

 **FLEXX ECO HEAT PUMP_R32**

Service Manual

INDOOR UNIT

FXE24HP230V1R32AH

FXE30HP230V1R32AH

FXE36HP230V1R32AH

FXE48HP230V1R32AH

FXE60HP230V1R32AH

OUTDOOR UNIT

FXE30HP230V1R32AO

FXE36HP230V1R32AO

FXE60HP230V1R32AO





GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI

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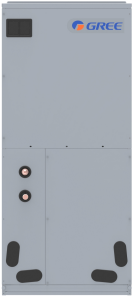
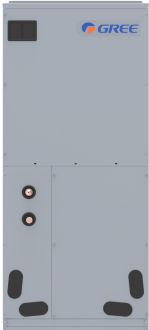
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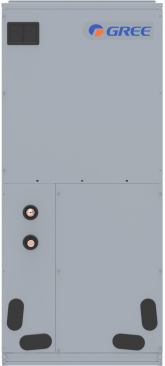
1 MODELS LIST

1.1 Outdoor Unit

Model	Power Supply	Finished Product Code	Appearance
	V/Ph/Hz		
FXE24HP230V1R32AO	208/230V-1Ph-60Hz	CF090W3400	
FXE30HP230V1R32AO	208/230V-1Ph-60Hz	CF090W3410	
FXE36HP230V1R32AO	208/230V-1Ph-60Hz	CF090W3370	
FXE48HP230V1R32AO	208/230V-1Ph-60Hz	CF090W3390	
FXE60HP230V1R32AO	208/230V-1Ph-60Hz	CF090W3380	

1.2 Indoor Unit

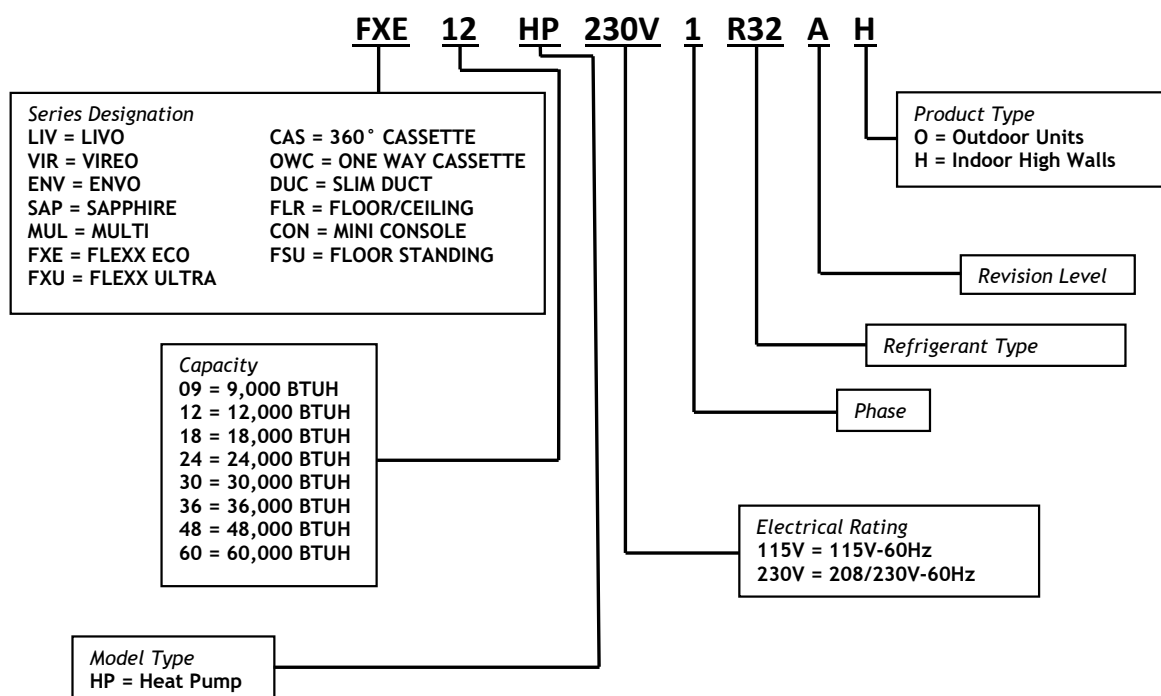
Model		Cooling/Heating Capacity (Btu/h)	Power Supply	Finished Product Code	Appearance
			V/Ph/Hz		
Airhandler	FXE24HP230V1R32AH	24000/24000	208/230V-1Ph-60Hz	EH010N0290	
Airhandler	FXE30HP230V1R32AH	28000/28000	208/230V-1Ph-60Hz	EH010N0300	
Airhandler	FXE36HP230V1R32AH	34000/34000	208/230V-1Ph-60Hz	EH010N0310	

Model		Cooling/Heating Capacity (Btu/h)	Power Supply	Finished Product Code	Appearance
			V/Ph/Hz		
Airhandler	FXE48HP230V1R32AH	48000/48000	208/230V-1Ph-60Hz	EH010N0280	
Airhandler	FXE60HP230V1R32AH	54000/54000	208/230V-1Ph-60Hz	EH010N0270	

Note: 1 Ton = 12000Btu/h = 3.517kW

2 NOMENCLATURE

EXAMPLE: FXE24HP230V1R32AH



3 FUNCTION

3.1 Description

This product is a non-communicating variable residential air conditioner developed for the North American market with low temperature heating function. The unit adopts multiple technologies such as two-stage EVI, DC inverter, non-communication control, etc. It has the characteristics of low temperature heating, energy-saving comfort, strong engineering adaptability, and can be widely used in homes, villas, and other places.

3.2 Features-Outdoor Units

- ◆ Two-stage EVI technology has good low temperature heating effect.
- ◆ Communication free control technology, self-learning and adjustment according to the usage environment. The unit has strong engineering adaptability and adopts 24V communication free control.
- ◆ Through technologies such as two-stage EVI and full DC inverter, operating range is wide, and it can also meet the refrigeration heat needs of users in high and low temperature environments. The operating range is wide, and it can also meet the refrigeration heat needs of users in extreme high and low temperature environments.
- ◆ The outdoor unit is designed with a dual electric heating belt, which preheats the compressor through the compressor crankcase electric heating belt, which effectively ensures the oil temperature superheat of the unit at low temperature start and avoids starting with liquid; the chassis is defrosted by the electric heating belt Ice, to prevent the abnormal rotation of the fan caused by snow and ice, and ensure the reliable operation of the unit during heating.
- ◆ The outdoor unit **condenser** adopts gold corrosion-resistant fins and adopts side discharge design, occupying a smaller area. The compressor has an independent sealed chamber, providing sound insulation.

3.3 Indoor Units



Airflow Patterns for Extra Comfort:

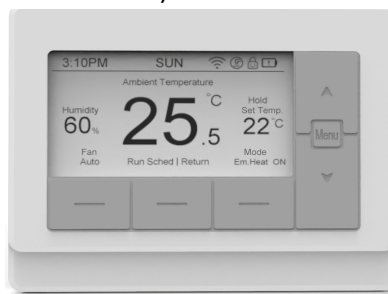
It can connect many supply-air outlets to the duct, so that it can make the temperature and humidity of the whole room even. All units are provided with filters that they are easily accessible from the rear of the unit.

