



48JC 04-06 WEATHEREXPERT® SERIES VARIABLE SPEED SINGLE PACKAGE ROOFTOP WITH ECOBBLUE™ 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:		
DESCRIPTION 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. FEATURES <u>Standard Base Unit</u> • Puron (R-410A) HFC refrigerant • 20 SEER and 18.9 SEER2 • Direct Drive - EcoBlue™ Technology indoor fan system uses Van 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 nominal unit capacity • Rated in accordance with AHRI Standards 210/240 • Designed in accordance with Underwriters Laboratories Std 1995 • Listed by UL and UL-Canada • Corrosive resistant composite sloping design; side or center drain condensate pan. Meets ASHRAE Standard 62 • Standard 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 and gas entry capability • Single point gas and electric connections • 24-volt control circuit protected with resettable circuit breaker • Permanently lubricated evaporator-fan motor • 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 • ASHRAE 90.1-2016, IECC-2015¹ energy compliant <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: • Large full text - multi line display • USB 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 <u>Cabinet</u> • Access panels with easy grip handles • Innovative, easy starting, no-strip screw feature on unit access panels • Pre-painted exterior panels and primer-coated interior panels tested to 500 hours salt spray protection • Fully insulated cabinet • Tool-less filter access door • Cabinet insulated with foil faced insulation that is encapsulated/taped throughout the indoor air stream <u>Refrigerant System</u> • 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 <u>Gas Heat</u> • 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 81% • Induced draft combustion • Redundant gas valve, with up to 2 stages of heating • Flame roll-out safety protector • Solid-state electronic direct spark ignition system <u>Standard Limited Parts Warranty</u> • 15-year gas heat exchanger parts - Stainless Steel • 10-year gas heat exchanger parts - Aluminized • 5-year compressor parts • 5-year Ultra Low Leak Economizer parts (factory-installed) • 3-year SystemVu™ controls • 1-year parts		

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PERFORMANCE DATA

Unit Operating Weight _____ lb Exhaust Fan Motor Size _____ HP
COOLING Curb Weight _____ lb
Gross Total Capacity _____ Btuh **HEATING (GAS)**
 at Condenser Air Temperature _____ °F Heating Capacity:
Gross Sensible Capacity _____ Btuh Stage 1 _____ Btuh
Compressor Power Input _____ kW Stage 2 _____ Btuh
Indoor Entering: db _____ °F / wb _____ °F Heating Capacity Total _____ Btuh
Airflow _____ CFM External Static Pressure _____ in. wg Stage 1 _____ kW
Indoor Fan Motor Size _____ HP 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 Relief¹

Low Leak Air Dampers —

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

☐ Economizer with ENTHALPY Sensing and Barometric Relief¹

Low Leak Air Dampers —

- Models with SystemVu™ meet California Title 24-2016 (Section 120.t Detection and Diagnostic (FDD) requirements (EconoMiSer 2 system).

☐ Economizer with DRY BULB Sensing and Barometric Relief¹

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 (EconoMiSer 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 (EconoMiSer 2 system).

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

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
- ☐ CO₂ 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 (EconoMiSer 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 (EconoMiSer 2 system).

☐ Economizer with DRY BULB Sensing and Barometric Relief

ULTRA LOW LEAK Air Dampers —

- Models with SystemVu meet California Energy Commission Title 24-2016 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 (EconoMiSer 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. (EconoMiSer 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
- ☐ CO₂ — wall mounted
- ☐ CO₂ — duct mounted
- ☐ CO₂ — unit mounted

[illegible]

ITC CLASSIFICATION	SHEET	DATE	SUPERCODES	48JCG/H 04-06 SINGLE PACKAGE ELECTRICAL COOLING WITH GAS HEAT	48TC004038
II S. ECCC-USD	1 OF 2	7/20/20	217120		

