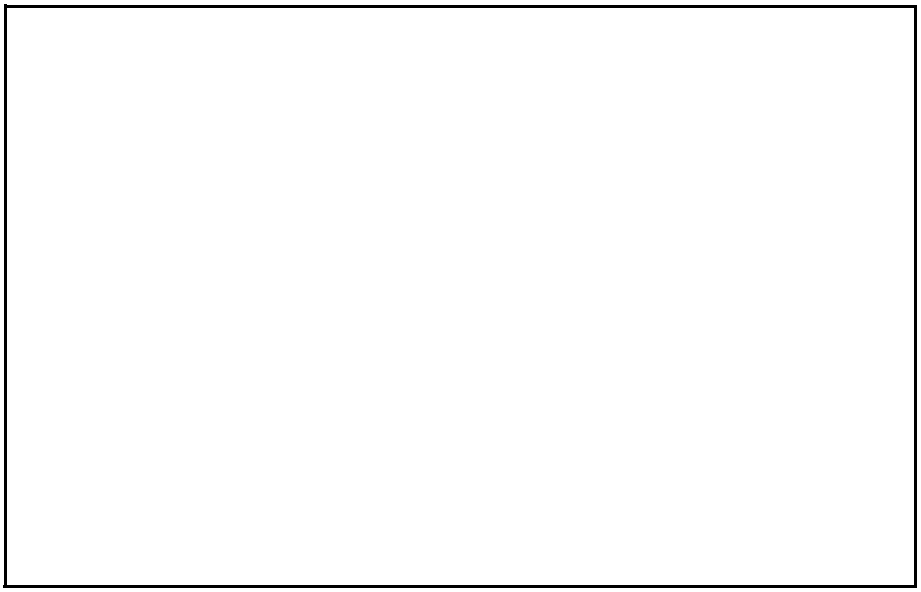
50JC WEATHEREXPERT® SERIES VARIABLE SPEED SINGLE PACKAGE ROOFTOP WITH ECOBLUE™ TECHNOLOGY COOLING UNITS WITH OPTIONAL ELECTRIC HEAT

— PERFORMANCE DATA

— CERTIFIED DIMENSION PRINTS

— CERTIFIED ROOF CURB DETAILS



JOB NAME:	LOCATION:	
BUYER:	BUYER PO #:	CARRIER#:
UNIT NUMBER:	MODEL NUMBER:	
PERFORMANCE DATA CERTIFIED BY:		

DESCRIPTION

50JC units are ultra high-efficiency single-packaged variable speed electric cooling, electric heating 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. All size 04-06 models use variable speed cooling capacity control.

FEATURES

Standard Base Unit

- Puron (R-410A) HFC refrigerant
- 20 SEER and 18.9 SEER2
- Exceeds ASHRAE (American Society of Heating, Refrigerating, and Air-Conditioning Engineers) 90.1-2016 and IECC®[1] (International Energy Conservation Code) IECC-2015 minimum efficiency requirements
- Rated in accordance with AHRI Standards 210/240
- Designed in accordance with Underwriters Laboratories Std 1995 and listed by UL and UL-Canada
- Corrosive resistant composite sloping design; side or center drain condensate pan. Meets ASHRAE Standard 62
- Cooling operating range from 0°F (-18°C) up to 125°F (52°C)
- Field convertible from vertical to horizontal airflow for slab mounting — no special kits required
- Two-inch disposable return air filters.
- Thru-the-bottom power entry capability
- Single point two-stage electric connections
- 24-volt control circuit protected with resettable circuit breaker
- Direct Drive — EcoBlue™ Technology Indoor fan system uses Vane Axial fan design and electronically commutated motor
  - – Shall have inherent automatic-reset thermal overload protection
  - – Shall require no fan/motor belts for operation, adjustments, and/or initial fan speed setup.
  - – Shall be internally protected from electrical phase reversal and loss
  - – Shall have slow ramp up to speed control capabilities to help reduce sound and comfort issues
  - – Shall be a slide-out design with two screw removal
- All sizes have variable speed cooling capacity control that ranges from 25% up to 105% of normal unit capacity
- Totally enclosed variable speed 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

