FRIEDRICH

Floating Air™ Select Series

DUCTLESS MINI-SPLIT SYSTEMS

WALL-MOUNTED, SINGLE ZONE HEAT PUMPS

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
- ENERGY STAR® certified models available*
- **Precision Inverter**® technology (variable speed compressor)
- Soft-Start™ compressor
- BLDC motor
- Built-in Wi-Fi
- Sleep mode
- Ultra quiet operation
- Easy-to-read temperature display
- Wireless remote control included
- Efficiencies of up to 21.0 SEER2

FEATURING OUR ***FastPro***® DESIGN

115 VOLT MODELS:



FAHSW09A1C, FAHSW12A1C



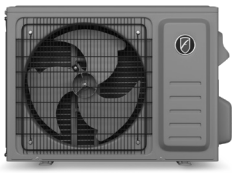
208/230 VOLT MODELS:



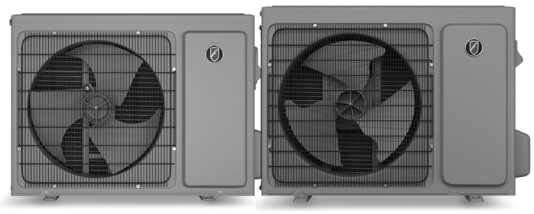
FAHFW18A3D, FAHFW24A3D



FAHSW36A3D
(***FastPro***® not available on this model)



FSHSR09B1C, FSHSR12B1C



FSHSR18B3D, FSHSR24B3D



FSHSR36B3D

PRECISION INVERTER® | ComfortPRO MOBILE APP | DIAMONDBLUE™ Advanced Corrosion Protection | FreshAire® IAQ READY | ENERGY STAR*

*Applies to FSHW091C and FSHW183D model sets.

