



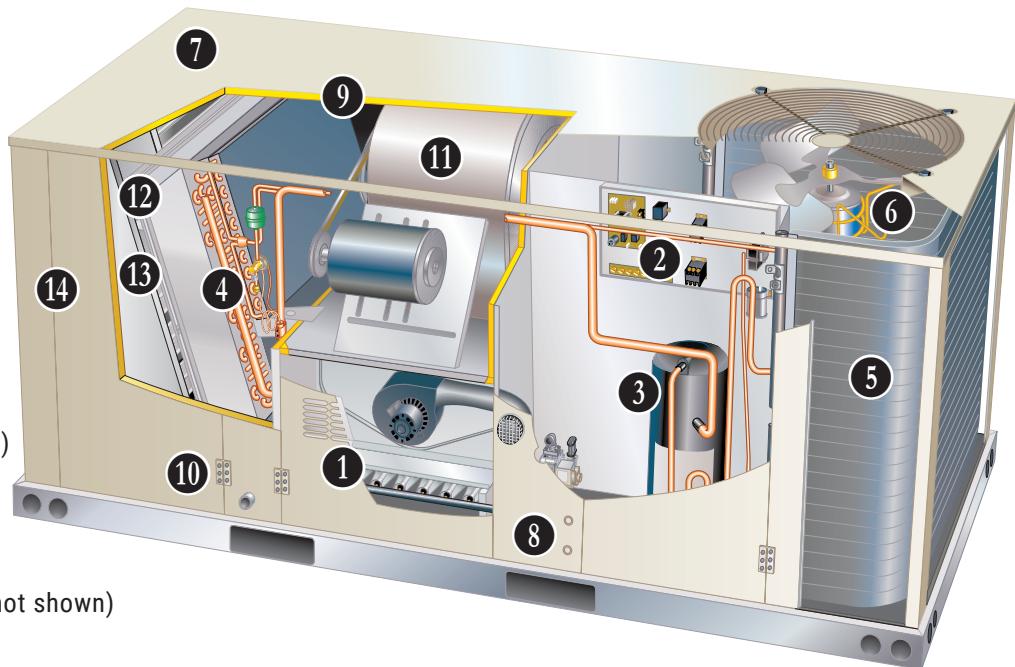
PACKAGED GAS / ELECTRIC

KGB**Landmark® Rooftop Units
Standard and High Efficiency - 60 Hz****COMMERCIAL
PRODUCT SPECIFICATIONS**Bulletin No. 210786
September 2019
Supersedes August 2018**LANDMARK®**
Performance Marked by Flexibility™**L Connection®**
N E T W O R K**ASHRAE 90.1
COMPLIANT****2 to 7.5 Tons****Net Cooling Capacity - 24,200 to 88,000 Btuh
Gas Input Heat Capacity - 65,000 to 150,000 Btuh****MODEL NUMBER IDENTIFICATION****K G B 060 S 4 B S 1 Y****Brand/Family**
K = Landmark® Product Line**Unit Type**
G = Packaged Gas Heat w/ Electric Cooling**Major Design Sequence**
B = 2nd Generation**Nominal Cooling Capacity - Tons**
024 = 2 Tons
030 = 2.5 Tons
036 = 3 Tons
048 = 4 Tons
060 = 5 Tons
072 = 6 Tons
074 = 6 Tons
090 = 7.5 Tons**Cooling Efficiency**
H = High Efficiency
S = Standard Efficiency**Refrigerant Type**
4 = R-410A**Voltage**
P = 208/230V-1 phase-60hz
Y = 208/230V-3 phase-60hz
G = 460V-3 phase-60hz
J = 575V-3 phase-60hz**Minor Design Sequence**
1 = 1st Revision
2 = 2nd Revision
3 = 3rd Revision**Heating Type**
S = Standard Gas Heat, 1 stage
M = Medium Gas Heat, 1 stage
U = Medium Gas Heat, 2 Stage
T = High Gas Heat, 1 Stage
H = High Gas Heat, 2 Stage
W = Standard Gas Heat, 1 Stage, Low NOx
B = Standard Gas Heat, 2 Stage Low NOx
Y = Medium Gas Heat, 1 Stage, Low NOx
Q = Medium Gas Heat, 2 Stage, Low NOx
Z = High Gas Heat, 1 Stage, Low NOx
X = High Gas Heat, 2 Stage, Low NOx**Blower Type**
D = Direct Drive (PSC)
E = Direct Drive (ECM)
B = Belt Drive
T = Belt Drive (2 Speed)

FEATURE HIGHLIGHTS

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

1. Heat Exchanger
2. Electronic Pilot Ignition
3. Scroll Compressor
4. Thermal Expansion Valves
5. Lennox' Environ™ Coil System
6. Outdoor Coil Fan Motors
7. Heavy Gauge Steel Cabinet
8. Power Entry
9. Insulation
10. Hinged Access Panels (option)
11. Supply Air Blower
12. Air Filters
13. Economizer (option)
14. Power Exhaust Fans (option, not shown)



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APPROVALS AND WARRANTY

APPROVALS

- AHRI Standard 210/240 certified (2 - 5 ton models)
- AHRI Standard 340/360 certified (6 and 7.5 ton models)
- ETL and CSA listed
- CSA certified energy ratings
- Unit and components ETL, NEC and CEC bonded for grounding to meet safety standards for servicing
- All models are ASHRAE 90.1 compliant
- ISO 9001 Registered Manufacturing Quality System

NOTE - All single phase models and models equipped with low NOx gas heat option meet the California Nitrogen Oxides Standard (NOx) limits of 40 ng/J that apply in the South Coast Air Quality Management District and the San Francisco Bay Area Air Quality Management District.

California Only

- If installed in South Coast Air Quality Management District (SCAQMD) only:
 - This gas unit does not meet the SCAQMD Rule 1111 NOx emission limit (14 ng/J), and thus is subject to a mitigation fee of up to \$450. This furnace is not eligible for the Clean Air Furnace Rebate Program: www.CleanAirFurnaceRebate.com.
- If installed in San Joaquin Valley Air Pollution Control District (SJVAPCD) only
 - This gas unit does not meet the SJVAPCD Rule 4905 NOx emission limit (14 ng/J), and thus is subject to a mitigation fee of up to \$450

WARRANTY

- Aluminized steel heat exchanger - Limited ten years
- Stainless steel heat exchanger (optional) - Limited fifteen years
- Compressors - Limited five years
- Lennox' Environ™ Coil System - Limited three years
- Optional High Performance Economizers - Limited five years
- All other covered components - Limited one year

FEATURES AND BENEFITS

HEATING SYSTEM

- 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

1 Heat Exchanger

- Tubular construction
- Aluminized steel
- Life cycle tested

NOTE - 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
- 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
- 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 NOx Models

- All single phase models are available in low NOx versions (40 ng/J).

FEATURES AND BENEFITS

HEATING SYSTEM (continued)

Required Selections

Gas Input Choice - Order one:

- Standard Gas Heat (1 Stage) 65,000 Btuh
- Standard Gas Heat (2 Stage) 70,000/53,000 Btuh
- Medium Gas Heat (1 Stage) 108,000 Btuh
- Medium Gas Heat (2 Stage) 81,000/108,000 Btuh
- High Gas Heat (1 Stage) 150,000 Btuh
- High Gas Heat (2 Stage) 113,000/150,000 Btuh

Standard or Low NOx

- Specify standard gas heat or Low NOx (40 ng/J) option (three phase models only)

NOTE - All single phase models are Low NOx (40 ng/J) equipped.

NOTE - Standard Gas Heat

(2 Stage) is only available with Low NOx models.

Options/Accessories

Factory Installed

Stainless Steel Heat Exchanger

- Required if mixed air temperature is below 45°F

Field Installed

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

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
- 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 based
- Ozone-friendly

3 Single Speed Scroll Compressor (024 through 072 Models)

- High performance, reliability and quiet operation
- Resiliently mounted on rubber grommets for quiet operation

Two-Stage Scroll Compressor (074 and 090 Models)

- Two-stage for increased part load efficiency, high performance, reliability and quiet operation
- Resiliently mounted on rubber grommets for quiet operation

Compressor Crankcase Heater

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

4 Thermal Expansion Valve

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

High Pressure Switch

- Protects the system from high pressure conditions

Filter/Drier

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

Freezestat

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

5 Lennox' Environ™ Coil System

- Lightweight, all aluminum brazed fin construction
- Constructed of three components:
 - A flat extrusion tube
 - Fins in-between the flat extrusion tube
 - Two refrigerant manifolds



Environ™ Coil System Features:

- Improved heat transfer performance due to high primary surface area (flat tubes) versus secondary surface (fins)
- Smaller internal volume (reduced refrigerant charge)
- High durability
- All aluminum construction
- Fewer brazed joints
- Compact design
- Reduced unit weight
- Easy maintenance/cleaning
- Mounting brackets with rubber inserts

FEATURES AND BENEFITS

COOLING SYSTEM (continued)

Evaporator Coil

- Copper tube construction
- Enhanced rippled-edge aluminum fins
- Flared shoulder tubing connections
- Silver soldered construction
- Factory leak tested
- Cross row circuiting with rifled tubing

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

6 Outdoor Coil Fan Motor

- Thermal overload protected
- Totally enclosed
- Permanently lubricated sleeve bearings (024, 030, 036 and 048 models)
- Permanently lubricated ball bearings (060, 072, 074, and 090 models)
- Shaft up
- Wire basket mount

Outdoor Coil Fan

- PVC coated fan guard furnished

Required Selections

Cooling Capacity

- Specify nominal cooling capacity

Options/Accessories

Factory Installed

Conventional Fin/Tube Condenser Coil (replaces Environ™ Coil System) (All except 072 and 074H)

- Copper tube construction
- Enhanced rippled-edge aluminum fins
- Flared shoulder tubing connections
- Silver soldered construction

NOTE - Required if Humiditrol® Dehumidification System is ordered.

Field Installed

Condensate Drain Trap

- Field installed only
- Available in copper or PVC

Drain Pan Overflow Switch

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

Low Ambient Kit (0°F)

- 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

NOTE - A crankcase heater must be installed on the compressor.

CABINET

7 Construction

- Heavy-gauge steel panels
- Two-layer enamel paint finish
- Full perimeter heavy-gauge galvanized steel base rail
- Base rails have rigging holes
- Three sides of the base rail have forklift slots
- Raised edges around duct and power entry openings in the bottom of the unit for water protection

Airflow Choice

- Units are shipped in downflow (vertical) return air configuration
- Can be field converted to horizontal air flow configuration without the need of a kit

8 Power/Gas Entry

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

NOTE - Optional Bottom Gas Entry Kit is available.

9 Insulation

- Fully insulated with non-hygroscopic fiberglass insulation (conditioned areas)
- Unit base is fully insulated
- Base insulation serves as an air seal to the roof curb, eliminating the need to add a seal during installation

Access Panels

- Economizer/Filter section
- Heating/Blower section
- Compressor/Controls section

NOTE - KGB060/074/090 models include a filler panel for proper cabinet fit for optional accessories (Economizers, Power Exhaust, Outdoor Air Dampers and Barometric Relief Dampers).

FEATURES AND BENEFITS

CABINET (continued)

Options/Accessories

Factory Installed

Corrosion Protection

- Completely flexible immersed coating
- Electrodeposited dry film process
- AST ElectroFin E-Coat
- Meets Mil Spec MIL-P-53084, ASTM B117 Standard Method Salt Spray Testing
- Indoor Corrosion Protection:
 - Coated coil
 - Coated reheat coil (Humiditrol®)
 - Painted blower housing
 - Painted base
- Outdoor Corrosion Protection:
 - Coated coil
 - Painted outdoor base

10 Hinged Access Panels

- Economizer/Filter section
- Heating/Blower section
- Compressor/Controls section
- Panel seals and quarter-turn latching handles provide a tight air and water seal

Field Installed

Combination Coil/Hail Guards

- Heavy gauge steel frame
- Painted to match cabinet
- Expanded metal mesh protects outdoor coil

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
- 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

Commercial Control Systems

L Connection® Network

- Complete building automation control system for single or multi-zone applications
- Options include local interface, software for local or remote communication, and hardware for networking other control functions
- See L Connection Network Product Specifications Bulletin for details

NOTE - Not available for Humiditrol® equipped units.

Thermostats

- Control system and thermostat options see page 11

BLOWER

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

Motor

- Overload protected
- Ball bearings (ECM and belt drive)
- Sleeve bearings (PSC direct drive)

ECM Motor

- Multi-tap ECM direct drive motors are offered on 024, 030, 036, 048 and 060 (208/230V-1ph) models
- Motor has nine speed taps to allow adjustment to meet cooling, heating, and ventilation needs at specified external static pressures

PSC Motor

- Direct drive PSC motors are offered on 036, 048, 060 (208/230V-3ph) models

Single Speed Belt Drive Motor

- Single speed belt drive motors are offered on 036, 048, 060, 072, 074 and 090 models and are available in several different sizes to maximize air performance

Two-Speed Belt Drive Motor

- Two-speed belt drive motor (low static/high static) is available on 074 and 090 models

11 Supply Air Blower

- Forward curved blades
- Blower wheel statically and dynamically balanced
- Belt drive motors have adjustable pulley for speed change

Required Selections

Supply Air Blower

- Order direct drive or belt drive blower (See Blower Data Table for specifications)
- Belt Drive - Order drive kit, see Drive Kit Specifications Table

FEATURES AND BENEFITS

ELECTRICAL

- All units include terminal block and fuse block in power entry junction box for single power entry application

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 (8- Amp)

- Accessible from outside of unit
- Spring loaded weatherproof cover furnished

GFI Service Outlets (2)

- 115V ground fault circuit interrupter (GFCI) type
- Non-powered
- Field-wired

GFI Weatherproof Cover

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

INDOOR AIR QUALITY

12 Air Filters

- Disposable 2 inch filters furnished as standard

Options/Accessories

Field Installed

Healthy Climate® High Efficiency Air Filters

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

Healthy Climate® UVC Germicidal Lamps



- Germicidal lamps emit ultra-violet (UV-C) energy, which has been proven to be effective in reducing microbes such as viruses, bacteria, yeasts, and molds
- This process either destroys the organism or controls its ability to reproduce
- UV-C energy greatly reduces the growth and proliferation of mold and other bioaerosols (bacteria and viruses) on illuminated surfaces (particularly coil and drain pan)
- Field installed in the blower/evaporator coil section
- All necessary hardware for installation is included
- Lamps operate on 208/230V power supply

NOTE - Step-down transformer must be field supplied when used with 460V and 575V rooftop units.

- Magnetic safety interlock terminates power when access panels are removed
- Approved by ETL

Indoor Air Quality (CO₂) Sensors

- Monitors CO₂ levels
- Reports to the Unit Controller which adjusts economizer dampers as needed

OPTIONS/ACCESSORIES

ECONOMIZER

Factory or Field Installed

13

Economizer

(Standard and High Performance Common Features)

- Combination Outdoor Air Hood is furnished
- Factory installed Economizer can be ordered with two exhaust options:
 - Barometric Relief Dampers
 - No Exhaust
- Field installed Economizer includes Barometric Relief Dampers with Combination Hood
- Barometric Relief Dampers allow relief of excess air, dampers prevent blow back and outdoor air infiltration during off cycle, bird screen furnished

NOTE - Barometric Relief Dampers are required when Economizer is factory installed with field installed Power Exhaust Fan option. See Power Exhaust Fan section and Options/Accessories table.

- 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

NOTE - 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 Barometric Dampers are required for horizontal Economizer applications and must be ordered separately

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

- 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
- Low leakage dampers are Air Movement and Control Association International (AMCA) Class 1A Certified - Maximum 3 cfm per sq. ft. leakage at 1 in. w.g.
- ASHRAE 90.1 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
- Flexible stainless steel jamb seals

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

OPTIONS/ACCESSORIES

ECONOMIZER (continued)

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.

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

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

EXHAUST

Field Installed

Horizontal Barometric Relief Dampers

- For use when unit is configured for horizontal applications with an economizer
- Allows relief of excess air
- Blade type dampers prevent blow back and outdoor air infiltration during off cycle
- Field installed in return air duct
- Exhaust hood with bird screen furnished

NOTE - Requires Horizontal Economizer Conversion Kit.

Horizontal Economizer Conversion Kit

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

14 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.
- 16 in. diameter fan
- 4 fan blades
- 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 No Exhaust option. Barometric Relief Dampers must also be ordered separately for field installation.

OUTDOOR AIR

Factory or Field Installed

Outdoor Air Dampers - Downflow or Horizontal With Air Hood

- Single blade damper
- 0 to 25% (fixed) outdoor air adjustable
- Installs in unit
- Includes outdoor air hood
- 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

OPTIONS/ACCESSORIES

ROOF CURBS

Field Installed

- Nailer strip furnished
- Mates to unit
- US National Roofing Contractors Approved
- Shipped knocked down

Hybrid Roof Curbs

- Downflow
- Interlocking tabs fasten corners together
- No tools required
- Can also be fastened together with furnished hardware
- Available in 8, 14, 18, and 24 inch heights

Full Perimeter Curbs, Downflow (090 Models Only)

- Hybrid roof curbs can be assembled using interlocking tabs to fasten corners together
- No tools required.
- Can also be fastened together with furnished hardware
- Available in 8, 14, 18, and 24 inch heights

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 60.

