



PHB [42, 48]C02E

Package Heat Pump Heating & Cooling Unit Specification Sheet

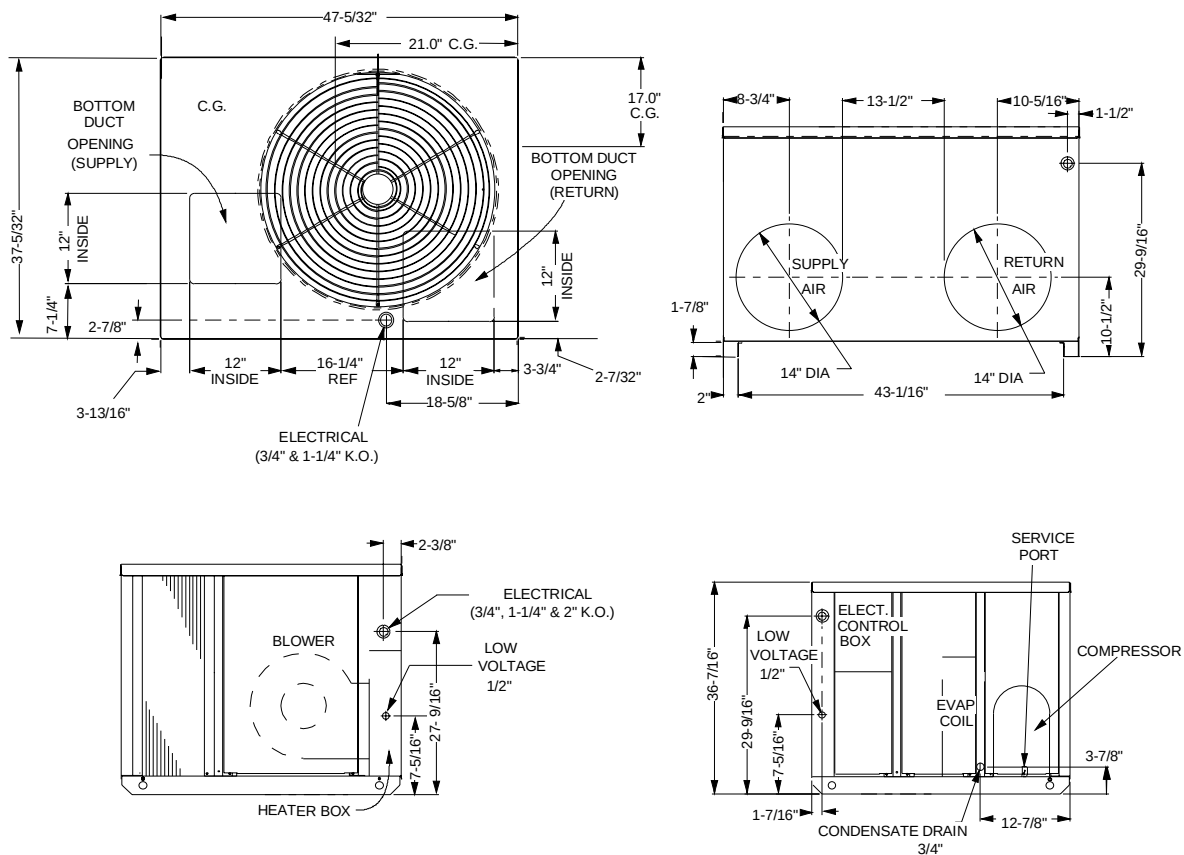
Affix this manual, Installation Instructions, and Users Information Manual adjacent to the unit.