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

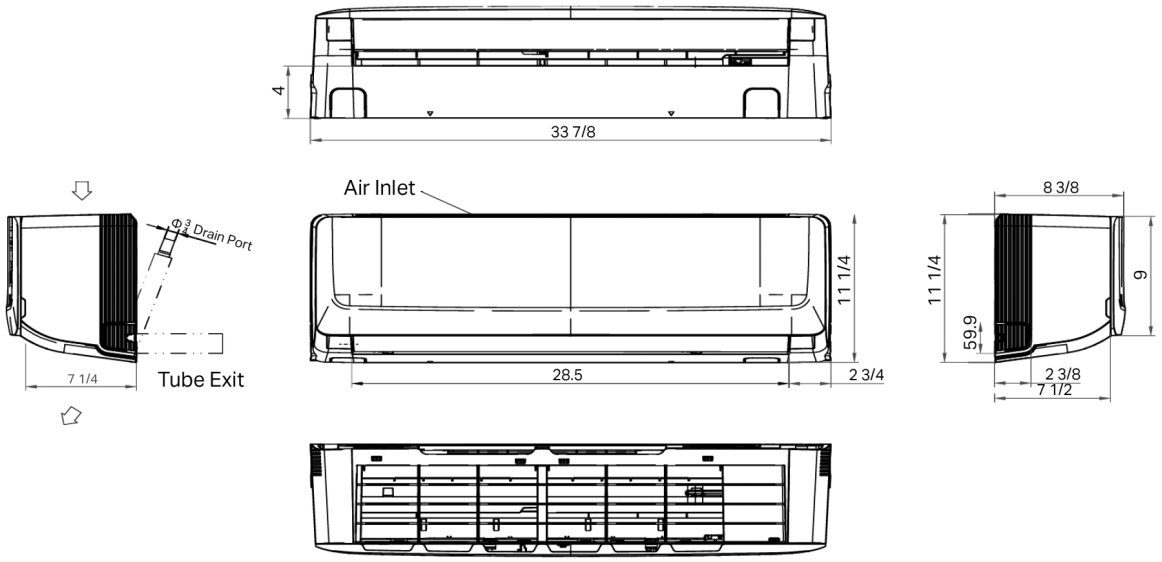
MODEL	**Model Set**	**Unit**	**FSHW091C**	**FSHW121C**	**FSHW183D**	**FSHW243D**	**FSHW363D**
	Indoor Model		**FAHSW09A1C**	**FAHSW12A1C**	**FAHFW18A3D**	**FAHFW24A3D**	**FAHSW36A3D**
	Outdoor Model		**FSHSR09B1C**	**FSHSR12B1C**	**FSHSR18B3D**	**FSHSR24B3D**	**FSHSR36B3D**
	Power Supply	V/Hz/ph	115V~, 60Hz, 1P		208V/230V~, 60Hz, 1P		
	ENERGY STAR® Standard	Y/N	Y	N	Y	N	N
	ENERGY STAR – Cold Climate	Y/N	N	N	N	N	N
COOLING	Rated Capacity @ 95°F	Btu/h	9,000	12,000	18,000	24,000	34,600
	Cooling Capacity Range (Min.–Max.)	Btu/h	3,600–10,000	4,000–13,000	6,500–19,000	8,000–25,000	9,300–36,000
	EER2 @ 95°F	Btu/h/W	12.50	10.20	12.00	10.60	9.50
	SEER2	Btu/h/W	20.00	18.00	21.00	19.50	20.00
	Cooling Operating Range	°F	5–118	5–118	5–118	5–118	5–118
HEATING	Rated Capacity @ 47°F	Btu/h	9,500	12,000	18,000	24,000	35,000
	Heating Capacity Range (Min.–Max.)	Btu/h	3,600–10,000	4,000–13,000	6,500–19,000	8,000–25,000	9,600–37,500
	COP @ 47°F	W/W	4.10	3.40	3.91	3.30	3.25
	COP @ 5°F	W/W	2.00	1.90	2.40	1.90	1.95
	HSPF2	Btu/h/W	9.00	8.50	9.80	8.50	8.40
	Rated Capacity Heating @ 17°F (-8.3°C)	Btu/h	6,800	8,800	14,800	21,000	19,200
	Maximum Heating Capacity @ 5°F (-15°C)	Btu/h	6,000	7,500	15,000	18,500	20,000
	Heating Operating Range	°F	-5–75	-5–75	-5–75	-5–75	-5–75
INDOOR AIRFLOW	Air Circulation (Max./H/M/L)	ft^3 CFM	382/341/294/247	394/365/312/253	647/588/482/382	706/647/559/441	1,059/1,018/883/712
	Sound Rating – Indoor (Max./H/M/L/Quiet)	dB(A)	42/39/37/35/32	42/39/37/35/32	48/45/41/39/36	50/48/43/41/39	52/48/43/39/38
INDOOR FAN MOTOR	Output	W	46	46	35	35	70
	Speed (High/Med/Low)	r/min	1,100/940/800	1,154/992/800	1,100/960/800	1,200/1,040/880	1,060/930/810
OUTDOOR AIRFLOW	Air Circulation (High) for Outdoor	ft^3 CFM	1,295	1,295	1,471	1,942	2,590
	Sound Rating – Outdoor	dB(A)	53.0	53.0	56.0	60.0	60.0
OUTDOOR FAN MOTOR	Output	W	36	36	60	102	102