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 sheet. 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		FXE24HP230V1R32AH	FXE30HP230V1R32AH	FXE36HP230V1R32AH	FXE48HP230V1R32AH	FXE60HP230V1R32AH
	Product Code		EH010N0290	EH010N0300	EH010N0310	EH010N0280	EH010N0270
	Outdoor Unit		FXE24HP230V1R32AO	FXE30HP230V1R32AO	FXE36HP230V1R32AO	FXE48HP230V1R32AO	FXE60HP230V1R32AO
	Product Code		CF090W3400	CF090W3410	CF090W3370	CF090W3390	CF090W3380
Capacity	Cooling Capacity	Btu/h	24000	28000	34000	48000	54000
	Heating Capacity	Btu/h	24000	28000	34000	48000	54000
Power Input	Cooling	kW	2.02	2.4	2.9	4.1	4.62
	Heating	kW	2.02	2.4	2.85	4.14	4.66
SEER 2/ HSPF2		—	18.50/8.50	18.50/8.50	19.0/8.50	17.0/9.5	16.5/9.0
Indoor Unit			FXE24HP230V1R32AH	FXE30HP230V1R32AH	FXE36HP230V1R32AH	FXE48HP230V1R32AH	FXE60HP230V1R32AH
Fan	Drive	—	Direct	Direct	Direct	Direct	Direct
	Motor Output	kW	0.37×1	0.37×1	0.37×1	0.75×1	0.75×1
	Air Flow	m ³ /h (CFM)	1360 (800)	1530 (900)	1785 (1050)	2380 (1400)	2550 (1500)
	Rated Ext. Static Pressure	Pa (In Wg)	125 (0.50)	125 (0.50)	125 (0.50)	125 (0.50)	125 (0.50)
	Ext. Static Pressure	Pa (In Wg)	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	54	
Air Filter	—	Metal	Metal	Metal	Metal	Metal	
Drain Piping	mm (inc)	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)	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)	86.0 (189.6)	86.0 (189.6)	
Outdoor Unit			FXE24HP230V1R32AO	FXE30HP230V1R32AO	FXE36HP230V1R32AO	FXE48HP230V1R32AO	FXE60HP230V1R32AO
Compressor	Type	—	Rotary	Rotary	Rotary	Rotary	Rotary
	Power Input	W	2092	2092	2092	3297	3297
Refrigerant	Control	—	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve

	Charge	kg (oz)	1.9 (67.0)	1.9 (67.0)	2.8 (98.8)	4.2 (148.2)	4.2 (148.2)
Outline Dimensions (W×H×D)		mm (inch)	920×370×746 (36-1/4×14-9/16×29-3/8)	920×370×746 (36-1/4×14-9/16×29-3/8)	920×370×746 (36-1/4×14-9/16×29-3/8)	900×340×1260 (35-7/16×13-3/8×49-5/8)	900×340×1260 (35-7/16×13-3/8×49-5/8)
Net Weight		kg (lb)	58 (128)	58 (128)	64.5 (142)	97 (214)	97 (214)
Piping Connections	Liquid	inch	Φ3/8	Φ3/8	Φ3/8	Φ3/8	Φ3/8
	Gas	inch	Φ3/4	Φ3/4	Φ3/4	Φ3/4	Φ3/4
	Max. Length	m (ft)	30 (98.4)	30 (98.4)	30 (98.4)	30 (98.4)	30 (98.4)
	Max. Height	m (ft)	15 (49.2)	15 (49.2)	15 (49.2)	15 (49.2)	15 (49.2)

Notes:

- a. The design of this unit conforms to the requirements of AHRI 210/240-2023 standard.
- b. The air volume is measured at the relevant standard external static pressure.
- c. Cooling (heating) capacity stated above is measured under nominal working conditions corresponding to standard 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)	DB: 35.0°C(95.0°F)
		WB: 19.4°C(67.0°F)	WB: 23.9°C(75.0°F)
Heating		DB: 21.1°C(70.0°F)	DB: 8.33°C(47.0°F)
		WB: 15.6°C(60.0°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(114.8°F)
Heating	-15.0°C(5.0°F)~24.0°C(75.2°F)

4.3 Cooling Performance

Notes:

ESP: External Static Pressure

DB: Dry Bulb Temperature; WB: Wet Bulb Temperature

TC: Total Capacity; SHC: Sensible Heat Capacity

Air Handler

FXE24HP230V1R32AH

Indoor air temperature °C		Outdoor dry bulb temperature °C														
		20			25			30			35			40		
DB	WB	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
20	14	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
23	16	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

26	18	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
27	19	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
30	22	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
32	24	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

FXE30HP230V1R32AH

Indoor air temperature °C		Outdoor dry bulb temperature °C														
		20			25			30			35			40		
		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
20	14	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
23	16	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
26	18	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
27	19	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
30	22	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
32	24	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

FXE36HP230V1R32AH

Indoor air temperature °C		Outdoor dry bulb temperature °C														
		20			25			30			35			40		
		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
20	14	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
23	16	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
26	18	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
27	19	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
30	22	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
32	24	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

FXE48HP230V1R32AH

Indoor air temperature °C		Outdoor dry bulb temperature °C														
		20			25			30			35			40		
		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
20	14	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
23	16	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
26	18	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
27	19	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
30	22	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
32	24	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

FXE60HP230V1R32AH

Indoor air temperature °C		Outdoor dry bulb temperature °C														
		20			25			30			35			40		
		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
20	14	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
23	16	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
26	18	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
27	19	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
30	22	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
32	24	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:

RLA: Rated load amperes (marked in the nameplate of the outdoor unit)

FLA: Full load current

Fuse: On the main board

Air Handler

FXE24HP230V1R32AO

Outdoor air temperature °C		Indoor dry bulb temperature °C									
		16		18		20		22		24	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
DB	WB	kw	kw	kw	kw	kw	kw	kw	kw	kw	kw
-10	-11	6.42	2.58	6.08	2.65	5.81	2.75	5.57	2.84	5.31	2.93
-5	-5.6	6.35	2.30	6.02	2.37	5.75	2.45	5.51	2.53	5.26	2.62
0	-0.7	6.53	2.27	6.19	2.33	5.91	2.42	5.67	2.50	5.40	2.58
7	6	7.44	2.16	7.06	2.22	6.74	2.30	6.46	2.38	6.16	2.46
10	8	7.88	2.23	7.47	2.29	7.13	2.37	6.84	2.45	6.52	2.53

FXE30HP230V1R32AO

Outdoor air temperature °C		Indoor dry bulb temperature °C									
		16		18		20		22		24	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
DB	WB	kw	kw	kw	kw	kw	kw	kw	kw	kw	kw
-10	-11	7.98	3.21	7.56	3.30	7.22	3.41	6.92	3.53	6.60	3.65
-5	-5.6	7.90	2.86	7.49	2.94	7.15	3.05	6.86	3.15	6.54	3.26
0	-0.7	8.12	2.82	7.70	2.90	7.35	3.00	7.05	3.10	6.72	3.21
7	6	9.26	2.69	8.77	2.76	8.38	2.86	8.03	2.96	7.66	3.05
10	8	9.79	2.77	9.28	2.85	8.87	2.95	8.50	3.04	8.10	3.15

FXE36HP230V1R32AO

Outdoor air temperature °C	Indoor dry bulb temperature °C
----------------------------	--------------------------------

		16		18		20		22		24	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
DB	WB	kw	kw	kw	kw	kw	kw	kw	kw	kw	kw
-10	-11	9.49	3.83	8.99	3.93	8.59	4.07	8.23	4.21	7.85	4.35
-5	-5.6	9.39	3.42	8.90	3.51	8.50	3.63	8.15	3.76	7.77	3.88
0	-0.7	9.65	3.37	9.15	3.46	8.74	3.58	8.38	3.70	7.99	3.82
7	6	11.01	3.20	10.43	3.29	9.96	3.41	9.55	3.52	9.11	3.64
10	8	11.64	3.30	11.04	3.39	10.54	3.51	10.11	3.63	9.64	3.75

