	0.68	0.92	1
	1360	21.3	3.49	0.68	0.89	1	18.8	4.1	0.7	0.93	1	16.3	4.86	0.74	0.98	1	15.6	5.14	0.74	1	1
21.7°C	905	21	3.47	0.44	0.56	0.73	18.7	4.09	0.44	0.6	0.76	16.3	4.85	0.42	0.61	0.79	15.5	5.14	0.41	0.6	0.79
	1135	22	3.51	0.46	0.64	0.8	19.5	4.13	0.45	0.65	0.84	16.9	4.89	0.44	0.67	0.89	16.1	5.17	0.44	0.67	0.9
	1360	22.7	3.54	0.48	0.68	0.87	20	4.15	0.48	0.7	0.91	17.4	4.91	0.48	0.74	0.97	16.6	5.19	0.48	0.74	0.99
Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		48°C					50°C					51.7°C									
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)							
				Dry Bulb					Dry Bulb					Dry Bulb							
L/s	kW	kW	24°C	27°C	29°C	kW	kW	24°C	27°C	29°C	kW	kW	24°C	27°C	29°C	kW	kW	24°C	27°C	29°C	
17.2°C	905	13.2	5.29	0.86	1	1	12.7	5.54	0.87	1	1	12.3	5.78	0.88	1	1					
	1135	14.2	5.33	0.96	1	1	13.7	5.59	0.98	1	1	13.3	5.82	0.99	1	1					
	1360	14.9	5.37	1	1	1	14.4	5.63	1	1	1	14	5.86	1	1	1					
19.4°C	905	14	5.33	0.62	0.84	1	13.4	5.57	0.62	0.86	1	12.9	5.8	0.62	0.87	1					
	1135	14.5	5.35	0.69	0.94	1	14	5.6	0.7	0.96	1	13.5	5.83	0.71	0.97	1					
	1360	15	5.37	0.76	1	1	14.4	5.62	0.77	1	1	14	5.85	0.78	1	1					
21.7°C	905	15	5.37	0.4	0.62	0.82	14.4	5.62	0.41	0.63	0.83	13.8	5.85	0.41	0.62	0.85					
	1135	15.6	5.4	0.45	0.69	0.93	15	5.65	0.45	0.7	0.94	14.4	5.88	0.45	0.71	0.95					
	1360	16	5.43	0.48	0.76	1	15.3	5.68	0.48	0.77	1	14.8	5.9	0.48	0.78	1					

## BLOWER DATA - BELT DRIVE - KCAO36 - DOWNFLOW

**BLOWER TABLE INCLUDES RESISTANCE FOR BASE UNIT ONLY WITH DRY INDOOR COIL AND AIR FILTERS IN PLACE.**

FOR ALL UNITS ADD:

- 1 - Any factory installed options air resistance (heat section, economizer, etc.).
- 2 - Any field installed accessories air resistance (duct resistance, diffuser, etc.).

See page 24 for blower motors and drives and wet coil and options/accessory air resistance data.

Air Volume		External Static - Pa (in. w.g.)																											
		25 (0.10)		50 (0.20)		75 (0.30)		100 (0.40)		125 (0.50)		150 (0.60)		175 (0.70)		200 (0.80)													
L/s	cfm	Rev/ min	BHP	kW	BHP	Rev/ min	BHP	kW	BHP	Rev/ min	BHP	kW	BHP	Rev/ min	BHP	kW	BHP	Rev/ min	BHP	kW	BHP								
425	900	486	0.09	0.12	0.16	623	0.15	0.20	0.22	695	0.16	0.22	0.24	767	0.17	0.23	0.25	836	0.19	0.25	0.28	897	0.21	0.28	0.30	953	0.22	0.30	0.33
472	1000	508	0.11	0.15	0.19	643	0.16	0.22	0.24	713	0.18	0.24	0.26	783	0.19	0.26	0.28	848	0.21	0.28	0.30	907	0.22	0.30	0.30	961	0.25	0.33	0.36
519	1100	533	0.13	0.18	0.22	665	0.19	0.25	0.27	733	0.20	0.27	0.28	800	0.21	0.28	0.31	863	0.23	0.31	0.31	919	0.25	0.34	0.34	971	0.27	0.36	0.40
566	1200	560	0.16	0.21	0.25	689	0.21	0.28	0.30	755	0.22	0.30	0.32	820	0.24	0.32	0.34	879	0.25	0.34	0.34	932	0.28	0.37	0.37	983	0.30	0.40	0.44
613	1300	591	0.18	0.24	0.28	716	0.23	0.31	0.33	779	0.25	0.33	0.35	841	0.26	0.35	0.38	897	0.28	0.38	0.38	948	0.31	0.41	0.41	996	0.33	0.44	0.49
661	1400	631	0.19	0.26	0.30	748	0.25	0.34	0.36	807	0.27	0.36	0.39	864	0.29	0.39	0.42	916	0.31	0.42	0.42	964	0.34	0.46	0.46	1011	0.37	0.49	0.54
708	1500	676	0.21	0.28	0.33	782	0.27	0.36	0.40	835	0.30	0.40	0.43	887	0.32	0.43	0.47	935	0.35	0.47	0.47	981	0.37	0.50	0.50	1028	0.40	0.54	0.59

Air Volume		External Static - Pa (in. w.g.)																											
		225 (0.90)		250 (1.00)		275 (1.10)		300 (1.20)		325 (1.30)		350 (1.40)		375 (1.50)		400 (1.60)													
L/s	cfm	Rev/ min	BHP	kW	BHP	Rev/ min	BHP	kW	BHP	Rev/ min	BHP	kW	BHP	Rev/ min	BHP	kW	BHP	Rev/ min	BHP	kW	BHP	Rev/ min	BHP	kW	BHP	Rev/ min	BHP	kW	BHP
425	900	1004	0.25	0.33	0.35	1106	0.28	0.37	0.40	1152	0.30	0.40	0.43	1193	0.32	0.43	0.46	1232	0.34	0.46	0.46	1269	0.37	0.49	0.49	1305	0.39	0.52	0.56
472	1000	1011	0.27	0.36	0.38	1111	0.31	0.41	0.43	1157	0.32	0.43	0.47	1199	0.35	0.47	0.50	1238	0.37	0.50	0.50	1276	0.40	0.53	0.53	1311	0.42	0.56	0.61
519	1100	1020	0.29	0.39	0.41	1118	0.33	0.44	0.47	1163	0.35	0.47	0.51	1206	0.38	0.51	0.54	1245	0.40	0.54	0.54	1282	0.43	0.58	0.58	1318	0.46	0.61	0.66
566	1200	1031	0.32	0.43	0.45	1127	0.36	0.48	0.52	1171	0.39	0.52	0.55	1213	0.41	0.55	0.59	1252	0.44	0.59	0.59	1289	0.46	0.62	0.62	1324	0.49	0.66	0.71
613	1300	1044	0.35	0.47	0.49	1137	0.40	0.53	0.56	1181	0.42	0.56	0.60	1221	0.45	0.60	0.64	1259	0.48	0.64	0.64	1296	0.51	0.68	0.68	1330	0.53	0.71	0.77
661	1400	1058	0.38	0.51	0.54	1150	0.43	0.57	0.61	1191	0.46	0.61	0.65	1231	0.48	0.65	0.69	1268	0.51	0.69	0.69	1303	0.54	0.73	0.73	1337	0.57	0.77	0.82
708	1500	1074	0.42	0.56	0.59	1163	0.47	0.63	0.67	1203	0.50	0.67	0.71	1241	0.53	0.71	0.75	1277	0.56	0.75	0.75	1312	0.59	0.79	0.79	1345	0.61	0.82	0.87

## BLOWER DATA - BELT DRIVE - KCA036 - HORIZONTAL

**BLOWER TABLE INCLUDES RESISTANCE FOR BASE UNIT ONLY WITH DRY INDOOR COIL AND AIR FILTERS IN PLACE.**

FOR ALL UNITS ADD:

- 1 - Any factory installed options air resistance (heat section, economizer, etc.).
- 2 - Any field installed accessories air resistance (duct resistance, diffuser, etc.).

See page 24 for blower motors and drives and wet coil and options/accessory air resistance data.

Air Volume		External Static - Pa (in. w.g.)																										
		25 (0.10)			50 (0.20)			75 (0.30)			100 (0.40)			125 (0.50)			150 (0.60)			175 (0.70)			200 (0.80)					
L/s	cfm	Rev/min	kW	BHP	Rev/min	kW	BHP	Rev/min	kW	BHP	Rev/min	kW	BHP	Rev/min	kW	BHP	Rev/min	kW	BHP	Rev/min	kW	BHP	Rev/min	kW	BHP			
425	900	485	0.08	0.11	554	0.10	0.13	578	0.12	0.16	627	0.12	0.16	703	0.13	0.18	780	0.16	0.21	841	0.17	0.23	888	0.20	0.27	935	0.22	0.30
472	1000	509	0.10	0.13	578	0.12	0.16	649	0.14	0.19	649	0.14	0.19	722	0.16	0.21	796	0.17	0.23	854	0.19	0.26	900	0.22	0.29	947	0.25	0.33
519	1100	537	0.12	0.16	605	0.14	0.19	674	0.16	0.21	674	0.16	0.21	744	0.18	0.24	813	0.19	0.26	868	0.22	0.29	913	0.25	0.33	959	0.27	0.36
566	1200	567	0.14	0.19	633	0.16	0.22	700	0.18	0.24	700	0.18	0.24	768	0.20	0.27	833	0.22	0.30	884	0.25	0.33	928	0.28	0.37	974	0.30	0.40
613	1300	599	0.16	0.22	664	0.19	0.25	729	0.21	0.28	729	0.21	0.28	793	0.22	0.30	853	0.25	0.33	902	0.28	0.37	945	0.31	0.41	990	0.33	0.44
661	1400	634	0.19	0.26	697	0.22	0.29	758	0.23	0.31	758	0.23	0.31	819	0.25	0.34	875	0.28	0.38	921	0.31	0.42	964	0.34	0.46	1008	0.37	0.49
708	1500	669	0.22	0.30	730	0.25	0.33	789	0.27	0.36	789	0.27	0.36	846	0.29	0.39	897	0.31	0.42	941	0.35	0.47	983	0.38	0.51	1028	0.40	0.54
Air Volume		External Static - Pa (in. w.g.)																										
		225 (0.90)			250 (1.00)			275 (1.10)			300 (1.20)			325 (1.30)			350 (1.40)			375 (1.50)			400 (1.60)					
L/s	cfm	Rev/min	kW	BHP	Rev/min	kW	BHP	Rev/min	kW	BHP	Rev/min	kW	BHP	Rev/min	kW	BHP	Rev/min	kW	BHP	Rev/min	kW	BHP	Rev/min	kW	BHP			
425	900	986	0.24	0.32	1039	0.26	0.35	1090	0.28	0.37	1137	0.30	0.40	1177	0.32	0.43	1214	0.34	0.46	1248	0.37	0.49	1280	0.38	0.51			
472	1000	997	0.26	0.35	1048	0.28	0.38	1098	0.31	0.41	1143	0.33	0.44	1184	0.35	0.47	1221	0.37	0.50	1255	0.40	0.53	1287	0.42	0.56			
519	1100	1008	0.29	0.39	1059	0.31	0.41	1107	0.33	0.44	1150	0.35	0.47	1191	0.38	0.51	1228	0.40	0.54	1263	0.43	0.57	1295	0.45	0.6			
566	1200	1022	0.32	0.43	1071	0.34	0.45	1117	0.36	0.48	1160	0.39	0.52	1200	0.41	0.55	1237	0.44	0.59	1271	0.46	0.62	1303	0.49	0.66			
613	1300	1037	0.35	0.47	1085	0.37	0.50	1130	0.40	0.53	1171	0.43	0.57	1210	0.45	0.60	1246	0.48	0.64	1280	0.51	0.68	1312	0.53	0.71			
661	1400	1054	0.39	0.52	1100	0.40	0.54	1144	0.43	0.58	1183	0.46	0.62	1221	0.49	0.66	1256	0.52	0.70	1290	0.54	0.73	1321	0.57	0.77			
708	1500	1073	0.43	0.57	1117	0.45	0.60	1159	0.48	0.64	1197	0.50	0.67	1234	0.53	0.71	1268	0.56	0.75	1301	0.59	0.79	1332	0.62	0.83			

## BLOWER DATA - BELT DRIVE - KCA048 - DOWNFLOW

BLOWER TABLE INCLUDES RESISTANCE FOR BASE UNIT ONLY WITH DRY INDOOR COIL AND AIR FILTERS IN PLACE.

