



QUICK START GUIDE

Split System Heat Pump

Thank you for choosing our product.
Please read this Quick Start Guide carefully before
operation and retain it for future reference.

To download an electric version of this manual visit
www.greecomfort.com/flexx-eco-quick-start-guide

PLEASE READ FIRST


Although very similar to traditional unitary heat pump systems, the FLEXE Heat Pump Systems have a few key installation differences.

1. The “W1/W2 terminal on the Air handler” activates the electric heat kit (if equipped).

- The W1/W2/D terminal must be connected at the indoor and outdoor unit, and at the thermostat.
- The heat kit is activated during defrost by the outdoor unit’s “D” terminal. (Some models may have “W1/W2” instead of “D.”)
- For a heat pump application, not straight cooling or dual fuel, the “W1/W2” control wire will connect to “W2” or “AUX” on the thermostat

2. This system contains PVE oil, not POE. Cross-contamination is prohibited.

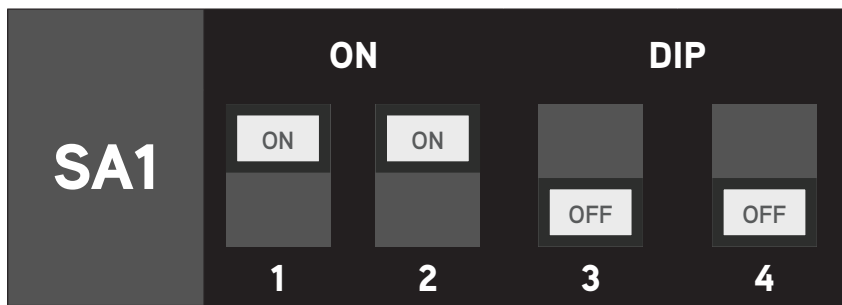
- It is highly recommended to install new refrigerant lines. If a line set must be reused, it must be professionally cleaned before installation.

 DO NOT DISCARD. STORE THIS INFORMATION IN A SAFE PLACE FOR FUTURE REFERENCE.

OUTDOOR UNIT DIP SWITCH SETTINGS

NOTE

- FLEXX outdoor units are configurable by a set of dip switches located in the upper right hand corner of the Main Control Board.
- By default, the capacity is set at the larger capacity. Defrost, Power Mode, and Energy Savings are all set for the Standard, by default.
- Power must be shut off prior to changing the dip switch settings.
- The outdoor unit capacity must match the indoor unit capacity. The Power Mode and Energy Saving modes cannot be set simultaneously.



NOTE

The ON position of the switch is towards the word "ON" located on the dip switch bank for the FLEXX outdoor unit.

Defrost	DIP#2	Operating Modes	DIP#3	DIP#4
Standard (Default)		Standard (Default)		
Strong Defrost		Energy Saving		
		Strong Mode		
		Self-adaption mode		

DEFROST

- **Standard Defrost Mode** is the default setting from the factory.
- **Strong Defrost Mode** is used in cold but high humidity environments such as areas near large bodies of water. Select Strong Defrost Mode if it is common practice to extend defrost timing or increase the frequency of defrost cycles in the area where the system is installed.
- In other cases where Standard Defrost Mode has been deemed insufficient, ensure the system is in good working order, the outdoor coil is clean, and the system is charged properly before changing the defrost setting to Strong Defrost Mode.

STRONG MODE

- In **Strong Defrost Mode**, the compressor will increase its speed at a higher rate than in **Standard Defrost Mode**, to reduce the ramp up time.
- **Strong Defrost Mode** may be enabled if **Standard Defrost Mode** is deemed insufficient by the customer but note it is less efficient.
- Always ensure the system is in good working order before enabling **Strong Defrost Mode**.

ENERGY SAVING MODE

- In **Energy Saving Mode**, the compressor will increase its speed at a lower slower rate. This can increase efficiency of the unit and provide additional dehumidification than the **Standard** or **Strong** modes.

SELF-ADAPTION MODE

- Function is not available, Do not use.

NOTE

Only one operation mode can be enabled at a time.

