



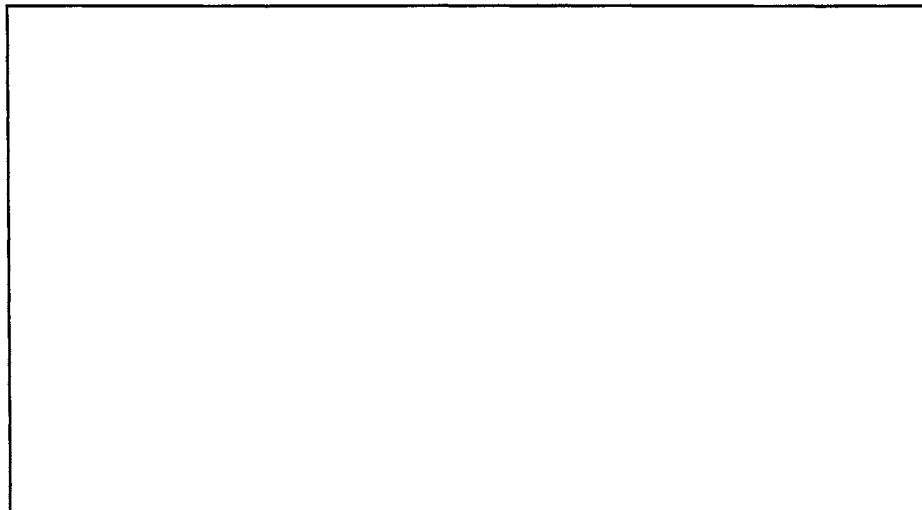
50EJQ,EWQ-1SB



50EJQ,EWQ024, 028

SINGLE-PACKAGE ROOFTOP HEAT PUMP UNITS

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



Date:	Supersedes:	50EJQ,EWQ024, 028 SINGLE-PACKAGE ROOFTOP HEAT PUMP UNITS		50EJQ,EWQ	Rev.:
JOB NAME:		LOCATION:			
BUYER:		BUYER P.O. #		CARRIER #	
UNIT NUMBER:		MODEL NUMBER:			
PERFORMANCE DATA CERTIFIED BY:					DATE:



ARI STANDARD
360



ALL 208/230
460 VOLT UNITS



DESCRIPTION

The new 50EJQ and EWQ "E-SERIES" rooftop heat pumps are Carrier's best single piece 20 and 25 ton rooftop heat pump units. These models supplement the "E-SERIES" rooftops on large Commercial/Industrial projects where heat pumps 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 50EJQ. Dedicated side supply/return models are designated 50EWQ.

The 50EJQ and EWQ 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 9.8 and COPs up to 3.3, superior fan performance up to 3.5-in. of external static, dual independent refrigeration circuits with 6D semi-hermetic compressors and service valves, upgradeable Direct Digital Controls and available centrifugal fan power exhaust.

STANDARD FEATURES

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

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

Remove start/stop capability.

Supply air temperature reset.

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 340/360-93.

115-volt and 24-volt control circuit.

Two-inch disposable-type return air filters.

Dual semi-hermetic Carrier compressors.

Fixed blower drive.

Fixed orifice refrigerant metering devices with spring-loaded check valves for heat pump control.

Lifting lugs.

Dual 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-drive actuator and low leak dampers.

Single point electrical service entry.

Cabinet made of WeatherArmor®.

Anti-microbial, Tuff Skin Rx 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.

Two-stage cooling.

PERFORMANCE DATA

Operating Weight _____ Lb/Unit _____ Lb/Curb

COOLING

Gross Total Capacity _____ Btuh

Gross Sensible Capacity _____ Btuh

Compressor Power Input _____ kW

@ _____ °F Outdoor Air Temp

Indoor Entering Air dB _____ °F wB _____ °F

Cfm _____ External Static Pressure _____ in. wg

Indoor Fan Motor _____ Hp _____ Rpm _____ Bhp

HEATING

Integrated Capacity _____ Btuh

Power Input to Unit _____ kW

Indoor Entering Air Temp _____ °F dB

Outdoor Air Temp _____ Winter Design

Supplemental Electrical Heater Capacity _____ kW

ELECTRICAL DATA

Power Supply to Unit _____ Volts _____ Phase _____ Hz

Minimum Circuit Amps _____ Maximum Overcurrent Protection _____

FIELD INSTALLED "EXPANSION ELECTRONIC 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 configured to:

