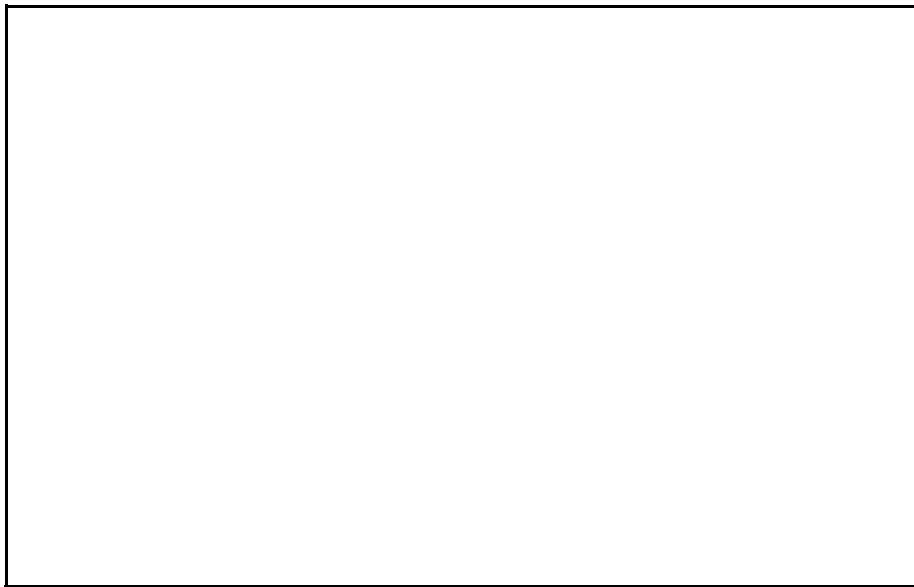




United Technologies

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

- PERFORMANCE DATA**
- CERTIFIED DIMENSION PRINTS**
- CERTIFIED ROOF CURB DIMENSION
PRINTS**



JOB NAME:	LOCATION:			
BUYER:	BUYER PO #:	CARRIER #:		
UNIT NUMBER:	MODEL NUMBER:			
PERFORMANCE DATA CERTIFIED BY:				
DESCRIPTION				
<p>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.</p>				
FEATURES				
<p><u>Standard Base Unit</u></p> <ul style="list-style-type: none"> 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 <p><u>Standard Base Unit with EnergyX</u></p> <ul style="list-style-type: none"> Combined Efficiency Factors (CEF) up to 18.0 Energy recovery rated and certified in accordance with AHRI Standard 1060-2000. Helps reduce mechanical cooling load at design temperatures up to 4 tons per 1000 cfm of outside air. 				
<ul style="list-style-type: none"> 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 <i>ComfortLink</i> Controls that provide: <ul style="list-style-type: none"> — 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 <p><u>Cabinet</u></p> <ul style="list-style-type: none"> 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 <p><u>Refrigerant System</u></p> <ul style="list-style-type: none"> 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 <p><u>Standard Limited Parts Warranty</u></p> <ul style="list-style-type: none"> 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

Unit Operating Weight _____ lb

COOLING

Gross Total Capacity _____ Btuh

at Condenser Air Temperature _____ °F

Gross Sensible Capacity _____ Btuh

Compressor Power Input _____ °F

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 (ELECTRIC)

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 _____

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 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 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 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 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).

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 X system).

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

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 LonWorks†, 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)

- 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 (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.

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) 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 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 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 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 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).

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 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).

* 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* 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).

* 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

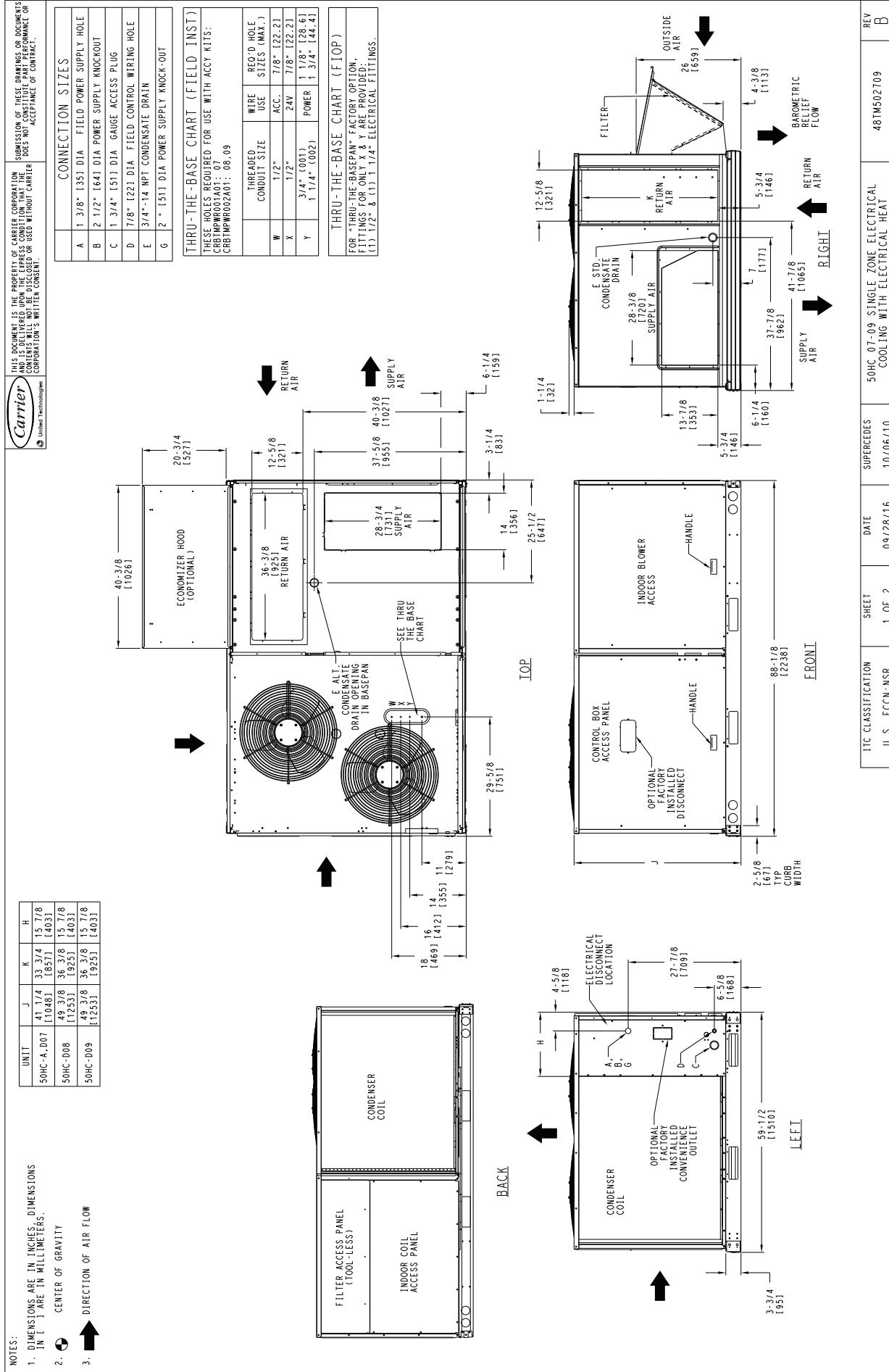


Fig. 1 — 50HC**07-09 Base Unit Dimensions

ITC CLASSIFICATION U.S. ECCC NSR	SHEET 1 OF 2	DATE 09/28/16	SUPERSEDES	50HC 07-09 SINGLE ZONE ELECTRICAL COOLING WITH ELECTRICAL HEAT	48IM502709	REV B
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UNIT DIMENSION PRINT