REFRIGERANT CHARGING

- This system contains PVE oil, not POE. Cross-contamination is prohibited.
- It is highly recommended to install new refrigerant lines. If a line set must be reused, it must be professionally cleaned before installation.
- Liquid line filter driers can be installed but are not required. Follow industry best practices for refrigerant piping.

FLEXE24HP230V1AO & FLEXE30HP230V1AO	
Length of Line Set	Add:
Less Than 31 Feet	None
41 Feet	1 Oz.
51 Feet	2 Oz.
61 Feet	3 Oz.
71 Feet	4 Oz.
81 Feet	5 Oz.
91 Feet	6 Oz.
From 92 to 98 Feet	None
98 Feet is the Maximum Line Length	

FLEXE36HP230V1AO to FLEXE60HP230V1AO	
Length of Line Set	Add:
Less Than 31 Feet	None
33 Feet	1 Oz.
36 Feet	2 Oz.
39 Feet	3 Oz.
42 Feet	4 Oz.
45 Feet	5 Oz.
48 Feet	6 Oz.
51 Feet	7 Oz.
54 Feet	8 Oz.
57 Feet	9 Oz.
60 Feet	10 Oz.
63 Feet	11 Oz.
66 Feet	12 Oz.
69 Feet	13 Oz.
72 Feet	14 Oz.
75 Feet	15 Oz.
78 Feet	1 lb.
81 Feet	1 lb. 1 Oz.
84 Feet	1 lb. 2 Oz.
87 Feet	1 lb. 3 Oz.
90 Feet	1 lb. 4 Oz.
93 Feet	1 lb. 5 Oz.
96 Feet	1 lb. 6 Oz.
99 Feet	1 lb. 7 Oz.
102 Feet	1 lb. 8 Oz.
105 Feet	1 lb. 9 Oz.
108 Feet	1 lb. 10 Oz.
111 Feet	1 lb. 11 Oz.
114 Feet	1 lb. 12 Oz.
117 Feet	1 lb. 13 Oz.
120 Feet	1 lb. 14 Oz.
123 Feet	1 lb. 15 Oz.
126 Feet	2 lb.
129 Feet	2 lb. 1 Oz.
132 Feet	2 lb. 2 Oz.
135 Feet	2 lb. 3 Oz.
138 Feet	2 lb. 4 Oz.
141 Feet	2 lb. 5 Oz.
144 Feet	2 lb. 6 Oz.
147 Feet	2 lb. 7 Oz.
150 Feet	2 lb. 8 Oz.
153 Feet	2 lb. 9 Oz.
156 Feet	2 lb. 10 Oz.
159 Feet	2 lb. 11 Oz.
162 Feet	2 lb. 12 Oz.
From 163 to 164 Feet	None
164 Feet is the Maximum Line Length	

COLD WEATHER STARTUP

The FLEXX outdoor unit is factory equipped with a crankcase heater.

- In outdoor temperatures below 32°F (0°C), ensure that power is applied to the outdoor unit for a minimum of 8 hours prior to startup.
- Upon power application, check the operation of the crankcase heater by removing the front access panel, opening the compressor blanket, and checking to see if the crankcase heater is hot.
- The crankcase heater ensures that liquid refrigerant is not present in the compressor before startup.
- Liquid refrigerant is not compressible and will force the compressor oil out of the compressor. This will damage the compressor.

INSTALLATION TIP

To make the best use of the 8 hour preheat, do the following:

1. Set the outdoor and indoor units
2. Install the refrigerant piping
3. Perform a leak check
4. Pull a 500 micron vacuum
5. Connect line voltage to the outdoor unit
6. Weigh in additional charge, if needed
7. Open the indoor and outdoor shutoff valves
8. Power on the outdoor unit
9. Complete all other installation items once power is applied to the outdoor unit

AIR HANDLER DIP SWITCH SETTINGS

NOTE

- The FLEXX Air Handlers are configurable by a set of dip switches located on the main control board. For proper operation, ensure that the air handler blower settings match the outdoor unit capacity and ducting design. Power must be off prior to changing the dip switch settings.
- There are 8 static pressure settings for the blower.
- Air handler's control box Dip Switches are located on the Main Control Board inside the air handler control box.
- By default, the blower is set at Speed 4 for 2 & 2-1/2 Ton, Speed 6 for 3 through 5 Ton.
- Dip switch settings are on the following two pages.
- As with all air handling equipment, a duct system with a design that exceeds the capabilities of the installed equipment will result in customer discomfort, limited performance, and reduced equipment life.