FOR ALL UNITS ADD:

- 1 - Any factory installed options air resistance (heat section, economizer, etc.).
- 2 - Any field installed accessories air resistance (duct resistance, diffuser, etc.).

See page 24 for blower motors and drives and wet coil and options/accessory air resistance data.

Air Volume		External Static - Pa (in. w.g.)																							
		25 (0.10)		50 (0.20)		75 (0.30)		100 (0.40)		125 (0.50)		150 (0.60)		175 (0.70)		200 (0.80)									
L/s	cfm	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP						
566	1200	560	0.16	0.21	625	0.19	0.25	689	0.21	0.28	755	0.22	0.30	820	0.24	0.32	879	0.25	0.34	932	0.28	0.37	983	0.30	0.40
613	1300	591	0.18	0.24	654	0.21	0.28	716	0.23	0.31	779	0.25	0.33	841	0.26	0.35	897	0.28	0.38	948	0.31	0.41	996	0.33	0.44
661	1400	631	0.19	0.26	690	0.22	0.30	748	0.25	0.34	807	0.27	0.36	864	0.29	0.39	916	0.31	0.42	964	0.34	0.46	1011	0.37	0.49
708	1500	675	0.21	0.28	729	0.25	0.33	782	0.27	0.36	835	0.30	0.40	887	0.32	0.43	935	0.35	0.47	981	0.37	0.50	1028	0.40	0.54
755	1600	718	0.23	0.31	766	0.26	0.35	814	0.30	0.40	862	0.33	0.44	910	0.36	0.48	955	0.39	0.52	1000	0.41	0.55	1046	0.44	0.59
802	1700	756	0.25	0.34	799	0.29	0.39	843	0.33	0.44	887	0.37	0.49	932	0.40	0.53	976	0.43	0.57	1020	0.46	0.61	1066	0.48	0.64
849	1800	787	0.30	0.40	828	0.34	0.45	870	0.37	0.50	912	0.41	0.55	955	0.44	0.59	999	0.47	0.63	1043	0.50	0.67	1089	0.52	0.70
897	1900	815	0.34	0.46	855	0.38	0.51	897	0.43	0.57	939	0.46	0.62	981	0.49	0.66	1024	0.51	0.69	1068	0.54	0.73	1113	0.57	0.76
944	2000	843	0.40	0.53	884	0.44	0.59	925	0.48	0.64	968	0.51	0.68	1009	0.54	0.72	1052	0.57	0.76	1095	0.59	0.79	1138	0.62	0.83

Air Volume		External Static - Pa (in. w.g.)																							
		225 (0.90)		250 (1.00)		275 (1.10)		300 (1.20)		325 (1.30)		350 (1.40)		375 (1.50)		400 (1.60)									
L/s	cfm	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP						
566	1200	1031	0.32	0.43	1079	0.34	0.45	1127	0.36	0.48	1171	0.39	0.52	1213	0.41	0.55	1252	0.44	0.59	1289	0.46	0.62	1324	0.49	0.66
613	1300	1044	0.35	0.47	1091	0.37	0.49	1137	0.40	0.53	1181	0.42	0.56	1221	0.45	0.60	1259	0.48	0.64	1296	0.51	0.68	1330	0.53	0.71
661	1400	1058	0.38	0.51	1105	0.40	0.54	1150	0.43	0.57	1191	0.46	0.61	1231	0.48	0.65	1268	0.51	0.69	1303	0.54	0.73	1337	0.57	0.77
708	1500	1074	0.42	0.56	1120	0.44	0.59	1163	0.47	0.63	1203	0.50	0.67	1241	0.53	0.71	1277	0.56	0.75	1312	0.59	0.79	1345	0.61	0.82
755	1600	1092	0.46	0.61	1137	0.48	0.65	1178	0.51	0.68	1216	0.54	0.72	1253	0.57	0.76	1288	0.60	0.80	1321	0.63	0.84	1354	0.66	0.88
802	1700	1112	0.50	0.67	1155	0.52	0.70	1193	0.56	0.75	1230	0.59	0.79	1265	0.62	0.83	1299	0.65	0.87	1332	0.68	0.91	1364	0.71	0.95
849	1800	1133	0.54	0.73	1174	0.57	0.77	1209	0.60	0.81	1244	0.63	0.85	1278	0.67	0.90	1311	0.70	0.94	1343	0.73	0.98	1375	0.76	1.02
897	1900	1156	0.60	0.80	1193	0.63	0.84	1226	0.66	0.89	1260	0.69	0.93	1293	0.72	0.97	1325	0.75	1.01	1356	0.79	1.06	1388	0.82	1.1
944	2000	1178	0.65	0.87	1213	0.69	0.92	1243	0.72	0.97	1275	0.76	1.02	1307	0.79	1.06	1339	0.82	1.10	1370	0.85	1.14	1402	0.88	1.18

## BLOWER DATA - BELT DRIVE - KCA048 - HORIZONTAL

BLOWER TABLE INCLUDES RESISTANCE FOR BASE UNIT ONLY WITH DRY INDOOR COIL AND AIR FILTERS IN PLACE.

FOR ALL UNITS ADD:

- 1 - Any factory installed options air resistance (heat section, economizer, etc.).
  - 2 - Any field installed accessories air resistance (duct resistance, diffuser, etc.).
- See page 24 for blower motors and drives and wet coil and options/accessory air resistance data.

Air Volume		External Static - Pa (in. w.g.)																							
		25 (0.10)		50 (0.20)		75 (0.30)		100 (0.40)		125 (0.50)		150 (0.60)		175 (0.70)		200 (0.80)									
L/s	cfm	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP						
566	1200	567	0.14	0.19	633	0.16	0.22	700	0.18	0.24	768	0.20	0.27	833	0.22	0.30	884	0.25	0.33	928	0.28	0.37	974	0.30	0.40
613	1300	599	0.16	0.22	664	0.19	0.25	729	0.21	0.28	793	0.22	0.30	853	0.25	0.33	902	0.28	0.37	945	0.31	0.41	990	0.33	0.44
661	1400	634	0.19	0.26	697	0.22	0.29	758	0.23	0.31	819	0.25	0.34	875	0.28	0.38	921	0.31	0.42	964	0.34	0.46	1008	0.37	0.49
708	1500	669	0.22	0.30	730	0.25	0.33	789	0.27	0.36	846	0.29	0.39	897	0.31	0.42	941	0.35	0.47	983	0.38	0.51	1028	0.40	0.54
755	1600	705	0.25	0.34	763	0.28	0.37	819	0.30	0.40	873	0.32	0.43	921	0.36	0.48	963	0.39	0.52	1004	0.42	0.56	1048	0.44	0.59
802	1700	741	0.28	0.38	796	0.31	0.41	850	0.34	0.45	900	0.37	0.49	945	0.40	0.53	985	0.43	0.58	1026	0.46	0.62	1070	0.48	0.65
849	1800	776	0.32	0.43	829	0.34	0.46	880	0.38	0.51	927	0.41	0.55	970	0.45	0.60	1009	0.48	0.64	1050	0.51	0.68	1093	0.53	0.71
897	1900	812	0.36	0.48	862	0.39	0.52	910	0.43	0.57	955	0.46	0.62	996	0.49	0.66	1035	0.53	0.71	1076	0.55	0.74	1118	0.58	0.78
944	2000	847	0.40	0.54	895	0.44	0.59	941	0.48	0.64	984	0.51	0.69	1023	0.55	0.74	1062	0.58	0.78	1103	0.60	0.81	1144	0.63	0.85

Air Volume		External Static - Pa (in. w.g.)																							
		225 (0.90)		250 (1.00)		275 (1.10)		300 (1.20)		325 (1.30)		350 (1.40)		375 (1.50)		400 (1.60)									
L/s	cfm	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP						
566	1200	1022	0.32	0.43	1071	0.34	0.45	1117	0.36	0.48	1160	0.39	0.52	1200	0.41	0.55	1237	0.44	0.59	1271	0.46	0.62	1303	0.49	0.66
613	1300	1037	0.35	0.47	1085	0.37	0.50	1130	0.40	0.53	1171	0.43	0.57	1210	0.45	0.60	1246	0.48	0.64	1280	0.51	0.68	1312	0.53	0.71
661	1400	1054	0.39	0.52	1100	0.40	0.54	1144	0.43	0.58	1183	0.46	0.62	1221	0.49	0.66	1256	0.52	0.70	1290	0.54	0.73	1321	0.57	0.77
708	1500	1073	0.43	0.57	1117	0.45	0.60	1159	0.48	0.64	1197	0.50	0.67	1234	0.53	0.71	1268	0.56	0.75	1301	0.59	0.79	1332	0.62	0.83
755	1600	1093	0.46	0.62	1136	0.49	0.66	1175	0.52	0.70	1212	0.55	0.74	1247	0.58	0.78	1281	0.61	0.82	1313	0.64	0.86	1344	0.67	0.9
802	1700	1114	0.51	0.68	1155	0.54	0.72	1192	0.57	0.76	1227	0.60	0.80	1262	0.63	0.85	1295	0.66	0.89	1327	0.69	0.93	1358	0.72	0.97
849	1800	1136	0.56	0.75	1175	0.59	0.79	1210	0.62	0.83	1245	0.66	0.88	1278	0.69	0.92	1311	0.72	0.97	1342	0.75	1.01	1373	0.78	1.05
897	1900	1159	0.61	0.82	1197	0.64	0.86	1229	0.69	0.92	1263	0.72	0.97	1296	0.75	1.01	1328	0.79	1.06	1359	0.82	1.10	1390	0.85	1.14
944	2000	1183	0.67	0.90	1218	0.71	0.95	1249	0.75	1.01	1282	0.79	1.06	1314	0.83	1.11	1346	0.86	1.15	1377	0.90	1.20	1408	0.93	1.24

## BLOWER DATA - BELT DRIVE - KCA060 - DOWNFLOW

BLOWER TABLE INCLUDES RESISTANCE FOR BASE UNIT ONLY WITH DRY INDOOR COIL AND AIR FILTERS IN PLACE.

FOR ALL UNITS ADD:

1 - Any factory installed options air resistance (heat section, economizer, etc.).