SPECIFICATIONS			
		PHB42C02E	PHB48C02E
COOLING CAPACITY	COOLING CAPACITY, BTUH	41,000	47,500
	SEER	11.05	11.05
HEATING RATING	47°/43°F	40,500	47,000
	35°/33°F	34,100	41,700
	17°/15°F	21,600	27,000
	HSPF	6.80	6.80
UNIT ELECTRICAL SPECIFICATION	VOLTAGE (NAMEPLATE)	208/230-60-1	208/230-60-1
	UNIT AMPS (TOTAL)	24	26.3
	MIN CIRCUIT AMPACITY	28.5	31.1
	MAX OVERCURRENT PROTECTION	45	50
COMPRESSOR	TYPE	SCROLL	SCROLL
	RATED LOAD AMPS	18	19.2
	LOCKED ROTOR AMPS	103	137
CONDENSER FAN MOTOR	HORSEPOWER	1/5	1/5
	RPM	825	825
	FULL LOAD AMPS	1.3	1.3
	LOCKED ROTOR AMPS	2	2
CONDENSER FAN	BLADE DIAMETER / NUMBER	22 / 4	22 / 4
	CFM	2200	2200
CONDENSER COIL	FACE AREA (SQ. FT.)	12	12
	NUMBER OF ROWS	2	2
	FINS PER INCH	20	20
EVAPORATOR BLOWER MOTOR	HORSEPOWER - NO. OF SPEEDS	3/4 - 3	3/4 - 3
	FULL LOAD AMPS	4.7	4.7
	LOCKED ROTOR AMPS	12.2	12.2
	MOTOR SPEED TAP - COOLING	LOW	MED
EVAPORATOR BLOWER	DIAMETER X WIDTH	10 X 8	10 X 8
	RATED SCFM COOLING	1350	1550
	MAX EXTERNAL STATIC PRESS	.5 WC	.5 WC
EVAPORATOR COIL	FACE AREA (SQ. FT.)	4.4	4.4
	NUMBER OF ROWS	4	4
	FINS PER INCH	14	14
GENERAL INFORMATION	FILTER SIZE (SQ. FT.)	4.5	5.5
	DRAIN SIZE	3/4 IN	3/4 IN
	EXPANSION DEVICE	TXV / TXV	TXV / TXV
	REFRIGERANT CHARGE R-22 (OZ.)	SEE NAMEPLATE	
	POWER SUPPLY ENTRANCE SIZE	1 1/4 IN.	1 1/4 IN.
	LOW VOLTAGE ENTRANCE SIZE	3/4 IN.	3/4 IN.
	SHIPPING WEIGHT LBS.	375	378
	OPERATING WEIGHT LBS.	362	365
ACCESSORIES	ROOFCURB - HEAT PUMP	PRC06A1	PRC06A1
	ROOFCURB - COMBINATION	PRC08A1	PRC08A1
	SXS TO OVER/UNDER KIT	PDTR0U4A	PDTR0U4A
	ELECTRIC HEATER KIT	PHCB**C1	PHCB**C1
	SINGLE POINT WIRING KIT	SPK07A	SPK08A
	HORIZONTAL DUCT COVER KIT	CHK001A	CHK001A
	AMBIENT THERMOSTAT KIT	ATK01	ATK01

NOTES:

1. All units are manufactured for use on 208/230 VAC, 60 Hz, single phase electrical supply.
2. **IMPORTANT:** While the data is presented as a guide, it is required to determine the proper size fuses and wires to electrically connect the unit in accordance with the National Electrical Code and/or all existing local codes.
3. Performance figures are based on Department of Energy information and requirements under continuous operating conditions. Performance will vary with weather conditions and use.

