

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

 Indicates sustainability feature

- **FastPro®** design for the fastest access for maintenance of any wall-mounted ductless systems
- All models ENERGY STAR® and ENERGY STAR® Cold Climate Heat Pump certified
- **Precision Inverter®** technology (variable speed compressor)
- Soft-Start™ compressor
- BLDC motor
- Built-in Wi-Fi
- Sleep mode
- Ultra quiet operation
- Low ambient heat pump operation down to 13°
- Easy-to-read temperature display
- Wireless remote control included

FEATURING OUR **FastPro®** DESIGN

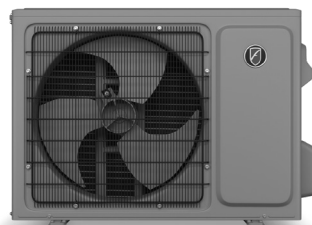


HIGH EFFICIENCY HEATING & COOLING

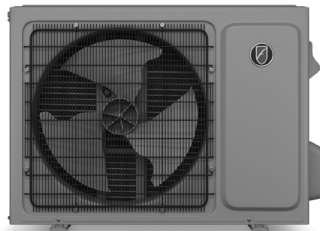
- Efficiencies of up to 25.0 SEER2
- Efficiencies of up to 11.0 HSPF2

115V: FAHSW09A1C and FAHSW12A1C

230V: FAHFW09A3D, FAHFW12A3D, FAHFW18A3D, FAHFW24A3D



FPFSR09A1C, FPFSR12A1C,
FPFSR09A3D, FPFSR12A3D



FPFSR18A3D



FPFSR24A3D



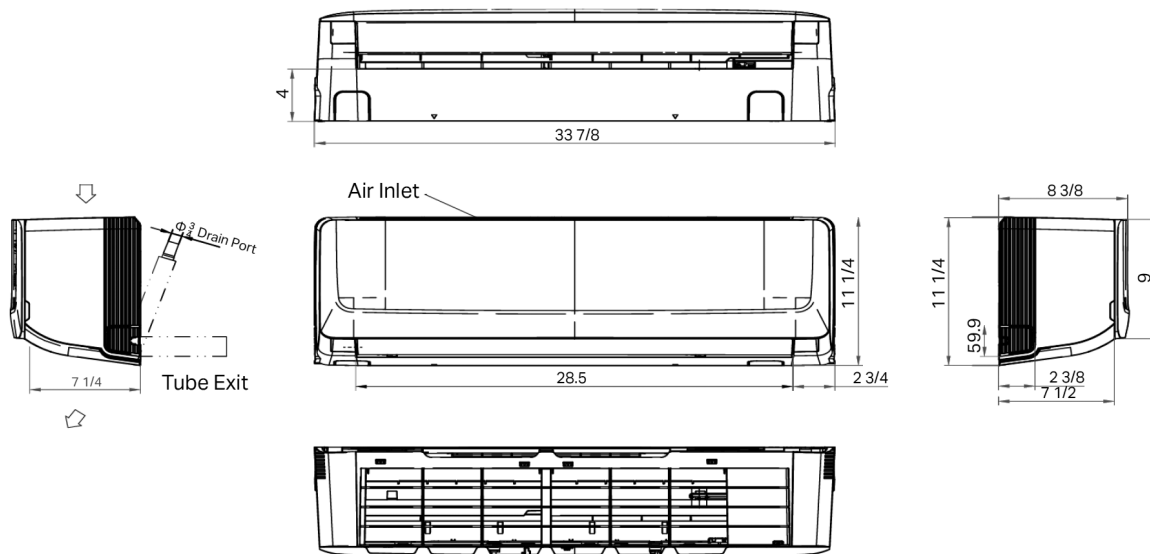
FLOATING AIR™ PRO SERIES | SINGLE-ZONE | WALL-MOUNTED HEAT PUMPS

MODEL	Model Set	Unit	FPHW091C	FPHW121C	FPHW093D	FPHW123D	FPHW183D	FPHW243D
	Indoor Model		FAHSW09A1C	FAHSW12A1C	FAHSW09A3D	FAHSW12A3D	FAHSW18A3D	FAHSW24A3D
	Outdoor Model		FPHSR09A1C	FPHSR12A1C	FPHSR09A3D	FPHSR12A3D	FPHSR18A3D	FPHSR24A3D
	Power Supply		115V~, 60Hz, 1P			208V/230V~, 60Hz, 1P		
	ENERGY STAR® Standard		Y/N	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	12.25	12.25	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 (Min.–Max.)	°F	5–118	5–118	5–118	5–118	5–118	5–118
	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
	COP @ 47°F	W/W	3.98	3.98	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 (Min.–Max.)	°F	-13–75	-13–75	-13–75	-13–75	-13–75	-13–75
	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
INDOOR FAN MOTOR	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
	Output	W	46	46	25	25	35	35
OUTDOOR AIRFLOW	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
	Air Circulation (High) for Outdoor	ft³ CFM	1,471	1,471	1,471	1,471	1,942	2,531
OUTDOOR FAN MOTOR	Sound Rating – Outdoor	dB(A)	53.0	53.0	53.0	53.0	58.0	61.0