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

FACTORY-INSTALLED OPTIONS

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

FIELD-INSTALLED ACCESSORIES

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

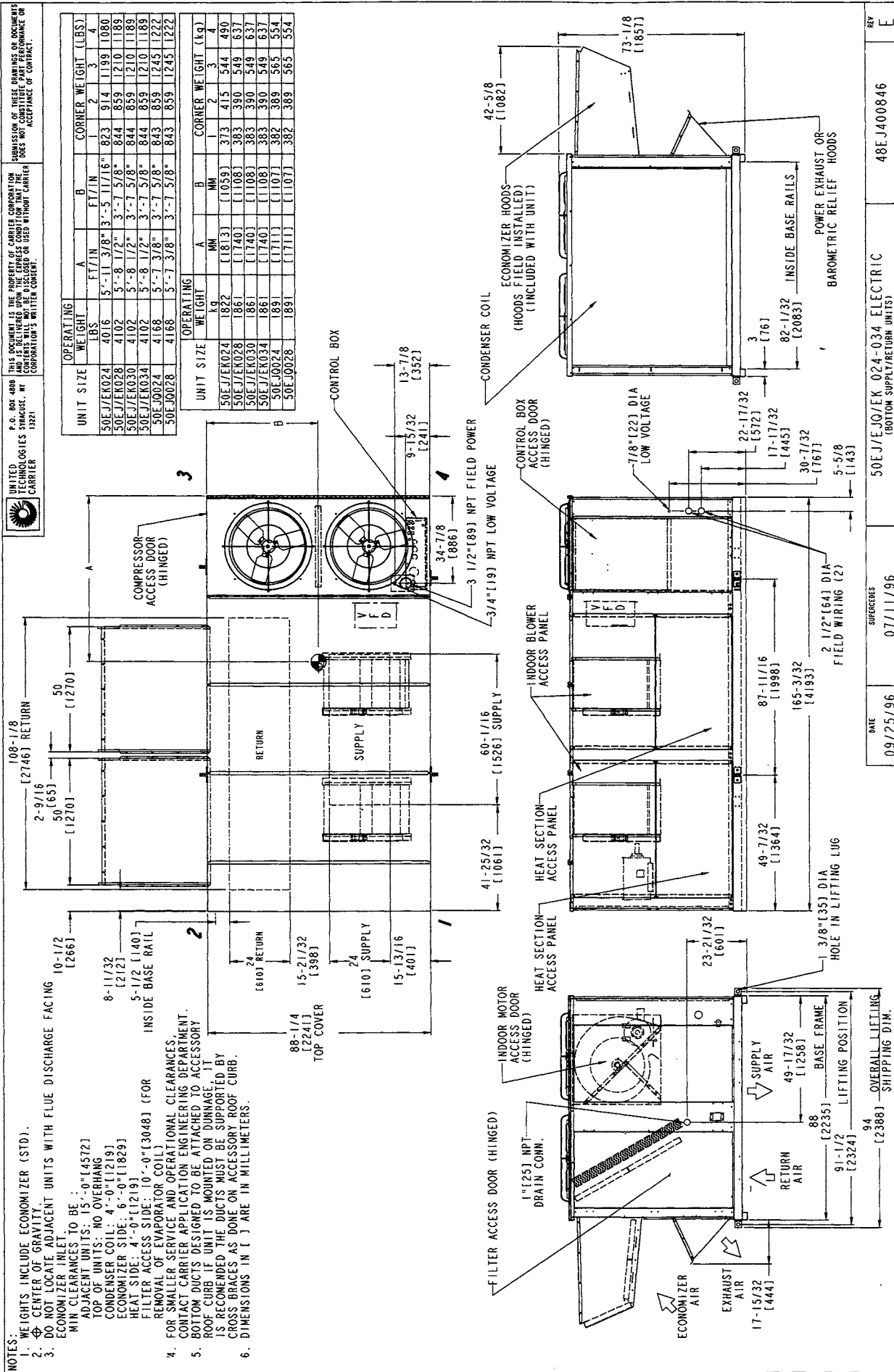
CERTIFIED DIMENSION PRINT

NOTES:
 1. WEIGHTS INCLUDE ECONOMIZER (STD.).
 2. ⌀ CENTER OF GRAVITY.
 3. DO NOT LOCATE ADJACENT UNITS WITH FLUE DISCHARGE FACING ECONOMIZER INLET.
 MIN CLEARANCES TO BE:
 ADJACENT UNITS: 15'-0" (4572)
 TOP OF UNITS: NO OVERHANG
 ECONOMIZER COIL: 4'-0" (1219)
 ECONOMIZER SIDE: 6'-0" (1829)
 HEAT SIDE: 4'-0" (1219)
 FILTER ACCESS SIDE: 10'-0" (3048) (FOR REMOVAL OF EVAPORATOR COIL)
 4. FOR SMALLER SERVICE AND OPERATIONAL CLEARANCES, CONTACT CARRIER SERVICE AND OPERATIONAL ENGINEERING DEPARTMENT.
 5. BOTTOM DUCTS DESIGNED TO BE ATTACHED TO ACCESSORY ROOF CURB. IF UNIT IS MOUNTED ON DUNNAGE, IT IS RECOMMENDED THE DUCTS MUST BE SUPPORTED BY CROSS BRACES AS DONE ON ACCESSORY ROOF CURB.
 6. DIMENSIONS IN () ARE IN MILLIMETERS.

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 CARRIER
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 13201
