



## **SUBMITTAL DATA**

# ENVBR24C / ENVBR36HPJ1OA 24000 BTU/H A-Coil for Unitary Heat Pump Split System

Job Name

Purchaser

Submmited to

Unit Designation

Location Date

Engineer

For

Schedule No.



#### **GENERAL FEATURES**

- AHRI Certificate: 212436229
- High Efficiency DC Inverter Technology
- Compact and Quiet 55 dB(A)
- · Side Discharge Outdoor Unit
- · 24VAC Thermostat Compatible
- · Zero Lot Line Design
- Match with Competitive Furnace
- Designed for New Construction or Replacement Market

- Low Ambient Cooling down to 5°F (-15°C)
- Low Ambient Heating down to -22°F (-30°C)
- Coil (Outdoor) Copper Tube/Aluminum Fin with Anti-Corrosion
   Coil Coating (Gold Colored Fin 1500Hr Salt Spray Rating)
- Coil (Indoor) Copper Tube/Aluminum Fin with Anti-Corrosion
   Coil Coating (Blue Colored Fin 500Hr Salt Spray Rating)

### **SPECIFICATIONS, FEATURES & FUNCTION SUMMARY**

CDECIFICATIONS	_	NVDD2/C/F	NV/PD7CLIPTIOA		
SPECIFICATIONS	ENVBR24C / ENVBR36HPJ1OA				
System Type	HEAT PUMP				
SYSTEM PERFORMAN					
Cooling	Min - Max	Btu/h	23000 (12000 - 24000)		
	Capacity @95°F	Btu/h	23000		
	Min - Max	Btu/h	25000 (12000 - 30000)		
Heating	Capacity @5°F	Btu/h	20000		
. reading	Capacity @17°F	Btu/h	17000		
	Capacity @47°F	W	25000		
SEER2			14.3		
EER2			10		
HSPF2			7.7		
COP @5°F			1.8		
COP @47°F			4.2		
Cooling Temperature Range		°F	5 - 129		
Heating Temperature Range		°F	-22 - 75		
Refrigerant Type			R410A		
INDOOR UNIT			ENVBR24C		
Dehumidification		pt/hr	6.03		
Condensate Drain Size (OD)		in	3/4		
External Dimensions (W x H x D)		in	17-1/2 × 23 × 21-1/4		
Package Dimension (	W x H x D)	in	21 x 25-13/16 x 27-1/8		
Refrigerant Charge - I	R410A	OZ	88		
Net Weight		lbs	64		
Gross Weight		lbs	75		

Gross Weight	103	75		
OUTDOOR UNIT		ENVBR36HPJ1OA		
Power Supply	VAC	208-230V / 1Ph / 60 Hz		
Sound Pressure Level	dB(A)	55		
Control Voltage	VAC	24		
Rated Current Cooling	А	21		
Rated Current Heating	А	25		
MCA	А	24		
MOCP	А	35		
Recommended Breaker Size	А	30		
External Dimensions (W x H x D)	in	37 × 32-1/4 × 18-1/8		
Package Dimension (W x H x D)	in	42-11/16 x 38-3/8 × 22-9/16		
Net Weight	lbs	217		
Gross Weight	lbs	240		
Refrigerant Charge - R410A	oz	148		
Additional Charge	oz/ft	0.32		
REFRIGERANT PIPING				
Line Set Size (Liquid - Gas) - Flared Connections	in	3/8 - 3/4		
Pre-Charge Length	ft	31		
Additional Charge	oz/ft	0.32		
Pipe Length (Min - Max)	ft	10 - 164		
Max. Pipe Elevation	ft	100		

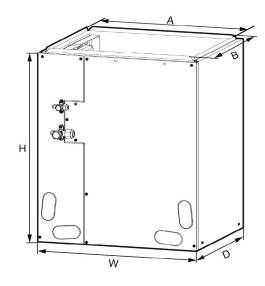
FEATURES & FUNCTIONS SUMMARY	ENVBR24C / ENVBR36HPJ1OA			
SYSTEM FEATURES				
Compressor	Inverter			
Ultra Low Frequency Torque Control	Yes			
Power Factor Correction	Yes			
Compressor Type	Rotary			
Refrigerant Type	R410A			
Outdooor Electronic Expansion Valve (EEV)	Yes			
Indoor TXV Control	Yes			
Basepan With Electric Heater	Yes			
Compressor With Electric Heater	Yes			
Fin Coating (Outdoor - Golden & Indoor - Blue)	Acrylic Resin			
Intelligent Defrosting	Yes			
Intelligent Preheating	Yes			
Low Voltage Startup	Yes			
Memory/Power Failure Recovery	Yes			
Self Diagnosis	Yes			
Low Ambient Cooling	Yes			
24VAC Thermostat Compatible	Yes			

### **DIMENSIONS**

### **INDOOR UNIT**

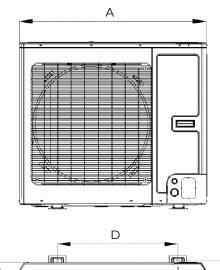
Unit: inch

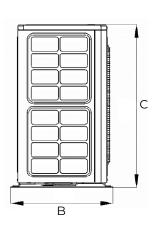
ENVBR24C					
DIMENSIONS					
А	15-7/8				
В	19-3/8				
Н	23				
W	17-1/2				
D	21-1/4				



# OUTDOOR UNIT

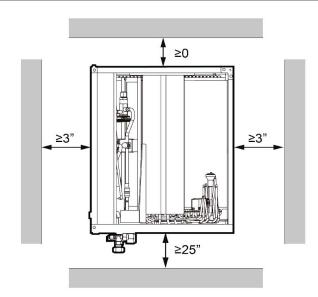
ENVBR36HPJ1OA DIMENSIONS				
А	37			
В	20-1/8			
С	32-1/4			
D	24			
Е	19-1/8			
F	18-1/8			







### INDOOR UNIT Minimum clearence



#### NOTE:

When installing the coil, take consideration to minimize the length of refrigerant tubing as much as possible. Do not install the air handler in a location either above or below the condenser that violates the instructions provided with the condenser. Service clearance is to take precedence. Allow a minimum of 25" in front of the unit for service clearance, as shown below.

