AireForce®

YOUR TRUSTED HVAC SOURCE

DUCTLESS

SUBMITTAL DATA

ENVBR60C / ENVBR60HPJ1OA

60000 BTU/H A-Coil for Unitary Heat Pump Split System

Job Name

Location

Date

Purchaser

Engineer

Submmited to

For

Unit Designation

Schedule No.

ENVBR60C

ENVBR60HPJ1OA

GENERAL FEATURES

- AHRI Certificate: 211306458
- High Efficiency DC Inverter Technology
- Compact and Quiet 58 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

SPECIFICATIONS		ENVBR60C / ENVBR60HPJ1OA	
System Type		HEAT PUMP	
SYSTEM PERFORMANCE			
Cooling	Min - Max	Btu/h	52000 (35000 -54000)
	Capacity @95˚F	Btu/h	52000
Heating	Min - Max	Btu/h	54000 (35000 - 60000)
	Capacity @5˚F	Btu/h	36000
	Capacity @17˚F	Btu/h	35000
	Capacity @47˚F	W	54000
SEER2			14.3
EER2			9
HSPF2			7.7
COP @5˚F			1.8
COP @47˚F			3.5
Cooling Temperature Range		˚F	5 - 129
Heating Temperature Range		˚F	-22 - 75
Refrigerant Type			R410A
INDOOR UNIT			ENVBR60C
Dehumidification		pt/hr	12.13
Condensate Drain Size (OD)		in	3 / 4
External Dimensions (W x H x D)		in	24-1/2 x 28-1/2 x 21-1/4
Package Dimension (W x H x D)		in	28-1/8 x 31-5/16 x 27-1/8
Refrigerant Charge - R410A		oz	88
Net Weight		lbs	94.8
Gross Weight		lbs	110.2
OUTDOOR UNIT			ENVBR60HPJ1OA
Power Supply		VAC	208-230V / 1Ph / 60 Hz
Sound Pressure Level		dB(A)	58
Control Voltage		VAC	24
Rated Current Cooling		A	30
Rated Current Heating		A	31
MCA		A	35
MOCP		A	45
Recommended Breaker Size		A	40
External Dimensions (W x H x D)		in	39-3/8 x 53-5/8 x 14-1/2
Package Dimension (W x H x D)		in	45-7/16 x 59-1/4 x 19-7/16
Net Weight		lbs	308
Gross Weight		lbs	337
Refrigerant Charge - R410A		oz	220.5
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	50

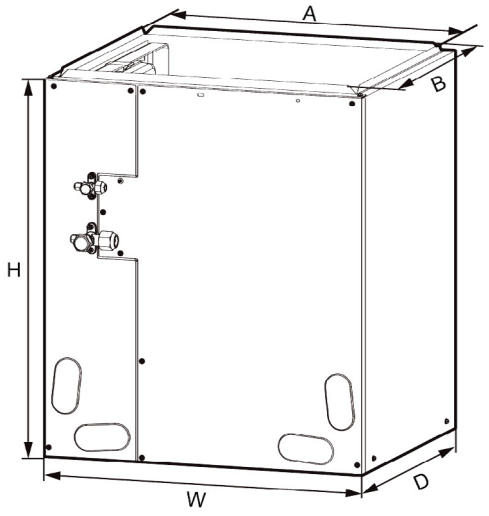
FEATURES & FUNCTIONS SUMMARY	ENVBR60C / ENVBR60HPJ1OA
SYSTEM FEATURES	
Compressor	Inverter
Ultra Low Frequency Torque Control	Yes
Power Factor Correction	Yes
Compressor Type	Rotary
Refrigerant Type	R410A
Outdooor Electronic Expansion Valve (EEV)	Yes
Indoor TXV Control	Yes
Basepan With Electric Heater	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