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UNIT SIZE	WEIGHT LBS	OPERATING		A		B		CORNER WEIGHT (LBS)	
		FT/IN	MM	FT/IN	MM	FT/IN	MM	1	2
50EJ/EK024	4016	5'-11 3/8"	1822	3'-5 1/16"	823	3'-5 1/16"	823	1	2
50EJ/EK028	4102	5'-8 1/2"	1861	3'-7 5/8"	844	3'-7 5/8"	844	1	2
50EJ/EK030	4102	5'-8 1/2"	1861	3'-7 5/8"	844	3'-7 5/8"	844	1	2
50EJ/EK034	4102	5'-8 1/2"	1861	3'-7 5/8"	844	3'-7 5/8"	844	1	2
50EJ0024	4168	5'-7 3/8"	1891	3'-7 5/8"	843	3'-7 5/8"	843	1	2
50EJ0028	4168	5'-7 3/8"	1891	3'-7 5/8"	843	3'-7 5/8"	843	1	2

UNIT SIZE	WEIGHT kg	OPERATING		A		B		CORNER WEIGHT (kg)	
		MM	MM	MM	MM	MM	MM	1	2
50EJ/EK024	1822	1822	1822	823	823	823	823	373	415
50EJ/EK028	1861	1861	1861	844	844	844	844	390	430
50EJ/EK030	1861	1861	1861	844	844	844	844	390	430
50EJ/EK034	1861	1861	1861	844	844	844	844	390	430
50EJ0024	1891	1891	1891	843	843	843	843	389	429
50EJ0028	1891	1891	1891	843	843	843	843	389	429



DATE	09/25/96	SUPERCESSES	07/11/96	50EJ/EK0/EK 024-034 ELECTRIC (BOTTOM SUPPLY/RETURN UNITS)	48EJ400846	REV	E
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CERTIFIED DIMENSION PRINT

