50HC 17-28 WEATHERMASTER® SERIES
SINGLE PACKAGE ROOFTOP
COOLING UNITS WITH OPTIONAL ELECTRIC
HEAT AND ENERGYX®

— PERFORMANCE DATA

— CERTIFIED DIMENSION PRINTS

— CERTIFIED ROOF CURB DETAILS
50HC units are high-efficiency, single-packaged electric cooling and optional electric heat units that are pre-wired and pre-charged with Puron® (R-410A) HFC refrigerant. Electric heat is available as a field-installed accessory. The units are factory tested in in both heating and cooling modes. The EnergyX® is a factory-installed and integrated Energy Recover Ventilator (ERV) which, when installed, provides total integration for optimum performance. Units may be ordered with various factory-installed options. Field-installed accessories are also available. This unit exceeds the DOE-2018 (Department of Energy), ASHRAE 90.1-2016 (American Society of Heating, Refrigerating, and Air-Conditioning Engineers), and IECC®-2015 (International Energy Conservation Code) minimum efficiency requirements when equipped with the Staged Air Volume (SAV™) system.

**FEATURES**

**Standard Base Unit**
- Puron (R-410A) HFC refrigerant
- IEERs up to 14.0 with SAV
- IEERs up to 13.4 without SAV
- EERs up to 12.2
- ASHRAE 90.1-2016 compliant and Energy Star qualified
- Rated in accordance with AHRI Standards 340/360
- Designed in accordance with Underwriters Laboratories Std 1995
- Listed by ETL and ETL-Canada
- Two-stage cooling capacity control on all models
- Non-corrosive composite sloping design; side or center drain condensate pan. Meets ASHRAE Standard 62
- Cooling operating range up to 125°F (52°C), and down to 35°F (2°C) standard. See factory-installed options and field-installed accessories for lower operating range capabilities
- Dedicated vertical and horizontal airflow models available as factory option — no special kits required
- Two-inch disposable return air filters. Four inch track available as field-installed accessory
- Thru-the-bottom power entry capability
- Single point electric connections
- 24-volt control circuit protected with resettable circuit breaker
- Belt drive evaporator-fan motor and pulley on all three phase voltage models
- Totally enclosed condenser motors with permanently lubricated bearings
- Low-pressure and high-pressure switches
- Full perimeter base rail with built-in rigging adapters and fork truck slots
- Centralized terminal board facilitating simple safety circuit troubleshooting and simplified control box arrangement

**Standard Base Unit with EnergyX**
- Combined Efficiency Factors (CEF) up to 17.0+
- Comfort Link Controls that provide:
  - Scrolling marquee display
  - Time schedule and service run test
  - Service diagnostics, alarms, and alarm, history
  - Sensor or thermostat sensor capabilities
- Outside air and exhaust air CFM monitoring and display capabilities
- Variable speed energy recovery fans for Demand Controlled Ventilation
- Dedicated vertical airflow models available. Horizontal curb kit available as a field-installed accessory

**Cabinet**
- Access panels with easy grip handles and 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**
- TXV refrigerant metering device with removable power element on each circuit
- Liquid line filter drier
- Scroll compressors with internal line-break overload protection
- Copper tube, aluminum fin coils with optional corrosion resistant coils
- Removable gauge line plugs for reading refrigerant pressure with unit panels in place

**Standard Limited Parts Warranty**
- 5-year electric heater parts (field-installed)
- 5-year compressor parts
- 5-year energy wheel parts
- 5-year Ultra Low Leak Economizer parts
- 1-year parts

* IECC is a registered trademark of International Code Council, Inc.
### PERFORMANCE DATA

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### ELECTRICAL DATA

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### SUBMITTAL DATA

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### FACTORY-INSTALLED OPTIONS

