

PRODUCT SPECIFICATIONS

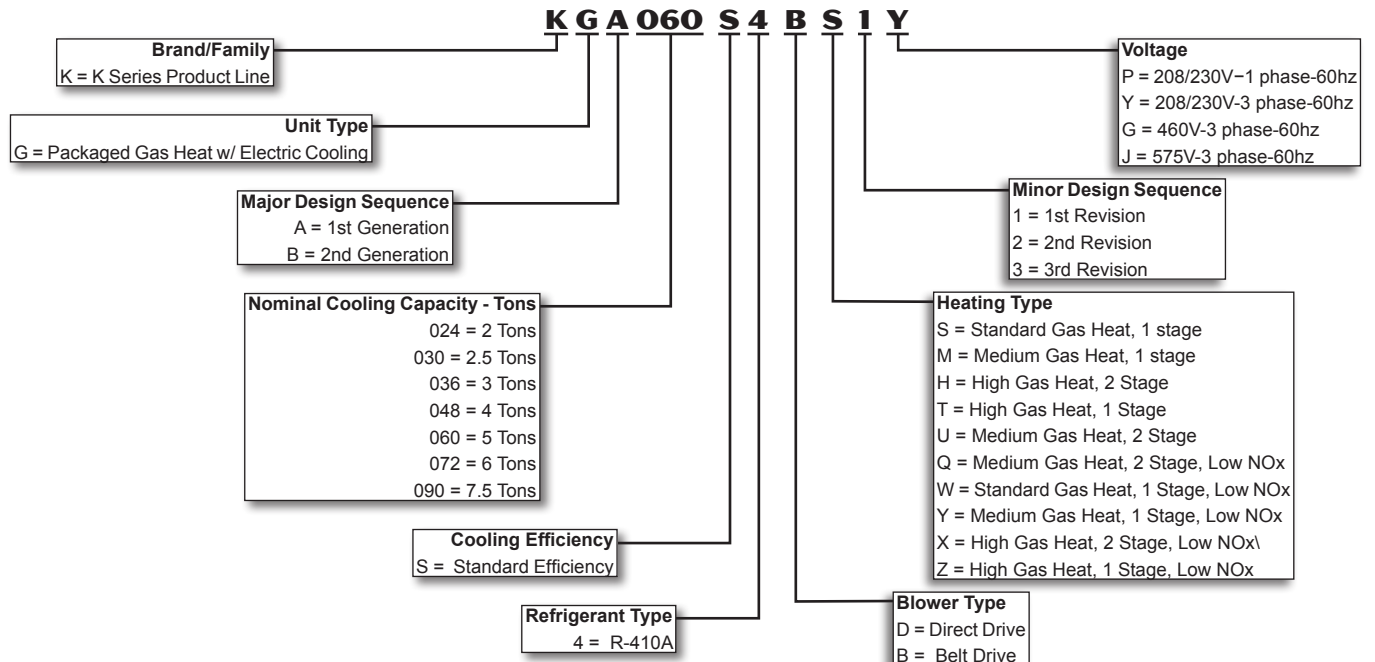
Bulletin No. KGA-024-090 (7/2014)



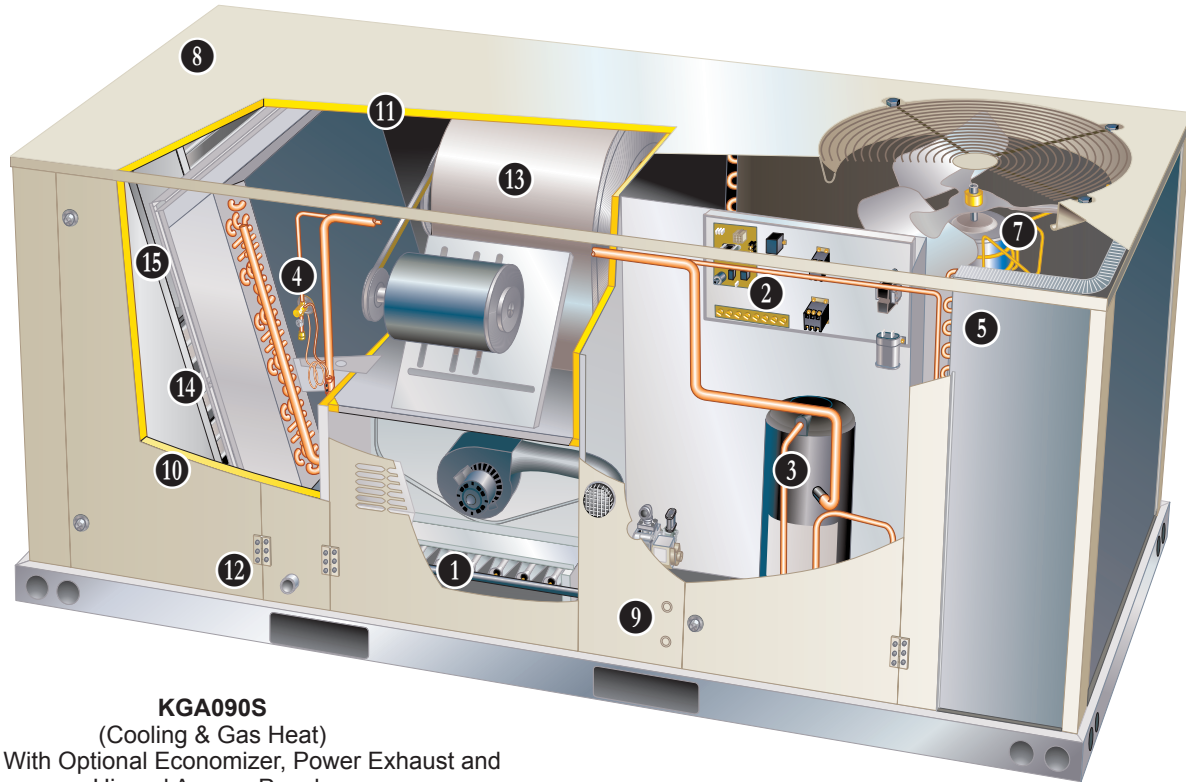
**ASHRAE 90.1
COMPLIANT**

2 to 7.5 Tons
Net Cooling Capacity – 23,600 to 90,000 Btuh
Gas Input Heat Capacity – 65,000 to 150,000 Btuh

MODEL NUMBER IDENTIFICATION



FEATURES AND BENEFITS



KGA090S
(Cooling & Gas Heat)
Shown With Optional Economizer, Power Exhaust and
Hinged Access Panels

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

- **R-410A Refrigerant** - Environmentally friendly
- **Scroll Compressors** - Single speed scroll compressors are furnished on all models.
- **Eco-last™ Coil System (090 Models Only)** - Smaller, lighter condenser coil.
- **High Pressure Switches** - Protect compressor.
- **Isolated Compressor Compartment** - Allows performance check during normal compressor operation without disrupting airflow.
- **Direct or Belt Drive Blower Motors** - Direct drive (024, 030, 036, 048 and 060 models). Belt drive motors (036, 048, 060, 072 and 090 models) 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.
- **Thermostatic Expansion Valves (024, 036, 048, 060 and 072 models)** - Provide peak cooling performance across the entire application range.
- **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

CONTENTS

Accessory Dimensions	37
Blower Data - Belt Drive	21
Blower Data - Direct Drive	18
Dimensions	36
Electrical Data	30
Features And Benefits	2
High Altitude Derate	15
Model Number Identification	1
Options / Accessories	9
Outdoor Sound Data	34
Ratings	16
Specifications - Belt Drive Blower.	14
Specifications - Direct Drive Blower.	12
Specifications - Gas Heat.	15
Unit Clearances.	33
Weight Data.	35

APPROVALS

AHRI Certified to AHRI Standard 210/240-2008 (2 thru 5 ton models) and AHRI Standard 340/360-2007 (6 and 7.5 ton models).

ETL and CSA listed.

Units are Certified by CSA.

Components bonded for grounding to meet safety standards for servicing required by UL, ULC and National and Canadian Electrical Codes.

All models are ASHRAE 90.1 compliant.

ISO 9001 Registered Manufacturing Quality System.

Models equipped with low NO_x gas heat meet the California Nitrogen Oxides (NO_x) Standards that apply in the South Coast Air Quality Management District and the San Francisco Bay Area Air Quality Management District.

WARRANTY

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

Limited five years on compressors.

Limited three years on the Eco-last™ Coil System.

Limited five years Optional High Performance Economizers.

Limited one year all other covered components.

HEATING SYSTEM

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

Heat Exchanger

Tubular construction, aluminized steel, life cycle tested.

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

- 2 Electronic Pilot Ignition

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

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

Limit Controls

Factory installed, redundant limit controls with fixed temperature setting.

Heat limit controls protect heat exchanger and other components from overheating.

Safety Switches

Flame roll-out switch, flame sensor and combustion air inducer proving switch protect system operation.

Low NO_x Models

All models are available in low NO_x versions.

Required Selections

Gas Input Choice - Order one:

- Standard Gas Heat (1 Stage) 65,000 Btuh (Not available for 090 models)
- Medium Gas Heat (1 Stage) 105,000 Btuh
- Medium Gas Heat (2 Stage) 73,500/105,000 Btuh
- High Gas Heat (1 Stage) 150,000 Btuh
- High Gas Heat (2 Stage) 105,000/150,000 Btuh

Standard or Low NO_x

Specify standard gas heat or Low NO_x option.

Options/Accessories

Factory Installed

Stainless Steel Heat Exchanger

Required if mixed air temperature is below 45°F.

Combustion Air Intake

Extensions

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

Low Temperature Vestibule Heater

Electric heater automatically controls minimum temperature in gas burner compartment when temperature is below -40°F. C.S.A. certified to allow operation of unit down to -60°F.

FEATURES AND BENEFITS

HEATING SYSTEM

(continued)

LPG/Propane Kits

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

Vertical Vent Extension Kit

Use to exhaust flue gases vertically above unit. Required when unit vent is too close to fresh air intakes per building codes. The vent kit also prevents ice formation on intake louvers.

COOLING SYSTEM

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

System can operate from 30°F to 125°F without any additional controls.

R-410A Refrigerant

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

Unit is factory pre-charged with refrigerant. See Specifications Tables.

3 Compressor

Scroll compressors for high performance, reliability and quiet operation.

Resiliently mounted on rubber grommets for quiet operation.

Compressor Crankcase Heater (Furnished on 072 Models Only)

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

4 Thermal Expansion Valve (024 thru 072 Models)

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

Refrigerant Metering Orifice (090 Models)

Accurately meters refrigerant in system.

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

Filter/Drier

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

High Pressure Switch

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

Freezestat

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

6 Eco-last™ Coil System (090 Models Only)

Condenser coil features lightweight, all aluminum brazed fin construction.

Constructed of three components: a flat extrusion tube, fins in-between the flat extrusion tube and two refrigerant manifolds.

Eco-last™ Coil System Features:

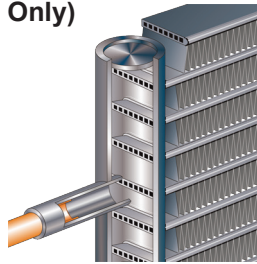
- Improved heat transfer performance due to high primary surface area (flat tubes) versus secondary surface (fins).
- Smaller internal volume (reduced refrigerant charge).
- High durability (all aluminum construction).
- Fewer brazed joints.
- Compact design (reduces unit weight).
- Easy maintenance/cleaning.

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

Angled design in cabinet helps protect coil from possible contact or hail damage.

Conventional Fin/Tube Coil (Condenser Coil for 024 thru 072 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 with rifled tubing optimizes both sensible and latent cooling capacity.

Condensate Drain Pan

Plastic pan, sloped to meet drainage requirements of ASHRAE 62.1.

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

7 Outdoor Coil Fan Motor

Thermal overload protected, totally enclosed, permanently lubricated sleeve (024, 030, 036 and 048 models) or ball bearings (060, 072 and 090 models), shaft up, wire basket mount.

Outdoor Coil Fan

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 PVC.

Compressor Crankcase Heater (Optional for 024 thru 060 and 090 Models Only)

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 0°F. A crankcase heater must be installed on the compressor.

FEATURES AND BENEFITS

CABINET

8 Construction

Heavy-gauge steel panels and full perimeter heavy-gauge galvanized steel base rail provides structural integrity for transportation, handling, and installation. Base rails have rigging holes. Three sides of the base rail have fork slots.

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

Airflow Choice

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

9 Power/Gas Entry

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

Optional Bottom Gas Entry Kit is available.

10 Exterior Panels

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

11 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

A completely flexible immersed coating with an electro-deposited 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

12 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

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.

Bottom Gas Entry Kit

Field installed piping kit to facilitate bottom gas entry.

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.

FEATURES AND BENEFITS

13 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 (belt drive) or sleeve bearings (direct drive).

Direct drive motors are offered on 024, 030, 036, 048 and 060 models.

Belt drive motors are offered on 036, 048, 060, 072 and 090 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.

All belt drive motors have adjustable pulley for speed change.

Ordering Information

Specify direct drive or belt drive motor

For belt drive, specify motor horsepower and drive kit number when base unit is ordered.

Required Selections

Supply Air Blower

Order one, belt drive or direct drive (See Blower Data Table for specifications).

Order one drive kit, belt drive only, see Drive Kit Specifications Table.

INDOOR AIR QUALITY

Air Filters

Disposable 2 inch filters furnished as standard.

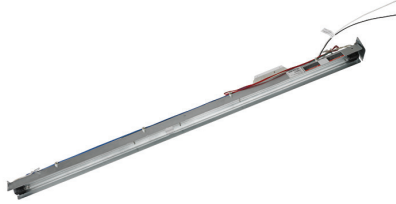
Options/Accessories

Field Installed

High Performance Air Filters

Disposable MERV 8 or MERV 13 (Minimum Efficiency Reporting Value based on ASHRAE 52.2) efficiency 2 inch pleated filters.

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 (CO₂) Sensor

Monitors CO₂ 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.

Required Selections

Voltage Choice

Specify when ordering base unit.

Options/Accessories

Factory or Field Installed

Disconnect Switch (80 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 tables for ordering information, page 30.

GFI Service Outlets (2)

115V ground fault circuit interrupter (GFCI) type, non-powered, field-wired.

Field Installed

GFI Weatherproof Cover

Single-gang cover.

Heavy-duty UV-resistant polycarbonate case construction. Hinged base cover with gasket.

ECONOMIZER OPTIONS

14 Economizer (Standard and High Performance Common Features)

Factory or Field Installed

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 CO₂ 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 (Not for Title 24)

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 55°F when CO₂ is higher than the CO₂ 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 55°F.

High Performance Economizer Features

Approved for California Title 24 building standards.

ASHRAE 90.1-2010 compliant.

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.

NOTE - High Performance Economizers are not approved for use with enthalpy controls in Title 24 applications.

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, CO₂ settings, stage 3 delay and additional calibration settings)
- CHECKOUT (damper positions)
- ALARMS (output signal that can be configured for remote alarm monitoring)

NOTE - The Free Cooling setpoint for Title 24 applications must be set based on the Climate Zone where the system is installed. See Section 140.4 "Prescriptive Requirements for Space Conditioning Systems" of the California Energy Commission's 2013 Building Energy Efficiency Standards.

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

OPTIONS / ACCESSORIES

ECONOMIZER OPTIONS

(continued)

Factory or Field Installed

Single Enthalpy Temperature Control

(Not for Title 24)

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

Field Installed

Differential Enthalpy Control (Not for Title 24)

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

15 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 16 in. diameter with 4 fan blades (C1PWRE10A) or 20 in. diameter with 5 blades (C1PWRE10AT). Both include a 1/3 hp motor.

NOTE - Not available for 024 and 030 models.

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

Linked mechanical dampers, 0 to 35% (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: 100°F.

Outdoor Air Hood is furnished.

ROOF CURBS

Hybrid Roof Curbs, Downflow

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

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 8, 14, 18, and 24 inch heights.

Full Perimeter Curbs, Downflow (090 Models Only)

Clip Curbs use interlocking tabs to fasten together. No tools required.

Hinged curb corners fasten together with furnished hinge pins.

Standard roof curb corners fasten together with furnished hardware.

NOTE - 090 models can be used on smaller 79-3/4 in. Hybrid Roof Curbs (not full perimeter) with 15-3/4 in. overhang at condenser end of unit. See dimension drawing on page 43.

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)

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.

OPTIONS / ACCESSORIES

Item	Catalog No.	024	030	036	048	060	072	090
COOLING SYSTEM								
Condensate Drain Trap	PVC - C1TRAP20AD2 Copper - C1TRAP10AD2	76W26 76W27	X X	X X	X X	X X	X X	X X
Compressor Crankcase Heater	208/230V-1 or 3 ph - K1CCHT02A-1P 208/230V-1 or 3 ph - T1CCHT01AN1P 460V-3ph - K1CCHT012A-1G 460V-3ph - T1CCHT01AN1G 575V-3ph - K1CCHT02A-1J 575V-3ph - T1CCHT01AN1J	39W04 95M07 39W05 95M08 39W06 95M09	X X X X X X	X X X X X X	X X X X X X	X X X X X X	X X X X X X	X X X X X X
Drain Pan Overflow Switch	K1SNSR71AB1-	74W42	X	X	X	X	X	X
Low Ambient Kit	K1SNSR33AN1	41W33	X	X	X	X	X	X
Efficiency	Standard	Factory	O	O	O	O	O	O
Refrigerant Type	R-410A	Factory	O	O	O	O	O	O
HEATING SYSTEM								
Bottom Gas Piping Kit	T1GPKT01AN1	19W50	X	X	X	X	X	X
Low Temperature Vestibule Heater	208/230V-1 or 3 ph - T1CWKT01AN1Y 460V-3ph - T1CWKT01AN1G 575V-3ph - T1CWKT01AN1J	19W53 19W54 19W62	X X X	X X X	X X X	X X X	X X X	X X X
Combustion Air Intake Extensions	T1EXTN10AN1	19W51	X	X	X	X	X	X
Gas Heat Input	Standard One-Stage - 65 kBtuh input Medium One-Stage - 105 kBtuh input Medium Two Stage - 73.5/105 kBtuh input High Two-Stage - 105/150 kBtuh input High One-Stage - 150 kBtuh input	Factory Factory Factory Factory Factory	O O O O O	O O O O O	O O O O O	O O O O O	O O O O O	O O O O O
LPG/Propane Conversion Kits	For one-stage models - C1PROP10AP1 For two-stage models - C1PROP20AP1	53W69 53W70	X X	X X	X X	X X	X X	X X
Stainless Steel Heat Exchanger			O	O	O	O	O	O
Vertical Vent Extension	C1EXTN20FF1	31W62	X	X	X	X	X	X
BLOWER - SUPPLY AIR								
Motors	Direct Drive - 0.25 hp Direct Drive - 0.5 hp Direct Drive - 0.75 hp ¹ Belt Drive - 1 hp Standard Efficiency ² Belt Drive - 1.5 hp Standard Efficiency ¹ Belt Drive - 2 hp Standard Efficiency Belt Drive - 3 hp Standard Efficiency	Factory Factory Factory Factory Factory Factory Factory	O O O O O O O	O O O O O O O	O O O O O O O	O O O O O O O	O O O O O O O	O O O O O O O
Drive Kits See Blower Data Tables for selection	Kit A01 - T1DRKT001-1 - 673-1010 rpm Kit A02 - T1DRKT002-1 - 745-1117 rpm Kit A03 - T1DRKT003-1 - 833-1250 rpm Kit A04 - T1DRKT004-1 - 968-1340 rpm Kit A05 - T1DRKT005-1 - 897-1346 rpm Kit A06 - T1DRKT006-1 - 1071-1429 rpm Kit A07 - T1DRKT007-1 - 1212-1548 rpm Kit A08 - T1DRKT008-1 - 1193-1591 rpm Kit AA01 - T1DRKT001AP1 - 522-784 rpm Kit AA02 - T1DRKT002AP1 - 632-875 rpm Kit AA03 - T1DRKT003AP1 - 798-1105 rpm Kit AA04 - T1DRKT004AP1 - 921-1228 rpm	Factory Factory Factory Factory Factory Factory Factory Factory Factory Factory Factory Factory Factory	O O O O O O O O O O O O O	O O O O O O O O O O O O O	O O O O O O O O O O O O O	O O O O O O O O O O O O O	O O O O O O O O O O O O O	

¹ 1 hp and 2 hp blower motors are not available for 208/230V-1ph applications.

