



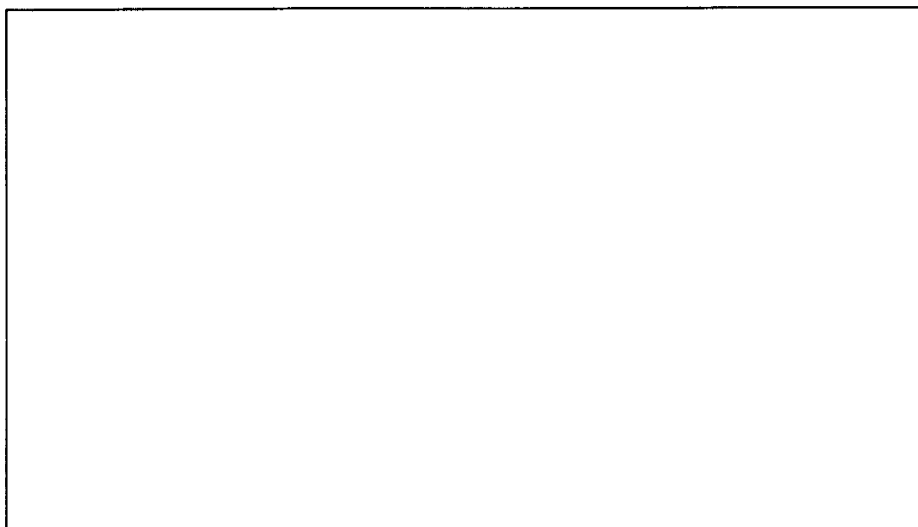
48GJ-1SB



**Tierra™ Series
48GJ_006, 008, & 012**

**COMBINATION
HEATING/COOLING UNITS WITH
CHLORINE FREE REFRIGERANT R-407C**

- PERFORMANCE/SUBMITTAL DATA**
- CERTIFIED DIMENSION PRINT**
- CERTIFIED ROOF CURB
DIMENSION PRINT**



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Date:	Supersedes:	48GJ_006, 008, & 012 COMBINATION HEATING/COOLING UNITS	48GJD/E/F	Rev.:
JOB NAME:		LOCATION:		
BUYER:		BUYER P.O. #	CARRIER #	
UNIT NUMBER:		MODEL NUMBER:		
PERFORMANCE DATA CERTIFIED BY:				DATE:



DESCRIPTION

48GJ units are one piece, 2-stage gas heating/1- and 2-stage electric cooling units that are charged with chlorine free R-407C refrigerant. This refrigerant has zero ozone depleting potential. It has a low profile, prewired, tested and charged at the factory. The units are easily field convertible for supply and return openings and are intended for installation on an accessory curb (ordered separately), or for slab mounting (for horizontal duct connections).

Units may be ordered with an array of factory options as well as multi-choices of gas heat sizes. All heating outputs are 2-stage controlled.

STANDARD FEATURES

Charged with chlorine free refrigerant.
 Zero ozone depleting potential.
 Standard one-year full product warranty.
 Five-year protection plan for the motor-compressor.
 Ten-year protection plan on heat exchanger.
 Low outdoor temperature cooling operation to 25 F (-4 C) as standard.
 Units are tested and certified by ARI and certified by UL and CUL.
 Factory-run test printout included in each rooftop.
 24-volt control circuit, with resettable circuit breaker.
 Exclusive Cycle-LOC™ compressor anti-cycle protection.
 Two-inch disposable-type return air filters in dedicated rack.
 Dual compressors (independent circuits) (008 & 012 size) with internal line break and overload protection, self-lubricating with internal discharge muffler.
 Refrigerant circuits contain a filter drier to trap dirt and moisture.
 Scroll compression standard.
 Adjustable belt drive evaporator fan on all units, with permanently lubricated motors.
 Noncorrosive condensate pan with self-draining sloping design and both bottom and side drain connections.
 Low-pressure/loss-of-charge, freeze protection, and high-pressure safety switches.
 Indoor and outdoor coils constructed of aluminum fins mechanically bonded to seamless copper tubes.
 Single-point gas and electrical connections.