#### Economizer with DRY BULB Sensing and Barometric Relief
- **Low Leak Air Dampers**
  - Models with W7212 controller provide standard non-diagnostic control (EconoMi$er® IV system).
  - Models with W7220 controller meet California Title 24-2016 Section 120.2.i for Fault Detection and Diagnostic (FDD) requirements (EconoMi$er X system).
  - Models with RTU Open controller meet California Title 24-2016 Section 120.2.i Fault Detection and Diagnostic (FDD) requirements (EconoMi$er 2 system).
  - Models with Comfortlink controller meet California Title 24-2016 Section 120.2.i Fault Detection and Diagnostic (FDD) requirements (EconoMi$er 2 system).
  - Models with PremierLink® controller. PremierLink controller does not meet California Title 24-2016 Section 120.2.i Fault Detection and Diagnostic (FDD) requirement (EconoMi$er 2 system).

#### Economizer with ENTHALPY Sensing and Barometric Relief
- **Low Leak Air Dampers**
  - Models with W7212 controller provide standard non-diagnostic control (EconoMi$er IV system).
  - Models with W7220 controller meet California Title 24-2016 Section 120.2.i for Fault Detection and Diagnostic (FDD) requirements (EconoMi$er X system).
  - Models with RTU Open controller meet California Title 24-2016 Section 120.2.i Fault Detection and Diagnostic (FDD) requirements (EconoMi$er 2 system).
  - Models with Comfortlink controller meet California Title 24-2016 Section 120.2.i Fault Detection and Diagnostic (FDD) requirements (EconoMi$er 2 system).
  - Models with PremierLink controller. PremierLink controller does not meet California Title 24-2016 Section 120.2.i Fault Detection and Diagnostic (FDD) requirement (EconoMi$er 2 system).

#### Economizer with DRY BULB Sensing and Barometric Relief
**ULTRA LOW LEAK Air Dampers**
- Models with W7220 controller meet California Energy Commission Title 24-2016 perspective section 140.4 (damper leakage, etc.), and mandatory section 120.2.i for Fault Detection and Diagnostic controls. Economizers meet ASHRAE 90.1-2016 damper leakage requirements as stated in section 6.5.1.1.4 and Table 6.4.3.4.3, and meet 2016 Fault Detection and Diagnostic requirements in section 6.4.3.12. Economizers meet IECC 2012 section C402.4.5.2 and, IECC 2015 sections C403.2.4.3 and C403.3.3.5 for outside air, return air, and relief air damper leakage requirements and IECC 2015 section C403.2.4.7 for Fault Detection and Diagnostic requirements. NOTE: IECC 2015 section C403.2.4.7.1 requires differential return air sensor, which must be ordered separately. Outside air, return air, and relief air (volume) dampers are AMCA rated — plus 5 year limited parts warranty (EconoMi$er 2 system).
- Models with PremierLink meet California Energy Commission Title 24-2016 perspective section 140.4 (damper leakage, etc.) and mandatory section 120.2.i for Fault Detection and Diagnostic requirements. Economizers meet ASHRAE 90.1-2016 damper leakage requirements as stated in section 6.5.1.1.4 and Table 6.4.3.4.3, and meet 2016 Fault Detection and Diagnostic requirements in section 6.4.3.12. Economizers meet IECC 2012 section C402.4.5.2 and, IECC 2015 sections C403.2.4.3 and C403.3.3.5 for outside air, return air, and relief air damper leakage requirements and IECC 2015 section C403.2.4.7 for Fault Detection and Diagnostic requirements. NOTE: IECC 2015 section C403.2.4.7.1 requires differential return air sensor, which must be ordered separately. Outside air, return air, and relief air (volume) dampers are AMCA rated — plus 5 year limited parts warranty (EconoMi$er 2 system).