	Output	W	36	36	36	36	60	102
ELECTRICAL	Speed (High)	r/min	850	880	880	880	840	880
	Rated Current	Cooling (A)	6.0	6.0	2.5	4.3	6.1	8.7
REFRIGERATION (R-454B)	MOP (Rating of Overcurrent Protective Device)	Cooling (W)	641	980	659	980	1,390	1,959
		Heating (A)	6.4	6.4	3.1	4.1	6.5	9.3
		Heating (W)	696	960	659	926	1,426	1,954
		A	25	25	15	15	30	35
	MCA (Minimum Circuit Ampacity)	A	16.0	16.0	9.5	10.5	20.0	22.0
	Communication Wire Size and Type		4 × 14AWG	4 × 14AWG	4 × 14AWG	4 × 14AWG	4 × 14AWG	4 × 14AWG
	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
INDOOR UNIT DIMENSIONS & WEIGHTS	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.	65.6	65.6	65.6	65.6	98.4	98.4
	Max. Elevation (Indoor Units Higher Than Outdoor Unit)	ft.	49.2	49.2	49.2	49.2	49.2	49.2
	Pre-charge Pipe Length	ft.	24.6	24.6	24.6	24.6	24.6	24.6
	Additional Refrigerant Charge per Foot After 25 ft.	oz./ft.	0.22	0.22	0.22	0.22	0.22	0.32
	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
	Packing (L×H×W)	in.	36-5/8×15×11-2/8	36-5/8×15×11-2/8	36-5/8×15×11-2/8	36-5/8×15×11-2/8	47-7/8×16-1/8×13	47-7/8×16-1/8×13
OUTDOOR UNIT DIMENSIONS & WEIGHTS	Net Weight	mm	930×380×285	930×380×285	930×380×285	930×380×285	1,215×410×330	1,425×460×395
		lbs.	22.1	22.05	22.1	22.05	34.2	34.2
	Shipping Weight	kg	10.0	10.0	10.0	10.0	16.0	16.0
		lbs.	26.5	26.5	26.5	26.5	39.7	39.7
	Dimension (W×H×D)	kg	12.0	12.0	12.0	12.0	18.0	18.0
		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
	Packing (L×H×W)	mm	810×585×280	810×585×280	810×585×280	810×585×280	860×650×310	900×750×340
		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
Standard	Net Weight	mm	940×630×385	940×630×385	940×630×385	940×630×385	995×720×420	1,060×820×450
		lbs.	75.0	77.2	70.6	70.6	97.0	112.5
	Shipping Weight	kg	34.0	35.0	32.0	32.0	44.0	51.0
		lbs.	86.0	86.0	81.6	81.6	105.8	121.3
With Registration	Net Weight	kg	39.0	39.0	37.0	37.0	48.0	55.0
		mm	810×585×280	810×585×280	810×585×280	810×585×280	860×650×310	900×750×340
	Shipping Weight	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



