

FEATURES

- Quiet horizontal discharge
- Compatible with side and bottom air discharge
- Powder-coated galvanized steel cabinet
- Electric heat kit available as a field-installed option
- High-efficiency compressors operate smoothly and quietly
- Internal safeguards protect the compressor against high and low pressure, and coil temperature
- Aluminum tube/aluminum fin coil
- High-efficiency ECM blower motor
- Compliant with UL-60335 certification
- Fit universal curbs
- All sizes fit in a standard truck bed
- Convenient access panels; slide out design for blower motor
- Uses more environmentally friendly R454B refrigerant
- Full DC variable speed condenser motor, more efficient, smarter, and quieter
- AHRI Certified and ETL listed

SRHP SERIES

HEAT PUMP PACKAGED UNIT

13.4 SEER2

Capacity: 24 - 60 kBTU/h



Warranty—5 years on parts and 10 years on compressor and heat exchanger.
(Limitations apply, see actual warranty for complete details.)
visit www.comfort-aire.com



MODEL NUMBER GUIDE

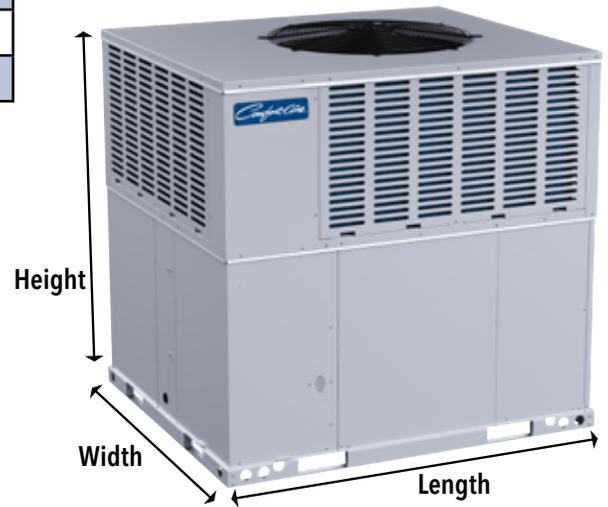
S	R	H	P	24	00	S	1	A
SE Series	Residential	Heat Pump	Package Unit	Cooling Capacity BTUH x 1000	Heating Capacity BTUH x 1000	Standard Efficiency	Power 1=208/230-1-60	Revision Level

SPECIFICATIONS

	SRHP2400S1A	SRHP3600S1A	SRHP4800S1A	SRHP6000S1A
PERFORMANCE				
Cooling (BTU/h) (@95°F)	22,800	34,000	46,500	57,000
SEER2	13.4	13.4	13.4	13.4
EER2 (@95°F)	11.0	11.0	11.0	11.0
Heating Capacity (@47°F)	22,800	34,200	48,000	57,000
HSPF2	6.70	6.70	6.70	6.70
ELECTRICAL DATA				
Voltage / Phase (60 Hz)	208/230/1	208/230/1	208/230/1	208/230/1
Min. / Max. Voltage	187/253	187/253	187/253	187/253
MCA	17.8	27.7	33.9	29.1
MOP	25	35	45	50
COMPRESSOR				
Type	Rotary	Rotary	Scroll	Scroll
Stage	Single	Single	Single	Single
RLA	12	18	22	28
LRA	55	72	95	125
OUTDOOR FAN MOTOR				
Motor Type	PSC	PSC	PSC	PSC
Capacitor(uF)	6	6	15	15
Horsepower (HP)	1/12	1/6	1/3	1/3
Full Load Amps (FLA)	0.8	1.0	2.1	2.1
Rated RPM	878	840	1050	1050
INDOOR BLOWER MOTOR				
Motor Type	PSC	ECM	PSC	ECM
Capacitor(uF)	12	/	20	/
Horsepower (HP)	1/5	1/2	4/5	3/4
Full Load Amps (FLA)	2.0	4.2	4.3	5.7
Rated RPM	908	880	976	950
REFRIGERATION SYSTEM				
Refrigerant Control	Orifice	Orifice	Orifice	Orifice
Refrigerant Charge (lbs. - oz.)	5-10	6-13	8-3	9-8
OPERATION RANGE				
Cooling(°F)	50-125	50-125	50-125	50-125
Heating(°F)	5-86	5-86	5-86	5-86
Sound Power (dB)	78	78	80	80

