

PURCHASER	P.O. #	DATE
PROJECT	LOCATION	
ENGINEER	ARCHITECT	
SUBMITTED BY	FOR APPROVAL	FOR REFERENCE

ITEM	PLAN DESIGNATION	QUANTITY	COOLING BTU/H	VOLTAGE	FRIEDRICH MODEL

Key Features

- **Fast Pro®** design for the fastest access for maintenance of any wall-mounted ductless systems
- **Precision Inverter®** technology (variable speed compressor)
- Soft-Start™ compressor
- BLDC motor

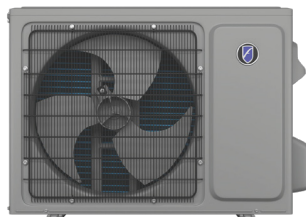
- Built-in Wi-Fi
- Ultra quiet operation
- Sleep mode
- All ENERGY STAR® certified models
- All ENERGY STAR® Cold-Climate Heat Pump certified models

- Easy-to-read temperature display
- Low ambient heat pump operation down to -13
- Low ambient cooling operation down to 5°F
- Wireless remote

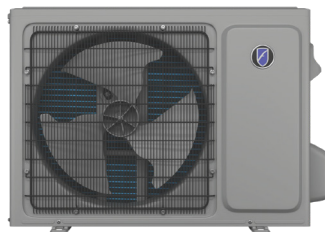
 indicates sustainability feature



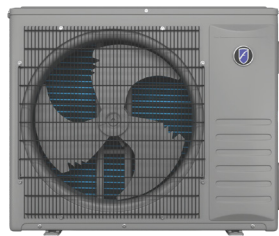
WIRELESS REMOTE WITH THE ABILITY TO CHANGE TO A COOL-ONLY REMOTE



FPHSR09A1C, FPHSR12A1C,
FPHSR09A3D, FPHSR12A3D



FPHSR18A3D



FPHSR24A3D

Pro **HIGH EFFICIENCY COOLING**

- Efficiencies of up to 25.0 SEER2
- Efficiencies of up to 11.0 HSPF2

FEATURING **FastPro®** DESIGN



115V: FAHSW09A1C, FAHSW12A1C
230V: FAHFW09A3D, FAHFW12A3D, FAHFW18A3D, FAHFW24A3D

Built-in Wi-Fi for control anytime, anywhere

- Easy to use **ComfortPro** Mobile app
- Create customizable, 7-day schedules
- Control with smartphone
- Compatible with Amazon Alexa or Google Home



