



PHD[36/42]C02E

Single Package Heat Pump Heating & Cooling Unit

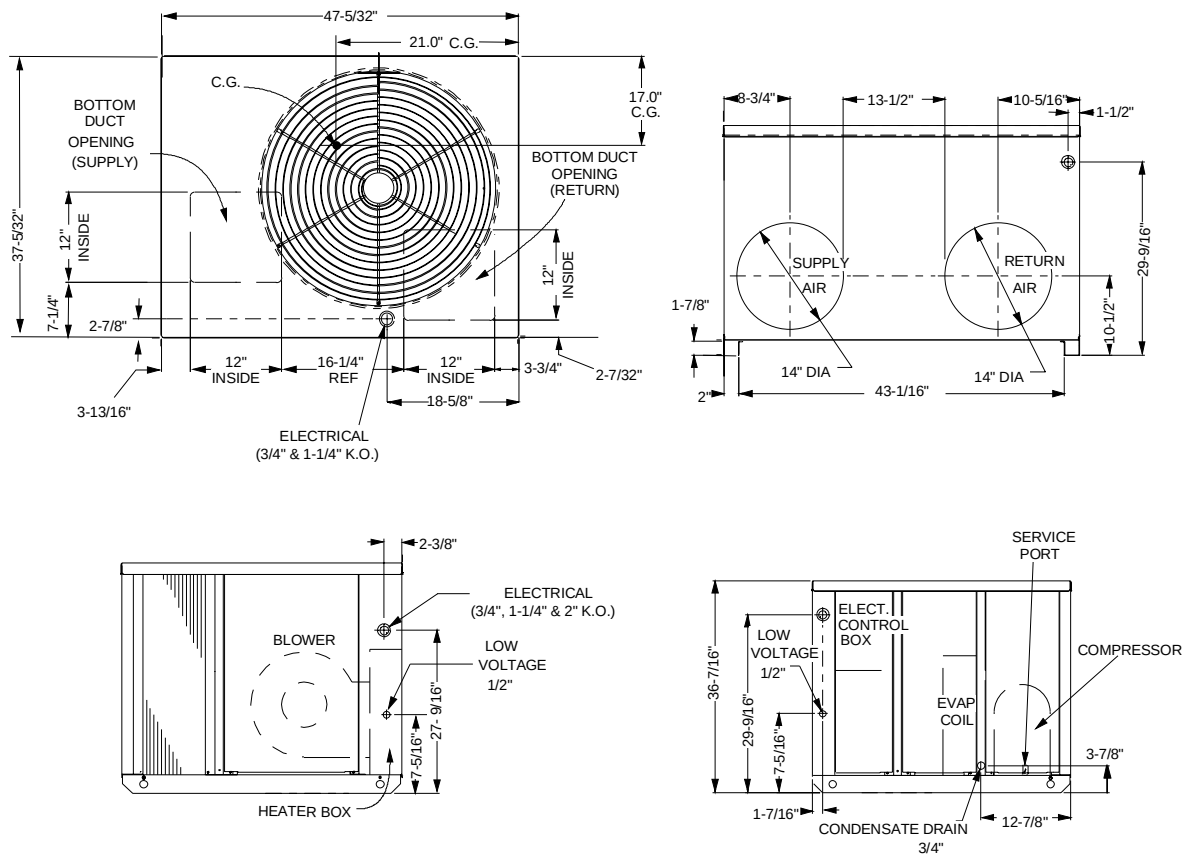
Specification Sheet

SPECIFICATIONS			
		PHD36C02E	PHD42C02E
COOLING RATING	COOLING CAPACITY, BTUH	34,000	40,000
	SEER	13.05	13.05
HEATING RATING	47°/43°F	33,000	40,000
	35°/33°F	29,000	35,000
	17°/15°F	19,000	21,500
	HSPF	7.1	7.1
UNIT ELECTRICAL SPECIFICATION	VOLTAGE (NAMEPLATE)	208/230-60-1	208/230-60-1
	UNIT AMPS (TOTAL)	20.4	25.6
	MIN CIRCUIT AMPACITY	24.2	28.9
	MAX OVERCURRENT PROTECTION	30	35
COMPRESSOR	TYPE	Scroll	Scroll
	RATED LOAD AMPS	16.4	20
	LOCKED ROTOR AMPS	83.0	104.0
CONDENSER FAN MOTOR	HORSEPOWER	1/5	1/5
	RPM	825	825
	FULL LOAD AMPS	1.3	1.3
	LOCKED ROTOR AMPS	2.0	2.0
CONDENSER FAN	BLADE DIAMETER / NUMBER	22" / 4	22" / 4
	CFM	2200	2200
CONDENSER COIL	FACE AREA (SQ. FT.)	12.4	12.4
	NUMBER OF ROWS	2	2
	FINS PER INCH	20	20
EVAPORATOR BLOWER MOTOR	HORSEPOWER - # OF SPEEDS	1/3 - 4	ECM
	FULL LOAD AMPS	2.6	4.3
	LOCKED ROTOR AMPS	4.2	ECM
	MOTOR SPEED TAP - COOLING	MED-HIGH	VARIABLE
	RPM	960	-
EVAPORATOR BLOWER	DIAMETER X WIDTH	10 X 8	10 X 8
	RATED SCFM COOLING	1100	1200
	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.)	3.0	3.4
	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	3/4, 1-1/4"	3/4, 1-1/4"
	LOW VOLTAGE ENTRANCE SIZE	3/4"	3/4"
	SHIPPING WEIGHT LBS.	365	373
	OPERATING WEIGHT LBS.	352	360
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	SPK05A	SPK06A
	HORIZONTAL DUCT COVER KIT	CHK001A	CHK001A
	AMBIENT THEROMSTAT 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