FXE48HP230V1R32AO

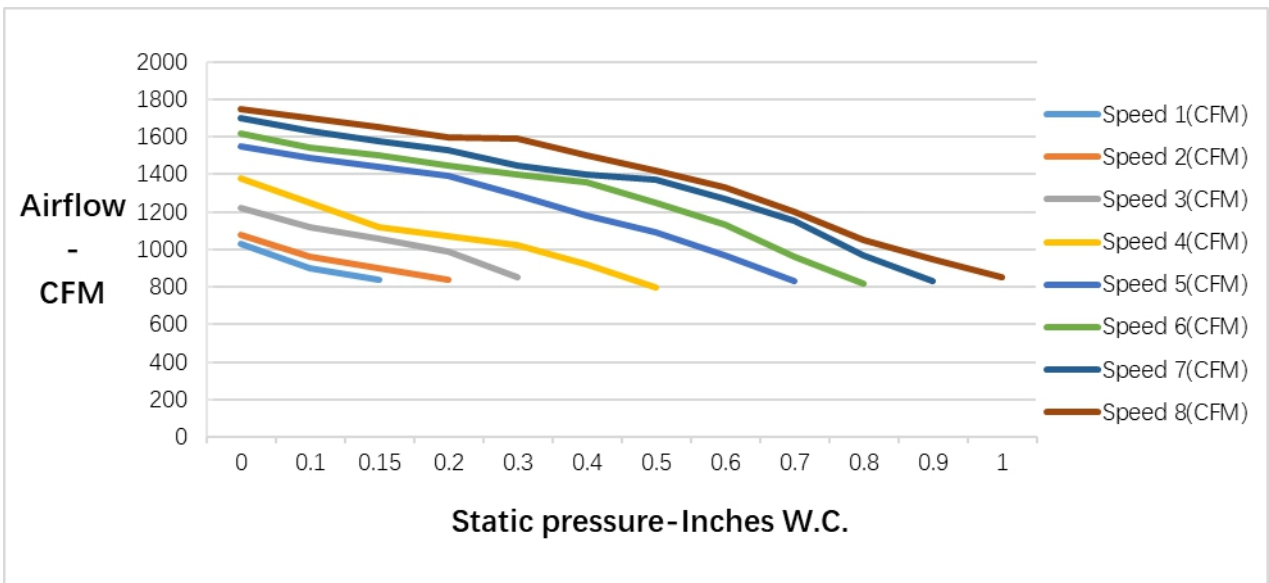
Outdoor air temperature °C		Indoor dry bulb temperature °C									
		16		18		20		22		24	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
DB	WB	kw	kw	kw	kw	kw	kw	kw	kw	kw	kw
-10	-11	12.83	6.07	12.16	6.24	11.62	6.46	11.14	6.67	10.62	6.90
-5	-5.6	12.71	5.42	12.04	5.57	11.50	5.77	11.03	5.96	10.51	6.16
0	-0.7	13.06	5.34	12.38	5.49	11.82	5.68	11.34	5.87	10.81	6.07
7	6	14.89	5.08	14.12	5.23	13.48	5.41	12.92	5.59	12.32	5.78
10	8	15.75	5.24	14.93	5.38	14.26	5.57	13.67	5.76	13.04	5.95

FXE60HP230V1R32AO

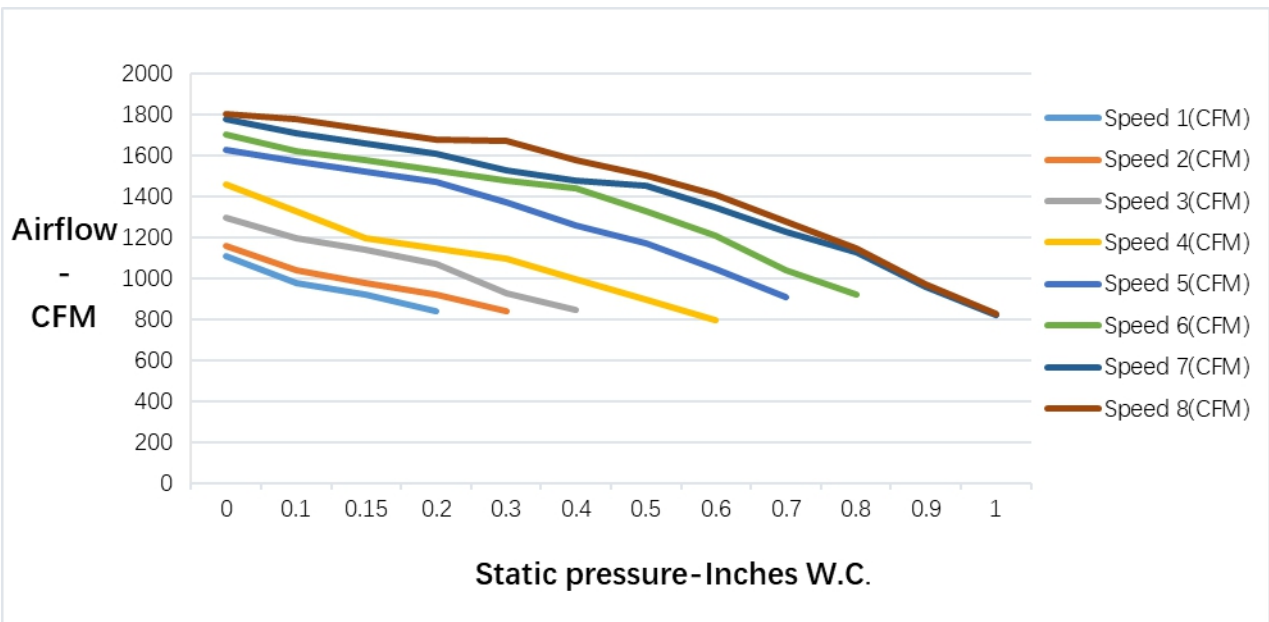
Outdoor air temperature °C		Indoor dry bulb temperature °C									
		16		18		20		22		24	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
DB	WB	kw	kw	kw	kw	kw	kw	kw	kw	kw	kw
-10	-11	15.07	5.78	14.29	5.94	13.64	6.15	13.08	6.35	12.47	6.57
-5	-5.6	14.92	5.16	14.14	5.30	13.51	5.49	12.95	5.67	12.35	5.86
0	-0.7	15.34	5.08	14.54	5.22	13.89	5.41	13.31	5.59	12.69	5.78
7	6	17.49	4.84	16.58	4.98	15.83	5.15	15.18	5.32	14.47	5.50
10	8	18.50	4.99	17.54	5.13	16.75	5.30	16.06	5.48	15.31	5.67