Adjustable Pitch Curb

- Downflow
- Fully adjustable pitch curbs (3/4 in. per foot in any direction) provide a level platform for rooftop units allowing flexible installations on roofs with uneven or sloped angles
- Uses interlocking tabs to fasten corners together. No tools required
- Hardware is furnished to connect upper curb with lower curb
- Available in 14 inch height

Adaptor Curbs (not shown)

- Curbs are regionally sourced
- Dimensions vary based upon the source

NOTE - Contact your local sales representative for a detailed cut sheet with applicable dimensions.

CEILING DIFFUSERS

Field Installed

Ceiling Diffusers (Flush or Step-Down)

- White powder coat finish on diffuser face and grilles
- Insulated UL listed duct liner
- Diffuser box has collars for duct connection
- Step-down diffusers have double deflection blades
- Flush diffusers have fixed blades
- Provisions for suspending
- Internally sealed to prevent recirculation
- Removable return air grille
- Adapts to T-bar ceiling grids or plaster ceilings

Transitions (Supply and Return)

- Used with diffusers
- Installs in roof curb
- Galvanized steel construction
- Flanges furnished for duct connection to diffusers
- Fully insulated

OPTIONAL CONVENTIONAL TEMPERATURE CONTROL SYSTEMS

Comfortsense® 7500 Commercial 7-Day Programmable Thermostat



- Four-Stage Heating / Two-Stage Cooling
- Universal Multi-Stage
- Intuitive Touchscreen Interface
- Automatic Changeover between Heating and Cooling
- Full Seven-Day Programming
- Four Time Periods Per Day
- Temperature and Humidity Control
- One-Touch Away Mode
- Holiday Scheduling
- Smooth Setback Recovery (SSR)
- Performance Reports
- Notifications/Reminders
- Dehumidification/Humiditrol® Control for Split Systems and Rooftop Units
- Economizer Relay Control
- Backlit Display
- Wallplate Furnished
- FDD, ASHRAE and IECC Compliant

Comfortsense® 3000 Commercial 5-2 Day Programmable Thermostat



- Two-Stage Heating / Two-Stage Cooling
- Conventional Systems
- Intuitive Interface
- 5-2 Day Programming
- Program Hold
- Remote Indoor Temperature Sensing
- Smooth Setback Recovery (SSR)
- Economizer Relay Control
- Maintenance/Filter/Service Reminders
- Backlit Display
- Wallplate Furnished
- Simple Up and Down Temperature Control

Bacnet Compatible Thermostat With Reheat Function



| Description | Model No. | Catalog No. |
|--------------------------------------------------|----------------------------------------|--------------|
| Comfortsense® 7500 7-Day Programmable | C0STAT06FF2L | 17G74 |
| Universal thermostat locking guard (clear) | C0MISC15AE1- | 39P21 |
| Temperature Sensors | 1 Remote non-adjustable wall-mount 20k | 47W36 |
| 1 Remote non-adjustable wall-mount 10k | C0SNZN73AE1- | 47W37 |
| Remote non-adjustable discharge air (duct mount) | C0SNDC00AE1- | 19L22 |
| Outdoor temperature sensor | C0SNSR03AE1- | X2658 |

¹ Remote wall-mount sensors can be applied in any of the following combinations:

One Sensor - (1) 47W36

Two Sensors - (2) 47W37

Three Sensors - (2) 47W36 and (1) 47W37

Four Sensors - (4) 47W36

Five Sensors - (3) 47W36 and (2) 47W37

| | | |
|-------------------------------------------------|------------------------------------------------|--------------|
| Comfortsense® 3000 5-2 Day Programmable | C0STAT05FF1L | 11Y05 |
| Thermostat wall mounting plate | C0MISC17AE1- | X2659 |
| Temperature Sensor | Remote non-adjustable wall mount 10k averaging | 47W37 |
| 1-7-Day Programmable - Bacnet Compatible | --- | Y8241 |

¹ Bacnet Thermostat (Y8241) will control units with and without the Humiditrol® option. If there is a mix of units equipped with and without Humiditrol on the same site, this thermostat can be used for all units if desired.

- 7-Day Programmable
- For units with or without Humiditrol®
- BTL listed MS/TP ensures compatibility with any Bacnet system
- Built-in control programs for conventional and heat pump applications
- Conventional systems up to 3-stage heat and 3-stage cool
- Heat pumps with 1 or 2 compressors and up to 2-stage auxiliary heat
- On-board temperature and humidity sensor
- Multiple configurable inputs and outputs enable advanced control strategies
- Set-up Wizard enables rapid system configuration
- No special tools required for installation or commissioning
- Seven-day (2, 4 or 6 event) occupancy scheduling per day
- Backlit 5-inch LCD touchscreen

HUMIDITROL® DEHUMIDIFICATION SYSTEM OPTION

OVERVIEW

NOTE - Not available with Environ™ Coil System.

Conventional Fin/Tube condenser coil must be ordered as a factory option.

- Factory installed option designed to control humidity
- Provides dehumidification on demand using ASHRAE 90.1 recommended method for comfort conditioning humidity controller
- Unit comes equipped with one row reheat coil, solenoid valve and humidity controller
- A dehumidistat or thermostat with a dehumidification output or a DDC controller with an isolated output is required to control humidity and must be located in the occupied space
- Reheat controls are located in the compressor control section of the unit for easy access

BENEFITS

- Improves indoor air quality
- Helps prevents damage due to high humidity levels
- Improves comfort levels by reducing space humidity levels

OPERATION

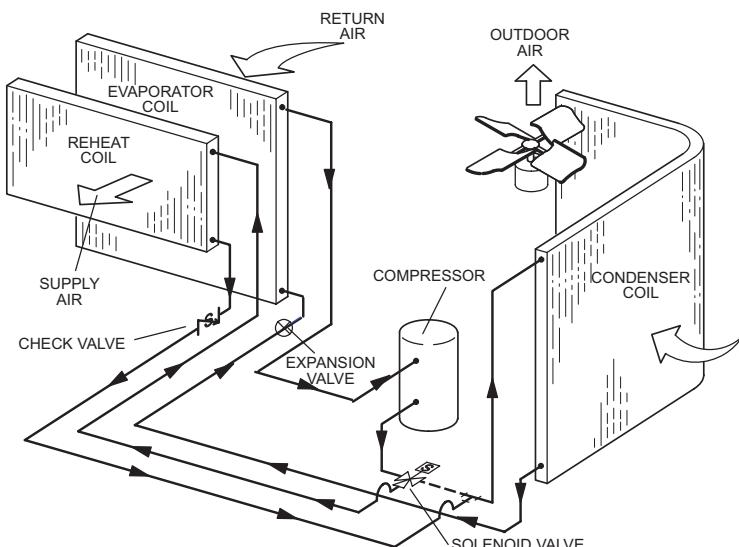
No Dehumidification Demand

- The unit will operate conventionally whenever there is a demand for cooling or heating and no dehumidification demand
- Free cooling is only permitted when there is no demand for dehumidification

Dehumidification Demand Only

- Reheat operation will initiate on a dehumidification demand and does not require a cooling demand
- Unit will operate in the dehumidification mode until the relative humidity of the conditioned space is below the setpoint
- Reheat coil is sized to provide 68°F to 75°F supply air during reheat operation

TYPICAL DEHUMIDIFICATION SCHEMATIC



- This reduces sensible cooling capacity and extends compressor run time to control humidity when the cooling load is low
- A solenoid valve diverts hot gas from the compressor to the reheat coil
- The cooled and dehumidified air from the evaporator is reheated as it passes through the reheat coil
- The de-superheated and partially condensed refrigerant continues to the outdoor condenser coil where condensing is completed
- The unit will continue to operate in this mode until the dehumidification demand is satisfied

Dehumidification and Cooling Demand (Thermostat/Room Sensor Application)

Two-stage compressor models (074S, 090S)

- A dehumidification demand sends both the blower (if T type blower is selected) and compressor to high speed
- If both a dehumidification and a Y1 cooling demand occur, the system will ignore the Y1 demand and continue to operate in dehumidification mode
- If a Y2 cooling demand occurs along with a dehumidification demand, the system operates in full cooling mode at full cooling airflow until the Y2 cooling demand is satisfied
- Then the system will revert to the dehumidification mode if a dehumidification mode demand is present

Single speed compressor model (024S through 060S)

- A two stage thermostat is required for dehumidification to operate with a single speed system
- If both a dehumidification and a Y1 cooling demand occur, the system will ignore the Y1 demand and continue to operate in dehumidification mode until the humidity setpoint is reached
- A Y2 demand will shut off dehumidification mode and normal cooling will resume until demand is satisfied

Options/Accessories

Field Installed

Dehumidistat

- Remote mounted dehumidistat for factory installed Humiditrol® option
- Adjustable 20-80%

NOTE - A thermostat with a dehumidification output or a DDC controller with an isolated output can be used instead.

- See Conventional Thermostat Control Systems on page 11 for additional control options

OPTIONS / ACCESSORIES

| Item | Model No. | Catalog No. | Unit Model No. | | | | | | | |
|----------------------------------------------------------------------|----------------------------------------|--------------|----------------|------------|------------|------------|------------|------------|------------|------------|
| | | | KGB 024 | KGB 030 | KGB 036 | KGB 048 | KGB 060 | KGB 072 | KGB 074 | KGB 090 |
| COOLING SYSTEM | | | | | | | | | | |
| Condensate Drain Trap | PVC - C1TRAP20AD2 | 76W26 | X | X | X | X | X | X | X | X |
| | Copper - C1TRAP10AD2 | 76W27 | X | X | X | X | X | X | X | X |
| Conventional Fin/Tube Condenser Coil (replaces Environ™ Coil System) | Factory | O O O O O | | | | | | | ^ O | O |
| Drain Pan Overflow Switch | K1SNSR71AB1- | 74W42 | X | X | X | X | X | X | X | X |
| Low Ambient Kit | K1SNSR33AN2 | 14D89 | X | X | X | X | X | X | X | X |
| Efficiency | High | | | | | | | O | O | O |
| | Standard | O O O O O | | | | | | O | O | O |
| Refrigerant Type | R-410A | O O O O O | | | | | O O O | | | |
| HEATING SYSTEM | | | | | | | | | | |
| Bottom Gas Piping Kit | T1GPKT01AN1 | 19W50 | X | X | X | X | X | X | X | X |
| Low Temperature Vestibule Heater | 208/230V-1 or 3 ph - T1CWKT01AN1Y | 19W53 | X | X | X | X | X | X | X | X |
| | 460V-3ph - T1CWKT01AN1G | 19W54 | | | X | X | X | X | X | X |
| | 575V-3ph - T1CWKT01AN1J | 19W62 | | | X | X | X | X | X | X |
| Combustion Air Intake Extensions | T1EXTN10AN1 | 19W51 | X | X | X | X | X | X | X | X |
| Gas Heat Input | Standard One-Stage - 65 kBtuh input | Factory | O O O O | | ^ 3 O | O | O | | | |
| | Standard Two-Stage - 53/70 kBtuh input | Factory | | | ^ 2 O | ^ 2 O | O | ^ 2 O | ^ 2 O | |
| | Medium One-Stage - 108 kBtuh input | Factory | | | O | O | ^ 3 O | O | O | O |
| | Medium Two Stage - 81/108 kBtuh input | Factory | | | O | O | O | O | O | O |
| | High One-Stage - 150 kBtuh input | Factory | | | | | ^ 3 O | ^ 3 O | O | O |
| | High Two-Stage - 113/150 kBtuh input | Factory | | | | | O | O | O | O |
| LPG/Propane Conversion Kits | For one-stage models - C1PROP10AP3 | 14N20 | X | X | X | X | X | X | X | X |
| | For two-stage models - C1PROP20AP3 | 14N21 | | | X | X | X | X | X | X |
| Stainless Steel Heat Exchanger | Factory | O O O O | | | O | O | O | O | O | O |
| Vertical Vent Extension | C1EXTN20FF1 | 31W62 | X | X | X | X | X | X | X | X |

¹ 074S models only.

² Standard Two-Stage Heat is only available with Low NOx Models.

³ Three-Phase models only.

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

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

O - Configure to Order (Factory Installed)

X - Field Installed

OPTIONS / ACCESSORIES

| Item | Model No. | Catalog No. | Unit Model No. | | | | | | | |
|--------------------------------------------------------------------------------------------|------------------------------------------------------------------|--------------|----------------|---------|---------|---------|---------|----------------|----------------|----------------|
| | | | KGB 024 | KGB 030 | KGB 036 | KGB 048 | KGB 060 | KGB 072 | KGB 074 | KGB 090 |
| BLOWER - SUPPLY AIR | | | | | | | | | | |
| Motors | Direct Drive (ECM) - 0.33 hp (208/230V-1ph) | Factory | O | O | | | | | | |
| | Direct Drive (ECM) - 0.50 hp (208/230V-1ph) | Factory | | | O | | | | | |
| | Direct Drive (ECM) - 0.75 hp (208/230V-1ph) | Factory | | | | O | | | | |
| | Direct Drive (ECM) - 1.0 hp (208/230V-1ph) | Factory | | | | | O | | | |
| | Direct Drive (PSC) - 0.5 hp (208/230V-3ph, 460V-3ph, 575V-3ph) | Factory | | | O | O | | | | |
| | Direct Drive (PSC) - 0.75 hp (208/230V-3ph, 460V-3ph, 575V-3ph) | Factory | | | | | O | | | |
| | Belt Drive - 1 hp (208/230V, 460V, 575V-3ph) Standard Efficiency | Factory | | | O | O | O | O | ³ O | ⁴ O |
| | Belt Drive - 2 hp (208/230V, 460V, 575V-3ph) Standard Efficiency | Factory | | | O | O | O | O | ³ O | ⁴ O |
| | Belt Drive - 3 hp (208/230V, 460V, 575V-3ph) Standard Efficiency | Factory | | | | | | | | ⁴ O |
| | Belt Drive - 1 hp (208/230V, 460V, 575V-3ph) (2 Speed) | Factory | | | | | | | ³ O | |
| | Belt Drive - 2 hp (208/230V, 460V, 575V-3ph) (2 Speed) | Factory | | | | | | | ³ O | ⁵ O |
| Drive Kits | Kit A01 - T1DRKT001-1 - 673-1010 rpm | Factory | | | O | | | | | |
| See Blower Data Tables for selection | Kit A02 - T1DRKT002-1 - 745-1117 rpm | Factory | | | | O | | | | |
| | Kit A03 - T1DRKT003-1 - 833-1250 rpm | Factory | | | | | O | | | |
| | Kit A04 - T1DRKT004-1 - 968-1340 rpm | Factory | | | | | | O | ¹ O | |
| | Kit A05 - T1DRKT005-1 - 897-1346 rpm | Factory | | | O | | | | | |
| | Kit A06 - T1DRKT006-1 - 1071-1429 rpm | Factory | | | | O | | | | |
| | Kit A07 - T1DRKT007-1 - 1212-1548 rpm | Factory | | | | | O | | | |
| | Kit A08 - T1DRKT008-1 - 1193-1591 rpm | Factory | | | | | | O | ¹ O | |
| | Kit AA01 - T1DRKT001AP1 - 522-784 rpm | Factory | | | | | O | ² O | | |
| | Kit AA02 - T1DRKT002AP1 - 632-875 rpm | Factory | | | | | O | ² O | | |
| | Kit AA03 - T1DRKT003AP1 - 798-1105 rpm | Factory | | | | | O | ² O | | |
| | Kit AA04 - T1DRKT004AP1 - 921-1128 rpm | Factory | | | | | | | ⁶ O | |
| CABINET | | | | | | | | | | |
| Combination Coil/Hail Guards | C1GARD51A-1 | 13R98 | X | X | X | X | | | | |
| | C1GARD51AT1 | 13T03 | | | | | X | X | X | |
| | K1GARD50AP1 | 13T17 | | | | | | | | X |
| Corrosion Protection | Factory | O | O | O | O | O | O | O | O | O |
| Hinged Access Panels | | O | O | O | O | O | O | O | O | O |
| CONTROLS | | | | | | | | | | |
| NOTE - Also see Conventional Thermostat Control Systems on page 11 for Additional Options. | | | | | | | | | | |
| Smoke Detector - Supply or Return (Power board and one sensor) | C1SNSR44AP1 | 53W78 | X | X | X | X | X | X | X | X |
| Smoke Detector - Supply and Return (Power board and two sensors) | C1SNSR43AP1 | 53W79 | X | X | X | X | X | X | X | X |
| L Connection® Building Automation System | | --- | X | X | X | X | X | X | X | X |

¹ 074S Belt Drive models only.

