48HC 07-14 WEATHERMASTER® SERIES
SINGLE PACKAGE ROOFTOP
GAS HEAT/ELECTRIC COOLING UNITS WITH
OPTIONAL ENERGYX®

— PERFORMANCE DATA

— CERTIFIED DIMENSION PRINTS

— CERTIFIED ROOF CURB DETAILS
**DESCRIPTION**

48HC single package rooftop units are high-efficiency, single-packaged electric cooling, gas heating units that are pre-wired and pre-charged with Puron® (R-410A) HFC refrigerant. The EnergyX® is a factory-installed and integrated Energy Recover 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. 48HC single package rooftop units exceed 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 without SAV
- IEERs up to 16.0 with SAV
- EERs up to 12.2
- Designed in accordance with Underwriters’ Laboratories Std 1995
- Listed by ETL and ETL-Canada
- Energy Star® certified
- Single-stage cooling capacity control on size 07
- Two-stage cooling capacity control on sizes 07 to 14
- 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
- Field convertible from vertical to horizontal airflow for slab mounting, no special kits required for sizes 07 to 12
- Two-inch disposable return air filters
- Thru-the-bottom power and gas entry capability
- Single point gas and electric connections
- 24-volt control circuit protected with resettable circuit breaker
- Belt drive evaporator-fan motor and pulley on all three phase voltage models
- Permanently lubricated evaporator-fan motor
- 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**

- All features listed above
- Combined Efficiency Factors (CEF) up to 18.0+
- Rated in accordance with AHRI Standards 340/360
- Energy recovery rated and certified in accordance with AHRI Standard 1060-2000
- Help 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 100 cfm of outside air
- Dedicated vertical airflow models available. Horizontal curb kit available as 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

### 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

### Gas Heat

- Exclusive IGC anti-cycle protection for gas heat operation
- IGC solid-state gas heat exchanger control for on-board diagnostics, anti-cycle protection, LED error code designation, burner control logic and energy saving indoor fan motor delay
- Gas efficiencies up to 82%
- Inducted draft combustion
- Redundant gas valve, with up to two stages of heating
- Flame roll-out safety protector
- Solid-state electronic direct spark ignition system

### Standard Limited Parts Warranty

- 15-year gas heat exchanger parts - Stainless Steel
- 10-year gas heat exchanger parts - Aluminized
- 5-year compressor parts
- 5-year energy wheel parts
- 5-year Ultra Low Leak economizer parts
- 1-year parts

* Energy Star is a registered trademark of the U.S. Environmental Protection Agency
PERFORMANCE DATA

Unit Operating Weight __________________________ lb

COOLING (ELECTRIC)

Gross Total Capacity __________________________ Btuh
   at Condenser Air Temperature __________ °F
Gross Sensible Capacity _________________________ Btuh
Compressor Power Input ________________________ kW
Indoor Entering: db __________ °F / wb __________ °F
Airflow _____ CFM  External Static Pressure _____ in. wg
Indoor Fan Motor Size _________________________ HP
Exhaust Fan Motor Size _________________________ HP

Curb Weight __________________________ lb

HEATING (GAS)

Heating Capacity:
   Stage 1 __________________________ Btuh
   Stage 2 __________________________ Btuh
   Heating Capacity Total ______________ Btuh
   Stage 1 __________________________ kW
   Stage 2 __________________________ kW
   Heating Capacity Total ______________ Btuh

ELECTRICAL DATA

Power Supply to Unit ___________________________
Volts _________________________________________
Phase _________________________________________ Hz
Maximum Circuit Amps _________________________
Maximum Overcurrent Protection ___________________

SUBMITTAL DATA

Job Name ________________________________
Architect ______________________________
Engineer ______________________________
Contractor _____________________________
Unit Designation ________________________
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®

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- 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 Diagnosis requirements in section 6.5.1.1.4 and Table 6.4.3.4.3, and meet 2016 Fault Detection and Diagnosis requirements in section 6.5.1.1.4.

- For outside air, return air, and relief air damper leakage requirements, IECC 2012 section C402.4.5.2 and, IECC 2015 sections C402.4.5.2 and C403.3.3.5 for fault detection and diagnostic requirements. NOTE: IECC 2015 section C403.3.3.5 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 Diagnosis requirements in section 6.5.1.1.4.

- For outside air, return air, and relief air damper leakage requirements, IECC 2012 section C402.4.5.2 and, IECC 2015 sections C402.4.5.2 and C403.3.3.5 for fault detection and diagnostic requirements. NOTE: IECC 2015 section C403.3.3.5 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.
Economizer with ENTHALPY Sensing and Barometric Relief (Cont)*

○ 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 IEC 2012 section C402.4.5.2 and, IEC 2015 sections C403.2.4.3 and C403.3.3.5 for outside air, return air, and relief air damper leak- age requirements and IEC 2015 section C403.2.4.7 for Fault Detection and Diagnostic requirements.

