50HC WEATHERMASTER® SERIES
SINGLE PACKAGE ROOFTOP
COOLING ONLY WITH OPTIONAL ELECTRIC
HEAT AND ENERGYX®

— PERFORMANCE DATA

— CERTIFIED DIMENSION PRINTS

— CERTIFIED ROOF CURB DIMENSION PRINTS
DESCRIPTION

50HC 6 to 12.5 ton 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 the cooling mode. The EnergyX® is a factory-installed and integrated Energy Recovery Ventilator (ERV) which, when installed, provides total integration for optimum performance. The units are factory tested in both heating and cooling modes. Units may be ordered with various factory-installed options. Field-installed accessories are also available. This unit meets 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
- EERs up to 12.4
- IEERs up to 14.2 without SAV™
- IEERs up to 16.2 with SAV
- 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
- Single-stage cooling capacity control on 07 model
- Two-stage cooling capacity control on 08-14 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. Field installable accessory kit extends the minimum down to –20°F (–29°C)
- Field convertible from vertical to horizontal airflow for slab mounting, 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 18.0
- Helps reduce mechanical cooling load at design temperatures up to 4 tons per 1000 cfm of outside air.
- Helps reduce mechanical heating load up to 2.5 ton per 1000 cfm of outside air.
- Dedicated vertical airflow models available. Horizontal curb kit available as a field installed accessory
- Direct drive (multi-speed/torque) ECM indoor fan motor
- ComfortLink 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

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. Corrosion resistant coils are not available for single phase (-3 voltage) models
- 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
### PERFORMANCE DATA

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
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<tr>
<td>Unit Operating Weight</td>
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<tr>
<td><strong>COOLING</strong></td>
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<tr>
<td>Gross Total Capacity</td>
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<tr>
<td>at Condenser Air Temperature</td>
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<tr>
<td>Gross Sensible Capacity</td>
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<td>Compressor Power Input</td>
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<td>Indoor Entering: db / wb</td>
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<td>Exhaust Fan Motor Size</td>
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<td>Curb Weight</td>
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### HEATING (ELECTRIC)

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<td>Stage 2</td>
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### ELECTRICAL DATA

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<td>Maximum Overcurrent Protection</td>
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### SUBMITTAL DATA

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<td>Contractor</td>
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<td>Unit Designation</td>
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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 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

- 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 6.4.3.3 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, 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 C402.4.7.1 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 X 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 6.4.3.3 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 C402.4.4.1 requires differential return air sensor, which must be ordered separately.

- 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 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

- 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
  - 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 and IECC 2015 section C403.2.4.7 for fault detection and diagnostic requirements. NOTE: IECC 2015 section C402.4.4.1 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. 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.
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 90.1-2016 Standard — section 6.4.3.10.b. Available on all models with two-stage cooling controls as well as the 6 ton unit with single stage cooling capacity control.*

☐ RTU Open multi-protocol controller communicates to LonWorks², MODBUS**, BACnet††, and Johnson N2 protocols.

☐ Energy recovery wheel bypass enthalpy economizer

☐ EnergyX® with economizer only

☐ EnergyX with frost protection only

☐ EnergyX with economizer and frost protection

☐ ComfortLink controller (ComfortLink controller is not available on Size 07 2-stage cooling models and Size 11 models equipped with Humidi-MiZer system).***

☐ Through the base connectors for electric conduit

☐ Humidi-MiZer® adaptive dehumidification system (Not available on size 11 models equipped with ComfortLink controller)

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

☐ Two-position motorized outdoor air damper*, †††

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

☐ Return Air smoke detector (available on models 08-14 with EnergyX and models 07-14 without EnergyX)

☐ Supply Air smoke detector

☐ CO2 Sensor

☐ Special coating protection for evaporator and condenser coils

☐ Hinged panels for easy unit access

☐ Foil faced insulation throughout entire cabinet

☐ Condenser hail guard - louvered style

☐ Condensate overflow switch

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

† LonWorks is a registered trademark of Schneider Electric.

