



**Base Efficiency Heat Pump
Belt-Drive Packaged Rooftop Unit
DBH Commercial
3-5 Nominal Tons
14 SEER / 11.5 EER**



* Complete warranty details available from your local distributor or manufacturer's representative or at www.daikincomfort.com or www.daikinac.com



Our Perfect Package:

Harnessing energy-efficient performance, proven technology, and enhanced comfort for life.

Since becoming the first company in Japan to manufacture packaged air conditioning systems, in 1951, Daikin has supported comfortable indoor living based on the strengths and technologies that have led to the growth of the company becoming one of the world's largest manufacturers of HVAC products, systems and refrigerants.

Today, as a comprehensive global manufacturer of HVAC products and systems, the Daikin brand is committed to being recognized as a truly global and excellent company capable of continually creating new value for its customers. The company plans to pursue sustainable growth and foster business operations that consistently harmonize with the goals of improving indoor comfort.

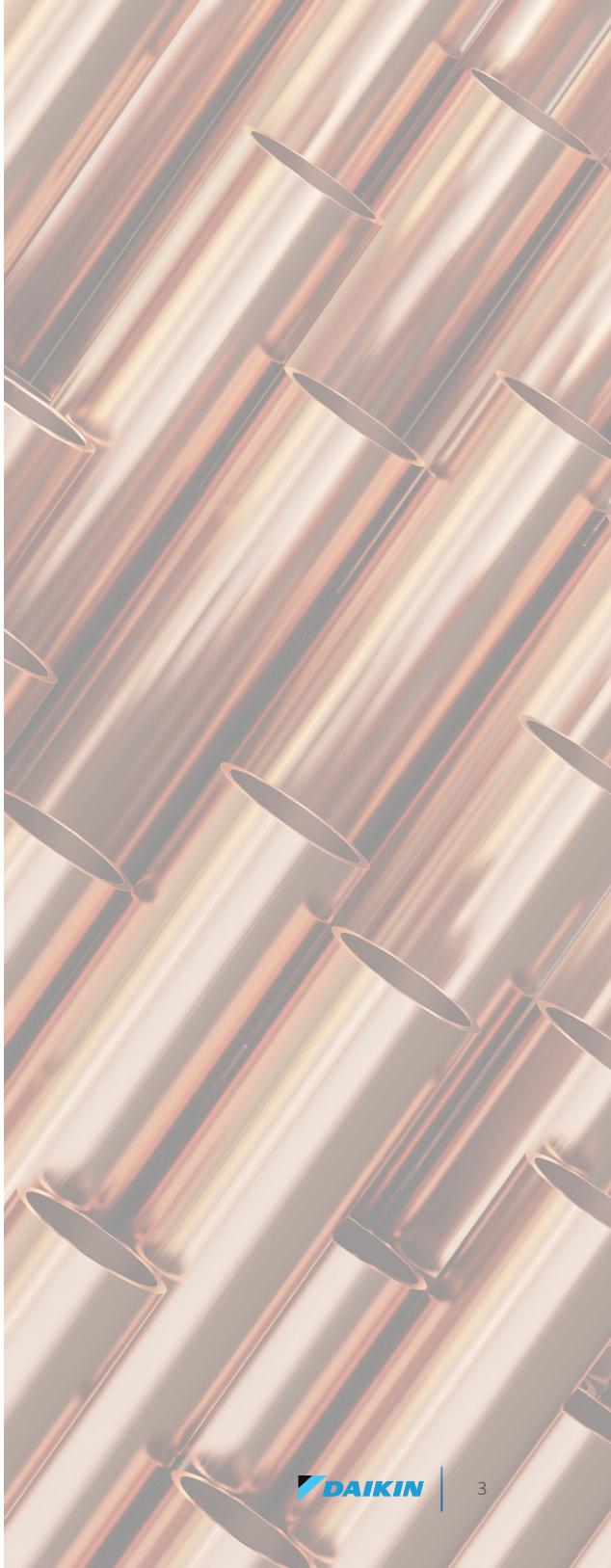
The group philosophy of the company includes:

- » Creating new value continuously for customers
- » Developing world leading energy-saving technology
- » Being a flexible and dynamic organization
- » Allowing employees to be the driving force for the success of the company
- » Fostering an atmosphere of best practices, boldness, and innovation
- » Thinking and acting globally

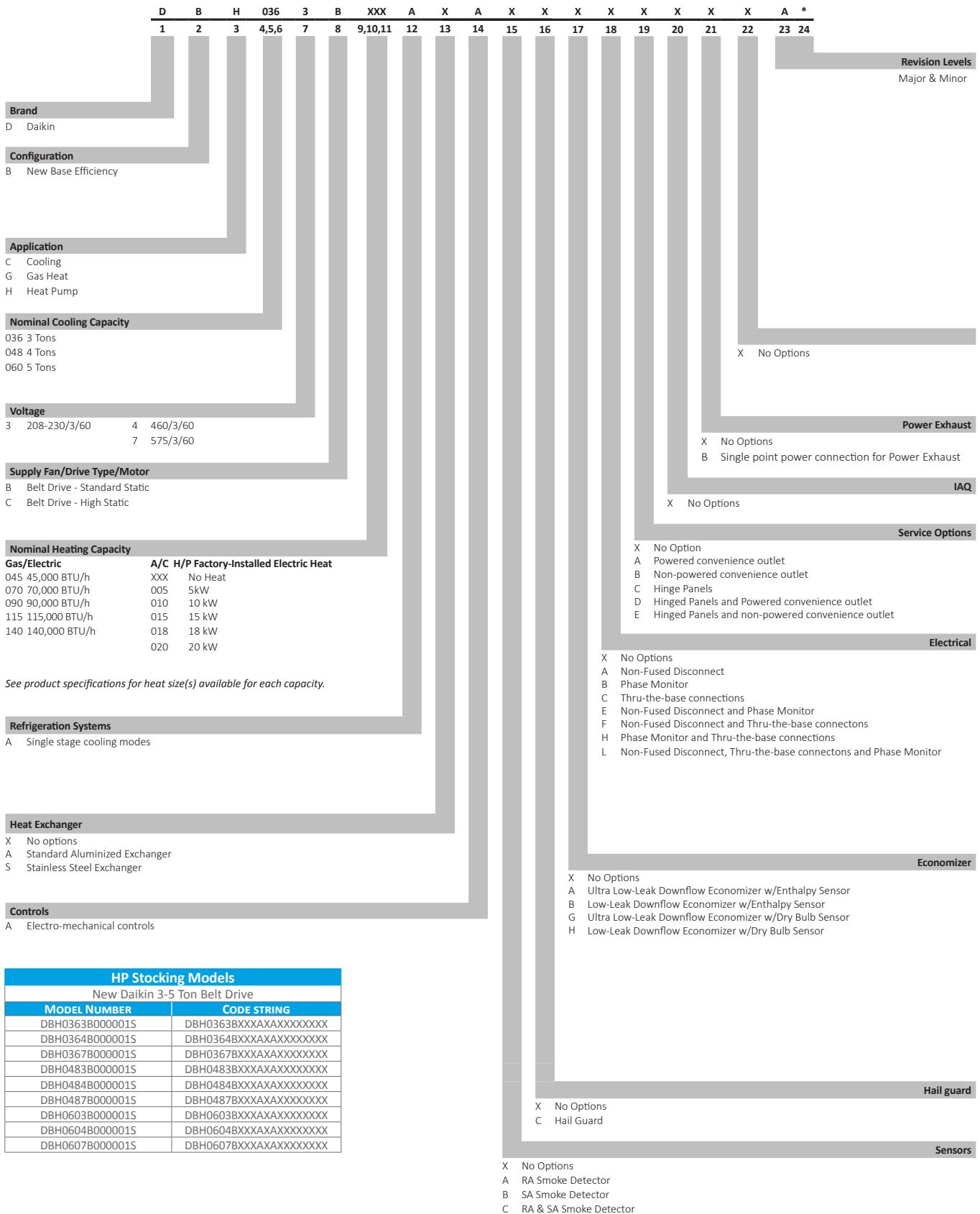


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Nomenclature



Features and Benefits

Daikin packaged rooftop units are built to perform, with features and options that provide lower installation and operating costs, superior indoor air quality, quiet operation and longevity.

Installation

Daikin Packaged units are designed with an easier and faster installation in mind for both new construction and retrofit. Our packaged rooftop units are built to be a direct replacement for most rooftop units on the field without the need of a curb adapter, to be able to replace the unit in a shorter time and at a lower cost.

Cabinet Construction

Daikin packaged rooftop units are made with high quality galvanized steel with a powder-paint finish to provide higher corrosion resistance.

- » Easy accessibility using our tool-less filter access.
- » The interior surface in the indoor air section is fully insulated to prevent sweating and thermal losses, using our foil face fiberglass insulation which also omits exposed filter fibers into the airstream.
- » 1" Raised flanged edges around the supply and return offer easier installation for the duct connections.