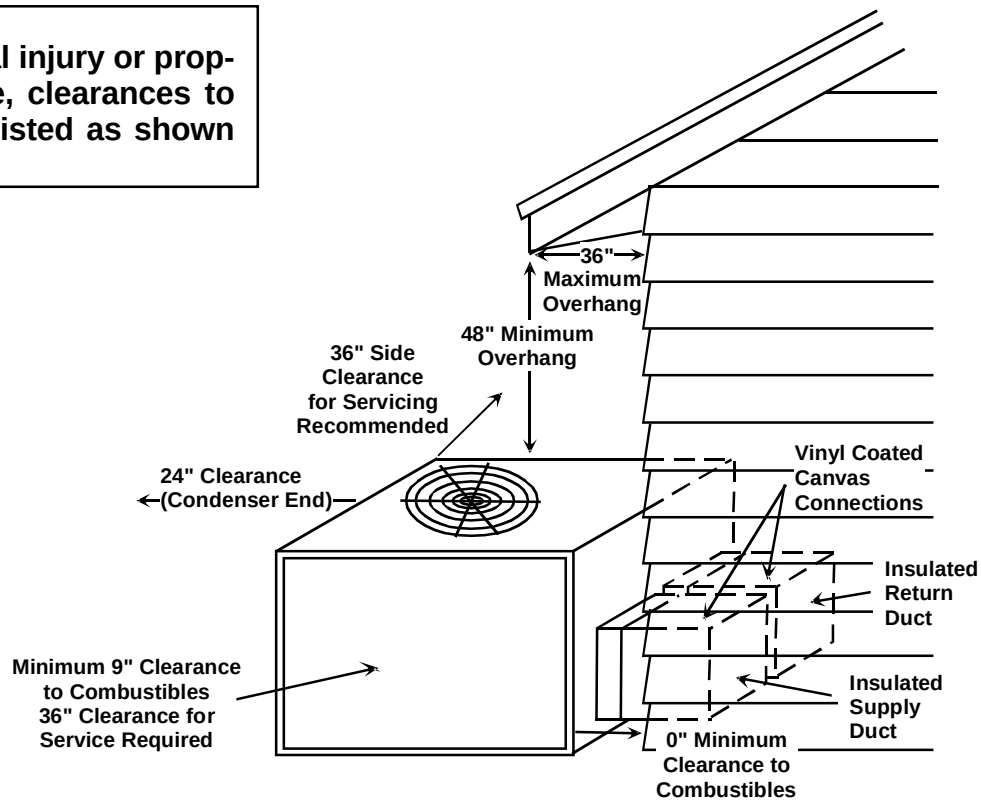
Dimensions



Clearances

! WARNING

To avoid death, personal injury or property damage due to fire, clearances to combustible surfaces listed as shown must be observed.