The drain pan must be at least 2" away from a standard gas-fired furnace heat exchanger and at least 4"-6" away from any drum-type or oil-fired furnace heat exchanger, depending on furnace model. Closer spacing may damage the drain pan and cause a leak.

#### **OUTDOOR UNIT**

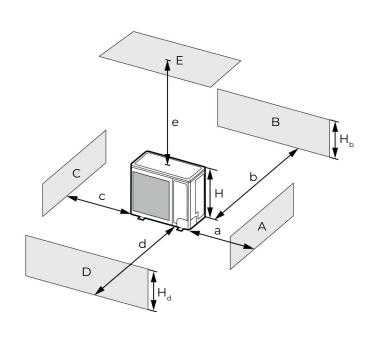
Minimum clearence

#### NOTE:

Install the Outdoor Unit **2 Inches**Above the Expected Snow Line

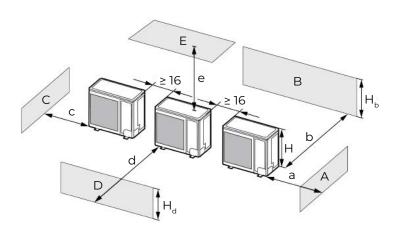
1. When one outdoor unit is to be installed.

A-E H <sub>b</sub>				(in)			
A-E	H <sub>b</sub> H <sub>d</sub> H		а	b	С	d	е
В		-	-	≥ 4	-	-	-
А, В, С		-	≥ 12	≥ 4	≥ 4	-	-
B, E		-	-	≥ 4	-	-	≥ 40
A, B, C, E		-	≥ 12	≥ 6	≥ 6	-	≥ 40
D		-	-	-	-	≥ 40	-
D, E		-	-	-	-	≥ 40	≥ 40
P D	H <sub>b</sub> < H <sub>d</sub>	H <sub>d</sub> < H	-	≥ 4	-	≥ 40	-
B, D	$H_b > H_d$	H <sub>d</sub> > H	-	≥ 4	-	≥ 40	-
		H <sub>b</sub> ≤1/2H	-	≥ 10	-	≥ 80	≥ 40
	H <sub>b</sub> < H <sub>d</sub>	1/2H < H <sub>b</sub> ≤H	-	≥ 10	-	≥ 80	≥ 40
P.D.E.		H <sub>b</sub> > H		Р	rohibite	d	
□, □, □	B, D, E	H <sub>d</sub> ≤ 1/2H	-	≥ 4	-	≥ 80	≥ 40
		1/2H < H <sub>d</sub> ≤H	-	≥ 8	-	≥ 80	≥ 40
		H <sub>d</sub> > H	Prohibited				



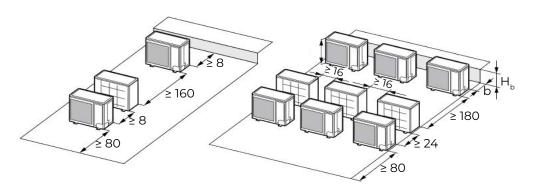
# 2. When two or more outdoor units are to be installed side by side.

	H <sub>b</sub> H <sub>d</sub> H		(in)				
A - E			а	b	С	d	е
А, В, С		-	≥ 12	≥ 12	≥ 40	-	-
A, B, C, E		-	≥ 12	≥ 12	≥ 40	-	≥ 40
D		-	-	-	-	≥ 80	-
D, E	-		-	-	-	≥ 80	≥ 40
B, D	H <sub>b</sub> < H <sub>d</sub>	H <sub>d</sub> > H	-	≥ 12	-	≥ 80	-
ь, и		H <sub>d</sub> ≤ 1/2H	-	≥ 10	-	≥ 80	-
	$H_b > H_d$	1/2H < H <sub>d</sub> ≤ H	-	≥ 12		≥ 100	
		H <sub>b</sub> ≤ 1/2H	-	≥ 12	-	≥ 80	≥ 40
	H <sub>b</sub> < H <sub>d</sub>	1/2H < H <sub>b</sub> ≤ H	-	≥ 12	-	≥ 100	≥ 40
B D E		H <sub>b</sub> >H		Prohibited			
D, D, E	B, D, E	H <sub>d</sub> ≤ 1/2H	-	≥ 10	-	≥ 100	≥ 40
		1/2H < H <sub>d</sub> ≤ H	-	≥ 12	-	≥ 100	≥ 40
		H <sub>d</sub> > H		P	rohibite	d	



### 3. When outdoor units are installed in rows.

H <sub>b</sub> H <sub>d</sub>	(in)		
H <sub>b</sub> ≤1/2H	b ≤ 10		
1/2H < H <sub>b</sub> ≤ H	b ≤ 12		
H <sub>b</sub> > H <sub>d</sub>	Prohibited		



4. When outdoor units are installed one above another.

