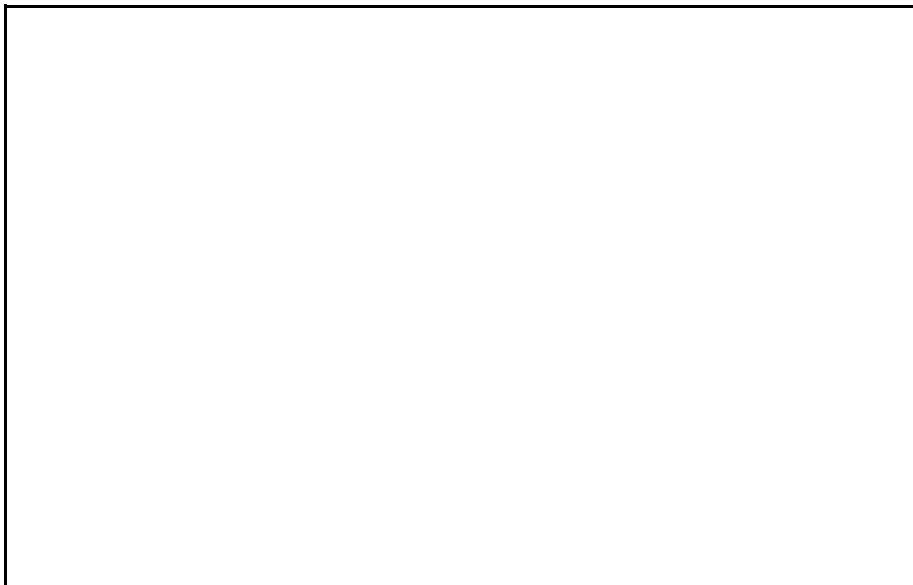


# **48JC 04-06 WEATHEREXPERT® SERIES VARIABLE SPEED SINGLE PACKAGE ROOFTOP WITH ECOBLUE™ TECHNOLOGY GAS HEAT/ELECTRIC COOLING UNITS**

