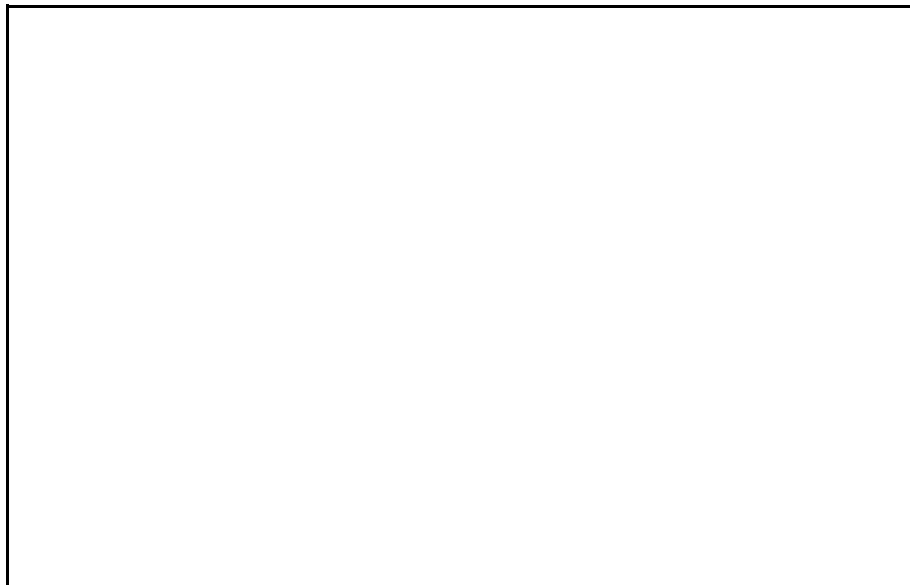




582K 04-07 LEGACY™ LINE WITH AXION FAN™ TECHNOLOGY SINGLE PACKAGE ROOFTOP GAS HEAT/ELECTRIC COOLING UNITS

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



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

DESCRIPTION

582K units are single-packaged electric cooling, gas heating unit that are pre-wired and pre-charged with Puron® (R-410A) HFC refrigerant. The units are factory tested in both heating and cooling modes. Sizes 04-06 models use single-stage cooling capacity control. Size 07 models use two-stage cooling capacity control.

FEATURES

Standard Base Unit

- Puron (R-410A) HFC refrigerant
- 14.0 SEER and 15.2 IEER on 3-phase products and 13.8 SEER2 on single-phase products
- IEER of 15.0
- Meets or exceeds ASHRAE 90.1 energy efficiency levels
- Rated in accordance with AHRI Standards 210/240 for sizes 04-06 and 340/360 for size 07
- Designed in accordance with Underwriters Laboratories Std 1995
- Listed by UL and UL-Canada
- Single-stage cooling capacity control on 04 to 06 models, two-stage on 07 models
- Corrosive resistant composite sloping design; side or center drain condensate pan. Meets ASHRAE Standard 62
- Standard cooling operating range from 40°F up to 115°F (4°C up to 46°C). Field installable accessory 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
- Thru-the-bottom power and gas entry capability
- Single point gas and electric connections
- 24-volt control circuit protected with resettable circuit breaker
- Direct Drive - Axion Fan 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
 - On 07 size model with two stage cooling capacity control, the indoor fan speed is automatically controlled to meet the code compliant 66% low fan speed and 100% at full fan speed
- 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
- New unit control board with intuitive quick fan speed adjustment

Cabinet

- 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

Refrigerant System

- Acutrol™ refrigerant metering system on 04 to 06 models, TXV on 07 models
- Liquid line filter drier
- Scroll compressors with internal line-break overload protection (one-stage on 04 to 06 models, two-stage on 07 models)
- Copper tube, aluminum fin coils with optional corrosion resistant coils
- Top cover removable gage line plugs for reading refrigerant pressure with unit panels in place

Gas Heat

- 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%
- Inducted draft combustion
- Redundant gas valve, with 2 stages of heating
- Flame roll-out safety protector
- Solid-state electronic direct spark ignition system
- Dedicated 3 to 5 ton “low NOx” models available that meet California Air Quality Management NOx requirement of 40 nanograms/joule. Low NOx models include stainless steel heat exchangers.