NOTE

- Only the "HEAT (SA2)" dip switches are adjusted.
- The "COOL (SA1)" dip switches must remain in the "ON" position.

Model	FLEXE24HP230V1AH		Model	FLEXE30HP230V1AH	
	HEAT (SA2)	COOL (SA1)		HEAT (SA2)	COOL (SA1)
Speed 1			Speed 1		
Speed 2			Speed 2		
Speed 3			Speed 3		
Speed 4			Speed 4		
Speed 5			Speed 5		
Speed 6			Speed 6		
Speed 7			Speed 7		
Speed 8			Speed 8		

Model	FLEXE36HP230V1AH	
	HEAT (SA2)	COOL (SA1)
Speed 1		
Speed 2		
Speed 3		
Speed 4		
Speed 5		
Speed 6		
Speed 7		
Speed 8		

Model	FLEXE42HP230V1AH	
	HEAT (SA2)	COOL (SA1)
Speed 1		
Speed 2		
Speed 3		
Speed 4		
Speed 5		
Speed 6		
Speed 7		
Speed 8		

Model	FLEXE48HP230V1AH	
	HEAT (SA2)	COOL (SA1)
Speed 1		
Speed 2		
Speed 3		
Speed 4		
Speed 5		
Speed 6		
Speed 7		
Speed 8		

Model	FLEXE60HP230V1AH	
	HEAT (SA2)	COOL (SA1)
Speed 1		
Speed 2		
Speed 3		
Speed 4		
Speed 5		
Speed 6		
Speed 7		
Speed 8		