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



JOB NAME:	LOCATION:			
BUYER:	BUYER PO #:	CARRIER#:		
UNIT NUMBER:	MODEL NUMBER:			
PERFORMANCE DATA CERTIFIED BY:				
<b>DESCRIPTION</b>				
<p>48JC single package variable speed rooftop units are ultra high-efficiency single-packaged electric cooling, gas heating units that are pre-wired and pre-charged with Puron® (R-410A) HFC refrigerant. The units are factory tested in both heating and cooling modes. All size 04-06 models use variable speed cooling capacity control.</p>				
<b>FEATURES</b>				
<p><b>Standard Base Unit</b></p> <ul style="list-style-type: none"> <li>Puron (R-410A) HFC refrigerant</li> <li>SEERs up to 20.0</li> <li>Direct Drive - EcoBlue™ Technology indoor fan system uses Van Axial fan design and electronically commutated motor <ul style="list-style-type: none"> <li>Shall have inherent automatic-reset thermal overload protection</li> <li>Shall require no fan/motor belts for operation, adjustments, and/or initial fan speed setup.</li> <li>Shall be internally protected from electrical phase reversal and loss</li> <li>Shall have slow ramp up to speed control capabilities to help reduce sound and comfort issues</li> <li>Shall be a slide-out design with two screw removal</li> </ul> </li> <li>All sizes have variable speed cooling capacity control that ranges from 25% up to 105% of nominal unit capacity</li> <li>Rated in accordance with AHRI Standards 210/240</li> <li>Designed in accordance with Underwriters Laboratories Std 1995</li> <li>Listed by UL and UL-Canada</li> <li>Corrosive resistant composite sloping design; side or center drain condensate pan. Meets ASHRAE Standard 62</li> <li>Standard cooling operating range from 0°F (-18°C) up to 125°F (52°C).</li> <li>Field convertible from vertical to horizontal airflow for slab mounting, no special kits required</li> <li>Two-inch disposable return air filters</li> <li>Thru-the-bottom power and gas entry capability</li> <li>Single point gas and electric connections</li> <li>24-volt control circuit protected with resettable circuit breaker</li> <li>Permanently lubricated evaporator-fan motor</li> <li>Totally enclosed variable speed condenser motors with permanently lubricated bearings</li> <li>Low-pressure and high-pressure switches</li> <li>Full perimeter base rail with built-in rigging adapters and fork truck slots</li> <li>ASHRAE 90.1-2016, IECC-2015* energy compliant</li> </ul> <p><u>SystemVu™ controls</u> are standard on each unit to help facilitate units' diagnostics, ease of commissioning, control the cooling, heating, ventilation operation and much more. Some highlights:</p> <ul style="list-style-type: none"> <li>Large full text - multi line display</li> <li>USB Flash Port for data transfer</li> <li>Built in i-Vu®, CCN and BACnet†</li> <li>Built in electrical phase and compressor reverse rotation protection</li> <li>Read refrigerant pressure from display- no gauges required</li> <li>Quick LED Status - Run, Alert, Fault</li> <li>Conventional thermostat or sensor capabilities</li> </ul>				
<p><b>Historical component runtime and starts</b></p> <p><b>Supply Air Tempering and Demand Limiting control</b></p> <p><b>Equipment / System Touch Compatibility</b></p> <p><b>Supports linkage on zoning systems using CCN VVT and i-Vu® Open VVT controls</b></p> <p><b>Cabinet</b></p> <ul style="list-style-type: none"> <li>Access panels with easy grip handles</li> <li>Innovative, easy starting, no-strip screw feature on unit access panels</li> <li>Pre-painted exterior panels and primer-coated interior panels tested to 500 hours salt spray protection</li> <li>Fully insulated cabinet</li> <li>Tool-less filter access door</li> <li>Cabinet insulated with foil faced insulation that is encapsulated/taped throughout the indoor air stream</li> </ul> <p><b>Refrigerant System</b></p> <ul style="list-style-type: none"> <li>TXV refrigerant metering device</li> <li>Liquid line filter drier</li> <li>Scroll compressors with internal line-break overload protection</li> <li>Copper tube, aluminum fin coils with optional corrosion resistant coils.</li> <li>Removable gage line plugs for reading refrigerant pressure with unit panels in place</li> </ul> <p><b>Gas Heat</b></p> <ul style="list-style-type: none"> <li>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</li> <li>Gas efficiencies up to 81%</li> <li>Induced draft combustion</li> <li>Redundant gas valve, with up to 2 stages of heating</li> <li>Flame roll-out safety protector</li> <li>Solid-state electronic direct spark ignition system</li> </ul> <p><b>Standard Limited Parts Warranty</b></p> <ul style="list-style-type: none"> <li>15-year gas heat exchanger parts - Stainless Steel</li> <li>10-year gas heat exchanger parts - Aluminized</li> <li>5-year compressor parts</li> <li>5-year Ultra Low Leak Economizer parts (factory-installed)</li> <li>3-year SystemVu™ controls</li> <li>1-year parts</li> </ul>				

\* IECC is a registered trademark of International Code Council, Inc.  
† BACnet is a trademark of ASHRAE.

## PERFORMANCE DATA

Unit Operating Weight \_\_\_\_\_ lb      Exhaust Fan Motor Size \_\_\_\_\_ HP  
**COOLING**  
Gross Total Capacity \_\_\_\_\_ Btuh      Curb Weight \_\_\_\_\_ lb  
at Condenser Air Temperature \_\_\_\_\_ °F  
Gross Sensible Capacity \_\_\_\_\_ Btuh      **HEATING (GAS)**  
Compressor Power Input \_\_\_\_\_ kW      Heating Capacity:  
Indoor Entering: db \_\_\_\_\_ °F / wb \_\_\_\_\_ °F      Stage 1 \_\_\_\_\_ Btuh  
Airflow \_\_\_\_ CFM External Static Pressure \_\_\_\_ in. wg      Stage 2 \_\_\_\_\_ Btuh  
Indoor Fan Motor Size \_\_\_\_\_ HP      Heating Capacity Total \_\_\_\_\_ Btuh  
Indoor Fan Motor Setting \_\_\_\_\_ Vdc      Stage 1 \_\_\_\_\_ kW  
Indoor Fan Motor Setting \_\_\_\_\_ Vdc      Stage 2 \_\_\_\_\_ kW  
Indoor Fan Motor Setting \_\_\_\_\_ Vdc      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\***

