



Technical Sales Guide

DC INVERTER HEAT PUMP SYSTEMS

(GC202210-I)

TECHNICAL SALES GUIDE 60Hz

CAPACITY RANGE: 24kBtu/h~60kBtu/h

LOW AMBIENT OPERATION TO -15°C (5 °F)







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DC INVERTER UNITARY HEAT PUMPS

1 PRODUCT LIST

➔ 1.1 Outdoor Unit

Model	Power Supply	Product Code	Appearance
	V/Ph/Hz		
FLEXE24HP230V1AO	208/230V-1Ph-60Hz	CF090W2280	
FLEXE30HP230V1AO	208/230V-1Ph-60Hz	CF090W2300	
FLEXE36HP230V1AO	208/230V-1Ph-60Hz	CF090W2290	
FLEXE42HP230V1AO	208/230V-1Ph-60Hz	CF090W2310	
FLEXE48HP230V1AO	208/230V-1Ph-60Hz	CF090W2270	
FLEXE60HP230V1AO	208/230V-1Ph-60Hz	CF090W2410	

➔ 1.2 Indoor Unit

	Model	Cooling/Heating Capacity (Btu/h)	Power Supply	Product Code	Appearance
			V/Ph/Hz		
Air handler	FLEXE24HP230V1AH	23000/23000	208/230V-1Ph-60Hz	EH010N0130	
Air handler	FLEXE30HP230V1AH	28600/28600	208/230V-1Ph-60Hz	EH010N0160	
Air handler	FLEXE36HP230V1AH	34000/34000	208/230V-1Ph-60Hz	EH010N0140	
Air handler	FLEXE42HP230V1AH	40000/40000	208/230V-1Ph-60Hz	EH010N0150	
Air handler	FLEXE48HP230V1AH	46000/46000	208/230V-1Ph-60Hz	EH010N0120	
Air handler	FLEXE60HP230V1AH	54000/54000	208/230V-1Ph-60Hz	EH010N0170	

DC INVERTER UNITARY HEAT PUMPS

2 NOMENCLATURE

FLEXE	24	HP	230V	1	A	O	
1	2	3	4	5	6	7	

NO.	Description	Options
1	Product Model	Gree FLEXX Economy
2	Capacity code	Nominal capacity (kBtu/h)
3	System type	HP = Heat Pump
4	Power supply	230 = 208/230V ~60Hz, 1-Phase
5	Design number 1	Named in order 1, 2, 3...
6	Design number 2	Named in order of A, B, C...
7	Unit type	O = Outdoor unit; H= High pressure air handler

3 PRODUCT FEATURES

➔ 3.1 Description

Gree R410A DC inverter u-match series air conditioners have combined the extraordinary comfort of the central air conditioners with the convenient installation and facility of the mini type of the split air conditioners. It is equipped with the condenser coil constructed of the hydrophilic aluminum fin and the inner groove copper pipe, and also the low-noise compressor with various protections on the high/low pressure, high discharge temperature, overload, and the sensor malfunction alarm. The casing of this unit is made of pre-painted steel, capable of resisting corrosion and rust creep and ensuring minimal fading when exposed to sunlight.

Gree R410A DC inverter u-match series air conditioning units can offer the perfect combination of superior product quality, high operating efficiency and cost efficiency. The capacity rated according to AHRI 210/240-2023 ranges from 24kBtu/h to 60kBu/h, which could be sufficient to different requirements from customers. These units have achieved UL certificate. All units are factory tested prior to dispatch to verify the operation performance and control functioning.

The unit can set for heating even when the outdoor ambient temperature drops to -15°C (5°F) and thus an ideal for locations that require heating in winter. The careful design from each part to the whole unit, together with the all-round process test and unit test, offers the high reliability for the whole system.

Perfect system protections can guarantee the safety of the system at utmost and get rid of the irreparable damage to the compressor or other critical parts under the harsh working conditions.

➔ 3.2 Features-Outdoor Units

- ◆ 24V control enables the third party 24V thermostat. The outdoor unit can auto adjust capacity intelligently without communication.
- ◆ Compact side discharge design occupies half area than that of conventional top discharge design, which is highly suitable for constricted application. It can be installed either on the ground or on the wall to save more space.

➔ 3.3 Indoor Units



DC INVERTER UNITARY HEAT PUMPS

Airflow Patterns for Extra Comfort:

It can connect many supply-air outlets to the duct, so that it can make the temperature and humidity of the whole room even. All units are provided with filters that they are easily accessible from the rear of the unit.

Flexible Installation:

Air-supply or air-return type, condensation water exit direction etc can be selected flexibly.

Easy Maintenance:

Evaporator coils are constructed of quality inner groove copper tube and hydrophilic aluminum fin. It adopts easy and reliable configuration design, so maintenance is very convenient and easy.



Versatile Functions:

- ◆ Time display function
- ◆ Timer function
- ◆ Memory function
- ◆ °F / °C switch function
- ◆ Temperature display function
- ◆ E-heater function
- ◆ 4-way valve energizing function
- ◆ Temperature compensation function

4 PRODUCT DATA

➔ 4.1 Product Data at Rated Condition

Air Handler

Model	Indoor Unit		FLEXE24HP230V1AH	FLEXE30HP230V1AH	FLEXE36HP230V1AH	FLEXE42HP230V1AH	FLEXE48HP230V1AH	FLEXE60HP230V1AH
	Product Code		EH010N0130	EH010N0160	EH010N0140	EH010N0150	EH010N0120	EH010N0170
	Outdoor Unit		FLEXE24HP230V1AO	FLEXE30HP230V1AO	FLEXE36HP230V1AO	FLEXE42HP230V1AO	FLEXE48HP230V1AO	FLEXE60HP230V1AO
	Product Code		CF090W2280	CF090W2300	CF090W2290	CF090W2310	CF090W2270	CF090W2410
Capacity	Cooling	Btu/h	23000	28600	34000	40000	46000	54000
	Heating	Btu/h	23000	28600	34000	40000	46000	54000
Power Input	Cooling	kW	2.30	2.86	3.07	4.08	5.41	5.36
	Heating	kW	2.30	2.86	3.41	4.22	5.41	5.15
SEER 2/ HSPF2		—	15.50 / 7.80	15.20 / 7.80	15.50 / 7.70	15.50 / 7.80	15.00 / 7.70	15.20 / 7.80