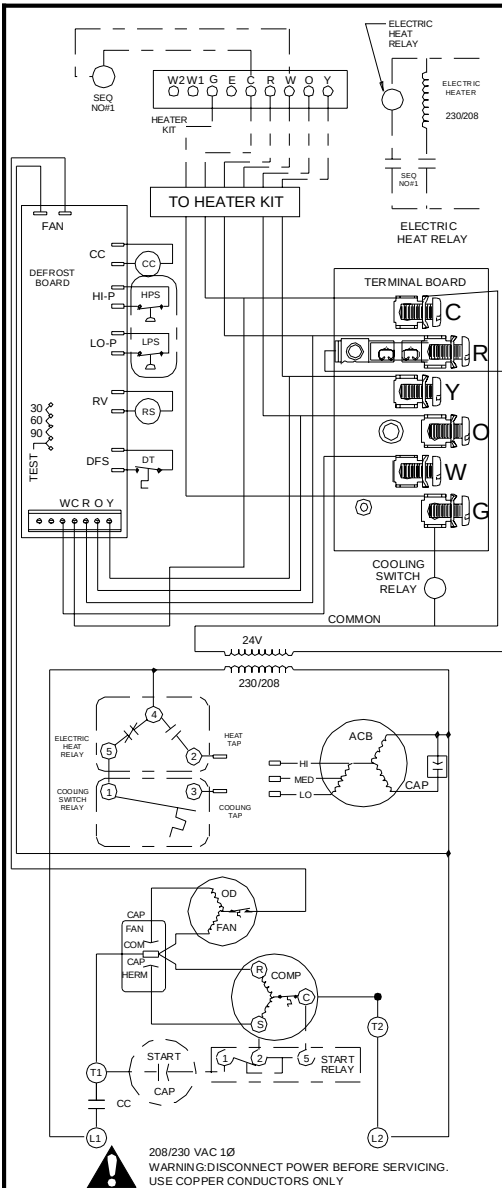




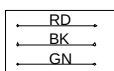
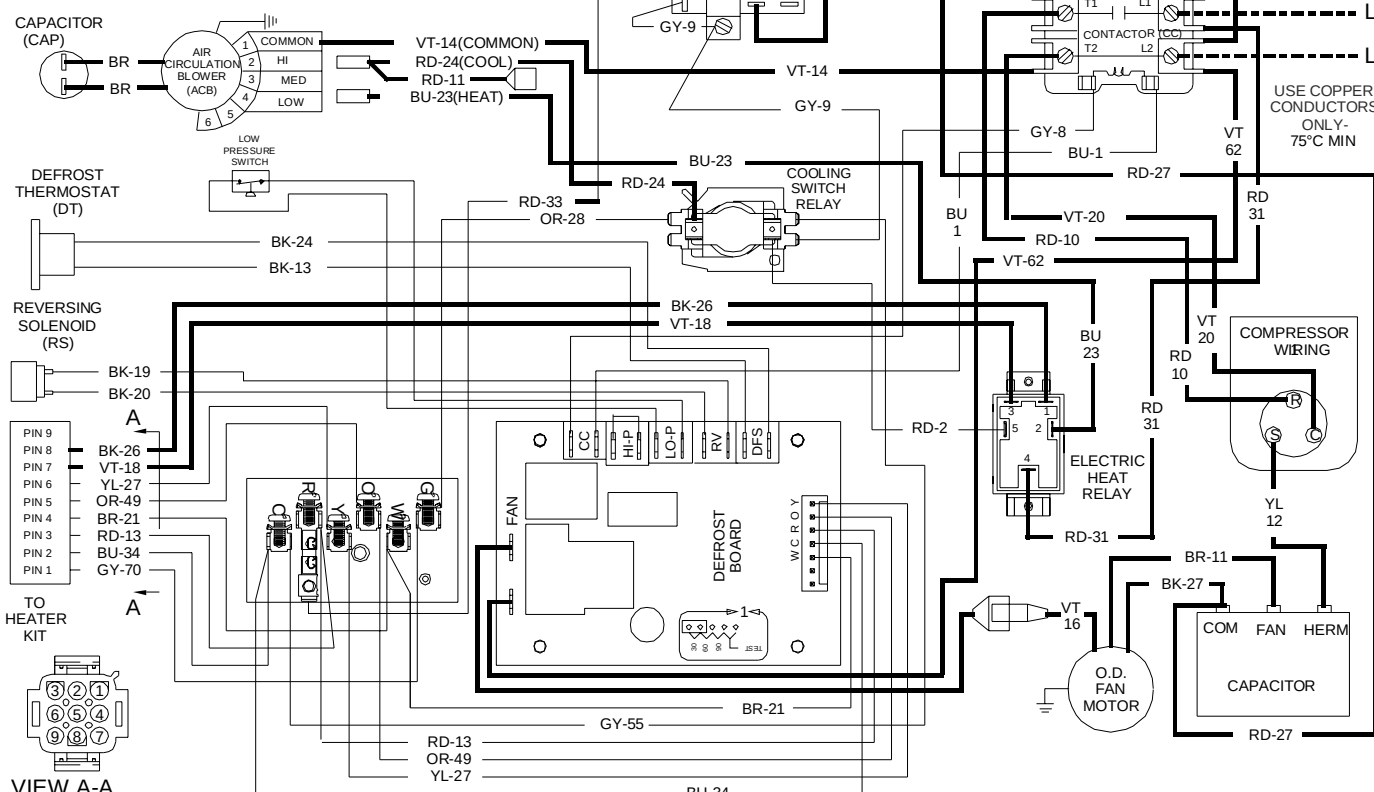
WARNING

To prevent death, personal injury or property damage due to electrical shock, disconnect electrical power to this unit before servicing or performing maintenance.

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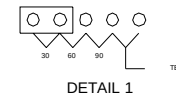


208 VOLT INSTALLATION
FOR PROPER OPERATION ON 208 VOLT THE FOLLOWING CHANGE MUST BE MADE:
MOVE RD6 WIRE FROM TRANSFORMER 230 TERMINAL TO 208 TERMINAL.