- » The full perimeter base rail is built using heavy gauge galvanized steel for a stronger structural installation, the base rails are a minimum of 3 ½" tall and include holes to allow for overhead rigging and lifting with forklifts.
- » Electrical lines and can be brought through the base of the unit or through the horizontal knockout for easier installation and accessibility on the field.

Compressor

High performance, low noise scroll compressors, adjust the speed to match the required total cooling and heating load for efficient part load control.

- » Resiliently factory-mounted on rubber grommets for vibration isolation
- » Refrigeration circuit includes both a low and high pressure transducer, high pressure safety switch and temperature sensors for the suction and discharge.
- » Unit is factory charged with environmental friendly and sustainable R-410A refrigerant.
- » Single stage scroll compressors.
- » Compressor location outside the condenser section to avoid air bypass.
- » Internal overload protection included with compressor.

Supply Fan

Indoor forward curb fans paired with belt drive motors provide an easy in the field belt and pulley adjustment for airflow control.

- » Slide out forward curb fan for easier maintenance and replacement.
- » High static drive options for application with high airflow/static requirements.
- » Each fan assembly is dynamically trim balanced at the factory before shipment for quick start up and efficient operation.
- » Motor with thermal overload and phase failure protection is provided for motor long lasting operation.

Features and Benefits

Coils

All units use large face area outdoor coils. These coils are constructed with seamless copper tubes, mechanically bonded into aluminum plate-type fins with full drawn collars to completely cover the tubes for high operating efficiencies.

The indoor coil section is installed in a draw through configuration to provide better dehumidification.

- » Coils are factory pressure tested to ensure pressure and leak integrity.
- » High and low pressure switches to be factory installed as fittings instead of brazed for easy removal and replacement.
- » Copper tube / aluminum fin coils on condenser and evaporator
- » 5mm Smart Coil Technology on all condenser coils for improved performance and reduced refrigerant load.

Heat Pump Heating

Evaporator coil, condenser coil, compressors and refrigerant circuit are designed for heat pump operation.

- » The refrigerant circuit contains a 4-way reversing valve to provide heat.
- » The outdoor coil includes a thermal expansion valve to control the refrigerant flow during heat pump operation.
- » Hybrid heating option is provided for auxiliary heating.
- » The refrigerant system includes a pump-down cycle for durable operation.

Controls and Wiring

Packaged rooftop units come equipped with a well-organized, large, easy to use weather proof internal control box with easy access, for a better user experience.

- » Units are factory-wired with labeled color-coded wires and complete 24-volt electro-mechanical controls package.
- » Units include single-point power entry as standard and also available with electric heat kits if selected.
- » Terminal blocks are provided as standard for easier installation and field power wiring.

Filtration

Unit provides a draw-through filter section as standard for better air quality and longer lasting component maintenance.

- » Filters installed on the units are standard off the shelf sizes for easy replacement.
- » One or two size filter per unit for lower maintenance cost and easy replacement.
- » Easy and fast filter service access.

Heating Section

Wide ranging of electric heat selections effectively handle most comfort heating demand from morning warm-up control to full heat.

Electric Heat

ETL approved electric heat is factory assembled, installed and tested.

- » Heating control is fully integrated into the unit's control system for quick startup and reliable control.
- » Durable low watt density, nickel chromium elements provide longer life.
- » Fuses are provided in each branch circuit to a maximum of 48 Amps per NEC requirements.
- » Single point power connection reduces installation cost.
- » For operational safeties electric heat includes automatic reset, and high temperature limit safety protection and an airflow safety switch to prevent electric heat operation in the event of no airflow.

Electrical

Units are completely wired and tested at the factory to provide faster commissioning and start-up.

- » Wiring complies with NEC requirements and all applicable UL standards.
- » For ease of use, wiring and electrical components are number coded and labeled according to the electrical diagram.
- » A 120 V GFI convenience receptacle requiring independent power supply for the receptacle is optional.
- » An optional unit powered 20 amp 115 V convenience receptacle, complete with factory mounted transformer, disconnect switch, and primary and secondary overload protection, eliminates the need to pull a separate 115 V power source.
- » Supply air fan, compressor, and condenser fan motor branch circuits have individual short circuit protection. Unit includes knockouts in the bottom of the main control panels for field wiring entrance.
- » A single point power connection with power block is standard and a terminal board is provided for connecting low voltage control wiring.
- » For better serviceability an optional non-fused disconnect switch can be installed inside the control panel and operated by an externally mounted handle to disconnect the electrical power at the unit



Applications

Daikin Rooftop units are intended for comfort cooling applications in normal heating, ventilating, and air conditioning. Consult your local Daikin sales representative for applications involving operations at high ambient temperatures, high altitudes, non-cataloged voltages, or for job specific unit selections that fall outside of the range of the catalog tables.

For proper operation, units should be rigged in accordance with instructions stated on the installation manual. Fire dampers, if required, must be installed in the ductwork according to local and/or state codes. No space is allowed for these dampers in the unit.

Follow factory check, test and start procedures explicitly to achieve satisfactory start-up and operation.

Most rooftop applications take advantage of the significant energy savings provided with economizer operation. When an economizer system is used, mechanical refrigeration is typically not required below an ambient temperature of 50°F.

Serviceability

Daikin packaged rooftop units are built with serviceability in mind, designed to make future maintenance and service on the unit easier and more accessible.

- » Our packaged rooftop units offer a slide out blower to facilitate the access and removal of the fan.
- » Filter panels on the small chassis line offer tool less access for easy maintenance.
- » Independent compressor outside of the air bypass to eliminate component blockage and provide easy access.
- » Labeled field connections, color coded and continuously marked wire to identify point-to-point component connections.
- » All 3 - 5 ton units are designed for convertible airflow orientation to serve downflow or horizontal applications. Every unit ships prepared to convert to horizontal orientation in the field if required.
- » Condenser clean out from inside-out.
- » Easy access to gas valves and control panel.



| Model | DBH0363B000001S | DBH0364B000001S | DBH0367B000001S |
|----------------------------------------------|-----------------|-----------------|-----------------|
| COOLING CAPACITY | | | |
| Total BTU/H | 35,000 | 35,000 | 35,000 |
| SEER / EER | 14.0/11.5 | 14.0/11.5 | 14.0/11.5 |
| HEATING CAPACITY | | | |
| BTU/h (47°F) | 34,200 | 34,200 | 34,200 |
| HSPF | 8 | 8 | 8 |
| COP | 2.34 | 2.34 | 2.34 |
| EVAPORATOR MOTOR / COIL | | | |
| Motor Type | Belt Drive | Belt Drive | Belt Drive |
| External Static Pressure (ESP) | Standard | Standard | Standard |
| Wheel Dia. X Width | 12x11 | 12x11 | 12x11 |
| Indoor Nominal CFM | 1170 | 1170 | 1170 |
| RPM | 1725 | 1725 | 1725 |
| Indoor Horsepower | 1.00 | 1.00 | 1.00 |
| Filter Size (in) | 14 X 20 X 2 (4) | 14 X 20 X 2 (4) | 14 X 20 X 2 (4) |
| Drain Size (NPT) | ¾ | ¾ | ¾ |
| R-410A Refrigerant Charge (oz.) | 175 | 175 | 175 |
| Evaporator Coil Face Area (ft ²) | 7.3 | 7.3 | 7.3 |
| Rows Deep/ Fins per Inch | ⁴/₁₆ | ⁴/₁₆ | ⁴/₁₆ |
| BELT DRIVE EVAP FAN DATA | | | |
| Motor Sheave | 1VL34 X 5/8 | 1VL34 X 5/8 | 1VL34 X 5/8 |
| Blower Sheave | AK61H | AK61H | AK61H |
| Belt | AX51 | AX51 | AX51 |
| CONDENSER FAN/COIL | | | |
| Quantity of Condenser Fan Motors | 1 | 1 | 1 |
| RPM (High/Low stage) | 810 | 810 | 810 |
| Outdoor Horsepower | 0.17 | 0.17 | 0.17 |
| Fan Diameter/ # Fan Blades | 22 / 3 | 22 / 3 | 22 / 3 |
| Face Area (ft ²) | 12.7 | 12.7 | 12.7 |
| Rows Deep / Fins per Inch | ²/₁₆ | ²/₁₆ | ²/₁₆ |
| COMPRESSOR (ALL SINGLE-STAGE) | | | |
| Quantity / Type / Stages | 1 / Scroll / 1 | 1 / Scroll / 1 | 1 / Scroll / 1 |
| Compressor RLA / LRA | 10.45 / 73 | 5.8 / 38 | 3.78 / 36.5 |
| ELECTRICAL DATA | | | |
| Voltage-Phase-Frequency | 208/230-3-60 | 460-3-60 | 575-3-60 |
| Indoor Blower FLA | 3.4 | 1.7 | 2.3 |
| Max External Static (In. W.C.) | 0.7 | 0.7 | 0.7 |
| Outdoor Fan FLA | 0.95 | 0.48 | 0.39 |
| Min. Circuit Ampacity ¹ | 17.4/17.4 | 9.39 | 7.42 |
| Max. Overcurrent Protection (A) ² | 25/25 | 15 | 15 |
| Power Supply Conduit Hole Dia. (in) | 1.125 | 1.125 | 1.125 |
| Low-Voltage Conduit Hole Dia. (in) | 0.5 | 0.5 | 0.5 |
| OPERATING WEIGHT (LBS.) | | | |
| Operating Weight (lbs) | 605 | 610 | 610 |
| SHIPPING WEIGHT (LBS.) | | | |
| Ship Weight (lbs) | 651 | 656 | 656 |

¹ Wire size should be determined in accordance with National Electrical Codes. Extensive wire runs will require larger wire sizes.