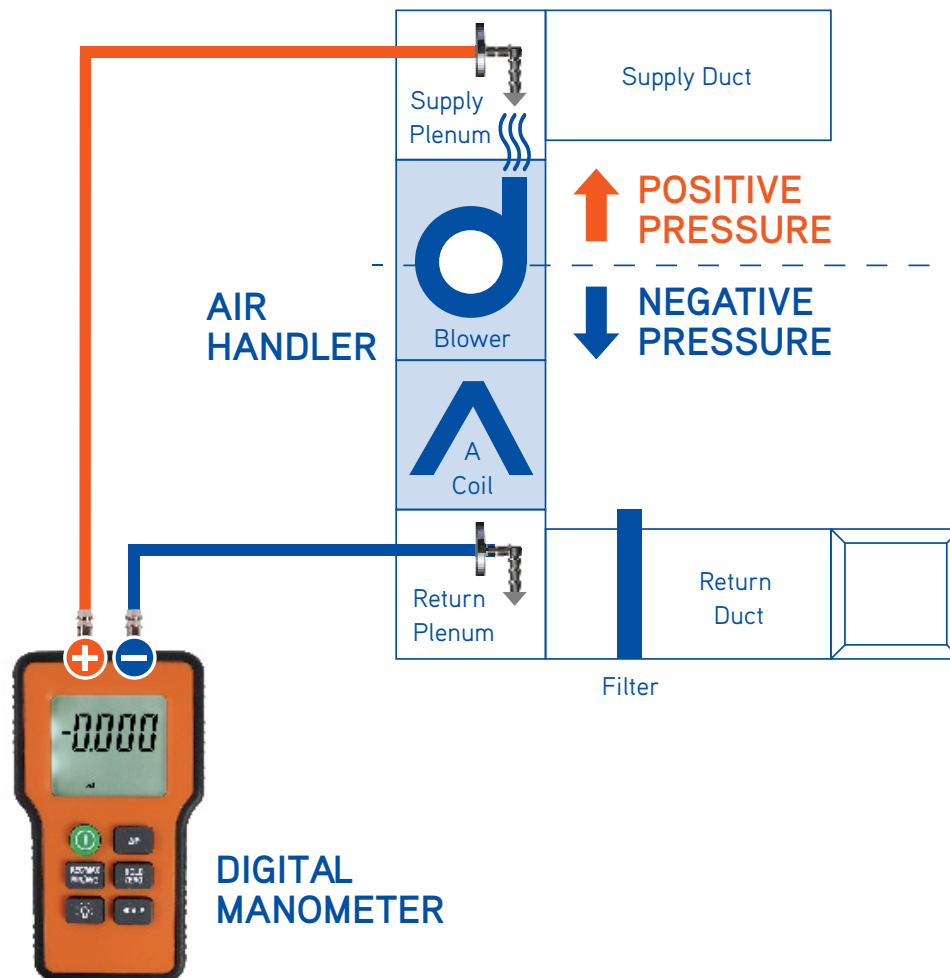
CHECKING STATIC PRESSURE

To properly utilize the below fan charts it is required to determine Total Static.

- Supply static must be measured in the supply trunk after the air handler and before branch ducts or registers in the airflow stream as shown in the figure above
- Return static must be measured in the return trunk towards the air handler after any branch returns, return grilles or filters
- Keep in mind static pressure drop will increase with a wet coil (cooling mode) vs dry coil (fan on or heating mode)

NOTE

- Total static includes everything the air handler is working against, supply duct return duct, branch duct, register boots, elbows, filter grille, filter and so on.
- Total Static is the difference between supply positive pressure and return negative pressure.



AIR HANDLER AIRFLOW RATINGS

The following CFM ratings are with a dry coil and included filter. For wet coil ratings, use 0.92 as the correction factor for the CFM.

Model	FLEXE24HP230V1AH											
Level	Static Pressure (In W.c.) and CFM											
	0	0.1	0.15	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
Speed 1	1030	900	-	-	-	-	-	-	-	-	-	-
Speed 2	1080	960	900	-	-	-	-	-	-	-	-	-
Speed 3	1220	1120	1060	990	-	-	-	-	-	-	-	-
Speed 4	1380	1250	1120	1070	1020	920	-	-	-	-	-	-
Speed 5	1550	1490	1440	1390	1290	1180	1090	970	-	-	-	-
Speed 6	1620	1540	1500	1450	1400	1360	1250	1130	960	-	-	-
Speed 7	1700	1630	1580	1530	1450	1400	1370	1270	1150	970	-	-
Speed 8	1750	1700	1650	1600	1590	1500	1420	1330	1200	1050	950	-

Model	FLEXE30HP230V1AH											
Level	Static Pressure (In W.c.) and CFM											
	0	0.1	0.15	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
Speed 1	1110	980	-	-	-	-	-	-	-	-	-	-
Speed 2	1160	1040	980	-	-	-	-	-	-	-	-	-
Speed 3	1300	1200	1140	1070	-	-	-	-	-	-	-	-
Speed 4	1460	1330	1200	1150	1100	1000	900	-	-	-	-	-
Speed 5	1630	1570	1520	1470	1370	1260	1090	900	-	-	-	-
Speed 6	1700	1620	1580	1530	1480	1440	1330	1210	1040	920	-	-
Speed 7	1780	1710	1660	1610	1530	1480	1450	1350	1230	1130	960	-
Speed 8	1800	1780	1730	1680	1670	1580	1500	1410	1280	1150	970	-

Model	FLEXE36HP230V1AH											
Level	Static Pressure (In W.c.) and CFM											
	0	0.1	0.15	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
Speed 1	1050	950	-	-	-	-	-	-	-	-	-	-
Speed 2	1220	1120	1020	960	-	-	-	-	-	-	-	-
Speed 3	1380	1260	1200	1100	950	-	-	-	-	-	-	-
Speed 4	1630	1580	1500	1430	1370	1200	1050	970	-	-	-	-
Speed 5	1710	1650	1600	1560	1480	1400	1250	1130	960	-	-	-
Speed 6	1775	1725	1675	1635	1560	1495	1405	1315	1205	1040	-	-
Speed 7	1840	1800	1750	1710	1640	1590	1500	1420	1330	1220	1100	930
Speed 8	1870	1830	1810	1800	1760	1690	1620	1520	1440	1350	1250	1150

