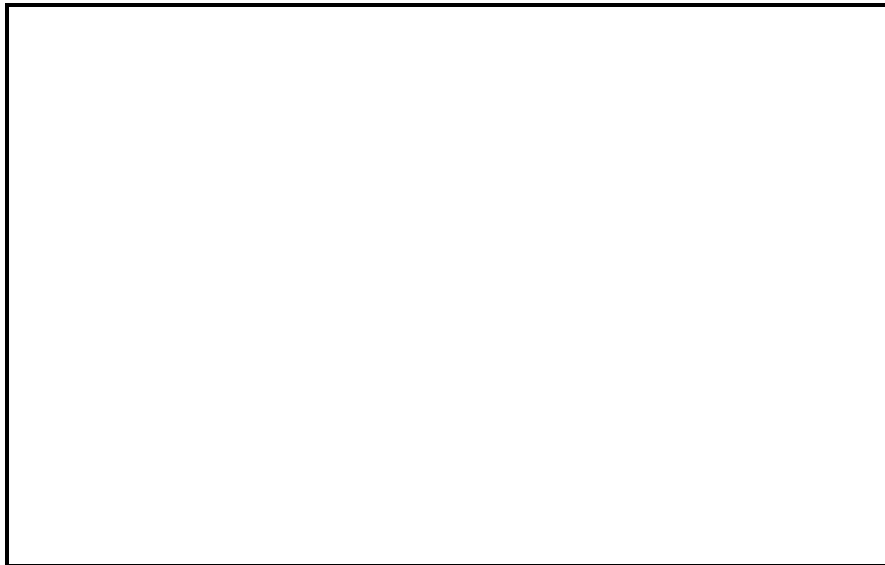


48KC WeatherMaker® Series
Single Package Rooftop, 14 SEER
Gas Heating/Electric Cooling Unit
Sizes 04 – 06 with Puron® (R-410A) Refrigerant



Submittal Data

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



Job Data: _____ Location: _____
Buyer: _____ Buyer P.O.#: _____ Carrier: _____
Unit Number: _____ Model Number: _____
Unit Designation: _____
Performance Data Certified By: _____



Certified to
ISO 9001



Use of the AHRI Certified
TM Mark indicates a
manufacturer's
participation in the
program For verification
of certification for individual
products, go to
www.ahridirectory.org.

DESCRIPTION

48KC units are 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.

48KC



STANDARD FEATURES

Base Unit

- Puron (R-410A) HFC refrigerant
- SEER's up to 14.1
- EER's up to 12.0
- Meets and exceeds ASHRAE 90.1 energy efficiency levels
- Rated in accordance with AHRI Standards 210/240
- Designed in accordance with Underwriters' Laboratories Std 1995
- Listed by UL & CUL-Canada
- Single-stage cooling capacity control
- Non-corrosive 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 - ECM Indoor fan motor is standard with optional belt drive systems
- 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
- Central Terminal Board facilitates simple safety circuit troubleshooting and simplified control box arrangement

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
- 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

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
- Dedicated 3-5 ton "Low NOx" models available that meet California Air Quality Management NOx requirement of 40 nanograms/joule or less. Low NOx models include stainless steel heat exchangers
- Gas efficiencies up to 82%
- Inducted draft combustion
- Redundant gas valve, with 2 states of heating
- Flame roll-out safety protector
- Solid-state electronic direct spark ignition system

STANDARD FEATURES (cont.)

Standard Warranty

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

PERFORMANCE DATA

Unit Operating Weight _____ lb

Curb Weight _____ lb

Cooling

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

Exhaust Fan Motor Size _____ Hp

Heating

Heating Capacity:

Stage 1 _____ Btuh

Stage 2 _____ Btuh

Heating Capacity Total _____ Btuh

Stage 1 _____ kW

Stage 2 _____ kW

Heating Capacity Total _____ kW

48KC

ELECTRICAL DATA

Power Supply to Unit _____ Volts _____ Phase _____ Hz

Minimum Circuit Amps _____ Maximum Overcurrent Protection _____

SUBMITTAL DATA

Job Name _____

Architect _____

Engineer _____

Contractor _____

Unit Designation _____

FACTORY-INSTALLED OPTIONS (FIOPs)

Economizer with DRY BULB sensing and barometric relief*

Standard Air Leak Dampers —

- Models with W7212 controller provides standard non-diagnostic control. EconoMi\$er IV.
- Models with W7220 controller meets California Title 24 (section 120.2) Fault Detection and Diagnostic (FDD) requirements. EconoMi\$er X.
- Models with RTU Open controller meets California Title 24 (section 120.2) Fault Detection and Diagnostic (FDD) requirements. EconoMi\$er 2.
- Models with PremierLink controller. PremierLink controller does not meet California Title 24 Section 120.2 Fault Detection and Diagnostic (FDD) requirement. EconoMi\$er 2.