Carrier									
<p>THIS DOCUMENT IS THE PROPERTY OF CARRIER CORPORATION AND IS DELIVERED UPON THE EXPRESS CONDITION THAT THE CARRIER CORPORATION'S NAME NOT BE DISCLOSED OR USED WITHOUT CONTRACT PARTNER'S WRITTEN CONSENT.</p>									
<p>* STANDARD UNIT WEIGHT IS WITHOUT ELECTRIC HEAT AND WITHOUT PACKAGING. FOR OTHER OPTIONS AND ACCESSORIES, REFER TO THE PRODUCT DATA CATALOG.</p>									
<p>© United Technologies</p>									
<p>50HC-D07 715 324.3 161.3 73.2 142.4 64.6 192.9 87.5 218.5 99.1 41 3/8 [1051] 34 1/4 [870] 20 1/2 [5211]</p>									
<p>50HC-D08 860 390 199.4 90.4 176.4 80 227.3 103 236.9 116.5 41 3/8 [1051] 33 1/2 [851] 23 3/4 [6031]</p>									
<p>50HC-D09 860 390 199.4 90.4 176.4 80 227.3 103 236.9 116.5 41 3/8 [1051] 33 1/2 [851] 23 3/4 [6031]</p>									
UNIT	STD. UNIT WEIGHT *	CORNER WEIGHT (A) LBS. KG.	CORNER WEIGHT (B) LBS. KG.	CORNER WEIGHT (C) LBS. KG.	CORNER WEIGHT (D) LBS. KG.	X	Y	Z	C.G.
50HC-D07	715	324.3	161.3	73.2	142.4	64.6	192.9	87.5	218.5 99.1 41 3/8 [1051] 34 1/4 [870] 20 1/2 [5211]
50HC-D08	860	390	199.4	90.4	176.4	80	227.3	103	236.9 116.5 41 3/8 [1051] 33 1/2 [851] 23 3/4 [6031]
50HC-D09	860	390	199.4	90.4	176.4	80	227.3	103	236.9 116.5 41 3/8 [1051] 33 1/2 [851] 23 3/4 [6031]

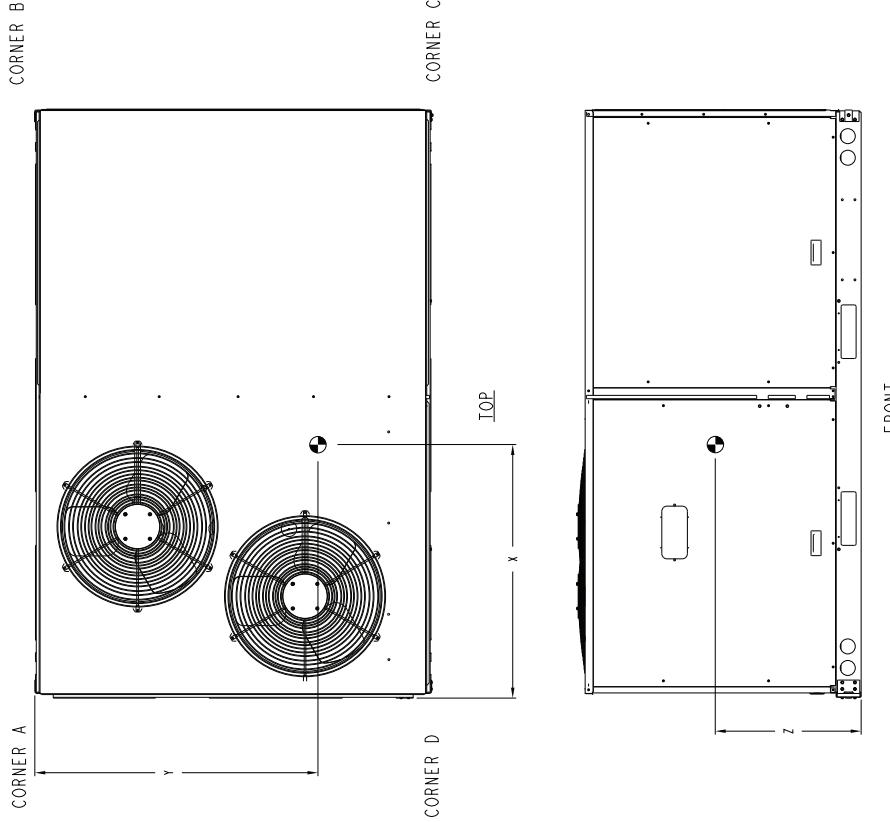


Fig. 1 — 50HC07-09 Base Unit Dimensions (cont)**

ITC CLASSIFICATION U.S. ECCN: NSR	SHEET 2 OF 2	DATE 09/28/16	SUPERSEDES 10/06/10	50HC 07-09 SINGLE ZONE ELECTRICAL COOLING WITH ELECTRICAL HEAT	48TM502709	REV B
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UNIT DIMENSION PRINT

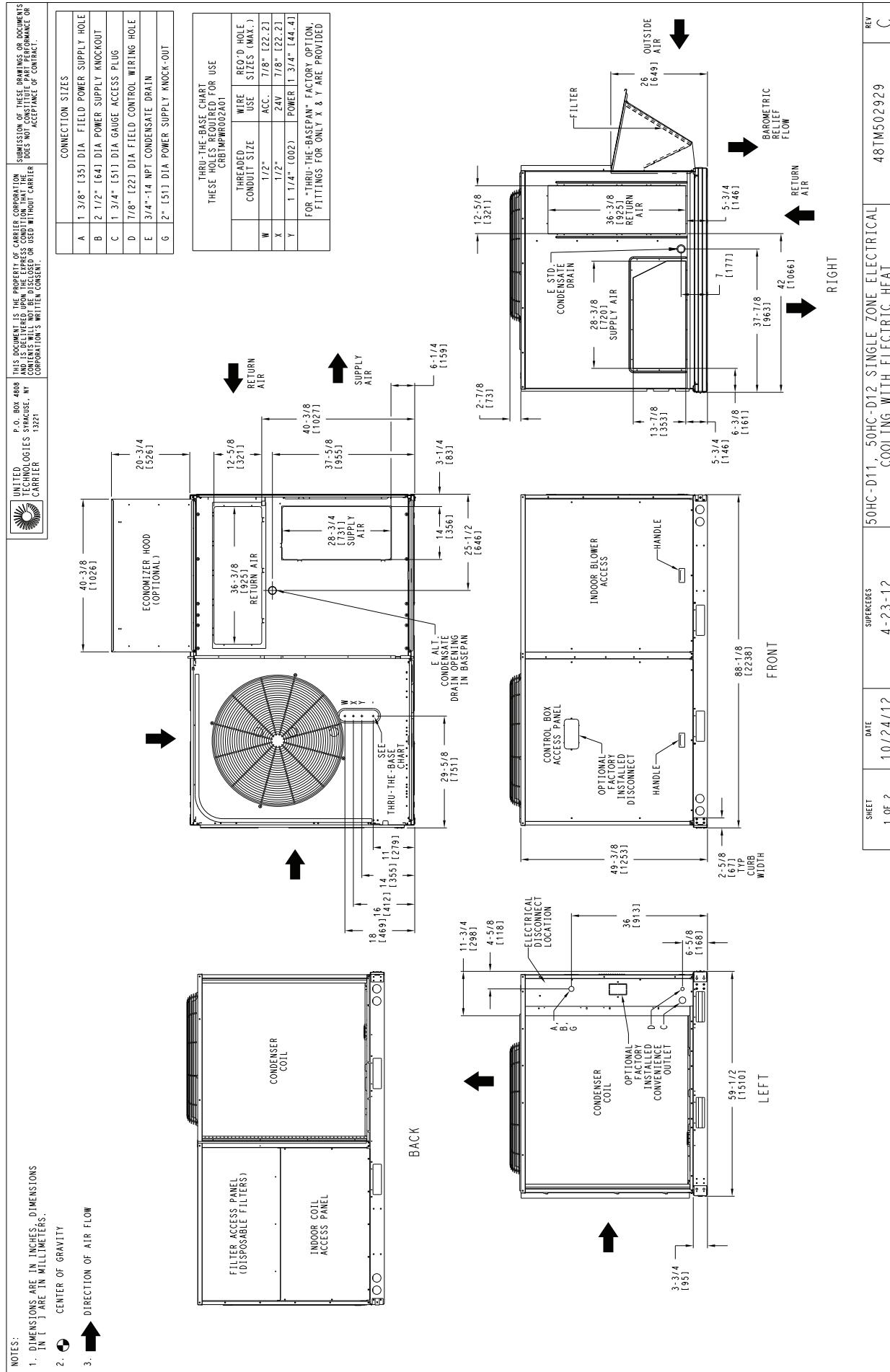
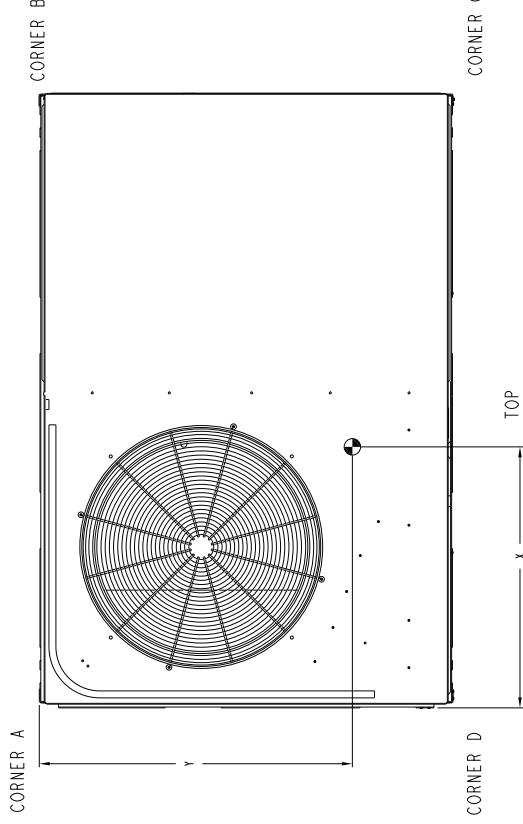