Indoor Unit			FLEXE24HP230V1AH	FLEXE30HP230V1AH	FLEXE36HP230V1AH	FLEXE42HP230V1AH	FLEXE48HP230V1AH	FLEXE60HP230V1AH
Power Supply		—	208/230V-1Ph-60Hz					
Fan	Drive	—	Direct	Direct	Direct	Direct	Direct	Direct
	Motor Output	kW	0.37×1	0.37×1	0.37×1	0.37×1	0.75×1	0.75×1
	Air Flow	m³/h (CFM)	1360 (800)	1530 (900)	1785 (1050)	2091 (1230)	2380 (1400)	2550 (1500)
	Rated Ext. Static Pressure	Pa (InWg)	125 (0.50)	125 (0.50)	125 (0.50)	125 (0.50)	125 (0.50)	125 (0.50)
	Ext. Static Pressure Range	Pa (InWg)	0~250 (0-1.0)	0~250 (0-1.0)	0~250 (0-1.0)	0~250 (0-1.0)	0~250 (0-1.0)	0~250 (0-1.0)
Sound Pressure Level (H/M/L)		dB(A)	47	51	51	53	53	54
Air Filter		—	Metal	Metal	Metal	Metal	Metal	Metal
Drain Piping		mm (inch)	Φ25.4×1.2 (Φ1×0.05)	Φ25.4×1.2 (Φ1×0.05)	Φ25.4×1.2 (Φ1×0.05)	Φ25.4×1.2 (Φ1×0.05)	Φ25.4×1.2 (Φ1×0.05)	Φ25.4×1.2 (Φ1×0.05)
Outline Dimensions (W×D×H)		mm (inch)	460×540×1105 (18-1/8×21-1/4×43-1/2)	460×540×1105 (18-1/8×21-1/4×43-1/2)	540×540×1224 (21-1/4×21-1/4×48-3/16)	540×540×1224 (21-1/4×21-1/4×48-3/16)	630×540×1320 (24-13/16×21-1/4×51.968)	630×540×1320 (24-13/16×21-1/4×51.968)
Net Weight		kg (lb)	57.0 (125.7)	57.0 (125.7)	70.0 (154.3)	70.0 (154.3)	86.0 (189.6)	86.0 (189.6)
Outdoor Unit			FLEXE24HP230V1AO	FLEXE30HP230V1AO	FLEXE36HP230V1AO	FLEXE42HP230V1AO	FLEXE48HP230V1AO	FLEXE60HP230V1AO
Power Supply		—	208/230V-1Ph-60Hz					
Heat Exchange		—	Inner Groove Copper Tube-Aluminum Fin					
Compressor	Type	—	Rotary	Rotary	Rotary	Rotary	Rotary	Rotary
	Power Input	W	1480	2020	2293	2293	2293	4580
Refrigerant	Control	—	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
	Charge	kg (oz)	2.0 (70.6)	2.2 (77.6)	3.0 (105.8)	3.5 (123.5)	4.5 (158.8)	5.6 (197.6)
Outline Dimensions (W×H×D)		mm (inch)	889×340×658 (35×13-3/8×25-7/8)	923×370×746 (36-5/16×14-9/16×29-3/8)	923×370×746 (36-5/16×14-9/16×29-3/8)	943×370×826 (37-1/8×14-9/16×32-1/2)	943×370×826 (37-1/8×14-9/16×32-1/2)	990×370×960 (39×14-9/16×37-13/16)
Net Weight		kg (lb)	45.0 (99.225)	54.0 (119.07)	60.1 (132.52)	69.0 (152.1)	74.5 (164.2)	91.0 (200.6)
Piping Connections	Liquid	Inch	Φ3/8	Φ3/8	Φ3/8	Φ3/8	Φ3/8	Φ3/8
	Gas	Inch	Φ3/4	Φ3/4	Φ3/4	Φ3/4	Φ3/4	Φ3/4
	Max. Length	m (ft)	30 (98.4)	30 (98.4)	50 (164.0)	50 (164.0)	50 (164.0)	50 (164.0)
	Max. Height	m (ft)	15 (49.2)	15 (49.2)	30 (98.4)	30 (98.4)	30 (98.4)	30 (98.4)

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NOTES:

- a. The design of this unit conforms to the requirements of AHRI 210/240-2023 standard.
- b. The air flow is measured at the rated external static pressure.
- c. Cooling (heating) capacity stated above is measured under nominal working conditions corresponding to rated external static pressure. The parameters are subject to change with the improvement of products, in which case the values on nameplate shall prevail.

—		Indoor	Outdoor
Cooling		DB: 26.7°C(80.0°F) WB: 19.4°C(67.0°F)	DB: 35.0°C(95.0°F) WB: 23.9°C(75.0°F)
Heating		DB: 21.1°C(70.0°F) WB: 15.6°C(60.0°F)	DB: 8.33°C(47.0°F) WB: 6.11°C(43.0°F)
Piping Length	24k~60k units	7.5m(24.6ft)	

4.2 Operation Range

Mode	Range of Outdoor Temperature
Cooling	-15.0°C(5.0°F)~ 48.0°C(114.8°F)
Heating	-15.0°C(5.0°F)~24.0°C(75.2°F)

4.3 Cooling Performance

NOTES:

PI: Power input
 DB: Dry Bulb Temperature; WB: Wet Bulb Temperature
 TC: Total Capacity; SHC: Sensible Heat Capacity

Air Handler
 FLEXE24HP230V1AO

Indoor air temperature °F		Outdoor dry bulb temperature °F														
		68			77			86			95			104		
		TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
DB	WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
68	57	5.80	3.92	1.24	6.24	4.22	1.65	6.31	4.26	2.01	5.97	4.04	2.12	5.73	3.87	2.21
73	61	6.20	4.46	1.30	6.68	4.80	1.73	6.75	4.86	2.10	6.39	4.60	2.22	6.13	4.41	2.32
79	64	6.51	4.87	1.34	7.01	5.24	1.78	7.09	5.30	2.17	6.71	5.02	2.29	6.44	4.82	2.38
81	66	6.54	4.94	1.34	7.05	5.31	1.79	7.12	5.37	2.18	6.74	5.08	2.30	6.47	4.88	2.40
86	72	6.87	5.34	1.38	7.40	5.75	1.84	7.48	5.81	2.24	7.08	5.50	2.37	6.79	5.28	2.47
90	75	7.22	5.84	1.42	7.77	6.29	1.89	7.85	6.35	2.31	7.43	6.01	2.44	7.13	5.77	2.54

FLEXE30HP230V1AO

Indoor air temperature °F		Outdoor dry bulb temperature °F														
		68			77			86			95			104		
		TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
DB	WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
68	57	7.21	4.39	1.54	7.76	4.72	2.05	7.84	4.77	2.49	7.42	4.52	2.64	7.13	4.34	2.74
73	61	7.71	5.10	1.61	8.30	5.49	2.15	8.39	5.55	2.62	7.94	5.25	2.76	7.62	5.04	2.88
79	64	8.10	5.63	1.66	8.72	6.07	2.21	8.81	6.13	2.69	8.34	5.80	2.85	8.01	5.57	2.96
81	66	8.14	5.72	1.67	8.76	6.16	2.22	8.85	6.23	2.71	8.38	5.89	2.86	8.05	5.66	2.98
86	72	8.54	6.25	1.72	9.20	6.73	2.29	9.30	6.80	2.79	8.80	6.44	2.94	8.45	6.18	3.07
90	75	8.97	6.91	1.77	9.66	7.44	2.35	9.76	7.52	2.87	9.24	7.11	3.03	8.87	6.83	3.16

