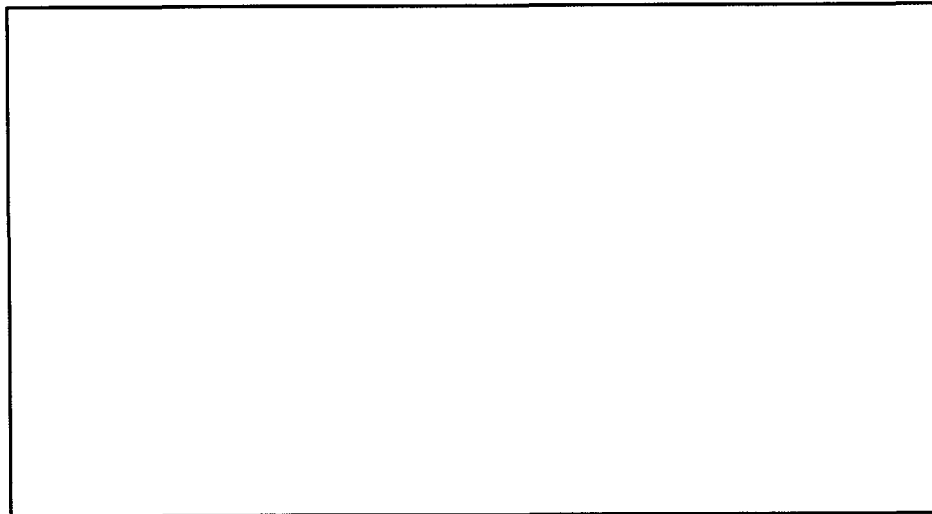




48/50E-3SB

48/50EJ,EK,EW,EY024, 028, 030, 034
SINGLE-PACKAGE COOLING UNITS
VARIABLE VOLUME
CONSTANT VOLUME
FACTORY-INSTALLED OPTIONAL HEAT
GAS HEAT
ELECTRIC HEAT

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



Date:	Supersedes:	48/50EJ,EK,EW,EY024,028,030,034 SINGLE-PACKAGE COOLING UNITS FACTORY-INSTALLED OPTIONAL HEAT GAS HEAT/ELECTRIC HEAT	48/50EJ,EK,EW,EY	Rev.: -3SB
JOB NAME:		LOCATION:		
BUYER:		BUYER P.O. #	CARRIER #	
UNIT NUMBER:		MODEL NUMBER:		
PERFORMANCE DATA CERTIFIED BY:			DATE:	

DESCRIPTION



ARI STANDARD
360



ALL 208/230
460 VOLT UNITS



The new 48/50EJ,EK,EW,EY "E-SERIES" rooftops are Carrier's best single piece 20-30 ton rooftop units, intended to complement the companion larger size "E-SERIES" rooftops on large Commercial/Industrial projects where smaller sizes may be needed and a common feature set is required.

Both dedicated downshot and side supply/return models are offered. Roof curb mounted, down-shot supply/return models are designated 48/50EJ (constant volume CV), and 48/50EK (variable air volume VAV). Dedicated side supply/return models are 48/50EW (CV) and 48/50EY (VAV).

All 48/50EJ,EK,EW,EY models feature the E-SERIES's industry leading industrial grade cabinet construction with fully hinged tool-less entry access panels, gear drive low leak economizer and hood assembly, EERs up to 10.4, superior fan performance up to 3.5" of external static, dual independent refrigeration circuits with 06D semi-hermetic compressors and service valves, upgradeable Direct Digital Controls, variable frequency drives on all VAV models and available centrifugal fan power exhaust.

STANDARD UNIT FEATURES

Unit compatible with Carrier Comfort Network or stand-alone operation.

Self-diagnostic run test confirms control and component operation at unit commissioning.

Remote start/stop capability.

Supply air temperature reset (VAV only).

Remote monitoring of alarms using CCN.

Large hinged access doors.

Standard one-year warranty.

Standard unit as factory assembled is listed by ETL and ETL, Canada.

Units are rated in accordance with ARI Standard 360.

115-volt and 24-volt control circuit.

Two-inch disposable-type return air filters.

Dual semi-hermetic Carrier compressors with service valves and crankcase heaters.

Fixed blower drive.

Lifting lugs.

Dual electrically and mechanically independent refrigeration circuits.

Circuit breaker protection for all power components.

Short-cycle compressor protection.

Sloped, aluminized steel condensate pan.