DIMENSIONAL DRAWINGS: WALL-MOUNTED HEAT PUMP

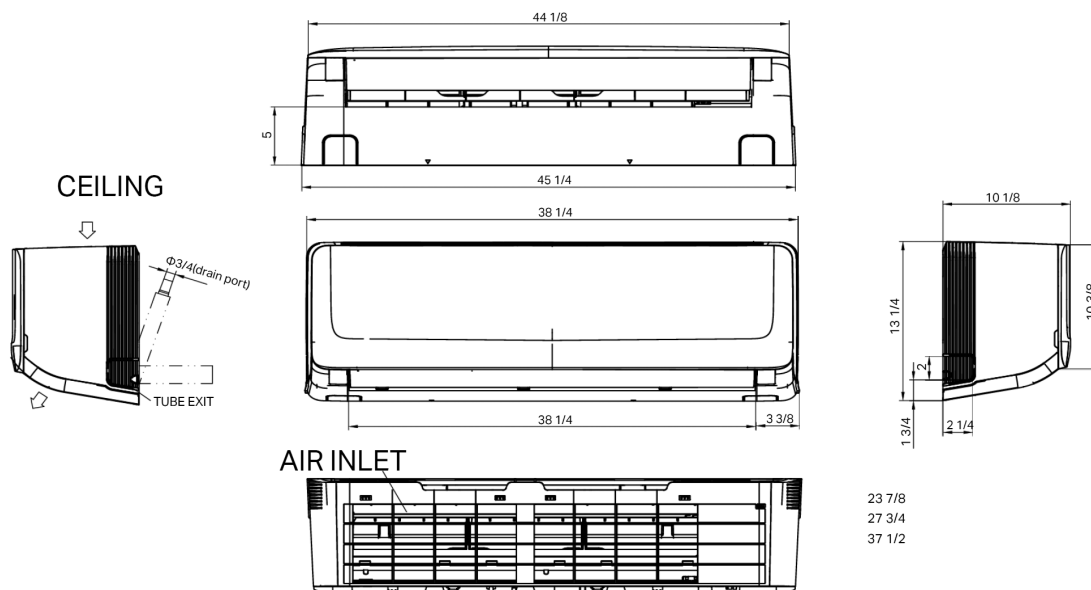
INDOOR UNITS/ FAHSW09A1C, FAHFW09A3D, FAHSW12A1C, FAHFW12A3D



Model	W	H	D
FAHSW09A1C, FAHFW09A3D, FAHSW12A1C, FAHFW12A3D	33 7/8"	11 2/8"	8 3/8"