Low Leak Air Dampers —

- Models with SystemVu™ a 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\***

Low Leak Air Dampers —

- Models with SystemVu™ meet California Title 24-2016 (Section 120.t) 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 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 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).

## FACTORY-INSTALLED OPTIONS (CONT)

- 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 (This option also includes low ambient controls)
- 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<sub>2</sub> sensor
- Condenser hail guard-louvered style
- Special coating protection for evaporator and condenser coils
- Hinged panels for easy unit access
- MERV-8 return air filters
- Phase monitor protection
- Condensate overflow switch
- 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™ 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 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).

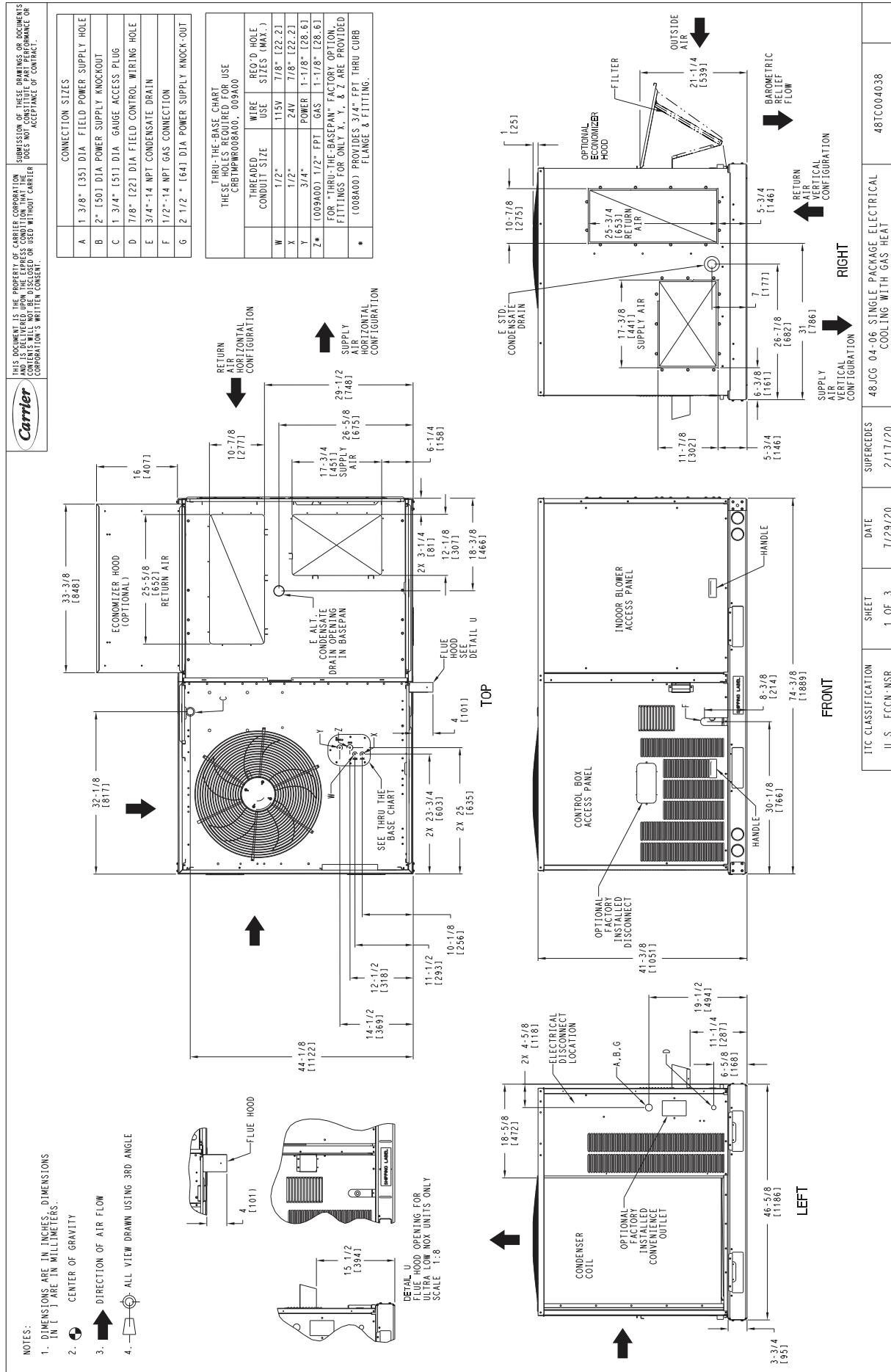
## FIELD-INSTALLED ACCESSORIES (CONT)