Stand-alone diagnostic.

Integrated economizer utilizing direct-coupled actuator and low leak gear driven dampers.

Single point electrical service entry.

Prepainted, galvanized steel cabinet.

Anti-microbial, Tuff Skin Rx cleanable insulation.

Compressor protection includes high- and low-pressure cutouts.

Evaporator fan motor protected by circuit breakers.

Condenser fan motors are totally enclosed, fan cooled with internal protection.

Low outdoor temperature cooling to 35° F as standard.

VFD (Variable Frequency Drive) on Variable Volume models.

Two-stage cooling on Constant Volume units.

Up to 6 stages of unloading for capacity control.

Compatible with 37H and 45 Series PIC terminals to form a Digital Air Volume System.

STANDARD HEATING FEATURES

Five-year non-prorated warranty on electric heater elements is stand-ard when heater is factory installed.

Integrated Gas Unit Controller (IGC) with diagnostics.

Induced-draft combustion.

Two-stage gas valves with redundant 100% shutoff feature.

Direct spark gas ignition.

Aluminized steel tubular heat exchangers.

Five-year non-prorated warranty on heat exchanger.

Heat limit switches, flame roll-out switches, combustion air fan switches and time relay interlocks.

PERFORMANCE DATA

Unit Operating Weight _____ lb

Curb Weight _____ lb

COOLING

Gross Total Capacity _____ Btuh

@ Condenser Air Temperature _____ °F

Gross Sensible Capacity _____ Btuh

Compressor Power Input _____ kW

Indoor Entering Air db _____ °F wb _____ °F

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

ELECTRICAL DATA

Power Supply to Unit _____ Volts _____ Phase _____ Hz

Minimum Circuit Amps _____ Maximum Fuse Amps _____

FIELD-INSTALLED "ELECTRONIC EXPANSION BOARD" FEATURES

Building Purge Mode — flush building interior with outdoor air to remove contaminants before occupancy (CCN and Power Exhaust required).

Provides a discrete output with occupancy control for use as specified by the customer.

Smoke Control functions (Building Pressurization and Smoke Purge) are provided through software. Terminals are provided to interface with field supplied smoke/fire panel (Power Exhaust required).

Enthalpy control can be provided using field-installed accessory enthalpy controls.

Economizers control field configurable to: maintain a minimum economizer set point position OR maintain the minimum economizer position based on input from an IAQ sensor (field supplied 4-20 mA).