All units have two-stage heating. 008 and 012 have two-stage mechanical cooling capability.
 Thru-the-bottom power entry capability.
 Direct drive propeller condenser fan totally enclosed with permanently lubricated bearings.
 Prepainted cabinet with primer inner panels, certified at 500-hr. salt spray test and noncorrosive screws.
 Large, easily removable panels provide ready access to unit components for rapid removal or maintenance.
 Filter access door for filter access and maintenance that requires no tools.
 Induced draft combustion system with Hall effect sensor to detect proper operation of induced draft motor.
 Heavy Alumagard™ coated heat exchangers, with aluminized steel burners and 2-stage gas valves.
 Acutrol™ metering device precisely controls flow to each circuit individually.
 Heating controls with direct spark ignition system, and two-stage redundant gas valve. Fan switch, overtemperature switch and flame rollout switch also included.
 Reliable, accurate control circuit with color coded wires and easy accessible terminal board.
 Integrated gas control board with built-in diagnostics to determine error codes and control indoor fan ON/OFF delays.
 Integrated gas control board provides anti-cycle protection for gas heat operation.

PERFORMANCE DATA

COOLING

Net Total Cap. _____ Btuh
 Net Sensible Cap. _____ Btuh
 Compressor Power Input _____ kW
 _____ °F Outdoor Air Temp
 Indoor Entering Air dB _____ °F wB _____ °F
 Cfm _____ Ext. Static Pressure _____ in. wg
 Fan Rpm _____ Bhp _____
 EER _____

HEATING

Input:
 Stage 1 _____ Total _____ Btuh
 Output:
 Stage 1 _____ Total _____ Btuh
 AFUE _____ %
 Steady State _____ %
 Operating Weight _____ lbs (unit) _____ lbs (curb)

ELECTRICAL DATA

Power Supply to Unit _____ Volts _____ Phase _____ Hz
 Minimum Circuit Amps _____ Maximum Overcurrent Protection (Fuse Only) _____

OPTIONS & ACCESSORIES

Factory Installed

- ☐ Economizer - Fully Modulating
- ☐ Copper/Copper Coils
- ☐ - Evaporator, Condenser, Both
- ☐ Non-Fused Disconnect Switch
- ☐ 115-Volt Convenience Outlet
- ☐ Apollo Direct Digital Controls

Field Installed

- ☐ Economizer - Fully Modulating
- ☐ 25% Two-Position Damper
- ☐ 100% Two-Position Damper

Field Installed (cont.)

- ☐ 50% Manual Air Damper
- ☐ Solid State Enthalpy Control
- ☐ Differential Enthalpy Control
- ☐ Roof Curb (14- or 24-inch Height)
- ☐ Thru-the-Roof Curb Electrical Connection Kit
- ☐ Time Guard® II Compressor Anti-Cycle Control
- ☐ Condenser Coil Hail Guard
- ☐ Condenser Coil Protector
- ☐ Economizer/Power Exhaust
- ☐ Condenser Coil Salt Spray Protector

Field Installed (cont.)

- ☐ -20° F Motormaster® Low Ambient Control Kit
- ☐ Remote Control Panel
- ☐ Programmable Set-Back Thermostat
- ☐ Electrical Mechanical Thermostat and Subbase
- ☐ Liquid Propane (LP) Gas Kit
- ☐ Low NOx Kit
- ☐ Flue Hood Protector Kit
- ☐ Flue Discharge Deflector
- ☐ Indoor Fan/Filter Status Indicator
- ☐ Other _____

UNIT

UNIT	STD. UNIT WEIGHT LBS. KG.	ECONOMIZER WEIGHT LBS. KG.	CORNER WEIGHT (A) LBS. KG.	CORNER WEIGHT (B) LBS. KG.	CORNER WEIGHT (C) LBS. KG.	CORNER WEIGHT (D) LBS. KG.
48GJF/GJE/GJD006	560 254	34 15.4	134 60.8	129 58.5	146 66.2	151 68.5