Fig. 2 — 50HC11, 50HC**12 Base Unit Dimensions**

UNIT DIMENSION PRINT

 UNITED TECHNOLOGIES STRAUSS, NY CARRIER 13221												<small>P.O. BOX 4808 THIS DOCUMENT IS THE PROPERTY OF CARRIER CORPORATION SUBMISSION OF THESE DRAWINGS OR DOCUMENTS DOES NOT CONSTITUTE A PERFORMANCE CONTRACT. THIS DOCUMENT IS TO BE KEPT UPON REQUEST OF CARRIER CONTENTS WILL NOT BE DISCLOSED OR USED WITHOUT CARRIER CORPORATION'S WRITTEN CONSENT.</small>			
UNIT	S.D. UNIT WEIGHT *	CORNER A		CORNER B		CORNER C		CORNER D		C. G.		WEIGHT (A)	WEIGHT (B)	WEIGHT (C)	WEIGHT (D)
		LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.				
50HCC-D11	1025	466	308	140	146	66	184	84	387	176	28 3/8 [721]	33 1/8 [841]	21 3/8 [543]		
50HCC-D11	1025	466	308	140	146	66	184	84	387	176	28 3/8 [721]	33 1/8 [841]	21 3/8 [543]		



CORNER A

CORNER B

CORNER C

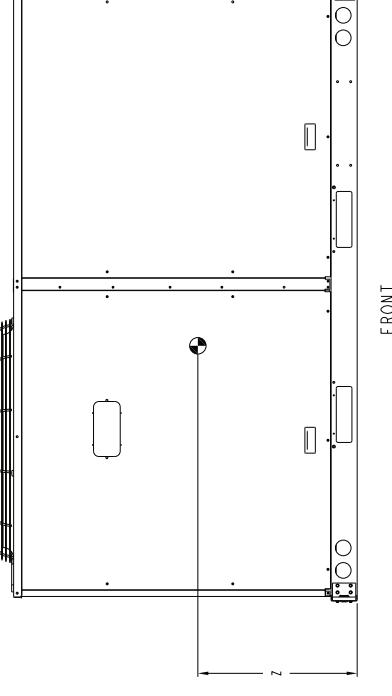
CORNER D

TOP

X

Y

Z



FRONT

X

Y

Z

SHEET 2 OF 2	DATE 10/24/12	SUPERSEDES 4-23-12	50HCC-D11, 50HCC-D12 SINGLE ZONE ELECTRICAL COOLING WITH ELECTRIC HEAT	48TM502929	REV C
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Fig. 2 — 50HCC11, 50HCC**12 Base Unit Dimensions (cont)**

UNIT DIMENSION PRINT

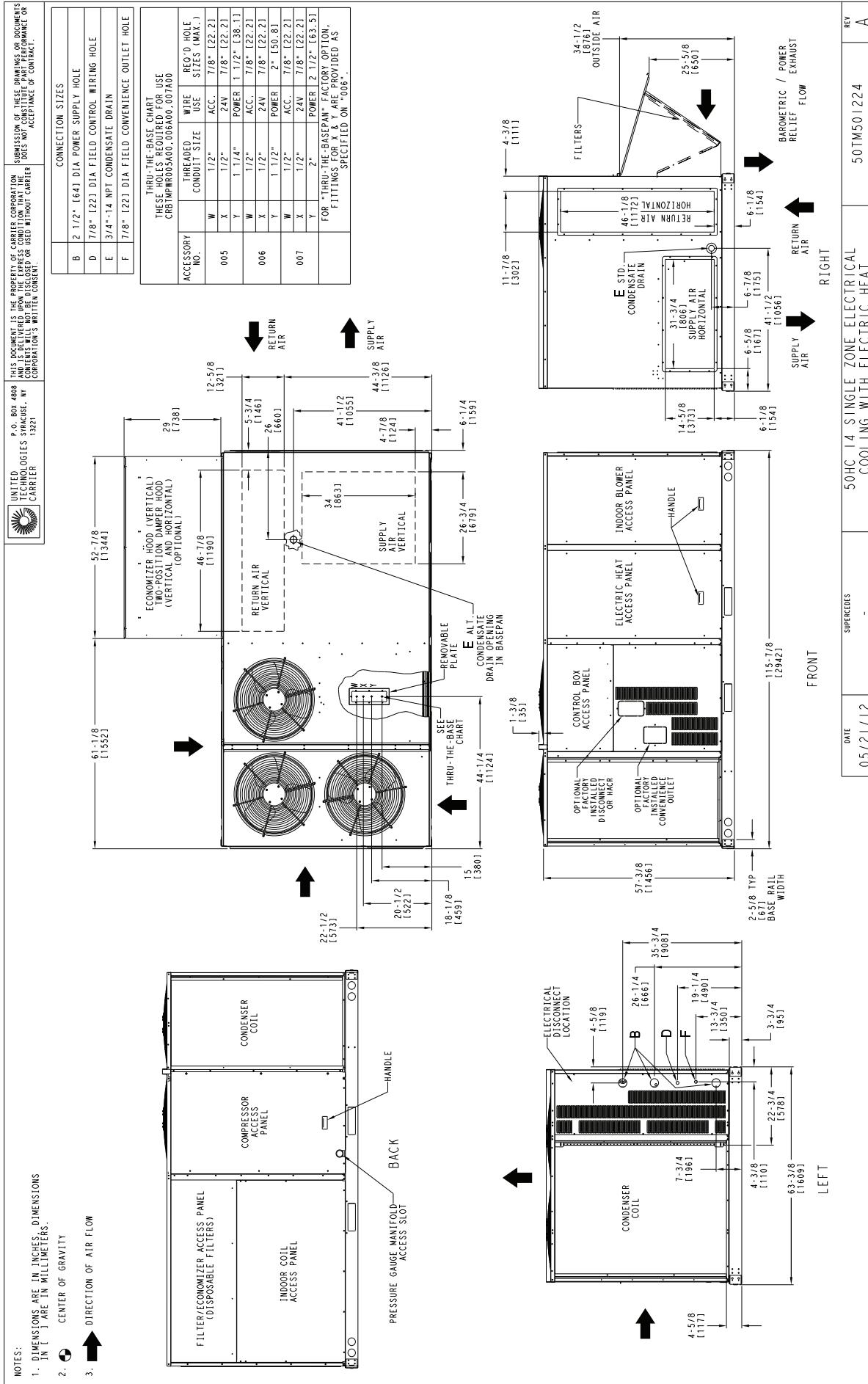
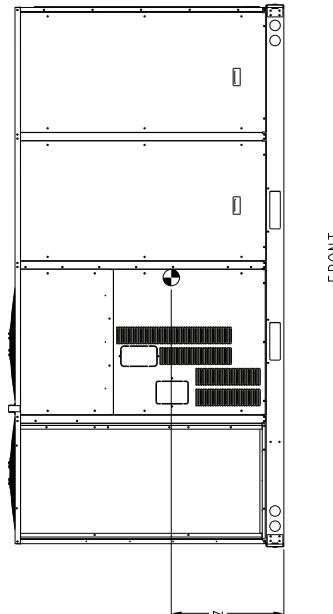
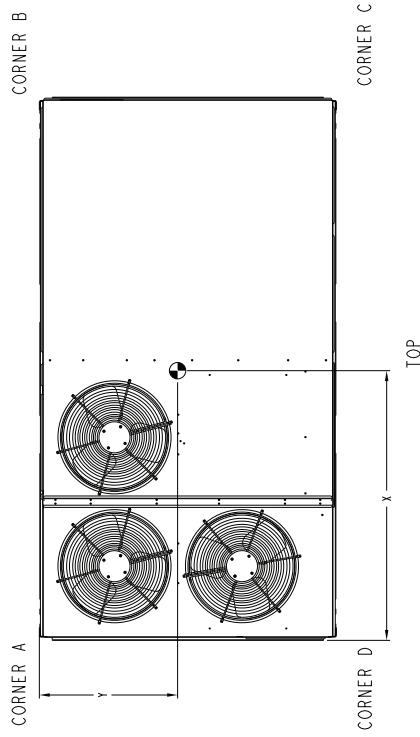