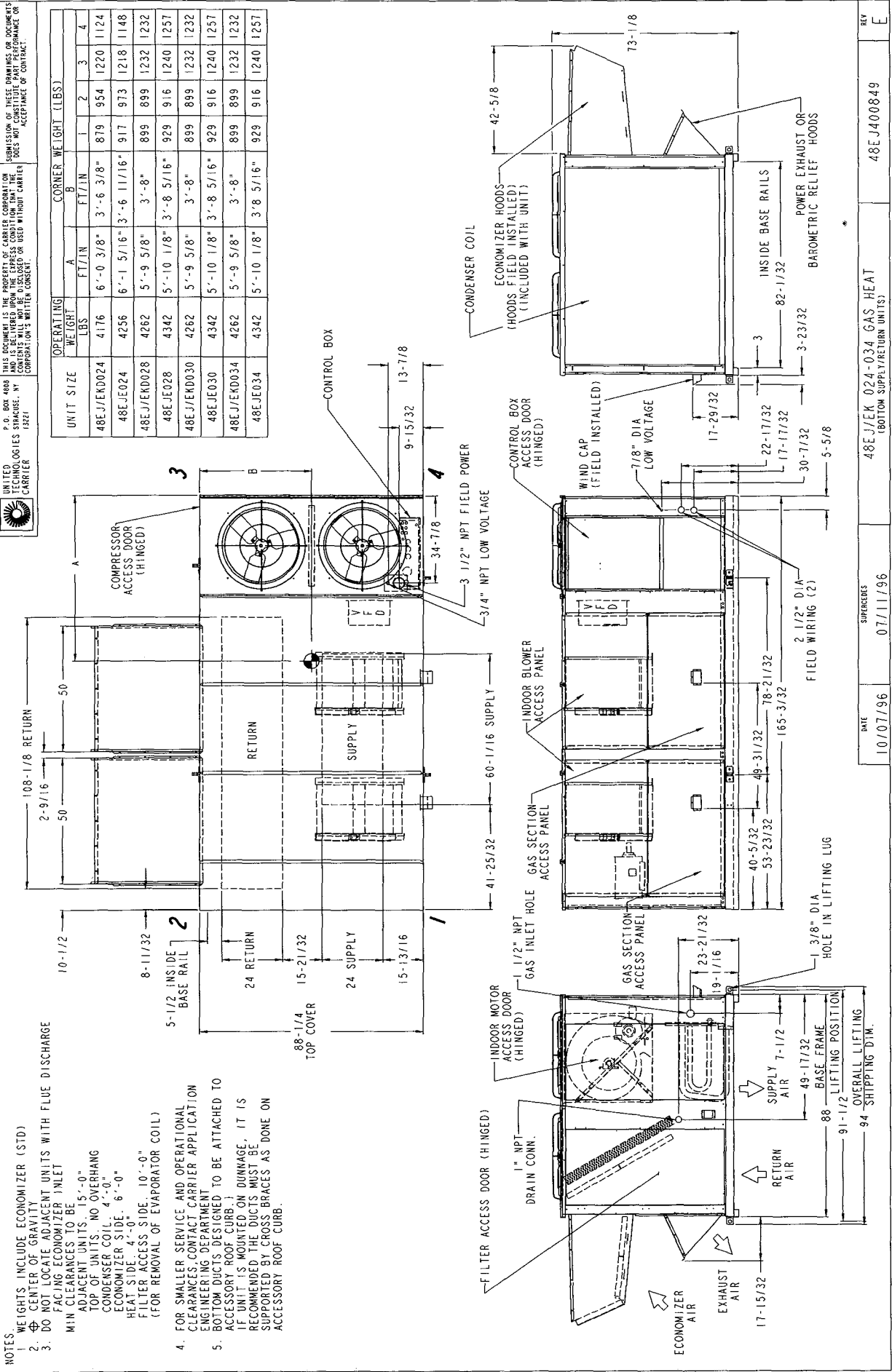
FACTORY-INSTALLED OPTIONS

- ☐ Barometric Relief
- ☐ Non-Modulating Centrifugal Fan Power Exhaust (CV)
- ☐ Modulating Centrifugal Fan Power Exhaust (VAV)
- ☐ Electric Heaters
- ☐ Copper Tube/Copper Fin Condenser Coil
- ☐ Pre-Coated Aluminum Fin Condenser Coil
- ☐ Alternate Horsepower Supply Fan Motors
- ☐ Alternate Horsepower High-Efficiency Supply Fan Motors