Model	FLEXE42HP230V1AH											
Level	Static Pressure (In W.c.) and CFM											
	0	0.1	0.15	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
Speed 1	1640	1500	-	-	-	-	-	-	-	-	-	-
Speed 2	1680	1560	1500	-	-	-	-	-	-	-	-	-
Speed 3	1810	1690	1620	1550	-	-	-	-	-	-	-	-
Speed 4	1930	1830	1770	1710	1580	1480	-	-	-	-	-	-
Speed 5	2200	2110	2040	1980	1860	1720	1620	1490	-	-	-	-
Speed 6	2240	2190	2145	2100	2010	1870	1750	1615	1500	-	-	-
Speed 7	2280	2240	2200	2180	2130	2080	2000	1880	1750	1600	-	-
Speed 8	2300	2260	2220	2190	2140	2090	2040	1980	1930	1800	1700	1550

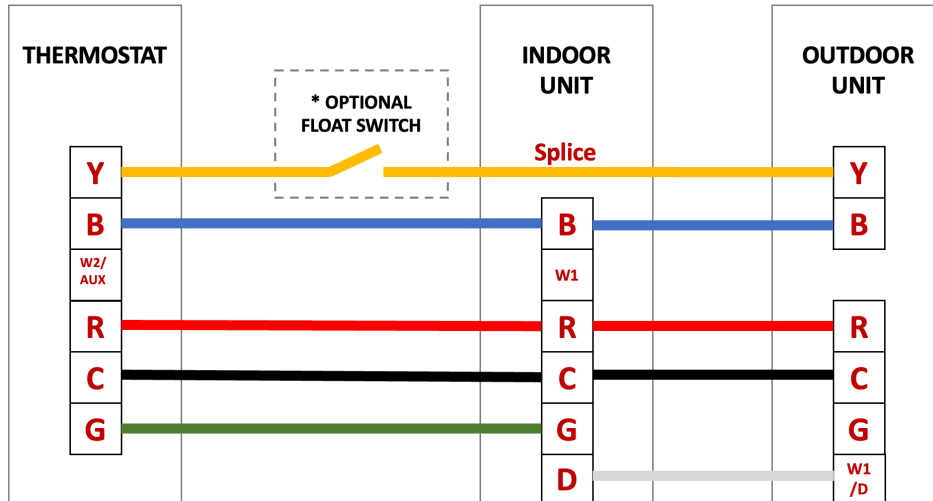
Model	FLEXE48HP230V1AH											
Level	Static Pressure (In W.c.) and CFM											
	0	0.1	0.15	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
Speed 1	1100	1000	-	-	-	-	-	-	-	-	-	-
Speed 2	1300	1200	1100	1010	-	-	-	-	-	-	-	-
Speed 3	1380	1260	1200	1100	950	-	-	-	-	-	-	-
Speed 4	1710	1650	1600	1560	1480	1400	1230	1150	1080	-	-	-
Speed 5	1775	1725	1675	1635	1560	1495	1405	1315	1205	1075	-	-
Speed 6	1840	1800	1750	1710	1640	1590	1500	1420	1330	1220	1080	900
Speed 7	1870	1830	1810	1800	1760	1690	1620	1520	1440	1350	1250	1150
Speed 8	1900	1860	1840	1830	1790	1720	1650	1550	1470	1380	1280	1180

Model	FLEXE60HP230V1AH											
Level	Static Pressure (In W.c.) and CFM											
	0	0.1	0.15	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
Speed 1	1660	1540	1470	-	-	-	-	-	-	-	-	-
Speed 2	1850	1720	1650	1600	-	-	-	-	-	-	-	-
Speed 3	1920	1800	1730	1650	1480	-	-	-	-	-	-	-
Speed 4	2110	2000	1950	1860	1760	1640	1500	-	-	-	-	-
Speed 5	2250	2200	2190	2140	2040	1930	1800	1670	1520	-	-	-
Speed 6	2260	2220	2200	2170	2090	2010	1910	1760	1650	1550	-	-
Speed 7	2300	2260	2230	2200	2150	2115	2050	1990	1920	1790	1650	1470
Speed 8	2320	2280	2250	2230	2190	2140	2080	2040	2000	1950	1920	1890