² May use fuses or HACR-type circuit breakers of the same size as noted.

Note: Always check the S&R plate for electrical data on the unit being installed.

| Model | DBH0483B000001S | DBH0484B000001S | DBH0487B000001S |
|----------------------------------------------|-----------------|-----------------|-----------------|
| COOLING CAPACITY | | | |
| Total BTU/H | 46,000 | 46,000 | 46,000 |
| SEER / EER | 14.0/11.5 | 14.0/11.5 | 14.0/11.5 |
| HEATING CAPACITY | | | |
| BTU/h (47°F) | 45,500 | 45,500 | 45,500 |
| HSPF | 8 | 8 | 8 |
| COP | 2.34 | 2.34 | 2.34 |
| EVAPORATOR MOTOR / COIL | | | |
| Motor Type | Belt Drive | Belt Drive | Belt Drive |
| External Static Pressure (ESP) | Standard | Standard | Standard |
| Wheel Dia. X Width | 12x11 | 12x11 | 12x11 |
| Indoor Nominal CFM | 1460 | 1460 | 1460 |
| RPM | 1725 | 1725 | 1725 |
| Indoor Horsepower | 1.00 | 1.00 | 1.00 |
| Filter Size (in) | 14 X 20 X 2 (4) | 14 X 20 X 2 (4) | 14 X 20 X 2 (4) |
| Drain Size (NPT) | ¾ | ¾ | ¾ |
| R-410A Refrigerant Charge (oz.) | 195 | 195 | 195 |
| Evaporator Coil Face Area (ft ²) | 7.3 | 7.3 | 7.3 |
| Rows Deep/ Fins per Inch | 4/16 | 4/16 | 4/16 |
| BELT DRIVE EVAP FAN DATA | | | |
| Motor Sheave | 1VL40 X 5/8 | 1VL40 X 5/8 | 1VL40 X 5/8 |
| Blower Sheave | AK66H | AK66H | AK66H |
| Belt | AX52 | AX52 | AX52 |
| CONDENSER FAN/COIL | | | |
| Quantity of Condenser Fan Motors | 1 | 1 | 1 |
| RPM (High/Low stage) | 1075 | 1075 | 1075 |
| Outdoor Horsepower | 0.25 | 0.25 | 0.25 |
| Fan Diameter/ # Fan Blades | 22 / 4 | 22 / 4 | 22 / 4 |
| Face Area (ft ²) | 17.3 | 17.3 | 17.3 |
| Rows Deep / Fins per Inch | 2/16 | 2/16 | 2/16 |
| COMPRESSOR (ALL SINGLE-STAGE) | | | |
| Quantity / Type / Stages | 1 / Scroll / 1 | 1 / Scroll / 1 | 1 / Scroll / 1 |
| Compressor RLA / LRA | 13.14 / 83.1 | 6.1 / 41 | 4.36 / 33 |
| ELECTRICAL DATA | | | |
| Voltage-Phase-Frequency | 208/230-3-60 | 460-3-60 | 575-3-60 |
| Indoor Blower FLA | 3.4 | 1.7 | 2.3 |
| Max External Static (In. W.C.) | 0.7 | 0.7 | 0.7 |
| Outdoor Fan FLA | 1.4 | 0.7 | 0.55 |
| Min. Circuit Ampacity ¹ | 21.2/21.2 | 10 | 8.3 |
| Max. Overcurrent Protection (A) ² | 30/30 | 15 | 15 |
| Power Supply Conduit Hole Dia. (in) | 1.125 | 1.125 | 1.125 |
| Low-Voltage Conduit Hole Dia. (in) | 0.5 | 0.5 | 0.5 |
| OPERATING WEIGHT (LBS.) | | | |
| Operating Weight (lbs) | 640 | 642 | 642 |
| SHIPPING WEIGHT (LBS.) | | | |
| Ship Weight (lbs) | 686 | 688 | 688 |

¹ Wire size should be determined in accordance with National Electrical Codes. Extensive wire runs will require larger wire sizes.

² May use fuses or HACR-type circuit breakers of the same size as noted.

Note: Always check the S&R plate for electrical data on the unit being installed.

| Model | DBH0603B000001S | DBH0604B000001S | DBH0607B000001S |
|----------------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| COOLING CAPACITY | | | |
| Total BTU/H | 56,500 | 56,500 | 56,500 |
| SEER / EER | 14.0/11.5 | 14.0/11.5 | 14.0/11.5 |
| HEATING CAPACITY | | | |
| BTU/h (47°F) | 56,500 | 56,500 | 56,500 |
| HSPF | 8 | 8 | 8 |
| COP | 2.34 | 2.34 | 2.34 |
| EVAPORATOR MOTOR / COIL | | | |
| Motor Type | Belt Drive | Belt Drive | Belt Drive |
| External Static Pressure (ESP) | Standard | Standard | Standard |
| Wheel Dia. X Width | 12x11 | 12x11 | 12x11 |
| Indoor Nominal CFM | 1460 | 1790 | 1790 |
| RPM | 1725 | 1760 | 1760 |
| Indoor Horsepower | 1.00 | 1.00 | 1.00 |
| Filter Size (in) | 14 X 20 X 2 (2) 20 X 20 X 2 (2) | 14 X 20 X 2 (2) 20 X 20 X 2 (2) | 14 X 20 X 2 (2) 20 X 20 X 2 (2) |
| Drain Size (NPT) | ¾ | ¾ | ¾ |
| R-410A Refrigerant Charge (oz.) | 208 | 208 | 208 |
| Evaporator Coil Face Area (ft ²) | 9.2 | 9.2 | 9.2 |
| Rows Deep/ Fins per Inch | 4/16 | 4/16 | 4/16 |
| BELT DRIVE EVAP FAN DATA | | | |
| Motor Sheave | 1VL44 X 7/8 | 1VL44 X 7/8 | 1VL44 X 7/8 |
| Blower Sheave | AK66H | AK66H | AK66H |
| Belt | AX52 | AX52 | AX52 |
| CONDENSER FAN/COIL | | | |
| Quantity of Condenser Fan Motors | 1 | 1 | 1 |
| RPM (High/Low stage) | 1075 | 1075 | 1075 |
| Outdoor Horsepower | 0.33 | 0.33 | 0.33 |
| Fan Diameter/ # Fan Blades | 22 / 4 | 22 / 4 | 22 / 4 |
| Face Area (ft ²) | 19.0 | 19.0 | 19.0 |
| Rows Deep / Fins per Inch | 2/16 | 2/16 | 2/16 |
| COMPRESSOR (ALL SINGLE-STAGE) | | | |
| Quantity / Type / Stages | 1 / Scroll / 1 | 1 / Scroll / 1 | 1 / Scroll / 1 |
| Compressor RLA / LRA | 15.9 / 110 | 7.1 / 52 | 5.13 / 39.5 |
| ELECTRICAL DATA | | | |
| Voltage-Phase-Frequency | 208/230-3-60 | 460-3-60 | 575-3-60 |
| Indoor Blower FLA | 3.2 | 1.5 | 1.2 |
| Max External Static (In. W.C.) | 0.8 | 0.8 | 0.8 |
| Outdoor Fan FLA | 2.3 | 1.1 | 0.9 |
| Min. Circuit Ampacity ¹ | 25.4/25.4 | 11.4 | 8.51 |
| Max. Overcurrent Protection (A) ² | 40/40 | 15 | 15 |
| Power Supply Conduit Hole Dia. (in) | 1.125 | 1.125 | 1.125 |
| Low-Voltage Conduit Hole Dia. (in) | 0.5 | 0.5 | 0.5 |
| OPERATING WEIGHT (LBS.) | | | |
| Operating Weight (lbs) | 686 | 693 | 693 |
| SHIPPING WEIGHT (LBS.) | | | |
| Ship Weight (lbs) | 732 | 739 | 739 |

¹ Wire size should be determined in accordance with National Electrical Codes. Extensive wire runs will require larger wire sizes.

² May use fuses or HACR-type circuit breakers of the same size as noted.

Note: Always check the S&R plate for electrical data on the unit being installed.