² 1.5 hp blower motor is only available for 208/230V-1ph applications.

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	Catalog No.	024	030	036	048	060	072	090
CABINET								
Coil Guards	T1GARD20A-1	17W87	X	X	X	X	X	
	T1GARD20N-1	17W88					X	
	K1GARD20AP1	53W21						X
Corrosion Protection		O	O	O	O	O	O	O
Hail Guards	T1GARD10A-1	17W89	X	X	X	X		
	T1GARD10N-1	17W90					X	
	K1GARD10AP1	53W22						X
Hinged Access Panels	Factory	O	O	O	O	O	O	O
CONTROLS								
Commercial Controls								
BACnet®	K0CTRL31A-1	96W14	OX	OX	OX	OX		
	K0CTRL31AP1	12B99					OX	OX
BACnet® Thermostat with Display	K0SNSR01FF1	97W23	X	X	X	X	X	X
BACnet® Thermostat without Display	K0SNSR00FF1	97W24	X	X	X	X	X	X
Novar® 2051	K0CTRL30A-1	96W11	OX	OX	OX	OX		
	K0CTRL30AP1	12B98					OX	OX
Plenum Cable (75 ft.)	K0MISC00FF1	97W25	X	X	X	X	X	X
Smoke Detector - Supply or Return (Power board and one sensor)	C1SNSR44AP1	53W78	X	X	X	X	X	X
Smoke Detector - Supply and Return (Power board and two sensors)	C1SNSR43AP1	53W79	X	X	X	X	X	X
ELECTRICAL								
Voltage 60 hz	208/230V - 1 phase	Factory	O	O	O	O		
	208/230V - 3 phase	Factory			O	O	O	O
	460V - 3 phase	Factory			O	O	O	O
	575V - 3 phase	Factory			O	O	O	O
Disconnect	See Electric Data Tables for usage		OX	OX	OX	OX	OX	OX
GFI Service 15 amp non-powered, field-wired (208/230V, 460V only)	LTAGFIK10/15	74M70	OX	OX	OX	OX	OX	OX
Outlets 20 amp non-powered, field-wired (575V only)	C1GFIC120FF1	67E01	X	X	X	X	X	X
Weatherproof Cover for GFI	C1GFIC199FF1	10C89	X	X	X	X	X	X
ECONOMIZER								
Standard Economizer With Outdoor Air Hood (Sensible Control) (Not for Title 24)								
Standard Economizer - Includes Barometric Relief Dampers and Exhaust Hood	K1ECON30A-2-	90W61	OX	OX	OX	OX		
	K1ECON30AT2-	90W62					OX	OX
Economizer - No Exhaust	Factory		O	O	O	O	O	O
Standard Economizer Controls (Not for Title 24)								
Single Enthalpy Control	C1SNSR64FF1	53W64	OX	OX	OX	OX	OX	OX
Differential Enthalpy Control (order 2)	C1SNSR64FF1	53W64	X	X	X	X	X	X
High Performance Economizer With Outdoor Air Hood (Sensible Control) (Approved for California Title 24 Building Standards)								
High Performance Economizer - Includes Barometric Relief Dampers and Exhaust Hood	K1ECON32A-1	10U56	OX	OX	OX	OX		
	K1ECON32AT1	10U57					OX	OX
High Performance Economizer Controls (Not for Title 24)								
Single Enthalpy Control		10Z75	OX	OX	OX	OX	OX	OX
Differential Enthalpy Control (order 2)		10Z75	X	X	X	X	X	X
Economizer Accessories								
Horizontal Economizer Conversion Kit	T1HECK00AN1	17W45	X	X	X	X	X	X
OUTDOOR AIR								
Outdoor Air Dampers - Includes Outdoor Air Hood								
Manual	C1DAMP11A-1	53W34	OX	OX	OX	OX		
	C1DAMP11AT1	53W37					OX	OX
Motorized	K1DAMP21A-1	79W95	OX	OX	OX	OX		
	K1DAMP21AT1	79W96					OX	OX

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	Catalog No.	024	030	036	048	060	072	090
POWER EXHAUST FAN								
Standard Static	208/230V-1 or 3ph - C1PWRE10A-1P	79W87		X	X	X		
<i>NOTE - Order Barometric Relief Dampers with Exhaust Hood below if unit is ordered with factory installed Economizer with "No Exhaust" option</i>	460V-3ph - C1PWRE10A-1G	79W88		X	X	X		
	575V-3ph - C1PWRE10A-1J	79W89		X	X	X		
	208/230V-1 or 3ph - C1PWRE10AT1P	79W90					X	X
	460V-3ph - C1PWRE10AT1G	79W91					X	X
	575V-3ph - C1PWRE10AT1J	79W92					X	X
¹ BAROMETRIC RELIEF								
Barometric Relief Dampers with Exhaust Hood	C1DAMP50A-1-	74W38	X	X	X	X		
	C1DAMP50AT1-	74W39					X	X
INDOOR AIR QUALITY								
Air Filters								
High Efficiency Air Filters	MERV 8 (16 x 20 x 2) - C1FLTR15A-1-	54W20	X	X	X	X		
Order 4 per unit	MERV 13 (16 x 20 x 2) - T1FLTR40A-1-	52W37	X	X	X	X		
	MERV 8 (20 x 20 x 2) - C1FLTR15D-1-	54W21					X	X
	MERV 13 (20 x 20 x 2) - C1FLTR40D-1-	52W39					X	X
Indoor Air Quality (Co₂) Sensors								
Sensor - Wall-mount, off-white plastic cover with LCD display	C0SNSR50AE1L	77N39	X	X	X	X	X	X
Sensor - Wall-mount, black plastic case, no display, rated for plenum mounting	C0SNSR53AE1L	87N54	X	X	X	X	X	X
CO ₂ Sensor Duct Mounting Kit - for downflow applications	C0MISC19AE1-	85L43	X	X	X	X	X	X
Aspiration Box - for duct mounting non-plenum rated CO ₂ sensor (77N39)	C0MISC16AE1-	90N43	X	X	X	X	X	X
UVC Germicidal Lamps								
² UVC Light Kit (208/230v-1ph)	E1UVCL10AN1-	50W90	X	X	X	X	X	X
CEILING DIFFUSERS								
Step-Down - Order one	RTD9-65-R	27G87	X	X	X	X		
	RTD11-95	29G04					X	X
Flush - Order one	FD9-65-R	27G86	X	X	X	X		
	FD11-95	29G08					X	X
Transitions (Supply and Return) - Order one	T1TRAN10AN1	17W53	X	X	X	X		
	T1TRAN20N-1	17W54					X	X
ROOF CURBS								
Hybrid Roof Curbs, Downflow								
8 in. height	C1CURB70A-1	11F50	X	X	X	X	X	² X
14 in. height	C1CURB71A-1	11F51	X	X	X	X	X	² X
18 in. height	C1CURB72A-1	11F52	X	X	X	X	X	² X
24 in. height	C1CURB73A-1	11F53	X	X	X	X	X	² X
Clip Curbs, Full Perimeter, Downflow								
8 in. height	K1CURB23AP1	52W20						X
14 in. height	K1CURB20AP1	52W21						X
18 in. height	K1CURB21AP1	52W22						X
24 in. height	K1CURB22AP1	52W23						X
Hinged, Full Perimeter, Downflow								
8 in. height	K1CURB30AP1	52W17						X
14 in. height	K1CURB32AP1	52W18						X
24 in. height	K1CURB33AP1	52W19						X
Standard, Full Perimeter, Downflow								
14 in. height	K1CURB10AP1	52W24						X
Adjustable Pitched Curb								
14 in. height	C1CURB55AT1	43W27	X	X	X	X	X	² X

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

² Lamps operate on 110-230V single-phase power supply. Step-down transformer may be ordered separately for 460V and 575V units. Alternately, 110V power supply may be used to directly power the UVC ballast(s).

³ 090 models fit smaller roof curbs with overhang. See dimension drawing.

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.

SPECIFICATIONS - DIRECT DRIVE BLOWER

General Data		Nominal Tonnage	2 Ton	2.5 Ton
	Model No.		KGA024S4D	KGA030S4D
	Efficiency Type		Standard	Standard
Cooling Performance	Gross Cooling Capacity - Btuh		24,400	29,800
	¹ Net Cooling Capacity - Btuh		23,600	28,800
	AHRI Rated Air Flow - cfm		840	1000
	² Sound Rating Number (SRN) (dBA)		75	75
	Total Unit Power - kW		2.1	2.6
	¹ SEER (Btuh/Watt)		13	13
	¹ EER (Btuh/Watt)		11.4	11.2
Refrigerant	Type		R-410A	R-410A
	Charge Furnished		7 lbs. 0 oz.	7 lbs. 12 oz.
Gas Heating Options - See page 15			Standard (1 Stage)	Standard (1 Stage)
Compressor Type (one per unit)			Scroll	Scroll
Outdoor Coil	Net face area - sq. ft.		15.6	15.6
	Tube diameter - in.		3/8	3/8
	Number of rows		1	1
	Fins per inch		20	20
Outdoor Coil Fan	Motor HP		1/4	1/4
	Motor rpm		825	825
	Total motor watts		250	250
	Diameter - in. / No. of blades		24 - 3	24 - 3
	Total air volume - cfm		3700	3700
Indoor Coil	Net face area - sq. ft.		7.8	7.8
	Tube diameter - in.		3/8	3/8
	Number of rows		3	3
	Fins per inch		14	14
	Drain Connection (no. and size) - in.		(1) 1 npt	(1) 1 npt
	Expansion device type		Balanced Port Thermostatic Expansion Valve, removeable power head	
Indoor Blower	Nominal Motor HP		.25	.25
	Wheel nominal diameter x width - in.		10 x 10	10 x 10
Filters	Type		Disposable	
	Number and size - in.		(4) 16 x 20 x 2	
Electrical Characteristics - 60 Hz			208/230V 1 phase	208/230V 1 phase

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

¹ AHRI Certified to AHRI Standard 210/240: 95°F outdoor air temperature and 80°F db/67°F wb entering evaporator air; minimum external duct static pressure.

² Sound Rating Number (SRN) rated in accordance with test conditions included in ARI Standard 270-95.

SPECIFICATIONS - DIRECT DRIVE BLOWER

General Data		Nominal Tonnage	3 Ton	4 Ton	5 Ton
		Model No.	KGA036S4D	KGA048S4D	KGA060S4D
		Efficiency Type	Standard	Standard	Standard
Cooling Performance	Gross Cooling Capacity - Btuh		37,500	50,000	61,800
	¹ Net Cooling Capacity - Btuh		36,000	48,000	59,000
	AHRI Rated Air Flow - cfm		1200	1600	1800
	² Sound Rating Number (SRN) (dBA)		75	75	82
	Total Unit Power - kW		3.4	4.4	5.3
	¹ SEER (Btuh/Watt)		13	13	13
	¹ EER (Btuh/Watt)		10.7	11	11.2
Refrigerant	Type		R-410A	R-410A	R-410A
	Charge Furnished		8 lbs. 5 oz.	8 lbs. 10 oz.	11 lbs. 0 oz.
Gas Heating Options - See page 15			Standard (1 stage) or Medium (1 or 2 stage)	Standard (1 stage), Medium (1 or 2 Stage) or High (1 or 2 Stage)	
Compressor Type (one per unit)			Scroll	Scroll	Scroll
Outdoor Coil	Net face area - sq. ft.		15.6	15.6	15.6
	Tube diameter - in.		3/8	3/8	3/8
	Number of rows		1	1.5	2
	Fins per inch		20	20	20
Outdoor Coil Fan	Motor HP		1/4	1/4	1/3
	Motor rpm		825	825	1075
	Total motor watts		250	250	370
	Diameter - in. / No. of blades		24 - 3	24 - 3	24 - 3
	Total air volume - cfm		3700	3500	4300
Indoor Coil	Net face area - sq. ft.		7.8	7.8	7.8
	Tube diameter - in.		3/8	3/8	3/8
	Number of rows		3	3	4
	Fins per inch		14	14	14
	Drain Connection (no. and size) - in.		(1) 1 npt	(1) 1 npt	(1) 1 npt
	Expansion device type		Balanced Port Thermostatic Expansion Valve, removeable power head		
Indoor Blower	Nominal Motor HP		.5	.5	.75
	Wheel nominal diameter x width - in.		10 x 10	10 x 10	11 x 10
Filters	Type		Disposable		
	Number and size - in.		(4) 16 x 20 x 2		
Electrical Characteristics - 60 Hz			208/230V 1 phase	208/230V 1 phase	208/230V 1 phase
			208/230V, 460V & 575V 3 phase	208/230V, 460V & 575V 3 phase	208/230V, 460V & 575V 3 phase

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

¹ AHRI Certified to AHRI Standard 210/240: 95°F outdoor air temperature and 80°F db/67°F wb entering evaporator air; minimum external duct static pressure.

² Sound Rating Number (SRN) rated in accordance with test conditions included in ARI Standard 270-95.

SPECIFICATIONS - BELT DRIVE BLOWER

3 - 7.5 TON

General Data		Nominal Tonnage	3 Ton	4 Ton	5 Ton	6 Ton	7.5 Ton	
		Model No.	KGA036S4B	KGA048S4B	KGA060S4B	KGA072S4B	KGA090S4B	
		Efficiency Type	Standard	Standard	Standard	Standard	Standard	
Cooling Performance	Gross Cooling Capacity - Btuh		37,500	50,000	61,800	72,800	92,000	
	Net Cooling Capacity - Btuh		¹ 36,000	¹ 48,000	¹ 59,000	² 70,000	² 90,000	
	AHRI Rated Air Flow - cfm		1200	1600	1800	2100	2430	
	³ Sound Rating Number (SRN) (dBA)		75	75	82	82	79	
	Total Unit Power - kW		3.4	4.4	5.3	6.3	8.2	
	SEER (Btuh/Watt)		¹ 13.0	¹ 13.0	¹ 13.0	---	---	
	IEER (Btuh/Watt)		---	---	---	² 11.2	² 11.2	
	EER (Btuh/Watt)		¹ 10.7	¹ 11	¹ 11.2	² 11.0	² 11.0	
Refrigerant	Type		R-410A	R-410A	R-410A	R-410A	R-410A	
	Charge Furnished		8 lbs. 5 oz.	8 lbs. 10 oz.	11 lbs. 0 oz.	14 lbs. 12 oz.	8 lbs. 10 oz.	
Gas Heating Options - See page 15			Standard (1 stage) or Medium (1 or 2 stage)	Standard (1 stage), Medium (1 or 2 Stage) or High (1 or 2 Stage)			Medium (1 or 2 Stage) or High (1 or 2 Stage)	
Compressor Type (one per unit)			Scroll	Scroll	Scroll	Scroll	Scroll	
Outdoor Coil	Net face area - sq. ft.		15.6	15.6	15.6	19.3	24.2	
	Tube diameter - in.		3/8	3/8	3/8	3/8	---	
	Number of rows		1	1.5	2	2	1	
	Fins / inch		20	20	20	20	23	
Outdoor Coil Fan	Motor HP		1/4	1/4	1/3	1/3	1/2	
	Motor rpm		825	825	1075	1075	1075	
	Total motor watts		250	250	370	405	520	
	Diameter - in. / No. of blades		24 - 3	24 - 3	24 - 3	24 - 3	24 - 4	
	Total air volume - cfm		3700	3500	4300	4800	5300	
Indoor Coil	Net face area - sq. ft.		7.8	7.8	7.8	9.7	9.7	
	Tube diameter - in.		3/8	3/8	3/8	3/8	3/8	
	Number of rows		3	3	4	4	4	
	Fins per inch		14	14	14	14	14	
	Drain Connection (no. and size) - in.		(1) 1 npt	(1) 1 npt	(1) 1 npt	(1) 1 npt	(1) 1 npt	
	Expansion device type		Balanced Port Thermostatic Expansion Valve, removeable power head					Refrigerant Metering Orifice (RFC)
⁴ Indoor Blower & Drive Selection	Nominal Motor HP		⁵ 1 hp, ⁶ 1.5 hp, ⁵ 2 hp	⁵ 1 hp, ⁶ 1.5 hp, ⁵ 2 hp	⁵ 1 hp, ⁶ 1.5 hp, ⁵ 2 hp	1 hp, 2 hp	1 hp	
	Maximum Usable Motor HP		1.15 hp, 1.7 hp, 2.3 hp	1.15 hp, 1.7 hp, 2.3 hp	1.15 hp, 1.7 hp, 2.3 hp	1.15 hp, 2.3 hp	1.15 hp	
	Available Drive Kits	A01		673 - 1010 rpm	745 - 1117 rpm	833 - 1250 rpm	968 - 1340 rpm	522 - 784 rpm
		A02		A05	A06	A07	A08	
		A03		897 - 1346 rpm	1071 - 1429 rpm	1212 - 1548 rpm	1193 - 1591 rpm	
	Nominal Motor HP		---	---	---	---	2 hp	
	Maximum Usable Motor HP		---	---	---	---	2.3 hp	
	Available Drive Kits	---		---	---	---	---	AA02
		---		---	---	---	---	632 - 875 rpm
		---		---	---	---	---	AA03
---			---	---	---	---	798 - 1105 rpm	
			---	---	---	---	3 hp	
			---	---	---	---	3.45 hp	
			---	---	---	---	AA04	
			---	---	---	---	921 - 1228 rpm	
Wheel nominal diameter x width - in.		10 x 10	10 x 10	10 x 10	10 x 10	15 x 9		
Filters	Type		Disposable			Disposable		
	Number and size - in.		(4) 16 x 20 x 2			(4) 20 x 20 x 2		
Electrical Characteristics - 60 Hz			208/230V 1 phase, 208/230V, 460V & 575V 3 phase	208/230V, 1 phase, 208/230V 460V & 575V 3 phase	208/230V 1 phase, 208/230V, 460V & 575V 3 phase	208/230V, 460V & 575V 3 phase	208/230V, 460V & 575V 3 phase	

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

^{1,2} AHRI Certified to AHRI Standard ¹ 210/240 or ² 340/360: 95°F outdoor air temperature and 80°F db/67°F wb entering evaporator air; minimum external duct static pressure.