	Speed (High)	r/min	850	880	840	880	900
ELECTRICAL	Rated Current	Cooling (A)	6.7	10.7	6.4	10.0	16.0
		Cooling (W)	720	1,176	1,506	2,264	3,660
		Heating (A)	6.2	9.6	8.1	9.5	14.2
		Heating (W)	679	1,034	1,349	2,132	3,160
	MOP (Rating of Overcurrent Protective Device)	A	25	25	20	35	40
	MCA (Minimum Circuit Ampacity)	A	14.6	15.6	14.5	21.0	25.8
	Communication Wire Size and Type		4 × 14AWG	4 × 14AWG	4 × 14AWG	4 × 14AWG	4 × 14AWG
REFRIGERATION (R-32)	Moisture Removal	pints/hr	1.9	2.5	3.8	4.2	7.9
	Refrigerant Charge Volume	oz.	21.2	21.9	45.9	47.7	72.4
	Liquid Pipe	in.	1/4	1/4	1/4	3/8	3/8
	Gas Pipe	in.	3/8	3/8	1/2	5/8	5/8
	Max. Pipe Length (Total)	ft.	65.6	65.6	98.4	98.4	98.4
	Max. Elevation (Indoor Units Higher Than Outdoor Unit)	ft.	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
	Additional Refrigerant Charge per Foot After 25 ft.	oz./ft.	0.22	0.22	0.22	0.32	0.43
INDOOR UNIT DIMENSIONS & WEIGHTS	Dimension (W×H×D)	in.	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	52-3/8×14-2/8×10-6/8
		mm	860×285×216	860×285×216	1,148×336×256	1,148×336×256	1,330×363×274
	Packing (L×H×W)	in.	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	56-1/8×15-4/8×18-1/8
		mm	930×285×380	930×285×380	1,215×330×410	1,215×330×410	1,425×395×460
	Net Weight	lbs.	22.1	22.05	32.0	34.2	40.8
		kg	10.0	10.0	15.0	16.0	19.0
	Shipping Weight	lbs.	26.5	26.5	37.5	39.7	50.3
		kg	12.0	12.0	17.0	18.0	23.0
OUTDOOR UNIT DIMENSIONS & WEIGHTS	Dimension (W×H×D)	in.	28-1/8×21-2/8×9-4/8	28-1/8×21-2/8×9-4/8	31-7/8×23×11	33-7/8×25-5/8×12-2/8	35-3/8×29-4/8×13-3/8
		mm	715×540×240	715×540×240	810×585×280	860×650×310	900×750×340
	Packing (L×H×W)	in.	32-5/8×23-1/8×13-3/8	32-5/8×23-1/8×13-3/8	37×25-2/8×15-1/8	39-1/8×28-3/8×16-4/8	41-6/8×32-2/8×17-6/8
		mm	830×588×340	830×588×340	940×640×385	995×720×420	1,060×820×450
	Net Weight	lbs.	52.9	57.3	86.0	101.4	121.3
		kg	24.0	26.0	39.0	46.0	55.0
	Shipping Weight	lbs.	57.3	61.7	92.6	110.3	132.3
		kg	26.0	28.0	42.0	50.0	60.0

