

Parts List, Charging Chart, Tech Labels, Wiring Diagram

PHX4 SERIES PACKAGE HEAT PUMP UNITS



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PHX4 PARTS LIST

KEY NO.	DESCRIPTION	FAST PART NO.	PHX424000K00A1	PHX430000K00A1	PHX436000K00A1	PHX442000K00A1	PHX448000K00A1	PHX460000K00A1
1	COMP ZPS20K4E-PFV-830	ZPS20K4EPFV830	1	*	*	*	*	*
1	COMP ZPS26K4E-PFV-830	ZPS26K4EPFV830	*	1	*	*	*	*
1	COMP ZPS30K4E-PFV-830	ZPS30K4EPFV830	*	*	1	*	*	*
1	COMP ZPS35K4E-PFV-830	ZPS35K4EPFV830	*	*	*	1	*	*
1	COMP ZPS40K4E-PFV-830	ZPS40K4EPFV830	*	*	*	*	1	*
1	COMP ZPS51K4E-PFV-830	ZPS51K4EPFV830	*	*	*	*	*	1
2	MTR CND 1/230 1/4 1100/1	1171335	*	*	*	*	1	1
2	MTR CND 1/230 1/4 1100/1	1173700	*	*	1	1	*	*
2	MTR CND 1/230 1/8 825/1	1173699	1	1	*	*	*	*
3	FAN C 20" 3B 1/2" 34 INT	1173706	1	1	*	*	*	*
3	FAN C 22" 3B 1/2" 24 INT	1171220	*	*	*	1	*	*
3	FAN C 22" 3B 1/2" 28 INT	1171219	*	*	1	*	1	1
4	COIL EVAP (30 AL)	1175170	*	1	*	*	*	*
4	COIL EVAP (36 AL)	1175171	*	*	1	*	*	*
4	COIL EVAP (42 AL)	1175172	*	*	*	1	*	*
4	COIL EVAP (48 AL)	1175173	*	*	*	*	1	*
4	COIL EVAP (60 AL)	1175174	*	*	*	*	*	1
4	COIL, EVAP(24 AL)	1174353	1	*	*	*	*	*
7	DISTRIBUTOR 5 CIRCUIT	1174243	*	*	*	*	1	*
7	DISTRIBUTOR 6 CKT	1175220	*	*	*	*	*	1
7	DISTRIBUTOR R410A	1174360	1	1	1	*	*	*
7	DISTRIBUTOR R410A	1174359	*	*	*	1	*	*
9	MOUNT KIT BLOWER MOTOR	1174295	1	1	1	1	1	1
10	WHEEL DD10x8x1/2 CW CV	1173813	1	1	*	*	*	*
10	WHEEL DD11x9x1/2 CW CV	1171742	*	*	1	1	*	*
10	WHEEL DD11x10x1/2 CW CV	1173815	*	*	*	*	1	1
11	MTR BLT 1/2HP 120/240VAC 1PH	1175180	1	*	*	*	*	*
11	MTR BLT 1/2HP 120/240VAC 1PH	1175181	*	*	1	*	*	*
11	MTR BLT 1HP 120/240VAC 1PH	1175184	*	*	*	*	*	1
11	MTR BLT 3/4HP 120/240VAC 1PH	1175182	*	*	*	1	*	*
11	MTR BLT 3/4HP 120/240VAC 1PH	1175183	*	*	*	*	1	*
11	MTR BLT 460V 1PH 1/2 HP	1175591	*	1	*	*	*	*
12	CAP RN RD 370V 5+35	1172110	1	*	*	*	*	*
12	CAP RN RD 370V 5+40	1172147	*	1	1	*	*	*
12	CAP RN RD 370V 5+45	1172124	*	*	*	1	*	*
12	CAPACITOR RUN RD 370V 45+10MFD	1173702	*	*	*	*	1	*
12	CAPACITOR RUN RD 370V 80+10MFD	1173703	*	*	*	*	*	1
13	CONTACTOR 1P 25A 24V	1173689	1	1	1	1	*	*
13	CONTACTOR 1P 40A 24V	1173690	*	*	*	*	1	1
14	BREAKER 3.2A 1 POLE 250V	1171114	1	1	1	1	1	1
15	TRANS 200/230/460>24 75VA	1171496	1	1	1	1	1	1
16	BOARD CONTROL MTR	1175186	1	1	1	1	1	1
17	COIL,COND (30 HP)	1175215	*	1	*	*	*	*
17	COIL,COND (24 HP)	1174400	1	*	*	*	*	*
17	COIL.COND (36 HP)	1175216	*	*	1	*	*	*
17	COIL.COND (42 HP)	1175217	*	*	*	1	*	*
17	COIL.COND (48 HP)	1175218	*	*	*	*	1	*
17	COIL.COND (60 HP)	1175219	*	*	*	*	*	1
18	PLUG COMP WIRE (SM)	1173826	1	1	1	1	1	1
19	PLUG COMP SOLENOID COIL 85"LDS	1173695	1	1	1	1	1	1

PHX4 PARTS LIST (continued)