Fig. 3 — 50HC**14 Base Unit Dimensions

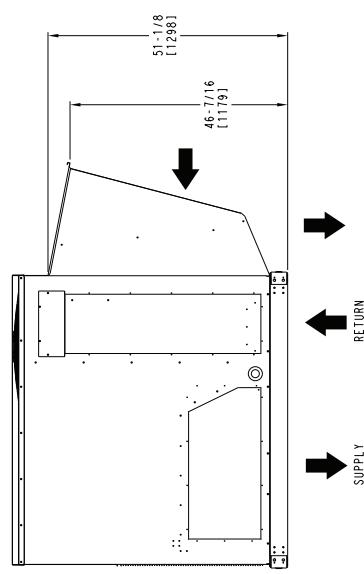
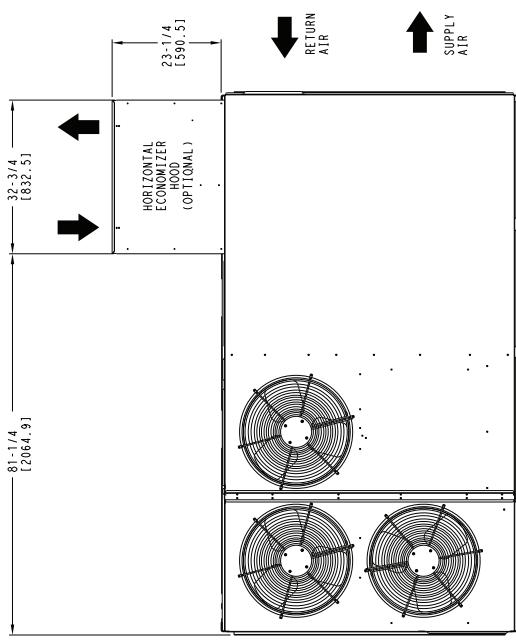
UNIT DIMENSION PRINT

UNIT	STD UNIT WEIGHT LBS.	CORNER WEIGHT (A) KG.	CORNER WEIGHT (B) KG.	CORNER WEIGHT (C) KG.	CORNER WEIGHT (D) KG.	WEIGHT (E) LBS.	WEIGHT (F) KG.	C.G. X	C.G. Y	C.G. Z
50HC 14	1360	617	335	151	361	344	164	370	145	60 1/8 [1527]

STANDARD UNIT WEIGHT IS WITHOUT ELECTRIC HEAT & WITHOUT PACKAGING.
FOR OPTIONS & ACCESSORIES, REFER TO THE PRODUCT DATA CATALOG.