DIMENSIONS AND WEIGHTS

	SRHP2400S1A	SRHP3600S1A	SRHP4800S1A	SRHP6000S1A
Height (in.)	46-13/16	46-13/16	51-7/16	51-7/16
Width (in.)	35-1/16	35-1/16	44-13/16	44-13/16
Length (in.)	50-11/16	50-11/16	51-9/16	51-9/16
Net Weight (lbs.)	397	415	544	551

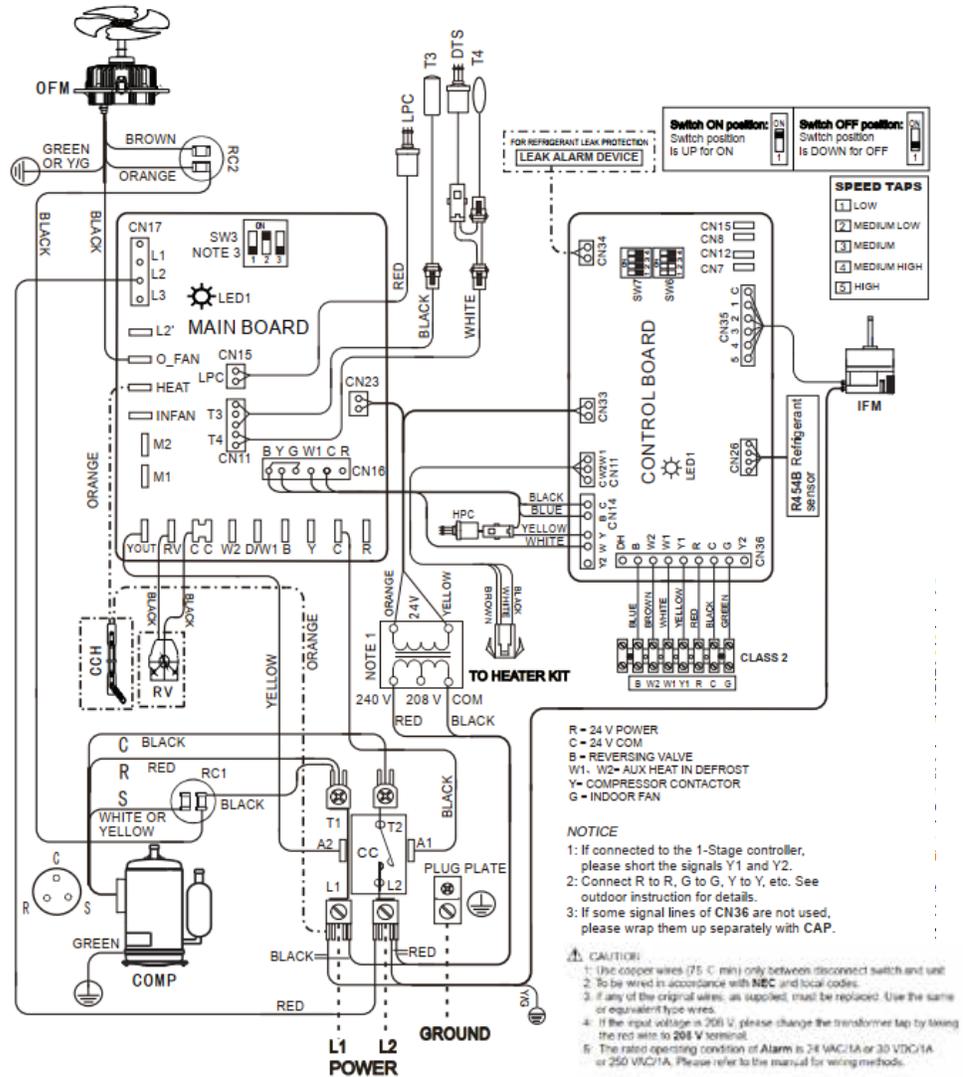


ELECTRIC HEAT KIT DATA

Model	Electrical Data						Heater Fan Speed		
	Model	KW	Stages	Amps	MCA	Max Fuse Breaker Amps	L	M	H
SRHP2400S1A	EHK-05J	3.8/5	1	18.1/20.8	23/26	25/30	•	•	•
	EHK-08J	5.6/7.5	1	27.1/31.3	34/40	35/40	x	•	•
	EHK-10J	7.5/10	1	36.1/41.7	46/53	50/60	x	•	•
SRHP3600S1A	EHK-05J	3.8/5	1	18.1/20.8	23/26	25/30	•	•	•
	EHK-08J	5.6/7.5	1	27.1/31.3	34/40	35/40	•	•	•
	EHK-10J	7.5/10	1	36.1/41.7	46/53	50/60	x	•	•
	EHK-15J	11.3/15	2	54.2/62.5	68/79	70/80	x	•	•
SRHP4800S1A	EHK-05J	3.8/5	1	18.1/20.8	23/26	25/30	•	•	•
	EHK-08J	5.6/7.5	1	27.1/31.3	34/40	35/40	•	•	•
	EHK-10J	7.5/10	1	36.1/41.7	46/53	50/60	•	•	•
	EHK-15J	11.3/15	2	54.2/62.5	68/79	70/80	x	•	•
	EHK-20J	15/20	2	72.3/83.4	91/105	100/110	x	x	•
SRHP6000S1A	EHK-05J	3.8/5	1	18.1/20.8	23/26	25/30	•	•	•
	EHK-08J	5.6/7.5	1	27.1/31.3	34/40	35/40	•	•	•
	EHK-10J	7.5/10	1	36.1/41.7	46/53	50/60	•	•	•