SystemVu™ controls are standard on each unit to help facilitate units' diagnostics, ease of commissioning, control the cooling, heating, ventilation operation and much more. Some highlights:

- Large full text - multi line display
- SB Flash Port for data transfer
- Built in i-Vu®, CCN and BACnet®[1]
- Built in electrical phase and compressor reverse rotation protection
- Read refrigerant pressure from display- no gauges required
- Quick LED Status - Run, Alert, Fault
- Conventional thermostat or sensor capabilities
- Historical component runtime and starts
- Supply Air Tempering and Demand Limiting control
- Equipment / System Touch Compatibility
- Supports linkage on zoning systems using CCN VVT and i-Vu Open VVT controls

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
- Tool-less filter access door
- Cabinet insulated with foil faced insulation that is encapsulated/taped throughout the indoor air stream

Refrigerant System

- TXV refrigerant metering device
- Liquid line filter drier
- Scroll compressors with internal line-break overload protection
- Copper tube, aluminum fin coils with optional corrosion resistant coils.
- Removable gage 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 Ultra Low Leak economizer parts (factory-installed)
- 3-year SystemVu™ controls
- 1-year parts

1. Third-party trademarks and logos are the property of their respective owners.

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
Indoor Fan Motor Setting _____ Vdc

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 _____ kW

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[1]**

Low Leak Air Dampers —

○ Models with SystemVu™ controller meet California Title 24-2016 (Section 120.2) Fault Detection and Diagnostic (FDD) requirements (EconoMi$er 2 system).

☐ **Economizer with ENTHALPY Sensing and Barometric Relief[1]**

Low Leak Air Dampers —

○ Models with SystemVu controller meet California Title 24-2016 (Section 120.2) Fault Detection and Diagnostic (FDD) requirements (EconoMi$er 2 system).

☐ **Economizer with DRY BULB Sensing and Barometric Relief[1]**

ULTRA LOW LEAK Air Dampers —

○ Models with SystemVu meet California Energy Commission Title 24-2016 prescriptive 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).

☐ **Economizer with ENTHALPY Sensing and Barometric Relief[1]**

ULTRA LOW LEAK Air Dampers —

○ Models with SystemVu meet California Energy Commission Title 24-2016 prescriptive 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).

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

FACTORY-INSTALLED OPTIONS (CONT)

- ☐ Through the base connectors for electric conduit
- ☐ Humidi-MiZer® adaptive dehumidification system (this option also includes low ambient controls)
- ☐ Electric heaters and single point electrical point kits.
- ☐ HACR circuit breaker
- ☐ Non-fused disconnect
- ☐ Powered 115-volt convenience outlet
- ☐ Non-powered 115-volt convenience outlet
- ☐ High static evaporator fan motor
- ☐ Return air smoke detector
- ☐ Supply air smoke detector
- ☐ CO_2 Sensor
- ☐ Special coating protection for evaporator and condenser coils
- ☐ MERV-8 return air filters
- ☐ Phase monitor protection
- ☐ Condensate overflow switch
- ☐ Hinged access panels for easy unit access
- ☐ Condenser hail guard - louvered style
- ☐ Cu/Cu coils

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.

FIELD-INSTALLED ACCESSORIES

☐ **Economizer with DRY BULB Sensing and Barometric Relief**

Low Leak Air Dampers —

◯ Models with SystemVu™ controller meet California Title 24-2016 Section 120.2.i Fault Detection and Diagnostic (FDD) requirements (EconoMi$er 2 system).

☐ **Economizer with ENTHALPY Sensing and Barometric Relief**

Low Leak Air Dampers —

◯ Models with SystemVu controller meet California Title 24-2016 Section 120.2.i Fault Detection and Diagnostic (FDD) requirements (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 prescriptive 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 (cont)**

ULTRA LOW LEAK Air Dampers —

◯ Models with SystemVu meet California Energy Commission Title 24-2016 prescriptive 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).