VERTICAL ECONOMIZER

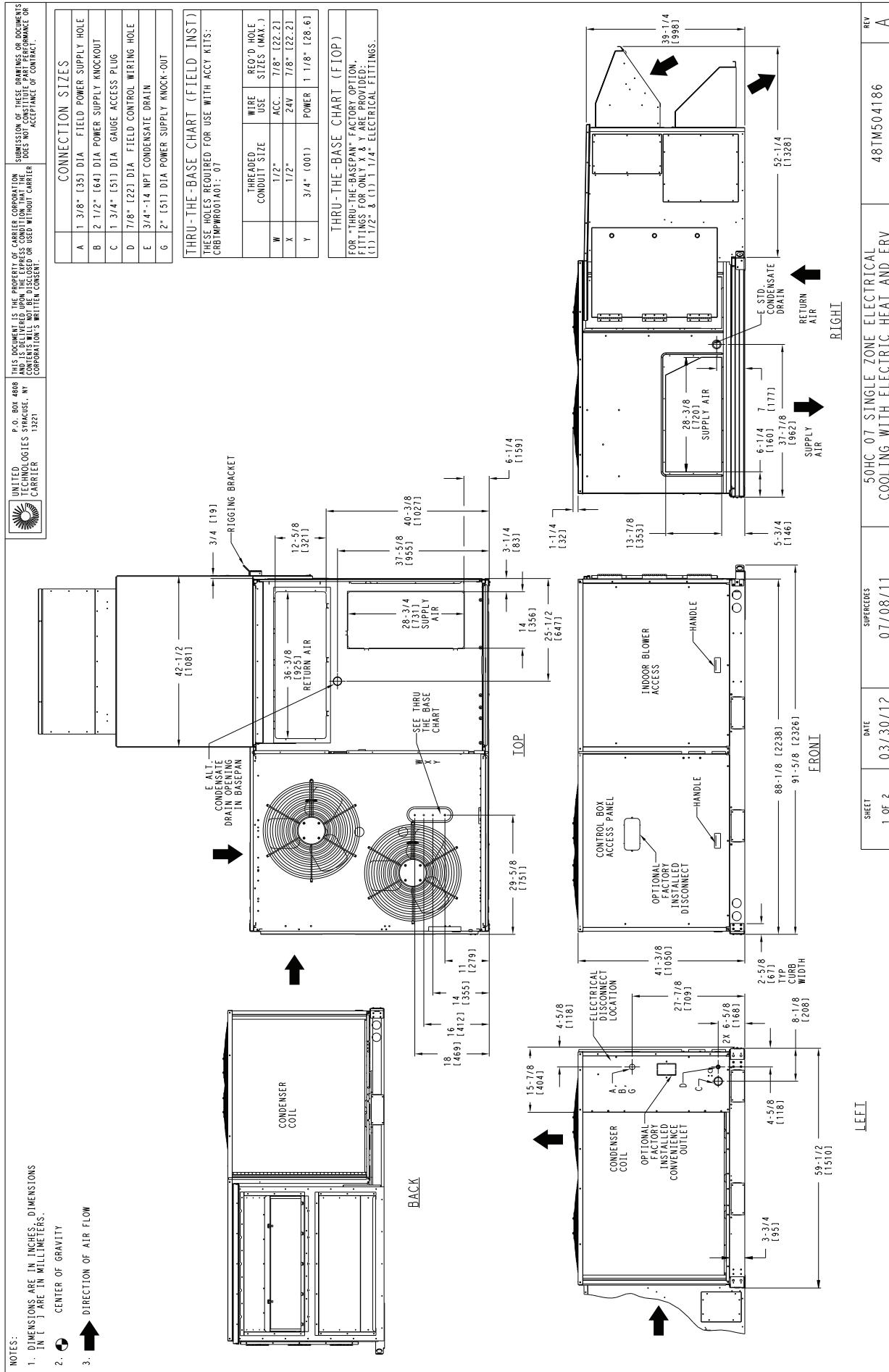


HORIZONTAL ECONOMIZER

DATE	SUPERSEDES	50HC 14 SINGLE ZONE ELECTRICAL COOLING WITH ELECTRIC HEAT	50TM501224	REV A
05/21/12	-	-	-	-

Fig. 3 — 50HC**14 Base Unit Dimensions (cont)