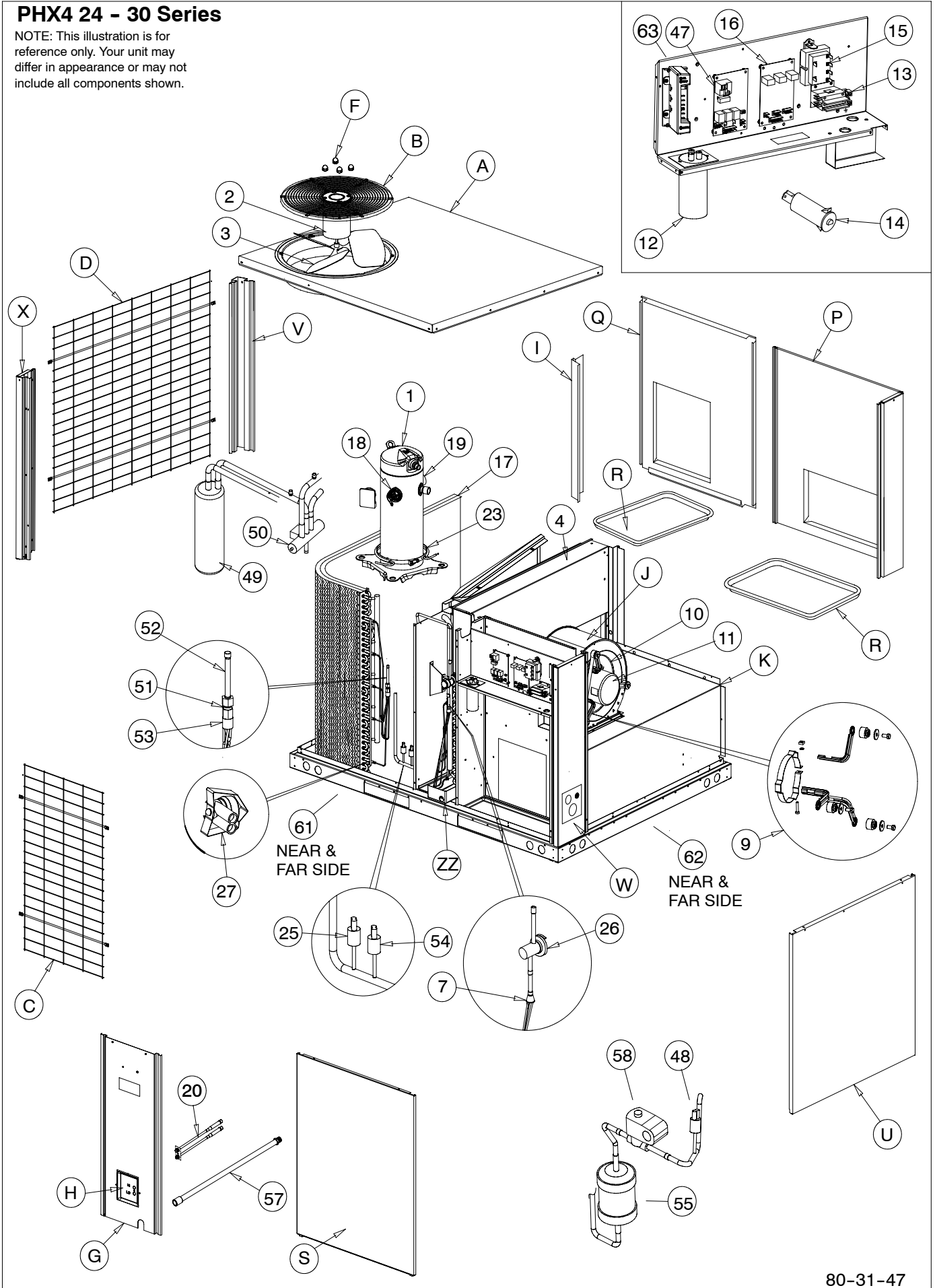
KEY NO.	DESCRIPTION	FAST PART NO.	PHX424000K00A1	PHX430000K00A1	PHX436000K00A1	PHX442000K00A1	PHX448000K00A1	PHX460000K00A1
20	PORT ASY VLV/SWT	1083619	1	1	1	1	1	1
23	HTR CC WP 40W240V	1173705	1	1	1	1	1	1
25	SWITCH PRESS HI O650 C420	1174407	1	1	1	1	1	1
26	VALVE	1175542	*	*	1	*	*	*
26	VALVE	1175557	*	*	*	*	1	*
26	VALVE	1175558	*	*	*	*	*	1
26	VALVE TXV 2.0 R410 SHT 86	1174408	1	*	*	*	*	*
26	VALVE TXV 2.0 R410 SHT 95	1174409	*	1	*	*	*	*
26	VALVE TXV 4.0 R410 SHT 88	1174410	*	*	*	1	*	*
27	SENSOR DEFROST O65 C32	1173637	*	1	*	*	*	*
27	SWITCH	1175561	1	*	1	1	1	1
47	BOARD DEFROST	1174185	1	1	1	1	1	*
48	SWITCH PRESS LO O20 C45	1174412	1	1	1	1	1	1
49	ACCUMULATOR	1173713	*	*	1	*	*	1
49	ACCUMULATOR 120 3/4 NH	1172018	1	1	*	*	*	*
49	ACCUMULATOR 174 IN3 7/8	1173714	*	*	*	1	1	*
50	VALVE REV W/COIL 24V	1173708	1	1	1	*	*	*
50	VALVE REV W/COIL 24V	1173709	*	*	*	*	*	1
51	METERING DEVICE	1174858	1	*	*	*	*	*
51	PISTON .052	1174060	*	*	1	*	*	*
51	PISTON .063	1174003	*	*	*	*	*	1
51	PISTON CHATLEFF .046	1173650	*	1	*	*	*	*
51	PISTON CHATLEFF .059	1173871	*	*	*	1	1	*
52	KIT TAILPIECE	1174325	1	1	1	1	1	1
53	DISTRIBUTOR 6 CIRCUIT	1174245	*	*	*	*	*	1
53	DISTRIBUTOR 3 CIRCUIT	1174241	1	*	*	*	*	*
53	DISTRIBUTOR 5 CIRCUIT	1174242	*	*	*	*	1	*
53	DISTRIBUTOR COND	1174446	*	1	1	1	*	*
54	SWITCH PRESS COMP SOL	1174413	1	1	1	1	1	1
55	DRIER BIFLOW 06 CI 3/8 SWEAT	1172311	1	1	1	1	1	1
57	TUBE DRAIN	1069172	1	1	*	*	*	*
58	VALVE SOLENOID	1174447	1	1	*	*	*	*
59	RAIL BASE GALV	1084078	*	*	1	1	1	1
60	RAIL BASE GALV	1054464	*	*	1	1	1	1
61	RAIL BASE GALV	1065001	2	2	1	1	1	1
62	RAIL BASE GALV	1113559	2	2	1	1	1	1
63	BOARD CONTROL COMF ALRT	1175221	1	1	1	1	1	1
A	PANEL TOP	1174392	1	1	*	*	*	*
A	PANEL TOP	1174393	*	*	1	1	1	1
B	GRILLE OUTLET	1174394	*	*	1	1	1	1
B	GRILLE OUTLET	1173832	1	1	*	*	*	*
C	GRILLE COND INLET	1175539	*	*	*	*	1	1
C	GRILLE COND INLET	1064544	1	1	*	*	*	*
C	GRILLE COND INLET	1064545	*	*	1	1	*	*
D	GRILLE COND INLET	1175543	1	1	1	1	*	*
D	GRILLE COND INLET	1064547	*	*	1	1	*	*
E	GRILLE COND INLET	1175544	*	*	*	*	1	1
E	GRILLE COND INLET	1064546	*	*	*	1	*	*
F	NUT CAP	1172740	4	4	4	4	4	4
G	PANEL ASY HI/LO PORT	1175545	*	*	*	*	1	1

PHX4 PARTS LIST (continued)

KEY NO.	DESCRIPTION	FAST PART NO.	PHX424000K00A1	PHX430000K00A1	PHX436000K00A1	PHX442000K00A1	PHX448000K00A1	PHX460000K00A1
			*	*	1	1	*	*
G	PANEL PORT	1068164	*	*	1	1	*	*
G	PANEL PORT P250	1068182	1	1	*	*	*	*
H	PLATE PORT P250	1068189	1	1	1	1	1	1
I	BRACKET EVAP GALV	1175546	*	*	*	*	1	1
I	BRACKET EVAP GALV	1098999	*	*	1	1	*	*
I	BRACKET EVAP GALV	1099106	1	1	*	*	*	*
J	HOUSING ASSY BLOWER	1175168	*	*	*	1	*	*
J	HOUSING ASSY BLOWER	1175169	*	*	*	*	1	1
J	HOUSING ASSY BLOWER	1174166	1	1	*	*	*	*
K	BOX, BLOWER	1174396	*	*	1	1	1	1
K	BOX, BLOWER	1174395	1	1	*	*	*	*
O	POST CENTER	1175547	*	*	*	*	1	1
O	POST CENTER	1068163	*	*	1	1	*	*
P	PANEL SUPPLY AIR	1111268	*	*	1	1	*	*
P	PANEL SUPPLY AIR	1110951	1	1	*	*	*	*
P	PANEL SUPPLY AIR	1175556	*	*	*	*	1	1
Q	PANEL RETURN AIR	1175548	*	*	*	*	1	1
Q	PANEL RETURN AIR	1110952	1	1	*	*	*	*
Q	PANEL RETURN AIR	1111269	*	*	1	1	*	*
R	COVER, DUCTS	1110961	2	2	*	*	*	*
R	COVER, DUCTS	1111275	*	*	2	2	2	2
S	PANEL ACCESS	1068186	*	*	1	1	*	*
S	PANEL ACCESS	1068185	1	1	*	*	*	*
S	PANEL ACCESS	1175549	*	*	*	*	1	1
U	PANEL ACCESS HT EX	1110953	1	1	*	*	*	*
U	PANEL ASY BLW ACCESS	1175550	*	*	*	*	1	1
U	PANEL BLR ACC	1111270	*	*	1	1	*	*
V	POST RETURN AIR	1175551	*	*	*	*	1	1
V	POST RETURN AIR	1068168	*	*	1	1	*	*
V	POST RETURN AIR P250	1068167	2	2	*	*	*	*
W	POST ASY ELEC HP/PAC	1174397	1	1	*	*	*	*
W	POST ASY ELEC HP/PAC	1174398	*	*	1	1	*	*
W	POST ASY ELEC HP/PAC	1175552	*	*	*	*	1	1
X	POST COND CORNER	1068172	*	*	1	1	*	*
X	POST COND CORNER	1175553	*	*	*	*	1	1
Y	PANEL ASY FILTER ACCESS	1175554	*	*	*	*	1	1
Y	PANEL FILTER	1111271	*	*	1	1	*	*
Z	PANEL ASY BAFFLE	1111281	*	*	1	1	*	*
Z	PANEL ASY BAFFLE	1175555	*	*	*	*	1	1
ZZ	PAN DRAIN	1110954	1	1	*	*	*	*
ZZ	PAN DRAIN	1172244	*	*	1	1	1	1
PARTS NOT SHOWN								
II	FILTER 16X20X2	1175222	*	*	*	*	2	2
II	FILTER 20X20X2	1175223	*	*	*	*	2	2
II	FILTER FG 20X30X2	1054503	*	*	2	2	*	*
II	HARNESS ASY	1175559	1	1	1	1	1	1
II	HARNESS ASY HP 208/230 B/C	1175560	1	1	1	1	1	1
II	HARNESS ASY MTR CNTRL	1175541	1	1	1	1	1	1