CONNECTION SIZES

CONNECTION SIZES	FIELD POWER SUPPLY HOLE	POWER SUPPLY KNOCK-OUT	CHARGING PORT HOLE	FIELD CONTROL WIRING HOLE	CONDENSATE DRAIN	POWER SUPPLY KNOCK-OUT
A	1 3/8" DIA.	[35]	2" DIA.	[51]	3/4" DIA.	[22]
B	2" DIA.	[51]	3/4" DIA.	[44]	3/4" DIA.	[22]
C	1 3/4" DIA.	[44]	3/4" DIA.	[22]	3/4" DIA.	[22]
D	7/8" DIA.	[22]	3/4" DIA.	[22]	3/4" DIA.	[22]
E	3/4" DIA.	[22]	3/4" DIA.	[22]	3/4" DIA.	[22]
F	1/2" DIA.	[22]	3/4" DIA.	[22]	3/4" DIA.	[22]
G	2 1/2" DIA.	[64]	3/4" DIA.	[22]	3/4" DIA.	[22]

NOTES:

1. DIMENSIONS IN [] ARE IN MILLIMETERS.
2. CENTER OF GRAVITY.
3. DIRECTION OF AIR FLOW.
4. ON VERTICAL DISCHARGE UNITS, DUCTWORK TO BE ATTACHED TO ACCESSORY ROOF CURB ONLY. FOR HORIZONTAL DISCHARGE UNITS, FIELD SUPPLIED FLANGES SHOULD BE ATTACHED TO HORIZONTAL DISCHARGE OPENINGS, AND ALL DUCTWORK SHOULD BE ATTACHED TO THE FLANGES.
5. MINIMUM CLEARANCE (LOCAL CODES OR JURISDICTION MAY PREVAIL):
 - A. BETWEEN UNIT, FLUE SIDE AND COMBUSTIBLE
 - B. BOTTOM OF UNIT TO COMBUSTIBLE SURFACES (WHEN NOT USING CURB) 1'-0"
 - C. BOTTOM OF UNIT TO COMBUSTIBLE SURFACES (WHEN NOT USING CURB) 0'-0"
 - D. CONDENSER COIL FOR PROPER AIR FLOW, 36-IN. ONE SIDE, 12-IN. THE OTHER, THE SIDE GETTING THE GREATER CLEARANCE IS OPTIONAL.
 - E. OVERHEAD, 60-IN. TO ASSURE PROPER CONDENSER FAN OPERATION.
 - F. BETWEEN UNITS, CONTROL BOX SIDE, 42-IN. PER NEC.
 - G. BETWEEN UNIT AND UNROOFED SURFACES, CONTROL BOX SIDE, 36-IN. PER NEC.
 - H. BETWEEN UNIT AND BLOCK OR CONCRETE WALLS, CONTROL BOX SIDE, 36-IN. PER NEC.
 - I. HORIZONTAL SUPPLY AND RETURN END, 0'-0"
6. WITH THE EXCEPTION OF THE CLEARANCE FOR THE CONDENSER COIL AND COMBUSTIBLE SIDE AS STATED IN NOTE #5A, B, AND C, A REMOVABLE FENCE OR BARRICADE REQUIRES NO CLEARANCE.
7. UNITS MAY BE INSTALLED ON COMBUSTIBLE FLOORS MADE OF WOOD OR CLASS A, B, OR C ROOF COVERING MATERIAL IF SET ON BASE RAIL.
8. THE VERTICAL CENTER OF GRAVITY IS 1'-6" (457) UP FROM THE BOTTOM OF THE BASE RAIL.

UNIT WEIGHTS

UNIT WEIGHT	STD. UNIT WEIGHT LBS. KG.	ECONOMIZER WEIGHT LBS. KG.	CORNER WEIGHT (A) LBS. KG.	CORNER WEIGHT (B) LBS. KG.	CORNER WEIGHT (C) LBS. KG.	CORNER WEIGHT (D) LBS. KG.
48GJF/GJE/GJD006	560 254	34 15.4	134 60.8	129 58.5	146 66.2	151 68.5

