

15.5 SEER2 HEAT PUMP



SUBMITTAL DATA

FLEXE24HP230V1AH / FLEXE24HP230V1AO
24000 BTU/H Unitary Heat Pump Split System

Job Name

Location

Date

Purchaser

Engineer

Submitted to

For

Unit Designation

Schedule No.



FLEXE24HP230V1AH



FLEXE24HP230V1AO

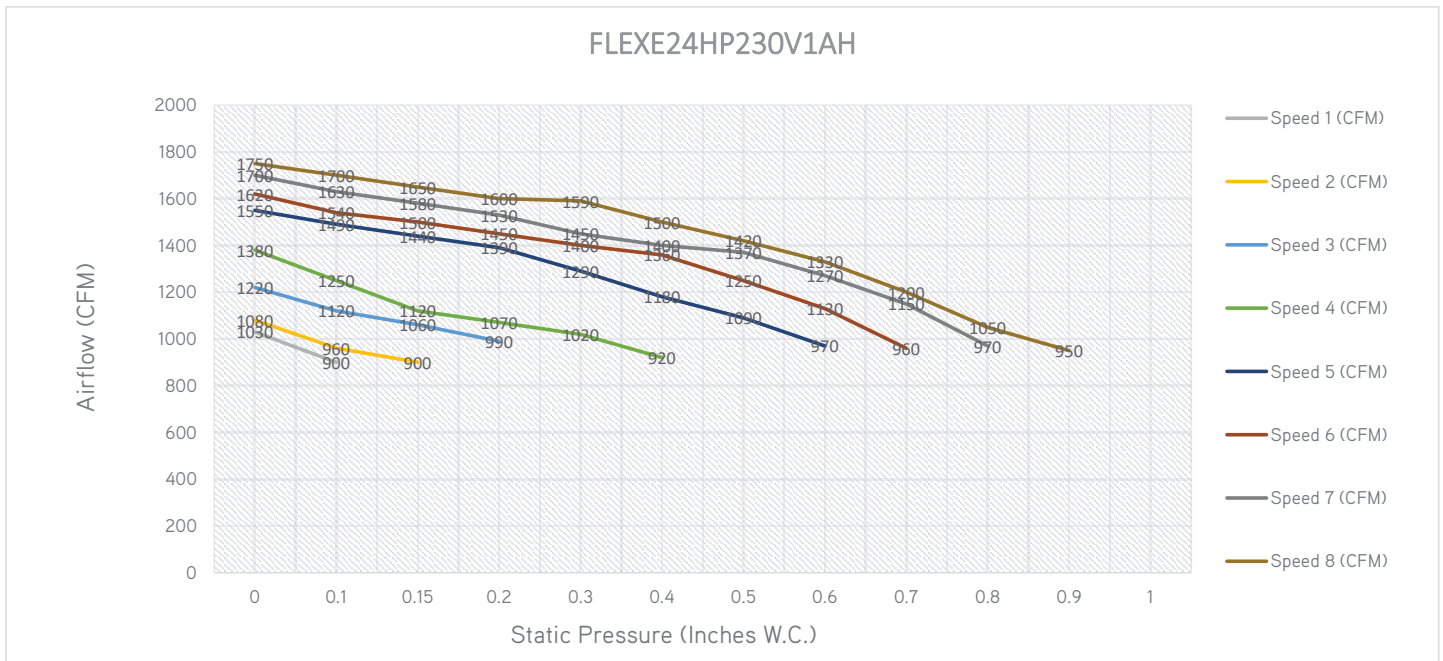
GENERAL FEATURES

- AHRI Certificate: [211078847](#)
- High Efficiency DC Inverter Technology
- 24VAC Thermostat Compatible
- Zero Lot Line Design
- 8 Speed Fan Motor
- Matched with Indoor Unit
- Designed for New Construction or Replacement Market
- Compact and Quiet, as low as 56 dB(A) Side Discharge Outdoor Unit
- Cooling and Heating down to -15°C (5°F)
- 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		FLEXE24HP230V1AH / FLEXE24HP230V1AO		FEATURES & FUNCTIONS SUMMARY		FLEXE24HP230V1AH / FLEXE24HP230V1AO	
System Type		HEAT PUMP					
SYSTEM PERFORMANCE				SYSTEM FEATURES			
Cooling	Min - Max	Btu/h	16100 - 25000	Compressor	Inverter		
	Capacity @95°F	Btu/h	23000	Ultra Low Frequency Torque Control	Yes		
Heating	Min - Max	Btu/h	11135 - 27000	Power Factor Correction	Yes		
	Capacity @5°F	Btu/h	13100	Compressor Type	Rotary		
	Capacity @17°F	Btu/h	14600	Refrigerant Type	R410A		
	Capacity @47°F	Btu/h	23000	Outdoor Electronic Expansion Valve (EEV)	Yes		
SEER2			15.5	Indoor TXV Control	Yes		
EER2			10.5	Basepan With Electric Heater	Yes		
HSPF2			7.8	Compressor With Electric Heater	Yes		
COP @5°F			1.8	Fin Coating (Outdoor - Golden & Indoor - Blue)	Acrylic Resin		
COP @47°F			3.1	Intelligent Defrosting	Yes		
Cooling Temperature Range	°F	5 - 118		Intelligent Preheating	Yes		
Heating Temperature Range	°F	5 - 75		Low Voltage Startup	Yes		
Refrigerant Type	R410A			Memory/Power Failure Recovery	Yes		
INDOOR UNIT		FLEXE24HP230V1AH		Self Diagnosis	Yes		
Power Supply	VAC	208-230V / 1Ph / 60 Hz		Low Ambient Cooling	No		
Sound Pressure Level	dB(A)	47		24VAC Thermostat Compatible	Yes		
Control Voltage	VAC	24		Indoor Fan Type	Centrifugal		