5 FAN CHARACTERISTICS

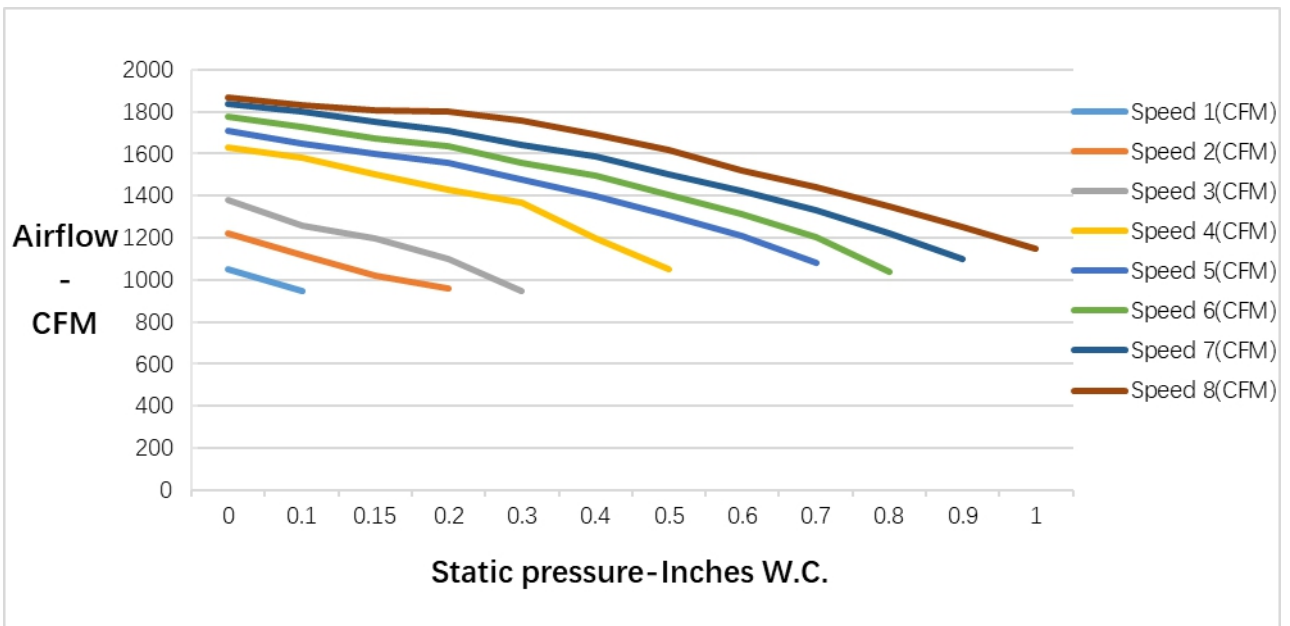
FXE24HP230V1R32AH



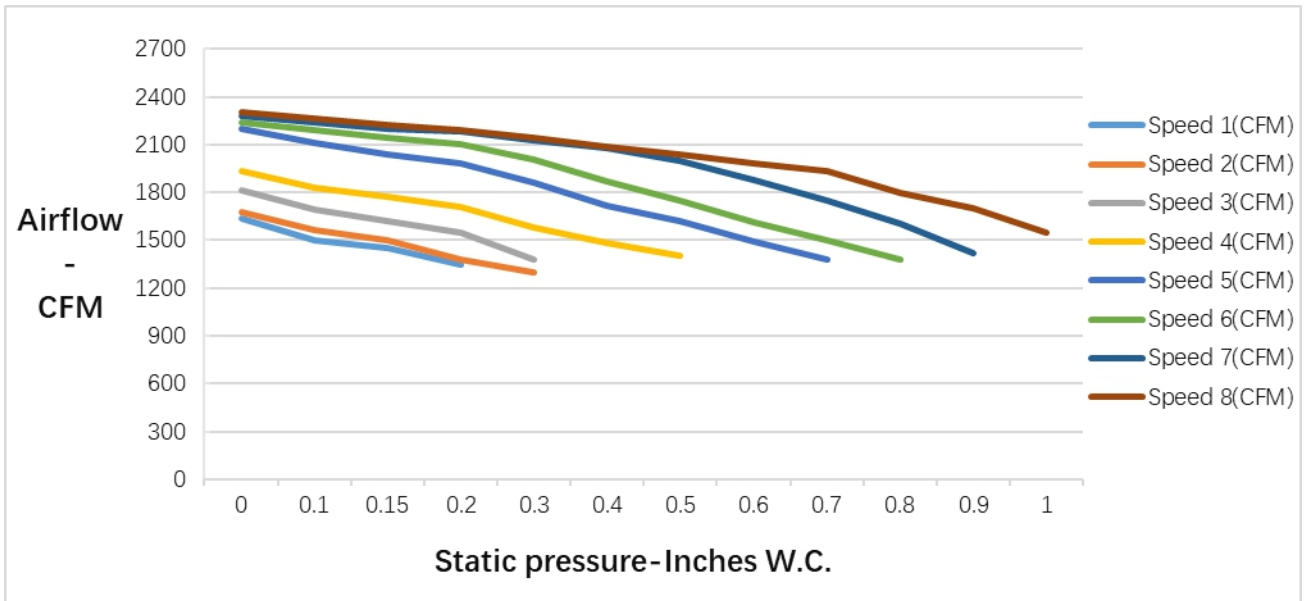
FXE30HP230V1R32AH



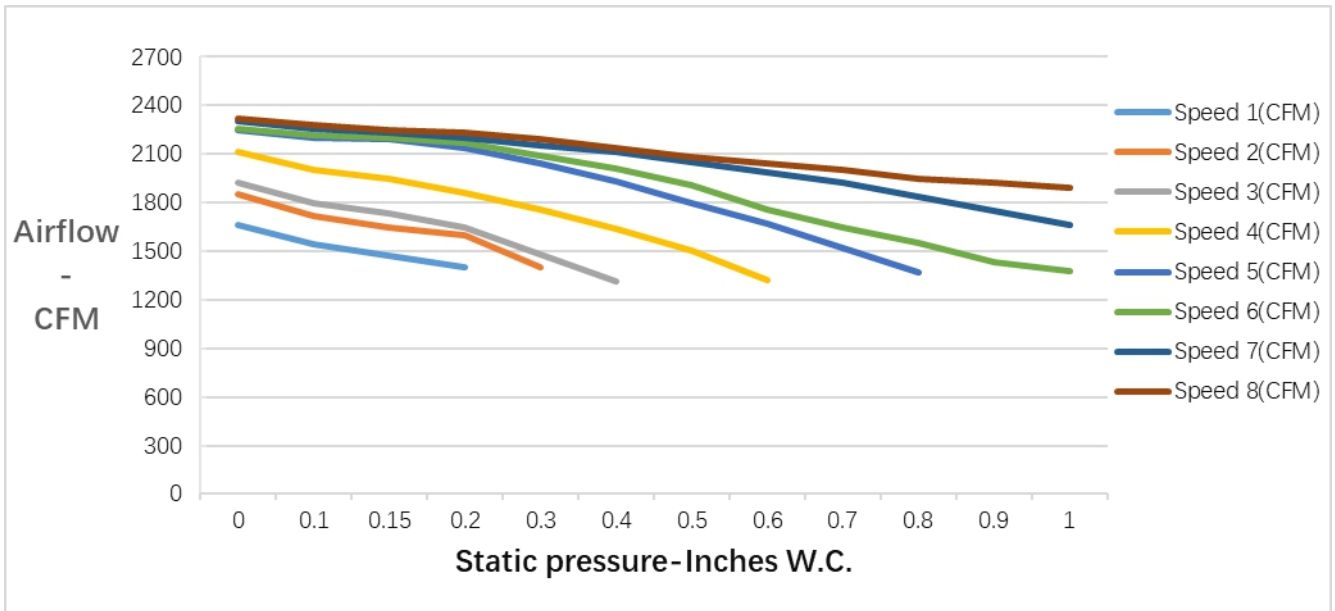
FXE36HP230V1R32AH



FXE48HP230V1R32AH



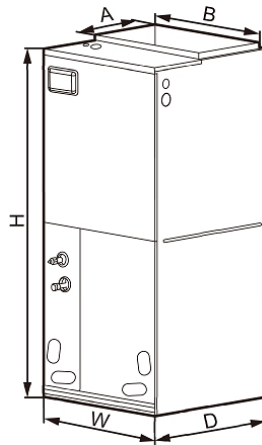
FXE60HP230V1R32AH



6 DIMENSION

6.1 Indoor Units

Air Handler



Unit: mm (inch)

Model	Dimension				
	W	D	H	A	B
FXE24HP230V1R32AH	18-1/8	21-1/4	43-1/2	11-5/8	16-3/4
FXE30HP230V1R32AH	(460)	(540)	(1105)	(295)	(426)
FXE36HP230V1R32AH	21-1/4	21-1/4	48-3/16	11-5/8	20
	(540)	(540)	(1224)	(295)	(508)
FXE48HP230V1R32AH	24-13/16	21-1/4	52	11-5/8	20
FXE60HP230V1R32AH	(630)	(540)	(1320)	(295)	(508)

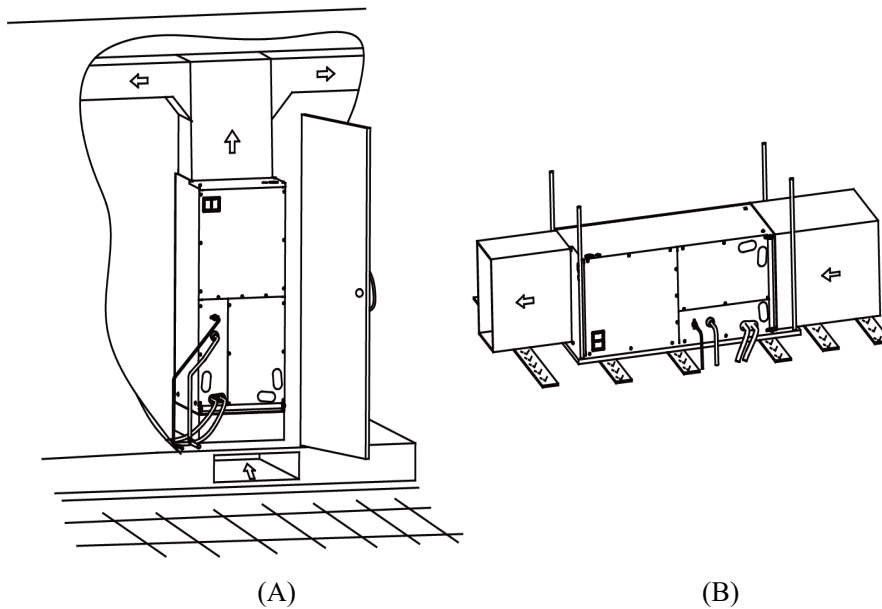
Note: When installing the air handler, take consideration to minimize the length of refrigerant tubing as much as possible. Do not install the air handler in a location either above or below the condenser that violates the instructions provided with the condenser. Service clearance is to take precedence.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