FLEXE36HP230V1AO

Indoor air temperature °F		Outdoor dry bulb temperature °F														
		68			77			86			95			104		
		TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
DB	WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
68	57	8.57	5.44	1.65	9.22	5.86	2.20	9.32	5.92	2.68	8.82	5.60	2.83	8.47	5.38	2.95
73	61	9.17	6.27	1.73	9.87	6.75	2.30	9.98	6.82	2.81	9.44	6.46	2.97	9.07	6.20	3.09
79	64	9.63	6.89	1.78	10.36	7.42	2.37	10.47	7.50	2.89	9.91	7.10	3.05	9.52	6.82	3.18
81	66	9.68	7.00	1.79	10.42	7.53	2.38	10.53	7.61	2.91	9.96	7.20	3.07	9.57	6.92	3.20
86	72	10.16	7.61	1.84	10.94	8.20	2.45	11.05	8.28	2.99	10.46	7.84	3.16	10.04	7.53	3.29
90	75	10.67	8.38	1.90	11.48	9.02	2.53	11.61	9.11	3.08	10.99	8.63	3.25	10.55	8.28	3.39

DC INVERTER UNITARY HEAT PUMPS

FLEXE42HP230V1AO

Indoor air temperature °F		Outdoor dry bulb temperature °F														
		68			77			86			95			104		
		TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
DB	WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
68	57	10.08	5.96	2.19	10.85	6.42	2.92	10.97	6.49	3.56	10.38	6.14	3.76	9.97	5.90	3.92
73	61	10.78	6.97	2.30	11.61	7.51	3.06	11.73	7.59	3.73	11.11	7.18	3.94	10.66	6.89	4.11
79	64	11.32	7.73	2.37	12.19	8.32	3.15	12.32	8.41	3.84	11.66	7.96	4.06	11.20	7.64	4.23
81	66	11.38	7.86	2.38	12.25	8.46	3.17	12.38	8.55	3.86	11.72	8.09	4.08	11.25	7.77	4.25
86	72	11.95	8.60	2.45	12.86	9.26	3.26	13.00	9.36	3.98	12.31	8.86	4.20	11.81	8.50	4.37
90	75	12.55	9.53	2.52	13.51	10.26	3.36	13.65	10.37	4.09	12.92	9.82	4.32	12.41	9.43	4.50

FLEXE48HP230V1AO

Indoor air temperature °F		Outdoor dry bulb temperature °F														
		68			77			86			95			104		
		TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
DB	WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
68	57	11.59	7.25	2.91	12.48	7.80	3.87	12.61	7.88	4.72	11.94	7.46	4.98	11.46	7.16	5.19
73	61	12.40	8.38	3.05	13.35	9.02	4.06	13.50	9.12	4.95	12.77	8.63	5.23	12.26	8.28	5.45
79	64	13.02	9.23	3.14	14.02	9.93	4.18	14.17	10.04	5.10	13.41	9.50	5.38	12.88	9.12	5.61
81	66	13.09	9.37	3.16	14.09	10.08	4.20	14.24	10.19	5.12	13.48	9.65	5.41	12.94	9.26	5.64
86	72	13.74	10.21	3.25	14.80	10.99	4.32	14.95	11.11	5.27	14.15	10.51	5.57	13.59	10.09	5.80
90	75	14.43	11.25	3.35	15.54	12.11	4.45	15.70	12.24	5.43	14.86	11.58	5.73	14.27	11.12	5.97

FLEXE60HP230V1AO

Indoor air temperature °F		Outdoor dry bulb temperature °F														
		68			77			86			95			104		
		TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
DB	WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
68	57	13.61	8.15	2.88	14.65	8.77	3.83	14.81	8.87	4.67	14.02	8.39	4.94	13.46	8.06	5.14
73	61	14.56	9.51	3.02	15.68	10.23	4.02	15.84	10.34	4.90	15.00	9.79	5.18	14.40	9.40	5.40
79	64	15.29	10.52	3.11	16.46	11.33	4.14	16.64	11.45	5.05	15.75	10.83	5.33	15.12	10.40	5.56
81	66	15.37	10.69	3.13	16.54	11.51	4.16	16.72	11.63	5.07	15.83	11.01	5.36	15.19	10.57	5.58
86	72	16.14	11.69	3.22	17.37	12.59	4.28	17.56	12.72	5.22	16.62	12.04	5.52	15.95	11.56	5.75
90	75	16.94	12.94	3.32	18.24	13.93	4.41	18.43	14.08	5.38	17.45	13.33	5.68	16.75	12.80	5.92

4.4 Heating Performance

NOTES:

PI: Power input
 DB: Dry Bulb Temperature; WB: Wet Bulb Temperature
 TC: Total Capacity; SHC: Sensible Heat Capacity
 Air Handler
 FLEXE24HP230V1AO

Outdoor air temperature °F		Indoor dry bulb temperature °F									
		61		64		68		72		75	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
DB	WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
14	12	6.42	2.58	6.08	2.65	5.81	2.75	5.57	2.84	5.31	2.93
23	22	6.35	2.30	6.02	2.37	5.75	2.45	5.51	2.53	5.26	2.62
32	31	6.53	2.27	6.19	2.33	5.91	2.42	5.67	2.50	5.40	2.58
45	43	7.44	2.16	7.06	2.22	6.74	2.30	6.46	2.38	6.16	2.46
50	46	7.88	2.23	7.47	2.29	7.13	2.37	6.84	2.45	6.52	2.53

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FLEXE30HP230V1AO

Outdoor air temperature °F		Indoor dry bulb temperature °F									
		61		64		68		72		75	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
DB	WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
14	12	7.98	3.21	7.56	3.30	7.22	3.41	6.92	3.53	6.60	3.65
23	22	7.90	2.86	7.49	2.94	7.15	3.05	6.86	3.15	6.54	3.26
32	31	8.12	2.82	7.70	2.90	7.35	3.00	7.05	3.10	6.72	3.21
45	43	9.26	2.69	8.77	2.76	8.38	2.86	8.03	2.96	7.66	3.05
50	46	9.79	2.77	9.28	2.85	8.87	2.95	8.50	3.04	8.10	3.15

FLEXE36HP230V1AO

Outdoor air temperature °F		Indoor dry bulb temperature °F									
		61		64		68		72		75	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
DB	WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
14	12	9.49	3.83	8.99	3.93	8.59	4.07	8.23	4.21	7.85	4.35
23	22	9.39	3.42	8.90	3.51	8.50	3.63	8.15	3.76	7.77	3.88
32	31	9.65	3.37	9.15	3.46	8.74	3.58	8.38	3.70	7.99	3.82
45	43	11.01	3.20	10.43	3.29	9.96	3.41	9.55	3.52	9.11	3.64
50	46	11.64	3.30	11.04	3.39	10.54	3.51	10.11	3.63	9.64	3.75