** MODBUS is a registered trademark of Schneider Electric.

†† BACnet is a registered trademark of ASHRAE (American Society of Heating, Refrigeration, and Air-Conditioning Engineers).

*** Available on units equipped with EnergyX only.

††† Not available with SAV 2-speed fan motor.
Economizer with DRY BULB Sensing and Barometric Relief®

Low Leak Air Dampers —

- Models with W7212 controller provide standard non-diagnostic control (EconoMiSer IV system).
- Models with W7220 controller meet California Title 24-2016 Section 120.2.i for Fault Detection and Diagnostic (FDD) requirements (EconoMiSer X system).
- Models with RTU Open controller meet California Title 24-2016 Section 120.2.i Fault Detection and Diagnostic (FDD) requirements (EconoMiSer 2 system).
- Models with ComfortLink controller meet California Title 24-2016 Section 120.2.i Fault Detection and Diagnostic (FDD) requirements (EconoMiSer 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 (EconoMiSer 2 system).

Economizer with ENTHALPY Sensing and Barometric Relief®

Low Leak Air Dampers —

- Models with W7212 controller provide standard non-diagnostic control (EconoMiSer IV system).
- Models with W7220 controller meet California Title 24-2016 Section 120.2.i Fault Detection and Diagnostic (FDD) requirements (EconoMiSer X system).
- Models with RTU Open controller meet California Title 24-2016 Section 120.2.i Fault Detection and Diagnostic (FDD) requirements (EconoMiSer 2 system).
- Models with ComfortLink controller meet California Title 24-2016 Section 120.2.i Fault Detection and Diagnostic (FDD) requirements (EconoMiSer 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 (EconoMiSer 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, and relief air damper leakage requirements economically 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 (EconoMiSer X 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 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 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 (EconoMiSer 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. 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 (EconoMiSer 2 system).

Economizer with DRY BULB Sensing and Barometric Relief®

ULTRA LOW LEAK Air Dampers —

- 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 (EconoMiSer 2 system).

* Not available for single phase (-3 voltage) models.
**FIELD-INSTALLED ACCESSORIES (CONT)**

- **Economizer with DRY BULB Sensing and Barometric Relief (cont)**
  - 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 6126 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 and return 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 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.

- **Models with ComfortLink**
  - 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**
  - 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™**
  - 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).

* Not available for single phase (-3 voltage) models.
FIELD-INSTALLED ACCESSORIES (CONT)

- Display Kit for Variable Frequency Drive (VFD), Staged Air Volume (SAV) system. Allows additional set up 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 — prop fan design
- Two-position motorized outdoor air damper
- Manual outside air damper 25%
- Manual outside air damper 50%
- 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 (models 07-12 only)
- Thru-the-bottom electrical and control connection kit (model 14 only)
- 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) (models 07 to 09 only)
- Low ambient head pressure controller, down to –20°F (–29°C)
- Time Guard II compressor anti-cycle protection
- Thermostats and Sensors
- Disconnect Switch Bracket (model 14 only when fused or non-fused disconnect is greater than 100 amps).
- Supply Duct Cover (size 14 only when field converting airflow from factory vertical to horizontal).
- Condensate overflow switch
- Four-inch filter track
- Filter status indicator switch*
- Motor status indicator switch*

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.