FIELD-INSTALLED ACCESSORIES (CONT)

- ☐ 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
- ☐ Thru-the-bottom connections, electrical
- ☐ Condenser hail guard, louvered style
- ☐ Phase monitor (loss of phase/phase reversal)
- ☐ 115v 20 Amp non unit powered convenience outlet kit
- ☐ Condensate overflow switch
- ☐ Thermostats and sensors

  NOTE: These models have variable speed cooling capability, use appropriate thermostat.

<u>Economizer Sensors</u>

- ☐ Single dry bulb control
- ☐ Differential dry bulb control
- ☐ Single enthalpy control
- ☐ Differential enthalpy control
- ☐ CO_2 — wall mounted
- ☐ CO_2 — duct mounted
- ☐ CO_2 — unit mounted

UNIT DIMENSION PRINT

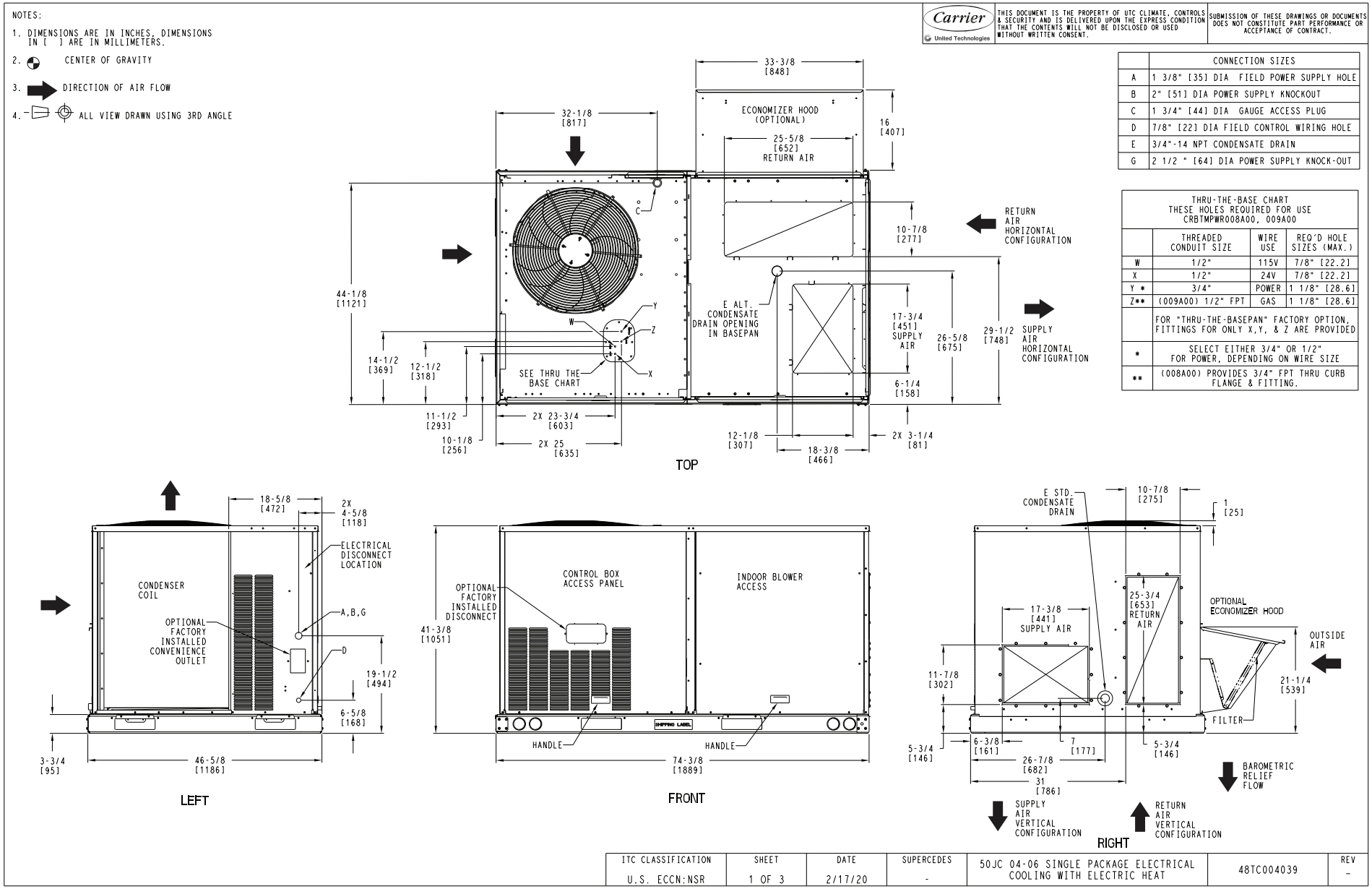
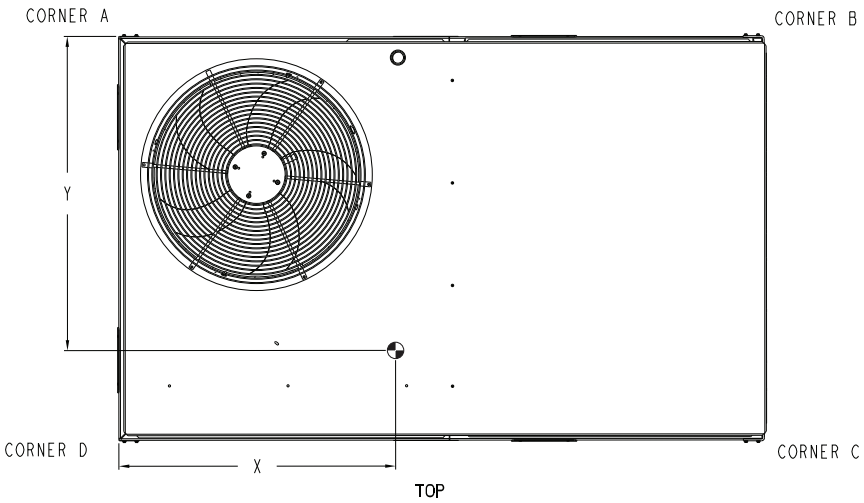