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

See page 24 for blower motors and drives and wet coil and options/accessory air resistance data.

Air Volume		External Static - Pa (in. w.g.)																							
		25 (0.10)		50 (0.20)		75 (0.30)		100 (0.40)		125 (0.50)		150 (0.60)		175 (0.70)		200 (0.80)									
L/s	cfm	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP						
755	1600	738	0.24	0.32	785	0.27	0.36	0.41	878	0.34	0.45	923	0.37	0.49	969	0.40	0.53	1014	0.43	0.57	1061	0.44	0.59		
802	1700	773	0.27	0.36	816	0.31	0.41	0.46	903	0.38	0.51	947	0.41	0.55	991	0.43	0.58	1036	0.46	0.62	1082	0.48	0.65		
849	1800	803	0.31	0.42	844	0.35	0.47	0.52	929	0.43	0.57	972	0.46	0.61	1016	0.48	0.64	1060	0.51	0.68	1106	0.53	0.71		
897	1900	831	0.36	0.48	872	0.40	0.54	0.59	957	0.47	0.63	1000	0.50	0.67	1043	0.53	0.71	1087	0.55	0.74	1131	0.58	0.78		
944	2000	861	0.42	0.56	903	0.46	0.61	0.66	988	0.52	0.70	1030	0.55	0.74	1072	0.57	0.77	1115	0.60	0.81	1157	0.63	0.85		
991	2100	893	0.47	0.63	935	0.51	0.69	0.73	1019	0.58	0.78	1060	0.60	0.81	1101	0.63	0.85	1143	0.66	0.89	1182	0.69	0.93		
1038	2200	927	0.53	0.71	969	0.57	0.76	0.81	1052	0.63	0.85	1091	0.66	0.89	1131	0.69	0.93	1170	0.72	0.97	1206	0.76	1.02		
1085	2300	963	0.59	0.79	1004	0.63	0.84	0.89	1084	0.69	0.93	1122	0.72	0.97	1159	0.76	1.02	1195	0.80	1.07	1228	0.84	1.13		
1133	2400	999	0.66	0.88	1039	0.69	0.92	0.97	1115	0.76	1.02	1151	0.79	1.06	1186	0.84	1.12	1219	0.88	1.18	1250	0.93	1.24		
Air Volume		External Static - Pa (in. w.g.)																							
		225 (0.90)		250 (1.00)		275 (1.10)		300 (1.20)		325 (1.30)		350 (1.40)		375 (1.50)		400 (1.60)									
L/s	cfm	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP						
755	1600	1107	0.46	0.62	1151	0.49	0.66	1190	0.52	0.70	1228	0.55	0.74	1264	0.58	0.78	1298	0.61	0.82	1332	0.64	0.86	1364	0.67	0.9
802	1700	1128	0.51	0.68	1169	0.54	0.72	1206	0.57	0.76	1242	0.60	0.80	1277	0.63	0.84	1310	0.66	0.88	1343	0.69	0.92	1375	0.72	0.96
849	1800	1150	0.55	0.74	1189	0.59	0.79	1223	0.62	0.83	1257	0.65	0.87	1291	0.68	0.91	1324	0.71	0.95	1356	0.74	0.99	1388	0.77	1.03
897	1900	1173	0.60	0.81	1208	0.64	0.86	1240	0.68	0.91	1273	0.71	0.95	1306	0.74	0.99	1338	0.77	1.03	1369	0.80	1.07	1401	0.84	1.12
944	2000	1195	0.66	0.89	1228	0.70	0.94	1257	0.74	0.99	1290	0.78	1.04	1321	0.81	1.08	1353	0.84	1.12	1384	0.87	1.16	1416	0.90	1.2
991	2100	1217	0.73	0.98	1247	0.78	1.04	1275	0.81	1.09	1306	0.85	1.14	1338	0.88	1.18	1369	0.91	1.22	1400	0.93	1.25	1432	0.96	1.29
1038	2200	1238	0.81	1.08	1265	0.85	1.14	1293	0.89	1.19	1324	0.93	1.24	1355	0.95	1.28	1387	0.98	1.31	1418	1.01	1.35	1450	1.04	1.39
1085	2300	1257	0.89	1.19	1284	0.93	1.25	1313	0.97	1.30	1344	1.00	1.34	1375	1.03	1.38	1406	1.05	1.41	1437	1.08	1.45	1470	1.10	1.48
1133	2400	1278	0.97	1.30	1305	1.01	1.36	1334	1.04	1.40	1364	1.07	1.44	1395	1.10	1.48	1427	1.13	1.51	1458	1.16	1.55	1492	1.18	1.58

## BLOWER DATA - BELT DRIVE - KCA060 - HORIZONTAL

BLOWER TABLE INCLUDES RESISTANCE FOR BASE UNIT ONLY WITH DRY INDOOR COIL AND AIR FILTERS IN PLACE.

FOR ALL UNITS ADD:

1 - Any factory installed options air resistance (heat section, economizer, etc.).

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

See page 24 for blower motors and drives and wet coil and options/accessory air resistance data.

Air Volume		External Static - Pa (in. w.g.)																							
		25 (0.10)		50 (0.20)		75 (0.30)		100 (0.40)		125 (0.50)		150 (0.60)		175 (0.70)		200 (0.80)									
L/s	cfm	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP						
755	1600	752	0.22	0.30	798	0.26	0.35	844	0.30	0.40	889	0.34	0.45	933	0.37	0.49	975	0.40	0.53	1018	0.43	0.57	1062	0.45	0.60
802	1700	785	0.26	0.35	827	0.30	0.40	871	0.34	0.46	914	0.38	0.51	957	0.41	0.55	999	0.44	0.59	1042	0.47	0.63	1085	0.49	0.66
849	1800	813	0.31	0.42	855	0.35	0.47	898	0.39	0.52	940	0.43	0.57	983	0.46	0.62	1025	0.49	0.66	1067	0.51	0.69	1110	0.54	0.72
897	1900	841	0.37	0.49	883	0.40	0.54	926	0.45	0.60	969	0.48	0.65	1011	0.51	0.69	1052	0.54	0.72	1094	0.57	0.76	1136	0.59	0.79
944	2000	871	0.42	0.56	914	0.46	0.62	957	0.50	0.67	1000	0.54	0.72	1040	0.57	0.76	1081	0.59	0.79	1122	0.62	0.83	1162	0.65	0.87
991	2100	903	0.48	0.64	946	0.52	0.70	990	0.56	0.75	1031	0.59	0.79	1071	0.62	0.83	1110	0.65	0.87	1150	0.68	0.91	1189	0.72	0.96
1038	2200	937	0.54	0.73	981	0.58	0.78	1023	0.62	0.83	1063	0.65	0.87	1102	0.68	0.91	1140	0.72	0.96	1178	0.75	1.01	1215	0.80	1.07
1085	2300	973	0.60	0.81	1015	0.64	0.86	1056	0.68	0.91	1095	0.72	0.96	1132	0.75	1.01	1170	0.79	1.06	1206	0.84	1.12	1242	0.89	1.19
1133	2400	1010	0.68	0.91	1051	0.72	0.96	1090	0.75	1.01	1127	0.79	1.06	1164	0.83	1.11	1200	0.88	1.18	1235	0.93	1.24	1269	0.98	1.31

Air Volume		External Static - Pa (in. w.g.)																							
		225 (0.90)		250 (1.00)		275 (1.10)		300 (1.20)		325 (1.30)		350 (1.40)		375 (1.50)		400 (1.60)									
L/s	cfm	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP						
755	1600	1107	0.47	0.63	1149	0.50	0.67	1187	0.53	0.71	1223	0.56	0.75	1258	0.59	0.79	1291	0.62	0.83	1323	0.65	0.87	1354	0.68	0.91
802	1700	1129	0.51	0.69	1169	0.54	0.73	1204	0.58	0.78	1240	0.61	0.82	1274	0.64	0.86	1306	0.67	0.90	1338	0.71	0.95	1369	0.74	0.99
849	1800	1152	0.57	0.76	1190	0.60	0.80	1223	0.63	0.85	1258	0.67	0.90	1291	0.70	0.94	1323	0.74	0.99	1354	0.77	1.03	1385	0.80	1.07
897	1900	1176	0.62	0.83	1212	0.66	0.89	1243	0.70	0.94	1277	0.74	0.99	1309	0.77	1.03	1341	0.81	1.08	1372	0.84	1.12	1402	0.87	1.16
944	2000	1201	0.69	0.92	1234	0.73	0.98	1264	0.78	1.04	1296	0.81	1.09	1329	0.84	1.13	1360	0.88	1.18	1391	0.91	1.22	1422	0.94	1.26
991	2100	1225	0.76	1.02	1256	0.81	1.08	1285	0.85	1.14	1318	0.89	1.19	1349	0.93	1.24	1381	0.95	1.28	1412	0.98	1.32	1442	1.01	1.36
1038	2200	1249	0.84	1.13	1279	0.89	1.19	1308	0.93	1.25	1340	0.97	1.30	1372	1.00	1.34	1403	1.03	1.38	1434	1.06	1.42	1465	1.09	1.46
1085	2300	1273	0.93	1.25	1303	0.98	1.31	1332	1.01	1.36	1364	1.05	1.41	1396	1.08	1.45	1427	1.11	1.49	1458	1.14	1.53	1490	1.17	1.57
1133	2400	1300	1.02	1.37	1329	1.07	1.43	1359	1.10	1.47	1390	1.13	1.52	1422	1.16	1.56	1453	1.19	1.60	1484	1.22	1.64	1516	1.25	1.67

## BLOWER DATA - BELT DRIVE - KCA072 - DOWNFLOW

BLOWER TABLE INCLUDES RESISTANCE FOR BASE UNIT ONLY WITH DRY INDOOR COIL AND AIR FILTERS IN PLACE.

FOR ALL UNITS ADD:

- 1 - Any factory installed options air resistance (heat section, economizer, etc.).
- 2 - Any field installed accessories air resistance (duct resistance, diffuser, etc.).

See page 24 for blower motors and drives and wet coil and options/accessory air resistance data.