² 074H Belt Drive models only.

³ KGB074B models have an optional 1hp or 2hp **Single Speed** Belt Drive; KGB074T models have an optional 1hp or 2hp **Two Speed** Belt Drive

⁴ KGB090B models have an optional 1hp, 2hp or 3hp Single Speed Belt Drive

⁵ KGB090T models have 2hp Two Speed Belt Drive

⁶ KGB090B with 3 hp blower motor only.

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

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

O - Configure to Order (Factory Installed)

X - Field Installed

OPTIONS / ACCESSORIES

| Item | Model No. | Catalog No. | Unit Model No. | | | | | | | | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|--------------|----------------|------------|------------|------------|------------|------------|----------------|------------|--|--|
| | | | KGB 024 | KGB 030 | KGB 036 | KGB 048 | KGB 060 | KGB 072 | KGB 074 | KGB 090 | | |
| ECONOMIZER | | | | | | | | | | | | |
| Standard Economizer With Outdoor Air Hood (Sensible Control) (Not for Title 24) | | | | | | | | | | | | |
| Standard Economizer - Includes Barometric Relief Dampers and Exhaust Hood | K1ECON30A-3- | 14D90 | OX | OX | OX | OX | OX | OX | OX | OX | | |
| Standard Economizer - No Exhaust | Factory | O | O | O | O | O | O | O | O | X | | |
| Standard Economizer Controls (Not for Title 24) | | | | | | | | | | | | |
| Single Enthalpy Control | C1NSNR64FF1 | 53W64 | OX | OX | OX | OX | OX | OX | OX | OX | | |
| Differential Enthalpy Control (order 2) | C1NSNR64FF1 | 53W64 | X | X | X | X | X | X | X | X | | |
| High Performance Economizer With Outdoor Air Hood (Sensible Control) (Approved for California Title 24 Building Standards / AMCA Class 1A Certified) | | | | | | | | | | | | |
| High Performance Economizer - Includes Barometric Relief Dampers and Exhaust Hood | K1ECON32A-3 | 16X75 | OX | OX | OX | OX | OX | OX | OX | OX | | |
| High Performance Economizer Controls (Not for Title 24) | | | | | | | | | | | | |
| Single Enthalpy Control | C1NSNR60FF1 | 10Z75 | OX | OX | OX | OX | OX | OX | OX | OX | | |
| Differential Enthalpy Control (order 2) | C1NSNR60FF1 | 10Z75 | X | X | X | X | X | X | X | X | | |
| Economizer Accessories | | | | | | | | | | | | |
| Horizontal Economizer Conversion Kit | T1HECK00AN1 | 17W45 | X | X | X | X | X | X | X | X | | |
| POWER EXHAUST FAN | | | | | | | | | | | | |
| Standard Static | 208/230V-1 or 3ph - C1PWRE10A-1P | 79W87 | | | X | X | X | X | X | X | | |
| NOTE - Field installed Power Exhaust Fan requires "Barometric Relief Dampers for Power Exhaust Kit" for field installation. See below. | 460V-3ph - C1PWRE10A-1G | 79W88 | | | X | X | X | X | X | X | | |
| | 575V-3ph - C1PWRE10A-1J | 79W89 | | | X | X | X | X | X | X | | |
| | | | | | | | | | | | | |
| 1 BAROMETRIC RELIEF | | | | | | | | | | | | |
| ¹ Barometric Relief Dampers for Power Exhaust Kit | C1DAMP50A-3- | 19D42 | | | X | X | X | X | X | X | | |
| ² Horizontal Barometric Relief Dampers With Exhaust Hood | LAGEDH03/15-2 | 19F01 | X | X | X | X | X | X | X | X | | |
| OUTDOOR AIR | | | | | | | | | | | | |
| Outdoor Air Dampers With Outdoor Air Hood | | | | | | | | | | | | |
| Motorized | C1DAMP21A-1 | 15D17 | OX | OX | OX | OX | OX | OX | OX | OX | | |
| Manual | C1DAMP11A-2 | 15D18 | OX | OX | OX | OX | OX | OX | OX | OX | | |
| HUMIDITROL® CONDENSER REHEAT OPTION | | | | | | | | | | | | |
| Humiditrol Dehumidification Option, includes remote mounted Dehumidistat | Factory | O | O | O | O | O | | | ⁴ O | O | | |
| ³ Dehumidistat, Remote Mounted | C0NSNR30FF1L | 99N41 | X | X | X | X | X | | ⁴ X | X | | |
| ELECTRICAL | | | | | | | | | | | | |
| Voltage | 208/230V - 1 phase | O | O | O | O | O | | | | | | |
| 60 hz | 208/230V - 3 phase | | O | O | O | O | O | O | | | | |
| | 460V - 3 phase | O | O | O | O | O | O | O | | | | |
| | 575V - 3 phase | O | O | O | O | O | O | O | | | | |
| Disconnect | See Electrical Data Tables for selection | OX | OX | OX | OX | OX | OX | OX | OX | OX | | |
| GFI Service Outlets | 15 amp non-powered, field-wired (208/230V, 460V only) LTAGFIK10/15 | 74M70 | OX | OX | OX | OX | OX | OX | OX | OX | | |
| | 20 amp non-powered, field-wired (575V only) | C1GFCI20FF1 | 67E01 | X | X | X | X | X | X | X | | |
| Weatherproof Cover for GFI | C1GFCI99FF1 | 10C89 | X | X | X | X | X | X | X | X | | |

¹ Required when Economizer is factory installed with field installed Power Exhaust Fan option.

² Required when Economizer is configured for horizontal airflow.

³ A thermostat with a dehumidification output or a DDC controller with an isolated output can be used instead.

⁴ 074S models only.

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

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

O - Configure to Order (Factory Installed)

X - Field Installed

OPTIONS / ACCESSORIES

| Item | Model No. | Catalog No. | Unit Model No. | | | | | | | | | | |
|---------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|------------------------------|----------------|---------|---------|---------|---------|---------|---------|---------|---|--|--|
| | | | KGB 024 | KGB 030 | KGB 036 | KGB 048 | KGB 060 | KGB 072 | KGB 074 | KGB 090 | | | |
| INDOOR AIR QUALITY | | | | | | | | | | | | | |
| Air Filters | | | | | | | | | | | | | |
| Healthy Climate® High Efficiency Air Filters Order 4 per unit | MERV 8 (16 x 20 x 2) - C1FLTR15A-1- MERV 13 (16 x 20 x 2) - T1FLTR40A-1- | 54W20 52W37 | X | X | X | X | | | | | | | |
| | MERV 8 (20 x 20 x 2) - C1FLTR15D-1- MERV 13 (20 x 20 x 2) - C1FLTR40D-1- | 54W21 52W39 | | | | | X | X | X | X | | | |
| Indoor Air Quality (CO ₂) Sensors | | | | | | | | | | | | | |
| Sensor - Wall-mount, off-white plastic cover with LCD display | C0SNSR50AE1L | 77N39 | X | X | 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 | X | X | | | |
| CO ₂ Sensor Duct Mounting Kit - for downflow applications | C0MISC19AE1- | 85L43 | X | X | 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 | X | X | | | |
| CEILING DIFFUSERS | | | | | | | | | | | | | |
| Step-Down - Order one | RTD9-65S RTD11-95S | 13K60 13K61 | X | X | X | X | X | | | | | | |
| Flush - Order one | FD9-65S FD11-95S | 13K55 13K56 | X | X | X | X | X | | X | X | X | | |
| Transitions (Supply and Return) - Order one | T1TRAN10AN1 T1TRAN20N-1 | 17W53 17W54 | X | X | X | X | X | | | X | X | | |
| ROOF CURBS | | | | | | | | | | | | | |
| Hybrid Roof Curbs, Downflow | | | | | | | | | | | | | |
| 8 in. height | C1CURB70A-1 | 11F50 | X | X | X | X | X | X | X | ^ X | | | |
| 14 in. height | C1CURB71A-1 | 11F51 | X | X | X | X | X | X | X | ^ X | | | |
| 18 in. height | C1CURB72A-1 | 11F52 | X | X | X | X | X | X | X | ^ X | | | |
| 24 in. height | C1CURB73A-1 | 11F53 | X | X | X | X | X | X | X | ^ X | | | |
| Hybrid Roof Curbs, Full Perimeter, Downflow | | | | | | | | | | | | | |
| 8 in. height | K1CURB70AP1 | 11S47 | | | | | | | | | X | | |
| 14 in. height | K1CURB71AP1 | 11S48 | | | | | | | | | X | | |
| 18 in. height | K1CURB72AP1 | 11T01 | | | | | | | | | X | | |
| 24 in. height | K1CURB73AP1 | 11T06 | | | | | | | | | X | | |
| Adjustable Pitch Curb | | | | | | | | | | | | | |
| 14 in. height | C1CURB55AT1 | 43W27 | X | X | X | X | X | X | X | X | | | |

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
2 TON | 2.5 TON

| General Data | Nominal Tonnage Model No. Efficiency Type Blower Type | 2 Ton | 2.5 Ton |
|----------------------------------------|----------------------------------------------------------------|------------------------------------------------------------------|---------------------------------|
| | | KGB024S4E | KGB030S4E |
| | | Standard | Standard |
| | | Multi-Speed Direct Drive ECM | Multi-Speed Direct Drive ECM |
| Cooling Performance | Gross Cooling Capacity - Btuh | 24,600 | 31,000 |
| | ¹ Net Cooling Capacity - Btuh | 24,000 | 30,000 |
| | AHRI Rated Air Flow - cfm | 810 | 1,000 |
| | ² Sound Rating Number (dBA) | 74 | 74 |
| | Total Unit Power - kW | 1.9 | 2.4 |
| | ¹ SEER (Btuh/Watt) | 14.0 | 14.0 |
| | ¹ EER (Btuh/Watt) | 12.5 | 11.5 |
| | | | |
| Refrigerant Charge | Refrigerant Type | R-410A | R-410A |
| | Environ™ Coil System | 4 lbs. 1 oz. | 5 lbs. 5 oz. |
| | Conventional Fin/Tube Coil | 10 lbs. 0 oz. | 10 lbs. 8 oz. |
| | Conventional Fin/Tube With Humiditrol® Dehumidification Option | 9 lbs. 15 oz. | 10 lbs. 7 oz. |
| Gas Heating Options - See page 24 | | Standard (1 Stage) | Standard (1 Stage) |
| Compressor Type (one per unit) | | Scroll | Scroll |
| Outdoor Coil Environ™ (Fin/Tube) | Net face area - sq. ft. | 11.7 (15.6) | 11.7 (15.6) |
| | Number of rows | 1 (2) | 1 (2) |
| | Fins per inch | 23 (20) | 23 (20) |
| Outdoor Coil Fan | Motor - (No.) HP | (1) 1/4 | (1) 1/4 |
| | Motor rpm | 825 | 825 |
| | Total Motor Input - watts | 335 | 335 |
| | Diameter - (No.) in. / No. of blades | (1) 24 - 4 | (1) 24 - 4 |
| | 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 | 2 | 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, removable power head | |
| Indoor Blower | Nominal Motor HP | 0.33 hp (ECM) | 0.33 hp (ECM) |
| | Wheel nominal diameter x width - in. | (1) 10 x 10 | (1) 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 rated in accordance with test conditions included in AHRI Standard 270-95.

SPECIFICATIONS - DIRECT DRIVE BLOWER
3 TON | 4 TON

| General Data | Nominal Tonnage Model No. Efficiency Type Blower Type | 3 Ton | 3 Ton | 4 Ton | 4 Ton |
|----------------------------------------|----------------------------------------------------------------|------------------------------------------------------------------|-------------------------------------|------------------------------------|----------------------------------------------------------------------------------|
| | | KGB036S4E | KGB036S4D | KGB048S4E | KGB048S4D |
| | | Standard | Standard | Standard | Standard |
| | | Multi-Speed Direct Drive ECM | Multi-Speed Direct Drive PSC | Multi-Speed Direct Drive ECM | Multi-Speed Direct Drive PSC |
| Cooling Performance | Gross Cooling Capacity - Btuh | 37,300 | 37,300 | 49,700 | 49,700 |
| | ¹ Net Cooling Capacity - Btuh | 36,000 | 36,000 | 47,500 | 47,500 |
| | AHRI Rated Air Flow - cfm | 1150 | 1150 | 1560 | 1560 |
| | ² Sound Rating Number (dBA) | 74 | 74 | 74 | 74 |
| | Total Unit Power - kW | 2.9 | 2.9 | 4.1 | 4.1 |
| | ¹ SEER (Btuh/Watt) | 14.0 | 14.0 | 14.0 | 14.0 |
| | ¹ EER (Btuh/Watt) | 12.3 | 12.3 | 11.5 | 11.5 |
| | | | | | |
| Refrigerant Charge | Refrigerant Type | R-410A | R-410A | R-410A | R-410A |
| | Environ™ Coil System | 5 lbs. 9 oz. | 5 lbs. 9 oz. | 5 lbs. 10 oz. | 5 lbs. 10 oz. |
| | Conventional Fin/Tube Coil | 11 lbs. 3 oz. | 11 lbs. 3 oz. | 9 lbs. 13 oz. | 9 lbs. 13 oz. |
| | Conventional Fin/Tube With Humiditrol® Dehumidification Option | 12 lbs. 7 oz. | 12 lbs. 7 oz. | 9 lbs. 13 oz. | 9 lbs. 13 oz. |
| Gas Heating Options - See page 24 | | Standard (1 or 2 Stage) Medium (1 or 2 Stage) | | | Standard (1 or 2 Stage) Medium (1 or 2 Stage) High (1 or 2 Stage) |
| Compressor Type (one per unit) | | Scroll | Scroll | Scroll | Scroll |
| Outdoor Coil Environ™ (Fin/Tube) | Net face area - sq. ft. | 14.5 (15.6) | 14.5 (15.6) | 14.5 (15.6) | 14.5 (15.6) |
| | Number of rows | 1 (2) | 1 (2) | 1 (2) | 1 (2) |
| | Fins per inch | 23 (20) | 23 (20) | 23 (20) | 23 (20) |
| Outdoor Coil Fan | Motor - (No.) HP | (1) 1/4 | (1) 1/4 | (1) 1/4 | (1) 1/4 |
| | Motor rpm | 825 | 825 | 825 | 825 |
| | Total Motor Input - watts | 325 | 325 | 325 | 325 |
| | Diameter - (No.) in. / No. of blades | (1) 24 - 4 | (1) 24 - 4 | (1) 24 - 4 | (1) 24 - 4 |
| | Total air volume - cfm | 3950 | 3950 | 3950 | 3950 |
| Indoor Coil | Net face area - sq. ft. | 7.8 | 7.8 | 7.8 | 7.8 |
| | Tube diameter - in. | 3/8 | 3/8 | 3/8 | 3/8 |
| | Number of rows | 3 | 3 | 3 | 3 |
| | Fins per inch | 14 | 14 | 14 | 14 |
| | Drain Connection (no.) and size - in. | (1) 1 NPT | (1) 1 NPT | (1) 1 NPT | (1) 1 NPT |
| | Expansion device type | Balanced Port Thermostatic Expansion Valve, removable power head | | | |
| Indoor Blower | Nominal Motor HP | 0.50 hp (ECM) | 0.50 hp (PSC) | 0.75 hp (ECM) | 0.50 hp (PSC) |
| | Wheel nominal diameter x width - in. | (1) 10 x 10 | (1) 10 x 10 | (1) 10 x 10 | (1) 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, 460V & 575V 3 phase | 208/230V 1 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 rated in accordance with test conditions included in AHRI Standard 270-95.