	EHK-15J	11.3/15	2	54.2/62.5	68/79	70/80	x	•	•
	EHK-20J	15/20	2	72.3/83.4	91/105	100/110	x	x	•

WIRING DIAGRAM

30/42/60(1PH)



CC	COMPRESSOR CONTACTOR
CCH	CRANKCASE HEATER
COMP	COMPRESSOR
DFC	DEFROST CONTROL
T4	AMBIENT TEMPERATURE SENSOR
T3	PIPE TEMPERATURE SENSOR
HPC	HIGH PRESSURE CUT-OUT CONTROL
LPC	LOW PRESSURE CUT-OUT CONTROL
DTS	DISCHARGE TEMPERATURE SWITCH
OFM	OUTDOOR FAN MOTOR
IFM	INDOOR FAN MOTOR
RC1	COMPRESSOR RUN CAPACITOR
RC2	OUTDOOR FAN MOTOR RUN CAPACITOR
RV	REVERSING VALVE
GND	GROUND CHASSIS

FACTORY STANDARD ————
FIELD INSTALLED - - - - -
FACTORY OPTIONAL - · - · - -

WARNING
CABINET MUST BE PERMANENTLY GROUNDED AND ALL WIRING TO CONFORM TO I.E.C., N.E.C., C.I.C. AND LOCAL CODES AS APPLICABLE. REPLACEMENT WIRE MUST BE THE SAME GAUGE AND INSULATION TYPE AS ORIGINAL WIRE. USE COPPER CONDUCTORS ONLY.

*** FACTORY DEFAULT**

SW3-1	ON	MANUAL DEFROST
	OFF	AUTOMATIC DEFROST *
SW3-2	ON	SINGLE-PHASE UNIT *
	OFF	THREE-PHASE UNIT
SW3-3	ON	DEFROSTING CYCLE: 30 min
	OFF	DEFROSTING CYCLE: 60 min *

The wiring diagram shown is for reference only, it maybe different from the actual product.