FLEXE42HP230V1AO

Outdoor air temperature °F		Indoor dry bulb temperature °F									
		61		64		68		72		75	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
DB	WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
14	12	11.16	4.73	10.58	4.87	10.10	5.04	9.68	5.21	9.23	5.38
23	22	11.05	4.23	10.47	4.35	10.00	4.50	9.59	4.65	9.14	4.80
32	31	11.36	4.16	10.77	4.28	10.28	4.43	9.86	4.58	9.40	4.73
45	43	12.95	3.97	12.27	4.08	11.72	4.22	11.24	4.36	10.71	4.51
50	46	13.70	4.09	12.98	4.20	12.40	4.35	11.89	4.49	11.33	4.64

FLEXE48HP230V1AO

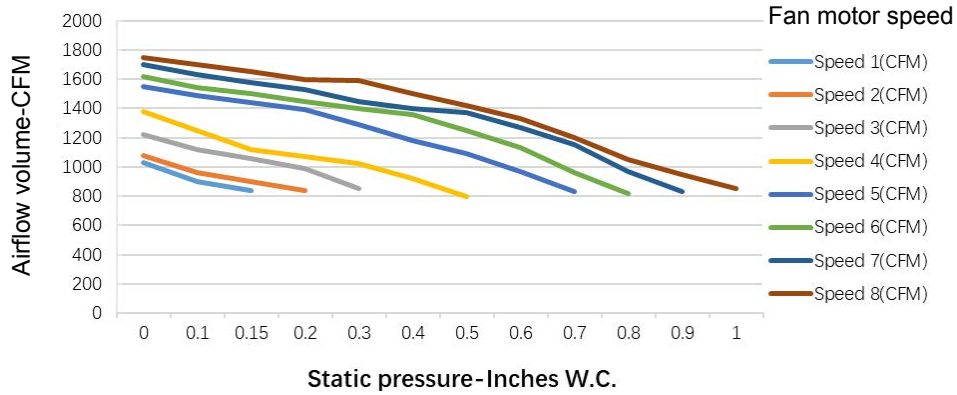
Outdoor air temperature °F		Indoor dry bulb temperature °F									
		61		64		68		72		75	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
DB	WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
14	12	12.83	6.07	12.16	6.24	11.62	6.46	11.14	6.67	10.62	6.90
23	22	12.71	5.42	12.04	5.57	11.50	5.77	11.03	5.96	10.51	6.16
32	31	13.06	5.34	12.38	5.49	11.82	5.68	11.34	5.87	10.81	6.07
45	43	14.89	5.08	14.12	5.23	13.48	5.41	12.92	5.59	12.32	5.78
50	46	15.75	5.24	14.93	5.38	14.26	5.57	13.67	5.76	13.04	5.95

FLEXE60HP230V1AO

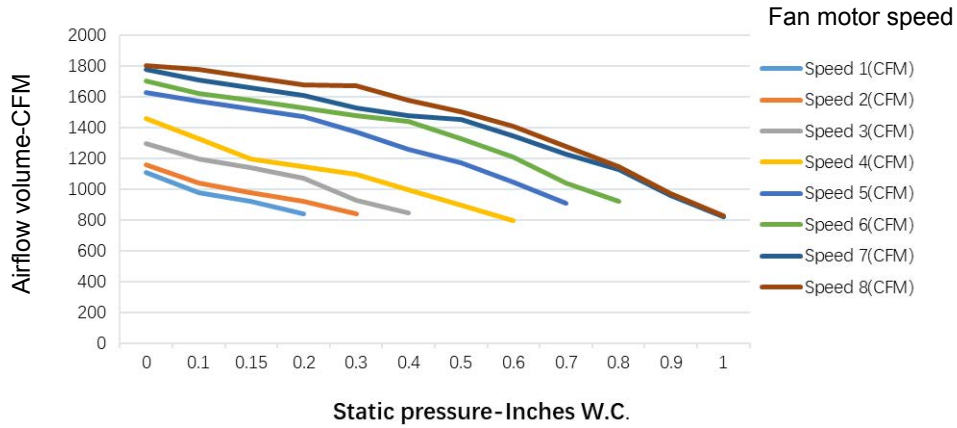
Outdoor air temperature °F		Indoor dry bulb temperature °F									
		61		64		68		72		75	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
DB	WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
14	12	15.07	5.78	14.29	5.94	13.64	6.15	13.08	6.35	12.47	6.57
23	22	14.92	5.16	14.14	5.30	13.51	5.49	12.95	5.67	12.35	5.86
32	31	15.34	5.08	14.54	5.22	13.89	5.41	13.31	5.59	12.69	5.78
45	43	17.49	4.84	16.58	4.98	15.83	5.15	15.18	5.32	14.47	5.50
50	46	18.50	4.99	17.54	5.13	16.75	5.30	16.06	5.48	15.31	5.67