SPECIFICATIONS - DIRECT DRIVE BLOWER
5 TON

| General Data | Nominal Tonnage | 5 Ton | 5 Ton |
|----------------------------------------|----------------------------------------------------------------|-------------------------------------------------------------------|----------------------------------------------------------------------------------|
| | | KGB060S4E | KGB060S4D |
| | | Standard | Standard |
| | | Multi-Speed Direct Drive ECM | Multi-Speed Direct Drive PSC |
| Cooling Performance | Gross Cooling Capacity - Btuh | 60,900 | 60,900 |
| | ¹ Net Cooling Capacity - Btuh | 58,500 | 58,500 |
| | AHRI Rated Air Flow - cfm | 1760 | 1760 |
| | ² Sound Rating Number (dBA) | 83 | 83 |
| | Total Unit Power - kW | 5.0 | 5.0 |
| | ¹ SEER (Btuh/Watt) | 14.0 | 14.0 |
| | ¹ EER (Btuh/Watt) | 11.0 | 11.0 |
| | | | |
| Refrigerant Charge | Refrigerant Type | R-410A | R-410A |
| | Environ™ Coil System | 8 lbs. 4 oz. | 8 lbs. 4 oz. |
| | Conventional Fin/Tube Coil | 14 lbs. 4 oz. | 14 lbs. 4 oz. |
| | Conventional Fin/Tube With Humiditrol® Dehumidification Option | 15 lbs. 3 oz. | 15 lbs. 3 oz. |
| Gas Heating Options - See page 24 | | Standard (2 Stage) Medium (2 Stage) High (2 Stage) | Standard (1 or 2 Stage) Medium (1 or 2 Stage) High (1 or 2 Stage) |
| Compressor Type (one per unit) | | Scroll | Scroll |
| Outdoor Coil Environ™ (Fin/Tube) | Net face area - sq. ft. | 17.8 (19.3) | 17.8 (19.3) |
| | Number of rows | 1 (2) | 1 (2) |
| | Fins per inch | 23 (20) | 23 (20) |
| Outdoor Coil Fan | Motor - (No.) HP | (1) 1/3 | (1) 1/3 |
| | Motor rpm | 1075 | 1075 |
| | Total Motor Input - watts | 375 | 375 |
| | Diameter - (No.) in. / No. of blades | (1) 24 - 3 | (1) 24 - 3 |
| | Total air volume - cfm | 4700 | 4700 |
| Indoor Coil | Net face area - sq. ft. | 9.7 | 9.7 |
| | Tube diameter - in. | 3/8 | 3/8 |
| | Number of rows | 4 | 4 |
| | 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, removable power head | |
| | | | |
| Indoor Blower | Nominal Motor HP | 1 hp (ECM) | 0.75 hp (PSC) |
| | Wheel nominal diameter x width - in. | (1) 11 x 10 | (1) 11 x 10 |
| Filters | Type | Disposable | |
| | Number and size - in. | (4) 20 x 20 x 2 | |
| Electrical Characteristics - 60 Hz | | 208/230V 1 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 rated in accordance with test conditions included in AHRI Standard 270-95.

SPECIFICATIONS - BELT DRIVE BLOWER
SINGLE SPEED - 3 TON | 4 TON | 5 TON

| General Data | Nominal Tonnage | 3 Ton | 4 Ton | 5 Ton |
|----------------------------------------------|----------------------------------------------------------------|------------------------------------------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------|
| | Model No. | KGB036S4B | KGB048S4B | KGB060S4B |
| | Efficiency Type | Standard | Standard | Standard |
| | Blower Type | Single Speed Belt Drive | Single Speed Belt Drive | Single Speed Belt Drive |
| Cooling Performance | Gross Cooling Capacity - Btuh | 37,300 | 49,700 | 60,900 |
| | ¹ Net Cooling Capacity - Btuh | 36,000 | 47,500 | 58,500 |
| | AHRI Rated Air Flow - cfm | 1150 | 1560 | 1760 |
| | ² Sound Rating Number (dBA) | 74 | 74 | 83 |
| | Total Unit Power - kW | 2.9 | 4.1 | 5 |
| | ¹ SEER (Btuh/Watt) | 14.0 | 14.0 | 14.0 |
| | ¹ EER (Btuh/Watt) | 12.3 | 11.5 | 11.0 |
| | Refrigerant Charge | R-410A | R-410A | R-410A |
| Refrigerant Charge | Environ™ Coil System | 5 lbs. 9 oz. | 5 lbs. 10 oz. | 8 lbs. 4 oz. |
| | Conventional Fin/Tube Coil | 11 lbs. 3 oz. | 9 lbs. 13 oz. | 14 lbs. 4 oz. |
| | Conventional Fin/Tube With Humiditrol® Dehumidification Option | 12 lbs. 7 oz. | 9 lbs. 13 oz. | 15 lbs. 3 oz. |
| | Gas Heating Options - See page 24 | Standard (1 or 2 Stage) Medium (1 or 2 Stage) | Standard (1 or 2 Stage) Medium (1 or 2 Stage) High (1 or 2 Stage) | Standard (1 or 2 Stage) Medium (1 or 2 Stage) High (1 or 2 Stage) |
| Compressor Type (one per unit) | | Scroll | Scroll | Scroll |
| Outdoor Coil Environ™ (Fin/Tube) | Net face area - sq. ft. | 14.5 (15.6) | 14.5 (15.6) | 17.8 (19.3) |
| | Number of rows | 1 (2) | 1 (2) | 1 (2) |
| | Fins / inch | 23 (20) | 23 (20) | 23 (20) |
| Outdoor Coil Fan | Motor - (No.) HP | (1) 1/4 | (1) 1/4 | (1) 1/3 |
| | Motor rpm | 825 | 825 | 1075 |
| | Total Motor Input - watts | 325 | 325 | 375 |
| | Diameter - (No.) in. / No. of blades | (1) 24 - 4 | (1) 24 - 4 | (1) 24 - 3 |
| | Total air volume - cfm | 3950 | 3950 | 4700 |
| | Indoor Coil | 7.8 | 7.8 | 9.7 |
| Indoor Coil | Net face area - sq. ft. | 3/8 | 3/8 | 3/8 |
| | Tube diameter - in. | 3 | 3 | 4 |
| | Number of rows | 14 | 14 | 14 |
| | Fins per inch | (1) 1 NPT | (1) 1 NPT | (1) 1 NPT |
| | Drain Connection (no.) and size - in. | Balanced Port Thermostatic Expansion Valve, removable power head | | |
| ³ Indoor Blower & Drive Selection | Nominal Motor HP | 1 hp, 2 hp | 1 hp, 2 hp | 1 hp, 2 hp |
| | Maximum Usable Motor Output (US Only) | 1.15 hp, 2.3 hp | 1.15 hp, 2.3 hp | 1.15 hp, 2.3 hp |
| | Available Drive Kits | A01 673 - 1010 rpm A05 897 - 1346 rpm | A02 745 - 1117 rpm A06 1071 - 1429 rpm | A03 833 - 1250 rpm A07 1212 - 1548 rpm |
| | Wheel nominal diameter x width - in. | (1) 10 x 10 | (1) 10 x 10 | (1) 10 x 10 |
| | Filters | Type | Disposable | |
| Number and size - in. | | (4) 16 x 20 x 2 | (4) 20 x 20 x 2 | |
| Electrical Characteristics - 60 Hz | | 208/230V, 460V or 575V - 60 hertz - 3 phase | | |

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

¹ 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 rated in accordance with test conditions included in AHRI Standard 270-95.

³ 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.

SPECIFICATIONS - BELT DRIVE BLOWER
SINGLE SPEED - 6 TON

| General Data | Nominal Tonnage | 6 Ton | 6 Ton |
|----------------------------------------------|----------------------------------------------------------------|-------------------------------------------------------------------------|--------------------------------------------------------------------|
| | Model No. | KGB072H4B | |
| | Efficiency Type | High | |
| | Blower Type | Single Speed Belt Drive | Single Speed Belt Drive |
| Cooling Performance | Gross Cooling Capacity - Btuh | 73,500 | 71,000 |
| | ¹ Net Cooling Capacity - Btuh | 72,000 | 68,000 |
| | AHRI Rated Air Flow - cfm | 1920 | 2150 |
| | ² Sound Rating Number (dBA) | 79 | 79 |
| | Total Unit Power - kW | 6.0 | 6.1 |
| | ¹ IEER | 13.5 | 12.7 |
| | ¹ EER (Btuh/Watt) | 12.0 | 11.0 |
| | | | |
| Refrigerant Charge | Refrigerant Type | R-410A | R-410A |
| | Environ™ Coil System | 7 lbs. 8 oz. | 7 lbs. 2 oz. |
| | Conventional Fin/Tube Coil | --- | 14 lbs. 8 oz. |
| | Conventional Fin/Tube With Humiditrol® Dehumidification Option | --- | 14 lbs. 11 oz. |
| Gas Heating Options - See page 24 | | Standard (1 or 2 Stage) Medium (1 or 2 Stage) High (1 or 2 Stage) | Standard (1 Stage) Medium (1 or 2 Stage) High (1 or 2 Stage) |
| Compressor Type (one per unit) | | Scroll | Two-Stage Scroll |
| Outdoor Coil Environ™ (Fin/Tube) | Net face area - sq. ft. | 17.8 | 17.8 (19.3) |
| | Number of rows | 1 | 1 (2) |
| | Fins / inch | 23 | 23 (20) |
| Outdoor Coil Fan | Motor - (No.) HP | (1) 1/3 | (1) 1/3 |
| | Motor rpm | 1075 | 1075 |
| | Total Motor Input - watts | 410 | 375 |
| | Diameter - (No.) in. / No. of blades | (1) 24 - 3 | (1) 24 - 3 |
| | Total air volume - cfm | 4800 | 4700 |
| Indoor Coil | Net face area - sq. ft. | 9.72 | 9.72 |
| | Tube diameter - in. | 3/8 | 3/8 |
| | Number of rows | 4 | 4 |
| | Fins per inch | 14 | 14 |
| | Drain Connection (no.) and size - in. | (1) 1 NPT | (1) 1 in. NPT |
| | Expansion device type | Balanced Port Thermostatic Expansion Valve, removable power head | |
| ³ Indoor Blower & Drive Selection | Nominal Motor Output | 1 hp, 2 hp | 1 hp, 2 hp |
| | Maximum Usable Motor Output (US Only) | 1.15 hp, 2.3 hp | 1.15 hp 2.3 hp |
| | Motor - Drive Kit Number | AA01 522-784 rpm AA02 632-875 rpm AA03 798-1105 rpm | A04 968 - 1340 rpm A08 1193-1591 rpm |
| | Wheel Nominal Diameter x Width - in. | (1) 15 x 9 | 10 X 10 |
| | | | |
| Filters | Type | Disposable | Disposable |
| | Number and size - in. | (4) 20 x 20 x 2 | (4) 20 x 20 x 2 |
| Electrical Characteristics - 60 Hz | | 208/230V, 460V or 575V - 60 hertz - 3 phase | |

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

¹ AHRI Certified to AHRI Standard 340/360: 95°F outdoor air temperature and 80°F db/67°F wb entering evaporator air; minimum external duct static pressure.

² Sound Rating Number rated in accordance with test conditions included in AHRI Standard 270-95.

³ 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.

SPECIFICATIONS - BELT DRIVE BLOWER
TWO-SPEED - 6 TON

| General Data | Nominal Tonnage | 6 Ton | 6 Ton |
|----------------------------------------------------------------|------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------------------------|
| | Model No. | KGB074S4T | |
| | Efficiency Type | Standard | |
| | Blower Type | Two Speed Belt Drive | Two Speed Belt Drive |
| Cooling Performance | Gross Cooling Capacity - Btuh | 71,000 | 72,000 |
| | ¹ Net Cooling Capacity - Btuh | 68,000 | 69,000 |
| | AHRI Rated Air Flow - cfm | 2100 | 2100 |
| | ² Sound Rating Number (dBA) | 79 | 79 |
| | Total Unit Power - kW | 6.1 | 5.7 |
| | ¹ IEER | 15.0 | 16.0 |
| | ¹ EER (Btuh/Watt) | 11.2 | 12.0 |
| Refrigerant Charge | Refrigerant Type | R-410A | R-410A |
| | Environ™ Coil System | 7 lbs. 2 oz. | 7 lbs. 2 oz. |
| | Conventional Fin/Tube Coil | 14 lbs. 8 oz. | --- |
| Conventional Fin/Tube With Humiditrol® Dehumidification Option | | 14 lbs. 11 oz. | --- |
| Gas Heating Options - See page 24 | | Standard (1 or 2 Stage), Medium (1 or 2 Stage), or High (1 or 2 Stage) | Standard (1 or 2 Stage), Medium (1 or 2 Stage), or High (1 or 2 Stage) |
| Compressor Type (one per unit) | | Two-Stage Scroll | Two-Stage Scroll |
| Outdoor Coil Environ™ (Fin/Tube) | Net face area - sq. ft. | 17.8 (19.3) | 17.8 |
| | Number of rows | 1 (2) | 1 |
| | Fins / inch | 23 (20) | 23 |
| Outdoor Coil Fan | Motor - (No.) HP | (1) 1/3 | (1) 1/3 |
| | Motor rpm | 1075 | 1075 |
| | Total Motor Input - watts | 375 | 375 |
| | Diameter - (No.) in. / No. of blades | (1) 24 - 3 | (1) 24 - 3 |
| | Total air volume - cfm | 4700 | 4700 |
| Indoor Coil | Net face area - sq. ft. | 9.72 | 9.72 |
| | Tube diameter - in. | 3/8 | 3/8 |
| | Number of rows | 4 | 4 |
| | 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, removable power head | |
| ³ Indoor Blower & Drive Selection | Nominal Motor Output | 1 hp, 2 hp | 1 hp, 2 hp |
| | Maximum Usable Motor Output (US Only) | 1.15 hp, 2.3 hp | 1.15 hp, 2.3 hp |
| | Motor - Drive Kit Number | A04 968 - 1340 rpm A08 1193-1591 rpm | AA01 522-784 rpm AA02 632-875 rpm AA03 798-1105 rpm |
| | Wheel Nominal Diameter x Width - in. | (1) 10 x 10 | (1) 15 x 9 |
| | Type | Disposable | |
| Filters | | (4) 20 x 20 x 2 | (4) 20 x 20 x 2 |
| Electrical Characteristics - 60 Hz | | 208/230V, 460V or 575V - 60 hertz - 3 phase | |

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

¹ AHRI Certified to AHRI Standard 340/360: 95°F outdoor air temperature and 80°F db/67°F wb entering evaporator air; minimum external duct static pressure.

² Sound Rating Number rated in accordance with test conditions included in AHRI Standard 270-95.

³ 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.

SPECIFICATIONS - BELT DRIVE BLOWER
SINGLE AND TWO-SPEED - 7.5 TON

| General Data | Nominal Tonnage | 7.5 Ton | 7.5 Ton |
|----------------------------------------------|----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|
| | Model No. | KGB090S4B | |
| | Efficiency Type | Standard | |
| | Blower Type | Single Speed Belt Drive | Two Speed Belt Drive |
| Cooling Performance | Gross Cooling Capacity - Btuh | 92,000 | 92,000 |
| | ¹ Net Cooling Capacity - Btuh | 88,000 | 88,000 |
| | AHRI Rated Air Flow - cfm | 2250 | 2250 |
| | ² Sound Rating Number (dBA) | 79 | 79 |
| | Total Unit Power - kW | 8.0 | 8.0 |
| | ¹ IEER | 12.7 | 14.0 |
| | ¹ EER (Btuh/Watt) | 11.0 | 11.0 |
| | | | |
| Refrigerant Charge | Refrigerant Type | R-410A | R-410A |
| | Environ™ Coil System | 9 lbs. 4 oz. | 9 lbs. 4 oz. |
| | Conventional Fin/Tube Coil | 17 lbs. 14 oz. | 17 lbs. 14 oz. |
| | Conventional Fin/Tube With Humiditrol® Dehumidification Option | 19 lbs. 14 oz. | 19 lbs. 14 oz. |
| Gas Heating Options - See page 24 | | Medium (1 or 2 stage) High (1 or 2 stage) | Medium (1 or 2 stage) High (1 or 2 stage) |
| Compressor Type (one per unit) | | Two-Stage Scroll | Two-Stage Scroll |
| Outdoor Coil Environ™ (Fin/Tube) | Net face area - sq. ft. | 24.2 (27.7) | 24.2 (27.7) |
| | Number of rows | 1 (2) | 1 (2) |
| | Fins / inch | 23 (20) | 23 (20) |
| Outdoor Coil Fan | Motor - (No.) HP | (1) 1/2 | (1) 1/2 |
| | Motor rpm | 1075 | 1075 |
| | Total Motor Input - watts | 520 | 520 |
| | Diameter - (No.) in. / No. of blades | (1) 24 - 4 | (1) 24 - 4 |
| | Total air volume - cfm | 5300 | 5300 |
| Indoor Coil | Net face area - sq. ft. | 9.72 | 9.72 |
| | Tube diameter - in. | 3/8 | 3/8 |
| | Number of rows | 4 | 4 |
| | Fins per inch | 14 | 14 |
| | Drain Connection (no.) and size - in. | (1) 1 in. NPT | (1) 1 in. NPT |
| | Expansion device type | Balanced Port Thermostatic Expansion Valve, removable power head | |
| ³ Indoor Blower & Drive Selection | Nominal Motor Output | 1 hp, 2 hp, 3hp | 2 hp |
| | Maximum Usable Motor Output (US Only) | 1.15 hp 2.3 hp, 3.45 hp | 2.3 hp |
| | Motor - Drive Kit Number | AA01 522-784 rpm AA02 632-875 rpm AA03 798-1105 rpm ⁴ AA04 921-1228 | AA01 522-784 rpm AA02 632-875 rpm AA03 798-1105 rpm |
| | Wheel Nominal Diameter x Width - in. | (1) 15 x 9 | (1) 15 x 9 |
| | Type | Disposable | |
| | Number and size - in. | (4) 20 x 20 x 2 | (4) 20 x 20 x 2 |
| Electrical Characteristics - 60 Hz | | 208/230V, 460V or 575V – 60 hertz – 3 phase | |

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

¹ AHRI Certified to AHRI Standard 340/360: 95°F outdoor air temperature and 80°F db/67°F wb entering evaporator air; minimum external duct static pressure.