NOTE: IEC 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) damp- ers are AMCA rated — plus 5 year limited parts war- ranty (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 IEC 2012 section C402.4.5.2 and, IEC 2015 sections C403.2.4.3 and C403.3.3.5 for outside air, return air, and relief air damper leak- age requirements and IEC 2015 section C403.2.4.7 for Fault Detection and Diagnostic requirements.

NOTE: IEC 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) damp- ers are AMCA rated — plus 5 year limited parts war- ranty (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 IEC 2012 section C402.4.5.2 and, IEC 2015 sections C403.2.4.3 and C403.3.3.5 for outside air, return air, and relief air damper leak- age requirements and IEC 2015 section C403.2.4.7 for Fault Detection and Diagnostic requirements.

NOTE: IEC 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) damp- ers are AMCA rated — plus 5 year limited parts war- ranty (EconoMi$er 2 system).

Staged Air Volume (SAV™) two-speed fan system (Available on units with Energy X sizes 08 to 14 with 2-stage cooling control and base unit sizes 07 to 14 with 2-stage cooling control)

EnergyX with economizer only

EnergyX with frost protection only

EnergyX with economizer and frost protection

RTU Open multi-protocol controller communicates to MODBUS†, BACnet*, LonWorks††, and Johnson Controls

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

ComfortLink controller (not available on sizes 07 2- stage cooling models and Size 11 models equipped with Humidi-Mizer® system)

Through the base connectors for gas and electric conduit/piping

Stainless steel gas heat exchanger (includes tubes, vestibule plate and collector box)

Humidi-Mizer® adaptive dehumidification system

NOTE: Humidi-Mizer system is not available on size 11 models equipped with ComfortLink controller or any model equipped with EnergyX®

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

Low Ambient Controller for cooling operation down to 0°F (–18°C) (Only available on sizes 07-09 without EnergyX)***

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

Condenser hail guard -louvered style

Special coating protection for evaporator and condenser coils

Condensate overflow switch

Hinged panels for easy unit access

Foil faced insulation throughout entire cabinet

NOTES:

1. Size 07 is not available with EnergyX.
2. Units ship from the factory in a vertical airflow configuration and are easily converted to a horizontal airflow configuration.

* Not available for single phase (-3 voltage) models.
† MODBUS is a registered trademark of Schneider Electric.
‡ BACnet is a registered trademark of ASHRAE (American Society of Heating, Refrigeration, and Air-Conditioning Engineers).
†† LonWorks is a registered trademark of Schneider Electric.
*** Not available with SAV 2-speed fan motor.
††† Only available on units not equipped with EnergyX.
†††† Size 11 goes down to 0°F standard.
††††† Available on base unit sizes 07 to 14 and EnergyX equipped models 08 to 14.
FIELD-INSTALLED ACCESSORIES

☐ Economizer with DRY BULB Sensing and Barometric Relief®
   - Standard 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 120.2.1 for Fault Detection and Diagnostic (FDD) requirements (EconoMiSer X system).
     ○ Models with RTU Open controller meet California Title 24-2016 Section 120.2.1 Fault Detection and Diagnostic (FDD) requirements (EconoMiSer 2 system).
     ○ Models with ComfortLink controller meet California Title 24-2016 Section 120.2.1 Fault Detection and Diagnostic (FDD) requirements (EconoMiSer 2 system).
     ○ Models with PremierLink controller. PremierLink controller does not meet California Title 24-2016 Section 120.2.1 Fault Detection and Diagnostic (FDD) requirement (EconoMiSer 2 system).

☐ Economizer with ENTHALPY Sensing and Barometric Relief®
   - Standard 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 120.2.1 for Fault Detection and Diagnostic (FDD) requirements (EconoMiSer X system).
     ○ Models with RTU Open controller meet California Title 24-2016 Section 120.2.1 Fault Detection and Diagnostic (FDD) requirements (EconoMiSer 2 system).
     ○ Models with ComfortLink controller meet California Title 24-2016 Section 120.2.1 Fault Detection and Diagnostic (FDD) requirements (EconoMiSer 2 system).
     ○ Models with PremierLink controller. PremierLink controller does not meet California Title 24-2016 Section 120.2.1 Fault Detection and Diagnostic (FDD) requirement (EconoMiSer 2 system).

☐ Economizer with 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 120.2.1 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 (EconoMiSer X system).
     ○ Models with ComfortLink meet California Energy Commission Title 24-2016 perspective section 140.4 (damper leakage etc.) and mandatory section 120.2.1 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 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 (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 120.2.1 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 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 (EconoMiSer 2 system).

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

☐ 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 6i26 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 (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 — plus 5 year limited parts warranty (EconoMi$er® 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 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).