CONTROL BOARD LED (GREEN) CODE	
☀️ STEADY ON	NORMAL OPERATION
☀️ OFF	POWER SUPPLY FAULT
🔴 KEEP FLASHING	REFRIGERANT LEAK PROTECTION
🔴 3 FLASH-1/CYCLE	R454B REFRIGERANT SENSOR FAULT
🔴 4 FLASH-1/CYCLE	R454B REFRIGERANT SENSOR COMMUNICATION FAULT
🔴 8 FLASH-1/CYCLE	R454B REFRIGERANT SENSOR OVER SERVICE LIFE

MAIN BOARD LED (RED) CODE	
☀️ STEADY ON	NORMAL OPERATION
☀️ OFF	DEFROST CONTROL
🔴 1 FLASH	T3 SENSOR FAULT
🔴 2 FLASH	T4 SENSOR FAULT OR DTS PROTECTION
🔴 3 FLASH	LPC PROTECTION
🔴 4 FLASH	POWER PHASE FAULT
🔴 5 FLASH	CONDENSOR COIL TEMPERATURE PROTECTION IN COOLING (T3)
🔴 6 FLASH	AMBIENT TEMPERATURE LIMITED (T4)

NOTICE2

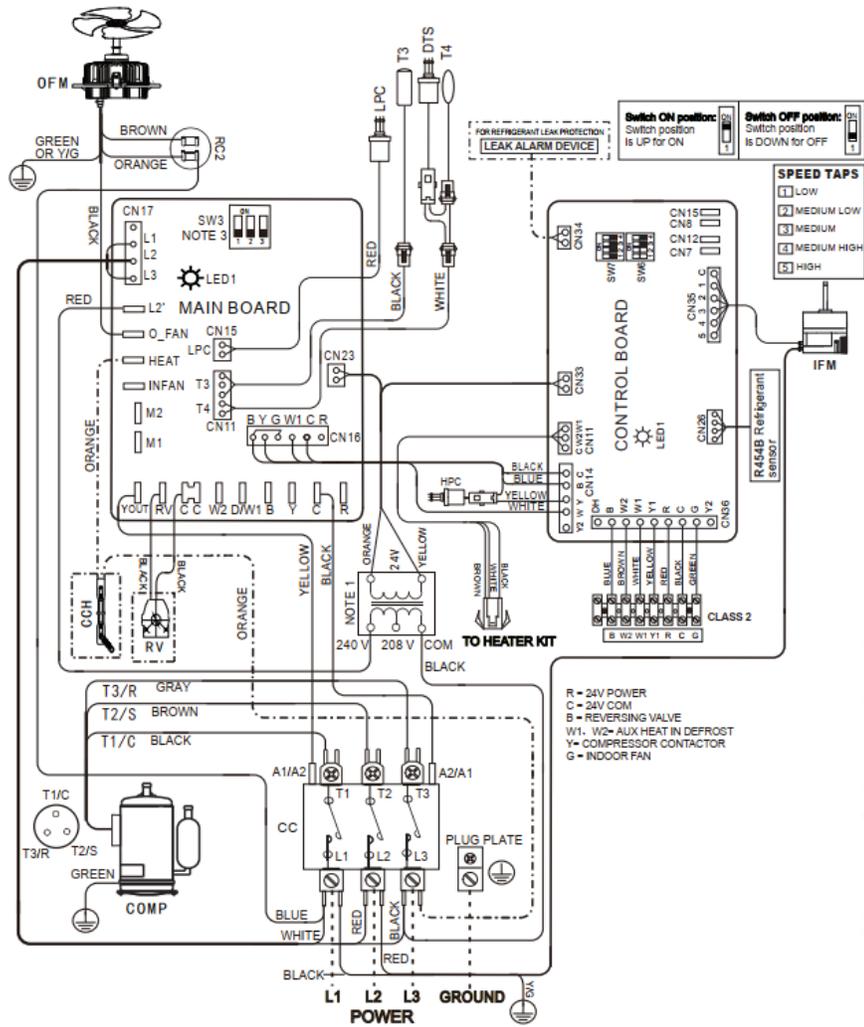
- Remove the red lead from "240 V" terminal and then connect there lead to "208 V" terminal on the transformer for 208 volts.
- "W2" wire is not provided in some models.
- "SW3" is only for hot pump system.
- "RV" is only for hot pump system; "RV" is not provided in some models.