ALTERNATE UNIT POWER REFRIGERANT LEADS MAY BE USED WITH ELECTRIC HEATER ACCESSORIES. SEE HEATER ACCESSORY INSTALLATION INSTRUCTIONS.

MODEL NUMBER	COOLING BLOWER SPEED TAP	ELECTRIC HEAT BLOWER TAP							
		PHCB07C1		PHCB10C1		PHCB15C1		PHCB20C1	
		DOWN	HORIZ	DOWN	HORIZ	DOWN	HORIZ	DOWN	HORIZ
PHB42C02E	LOW	LOW	LOW	LOW	LOW	LOW	LOW	MED	MED
PHB48C02E	MED	MED	MED	MED	MED	MED	MED	HIGH	HIGH



20310701 REV. 0

COLOR CODE
YL YELLOW BR BROWN
OR ORANGE WH WHITE
VT VIOLET BU BLUE
GN GREEN GY GRAY
BK BLACK RD RED

— LOW VOLTAGE
- - - LOW VOLTAGE FIELD
— HI VOLTAGE
- - - HI VOLTAGE FIELD

Typical Heat Performance Data



CAUTION

The installation must be adjusted to obtain a temperature rise within the range listed on the unit nameplate.

*Entering indoor dry bulb temperature. All pressures are at gauge port. All temperatures are °F. Amps for total unit.

PHB42C02E																
	Outdoor Ambient Temperature (° F)															
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5	0
Δ T	32.5	30.8	29.0	27.1	25.9	25.1	23.3	21.5	17.2	15.9	14.6	13.8	13.3	11.9	10.6	9.2
AMPS	24.8	23.3	22.1	21.1	20.5	20.2	19.3	18.6	18.0	17.4	16.8	16.5	16.3	15.7	15.0	14.4
HI PR	268	257	247	237	231	227	218	209	200	191	184	179	176	169	163	156
LO PR	71	66	62	56	53	51	47	42	38	34	30	28	27	23	19	16

Above information is for nominal CFM and 70 degree indoor dry bulb. Instantaneous capacity listed.

PHB48C02E																
	Outdoor Ambient Temperature (° F)															
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5	0
Δ T	33.5	31.7	29.9	27.9	26.7	25.8	24.0	22.1	18.9	17.4	16.0	15.2	14.6	13.1	11.6	10.1
AMPS	26.8	25.3	24.0	22.9	22.3	22.0	21.1	20.3	19.6	19.0	18.4	18.1	17.9	17.3	16.5	15.9
HI PR	275	264	254	243	237	232	223	214	205	196	188	184	181	174	167	160
LO PR	70	65	61	56	53	51	47	42	38	34	30	28	27	22	19	16

Above information is for nominal CFM and 70 degree indoor dry bulb. Instantaneous capacity listed.

Dry Coil Data

PHB42,48C02E						
UNIT STATIC (in W.C.)	FAN SPEED					
	LOW		MED		HIGH	
	CFM	WATTS	CFM	WATTS	CFM	WATTS
0.2	1540	620	1780	735	2265	1010
0.3	1520	600	1755	705	2160	965
0.4	1495	575	1700	670	2095	925
0.5	1460	555	1640	640	1980	880
0.6	1400	520	1570	600	1885	840
0.7	1335	490	1500	570	1770	795
0.8	1260	450	1400	520	1650	750

Electric Strip Heat Data

Electric strip heat data will be included in the specific electric heat kit installation material shipped with the electric heater kit.

Typical Cooling Performance Data



CAUTION

The installation must be adjusted to obtain a temperature rise within the range listed on the unit nameplate.