#### Economizer with ENTHALPY Sensing and Barometric Relief
**ULTRA LOW LEAK Air Dampers**
- Models with W7220 controller meet California Energy Commission Title 24-2016 perspective section 140.4 (damper leakage, etc.), and mandatory section 120.2.i for Fault Detection and Diagnostic controls. Economizers meet ASHRAE 90.1-2016 damper leakage requirements as stated in section 6.5.1.1.4 and Table 6.4.3.4.3, and meet 2016 Fault Detection and Diagnostic requirements in section 6.4.3.12. Economizers meet IECC 2012 section C402.4.5.2 and, IECC 2015 sections C403.2.4.3 and C403.3.3.5 for outside air, return air, and relief air damper leakage requirements and IECC 2015 section C403.2.4.7 for Fault Detection and Diagnostic requirements. NOTE: IECC 2015 section C403.2.4.7.1 requires differential return air sensor, which must be ordered separately. Outside air, return air, and relief air (volume) dampers are AMCA rated — plus 5 year limited parts warranty (EconoMi$er 2 system).
FACTORY-INSTALLED OPTIONS (CONT)

☐ Economizer with ENTHALPY Sensing and Barometric Relief (cont)

ULTRA LOW LEAK Air Dampers —

○ Models with ComfortLink meet California Energy Commission Title 24-2016 perspective section 140.4 (damper leakage, etc.) and mandatory section 120.2.i for Fault Detection and Diagnostic requirements. Economizers meet ASHRAE 90.1-2016 damper leakage requirements as stated in section 6.5.1.1.4 and Table 6.4.3.4.3, and meet 2016 Fault Detection and Diagnosis requirements in section 6.4.3.12. Economizers meet IECC 2012 section C402.4.5.2 and, IECC 2015 sections C403.2.4.3 and C403.3.3.5 for outside air, return air, and relief air damper leakage requirements and IECC 2015 section C403.2.4.7 for Fault Detection and Diagnostic requirements.

NOTE: IECC 2015 section C403.2.4.7.1 requires differential return air sensor, which must be ordered separately.

Outside air, return air, and relief air (volume) dampers are AMCA rated — plus 5 year limited parts warranty (EconoMi$er® 2 system).

○ Models with RTU Open meet California Energy Commission Title 24-2016 perspective section 140.4 (damper leakage, etc.) and mandatory section 120.2.i for Fault Detection and Diagnostic requirements. Economizers meet ASHRAE 90.1-2016 damper leakage requirements as stated in section 6.5.1.1.4 and Table 6.4.3.4.3, and meet 2016 Fault Detection and Diagnosis requirements in section 6.4.3.12. Economizers meet IECC 2012 section C402.4.5.2 and, IECC 2015 sections C403.2.4.3 and C403.3.3.5 for outside air, return air, and relief air damper leakage requirements and IECC 2015 section C403.2.4.7 for Fault Detection and Diagnostic requirements.

NOTE: IECC 2015 section C403.2.4.7.1 requires differential return air sensor, which must be ordered separately.

Outside air, return air, and relief air (volume) dampers are AMCA rated — plus 5 year limited parts warranty (EconoMi$er 2 system).

○ Models with PremierLink™ meet California Energy Commission Title 24-2016 perspective section 140.4 (damper leakage, etc.) and mandatory section 120.2.i for Fault Detection and Diagnostic requirements. Economizers meet ASHRAE 90.1-2016 damper leakage requirements as stated in section 6.5.1.1.4 and Table 6.4.3.4.3, and meet 2016 Fault Detection and Diagnosis requirements in section 6.4.3.12. Economizers meet IECC 2012 section C402.4.5.2 and, IECC 2015 sections C403.2.4.3 and C403.3.3.5 for outside air, return air, and relief air damper leakage requirements and IECC 2015 section C403.2.4.7 for Fault Detection and Diagnostic requirements.

NOTE: IECC 2015 section C403.2.4.7.1 requires differential return air sensor, which must be ordered separately.

Outside air, return air, and relief air (volume) dampers are AMCA rated — plus 5 year limited parts warranty (EconoMi$er 2 system).

☐ Staged Air Volume (SAV) system utilizes a Variable Frequency Drive (VFD) to automatically adjust the indoor fan motor for 2-speed indoor fan motor control. Conforms to ASHRAE 90.1-2013 Standard — section 6.4.3.10.b. Available on all models with two stage cooling control.