CONNECTION SIZES

CONNECTION SIZES	FIELD POWER SUPPLY HOLE	POWER SUPPLY KNOCK-OUT	CHARGING PORT HOLE	FIELD CONTROL WIRING HOLE	CONDENSATE DRAIN	POWER SUPPLY KNOCK-OUT
A	1 3/8" DIA.	[35]	2" DIA.	[51]	3/4" DIA.	[22]
B	2" DIA.	[51]	3/4" DIA.	[44]	3/4" DIA.	[22]
C	1 3/4" DIA.	[44]	3/4" DIA.	[22]	3/4" DIA.	[22]
D	7/8" DIA.	[22]	3/4" DIA.	[22]	3/4" DIA.	[22]
E	3/4" DIA.	[22]	3/4" DIA.	[22]	3/4" DIA.	[22]
F	1/2" DIA.	[22]	3/4" DIA.	[22]	3/4" DIA.	[22]
G	2 1/2" DIA.	[64]	3/4" DIA.	[22]	3/4" DIA.	[22]

UNIT WEIGHTS

UNIT WEIGHT	STD. UNIT WEIGHT LBS. KG.	ECONOMIZER WEIGHT LBS. KG.	CORNER WEIGHT (A) LBS. KG.	CORNER WEIGHT (B) LBS. KG.	CORNER WEIGHT (C) LBS. KG.	CORNER WEIGHT (D) LBS. KG.