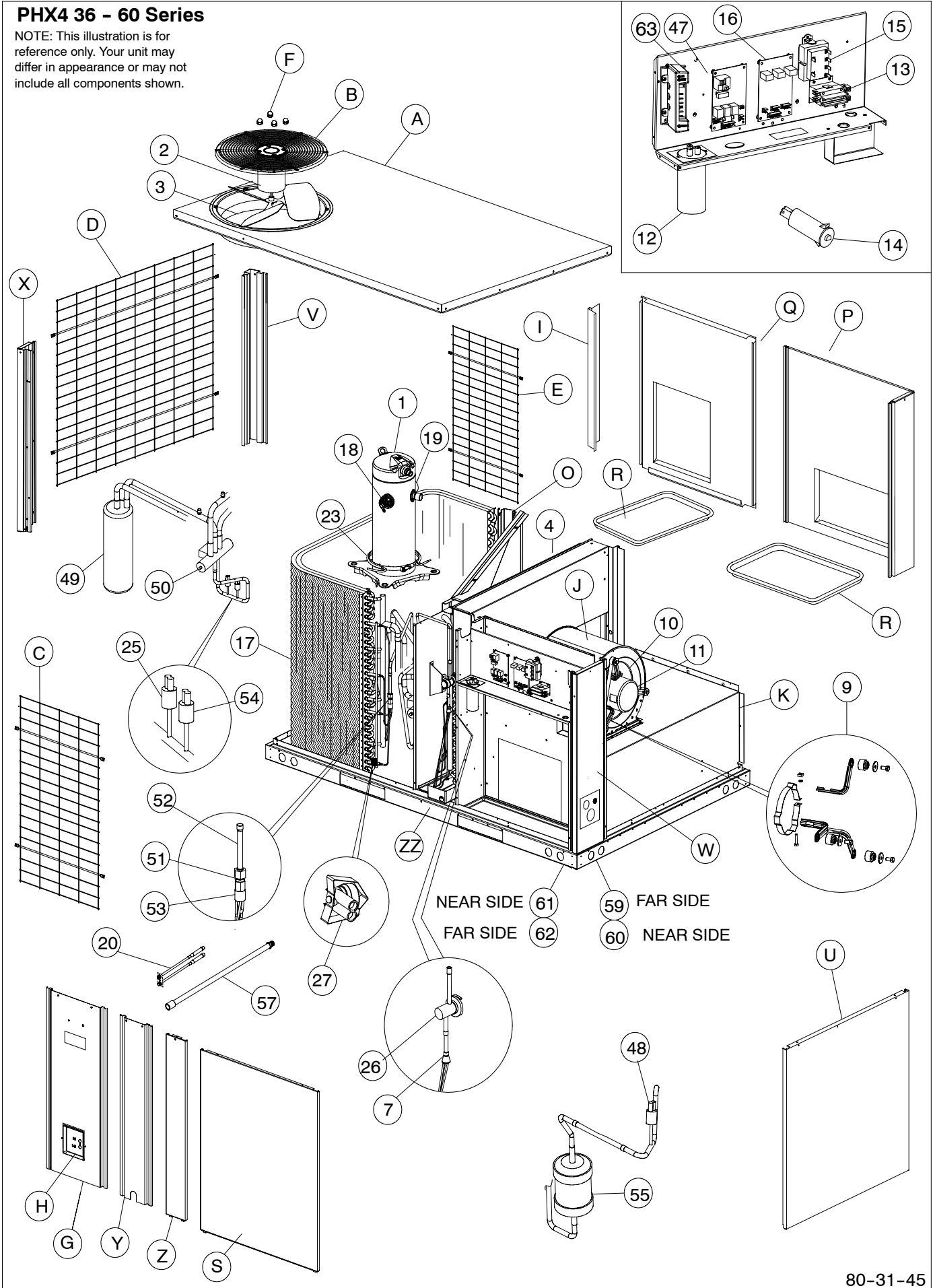
PHX4 24 - 30 Series

NOTE: This illustration is for reference only. Your unit may differ in appearance or may not include all components shown.



PHX4 36 - 60 Series

NOTE: This illustration is for reference only. Your unit may differ in appearance or may not include all components shown.



Charging Procedure

1. Measure Discharge line pressure by attaching a gauge to the service port.
2. Measure the Liquid line temperature by attaching a temperature sensing device to it.
3. Insulate the temperature sensing device so that the Outdoor Ambient doesn't affect the reading.
4. Refer to the required Subcooling in the table based on the model size and the Outdoor Ambient temperature.
5. Interpolate if the Outdoor temperature lies in between the table values. Extrapolate if the temperature lies beyond the table range.
6. Find the Pressure Value corresponding to the measured Pressure on the Compressor Discharge line.
7. Read across from the Pressure reading to obtain the Liquid line temperature for a required Subcooling.
8. Add Charge if the measured temperature is higher than the liquid line temperature value in the table.
9. Add Charge using the service connection on the Suction line of the Compressor.

Required Subcooling °F (°C)

Model Size	Outdoor Ambient Temperature				
	75 (24)	82 (28)	85 (29)	95 (35)	105 (41)
024	17.4 (9.6)	17.5 (9.7)	17.6 (9.8)	17.9 (9.9)	18.2 (10.1)
030	17.6 (9.8)	17.4 (9.7)	17.3 (9.6)	16.9 (9.4)	16.5 (9.2)
036	18.6 (10.3)	18.7 (10.4)	18.7 (10.4)	18.9 (10.5)	19.1 (10.6)
042	16.9 (9.4)	16.6 (9.2)	16.5 (9.2)	16 (8.9)	15.5 (8.6)
048	18 (10)	17.8 (9.9)	17.7 (9.8)	17.3 (9.6)	16.9 (9.4)
060	22.2 (12.3)	22 (12.2)	21.9 (12.2)	21.5 (11.9)	21.1 (11.7)

Required Liquid Line Temperature for a Specific Subcooling (R-410A)