NOTES: _____
 1. WEIGHS INCLUDE ECONOMIZER (STD). _____



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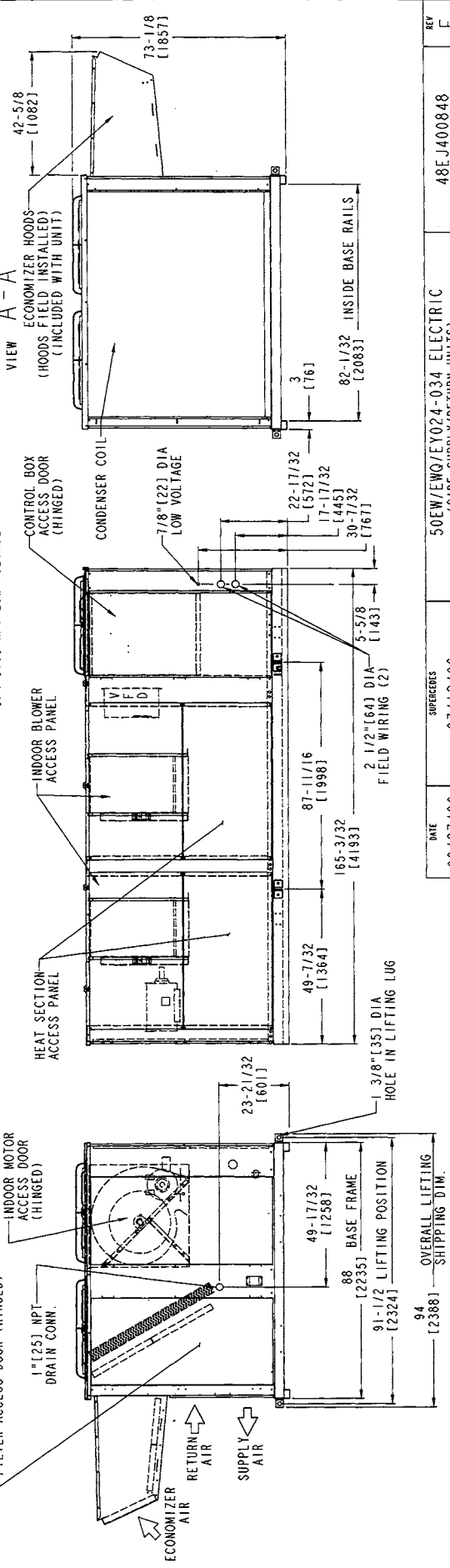
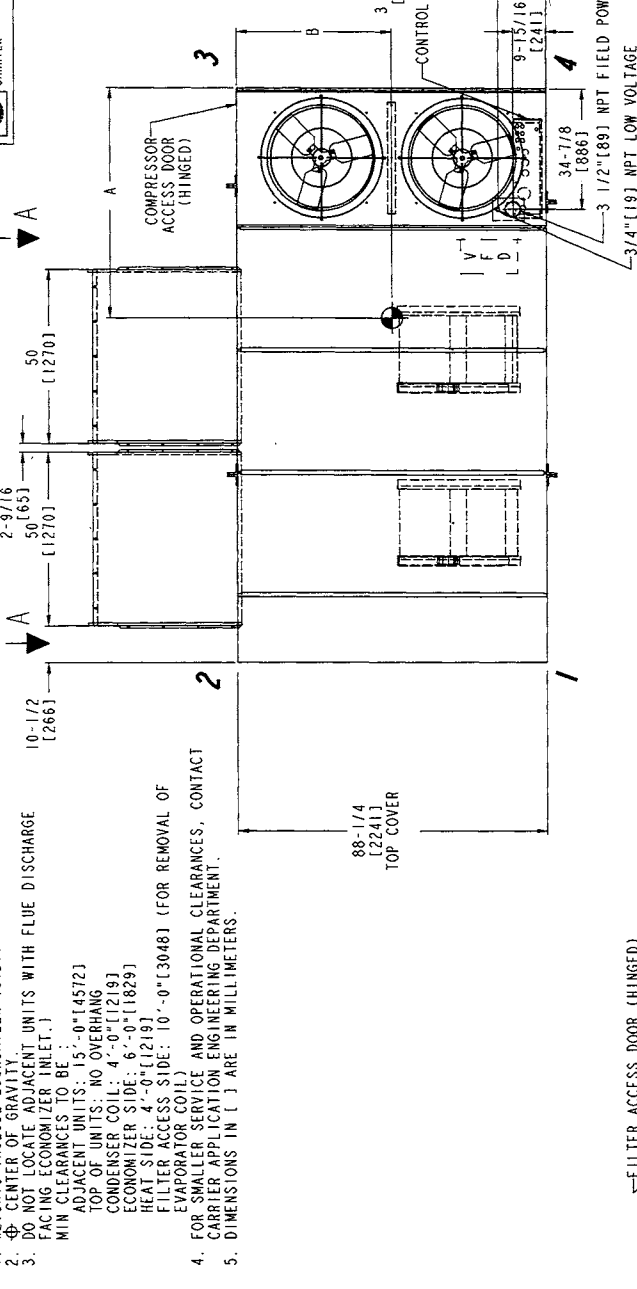
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UNIT WEIGHT	OPERATING		A		B		CORNER WT (LBS.)			
	LBS	FT./IN.	FT./IN.		FT./IN.		1 2 3 4			
			1	2	1	2	3	4		
50EW/EY024	4016	5'-11 3/8"	3'-5 1/8"	3'-5 1/8"	823	914	119	1080		
50EW/EY028	4102	5'-8 1/2"	3'-7 5/8"	3'-7 5/8"	844	859	1210	189		
50EW/EY030	4102	5'-8 1/2"	3'-7 5/8"	3'-7 5/8"	844	859	1210	189		
50EW/EY034	4102	5'-8 1/2"	3'-7 5/8"	3'-7 5/8"	844	859	1210	189		
50W0024	4168	5'-7 3/8"	3'-7 5/8"	3'-7 5/8"	843	859	1245	222		
50W0028	4168	5'-7 3/8"	3'-7 5/8"	3'-7 5/8"	843	859	1245	222		

