Submittal Data

— PERFORMANCE DATA
— CERTIFIED DIMENSION PRINTS
— CERTIFIED ROOF CURB DIMENSION PRINTS
— SERVICE OPTION DIMENSION PRINTS
DESCRIPTION

50KCQ units are one-piece heat pump units, with a low profile, prewired, tested and charged at the factory. These units have field convertible supply and return openings and are intended for installation on a roof curb accessory (ordered separately), or for slab mounting (for horizontal duct connections). Units are designed to accept field-installed electric heaters. Units may be ordered with various factory-installed options. Field-installed accessories are also available.

STANDARD FEATURES

Base Unit
- Puron (R-410A) HFC refrigerant
- Meets and Exceeds ASHRAE 90.1 energy levels
- SEERs up to 14.3
- EERs up to 12.2
- HSPFs up to 8.2
- Rated in accordance with AHRI Standards 210/240
- Single stage cooling capacity control
- Designed in accordance with Underwriters’ Laboratories Std 1995
- Listed by UL & UL-Canada
- Non-corrosive composite sloping design; side or center drain condensate pan. Meets ASHRAE Standard 62
- Cooling operating range from 25°F up to 115°F (-4°C up to 46°C). Field installed accessory extends the minimum down to -20°F (-29°C).
- Convertible from vertical to horizontal airflow for slab mounting. No special kits required.
- Two-inch disposable return air filters
- Thru-the-bottom power entry capability
- Single point electric connections on field-installed electric heat units
- 24-volt control circuit protected with resettable circuit breaker and 75-VA transformer
- Permanently lubricated evaporator-fan motor
- Direct Drive - ECM motor standard with optional belt drive systems (single phase models are Direct Drive only)
- Totally enclosed condenser motors with permanently lubricated bearings
- Dependable Time/Temperature defrost control board and logic
- Central Terminal Board for component and unit wiring connections.
- Loss of Charge, High-Pressure, and Freeze Protection switches
- Full perimeter base rail with built-in rigging adapters and fork truck slots.

Cabinet
- Access panels with easy grip handles and replaceable NO-STRIP screw collar
- Pre-painted exterior panels and primer-coated interior panels tested to 500 hours salt spray protection
- Fully insulated cabinet
- Tool-less filter access door

Refrigerant System
- Acutrol™ refrigerant metering system
- Liquid line filter drier
- Scroll compressors with internal line-break overload protection
- Indoor and outdoor coils constructed of aluminum fins mechanically bonded to seamless copper tubes.
- Removable gauge line plugs for reading refrigerant pressure with unit panels in place
- Four-way reversing valve operation
- Suction Line Accumulator standard - prevents excessive liquid flood back of refrigerant to the compressor even during the start of the defrost cycle.

Standard Warranty
- 5-year electric heater (field-installed)
- 5-year compressor
- 1-year parts
PERFORMANCE DATA

Unit Operating Weight ____________________________ lb

**Cooling**

Net Total Capacity ____________________________ Btuh
Net Sensible Capacity ____________________________ Btuh
Compressor Power Input ____________________________ kW
  at Outdoor Air Temperature ________ °F db
Indoor Entering Air db: ________ °F     wb ________ °F
Airflow ____CFM   External Static Pressure ____ in.wg

Curb Weight ____________________________ lb

**Heating**

Power Input to Unit ____________________________ kw
Integrated Capacity ____________________________ Btuh
Indoor Operating Air Temperature ________ °F db
Outdoor Air Temperature ________ °F (Winter Design)
Rating at 70% R.H. Outdoors ________ kW Heater Selected
Heat/Cool Ratio ____________________________
Electrical Capacity Required ____________________________ Btuh

ELECTRICAL DATA

Power Supply to Unit ____________________________ Volts __________________ Phase __________________ Hz
Minimum Circuit Amps ____________________________ Maximum Overcurrent Protection (Fuse Only) __________________