Required Subcooling (°F) Pressure (psig)	Required Subcooling (°F)			
	5	10	15	25
174	56	51	46	36
181	59	54	49	39
188	61	56	51	41
195	63	58	53	43
202	65	60	55	45
209	67	62	57	47
216	69	64	59	49
223	71	66	61	51
189	61	56	51	41
196	63	58	53	43
203	66	61	56	46
210	68	63	58	48
217	70	65	60	50
224	72	67	62	52
231	74	69	64	54
238	76	71	66	56
245	77	72	67	57
252	79	74	69	59
260	81	76	71	61
268	83	78	73	63
276	85	80	75	65
284	87	82	77	67
292	89	84	79	69
300	91	86	81	71
309	93	88	83	73
318	95	90	85	75
327	97	92	87	77
336	99	94	89	79
345	101	96	91	81
354	103	98	93	83
364	105	100	95	85
374	107	102	97	87
384	108	103	98	88
394	110	105	100	90
404	112	107	102	92
414	114	109	104	94
424	116	111	106	96
434	118	113	108	98
444	119	114	109	99
454	121	116	111	101
464	123	118	113	103
474	124	119	114	104
484	126	121	116	106
494	127	122	117	107
504	129	124	119	109
514	131	126	121	111
524	132	127	122	112
534	134	129	124	114

Required Subcooling (°C) Pressure (kPa)	Required Subcooling (°C)			
	3	6	8	14
1200	13	11	8	2
1248	15	12	9	4
1296	16	13	10	5
1344	17	14	12	6
1393	18	16	13	7
1441	20	17	14	9
1489	21	18	15	10
1537	22	19	16	11
1303	16	13	11	5
1351	17	15	12	6
1399	19	16	13	8
1448	20	17	14	9
1496	21	18	15	10
1544	22	19	16	11
1593	23	20	18	12
1641	24	21	19	13
1689	25	22	20	14
1737	26	23	21	15
1792	27	25	22	16
1848	29	26	23	17
1903	30	27	24	19
1958	31	28	25	20
2013	32	29	26	21
2068	33	30	27	22
2130	34	31	28	23
2192	35	32	29	24
2254	36	33	31	25
2316	37	34	32	26
2378	38	35	33	27
2440	39	36	34	28
2509	40	38	35	29
2578	41	39	36	30
2647	42	40	37	31
2716	44	41	38	32
2785	45	42	39	33
2854	46	43	40	34
2923	47	44	41	35
2992	48	45	42	36
3061	48	46	43	37
3130	49	47	44	38
3199	50	48	45	39
3268	51	48	46	40
3337	52	49	47	41
3406	53	50	47	42
3475	54	51	48	43
3544	55	52	49	44
3612	56	53	50	45
3681	56	54	51	45

PHX4 24																										
Outdoor Ambient Temperature - Degrees F, Dry Bulb																										
75					85					95					105					115						
Entering Indoor Temperature - Degrees F, Wet Bulb																										
CFM		57	62	63††	67	72	57	62	63††	67	72	57	62	63††	67	72	57	62	63††	67	72	57	62	63††	67	72
720	MBh†	22.16	22.85	23.34	25.10	27.60	21.30	21.75	22.21	23.90	26.28	20.38	20.61	21.03	22.63	24.90	19.41	19.42	19.78	21.30	23.45	18.36	18.36	18.46	19.89	21.91
	S/T‡	1.00	0.86	0.69	0.67	0.49	1.00	0.89	0.71	0.68	0.50	1.00	0.91	0.72	0.70	0.51	1.00	1.00	0.74	0.72	0.52	1.00	1.00	0.77	0.74	0.53
	AMPS*	7.00	7.04	7.06	7.17	7.32	7.89	7.92	7.94	8.06	8.21	8.85	8.87	8.90	9.01	9.17	9.90	9.90	9.93	10.05	10.21	11.03	11.03	11.04	11.16	11.33
	HI PR	282	284	285	288	293	325	326	327	331	336	372	373	374	378	384	424	424	425	430	435	481	481	482	486	491
	LO PR	129	133	135	145	159	132	135	137	147	161	136	137	139	150	164	139	139	141	152	166	144	144	144	154	168
800	MBh†	22.99	23.33	23.79	25.57	28.09	22.08	22.20	22.62	24.32	26.73	21.11	21.11	21.39	22.80	25.29	20.08	20.08	20.10	21.63	23.79	18.97	18.97	18.74	20.17	22.20
	S/T‡	1.00	0.90	0.72	0.69	0.51	1.00	0.92	0.73	0.71	0.51	1.00	1.00	0.75	0.72	0.52	1.00	1.00	0.77	0.75	0.54	1.00	1.00	0.80	0.77	0.55
	AMPS*	7.09	7.11	7.14	7.25	7.39	7.99	7.99	8.02	8.13	8.28	8.95	8.95	8.97	9.09	9.25	10.00	10.00	10.00	10.12	10.29	11.13	11.13	11.11	11.23	11.40
	HI PR	284	285	286	289	294	327	327	328	332	337	374	374	375	379	385	426	426	426	431	436	483	483	483	487	492
	LO PR	134	136	138	148	162	137	138	140	150	164	141	141	142	152	166	144	144	144	154	169	148	148	146	157	171
880	MBh†	23.72	23.77	24.15	25.95	28.50	22.76	22.76	22.95	24.66	27.09	21.74	21.74	21.68	23.30	25.61	20.66	20.66	20.36	21.89	24.07	19.50	19.50	18.96	20.40	22.44
	S/T‡	1.00	0.99	0.74	0.71	0.52	1.00	1.00	0.76	0.73	0.53	1.00	1.00	0.78	0.75	0.54	1.00	1.00	0.80	0.78	0.55	1.00	1.00	0.83	0.81	0.57
	AMPS*	7.19	7.19	7.21	7.32	7.46	8.08	8.08	8.09	8.20	8.36	9.05	9.05	9.04	9.16	9.32	10.10	10.10	10.07	10.19	10.36	11.23	11.23	11.18	11.30	11.47
	HI PR	286	286	287	290	295	329	329	329	333	338	376	376	376	380	386	428	428	427	431	437	485	485	483	488	493
	LO PR	138	139	140	151	165	142	142	142	153	167	145	145	144	155	169	149	149	146	157	171	152	152	148	159	173

ID Blower Setting - High Stage Cooling			
Operating Mode	Lo	Nom	High
Cooling Mode	720	800	880
Cooling Mode w/dehum	576	640	704