Standard Limited Parts Warranty

- 15-year gas heat exchanger parts - Stainless Steel
- 10-year gas heat exchanger parts - Aluminized
- 5-year compressor parts

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 Relief (04-06 sizes)

Low Leak Air Dampers —

- Models with W7212 controller provide standard non-diagnostic control (EconoMiSer® IV system).
- Models with W7220 controller meet California Title 24 (Section 120.2), IECC, and ASHRAE 90.1 for Fault Detection and Diagnostic (FDD) requirements (EconoMiSer X system).
- Models with RTU Open controller meet California Title 24 (Section 120.2), IECC, and ASHRAE 90.1 for Fault Detection and Diagnostic (FDD) requirements (EconoMiSer 2 system).

❑ Economizer with ENTHALPY Sensing and Barometric Relief (04-06 sizes)

Low Leak Air Dampers —

- Models with W7212 controller provide standard non-diagnostic control (EconoMiSer® IV system).
- Models with W7220 controller meet California Title 24 (Section 120.2), IECC, and ASHRAE 90.1 for Fault Detection and Diagnostic (FDD) requirements (EconoMiSer X system).
- Models with RTU Open controller meet California Title 24 (Section 120.2), IECC, and ASHRAE 90.1 for Fault Detection and Diagnostic (FDD) requirements (EconoMiSer 2 system).

❑ Economizer with DRY BULB Sensing and Barometric Relief (04-07 sizes)

ULTRA LOW LEAK Air Dampers —

- Models with W7220 controller 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 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 RTU Open 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 (04-07 sizes)

ULTRA LOW LEAK Air Dampers —

- Models with W7220 controller 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 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.
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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).

FACTORY-INSTALLED OPTIONS (cont)

Standard Base Unit

- ☐ RTU Open multi-protocol controller communicates to BACnet^{TM1}, Modbus^{®1}, LonWorks^{®1}, and Johnson N2 protocols.
- ☐ Through the base connectors for gas and electric conduit/piping
- ☐ Stainless steel gas heat exchanger (includes tubes, vestibule plate and collector box)
- ☐ Perfect HumidityTM adaptive dehumidification system (This option should also include low ambient controls)²
- ☐ Two-position motorized outdoor air damper (04-06 sizes)
- ☐ Non-fused disconnect
- ☐ Powered 115-volt convenience outlet²
- ☐ 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 style²
- ☐ Special coating protection for evaporator and condenser coils²
- ☐ Hinged access doors
- ☐ Condensate overflow switch

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.

1. Third-party trademarks and logos are the property of their respective owners.
2. Not available on single-phase models.

FIELD-INSTALLED ACCESSORIES

NOTE: 582K 07 models use two-speed indoor fan logic, the W7212 controller is designed for single-speed motor control. See Application Tip “BY-ROOFTOP-18-01” for further guidance when using this unit.

❑ Economizer with DRY BULB Sensing and Barometric Relief

Low Leak Air Dampers —

- Models with W7212 controller provide standard non-diagnostic control. EconoMiSer® IV.
- Models with W7220 controller meet California Title 24 (Section 120.2), IECC, and ASHRAE 90.1 for Fault Detection and Diagnostic (FDD) requirements (EconoMiSer X system).
- Models with RTU Open controller meet California Title 24 (Section 120.2), IECC, and ASHRAE 90.1 for Fault Detection and Diagnostic (FDD) requirements (EconoMiSer 2 system).

❑ Economizer with ENTHALPY Sensing and Barometric Relief

Low Leak Air Dampers —

- Models with W7212 controller provide standard non-diagnostic control. EconoMiSer IV.
- Models with W7220 controller meet California Title 24 (Section 120.2), IECC, and ASHRAE 90.1 for Fault Detection and Diagnostic (FDD) requirements (EconoMiSer X system).
- Models with RTU Open controller meet California Title 24 (Section 120.2), IECC, and ASHRAE 90.1 for Fault Detection and Diagnostic (FDD) requirements (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 prescriptive 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 RTU Open 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 90.1-2013 / 2016 damper leakage requirements as stat-

ed 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.