OPTIONAL - - - - - FIELD INSTALLED - - - - -

DETAILED REFERENCE MANUAL INSTRUCTIONS			
	DIP SWITCH	Y1 OR G	W/W1/W2
SW6-1,2 FAN SPEED TAPS		2	3
		3	4
		4	5
		5	5
NOT USED			
SW6-3,4		FACTORY DEFAULT	
SW7-1,2 SW7-3,4		FACTORY DEFAULT	

WIRING DIAGRAM

60(3PH)



CC	COMPRESSOR CONTACTOR
CCH	CRANKCASE HEATER
COMP	COMPRESSOR
DFC	DEFROST CONTROL
T4	AMBIENT TEMPERATURE SENSOR
T3	FRE TEMPERATURE SENSOR
HPC	HIGH PRESSURE CUT OUT CONTROL
LPC	LOW PRESSURE CUT OUT CONTROL
DTS	DISCHARGE TEMPERATURE SWITCH
OFM	OUTDOOR FAN MOTOR
IFM	INDOOR FAN MOTOR
RC1	COMPRESSOR RUN CAPACITOR
RC2	OUTDOOR FAN MOTOR RUN CAPACITOR
RV	REVERSING VALVE
QND	GROUND CHASSIS

FACTORY STANDARD	————
FIELD INSTALLED	-----
FACTORY OPTIONAL	-----

WARNING
CABINET MUST BE PERMANENTLY GROUNDED AND ALL WIRING TO CONFORM TO I.E.C./I.E.C., C.I. CARD LOCAL CODES AS APPLICABLE. REPLACEMENT WIRE MUST BE THE SAME GAUGE AND INSULATION TYPE AS ORIGINAL WIRE. USE COPPER CONDUCTORS ONLY.

*** FACTORY DEFAULT**

SW3-1	ON MANUAL DEFROST
	OFF AUTOMATIC DEFROST *
SW3-2	ON SINGLE-PHASE UNIT
	OFF THREE-PHASE UNIT *
SW3-3	ON DEFROSTING CYCLE 30 min *
	OFF DEFROSTING CYCLE 60 min *

The wiring diagram shown is for reference only, it may be different from the actual product.

NOTICE

- Remove the red lead from "240 V" terminal and then connect the red lead to "208 V" terminal on the transformer for 208 volts.
- "W2" wire is not provided in some models.
- "SW3" is only for hot pump system.
- "RV" is only for hot pump system; "RV" is not provided in some models.

OPTIONAL	-----	FIELD INSTALLED	-----
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CONTROL BOARD LED (GREEN) CODE	
STEADY ON	NORMAL OPERATION
OFF	POWER SUPPLY FAULT
KEEP FLASHING	REFRIGERANT LEAK PROTECTION
3 FLASH/CYCLE	R654B REFRIGERANT SENSOR FAULT
4 FLASH/CYCLE	R654B REFRIGERANT SENSOR COMMUNICATION FAULT
6 FLASH/CYCLE	R654B REFRIGERANT SENSOR OVER SERVICE LIFE