FreshAir® IAQ READY



FLOATING AIR™ PRO | SINGLE-ZONE | WALL-MOUNTED HEAT PUMPS

MODEL	Model Set	Unit	FPHW091C	FPHW121C	FPHW093D	FPHW123D	FPHW183D	FPHW243D
	Indoor Model		FAHSW09A1C	FAHSW12A1C	FAHFW09A3D	FAHFW12A3D	FAHFW18A3D	FAHFW24A3D
	Outdoor Model		FPHSR09A1C	FPHSR12A1C	FPHSR09A3D	FPHSR12A3D	FPHSR18A3D	FPHSR24A3D
	Power Supply		115V~,60Hz,1P			208V/230V~,60Hz,1P		
	ENERGY STAR® Standard		Y	Y	Y	Y	Y	Y
COOLING	ENERGY STAR – Cold Climate	Y/N	Y	Y	Y	Y	Y	Y
	Rated Capacity @ 95°F	Btu/h	9,000	12,000	9,000	12,000	18,000	24,000
	Cooling Capacity Range (Min.–Max.)	Btu/h	3,600-10,000	4,000-13,000	3,600-10,000	4,000-13,000	6,500-19,000	8,000-25,000
	EER2 @ 95°F	Btu/h/W	12.30	12.30	13.65	12.25	12.95	12.25
	SEER2	Btu/h/W	23.00	22.00	25.00	23.00	21.00	22.50
HEATING	Cooling Operating Range	°F	5°F–118°F	5°F–118°F	5°F–118°F	5°F–118°F	5°F–118°F	5°F–118°F
	Rated Capacity @ 47°F	Btu/h	9,500	12,000	9,000	12,000	18,000	24,000
	Heating Capacity Range (Min.–Max.)	Btu/h	3,600-10,000	4,000-13,000	3,600-10,000	4,000-13,000	6,500-19,000	8,000-25,000
		W/W	4.00	4.00	4.00	3.80	3.70	3.60
	COP @ 5°F	W/W	1.90	1.90	2.10	2.00	1.90	1.80
	HSPF2	Btu/h/W	10.00	9.50	11.00	10.00	10.00	9.50
	Rated Capacity Heating @ 17°F (-8.3°C)	Btu/h	9,500	9,300	9,000	10,800	18,000	22,000
	Maximum Heating Capacity @ 5°F (-15°C)	Btu/h	8,700	9,200	9,000	11,000	18,000	19,800
	Maximum Heating Capacity @ -13°F (-25°C)	Btu/h	4,600	5,900	5,400	6,100	11,500	12,100
INDOOR AIRFLOW	Heating Operating Range	°F	-13°F–75°F	-13°F–75°F	-13°F–75°F	-13°F–75°F	-13°F–75°F	-13°F–75°F
	Air Circulation (Max./H/M/L)	ft³ CFM	382/341/294/247	394/365/312/253	382/341/294/247	394/365/312/253	647/588/482/382	706/647/559/441
	Sound Rating - Indoor (Max/H/M/L/Quiet)	dB(A)	42/39/37/35/32	42/39/37/35/32	42/39/37/35/32	42/39/37/35/32	48/45/41/39/36	50/48/43/41/39
INDOOR FAN MOTOR	Output	W	46	46	25	25	35	35
	Speed (High/Med/Low)	r/min	1,100/940/800	1,154/992/800	1,101/938/800	1,154/992/800	1,100/960/800	1,200/1,040/880
OUTDOOR AIRFLOW	Air Circulation (High) for Outdoor	ft³ CFM	1,471	1,471	1,471	1,471	1,942	2,531
	Sound Rating - Outdoor	dB(A)	53.0	53.0	53.0	53.0	58.0	61.0
OUTDOOR FAN MOTOR	Output	W	36	36	36	36	60	102
	Speed (High)	r/min	850	880	880	880	840	880
ELECTRICAL	Rated Current	Cooling (A)	6.00	6.00	2.50	4.30	6.10	8.70
		Cooling (W)	641	980	659	980	1,390	1,959
		Heating (A)	6.40	6.40	3.10	4.10	6.50	9.30
		Heating (W)	696	960	659	926	1,426	1,954
	MOP (Rating of Overcurrent Protective Device)	A	25	25	15	15	30	35
	MCA (Minimum Circuit Ampacity)	A	16	16	9.5	10.5	20	22
	Communication Wire Size and Type		4x14 AWG	4x14 AWG	4x14 AWG	4x14 AWG	4x14 AWG	4x14 AWG
REFRIGERATION (R454B)	Moisture Removal	pints/hr	1.9	2.5	1.9	2.5	3.2	4.7
	Refrigerant Charge Volume	oz.	33.5	35.3	35.3	38.1	53.0	70.6
	Liquid Pipe	in.	1/4	1/4	1/4	1/4	1/4	3/8
	Gas Pipe	in.	3/8	3/8	3/8	3/8	1/2	5/8
	Max. Pipe Length (Total)	ft.	66	66	66	66	98	98
	Max. Elevation (Indoor Units Higher Than Outdoor Unit)	ft.	49	49	49	49	49	49
	Pre-charge Pipe Length	ft.	25	25	25	25	25	25
	Additional Refrigerant Charge per Foot After 25 ft.	oz./ft.	0.22	0.22	0.22	0.22	0.22	0.32
INDOOR UNIT	Dimension (W×H×D)	in	33-7/8 × 11-2/8 × 8-4/8	33-7/8 × 11-2/8 × 8-4/8	33-7/8 × 11-2/8 × 8-4/8	33-7/8 × 11-2/8 × 8-4/8	45-2/8 × 13-2/8 × 10-1/8	45-2/8 × 13-2/8 × 10-1/8
		mm	860×285×216	860×285×216	860×285×216	860×285×216	1,148×336×256	1,148×336×256
	Packing (W×H×D)	in	36-5/8 × 11 2/8 × 15	36-5/8 × 11 2/8 × 15	36-5/8 × 11 2/8 × 15	36-5/8 × 11 2/8 × 15	47-7/8×13×16-1/8	56-1/8×18-1/8×15-4/8
		mm	930x285x380	930x285x380	930x285x380	930x285x380	1,215×330×410	1,425×395×460
	Net Weight	lbs.	22	22	22	22	34	34
		kg	10	10	10	10	16	16
	Shipping Weight	lbs.	26	26	26	26	40	40
		kg	12	12	12	12	18	18
OUTDOOR UNIT	Dimension (W×H×D)	in	31-7/8 × 23 × 11	31-7/8 × 23 × 11	31-7/8 × 23 × 11	31-7/8 × 23 × 11	33-7/8 × 25-5/8 × 12-2/8	35-3/8 × 29-4/8 × 13-3/8
		mm	810x585x280	810x585x280	810x585x280	810x585x280	860×650×310	900×750×340
	Packing (W×H×D)	in	37×24 6/8×15 1/8	37 ×24-6/8 ×15-1/8	37 ×24-6/8 ×15-1/8	37 ×24-6/8 ×15-1/8	39-1/8 ×28-3/8 ×16-4/8	41-6/8×32-2/8×17-6/8
		mm	940×630×385	940×630×385	940×630×385	940×630×385	995×720×420	1,060×820×450
	Net Weight	lbs.	75	77	71	71	97	113
		kg	34	35	32	32	44	51
	Shipping Weight	lbs.	86	86	82	82	106	121
		kg	39	39	37	37	48	55