Economizer with ENTHALPY sensing and barometric relief*

Standard Air Leak Dampers —

- Models with W7212 controller provides standard non-diagnostic control. EconoMi\$er IV.
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Economizer with DRY BULB sensing and barometric relief*

ULTRA LOW LEAK Air Dampers —

- Models with W7220 controller meets California Title 24 (section 120.2) Fault Detection and Diagnostic (FDD) requirements, has return, outside air and relief damper leakage that meets Title 24 (section 140.4 and ASHRAE 90.1) requirements - plus 5 year limited parts warranty. EconoMi\$er X.
- Models with RTU Open controller meets California Title 24 (section 120.2) Fault Detection and Diagnostic (FDD) requirements, has return, outside air and relief damper leakage that meets Title 24 (section 140.4 and ASHRAE 90.1) requirements - plus 5 year limited parts warranty. EconoMi\$er 2.

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RTU Open multi-protocol controller communicates to LON, MODBUS, BACNET and Johnson N2 protocols.

CCN Direct Digital Control (DDC) - PremierLink™

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 Motormaster I controls)

2 position motorized outdoor air damper*

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*

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

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* price pages for further information.

FIELD INSTALLED ACCESSORIES

Economizer with DRY BULB sensing and barometric relief

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Energy Demand System - wireless automated demand management and response controllers

- Power exhaust - prop fan design
- Two-position motorized outdoor air damper
- Manual outside air damper 25%
- Manual outside air damper 50%
- Roofcurb - 14 inch (356mm) tall
- Roofcurb - 24 inch (610mm) 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 0°F (-18°C)
- Low ambient head pressure controller, down to -20°F (-29°C)
- Time Guard II compressor anti-cycle protection
- Thermostats and Sensors