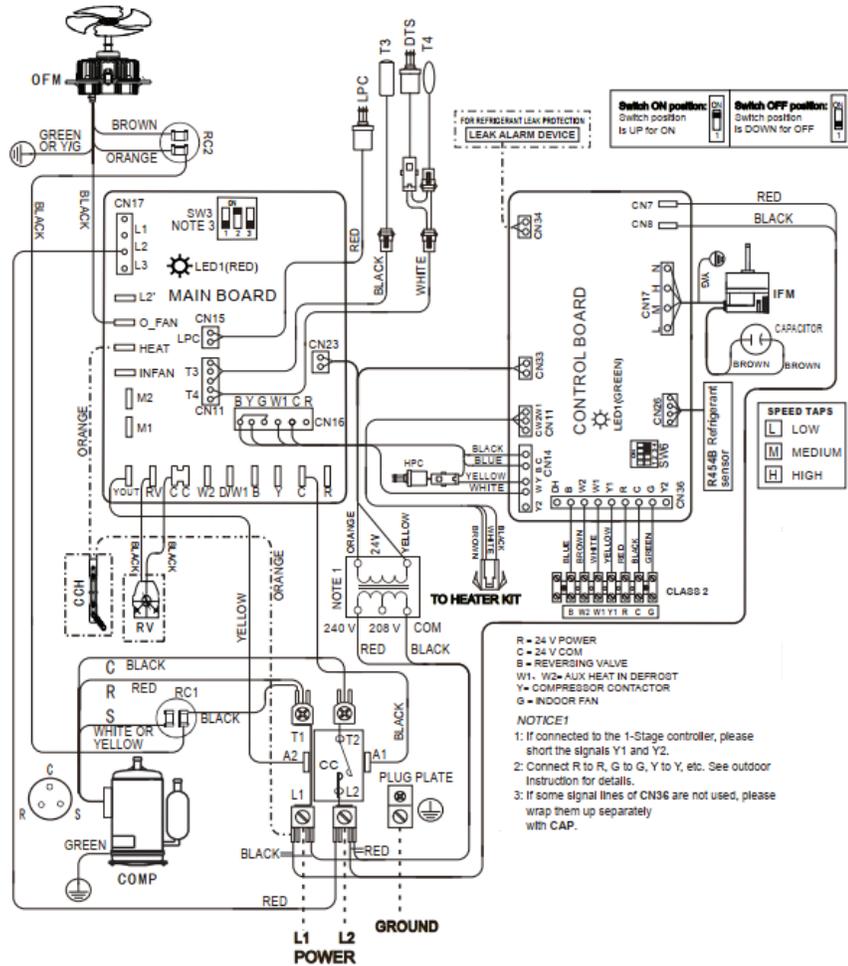
MAIN BOARD LED (RED) CODE	
STEADY ON	NORMAL OPERATION
OFF	DEFROST CONTROL
1 FLASH	T3 SENSOR FAULT
2 FLASH	T4 SENSOR FAULT OR DTS PROTECTION
3 FLASH	LPC PROTECTION
4 FLASH	POWER PHASE FAULT
5 FLASH	CONDENSOR COIL TEMPERATURE PROTECTION IN COOLING(T3)
6 FLASH	AMBIENT TEMPERATURE LIMITED(T4)

- NOTICE**
- Connect R to R, G to G, Y to Y, etc. See outdoor instruction for details.
 - If some signal lines of CN26 are not used, please wrap them up separately with CAP.
- CAUTION**
- Use copper wires (75 °C min) only between disconnect switch and unit.
 - To be wired in accordance with NEC and local codes.
 - If any of the original wires, as supplied, must be replaced. Use the same or equivalent type wires.
 - If the input voltage is 208 V, please change the transformer tap by taking the red wire to 208V terminal.
 - The rated operating condition of Alarm is 24 VAC/1A or 30 VDC/1A or 250 VAC/1A. Please refer to the manual for wiring methods.

DETAILED REFERENCE MANUAL INSTRUCTIONS			
SW6-1,2 FAN SPEED TAPS	DIP SWITCH	Y1 OR G	W/W1/W2
		2	3
		3	4
		4	5
		5	5
60 kBtu/h			
NOT USED			
SW6-3,4		FACTORY DEFAULT	
SW7-1,2 SW7-3,4		FACTORY DEFAULT	

WIRING DIAGRAM

24/48



CC	COMPRESSOR CONTACTOR
CCH	CRANKCASE HEATER
COMP	COMPRESSOR
DFC	DEFROST CONTROL
T4	AMBIENT TEMPERATURE SENSOR
T3	PIPE TEMPERATURE SENSOR
HPC	HIGH PRESSURE CUT-OUT CONTROL
LPC	LOW PRESSURE CUT-OUT CONTROL
DTS	DISCHARGE TEMPERATURE SWITCH
OFM	OUTDOOR FAN MOTOR
IFM	INDOOR FAN MOTOR
RC1	COMPRESSOR RUN CAPACITOR
RV	REVERSING VALVE
GND	GROUND CHASSIS

FACTORY STANDARD	—————
FIELD INSTALLED	-----
FACTORY OPTIONAL	-----

WARNING
 CABINET MUST BE PERMANENTLY GROUNDED AND ALL WIRING TO CONFORM TO I.E.C.N.E.C, C.L.C AND LOCAL CODES AS APPLICABLE. REPLACEMENT WIRE MUST BE THE SAME GAUGE AND INSULATION TYPE AS ORIGINAL WIRE. USE COPPER CONDUCTORS ONLY.