5 FAN CHARACTERISTICS

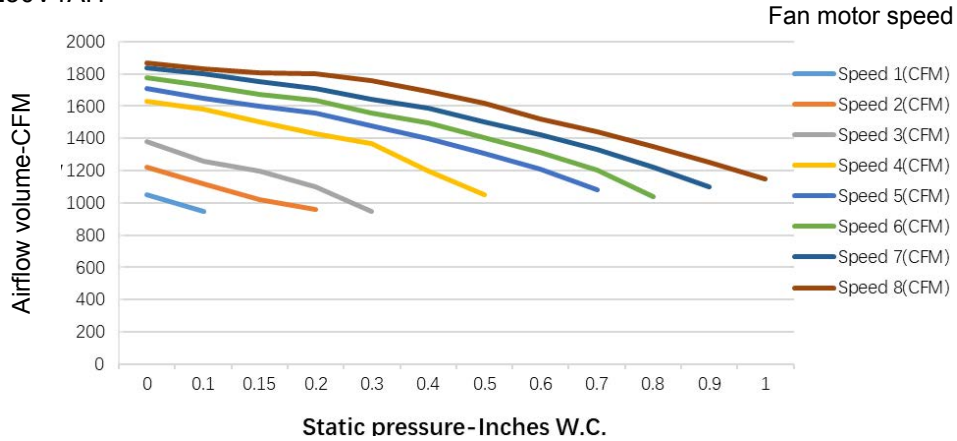
FLEXE24HP230V1AH



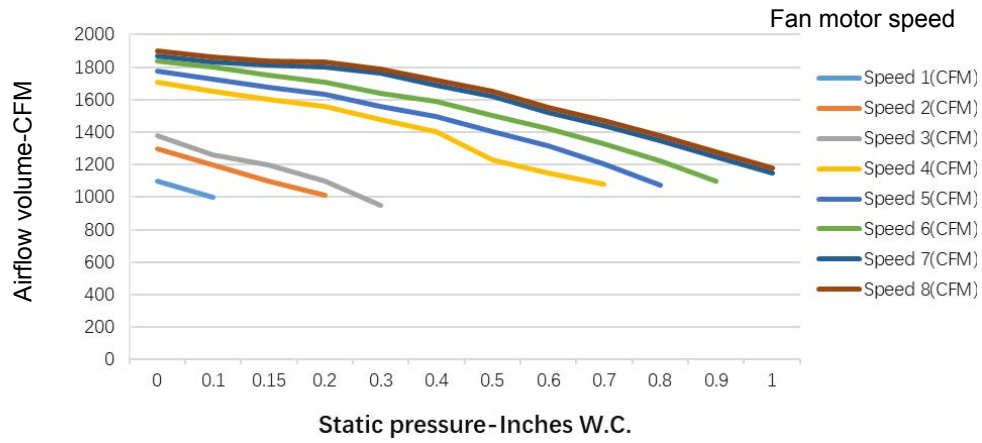
FLEXE30HP230V1AH



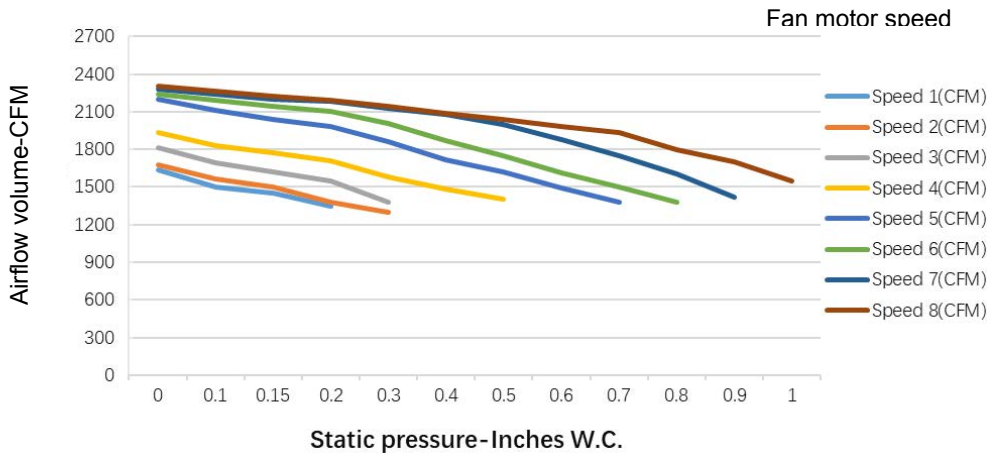
FLEXE36HP230V1AH



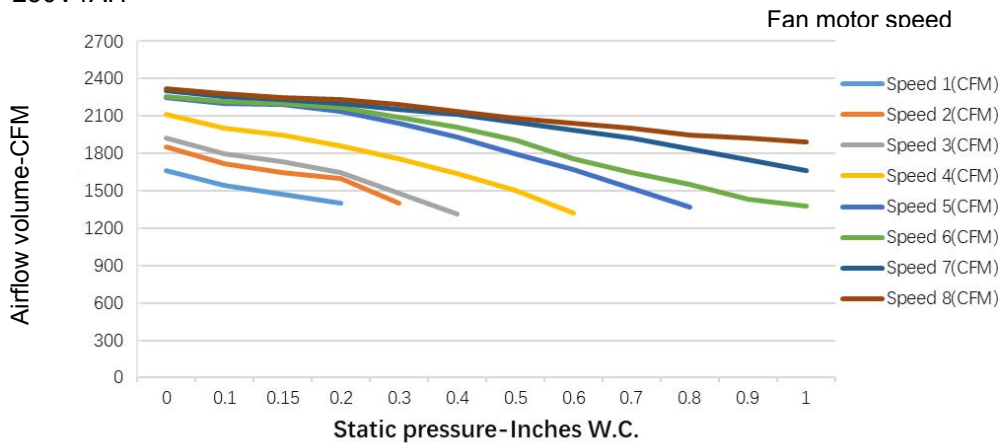
FLEXE42HP230V1AH



FLEXE48HP230V1AH



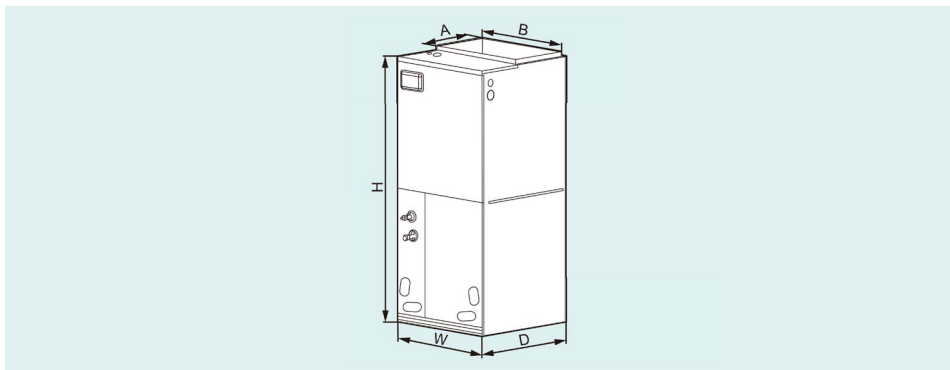
FLEXE60HP230V1AH



6 DIMENSION

➔ 6.1 Indoor Units

Air Handler



Unit: mm (inch)

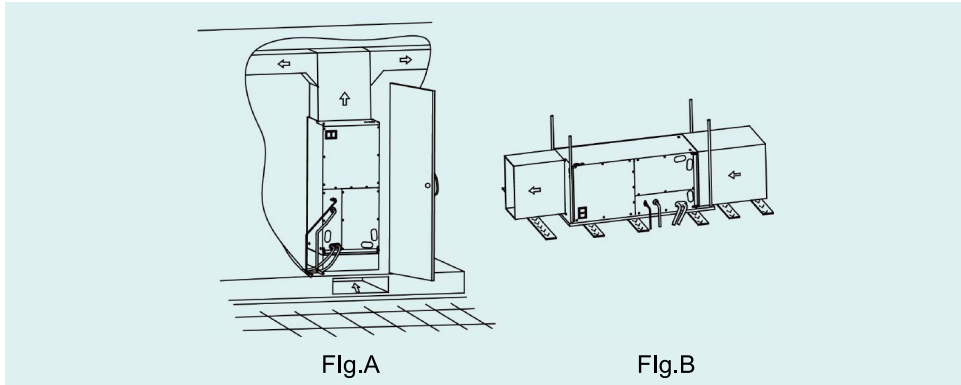
Model	Dimension				
	W	D	H	A	B
FLEXE24HP230V1AH	18-1/8	21-1/4	43-1/2	11-5/8	16-3/4
FLEXE30HP230V1AH	(460)	(540)	(1105)	(295)	(426)
FLEXE36HP230V1AH	21-1/4	21-1/4	48-3/16	11-5/8	20
FLEXE42HP230V1AH	(540)	(540)	(1224)	(295)	(508)
FLEXE48HP230V1AH	24-13/16	21-1/4	52	11-5/8	20
FLEXE60HP230V1AH	(630)	(540)	(1320)	(295)	(508)

NOTE: When installing the air handler, 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 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. Do not operate this product without all ductwork attached.