PHB42C02E																										
			Outdoor Ambient Temperature (°F)																							
			65				75				85				95				105				115			
			Entering Indoor Wet Bulb Temperature (°F)																							
IDB*	Airflow		59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71				
70	1450	Delta T	17	15	11	-	17	15	11	-	17	15	11	-	17	15	11	-	17	15	11	-				
		AMPS	19.0	19.3	19.8	-	20.1	20.5	21.0	-	21.5	21.9	22.5	-	22.6	23.1	23.7	-	23.8	24.3	24.9	-				
		HI PR	165	178	188	-	186	200	211	-	211	227	240	-	240	259	273	-	271	291	307	-				
		LO PR	62	66	72	-	65	70	76	-	68	72	79	-	71	76	83	-	75	80	87	-				
	1350	Delta T	18	15	12	-	18	16	12	-	18	16	12	-	18	16	12	-	18	16	12	-				
		AMPS	18.9	19.3	19.7	-	20.1	20.5	21.0	-	21.4	21.8	22.4	-	22.6	23.0	23.6	-	23.7	24.2	24.9	-				
		HI PR	165	178	187	-	185	199	210	-	210	227	239	-	240	258	272	-	270	290	306	-				
		LO PR	62	66	72	-	65	69	76	-	68	72	79	-	71	76	83	-	75	79	87	-				
	1250	Delta T	18	16	12	-	19	16	12	-	19	16	12	-	19	16	12	-	18	16	12	-				
		AMPS	18.7	19.0	19.5	-	19.8	20.2	20.7	-	21.2	21.6	22.1	-	22.3	22.7	23.3	-	23.4	23.9	24.6	-				
		HI PR	162	174	184	-	182	196	207	-	207	223	235	-	236	254	268	-	265	285	301	-				
		LO PR	61	64	70	-	64	68	74	-	67	71	77	-	70	74	81	-	73	78	85	-				
75	1450	Delta T	20	18	15	10	20	18	15	10	20	18	15	10	20	19	15	10	20	18	15	10				
		AMPS	19.1	19.4	19.9	20.5	20.3	20.6	21.2	21.8	21.6	22.0	22.6	23.3	22.8	23.2	23.9	24.6	24.0	24.5	25.1	25.9				
		HI PR	167	180	190	198	188	202	213	222	213	230	242	253	243	261	276	288	273	294	311	324				
		LO PR	62	66	73	77	66	70	77	82	69	73	80	85	72	77	84	89	76	80	88	93				
	1350	Delta T	21	19	16	11	21	19	16	11	21	19	16	11	21	19	16	11	21	19	16	11				
		AMPS	19.0	19.4	19.9	20.5	20.2	20.6	21.1	21.7	21.6	22.0	22.6	23.3	22.8	23.2	23.8	24.6	23.9	24.4	25.1	25.8				
		HI PR	167	179	189	197	187	201	212	222	213	229	242	252	242	261	275	287	272	293	310	323				
		LO PR	62	66	72	77	66	70	76	81	68	73	79	85	72	76	83	89	75	80	87	93				
	1250	Delta T	21	19	16	11	21	20	16	11	21	20	16	11	22	20	16	11	21	20	16	11				
		AMPS	18.8	19.2	19.6	20.2	20.0	20.4	20.9	21.5	21.3	21.7	22.3	23.0	22.5	22.9	23.5	24.2	23.6	24.1	24.7	25.5				
		HI PR	164	176	186	194	184	198	209	218	209	225	238	248	238	256	271	282	268	288	304	317				
		LO PR	61	65	71	76	65	69	75	80	67	72	78	83	71	75	82	87	74	79	86	92				
80	1450	Delta T	22	21	18	15	22	21	19	15	22	21	19	15	22	22	19	15	22	21	18	15				
		AMPS	19.2	19.6	20.1	20.6	20.4	20.8	21.3	22.0	21.8	22.2	22.8	23.5	23.0	23.4	24.1	24.8	24.2	24.6	25.3	26.1				
		HI PR	169	182	192	200	189	204	215	225	215	232	245	255	245	264	279	291	276	297	314	327				
		LO PR	63	67	73	78	67	71	77	82	69	74	80	86	73	77	85	90	76	81	89	94				
	1350	Delta T	23	22	19	15	23	22	19	15	23	22	19	16	23	22	20	16	23	22	19	15				
		AMPS	19.2	19.5	20.0	20.6	20.4	20.7	21.3	21.9	21.7	22.2	22.7	23.4	22.9	23.4	24.0	24.7	24.1	24.6	25.3	26.0				
		HI PR	168	181	191	199	189	203	215	224	215	231	244	255	245	263	278	290	275	296	313	326				
		LO PR	63	67	73	78	66	71	77	82	69	74	80	85	73	77	84	90	76	81	88	94				
	1250	Delta T	24	23	20	16	24	23	20	16	24	23	20	16	24	23	20	16	24	23	20	16				
		AMPS	19.0	19.3	19.8	20.3	20.1	20.5	21.0	21.6	21.5	21.9	22.5	23.1	22.6	23.1	23.7	24.4	23.8	24.3	24.9	25.7				
		HI PR	165	178	188	196	186	200	211	220	211	227	240	250	240	259	273	285	271	291	307	321				
		LO PR	62	66	72	77	65	70	76	81	68	72	79	84	71	76	83	88	75	80	87	92				