³ Sound Rating Number (SRN) rated in accordance with test conditions included in ARI Standard 270-95.

⁴ Using total air volume and system static pressure requirements determine from blower performance tables rpm and motor hp required. Maximum usable hp of motors furnished are shown. In Canada, nominal motor hp is also maximum usable motor hp output. If motors of comparable hp are used, be sure to keep within the service factor limitations outlined on the motor nameplate.

⁵ 1 hp and 2 hp blower motors are not available for 208/230V-1ph applications.

⁶ 1.5 hp blower motor only available for 208/230V-1ph applications.

SPECIFICATIONS - GAS HEAT

Model No.	KGA024, KGA030	KGA036, KGA048, KGA060, KGA072	KGA036, KGA048, KGA060, KGA072	KGA090	KGA036, KGA048, KGA060, KGA072	KGA090	KGA048, KGA060, KGA072	KGA090	KGA048, KGA060, KGA072	KGA090	
Heat Input Type	Standard (1 Stage)	Standard (1 Stage)	Medium (1 Stage)		Medium (2 Stage)		High (1 Stage)		High (2 Stage)		
Input Btuh	1st Stage	65,000	65,000	105,000		73,500		150,000		105,000	
	2nd Stage	---	---	---		105,000		---		150,000	
Output Btuh	1st Stage	52,000	52,000	84,000		59,000		120,000		85,500	
	2nd Stage	---	---	---		84,000		---		120,000	
Temp. Rise	1st stage	35 - 65	20 - 50	25 - 70	20 - 50	15 - 55	10 - 40	40 - 85	30 - 60	25 - 65 / 20 - 50	
	2nd Stage	---	---	---	---	25 - 70	20 - 50	---	---	40 - 85 / 30 - 60	
1 AFUE		80	80	80	80	80	80	80	80	80	
Thermal Efficiency	1st Stage	80	80	80	80	80	80	80	80	81.5 / 81.5	
	2nd Stage	---	---	---	---	80	80	---	---	80 / 80	
Gas Supply Connections		1/2 in. NPT									
Rec. Gas Supply Pressure - Nat./ LPG		7 in.w.g. / 11 in.w.g.									

¹ Annual Fuel Utilization Efficiency based on U.S. DOE test procedures and FTC labeling regulations.

HIGH ALTITUDE DERATE

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

Heat Input Type	Altitude Feet	Gas Manifold Pressure in. w.g.		Input Rate (Btuh)
		Natural Gas	LPG/ Propane	
Standard (1 stage)	2001 - 4500	3.0	9.0	60,000
Medium (1 stage)	2001 - 4500	3.0	9.0	97,000
Medium (2 stage)	2001 - 4500	3.0/1.7	9.0/5.1	97,000 / 73,500
High (1 stage)	2001 - 4500	3.0	9.0	138,000
High (2 stage)	2001 - 4500	3.0/1.7	9.0/5.1	138,000 / 105,000

RATINGS

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

5 TON - KGA060S4

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		85°F					95°F					105°F					115°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb		
				75°F	80°F	85°F			75°F	80°F	85°F			75°F	80°F	85°F			75°F	80°F	85°F
63°F	1600	60.1	3.48	0.68	0.84	1	57	3.93	0.69	0.86	1	53.5	4.44	0.71	0.89	1	50	5.04	0.73	0.93	1
	2000	63.1	3.51	0.74	0.94	1	59.8	3.96	0.76	0.97	1	56	4.47	0.78	1	1	52.6	5.06	0.81	1	1
	2400	65.6	3.54	0.8	1	1	62.3	3.99	0.83	1	1	59.1	4.51	0.86	1	1	55.6	5.1	0.91	1	1
67°F	1600	63.9	3.52	0.54	0.66	0.79	60.5	3.97	0.54	0.67	0.82	57.1	4.48	0.55	0.69	0.85	53.2	5.07	0.56	0.71	0.89
	2000	66.8	3.55	0.57	0.72	0.9	63.1	4	0.58	0.73	0.93	59.2	4.51	0.58	0.75	0.97	55.1	5.1	0.59	0.79	1
	2400	68.9	3.58	0.6	0.78	0.99	65	4.02	0.61	0.8	1	61.1	4.54	0.63	0.84	1	56.8	5.12	0.64	0.88	1
71°F	1600	67.7	3.56	0.4	0.52	0.64	64.2	4.01	0.41	0.53	0.65	60.4	4.53	0.4	0.54	0.67	56.4	5.12	0.4	0.54	0.69
	2000	70.7	3.6	0.42	0.56	0.7	67	4.05	0.42	0.57	0.71	62.8	4.56	0.42	0.57	0.73	58.5	5.15	0.42	0.59	0.76
	2400	72.7	3.62	0.43	0.59	0.75	68.7	4.07	0.43	0.6	0.78	64.6	4.58	0.44	0.62	0.81	60	5.17	0.44	0.64	0.85

6 TON - KGA072S4

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		85°F					95°F					105°F					115°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb		
				75°F	80°F	85°F			75°F	80°F	85°F			75°F	80°F	85°F			75°F	80°F	85°F
63°F	1920	70	4.55	0.68	0.83	0.99	66.6	5.06	0.7	0.86	1	62.8	5.63	0.71	0.89	1	58.5	6.28	0.73	0.92	1
	2400	73.8	4.57	0.74	0.93	1	70.1	5.07	0.76	0.96	1	66.1	5.64	0.78	0.99	1	61.8	6.29	0.8	1	1
	2880	76.6	4.57	0.8	1	1	73.1	5.08	0.82	1	1	69.6	5.65	0.85	1	1	65.6	6.31	0.89	1	1
67°F	1920	74.5	4.57	0.54	0.66	0.79	70.9	5.07	0.54	0.67	0.81	67	5.64	0.55	0.69	0.84	62.7	6.29	0.56	0.71	0.88
	2400	78.3	4.58	0.57	0.71	0.89	74.5	5.08	0.58	0.73	0.92	70.3	5.65	0.59	0.75	0.95	65.6	6.3	0.6	0.77	0.98
	2880	81.2	4.59	0.6	0.77	0.97	77	5.09	0.61	0.79	0.99	72.7	5.66	0.62	0.82	1	67.9	6.31	0.64	0.86	1
71°F	1920	79.1	4.59	0.41	0.53	0.64	75	5.08	0.41	0.53	0.65	71.1	5.66	0.4	0.53	0.66	66.6	6.3	0.41	0.54	0.68
	2400	83	4.6	0.42	0.56	0.69	79	5.1	0.42	0.57	0.7	74.5	5.67	0.42	0.58	0.72	69.9	6.32	0.42	0.59	0.75
	2880	85.9	4.61	0.44	0.59	0.74	81.7	5.11	0.44	0.6	0.77	77	5.67	0.44	0.61	0.79	72.3	6.33	0.44	0.63	0.83

7.5 TON - KGA090S4

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		85°F					95°F					105°F					115°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb		
				75°F	80°F	85°F			75°F	80°F	85°F			75°F	80°F	85°F			75°F	80°F	85°F
63°F	2400	92.4	5.97	0.69	0.84	0.98	85.3	6.6	0.7	0.86	1	77.8	7.32	0.7	0.88	1	69.9	8.15	0.71	0.91	1
	3000	97.7	6.04	0.75	0.92	1	90.2	6.68	0.76	0.95	1	82.5	7.4	0.78	0.98	1	74.5	8.23	0.81	1	1
	3600	101.9	6.11	0.81	1	1	94.6	6.75	0.83	1	1	87.2	7.48	0.85	1	1	79.5	8.33	0.89	1	1
67°F	2400	99.4	6.07	0.54	0.67	0.81	91.8	6.7	0.53	0.68	0.83	84.2	7.43	0.53	0.68	0.85	75.9	8.26	0.52	0.7	0.88
	3000	104.5	6.15	0.57	0.73	0.89	96.8	6.78	0.58	0.74	0.91	88.7	7.51	0.57	0.76	0.95	79.9	8.34	0.58	0.79	0.99
	3600	108.5	6.21	0.61	0.79	0.97	100.2	6.84	0.62	0.81	0.99	92	7.57	0.62	0.84	1	82.7	8.39	0.62	0.87	1
71°F	2400	106.2	6.17	0.4	0.53	0.65	98.5	6.81	0.38	0.52	0.66	90.6	7.54	0.37	0.52	0.67	82.2	8.38	0.36	0.52	0.68
	3000	111.7	6.26	0.41	0.57	0.71	103.8	6.9	0.4	0.57	0.72	95.1	7.63	0.4	0.57	0.74	86.3	8.46	0.38	0.58	0.77
	3600	115.6	6.33	0.44	0.6	0.77	107.2	6.96	0.43	0.61	0.79	98.6	7.69	0.42	0.62	0.82	89	8.51	0.41	0.63	0.85

BLOWER DATA - DIRECT DRIVE**2 - 2.5 TON****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 (larger gas heat section, economizer, wet coil, etc.) See page 28.

2 - Any field installed accessories air resistance (duct resistance, diffuser, etc.) See page 28.

External Static Pressure (in. w.g.)	Air Volume (cfm) at Various Blower Speeds					
	208 VOLTS			230 VOLTS		
	High	Medium	Low	High	Medium	Low
2 and 2.5 Ton Standard Efficiency (Downflow)				KGA024S and KGA030S		
0.0	1211	949	852	1365	1097	916
0.1	1251	946	826	1422	1099	908
0.2	1241	952	794	1419	1112	893
0.3	1234	915	749	1419	1074	861
0.4	1213	880	702	1402	1038	824
0.5	1178	846	661	1366	1003	795
0.6	1118	790	585	1302	942	720
0.7	1054	751	518	1231	900	655
0.8	964	675	460	1130	815	600
0.9	882	626	368	1037	762	501
1.0	729	494	286	859	606	412
2 and 2.5 Ton Standard Efficiency (Horizontal)				KGA024S and KGA030S		
0.0	1163	930	815	1312	1075	875
0.1	1173	912	783	1333	1060	861
0.2	1169	888	746	1337	1037	839
0.3	1152	858	704	1325	1007	809
0.4	1122	822	657	1297	969	772
0.5	1079	779	606	1252	923	728
0.6	1023	730	549	1191	870	676
0.7	953	674	488	1114	808	617
0.8	871	613	422	1020	739	550
0.9	775	545	350	911	662	476
1.0	666	470	274	785	578	395

BLOWER DATA - DIRECT DRIVE

3 - 4 TON

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 (larger gas heat section, economizer, wet coil, etc.) See page 28.

2 - Any field installed accessories air resistance (duct resistance, diffuser, etc.) See page 28.

External Static Pressure (in. w.g.)	Air Volume (cfm) at Various Blower Speeds								
	208 VOLTS			230 VOLTS			460/575 VOLTS		
	High	Medium	Low	High	Medium	Low	High	Medium	Low
3 and 4 Ton Standard Efficiency (Downflow)					KGA036S and KGA048S				
0.0	1873	1561	1123	2094	1783	1321	2064	1727	1216
0.1	1993	1601	1148	2168	1797	1338	2105	1744	1229
0.2	1913	1601	1137	2098	1803	1308	2050	1694	1198
0.3	1858	1527	1078	2036	1725	1261	1987	1638	1167
0.4	1801	1496	1046	1973	1679	1219	1905	1598	1148
0.5	1763	1467	987	1910	1647	1177	1862	1559	1108
0.6	1709	1414	897	1830	1560	1080	1781	1509	1057
0.7	1617	1368	806	1727	1519	986	1698	1449	982
0.8	1472	1269	730	1604	1419	918	1614	1389	920
0.9	1359	1162	487	1478	1363	706	1488	1346	792
1.0	961	922	370	1093	1083	590	1167	1099	703
3 and 4 Ton Standard Efficiency (Horizontal)					KGA036S and KGA048S				
0.0	1799	1530	1073	2012	1747	1263	2015	1756	1251
0.1	1868	1544	1088	2032	1733	1268	2071	1760	1279
0.2	1802	1494	1068	1976	1682	1228	2014	1700	1226
0.3	1735	1432	1014	1900	1618	1185	1937	1634	1187
0.4	1666	1397	980	1825	1568	1142	1878	1597	1174
0.5	1615	1350	904	1750	1516	1078	1801	1558	1124
0.6	1564	1305	842	1675	1440	1014	1743	1479	1060
0.7	1462	1228	758	1562	1364	928	1664	1415	982
0.8	1330	1151	670	1449	1287	842	1512	1335	865
0.9	1194	1011	464	1298	1185	671	1393	1297	733
1.0	878	878	355	998	1032	565	1060	1063	618

BLOWER DATA - DIRECT DRIVE**5 TON****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 (larger gas heat section, economizer, wet coil, etc.) See page 28.

2 - Any field installed accessories air resistance (duct resistance, diffuser, etc.) See page 28.

External Static Pressure (in. w.g.)	Air Volume (cfm) at Various Blower Speeds					
	208 VOLTS		230 VOLTS		460/575 VOLTS	
	High	Low	High	Low	High	Low
5 Ton Standard Efficiency (Downflow)						KGA060S
0.0	2200	1649	2411	1957	2241	1755
0.1	2256	1669	2417	2002	2221	1742
0.2	2202	1739	2396	1985	2193	1747
0.3	2170	1705	2328	1972	2144	1725
0.4	2158	1689	2293	1959	2104	1695
0.5	2130	1676	2279	1930	2086	1678
0.6	2056	1662	2158	1900	2008	1652
0.7	2032	1657	2089	1857	1975	1610
0.8	1963	1591	2077	1796	1941	1586
0.9	1887	1597	1876	1746	1855	1555
1.0	1695	1400	1746	1601	1778	1486
5 Ton Standard Efficiency (Horizontal)						KGA060S
0.0	2114	1615	2305	1880	2308	1890
0.1	2115	1610	2290	1876	2334	1906
0.2	2074	1622	2249	1870	2292	1890
0.3	2025	1599	2188	1841	2230	1859
0.4	1996	1577	2148	1812	2210	1846
0.5	1952	1542	2087	1768	2148	1817
0.6	1882	1534	2026	1739	2108	1786
0.7	1838	1488	1966	1680	2094	1743
0.8	1773	1443	1905	1622	1988	1682
0.9	1657	1389	1784	1534	1915	1679
1.0	1548	1335	1672	1462	1853	1506

BLOWER DATA - BELT DRIVE - KGA036

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, wet coil, etc.).

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

See page 28 for blower motors and drives and wet coil and options/accessory air resistance data.

DOWNFLOW

Air Volume cfm	External Static - in. w.g.															
	0.10		0.20		0.30		0.40		0.50		0.60		0.70		0.80	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Field Furnished						Kit A01									
900	493	0.11	564	0.15	637	0.19	711	0.22	783	0.24	851	0.26	910	0.29	961	0.32
1000	517	0.14	588	0.18	660	0.22	733	0.24	804	0.26	868	0.29	924	0.32	974	0.35
1100	544	0.17	614	0.21	685	0.25	757	0.27	826	0.29	887	0.32	940	0.36	987	0.38
1200	574	0.2	643	0.24	712	0.28	782	0.31	849	0.33	906	0.36	956	0.39	1001	0.42
1300	613	0.23	679	0.28	745	0.31	811	0.34	873	0.36	926	0.40	973	0.43	1016	0.46
1400	662	0.26	722	0.30	781	0.34	841	0.37	897	0.41	944	0.44	989	0.48	1032	0.51
1500	710	0.29	763	0.33	816	0.38	869	0.41	919	0.45	963	0.49	1006	0.53	1049	0.56

Air Volume cfm	External Static - in. w.g.															
	0.90		1.00		1.10		1.20		1.30		1.40		1.50		1.60	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Kit A01			Kit A05												
900	1008	0.34	1056	0.36	1104	0.39	1149	0.41	1190	0.44	1229	0.46	1267	0.49	1305	0.52
1000	1020	0.37	1067	0.40	1115	0.42	1159	0.45	1200	0.48	1239	0.51	1277	0.54	1314	0.57
1100	1032	0.41	1078	0.43	1124	0.46	1168	0.49	1210	0.52	1249	0.55	1286	0.58	1323	0.62
1200	1045	0.45	1090	0.47	1135	0.50	1178	0.53	1220	0.57	1259	0.60	1296	0.64	1332	0.67
1300	1060	0.49	1104	0.51	1148	0.55	1190	0.58	1230	0.62	1269	0.65	1306	0.69	1342	0.72
1400	1075	0.53	1119	0.56	1162	0.60	1203	0.63	1242	0.67	1280	0.71	1317	0.75	1352	0.78
1500	1093	0.58	1136	0.61	1177	0.65	1217	0.69	1255	0.73	1292	0.77	1328	0.80	1364	0.84

HORIZONTAL

Air Volume cfm	External Static - in. w.g.															
	0.10		0.20		0.30		0.40		0.50		0.60		0.70		0.80	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Field Furnished						Kit A01									
900	465	0.09	531	0.14	600	0.17	670	0.20	740	0.22	808	0.24	869	0.27	925	0.30
1000	483	0.12	549	0.16	617	0.20	687	0.22	756	0.24	822	0.26	881	0.29	935	0.33
1100	504	0.14	570	0.19	637	0.22	706	0.25	773	0.27	837	0.29	894	0.32	946	0.36
1200	527	0.17	592	0.22	658	0.25	726	0.28	792	0.30	854	0.32	908	0.36	957	0.39
1300	552	0.20	617	0.25	682	0.29	748	0.31	812	0.33	871	0.36	923	0.40	970	0.43
1400	580	0.24	644	0.28	708	0.32	773	0.35	834	0.37	890	0.40	938	0.44	984	0.48
1500	611	0.28	674	0.32	736	0.35	799	0.38	857	0.41	908	0.44	954	0.49	998	0.52

Air Volume cfm	External Static - in. w.g.															
	0.90		1.00		1.10		1.20		1.30		1.40		1.50		1.60	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Kit A01			Kit A05												
900	977	0.33	1028	0.36	1079	0.39	1127	0.42	1169	0.45	1208	0.48	1246	0.51	1282	0.54
1000	985	0.36	1036	0.39	1087	0.42	1135	0.45	1177	0.48	1216	0.52	1253	0.55	1290	0.58
1100	995	0.39	1044	0.42	1093	0.45	1140	0.49	1183	0.52	1223	0.56	1261	0.59	1297	0.62
1200	1005	0.43	1053	0.46	1100	0.49	1146	0.53	1190	0.56	1230	0.60	1268	0.63	1304	0.67
1300	1016	0.47	1063	0.50	1109	0.53	1154	0.57	1197	0.61	1237	0.64	1275	0.68	1311	0.72
1400	1029	0.51	1074	0.54	1120	0.58	1164	0.61	1205	0.65	1245	0.69	1282	0.73	1318	0.77
1500	1042	0.56	1087	0.59	1132	0.62	1174	0.66	1215	0.71	1253	0.75	1290	0.78	1326	0.82

BLOWER DATA - BELT DRIVE - KGA048

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, wet coil, etc.).