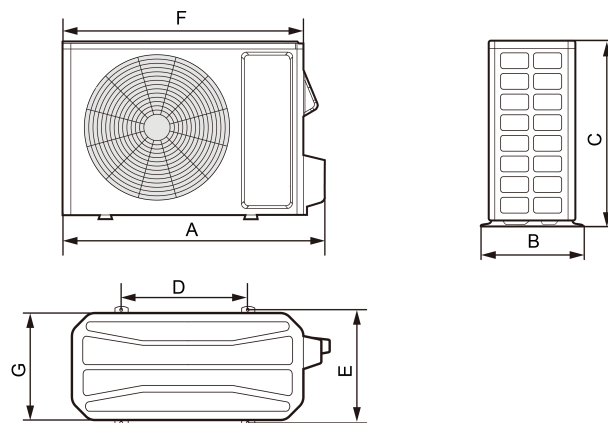
Based upon the actual conditions, if air handler is installed as Fig (A), the air handler should be concealed in a specific room or space and make sure the air handler is not accessible to the general public.

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.



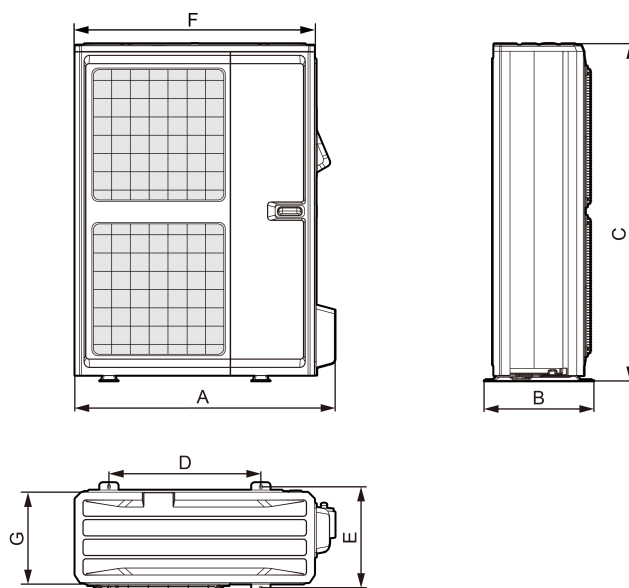
6.2 Outdoor Units

Be suit for FXE24HP230V1R32AO, FXE30HP230V1R32AO, FXE36HP230V1R32AO,FXE48HP230V1R32AO, FXE60HP230V1R32AO



Unit: inch (mm)

Model \ Dimensions	A	B	C	D	E	F	G
FXE24HP230V1R32AO	39-3/8 (1000)	16-13/16 (427)	29-3/8 (746)	24 (610)	15-9/16 (396)	36-1/4 (920)	14-9/16 (370)
FXE30HP230V1R32AO							
FXE36HP230V1R32AO							



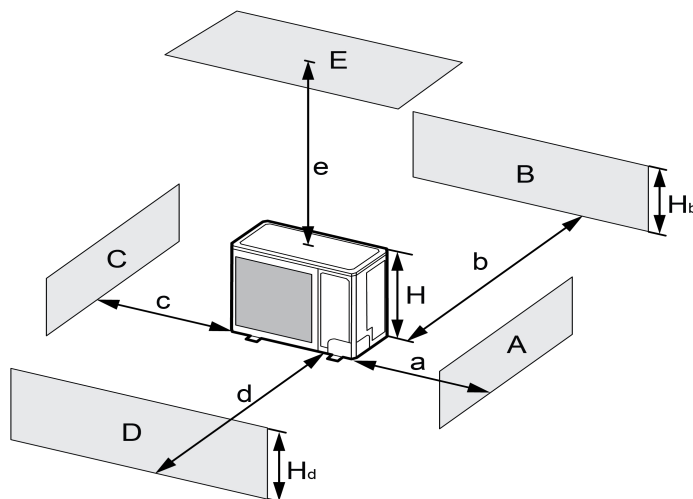
Unit: inch (mm)

Model \ Dimensions	A	B	C	D	E	F	G
FXE48HP230V1R32AO	38-1/2 (978)	16-1/4 (412)	49-5/8 (1260)	22-7/16 (570)	14-7/8 (378)	35-7/16 (900)	13-3/8 (340)
FXE60HP230V1R32AO							

Installation Location

- 1) When one outdoor unit is to be installed

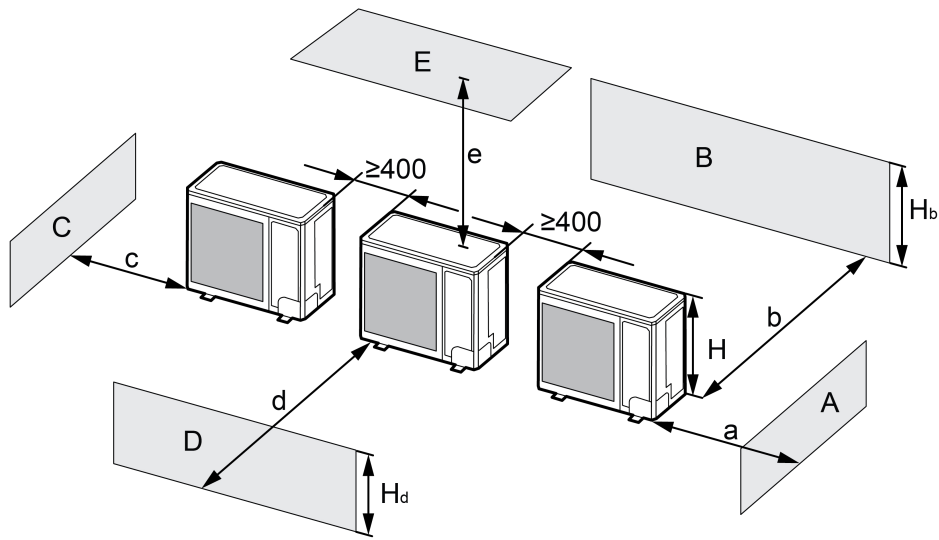
Unit: mm



A~E	H _b H _d H		(mm)				
			a	b	c	d	e
B	—			≥100			
A,B,C,	—		≥300	≥100	≥100		
B,E	—			≥100			≥1000
A,B,C,E	—		≥300	≥150	≥150		≥1000
D	—					≥1000	
D,E	—					≥1000	≥1000
B,D	H _b < H _D	H _D > H		≥100		≥1000	
	H _b > H _D	H _D < H		≥100		≥1000	
B,D,E	H _b < H _D	H _b ≤ 1/2 H		≥250		≥2000	≥1000
		1/2 H < H _b ≤ H		≥250		≥2000	≥1000
		H _b > H	Prohibited				
	H _b > H _D	H _D ≤ 1/2 H		≥100		≥2000	≥1000
		1/2 H < H _D ≤ H		≥200		≥2000	≥1000
		H _D > H	Prohibited				