² Sound Rating Number rated in accordance with test conditions included in AHRI Standard 270-95.

³ 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.

⁴ 3 hp blower motor only.

BLOWER DATA**DIRECT DRIVE ECM - 2 TON | 2.5 TON****KGB024S4E | KGB030S4E****BLOWER TABLE INCLUDES RESISTANCE FOR BASE UNIT ONLY WITH DRY INDOOR COIL AND AIR FILTERS IN PLACE.**

FOR ALL UNITS ADD:

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

See for wet coil and options/accessory air resistance data.

DOWNFLOW

| External Static Press. in. w.g. | Air Volume (cfm) at Various Blower Speeds | | | | | |
|------------------------------------------|-------------------------------------------|------------------------------|----------------------------------------------------------------------------|----------------------------------------------------------------------------|------------------------------|-----------------------------------------|
| | Blower Only | Low Speed | | High Speed | | Free Cooling |
| | | Cooling: Y1 (Pin 2 and 5) | 1st Stage Heating: W1 (Pin 2) 2nd Stage Heating: W2 (Pin 2 and 4) | 1st Stage Heating: W1 (Pin 3) 2nd Stage Heating: W2 (Pin 3 and 4) | Cooling: Y1 (Pin 3 and 5) | Low and High Speed: Y1 (Pin 1 and 5) |
| 0 | 488 | 985 | 1127 | 1353 | 1127 | 1127 |
| 0.1 | 421 | 913 | 1082 | 1311 | 1082 | 1082 |
| 0.2 | 333 | 841 | 1037 | 1269 | 1037 | 1037 |
| 0.3 | 285 | 754 | 988 | 1224 | 988 | 988 |
| 0.4 | 215 | 668 | 923 | 1180 | 923 | 923 |
| 0.5 | --- | 611 | 858 | 1135 | 858 | 858 |
| 0.6 | --- | 553 | 809 | 1076 | 809 | 809 |
| 0.7 | --- | 481 | 760 | 1017 | 760 | 760 |
| 0.8 | --- | --- | 694 | 972 | 694 | 694 |
| 0.9 | --- | --- | 646 | 928 | 646 | 646 |
| 1.0 | --- | --- | 580 | 869 | 580 | 580 |

HORIZONTAL

| External Static Press. in. w.g. | Air Volume (cfm) at Various Blower Speeds | | | | | |
|------------------------------------------|-------------------------------------------|------------------------------|----------------------------------------------------------------------------|----------------------------------------------------------------------------|------------------------------|-----------------------------------------|
| | Blower Only | Low Speed | | High Speed | | Free Cooling |
| | | Cooling: Y1 (Pin 2 and 5) | 1st Stage Heating: W1 (Pin 2) 2nd Stage Heating: W2 (Pin 2 and 4) | 1st Stage Heating: W1 (Pin 3) 2nd Stage Heating: W2 (Pin 3 and 4) | Cooling: Y1 (Pin 3 and 5) | Low and High Speed: Y1 (Pin 1 and 5) |
| 0 | 479 | 965 | 1104 | 1326 | 1104 | 1104 |
| 0.1 | 412 | 895 | 1060 | 1285 | 1060 | 1060 |
| 0.2 | 326 | 824 | 1016 | 1244 | 1016 | 1016 |
| 0.3 | 280 | 739 | 968 | 1200 | 968 | 968 |
| 0.4 | 211 | 655 | 905 | 1156 | 905 | 905 |
| 0.5 | --- | 599 | 841 | 1112 | 841 | 841 |
| 0.6 | --- | 542 | 793 | 1054 | 793 | 793 |
| 0.7 | --- | 471 | 745 | 997 | 745 | 745 |
| 0.8 | --- | --- | 680 | 953 | 680 | 680 |
| 0.9 | --- | --- | 633 | 909 | 633 | 633 |
| 1.0 | --- | --- | 568 | 852 | 568 | 568 |

BLOWER DATA**DIRECT DRIVE ECM - 4 TON****KGB048S4E**

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 46.

2 - Any field installed accessories air resistance (duct resistance, diffuser, etc.) See page 46.

DOWNFLOW

| External Static Press. in. w.g. | Air Volume (cfm) at Various Blower Speeds | | | | | |
|------------------------------------------|-------------------------------------------|------------------------------|----------------------------------------------------------------------------|----------------------------------------|------------------------------------------------------------------|-----------------------------------------|
| | Blower Only | Low Speed | | High Speed | | Free Cooling |
| | Low and High Speed: G (Pin 1) | Cooling: Y1 (Pin 2 and 5) | 1st Stage Heating: W1 (Pin 2) 2nd Stage Heating: W2 (Pin 2 and 4) | 2nd Stage Heating: W2 (Pin 3 and 4) | 1st Stage Heating: W1 (Pin 3) Cooling: Y1 (Pin 3 and 5) | Low and High Speed: Y1 (Pin 1 and 5) |
| 0 | 963 | 1561 | 1869 | 2156 | 1869 | 1958 |
| 0.1 | 897 | 1530 | 1842 | 2132 | 1842 | 1920 |
| 0.2 | 831 | 1499 | 1815 | 2108 | 1815 | 1882 |
| 0.3 | 752 | 1466 | 1788 | 2084 | 1788 | 1844 |
| 0.4 | 673 | 1432 | 1750 | 2057 | 1750 | 1814 |
| 0.5 | 620 | 1398 | 1723 | 2031 | 1723 | 1784 |
| 0.6 | 567 | 1353 | 1695 | 1991 | 1695 | 1754 |
| 0.7 | 501 | 1319 | 1658 | 1952 | 1658 | 1724 |
| 0.8 | --- | 1274 | 1621 | 1899 | 1621 | 1694 |
| 0.9 | --- | 1240 | 1593 | 1794 | 1593 | 1672 |
| 1.0 | --- | 1184 | 1556 | 1689 | 1556 | 1650 |

HORIZONTAL

| External Static Press. in. w.g. | Air Volume (cfm) at Various Blower Speeds | | | | | |
|------------------------------------------|-------------------------------------------|------------------------------|----------------------------------------------------------------------------|----------------------------------------|------------------------------------------------------------------|-----------------------------------------|
| | Blower Only | Low Speed | | High Speed | | Free Cooling |
| | Low and High Speed: G (Pin 1) | Cooling: Y1 (Pin 2 and 5) | 1st Stage Heating: W1 (Pin 2) 2nd Stage Heating: W2 (Pin 2 and 4) | 2nd Stage Heating: W2 (Pin 3 and 4) | 1st Stage Heating: W1 (Pin 3) Cooling: Y1 (Pin 3 and 5) | Low and High Speed: Y1 (Pin 1 and 5) |
| 0 | 944 | 1530 | 1832 | 2113 | 1832 | 1919 |
| 0.1 | 879 | 1499 | 1805 | 2089 | 1805 | 1882 |
| 0.2 | 814 | 1469 | 1779 | 2066 | 1779 | 1844 |
| 0.3 | 737 | 1437 | 1752 | 2042 | 1752 | 1807 |
| 0.4 | 660 | 1403 | 1715 | 2016 | 1715 | 1778 |
| 0.5 | 608 | 1370 | 1689 | 1990 | 1689 | 1748 |
| 0.6 | 556 | 1326 | 1661 | 1951 | 1661 | 1719 |
| 0.7 | 491 | 1293 | 1625 | 1913 | 1625 | 1690 |
| 0.8 | --- | 1249 | 1589 | 1861 | 1589 | 1660 |
| 0.9 | --- | 1215 | 1561 | 1758 | 1561 | 1639 |
| 1.0 | --- | 1160 | 1525 | 1655 | 1525 | 1617 |

BLOWER DATA**DIRECT DRIVE PSC - 3 TON | 4 TON**

KGB036S4D | KGB048S4D

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 46.

2 - Any field installed accessories air resistance (duct resistance, diffuser, etc.) See page 46.

| 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) | | | | | | | | | KGB036S and KGB048S |
| 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) | | | | | | | | | KGB036S and KGB048S |
| 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 PSC - 5 TON****KGB060S4D**

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 46.

2 - Any field installed accessories air resistance (duct resistance, diffuser, etc.) See page 46.

| 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) | | | | | | KGB060S |
| 0.0 | 1940 | 1581 | 2131 | 1788 | 2131 | 1788 |
| 0.1 | 1929 | 1566 | 2107 | 1784 | 2107 | 1784 |
| 0.2 | 1906 | 1552 | 2074 | 1774 | 2074 | 1774 |
| 0.3 | 1872 | 1546 | 2036 | 1752 | 2036 | 1752 |
| 0.4 | 1836 | 1526 | 1998 | 1708 | 1998 | 1708 |
| 0.5 | 1802 | 1486 | 1960 | 1679 | 1960 | 1679 |
| 0.6 | 1749 | 1447 | 1904 | 1635 | 1904 | 1635 |
| 0.7 | 1714 | 1407 | 1847 | 1576 | 1847 | 1576 |
| 0.8 | 1644 | 1347 | 1771 | 1518 | 1771 | 1518 |
| 0.9 | 1574 | 1245 | 1658 | 1430 | 1658 | 1430 |
| 1.0 | 1338 | --- | 1506 | --- | 1506 | --- |
| 5 Ton Standard Efficiency (Horizontal) | | | | | | KGB060S |
| 0.0 | 1930 | 1575 | 2143 | 1764 | 2143 | 1764 |
| 0.1 | 1920 | 1573 | 2115 | 1761 | 2115 | 1761 |
| 0.2 | 1910 | 1576 | 2088 | 1751 | 2088 | 1751 |
| 0.3 | 1870 | 1552 | 2055 | 1746 | 2055 | 1746 |
| 0.4 | 1840 | 1524 | 2023 | 1704 | 2023 | 1704 |
| 0.5 | 1790 | 1495 | 1979 | 1675 | 1979 | 1675 |
| 0.6 | 1739 | 1466 | 1925 | 1633 | 1925 | 1633 |
| 0.7 | 1679 | 1428 | 1860 | 1590 | 1860 | 1590 |
| 0.8 | 1639 | 1371 | 1775 | 1534 | 1775 | 1534 |
| 0.9 | 1559 | 1270 | 1670 | 1421 | 1670 | 1421 |
| 1.0 | 1438 | --- | 1539 | 1285 | 1539 | 1285 |

ELECTRICAL DATA
DIRECT DRIVE ECM - 2 TON | 2.5 TON ECM

| | Model No. | KGB024S4E | KGB030S4E |
|---------------------------------------------|-------------------|-----------------|-----------------|
| ¹ Voltage - 60hz | | 208/230V - 1 Ph | 208/230V - 1 Ph |
| Compressor | Rated Load Amps | 10.9 | 13.5 |
| | Locked Rotor Amps | 60 | 73 |
| Outdoor Fan Motor | Full Load Amps | 1.7 | 1.7 |
| Service Outlet 115V GFI (amps) | | 15 | 15 |
| Indoor Blower Motor | Horsepower | 0.33 | 0.33 |
| | Type | Direct (ECM) | Direct (ECM) |
| | Full Load Amps | 2.9 | 2.9 |
| ² Maximum Overcurrent Protection | Unit Only | 25 | 30 |
| ³ Minimum Circuit Ampacity | Unit Only | 19 | 22 |

ELECTRICAL ACCESSORIES

| | | | |
|------------|-----------------|-------|-------|
| Disconnect | 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
DIRECT DRIVE ECM - 3 TON | 4 TON | 5 TON

| | Model No. | KGB036S4E | KGB048S4E | KGB060S4E |
|---------------------------------------------|--------------------------------|-----------------|-----------------|-----------------|
| ¹ Voltage - 60hz | | 208/230V - 1 Ph | 208/230V - 1 Ph | 208/230V - 1 Ph |
| Compressor | Rated Load Amps | 15.3 | 20 | 22.1 |
| | Locked Rotor Amps | 70 | 99 | 125 |
| Outdoor Fan Motor | Full Load Amps | 1.7 | 1.7 | 1.65 |
| Power Exhaust (1) 0.33 HP | Full Load Amps | 2.4 | 2.4 | 2.4 |
| Service Outlet 115V GFI (amps) | | 15 | 15 | 15 |
| Indoor Blower Motor | Horsepower | 0.50 | 0.75 | 1.0 |
| | Type | Direct (ECM) | Direct (ECM) | Direct (ECM) |
| | Full Load Amps | 4.6 | 6.3 | 8.4 |
| ² Maximum Overcurrent Protection | Unit Only | 40 | 50 | 50 |
| | with (1) 0.33 HP Power Exhaust | 40 | 50 | 60 |
| ³ Minimum Circuit Ampacity | Unit Only | 26 | 33 | 37 |
| | with (1) 0.33 HP Power Exhaust | 28 | 36 | 40 |

ELECTRICAL ACCESSORIES

| | | | | |
|------------|-----------------|-------|-------|-------|
| Disconnect | Standard Access | 20W17 | 20W17 | 20W20 |
| | Hinged Access | 20W23 | 20W23 | 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**DIRECT DRIVE PSC - 3 TON**

| Model No. | | KGB036S4D | | |
|---------------------------------------------|--------------------------------|------------------------|--------------------|--------------------|
| ¹ Voltage - 60hz | | 208/230V - 3 Ph | 460V - 3 Ph | 575V - 3 Ph |
| Compressor | Rated Load Amps | 8.7 | 4 | 3.6 |
| | Locked Rotor Amps | 70 | 31 | 27 |
| Outdoor Fan Motor | Full Load Amps | 1.7 | 1.1 | 0.7 |
| Power Exhaust (1) 0.33 HP | Full Load Amps | 2.4 | 1.3 | 1 |
| Service Outlet 115V GFI (amps) | | 15 | 15 | 20 |
| Indoor Blower Motor | Horsepower | 0.5 | 0.5 | 0.5 |
| | Type | Direct (PSC) | Direct (PSC) | Direct (PSC) |
| | Full Load Amps | 3.9 | 2 | 2 |
| ² Maximum Overcurrent Protection | Unit Only | 25 | 15 | 15 |
| | with (1) 0.33 HP Power Exhaust | 25 | 15 | 15 |
| ³ Minimum Circuit Ampacity | Unit Only | 17 | 9 | 8 |
| | with (1) 0.33 HP Power Exhaust | 19 | 10 | 9 |

ELECTRICAL ACCESSORIES

| | | | | |
|------------|-----------------|--------------|--------------|--------------|
| Disconnect | Standard Access | 20W17 | 20W17 | 20W17 |
| | Hinged Access | 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****DIRECT DRIVE PSC - 4 TON****KGB048S4D - STANDARD EFFICIENCY - DIRECT DRIVE PSC BLOWER**

| | | 208/230V - 3 Ph | 460V - 3 Ph | 575V - 3 Ph |
|---------------------------------------------|--------------------------------|------------------------|--------------------|--------------------|
| Compressor | Rated Load Amps | 11 | 5.5 | 4.7 |
| | Locked Rotor Amps | 86 | 37 | 34 |
| Outdoor Fan Motor | Full Load Amps | 1.7 | 1.1 | 0.7 |
| Power Exhaust (1) 0.33 HP | Full Load Amps | 2.4 | 1.3 | 1 |
| Service Outlet 115V GFI (amps) | | 15 | 1.3 | 1 |
| Indoor Blower Motor | Horsepower | 0.5 | 0.5 | 0.5 |
| | Type | Direct (PSC) | Direct (PSC) | Direct (PSC) |
| | Full Load Amps | 3.9 | 2 | 2 |
| ² Maximum Overcurrent Protection | Unit Only | 30 | 15 | 15 |
| | with (1) 0.33 HP Power Exhaust | 30 | 15 | 15 |
| ³ Minimum Circuit Ampacity | Unit Only | 20 | 10 | 9 |
| | with (1) 0.33 HP Power Exhaust | 22 | 12 | 10 |

ELECTRICAL ACCESSORIES

| | | | | |
|------------|-----------------|--------------|--------------|--------------|
| Disconnect | Standard Access | 20W17 | 20W17 | 20W17 |
| | Hinged Access | 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**DIRECT DRIVE PSC - 5 TON**

| Model No. | | KGB060S4D | | |
|---------------------------------------------|--------------------------------|-----------------|--------------|--------------|
| | | 208/230V - 3 Ph | 460V - 3 Ph | 575V - 3 Ph |
| ¹ Voltage - 60hz | | | | |
| Compressor | Rated Load Amps | 13.5 | 8 | 5 |
| | Locked Rotor Amps | 109 | 59 | 40 |
| Outdoor Fan Motor | Full Load Amps | 1.7 | 0.8 | 1 |
| Power Exhaust (1) 0.33 HP | Full Load Amps | 2.4 | 1.3 | 1 |
| Service Outlet 115V GFI (amps) | | 15 | 15 | 20 |
| Indoor Blower Motor | Horsepower | 0.75 | 0.75 | 0.75 |
| | Type | Direct (PSC) | Direct (PSC) | Direct (PSC) |
| | Full Load Amps | 4.9 | 2.5 | 2.5 |
| ² Maximum Overcurrent Protection | Unit Only | 35 | 20 | 15 |
| | with (1) 0.33 HP Power Exhaust | 35 | 20 | 15 |
| ³ Minimum Circuit Ampacity | Unit Only | 24 | 14 | 10 |
| | with (1) 0.33 HP Power Exhaust | 26 | 15 | 11 |