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

See page 28 for blower motors and drives and wet coil and options/accessory air resistance data.

DOWNFLOW

Air Volume cfm	External Static - in. w.g.															
	0.10		0.20		0.30		0.40		0.50		0.60		0.70		0.80	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Field Furnished						Kit A02									
1200	574	0.20	644	0.24	713	0.28	784	0.31	850	0.33	906	0.36	953	0.39	998	0.42
1300	608	0.24	677	0.28	744	0.31	813	0.34	874	0.37	925	0.40	969	0.43	1014	0.46
1400	645	0.28	712	0.31	778	0.35	842	0.38	898	0.41	944	0.44	986	0.48	1030	0.51
1500	684	0.31	749	0.35	811	0.38	871	0.42	921	0.45	963	0.49	1004	0.53	1048	0.56
1600	723	0.35	785	0.39	844	0.43	898	0.46	943	0.50	983	0.54	1024	0.58	1067	0.61
1700	761	0.40	819	0.44	875	0.48	924	0.52	965	0.56	1004	0.60	1045	0.63	1089	0.66
1800	798	0.45	853	0.49	905	0.54	950	0.58	990	0.62	1028	0.66	1069	0.69	1112	0.72
1900	834	0.51	885	0.55	934	0.60	977	0.64	1015	0.68	1054	0.72	1095	0.75	1137	0.79
2000	869	0.57	917	0.62	962	0.67	1004	0.71	1042	0.75	1081	0.78	1121	0.82	1162	0.86

Air Volume cfm	External Static - in. w.g.															
	0.90		1.00		1.10		1.20		1.30		1.40		1.50		1.60	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Kit A02				Kit A06											
1200	1043	0.44	1090	0.47	1135	0.50	1179	0.53	1220	0.57	1259	0.60	1297	0.64	1333	0.67
1300	1058	0.49	1104	0.51	1148	0.55	1190	0.58	1231	0.62	1269	0.65	1306	0.69	1342	0.72
1400	1074	0.53	1119	0.56	1162	0.59	1203	0.63	1242	0.67	1280	0.71	1317	0.74	1352	0.78
1500	1092	0.58	1136	0.61	1177	0.65	1217	0.69	1255	0.73	1292	0.76	1328	0.80	1364	0.84
1600	1112	0.63	1154	0.67	1193	0.71	1232	0.75	1269	0.79	1306	0.83	1341	0.87	1377	0.91
1700	1132	0.69	1173	0.73	1211	0.77	1248	0.81	1285	0.86	1321	0.90	1356	0.94	1391	0.98
1800	1154	0.76	1194	0.80	1230	0.85	1266	0.89	1302	0.93	1338	0.98	1373	1.02	1408	1.06
1900	1178	0.83	1215	0.88	1250	0.93	1286	0.98	1321	1.02	1356	1.06	1391	1.10	1426	1.14
2000	1201	0.91	1237	0.97	1271	1.02	1307	1.07	1342	1.11	1376	1.15	1411	1.19	1446	1.23

HORIZONTAL

Air Volume cfm	External Static - in. w.g.															
	0.10		0.20		0.30		0.40		0.50		0.60		0.70		0.80	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Field Furnished						Kit A02									
1200	540	0.18	606	0.22	673	0.26	748	0.29	816	0.30	870	0.33	914	0.37	961	0.40
1300	568	0.21	634	0.26	699	0.29	771	0.32	835	0.34	886	0.37	929	0.41	975	0.44
1400	599	0.25	664	0.29	728	0.33	795	0.35	855	0.38	903	0.41	946	0.45	991	0.49
1500	632	0.29	696	0.33	758	0.36	821	0.39	877	0.42	922	0.46	963	0.50	1008	0.54
1600	667	0.33	729	0.36	789	0.40	848	0.43	898	0.46	941	0.51	982	0.55	1026	0.59
1700	702	0.36	761	0.40	819	0.44	873	0.48	920	0.52	960	0.56	1001	0.61	1044	0.64
1800	737	0.41	794	0.45	848	0.49	898	0.53	941	0.58	981	0.62	1021	0.66	1064	0.70
1900	771	0.46	825	0.50	877	0.54	923	0.59	964	0.64	1002	0.68	1043	0.72	1085	0.76
2000	805	0.51	857	0.56	905	0.61	948	0.66	987	0.71	1025	0.75	1065	0.79	1107	0.82

Air Volume cfm	External Static - in. w.g.															
	0.90		1.00		1.10		1.20		1.30		1.40		1.50		1.60	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Kit A02				Kit A06											
1200	1010	0.43	1061	0.46	1110	0.50	1156	0.53	1199	0.57	1239	0.61	1276	0.64	1312	0.68
1300	1024	0.47	1073	0.50	1120	0.54	1165	0.58	1207	0.62	1246	0.65	1284	0.69	1320	0.73
1400	1038	0.52	1086	0.55	1131	0.59	1175	0.62	1216	0.66	1255	0.70	1292	0.74	1328	0.78
1500	1054	0.57	1100	0.60	1144	0.64	1186	0.68	1226	0.72	1264	0.75	1301	0.79	1336	0.83
1600	1071	0.62	1116	0.65	1158	0.69	1198	0.73	1237	0.77	1274	0.81	1310	0.85	1345	0.89
1700	1089	0.67	1132	0.71	1172	0.75	1211	0.79	1249	0.83	1285	0.87	1321	0.91	1355	0.95
1800	1108	0.73	1149	0.77	1188	0.81	1225	0.85	1262	0.90	1298	0.94	1332	0.98	1366	1.01
1900	1128	0.79	1167	0.84	1204	0.88	1241	0.92	1276	0.97	1311	1.01	1345	1.05	1379	1.09
2000	1148	0.86	1186	0.91	1221	0.96	1257	1.00	1292	1.05	1326	1.09	1359	1.13	1393	1.17

BLOWER DATA - BELT DRIVE - KGA060

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, wet coil, etc.).

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

See page 28 for blower motors and drives and wet coil and options/accessory air resistance data.

DOWNFLOW

Air Volume cfm	External Static - in. w.g.															
	0.10		0.20		0.30		0.40		0.50		0.60		0.70		0.80	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Field Furnished				Kit A03											
1600	745	0.36	805	0.40	862	0.44	913	0.48	956	0.52	996	0.55	1037	0.59	1081	0.62
1700	783	0.41	840	0.45	893	0.49	940	0.53	980	0.57	1019	0.61	1061	0.64	1104	0.67
1800	820	0.47	873	0.51	923	0.55	967	0.60	1006	0.63	1045	0.67	1086	0.70	1129	0.73
1900	856	0.52	906	0.57	953	0.62	994	0.66	1032	0.70	1071	0.73	1112	0.76	1154	0.80
2000	891	0.59	937	0.64	982	0.69	1022	0.73	1060	0.76	1099	0.80	1140	0.84	1180	0.88
2100	924	0.66	968	0.71	1011	0.75	1051	0.79	1089	0.83	1128	0.87	1167	0.92	1206	0.97
2200	956	0.74	999	0.78	1041	0.83	1080	0.87	1119	0.91	1157	0.96	1196	1.02	1233	1.08
2300	990	0.81	1032	0.86	1072	0.91	1111	0.95	1149	1.00	1187	1.06	1225	1.13	1261	1.19
2400	1025	0.90	1066	0.95	1105	1.00	1143	1.05	1181	1.11	1218	1.17	1255	1.24	1290	1.30

Air Volume cfm	External Static - in. w.g.															
	0.90		1.00		1.10		1.20		1.30		1.40		1.50		1.60	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Kit A03						Kit A07									
1600	1125	0.64	1167	0.68	1206	0.72	1244	0.76	1281	0.80	1317	0.84	1353	0.88	1388	0.92
1700	1147	0.70	1187	0.75	1224	0.79	1261	0.83	1298	0.87	1333	0.91	1369	0.95	1404	0.99
1800	1170	0.77	1208	0.82	1244	0.87	1280	0.91	1316	0.95	1351	0.99	1386	1.03	1422	1.07
1900	1194	0.85	1230	0.90	1265	0.95	1301	1.00	1336	1.04	1371	1.08	1406	1.12	1441	1.16
2000	1218	0.94	1253	1.00	1287	1.05	1323	1.09	1358	1.14	1392	1.17	1427	1.21	1463	1.25
2100	1243	1.03	1277	1.09	1311	1.15	1346	1.19	1381	1.23	1415	1.27	1450	1.31	1486	1.34
2200	1268	1.14	1302	1.20	1336	1.25	1371	1.29	1405	1.33	1439	1.37	1474	1.40	1511	1.44
2300	1295	1.25	1328	1.30	1362	1.35	1397	1.39	1431	1.43	1465	1.47	1500	1.50	1537	1.54
2400	1324	1.36	1356	1.41	1390	1.46	1424	1.50	1458	1.53	1492	1.57	1527	1.61	1563	1.64

HORIZONTAL

Air Volume cfm	External Static - in. w.g.															
	0.10		0.20		0.30		0.40		0.50		0.60		0.70		0.80	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Field Furnished				Kit A03											
1600	690	0.33	751	0.37	810	0.40	865	0.44	912	0.48	955	0.52	997	0.56	1041	0.60
1700	725	0.38	784	0.41	839	0.45	891	0.49	935	0.53	975	0.58	1017	0.62	1060	0.65
1800	761	0.42	816	0.46	868	0.50	916	0.55	957	0.59	997	0.64	1038	0.68	1081	0.71
1900	795	0.48	848	0.52	897	0.56	942	0.61	981	0.66	1020	0.70	1060	0.74	1103	0.77
2000	830	0.53	879	0.58	926	0.63	968	0.68	1006	0.73	1044	0.77	1084	0.80	1126	0.84
2100	863	0.60	910	0.65	954	0.70	994	0.75	1032	0.80	1070	0.83	1110	0.87	1150	0.91
2200	895	0.67	939	0.73	982	0.78	1021	0.83	1058	0.87	1096	0.91	1135	0.95	1174	1.00
2300	926	0.75	969	0.81	1009	0.86	1048	0.90	1085	0.94	1122	0.99	1160	1.04	1197	1.09
2400	957	0.84	998	0.89	1038	0.94	1076	0.98	1112	1.03	1149	1.08	1185	1.14	1221	1.20

Air Volume cfm	External Static - in. w.g.															
	0.90		1.00		1.10		1.20		1.30		1.40		1.50		1.60	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Kit A03						Kit A07									
1600	1086	0.63	1129	0.66	1171	0.70	1211	0.74	1249	0.78	1286	0.82	1321	0.86	1356	0.90
1700	1104	0.68	1147	0.72	1186	0.76	1225	0.80	1262	0.84	1298	0.88	1333	0.92	1367	0.96
1800	1124	0.74	1165	0.79	1202	0.83	1240	0.87	1276	0.91	1311	0.95	1345	0.99	1380	1.03
1900	1145	0.81	1183	0.85	1220	0.90	1256	0.94	1291	0.99	1326	1.03	1360	1.07	1393	1.10
2000	1167	0.88	1203	0.93	1237	0.98	1273	1.03	1307	1.07	1341	1.11	1375	1.15	1408	1.18
2100	1188	0.96	1222	1.02	1256	1.07	1291	1.12	1324	1.16	1358	1.20	1391	1.23	1424	1.27
2200	1210	1.05	1243	1.11	1275	1.17	1309	1.21	1343	1.25	1376	1.29	1409	1.33	1442	1.36
2300	1232	1.16	1263	1.22	1295	1.27	1329	1.31	1362	1.35	1395	1.39	1428	1.42	1462	1.45
2400	1254	1.26	1284	1.32	1317	1.37	1350	1.41	1383	1.45	1415	1.48	1448	1.52	1483	1.55

BLOWER DATA - BELT DRIVE - DOWNFLOW - KGA072

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, wet coil, etc.).

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

See page 28 for blower motors and drives and wet coil and options/accessory air resistance data.

Air Volume cfm	External Static - in. w.g.															
	0.10		0.20		0.30		0.40		0.50		0.60		0.70		0.80	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Field Furnished								Kit A04							
1900	857	0.41	892	0.45	927	0.50	962	0.55	999	0.60	1036	0.65	1074	0.69	1112	0.73
2000	879	0.47	913	0.52	948	0.56	984	0.61	1020	0.67	1058	0.72	1096	0.76	1134	0.80
2100	900	0.53	935	0.58	970	0.63	1007	0.69	1044	0.74	1081	0.79	1119	0.84	1157	0.88
2200	922	0.60	958	0.65	994	0.71	1031	0.76	1068	0.82	1106	0.87	1143	0.91	1180	0.95
2300	947	0.67	983	0.73	1020	0.79	1057	0.85	1094	0.90	1131	0.95	1168	1.00	1205	1.03
2400	974	0.76	1010	0.82	1047	0.88	1084	0.94	1120	0.99	1157	1.04	1193	1.08	1230	1.12
2500	1002	0.85	1039	0.91	1075	0.97	1112	1.03	1148	1.08	1184	1.13	1220	1.17	1257	1.21
2600	1032	0.95	1068	1.01	1105	1.07	1141	1.13	1177	1.17	1213	1.22	1248	1.26	1284	1.31
2700	1062	1.05	1099	1.11	1136	1.17	1172	1.22	1207	1.27	1242	1.32	1277	1.37	1312	1.43
2800	1094	1.16	1131	1.22	1167	1.27	1202	1.32	1237	1.38	1271	1.43	1305	1.49	1339	1.56
2900	1127	1.26	1163	1.32	1198	1.38	1233	1.44	1267	1.50	1300	1.56	1334	1.64	1367	1.71
Air Volume cfm	External Static - in. w.g.															
	0.90		1.00		1.10		1.20		1.30		1.40		1.50		1.60	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Kit A04												Kit A08			
1900	1150	0.77	1188	0.81	1227	0.85	1267	0.88	1303	0.92	1333	0.97	1360	1.02	1392	1.06
2000	1172	0.84	1210	0.88	1248	0.92	1286	0.96	1321	1.00	1350	1.05	1377	1.10	1409	1.14
2100	1195	0.91	1233	0.95	1269	1.00	1306	1.04	1339	1.09	1367	1.14	1395	1.19	1426	1.23
2200	1218	0.99	1255	1.03	1290	1.09	1324	1.14	1356	1.19	1385	1.24	1413	1.28	1444	1.32
2300	1242	1.07	1277	1.13	1310	1.20	1343	1.26	1374	1.30	1403	1.34	1432	1.38	1464	1.42
2400	1267	1.16	1300	1.23	1332	1.31	1364	1.37	1394	1.41	1423	1.45	1453	1.48	1484	1.53
2500	1292	1.26	1324	1.34	1355	1.42	1387	1.48	1417	1.52	1445	1.56	1475	1.59	1506	1.64
2600	1318	1.38	1350	1.46	1380	1.55	1411	1.60	1440	1.64	1469	1.68	1498	1.71	1529	1.76
2700	1345	1.51	1376	1.60	1406	1.68	1436	1.73	1465	1.77	1493	1.80	1523	1.84	1553	1.88
2800	1372	1.65	1403	1.74	1433	1.82	1462	1.86	1490	1.90	1519	1.93	1548	1.97	1578	2.01
2900	1399	1.80	1430	1.89	1460	1.96	1489	2.00	1516	2.03	1544	2.06	1573	2.10	1603	2.14

BLOWER DATA - BELT DRIVE - HORIZONTAL - KGA072

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, wet coil, etc.).

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

See page 28 for blower motors and drives and wet coil and options/accessory air resistance data.