Standard **With Registration**

7YR. PARTS WARRANTY 10YR. COMPRESSOR WARRANTY 10YR. PARTS WARRANTY 10YR. COMPRESSOR WARRANTY

DIMENSIONAL DRAWINGS: WALL-MOUNTED HEAT PUMP

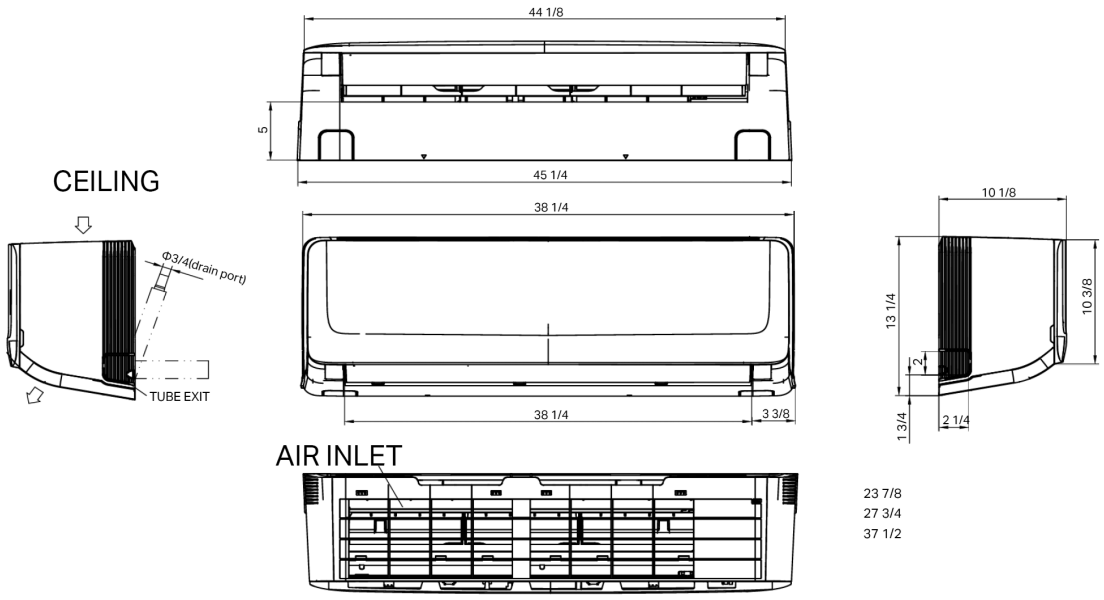
INDOOR UNITS/ FAHSW09A1C, FAHSW12A1C



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

UNITS: INCHES

INDOOR UNITS/ FAHFW18A3D, FAHFW24A3D

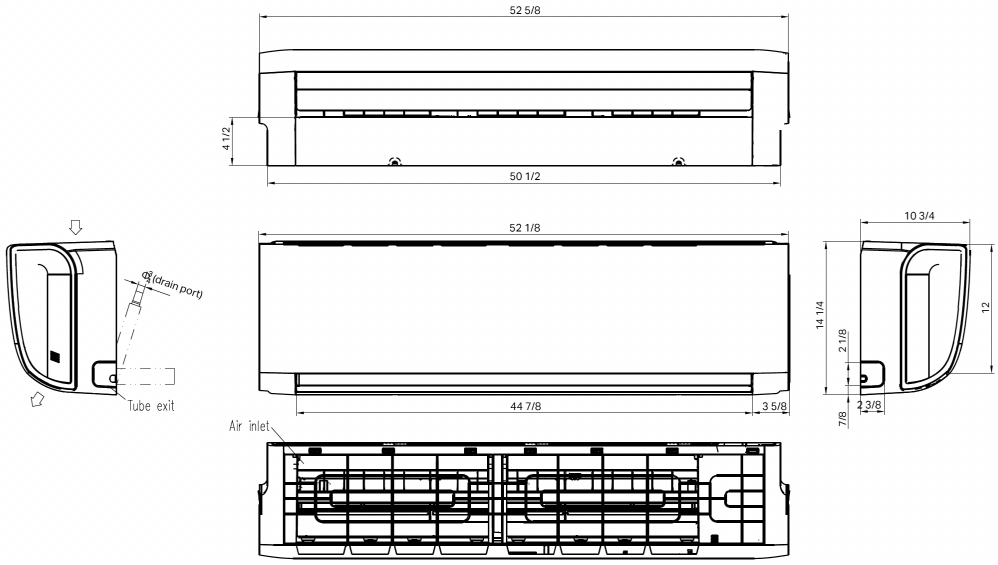


Model	W	H	D
FAHFW18A3D, FAHFW24A3D	45 2/8"	13 2/8"	10 1/8"

UNITS: INCHES

DIMENSIONAL DRAWINGS: WALL-MOUNTED HEAT PUMP

INDOOR UNITS/ FAHSW36A3D

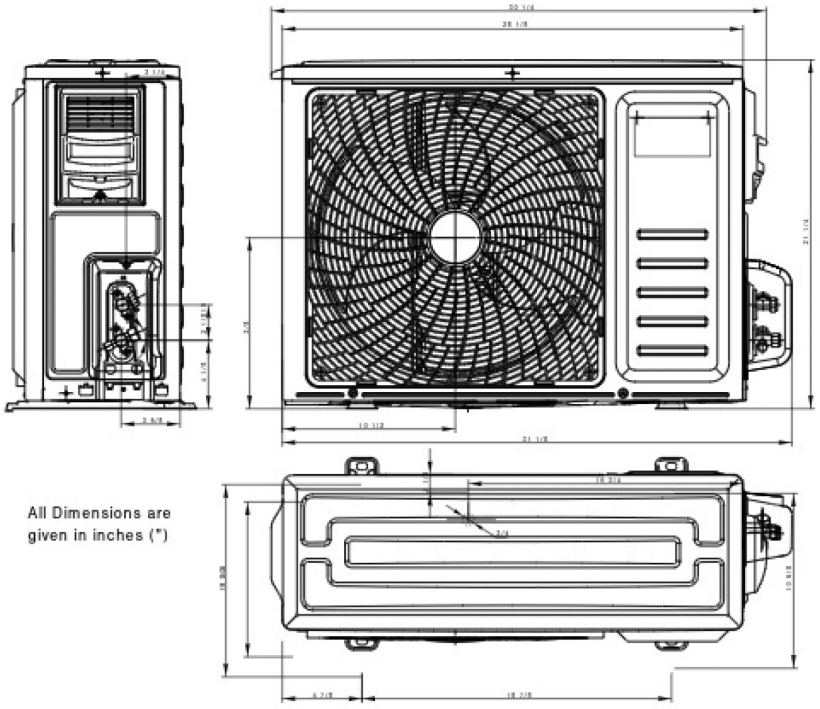


Model	W	H	D
FAHSW36A3D	52 5/8"	14 2/8"	10 6/8"