PHX4 30																											
Outdoor Ambient Temperature - Degrees F, Dry Bulb																											
75					85					95					105					115							
Entering Indoor Temperature - Degrees F, Wet Bulb																											
CFM		57	62	63††	67	72	57	62	63††	67	72	57	62	63††	67	72	57	62	63††	67	72	57	62	63††	67	72	
787	MBh†	27.07	28.40	29.01	31.13	34.12	26.05	27.07	27.65	29.67	32.51	24.95	25.67	26.21	28.12	30.82	23.78	24.19	24.68	26.48	29.03	22.50	22.82	23.05	24.73	27.11	
	S/T‡	1.00	0.86	0.70	0.67	0.50	1.00	0.88	0.71	0.68	0.51	1.00	0.90	0.72	0.69	0.52	1.00	0.93	0.74	0.71	0.52	1.00	0.96	0.76	0.73	0.54	
	AMPS*	8.88	8.96	8.99	9.13	9.31	9.86	9.93	9.96	10.10	10.30	10.94	11.00	11.04	11.18	11.39	12.16	12.20	12.23	12.39	12.60	13.54	13.55	13.58	13.74	13.96	
	HI PR	296	300	301	306	313	340	343	345	350	357	389	391	392	398	406	442	443	444	450	458	499	500	501	507	515	
	LO PR	121	127	129	139	153	124	129	131	141	155	127	131	133	144	157	131	133	136	146	160	135	136	138	149	163	
875	MBh†	28.11	29.01	29.60	31.74	34.76	27.02	27.62	28.17	30.21	33.09	25.85	26.17	26.67	28.60	31.32	24.60	24.66	25.08	26.90	29.46	23.25	23.25	23.39	25.08	27.48	
	S/T‡	1.00	0.89	0.72	0.69	0.51	1.00	0.91	0.73	0.70	0.52	1.00	0.94	0.75	0.72	0.53	1.00	0.99	0.77	0.74	0.54	1.00	1.00	0.79	0.77	0.55	
	AMPS*	9.02	9.08	9.11	9.25	9.44	10.01	10.05	10.08	10.22	10.42	11.10	11.12	11.15	11.30	11.51	12.32	12.32	12.35	12.51	12.72	13.70	13.69	13.70	13.86	14.08	
	HI PR	299	301	302	308	315	343	345	346	352	359	392	393	394	400	407	445	445	446	452	460	502	502	502	508	516	
	LO PR	126	130	132	142	156	129	132	134	144	158	132	134	136	146	160	136	137	138	149	163	140	140	141	151	165	
962	MBh†	29.01	29.51	30.07	32.23	35.27	27.86	28.10	28.59	30.64	33.54	26.63	26.64	27.04	28.98	31.72	25.31	25.31	25.40	27.22	29.80	23.89	23.89	23.66	25.36	27.77	
	S/T‡	1.00	0.93	0.74	0.71	0.52	1.00	0.95	0.75	0.73	0.53	1.00	1.00	0.77	0.75	0.54	1.00	1.00	0.80	0.77	0.55	1.00	1.00	0.82	0.80	0.57	
	AMPS*	9.16	9.19	9.22	9.36	9.55	10.15	10.16	10.19	10.34	10.54	11.24	11.24	11.27	11.42	11.62	12.46	12.46	12.46	12.62	12.84	13.84	13.84	13.81	13.97	14.19	
	HI PR	301	303	304	309	316	346	346	347	3	3	361	394	394	395	401	409	447	447	447	453	461	505	505	504	509	517
	LO PR	130	133	135	145	159	134	135	137	147	161	137	137	139	149	163	141	141	141	151	165	145	145	143	153	168	

ID Blower Setting - High Stage Cooling			
Operating Mode	Lo	Nom	High
Cooling Mode	787	875	962
Cooling Mode w/dehum	630	700	770

† Total capacities are net (I.D blower heat subtracted).

* System amps are total of indoor and outdoor amps

‡ S/T are based on 80°F db entering air at the indoor coil. For sensible capacities at other than 80°F db, deduct 835 Btu/h per 1000 cfm of indoor coil air from MBh/S/T for each degree below 80°F, or add 835 Btu/h per 1000 cfm of indoor coil air from MBh/S/T for each degree above 80°F

†† At TVA rating indoor condition (75°F db/ 63°F wb), All other indoor air temperatures are at 80°F db

PHX4 36

Outdoor Ambient Temperature - Degrees F, Dry Bulb

75	85	95	105	115
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Entering Indoor Temperature - Degrees F, Wet Bulb

CFM		75					85					95					105					115				
		57	62	63††	67	72	57	62	63††	67	72	57	62	63††	67	72	57	62	63††	67	72	57	62	63††	67	72
1080	MBh†	33.33	34.47	35.23	38.02	41.96	31.95	32.69	33.40	36.07	39.85	30.49	30.85	31.49	34.04	37.65	28.95	28.98	29.50	31.92	35.36	27.31	27.31	27.41	29.69	32.94
	S/T‡	1.00	0.86	0.69	0.66	0.49	1.00	0.88	0.70	0.68	0.50	1.00	0.91	0.72	0.69	0.51	1.00	1.00	0.74	0.71	0.52	1.00	1.00	0.77	0.74	0.53
	AMPS*	10.59	10.62	10.64	10.72	10.82	11.94	11.96	11.98	12.07	12.18	13.41	13.43	13.45	13.54	13.66	15.03	15.03	15.05	15.15	15.28	16.79	16.79	16.79	16.90	17.04
	HI PR	281	283	284	287	292	324	325	326	330	335	371	372	373	377	382	423	423	424	428	434	480	480	481	485	490
	LO PR	127	130	133	143	156	130	133	135	145	158	134	135	137	147	161	138	138	140	150	163	142	142	142	152	166
1200	MBh†	34.59	35.19	35.91	38.73	42.73	33.12	33.37	34.00	36.71	40.54	31.58	31.57	32.02	34.40	38.25	29.96	29.96	29.97	32.41	35.88	28.23	28.23	27.81	30.11	33.39
	S/T‡	1.00	0.89	0.71	0.68	0.50	1.00	0.92	0.73	0.70	0.51	1.00	1.00	0.75	0.72	0.52	1.00	1.00	0.77	0.74	0.53	1.00	1.00	0.80	0.77	0.55
	AMPS*	10.74	10.76	10.78	10.85	10.95	12.09	12.10	12.12	12.20	12.31	13.57	13.57	13.58	13.67	13.79	15.19	15.19	15.19	15.29	15.41	16.95	16.95	16.93	17.04	17.17
	HI PR	283	284	285	288	293	326	326	327	331	336	373	373	374	378	383	425	425	425	429	435	482	482	481	486	491
	LO PR	131	133	135	145	159	135	136	138	148	161	138	138	140	150	163	142	142	142	152	166	147	147	144	155	168
1320	MBh†	35.70	35.85	36.45	39.31	43.36	34.15	34.15	34.49	37.22	41.10	32.53	32.53	32.46	35.05	38.74	30.83	30.83	30.35	32.80	36.30	29.02	29.02	28.14	30.45	33.74
	S/T‡	1.00	0.93	0.73	0.71	0.51	1.00	1.00	0.75	0.73	0.52	1.00	1.00	0.78	0.75	0.54	1.00	1.00	0.80	0.77	0.55	1.00	1.00	0.83	0.80	0.56
	AMPS*	10.89	10.89	10.91	10.98	11.08	12.24	12.24	12.25	12.33	12.44	13.72	13.72	13.72	13.81	13.92	15.34	15.34	15.32	15.42	15.54	17.11	17.11	17.06	17.17	17.30
	HI PR	284	285	285	289	294	328	328	328	332	337	375	375	375	379	384	427	427	426	430	436	484	484	482	486	492
	LO PR	136	136	138	148	161	139	139	140	150	163	143	143	142	152	166	146	146	144	154	168	151	151	146	157	170

ID Blower Setting - High Stage Cooling			
Operating Mode	Lo	Nom	High
Cooling Mode	1080	1200	1320
Cooling Mode w/dehum	864	960	1056

PHX4 42

Outdoor Ambient Temperature - Degrees F, Dry Bulb

75	85	95	105	115
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Entering Indoor Temperature - Degrees F, Wet Bulb