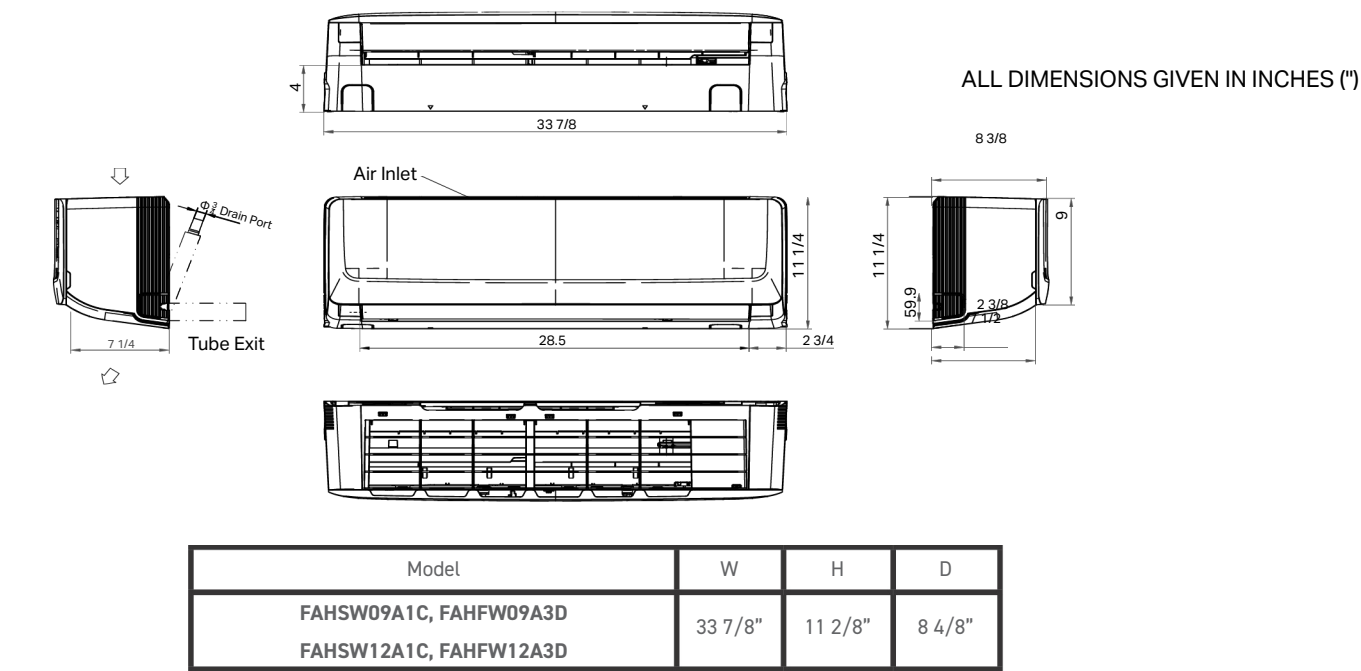
Standard

With Registration

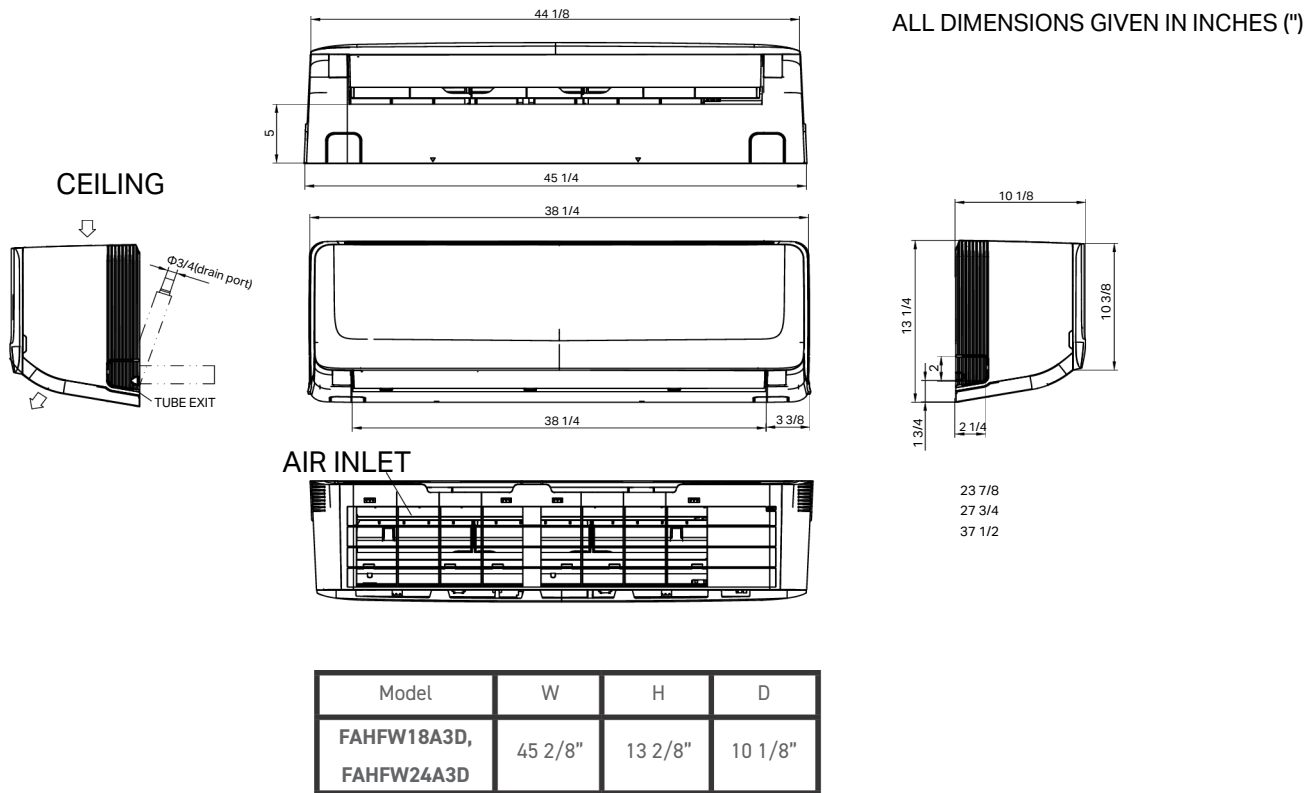


DIMENSIONAL DRAWINGS