UNITS: INCHES

INDOOR UNITS/ FAHFW18A3D, FAHFW24A3D

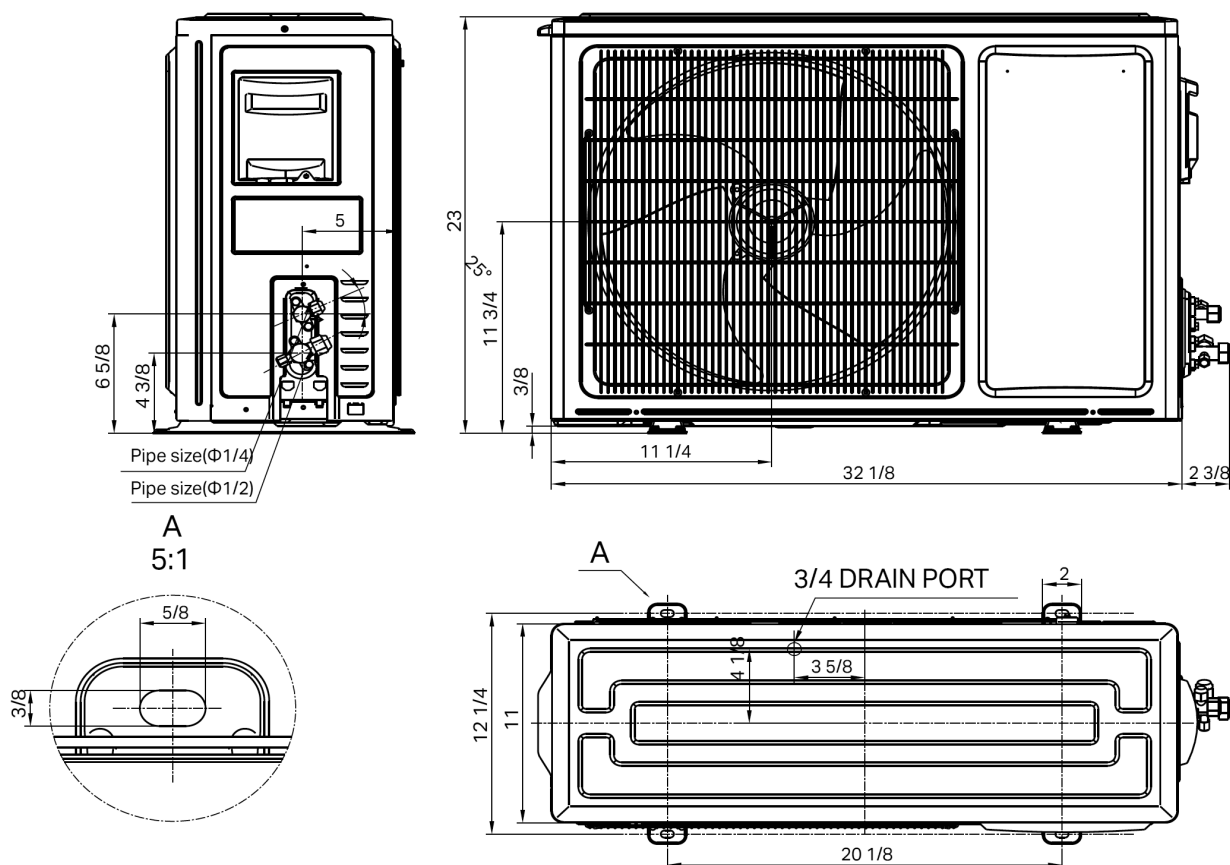


Model	W	H	D
FAHFW18A3D, FAHFW24A3D	45 2/8"	13 2/8"	10 1/8"

