

15.5 SEER2 HEAT PUMP



SUBMITTAL DATA

FLEXE30HP230V1AH / FLEXE30HP230V1AO
30000 BTU/H Unitary Heat Pump Split System

Job Name

Location

Date

Purchaser

Engineer

Submitted to

For

Unit Designation

Schedule No.



FLEXE30HP230V1AH



FLEXE30HP230V1AO

GENERAL FEATURES

- AHRI Certificate: [211078848](#)
- 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 58 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 FLEXE30HP230V1AH / FLEXE30HP230V1AO

System Type HEAT PUMP

SYSTEM PERFORMANCE

Cooling	Min - Max	Btu/h	23275 - 30000
	Capacity @95°F	Btu/h	28600
Heating	Min - Max	Btu/h	13680 - 31000
	Capacity @5°F	Btu/h	16100
	Capacity @17°F	Btu/h	18600
	Capacity @47°F	Btu/h	28600
SEER2			15.2
EER2			10
HSPF2			7.8
COP @5°F			1.8
COP @47°F			2.9
Cooling Temperature Range	°F		5 - 118
Heating Temperature Range	°F		5 - 75
Refrigerant Type			R410A

INDOOR UNIT FLEXE30HP230V1AH

Power Supply	VAC	208-230V / 1Ph / 60 Hz
Sound Pressure Level	dB(A)	51
Control Voltage	VAC	24
Rated Current Cooling	A	3
Rated Current Heating	A	3
MCA	A	4.4
MOCP	A	15
Electric Heater (Optional)	kW	5, 8
Air Flow	CFM	900
External Static Pressure (Up to)	In W.c.	1.0
Dehumidification	pt/hr	9.70
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 FLEXE30HP230V1AO

Power Supply	VAC	208-230V / 1Ph / 60 Hz
Sound Pressure Level	dB(A)	58
Control Voltage	VAC	24
Rated Current Cooling	A	15.3
Rated Current Heating	A	16
MCA	A	20
MOCP	A	25
External Dimensions (W x H x D)	in	36-3/8 x 29-3/8 x 14-5/8
Package Dimension (W x H x D)	in	42-5/8 x 31-1/28 x 19
Net Weight	lbs	119.0
Gross Weight	lbs	127.9
Refrigerant Charge - R410A	oz	77.6
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