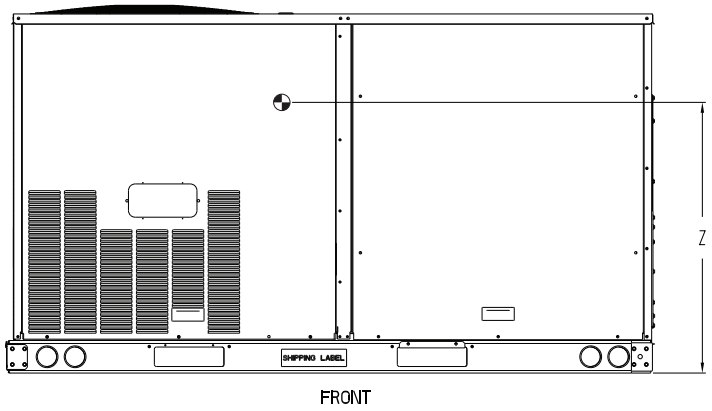
Fig. 1 — 50JC04-06 Base Unit Dimensions**

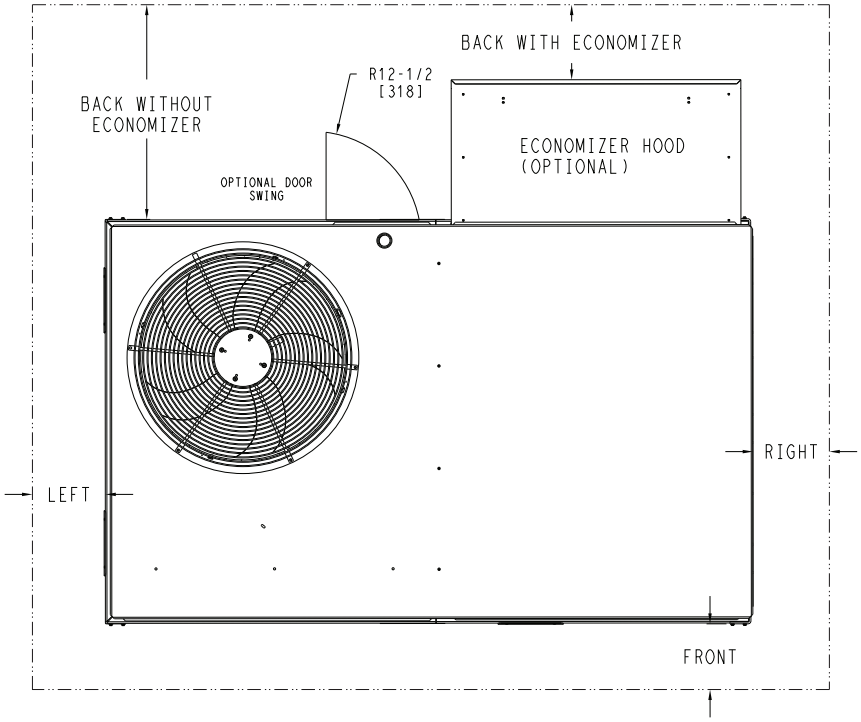
UNIT DIMENSION PRINT

UNIT	STD. UNIT WEIGHT *		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		SUPPLY OPENING C.G.		HEIGHT
	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z
50JC**04	542	246	136	62	119	54	134	61	153	69	34 3/4 [883]	24 3/4 [629]	19 3/4 [502]
50JC**05	565	256	142	64	125	57	140	64	158	72	34 7/8 [886]	24 5/8 [625]	19 1/2 [495]
50JC**06	567	257	144	65	126	57	138	63	159	72	34 5/8 [879]	24 1/2 [622]	19 1/2 [495]

*- STANDARD UNIT WEIGHT IS WITHOUT ELECTRIC HEAT AND WITHOUT PACKAGING.
FOR OTHER OPTIONS AND ACCESSORIES REFER TO THE PRODUCT DATA CATALOG.







NOTE:

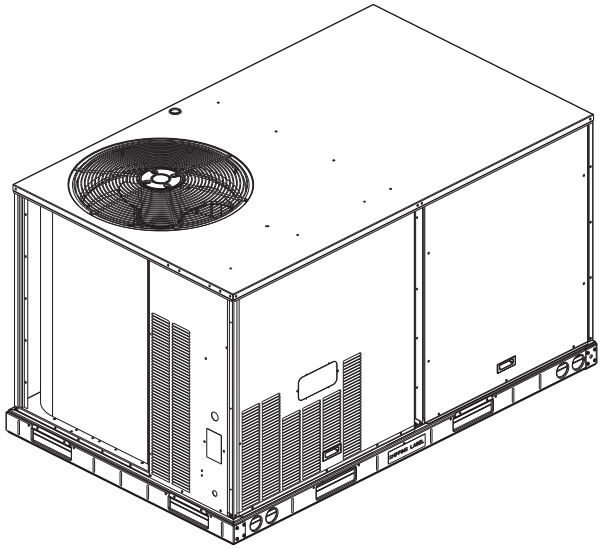
1. FOR ALL MINIMUM CLEARANCES LOCAL CODES OR JURISDICTIONS MAY PREVAIL.