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

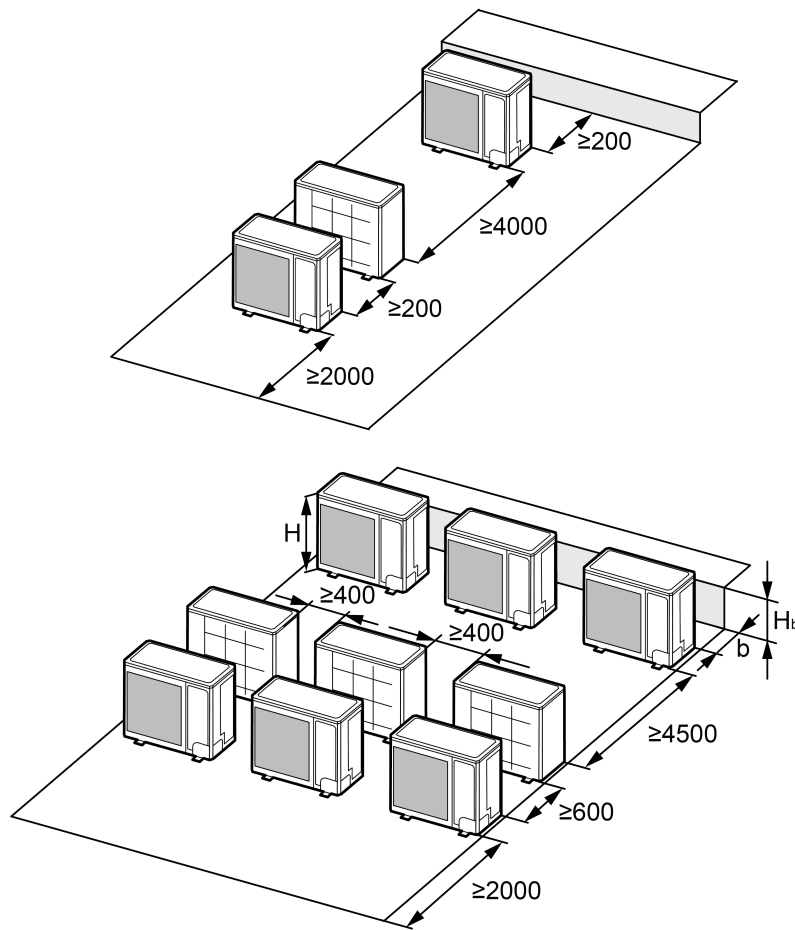
Unit: mm



A~E	H _b H _D H		(mm)				
			a	b	c	d	e
A,B,C	—		≥300	≥300	≥1000		
A,B,C,E	—		≥300	≥300	≥1000		≥1000
D	—					≥2000	
D,E	—					≥2000	≥1000
B,D	H _b < H _D	H _D > H		≥300		≥2000	
	H _b > H _D	H _D ≤ 1/2 H		≥250		≥2000	
		1/2 H < H _D ≤ H		≥300		≥2500	
B,D,E	H _b < H _D	H _b ≤ 1/2 H		≥300		≥2000	≥1000
		1/2 H < H _b ≤ H		≥300		≥2500	≥1000
		H _b > H	Prohibited				
	H _b > H _D	H _D ≤ 1/2 H		≥250		≥2500	≥1000
		1/2 H < H _D ≤ H		≥300		≥2500	≥1000
		H _D > H	Prohibited				

3) When outdoor units are installed in rows

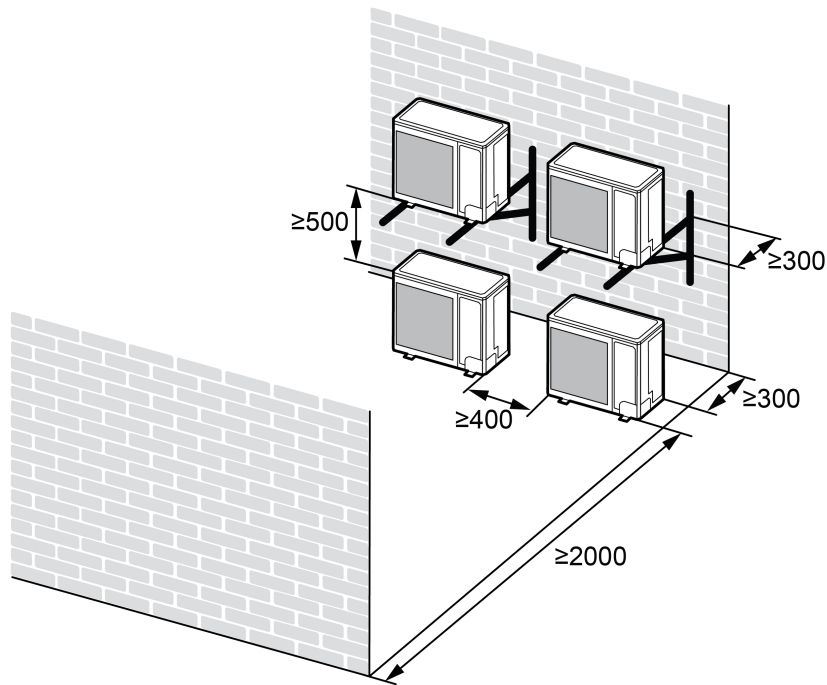
Unit: mm



H_b H	(mm)
$H_b \leq 1/2 H$	$b \geq 250$
$1/2 H < H_b \leq H$	$b \geq 300$
$H_b > H$	Prohibited

4) When outdoor units are installed one above another

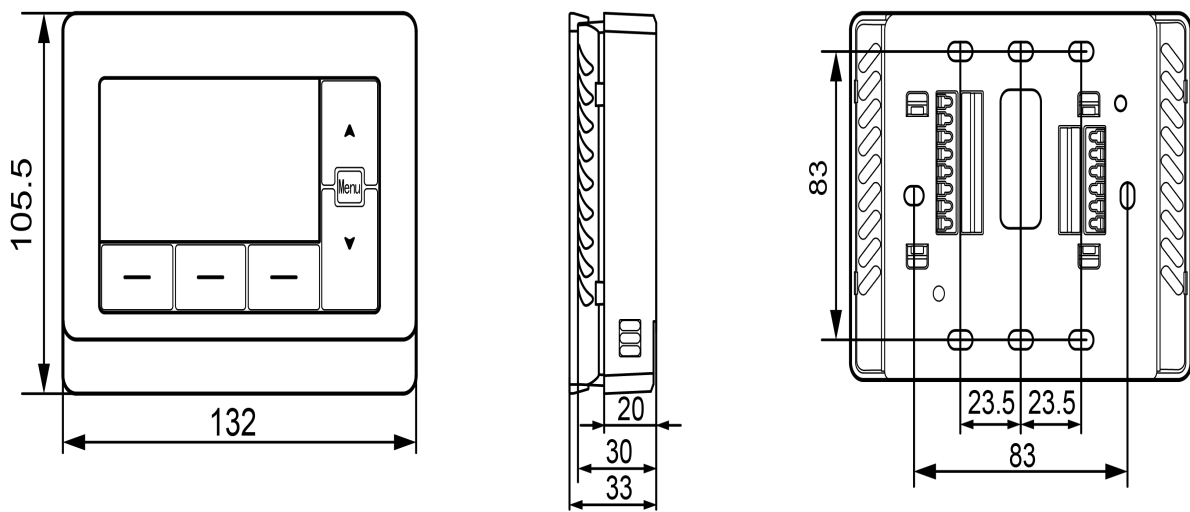
Unit: mm



6.3 Dimension – Controller

Thermostat (Optional)