48GJF/GJE/GJD006	560 254	34 15.4	134 60.8	129 58.5	146 66.2	151 68.5

CONNECTION SIZES

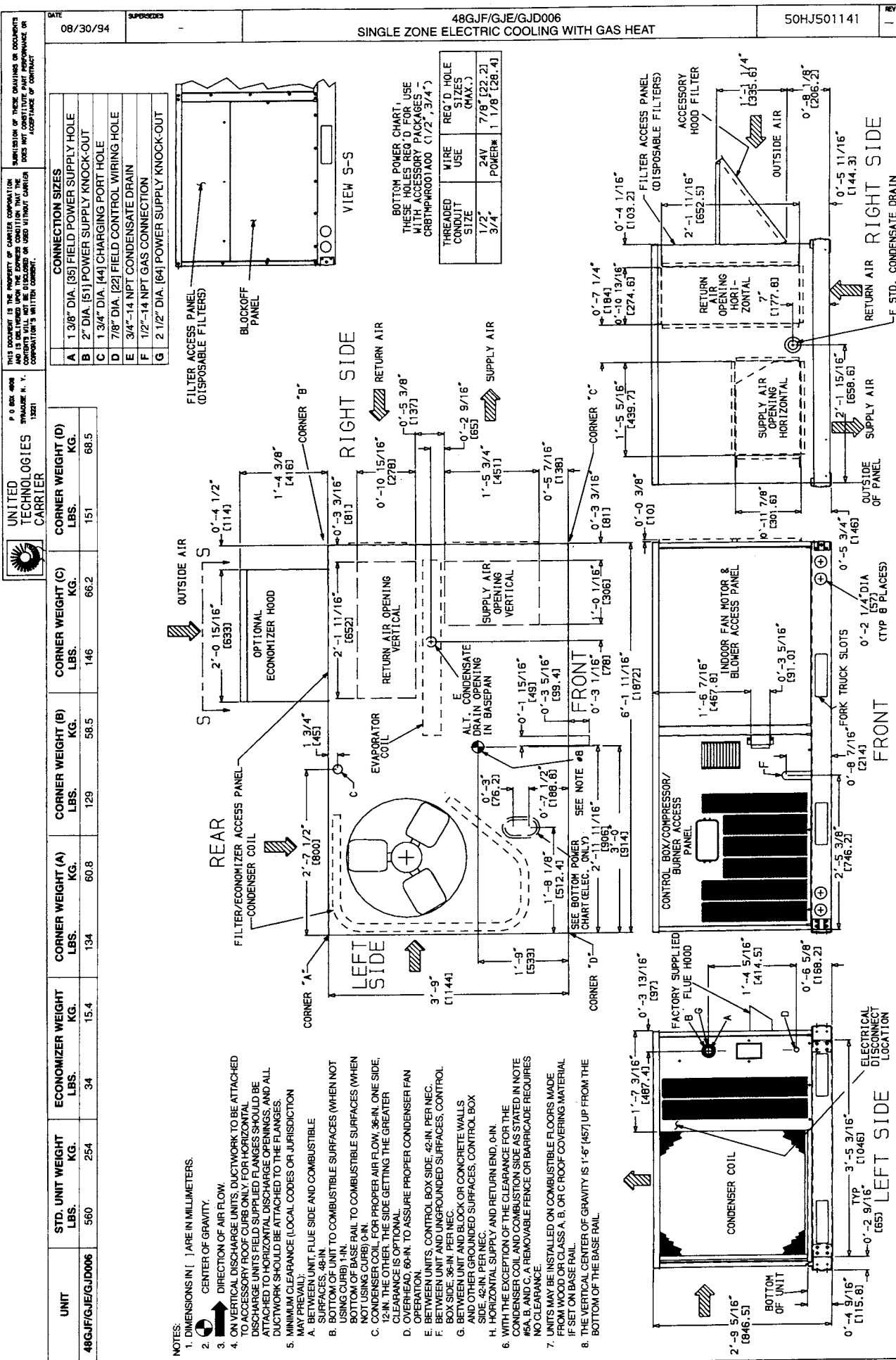
CONNECTION SIZES	FIELD POWER SUPPLY HOLE	POWER SUPPLY KNOCK-OUT	CHARGING PORT HOLE	FIELD CONTROL WIRING HOLE	CONDENSATE DRAIN	POWER SUPPLY KNOCK-OUT
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B	2" DIA.	[51]	3/4" DIA.	[44]	3/4" DIA.	[22]
C	1 3/4" DIA.	[44]	3/4" DIA.	[22]	3/4" DIA.	[22]
D	7/8" DIA.	[22]	3/4" DIA.	[22]	3/4" DIA.	[22]
E	3/4" DIA.	[22]	3/4" DIA.	[22]	3/4" DIA.	[22]
F	1/2" DIA.	[22]	3/4" DIA.	[22]	3/4" DIA.	[22]
G	2 1/2" DIA.	[64]	3/4" DIA.	[22]	3/4" DIA.	[22]