❑ Economizer with ENTHALPY Sensing and Barometric Relief

ULTRA LOW LEAK Air Dampers —

- Models with W7220 controller 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 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.
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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.

FIELD-INSTALLED ACCESSORIES (cont)

NOTE: 582K 07 models use two-speed indoor fan logic, the two-position damper and manual dampers are designed for single-speed motor control. See Application Tip “BY-ROOFTOP-18-01” for further guidance when using this unit.

- ☐ 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
- ☐ Condenser hail guard, louvered style
- ☐ Flue shield
- ☐ 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)
- ☐ Fan/Filter status switch
- ☐ Low ambient head pressure controller, down to –20°F (–29°C)

- ☐ Time Guard II compressor anti-cycle protection
- ☐ Thermostats and sensors
NOTE: Size 07 model has two-stage cooling thermostat; use appropriate thermostat.
- ☐ Condensate overflow switch
- ☐ Non-powered 115-volt (20 amp) convenience outlet
- ☐ Side access hinged filter door kit
- ☐ Horn/Strobe annunciator

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

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 ANGLE

CONNECTION SIZES

	CONNECTION SIZES
A	1 3/8" (35) DIA. FIELD POWER SUPPLY HOLE
B	2" (50) DIA. POWER SUPPLY KNOCKOUT
C	1 3/4" (51) DIA. GAUGE ACCESS PLUG
D	7/8" (22) DIA. FIELD CONTROL WIRING HOLE
E	3/4" - 1/4 NPT CONDENSATE DRAIN
F	1/2" - 1/4 NPT GAS CONNECTION
G	2 1/2" (64) DIA. POWER SUPPLY KNOCK-OUT

THRU-THE-BASE CHART
THESE HOLES REQUIRED FOR USE CRIMP/008A00, 009A00

	THREADED CONDUIT SIZE	WIRE USE SIZES (MAX.)	REQ'D HOLE SIZES (MAX.)
W	1/2"	115W	7/8" (22.2)
X	1/2"	2AW	7/8" (22.2)
Y	3/4"	POWER	1-1/8" (28.6)
Z*	(009A00) 1/2" FPT GAS	1-1/8" (28.6)	1-1/8" (28.6)

FOR "THRU-THE-BASEPAN" FACTORY OPTION, FITTINGS FOR ONLY X, Y, & Z ARE PROVIDED (008A00) PROVIDES 3/4" FPT THRU CURB FLANGE & FITTING.

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	REV
II S FCCN-MSR	1 OF 3	11/17/20	582K 04-07 SINGLE PACKAGE ELECTRICAL COOLING WITH GAS HEAT	D
				48TC003095