UNITS: INCHES

DIMENSIONAL DRAWINGS: OUTDOOR HEAT PUMPS

OUTDOOR UNITS/ FPHSR09A1C, FPHSR09A3D, FPHSR12A1C, FPHSR12A3D

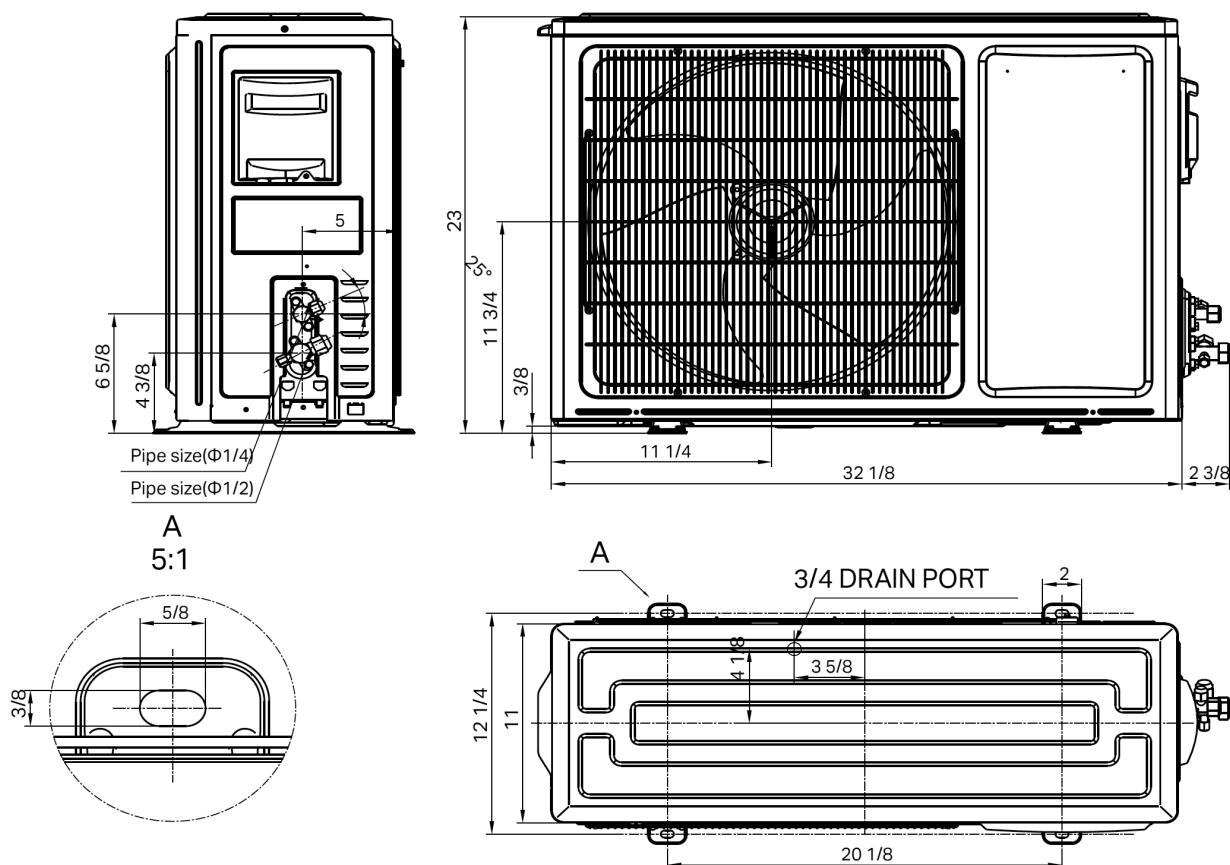


Model	W	H	D
FPHSR09A1C, FPHSR09A3D, FPHSR12A1C, FPHSR12A3D	32 1/8"	23"	11"