CFM		75					85					95					105					115				
		57	62	63††	67	72	57	62	63††	67	72	57	62	63††	67	72	57	62	63††	67	72	57	62	63††	67	72
1260	MBh†	38.35	39.47	40.31	43.44	47.86	36.97	37.72	38.49	41.49	45.73	35.47	35.85	36.55	39.41	43.45	33.85	33.90	34.46	37.17	41.01	32.07	32.07	32.20	34.75	38.37
	S/T‡	1.00	0.86	0.69	0.67	0.49	1.00	0.88	0.71	0.68	0.50	1.00	0.91	0.72	0.69	0.51	1.00	0.99	0.74	0.71	0.52	1.00	1.00	0.76	0.74	0.53
	AMPS*	12.77	12.83	12.86	13.03	13.25	14.02	14.06	14.10	14.27	14.50	15.39	15.41	15.44	15.62	15.85	16.89	16.89	16.92	17.10	17.35	18.57	18.57	18.57	18.75	19.00
	HI PR	286	287	288	293	299	329	330	331	336	342	376	377	378	383	390	428	428	429	434	441	485	485	485	490	497
	LO PR	126	129	132	141	154	129	131	133	143	156	132	133	135	145	159	136	136	137	147	161	140	140	140	150	163
1400	MBh†	39.73	40.27	41.02	44.19	48.68	38.26	38.47	39.13	42.16	46.46	36.68	36.66	37.11	40.50	44.09	34.96	34.96	34.96	37.69	41.56	33.08	33.08	32.64	35.20	38.84
	S/T‡	1.00	0.90	0.72	0.69	0.51	1.00	0.92	0.73	0.70	0.51	1.00	1.00	0.75	0.72	0.52	1.00	1.00	0.77	0.74	0.53	1.00	1.00	0.80	0.77	0.55
	AMPS*	13.00	13.02	13.06	13.22	13.45	14.25	14.26	14.29	14.46	14.69	15.61	15.61	15.63	15.81	16.05	17.12	17.12	17.11	17.29	17.54	18.80	18.80	18.76	18.94	19.19
	HI PR	288	289	289	294	300	331	332	332	337	344	379	379	379	384	391	431	431	430	436	443	487	487	486	492	498
	LO PR	131	132	134	144	157	133	134	136	146	159	137	137	138	148	161	140	140	140	150	163	144	144	142	152	166
1540	MBh†	40.94	41.01	41.59	44.80	49.33	39.39	39.39	39.64	42.70	47.04	37.72	37.72	37.57	40.48	44.60	35.92	35.92	35.36	38.10	42.00	33.95	33.95	32.98	35.56	39.20
	S/T‡	1.00	0.93	0.74	0.71	0.52	1.00	1.00	0.76	0.73	0.53	1.00	1.00	0.77	0.75	0.54	1.00	1.00	0.80	0.77	0.55	1.00	1.00	0.83	0.80	0.56
	AMPS*	13.21	13.22	13.24	13.41	13.64	14.47	14.47	14.47	14.65	14.88	15.83	15.83	15.82	15.99	16.24	17.34	17.34	17.29	17.48	17.72	19.02	19.02	18.94	19.12	19.37
	HI PR	290	290	290	295	301	333	333	333	338	345	381	381	380	385	392	433	433	431	437	444	489	489	487	492	499
	LO PR	135	135	136	146	160	138	138	138	148	162	141	141	140	150	163	144	144	142	152	165	148	148	144	154	168

ID Blower Setting - High Stage Cooling			
Operating Mode	Lo	Nom	High
Cooling Mode	1260	1400	1540
Cooling Mode w/dehum	1008	1120	1232

† Total capacities are net (I.D blower heat subtracted).

* System amps are total of indoor and outdoor amps

‡ S/T are based on 80°F db entering air at the indoor coil. For sensible capacities at other than 80°F db, deduct 835 Btuh per 1000 cfm of indoor coil air from MBhX/S/T for each degree below 80°F, or add 835 Btuh per 1000 cfm of indoor coil air from MBhX/S/T for each degree above 80°F

†† At TVA rating indoor condition (75°F db/ 63°F wb), All other indoor air temperatures are at 80°F db

PHX4 48																										
Outdoor Ambient Temperature - Degrees F, Dry Bulb																										
75					85					95					105					115						
Entering Indoor Temperature - Degrees F, Wet Bulb																										
CFM		57	62	63††	67	72	57	62	63††	67	72	57	62	63††	67	72	57	62	63††	67	72	57	62	63††	67	72
1440	MBh†	44.14	45.41	46.32	49.97	55.13	42.56	43.42	44.24	47.74	52.67	40.84	41.29	42.01	45.34	50.05	38.97	39.05	39.60	42.76	47.22	36.91	36.91	37.01	39.98	44.18
	S/T‡	1.00	0.87	0.69	0.67	0.49	1.00	0.88	0.71	0.68	0.50	1.00	0.91	0.72	0.69	0.51	1.00	0.93	0.74	0.71	0.52	1.00	1.00	0.76	0.74	0.53
	AMPS*	14.79	14.86	14.90	15.09	15.35	16.17	16.22	16.26	16.46	16.72	17.68	17.70	17.74	17.94	18.22	19.33	19.34	19.37	19.58	19.87	21.18	21.18	21.18	21.39	21.69
	HI PR	288	290	291	296	302	331	333	334	339	346	379	380	381	386	393	431	431	432	437	445	487	487	487	493	500
	LO PR	127	130	132	142	155	130	132	134	144	157	133	135	136	146	160	137	137	139	149	162	141	141	141	151	165
1600	MBh†	45.70	46.32	47.11	50.81	56.03	44.02	44.30	44.95	48.49	53.49	42.20	42.16	42.64	46.00	50.77	40.22	40.22	40.16	43.34	47.84	38.05	38.05	37.49	40.48	44.70
	S/T‡	1.00	0.90	0.72	0.69	0.51	1.00	0.92	0.73	0.70	0.51	1.00	1.00	0.75	0.72	0.52	1.00	1.00	0.77	0.74	0.53	1.00	1.00	0.80	0.77	0.55
	AMPS*	15.07	15.10	15.14	15.33	15.60	16.45	16.47	16.50	16.70	16.97	17.96	17.96	17.98	18.18	18.46	19.62	19.62	19.61	19.82	20.11	21.46	21.46	21.42	21.63	21.93
	HI PR	290	291	292	297	303	334	334	335	340	347	381	381	382	387	395	433	433	433	439	446	490	490	489	494	502
	LO PR	131	133	135	145	158	134	135	137	147	160	138	138	139	149	162	142	141	141	151	165	146	146	143	153	167
1760	MBh†	47.06	47.19	47.74	51.48	56.76	45.29	45.28	45.52	49.08	54.14	43.38	43.37	43.15	46.53	51.33	41.30	41.30	40.61	43.81	48.33	39.03	39.03	37.88	40.88	45.10
	S/T‡	1.00	0.93	0.74	0.71	0.52	1.00	1.00	0.75	0.73	0.53	1.00	1.00	0.77	0.75	0.54	1.00	1.00	0.80	0.77	0.55	1.00	1.00	0.83	0.80	0.56
	AMPS*	15.34	15.35	15.37	15.57	15.84	16.72	16.72	16.73	16.93	17.21	18.23	18.23	18.21	18.42	18.70	19.89	19.89	19.84	20.05	20.34	21.74	21.74	21.65	21.86	22.16
	HI PR	292	292	293	298	304	336	336	336	341	348	384	384	383	388	396	435	435	434	440	447	492	492	490	495	503
	LO PR	135	136	137	147	160	138	138	139	149	162	142	142	141	151	164	145	145	143	153	167	149	149	145	155	169

ID Blower Setting - High Stage Cooling			
Operating Mode	Lo	Nom	High
Cooling Mode	1440	1600	1760
Cooling Mode widehum	1152	1280	1408