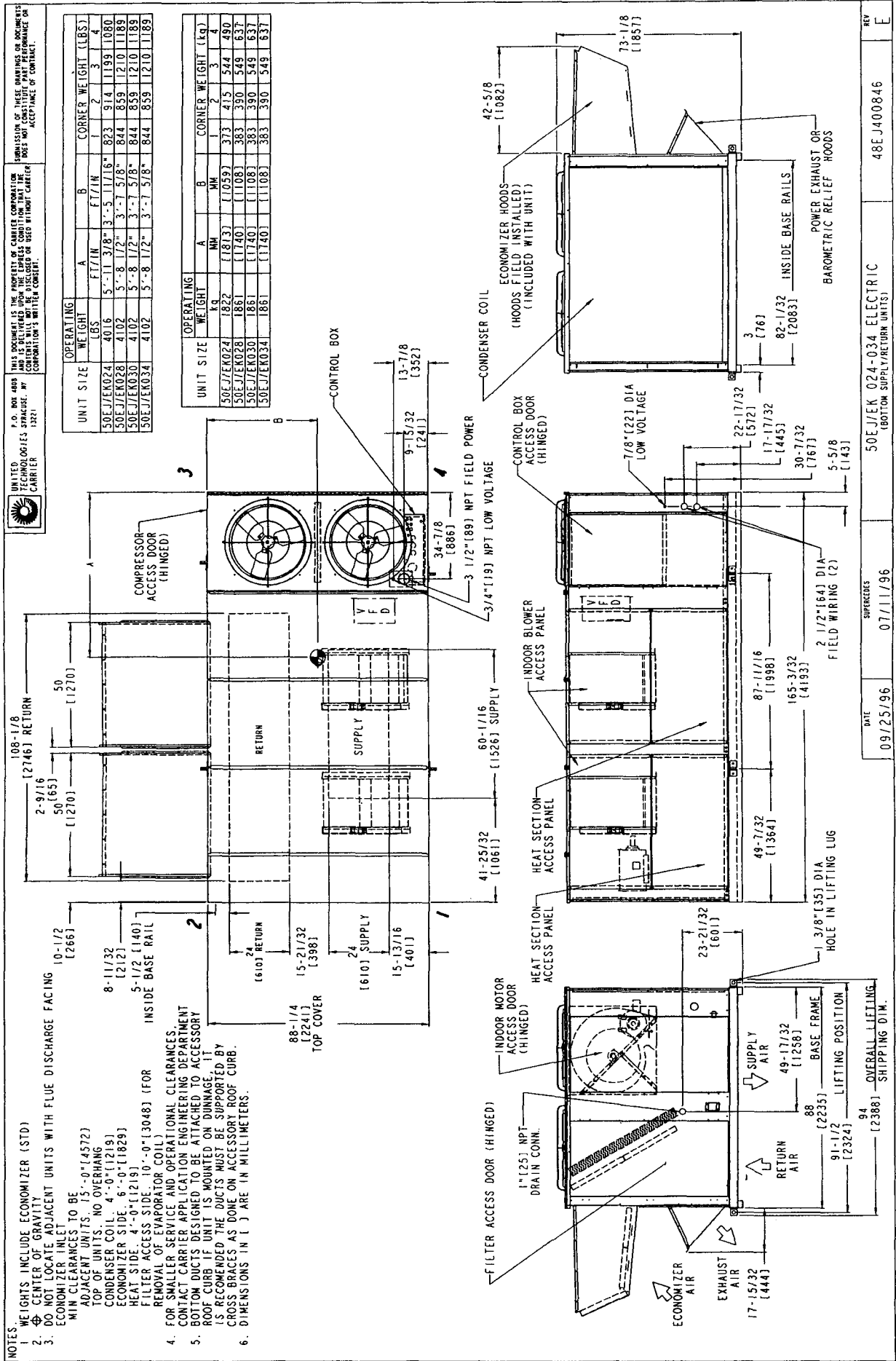
FIELD-INSTALLED ACCESSORIES

- ☐ Optional 4-Year Extended Compressor Warranty
- ☐ Roof Curb with Full Perimeter Support
- ☐ Condenser Coil Hail Guard
- ☐ Compressor Suction Pressure Unloaders
- ☐ Motormaster® III Head Pressure Control
- ☐ Electronic Timeclock for Stand Alone VAV Applications
- ☐ Thermostat and Subbase
- ☐ Non-Modulating to Modulating Power Exhaust Conversion Kit
- ☐ LP Gas Conversion Kit
- ☐ Space Temperature Sensor
- ☐ Space Temperature Sensor with Offset
- ☐ Electronic Expansion Board
- ☐ IAQ Sensor
- ☐ Enthalpy Control
- ☐ Differential Enthalpy Control

CERTIFIED DIMENSION PRINT



CERTIFIED DIMENSION PRINT



CERTIFIED DIMENSION PRINT

NOTES:

- WEIGHTS INCLUDE ECONOMIZER (STD)
- ⊕ CENTER OF GRAVITY
- DO NOT LOCATE ADJACENT UNITS WITH FLUE DISCHARGE FACING ECONOMIZER INLET
MIN CLEARANCES TO BE:
ADJACENT UNITS - 15'-0"
TOP OF UNITS - NO OVERHANG
CONDENSER COIL - 4'-0"
ECONOMIZER SIDE - 6'-0"
HEAT SIDE - 4'-0"
FILTER ACCESS SIDE - 10'-0" (FOR REMOVAL OF EVAPORATOR COIL)
- FOR SMALLER SERVICE AND OPERATIONAL CLEARANCES, CONTACT CARRIER APPLICATION ENGINEERING DEPARTMENT