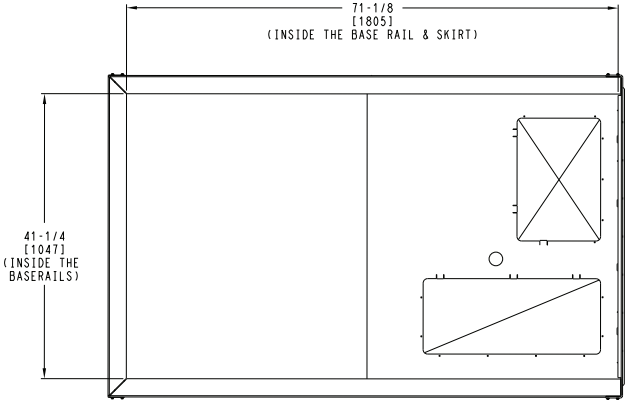
	CLEARANCE		
	SERVICE WITH:	SERVICE WITH:	OPERATING
SURFACE	CONDUCTIVE BARRIER	NONCONDUCTIVE BARRIER	CLEARANCE
FRONT	48 [1219mm]	36 [914mm]	18 [457mm]
LEFT	48 [1219mm]	42 [1067mm]	18 [457mm]
BACK W/O HOOD	48 [1219mm]	42 [1067mm]	18 [457mm]
BACK W/HOOD	36 [914mm]	36 [914mm]	18 [457mm]
RIGHT	36 [914mm]	36 [914mm]	18 [457mm]
TOP	72 [1829mm]	72 [1829mm]	72 [1829mm]

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES			REV
U.S. ECCN:NSR	2 OF 3	2/17/20	-	50JC 04-06 SINGLE PACKAGE ELECTRICAL COOLING WITH ELECTRIC HEAT	48TC004039	-

Fig. 1 — 50JC04-06 Base Unit Dimensions (cont)**

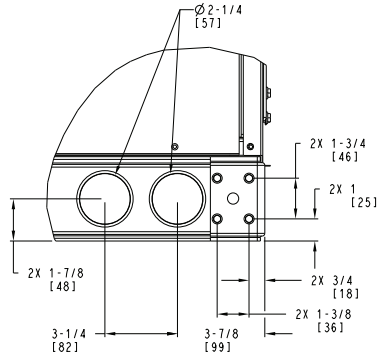
UNIT DIMENSION PRINT



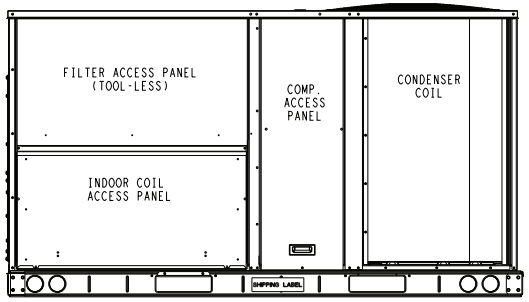


INSIDE BASERAIL DIMENSIONS

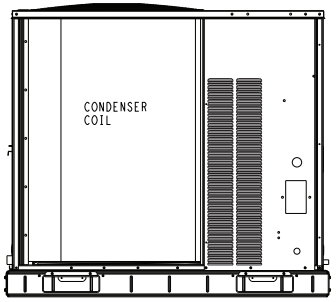
BOTTOM



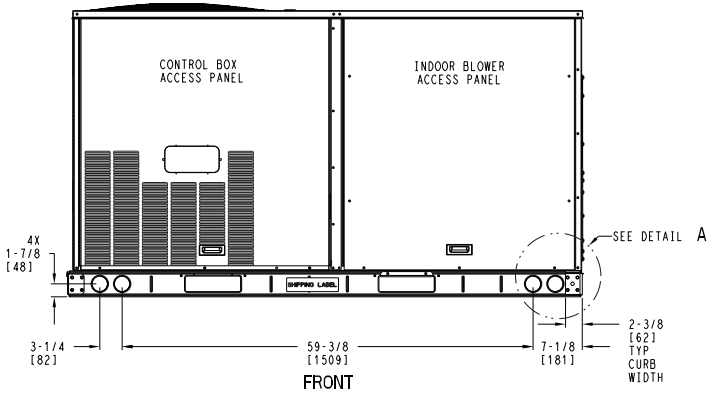
DETAIL A
TYP 4 PLCS



BACK



LEFT



FRONT

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES			REV
U.S. ECCN:NSR	3 OF 3	2/17/20	-	50JC 04-06 SINGLE PACKAGE ELECTRICAL COOLING WITH ELECTRIC HEAT	48TC004039	-