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

CERTIFIED DIMENSION 48KC*04-06

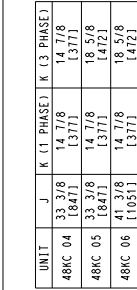
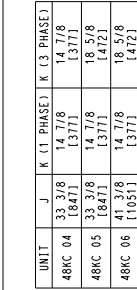
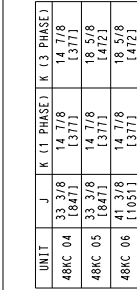
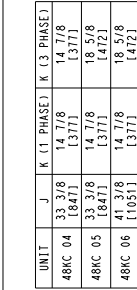
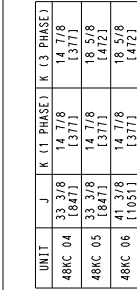
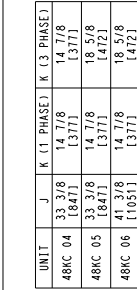
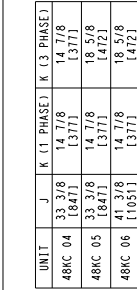
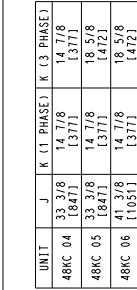
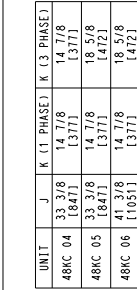
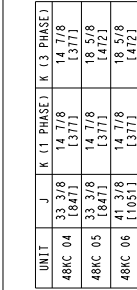
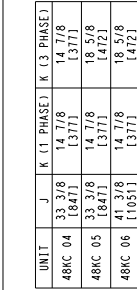
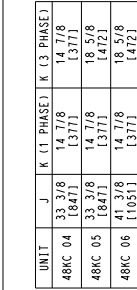
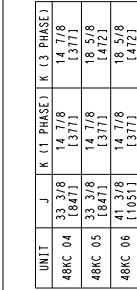
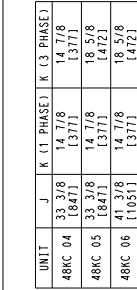
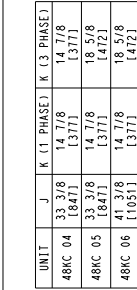
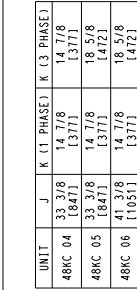
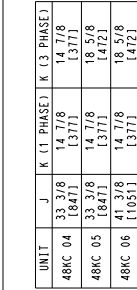
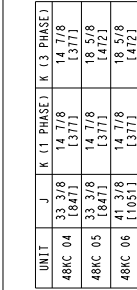
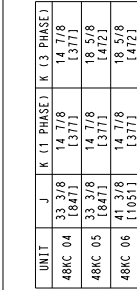
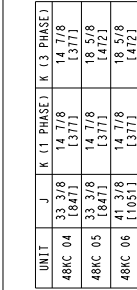
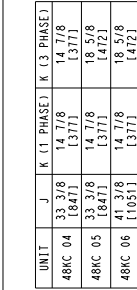
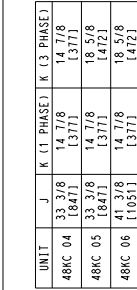
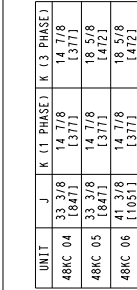
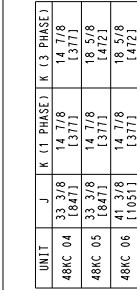
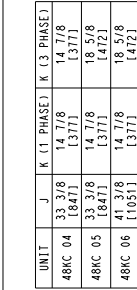
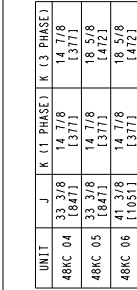
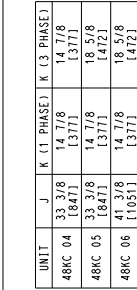
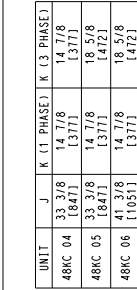
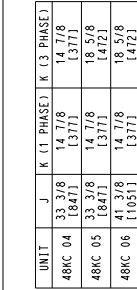
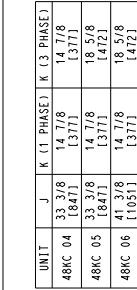
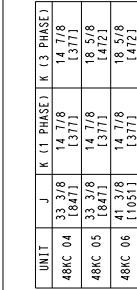
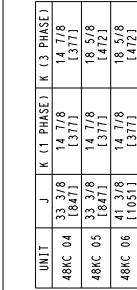
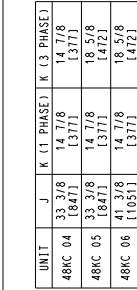
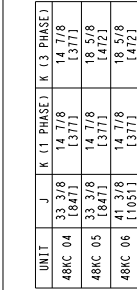
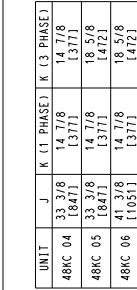
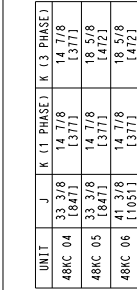
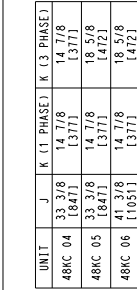
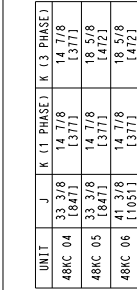
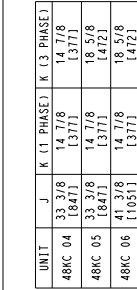
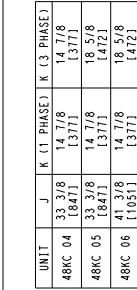
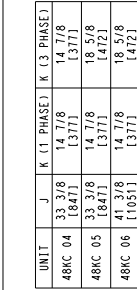
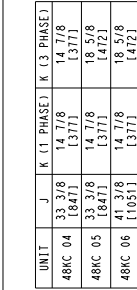