AHRI Ratings

| MODEL | CAPACITY | EER | SEER |
|----------|----------|------|------|
| DBH036*B | 35,000 | 11.5 | 14 |
| DBH048*B | 46,500 | 11.5 | 14 |
| DBH060*B | 57,000 | 11.5 | 14 |

Sound Data

| Model | OUTDOOR SOUND (dB) AT 60 Hz | | | | | | | | |
|-------|-----------------------------|------|------|------|------|------|------|------|------|
| | A-Weighted | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| 036 | 75 | 78.5 | 85.4 | 74.4 | 71.8 | 69.1 | 65.8 | 60.9 | 59.2 |
| 048 | 73 | 82.5 | 78.1 | 71.6 | 69.5 | 68.0 | 66.1 | 59.5 | 58.6 |
| 060 | 76 | 84.4 | 80.5 | 76.2 | 72.9 | 70.9 | 67.4 | 63.8 | 63.1 |

Notes:

¹ Outdoor sound data is measured in accordance with AHRI standard 270.

² Measurements are expressed in terms of sound power. Do not compare these values to sound pressure values because sound pressure depends on specific environment factors which normally do not match individual applications. Sound power values are independent of the environment and therefore more accurate.

³ A-weighted sound ratings filter out high and very low frequencies, to better approximate the response of "average" human ear. A-weighted measurements for Daikin units are taken in accordance with AHRI standard 270.

Expanded Cooling Data

DBH048*B/C

| IDB | Airflow | ID WB | Outdoor Ambient Temperature | | | | | | | | | | | | 105 | | | | | | |
|--------------------------------------------|------------|--------|-----------------------------|--------|----|--------|--------|--------|----|--------|--------|--------|----|--------|--------|--------|----|--------|--------|--------|----|
| | | | 85 | | | | | | 95 | | | | | | 105 | | | 115 | | | |
| | | | 65 | | | 75 | | | 85 | | | 95 | | | 105 | | | 115 | | | |
| IDB | Airflow | ID WB | 59 | 63 | 67 | 71 | 59 | 63 | 67 | 71 | 59 | 63 | 67 | 71 | 59 | 63 | 67 | 71 | 59 | 63 | 67 |
| 1200 | Capacity | 46,569 | 47,230 | 48,628 | - | 46,150 | 46,811 | 48,209 | - | 44,928 | 45,589 | 46,987 | - | 42,826 | 43,487 | 44,885 | - | 40,256 | 40,917 | 42,315 | - |
| | S/T | 0.56 | 0.49 | 0.35 | - | 0.57 | 0.49 | 0.36 | - | 0.59 | 0.52 | 0.39 | - | 0.61 | 0.54 | 0.40 | - | 1.00 | 0.56 | 0.43 | - |
| | Evap dT | 21.44 | 19.51 | 15.90 | - | 21.38 | 19.45 | 15.85 | - | 21.65 | 19.72 | 16.12 | - | 21.36 | 19.43 | 15.83 | - | 21.11 | 19.18 | 15.57 | - |
| | Pr Suc | 122 | 124 | 127 | - | 130 | 131 | 134 | - | 136 | 138 | 141 | - | 142 | 143 | 147 | - | 147 | 149 | 152 | - |
| | Pr Dis | 253 | 255 | 256 | - | 294 | 295 | 297 | - | 336 | 337 | 339 | - | 381 | 382 | 384 | - | 430 | 431 | 433 | - |
| | TotalPower | 2,856 | 2,853 | 2,847 | - | 3,195 | 3,192 | 3,186 | - | 3,573 | 3,570 | 3,564 | - | 3,982 | 3,979 | 3,974 | - | 4,439 | 4,437 | 4,431 | - |
| 1460 | Capacity | 47,414 | 48,076 | 49,474 | - | 46,996 | 47,657 | 49,055 | - | 45,774 | 46,435 | 47,833 | - | 43,671 | 44,332 | 45,730 | - | 41,101 | 41,762 | 43,160 | - |
| | S/T | 0.66 | 0.58 | 0.45 | - | 0.66 | 0.59 | 0.45 | - | 0.69 | 0.61 | 0.48 | - | 1.00 | 0.63 | 0.50 | - | 1.00 | 0.65 | 0.52 | - |
| | Evap dT | 19.69 | 17.76 | 14.16 | - | 19.64 | 17.71 | 14.11 | - | 19.91 | 17.98 | 14.38 | - | 19.62 | 17.69 | 14.09 | - | 19.36 | 17.43 | 13.83 | - |
| | Pr Suc | 125 | 126 | 129 | - | 132 | 134 | 137 | - | 139 | 140 | 144 | - | 144 | 146 | 149 | - | 150 | 151 | 154 | - |
| | Pr Dis | 257 | 258 | 260 | - | 297 | 298 | 300 | - | 339 | 340 | 342 | - | 384 | 385 | 387 | - | 433 | 434 | 436 | - |
| | TotalPower | 2,882 | 2,880 | 2,874 | - | 3,221 | 3,218 | 3,213 | - | 3,559 | 3,597 | 3,591 | - | 4,008 | 4,006 | 4,000 | - | 4,466 | 4,463 | 4,457 | - |
| 1800 | Capacity | 48,909 | 49,570 | 50,968 | - | 48,490 | 49,151 | 50,549 | - | 47,268 | 47,929 | 49,327 | - | 45,165 | 45,826 | 47,224 | - | 42,596 | 43,257 | 44,655 | - |
| | S/T | 0.70 | 0.63 | 0.49 | - | 0.71 | 0.63 | 0.50 | - | 0.73 | 0.66 | 0.52 | - | 1.00 | 0.68 | 0.54 | - | 1.00 | 0.70 | 0.56 | - |
| | Evap dT | 17.96 | 16.03 | 12.43 | - | 17.90 | 15.97 | 12.37 | - | 18.17 | 16.25 | 12.64 | - | 17.88 | 15.95 | 12.35 | - | 17.63 | 15.70 | 12.10 | - |
| | Pr Suc | 129 | 130 | 133 | - | 136 | 138 | 141 | - | 143 | 144 | 147 | - | 148 | 150 | 153 | - | 154 | 155 | 158 | - |
| | Pr Dis | 261 | 262 | 263 | - | 301 | 302 | 304 | - | 343 | 344 | 346 | - | 388 | 389 | 391 | - | 437 | 438 | 440 | - |
| | TotalPower | 2,908 | 2,906 | 2,900 | - | 3,247 | 3,244 | 3,239 | - | 3,625 | 3,623 | 3,617 | - | 4,034 | 4,032 | 4,026 | - | 4,492 | 4,489 | 4,483 | - |
| Shaded area reflects ACCA (TVA) conditions | | | | | | | | | | | | | | | | | | | | | |
| Shaded area reflects ACCA (TVA) conditions | | | | | | | | | | | | | | | | | | | | | |
| Shaded area reflects ACCA (TVA) conditions | | | | | | | | | | | | | | | | | | | | | |

kW = Total system power

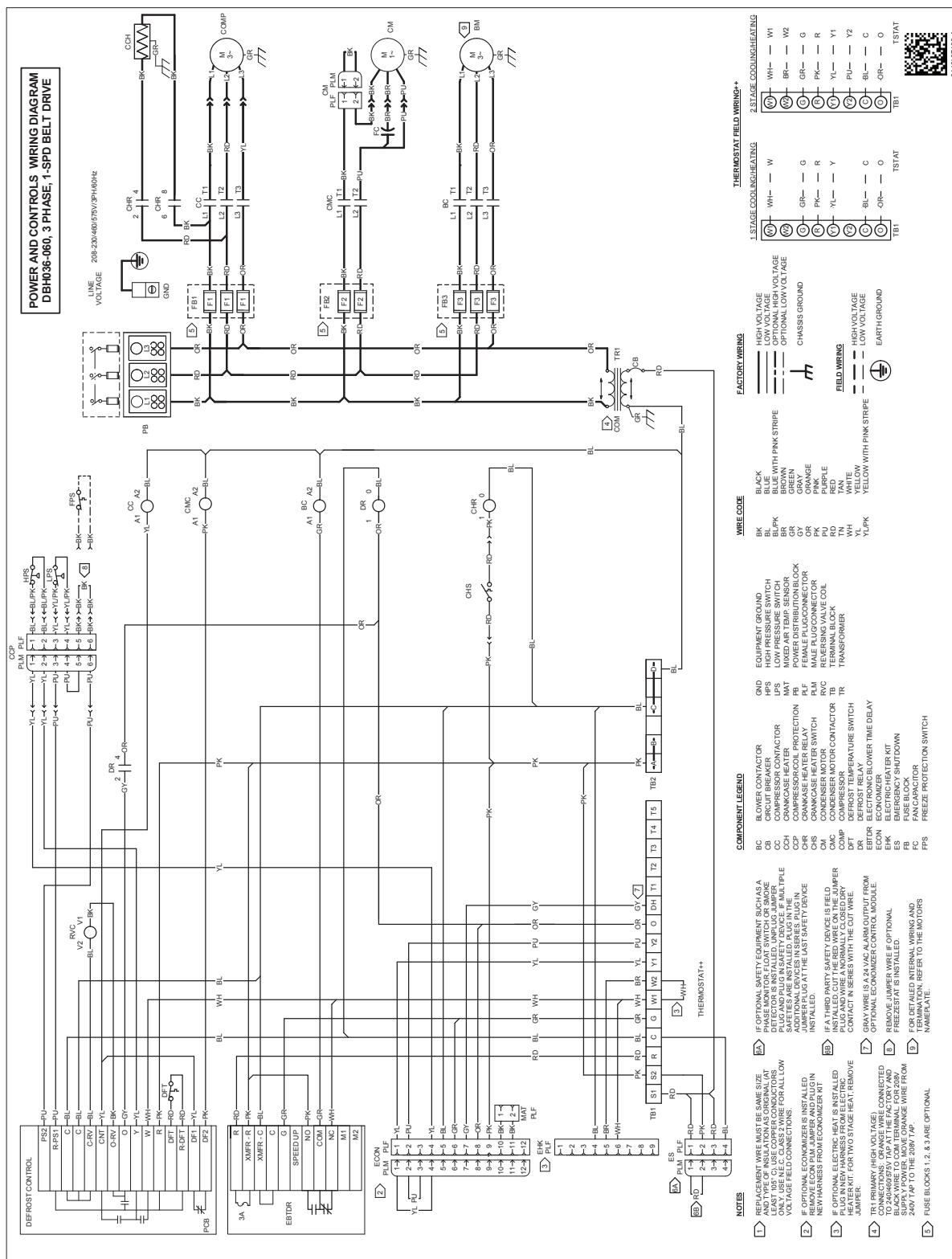
Amps: Unit amps (comp + evaporator + condenser fan motors)