ELECTRICAL ACCESSORIES

| | | | | |
|------------|-----------------|-------|-------|-------|
| Disconnect | 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**BELT DRIVE (SINGLE SPEED) - 3 TON**

| Model No. | | KGB036S4B | | | | | | | |
|---------------------------------------------|--------------------------------|-----------------|------|-------------|------|-------------|------|--|--|
| ¹ Voltage - 60hz | | 208/230V - 3 Ph | | 460V - 3 Ph | | 575V - 3 Ph | | | |
| Compressor | Rated Load Amps | 8.7 | | | 4 | | | | |
| | Locked Rotor Amps | 70 | | | 31 | | | | |
| Outdoor Fan Motor | Full Load Amps | 1.7 | | | 1.1 | | | | |
| Power Exhaust (1) 0.33 HP | Full Load Amps | 2.4 | | | 1.3 | | | | |
| Service Outlet 115V GFI (amps) | | 15 | | | 15 | | | | |
| Indoor Blower Motor | Horsepower | 1 | 2 | 1 | 2 | 1 | 2 | | |
| | Type | Belt | Belt | Belt | Belt | Belt | Belt | | |
| | Full Load Amps | 4.6 | 7.5 | 2.1 | 3.4 | 1.7 | 2.7 | | |
| ² Maximum Overcurrent Protection | Unit Only | 25 | 25 | 15 | 15 | 15 | 15 | | |
| | with (1) 0.33 HP Power Exhaust | 25 | 30 | 15 | 15 | 15 | 15 | | |
| ³ Minimum Circuit Ampacity | Unit Only | 18 | 21 | 9 | 10 | 7 | 8 | | |
| | with (1) 0.33 HP Power Exhaust | 20 | 23 | 10 | 11 | 8 | 9 | | |

ELECTRICAL ACCESSORIES

| | | | | |
|------------|-----------------|-------|-------|-------|
| Disconnect | Standard Access | 20W17 | 20W17 | 20W17 |
| | Hinged Access | 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****BELT DRIVE (SINGLE SPEED) - 4 TON**

| Model No. | | KGB048S4B | | | | | |
|---------------------------------------------|--------------------------------|-----------------|------|------|-------------|------|-------------|
| ¹ Voltage - 60hz | | 208/230V - 3 Ph | | | 460V - 3 Ph | | 575V - 3 Ph |
| Compressor | Rated Load Amps | 11 | | | 5.5 | | |
| | Locked Rotor Amps | 86 | | | 37 | | |
| Outdoor Fan Motor | Full Load Amps | 1.7 | | | 1.1 | | |
| Power Exhaust (1) 0.33 HP | Full Load Amps | 2.4 | | | 1.3 | | |
| Service Outlet 115V GFI (amps) | | 15 | | | 15 | | |
| Indoor Blower Motor | Horsepower | 1 | 2 | 1 | 2 | 1 | 2 |
| | Type | Belt | Belt | Belt | Belt | Belt | Belt |
| | Full Load Amps | 4.6 | 7.5 | 2.1 | 3.4 | 1.7 | 2.7 |
| ² Maximum Overcurrent Protection | Unit Only | 30 | 30 | 15 | 15 | 15 | 15 |
| | with (1) 0.33 HP Power Exhaust | 30 | 35 | 15 | 15 | 15 | 15 |
| ³ Minimum Circuit Ampacity | Unit Only | 21 | 23 | 11 | 12 | 9 | 10 |
| | with (1) 0.33 HP Power Exhaust | 23 | 26 | 12 | 13 | 10 | 11 |

ELECTRICAL ACCESSORIES

| | | | | |
|------------|-----------------|-------|-------|-------|
| Disconnect | Standard Access | 20W17 | 20W17 | 20W17 |
| | Hinged Access | 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
BELT DRIVE (SINGLE OR TWO-SPEED) - 6 TON

| Model No. | | KGB074S4B / KGB074S4T | | | | |
|---------------------------------------------|--------------------------------|-----------------------|------|-------------|------|-------------|
| ¹ Voltage - 60hz | | 208/230V - 3 Ph | | 460V - 3 Ph | | 575V - 3 Ph |
| Compressor | Rated Load Amps | 17.6 | | 8.5 | | 6.3 |
| | Locked Rotor Amps | 136 | | 66.1 | | 55.3 |
| Outdoor Fan Motor | Full Load Amps | 2.4 | | 1.3 | | 1 |
| Power Exhaust (1) 0.33 HP | Full Load Amps | 2.4 | | 1.3 | | 1 |
| Service Outlet 115V GFI (amps) | | 15 | | 15 | | 20 |
| Indoor Blower Motor | Horsepower | 1 | 2 | 1 | 2 | 1 |
| | Type | Belt | Belt | Belt | Belt | Belt |
| | Full Load Amps | 4.6 | 7.5 | 2.1 | 3.4 | 1.7 |
| ² Maximum Overcurrent Protection | Unit Only | 45 | 45 | 20 | 20 | 15 |
| | with (1) 0.33 HP Power Exhaust | 45 | 50 | 20 | 25 | 15 |
| ³ Minimum Circuit Ampacity | Unit Only | 29 | 32 | 15 | 16 | 11 |
| | with (1) 0.33 HP Power Exhaust | 32 | 35 | 16 | 17 | 12 |
| ELECTRICAL ACCESSORIES | | | | | | |
| Disconnect | 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
BELT DRIVE (TWO-SPEED) - 6 TON

| Model No. | | KGB074H4T | | | | |
|---------------------------------------------|--------------------------------|-----------------|------|-------------|------|-------------|
| ¹ Voltage - 60hz | | 208/230V - 3 Ph | | 460V - 3 Ph | | 575V - 3 Ph |
| Compressor | Rated Load Amps | 17.6 | | 8.5 | | 6.3 |
| | Locked Rotor Amps | 136 | | 66.1 | | 55.3 |
| Outdoor Fan Motor | Full Load Amps | 2.4 | | 1.3 | | 1 |
| Power Exhaust (1) 0.33 HP | Full Load Amps | 2.4 | | 1.3 | | 1 |
| Service Outlet 115V GFI (amps) | | 15 | | 15 | | 20 |
| Indoor Blower Motor | Horsepower | 1 | 2 | 1 | 2 | 1 |
| | Type | Belt | Belt | Belt | Belt | Belt |
| | Full Load Amps | 4.6 | 7.5 | 2.1 | 3.4 | 1.7 |
| ² Maximum Overcurrent Protection | Unit Only | 45 | 45 | 20 | 20 | 15 |
| | with (1) 0.33 HP Power Exhaust | 45 | 50 | 20 | 25 | 15 |
| ³ Minimum Circuit Ampacity | Unit Only | 29 | 32 | 15 | 16 | 11 |
| | with (1) 0.33 HP Power Exhaust | 32 | 35 | 16 | 17 | 12 |
| ELECTRICAL ACCESSORIES | | | | | | |
| Disconnect | 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

BELT DRIVE (SINGLE SPEED) - 7.5 TON

| Model No. | | KGB090S4B | | | | | | |
|--------------------------------|--------------------------------|-----------------|------|------|-------------|------|-------------|------|
| | | 208/230V - 3 Ph | | | 460V - 3 Ph | | 575V - 3 Ph | |
| Compressor | Rated Load Amps | 26.9 | | | 12 | | 9 | |
| | Locked Rotor Amps | 164 | | | 94 | | 65 | |
| Outdoor Fan Motor | Full Load Amps | 3 | | | 1.5 | | 1.2 | |
| Power Exhaust (1) 0.33 HP | Full Load Amps | 2.4 | | | 1.3 | | 1 | |
| Service Outlet 115V GFI (amps) | | 15 | | | 15 | | 20 | |
| Indoor Blower Motor | Horsepower | 1 | 2 | 3 | 1 | 2 | 3 | 1 |
| | Type | Belt | Belt | Belt | Belt | Belt | Belt | Belt |
| | Full Load Amps | 4.6 | 7.5 | 10.6 | 2.1 | 3.4 | 4.8 | 1.7 |
| Overcurrent Protection | Unit Only | 60 | 70 | 70 | 30 | 30 | 30 | 20 |
| | with (1) 0.33 HP Power Exhaust | 70 | 70 | 70 | 30 | 30 | 30 | 20 |
| Circuit Ampacity | Unit Only | 42 | 45 | 48 | 19 | 20 | 22 | 15 |
| | with (1) 0.33 HP Power Exhaust | 44 | 47 | 50 | 20 | 22 | 23 | 16 |

ELECTRICAL ACCESSORIES

| | | | | | | |
|------------|-----------------------------|-------|-------|-------|-------|-------|
| Disconnect | Standard Access - 0-22.5 kW | 20W18 | 20W18 | 20W18 | 20W18 | 20W18 |
| | 30 kW | 20W19 | 20W19 | 20W19 | 20W18 | 20W18 |
| | Hinged Access - 0-22.5 kW | 20W24 | 20W24 | 20W24 | 20W24 | 20W24 |
| | 30 kW | 20W25 | 20W25 | 20W25 | 20W24 | 20W24 |

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.

⁴ Factory installed circuit breaker not available.

ELECTRICAL DATA

BELT DRIVE (TWO-SPEED) - 7.5 TON

| Model No. | | KGB090S4T | | |
|--------------------------------|--------------------------------|-----------------|-------------|-------------|
| | | 208/230V - 3 Ph | 460V - 3 Ph | 575V - 3 Ph |
| Compressor | Rated Load Amps | 26.9 | 12 | 9 |
| | Locked Rotor Amps | 164 | 94 | 65 |
| Outdoor Fan Motor | Full Load Amps | 3 | 1.5 | 1.2 |
| Power Exhaust (1) 0.33 HP | Full Load Amps | 2.4 | 1.3 | 1 |
| Service Outlet 115V GFI (amps) | | 15 | 15 | 20 |
| Indoor Blower Motor | Horsepower | 2 | 2 | 2 |
| | Type | Belt | Belt | Belt |
| | Full Load Amps | 7.5 | 3.4 | 2.7 |
| Overcurrent Protection | Unit Only | 70 | 30 | 20 |
| | with (1) 0.33 HP Power Exhaust | 70 | 30 | 25 |
| Circuit Ampacity | Unit Only | 45 | 20 | 16 |
| | with (1) 0.33 HP Power Exhaust | 47 | 22 | 17 |

ELECTRICAL ACCESSORIES

| | | | | |
|------------|-----------------|-------|-------|-------|
| Disconnect | Standard Access | 20W20 | 20W20 | 20W20 |
| | Hinged Access | 20W26 | 20W26 | 20W26 |

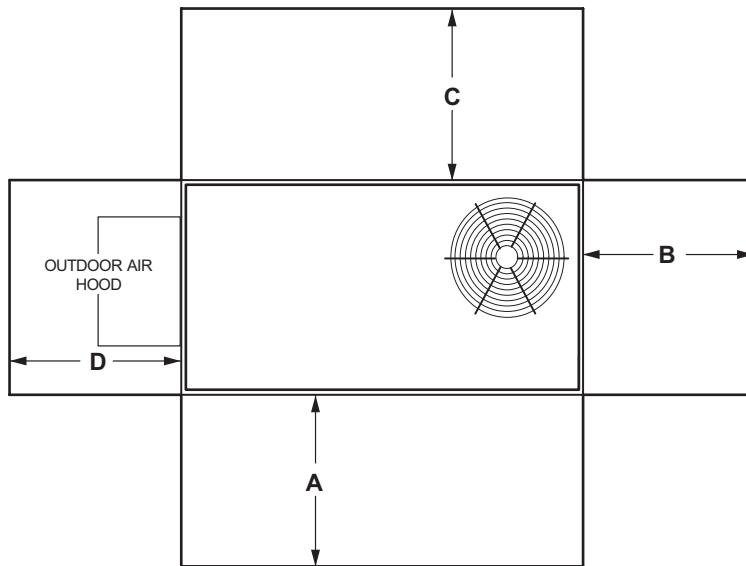
NOTE - All units have a minimum Short Circuit Current Rating (SCCR) of 5000 amps.

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



| ¹ Unit Clearance | A in. mm | B in. mm | C in. mm | D in. mm | Top Clearance |
|-----------------------------|----------------|----------------|----------------|----------------|------------------|
| 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.

WEIGHT DATA

| Model Number | Outdoor Coil | Net | | Shipping | | Outdoor Coil | Net | | Shipping | |
|--------------------|--------------|------|-----|----------|-----|--------------|------------------|------------------|------------------|------------------|
| | | Lbs. | kg | Lbs. | kg | | Lbs. | kg | Lbs. | kg |
| 024S Base Unit | Environ™ | 530 | 240 | 571 | 259 | Fin/Tube | 566 | 257 | 607 | 275 |
| 024S Max. Unit | Environ™ | 640 | 290 | 681 | 309 | Fin/Tube | 700 | 318 | 741 | 336 |
| 030S Base Unit | Environ™ | 533 | 242 | 574 | 260 | Fin/Tube | 569 | 258 | 610 | 277 |
| 030S Max. Unit | Environ™ | 643 | 292 | 684 | 310 | Fin/Tube | 703 | 319 | 744 | 337 |
| 036 Base Unit | Environ™ | 555 | 252 | 596 | 270 | Fin/Tube | 588 | 267 | 629 | 285 |
| 036 Max. Unit | Environ™ | 701 | 318 | 742 | 337 | Fin/Tube | 761 | 345 | 802 | 364 |
| 048 Base Unit | Environ™ | 555 | 252 | 596 | 270 | Fin/Tube | 588 | 267 | 629 | 285 |
| 048 Max. Unit | Environ™ | 716 | 325 | 757 | 343 | Fin/Tube | 776 | 352 | 817 | 371 |
| 060 Base Unit | Environ™ | 649 | 294 | 690 | 313 | Fin/Tube | 682 | 309 | 723 | 328 |
| 060 Max. Unit | Environ™ | 813 | 369 | 854 | 387 | Fin/Tube | 873 | 396 | 914 | 415 |
| 072, 074 Base Unit | Environ™ | 649 | 294 | 690 | 313 | Fin/Tube | ¹ 682 | ¹ 309 | ¹ 723 | ¹ 328 |
| 072, 074 Max. Unit | Environ™ | 813 | 369 | 854 | 387 | Fin/Tube | ¹ 873 | ¹ 396 | ¹ 914 | ¹ 415 |
| 090 Base Unit | Environ™ | 783 | 355 | 843 | 382 | Fin/Tube | 848 | 385 | 908 | 412 |
| 090 Max. Unit | Environ™ | 883 | 401 | 953 | 432 | Fin/Tube | 975 | 442 | 1045 | 474 |

¹ 074S models only.