PHX4 60																										
Outdoor Ambient Temperature - Degrees F, Dry Bulb																										
75					85					95					105					115						
Entering Indoor Temperature - Degrees F, Wet Bulb																										
CFM		57	62	63††	67	72	57	62	63††	67	72	57	62	63††	67	72	57	62	63††	67	72	57	62	63††	67	72
1575	MBh†	53.72	56.33	57.55	61.78	67.72	51.82	53.85	55.01	59.04	64.71	49.75	51.20	52.29	56.12	61.50	47.50	48.36	49.36	52.97	58.05	45.03	45.31	46.18	49.57	54.30
	S/T‡	1.00	0.86	0.70	0.67	0.50	1.00	0.88	0.71	0.68	0.51	1.00	0.90	0.72	0.69	0.52	1.00	0.93	0.74	0.71	0.52	1.00	0.96	0.76	0.73	0.54
	AMPS*	17.81	17.98	18.05	18.33	18.73	19.67	19.81	19.89	20.17	20.58	21.70	21.82	21.89	22.19	22.61	23.96	24.03	24.10	24.41	24.84	26.46	26.48	26.55	26.86	27.30
	HI PR	302	305	307	312	320	347	350	351	357	365	396	399	400	406	414	450	451	453	459	468	508	509	510	516	525
	LO PR	122	128	130	140	154	125	130	132	142	156	128	132	134	144	158	132	134	137	147	161	136	137	139	149	163
1750	MBh†	55.71	57.45	58.64	62.91	68.92	53.67	54.87	55.98	60.05	65.78	51.47	52.13	53.14	57.00	62.43	49.08	49.24	50.09	53.73	58.85	46.47	46.47	46.81	50.21	54.96
	S/T‡	1.00	0.90	0.72	0.69	0.51	1.00	0.92	0.73	0.70	0.52	1.00	0.94	0.75	0.72	0.53	1.00	0.97	0.77	0.74	0.54	1.00	1.00	0.79	0.76	0.55
	AMPS*	18.20	18.32	18.39	18.67	19.07	20.06	20.15	20.22	20.51	20.92	22.10	22.15	22.22	22.53	22.95	24.36	24.37	24.43	24.74	25.18	26.86	26.86	26.88	27.19	27.63
	HI PR	305	307	308	314	321	350	352	353	359	367	399	400	402	408	416	453	453	455	461	469	511	511	512	518	526
	LO PR	127	131	133	143	157	130	133	135	145	159	133	135	137	147	161	137	137	139	150	164	141	141	142	152	166
1925	MBh†	57.44	58.39	59.50	63.81	69.87	55.29	55.76	56.74	60.84	66.62	52.97	53.01	53.81	57.69	63.16	50.45	50.45	50.67	54.32	59.46	47.69	47.69	47.29	50.70	55.46
	S/T‡	1.00	0.93	0.74	0.71	0.53	1.00	0.95	0.76	0.73	0.53	1.00	1.00	0.77	0.75	0.54	1.00	1.00	0.80	0.77	0.55	1.00	1.00	0.82	0.80	0.57
	AMPS*	18.58	18.64	18.71	19.00	19.40	20.44	20.48	20.54	20.84	21.25	22.49	22.49	22.54	22.85	23.27	24.74	24.74	24.75	25.06	25.50	27.24	27.24	27.19	27.51	27.95
	HI PR	307	309	310	315	323	353	353	355	360	368	402	402	403	409	418	456	456	456	462	471	514	514	513	519	528
	LO PR	131	134	136	146	160	134	136	137	148	162	138	138	139	150	164	141	141	141	152	166	145	145	144	154	169

ID Blower Setting - High Stage Cooling			
Operating Mode	Lo	Nom	High
Cooling Mode	1575	1750	1925
Cooling Mode widehum	1260	1400	1540

† Total capacities are net (I.D blower heat subtracted).

* System amps are total of indoor and outdoor amps

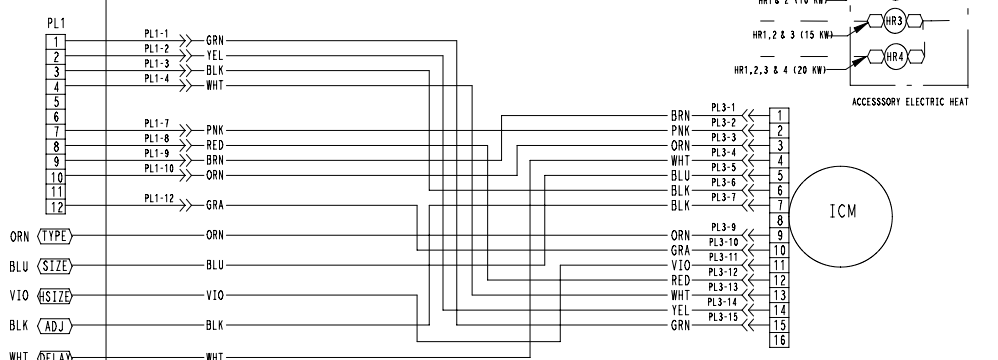
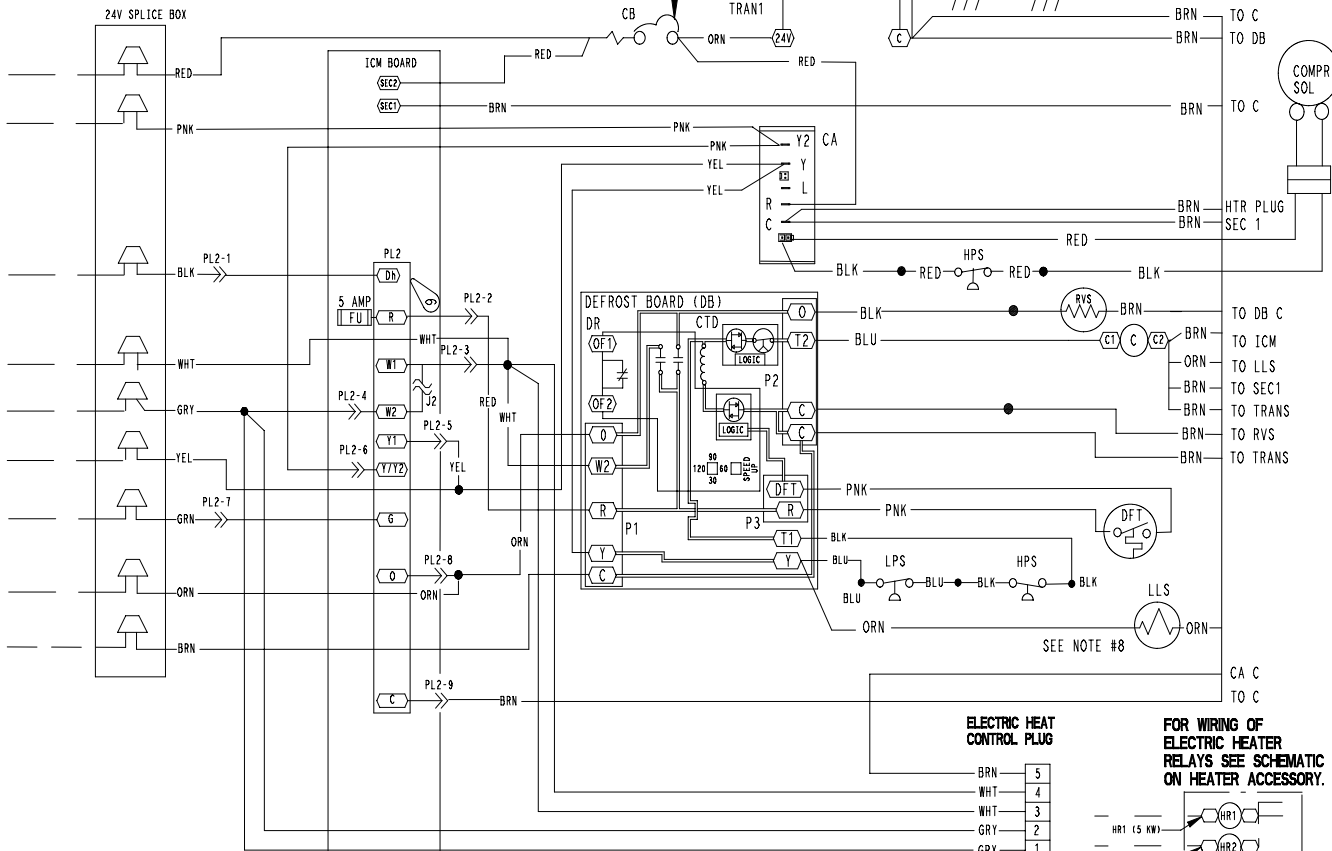
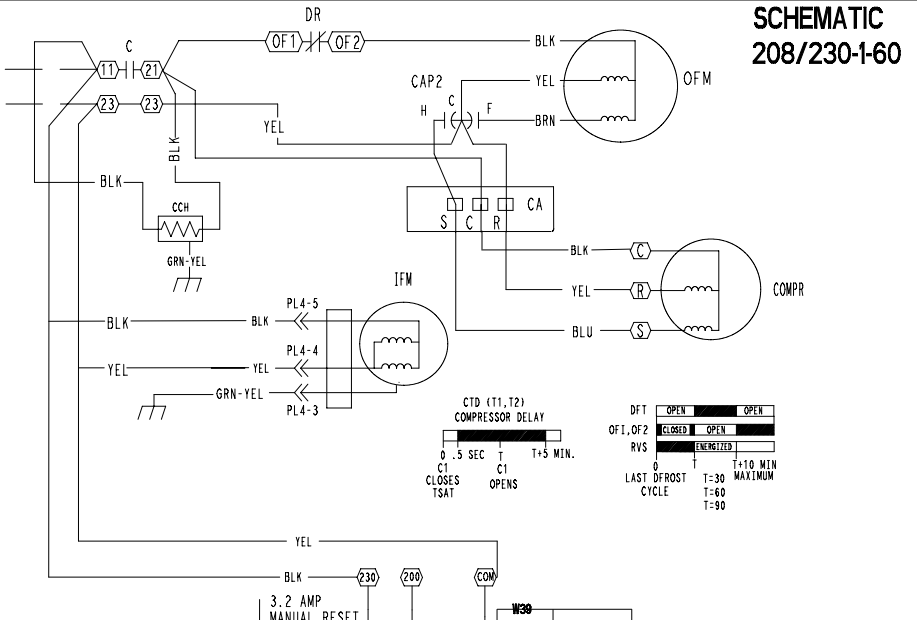
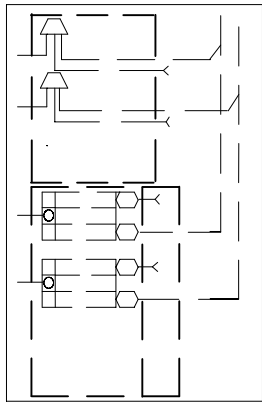
‡ S/T are based on 80°F db entering air at the indoor coil. For sensible capacities at other than 80°F db, deduct 835 Btuh per 1000 cfm of indoor coil air from MBh/S/T for each degree below 80°F, or add 835 Btuh per 1000 cfm of indoor coil air from MBh/S/T for each degree above 80°F