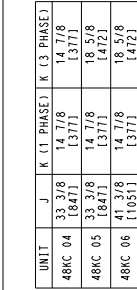
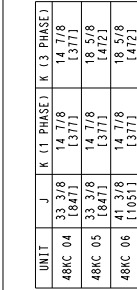
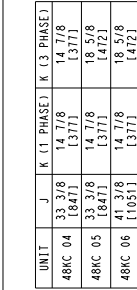
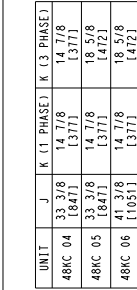
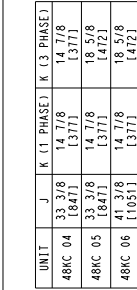
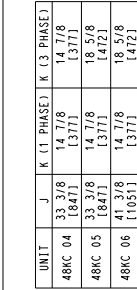
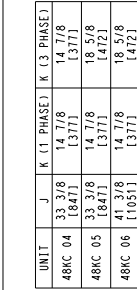
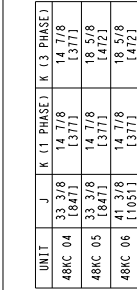
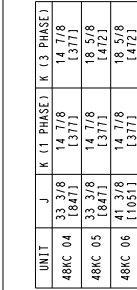
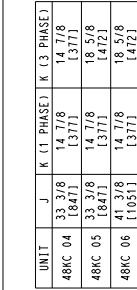
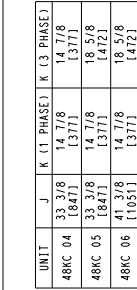
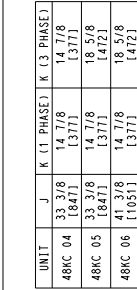
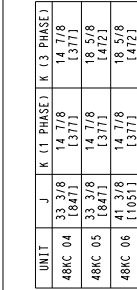
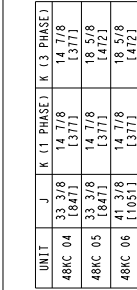
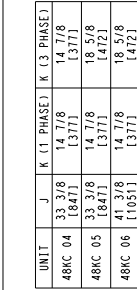
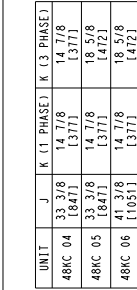
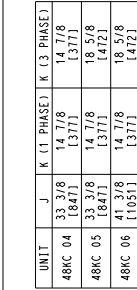
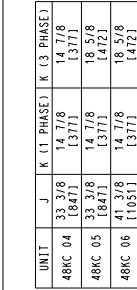
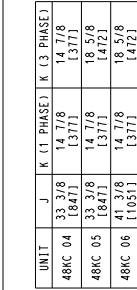
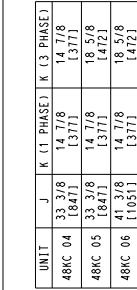
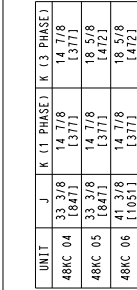
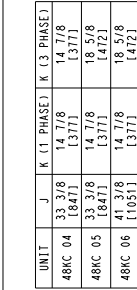
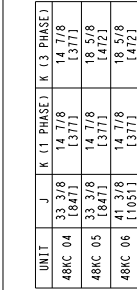
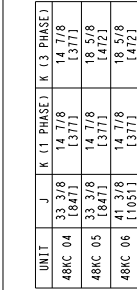
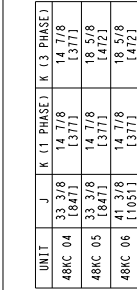
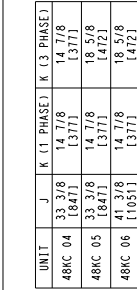
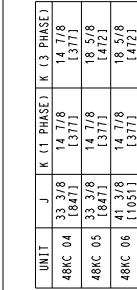
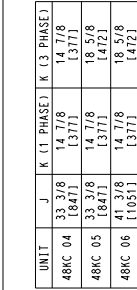
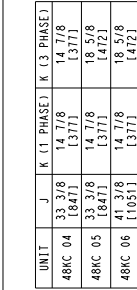
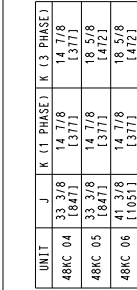
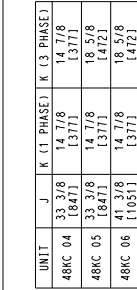
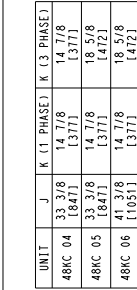
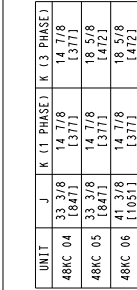
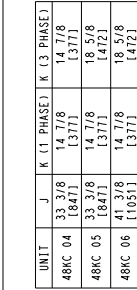
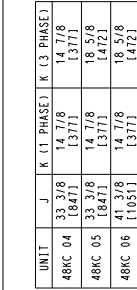
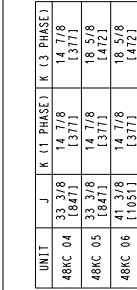
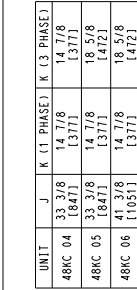
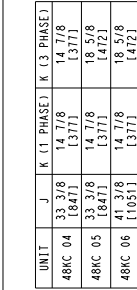
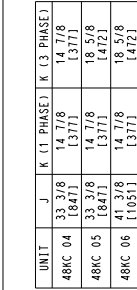
UNIT	J	K (1 PHASE)	K (3 PHASE)
48KC 04	33-3/8 [847]	14-7/8 [377]	14-7/8 [377]
48KC 05	33-3/8 [847]	15-7/8 [403]	19-3/8 [493]
48KC 06	41-5/8 [1051]	14-7/8 [377]	19-5/8 [493]