Air Volume cfm	External Static - in. w.g.															
	0.10		0.20		0.30		0.40		0.50		0.60		0.70		0.80	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Field Furnished										Kit A04					
1900	796	0.38	837	0.43	878	0.48	918	0.53	958	0.58	997	0.62	1036	0.67	1074	0.71
2000	833	0.43	870	0.48	907	0.54	943	0.59	980	0.64	1018	0.69	1055	0.73	1093	0.77
2100	864	0.50	897	0.55	931	0.60	966	0.65	1002	0.71	1038	0.76	1075	0.80	1113	0.83
2200	887	0.57	920	0.62	953	0.67	988	0.73	1024	0.78	1060	0.83	1097	0.87	1135	0.90
2300	909	0.64	942	0.70	976	0.75	1011	0.81	1046	0.86	1083	0.91	1120	0.95	1157	0.98
2400	931	0.72	965	0.78	999	0.83	1035	0.89	1071	0.94	1108	0.99	1144	1.03	1181	1.07
2500	955	0.80	989	0.86	1024	0.92	1061	0.98	1097	1.03	1133	1.08	1170	1.11	1205	1.15
2600	981	0.90	1016	0.96	1052	1.01	1088	1.07	1124	1.12	1160	1.16	1195	1.20	1230	1.25
2700	1009	0.99	1044	1.05	1080	1.11	1116	1.16	1152	1.21	1187	1.26	1221	1.30	1254	1.35
2800	1038	1.10	1073	1.16	1109	1.21	1145	1.26	1180	1.31	1214	1.36	1247	1.40	1279	1.46
2900	1068	1.20	1104	1.26	1139	1.31	1174	1.36	1208	1.41	1240	1.47	1273	1.52	1304	1.58

Air Volume cfm	External Static - in. w.g.															
	0.90		1.00		1.10		1.20		1.30		1.40		1.50		1.60	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Kit A04												Kit A08			
1900	1112	0.74	1151	0.77	1190	0.81	1228	0.84	1265	0.88	1301	0.92	1335	0.97	1367	1.01
2000	1131	0.80	1170	0.83	1208	0.87	1245	0.91	1281	0.96	1316	1.00	1349	1.04	1380	1.09
2100	1151	0.87	1189	0.90	1227	0.94	1263	0.99	1298	1.04	1331	1.08	1363	1.13	1394	1.17
2200	1173	0.94	1210	0.98	1246	1.02	1281	1.07	1315	1.12	1347	1.17	1379	1.22	1409	1.26
2300	1195	1.02	1231	1.06	1266	1.11	1300	1.16	1333	1.22	1364	1.27	1395	1.32	1424	1.36
2400	1217	1.10	1252	1.15	1286	1.20	1319	1.26	1351	1.32	1382	1.38	1411	1.43	1440	1.48
2500	1240	1.20	1274	1.25	1307	1.31	1339	1.37	1370	1.43	1400	1.49	1428	1.55	1457	1.59
2600	1264	1.30	1297	1.35	1329	1.42	1360	1.49	1389	1.55	1418	1.61	1446	1.67	1475	1.72
2700	1287	1.40	1319	1.47	1350	1.54	1380	1.61	1409	1.68	1437	1.74	1465	1.79	1493	1.84
2800	1311	1.52	1342	1.59	1373	1.66	1402	1.74	1430	1.8	1457	1.87	1485	1.92	1513	1.97
2900	1335	1.65	1366	1.72	1395	1.79	1424	1.87	1451	1.94	1478	2.00	1505	2.05	1533	2.09

BLOWER DATA - BELT DRIVE - KGA090 - 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, wet coil, etc.).

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

See page 28 for blower motors and drives and wet coil and options/accessory air resistance data.

Air Volume cfm	External Static - in. w.g.																			
	0.10		0.20		0.30		0.40		0.50		0.60		0.70		0.80		0.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Drive Kit AA01										Drive Kit AA02						AA03			
2400	621	0.71	652	0.76	684	0.81	716	0.86	746	0.92	776	0.97	805	1.02	830	1.08	855	1.14	879	1.19
2500	642	0.77	673	0.82	704	0.87	734	0.93	764	0.98	793	1.04	820	1.09	845	1.15	868	1.21	892	1.27
2600	665	0.82	694	0.88	724	0.93	753	0.99	782	1.05	810	1.11	835	1.17	859	1.23	883	1.29	907	1.34
2700	688	0.89	716	0.94	744	1.00	773	1.06	800	1.13	827	1.19	851	1.25	875	1.31	898	1.37	922	1.42
2800	710	0.95	738	1.02	765	1.08	792	1.15	818	1.21	844	1.28	868	1.34	891	1.40	914	1.45	938	1.51
2900	733	1.03	759	1.10	785	1.17	811	1.24	836	1.30	861	1.37	885	1.43	908	1.49	931	1.54	954	1.59
3000	754	1.12	779	1.19	805	1.26	830	1.33	855	1.40	879	1.46	902	1.52	925	1.58	948	1.63	970	1.69
3100	775	1.22	800	1.29	824	1.36	849	1.43	873	1.50	897	1.56	920	1.62	942	1.67	964	1.73	987	1.78
3200	796	1.32	820	1.39	844	1.47	868	1.53	892	1.60	915	1.66	937	1.72	959	1.77	981	1.83	1002	1.88
3300	816	1.43	840	1.50	863	1.57	887	1.64	910	1.70	933	1.76	955	1.82	976	1.88	997	1.93	1018	1.99
3400	837	1.54	860	1.61	883	1.68	906	1.75	929	1.81	951	1.87	972	1.93	993	1.98	1013	2.05	1033	2.11
3500	858	1.66	881	1.73	903	1.79	926	1.86	948	1.92	969	1.98	990	2.04	1009	2.10	1029	2.17	1048	2.24
3600	879	1.77	901	1.84	923	1.91	945	1.97	966	2.04	987	2.10	1006	2.16	1025	2.23	1044	2.30	1062	2.38
Air Volume cfm	External Static - in. w.g.																			
	0.90		1.00		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Drive Kit AA03																AA04			
2400	904	1.25	929	1.29	956	1.34	982	1.39	1008	1.43	1032	1.49	1056	1.55	1078	1.62	1099	1.68	1121	1.75
2500	917	1.32	942	1.37	968	1.41	994	1.46	1020	1.51	1044	1.57	1066	1.64	1088	1.70	1108	1.77	1130	1.84
2600	931	1.39	957	1.44	982	1.49	1008	1.54	1032	1.60	1055	1.66	1077	1.73	1098	1.80	1118	1.87	1139	1.94
2700	946	1.47	971	1.52	996	1.57	1021	1.63	1045	1.69	1067	1.76	1088	1.83	1108	1.91	1127	1.98	1148	2.05
2800	962	1.56	986	1.61	1011	1.66	1034	1.72	1057	1.79	1079	1.86	1099	1.94	1118	2.02	1137	2.09	1158	2.16
2900	978	1.65	1001	1.70	1025	1.75	1048	1.82	1069	1.89	1090	1.98	1109	2.06	1128	2.14	1147	2.22	1167	2.28
3000	993	1.74	1016	1.79	1039	1.86	1061	1.93	1081	2.01	1101	2.10	1120	2.18	1138	2.27	1157	2.34	1177	2.41
3100	1009	1.84	1031	1.90	1052	1.97	1073	2.05	1093	2.13	1112	2.22	1130	2.31	1148	2.40	1167	2.47	1187	2.53
3200	1024	1.94	1045	2.01	1065	2.09	1085	2.17	1104	2.26	1123	2.36	1141	2.45	1159	2.53	1178	2.60	1198	2.66
3300	1038	2.06	1058	2.13	1078	2.22	1097	2.31	1116	2.40	1134	2.49	1152	2.58	1170	2.66	1189	2.73	1209	2.79
3400	1053	2.19	1072	2.27	1091	2.35	1109	2.45	1127	2.54	1145	2.63	1163	2.72	1181	2.79	1200	2.86	1220	2.92
3500	1067	2.32	1085	2.41	1103	2.50	1121	2.59	1138	2.69	1156	2.78	1174	2.85	1192	2.93	1212	2.99	1231	3.05
3600	1081	2.46	1098	2.55	1116	2.64	1133	2.74	1151	2.83	1168	2.91	1186	2.99	1205	3.06	1224	3.12	1243	3.17

BLOWER DATA - BELT DRIVE - KGA090 - 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, wet coil, etc.).

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

See page 28 for blower motors and drives and wet coil and options/accessory air resistance data.

Air Volume cfm	External Static - in. w.g.																			
	0.10		0.20		0.30		0.40		0.50		0.60		0.70		0.80		0.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Drive Kit AA01																Drive Kit AA02			
2400	572	0.75	602	0.78	633	0.81	664	0.85	695	0.88	725	0.92	755	0.97	784	1.01	811	1.06	836	1.11
2500	591	0.80	620	0.83	650	0.87	680	0.90	711	0.94	740	0.98	769	1.03	797	1.08	823	1.13	847	1.18
2600	610	0.86	639	0.89	668	0.92	697	0.96	727	1.00	755	1.05	783	1.09	810	1.14	835	1.20	859	1.25
2700	630	0.91	658	0.95	686	0.98	715	1.02	743	1.07	771	1.11	798	1.16	824	1.22	848	1.27	872	1.32
2800	650	0.97	677	1.01	705	1.05	732	1.09	760	1.14	787	1.19	813	1.24	838	1.30	861	1.35	885	1.40
2900	670	1.03	697	1.07	724	1.11	750	1.16	777	1.21	803	1.27	828	1.32	852	1.38	876	1.44	898	1.49
3000	691	1.09	717	1.14	743	1.18	769	1.24	794	1.29	819	1.35	844	1.42	868	1.47	890	1.53	913	1.58
3100	712	1.16	737	1.21	762	1.27	787	1.32	812	1.39	836	1.45	860	1.51	883	1.57	906	1.63	928	1.68
3200	732	1.24	756	1.30	781	1.36	805	1.42	829	1.48	853	1.55	876	1.61	899	1.67	921	1.73	943	1.78
3300	752	1.33	776	1.39	799	1.46	823	1.52	847	1.59	870	1.65	893	1.71	916	1.77	937	1.83	959	1.88
3400	772	1.43	795	1.50	818	1.56	842	1.63	865	1.69	888	1.76	910	1.82	932	1.88	953	1.93	974	1.99
3500	792	1.54	815	1.61	838	1.67	861	1.74	883	1.80	906	1.87	928	1.93	949	1.98	970	2.04	990	2.10
3600	812	1.65	834	1.72	857	1.79	880	1.85	902	1.92	924	1.98	945	2.04	966	2.10	986	2.16	1005	2.22
Air Volume cfm	External Static - in. w.g.																			
	0.90		1.00		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	AA02		Drive Kit AA03																	
2400	861	1.16	886	1.21	911	1.26	937	1.30	963	1.35	988	1.41	1012	1.47	1034	1.53	1055	1.59	1076	1.65
2500	872	1.23	896	1.27	921	1.32	947	1.37	972	1.43	997	1.48	1019	1.55	1041	1.61	1061	1.68	1081	1.74
2600	883	1.30	908	1.35	933	1.40	958	1.45	982	1.50	1006	1.57	1027	1.63	1048	1.70	1068	1.77	1087	1.83
2700	895	1.37	920	1.42	944	1.47	969	1.53	992	1.59	1015	1.65	1036	1.72	1056	1.79	1075	1.86	1094	1.92
2800	908	1.45	932	1.50	956	1.56	980	1.62	1003	1.68	1025	1.75	1045	1.82	1064	1.89	1083	1.96	1102	2.02
2900	922	1.54	945	1.59	969	1.65	992	1.71	1014	1.78	1035	1.85	1055	1.92	1074	2.00	1092	2.07	1111	2.13
3000	936	1.63	959	1.68	982	1.74	1004	1.81	1026	1.88	1046	1.96	1065	2.03	1084	2.11	1102	2.18	1120	2.25
3100	950	1.73	973	1.78	995	1.85	1017	1.91	1037	1.99	1057	2.07	1076	2.15	1094	2.23	1112	2.31	1130	2.38
3200	965	1.83	987	1.89	1008	1.95	1029	2.03	1049	2.11	1068	2.19	1087	2.28	1105	2.36	1123	2.44	1141	2.51
3300	980	1.94	1001	2.00	1022	2.07	1042	2.15	1061	2.23	1080	2.32	1098	2.41	1116	2.50	1134	2.58	1152	2.65
3400	995	2.05	1015	2.12	1035	2.19	1054	2.28	1073	2.37	1092	2.46	1110	2.55	1128	2.64	1145	2.72	1163	2.79
3500	1010	2.17	1029	2.24	1048	2.32	1067	2.41	1086	2.51	1104	2.60	1122	2.70	1139	2.78	1157	2.86	1174	2.93
3600	1024	2.30	1043	2.38	1062	2.46	1080	2.55	1098	2.65	1116	2.75	1133	2.84	1151	2.93	1168	3.01	1186	3.08
	AA03		Drive Kit AA04																	

BLOWER DATA

BELT DRIVE KIT SPECIFICATIONS

Model No.	Blower Motor Choice (HP)						Drive Kit No.	RPM Range
	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum		
036	1	1.15	1.5	1.7	2	2.3	A01	673 - 1010 rpm
							A05	897 - 1346 rpm
048	1	1.15	1.5	1.7	2	2.3	A02	745 - 1117 rpm
							A06	1071 - 1429 rpm
060	1	1.15	1.5	1.7	2	2.3	A03	833 - 1250 rpm
							A07	1212 - 1548 rpm
072	1	1.15	---	---	2	2.3	A04	968 - 1340 rpm
							A08	1193 - 1591 rpm
090	1	1.15	---	---	---	---	AA01	522 - 784 rpm
	2	2.3	---	---	---	---	AA02	632 - 875 rpm
	3	3.45	---	---	---	---	AA03	798 - 1105 rpm
							AA04	921 - 1228 rpm

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

POWER EXHAUST FAN PERFORMANCE

Return Air System Static Pressure - in. w.g.	Air Volume Exhausted cfm	Return Air System Static Pressure - in. w.g.	Air Volume Exhausted cfm
036-048-60 MODELS		072-090 MODELS	
0.00	2000	0.00	3175
0.05	1990	0.05	2955
0.10	1924	0.10	2685
0.15	1810	0.15	2410
0.20	1664	0.20	2165
0.25	1507	0.25	1920
0.30	1350	0.30	1420
0.35	1210	0.35	1200

OPTIONS / ACCESSORIES AIR RESISTANCE FOR 024-072 MODELS - in. w.g.

Air Volume cfm	Wet Indoor Coil			Gas Heat		Economizer	Filters	
	036-048	060	072	Medium Input	High Input		MERV 8	MERV 13
800	0.01	0.01	0.01	0.02	0.02	0.04	0.04	0.05
1000	0.02	0.02	0.01	0.02	0.02	0.04	0.04	0.07
1200	0.03	0.04	0.02	0.02	0.02	0.04	0.04	0.07
1400	0.04	0.05	0.03	0.02	0.03	0.04	0.04	0.07
1600	0.05	0.06	0.04	0.03	0.04	0.04	0.04	0.07
1800	0.06	0.07	0.05	0.03	0.05	0.05	0.05	0.07
2000	0.08	0.09	0.06	0.04	0.06	0.05	0.05	0.08
2200	0.09	0.10	0.07	0.04	0.07	0.05	0.05	0.08
2400	0.10	0.12	0.08	0.05	0.08	0.05	0.05	0.08
2600	0.11	0.13	0.09	0.05	0.09	0.06	0.05	0.08
2800	0.13	0.15	0.10	0.06	0.10	0.06	0.05	0.08
3000	0.14	0.16	0.12	0.07	0.11	0.06	0.05	0.08

OPTIONS / ACCESSORIES AIR RESISTANCE FOR 090 MODELS - in. w.g.

Air Volume cfm	Wet Indoor Coil	Gas Heat High Input	Economizer	Filters	
				MERV 8	MERV 13
2400	0.08	0.03	0.05	0.05	0.08
2600	0.09	0.04	0.06	0.05	0.08
2800	0.10	0.04	0.06	0.05	0.08
3000	0.11	0.04	0.06	0.05	0.08
3200	0.12	0.04	0.06	0.06	0.09
3400	0.14	0.05	0.06	0.06	0.09
3600	0.15	0.05	0.06	0.06	0.10

BLOWER DATA

CEILING DIFFUSERS AIR RESISTANCE (in. w.g.)

Air Volume cfm	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	
800	0.15	0.13	0.11	0.11	---	---	---	---
1000	0.19	0.16	0.14	0.14	---	---	---	---
1200	0.25	0.20	0.17	0.17	---	---	---	---
1400	0.33	0.26	0.20	0.20	---	---	---	---
1600	0.43	0.32	0.20	0.24	---	---	---	---
1800	0.56	0.40	0.30	0.30	0.13	0.11	0.09	0.09
2000	0.73	0.50	0.36	0.36	0.15	0.13	0.11	0.10
2200	0.95	0.63	0.44	0.44	0.18	0.15	0.12	0.12
2400	---	----	---	---	0.21	0.18	0.15	0.14
2600	---	----	---	---	0.24	0.21	0.18	0.17
2800	---	----	---	---	0.27	0.24	0.21	0.20
3000	---	----	---	---	0.32	0.29	0.25	0.25
3200	---	----	---	---	0.41	0.37	0.32	0.31
3400	---	----	---	---	0.50	0.45	0.39	0.37
3600	---	----	---	---	0.61	0.54	0.48	0.44

CEILING DIFFUSER AIR THROW DATA

Air Volume - cfm	¹ Effective Throw - ft.	
Model No.	RTD9-65	FD9-65
800	10 - 17	14 - 18
1000	10 - 17	15 - 20
1200	11 - 18	16 - 22
1400	12 - 19	17 - 24
1600	12 - 20	18 - 25
1800	13 - 21	20 - 28
2000	14 - 23	21 - 29
2200	16 - 25	22 - 30
Model No.	RTD11-95	FD11-95
2600	24 - 29	19 - 24
2800	25 - 30	20 - 28
3000	27 - 33	21 - 29
3200	28 - 35	22 - 29
3400	30 - 37	22 - 30
3600	25 - 33	22 - 24

¹ Effective throw based on terminal velocities of 75 ft. per minute.

ELECTRICAL DATA **2 - 2.5 TON**

DIRECT DRIVE BLOWER		KGA024S	KGA030S
¹ Voltage - 60hz		208/230V - 1 Ph	208/230V - 1 Ph
Compressor 1	Rated Load Amps	13.5	14.1
	Locked Rotor Amps	58.3	73
Outdoor Fan Motors (1)	Full Load Amps (total)	1.7	1.7
Service Outlet 115V GFI (amps)		15	15
Indoor Blower Motor	Horsepower	.25	.25
	Full Load Amps	1.8	1.8
² Maximum Overcurrent Protection	Unit Only	30	35
³ Minimum Circuit Ampacity	Unit Only	21	22

ELECTRICAL ACCESSORIES

Disconnect Kit	Standard Access	20W17	20W17
	Hinged Access	20W23	20W23

NOTE - All units have a minimum Short Circuit Current Rating (SCCR) of 5000 amps.
¹ Extremes of operating range are plus and minus 10% of line voltage.
² HACR type breaker or fuse.
³ Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.

ELECTRICAL DATA **3 TON**

KGA036S

¹ Voltage - 60hz		208/230V - 1 Ph			208/230V - 3 Ph			460V - 3 Ph			575V - 3 Ph		
Compressor 1	Rated Load Amps	16.7			10.4			5.8			3.8		
	Locked Rotor Amps	79			73			38			36.5		
Outdoor Fan Motors (1)	Full Load Amps (total)	1.7			1.7			1.1			0.7		
Power Exhaust (1) 0.33 HP	Full Load Amps (total)	2.4			2.4			1.3			1		
Service Outlet 115V GFI (amps)		15			15			15			20		
Indoor Blower Motor	Horsepower	.5	1.5	.5	1	2	.5	1	2	.5	1	2	
	Full Load Amps	3.9	11	3.9	4.6	7.5	2	2.1	3.4	2	1.7	2.7	
² Maximum Overcurrent Protection	Unit Only	40	50	25	25	30	15	15	15	15	15	15	
	with (1) 0.33 HP Power Exhaust	45	50	30	30	35	15	15	15	15	15	15	
³ Minimum Circuit Ampacity	Unit Only	27	34	19	20	23	11	11	12	8	8	9	
	with (1) 0.33 HP Power Exhaust	29	36	21	22	25	12	12	14	9	9	10	

ELECTRICAL ACCESSORIES

Disconnect Kit	Standard Access	20W17	20W17	20W17	20W17
	Hinged Access	20W23	20W23	20W23	20W23

NOTE - All units have a minimum Short Circuit Current Rating (SCCR) of 5000 amps.
¹ Extremes of operating range are plus and minus 10% of line voltage.
² HACR type breaker or fuse.
³ Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.