INDOOR UNIT / FAHSW09A1C, FAHFW09A3D FAHSW12A1C, FAHFW12A3D

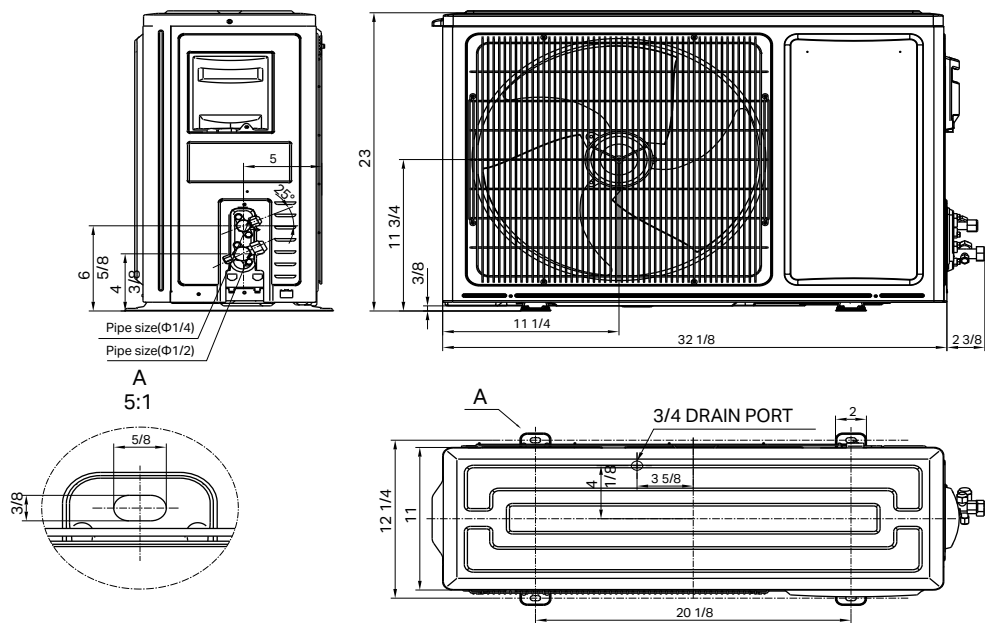


INDOOR UNIT / FAHFW18A3D, FAHFW24A3D



DIMENSIONAL DRAWINGS