*** FACTORY DEFAULT**

SW3-1	ON	MANUAL DEFROST
	OFF	AUTOMATIC DEFROST *
SW3-2	ON	SINGLE-PHASE UNIT *
	OFF	THREE-PHASE UNIT
SW3-3	ON	DEFROSTING CYCLE 30 min
	OFF	DEFROSTING CYCLE 60 min *

The wiring diagram shown is for reference only, it maybe different from the actual product.

NOTICE 2

- 1: Remove the red lead from "240 V" terminal and then connect the red lead to "208 V" terminal on the transformer for 208 volts.
- 2: "W2" wire is not provided in some models.
- 3: "SW3" is only for hot pump system.
- 4: "RV" is only for hot pump system; "RV" is not provided in some models.

OPTIONAL ----- FIELD INSTALLED -----

CONTROL BOARD LED (GREEN) CODE	
STEADY ON	NORMAL OPERATION
OFF	POWER SUPPLY FAULT
KEEP FLASHING	REFRIGERANT LEAK PROTECTION
3 FLASH/CYCLE	R454B REFRIGERANT SENSOR FAULT
4 FLASH/CYCLE	R454B REFRIGERANT SENSOR COMMUNICATION FAULT
8 FLASH/CYCLE	R454B REFRIGERANT SENSOR OVER SERVICE LIFE

MAIN BOARD LED(RED) CODE	
STEADY ON	NORMAL OPERATION
OFF	DEFROST CONTROL
1 FLASH	T3 SENSOR FAULT
2 FLASH	T4 SENSOR FAULT OR DTS PROTECTION
3 FLASH	LPC PROTECTION
4 FLASH	POWER PHASE FAULT
5 FLASH	CONDENSOR COIL TEMPERATURE PROTECTION IN COOLING(T3)
6 FLASH	AMBIENT TEMPERATURE LIMITED(T4)

DETAILED REFERENCE MANUAL INSTRUCTIONS			
	DIP SWITCH	G	W/W1/W2
SW6-1,2 FAN SPEED TAPS	48 kBtu/h	L	H
	24 kBtu/h	L	H
		M	H
SW6-3	0 S OFF-DELAY		
	90S OFF-DELAY (FACTORY DEFAULT)		
NOT USED			
SW6-4			FACTORY DEFAULT

CAUTION

- 1: Use copper wires (75 C min) only between disconnect switch and unit.
- 2: To be wired in accordance with NEC and local codes.
- 3: If any of the original wires, as supplied, must be replaced. Use the same or equivalent type wires.
- 4: If the input voltage is 208 V, please change the transformer tap by taking the red wire to 208V terminal.
- 5: The rated operating condition of Alarm is 24 VAC/1A or 30 VDC/1A or 250 VAC/1A. Please refer to the manual for wiring methods.