☐ EnergyX Energy Recovery

☐ EnergyX with Economizer

☐ EnergyX with Frost Protection

☐ EnergyX with Frost Protection and Economizer

☐ RTU Open multi-protocol controller communicates to LonWorks®, MODBUS™, BACnet®, and Johnson Controls

☐ Energy Recover wheel bypass Enthalpy economizer

☐ CCN Direct Digital Control (DDC) — PremierLink™ controller

☐ ComfortLink controller that provides:

— scrolling marquee display
— time schedule and service run test
— service diagnostic, alarms, and alarm history
— sensor or thermostat sensing capabilities

☐ Through the base connectors for electric conduit

☐ Humidi-MiZer® adaptive dehumidification system

☐ Two-position motorized outdoor air damper

☐ Low Ambient Controller for cooling operation down to 0°F (~18°C)

☐ Electric heaters and single point electrical point kits.

☐ HACR circuit breaker

☐ Non-fused disconnect†††

☐ Powered 115-volt convenience outlet

☐ Non-powered 115-volt convenience outlet

☐ High static evaporator fan motor

☐ Return Air smoke detector

☐ Supply Air smoke detector

☐ CO₂ Sensor

☐ Special coating protection for evaporator and condenser coils

☐ Hinged panels for easy unit access

☐ Condenser hail guard - louvered style

☐ Foil faced insulation throughout entire cabinet

☐ Power exhaust — centrifugal fan design

* Not available on units equipped with SAV 2-speed fan motor.
††† LonWorks is a registered trademark of Echelon Corporation.
** MODBUS is a registered trademark of Schneider Electric.
*** BACnet is a registered trademark of ASHRAE (American Society of Heating, Refrigeration, and Air-Conditioning Engineers).
**** HACR circuit breaker cannot be used when rooftop MOCP electrical rating exceeds 200 amps at 208/230 volt, 90 amps at 460 volts, and 90 amps at 575 volts. 575 volts can only be used on Wye power supply. Delta power supply is prohibited. Carrier’s RTUBuilder selects this automatically.
† † † Non-fused disconnect switch cannot be used when MOCP electrical rating exceeds 70 amps at 460/575 volt and 150 amps at 208/230 volt. Carrier’s Packaged RTUBuilder selects this automatically.
**FIELD-INSTALLED ACCESSORIES**

- **Economizer with DRY BULB Sensing and Barometric Relief**
  - Low Leak Air Dampers —
    - Models with W7212 controller provide standard non-diagnostic control (EconoMi$er® IV system).
    - Models with W7220 controller meet California Title 24-2016 Section 120.2.i for Fault Detection and Diagnostic (FDD) requirements (EconoMi$er X system).
    - Models with RTU Open controller meet California Title 24-2016 Section 120.2.i Fault Detection and Diagnostic (FDD) requirements (EconoMi$er 2 system).
    - Models with ComfortLink controller meet California Title 24-2016 Section 120.2.i Fault Detection and Diagnostic (FDD) requirements (EconoMi$er 2 system).
  - Models with PremierLink™ controller. PremierLink controller does not meet California Title 24-2016 Section 120.2.i Fault Detection and Diagnostic (FDD) requirements (EconoMi$er IV system).

- **Economizer with ENTHALPY Sensing and Barometric Relief**
  - Low Leak Air Dampers —
    - Models with W7212 controller provide standard non-diagnostic control (EconoMi$er IV system).
    - Models with W7220 controller meet California Title 24-2016 Section 120.2.i for Fault Detection and Diagnostic (FDD) requirements (EconoMi$er X system).
    - Models with RTU Open controller meet California Title 24-2016 Section 120.2.i Fault Detection and Diagnostic (FDD) requirements (EconoMi$er 2 system).
    - Models with ComfortLink controller meet California Title 24-2016 Section 120.2.i Fault Detection and Diagnostic (FDD) requirements (EconoMi$er 2 system).
  - Models with PremierLink™ controller. PremierLink controller does not meet California Title 24-2016 Section 120.2.i Fault Detection and Diagnostic (FDD) requirements (EconoMi$er X system).

