

Floating Air® Pro Ductless Split Systems

WALL-MOUNTED, SINGLE ZONE HEAT PUMPS

PURCHASER	P.O. #	DATE
	1	
PROJECT	LOCATION	
ENGINEER	ARCHITECT	
	7.11.01.11.20.1	
SUBMITTED BY	FOR APPROVAL	FOR REFERENCE

ITEM	PLAN DESIGNATION	QUANTITY	COOLING BTU/H	VOLTAGE	FRIEDRICH MODEL

Features

- 115V Single Zone Heat Pump
- Precision Inverter® technology (variable speed compressor)
- Soft start compressor
- BLDC motor
- High efficiency for low operating cost
- DiamonBlue Advanced Corrosion Protection®
- Auto Clean indoor coil
- Cooling/Heating/Fan/Auto mode
- Surge Cool/Heat
- Natural air flow
- Ultra quiet operation
- Sleep mode
- Auto restart
- Auto changeover
- 24-hour on/off timer
- ENERGY STAR® qualified model
- Hidden display (only visible during operation)

OPERATION IN EXTREME CONDITIONS

- Low ambient operation down to 5° F (Cooling mode)
- Low ambient operation down to -4° F (Heating mode)





Wi-Fi

Wi-Fi available on select models for control anytime, anywhere

- Easy to use FriedrichGo™ app
- Control with smartphone
- Compatible with Amazon Alexa and Google Home



WIRELESS
REMOTE CONTROL









SPECIFICATIONS

PERFORMANCE RATINGS		115 volt models		230/208 volt models		
SYSTEM MODEL NO.		FPHW091 FPHW091A Wi-Fi	FPHW121 FPHW121A Wi-Fi	FPHW093 FPHW093A Wi-Fi	FPHW123 FPHW123A Wi-Fi	
INDOOR MODEL		FPHSW09A1A FPHSW09A1B Wi-Fi	FPHSW12A1A FPHSW12A1B Wi-Fi	FPHFW09A3A FPHFW09A3B Wi-Fi	FPHFW12A3A FPHFW12A3B Wi-Fi	
OUTDOOR MODEL		FPHSR09A1A	FPHSR12A1A	FPHSR09A3A	FPHSR12A3A	
SPECIFICATIONS						
CAPACITY COOLING (RATED)	Btu	9000	12000	9000	12000	
CAPACITY COOLING MIN - MAX	Btu	3600-10000	4000-13500	3600-10000	4000-13500	
CAPACITY HEATING (RATED) @ 47°F	Btu	9500	13000	9500	13000	
CAPACITY HEATING (RATED) @ 17°F	Btu	5000	7500	5000	7500	
CAPACITY HEATING MIN - MAX	Btu	3600-10500	4000-14000	3600-10500	4000-14000	
SENSIBLE HEAT RATIO		76%	77%	76%	77%	
COP		3.56	3.46	3.88	3.42	
HSPF		10.0	10.5	10.7	10.5	
SEER		19.5	22.0	22.5	22.0	
EER		12.8	13.0	13.7	13.0	
ENERGY STAR		YES	YES	YES	YES	
MOISTURE REMOVAL	Pts/h	1.9	2.5	1.9	2.5	
AIRFLOW (HIGH/MED/LOW/QUIET)	CFM	424/382/323/247	424/382/323/247	424/382/323/247	424/382/323/247	
SOUND RATING - INDOOR (HIGH/MED/LOW/QUIET)	dB-A	39/32/29/26	39/32/29/26	39/32/29/26	39/32/29/26	
SOUND RATING - OUTDOOR	dB-A	53	53	53	53	
OPERATING RANGE (HEATING)	°F	(-4° – 75°)	(-4° – 75°)	(-4° – 75°)	(-4° – 75°)	
OPERATING RANGE (COOLING)	°F	(5° – 115°)	(5° – 115°)	(5° – 115°)	(5° – 115°)	
EST. YEARLY OPERATING COST	U.S. \$	\$61	\$72	\$53	\$72	
ELECTRICAL DATA	σ.σ. φ	Ψ	4.2	400	4/-	
POWER SOURCE	V-Hz-Phase	115-60-1	115-60-1	230/208-60-1	230/208-60-1	
MIN. AMPACITY	A	13.5	16.5	10	10	
COOLING WATTS	W	700	950	655	960	
COOLING AMPS	**	6.3	8.3	2.9	4.3	
HEATING WATTS	W	780	1100	720	1110	
HEATING AMPS	**	7.0	9.7	3.1	5.0	
MAX. TD FUSE/BREAKER	Α	20	25	15	15	
POWER AND COMMUNICATION CABLE	No. x AWG	4 x 14AWG	4 x 14AWG	4 x 14AWG	4 x 14AWG	
REFRIGERATION SYSTEM	NO. X AVVO	4 X 14AVVO	4 × 14AVVO	4 / 14/14	4 / 14/4/10	
REFRIGERANT		R410a	R410a	R410a	R410a	
COMPRESSOR TYPE		Rotary	Rotary	Rotary	Rotary	
CONNECTIONS		Flare	Flare	Flare	Flare	
LIQUID LINE O.D.	in	1/4	1/4	1/4	1/4	
SUCTION LINE O.D.	in	3/8	3/8	3/8	3/8	
REFRIGERANT CHARGE		33.5	40.9	33.5	40.9	
FACTORY PRECHARGE	oz.	25	25	25	25	
MIN. / MAX. LINE LENGTH	ft.	9.8-50	9.8-50	9.8-50	9.8-50	
MAX. HEIGHT DIFFERENCE	ft	33	33	33	33	
DIMENSIONS & WEIGHT	π	33	აა	აა		
INDOOR UNIT						
W x H x D	in	22.7/214	1 ¹ /8 x 8 ¹ / ₂	22.7/01	1 ¹ /8 x 8 ¹ /2	
				+	1	
NET WEIGHT	lbs	20	20	20	20	
SHIPPING WEIGHT	lbs	24.25	24.25	24.25	24.25	
OUTDOOR UNIT		00.1/- 40. 0.1/	04.7/- 00.44	00.1/- 4001/	04.7/- 02.44	
W x H x D	in	28 ¹ /8 x 19 x 9 ¹ / ₂	31 ⁷ /8 x 23 x 11	28 ¹ /8 x 19 x 9 ¹ / ₂	31 ⁷ /8 x 23 x 11	
NET WEIGHT	lbs 	65	78	59.5	72.5	
SHIPPING WEIGHT	lbs	68	82.5	65	79	
TOTAL NET WEIGHT	lbs	85	98	79.5	92.5	
TOTAL SHIPPING WEIGHT	lbs	92.25	106.75	89.25	103.25	