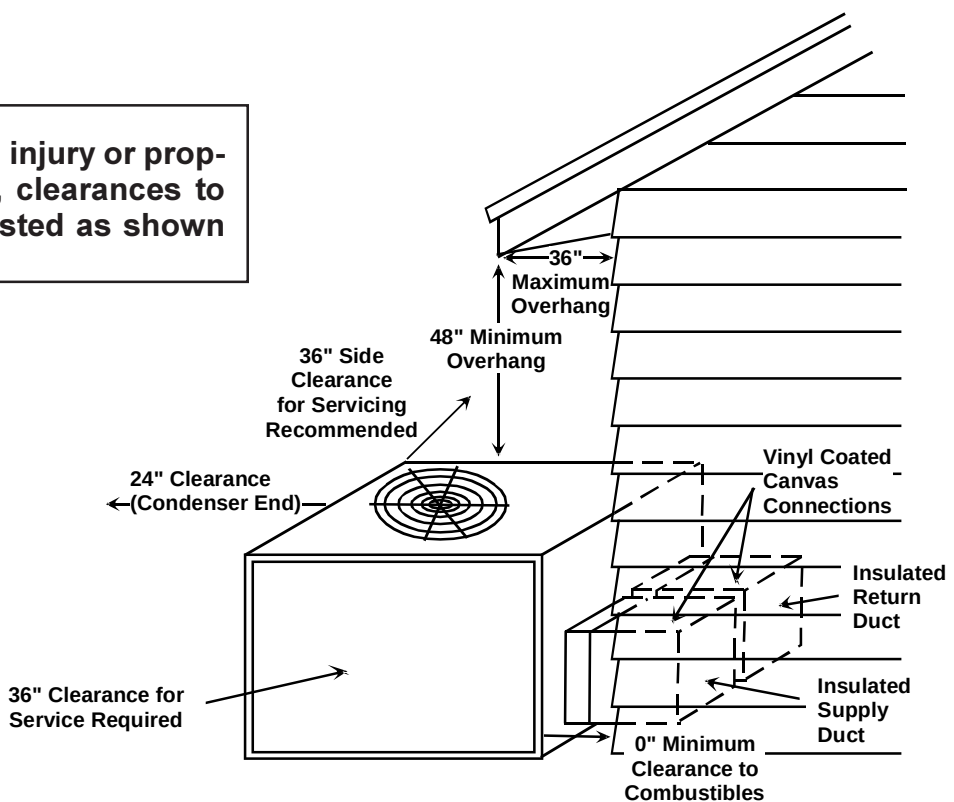


Clearances

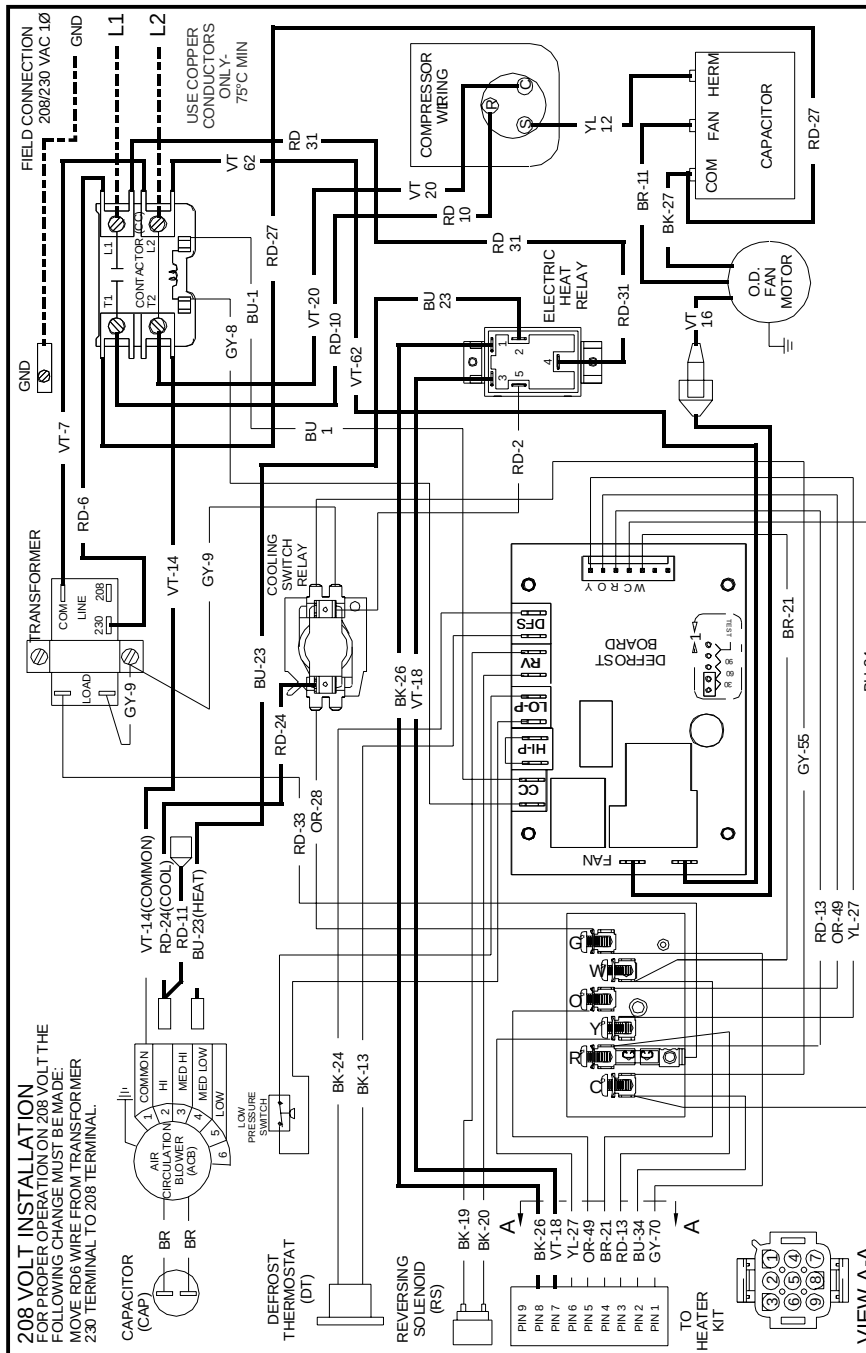


WARNING

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