UNIT DIMENSION PRINT



UNIT DIMENSION PRINT

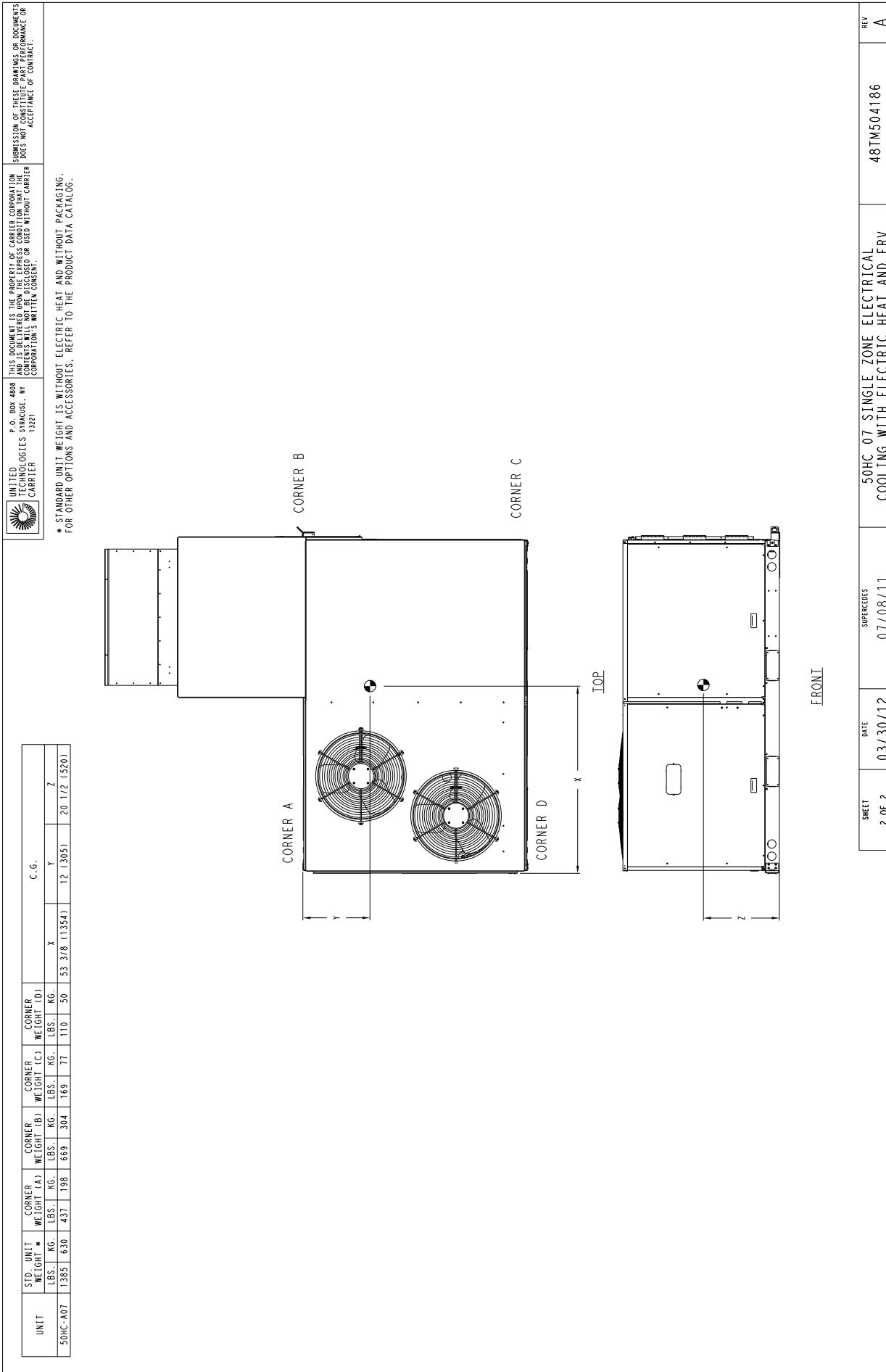


Fig. 4 — 50HC07 Base Unit with EnergyX® Dimensions (cont)**

UNIT DIMENSION PRINT

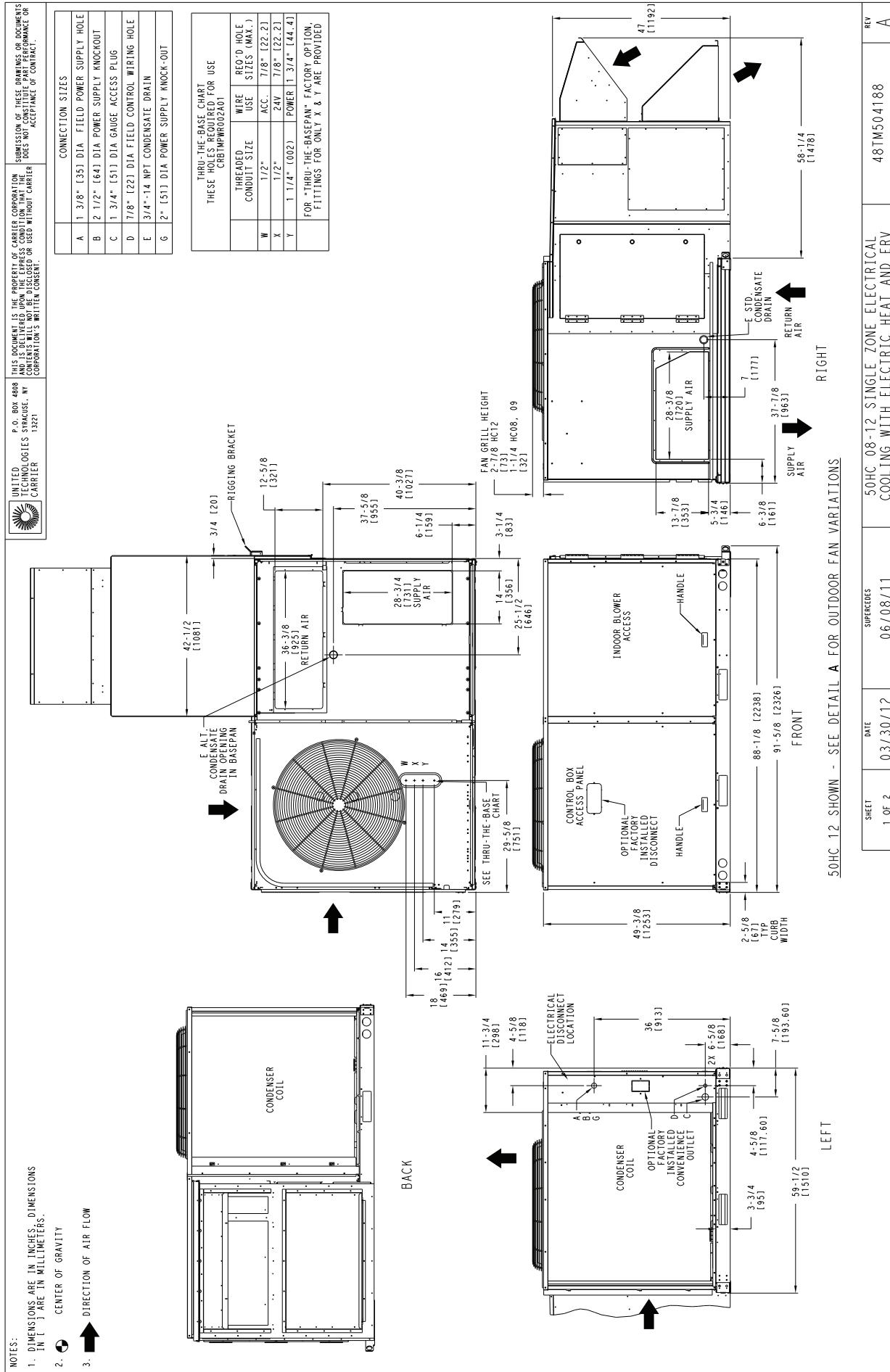


Fig. 5 — 50HC**08-12 Base Unit with EnergyX® Dimensions

UNIT DIMENSION PRINT

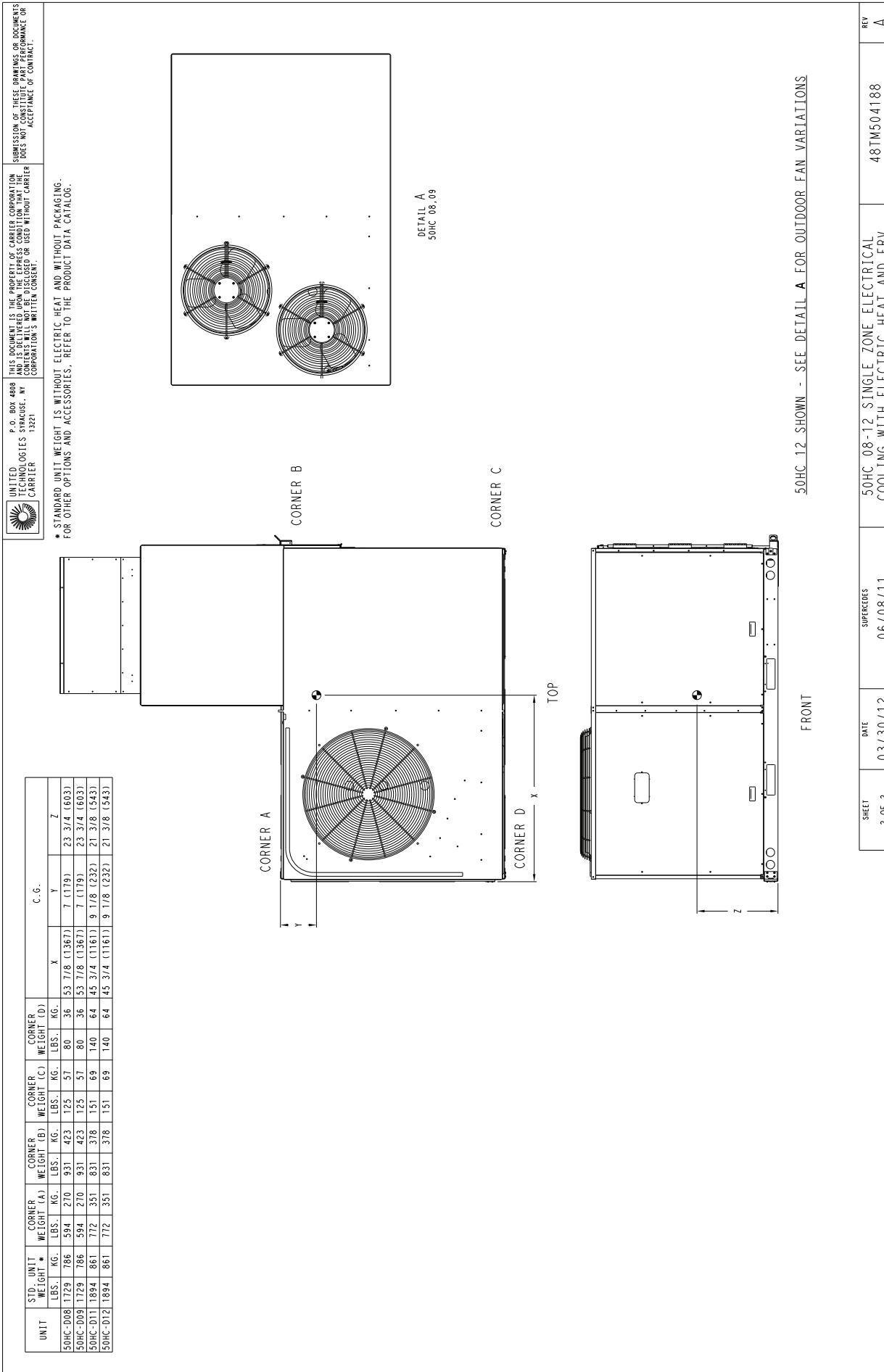


Fig. 5 — 50HC08-12 Base Unit with EnergyX® Dimensions (cont)**

UNIT DIMENSION PRINT

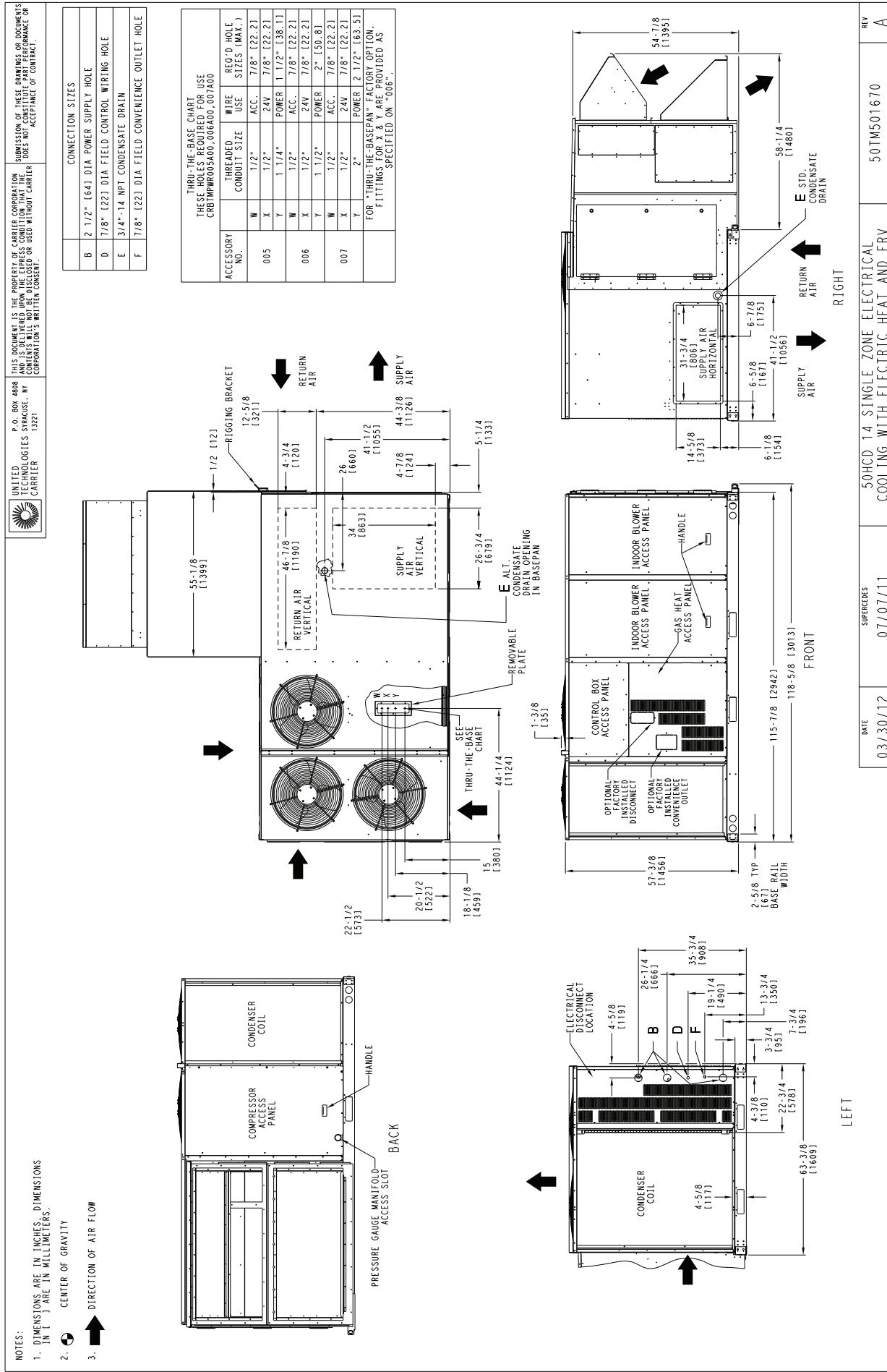


Fig. 6 — 50HCD**14 Base Unit with EnergyX® Dimensions

UNIT DIMENSION PRINT

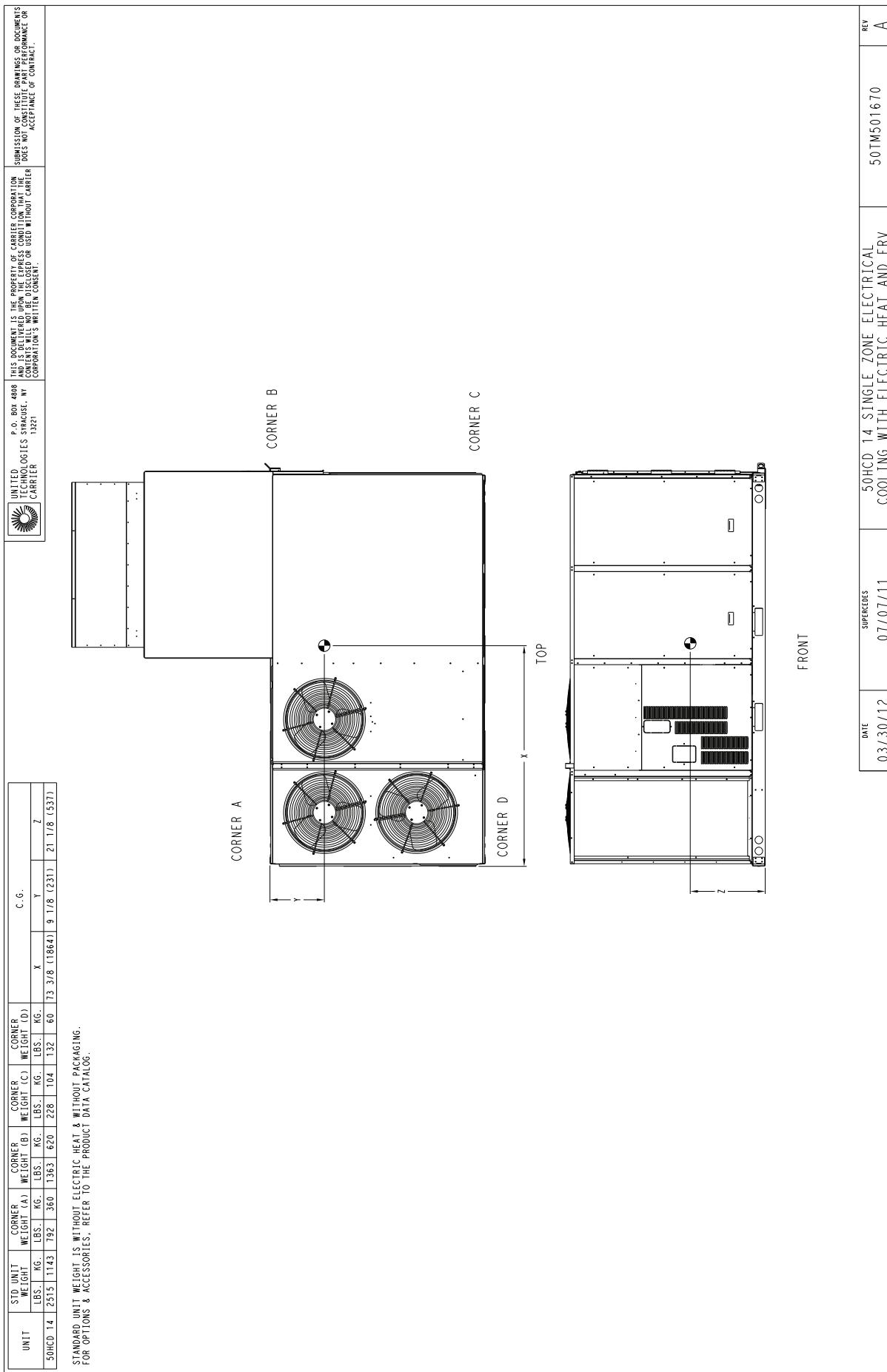


Fig. 6 — 50HCD14 Base Unit with EnergyX® Dimensions (cont)**

ACCESSORY DIMENSIONS PRINT

ROOFCURB ACCESSORY	A	UNIT SIZE
CRRFCURB003A01	1' - 2" [356]	50HC-*07-09
CRRFCURB004A01	2' - 0" [610]	

NOTES:

1. ROOFCURB ACCESSORY IS SHIPPED DISASSEMBLED.
 2. INSULATED PANELS: 1" THK. POLYURETHANE FOAM, 1-3/4 # DENSITY.
 3. DIMENSIONS IN [] ARE IN MILLIMETERS.
 4. ROOFCURB: 16 GAGE STEEL.
 5. ATTACH DUCTWORK TO CURB. (FLANGES OF DUCT REST ON CURB)
 6. SERVICE CLEARANCE 4' ON EACH SIDE.
 7. DIRECTION OF AIR FLOW.

CONNECTOR PKG. ACC.	B	C	D ALT DRAIN HOLE	POWER	CONTROL	ACCESSORY PWR
CRBTPWRO02A01	2'-8 7/16" [827]	1'-10 15/16" [583]	1 3/4" [44.5]	1 1/4" [31.7]	1/2" [12.7] NPT	1/2" [12.7] NPT
CRBTPWRO04A01						