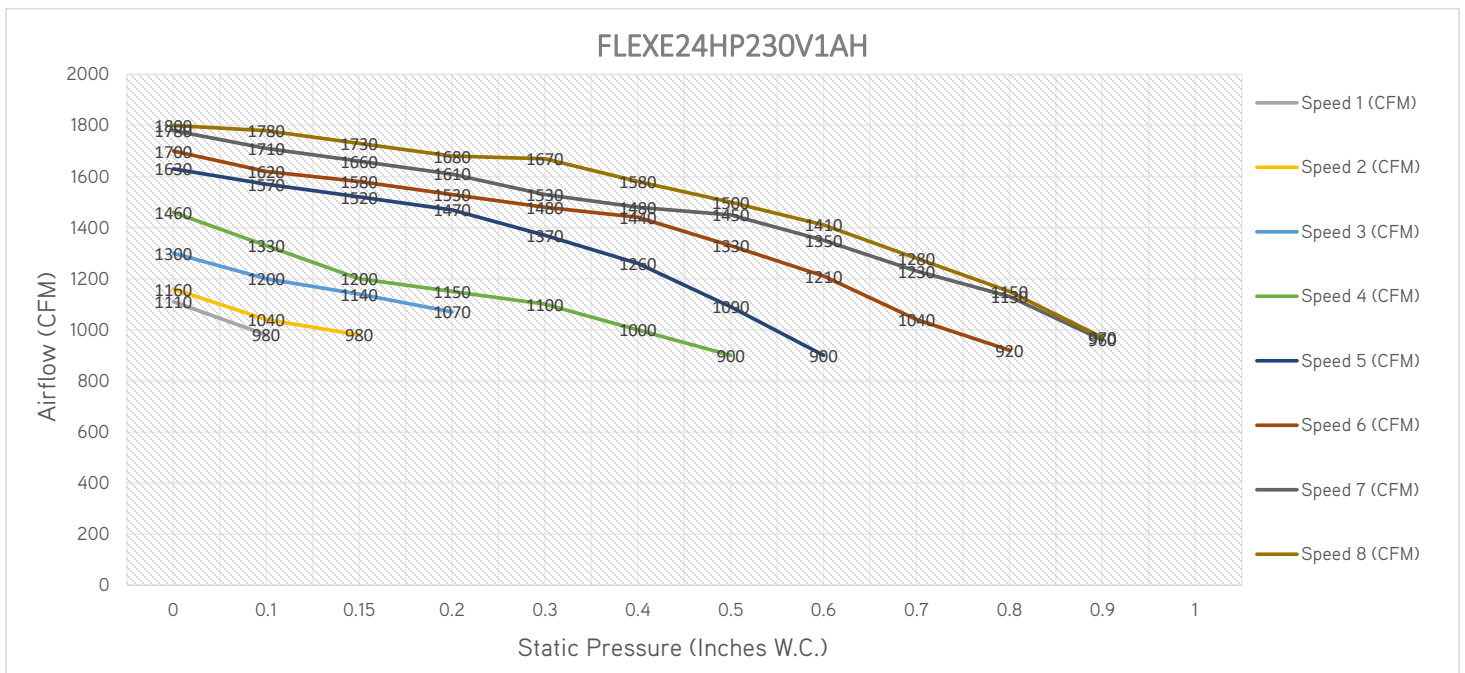
FEATURES & FUNCTIONS SUMMARY FLEXE30HP230V1AH / FLEXE30HP230V1AO

SYSTEM FEATURES

Compressor	Inverter
Ultra Low Frequency Torque Control	Yes
Power Factor Correction	Yes
Compressor Type	Rotary
Refrigerant Type	R410A
Outdoor 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	No
24VAC Thermostat Compatible	Yes
Indoor Fan Type	Centrifugal
Multi Fan Speeds	8
Auxiliary Electrical Heater	Optional

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)	1110	980										
Speed 2 (CFM)	1160	1040	980									
Speed 3 (CFM)	1300	1200	1140	1070								
Speed 4 (CFM)	1460	1330	1200	1150	1100	1000	900					
Speed 5 (CFM)	1630	1570	1520	1470	1370	1260	1090	900				
Speed 6 (CFM)	1700	1620	1580	1530	1480	1440	1330	1210	1040	920		
Speed 7 (CFM)	1780	1710	1660	1610	1530	1480	1450	1350	1230	1130	960	
Speed 8 (CFM)	1800	1780	1730	1680	1670	1580	1500	1410	1280	1150	970	



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

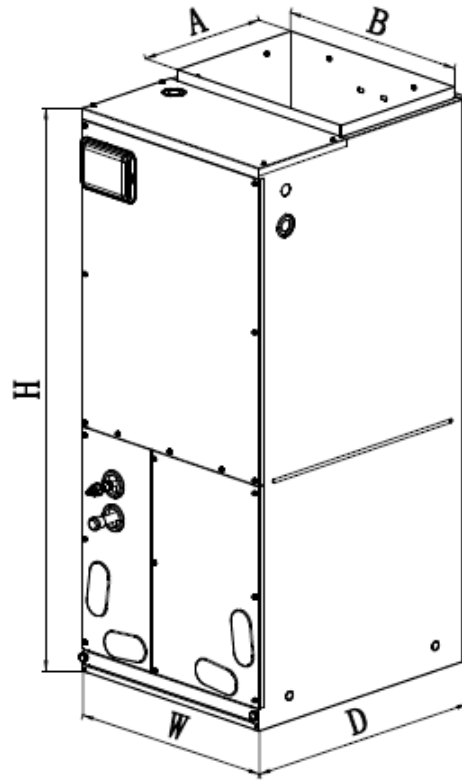
INDOOR UNIT

Unit: inch

FLEXE30HP230V1AH	
DIMENSIONS	
A	11-5/8'
B	14-1/2'
H	4' -1/8"
W	14-1/2"
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