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



VIEW A

BU-34

RD

BK

GN

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

20310801 REV. 0

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

LOW VOLTAGE FIELD
—
—
HI VOLTAGE
—
HI VOLTAGE FIELD

DETAIL 1

TEST

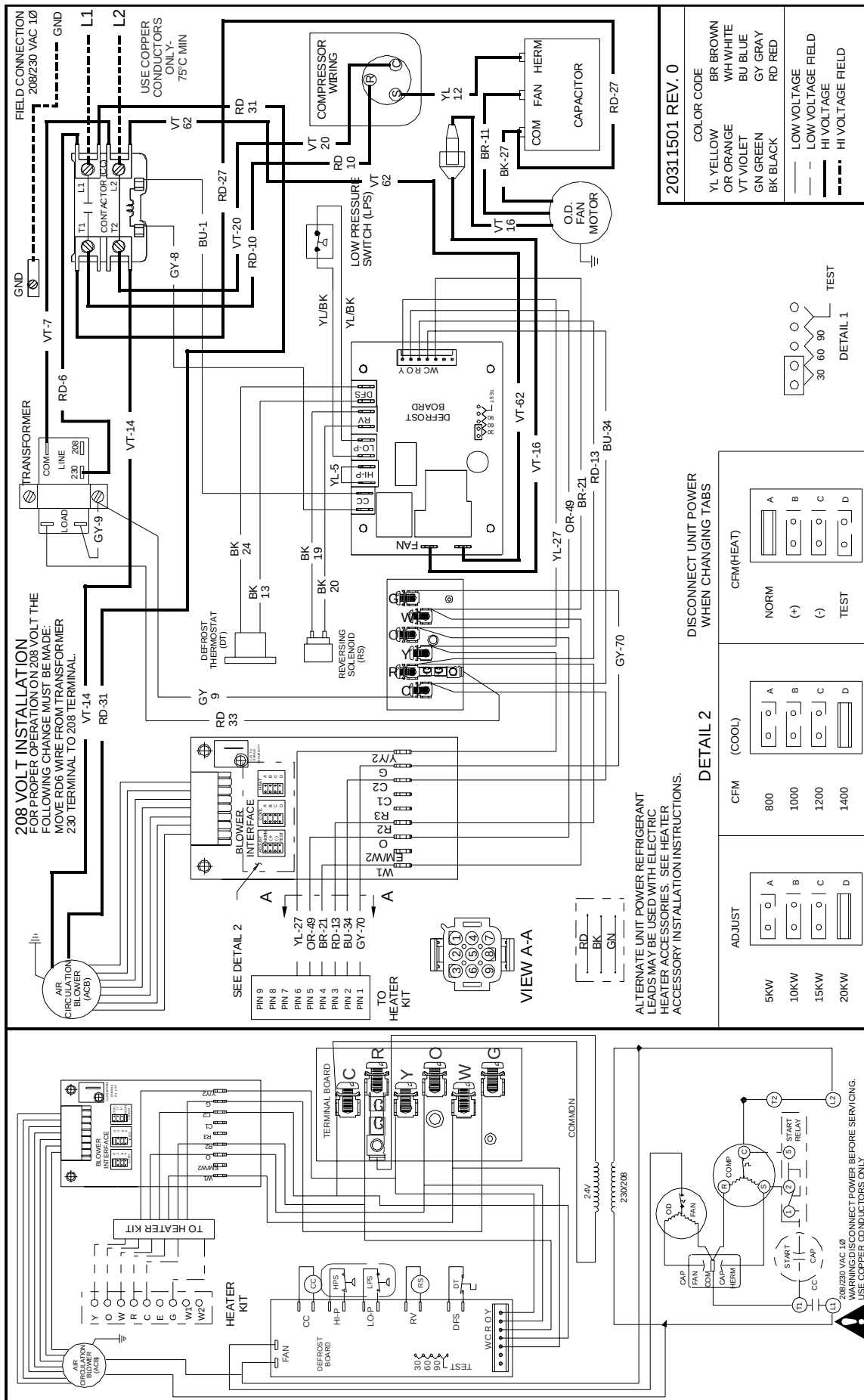
MODEL NUMBER
PHD24C02E
PHD30C02E
PHD36C02E