- **Economizer with DRY BULB Sensing and Barometric Relief**
  - Ultra Low Leak Air Dampers —
    - Models with W7220 controller meet California Energy Commission Title 24-2016 perspective section 140.4 (damper leakage, etc.) and mandatory section 120.2.i for Fault Detection and Diagnostic controls. Economizers meet ASHRAE 90.1-2016 damper leakage requirements as stated in section 6.5.1.1.4 and Table 6.4.3.4.3, and meet 2016 Fault Detection and Diagnostic requirements in section 6.4.3.12. For outside air, return air, and relief air damper leakage requirements, Economizers meet ASHRAE 90.1-2016 damper leakage requirements as stated in section 6.5.1.1.4 and Table 6.4.3.4.3, and meet 2016 Fault Detection and Diagnostic requirements in section 6.4.3.12. Economizers meet IECC 2012 section C402.4.5.2 and, IECC 2015 sections C403.2.4.3 and C403.3.3.5 for outside air, return air, and relief air damper leakage requirements and IECC 2015 section C403.2.4.7 for Fault Detection and Diagnostic requirements.
    - NOTE: IECC 2015 section C403.2.4.7.1 requires differential return air sensor, which must be ordered separately. Outside air, return air, and relief air (volume) dampers are AMCA rated — plus 5 year limited parts warranty (EconoMi$er 2 system).
    - Models with PremierLink™ controller. PremierLink controller does not meet California Title 24-2016 Section 120.2.i Fault Detection and Diagnostic (FDD) requirements (EconoMi$er IV system).
  - Models with RTU Open meet California Energy Commission Title 24-2016 perspective section 140.4 (damper leakage, etc.) and mandatory section 120.2.i for Fault Detection and Diagnostic requirements. Economizers meet ASHRAE 90.1-2016 damper leakage requirements as stated in section 6.5.1.1.4 and Table 6.4.3.4.3, and meet 2016 Fault Detection and Diagnostic requirements in section 6.4.3.12. Economizers meet IECC 2012 section C402.4.5.2 and, IECC 2015 sections C403.2.4.3 and C403.3.3.5 for outside air, return air, and relief air damper leakage requirements and IECC 2015 section C403.2.4.7 for Fault Detection and Diagnostic requirements.
    - NOTE: IECC 2015 section C403.2.4.7.1 requires differential return air sensor, which must be ordered separately. Outside air, return air, and relief air (volume) dampers are AMCA rated — plus 5 year limited parts warranty (EconoMi$er 2 system).
  - Models with SystemVu™ meet California Energy Commission Title 24-2016 perspective section 140.4 (damper leakage, etc.) and mandatory section 120.2.i for Fault Detection and Diagnostic requirements. Economizers meet ASHRAE 90.1-2016 damper leakage requirements as stated in section 6.5.1.1.4 and Table 6.4.3.4.3, and meet 2016 Fault Detection and Diagnostic requirements in section 6.4.3.12. Economizers meet IECC 2012 section C402.4.5.2 and, IECC 2015 sections C403.2.4.3 and C403.3.3.5 for outside air, return air, and relief air damper leakage requirements and IECC 2015 section C403.2.4.7 for Fault Detection and Diagnostic requirements.
  - Models with SystemVu™ meet California Energy Commission Title 24-2016 perspective section 140.4 (damper leakage, etc.) and mandatory section 120.2.i for Fault Detection and Diagnostic requirements. Economizers meet ASHRAE 90.1-2016 damper leakage requirements as stated in section 6.5.1.1.4 and Table 6.4.3.4.3, and meet 2016 Fault Detection and Diagnostic requirements in section 6.4.3.12. Economizers meet IECC 2012 section C402.4.5.2 and, IECC 2015 sections C403.2.4.3 and C403.3.3.5 for outside air, return air, and relief air damper leakage requirements and IECC 2015 section C403.2.4.7 for Fault Detection and Diagnostic requirements.
    - NOTE: IECC 2015 section C403.2.4.7.1 requires differential return air sensor, which must be ordered separately. Outside air, return air, and relief air (volume) dampers are AMCA rated — plus 5 year limited parts warranty (EconoMi$er 2 system).