Rated Current Cooling	A	3		Multi Fan Speeds	8		
Rated Current Heating	A	3		Auxiliary Electrical Heater	Optional		
MCA	A	3.5					
MOCP	A	15					
Electric Heater (Optional)	kW	5, 8					
Air Flow	CFM	800					
External Static Pressure (Up to)	In W.c.	1.0					
Dehumidification	pt/hr	3.06					
External Dimensions (W x H x D)	in	18-1/8 x 43-1/2 x 21-1/4					
Package Dimension (W x H x D)	in	20-5/8 x 45-11/16 x 26					
Net Weight	lbs	125.7					
Gross Weight	lbs	134.5					
OUTDOOR UNIT		FLEXE24HP230V1AO					
Power Supply	VAC	208-230V / 1Ph / 60 Hz					
Sound Pressure Level	dB(A)	56					
Control Voltage	VAC	24					
Rated Current Cooling	A	15.5					
Rated Current Heating	A	15.5					
MCA	A	17					
MOCP	A	20					
External Dimensions (W x H x D)	in	35 x 25-7/8 x 13-3/8					
Package Dimension (W x H x D)	in	40-5/8 x 28-3/4 x 18					
Net Weight	lbs	99.2					
Gross Weight	lbs	108					
Refrigerant Charge - R410A	oz	70.6					
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					
Pipe Length (Min - Max)	ft	10 - 98.4					
Max. Pipe Elevation	ft	49.2					

FAN PERFORMANCE



Static Pressure (Inches W.C.)	0	0.1	0.15	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1
Speed 1 (CFM)	1030	900										
Speed 2 (CFM)	1080	960	900									
Speed 3 (CFM)	1220	1120	1060	990								
Speed 4 (CFM)	1380	1250	1120	1070	1020	920						
Speed 5 (CFM)	1550	1490	1440	1390	1290	1180	1090	970				
Speed 6 (CFM)	1620	1540	1500	1450	1400	1360	1250	1130	960			
Speed 7 (CFM)	1700	1630	1580	1530	1450	1400	1370	1270	1150	970		
Speed 8 (CFM)	1750	1700	1650	1600	1590	1500	1420	1330	1200	1050	950	

NOTE:

1. Above chart CFM ratings are based on dry coil with factory filter installed.
2. For wet coil CFM ratings, multiply the CFM by 0.96 correction factor.

DIMENSIONS

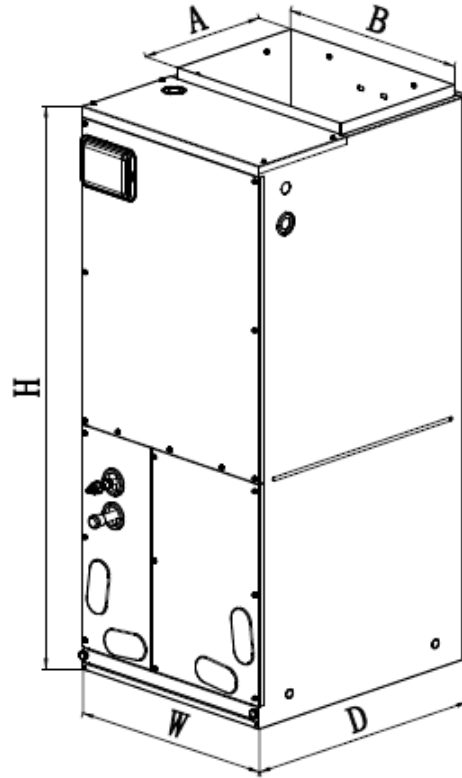
INDOOR UNIT

Unit: inch

FLEXE24HP230V1AH	
DIMENSIONS	
A	11-5/8"
B	11-1/2"
H	47-1/2"
W	16-1/2"
D	21-1/4"