UNITS: INCHES

DIMENSIONAL DRAWINGS: OUTDOOR HEAT PUMPS

OUTDOOR UNITS/ FPHSR09A1C, FPHSR09A3D, FPHSR12A1C, FPHSR12A3D

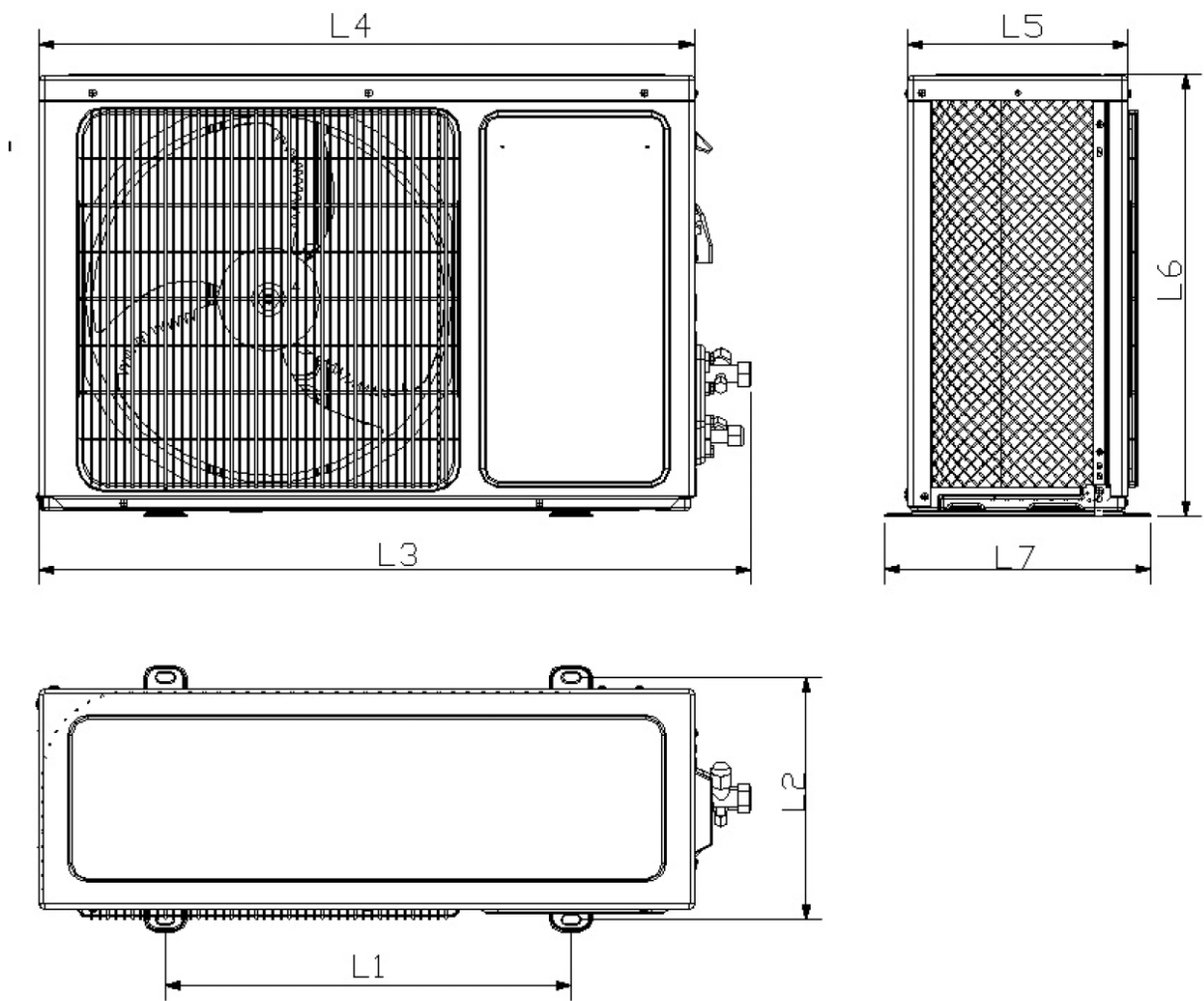


Model	W	H	D
FPHSR09A1C, FPHSR09A3D, FPHSR12A1C, FPHSR12A3D	32 1/8"	23"	11"