Air Volume		External Static - Pa (in. w.g.)																							
		25 (0.10)		50 (0.20)		75 (0.30)		100 (0.40)		125 (0.50)		150 (0.60)		175 (0.70)		200 (0.80)									
L/s	cfm	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP						
897	1900	826	0.27	0.36	859	0.31	0.41	894	0.34	0.45	928	0.37	0.50	964	0.42	0.56	1000	0.46	0.61	1036	0.49	0.66	1072	0.52	0.70
944	2000	857	0.31	0.42	889	0.35	0.47	920	0.39	0.52	952	0.43	0.57	986	0.46	0.62	1020	0.51	0.68	1055	0.54	0.73	1091	0.57	0.77
991	2100	878	0.37	0.49	909	0.40	0.54	940	0.44	0.59	973	0.48	0.64	1006	0.52	0.70	1041	0.56	0.75	1076	0.60	0.80	1112	0.63	0.85
1038	2200	897	0.41	0.55	929	0.46	0.61	961	0.49	0.66	994	0.54	0.72	1028	0.58	0.78	1063	0.62	0.83	1099	0.66	0.89	1134	0.69	0.93
1085	2300	918	0.46	0.62	950	0.51	0.68	983	0.55	0.74	1017	0.60	0.80	1052	0.64	0.86	1087	0.69	0.92	1122	0.72	0.97	1157	0.76	1.02
1133	2400	941	0.52	0.70	974	0.57	0.77	1008	0.62	0.83	1042	0.67	0.90	1077	0.72	0.96	1111	0.75	1.01	1146	0.79	1.06	1181	0.83	1.11
1180	2500	966	0.59	0.79	1000	0.64	0.86	1034	0.69	0.93	1068	0.75	1.00	1103	0.79	1.06	1137	0.83	1.11	1171	0.87	1.16	1205	0.90	1.20
1227	2600	994	0.67	0.90	1028	0.72	0.97	1062	0.78	1.04	1096	0.82	1.10	1130	0.87	1.16	1164	0.90	1.21	1197	0.94	1.26	1231	0.97	1.30
1274	2700	1023	0.75	1.01	1057	0.81	1.08	1091	0.86	1.15	1125	0.91	1.22	1159	0.95	1.27	1192	0.98	1.32	1225	1.02	1.37	1258	1.05	1.41
1321	2800	1053	0.84	1.13	1088	0.90	1.21	1122	0.95	1.27	1155	0.99	1.33	1188	1.04	1.39	1221	1.07	1.43	1253	1.10	1.48	1286	1.14	1.53
1369	2900	1085	0.94	1.26	1119	0.99	1.33	1153	1.04	1.40	1186	1.08	1.45	1218	1.13	1.51	1250	1.16	1.55	1281	1.20	1.61	1313	1.24	1.66
Air Volume		External Static - Pa (in. w.g.)																							
		225 (0.90)		250 (1.00)		275 (1.10)		300 (1.20)		325 (1.30)		350 (1.40)		375 (1.50)		400 (1.60)									
L/s	cfm	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP
897	1900	1109	0.56	0.75	1146	0.59	0.79	1183	0.61	0.82	1221	0.64	0.86	1260	0.67	0.90	1294	0.70	0.94	1323	0.73	0.98	1349	0.76	1.02
944	2000	1128	0.61	0.82	1164	0.64	0.86	1201	0.66	0.89	1239	0.69	0.93	1276	0.72	0.97	1310	0.75	1.01	1336	0.79	1.06	1362	0.82	1.1
991	2100	1148	0.66	0.89	1185	0.69	0.93	1221	0.72	0.97	1258	0.75	1.01	1294	0.78	1.05	1325	0.81	1.09	1351	0.85	1.14	1376	0.89	1.19
1038	2200	1170	0.72	0.97	1206	0.75	1.01	1242	0.78	1.05	1277	0.81	1.09	1311	0.85	1.14	1341	0.88	1.18	1365	0.92	1.23	1390	0.95	1.28
1085	2300	1193	0.79	1.06	1228	0.81	1.09	1262	0.85	1.14	1295	0.89	1.19	1327	0.93	1.24	1355	0.96	1.29	1380	0.99	1.33	1406	1.02	1.37
1133	2400	1216	0.86	1.15	1250	0.89	1.19	1282	0.93	1.24	1313	0.97	1.30	1343	1.01	1.36	1371	1.04	1.40	1396	1.07	1.44	1423	1.10	1.48
1180	2500	1240	0.93	1.24	1273	0.96	1.29	1302	1.01	1.36	1331	1.06	1.42	1360	1.10	1.48	1388	1.13	1.52	1414	1.16	1.55	1441	1.18	1.58
1227	2600	1265	1.00	1.34	1296	1.04	1.40	1324	1.10	1.47	1352	1.15	1.54	1381	1.19	1.60	1408	1.22	1.64	1434	1.25	1.67	1460	1.27	1.7
1274	2700	1291	1.09	1.46	1321	1.13	1.52	1347	1.19	1.60	1374	1.25	1.67	1403	1.28	1.72	1429	1.31	1.76	1455	1.34	1.79	1481	1.36	1.82
1321	2800	1317	1.18	1.58	1346	1.24	1.66	1372	1.30	1.74	1399	1.34	1.80	1426	1.38	1.85	1451	1.41	1.89	1477	1.43	1.92	1503	1.45	1.95
1369	2900	1343	1.28	1.72	1371	1.34	1.80	1397	1.40	1.88	1424	1.45	1.95	1450	1.48	1.99	1475	1.51	2.02	1500	1.53	2.05	1526	1.55	2.08

## BLOWER DATA - BELT DRIVE - KCA072 - HORIZONTAL

BLOWER TABLE INCLUDES RESISTANCE FOR BASE UNIT ONLY WITH DRY INDOOR COIL AND AIR FILTERS IN PLACE.

FOR ALL UNITS ADD:

- 1 - Any factory installed options air resistance (heat section, economizer, etc.).
- 2 - Any field installed accessories air resistance (duct resistance, diffuser, etc.).

See page 24 for blower motors and drives and wet coil and options/accessory air resistance data.

Air Volume		External Static - Pa (in. w.g.)																							
		25 (0.10)		50 (0.20)		75 (0.30)		100 (0.40)		125 (0.50)		150 (0.60)		175 (0.70)		200 (0.80)									
L/s	cfm	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP						
897	1900	853	0.31	0.41	886	0.34	0.46	919	0.37	0.50	952	0.41	0.55	986	0.45	0.60	1021	0.48	0.64	1056	0.51	0.69	1091	0.54	0.73
944	2000	883	0.36	0.48	913	0.40	0.53	944	0.43	0.57	976	0.46	0.62	1009	0.50	0.67	1043	0.53	0.71	1078	0.57	0.76	1112	0.60	0.80
991	2100	906	0.42	0.56	936	0.45	0.60	967	0.48	0.65	999	0.52	0.70	1033	0.56	0.75	1067	0.59	0.79	1101	0.63	0.84	1135	0.66	0.88
1038	2200	930	0.48	0.64	960	0.51	0.68	991	0.54	0.73	1024	0.58	0.78	1058	0.62	0.83	1092	0.66	0.88	1126	0.69	0.92	1160	0.72	0.96
1085	2300	954	0.54	0.72	985	0.57	0.77	1017	0.61	0.82	1051	0.65	0.87	1085	0.69	0.92	1119	0.72	0.96	1152	0.75	1.00	1186	0.78	1.04
1133	2400	981	0.60	0.81	1013	0.64	0.86	1046	0.68	0.91	1079	0.72	0.96	1113	0.75	1.00	1146	0.78	1.05	1180	0.81	1.09	1213	0.84	1.13
1180	2500	1010	0.68	0.91	1042	0.72	0.96	1075	0.75	1.00	1109	0.78	1.05	1142	0.81	1.09	1175	0.85	1.14	1207	0.88	1.18	1239	0.92	1.23
1227	2600	1040	0.75	1.01	1073	0.78	1.05	1106	0.82	1.10	1139	0.85	1.14	1171	0.89	1.19	1203	0.92	1.23	1235	0.95	1.28	1266	0.99	1.33
1274	2700	1072	0.82	1.10	1104	0.86	1.15	1137	0.90	1.20	1169	0.93	1.24	1201	0.96	1.29	1232	1.00	1.34	1263	1.04	1.40	1293	1.09	1.46
1321	2800	1105	0.90	1.21	1137	0.93	1.25	1168	0.97	1.30	1200	1.01	1.35	1231	1.04	1.40	1261	1.09	1.46	1291	1.13	1.52	1321	1.19	1.59
1369	2900	1138	0.98	1.32	1169	1.02	1.37	1200	1.06	1.42	1231	1.10	1.47	1261	1.14	1.53	1291	1.19	1.60	1321	1.24	1.66	1350	1.29	1.73
Air Volume		External Static - Pa (in. w.g.)																							
		225 (0.90)		250 (1.00)		275 (1.10)		300 (1.20)		325 (1.30)		350 (1.40)		375 (1.50)		400 (1.60)									
L/s	cfm	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP	Rev/ min	kW	BHP						
897	1900	1126	0.57	0.77	1163	0.60	0.81	1200	0.63	0.85	1237	0.66	0.88	1273	0.69	0.92	1306	0.72	0.96	1339	0.75	1.00	1371	0.78	1.04
944	2000	1148	0.63	0.84	1183	0.66	0.88	1220	0.69	0.92	1257	0.72	0.96	1291	0.75	1.00	1323	0.78	1.04	1354	0.81	1.08	1385	0.84	1.12
991	2100	1170	0.69	0.92	1206	0.72	0.96	1242	0.75	1.00	1277	0.78	1.04	1310	0.81	1.08	1340	0.84	1.13	1371	0.87	1.17	1401	0.90	1.21
1038	2200	1195	0.75	1.00	1230	0.78	1.04	1265	0.81	1.08	1299	0.84	1.13	1330	0.88	1.18	1359	0.92	1.23	1388	0.95	1.27	1418	0.98	1.31
1085	2300	1220	0.81	1.08	1254	0.84	1.13	1288	0.87	1.17	1320	0.92	1.23	1350	0.95	1.28	1378	1.00	1.34	1406	1.03	1.38	1435	1.06	1.42
1133	2400	1245	0.88	1.18	1278	0.91	1.22	1311	0.95	1.28	1341	0.99	1.33	1370	1.04	1.40	1397	1.08	1.45	1425	1.12	1.50	1454	1.15	1.54
1180	2500	1271	0.95	1.28	1303	0.99	1.33	1334	1.04	1.39	1363	1.08	1.45	1391	1.13	1.52	1418	1.17	1.57	1446	1.21	1.62	1474	1.24	1.66
1227	2600	1297	1.04	1.39	1328	1.08	1.45	1357	1.13	1.52	1385	1.18	1.58	1412	1.22	1.64	1439	1.27	1.70	1467	1.30	1.74	1495	1.33	1.78
1274	2700	1323	1.13	1.52	1353	1.18	1.58	1382	1.23	1.65	1409	1.28	1.72	1435	1.32	1.77	1462	1.36	1.82	1490	1.39	1.86	1517	1.42	1.9
1321	2800	1351	1.23	1.65	1380	1.28	1.72	1407	1.33	1.78	1434	1.38	1.85	1460	1.42	1.90	1486	1.45	1.95	1513	1.48	1.99	1541	1.51	2.02
1369	2900	1379	1.34	1.79	1407	1.39	1.86	1434	1.43	1.92	1460	1.48	1.98	1485	1.52	2.04	1511	1.55	2.08	1538	1.58	2.12	1565	1.60	2.15

## BLOWER DATA

### BELT DRIVE KIT SPECIFICATIONS

Model No.	Motor kW (HP)		No. of Speeds	Drive Kits and Rev/Min Range									
	Nominal	Max		A01	A02	A03	A04	A05	A06	A07	A08	A09	
036	1.5 (2)	1.7 (2.3)	1	561 - 842	---	---	---	---	748 - 1122	---	---	---	---
048	1.5 (2)	1.7 (2.3)	1	---	621 - 931	---	---	---	---	893 - 1191	---	---	---
060	1.5 (2)	1.7 (2.3)	1	---	---	694 - 1042	---	---	---	---	1010 - 1290	---	---
072	1.5 (2)	1.7 (2.3)	1	---	---	---	---	---	---	---	---	994 - 1326	1193 - 1594

NOTE – 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 are shown. If motors of comparable kW are used, be sure to keep within the service factor limitations outlined on the motor nameplate.