UNIT WEIGHTS

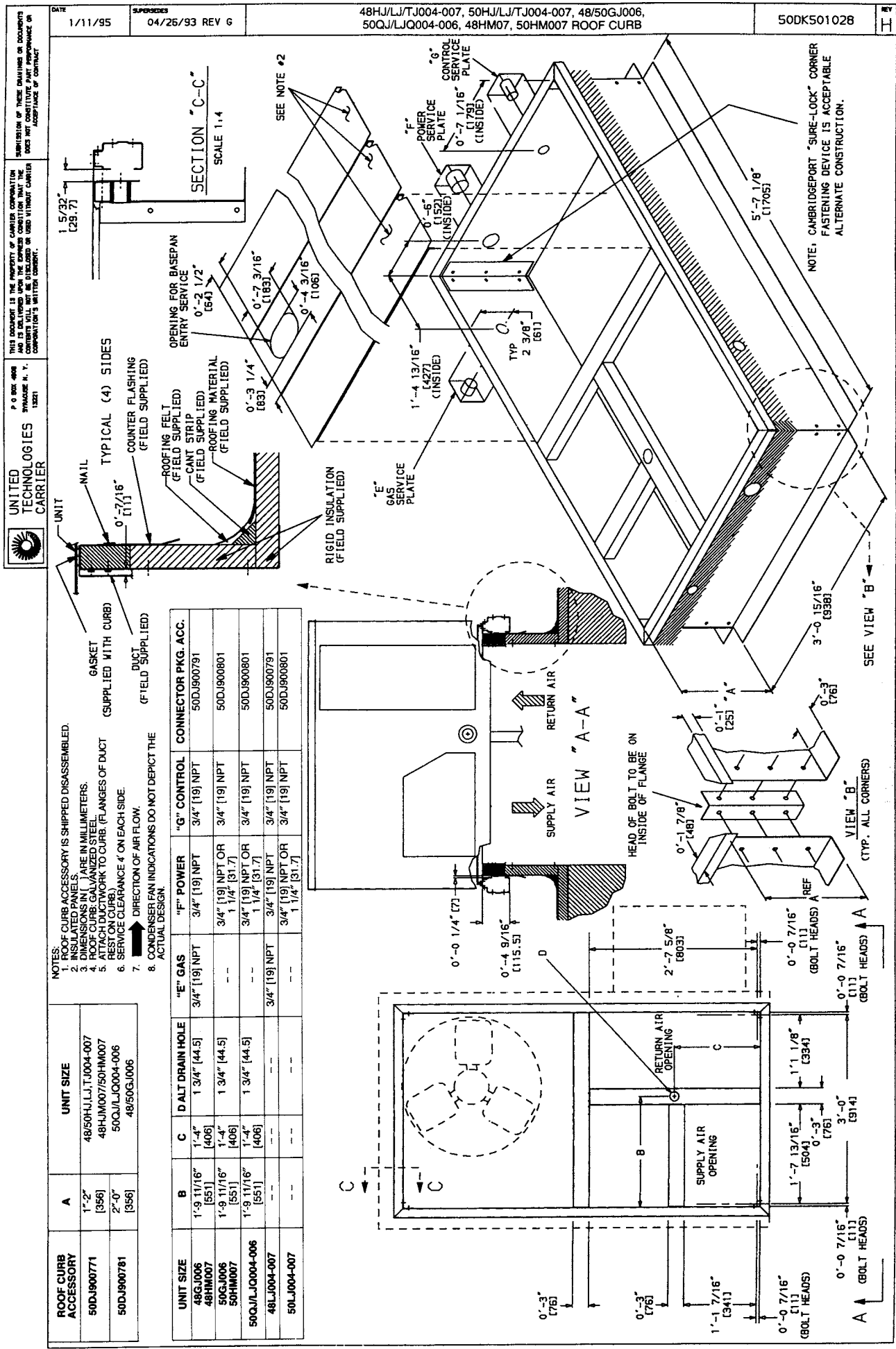
UNIT WEIGHT	STD. UNIT WEIGHT LBS. KG.	ECONOMIZER WEIGHT LBS. KG.	CORNER WEIGHT (A) LBS. KG.	CORNER WEIGHT (B) LBS. KG.	CORNER WEIGHT (C) LBS. KG.	CORNER WEIGHT (D) LBS. KG.
48GJF/GJE/GJD006	560 254	34 15.4	134 60.8	129 58.5	146 66.2	151 68.5

CONNECTION SIZES

CONNECTION SIZES	FIELD POWER SUPPLY HOLE	POWER SUPPLY KNOCK-OUT	CHARGING PORT HOLE	FIELD CONTROL WIRING HOLE	CONDENSATE DRAIN	POWER SUPPLY KNOCK-OUT
A	1 3/8" DIA.	[35]	2" DIA.	[51]	3/4" DIA.	[22]
B	2" DIA.	[51]	3/4" DIA.	[44]	3/4" DIA.	[22]
C	1 3/4" DIA.	[44]	3/4" DIA.	[22]	3/4" DIA.	[22]
D	7/8" DIA.	[22]	3/4" DIA.	[22]	3/4" DIA.	