*Entering Dry Bulb Temperature.

NOTE: Darker shaded area with white lettering is ARI rating conditions, (95° ambient, 80° IDB + 67° IWB).

Lighter shaded area with black lettering is ACCA rating conditions, (95° ambient, 75° IDB + 63° IWB).

All Pressures are PSIG. All temperatures are in °F.

Low and high pressure are measured at gauge port.

Amps are total unit amps at a rated voltage of 230 VAC.

Typical Cooling Performance Data



CAUTION

The installation must be adjusted to obtain a temperature rise within the range listed on the unit nameplate.

PHB48C02E																										
			Outdoor Ambient Temperature (°F)																							
			65				75				85				95				105				115			
			Entering Indoor Wet Bulb Temperature (°F)																							
IDB*	Airflow		59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71
70	1750	Delta T	18	15	12	-	18	15	12	-	18	16	12	-	18	16	12	-	18	15	12	-	17	14	11	-
		AMPS	20.9	21.3	21.8	-	22.2	22.6	23.1	-	23.6	24.0	24.7	-	24.8	25.3	26.0	-	26.1	26.6	27.3	-	27.3	27.8	28.6	-
		HI PR	158	170	180	-	178	191	202	-	202	217	230	-	230	248	261	-	259	279	294	-	286	308	325	-
		LO PR	59	63	69	-	63	67	73	-	65	69	76	-	69	73	80	-	72	76	83	-	74	79	86	-
	1650	Delta T	18	16	12	-	19	16	12	-	19	16	12	-	19	16	12	-	18	16	12	-	17	15	11	-
		AMPS	20.9	21.2	21.8	-	22.1	22.5	23.1	-	23.5	24.0	24.6	-	24.8	25.3	25.9	-	26.0	26.5	27.2	-	27.2	27.8	28.5	-
		HI PR	158	170	179	-	177	191	201	-	201	217	229	-	229	247	261	-	258	278	293	-	285	307	324	-
		LO PR	59	63	69	-	63	67	73	-	65	69	76	-	68	73	79	-	72	76	83	-	74	79	86	-
	1550	Delta T	19	16	12	-	19	16	12	-	19	16	12	-	19	16	12	-	19	16	12	-	18	15	12	-
		AMPS	20.6	21.0	21.5	-	21.9	22.3	22.8	-	23.3	23.7	24.3	-	24.5	24.9	25.6	-	25.7	26.2	26.9	-	26.9	27.4	28.2	-
		HI PR	155	167	176	-	174	187	198	-	198	213	225	-	225	243	256	-	254	273	288	-	280	302	319	-
		LO PR	58	62	68	-	62	65	71	-	64	68	74	-	67	71	78	-	70	75	82	-	73	77	85	-
75	1750	Delta T	20	19	15	11	21	19	16	11	21	19	16	11	21	19	16	11	21	19	16	11	19	18	14	10
		AMPS	21.1	21.4	22.0	22.6	22.3	22.7	23.3	23.9	23.8	24.2	24.8	25.6	25.0	25.5	26.2	26.9	26.3	26.8	27.5	28.3	27.5	28.1	28.8	29.7
		HI PR	160	172	182	190	179	193	204	213	204	220	232	242	232	250	264	275	261	281	297	310	289	311	328	342
		LO PR	60	64	70	74	63	67	74	78	66	70	77	82	69	74	80	86	73	77	84	90	75	80	87	93
	1650	Delta T	21	19	16	11	21	20	16	11	21	20	16	11	22	20	16	11	21	20	16	11	20	18	15	10