ELECTRICAL DATA**4 TON****KGA048S**

¹ Voltage - 60hz		208/230V - 1 Ph			208/230V - 3 Ph			460V - 3 Ph			575V - 3 Ph		
Compressor 1	Rated Load Amps	21.8			13.7			6.2			4.8		
	Locked Rotor Amps	117			83.1			41			33		
Outdoor Fan Motors (1)	Full Load Amps (total)	1.7			1.7			1.1			0.7		
Power Exhaust (1) 0.33 HP	Full Load Amps (total)	2.4			2.4			1.3			1		
Service Outlet 115V GFI (amps)		1			15			15			20		
Indoor Blower Motor	Horsepower	.5	1.5	.5	1	2	.5	1	2	.5	1	2	
	Full Load Amps	3.9	11	3.9	4.6	7.5	2	2.1	3.4	2	1.7	2.7	
² Maximum Overcurrent Protection	Unit Only	50	60	35	35	40	15	15	15	15	15	15	
	with (1) 0.33 HP Power Exhaust	50	60	35	35	40	15	15	15	15	15	15	
³ Minimum Circuit Ampacity	Unit Only	33	40	23	24	27	11	11	13	9	9	10	
	with (1) 0.33 HP Power Exhaust	36	43	26	26	29	13	13	14	10	10	11	

ELECTRICAL ACCESSORIES

Disconnect Kit	Standard Access	20W17	20W17	20W17	20W17
	Hinged Access	20W23	20W23	20W23	20W23

NOTE - All units have a minimum Short Circuit Current Rating (SCCR) of 5000 amps.

¹ Extremes of operating range are plus and minus 10% of line voltage.² HACR type breaker or fuse.³ Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.**ELECTRICAL DATA****5 TON****KGA060S**

¹ Voltage - 60hz		208/230V - 1 Ph			208/230V - 3 Ph			460V - 3 Ph			575V - 3 Ph		
Compressor 1	Rated Load Amps	22.1			13.5			8			5		
	Locked Rotor Amps	125			109			59			40		
Outdoor Fan Motors (1)	Full Load Amps (total)	2.4			2.4			1.3			1		
Power Exhaust (1) 0.33 HP	Full Load Amps (total)	2.4			2.4			1.3			1		
Service Outlet 115V GFI (amps)		15			15			15			20		
Indoor Blower Motor	Horsepower	.75	1.5	.75	1	2	.75	1	2	.75	1	2	
	Full Load Amps	4.9	11	4.9	4.6	7.5	2.5	2.1	3.4	2.5	1.7	2.7	
² Maximum Overcurrent Protection	Unit Only	50	60	35	35	40	20	20	20	15	15	15	
	with (1) 0.33 HP Power Exhaust	50	60	40	35	40	20	20	20	15	15	15	
³ Minimum Circuit Ampacity	Unit Only	35	42	25	24	27	14	14	15	10	9	10	
	with (1) 0.33 HP Power Exhaust	38	44	27	27	30	16	15	16	11	10	11	

ELECTRICAL ACCESSORIES

Disconnect Kit	Standard Access	20W17	20W17	20W17	20W17
	Hinged Access	20W23	20W23	20W23	20W23

NOTE - All units have a minimum Short Circuit Current Rating (SCCR) of 5000 amps.

¹ Extremes of operating range are plus and minus 10% of line voltage.² HACR type breaker or fuse.³ Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.

ELECTRICAL DATA**6 TON****KGA072S**

¹ Voltage - 60hz		208/230V - 3 Ph			460V - 3 Ph			575V - 3 Ph		
Compressor 1	Rated Load Amps	19			9.7			7.4		
	Locked Rotor Amps	123			62			50		
Outdoor Fan Motors (1)	Full Load Amps (total)	2.4			1.3			1		
Power Exhaust (1) 0.33 HP	Full Load Amps (total)	2.4			1.3			1		
Service Outlet 115V GFI (amps)		15			15			20		
Indoor Blower Motor	Horsepower	1	2	1	2	1	2	1	2	
	Full Load Amps	4.6	7.5	2.1	3.4	1.7	2.7	1.7	2.7	
² Maximum Overcurrent Protection	Unit Only	45	50	25	25	15	20	15	20	
	with (1) 0.33 HP Power Exhaust	50	50	25	25	20	20	20	20	
³ Minimum Circuit Ampacity	Unit Only	31	34	16	17	12	13	12	13	
	with (1) 0.33 HP Power Exhaust	34	37	17	19	13	14	13	14	

ELECTRICAL ACCESSORIES

Disconnect Kit	Standard Access	20W20	20W20	20W20
	Hinged Access	20W26	20W26	20W26

NOTE - All units have a minimum Short Circuit Current Rating (SCCR) of 5000 amps.

¹ Extremes of operating range are plus and minus 10% of line voltage.² HACR type breaker or fuse.³ Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.**ELECTRICAL DATA****7.5 TON****KGA090S**

¹ Voltage - 60hz		208/230V - 3 Ph			460V - 3 Ph			575V - 3 Ph		
Compressor 1	Rated Load Amps	25			12.2			9		
	Locked Rotor Amps	164			100			78		
Outdoor Fan Motors (1)	Full Load Amps (total)	2.4			1.3			1		
Power Exhaust (1) 0.33 HP	Full Load Amps (total)	2.4			1.3			1		
Service Outlet 115V GFI		15			15			20		
Indoor Blower Motor	Horsepower	1	2	3	1	2	3	1	2	3
	Full Load Amps	4.6	7.5	10.6	2.1	3.4	4.8	1.7	2.7	3.9
² Maximum Overcurrent Protection	Unit Only	60	60	60	30	30	30	20	20	25
	with (1) 0.33 HP Power Exhaust	60	60	70	30	30	30	20	20	25
³ Minimum Circuit Ampacity	Unit Only	39	42	45	19	20	22	14	15	17
	with (1) 0.33 HP Power Exhaust	41	44	47	20	22	23	15	16	18

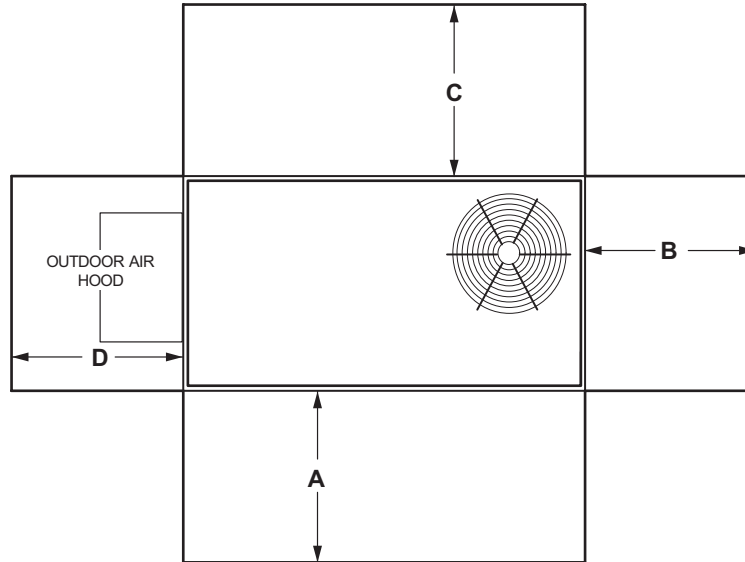
ELECTRICAL ACCESSORIES

Disconnect Kit	Standard Access	20W20	20W20	20W20
	Hinged Access	20W26	20W26	20W26

NOTE - All units have a minimum Short Circuit Current Rating (SCCR) of 5000 amps.

¹ Extremes of operating range are plus and minus 10% of line voltage.² HACR type breaker or fuse.³ Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.

UNIT CLEARANCES - INCHES (MM)



¹ Unit Clearance	A		B		C		D		Top Clearance
	in.	mm	in.	mm	in.	mm	in.	mm	
Service Clearance	48	1219	36	914	36	914	36	914	Unobstructed
Clearance to Combustibles	36	914	1	25	1	25	1	25	
Minimum Operation Clearance	36	914	36	914	36	914	36	914	

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

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

Clearance to Combustibles - Required clearance to combustible material.

Minimum Operation Clearance - Required clearance for proper unit operation.

OUTDOOR SOUND DATA

Unit Model No.	Octave Band Linear Sound Power Levels dB, re 10 ⁻¹² Watts - Center Frequency - Hz							¹ Sound Rating Number (SRN) (dBA)
	125	250	500	1000	2000	4000	8000	
024, 030, 036 and 048	63	66	70	71	68	62	53	75
060 and 072	67	72	77	76	73	68	61	82
090	66	71	73	74	70	65	57	79

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

¹ 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).

WEIGHT DATA

Model Number	Net				Shipping			
	Base		Max.		Base		Max.	
	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg
024S	531	241	631	286	591	268	700	318
030S	533	242	633	287	593	269	702	318
036S	534	242	634	288	594	269	703	319
048S	571	259	682	309	631	286	751	341
060S	601	273	712	323	661	300	781	354
072S	700	318	798	362	760	345	870	395
090S	783	355	883	401	843	382	953	432

Base Unit - The unit with standard heat exchanger NO OPTIONS.

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

OPTIONS / ACCESSORIES

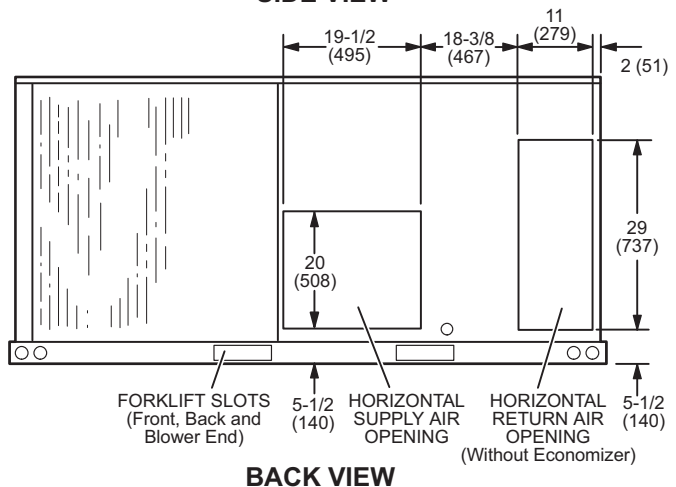
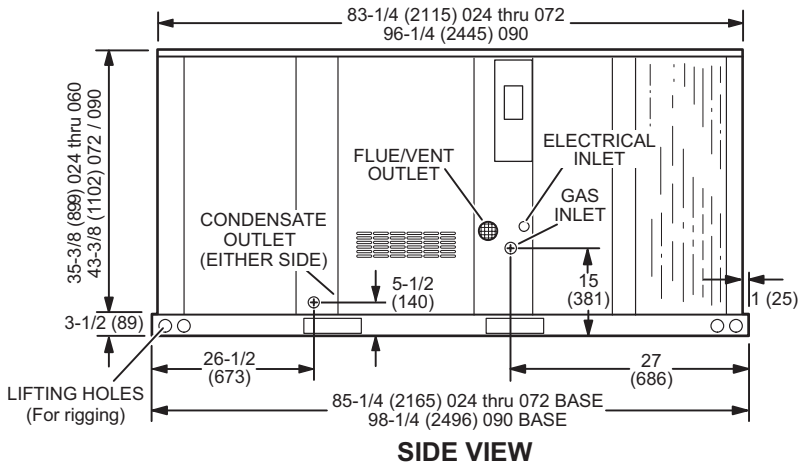
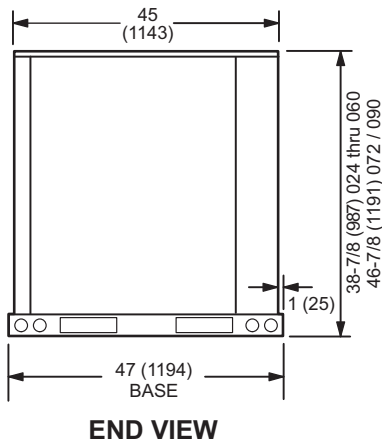
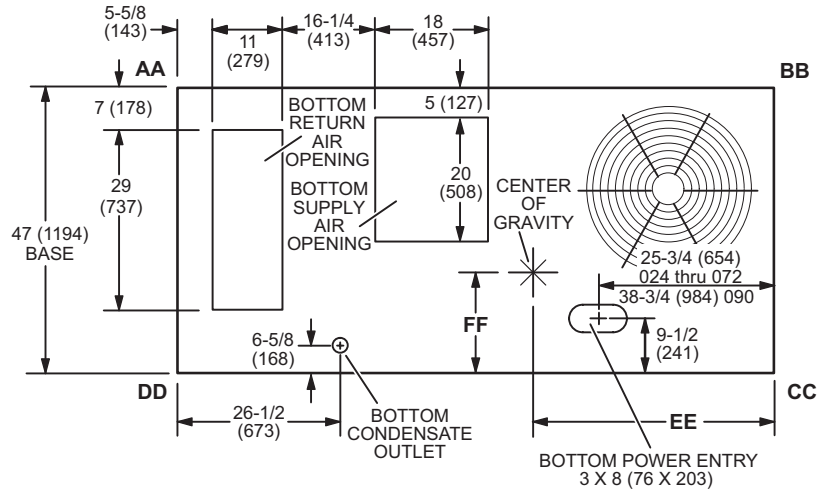
		Shipping Weights	
		lbs.	kg
ECONOMIZER / OUTDOOR AIR / EXHAUST			
Economizer			
	024-060	131	59
	072-090	152	69
Outdoor Air Dampers			
Motorized	024-060	25	12
	072-090	29	14
Manual	024-060	18	9
	072-090	22	11
Power Exhaust			
Standard Static	024-060	35	17
	072-090	39	19
GAS HEAT			
	Medium Heat (adder over standard heat)	8	4
	High Heat (adder over standard heat)	19	9
ROOF CURBS			
Hybrid Roof Curbs, Downflow			
	8 in. height	50	23
	14 in. height	70	32
	18 in. height	80	36
	24 in. height	100	45
Clip Curbs, Full Perimeter, Downflow			
	8 in. height	83	38
	14 in. height	101	46
	18 in. height	113	51
	24 in. height	131	59
Hinged, Full Perimeter, Downflow			
	8 in. height	83	38
	18 in. height	113	49
	24 in. height	131	59
Standard, Full Perimeter, Downflow			
	14 in. height	101	46
CEILING DIFFUSERS			
Step-Down	RTD9-65	67	30
	RTD11-95	88	40
Flush	FD9-65	37	17
	FD11-95	75	34
Transitions (Supply and Return)	T1TRAN10AN1	22	10
	T1TRAN20N-1	21	10

DIMENSIONS - INCHES (MM)

Model No.	CORNER WEIGHTS								CENTER OF GRAVITY							
	AA		BB		CC		DD		EE		FF		FF			
	Base lbs. kg	Max. lbs. kg	Base lbs. kg	Max. lbs. kg	Base lbs. kg	Max. lbs. kg	Base lbs. kg	Max. lbs. kg	Base in. mm	Max. in. mm	Base in. mm	Max. in. mm	Base in. mm	Max. in. mm		
024	92 42	113 52	112 51	128 58	180 82	207 94	148 67	183 83	38-1/2 978	40 1016	18 457	18 457	18 457	18 457		
030	92 42	114 52	112 51	129 58	180 82	207 94	149 68	183 83	38-1/2 978	40 1016	18 457	18 457	18 457	18 457		
036	92 42	114 52	112 51	129 59	181 82	208 94	149 68	184 83	38-1/2 978	40 1016	18 457	18 457	18 457	18 457		
048	99 45	123 56	120 55	139 63	193 88	223 102	159 72	197 90	38-1/2 978	40 1016	18 457	18 457	18 457	18 457		
060	104 47	128 58	126 57	145 66	203 92	233 106	167 76	206 94	38-1/2 978	40 1016	18 457	18 457	18 457	18 457		
072	121 55	143 65	147 67	162 74	237 108	261 119	195 89	231 105	38-1/2 978	40 1016	18 457	18 457	18 457	18 457		
090	168 76	195 88	183 83	212 96	227 103	263 119	203 95	241 109	47 1194	47 1194	21 533	21 533	21 533	21 533		

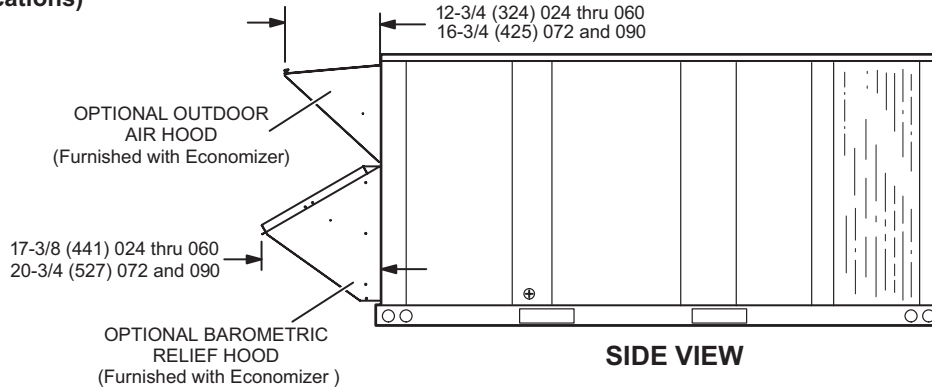
Base Unit - The unit with NO INTERNAL OPTIONS.

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.