SUBMITTAL DATA

Job Name ____________________________
Architect ____________________________
Engineer ____________________________
Contractor ____________________________
Unit Designation ____________________________
FACTORY-INSTALLED OPTIONS (FIOPs)

☐ Economizer with DRY BULB sensing and barometric relief*
  Standard Air Leak Dampers —
  ☐ Models with W7212 controller provides standard non-diagnostic control. EconoMi$er IV.
  ☐ Models with W7220 controller meets California Title 24 (section 120.2) Fault Detection and Diagnostic (FDD) requirements. EconoMi$er X.
  ☐ Models with RTU Open controller meets California Title 24 (section 120.2) Fault Detection and Diagnostic (FDD) requirements. EconoMi$er 2.
  ☐ Models with PremierLink controller. PremierLink controller does not meet California Title 24 Section 120.2 Fault Detection and Diagnostic (FDD) requirement. EconoMi$er 2.

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☐ Economizer with DRY BULB sensing and barometric relief*
  ULTRA LOW LEAK Air Dampers —
  ☐ Models with W7220 controller meets California Title 24 (section 120.2) Fault Detection and Diagnostic (FDD) requirements, has return, outside air and relief damper leakage that meets Title 24 (section 140.4 and ASHRAE 90.1) requirements - plus 5 year limited parts warranty. EconoMi$er X.
  ☐ Models with RTU Open controller meets California Title 24 (section 120.2) Fault Detection and Diagnostic (FDD) requirements, has return, outside air and relief damper leakage that meets Title 24 (section 140.4 and ASHRAE 90.1) requirements - plus 5 year limited parts warranty. EconoMi$er 2.

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☐ RTU Open multi-protocol controller communicates to LON, MODBUS, BACNET and Johnson N2 protocols.
☐ CCN Direct Digital Control (DDC) - PremierLink™
☐ Through the base connectors electric conduit
☐ Two-position motorized outdoor air damper*
☐ Non-fused disconnect switch
☐ Powered 115-volt convenience outlet*
☐ Non-powered 115-volt convenience outlet
☐ High static indoor fan motor and drive
☐ Return Air smoke detector
☐ Supply Air smoke detector
☐ Smoke detectors — return and supply air
☐ CO2 Sensor
☐ Condenser hail guard — louvered style*
☐ Special coating protection for evaporator and condenser coils*

* Not available on single phase (-3) voltage models.

OPTIONAL WARRANTIES
☐ Complete Unit Parts only up to 5 years
☐ Complete Unit Parts and Labor up to 5 years

Many other optional warranties are available. See the Commercial Start-Up and Optional Extended Warranty Price price pages for further information.
FIELD INSTALLED ACCESSORIES

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NOTES:
1. ROOF CURB ACCESSORY IS SHIPPED DISASSEMBLED.
2. INSULATED PANELS: 25.4 [1"] POLYURETHANE FOAM, 44.5 [1-3/4"] DENSITY.
3. DIMENSIONS [IN] ARE IN MILLIMETERS.
4. ROOF CURB: 16 GA STEEL.
5. ATTACH DUCTWORK TO CURB (FLANGES OF DUCT REST ON CURB)
6. SERVICE CLEARANCE 4 FT GIVE EACH SIDE
7. DIRECTION OF AIRFLOW
8. CONNECTOR PACKAGE CRBTMPWR001A01 IS FOR THRU-THE-CURB GAS TYPE
   PACKAGE CRBTMPWR003A01 IS FOR THRU-THE-BOTTOM TYPE GAS CONNECTIONS.

CONNECTOR PKG. ACC. | GAS CONNECTION TYPE | GAS FITTING | POWER WIRING FITTING | CONTROL WIRING FITTING | ACCESSORY COMPONENTS | OUTLET WIRING CONNECTOR
---------------------|---------------------|--------------|-----------------------|------------------------|-----------------------|------------------------
CRBTMPWR003A01      | THRU THE BOTTOM     | 3/8" NPT     | 1/2" [12.7] NPT       | 1/2" [12.7] NPT         | 1-1/2 [38.1]" NPT     |

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