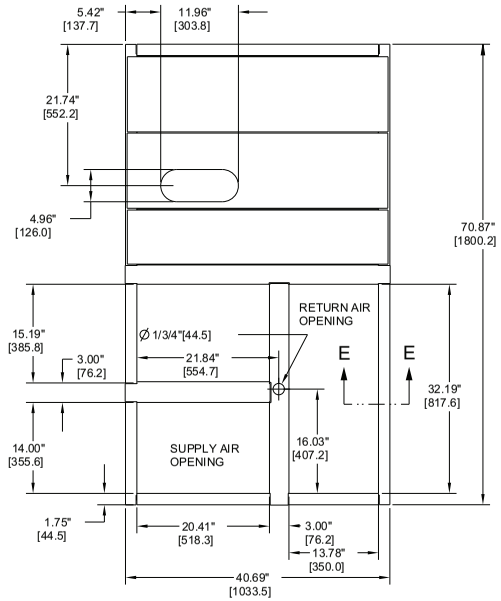
Fig. 1 — 50JC04-06 Base Unit Dimensions (cont)**

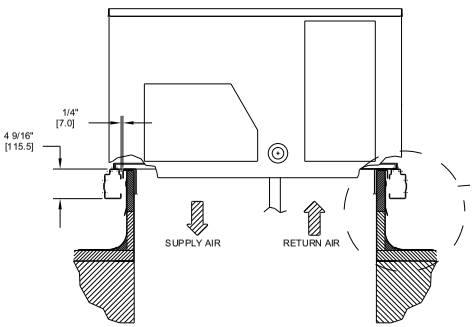
ACCESSORY DIMENSION PRINT

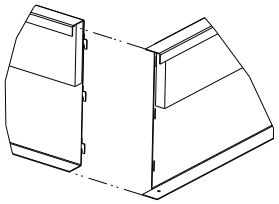
ROOF CURB ACCESSORY #	A
CRRFCURB001A01	14" [356]
CRRFCURB002A01	24" [610]

NOTES:
1. ROOFCURB ACCESSORY IS SHIPPED DISASSEMBLED.
2. INSULATED PANELS: 25.4 [1"] THK. POLYURETHANE FOAM, 44.5 [1-3/4] # DENSITY.
3. DIMENSIONS IN [ ] ARE IN MILLIMETERS.
4. ROOFCURB: 18 GAGE STEEL.
5. ATTACH DUCTWORK TO CURB. (FLANGES OF DUCT REST ON CURB).
6. SERVICE CLEARANCE 4 FEET ON EACH SIDE.
7. DIRECTION OF AIR FLOW.
8. CONNECTOR PACKAGE CRBTMPWR001A01 IS FOR THRU-THE-CURB GAS TYPE PACKAGE CRBTMPWR003A01 IS FOR THRU-THE-BOTTOM TYPE GAS CONNECTIONS.