CERTIFIED ROOF CURB DIMENSION PRINT



CERTIFIED DIMENSION PRINT



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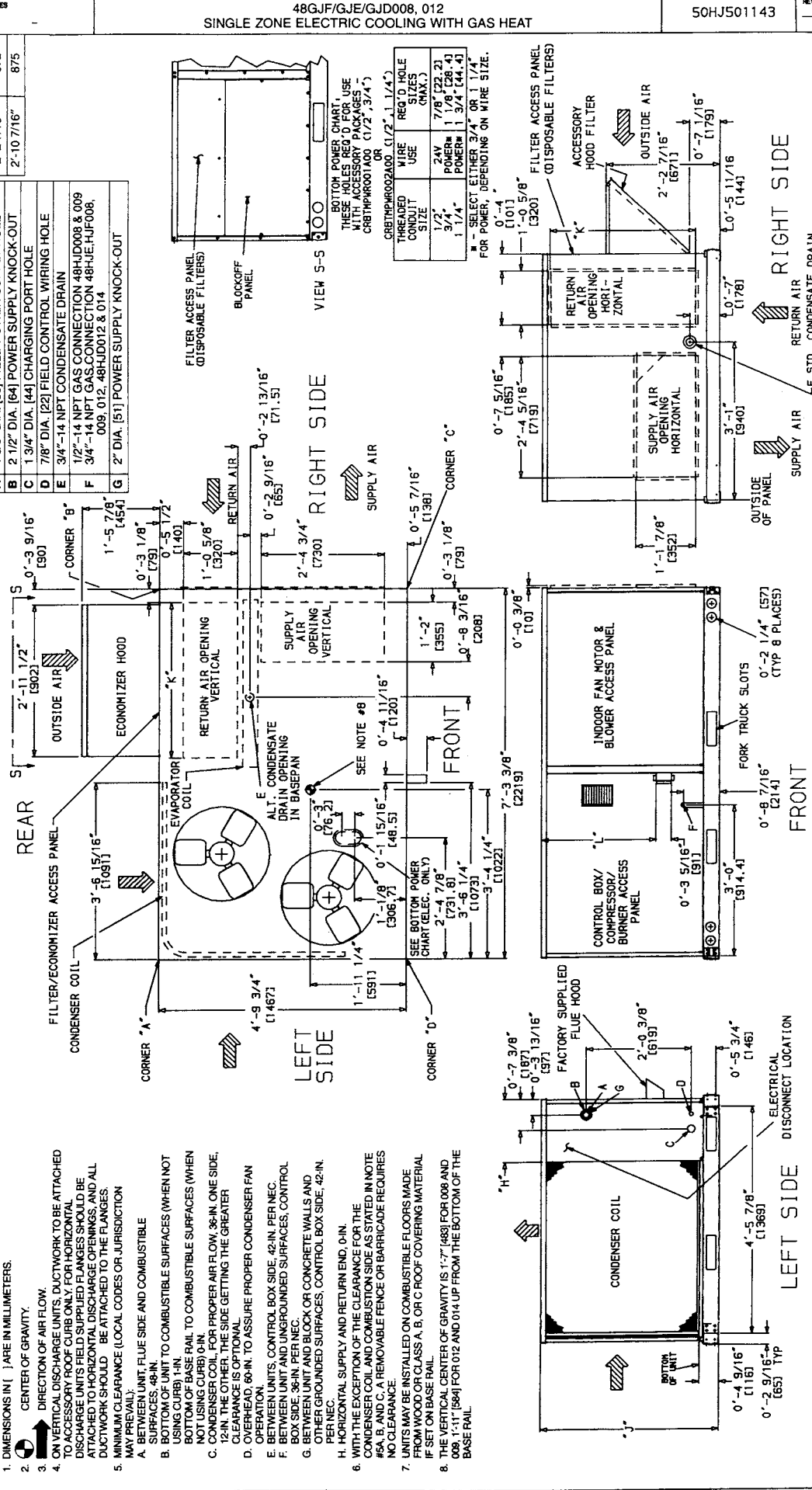
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UNIT	STD. UNIT WEIGHT LBS.	ECONOMIZER WEIGHT LBS.	CORNER WEIGHT (A) LBS.	CORNER WEIGHT (B) LBS.	CORNER WEIGHT (C) LBS.	CORNER WEIGHT (D) LBS.	KG.	"H" FT.-IN.	"J" MM	"K" FT.-IN.	"L" MM
48GJF/GJE/GJD008	870	395	44	20	189	86	127	2'-0 7/8"	632	3'-5 5/16"	1050
48GJF/GJE/GJD012	1035	469	44	20	225	102	151	1'-2 7/8"	378	4'-1 5/16"	1253

CONNECTION SIZES	FT.-IN.	MM
A 1 3/8" DIA. [35] FIELD POWER SUPPLY KNOCK-OUT	2'-2 7/16"	875
B 2 1/2" DIA. [64] FIELD POWER SUPPLY KNOCK-OUT	2'-9 11/16"	856
C 1 3/4" DIA. [44] CHARGING PORT HOLE	2'-9 11/16"	856
D 7/8" DIA. [22] FIELD CONTROL WIRING HOLE	2'-9 11/16"	856
E 3/4"-14 NPT CONDENSATE DRAIN	2'-9 11/16"	856
F 1/2"-14 NPT GAS CONNECTION 48HJD008 & 009	2'-9 11/16"	856
G 3/4"-14 NPT GAS CONNECTION 48HJE, HJF008, 009, 012, 48HJD012 & 014	2'-9 11/16"	856
H 2" DIA. [51] POWER SUPPLY KNOCK-OUT	2'-9 11/16"	856