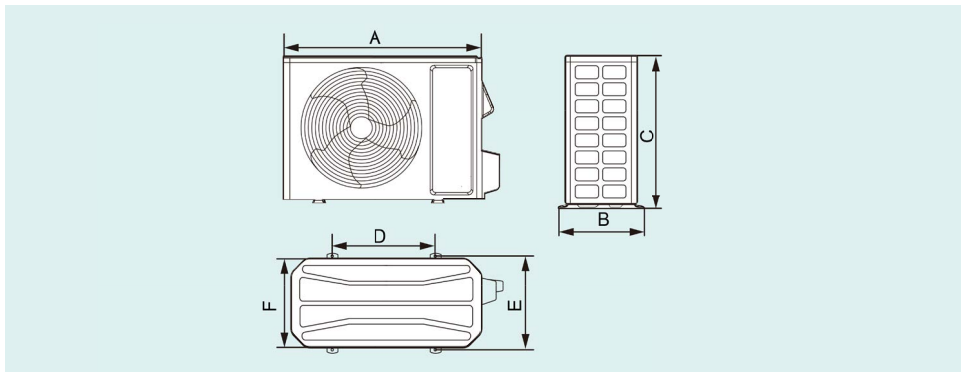
Based upon the actual conditions, if air handler is installed as Fig (A), the air handler should be concealed in a specific room or space and make sure the air handler is not accessible to the general public.

Based upon the actual conditions, if air handler is installed as Fig (B), make sure that there is enough space for care and maintenance and the height between the air handler and ground is above 2500mm. And the air handler is not accessible to the general public.



➔ 6.2 Outdoor Units

For FLEXE24HP230V1AO, FLEXE30HP230V1AO, FLEXE36HP230V1AO, FLEXE42HP230V1AO, FLEXE48HP230V1AO, FLEXE60HP230V1AO, unit:



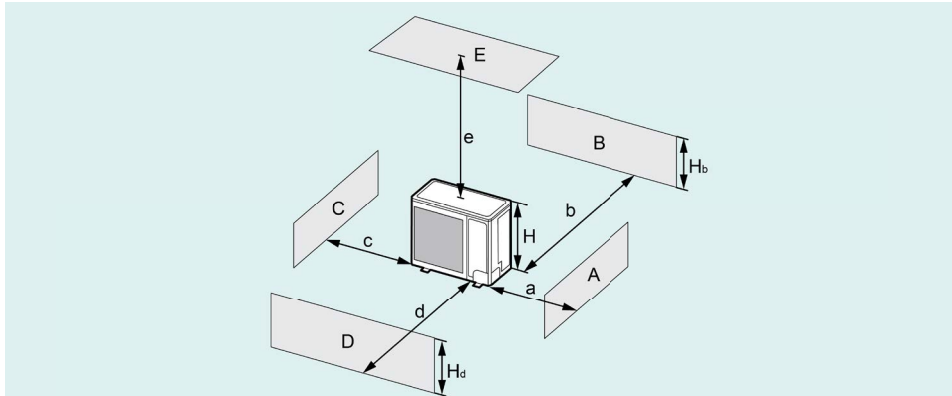
Unit: mm (inch)

Model	Item	A	B	C	D	E	F
FLEXE24HP230V1AO		35 (889)	15-13/16 (402)	25-7/8 (658)	22-7/16 (570)	14-9/16 (370)	13-3/8 (340)
FLEXE30HP230V1AO		36-5/16 (923)	16-13/16 (427)	29-3/8 (746)	24 (610)	15-9/16 (396)	14-9/16 (370)
FLEXE36HP230V1AO		37-1/8 (943)	16-13/16 (427)	32-1/2 (826)	25 (635)	15-9/16 (396)	14-9/16 (370)
FLEXE42HP230V1AO		39 (990)	16-13/16 (427)	37-13/16 (960)	29-3/4 (755)	15-9/16 (396)	14-9/16 (370)

DC INVERTER UNITARY HEAT PUMPS

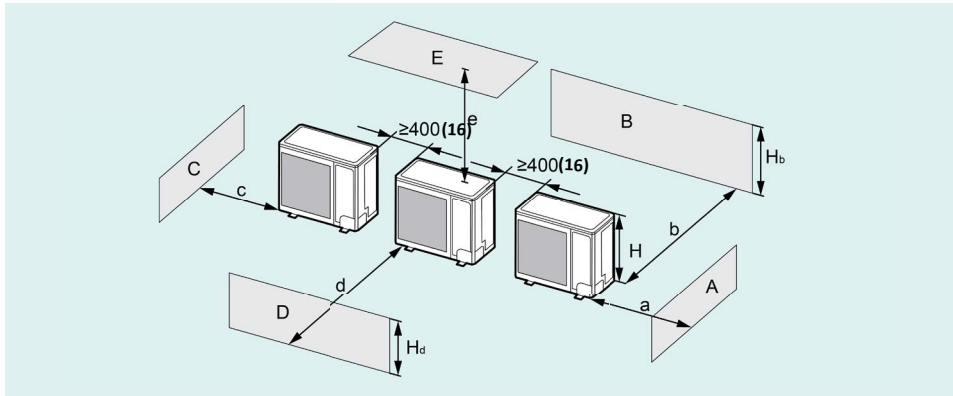
Installation Location

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 < HD	H _b ≤ 1/2 H	—	≥ 10	—	≥ 79	≥ 40
		1/2 H < H _b ≤ H	—	≥ 10	—	≥ 79	≥ 40
		H _b > H	Prohibited				
	H _b > HD	H _d ≤ 1/2 H	—	≥ 8	—	≥ 79	≥ 40
		1/2 H < H _d ≤ H	—	≥ 8	—	≥ 79	≥ 40
		H _d > H	Prohibited				

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

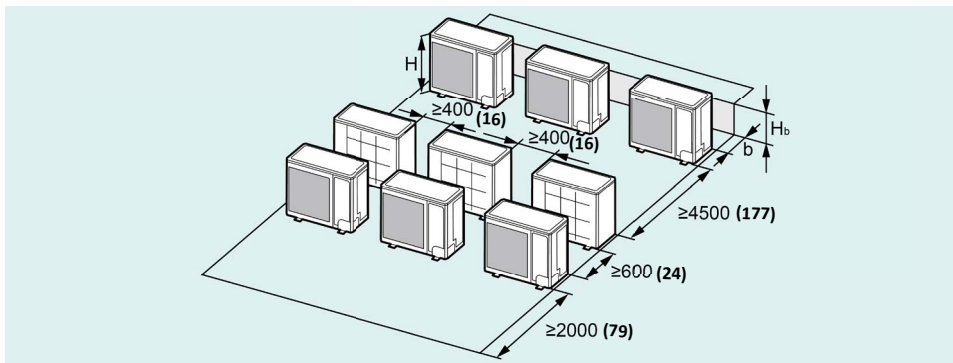
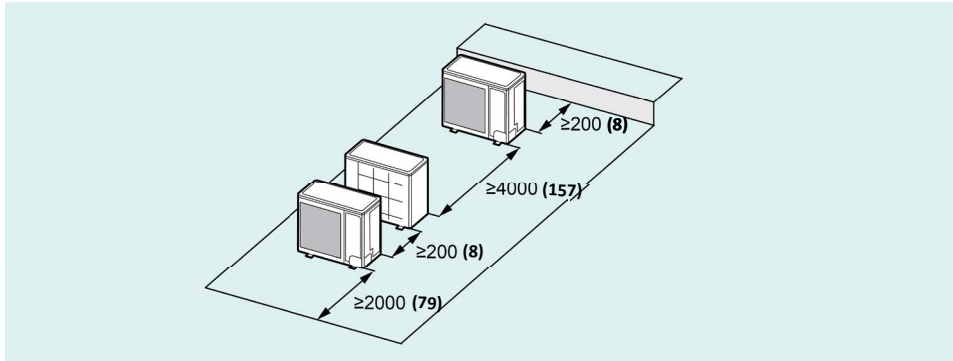