UNITS: INCHES

DIMENSIONAL DRAWINGS: OUTDOOR HEAT PUMP

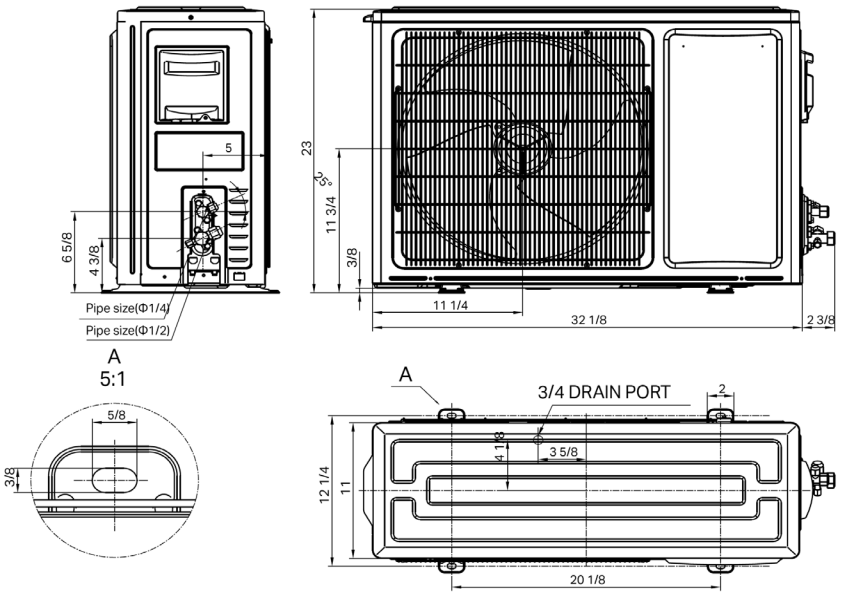
OUTDOOR UNITS/ FSHSR09B1C, FSHSR12B1C



Model	W	H	D
FSHSR09B1C, FSHSR12B1C	28 1/8"	21 2/8"	8 4/8"