COOLING BLOWER SPEED TAP
LOW
MED-LOW
MED-HIGH

ELECTRIC HEAT BLOWER TAP					
PHCB05C1		PHCB10C1		PHCB15C1	PHCB20C1
DOWN	HORIZ	DOWN	HORIZ	DOWN	HORIZ
MED LOW	LOW	MED LOW	MED HIGH	HIGH	HIGH
MED LOW	LOW	MED LOW	MED HIGH	HIGH	HIGH
MED LOW	LOW	MED LOW	MED HIGH	HIGH	HIGH
MED LOW	LOW	MED LOW	MED HIGH	HIGH	HIGH

WARNING

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



Typical Heat Performance Data



CAUTION

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

*Above information is for nominal CFM and 70°F indoor dry bulb.

*All pressures are PSIG. High Pressure measured at gauge port, low pressure measured at gauge port.

*All temperatures are °F.

*Amps shown are for total unit at a rated voltage of 230 VAC.

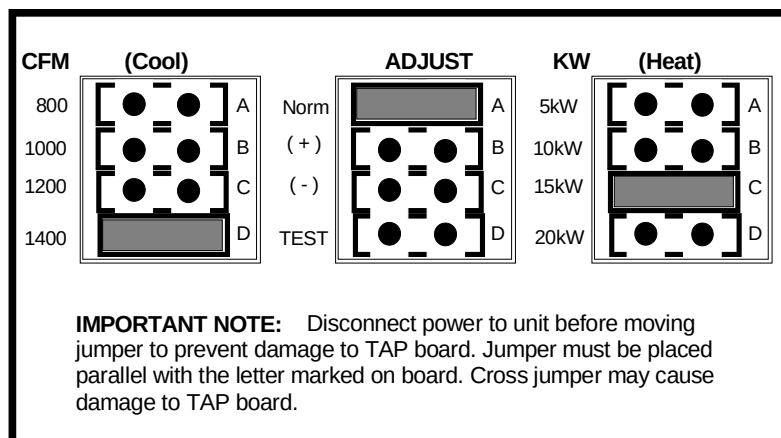
PHD36C02E																		
	Outdoor Ambient Temperature (° F)																	
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5	0	-5	-10
Delta T	33.8	32	30.1	28.2	26.9	26.1	24.2	22.3	17.7	16.4	15.1	14.2	13.7	12.3	10.9	9.5	8.1	6.7
AMPS	17.1	16	15.1	14.3	13.8	13.6	12.9	12.3	11.9	11.4	10.9	10.7	10.6	10.1	9.6	9.1	9	8
HI PR	274	263	253	242	236	232	223	214	205	195	188	183	180	173	166	160	154	148
LO PR	74	69	65	59	56	54	50	44	40	36	31	29	28	24	20	17	15	12

PHD42C02E																		
	Outdoor Ambient Temperature (° F)																	
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5	0	-5	-10
Delta T	38.2	36.1	34	31.8	30.4	29.4	27.3	25.2	19.8	18.3	16.9	15.9	15.3	13.8	12.2	10.6	9.1	7.4
AMPS	21.4	19.9	18.6	17.5	16.9	16.6	15.7	14.9	14.3	13.6	13.0	12.7	12.5	11.9	11.1	10.5	10	9
HI PR	311	299	287	274	268	263	253	243	232	222	213	208	204	196	189	181	175	169
LO PR	74	68	64	59	56	53	49	44	40	35	31	29	28	24	20	17	15	12

Dry Coil Data

PHD36C02E								
Unit Static (In. W.C.)	Fan Speed							
	Low		Med		Med-High		High	
	CFM	Watts	CFM	Watts	CFM	Watts	CFM	Watts
0.1	840	230	1010	295	1230	385	1660	550
0.2	820	225	990	287	1205	372	1600	530
0.3	800	220	970	280	1180	360	1540	510
0.4	770	210	940	270	1150	345	1480	485
0.5	735	200	905	260	1110	330	1420	460
0.6	700	185	850	250	1060	305	1350	435
0.7	660	170	790	235	1005	290	1280	410
0.8	605	155	700	220	905	275	1205	390

PHD42C02E					
COOLING SPEED	ADJUST TAB	CFM @ 0.1 - 0.5 ESP	Heating Speed	Adjust Tab	CFM @ 0.1 - 0.5 ESP
A	Minus	750	A	Minus	790
A	Normal	840	A	Normal	880
A	Plus	920	A	Plus	960
B	Minus	880	B	Minus	900
B	Normal	980	B	Normal	1010
B	Plus	1070	B	Plus	1110
C	Minus	1050	C	Minus	1060
C	Normal	1170	C	Normal	1180
C	Plus	1280	C	Plus	1290
D	Minus	1210	D	Minus	1150
D	Normal	1350	D	Normal	1280
D	Plus	1480	D	Plus	1400



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.