CERTIFIED DIMENSION PRINT

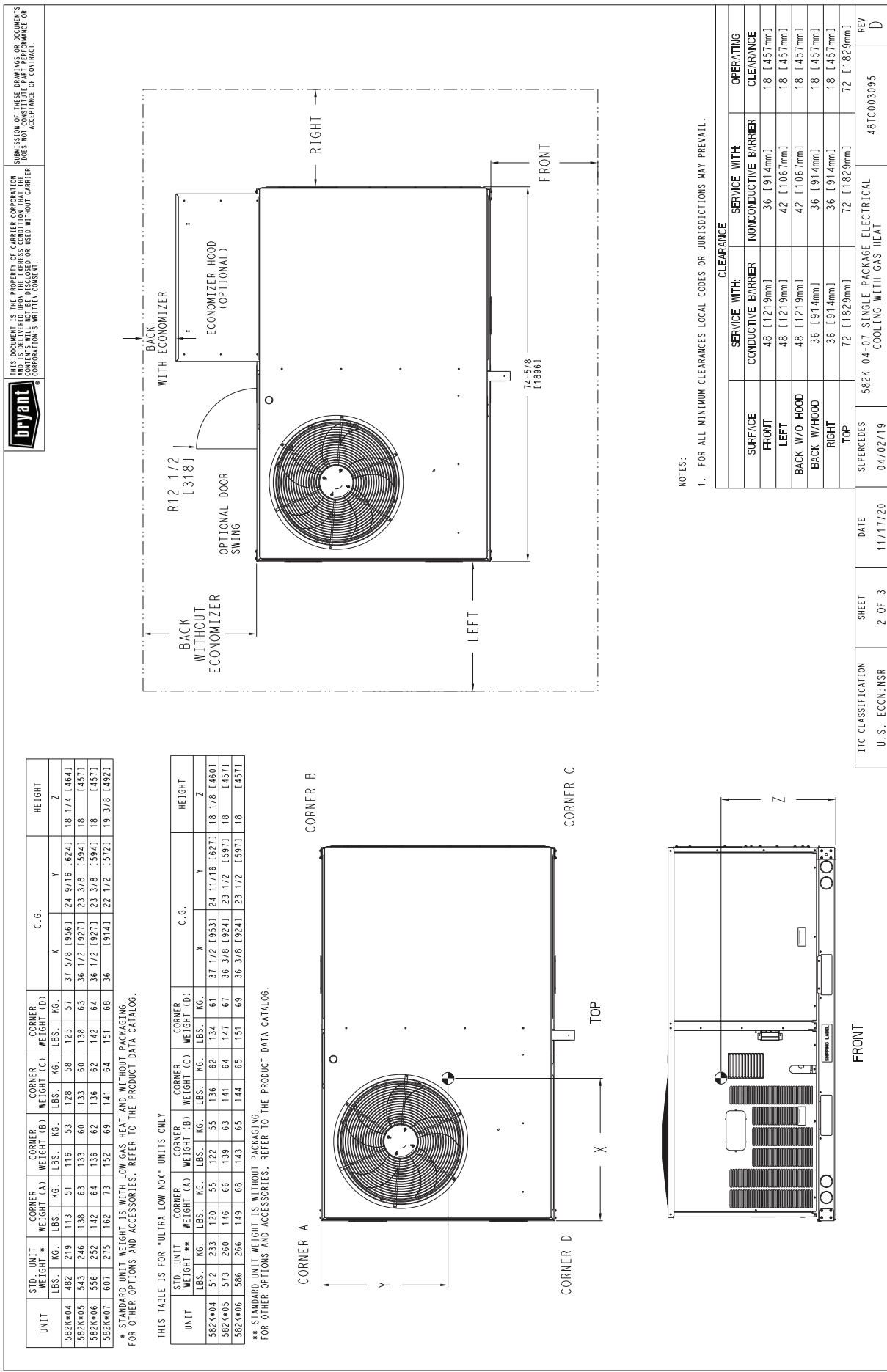


Fig. 1 — 582K**04-07 Dimensional Drawing (cont)