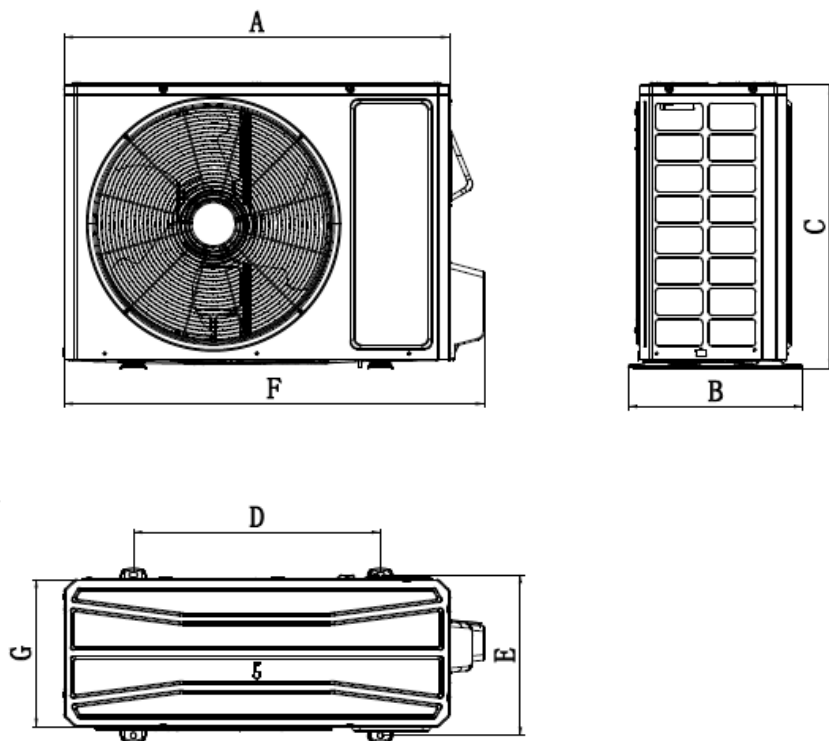
*Supplied filter is metal mesh



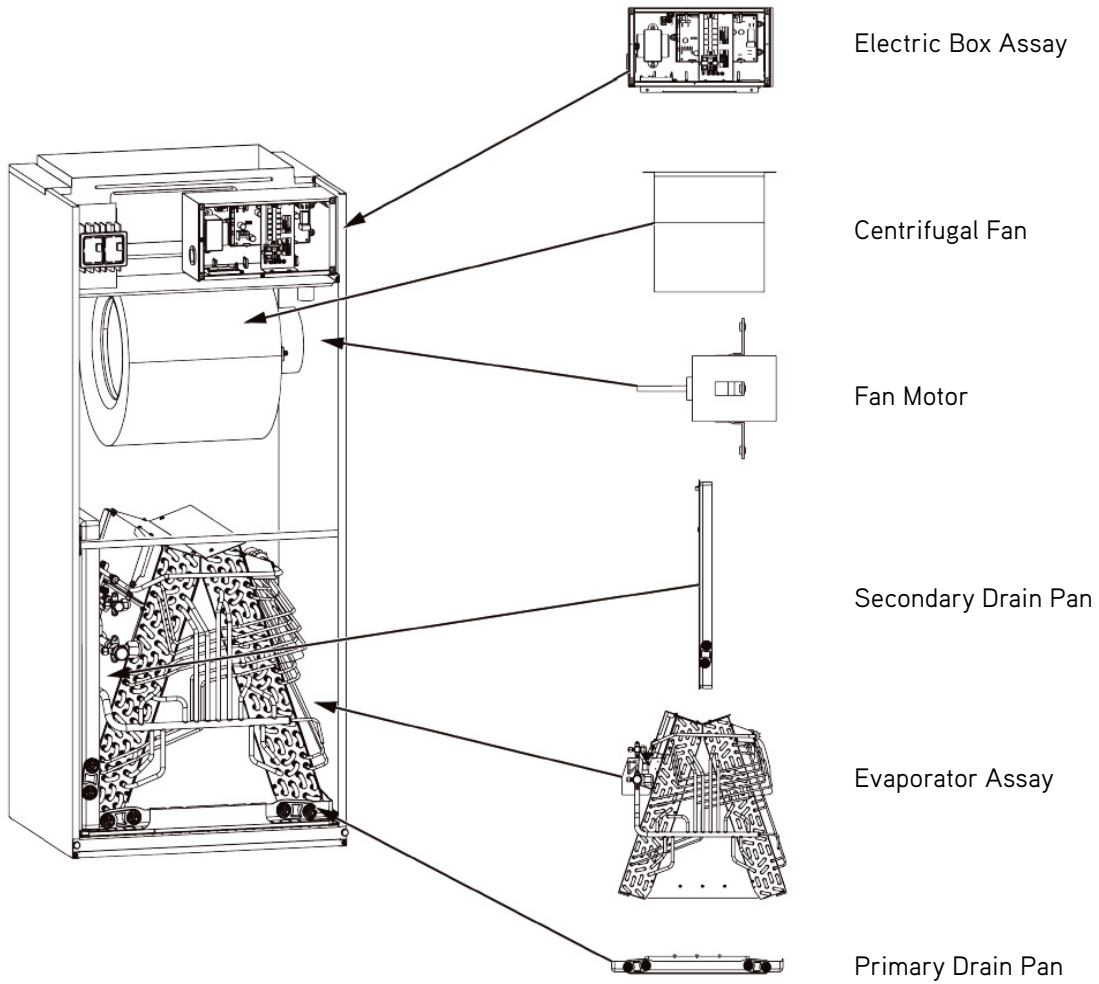
OUTDOOR UNIT

Unit: inch

FLEXE30HP230V1AO	
DIMENSIONS	
A	36-3/8"
B	15-13/16"
C	29-3/8"
D	22-7/16"
E	14-9/16"
F	38-1/4"
G	14-5/8"



ACCESSORY HEATER AND GENERAL INFORMATION



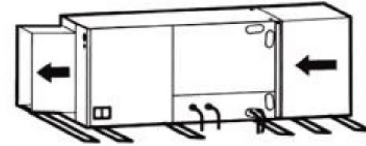
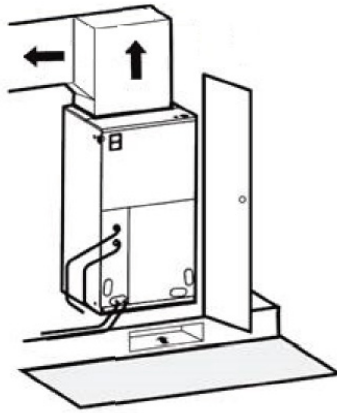
Model	Heat Kit Model	Electric Heat (kW)		Min. Circuit Ampacity (A)		Max Fuse or Breaker (A)	
		208V	230V	208V	230V	208V	230V
FLEXE30HP230V1AH	ECOHTR05KW	3.74	4.6	31	33	35	35
	ECOHTR08KW	6.03	7.36	44	48	45	50