PHD36C02E																										
			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	1270	Delta T	17	14	11	-	17	15	11	-	17	15	11	-	17	15	11	-	17	14	11	-	16	14	10	-
		AMPS	11.3	11.6	11.9	-	12.1	12.4	12.7	-	13.0	13.3	13.7	-	13.8	14.1	14.5	-	14.6	14.9	15.3	-	15.3	15.7	16.1	-
		HI PR	157	169	179	-	176	190	200	-	200	216	228	-	228	246	259	-	257	276	292	-	284	305	323	-
		LO PR	62	66	72	-	66	70	76	-	68	73	79	-	72	76	83	-	75	80	87	-	78	83	90	-
	1170	Delta T	18	15	12	-	18	15	12	-	18	15	12	-	18	15	12	-	18	15	12	-	16	14	11	-
		AMPS	11.3	11.5	11.9	-	12.1	12.3	12.7	-	13.0	13.3	13.6	-	13.8	14.0	14.5	-	14.5	14.8	15.3	-	15.3	15.6	16.1	-
		HI PR	157	169	178	-	176	189	200	-	200	215	227	-	228	245	259	-	256	276	291	-	283	305	322	-
		LO PR	62	66	72	-	65	70	76	-	68	72	79	-	71	76	83	-	75	80	87	-	77	82	90	-
	1070	Delta T	18	16	12	-	18	16	12	-	18	16	12	-	19	16	12	-	18	16	12	-	17	15	11	-
		AMPS	11.2	11.4	11.7	-	11.9	12.2	12.5	-	12.8	13.1	13.5	-	13.6	13.9	14.3	-	14.3	14.6	15.1	-	15.1	15.4	15.9	-
		HI PR	154	166	175	-	173	186	196	-	196	211	223	-	224	241	254	-	252	271	286	-	278	299	316	-
		LO PR	61	65	71	-	64	68	75	-	67	71	78	-	70	75	81	-	74	78	85	-	76	81	88	-
75	1270	Delta T	19	18	15	10	19	18	15	10	19	18	15	10	20	18	15	10	19	18	15	10	18	17	14	9
		AMPS	11.4	11.7	12.0	12.4	12.2	12.5	12.8	13.2	13.1	13.4	13.8	14.2	13.9	14.2	14.6	15.1	14.7	15.0	15.4	16.0	15.5	15.8	16.3	16.8
		HI PR	159	171	180	188	178	192	202	211	203	218	230	240	231	248	262	273	260	279	295	308	287	309	326	340
		LO PR	63	67	73	78	66	70	77	82	69	73	80	85	72	77	84	89	76	81	88	94	78	83	91	97
	1170	Delta T	20	19	15	11	21	19	15	11	21	19	15	11	21	19	16	11	20	19	15	11	19	18	14	10
		AMPS	11.4	11.6	12.0	12.3	12.2	12.4	12.8	13.2	13.1	13.4	13.7	14.2	13.9	14.2	14.6	15.1	14.6	15.0	15.4	15.9	15.4	15.8	16.2	16.8