†† At TVA rating indoor condition (75°F db/ 63°F wb), All other indoor air temperatures are at 80°F db

EQUIP_GND
FIELD
SUPPLY
POWER

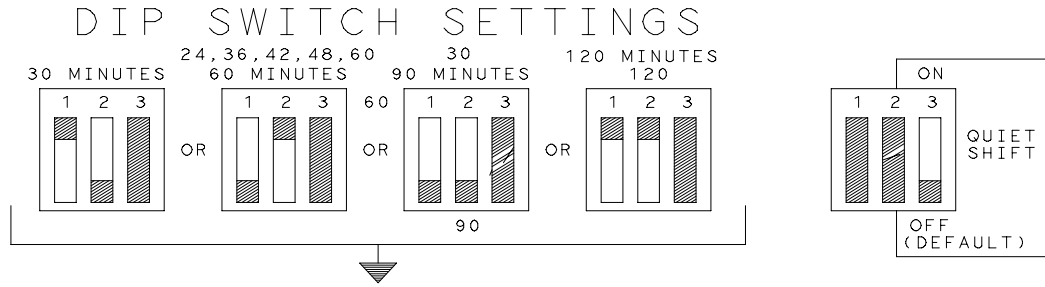
MAXIMUM WIRE SIZE 2 ANG.

FOR WIRING WITH ELECTRIC HEATERS SEE SCHEMATIC ON HEATER ACCESSORY.



See Next Page For Dip Switch Settings.

50CY501715 6.0



NOTES:

1. IF ANY OF THE ORIGINAL WIRES FURNISHED ARE REPLACED, IT MUST BE REPLACED WITH TYPE 90 DEGREE C WIRE OR IT'S EQUIVALENT.
2. SEE PRICE PAGES FOR THERMOSTAT AND SUBBASES.
3. USE 75 DEGREE COPPER CONDUCTORS FOR FIELD INSTALLATION.
4. REPLACE LOW VOLTAGE FUSES WITH NO GREATER THAN 5 AMP FUSES.
5. REMOVE J1 WHEN USING THERMIDISTAT/HUMIDISTAT AND DEHUMIDIFICATION MODE.
6. REMOVE J2 WHEN USING ELECTRIC HEAT STAGING.
7. TO BE WIRED IN ACCORDANCE WITH NEC AND LOCAL CODES.
8. LLS ON 24 & 30 SIZE UNITS ONLY.

FIELD SELECTABLE OPTIONS FOR TIME PERIOD BETWEEN DEFROST CYCLES (MINUTES)

THE COMPRESSOR WILL SHUT OFF FOR 30SEC. ON DEFROST INITIATION AND TERMINATION IN THE "QUIET SHIFT" ON POSITION



JUMPERED TEST PINS (USE METAL OBJECT) FIELD SPEED-UP CYCLE

- 1) MOMENTARILY SHORT PINS AND RELEASE TO BYPASS COMPRESSOR OFF DELAY.
- 2) SHORT FOR 5+ SEC. AND RELEASE FOR FORCED DEFROST.
- 3) PERMANENT SHORT WILL BE IGNORED.

DEFROST WILL TERMINATE IN 30 SEC. IF DFT OPEN.
DEFROST WILL TERMINATE NORMALLY IF DFT IS CLOSED.

LEGEND

△	FIELD SPLICE	DB	DEFROST BOARD
○	TERMINAL (MARKED)	DFT	DEFROST THERMOSTAT
○	TERMINAL (UNMARKED)	DR	DEFROST RELAY
●	SPLICE	EQUIP	EQUIPMENT
○	SPLICE (MARKED)	FU	FUSE
—	FACTORY WIRING	GND	GROUND
- -	FIELD CONTROL WIRING	HPS	HIGH PRESSURE SWITCH
— —	FIELD POWER WIRING	HR	HEATER RELAY
- - -	ACCESSORY OR OPTIONAL WIRING	HTR	HEATER
—	TO INDICATE COMMON POTENTIAL ONLY: NOT TO REPRESENT WIRING	ICM	INTEGRATED CONTROL MOTOR
AHA	ADJUSTABLE HEAT ANTICIPATOR	IFM	INDOOR FAN MOTOR
C	CONTACTOR	LPS	LOW PRESSURE SWITCH
CAP	CAPACITOR	OFM	OUTDOOR FAN MOTOR
CB	CIRCUIT BREAKER	PL	PLUG
CCH	CRANKCASE HEATER	QT	QUADRUPLE TERMINAL
COMP	COMPRESSOR MOTOR	RVS	REVERSING VALVE SOLENOID
CTD	COMPRESSOR TIME DELAY	S.B.	SLOW BLOW FUSE
CA	COMFORT ALERT	TC	THERMOSTAT - COOLING
		TDR	TIME DELAY RELAY
		TH	THERMOSTAT - HEATING
		TRAN	TRANSFORMER