- NOTES:
1. DIMENSIONS ARE IN INCHES, DIMENSIONS IN MILLIMETERS.
 2. CENTER OF GRAVITY
 3. DIRECTION OF AIR FLOW

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"-14 NPT CONDENSATE DRAIN
F	1/2"-14 NPT GAS CONNECTION
G	2 1/2" [64] DIA. POWER SUPPLY KNOCK-OUT

THRU-THE-BASE CHART	
W	1/2" ACC. 7/8" [22.2]
X	3/4" [20.0] 0.03" POWER 1 1/8" [28.4]
Y	1/2" [12.7] 0.03" GAS 3/16" [3.0]
Z	1/2" [12.7] 0.03" GAS 3/16" [3.0]

FOR "THRU-THE-BASEPAN" FACTORY OPTION, FITTINGS FOR ONLY X, Y, & Z ARE PROVIDED. SELECT EITHER 3/4" OR 1/2" FOR POWER, DEPENDING ON WIRE SIZE (001) PROVIDES 3/4" FPT THRU CURB FLANGE & FITTING.



CERTIFIED DIMENSION 48KC*04-06


UNITED TECHNOLOGIES
CARRIER

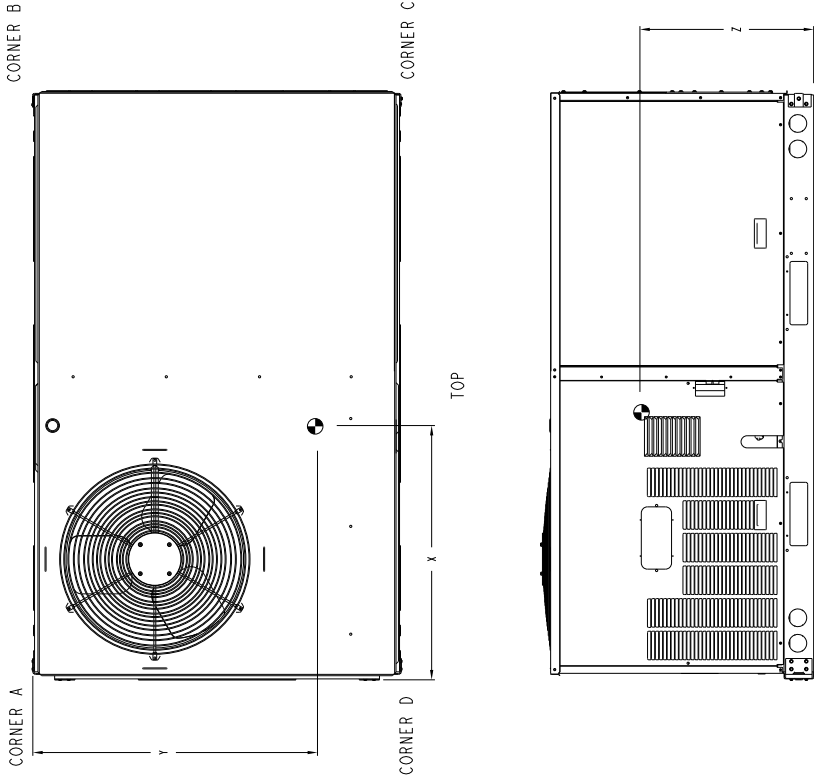
P. O. Box 4889
 HAVERTY, MD 21056
 410.321.1321

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UNIT	STD. UNIT WEIGHT		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.			HEIGHT		
	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z	18 7/8 (479)	20 1/8 (511)	
48KC 04	490	222	120	54	111	50	125	56	61	35	3/4 (908)	24	3/4 (628)	18	7/8 (479)	
48KC 05	544	246	130	58	126	57	142	64	66	36	3/4 (933)	24	3/4 (628)	18	7/8 (479)	
48KC 06	597	270	141	64	156	70	158	71	142	64	39	1/8 (993)	23	1/2 (597)	20	1/8 (511)

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



SHEET	DATE	SUPERSEDES	48KC 04-06 SINGLE ZONE ELECTRICAL	REV
2 OF 2	09-16-14	-	COOLING WITH GAS HEAT	-

C14239

48KC

ROOF CURB DETAILS