### OPTIONS / ACCESSORIES AIR RESISTANCE

Air Volume		Wet Indoor Coil						Economizer		Electric Heat		Filters			
		036-048		060		072						MERV 8		MERV 13	
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.	Pa	in. w.g.
375	800	2	0.01	2	0.01	2	0.01	10	0.04	2	0.01	10	0.04	12	0.05
470	1000	5	0.02	5	0.02	2	0.01	10	0.04	7	0.03	10	0.04	17	0.07
565	1200	7	0.03	7	0.04	5	0.02	10	0.04	15	0.06	10	0.04	17	0.07
660	1400	10	0.04	12	0.05	7	0.03	10	0.04	22	0.09	10	0.04	17	0.07
755	1600	12	0.05	15	0.06	7	0.04	10	0.04	30	0.12	10	0.04	17	0.07
850	1800	15	0.06	17	0.07	12	0.05	12	0.05	37	0.15	12	0.05	17	0.07
945	2000	20	0.08	22	0.09	15	0.06	12	0.05	45	0.18	12	0.05	20	0.08
1040	2200	22	0.09	25	0.10	17	0.07	12	0.05	50	0.20	12	0.05	20	0.08
1130	2400	25	0.10	30	0.12	20	0.08	12	0.05	55	0.22	12	0.05	20	0.08
1225	2600	27	0.11	30	0.13	22	0.09	15	0.06	60	0.24	12	0.05	20	0.08
1320	2800	30	0.13	37	0.15	25	0.10	15	0.06	65	0.26	12	0.05	20	0.08
1415	3000	35	0.14	40	0.16	30	0.12	15	0.06	70	0.28	12	0.05	20	0.08

### POWER EXHAUST FAN PERFORMANCE

Return Air System Static Pressure		Air Volume Exhausted	
Pa	in. w.g.	L/s	cfm
0	0.00	787	1665
12	0.05	783	1660
25	0.10	757	1605
37	0.15	712	1510
50	0.20	654	1385
62	0.25	593	1255
75	0.30	531	1125
87	0.35	476	1010

## BLOWER DATA

### CEILING DIFFUSERS AIR RESISTANCE

Air Volume		RTD9-65S Step-Down Diffuser						FD9-65S Flush Diffuser		RTD11-95S Step-Down Diffuser						FD11-95S 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.	Pa	in. w.g.	Pa	in. w.g.
375	800	37	0.15	32	0.13	27	0.11	27	0.11	---	---	---	---	---	---	---	---
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

### CEILING DIFFUSER AIR THROW DATA

Air Volume		<sup>1</sup> Effective Throw			
Model No.		RTD9-65S		FD9-65S	
L/s	cfm	m	ft.	m	ft.
375	800	3 - 5	10 - 17	4 - 5	14 - 18
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.		RTD11-95S		FD11-95S	
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

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

## ELECTRIC HEAT CAPACITIES

Input Voltage	5.7 kW			11.5 kW			17.2 kW			23 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	20.9	71 400
420	1	5.7	19 500	1	11.5	39 300	1	17.2	58 800	1	23.0	78 500

## ELECTRICAL DATA

Model no.		KCA036S4	KCA048S4
<sup>1</sup> Voltage - 50hz with Neutral		380/420V - 3 Ph	380/420V - 3 Ph
Compressor	Rated Load Amps	4	5.5
	Locked Rotor Amps	31	37
Outdoor Fan Motor	Full Load Amps	1.1	1.1
Power Exhaust (1) 0.25 kW	Full Load Amps	1.3	1.3
Indoor Blower Motor	kW	1.5	1.5
	Full Load Amps	3.6	3.6
<sup>2</sup> Maximum Overcurrent Protection	Unit Only	15	15
	With (1) 0.25 kW Power Exhaust	15	15
<sup>3</sup> Minimum Circuit Ampacity	Unit Only	10	12
	With (1) 0.25 kW Power Exhaust	11	13

## ELECTRIC HEAT DATA

Electric Heat Voltage			420	420
<sup>2</sup> Maximum Overcurrent Protection	Unit+	5.7 kW	15	15
	<sup>4</sup> Electric Heat	11.5 kW	25	25
<sup>3</sup> Minimum Circuit Ampacity	Unit+	5.7 kW	15	15
	<sup>4</sup> Electric Heat	11.5 kW	25	25
<sup>2</sup> Maximum Overcurrent Protection	Unit+	5.7 kW	20	20
	<sup>4</sup> Electric Heat and (1) 0.25 kW Power Exhaust	11.5 kW	30	30
<sup>3</sup> Minimum Circuit Ampacity	Unit+	5.7 kW	16	16
	<sup>4</sup> Electric Heat and (1) 0.25 kW Power Exhaust	11.5 kW	26	26

<sup>1</sup> Extremes of operating range are plus and minus 10% of line voltage.

<sup>2</sup> Heating, Air Conditioning, Refrigeration type breaker or fuse.

<sup>3</sup> Refer to local electrical code to determine wire, fuse and disconnect size requirements.

<sup>4</sup> Nominal kW based on 420V-3ph-50hz.

<b>ELECTRICAL DATA</b>				
Model No.			<b>KCA060S4</b>	<b>KCA072S4</b>
<sup>1</sup> Voltage - 50hz with Neutral			<b>380/420V - 3 Ph</b>	<b>380/420V - 3 Ph</b>
<b>Compressor</b>	Rated Load Amps		8	9.7
	Locked Rotor Amps		59	64
<b>Outdoor Fan Motor</b>	Full Load Amps		1.3	1.3
<b>Power Exhaust (1) 0.25 kW</b>	Full Load Amps		1.3	1.3
<b>Indoor Blower Motor</b>	kW		1.5	1.5
	Full Load Amps		3.6	3.6
<sup>2</sup> <b>Maximum Overcurrent Protection</b>	Unit Only		20	25
	With (1) 0.25 kW Power Exhaust		20	25
<sup>3</sup> <b>Minimum Circuit Ampacity</b>	Unit Only		15	18
	With (1) 0.25 kW Power Exhaust		17	19
<b>ELECTRIC HEAT DATA</b>				
<b>Electric Heat Voltage</b>			<b>420</b>	<b>420</b>
<sup>2</sup> <b>Maximum Overcurrent Protection</b>	Unit+ <sup>4</sup> Electric Heat	<b>5.7 kW</b>	20	25
		<b>11.5 kW</b>	25	25
		<b>17.2 kW</b>	35	35
		<b>23 kW</b>	---	45
<sup>3</sup> <b>Minimum Circuit Ampacity</b>	Unit+ <sup>4</sup> Electric Heat	<b>5.7 kW</b>	15	18
		<b>11.5 kW</b>	25	25
		<b>17.2 kW</b>	35	35
		<b>23 kW</b>	---	44
<sup>2</sup> <b>Maximum Overcurrent Protection</b>	Unit+ <sup>4</sup> Electric Heat and (1) 0.25 kW Power Exhaust	<b>5.7 kW</b>	20	25
		<b>11.5 kW</b>	30	30
		<b>17.2 kW</b>	40	40
		<b>23 kW</b>	---	50
<sup>3</sup> <b>Minimum Circuit Ampacity</b>	Unit+ <sup>4</sup> Electric Heat and (1) 0.25 kW Power Exhaust	<b>5.7 kW</b>	17	19
		<b>11.5 kW</b>	26	26
		<b>17.2 kW</b>	36	36
		<b>23 kW</b>	---	46

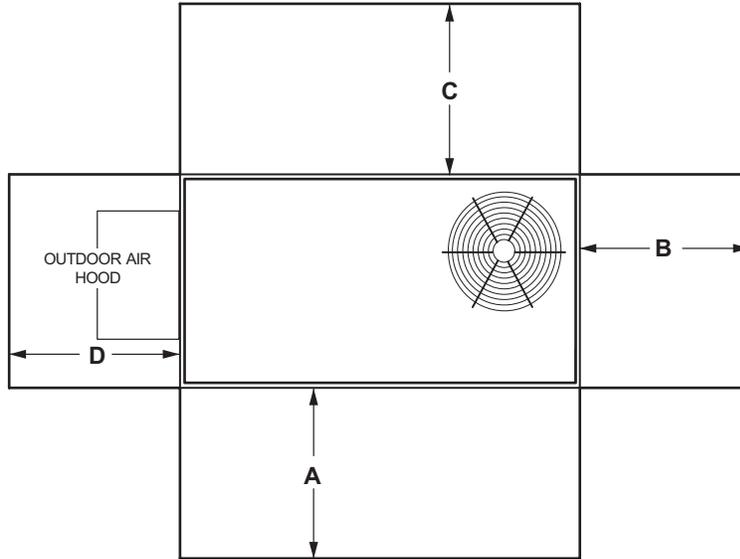
<sup>1</sup> Extremes of operating range are plus and minus 10% of line voltage.

<sup>2</sup> Heating, Air Conditioning, Refrigeration type breaker or fuse.

<sup>3</sup> Refer to local electrical code to determine wire, fuse and disconnect size requirements.

<sup>4</sup> Nominal kW based on 420V-3ph-50hz.

## UNIT CLEARANCES - MM (INCHES)



<sup>1</sup> Unit Clearance	A		B		C		D		Top Clearance
	mm	in.	mm	in.	mm	in.	mm	in.	
<b>Service Clearance</b>	914	36	914	36	914	36	914	36	Unobstructed
<b>Minimum Operation Clearance</b>	914	36	914	36	914	36	914	36	

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

<sup>1</sup> **Service Clearance** - Required for removal of serviceable parts.

**Minimum Operation Clearance** - Required clearance for proper unit operation.

## OUTDOOR SOUND DATA

Unit Model No.	Octave Band Linear Sound Power Levels dB, re 10 <sup>-12</sup> Watts - Center Frequency - Hz							<sup>1</sup> Sound Rating Number (SRN) (dBA)
	125	250	500	1000	2000	4000	8000	
<b>KCA036 and 048</b>	63	66	70	71	68	62	53	75
<b>KCA060</b>	67	72	77	76	73	68	61	82
<b>KCA072</b>	66	71	74	73	70	65	57	79

Note - The octave sound power data does not include tonal corrections.

<sup>1</sup> Sound Rating Number according to ARI Standard 270-95 (includes pure tone penalty). "SRN" is the overall A-Weighted Sound Power Level, (LWA), dB (100 Hz to 10,000 Hz).