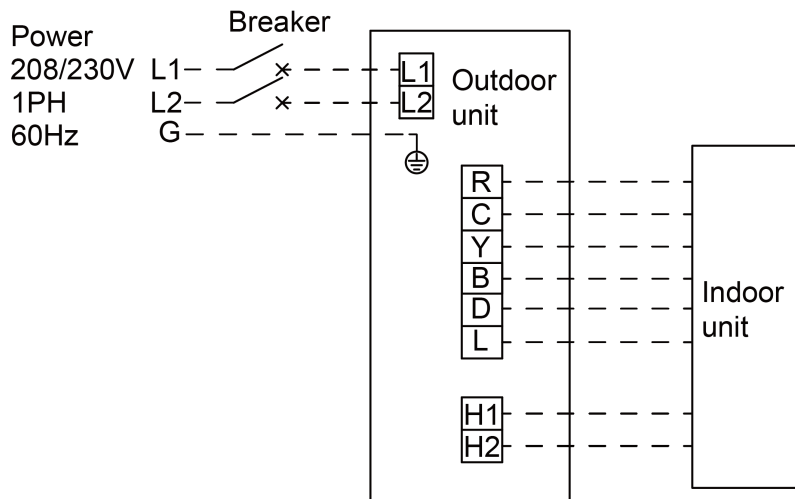
Unit: mm



7 WIRING DIAGRAM

7.1 Field Wiring Diagrams Outdoor Units

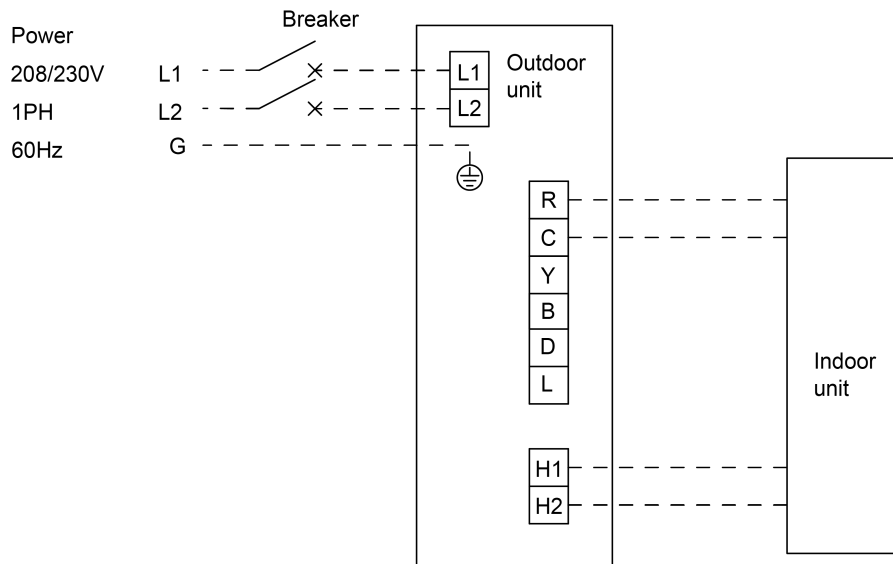
Electrical wiring of outdoor units



FXE24HP230V1R32AO, FXE30HP230V1R32AO

FXE36HP230V1R32AO, FXE48HP230V1R32AO, FXE60HP230V1R32AO

24V mode wiring

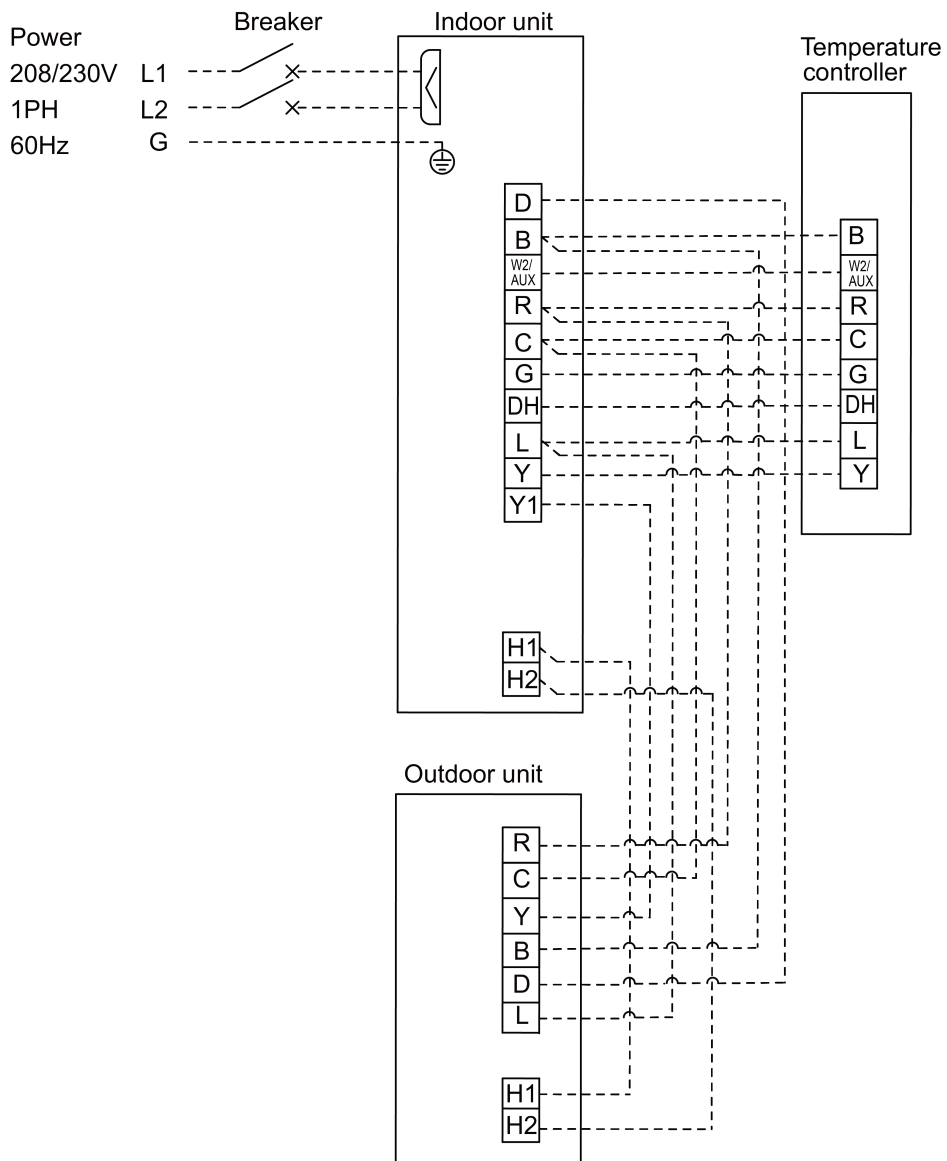


FXE24HP230V1R32AO, FXE30HP230V1R32AO

FXE36HP230V1R32AO, FXE48HP230V1R32AO, FXE60HP230V1R32AO

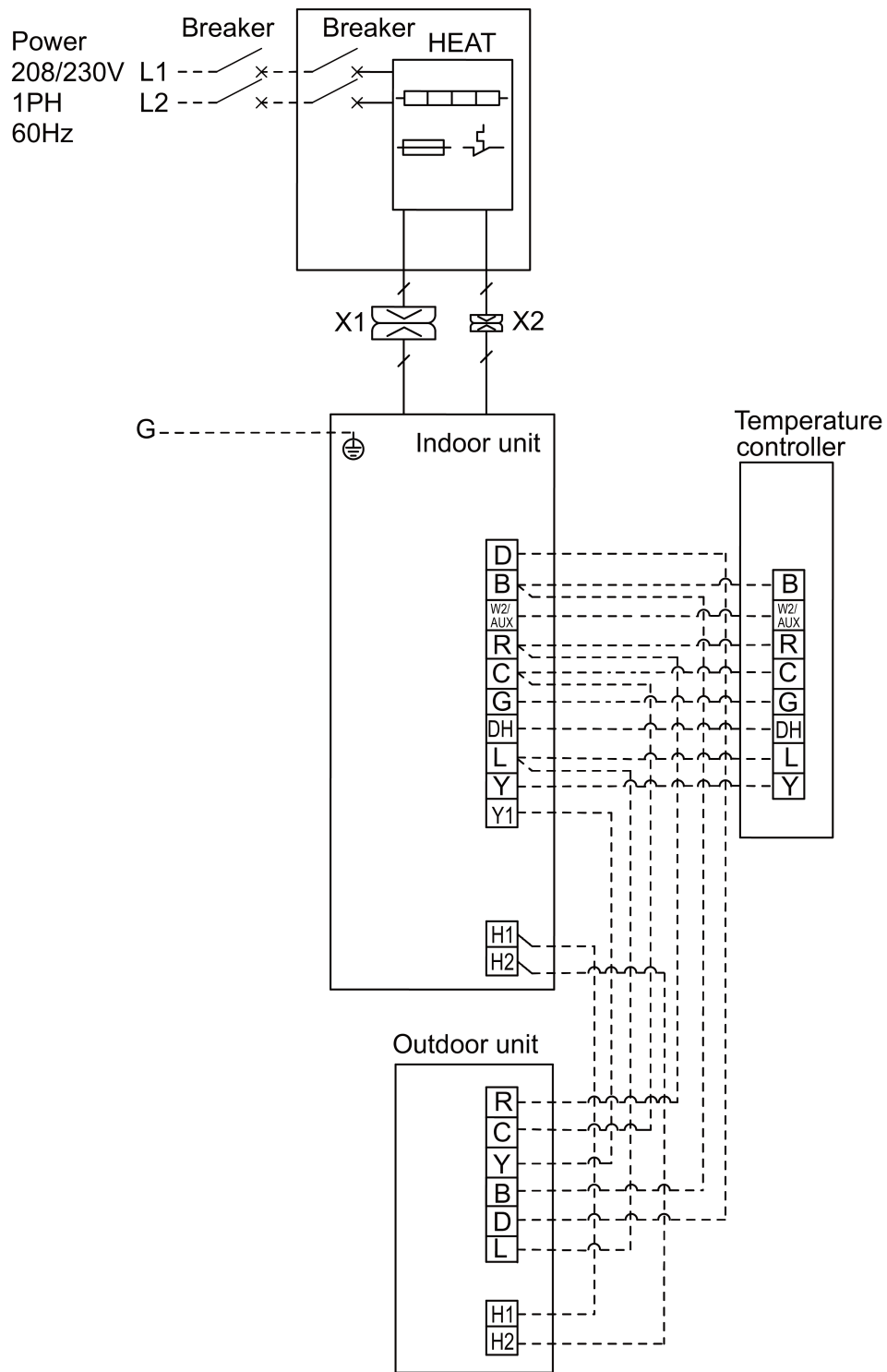
RS485 mode wiring

Air Handler

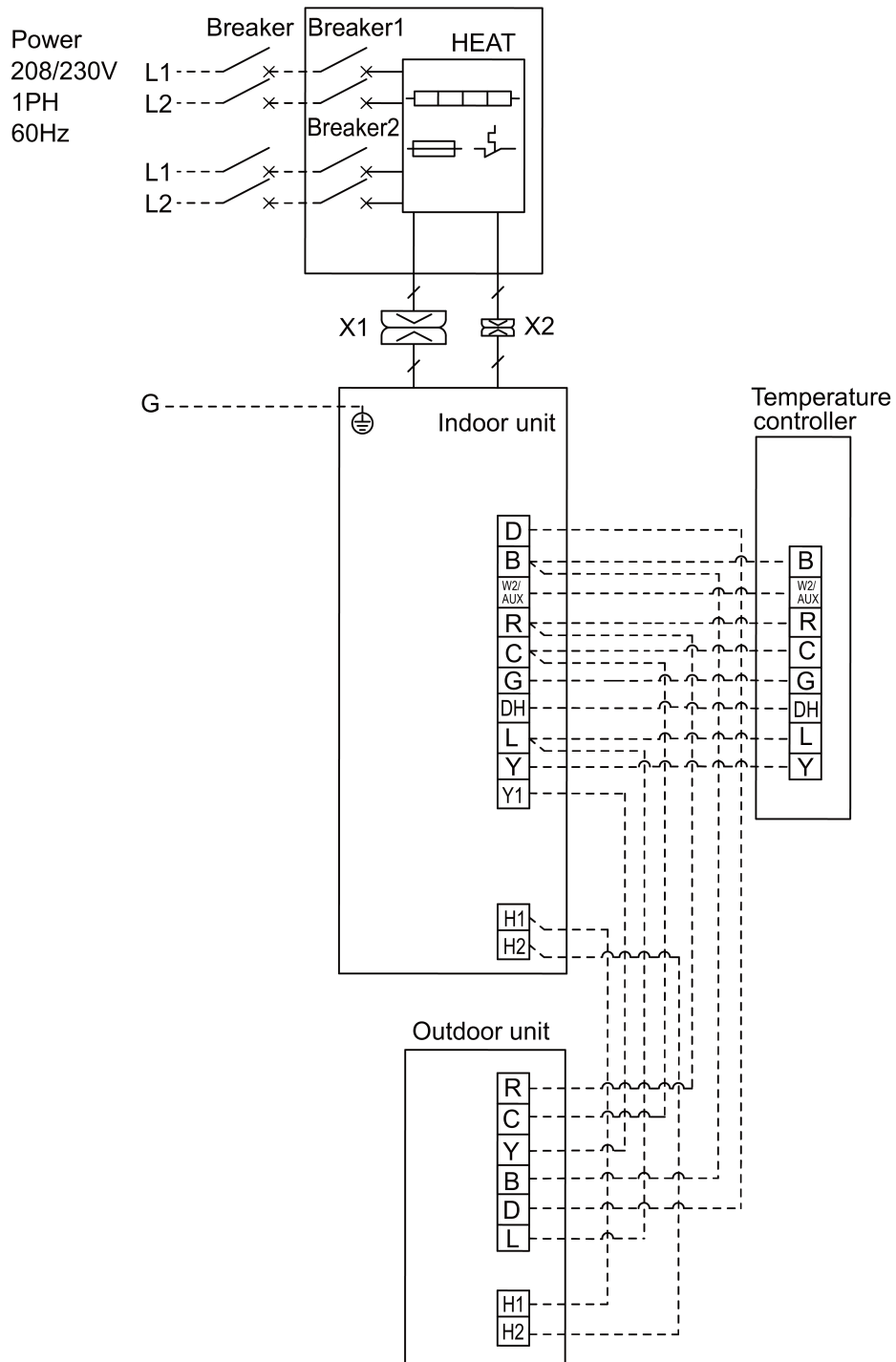


FXE24HP230V1R32AH, FXE30HP230V1R32AH, FXE36HP230V1R32AH,

FXE48HP230V1R32AH, FXE60HP230V1R32AH



FXE24HP230V1R32AH, FXE30HP230V1R32AH,
 FXE36HP230V1R32AH, FXE48HP230V1R32AH,
 FXE60HP230V1R32AH(only for air handler with BLR
 6000W/240V BLR)



FXE30HP230V1R32AH, FXE36HP230V1R32AH, FXE48HP230V1R32AH,
 FXE60HP230V1R32AH(only for air handler with BLR 9000W/240V or 12000W/240V)

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.

G means indoor unit fan signal for the indoor unit.

W2/AUX means heater control signal.

L means refrigerant leakage protection signal.

DH means Initial signal.

Y1 means thermostat and compressor output signals.