UNIT DIMENSION PRINT

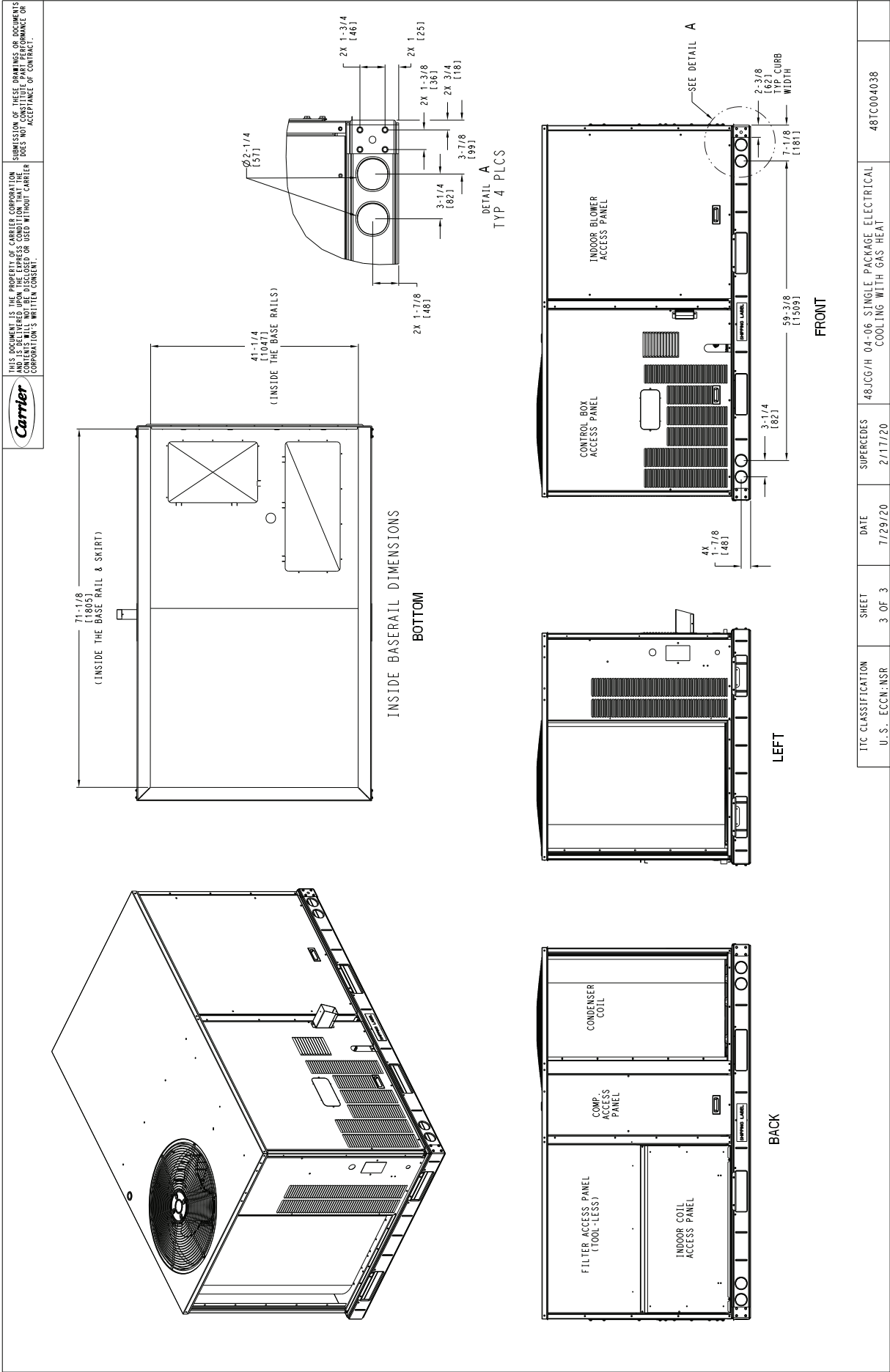
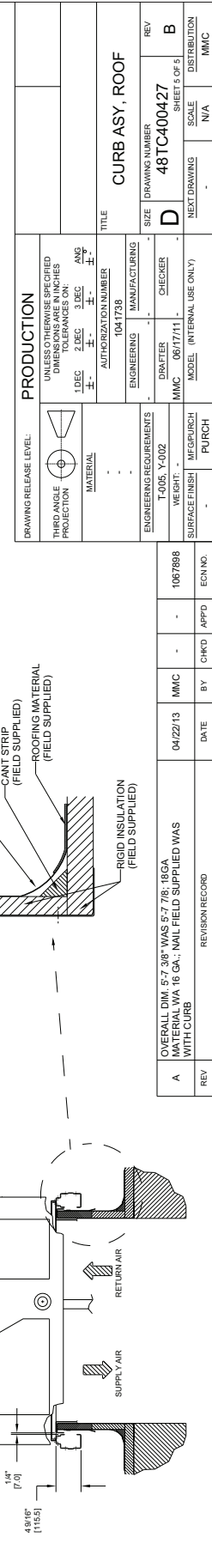


Fig. 1 — 48JC*04-06 Unit Dimensions (cont)

CONNECTOR PKG. ACC.	GAS CONNECTION TYPE	GAS FITTING	POWER WIRING FITTING	CONTROL WIRING FITTING	ACCESSORY CONVENIENCE OUTLET WIRING CONNECTOR
CR8TMR001A01	THRU THE CURB	3/4" [19] NPT			
CR8TMR003A01	THRU THE BOTTOM	1/2" [12.7] NPT	3/4" [19] NPT	1/2" [12.7] NPT	1/2" [12.7] NPT



11