		HI PR	158	170	180	188	178	191	202	210	202	217	229	239	230	248	261	273	259	278	294	307	286	308	325	339
		LO PR	63	67	73	77	66	70	77	82	69	73	80	85	72	77	84	89	76	80	88	93	78	83	91	97
	1070	Delta T	21	19	16	11	21	20	16	11	21	20	16	11	21	20	16	11	21	20	16	11	20	18	15	10
		AMPS	11.3	11.5	11.8	12.2	12.0	12.3	12.6	13.0	12.9	13.2	13.6	14.0	13.7	14.0	14.4	14.9	14.4	14.8	15.2	15.7	15.2	15.5	16.0	16.5
		HI PR	156	167	177	184	175	188	198	207	199	214	226	235	226	243	257	268	254	274	289	301	281	302	319	333
		LO PR	61	65	71	76	65	69	75	80	67	72	78	83	71	75	82	88	74	79	86	92	77	82	89	95
80	1270	Delta T	21	21	18	14	22	21	18	14	22	21	18	14	22	21	18	15	22	21	18	14	20	19	17	13
		AMPS	11.5	11.7	12.1	12.5	12.3	12.6	12.9	13.3	13.2	13.5	13.9	14.4	14.0	14.3	14.7	15.2	14.8	15.1	15.6	16.1	15.6	15.9	16.4	17.0
		HI PR	160	173	182	190	180	194	204	213	205	220	232	242	233	251	265	276	262	282	298	311	290	312	329	343
		LO PR	63	67	74	78	67	71	78	83	70	74	81	86	73	78	85	90	77	81	89	95	79	84	92	98
	1170	Delta T	23	22	19	15	23	22	19	15	23	22	19	15	23	22	19	15	23	22	19	15	21	20	18	14
		AMPS	11.5	11.7	12.0	12.4	12.3	12.5	12.9	13.3	13.2	13.5	13.9	14.3	14.0	14.3	14.7	15.2	14.8	15.1	15.5	16.1	15.5	15.9	16.4	16.9
		HI PR	160	172	182	189	179	193	204	213	204	220	232	242	232	250	264	275	261	281	297	310	289	311	328	342
		LO PR	63	67	73	78	67	71	77	83	69	74	81	86	73	77	85	90	76	81	89	94	79	84	92	98
	1070	Delta T	23	23	20	16	24	23	20	16	24	23	20	16	24	23	20	16	24	23	20	16	22	21	18	15
		AMPS	11.3	11.6	11.9	12.3	12.1	12.4	12.7	13.1	13.0	13.3	13.7	14.1	13.8	14.1	14.5	15.0	14.6	14.9	15.3	15.8	15.3	15.7	16.1	16.7
		HI PR	157	169	179	186	176	190	200	209	201	216	228	238	228	246	260	271	257	276	292	305	284	305	323	336
		LO PR	62	66	72	77	66	70	76	81	68	73	79	84	72	76	83	89	75	80	87	93	78	83	90	96