- **Economizer with DRY BULB Sensing and Barometric Relief**
  - Ultra Low Leak Air Dampers —
    - Models with W7220 controller meet California Energy Commission Title 24-2016 perspective section 140.4 (damper leakage, etc.) and mandatory section 120.2.i for Fault Detection and Diagnostic controls. Economizers meet ASHRAE 90.1-2016 damper leakage requirements as stated in section 6.5.1.1.4 and Table 6.4.3.4.3, and meet 2016 Fault Detection and Diagnostic requirements in section 6.4.3.12. For outside air, return air, and relief air damper leakage requirements, Economizers meet ASHRAE 90.1-2016 damper leakage requirements as stated in section 6.5.1.1.4 and Table 6.4.3.4.3, and meet 2016 Fault Detection and Diagnostic requirements in section 6.4.3.12. Economizers meet ASHRAE 90.1-2016 damper leakage requirements as stated in section 6.5.1.1.4 and Table 6.4.3.4.3, and meet 2016 Fault Detection and Diagnostic requirements in section 6.4.3.12. Economizers meet IECC 2012 section C402.4.5.2 and, IECC 2015 sections C403.2.4.3 and C403.3.3.5 for outside air, return air, and relief air damper leakage requirements and IECC 2015 section C403.2.4.7 for Fault Detection and Diagnostic requirements.
    - NOTE: IECC 2015 section C403.2.4.7.1 requires differential return air sensor, which must be ordered separately. Outside air, return air, and relief air (volume) dampers are AMCA rated — plus 5 year limited parts warranty (EconoMi$er 2 system).
    - Models with PremierLink™ controller. PremierLink controller does not meet California Title 24-2016 Section 120.2.i Fault Detection and Diagnostic (FDD) requirement (EconoMi$er 2 system).

- **Economizer with DRY BULB Sensing and Barometric Relief**
  - Ultra Low Leak Air Dampers —
    - Models with W7220 controller meet California Energy Commission Title 24-2016 perspective section 140.4 (damper leakage, etc.) and mandatory section 120.2.i for Fault Detection and Diagnostic controls. Economizers meet ASHRAE 90.1-2016 damper leakage requirements as stated in section 6.5.1.1.4 and Table 6.4.3.4.3, and meet 2016 Fault Detection and Diagnostic requirements in section 6.4.3.12. For outside air, return air, and relief air damper leakage requirements, Economizers meet ASHRAE 90.1-2016 damper leakage requirements as stated in section 6.5.1.1.4 and Table 6.4.3.4.3, and meet 2016 Fault Detection and Diagnostic requirements in section 6.4.3.12. Economizers meet IECC 2012 section C402.4.5.2 and, IECC 2015 sections C403.2.4.3 and C403.3.3.5 for outside air, return air, and relief air damper leakage requirements and IECC 2015 section C403.2.4.7 for Fault Detection and Diagnostic requirements.
    - NOTE: IECC 2015 section C403.2.4.7.1 requires differential return air sensor, which must be ordered separately. Outside air, return air, and relief air (volume) dampers are AMCA rated — plus 5 year limited parts warranty (EconoMi$er 2 system).
FIELD-INSTALLED ACCESSORIES

☐ Economizer with DRY BULB Sensing and Barometric Relief (Cont)

ULTRA LOW LEAK Air Dampers —
- Models with I/O Flex meet California Energy Commission Title 24-2016 perspective section 140.4 (damper leakage, etc.) and mandatory section 120.2.i for Fault Detection and Diagnostic requirements. Models with I/O Flex 6f26 controller meet ASHRAE 90.1-2016 damper leakage requirements as stated in section 6.5.1.1.4 and Table 6.4.3.4.3, and meet 2016 Fault Detection and Diagnosis requirements in section 6.4.3.12. Economizers meet IECC 2012 section C402.4.5.2 and, IECC 2015 sections C403.2.4.3 and C403.3.3.5 for outside air, return air, and relief air damper leakage requirements and IECC 2015 section C403.2.4.7 for Fault Detection and Diagnostic requirements.