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

Standard Base Unit
- Display Kit — for Variable Frequency Drive (VFD), Staged Air Volume (SAV™) system. Allows additional set to and diagnostics of the unit VFD controller. Can be unit mounted or used with any other compatible VFD model as a reusable device*
- Energy Demand System — wireless automated demand management and response controllers*
- 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 (356mm) tall
- Roof curb — 24 inch (610mm) tall
- Horizontal roof curb adapts to standard base unit and directs airflow horizontally
- Thru-the-bottom connections, electrical only
- Thru-the-bottom connections, electrical and gas
- Thru-the-bottom electrical, control, and gas connection kit (size 14 only)*
- Thru-the-bottom electrical and thru-the-curb gas connection kit (sizes 07-12)*
- Condenser hail guard, louvered style
- Flue shield (sizes 07-12)*
- Flue discharge deflector
- Liquid propane (LP) conversion kit
- High altitude conversion kit
- 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) (all sizes)
- Time Guard II compressor anti-cycle protection*
- Thermostats and Sensors
- Disconnect Switch Bracket — Size 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*
- Fan/Filter status switch
- Horn/Strobe Annunciator
- Condensate overflow switch*

Economizer Sensors
- Single dry bulb control
- Differential dry bulb control
- Single enthalpy control
- Differential enthalphy 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 two-speed fan motor.
** Available on unit sizes 07 to 09 without EnergyX installed and on all sizes with EnergyX installed.
UNIT DIMENSION PRINT

Fig. 1 — 48HC**07-09 Single Zone Electric Cooling With Gas Heat, Base Unit Dimensions
Fig. 1 — 48HC**07-09 Base Unit Dimensions (cont)
Fig. 2 — 48HC**11,12 Single-Zone Electric Cooling with Gas Heat, Base Unit Dimensions
UNIT DIMENSIONS PRINT

Fig. 2 — 48HC**11,12 Base Unit Dimensions (cont)
Fig. 3 — 48HC**14 Single-Zone Electric Cooling with Gas Heat, Base Unit Dimensions
Fig. 3 — 48HC**14 Base Unit Dimensions (cont)
Fig. 4 — 48HC**07 with EnergyX® Unit Dimensions
Fig. 4 — 48HC**07 with EnergyX® Unit Dimensions (cont)
UNIT DIMENSIONS PRINT

Fig. 5 — 48HC**08-12 with EnergyX® Unit Dimensions
Fig. 5 — 48HC**08-12 with EnergyX® Unit Dimensions (cont)
Fig. 6 — 48HC**14 with EnergyX® Unit Dimensions
### UNIT DIMENSIONS PRINT

#### Fig. 6 — 48HC**14 with EnergyX® Unit Dimensions (cont)

<table>
<thead>
<tr>
<th>UNIT</th>
<th>STD UNIT</th>
<th>CORNER</th>
<th>CORNER</th>
<th>CORNER</th>
<th>CORNER</th>
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<td>364</td>
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*Standard unit weight is with low heat & without packaging. For options & accessories, refer to the product data catalog.*
Fig. 7 — 48HC**07-09 Roof Curb Dimensions
Fig. 8 — 48HC**12 Roof Curb Dimensions

NOTES:
1. ROOFCURB ACCESSORY IS SHIPPED DISASSEMBLED.
2. INSULATED PANELS, 1" THE POLYURETHANE FOAM, 1-3/4" DENSITY.
3. DIMENSIONS IN [ ] ARE IN MILLIMETERS.
4. ROOFCURB IS MADE OF STEEL.
5. ATTACH DUCTWORK TO CURB, (PLATES OF DUCT REST ON CURB).
6. SERVICE CLEARANCE 4" ON EACH SIDE.
7. DIRECTION OF AIR FLOW.
8. CONNECTOR PACKAGE CRBTHPR002A01 IS FOR THRU-THE-CURB GAS TYPE.
   CONNECTOR PACKAGE CRBTHPR004A01 IS FOR THRU-THE-BOTTOM TYPE GAS
   CONNECTIONS.
NOTES:
1. Roof curb accessory is shipped disassembled.
2. Insulated panels: 1" thick. Polyurethane foam, 1 3/4 in. density.
3. Dimensions in [ ] are in millimeters.
4. Roof curb: galvanized steel.
5. Attach ductwork to curb (flanges of duct rest on curb).
6. Service clearance: 4 ft. on each side.
7. Direction of airflow.
8. Connector package CRBTMPWR002A01 is for thru-the-curb type gas connections.
   Connector package CRBTMPWR004A01 is for thru-the-base type gas connections.

## ACCESSORY DIMENSIONS PRINT

<table>
<thead>
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<th>ROOF CURB ACCESSORY</th>
<th>A (ft.-in.)</th>
<th>UNIT SIZE</th>
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<tbody>
<tr>
<td>CRBTMPWR001A01</td>
<td>1-2</td>
<td>[356]</td>
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<tr>
<td>CRBTMPWR001A01</td>
<td>2-0</td>
<td>[610]</td>
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</tbody>
</table>

**CRBTMPWR001A01** 48HC**12

**CRBTMPWR001A01**

Fig. 9 — 48HC**14 Roof Curb Dimensions