FILTER SIZE	
Supplied*	16-1/2" x 20-3/8" x 5/8"
Suggested	16-1/2" x 20-3/8" x 1"

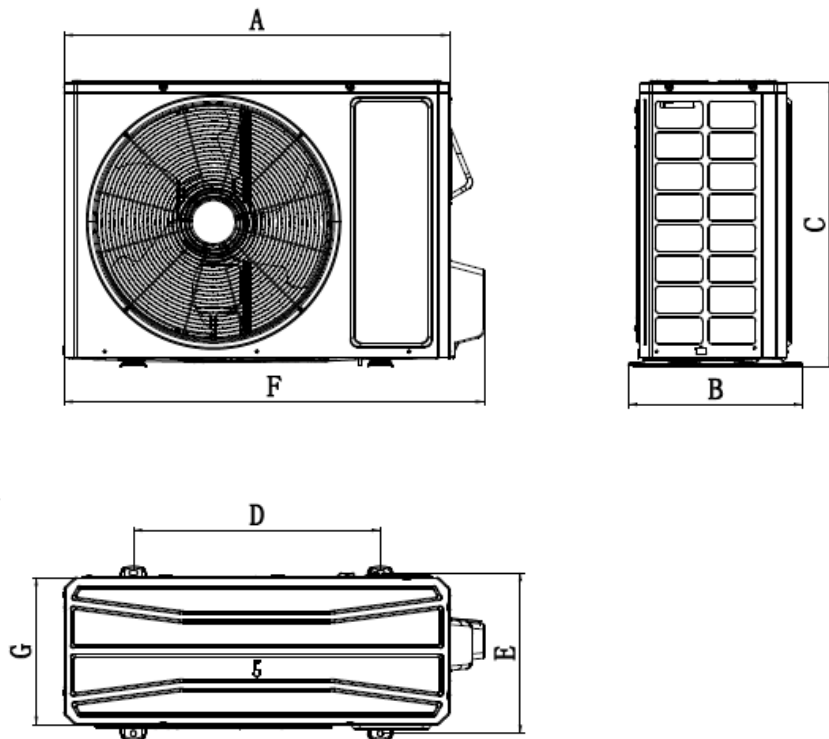
*Supplied filter is metal mesh



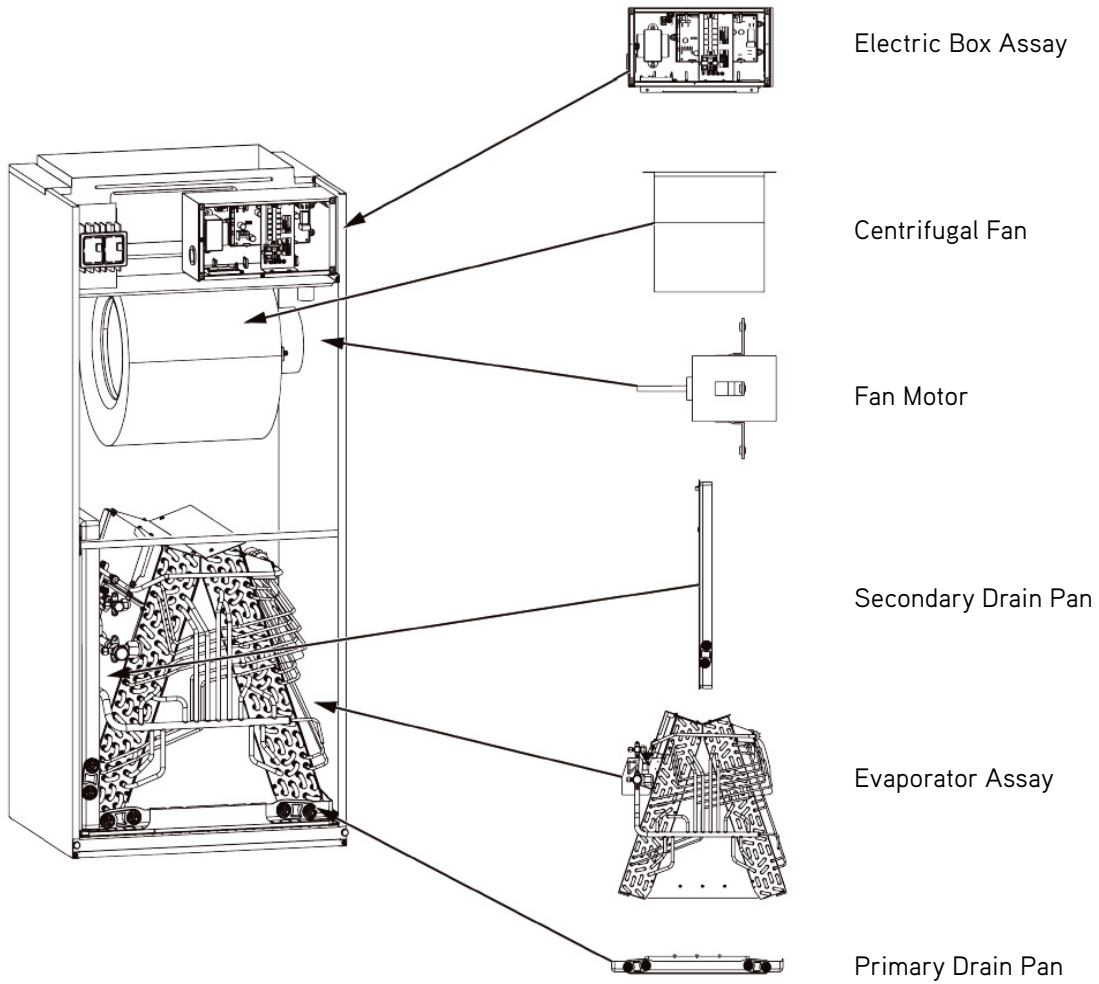
OUTDOOR UNIT

Unit: inch

FLEXE24HP230V1AO	
DIMENSIONS	
A	35"
B	15-13/16"
C	25-7/8"
D	22-7/16"
E	14-9/16"
F	38-1/4"
G	13-3/8"



ACCESSORY HEATER AND GENERAL INFORMATION



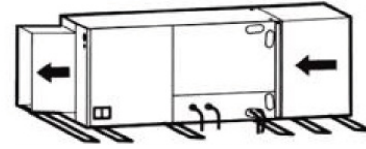
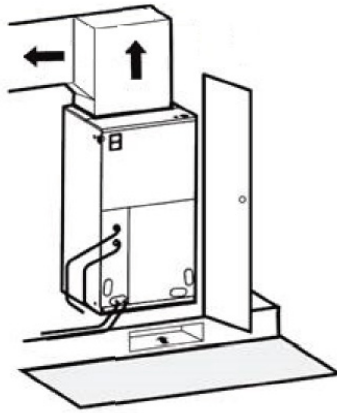
Model	Heat Kit Model	Electric Heat (kW)		Min. Circuit Ampacity (A)		Max Fuse or Breaker (A)	
		208V	230V	208V	230V	208V	230V
FLEXE24HP230V1AH	ECOHTR05KW	3.74	4.6	31	33	35	35
	ECOHTR08KW	6.03	7.36	44	48	45	50

CLEARANCES

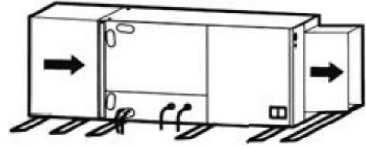
INDOOR UNIT

Minimum clearance

FRONT > 24



Horizontal Left Configuration - No Modification Needed



Horizontal Right Configuration - Must Relocate Drain Pan

NOTE:

Allow a minimum of 24" in front of the unit for service clearance. When installing in an area directly over a finished ceiling (such as an attic), an emergency drain pan is required directly under the unit. **See local and state codes for requirements.** When installing this unit in an area that may become wet, elevate the unit with a sturdy, non-porous material. In installations that may lead to physical damage (i.e. a garage) it is advised to install a protective barrier to prevent such damage. This air handler is designed for a complete supply and return ductwork system.