## OPTIONAL CONVENTIONAL TEMPERATURE CONTROL SYSTEMS

Item	Model No.	Catalog No.
<p><b>COMFORTSENSE® 7500 COMMERCIAL 7-DAY PROGRAMMABLE THERMOSTAT</b></p>  <ul style="list-style-type: none"> <li>• Four-Stage Heating / Two-Stage Cooling Universal Multi-Stage</li> <li>• Intuitive Touchscreen Interface</li> <li>• Remote Indoor Temperature Sensing with Averaging</li> <li>• Outside or Discharge Air Temperature Display</li> <li>• Full Seven-Day Programming</li> <li>• Four Time Periods Per Day</li> <li>• Occupancy Scheduling with Economizer Relay Control</li> <li>• Away Mode</li> <li>• Holiday Scheduling</li> <li>• Smooth Setback Recovery (SSR)</li> <li>• Performance Reports</li> <li>• Notifications/Reminders</li> <li>• Dehumidification/Humiditrol® Control for Split Systems and Rooftop Units</li> <li>• Economizer Relay Control</li> <li>• Backlit Display</li> <li>• Wallplate Furnished</li> </ul>	C0STAT06FF1L	<b>13H15</b>
<p><b>Optional Accessories</b></p> <p><sup>1</sup> Remote non-adjustable wall mount 20k temperature sensor</p> <p><sup>1</sup> Remote non-adjustable wall mount 10k temperature sensor</p> <p>Remote non-adjustable discharge air (duct mount) temperature sensor</p> <p>Outdoor temperature sensor</p> <p>Locking cover (clear)</p> <p><sup>1</sup> Remote sensors can be applied in any of the following combinations:            One Sensor - (1) 47W36            Two Sensors - (2) 47W37            Three Sensors - (2) 47W36 and (1) 47W37            Four Sensors - (4) 47W36            Five Sensors - (3) 47W36 and (2) 47W37</p>	C0SNZN01AE2- C0SNZN73AE1- C0SNDC00AE1- C0SNSR03AE1- C0MISC15AE1-	<b>47W36</b> <b>47W37</b> <b>19L22</b> <b>X2658</b> <b>39P21</b>
<p><b>COMFORTSENSE® 3000 COMMERCIAL 5-2 DAY PROGRAMMABLE THERMOSTAT</b></p>  <ul style="list-style-type: none"> <li>• Two-Stage Heating / Two-Stage Cooling Conventional Systems</li> <li>• Intuitive Interface</li> <li>• 5-2 Day Programming</li> <li>• Program Hold</li> <li>• Remote Indoor Temperature Sensing</li> <li>• Smooth Setback Recovery (SSR)</li> <li>• Economizer Relay Control</li> <li>• Maintenance/Filter/Service Reminders</li> <li>• Backlit Display</li> <li>• Wallplate Furnished</li> <li>• Simple Up and Down Temperature Control.</li> </ul>	C0STAT05FF1L	<b>11Y05</b>
<p><b>Optional Accessories</b></p> <p>Remote non-adjustable wall mount 10k averaging temperature sensor</p> <p>Optional wall mounting plate</p>	C0SNZN73AE1- C0MISC17AE1-	<b>47W37</b> <b>X2659</b>
<p><b>DIGITAL NON-PROGRAMMABLE THERMOSTAT</b></p>  <ul style="list-style-type: none"> <li>• One-Stage Heating / Cooling Conventional Systems</li> <li>• Intuitive Interface</li> <li>• Automatic Changeover</li> <li>• Backlit Display</li> <li>• Simple Up and Down Temperature Control.</li> </ul>	C0STAT12AE1L	<b>51M32</b>
<p><b>Optional Accessories</b></p> <p>Outdoor temperature sensor</p> <p>Optional wall mounting plate</p>	C0SNSR04AE1- C0MISC17AE1-	<b>X2658</b> <b>X2659</b>

## WEIGHT DATA

Model Number	Net				Shipping			
	Base		Max.		Base		Max.	
	kg	lbs.	kg	lbs.	kg	lbs.	kg	lbs.
KCA036S	226	498	277	610	253	558	308	679
KCA048S	243	535	293	647	270	595	325	716
KCA060S	256	565	309	681	283	625	340	750
KCA072S	281	620	340	750	300	661	359	791

Base Unit - The unit with NO OPTIONS.

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

## OPTIONS / ACCESSORIES

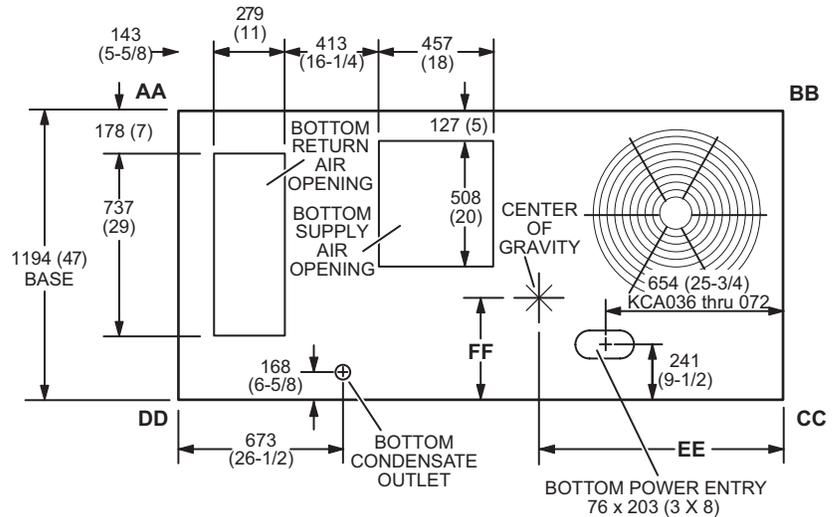
	Shipping Weights		
	kg	lbs.	
<b>ECONOMIZER</b>			
<b>Economizer</b>			
Economizer, Includes Barometric Relief Dampers and Exhaust Hood	59	131	
<b>OUTDOOR AIR</b>			
<b>Outdoor Air Dampers</b>			
Motorized	18	40	
Manual	14	30	
<b>POWER EXHAUST</b>			
Standard Static	16	35	
<b>ELECTRIC HEAT</b>			
5.7 kW	14	31	
11.5 kW	14	31	
17.2 kW	16	35	
23 kW	16	35	
<b>ROOF CURBS</b>			
<b>Hybrid Roof Curb, Downflow</b>			
203 mm height	23	50	
356 mm height	32	70	
457 mm height	36	80	
610 mm height	45	100	
<b>Hybrid Curb, Full Perimeter, Downflow</b>			
203 mm height	26	57	
356 mm height	27	60	
457 mm height	41	91	
610 mm height	52	114	
<b>Adjustable Pitch Curb, Downflow</b>			
356 mm height	51	113	
<b>CEILING DIFFUSERS</b>			
Step-Down	RTD9-65S	36	80
	RTD11-95S	54	118
Flush	FD9-65S	36	80
	FD11-95S	54	118
Transitions (Supply and Return)	T1TRAN10AN1	10	22
	T1TRAN20N-1	10	21

## DIMENSIONS - UNIT - MM (INCHES)

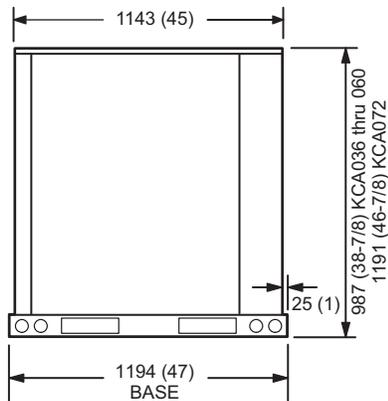
Model No.	CORNER WEIGHTS								CENTER OF GRAVITY							
	AA		BB		CC		DD		EE		FF		FF			
	Base	Max.	Base	Max.	Base	Max.	Base	Max.	Base	Max.	Base	Max.	Base	Max.		
	kg lbs.	kg lbs.	kg lbs.	kg lbs.	kg lbs.	kg lbs.	kg lbs.	kg lbs.	kg lbs.	mm in.	mm in.	mm in.	mm in.	mm in.		
<b>036</b>	39 86	50 110	48 105	56 124	77 169	91 200	63 139	80 177	978 38-1/2	1016 40	457 18	457 18	457 18	457 18		
<b>048</b>	42 93	53 116	51 112	60 132	82 181	96 212	68 149	85 187	978 38-1/2	1016 40	457 18	457 18	457 18	457 18		
<b>060</b>	44 98	56 122	54 119	63 138	87 191	101 223	72 157	90 197	978 38-1/2	1016 40	457 18	457 18	457 18	457 18		
<b>072</b>	53 118	65 142	63 140	69 152	89 197	93 205	75 166	114 251	991 39	1137 44-3/4	495 19-1/2	508 20	508 20	508 20		

Base Unit - The unit with NO INTERNAL OPTIONS.

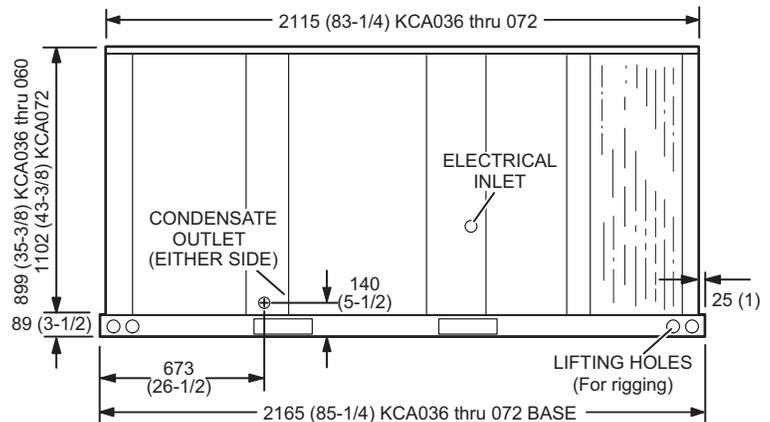
Max. Unit - The unit with ALL INTERNAL OPTIONS Installed. (Economizer, Standard Static Power Exhaust Fans, Controls, etc.). Does not include accessories external to unit or high static power exhaust.