A~E	H_B H_0 H		(in)				
			a	b	c	d	e
A,B,C	—		≥ 12	≥ 12	≥ 40	—	—
A,B,C,E	—		≥ 12	≥ 12	≥ 40	—	≥ 40
D	—		—	—	—	≥ 79	—
D,E	—		—	—	—	≥ 79	≥ 40
B,D	$H_B < H_D$	$H_0 > H$	—	≥ 12	—	≥ 79	—
	$H_B > H_D$	$H_0 \leq 1/2 H$	—	≥ 10	—	≥ 79	—
		$1/2 H < H_0 \leq H$	—	≥ 12	—	≥ 98	—
B,D,E	$H_B < H_D$	$H_B \leq 1/2 H$	—	≥ 12	—	≥ 79	≥ 40
		$1/2 H < H_B \leq H$	—	≥ 12	—	≥ 98	≥ 40
		$H_B > H$	Prohibited				
	$H_B > H_D$	$H_0 \leq 1/2 H$	—	≥ 10	—	≥ 98	≥ 40
		$1/2 H < H_0 \leq H$	—	≥ 12	—	≥ 98	≥ 40
		$H_0 > H$	Prohibited				

DC INVERTER UNITARY HEAT PUMPS

3) When outdoor units are installed in rows

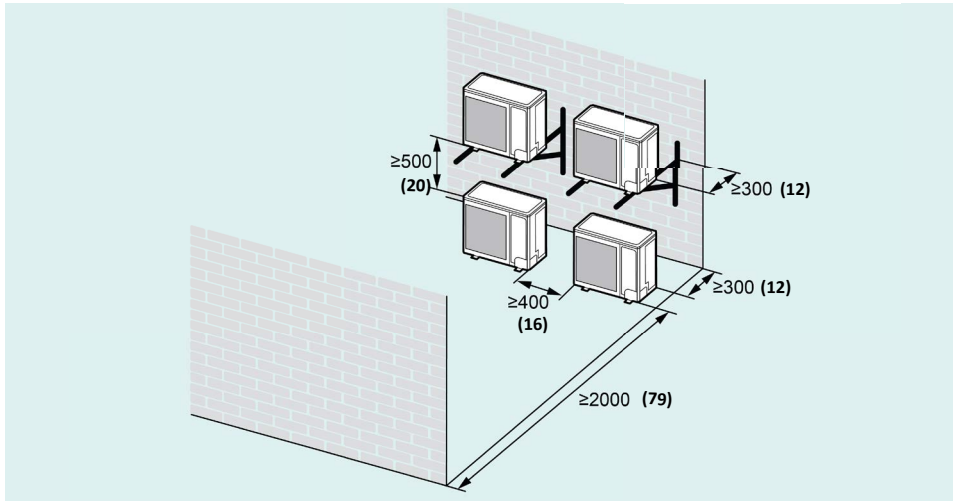
Unit: mm



H_B H	(mm)
$H_B \leq 1/2 H$	$b \geq 10$
$1/2 H < H_B \leq H$	$b \geq 12$
$H_B > H$	Prohibited

4) When outdoor units are installed one above another

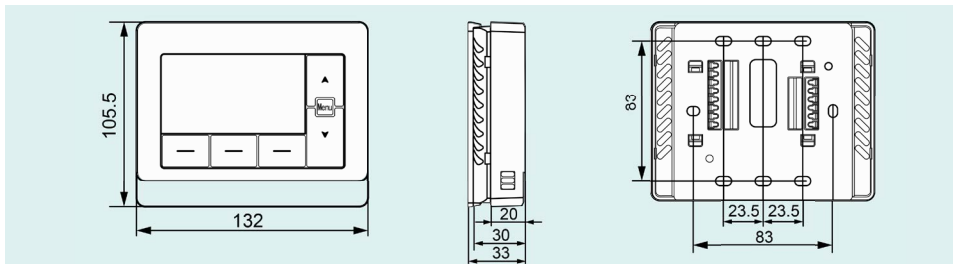
Unit: mm(in)



6.3 Dimension – Controller

Thermostat (Optional)

Unit: mm (in)



mm	20	23.5	30	33	83	105.5	132
in	.78	0.9	1.2	1.3	3.25	4.2	5.2

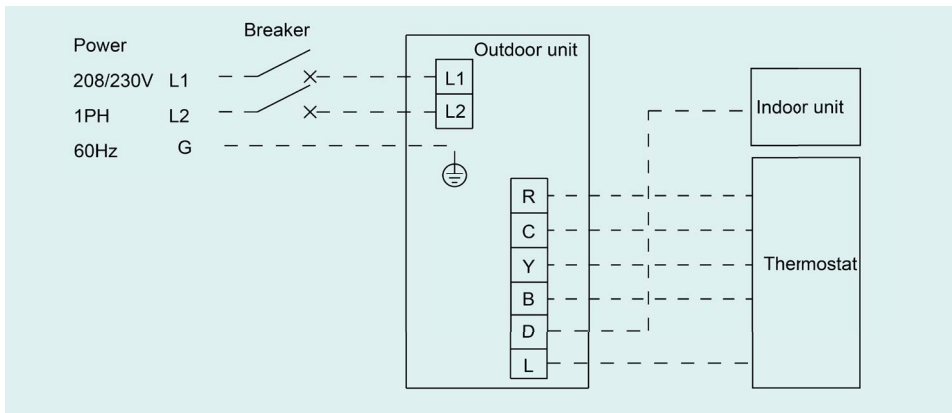
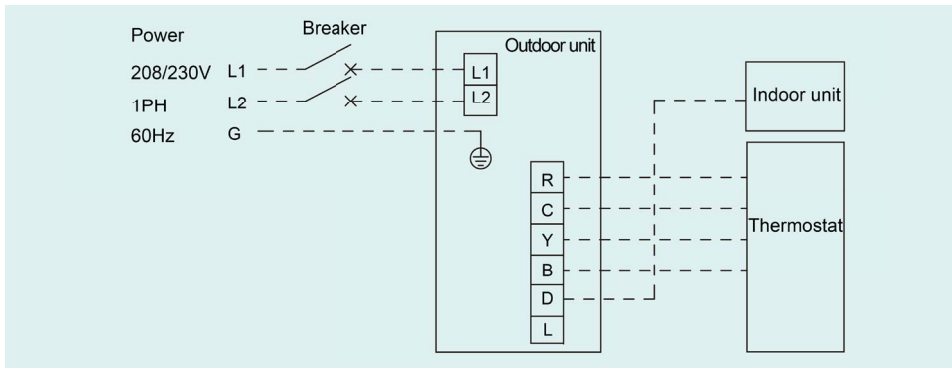
DC INVERTER UNITARY HEAT PUMPS