High and low pressures are measured at the liquid and suction access fittings.

Design Subcooling, 16 - 19°F @ the liquid access fitting connection. Design Superheat 8 - 12°F @ the compressor suction access fitting connection.

Electrical Heater Data

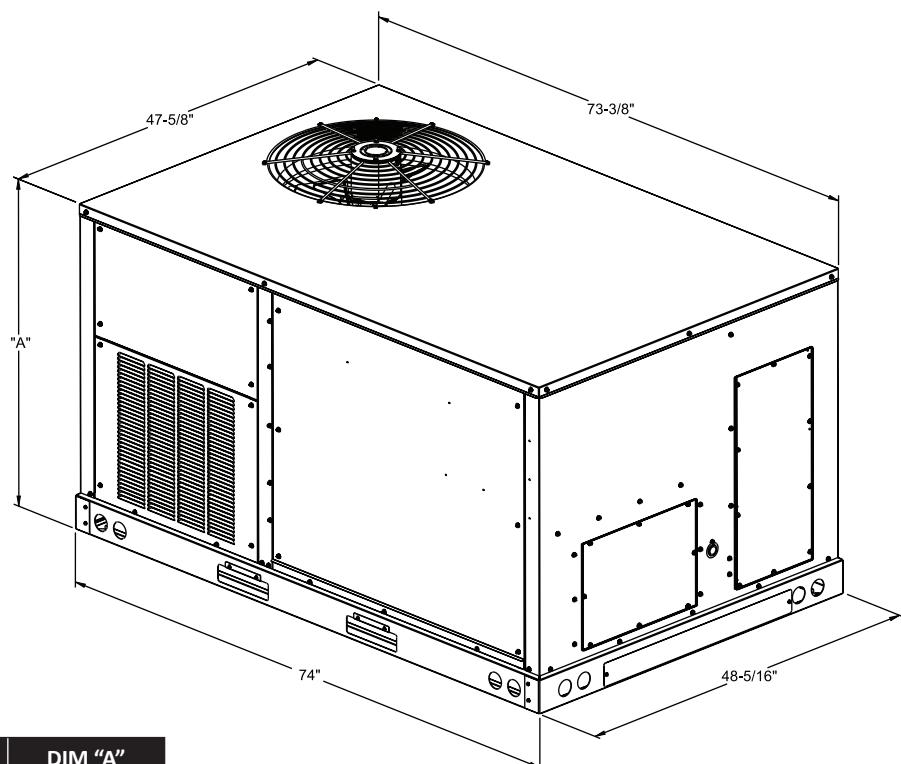
| ELECTRIC HEATERS | | | | | | | | |
|------------------|-------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|
| MODEL # | MIN AIRFLOW | MAX AIRFLOW | EH*D-*S05 | EH*D-*S10 | EH*B-*S15 | EH*B-*S18 | EH*B-*S20 | EH*B-*S30 |
| DBH036* | 975 | 1350 | X | X | X | | | |
| DBH048* | 1300 | 1800 | X | X | X | X | X | |
| DBH060* | 1625 | 2250 | X | X | X | X | X | |



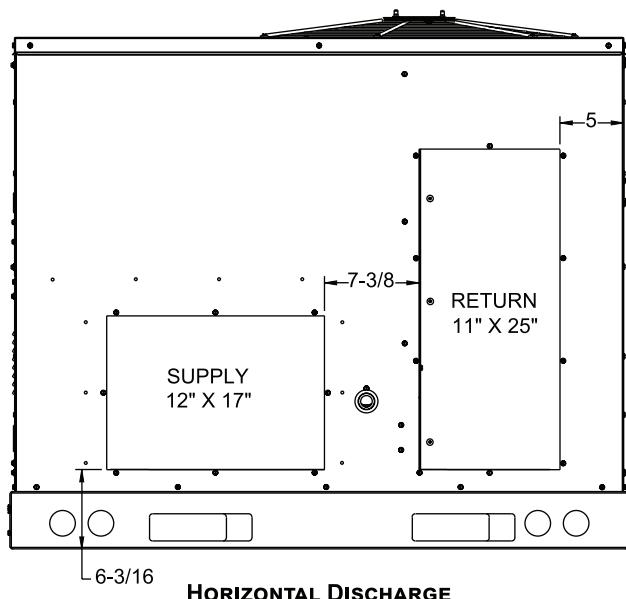
Wiring is subject to change. Always refer to the wiring diagram on the unit for the most up-to-date wiring.

| | |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| WARNING | High Voltage: Disconnect all power before servicing or installing this unit. Multiple power sources may be present. Failure to do so may cause property damage, personal injury, or death. |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

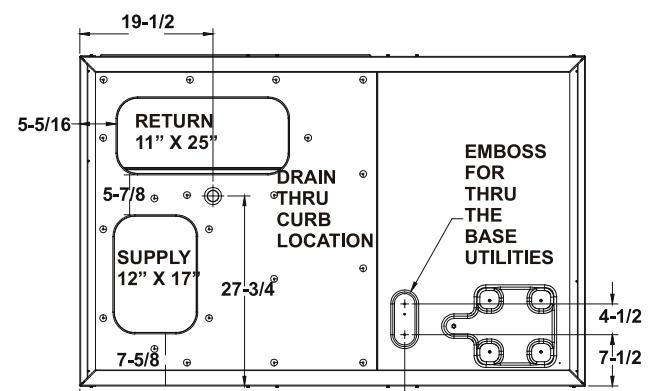
014607198A



| Model Size | DIM "A" |
|------------|--------------------|
| 3-4 ton HP | 39 $\frac{7}{8}$ " |
| 5 ton HP | 43 $\frac{1}{2}$ " |