UNITS: INCHES

OUTDOOR UNITS/ FSHSR18B3D

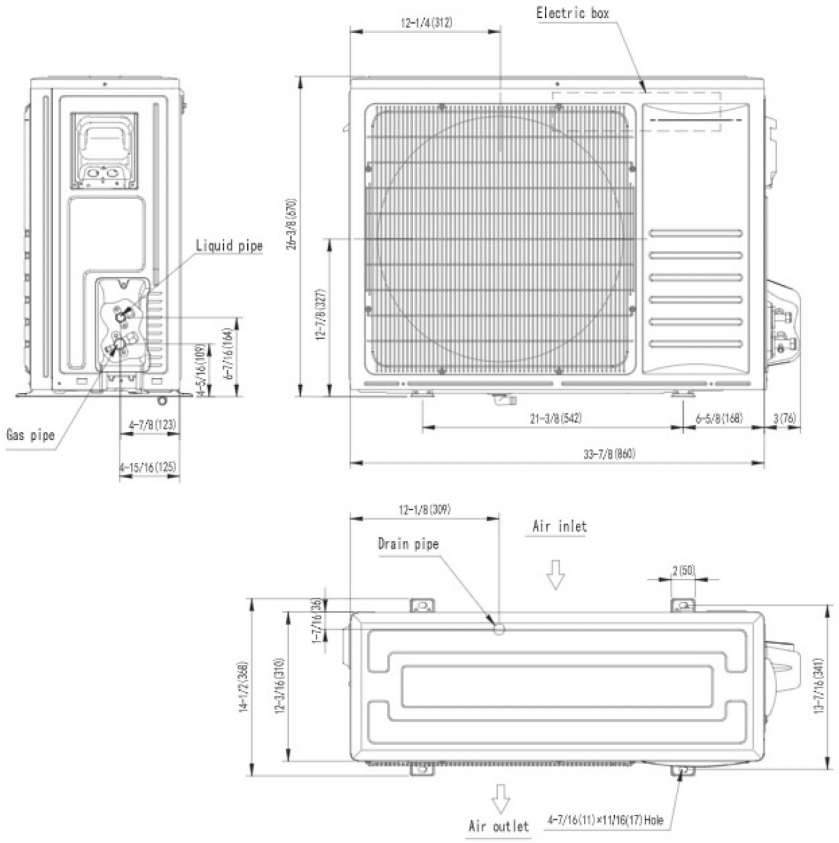


Model	W	H	D
FSHSR18B3D	32 1/8"	23"	11"

UNITS: INCHES

DIMENSIONAL DRAWINGS: OUTDOOR HEAT PUMP

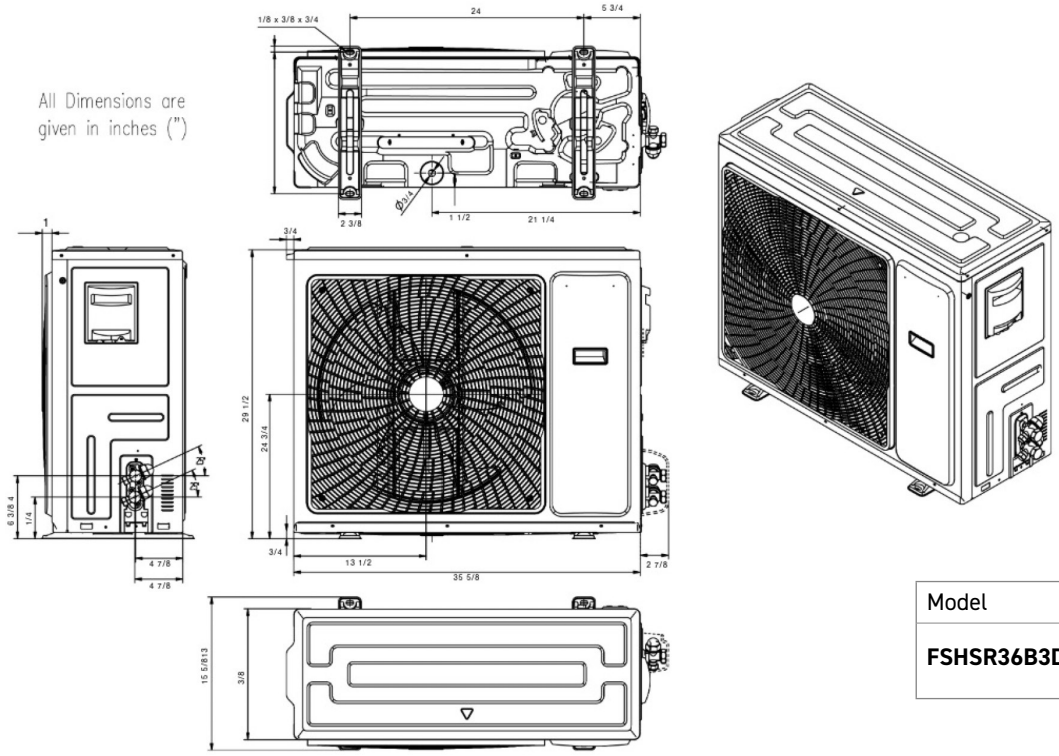
OUTDOOR UNITS/ FSHSR24B3D



Model	W	H	D
FSHSR24B3D	33 7/8"	26 3/16"	12 2/8"

UNITS: INCHES

OUTDOOR UNITS/ FSHSR36B3D



Model	W	H	D
FSHSR36B3D	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"	FSHW091C, FSHW121C
T32350	35'	1/4"	3/8"	

Kit#	Length (ft.)	Liquid	Suction	System Model
T42150	15'	1/4"	1/2"	FSHW183D
T53250	25'	3/8"	5/8"	FSHW243D, FSHW363D

*Insulated line sets are available for all Friedrich split sysmets 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.)
FSHW091C, FSHW121C	10	66
FSHW183D, FSHW243D	10	98
FSHW363D	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.



FreshAire 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. Seee Installation and Operational Manual for additional information & requirements.