OUTDOOR UNIT

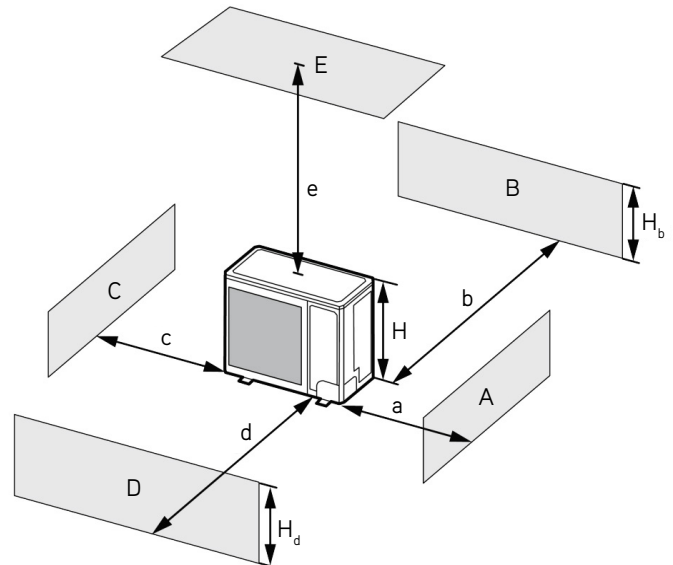
Minimum clearance

NOTE:

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

1. When one outdoor unit is to be installed.

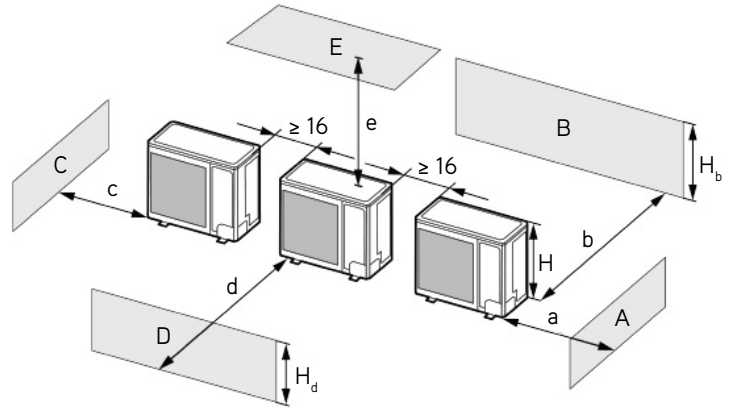
A - E	H_b H_d H		(in)				
			a	b	c	d	e
B	-	-	-	≥ 4	-	-	-
A, B, C	-	-	≥ 12	≥ 4	≥ 4	-	-
B, E	-	-	-	≥ 4	-	-	≥ 40
A, B, C, E	-	-	≥ 12	≥ 6	≥ 6	-	≥ 40
D	-	-	-	-	-	≥ 40	-
D, E	-	-	-	-	-	≥ 40	≥ 40
B, D	$H_b < H_d$	$H_d < H$	-	≥ 4	-	≥ 40	-
	$H_b > H_d$	$H_d > H$	-	≥ 4	-	≥ 40	-
B, D, E	$H_b < H_d$	$H_b \leq 1/2H$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



CLEARANCES

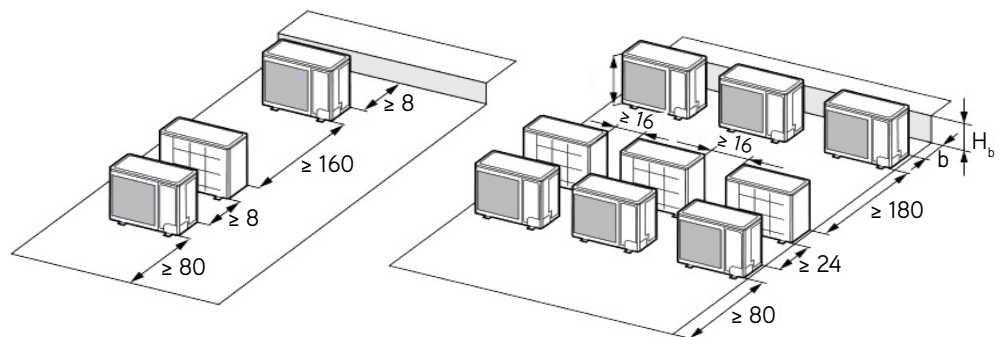
2. When two or more outdoor units are to be installed side by side.

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
	$H_b > H_d$	$H_d \leq 1/2H$	-	≥ 10	-	≥ 80
B, D, E	$H_b > H_d$	$1/2H < H_b \leq H$	-	≥ 12	-	≥ 100
		$H_b \leq 1/2H$	-	≥ 12	-	≥ 80
	$H_b < H_d$	$1/2H < H_b \leq H$	-	≥ 12	-	≥ 100
		$H_b > H$	Prohibited			
	$H_b > H_d$	$H_d \leq 1/2H$	-	≥ 10	-	≥ 100
		$1/2H < H_d \leq H$	-	≥ 12	-	≥ 100
	$H_d > H$	Prohibited				



3. When outdoor units are installed in rows.

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



4. When outdoor units are installed one above another.