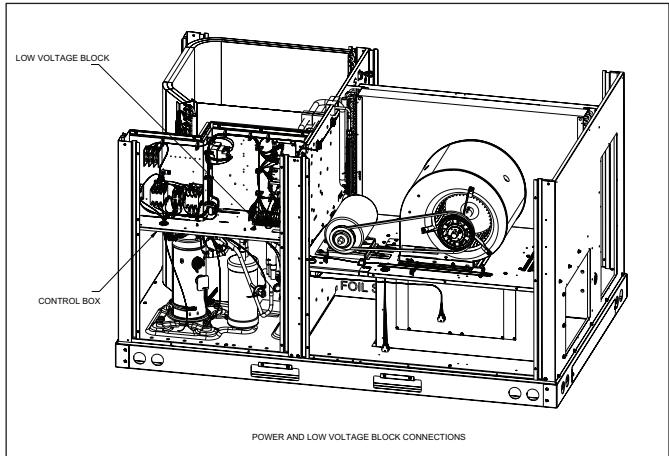
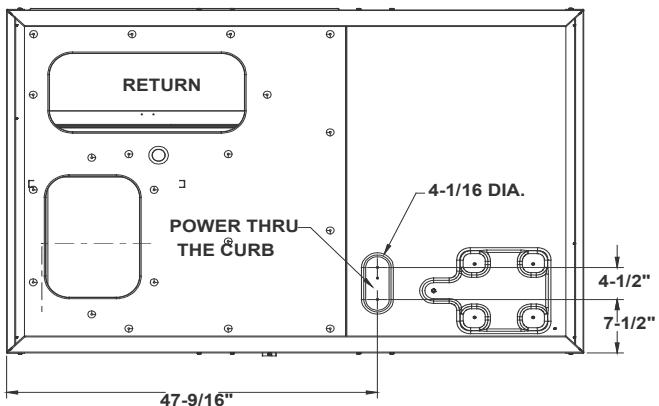
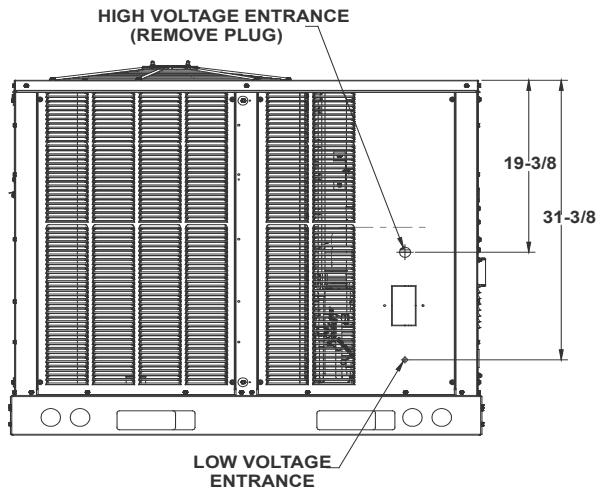
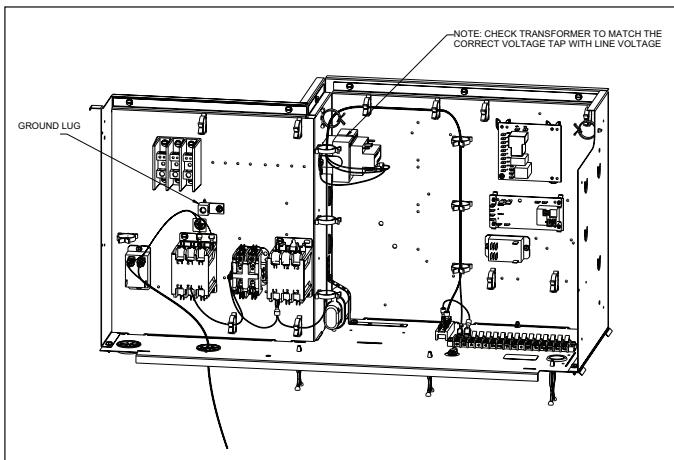
HORIZONTAL DISCHARGE



BOTTOM VIEW OF UNIT

VERTICAL DISCHARGE

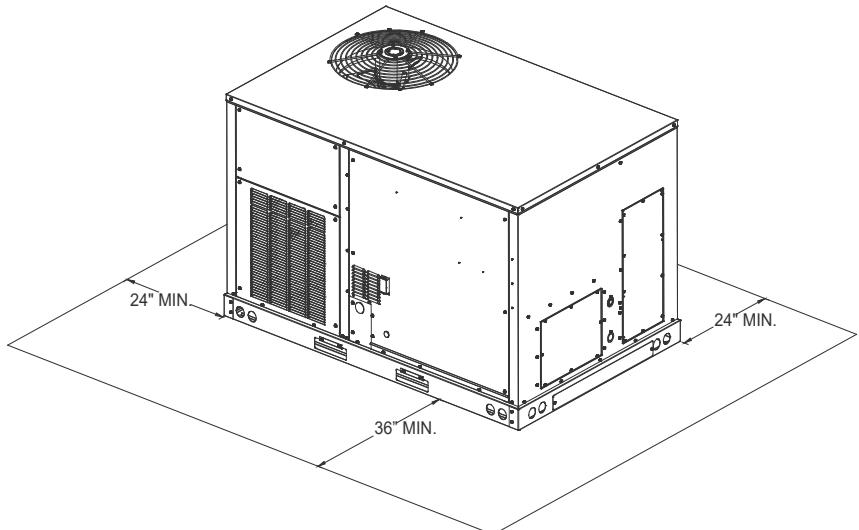
Electrical Connections



Unit Clearances

Service Clearance

Allow for recommended service clearances as shown in figure to the right. In situations that have multiple units, a 36" minimum clearance is required between the condenser coils. A clearance of 48" is recommended on all sides of the unit to allow service access and to insure proper ventilation and condenser airflow. The top of the unit should be unobstructed. Provide a roof walkway along the sides of the unit for service and access to controls and components. Contact your Daikin sales representative for service requirements less than those recommended.



Unit Location

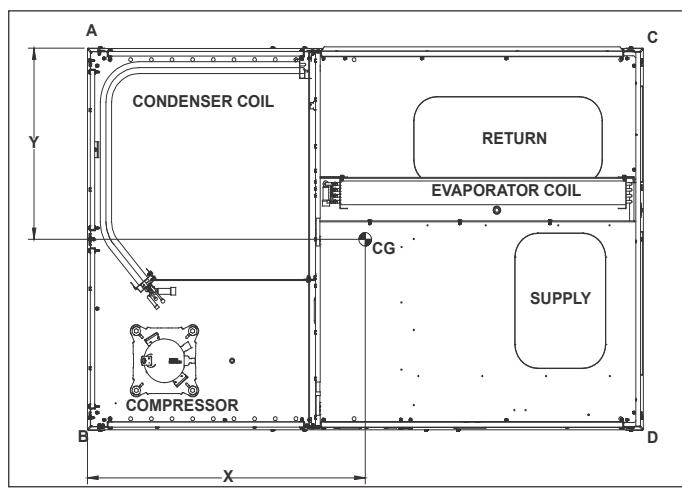
The structural engineer must verify that the roof has adequate support and ability to minimize deflection. Take extreme caution when using on a wooden roof structure. Unit condenser coils should be in a location that avoids any heated exhaust air.

Allow sufficient space around the unit for maintenance/service clearance. Consult your Daikin sales representative if available clearances do not meet minimum recommendations.

Where code considerations, such as the NEC, require extended clearances, these take precedence.

Provisions for forks have been included in the unit base frame. No other fork locations are approved.

- » Unit must be lifted by the four lifting holes located at the base frame corners.
- » Lifting cables should be attached to the unit with shackles.
- » The distance between the crane hook and the top of the unit must not be less than 60".
- » Two spreader bars must span over the unit to prevent damage to the cabinet by the lift cables. Spreader bars must be of sufficient length so that cables do not come in contact with the unit during transport. Remove wood struts mounted beneath unit base



frame before setting unit on roof curb. These struts are intended to protect unit base frame from fork lift damage. To remove the struts, extract the sheet metal retainers and pull the struts through the base of the unit. Refer to rigging label on the unit.

Important: If using bottom discharge with roof curb, duct-work should be attached to the curb prior to installing the unit. Refer to the Roof Curb Installation Instructions for proper curb installation. Curbing must be installed in compliance with the National Roofing Contractors Association Manual. Lower unit carefully onto roof mounting curb. While rigging the unit, the center of gravity will cause the condenser end to be lower than the supply air end. Bring condenser end of unit into alignment with the curb. With condenser end of the unit resting on curb member and using curb as a fulcrum, lower opposite end of the unit until entire unit is seated on the curb. When a rectangular cantilever curb is used, take care to center the unit. Check for proper alignment and orientation of supply and return openings with duct.

Roof Curb Installation

The roof curb is field-assembled and must be installed level (within 1/16" per foot side to side). A sub-base must be constructed by the contractor in applications involving pitched roofs. Gaskets are furnished and must be installed between the unit and curb. For proper installation, follow NRCA guidelines. In applications requiring post and rail installation, an I-beam securely mounted on multiple posts should support the unit on each side. In addition, the insulation on the underside of the unit should be protected from the elements. Applications in geographic areas subjected to seismic or hurricane conditions must meet code requirements for fastening the unit to the curb and the curb to the building structure. For further and more detailed information please refer to our Daikin Light Commercial Packaged unit IOD.