*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.

PHD42C02E																										
			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	1350	Delta T	18	16	12	-	19	16	12	-	19	16	12	-	19	16	12	-	18	16	12	-	17	15	11	-
		AMPS	12.9	13.2	13.6	-	13.9	14.2	14.7	-	15.0	15.4	15.9	-	16.0	16.4	16.9	-	17.0	17.4	18.0	-	18.0	18.4	19.0	-
		HI PR	165	178	188	-	186	200	211	-	211	227	240	-	240	259	273	-	271	291	307	-	299	322	340	-
		LO PR	58	62	68	-	62	66	72	-	64	68	74	-	67	72	78	-	71	75	82	-	73	78	85	-
	1250	Delta T	19	17	13	-	19	17	13	-	19	17	13	-	20	17	13	-	19	17	13	-	18	16	12	-
		AMPS	12.9	13.1	13.6	-	13.8	14.2	14.6	-	15.0	15.3	15.8	-	16.0	16.4	16.9	-	17.0	17.4	17.9	-	18.0	18.4	19.0	-
		HI PR	165	178	187	-	185	199	210	-	210	227	239	-	240	258	272	-	270	290	306	-	298	321	339	-
		LO PR	58	62	68	-	61	65	71	-	64	68	74	-	67	71	78	-	70	75	82	-	73	77	84	-
	1150	Delta T	20	17	13	-	20	17	13	-	20	17	13	-	20	18	13	-	20	17	13	-	19	16	12	-
		AMPS	12.7	13.0	13.4	-	13.6	14.0	14.4	-	14.8	15.1	15.6	-	15.7	16.1	16.6	-	16.7	17.1	17.7	-	17.7	18.1	18.7	-
		HI PR	162	174	184	-	182	196	207	-	207	223	235	-	236	254	268	-	265	285	301	-	293	315	333	-
		LO PR	57	61	66	-	60	64	70	-	63	67	73	-	66	70	77	-	69	74	80	-	71	76	83	-
75	1350	Delta T	21	20	16	11	21	20	16	11	21	20	16	11	22	20	16	11	21	20	16	11	20	18	15	10
		AMPS	13.0	13.3	13.7	14.2	14.0	14.3	14.8	15.3	15.2	15.5	16.0	16.6	16.2	16.6	17.1	17.7	17.2	17.6	18.2	18.8	18.2	18.6	19.2	19.9
		HI PR	167	180	190	198	188	202	213	222	213	230	242	253	243	261	276	288	273	294	311	324	302	325	343	358
		LO PR	59	63	68	73	62	66	72	77	65	69	75	80	68	72	79	84	71	76	83	88	74	78	86	91
	1250	Delta T	22	20	17	12	23	21	17	12	23	21	17	12	23	21	17	12	22	21	17	12	21	19	16	11
		AMPS	13.0	13.3	13.7	14.2	14.0	14.3	14.7	15.3	15.1	15.5	16.0	16.6	16.1	16.5	17.0	17.7	17.1	17.5	18.1	18.8	18.1	18.6	19.2	19.9
		HI PR	167	179	189	197	187	201	212	222	213	229	242	252	242	261	275	287	272	293	310	323	301	324	342	357
		LO PR	59	63	68	73	62	66	72	77	65	69	75	80	68	72	79	84	71	76	82	88	73	78	85	91
	1150	Delta T	23	21	17	12	23	21	18	12	23	21	18	12	23	22	18	12	23	21	17	12	22	20	16	11
		AMPS	12.8	13.1	13.5	14.0	13.8	14.1	14.5	15.0	14.9	15.2	15.7	16.3	15.9	16.3	16.8	17.4	16.9	17.3	17.8	18.5	17.8	18.3	18.9	19.6
		HI PR	164	176	186	194	184	198	209	218	209	225	238	248	238	256	271	282	268	288	304	317	296	318	336	351
		LO PR	58	61	67	71	61	65	71	75	63	67	74	78	67	71	77	82	70	74	81	86	72	77	84	89
80	1350	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	13.1	13.4	13.8	14.3	14.1	14.5	14.9	15.5	15.3	15.7	16.2	16.8	16.3	16.7	17.2	17.9	17.3	17.7	18.3	19.0	18.3	18.8	19.4	20.1
		HI PR	169	182	192	200	189	204	215	225	215	232	245	255	245	264	279	291	276	297	314	327	305	328	347	361
		LO PR	60	63	69	74	63	67	73	78	65	70	76	81	69	73	80	85	72	77	84	89	74	79	86	92
	1250	Delta T	25	24	21	17	25	24	21	17	25	24	21	17	25	24	21	17	25	24	21	17	23	22	19	16
		AMPS	13.1	13.4	13.8	14.3	14.1	14.4	14.9	15.4	15.3	15.6	16.1	16.7	16.3	16.7	17.2	17.8	17.3	17.7	18.3	19.0	18.3	18.7	19.3	20.1
		HI PR	168	181	191	199	189	203	215	224	215	231	244	255	245	263	278	290	275	296	313	326	304	327	346	360
		LO PR	59	63	69	73	63	67	73	78	65	69	76	81	68	73	80	85	72	76	83	89	74	79	86	92
	1070	Delta T	26	25	21	17	26	25	22	17	26	25	22	17	26	25	22	17	26	25	21	17	24	23	20	16
		AMPS	12.9	13.2	13.6	14.1	13.9	14.2	14.7	15.2	15.0	15.4	15.9	16.5	16.0	16.4	16.9	17.6	17.0	17.4	18.0	18.7	18.0	18.4	19.0	19.7
		HI PR	165	178	188	196	186	200	211	220	211	227	240	250	240	259	273	285	271	291	307	321	299	322	340	354
		LO PR	58	62	68	72	62	66	72	76	64	68	74	79	67	72	78	83	71	75	82	87	73	78	85	90

*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.