UNITS: INCHES

DIMENSIONAL DRAWINGS: OUTDOOR HEAT PUMPS

OUTDOOR UNITS/ FPHSR18A3D

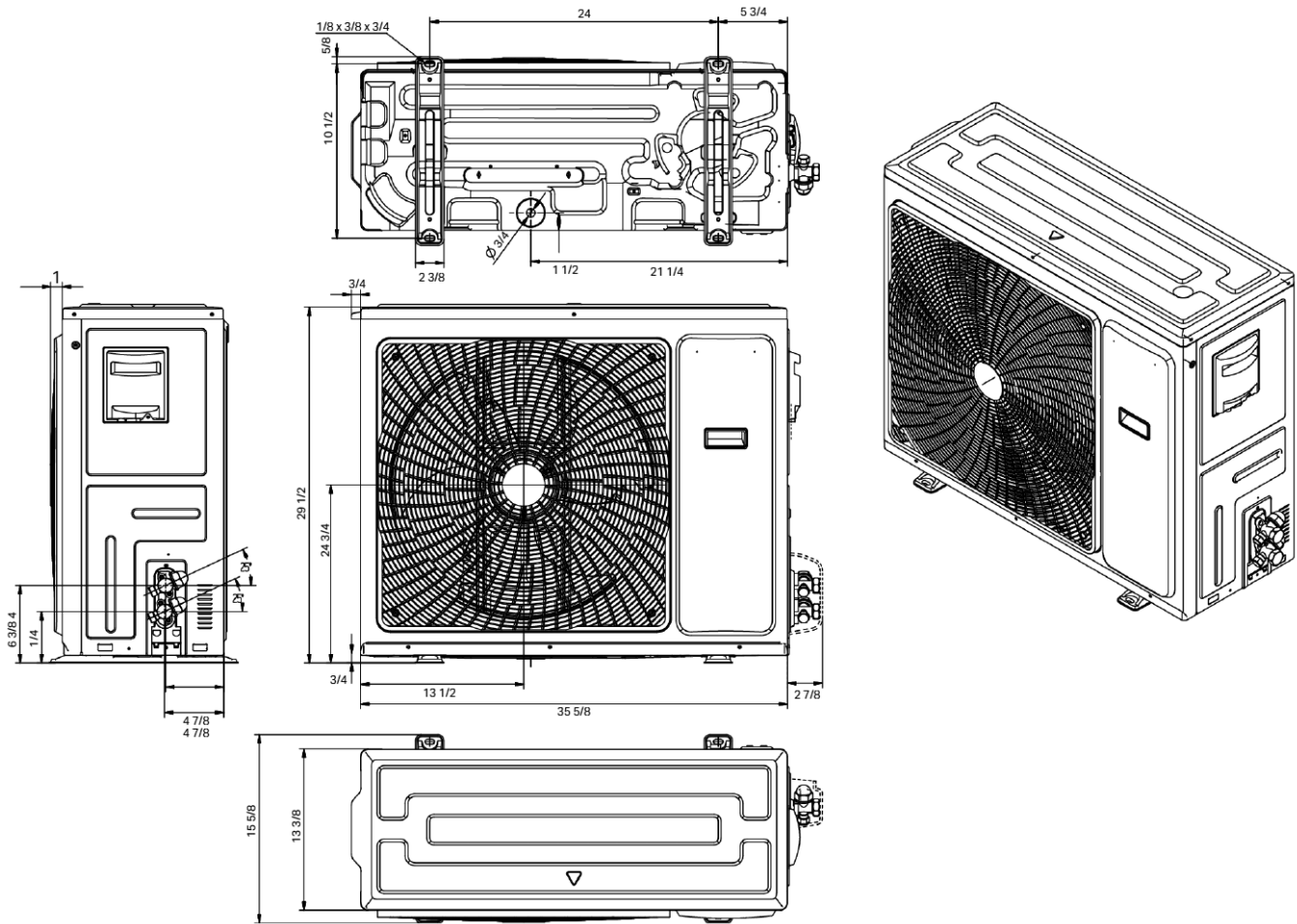


Model	L1	L2	L3	Width	Depth	Height	L7
				L4	L5	L6	
FPHSR18A3D	21 11/32	12 19/32"	34 7/8"	33 7/8"	12 1/8"	25 1/2"	13"

UNITS: INCHES

DIMENSIONAL DRAWINGS: OUTDOOR HEAT PUMPS

OUTDOOR UNITS/ FPHSR24A3D



Model	W	H	D
FPHSW24A3D	35 5/8"	29 4/8"	13 3/8"

UNITS: INCHES

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

System Model	Min. (ft.)	Max. (ft.)
FPHW091C, FPHW121C, FPHW093D, FPHW123D	10	66
FPHW183D	10	98
FPHW243D	15	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 hard-wired controller for Floating Air wall-mounted and cassette indoor models. Included with concealed ducted models. Not compatible with AHU indoor models. See your Friedrich representative for options.



FreshAir Purifier APWM1 by iWave® – Optional accessory for all wall-mounted ductless models that kills mold, bacteria and viruses—while effectively removing odors and VOCs.



DSSXEMWRTA4 – Optional wireless energy management thermostat with occupancy sensor. For Floating Air Pro, single- and multi-zone models. See your Friedrich representative for options.



ADS01 – Field-installed A2L sensor for Floating Air R-454B wall-mounted applications.

ADS02 – Field-installed A2L sensor for Floating Air R-32 wall-mounted applications. See Installation and Operational Manual for additional information & requirements.