CERTIFIED DIMENSIONS PRINT

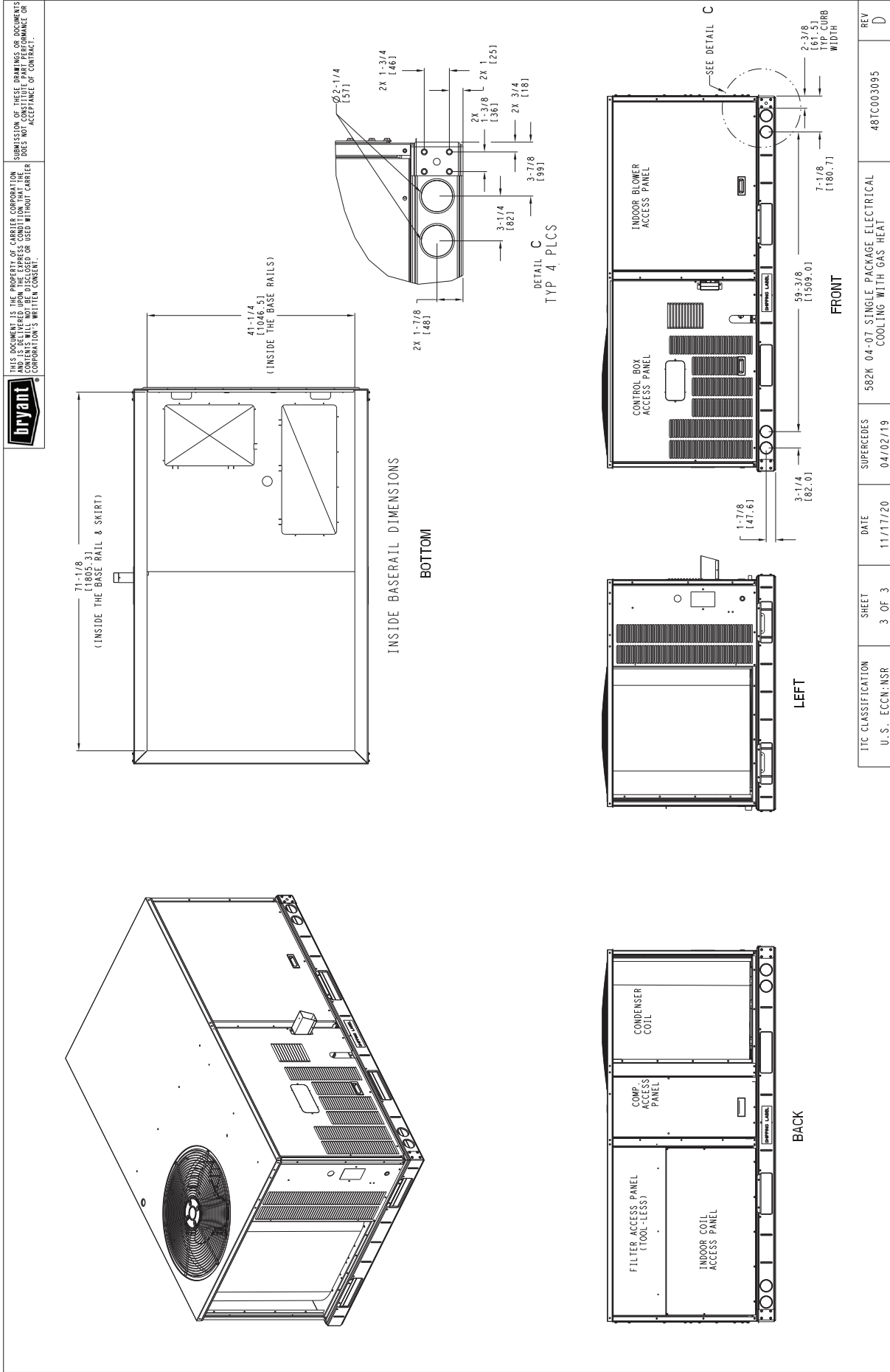


Fig. 1 — 582K**04-07 Dimensional Drawing (cont)

CONNECTOR PKG. ACC.	GAS CONNECTION TYPE	GAS FITTING	POWER WIRING FITTING	CONTROL WIRING FITTING	ACCESSORY CONVENIENCE OUTLET WIRING CONNECTOR
CRBTNPWR007A01	THRU THE CURB	3/4" [19] NPT	3/4" [19] NPT	1/2" [12.7] NPT	1/2" [12.7] NPT
CRBTNPWR003A01	THRU THE BOTTOM	1/2" [12.7] NPT			

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

- NOTES:
1. ROOF CURB ACCESSORY IS SHIPPED DISASSEMBLED.
2. INSULATED PANELS 25X117THICK POLYURETHANE FOAM, 44.5 [1.34] # DENSITY.
3. INSULATED PANELS 25X117THICK POLYURETHANE FOAM, 44.5 [1.34] # DENSITY.
4. ROOF CURB, 18 GAGE STEEL.
5. ATTACH DUCTWORK TO CURB, (FLANGES OF DUCT REST ON CURB).
6. SERVICE CLEARANCE 4 FEET, ON EACH SIDE.
7. CONNECTOR PACKAGE CRBTMPW001A01 IS FOR THRU-THE CURB GAS TYPE
8. CONNECTOR PACKAGE CRBTMPW003A01 IS FOR THRU-THE-BOTTOM TYPE GAS CONNECTIONS