NOTE: IECC 2015 section C403.2.4.7.1 requires differential return air sensor, which must be ordered separately.

Outside air, return air, and relief air (volume) dampers are AMCA rated — plus 5 year limited parts warranty (EconoMiS® 2 system).

☐ Economizer with ENTHALPY Sensing and Barometric Relief

ULTRA LOW LEAK Air Dampers —
- Models with W7220 controller meet California Energy Commission Title 24-2016 perspective section 140.4 (damper leakage, etc.), and mandatory section 120.2.i for Fault Detection and Diagnostic controls. Economizers meet ASHRAE 90.1-2016 damper leakage requirements as stated in section 6.5.1.1.4 and Table 6.4.3.4.3, and meet 2016 Fault Detection and Diagnosis requirements in section 6.4.3.12. For outside air, return, and relief air damper leakage requirements economizers meet IECC 2012 section C402.4.5.2 and, IECC 2015 sections C403.2.4.3 and C403.3.3.5 and IECC 2015 section C403.2.4.7 for Fault Detection and Diagnostic requirements.

NOTE: IECC 2015 section C403.2.4.7.1 requires differential return air sensor, which must be ordered separately.

Outside air, return air, and relief air (volume) dampers are AMCA rated — plus 5 year limited parts warranty (EconoMiS® 2 system).

- Models with RTU Open meet California Energy Commission Title 24-2016 perspective section 140.4 (damper leakage, etc.) and mandatory section 120.2.i for Fault Detection and Diagnostic requirements. Economizers meet ASHRAE 90.1-2016 damper leakage requirements as stated in section 6.5.1.1.4 and Table 6.4.3.4.3, and meet 2016 Fault Detection and Diagnostic requirements in section 6.4.3.12. Economizers meet IECC 2012 section C402.4.5.2 and, IECC 2015 sections C403.2.4.3 and C403.3.3.5 for outside air, return air, and relief air damper leakage requirements and IECC 2015 section C403.2.4.7 for Fault Detection and Diagnostic requirements.

NOTE: IECC 2015 section C403.2.4.7.1 requires differential return air sensor, which must be ordered separately.

Outside air, return air, and relief air (volume) dampers are AMCA rated — plus 5 year limited parts warranty. (EconoMiS® 2 system).

- Models with ComfortLink meet California Energy Commission Title 24-2016 perspective section 140.4 (damper leakage, etc.) and mandatory section 120.2.i for Fault Detection and Diagnostic requirements. Economizers meet ASHRAE 90.1-2016 damper leakage requirements as stated in section 6.5.1.1.4 and Table 6.4.3.4.3, and meet 2016 Fault Detection and Diagnosis requirements in section 6.4.3.12.

Economizers meet IECC 2012 section C402.4.5.2 and, IECC 2015 sections C403.2.4.3 and C403.3.3.5 for outside air, return air, and relief air damper leakage requirements and IECC 2015 section C403.2.4.7 for Fault Detection and Diagnostic requirements.

NOTE: IECC 2015 section C403.2.4.7.1 requires differential return air sensor, which must be ordered separately.

Outside air, return air, and relief air (volume) dampers are AMCA rated — plus 5 year limited parts warranty (EconoMiS® 2 system).