OUTDOOR UNITS / FPHSR09A1C, FPHSR09A3D, FPHSR12A1C, FPHSR12A3D

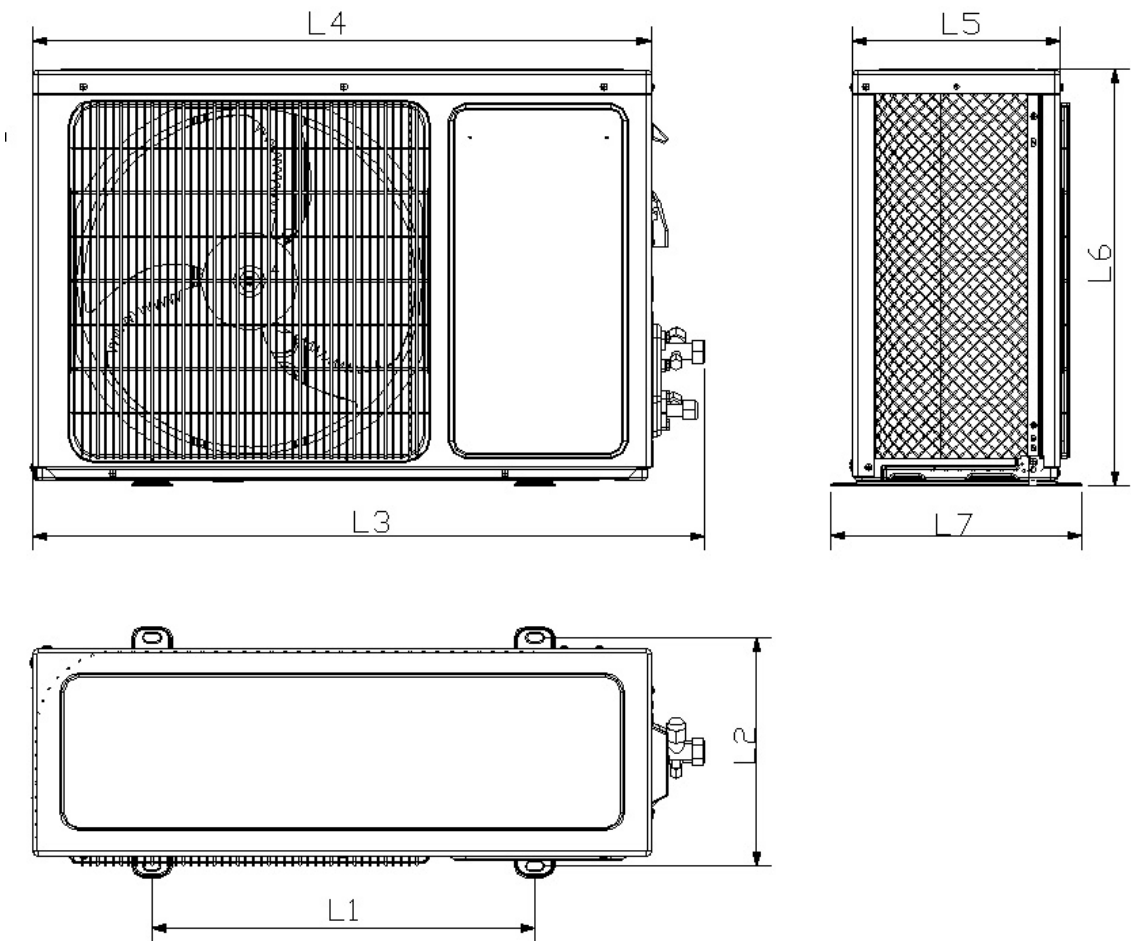


All Dimensions are given in inches (")

Model	W	H	D