24V CONTROL WIRING SCHEMATIC

Thermostat wiring without heat kit-B Revision Blower shutdown during defrost

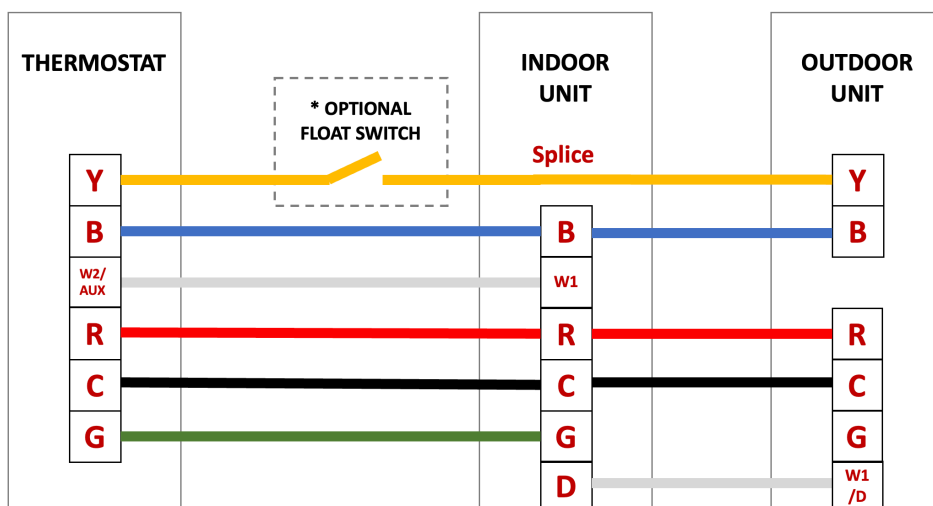
- The heat kit is activated during defrost by the outdoor unit's "D" terminal. (Some models may have "W1/W2" instead of "D.")



NOTE

Blower shuts down during defrost to prevent cold air in the space. Indoor - Terminal block could be marked as W1 or W2. Outdoor - Terminal block could be marked as W1/D or W2/D.

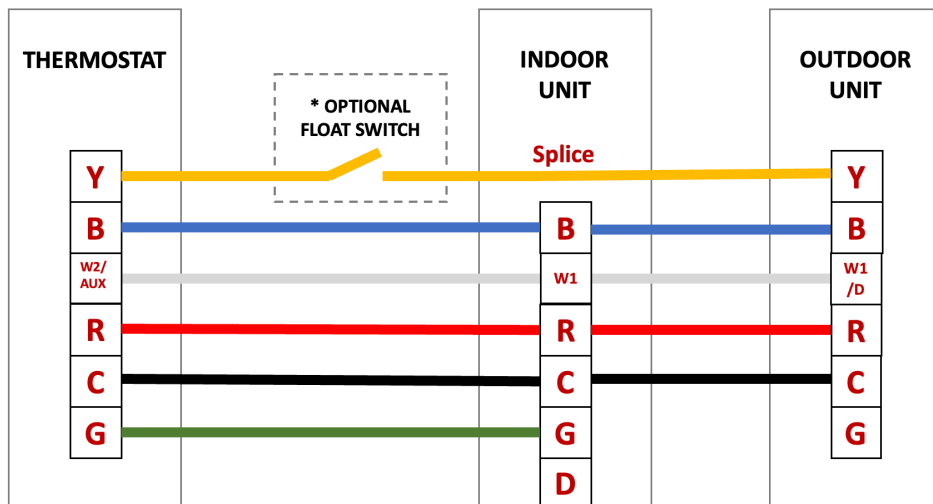
Thermostat wiring with heat kit-B Revision Blower shutdown during defrost



NOTE

Blower shuts down and heat kit does not activate. Indoor - Terminal block could be marked as W1 or W2. Outdoor - Terminal block could be marked as W1/D or W2/D.

Thermostat wiring without heat kit-B Revision
 Activate heat kit during defrost



NOTE

Heat kit and blower runs during defrost. Indoor - Terminal block could be marked as W1 or W2.
 Outdoor - Terminal block could be marked as W1/D or W2/D.



Air comfort for all

U.S. CONTACT INFORMATION TRADEWINDS, LLC

E-mail: info@twciimate.com

Contractor Support: 888-850-7928 | Mon-Fri 8 AM - 5 PM EST

GREECOMFORT.COM