AIR FLOW DATA

Model Number	Motor Speed		External Static Pressure-Inches W.C. [kPa]										
			0[0]	0.1[.02]	0.2[.05]	0.3[.07]	0.4[.10]	0.5[.12]	0.58	0.6[.15]	0.7[.17]	0.8[.20]	
SRHP2400S1A	Low- Factory	CFM	941.2	839.3	782.6	729.7	638.4	552.1	479.2	464.4	386.5	326.7	
		Current2/A	1.01	0	0	0	0	0	0	0	0	0	0
		Power2/W	231	226	222	218	213	210	207	206	200	195	
	Middle	CFM	1163.1	1045.6	989.5	933.5	873.3	821.7	723	708.2	608	502.3	
		Current2/A	1.38	1.35	1.33	1.31	1.28	1.26	1.23	1.23	1.2	1.17	
		Power2/W	315	306	301	296	289	282	273	272	266	257	
	High	CFM	1304.5	1182.4	1107.8	1044.2	982.9	932.5	869.6	824.8	713.5	594.2	
		Current2/A	1.66	1.6	1.58	1.55	1.53	1.5	1.48	1.46	1.43	1.4	
		Power2/W	371	355	348	341	335	326	318	314	306	297	
SRHP3600S1A	Low (Tap2)	CFM	1279.3	1233.8	1142	1095.8	1054.2	1006.1	969.8	959.6	887.5	821	
		Current2/A	2.28	2.33	2.39	2.43	2.46	2.51	2.54	2.55	2.62	2.67	
		Power2/W	258	260	270	280	281	290	298	300	310	317	
	Middle (Tap3)- Factory	CFM	1458.9	1420.2	1376.1	1287.4	1250.4	1212.5	1179.1	1171.5	1132.4	1090.5	
		Current2/A	3.03	3.1	3.15	3.23	3.28	3.33	3.37	3.37	3.43	3.48	
		Power2/W	370	380	390	400	410	415	420	420	430	440	
	High (Tap4)	CFM	1516.3	1477.6	1436.4	1344.6	1308	1270.3	1239	1230.7	1194.1	1154.8	
		Current2/A	3.3	3.37	3.43	3.52	3.56	3.61	3.65	3.66	3.71	3.76	
		Power2/W	410	420	430	445	450	460	462	464	470	480	
SRHP4800S1A	Low- Factory	CFM	1989	1934	1876	1812	1737	1653	1583	1567	1476	1354	
		Current2/A	17.38	17.24	17.17	17.09	16.98	16.89	16.81	16.77	16.64	16.48	
		Power2/W	3987	3956	3937	3919	3893	3872	3855	3845	3814	3777	
	Middle	CFM	2115	2048	1980	1914	1834	1739	1662	1645	1547	1427	
		Current2/A	17.69	17.56	17.44	17.36	17.25	17.13	17.06	17.06	16.92	16.77	
		Power2/W	4056	4026	3998	3979	3953	3925	3909	3910	3877	3841	
	High	CFM	2242	2164	2088	2006	1921	1821	1735	1721	1614	1496	
		Current2/A	18.12	18.04	17.92	17.81	17.66	17.55	17.44	17.44	17.31	17.15	
		Power2/W	4151	4133	4105	4079	4043	4018	3992	3993	3963	3924	
SRHP6000S1A	Low (Tap3)	CFM	1604.2	1550.3	1493.9	1431.4	1371.7	1311.9	1252.6	1253.4	1189.8	1126.2	
		Current2/A	2.52	2.58	2.66	2.73	2.8	2.87	2.93	2.95	3.03	3.11	
		Power2/W	290	300	310	320	330	341	350	355	370	380	
	Middle (Tap4)- Factory	CFM	1934.1	1992.4	1884.3	1797	1742.7	1690.4	1653.4	1643.3	1590.5	1540.7	
		Current2/A	3.38	3.93	4.01	4.09	4.18	4.27	4.33	4.34	4.43	4.52	
		Power2/W	490	500	511	529	540	551	560	562	580	590	
	High (Tap5)	CFM	2033.1	1984.5	1939	1891.9	1837.6	1788	1748.9	1739.8	1687.2	1640.2	
		Current2/A	4.35	4.42	4.48	4.56	4.65	4.73	4.8	4.81	4.9	4.99	
		Power2/W	567	575	586	599	610	620	630	634	650	660	

---Shaded boxes represent airflow outside the required 300 to 450cfm/ton, which are not recommended



Comfort-Cire®

"This product complies with all California product labeling laws including, but not limited to, the Safe Drinking Water and Toxic Enforcement Act of 1986, more commonly known as Proposition 65."

Due to ongoing product improvements, specifications and dimensions are subject to change and correction without notice or incurring obligations. Determining the application and suitability for use of any product is the responsibility of the installer. Additionally, the installer is responsible for verifying dimensional data on the actual product prior to beginning any installation preparations. Third party incentive and rebate programs have precise requirements as to product performance and certification. All products meet applicable regulations in effect on date of manufacture; however, certifications are not necessarily granted for the life of a product. Therefore, it is the responsibility of the applicant to determine whether a specific model qualifies for these incentive/rebate programs.