H1/H2 means RS485 communication.

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

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

NOTE: L must be connected and connected to the outdoor unit.

NOTE: Breaker must be incorporated in the fixed wiring in accordance with the wiring rules.

NOTE: When installing electric heating, M6 screws are required for grounding screws.

7.2 Specification of Power Supply Wire and Air Switch

7.2.1 Outdoor Units

Model	Power supply	Fuse capacity (A)	Maximum over-current protection (A)	Minimum circuit ampacity (A)
FXE24HP230V1R32AO	208/230V-1Ph-60Hz	25	25	21
FXE30HP230V1R32AO	208/230V-1Ph-60Hz	30	30	27.7
FXE36HP230V1R32AO	208/230V-1Ph-60Hz	30	30	27.7
FXE48HP230V1R32AO	208/230V-1Ph-60Hz	45	45	39.9
FXE60HP230V1R32AO	208/230V-1Ph-60Hz	45	45	39.9

7.2.2 Indoor Units

Air Handler

Model	Power Supply	Minimum Circuit Ampacity (A)	Maximum Overcurrent Protection (A)	Fuse Capacity (A)
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FXE24HP230V1R32AH	208/230V-1Ph-60Hz	4.7	15	3.15
FXE30HP230V1R32AH		5.3		
FXE36HP230V1R32AH		5.3		
FXE48HP230V1R32AH		7.1		
FXE60HP230V1R32AH		7.7		



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