- 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 only
  - Thru-the-bottom connections, electrical and gas
  - Thru-the-bottom electrical, control, and gas connection kit
  - Thru-the-bottom electrical and thru-the-curb gas connection kit
  - Condenser hail guard, louvered style
  - Flue heat shield
  - Flue discharge deflector
  - Liquid propane (LP) conversion kit
  - High altitude conversion kit
  - Phase monitor (loss of phase/phase reversal)
  - Condensate overflow switch
  - Non-powered 115-volt (20 amp) convenience outlet
  - Condensate overflow switch
  - Motor status indicator switch
  - Fan/Filter status indicator switch
  - Thermostats and sensors
- NOTE: These models have variable speed cooling capability, use appropriate thermostat.
- Economizer Sensors
- Single dry bulb control
  - Differential dry bulb control
  - Single enthalpy control
  - Differential enthalpy control
  - CO<sub>2</sub> — wall mounted
  - CO<sub>2</sub> — duct mounted
  - CO<sub>2</sub> — unit mounted

UNIT DIMENSION PRINT

NOTES:

1. DIMENSIONS ARE IN INCHES. DIMENSIONS IN [ ] ARE IN MILLIMETERS.
2.  CENTER OF GRAVITY
3.  DIRECTION OF AIR FLOW
4.  ALL VIEW DRAWN USING 3RD AN-