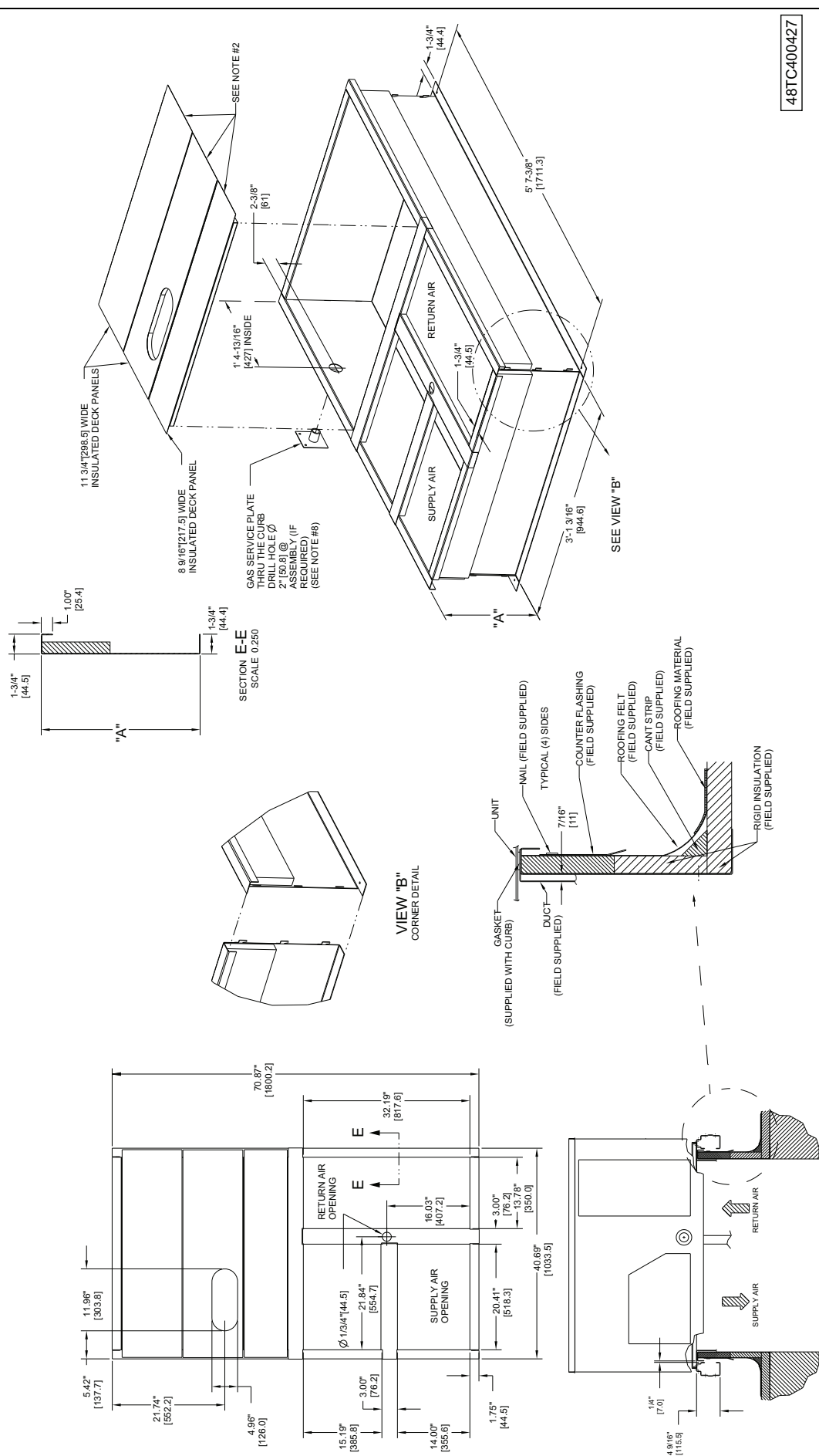


Fig. 2 — 582K04-07 Roof Curb Accessory Details**