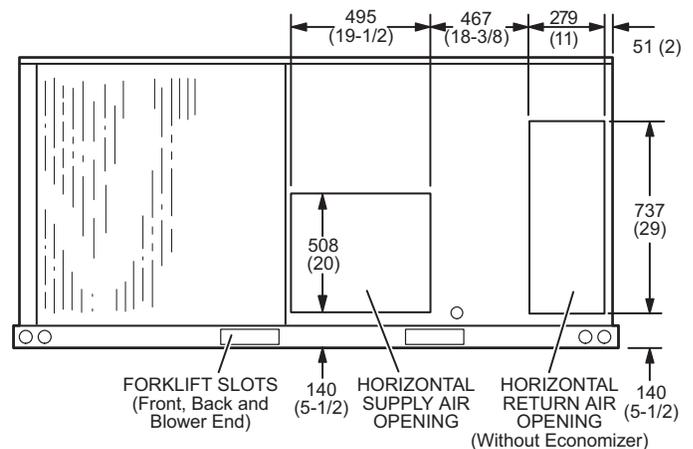
**TOP VIEW (Base)**



**END VIEW**



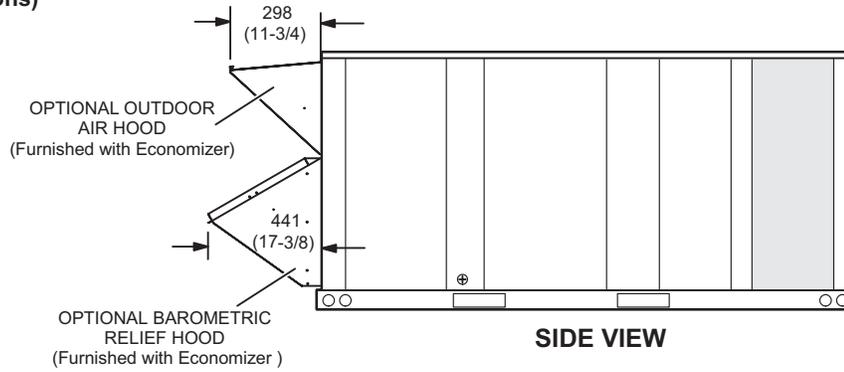
**SIDE VIEW**



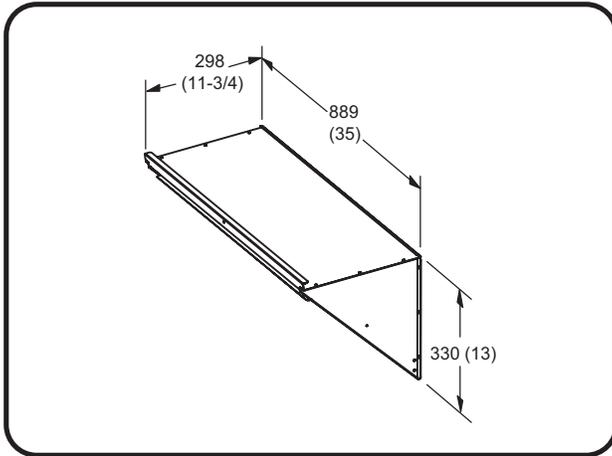
**BACK VIEW**

## DIMENSIONS - ACCESSORIES - MM (INCHES)

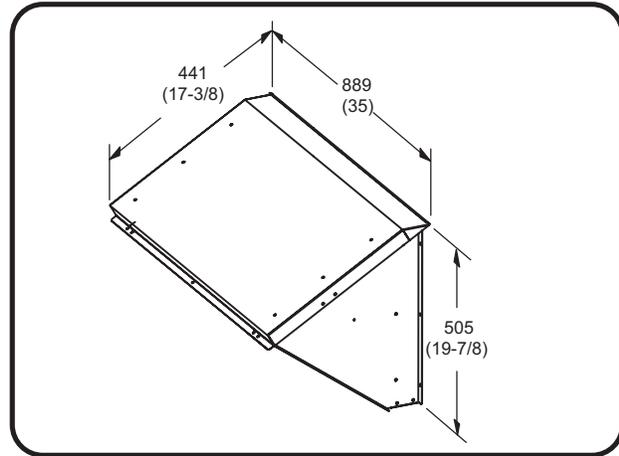
### OUTDOOR AIR HOOD DETAIL FOR OPTIONAL ECONOMIZER AND BAROMETRIC RELIEF DAMPERS (Downflow Applications)



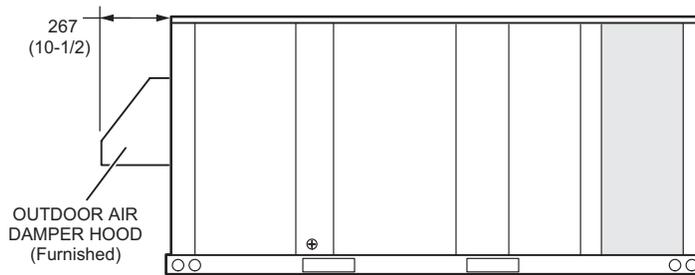
### OUTDOOR AIR HOOD FOR ECONOMIZER (Furnished)



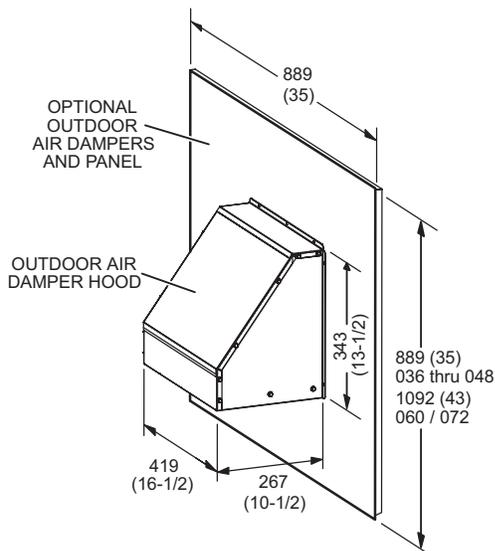
### BAROMETRIC RELIEF HOOD FOR ECONOMIZER (Furnished)



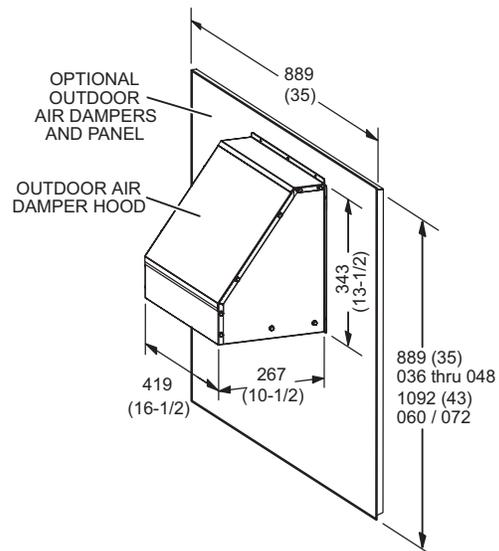
### OUTDOOR AIR DAMPER HOOD DETAIL (Downflow or Horizontal Applications)



### MANUAL OUTDOOR AIR HOOD

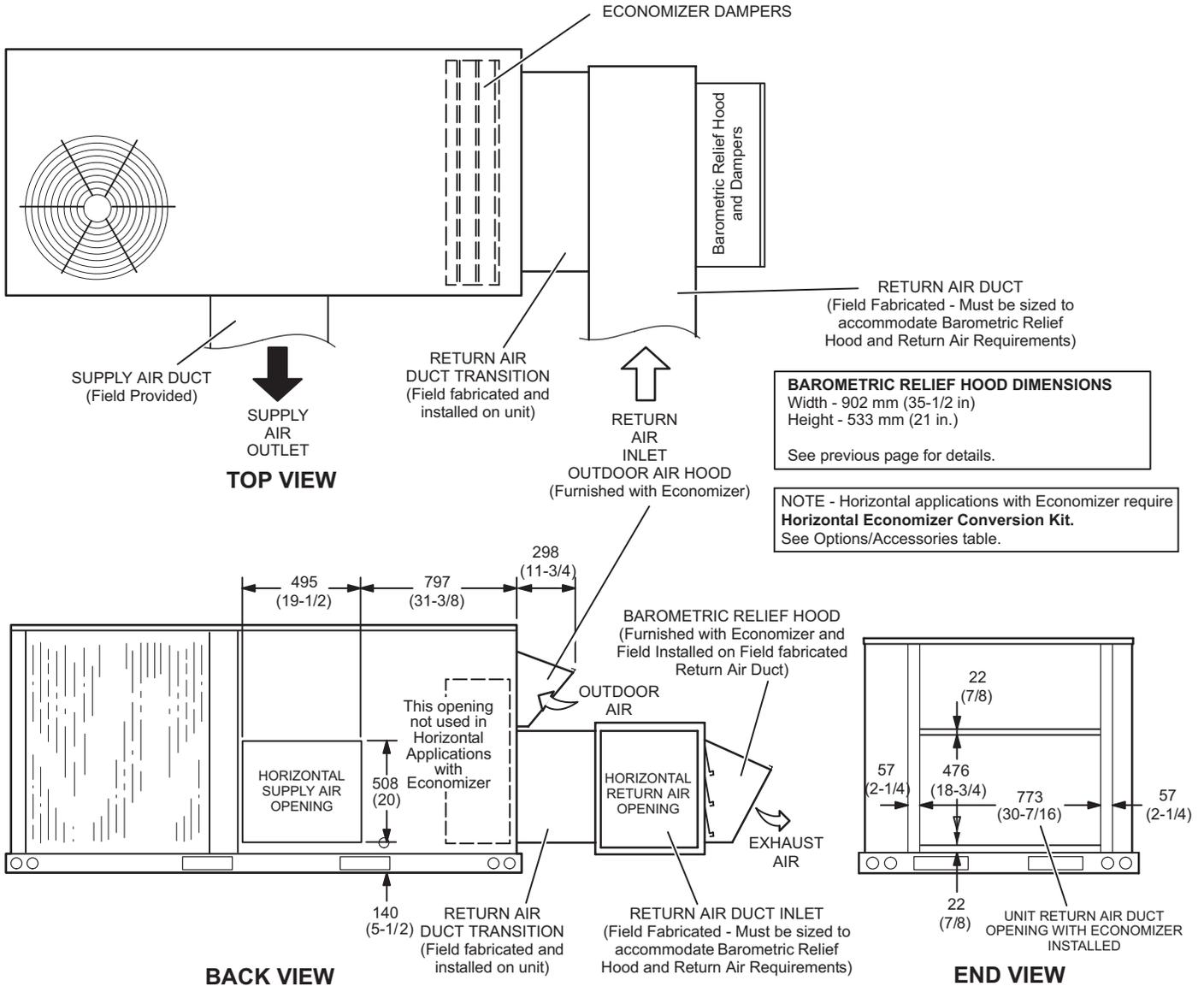


### MOTORIZED OUTDOOR AIR HOOD



## DIMENSIONS - ACCESSORIES - MM (INCHES)

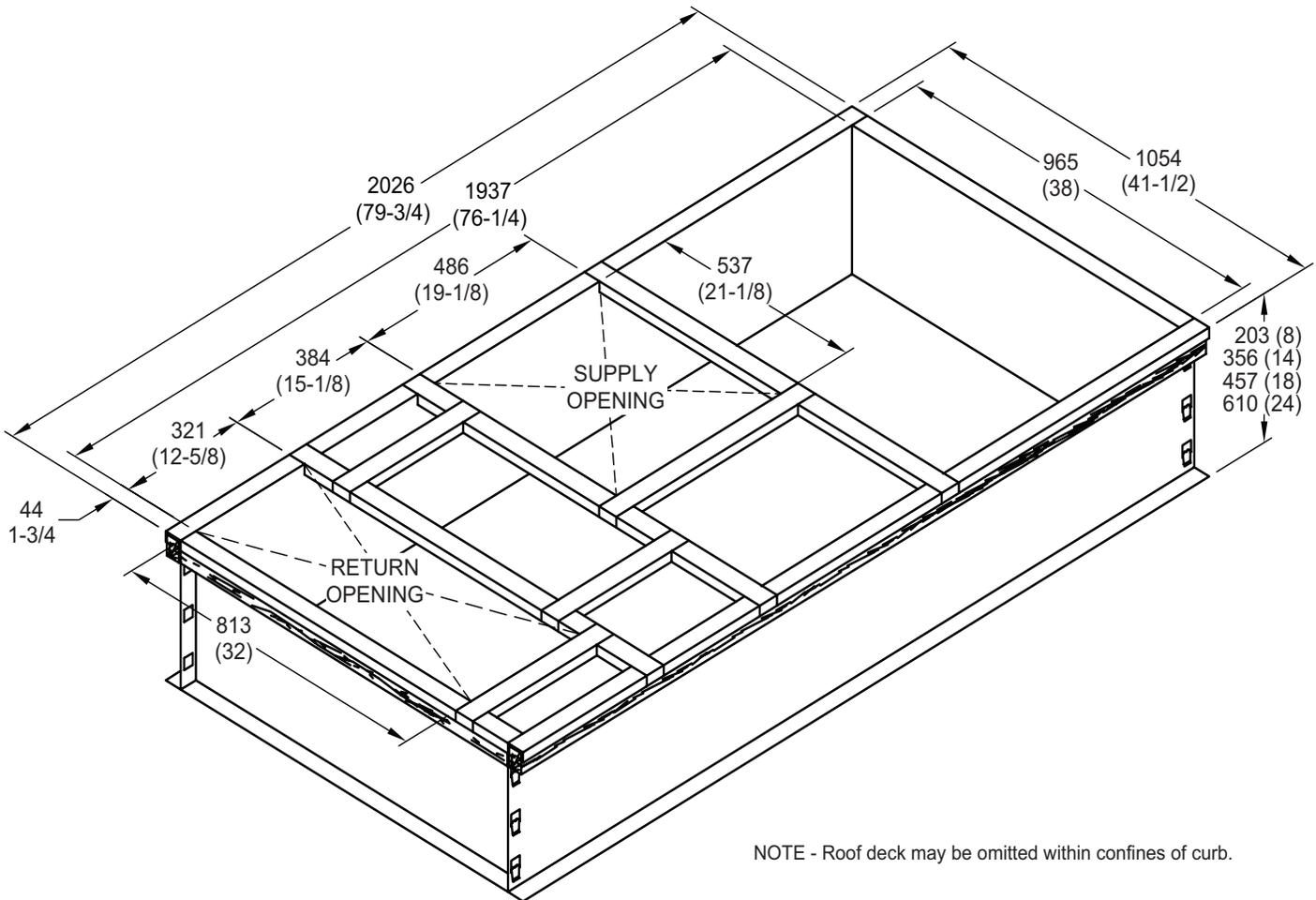
### OUTDOOR AIR HOOD DETAIL WITH OPTIONAL ECONOMIZER AND BAROMETRIC RELIEF DAMPERS (Horizontal Applications)