Weights

| Model | Shipping Weight (lbs) | Operating Weight (lbs) | Corner Weights (lbs) | | | | Length | Width |
|-----------------|-----------------------|------------------------|----------------------|-----|-----|-----|--------|-------------------|
| | | | A | B | C | D | | |
| DBH0363B000001S | 651 | 605 | 156 | 165 | 112 | 172 | 34½ | 27½ ₁₀ |
| DBH0364B000001S | 656 | 610 | 140 | 180 | 14 | 142 | 35½ | 26% |
| DBH0483B000001S | 686 | 640 | 121 | 224 | 150 | 145 | 34 | 27% |
| DBH0484B000001S | 688 | 642 | 131 | 213 | 142 | 156 | 34½ | 27% |
| DBH0603B000001S | 732 | 686 | 234 | 150 | 73 | 229 | 32½ | 26½ ₁₀ |
| DBH0604B000001S | 739 | 693 | 108 | 270 | 186 | 129 | 33½ | 27% |

Accessories

| Field Accessory part number | Description | Fits Model Sizes | Field-Installed | Factory-Installed | Operating Weight (lbs) |
|------------------------------------|-------------------------------------------------------------------------|------------------|-----------------|-------------------|------------------------|
| Electric Heat Kits | | | | | |
| EHXB-3S05 | Electric Heater, Belt Drive, 208-230V, 3PH, 5kW | 3-6 ton | ✓ | ✓ | |
| EHXB-3S10 | Electric Heater, Belt Drive, 208-230V, 3PH, 10kW | 3-6 ton | ✓ | ✓ | |
| EHXB-3S15 | Electric Heater, Belt Drive, 208-230V, 3PH, 15kW | 3-6 ton | ✓ | ✓ | |
| EHXB-3S18 | Electric Heater, Belt Drive, 208-230V, 3PH, 18kW | 4-6 ton | ✓ | ✓ | |
| EHXB-3S20 | Electric Heater, Belt Drive, 208-230V, 3PH, 20kW | 4-6 ton | ✓ | ✓ | |
| EHXB-4S05 | Electric Heater, Belt Drive, 460V, 3PH, 5kW | 3-6 ton | ✓ | ✓ | |
| EHXB-4S10 | Electric Heater, Belt Drive, 460V, 3PH, 10kW | 3-6 ton | ✓ | ✓ | |
| EHXB-4S15 | Electric Heater, Belt Drive, 460V, 3PH, 15kW | 3-6 ton | ✓ | ✓ | |
| EHXB-4S18 | Electric Heater, Belt Drive, 460V, 3PH, 18kW | 4-6 ton | ✓ | ✓ | |
| EHXB-4S20 | Electric Heater, Belt Drive, 460V, 3PH, 20kW | 4-6 ton | ✓ | ✓ | |
| EHXB-7S05 | Electric Heater, Belt Drive, 575V, 3PH, 5kW | 3-6 ton | ✓ | ✓ | |
| EHXB-7S10 | Electric Heater, Belt Drive, 575V, 3PH, 10kW | 3-6 ton | ✓ | ✓ | |
| EHXB-7S15 | Electric Heater, Belt Drive, 575V, 3PH, 15kW | 3-6 ton | ✓ | ✓ | |
| EHXB-7S18 | Electric Heater, Belt Drive, 575V, 3PH, 18kW | 4-6 ton | ✓ | ✓ | |
| EHXB-7S20 | Electric Heater, Belt Drive, 575V, 3PH, 20kW | 4-6 ton | ✓ | ✓ | |
| Duct Smoke Detectors | | | | | |
| | Duct Smoke Detectors - Return | 3-6 ton | | ✓ | 11 |
| | Duct Smoke Detectors - Supply | 3-6 ton | | ✓ | 11 |
| | Duct Smoke Detectors - Supply and Return | 3-6 ton | | ✓ | 11 |
| Non-Fused Disconnect Switch | | | | | |
| | 60 Amp Disconnect | 3-6 ton | | ✓ | 5 |
| | 100 Amp Disconnect | 3-6 ton | | ✓ | 5 |
| | 150 Amp Disconnect | 3-6 ton | | ✓ | 5 |
| Convenience Outlets | | | | | |
| | Convenience Outlets - Powered, 208/230 V | 3-6 ton | | ✓ | 42 |
| | Convenience Outlets - Powered, 460 V | 3-6 ton | | ✓ | 42 |
| | Convenience Outlets - Powered, 575 V | 3-6 ton | | ✓ | 42 |
| | Convenience Outlets - Non-Powered | 3-6 ton | | ✓ | 2 |
| Hinged Access Panels | | | | | |
| | Hinged Access Panels, 39" cabinet | 3-5 ton | | ✓ | |
| | Hinged Access Panels, 43" cabinet | 5 ton | | ✓ | |
| Economizer | | | | | |
| 0270L01163 | Horizontal Economizer Ultra Low-Leak JADE Dry-Bulb, 39" cabinet | 3-4 ton | ✓ | | 88 |
| 0270L01759 | Horizontal Economizer Ultra Low-Leak JADE Enthalpy Sensor, 39" cabinet | 3-4 ton | ✓ | | 88 |
| 0270L01598 | Horizontal Economizer Ultra Low-Leak JADE Dry-Bulb, 43" cabinet | 5 ton | ✓ | | 88 |
| 0270L01757 | Horizontal Economizer Ultra Low-Leak JADE Enthalpy Sensor, 43" cabinet | 5 ton | ✓ | | 88 |
| 0270L01753 | Vertical Economizer Standard Low-Leak JADE Ethalpy Sensor | 3-5 ton | ✓ | ✓ | 65 |
| 0270L01755 | Vertical Economizer Ultra Low-Leak JADE Ethalpy Sensor | 3-5 ton | ✓ | ✓ | 65 |
| 0270L01156 | Vertical Economizer Standard Low-Leak JADE Dry-Bulb | 3-5 ton | ✓ | ✓ | 65 |
| 0270L01158 | Vertical Economizer Ultra Low-Leak JADE Dry-Bulb | 3-5 ton | ✓ | ✓ | 65 |
| Curbs and Restraint Clips | | | | | |
| 0221L00014 | Roof Curb 14" Tall, Knocked Down | 3-5 ton | ✓ | | 80 |
| 0221L00015 | Roof Curb 24" Tall, Knocked Down | 3-5 ton | ✓ | | 109 |
| 0270L01261 | Hold Down Bracket Kit | 3-5 ton | ✓ | | 8 |
| 0270L01250 | Hold Down Bracket Kit for Daikin Roofcurb | 3-5 ton | ✓ | | 8 |
| 0221L00019 | Roof Curb 14" Tall Seismic with Hold Down Brackets, Knocked Down | 3-5 ton | ✓ | | 102 |
| 0221L00020 | Roof Curb 14" Tall Wind-Rated Hurricane with Hold Down Brackets, Welded | 3-5 ton | ✓ | | 140 |

Accessories

| Field Accessory part number | Description | Fits Model Sizes | Field-Installed | Factory-Installed | Operating Weight (lbs) |
|------------------------------------------|-----------------------------------------------------------------------|------------------|-----------------|-------------------|------------------------|
| Concentrics | | | | | |
| 0270L01602 | Concentric Diffuser 24 x 48 with 16" dia collars | 3-5 ton | ✓ | | 32 |
| 0270L01603 | Concentric Diffuser 24 x 48 with 18" dia collars | 3-5 ton | ✓ | | 35 |
| 0270L01335 | Concentric Duct Adaptor Kit for 16" Dia. Duct | 3-5 ton | ✓ | | 28 |
| 0270L01338 | Concentric Duct Adaptor Kit for 18" Dia. Duct | 3-5 ton | ✓ | | 28 |
| Damper | | | | | |
| 0270L01165 | 2 Position Motorized Damper | 3-5 ton | ✓ | | 40 |
| 0270L01166 | Manual Outdoor Air Damper | 3-5 ton | ✓ | | 24 |
| Hail Guard Kits | | | | | |
| HAILGD036HE | Condenser Coil Hail Guards, 39" cabinet | 3-5 ton | ✓ | ✓ | |
| HAILGD036HE | Condenser Coil Hail Guards, 39" cabinet | 3-5 ton | ✓ | ✓ | |
| High Efficiency Filters | | | | | |
| 0160L00268 | High Efficiency MERV 8 Air Filter Kit - 14x20x2 (qty 4) | 3-4 ton | ✓ | | 4 |
| 0160L00268 | High Efficiency MERV 8 Air Filter Kit - 14x20x2 (qty 2) | 5 ton | ✓ | | 4 |
| 0160L00270 | High Efficiency MERV 8 Air Filter Kit - 20x20x2 (qty 2) | 5 ton | ✓ | | 4 |
| 0160L00204 | High Efficiency MERV 13 Air Filter Kit - 14x20x2 (qty 4) | 3-4 ton | ✓ | | 4 |
| 0160L00204 | High Efficiency MERV 13 Air Filter Kit - 14x20x2 (qty 2) | 5 ton | ✓ | | 4 |
| 0160L00201 | High Efficiency MERV 13 Air Filter Kit - 20x20x2 (qty 2) | 5 ton | ✓ | | 4 |
| Misc Accessories | | | | | |
| TTBCKHE01 | Through the Base Gas/Electrical | 3-6 ton | ✓ | ✓ | 1 |
| 3PMKP1 | Phase Monitor Kit | 3-6 ton | ✓ | ✓ | 2 |
| 0270L01232 | Burglar bars Inserts | 3-6 ton | ✓ | | 18 |
| Power Exhaust | | | | | |
| 0270L01167 | Power Exhaust Prop Vertical Economizer, 230 V | 3-5 ton | ✓ | | 57 |
| 0270L01170 | Power Exhaust Prop Horizontal Economizer, 230 V | 3-5 ton | ✓ | | 47 |
| 0270L01171 | Power Exhaust Prop Vertical Economizer, 460 V | 3-5 ton | ✓ | | 57 |
| 0270L01168 | Power Exhaust Prop Horizontal Economizer, 460 V | 3-5 ton | ✓ | | 47 |
| Controls, Thermostats and Sensors | | | | | |
| DT4272C | Comm Touch Digital Stat w/ WiFi 4h/2c | 3-6 ton | ✓ | | 1 |
| DT4273C | Comm Touch Digital Stat w/ WiFi & Humidity Control 4h/2cc | 3-6 ton | ✓ | | 1 |
| TSTATGAC-WS | Remote indoor sensor | 3-6 ton | ✓ | | 1 |
| 250803400 | AppStat RTU 2H/2C Econ | 3-6 ton | ✓ | | 1 |
| 250803600 | AppStat HPU 3H/2C Econ (HP only) | 3-6 ton | ✓ | | 1 |
| D4271C | 4h/2c Commercial 7day Programmable Wi-Fi Capable thermostat | 3-6 ton | ✓ | | 1 |
| D4272C | 4h/2c Commercial 7day Programmable Wi-Fi Capable Hum/dehum thermostat | 3-6 ton | ✓ | | 1 |
| C7232A1024 | CO ₂ Sensor (Wall Mtd) | 3-6 ton | ✓ | | 1 |
| C7232B1022 | CO ₂ Sensor (Duct Mtd) | 3-6 ton | ✓ | | 1 |