		AMPS	21.0	21.4	21.9	22.5	22.3	22.7	23.2	23.9	23.7	24.2	24.8	25.5	25.0	25.4	26.1	26.9	26.2	26.7	27.4	28.3	27.5	28.0	28.8	29.6
		HI PR	159	172	181	189	179	193	203	212	203	219	231	241	232	249	263	275	261	281	296	309	288	310	327	341
		LO PR	60	64	70	74	63	67	73	78	66	70	76	81	69	73	80	85	72	77	84	90	75	80	87	93
	1550	Delta T	22	20	16	11	22	20	16	11	22	20	16	11	22	20	17	11	22	20	16	11	20	19	15	11
		AMPS	20.8	21.1	21.7	22.3	22.0	22.4	23.0	23.6	23.4	23.9	24.5	25.2	24.7	25.1	25.8	26.6	25.9	26.4	27.1	27.9	27.1	27.6	28.4	29.3
		HI PR	157	169	178	186	176	189	200	208	200	215	227	237	228	245	259	270	256	276	291	304	283	305	322	336
		LO PR	59	63	68	73	62	66	72	77	65	69	75	80	68	72	79	84	71	76	83	88	74	78	85	91
80	1750	Delta T	23	22	19	15	23	22	19	15	23	22	19	15	23	22	19	15	23	22	19	15	21	21	18	14
		AMPS	21.2	21.6	22.1	22.7	22.5	22.9	23.4	24.1	23.9	24.4	25.0	25.7	25.2	25.7	26.4	27.1	26.5	27.0	27.7	28.6	27.7	28.3	29.0	29.9
		HI PR	162	174	184	191	181	195	206	215	206	222	234	244	235	253	267	278	264	284	300	313	292	314	332	346
		LO PR	61	65	70	75	64	68	74	79	67	71	77	82	70	74	81	87	73	78	85	91	76	81	88	94
	1650	Delta T	24	23	20	16	24	23	20	16	24	23	20	16	24	23	20	16	24	23	20	16	22	21	19	15
		AMPS	21.2	21.5	22.1	22.7	22.4	22.8	23.4	24.1	23.9	24.3	25.0	25.7	25.1	25.6	26.3	27.1	26.4	26.9	27.6	28.5	27.7	28.2	29.0	29.9
		HI PR	161	173	183	191	181	194	205	214	206	221	234	244	234	252	266	277	263	283	299	312	291	313	331	345
		LO PR	60	64	70	75	64	68	74	79	66	71	77	82	70	74	81	86	73	78	85	90	76	80	88	94
	1550	Delta T	24	23	20	16	24	23	20	16	24	23	20	16	25	24	20	16	24	23	20	16	23	22	19	15
		AMPS	20.9	21.3	21.8	22.4	22.2	22.6	23.1	23.8	23.6	24.0	24.7	25.4	24.8	25.3	26.0	26.7	26.1	26.6	27.3	28.1	27.3	27.8	28.6	29.5
		HI PR	158	170	180	188	178	191	202	211	202	217	230	239	230	248	261	273	259	279	294	307	286	308	325	339
		LO PR	59	63	69	74	63	67	73	78	65	69	76	81	69	73	80	85	72	76	83	89	74	79	86	92

*Entering Dry Bulb Temperature.

NOTE: Darker shaded area with white lettering is ARI rating conditions, (95° ambient, 80° IDB + 67° IWB).

Lighter shaded area with black lettering is ACCA rating conditions, (95° ambient, 75° IDB + 63° IWB).

All Pressures are PSIG. All temperatures are in °F.

Low and high pressure are measured at gauge port.

Amps are total unit amps at a rated voltage of 230 VAC.