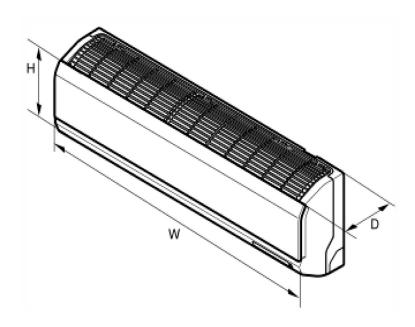
Your operating costs will depend on your utility rates and use. The estimated operating cost is based on a electricity cost of \$.12 per kWh. For more information, visit www.ftc.gov/energy.

Due to continuing research in new energy-saving technology, specifications are subject to change without notice.



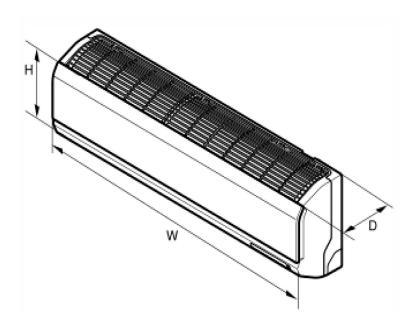


	W	Н	D
FRHSW09A1A (B)	33 7/8"	11 3/16"	8 1/2"

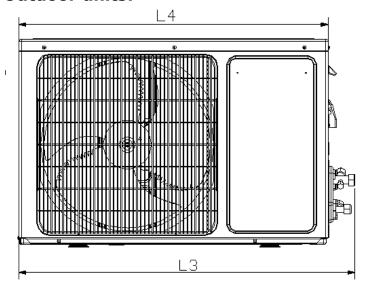


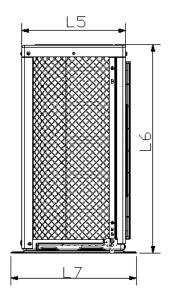
INDOOR UNIT / FRHSW12A1A (B)

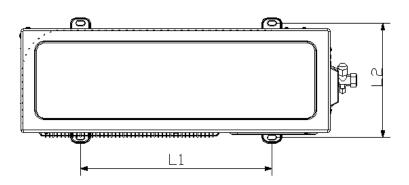
	W	Н	D
FRHSW12A1A (B)	33 7/8"	11 ³ /16"	8 1/2"



Outdoor units:







			Width	Depth	Height		
	L1	L2	L3	L4	L5	L6	L7
Model	(in.)	(in.)	(in.)	(in.)	(in.)	(in.)	(in.)
FPHSR09A1A	17 ⁷ /16	10 3/8	30 9/16	28 1/8	9 7/16	19	11 13/32
FPHSR12A1A	20 ¹ /16	12 ¹⁹ /32	34 ⁷ /8	31 ⁷ /8	11	23	13

ACCESSORIES

REFRIGERATION LINE SETS* (Required accessory)

Kit#	Length (ft.)	Liquid	Suction	System Model
T32150	15'	1/4"	3/8"	FPHW091 (A)
T32350	35'	1/4"	3/8"	FPHW121 (A)

^{*}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.)
FRHW091 (A)	10	50
FRHW121 (A)	10	50

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	

WALL CONTROLLER



FPWC1 Optional wired wall controller