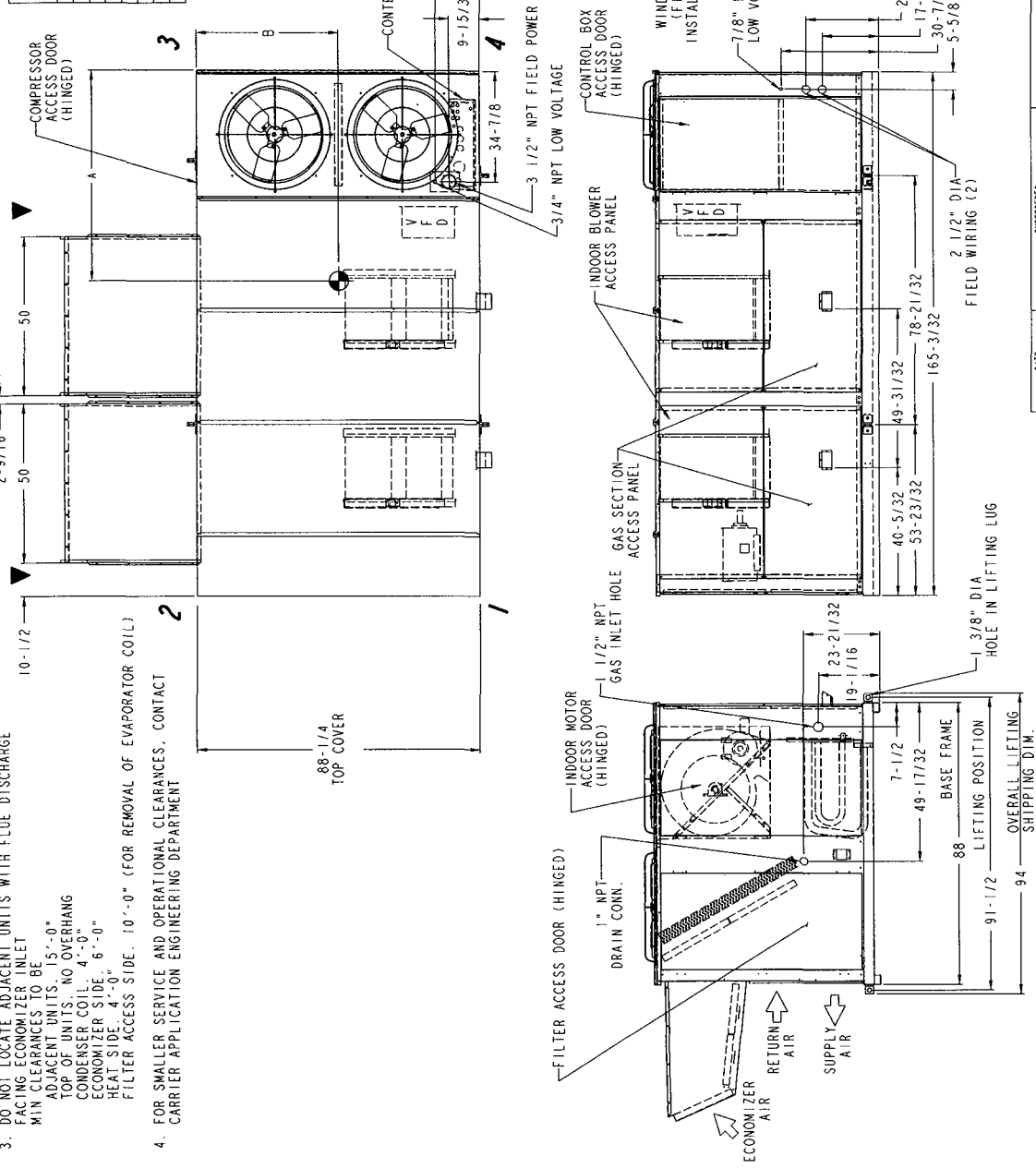


UNITED
CARRIER

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UNIT SIZE	OPERATING WEIGHT (LBS)	CORNER WEIGHT (LBS)					
		A	B	1	2	3	4
48EW/EV0024	4176	6'-0" 3/8"	3'-6" 3/8"	879	954	1220	1124
48WEV024	4256	6'-1" 5/16"	3'-6" 11/16"	917	973	1218	1148
48WEV0028	4262	5'-9" 5/8"	3'-8"	899	899	1232	1232
48WEV028	4342	5'-10" 1/8"	3'-8" 5/16"	929	916	1240	1257
48EW/EV0030	4262	5'-9" 5/8"	3'-8"	899	899	1232	1232
48WEV030	4342	5'-10" 1/8"	3'-8" 5/16"	929	916	1240	1257
48WEV034	4262	5'-9" 5/8"	3'-8"	899	899	1232	1232
48WEV034	4342	5'-10" 1/8"	3'-8" 5/16"	929	916	1240	1257



DATE	SUPERSEDES	48EW/EV 024-034 GAS HEAT (SIDE SUPPLY/RETURN UNITS)	REV
10/09/96	07/15/96	48EJ400850	D