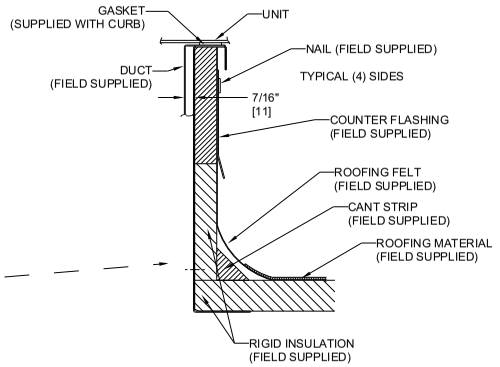
CONNECTOR PKG. ACC.	GAS CONNECTION TYPE	GAS FITTING	POWER WIRING FITTING	CONTROL WIRING FITTING	ACCESSORY CONVENIENCE OUTLET WIRING CONNECTOR
CRBTMPWR001A01	THRU THE CURB	3/4" [19] NPT	3/4" [19] NPT	1/2" [12.7] NPT	1/2" [12.7] NPT
CRBTMPWR003A01	THRU THE BOTTOM	1/2" [12.7] NPT			

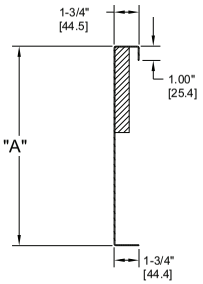




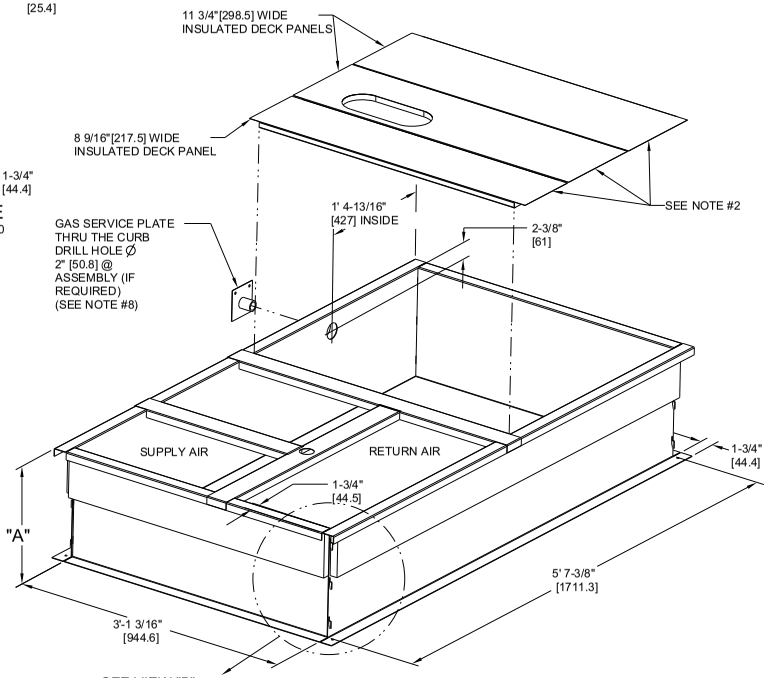


VIEW "B"
CORNER DETAIL





SECTION E-E
SCALE 0.250



CERTIFIED DRAWING

REV	REVISION RECORD	DATE	BY	CHK'D	APP'D	ECN NO.
A	OVERALL DIM. 5'-7 3/8" WAS 5'-7 7/8; 18GA MATERIAL WA 16 GA.; NAIL FIELD SUPPLIED WAS WITH CURB	04/22/13	MMC	-	-	1067898

DRAWING RELEASE LEVEL: PRODUCTION			
THIRD ANGLE PROJECTION	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: 1 DEC ± - 2 DEC ± - 3 DEC ± - ANG ± °		
MATERIAL - - -	AUTHORIZATION NUMBER 1041738	TITLE	CURB ASY, ROOF
ENGINEERING REQUIREMENTS T-005, Y-002	ENGINEERING - MANUFACTURING -	SIZE D	DRAWING NUMBER 48TC400427 SHEET 5 OF 5 REV B
WEIGHT: -	DRAFTER MMC 06/17/11 CHECKER -		
SURFACE FINISH - MFG/PURCH PURCH	MODEL (INTERNAL USE ONLY) -	NEXT DRAWING - SCALE N/A	DISTRIBUTION MMC

Fig. 2 — 50JC04-06 Base Unit Dimensions**