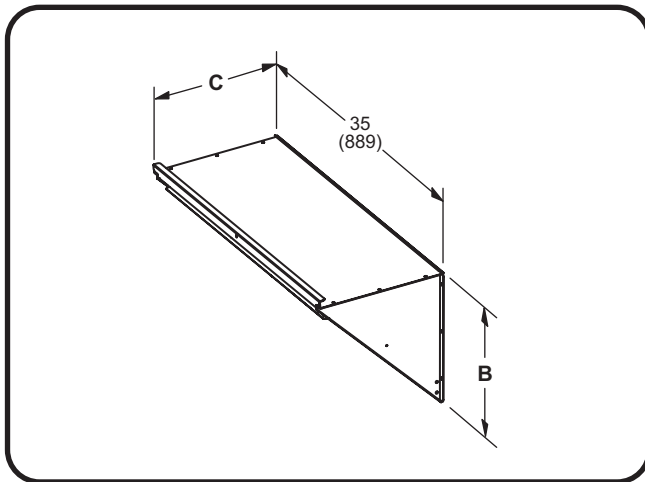


ACCESSORY DIMENSIONS - INCHES (MM)

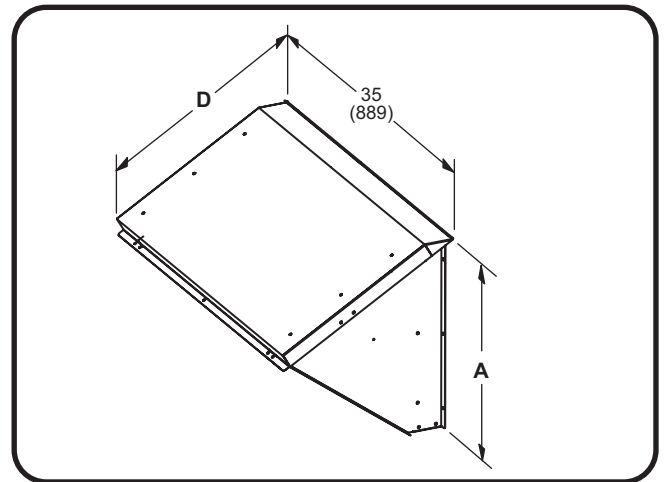
OUTDOOR AIR HOOD DETAIL FOR OPTIONAL ECONOMIZER AND BAROMETRIC RELIEF DAMPERS (Downflow Applications)



OUTDOOR AIR HOOD FOR ECONOMIZER (Furnished)

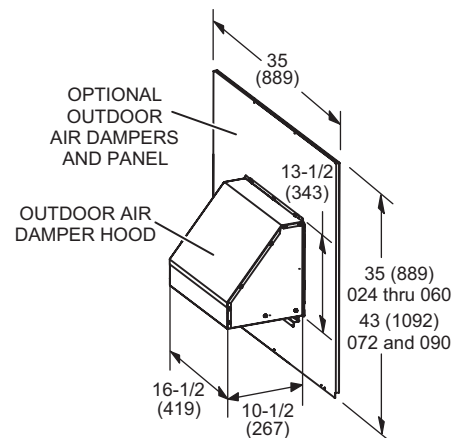
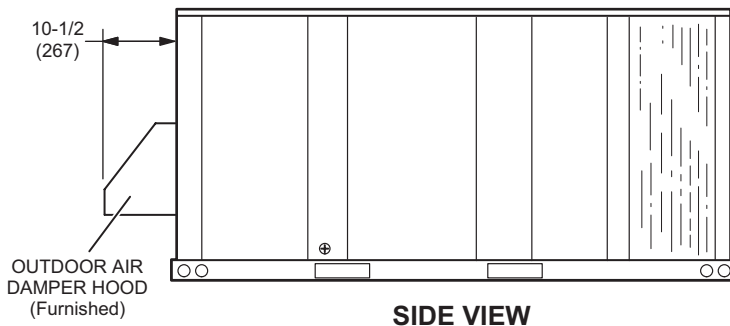


BAROMETRIC RELIEF HOOD FOR ECONOMIZER (Furnished)



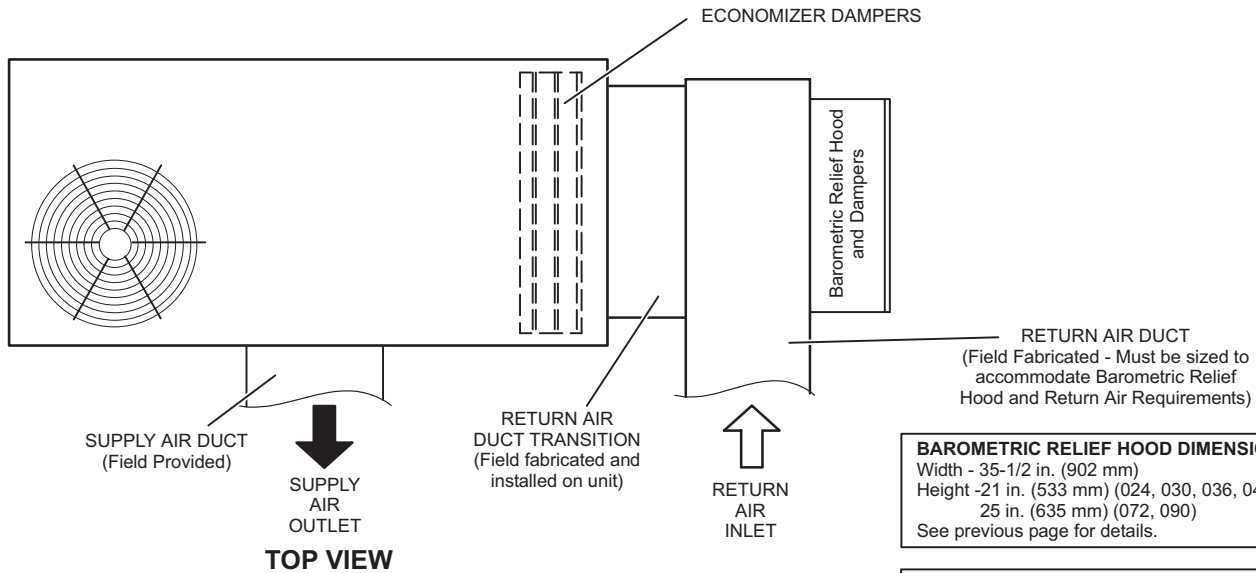
Model No.	A		B		C		D	
	in.	mm	in.	mm	in.	mm	in.	mm
024, 030, 036, 048, 060	19-7/8	505	13	330	11-3/4	298	17-3/8	441
072, 090	23-3/4	603	17	432	15-3/4	400	20-3/4	527

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



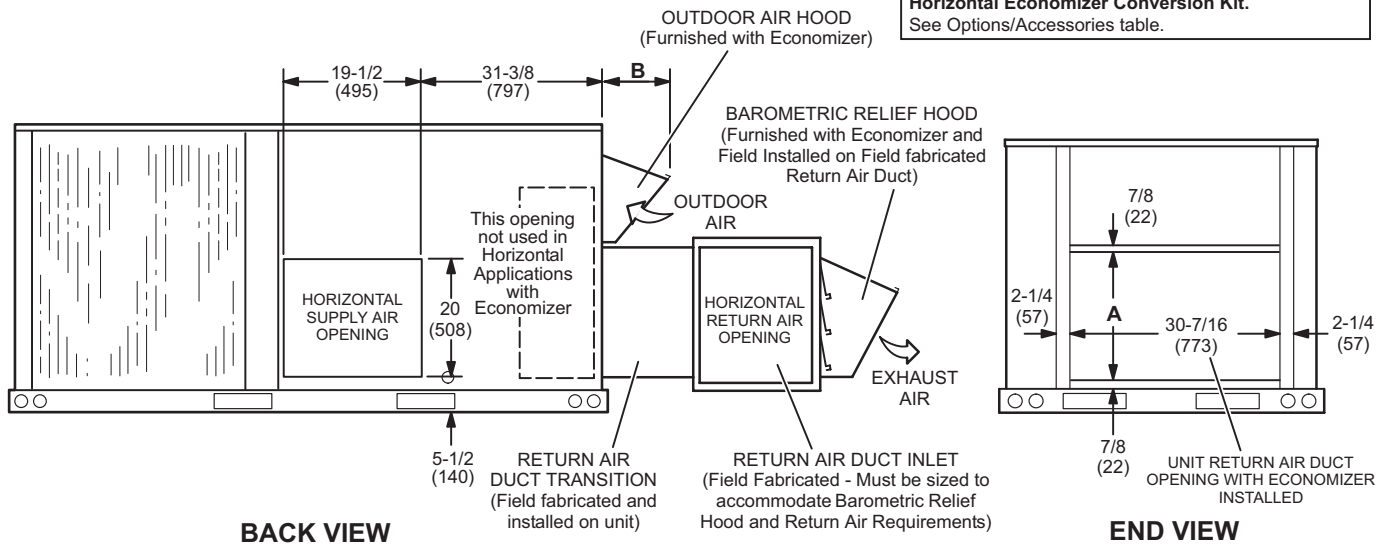
ACCESSORY DIMENSIONS - INCHES (MM)

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



BAROMETRIC RELIEF HOOD DIMENSIONS
 Width - 35-1/2 in. (902 mm)
 Height -21 in. (533 mm) (024, 030, 036, 048, 060)
 25 in. (635 mm) (072, 090)
 See previous page for details.

NOTE - Horizontal applications with Economizer require Horizontal Economizer Conversion Kit.
 See Options/Accessories table.

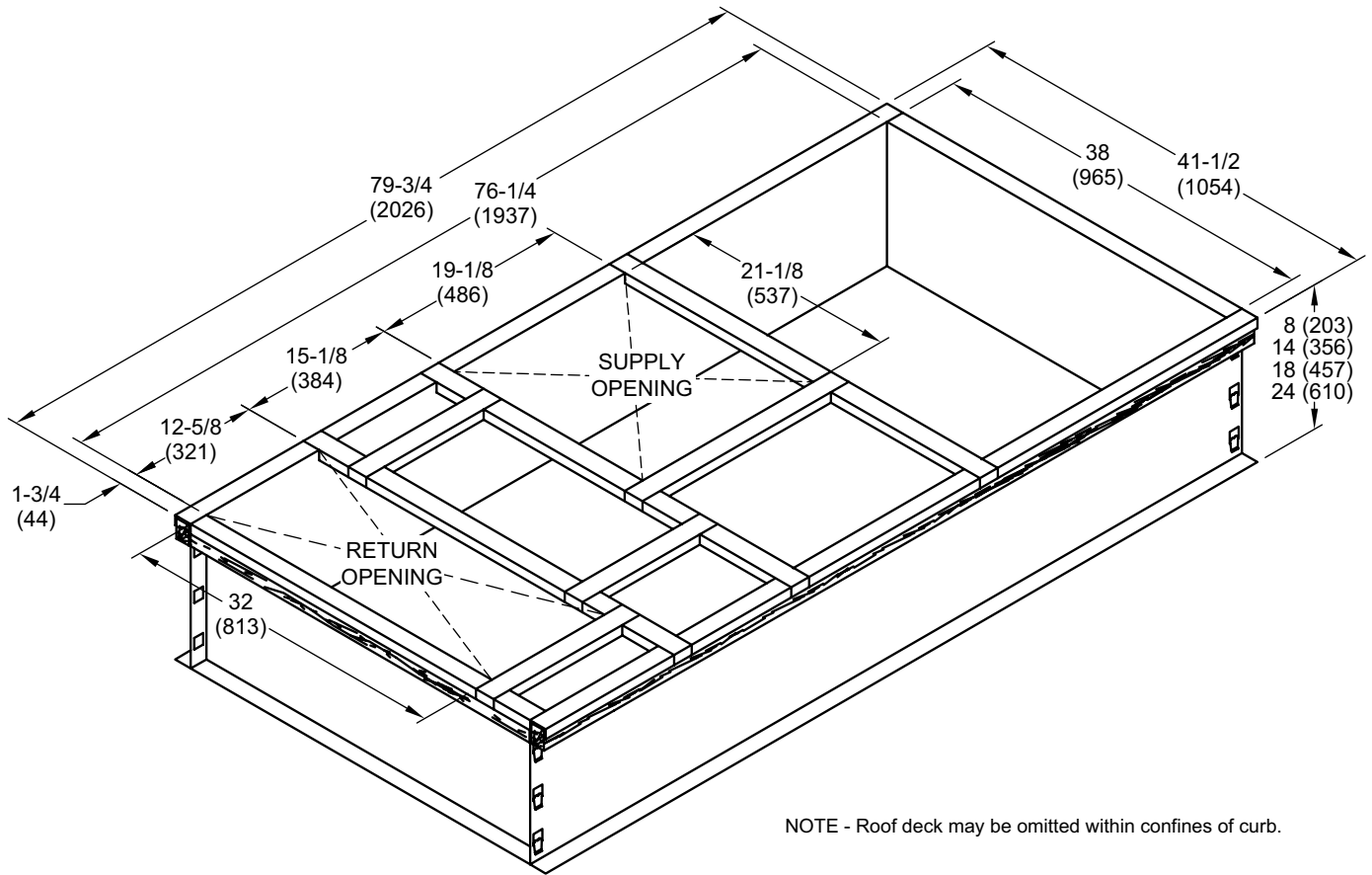


NOTE - Return Air Duct and Transition must be supported.

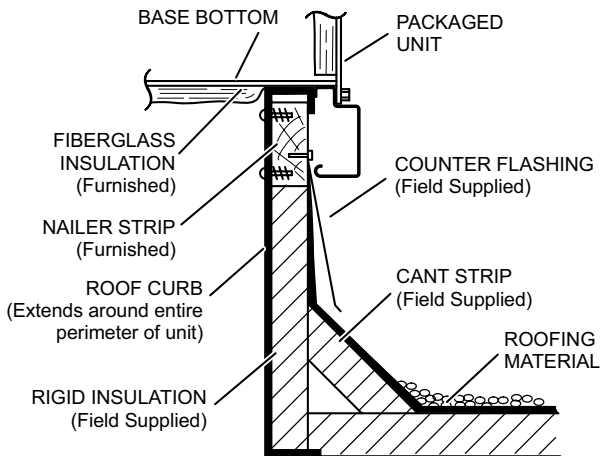
Model No.	A		B	
	in.	mm	in.	mm
024, 030, 036, 048, 060	18-3/4	476	11-3/4	298
072, 090	22-1/2	572	15-3/4	400

ACCESSORY DIMENSIONS - INCHES (MM)

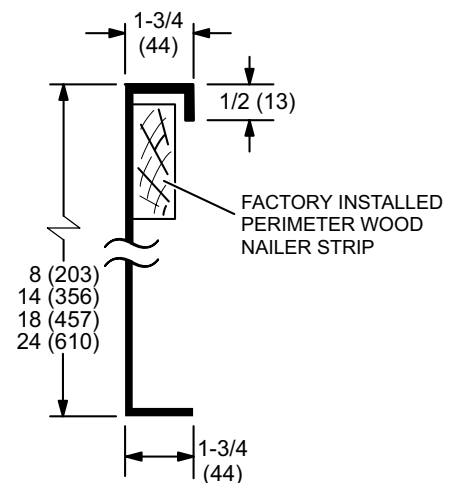
HYBRID ROOF CURBS - DOUBLE DUCT OPENING



TYPICAL FLASHING DETAIL FOR ROOF CURB

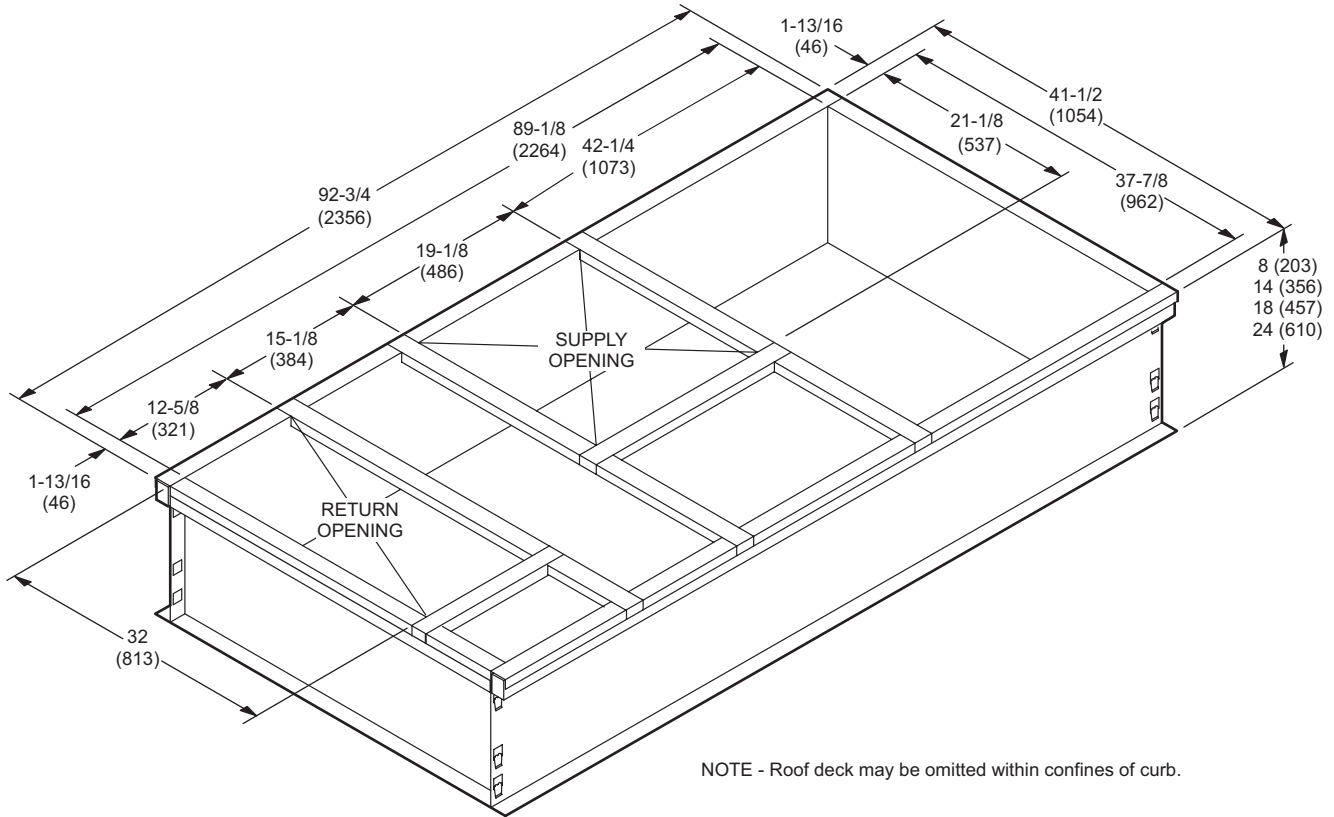


DETAIL ROOF CURB

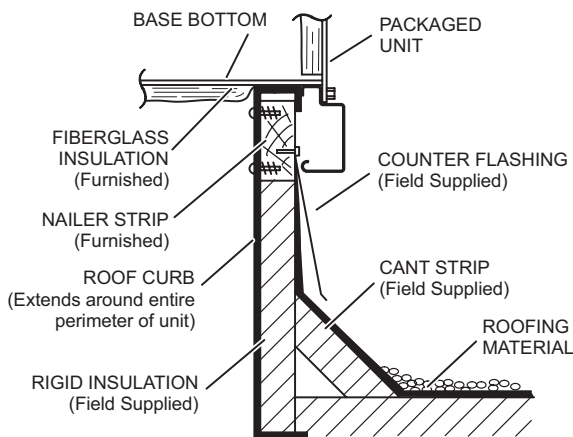


ACCESSORY DIMENSIONS - INCHES (MM)