Note: Where multiple variations are available, the heaviest combination is listed.

Factory Installed Options

- » **Non-Powered Convenience Outlet:** A 120V, 15A, GFCI outlet can be installed in the unit making it easier for technicians to service other units once an electrician runs power to the outlet. Outlet shall be factory-installed and internally mounted with easily accessible 120-v female receptacle. Transformer not included for this option. Outlet shall include a field-installed "While-in-Use" cover.
- » **High-Static Kit:** Allows for operation in higher static applications.
- » **Powered Convenience Outlet:** A 120V, 15A, GFCI outlet can be powered with a step-transformer built into the unit. For use when the unit is not running. When a factory-installed powered convenience outlet is installed in the equipment, the unit MCA (Min. Circuit Ampacity) will increase by 7.5A for 208/230V units; increase by 3.75A for 460V units; and by 3A for 575V units. The MOP (Max. Overcurrent Protection) device must be sized accordingly. Outlet shall be powered from main line power to the rooftop unit. Outlet shall include a field-installed "While-in-Use" cover.
- » **Return Air and/or Supply Air Smoke Detectors:** Return air and/or supply air smoke detectors can be installed in the unit. To safely identify the presence of smoke inside the air conditioning system and shutdown the blower to prevent the smoke to disperse into different zones.
- » **Disconnect Switch (non-fused):** A disconnect switch can be installed in the unit with factory wiring complete from the switch to the unit. Please note that for air conditioner and heat pump units, the appropriate electric heat kit must be ordered along with the disconnect switch (non-fused) to be factory-installed. For models with a powered convenience outlet option and a disconnect switch (non-fused) option, the power to the powered convenience outlet will be shut off when the disconnect switch (non-fused) is in the off position. National Electric Code (NEC) and UL approved non-fused switch shall provide unit power shutoff. The switch shall be accessible from outside of the unit and provide local shutdown and lockout capability.
- » **Hinged Access Panels:** Allows access to unit's major components. Combined with latches for easy access to control box, compressor, filters and blower motor.
- » **Through-the-base electrical connection:** Allows an easier and faster field installation through the unit basepan.
- » **Electromechanical Controls:** Basic controls that include terminal block for unit connectivity to T-Stat.

Field Installed Options

- » **Manual Fresh Air Damper:** Manual damper package shall consist of damper, air inlet screen, and rain hood which can be preset to admit up to 25% outdoor air for year round ventilation.
- » **Motorized Fresh Air Damper:** A two-position damper with rain hood and screen provides up to 50% outside air when the indoor fan starts and closes when the indoor fan shuts down. Consist of actuator, damper, air inlet screen, and rain hood. Damper shall close upon indoor (evaporator) fan shutoff and/or loss of power. The damper actuator shall plug into the rooftop unit's wiring harness plug. No hard wiring shall be required.
- » **Power Exhaust:** Power exhaust shall be used in conjunction with an integrated economizer. This accessory exhausts return air and may be used in either downflow or horizontal (duct-mounted) applications. Horizontal power exhaust shall be mounted in return ductwork. Power exhaust shall be controlled by economizer controller operation. Exhaust fans shall be energized when dampers open past the 0-100% adjustable setpoint on the economizer control.
- » **Horizontal Economizer:** Fully modulating between 0 and 100%, contain seals that meet ASHRAE 90.1 requirements. Includes motor and dampers, minimum position settings, preset linkage, wiring harness with plug, mixed air temperature sensor, and enthalpy control. An optional duct-mounted barometric relief damper is available. An optional return enthalpy sensor is available to provide comparative or differential enthalpy control. Damper blades shall be galvanized steel with composite gears. Plastic or composite blades on intake or return shall not be acceptable. Standard leak rate shall be equipped with dampers not to exceed 2% leakage at 1 in. wg pressure differential. Ultra Low Leak design meets California Title 24 section 140.4 and ASHRAE90.1 requirements for 4 cfm per sq.ft. on the outside air dampers and 10 cfm per sq. ft. on the return dampers. Shall be designed to close damper(s) during loss-of-power situations with spring return built into motor. Economizer controller shall accept a 2-10 Vdc CO₂ sensor input for IAQ/DCV control. In this mode, dampers shall modulate the outdoor air damper to provide ventilation based on the sensor input.
- » Economizer controller shall be Honeywell JADE W7220 that provides:
 - 2-line LCD interface screen for setup, configuration and troubleshooting.
 - On-board Fault Detection and Diagnostics (FDD) that senses and alerts when the economizer is not operating properly, per California Title 24.
 - Sensor failure loss of communication identification
 - Automatic sensor detection
 - Capabilities for use with multiple-speed indoor fan systems
 - Utilize digital sensors: Dry bulb and Enthalpy
 - Economizer controller shall provide indications when in free cooling mode, in the DCV mode, or the exhaust fan contact is closed.

Factory and Field Installed Options

- » **Roof curbs:** Full perimeter roof curb with exhaust capability providing separate air streams for energy recovery from the exhaust air without supply air contamination. Two different heights 14" and 24", allows proper installation and structure stability. Formed galvanized steel with wood nailer strip and shall be capable of supporting entire unit weight.
- » **Concentric duct kits:** Designed to provide a single point air distribution system with the added benefit of having directional air control.
- » **Restraint mounting clips:** Allows for installation reinforcement for Hurricane and/or seismic events.
- » **CO₂ sensor:** Sensor designed to alarm the system when the CO₂ levels are outside safe parameters.
- » **Burglar Bar Sleeves:** Designed to prevent the access thru the return or supply ducting inside the unit.
- » **Downflow square to round adapter 18":** Installed into a recessed portion of the roof curb, the concentric duct adaptor changes the orientation of the ductwork from square to round for applications utilizing that type of ducting system.
- » **Side discharge concentric diffuser system:** The Concentric diffuser system is an all in one supply and return duct free arrangement for RTU systems. This system comes with two separate duct connections, one for a supply and another for a return.
- » **Remote indoor sensor:** Remote sensor to monitor the temperature on zones away from the main thermostat.
- » **Drain pan overflow switch:** Allows the controls to detect and send an alarm when there is an overflow on the drain pan.
- » **Freeze stat:** Temperature sensing device that monitors the heat exchange to prevent the coil from freezing.

Factory and Field Installed Options

- » **Downflow Economizer:** Fully modulating between 0 and 100%, contain seals that meet ASHRAE 90.1 requirements. Includes motor and dampers, minimum position settings, a preset linkage, a wiring harness with plug, a mixed air temperature sensor, enthalpy control, and a barometric relief damper. An optional return enthalpy sensor is available to provide comparative or differential enthalpy control. Damper blades shall be galvanized steel with composite gears. Plastic or composite blades on intake or return shall not be acceptable. Standard leak rate shall be equipped with dampers not to

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 - Capabilities for use with multiple-speed indoor fan systems
 - Utilize digital sensors: Dry bulb and Enthalpy
 - Economizer controller shall provide indications when in free cooling mode, in the DCV mode, or the exhaust fan contact is closed.
- » **Low Ambient Control:** Allows cooling operation down to 35°F outdoor ambient temperature for 3 - 6 ton units.
- » **Phase Monitor:** Phase monitor (3 phase only) shall provide protection for motors and compressors against problems caused by phase loss, phase reversal and phase unbalance. Phase monitor is equipped with an LED that provides an ON or FAULT indicator.
- » **Condenser Hail Guards:** Louvered metal guards help protect the condenser coil from hail and debris; available as a field-installed options on 3 – 12½ ton units.