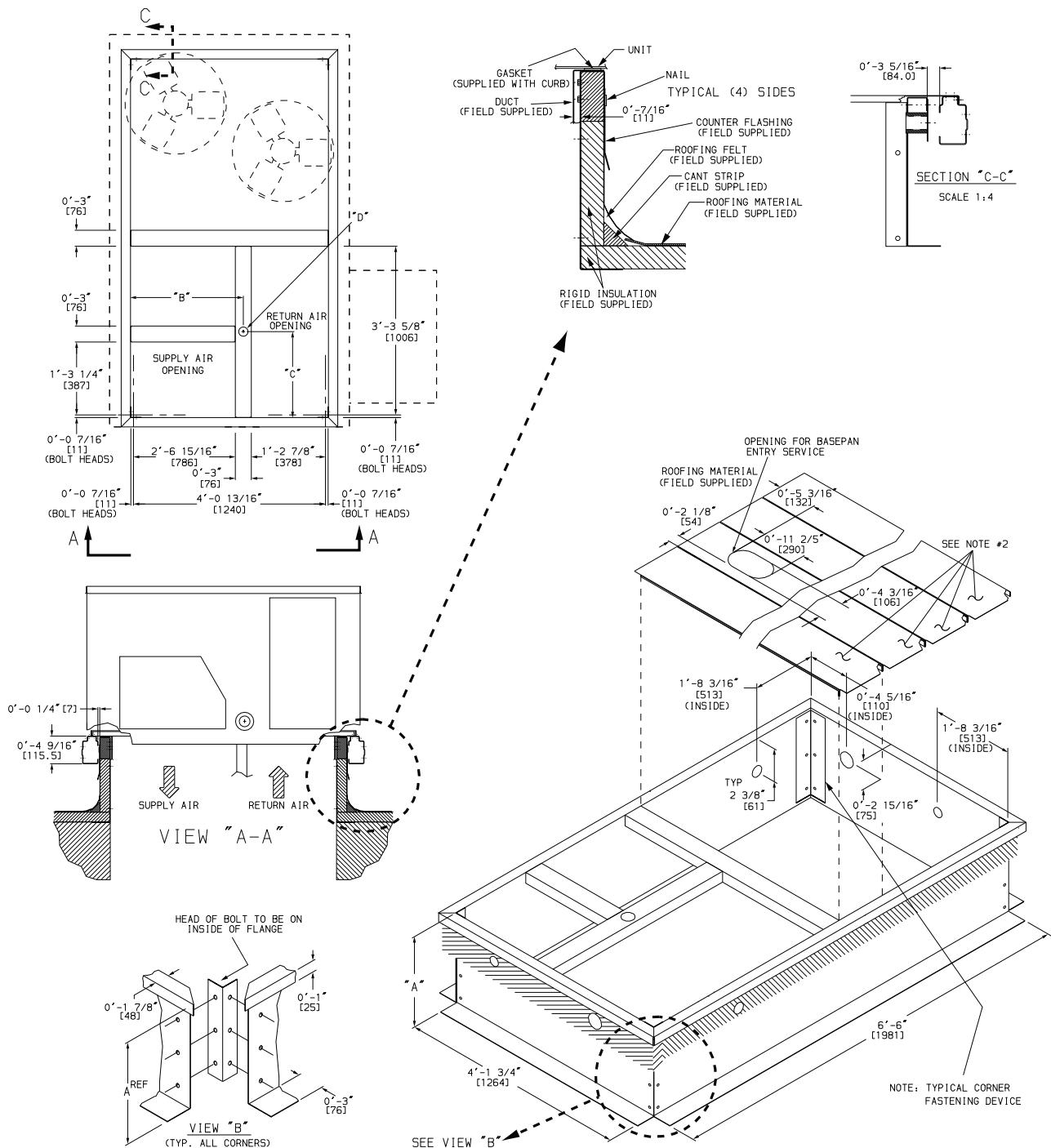


Fig. 7 — 50HC07-12 Roof Curb Dimensions**

ACCESSORY DIMENSIONS PRINT

ROOF CURB ACCESSORY #	A
CRRFCURBO74A00	[14" [356]
CRRFCURBO75A00	[24" [610]

NOTES:
 1. ROOF CURB ACCESSORY IS SHIPPED DISASSEMBLED.
 2. INSULATED PANELS - 11/2" THICK POLYURETHANE FOAM, 1.0# DENSITY.
 3. DIMENSIONS IN INCHES (IN.) ARE IN MILLIMETERS.
 4. ROOF CUB SIDEWALLS: 16 GAUGE STEEL.
 5. ATTACH DUCT WORK TO FLANGES OF DUCT REST ON CURB.
 6. SERVICE CLEARANCE 4 FT ON EACH SIDE.
 7. DIRECTION OF AIR FLOW.
 8. "L" & "S" DESIGNATIONS DENOTE LOCATION OF COMMON CROSS RAIL,
 (ONE "L" OR LARGE OPENING CURB).

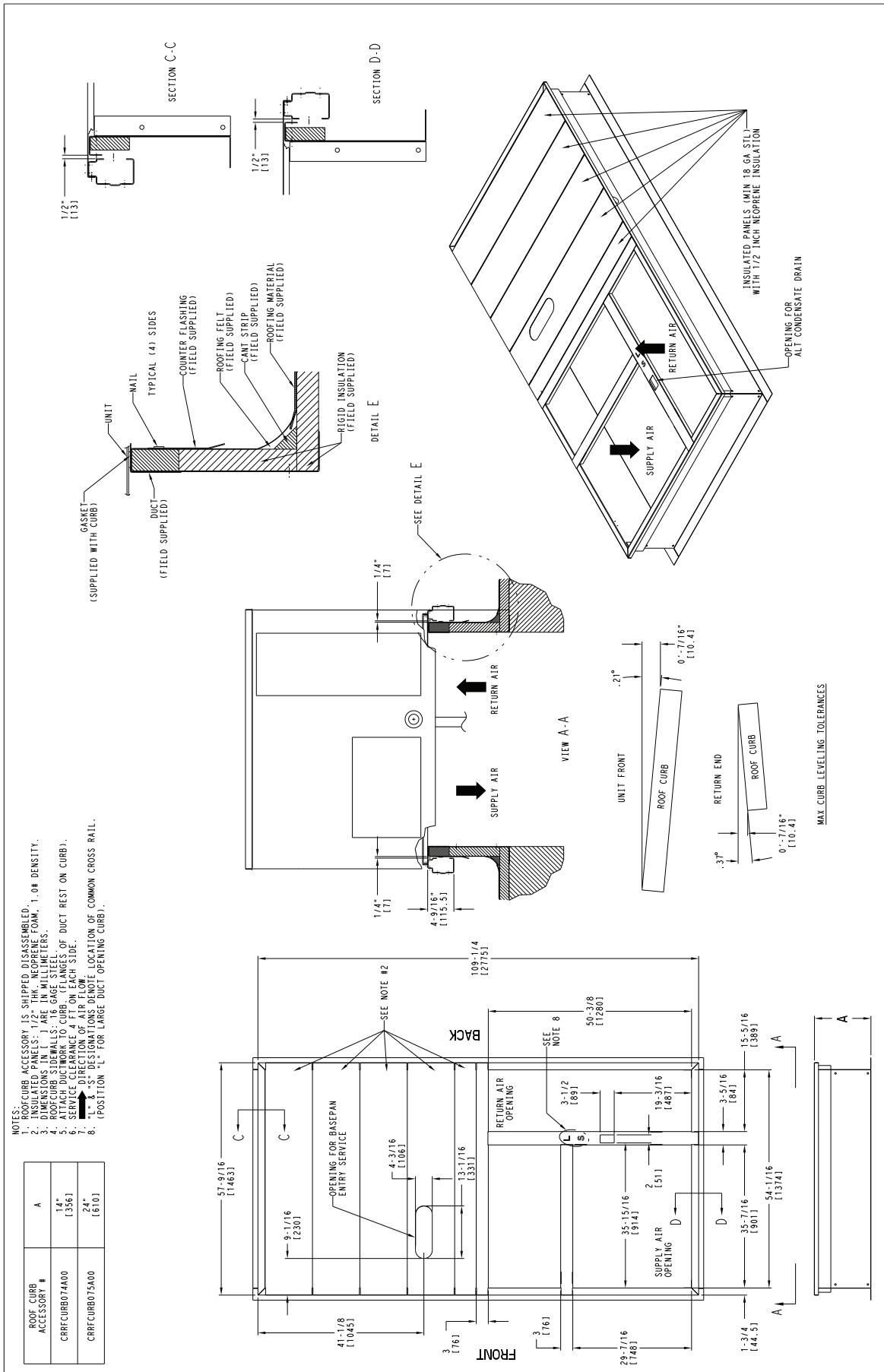


Fig. 8 — 50HC14 Roof Curb Dimensions**