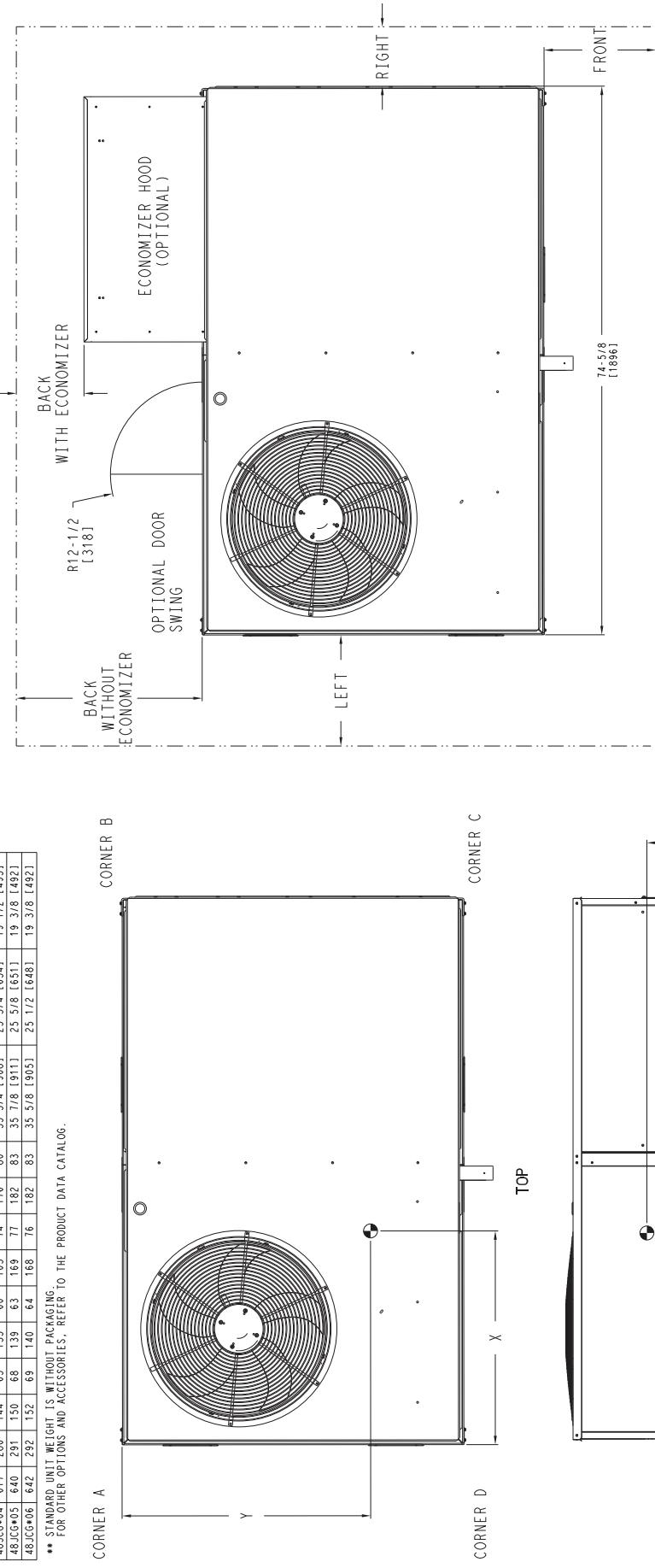
**Fig. 1 – 48JC\*04-06 Unit Dimensions**

UNIT DIMENSION PRINT

UNIT	STD. UNIT	CORNER WEIGHT (LB.)	CORNER WEIGHT (LB.)	CORNER WEIGHT (LB.)	CORNER WEIGHT (LB.)	C. G.	HEIGHT												
	LBS.	KG.	LBS.	KG.	LBS.	KG.	Z												
18.JCG-04	6.17	280	144	65	33	60	163	74	80	35	34	1908	25	34	6540	19	1/2	4455	
48.JCG-05	6.40	291	150	68	139	64	169	77	182	83	35	77	1911	25	57	6511	19	3/8	4492
48.JCG-06	6.42	292	152	69	140	64	168	76	182	83	35	78	1911	25	57	6488	19	3/8	4492

\*\* STANDARD UNIT WEIGHT IS WITHOUT PACKAGING.  
FOR OTHER OPTIONS AND ACCESSORIES, REFER TO THE PRODUCT DATA CATALOG.

THE JOURNAL OF CLIMATE



**NOTES:**

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

CLEARANCE			
SURFACE	SERVICE WITH CONDUCTIVE BARRIER	SERVICE WITH NONCONDUCTIVE BARRIER	OPERATING 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]