UNIT NO.	OPERATING WEIGHT		A		B		CORNER WEIGHT (kg)			
	UNIT SIZE	kg	F/T IN	F/T IN	1	2	3	4		
50EW/EY024	1822	1822	17813	17379	373	415	544	490		
50WF/EY028	1861	1861	17440	17008	383	390	549	637		
50WF/EY030	1861	1861	17440	17008	383	390	549	637		
50WF/EY034	1861	1861	17440	17008	383	390	549	637		
50W024	1891	1891	17111	16777	382	389	565	554		
50W028	1891	1891	17111	16777	382	389	565	554		



[2388]	DATE	SUBPERCENTS	REV
OVERALL LIFTING SHIPPING DIM.	09/27/96	07/12/96	E
		50EW/EWQ/EV024-034 ELECTRIC (SIDE SUPPLY/RETURN UNITS)	48EJ400848

CERTIFIED ROOF CURB DIMENSION PRINT

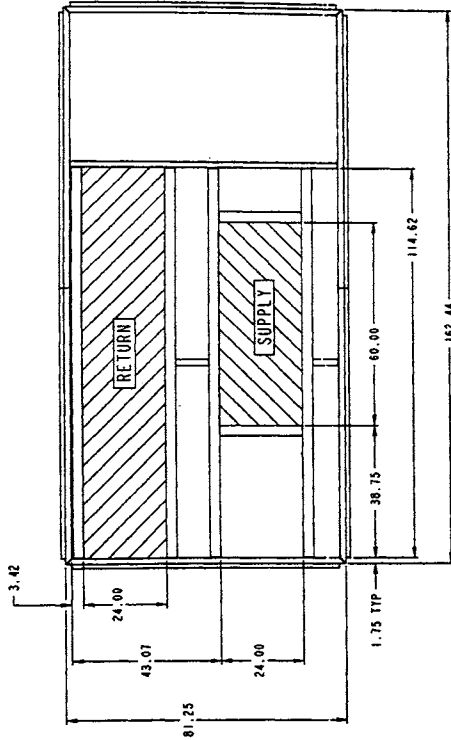


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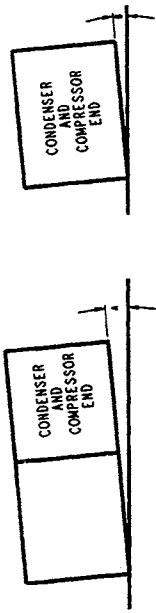
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NOTE: 1. UNLESS OTHERWISE SPECIFIED ALL DIM ARE TO OUTSIDE OF PART.
2. ROOFCURB ACCESSORY CRFCURB003A00 IS SHIPPED DISASSEMBLED.
3. ALL ROOFCURB PARTS ARE TO BE 14 GA GALVANIZED STL.



NOTE:
TO PREVENT STANDING WATER IN THE DRAIN PAN OF THE
INDOOR SECTION AND THE GAS EXCHANGERS
UNIT CAN ONLY BE PITCHED AS SHOWN.



DIMENSIONS
(DEGREES AND INCHES)

A	B
DEG.	IN. DEG. IN.
1.0	2.9 .50 .75

UNIT LEVELING TOLERANCES
*FROM EDGE OF UNIT TO HORIZONTAL