OPTIONS / ACCESSORIES

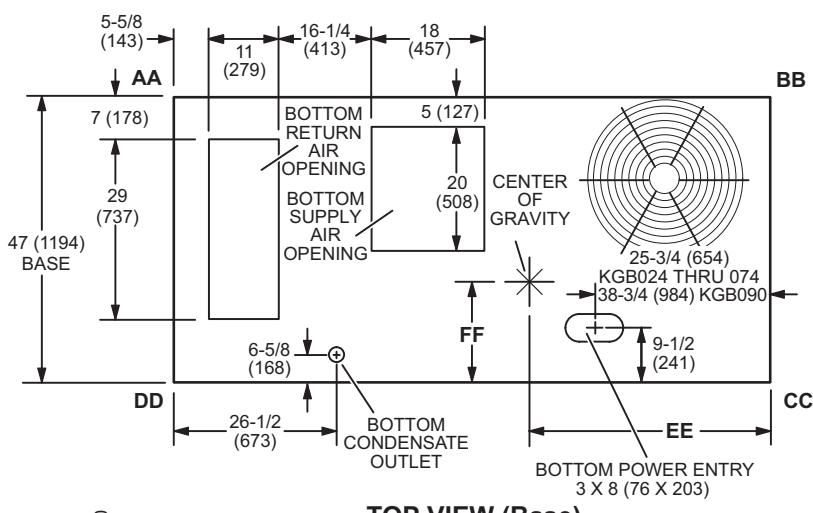
| | Shipping Weights | |
|------------------------------------------------------------------|------------------|-----|
| | Ibs. | kg |
| ECONOMIZER / OUTDOOR AIR / EXHAUST | | |
| Economizer | | |
| Economizer - Includes Barometric Relief Dampers and Exhaust Hood | 131 | 59 |
| Outdoor Air Dampers | | |
| Motorized | 40 | 18 |
| Manual | 30 | 14 |
| Power Exhaust | | |
| Standard Static | 35 | 16 |
| GAS HEAT | | |
| Medium Heat (adder over standard heat) | 8 | 4 |
| High Heat (adder over standard heat) | 19 | 9 |
| HUMIDITROL® DEHUMIDIFICATION SYSTEM | | |
| Humiditrol Dehumidification Option (Net Weight) | 27 | 12 |
| 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 |
| Hybrid Roof Curbs, Full Perimeter, Downflow | | |
| 8 in. height | 57 | 26 |
| 14 in. height | 60 | 27 |
| 18 in. height | 91 | 41 |
| 24 in. height | 114 | 52 |
| Adjustable Pitch Curb, Downflow | | |
| 14 in. height | 113 | 51 |
| CEILING DIFFUSERS | | |
| Step-Down | RTD9-65S | 80 |
| | RTD11-95S | 118 |
| Flush | FD9-65S | 80 |
| | FD11-95S | 118 |
| Transitions (Supply and Return) | T1TRAN10AN1 | 22 |
| | T1TRAN20N-1 | 21 |

DIMENSIONS - UNIT

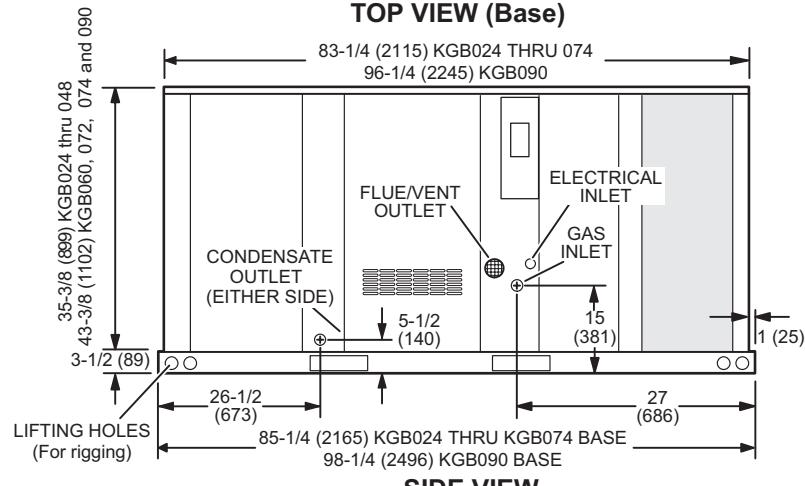
| Model No. | CORNER WEIGHTS | | | | | | | | | | CENTER OF GRAVITY | | | | | | | |
|-----------|----------------|---------|-----------|---------|-----------|---------|-----------|---------|----------|---------|-------------------|---------|----------|---------|----------|---------|----------|---------|
| | AA | | BB | | CC | | DD | | EE | | FF | | | | | | | |
| | Base lbs. | Max. kg | Base lbs. | Max. kg | Base lbs. | Max. kg | Base lbs. | Max. kg | Base in. | Max. mm | Base in. | Max. mm | Base in. | Max. mm | Base in. | Max. mm | Base in. | Max. mm |
| 024 | 107 | 49 | 129 | 59 | 124 | 56 | 132 | 60 | 160 | 73 | 170 | 77 | 138 | 63 | 208 | 95 | 39-1/2 | 1003 |
| 030 | 108 | 49 | 130 | 59 | 125 | 57 | 132 | 60 | 161 | 73 | 171 | 78 | 139 | 63 | 209 | 95 | 39-1/2 | 1003 |
| 036 | 112 | 51 | 142 | 64 | 130 | 59 | 141 | 64 | 168 | 76 | 190 | 86 | 145 | 66 | 228 | 104 | 39-1/2 | 1003 |
| 048 | 112 | 51 | 145 | 66 | 130 | 59 | 144 | 65 | 168 | 76 | 194 | 88 | 145 | 66 | 233 | 106 | 39-1/2 | 1003 |
| 060 | 130 | 59 | 162 | 74 | 147 | 67 | 167 | 76 | 198 | 90 | 226 | 103 | 175 | 79 | 257 | 117 | 40 | 1016 |
| 072 | 130 | 59 | 162 | 74 | 147 | 67 | 167 | 76 | 198 | 90 | 226 | 103 | 175 | 79 | 257 | 117 | 40 | 1016 |
| 074 | 130 | 59 | 162 | 74 | 147 | 67 | 167 | 76 | 198 | 90 | 226 | 103 | 175 | 79 | 257 | 117 | 40 | 1016 |
| 090 | 168 | 76 | 195 | 88 | 183 | 83 | 212 | 96 | 227 | 103 | 263 | 119 | 203 | 95 | 241 | 109 | 47 | 1194 |
| | | | | | | | | | | | | | | | | | | 21 |
| | | | | | | | | | | | | | | | | | | 533 |

Base Unit - The unit with NO INTERNAL OPTIONS.

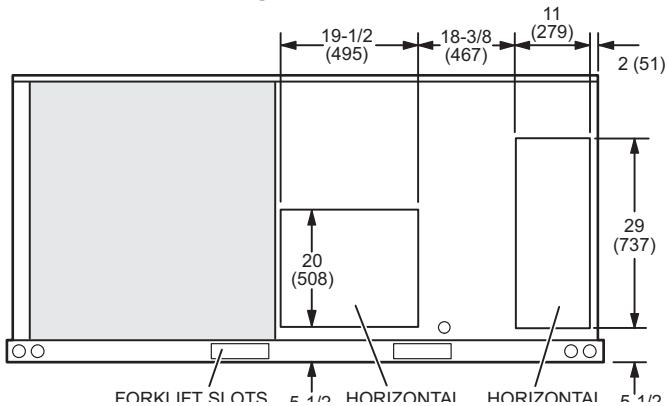
Max. Unit - The unit with ALL INTERNAL OPTIONS Installed. (Economizer, Standard Static Power Exhaust Fans, Controls, etc.). Does not include accessories external to unit or high static power exhaust.



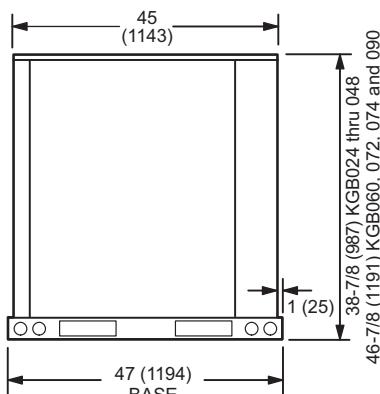
TOP VIEW (Base)



SIDE VIEW

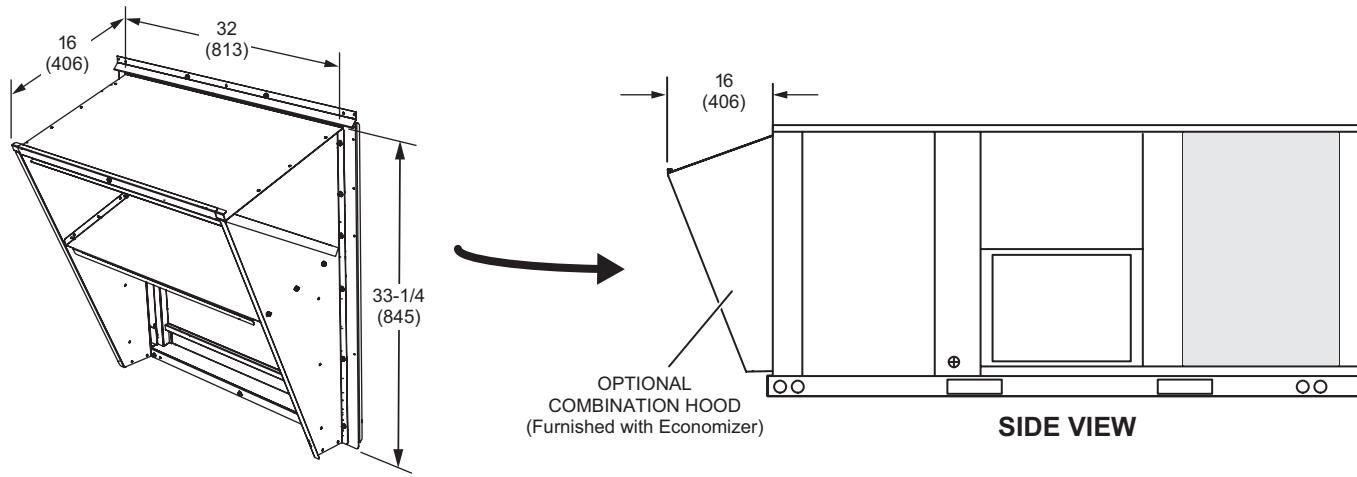


END VIEW



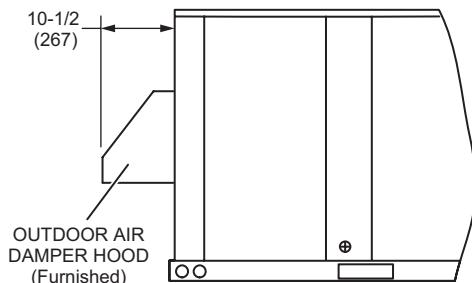
DIMENSIONS - ACCESSORIES

COMBINATION OUTDOOR AIR HOOD DETAIL FOR OPTIONAL ECONOMIZER AND BAROMETRIC RELIEF DAMPERS (Furnished With Economizer for Downflow Applications)

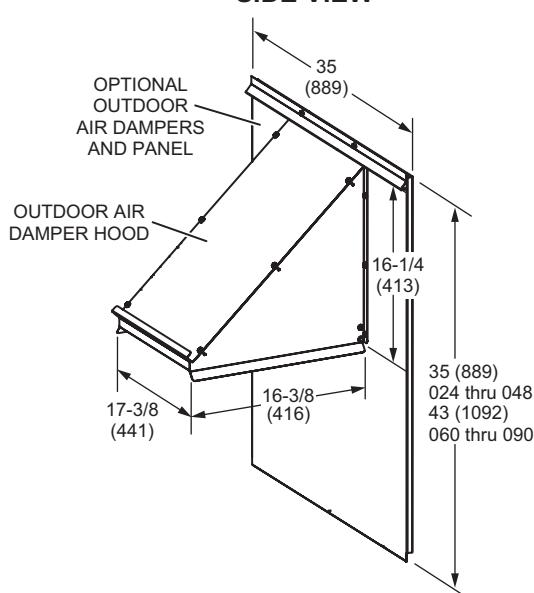
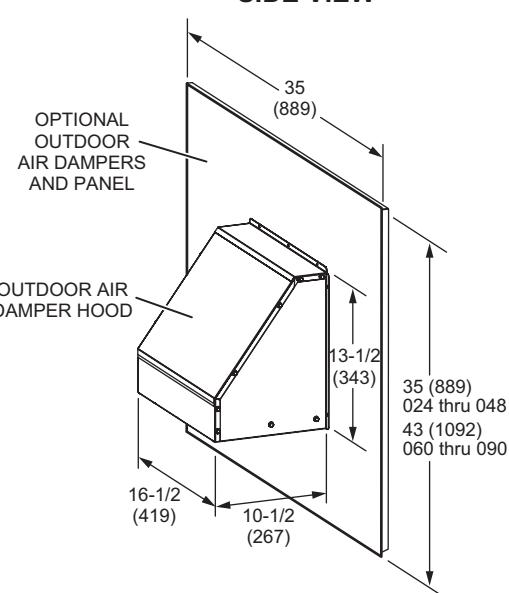
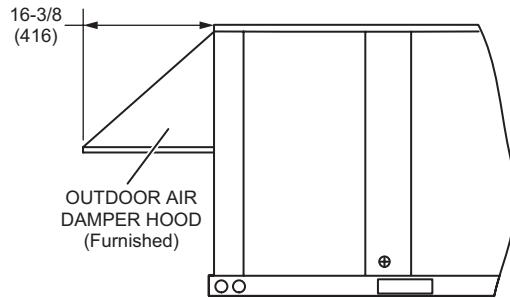


OUTDOOR AIR DAMPER HOOD DETAIL (Downflow or Horizontal Applications)