NOTES:

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3. DIRECTION OF AIR FLOW.
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5. MINIMUM CLEARANCE (LOCAL CODES OR JURISDICTION MAY PREVAIL):
 - A. BETWEEN UNIT, FLUE SIDE AND COMBUSTIBLE SURFACES, 48-IN.
 - B. BOTTOM OF UNIT TO COMBUSTIBLE SURFACES (WHEN USING CURB) 14-IN.
 - C. BOTTOM OF BASE RAIL TO COMBUSTIBLE SURFACES (WHEN USING CURB) 14-IN.
 - D. CONDENSER COIL TO CURB FOR PROPER AIR FLOW, 36-IN. ONE SIDE, 12-IN. THE OTHER, THE SIDE GETTING THE GREATER CLEARANCE IS OPTIONAL.
 - E. OVERHEAD, 60-IN. TO ASSURE PROPER CONDENSER FAN OPERATION.
 - F. BETWEEN UNITS, CONTROL BOX SIDE, 42-IN. PER NEC.
 - G. BETWEEN UNIT AND UNGROUNDED SURFACES, CONTROL BOX SIDE, 36-IN. PER NEC.
 - H. BETWEEN UNIT AND BLOCK OR CONCRETE WALLS AND OTHER GROUNDED SURFACES, CONTROL BOX SIDE, 42-IN. PER NEC.
 - I. HORIZONTAL SUPPLY AND RETURN END, 0-IN.
 - J. WITH THE EXCEPTION OF THE CLEARANCE FOR THE CONDENSER COIL AND COMBUSTION SIDE AS STATED IN NOTE #5A, B, AND C, A REMOVABLE FENCE OR BARRICADE REQUIRES NO CLEARANCE.
 - K. UNITS MAY BE INSTALLED ON COMBUSTIBLE FLOORS MADE FROM WOOD OR CLASS A, B, OR C ROOF COVERING MATERIAL IF SET ON BASE RAIL.
 - L. THE VERTICAL CENTER OF GRAVITY IS 1'-7" [483] FOR 008 AND 009, 1'-11" [564] FOR 012 AND 014 UP FROM THE BOTTOM OF THE BASE RAIL.



REVISIONS

DATE

06/27/94

SUPERSIDES

48GJF/GJE/GJD008, 012

SINGLE ZONE ELECTRIC COOLING WITH GAS HEAT

50HJ501143

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ROOF CURB ACCESSORY	A	UNIT SIZE
50DJ901371	1'-2" [356]	48H/L/J/T J008-014 50H/L/J/T J008-014
50DJ901381	2'-0" [610]	50Q/L/J Q008 & 012 48/50G J008 & 012

SERVICE PLATE SIZES							
UNIT SIZE	B	C	D ALT DRAIN HOLE	"E" GAS	"F" POWER	"G" CONTROL	CONNECTOR PKG. ACC.
48GJ008-012	2'-8 7/16" [827]	1'-10 15/16" [583]	1 3/4" [44.5]	3/4" [19] NPT	1" [25] NPT	3/4" [19] NPT	50DJ901551
50GJ008-012	2'-8 7/16" [827]	1'-10 15/16" [583]	1 3/4" [44.5]	--	1" [25] NPT OR 2" [50.8] NPT	3/4" [19] NPT	50DJ901311
50QJLJ008 & 012	2'-8 7/16" [827]	1'-10 15/16" [583]	1 3/4" [44.5]	--	1" [25] NPT OR 2" [50.8] NPT	3/4" [19] NPT	50DJ901311
48LJ008-014	--	--	--	3/4" [19] NPT	1" [25] NPT	3/4" [19] NPT	50DJ901551
50LJ008-014	--	--	--	--	1" [25] NPT OR 2" [50.8] NPT	3/4" [19] NPT	50DJ901311