7 WIRING DIAGRAM

7.1 Field Wiring Diagrams

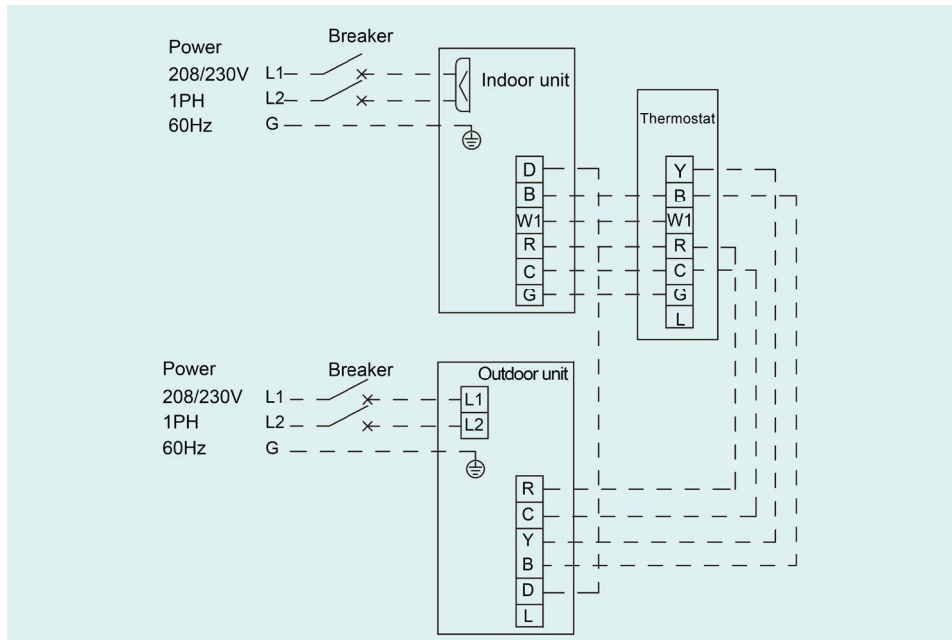
Outdoor Units

For FLEXE24HP230V1AO, FLEXE30HP230V1AO, FLEXE36HP230V1AO unit:

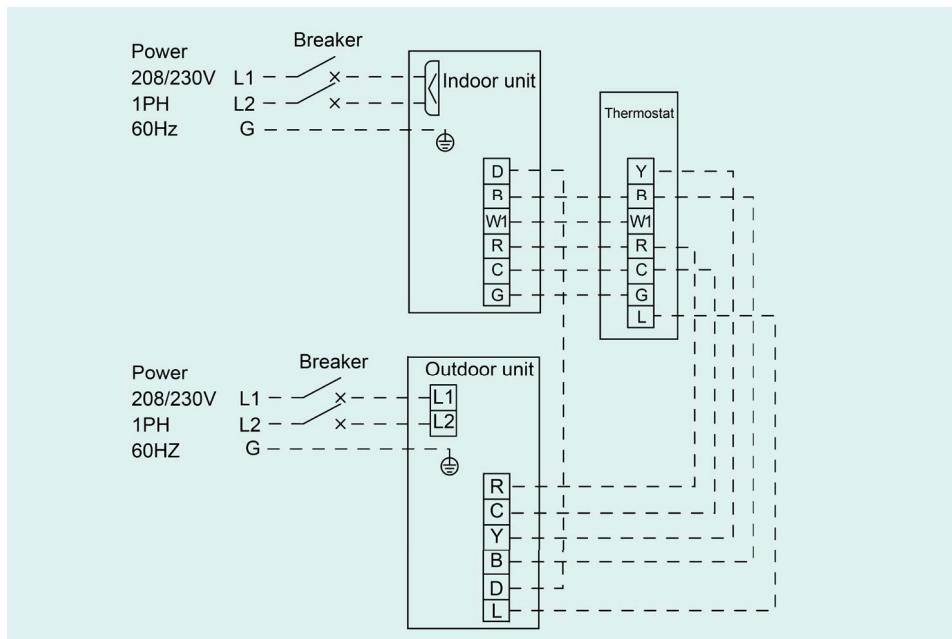


Air Handler

For FLEXE24HP230V1AH, FLEXE30HP230V1AH, FLEXE36HP230V1AH unit:



For FLEXE42HP230V1AH, FLEXE48HP230V1AH, FLEXE60HP230V1AH unit:



NOTE:

- Y means Compressor control signal for the outdoor unit;
- B which is energized under the heating mode means 4-way valve control signal;
- D means defrosting signal;
- R means 24V AC power supply;
- C means 24V common;

DC INVERTER UNITARY HEAT PUMPS

G means indoor unit fan signal for the indoor unit;

W1 means heater control signal;

L reserved function.

NOTE: 1.For cooling only unit, there is no need to connect the B and D terminals.

2.When outdoor defrosts, D of outdoor unit will send 24V signal to avoid cold winds.

3.L reserved function, the wiring board does not pick up.



7.2 Specification of Power Supply Wire and Air Switch

7.2.1 Outdoor Units

Model	Power Supply	Fuse Capacity	Minimum Circuit Ampacity	Maximum Overcurrent Protection
	V / Ph / Hz	A	A	A
FLEXE24HP230V1AO	208/230V-1Ph-60Hz	20	17	20
FLEXE30HP230V1AO	208/230V-1Ph-60Hz	25	20	25
FLEXE36HP230V1AO	208/230V-1Ph-60Hz	30	22.5	30
FLEXE42HP230V1AO	208/230V-1Ph-60Hz	35	25.5	35
FLEXE48HP230V1AO	208/230V-1Ph-60Hz	40	29	40
FLEXE60HP230V1AO	208/230V-1Ph-60Hz	45	32	45

7.2.2 Indoor Units

Air Handler

Model	Power Supply V / Ph / Hz	Minimum Circuit Ampacity	Maximum Overcurrent Protection
		A	A
FLEXE24HP230V1AH	208/230V-1Ph-60Hz	1.8	15
FLEXE30HP230V1AH		3.2	
FLEXE36HP230V1AH		4	
FLEXE42HP230V1AH		4.3	
FLEXE48HP230V1AH		6.9	
FLEXE60HP230V1AH		7.5	



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