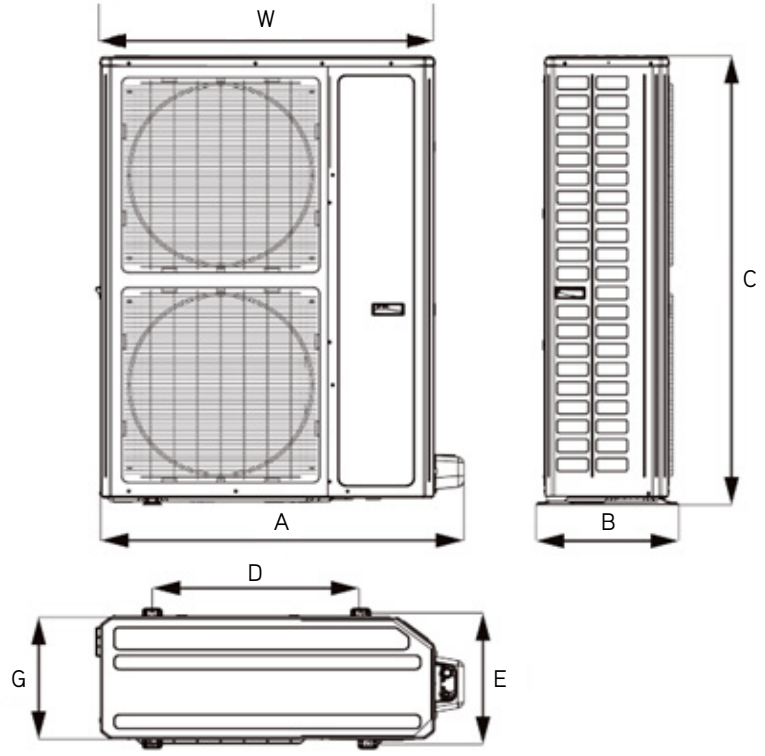
ENVBR60C	
DIMENSIONS	
A	22-7/8
B	19-3/8
H	28-1/2
W	24-1/2
D	21-1/4



OUTDOOR UNIT

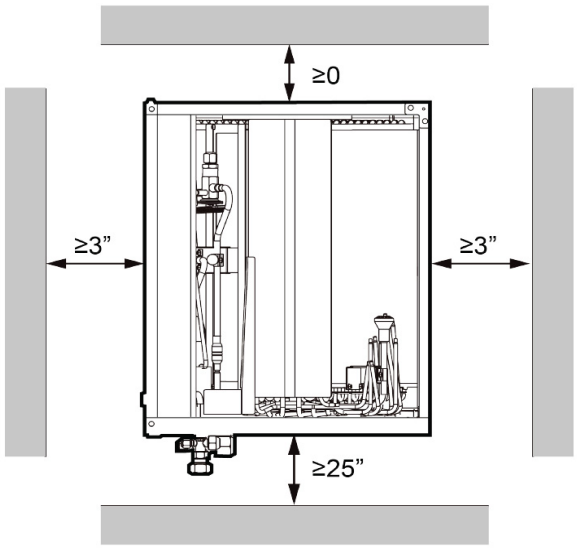
Unit: inch

ENVBR60HPJ1OA	
DIMENSIONS	
A	42-3/4
B	16-7/8
C	53-5/8
D	24-3/8
E	15-5/8
G	14-1/2
W	39-3/8



CLEARANCES

INDOOR UNIT
Minimum clearence



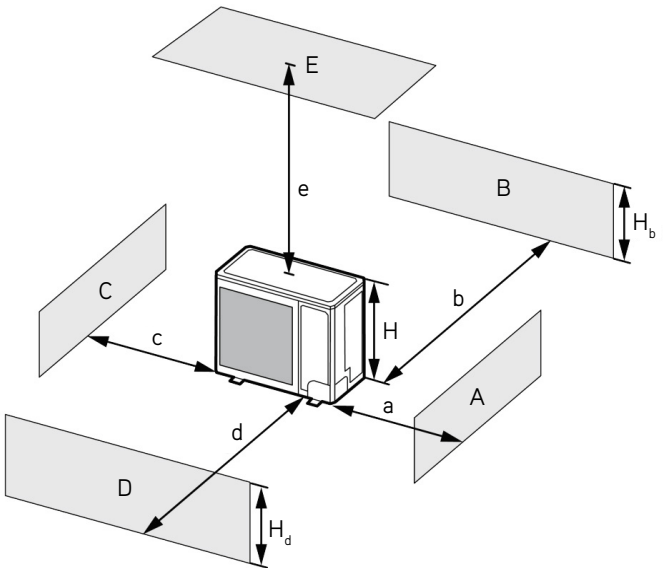
NOTE:
When installing the coil, take consideration to minimize the length of refrigerant tubing as much as possible. Do not install the air handler in a location either above or below the condenser that violates the instructions provided with the condenser. Service clearance is to take precedence. Allow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