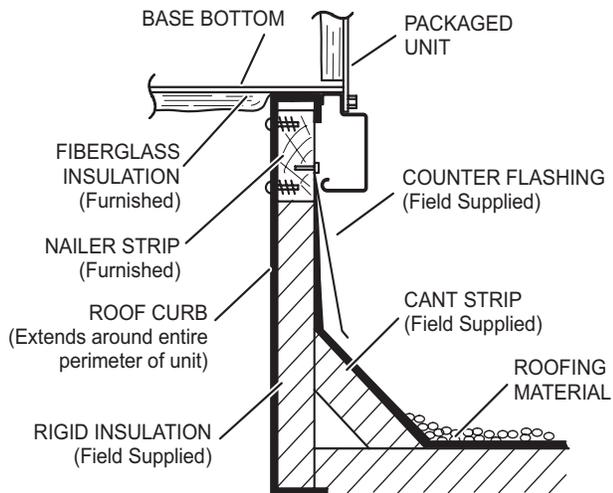
**NOTE - Return Air Duct and Transition must be supported.**

# DIMENSIONS - ACCESSORIES - MM (INCHES)

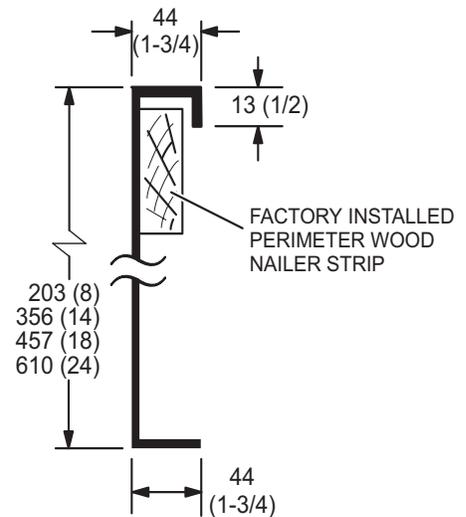
## HYBRID ROOF CURBS - DOUBLE DUCT OPENING



### TYPICAL FLASHING DETAIL FOR ROOF CURB

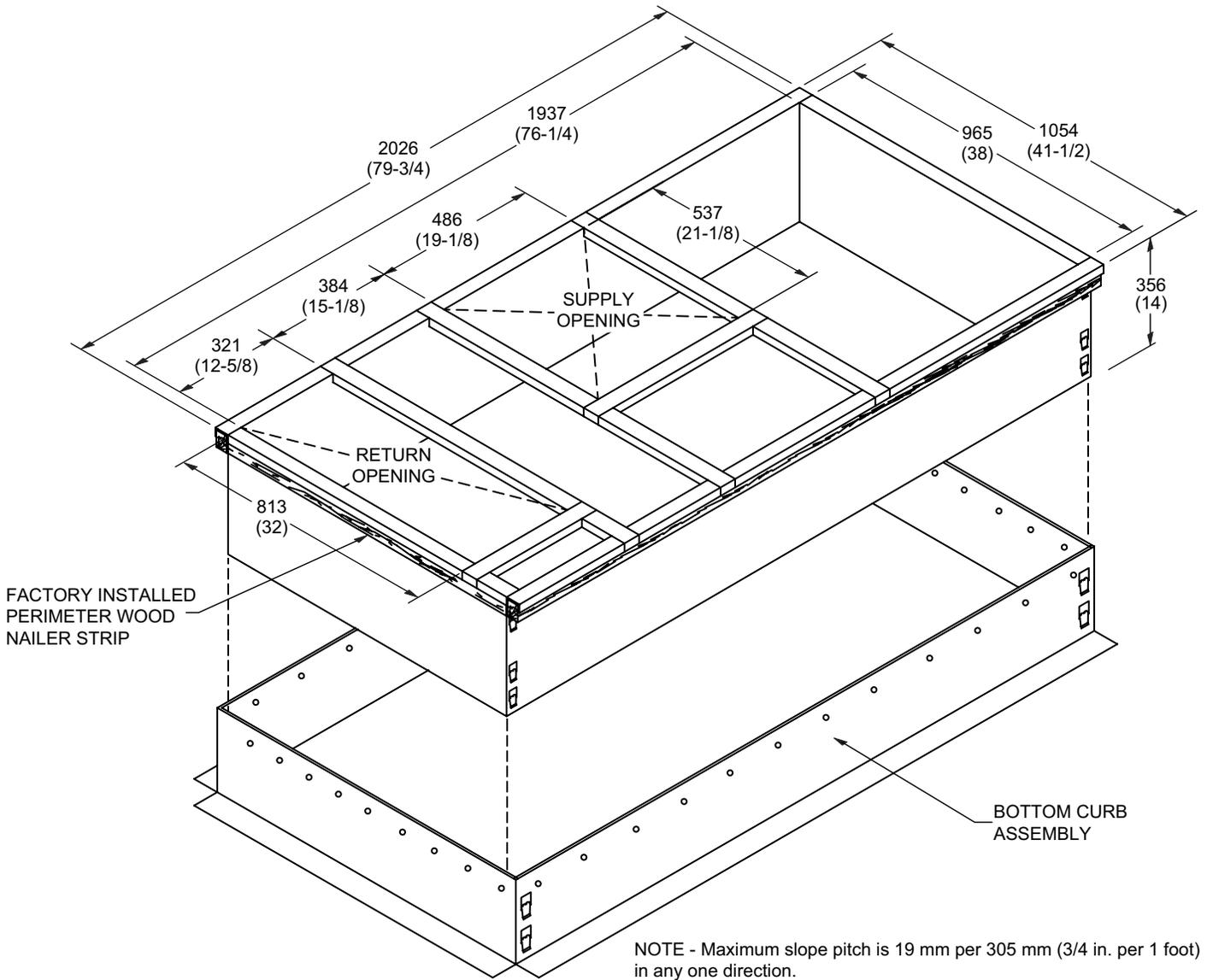


### DETAIL ROOF CURB

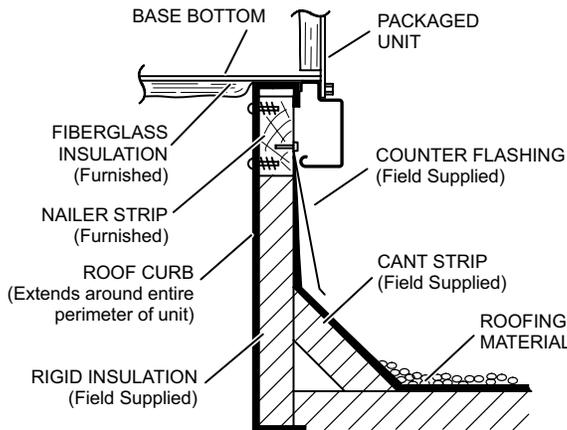


# DIMENSIONS - ACCESSORIES - MM (INCHES)

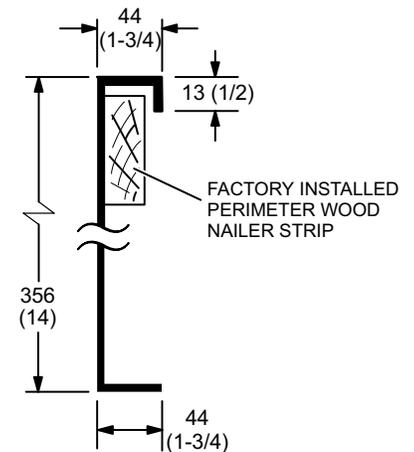
## ADJUSTABLE PITCH CURBS - DOUBLE DUCT OPENING



### TYPICAL FLASHING DETAIL FOR ROOF CURB



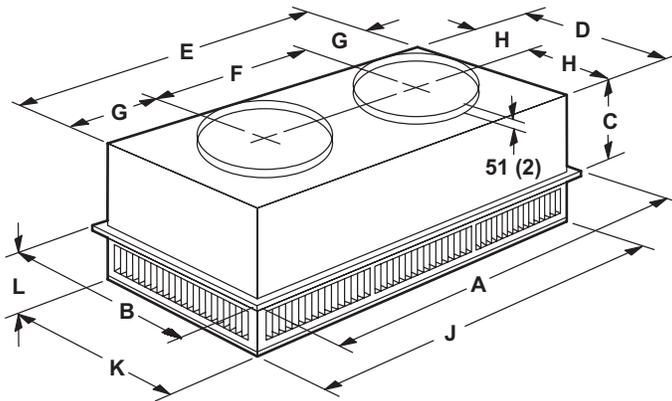
### DETAIL ROOF CURB



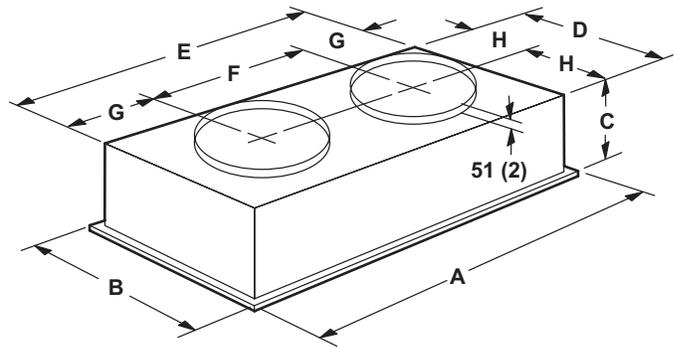
## DIMENSIONS - ACCESSORIES - MM (INCHES)

### COMBINATION CEILING SUPPLY AND RETURN DIFFUSERS

#### STEP-DOWN CEILING DIFFUSER



#### FLUSH CEILING DIFFUSER



Model Number		RTD9-65S	RTD11-95S
A	mm	1159	1159
	in.	47-5/8	47-5/8
B	mm	600	752
	in.	23-5/8	29-5/8
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		FD9-65S	FD11-95S
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
Document	Changed KC to KCA to differentiate between new KCB models (separate document).
Optional Accessories	BACNet and High Performance Economizer model numbers and catalog numbers changed.



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