- Models with PremierLink™ meet California Energy Commission Title 24-2016 perspective section 140.4 (damper leakage, etc.) and mandatory section 120.2.i for Fault Detection and Diagnostic requirements. Economizers meet ASHRAE 90.1-2016 damper leakage requirements as stated in section 6.5.1.1.4 and Table 6.4.3.4.3, and meet 2016 Fault Detection and Diagnostic requirements in section 6.4.3.12. Economizers meet IECC 2012 section C402.4.5.2 and, IECC 2015 sections C403.2.4.3 and C403.3.3.5 for outside air, return air, and relief air damper leakage requirements and IECC 2015 section C403.2.4.7 for Fault Detection and Diagnostic requirements.

NOTE: IECC 2015 section C403.2.4.7.1 requires differential return air sensor, which must be ordered separately.

Outside air, return air, and relief air (volume) dampers are AMCA rated — plus 5 year limited parts warranty (EconoMiS® 2 system).
Display Kit for Variable Frequency Drive (VFD), Staged Air Volume (SAV) system. Allows additional setup and diagnostics of the unit VFD controller. Can be unit mounted or used with any other compatible VFD model as a reusable device.

ComfortLink economizer control board (when ComfortLink and field-installed economizer are required)

Energy Demand System — wireless automated demand management and response controllers

Electric heater(s)

Power exhaust — centrifugal

Barometric relief fan design

Two-position motorized outdoor air damper

Manual outside air damper

Roof curb — 14 inch (356 mm) tall

Roof curb — 24 inch (610 mm) tall

Horizontal roof curb adapts to standard base unit and directs airflow horizontally

Thru-the-bottom connections, electrical

Condenser hail guard, louvered style

Phase monitor (loss of phase/phase reversal)

Winter start kit, down to 25°F (–4°C)

Low ambient head pressure controller, down to 0°F (–18°C)

Low ambient head pressure controller, down to –20°F (–29°C)

Time Guard II compressor anti-cycle protection

Thermostats and Sensors

Return Air smoke detector

Supply Air smoke detector

Filter status indicator switch

Motor status indicator switch

Four-inch return air filter track

Economizer Sensors

Single dry bulb control

Differential dry bulb control

Single enthalpy control

Differential enthalpy control

CO₂ — wall mounted

CO₂ — duct mounted

CO₂ — unit mounted

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 pages for further information.

* Not available on units with EnergyX® installed.
† Not available with SAV 2-speed fan motor.
UNIT DIMENSION PRINT

Fig. 1 — 50HC**17 Base Unit Dimensions
Fig. 1 — 50HC**17 Base Unit Dimensions (cont)
*Standard unit weight is without electric heat and without packaging. For other options and accessories, refer to the product data catalog.
Fig. 2 — 50HC**20-24 Base Unit Dimensions
Fig. 2 — 50HC**20,24 Base Unit Dimensions (cont)
UNIT DIMENSION PRINT

Fig. 2 — 50HC**20,24 Base Unit Dimensions (cont)

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UNIT DIMENSION PRINT

<table>
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* STANDARD UNIT WEIGHT IS WITHOUT ELECTRIC HEAT AND WITHOUT PACKAGING.

FOR OTHER OPTIONS AND ACCESSORIES, REFER TO THE PRODUCT DATA CATALOG.
Fig. 3 — 50HC**28 Base Unit Dimensions (cont)
Fig. 3 — 50HC**28 Base Unit Dimensions (cont)
Fig. 4 — 50HC**17 Base Unit Dimensions with EnergyX®
Fig. 4 — 50HC**17 Base Unit Dimensions with EnergyX® (cont)
Fig. 5 — 50HC**20 Base Unit Dimensions with EnergyX®
Fig. 5 — 50HC**20 Base Unit Dimensions with EnergyX® (cont)
Fig. 6 — 50HC**24 Base Unit Dimensions with EnergyX®
Fig. 6 — 50HC**24 Base Unit with EnergyX® (cont)
Fig. 7 — 50HC**28 Base Unit Dimensions with EnergyX®
Fig. 8 — 50HC**14 Roof Curb Dimensions
Fig. 9 — 50HC**14 Roof Curb Dimensions
Fig. 10 — 50HC**14 Roof Curb Dimensions