FPHSR09A1C, FPHSR09A3D	31 7/8"	23"	11"
FPHSR12A1C, FPHSR12A3D			

DIMENSIONAL DRAWINGS
OUTDOOR UNITS / FPHSR18A3D

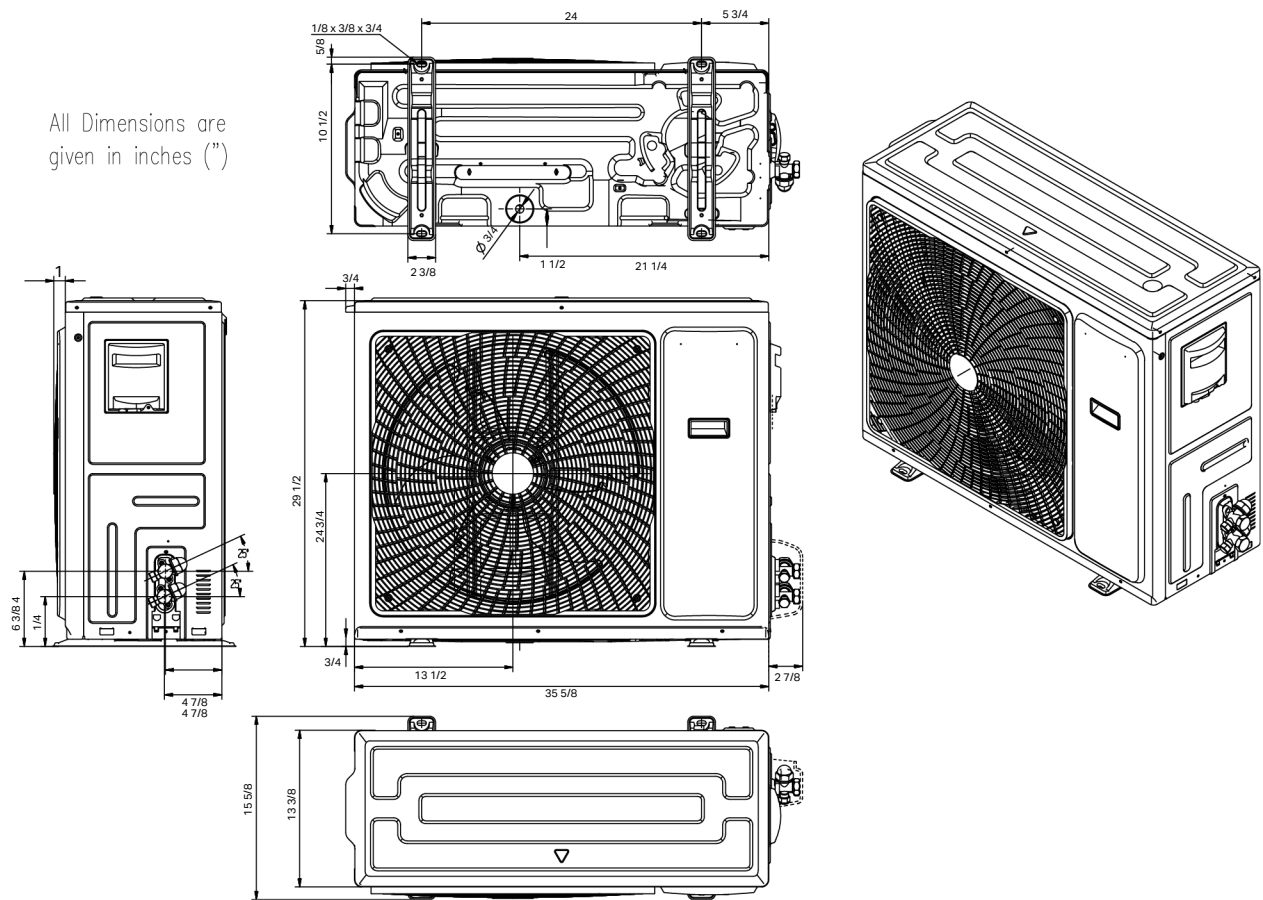
Outdoor units:



				Width	Depth	Height	
Model	L1 (in.)	L2 (in.)	L3 (in.)	L4 (in.)	L5 (in.)	L6 (in.)	L7 (in.)
FPHSR18A3D	21 11/32	12 19/32	34 7/8	33 7/8	12 1/8	25 1/2	13

DIMENSIONAL DRAWINGS
OUTDOOR UNITS / FPHSR24A3D

All Dimensions are
given in inches (")



Model	W	H	D
FPHSR24A3D	35 3/8"	29 4/8"	13 3/8"

REFRIGERATION LINE SETS*

Kit#	Length (ft.)	Liquid	Suction	System Model
T32150	15'	1/4"	3/8"	FPHW091C, FPHW121C, FPHW093D, FPHW123D
T32350	35'	1/4"	3/8"	

Kit#	Length (ft.)	Liquid	Suction	System Model
T42150	15'	1/4"	1/2"	FPHW183D
T53250	25'	3/8"	5/8"	FPHW243D

*Insulated line sets are available for all Friedrich split systems in 15 ft. and 35 ft. lengths. Each line set is equipped with flare nuts on both ends. Both liquid and suction lines are insulated. Line sets can be joined together with field supplied double male connectors. Each system requires one line set for each indoor unit installed.

REFRIGERATION LINE SETS MIN./MAX. LENGTHS

Floating Air® Pro		
System Model	Min. (ft.)	Max. (ft.)
FPHW091C, FPHW121C, FPHW093D, FPHW123D	10	66
FPHW183D	10	98
FPHW243D	10	98

TORQUE WRENCH SETTINGS

Outside Diameter		Torque	
mm	inch	ft-lbs.	N-m
6.35	1/4	13 – 18	17.6 – 24.5
9.52	3/8	25 – 30	33.3 – 41.2
12.7	1/2	40 – 47	53.9 – 64.7
15.88	5/8	45 – 59	61.7 – 80.4

ACCESSORIES



FPWC1 - Optional wired wall controller for Floating Air Pro, single- and multi-zone models. Please check with your Friedrich representative for options.



DSSXEMWRTA4 - Optional wireless energy management thermostat with occupancy sensor. For Floating Air Pro, single- and multi-zone models.



ADS01 - Optional A2L sensor for Floating Air FAHMMW07A3D, FAHFW09A3D, and FAHFW12A3D 230v indoor wall-mounted. See Installation and Operational Manual for additional information & requirements.



APWM1 - Optional FreshAir Purifier by iWave® features needlepoint bi-polar ionization to address any mold, bacteria, virus, allergens, and VOC's that may be in your air stream to ensure delivery of healthy, clean, purified air. Optional accessory for all Friedrich wall-mounted ductless models.