MANUAL OUTDOOR AIR HOOD

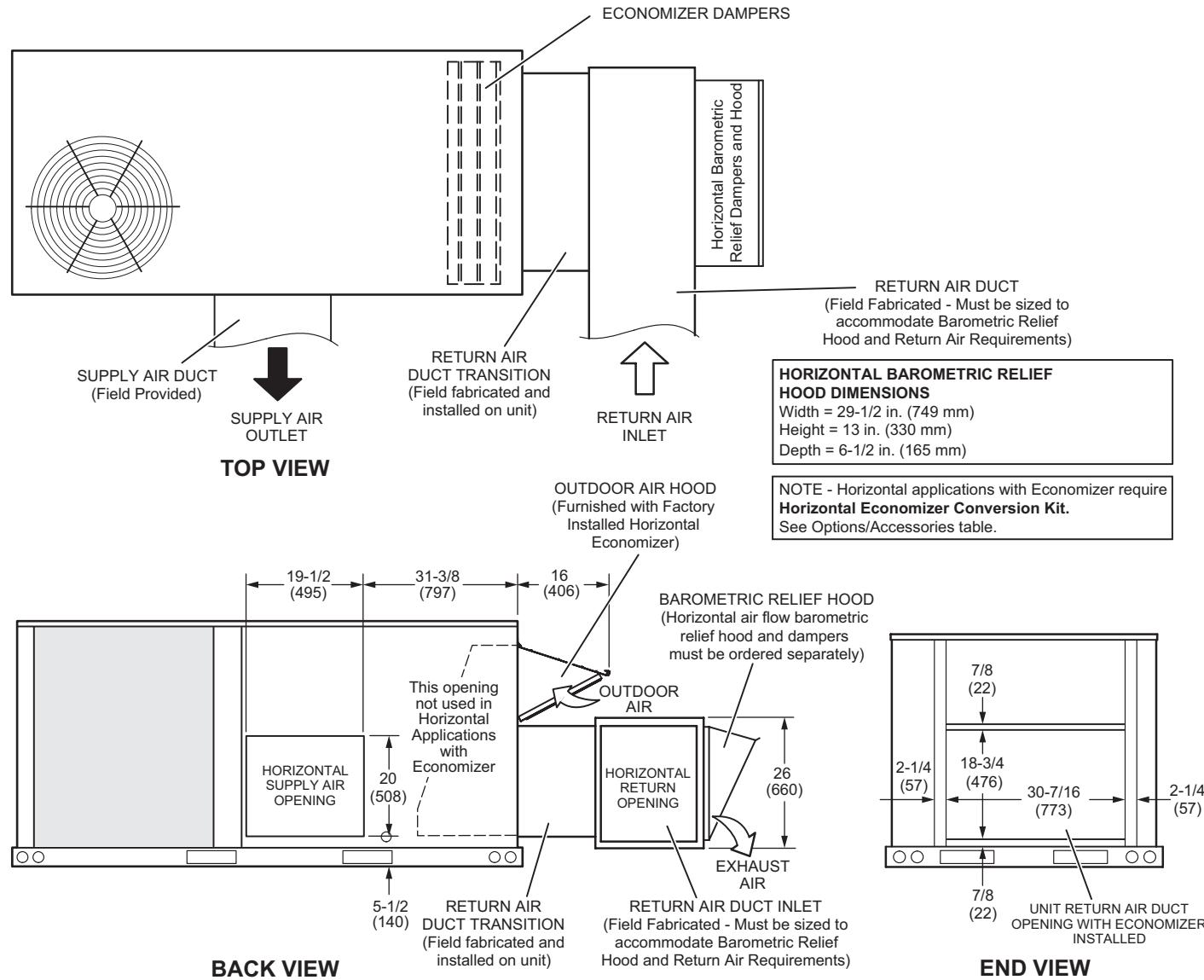


MOTORIZED OUTDOOR AIR HOOD



DIMENSIONS - ACCESSORIES

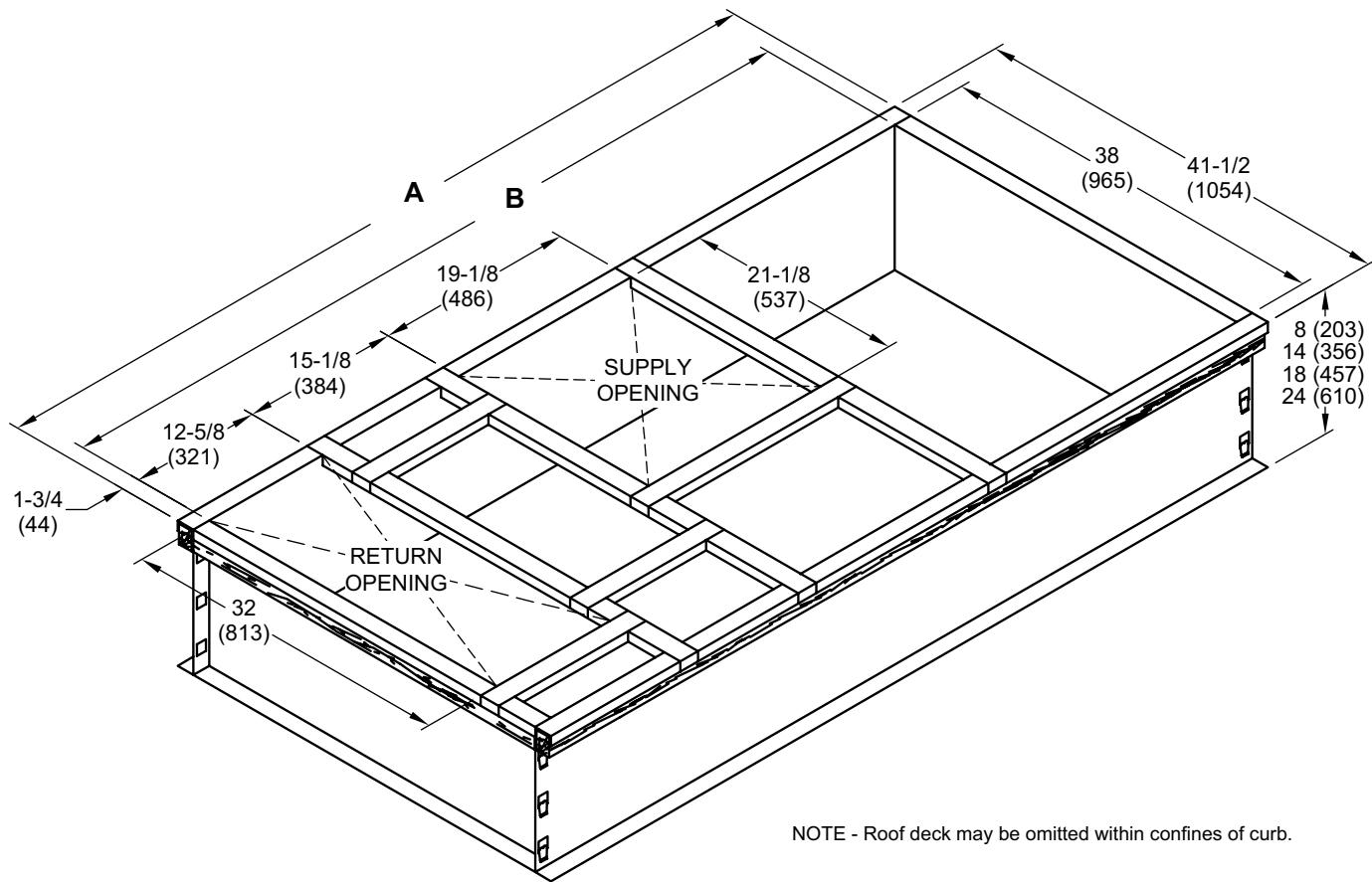
OUTDOOR AIR HOOD DETAIL WITH OPTIONAL ECONOMIZER AND OPTIONAL BAROMETRIC RELIEF DAMPERS WITH HOOD (Horizontal Application)



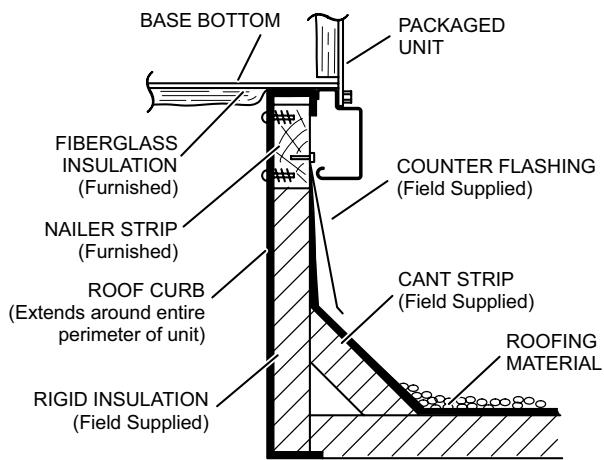
NOTE - Return Air Duct and Transition must be supported

DIMENSIONS - ACCESSORIES

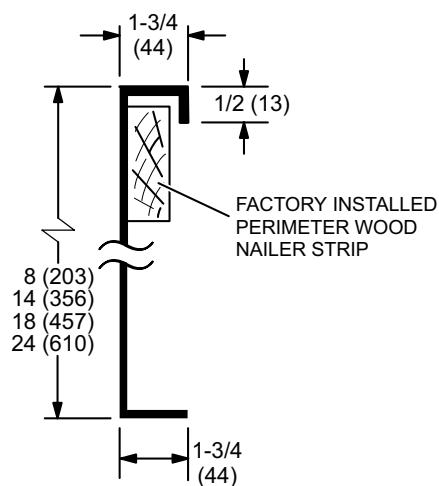
HYBRID ROOF CURBS - DOUBLE DUCT OPENING - STANDARD AND FULL PERIMETER



TYPICAL FLASHING DETAIL FOR ROOF CURB



DETAIL ROOF CURB

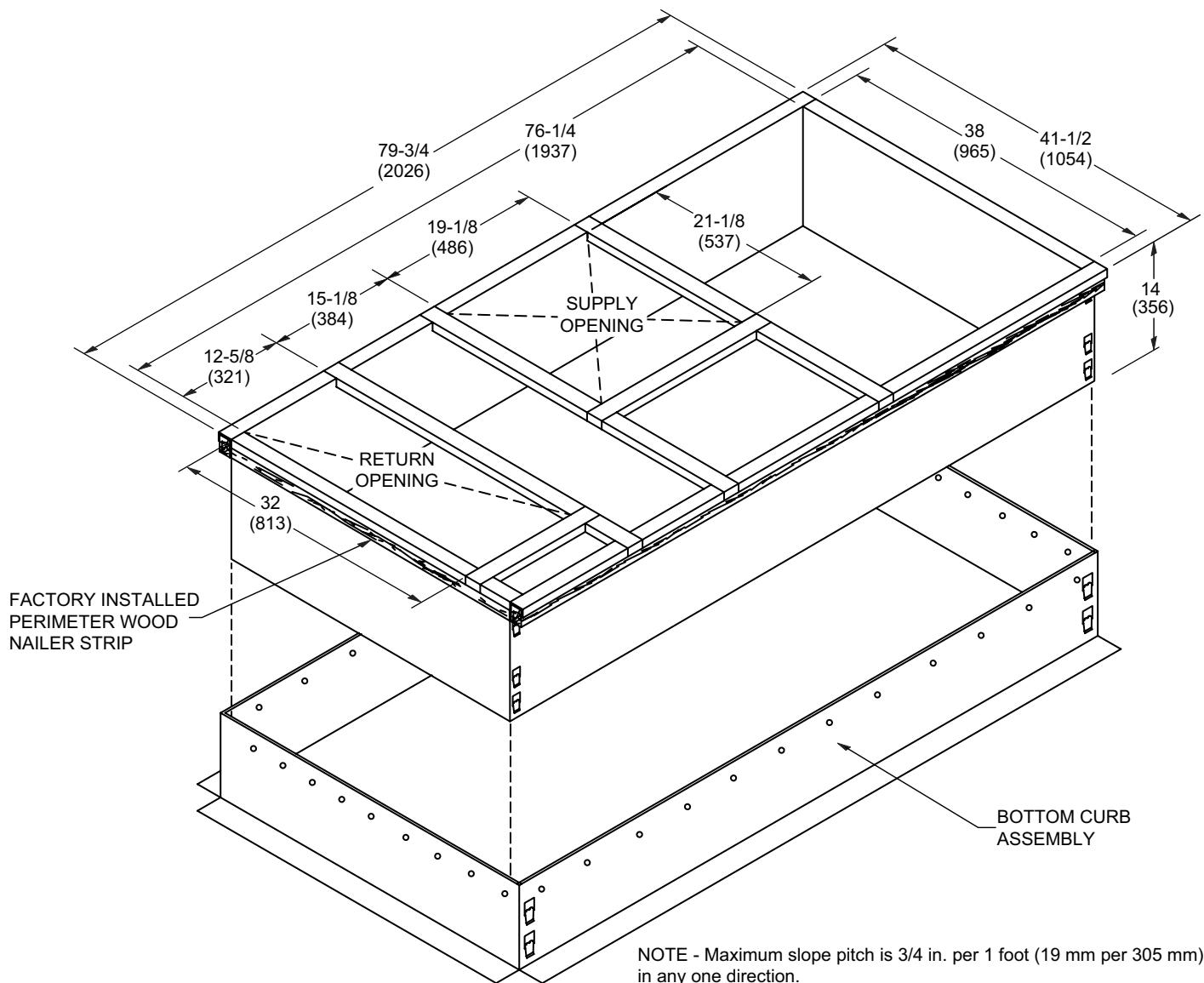


| Model No. | A | | B | |
|---------------------------------------------------------------|--------|------|--------|------|
| | in. | mm | in. | mm |
| Standard - 024, 030, 036, 048, 060, 072, 074 ¹ 090 | 79-3/4 | 2026 | 76-1/4 | 1937 |
| Full Perimeter - 090 | 92-3/4 | 2356 | 89-1/4 | 2267 |

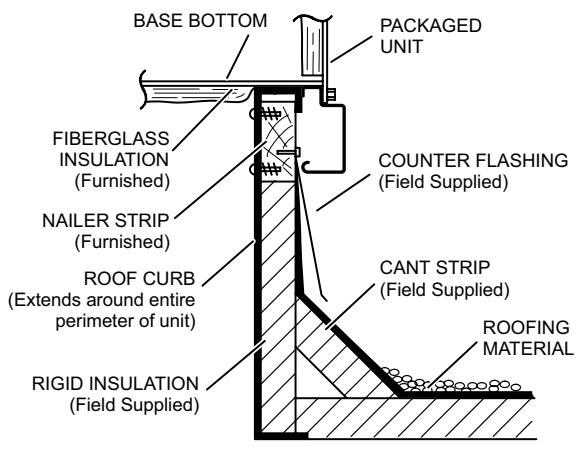
¹ 090 models can be used on smaller 79-3/4 in. (2026 mm) roof curbs (not full perimeter) with 15-3/4 in. (400 mm) overhang at condenser end of unit. See dimension drawing on page 53

DIMENSIONS - ACCESSORIES

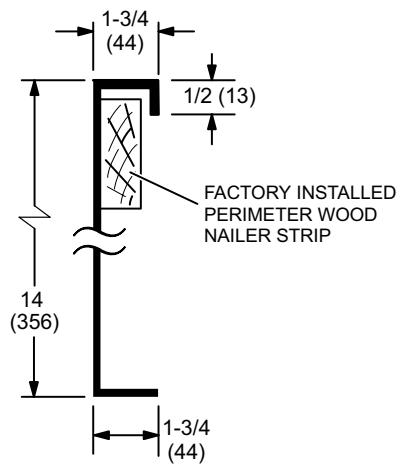
ADJUSTABLE PITCH CURBS - DOUBLE DUCT OPENING



TYPICAL FLASHING DETAIL FOR ROOF CURB

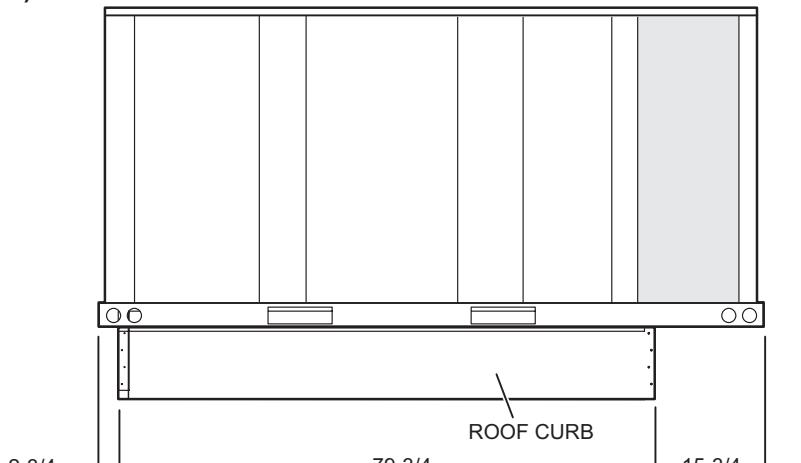


DETAIL ROOF CURB



DIMENSIONS - ACCESSORIES

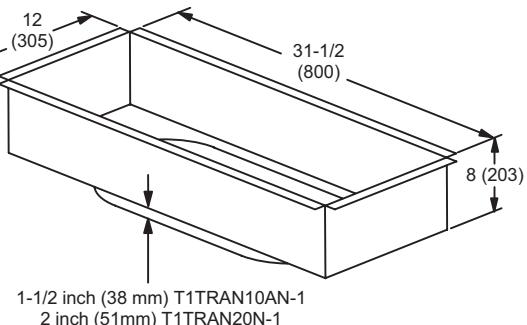
**090 MODELS - SHOWING OVERHANG ON SMALLER 79-3/4 INCH LENGTH ROOF CURBS
(Not Full Perimeter)**



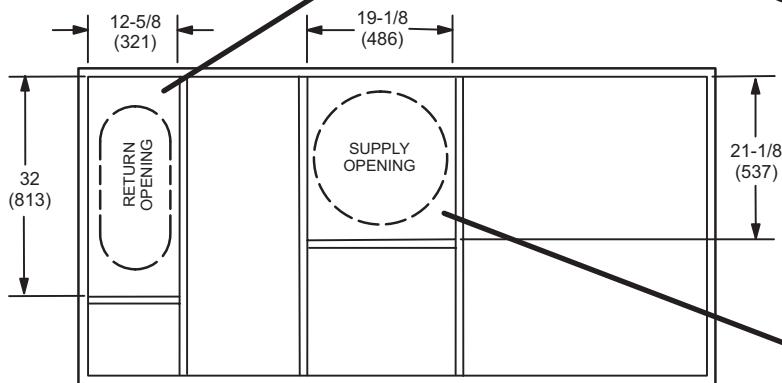
SIDE VIEW

TRANSITIONS

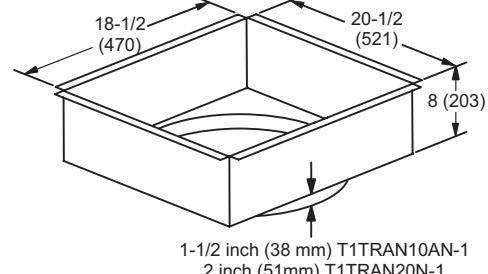
T1TRAN10AN-1 - FOR 18 INCH (457 MM) DUCT
T1TRAN20N-1 - FOR 20 INCH (508 MM) DUCT



RETURN TRANSITION



T1TRAN10AN-1 - FOR 18 INCH (457 MM) DUCT
T1TRAN20N-1 - FOR 20 INCH (508 MM) DUCT

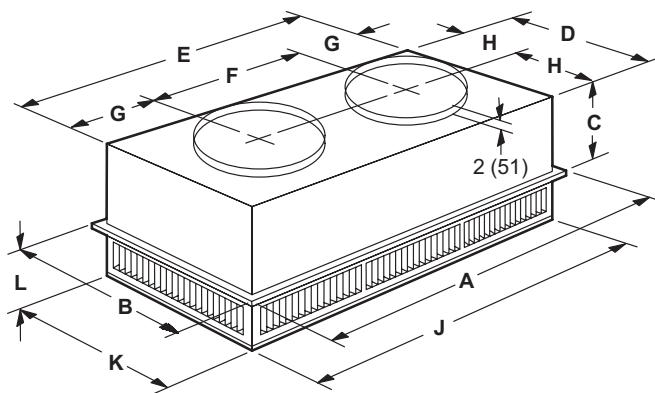


SUPPLY TRANSITION

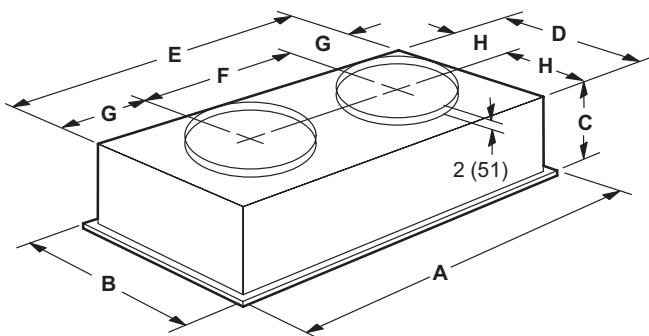
DIMENSIONS - ACCESSORIES

COMBINATION CEILING SUPPLY AND RETURN DIFFUSERS

STEP-DOWN CEILING DIFFUSER



FLUSH CEILING DIFFUSER



| Model Number | | RTD9-65S | RTD11-95S |
|------------------|-----|-----------|-----------|
| 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 | | FD9-65S | FD11-95S |
|------------------|-----|-----------|-----------|
| 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 |
|-------------------|----------------------------------------------------------------------|
| Dimensions - Unit | Added unit lengths for 024-030 models (same as 036-048-060-072-074). |



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Improper installation, adjustment, alteration, service or maintenance can cause property damage or personal injury.
Installation and service must be performed by a qualified installer and servicing agency.

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