* Available on units with EnergyX® installed only
UNIT DIMENSION PRINT

Fig. 1 — 50HC**07-09 Base Unit Dimensions
### UNIT DIMENSION PRINT

<table>
<thead>
<tr>
<th>UNIT</th>
<th>STD UNIT</th>
<th>WEIGHT</th>
<th>CORNER A</th>
<th>CORNER B</th>
<th>CORNER C</th>
<th>CORNER D</th>
<th>C.G.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMC-A.007</td>
<td>704</td>
<td>569.9</td>
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<td>142.0</td>
<td>84.4</td>
<td>192.0</td>
<td>87.5</td>
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<td>SMC-008</td>
<td>864</td>
<td>880</td>
<td>159.8</td>
<td>92.4</td>
<td>174.4</td>
<td>80</td>
<td>177.5</td>
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<tr>
<td>SMC-009</td>
<td>888</td>
<td>880</td>
<td>159.8</td>
<td>92.4</td>
<td>174.4</td>
<td>80</td>
<td>177.5</td>
</tr>
</tbody>
</table>

* Standard unit weight is without electric heat and without packaging. For other options and accessories, refer to the product data catalog.

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**Fig. 1** — 50HC**07-09 Base Unit Dimensions (cont)
UNIT DIMENSION PRINT

Fig. 2 — 50HC**11, 50HC**12 Base Unit Dimensions
UNIT DIMENSION PRINT

Fig. 2 — 50HC**11, 50HC**12 Base Unit Dimensions (cont)
UNIT DIMENSION PRINT

Fig. 3 — 50HC**14 Base Unit Dimensions
UNIT DIMENSION PRINT

Fig. 3 — 50HC**14 Base Unit Dimensions (cont)
Fig. 4 — 50HC**07 Base Unit with EnergyX® Dimensions
UNIT DIMENSION PRINT

Fig. 4 — 50HC**07 Base Unit with EnergyX® Dimensions (cont)
Fig. 5 — 50HC**08-12 Base Unit with EnergyX® Dimensions
UNIT DIMENSION PRINT

Fig. 5 — 50HC**08-12 Base Unit with EnergyX® Dimensions (cont)

<table>
<thead>
<tr>
<th>UNIT</th>
<th>ID.</th>
<th>WEIGHT</th>
<th>HDG. (A)</th>
<th>CORNER</th>
<th>HDG. (B)</th>
<th>CORNER</th>
<th>HDG. (C)</th>
<th>CORNER</th>
<th>HDG. (D)</th>
<th>C. G.</th>
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</thead>
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<tr>
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<td>310</td>
<td>300</td>
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<td>50HC-005</td>
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<td>110</td>
<td>310</td>
<td>140</td>
</tr>
<tr>
<td>50HC-006</td>
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<td>195</td>
<td>310</td>
<td>300</td>
<td>210</td>
<td>125</td>
<td>150</td>
<td>110</td>
<td>310</td>
<td>140</td>
</tr>
</tbody>
</table>

*STANDARD UNIT WEIGHT IS REMOVED ELECTRIC HEAT AND REMOVABLE PACKAGING. FOR OTHER OPTIONS AND ACCESSORIES, REFER TO THE PRODUCT DATA CATALOG.*

50HC 12 SHOWN - SEE DETAIL A FOR OUTDOOR FAN VARIATIONS
UNIT DIMENSION PRINT

Fig. 6 — 50HC**14 Base Unit with EnergyX® Dimensions
### Fig. 6 — 50HC**14 Base Unit with EnergyX® Dimensions (cont)

<table>
<thead>
<tr>
<th>Dimension</th>
<th><strong>(in.</strong></th>
<th><strong>(cm)</strong></th>
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</thead>
<tbody>
<tr>
<td><strong>L</strong></td>
<td><strong>W</strong></td>
<td><strong>H</strong></td>
</tr>
<tr>
<td><strong>L</strong></td>
<td><strong>W</strong></td>
<td><strong>H</strong></td>
</tr>
</tbody>
</table>

**UNIT DIMENSION PRINT**

STANDARD UNIT WEIGHT is WITHOUT ELECTRIC HEAT & WITHOUT PACKAGING.

FOR OPTIONS & ACCESSORIES, REFER TO THE PRODUCT DATA CATALOG.
Fig. 7 — 50HC**07-12 Roof Curb Dimensions
Fig. 8 — 50HC**14 Roof Curb Dimensions