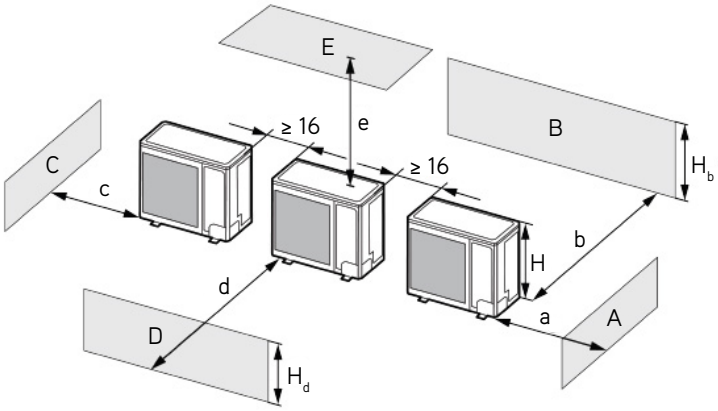
A - E	H_b H_d H		(in)				
			a	b	c	d	e
B	-		-	≥ 4	-	-	-
A, B, C	-		≥ 12	≥ 4	≥ 4	-	-
B, E	-		-	≥ 4	-	-	≥ 40
A, B, C, E	-		≥ 12	≥ 6	≥ 6	-	≥ 40
D	-		-	-	-	≥ 40	-
D, E	-		-	-	-	≥ 40	≥ 40
B, D	$H_b < H_d$	$H_d < H$	-	≥ 4	-	≥ 40	-
	$H_b > H_d$	$H_d > H$	-	≥ 4	-	≥ 40	-
B, D, E	$H_b < H_d$	$H_b \leq 1/2H$	-	≥ 10	-	≥ 80	≥ 40
		$1/2H < H_b \leq H$	-	≥ 10	-	≥ 80	≥ 40
		$H_b > H$	Prohibited				
	$H_b > H_d$	$H_d \leq 1/2H$	-	≥ 4	-	≥ 80	≥ 40
		$1/2H < H_d \leq H$	-	≥ 8	-	≥ 80	≥ 40
		$H_d > H$	Prohibited				



CLEARANCES

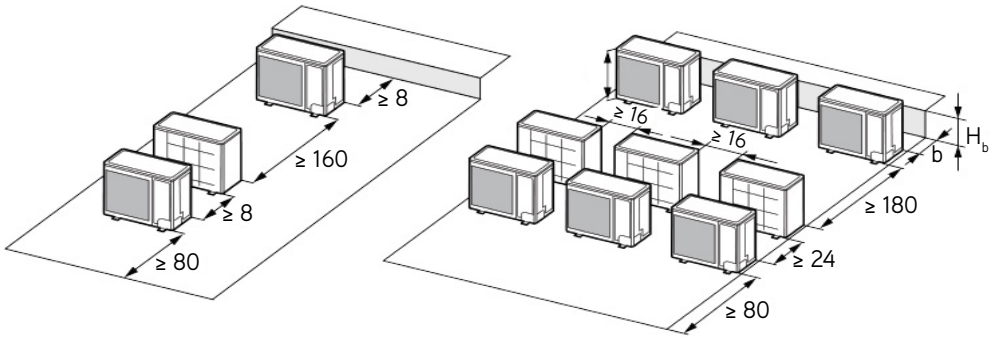
2. When two or more outdoor units are to be installed side by side.

A - E	H_b H_d H		(in)				
			a	b	c	d	e
A, B, C	-		≥ 12	≥ 12	≥ 40	-	-
A, B, C, E	-		≥ 12	≥ 12	≥ 40	-	≥ 40
D	-		-	-	-	≥ 80	-
D, E	-		-	-	-	≥ 80	≥ 40
B, D	$H_b < H_d$	$H_d > H$	-	≥ 12	-	≥ 80	-
B, D, E	$H_b > H_d$	$H_d \leq 1/2H$	-	≥ 10	-	≥ 80	-
		$1/2H < H_d \leq H$	-	≥ 12		≥ 100	
	$H_b < H_d$	$H_b \leq 1/2H$	-	≥ 12	-	≥ 80	≥ 40
		$1/2H < H_b \leq H$	-	≥ 12	-	≥ 100	≥ 40
		$H_b > H$	Prohibited				
	$H_b > H_d$	$H_d \leq 1/2H$	-	≥ 10	-	≥ 100	≥ 40
		$1/2H < H_d \leq H$	-	≥ 12	-	≥ 100	≥ 40
		$H_d > H$	Prohibited				



3. When outdoor units are installed in rows.

H_b H_d	(in)
$H_b \leq 1/2H$	b ≤ 10
$1/2H < H_b \leq H$	b ≤ 12
$H_b > H_d$	Prohibited



4. When outdoor units are installed one above another.