CLEARANCES

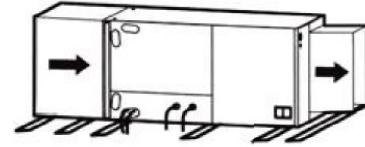
INDOOR UNIT

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

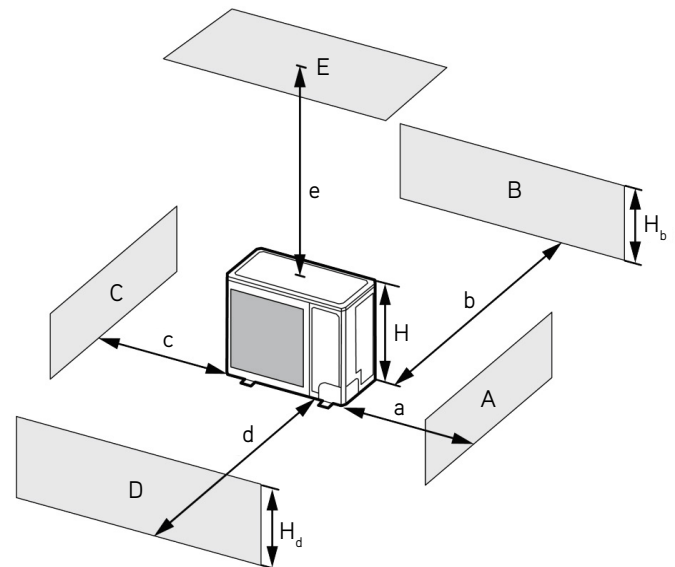
Minimum clearance

NOTE:

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

1. When one outdoor unit is to be installed.

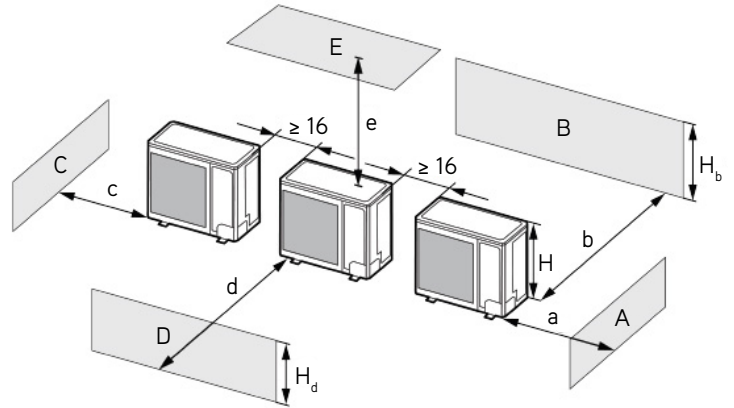
A - E	H_b H_d H		(in)				
			a	b	c	d	e
B	-	-	-	≥ 4	-	-	-
A, B, C	-	-	≥ 12	≥ 4	≥ 4	-	-
B, E	-	-	-	≥ 4	-	-	≥ 40
A, B, C, E	-	-	≥ 12	≥ 6	≥ 6	-	≥ 40
D	-	-	-	-	-	≥ 40	-
D, E	-	-	-	-	-	≥ 40	≥ 40
B, D	$H_b < H_d$	$H_d < H$	-	≥ 4	-	≥ 40	-
	$H_b > H_d$	$H_d > H$	-	≥ 4	-	≥ 40	-
B, D, E	$H_b < H_d$	$H_b \leq 1/2H$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

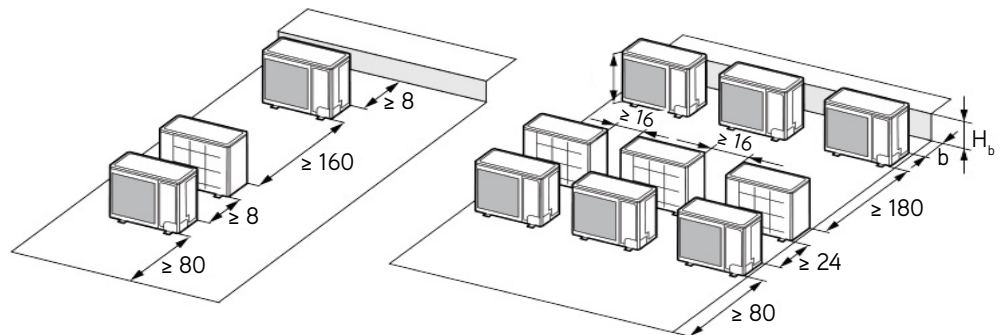
2. When two or more outdoor units are to be installed side by side.

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
		$1/2H < H_b \leq H$	-	≥ 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.