IIC CLASSIFICATION: "C EOCN NED" SHEET: 3 OF 3 DATE: 7/10/00

48/ICG 04-06 SINGLE PACKAGE ELECTRICAL COOLING WITH GAS HEAT

48/TC004038

**Fig. 1 – 48JC\*04-06 Unit Dimensions (cont)**

## UNIT DIMENSION PRINT

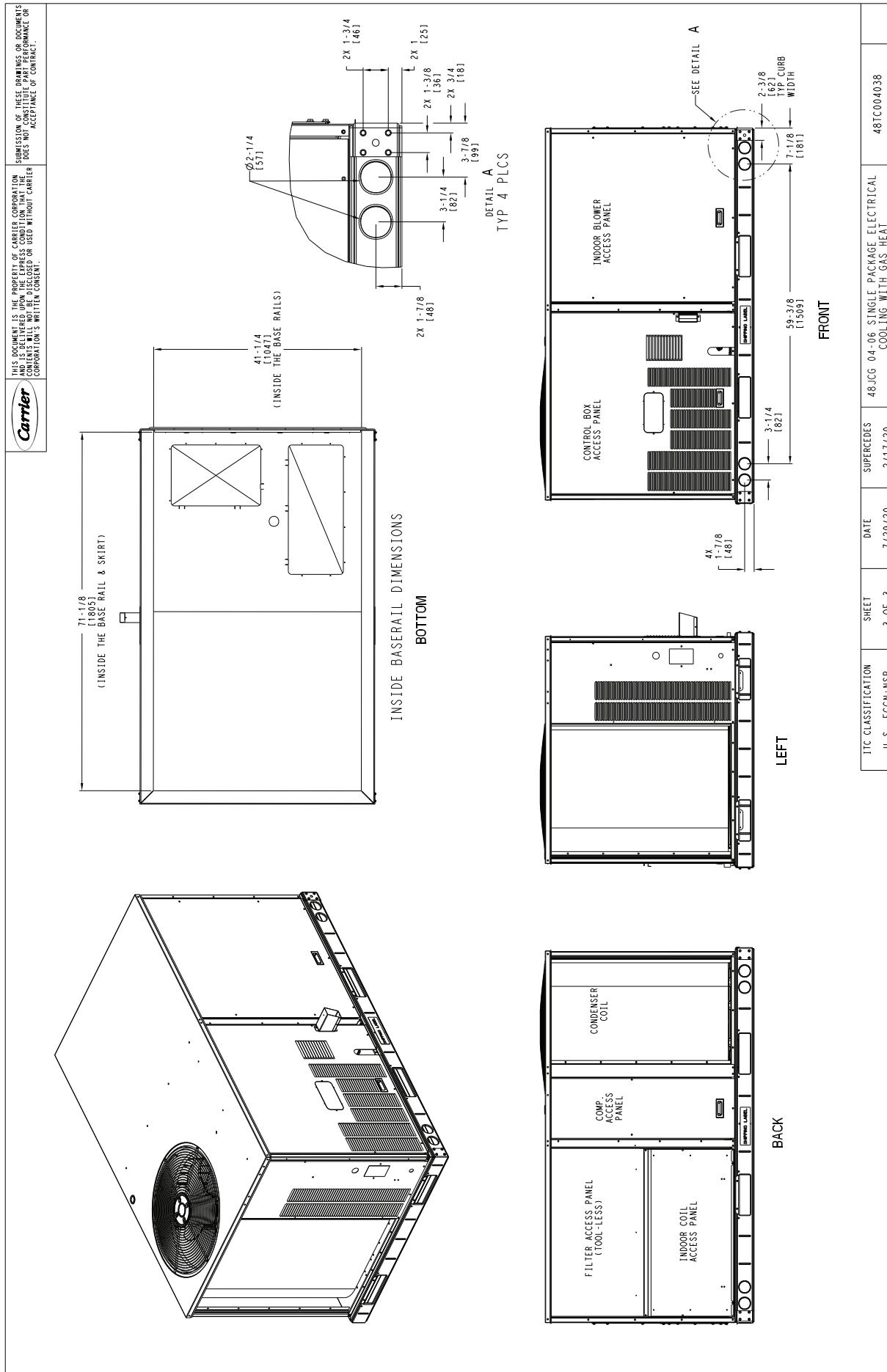
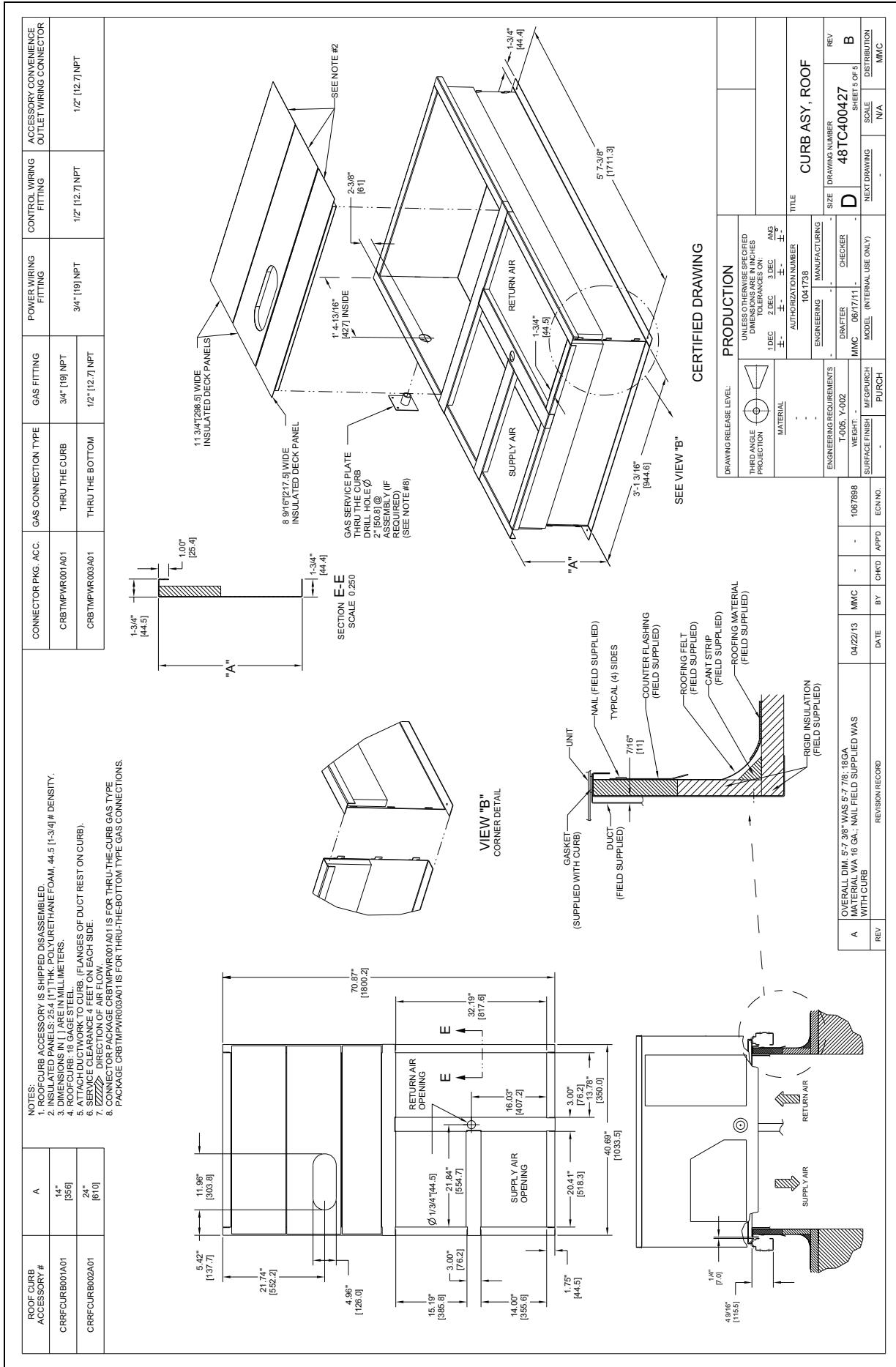


Fig. 1 — 48JC\*04-06 Unit Dimensions (cont)

# ACCESSORY DIMENSION PRINT



**Fig. 2 — 48JC\*04-06 Roof Curb Dimensions**