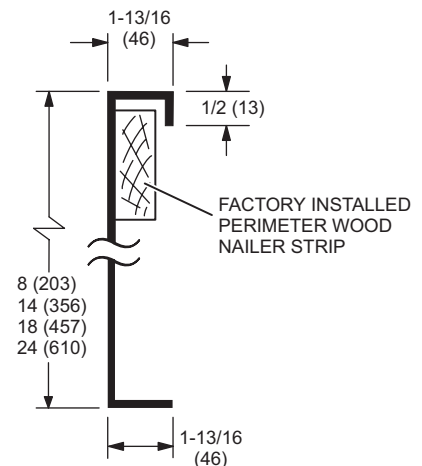
CLIP CURBS - FULL PERIMETER - DOUBLE DUCT OPENING (090 MODELS ONLY)



TYPICAL FLASHING DETAIL FOR ROOF CURB

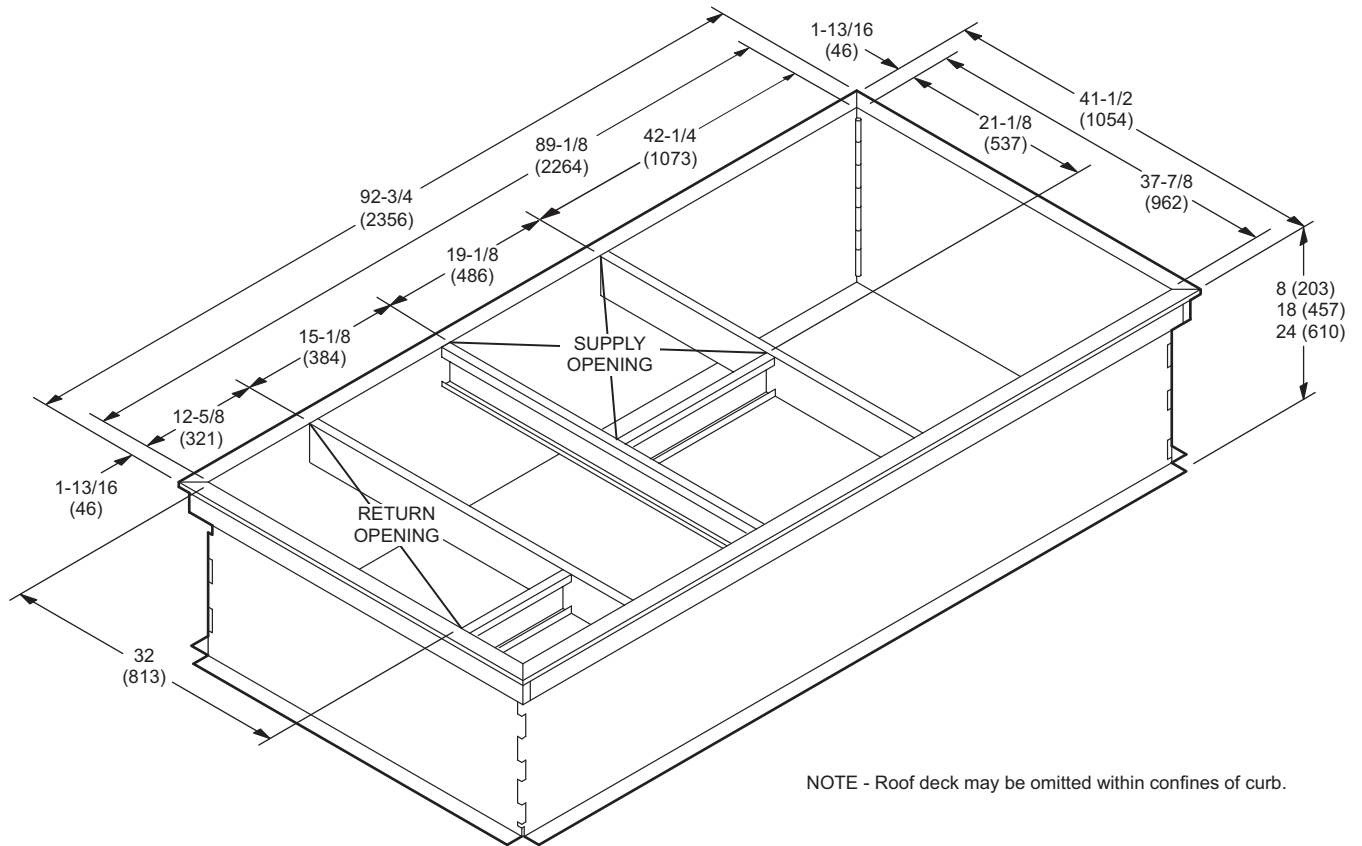


DETAIL ROOF CURB



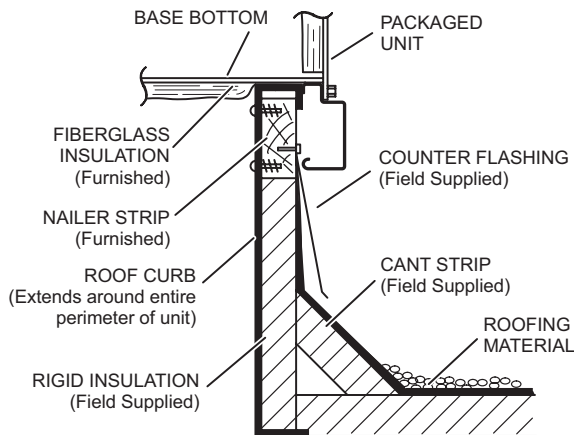
ACCESSORY DIMENSIONS - INCHES (MM)

HINGED ROOF CURBS - FULL PERIMETER - DOUBLE DUCT OPENING (090 MODELS ONLY)

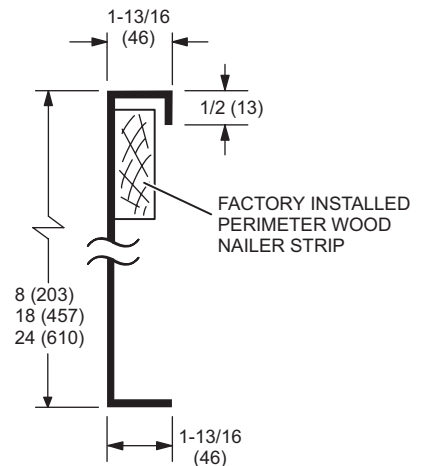


NOTE - Roof deck may be omitted within confines of curb.

TYPICAL FLASHING DETAIL FOR ROOF CURB

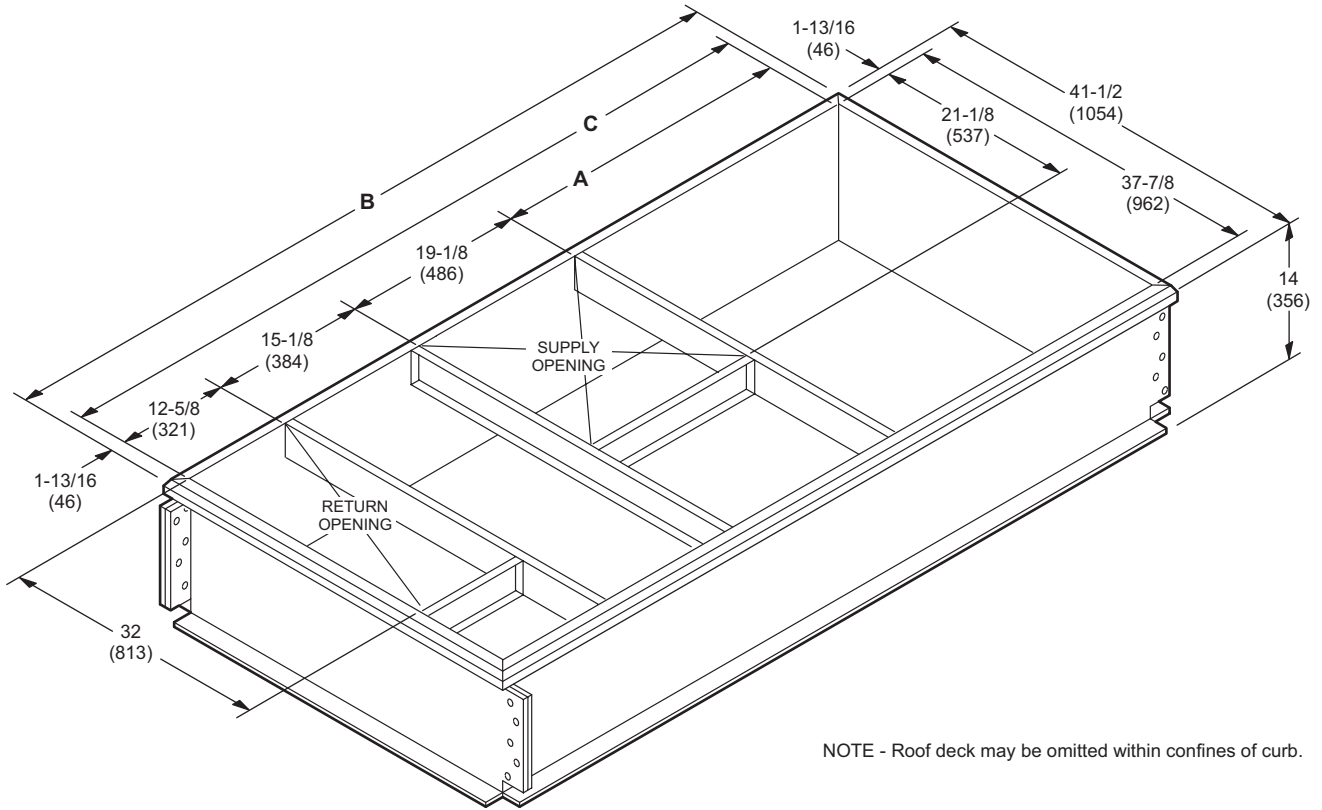


DETAIL ROOF CURB



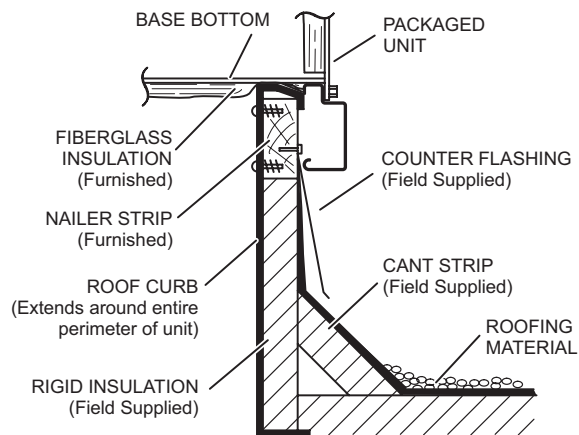
ACCESSORY DIMENSIONS - INCHES (MM)

STANDARD ROOF CURBS - FULL PERIMETER - DOUBLE DUCT OPENING (090 MODELS ONLY)

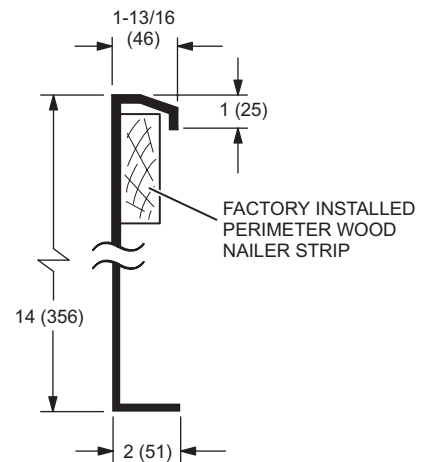


NOTE - Roof deck may be omitted within confines of curb.

TYPICAL FLASHING DETAIL FOR ROOF CURB

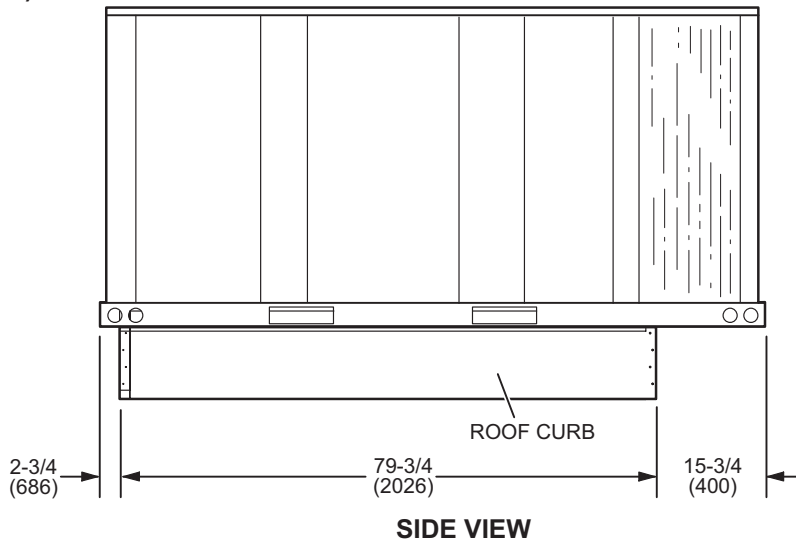


DETAIL ROOF CURB

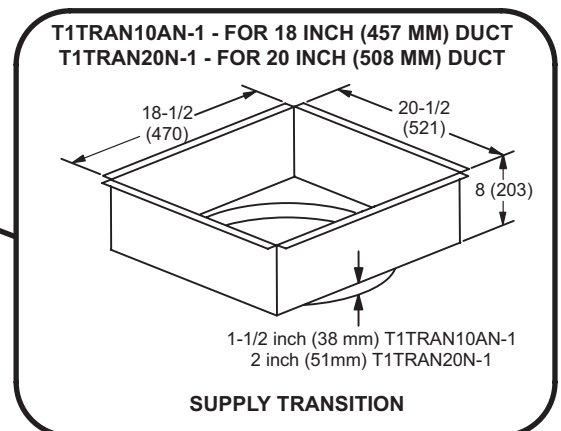
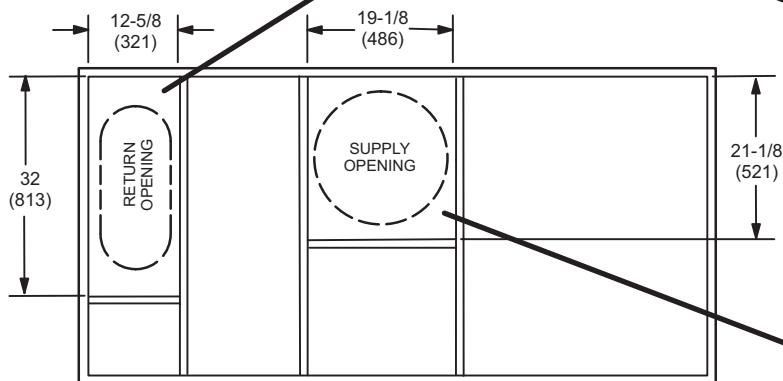
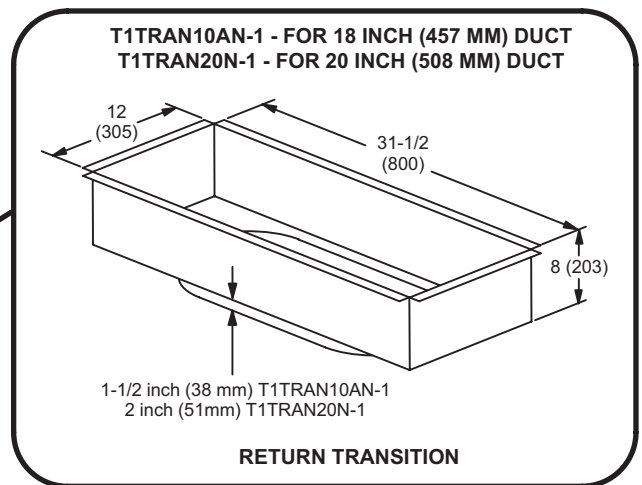


ACCESSORY DIMENSIONS - INCHES (MM)

**090 MODELS - SHOWING OVERHANG ON SMALLER 79-3/4 INCH LENGTH ROOF CURBS
(Not Full Perimeter)**



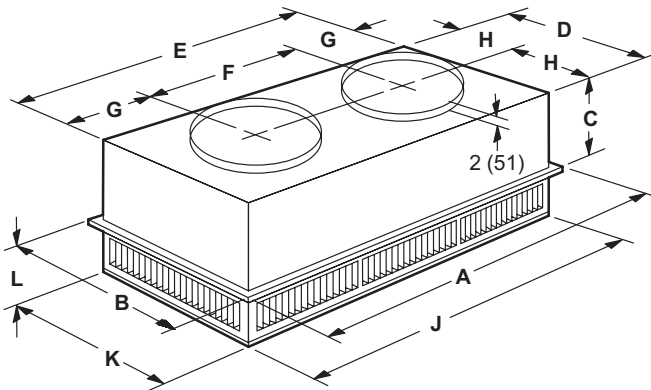
TRANSITIONS



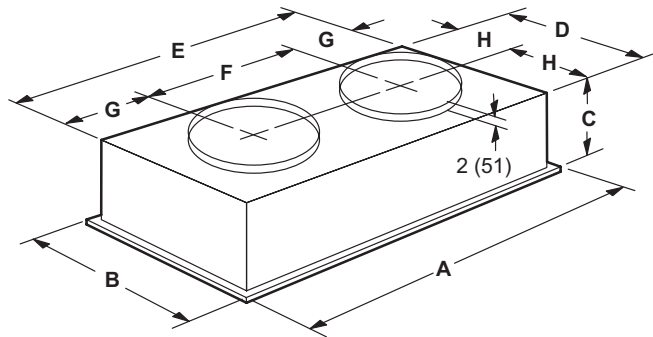
ACCESSORY DIMENSIONS - INCHES (MM)

COMBINATION CEILING SUPPLY AND RETURN DIFFUSERS

STEP-DOWN CEILING DIFFUSER



FLUSH CEILING DIFFUSER



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

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

REVISIONS

Section	Description
Options/Accessories	Added new BACnet and Novar 2051 Controls for 072-090 models.



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