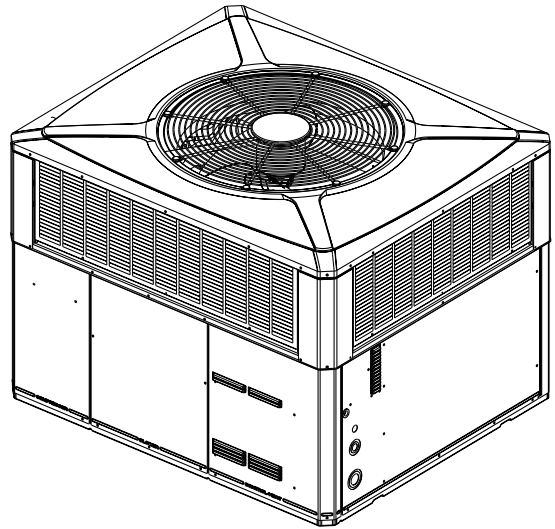


Product and Submittal Data

Single Packaged Heat Pump Entry, Convertible, 2 to 5 Ton, R-454B

A5PH3024A1000A
A5PH3030A1000A
A5PH3036A1000A
A5PH3042A1000A
A5PH3048A1000A
A5PH3060A1000A



Note: Graphics in this document are for representation only. Actual model may differ in appearance.

Introduction

Single Packaged Electric Heat Pumps are easy and versatile to install.

Because cooling and heating functions are all contained in a single cabinet, Trane packaged heat pump systems are easy to install and service. It can be flush mounted beside your home at ground level or placed on the roof for horizontal or downflow installation. When connected to an optional Trane thermostat control, and air distribution ducts, you have a highly efficient, total home comfort system.

Single Packaged Electric Heat Pump Systems are unmatched in quality and reliability.

All major components on these products, including the compressor, have been designed and manufactured for maximum service. Every compressor is designed and manufactured to exacting specifications. Each design is life tested in extreme environments to ensure reliable and long lasting operation in normal applications. Each compressor has internal motor protection for added reliability.

Single Packaged Electric Heat Pump Systems provide better performance.

Our single packaged cooling/heating units offer cooling/heating efficiencies that are unmatched in the industry and provide you with a product far superior in performance than the competition.

Copyright

This document and the information in it are the property of Trane, and may not be used or reproduced in whole or in part without written permission. Trane reserves the right to revise this publication at any time, and to make changes to its content without obligation to notify any person of such revision or change.

Trademark

All trademarks referenced in this document are the trademarks of their respective owners.

Data Notes

This document supersedes and includes data from the documents listed below.

Table 1. Data notes

Literature Number	Title
A5PH3024A-SUB-1*	Single Packaged Heat Pump Model A5PH3024A1000A Submittal
A5PH3030A-SUB-1*	Single Packaged Heat Pump Model A5PH3030A1000A Submittal
A5PH3036A-SUB-1*	Single Packaged Heat Pump Model A5PH3036A1000A Submittal
A5PH3042A-SUB-1*	Single Packaged Heat Pump Model A5PH3042A1000A Submittal
A5PH3048A-SUB-1*	Single Packaged Heat Pump Model A5PH3048A1000A Submittal
A5PH3060A-SUB-1*	Single Packaged Heat Pump Model A5PH3060A1000A Submittal

Table of Contents

- Optional Equipment Listing 4
- Product Specifications 5
- Supplementary Electric Heaters 7
- BAYSPEK - Single Power Entry Kit 9
- Indoor Fan Performance (230V) 10
- Wiring Diagrams..... 13
- Full Perimeter Roof Mounting Curb 19
- Optional Equipment — Outside Air Damper 21
- Optional Equipment — Filter Rack 22
- Dimensional Data..... 23
- Mechanical Specifications 25

Optional Equipment Listing

Table 2. Optional equipment listing

454 Model Number	Use With
Hinged Filter Access Door (A5PH3024-36)	BAYACCDOR1A []
Hinged Filter Access Door (A5PH3042-60)	BAYACCDOR2A []
Adapter Curb (Cabinet A/B) (A5PH3024-36)	BAYADAP050A []
Adapter Curb (Cabinet C) (A5PH3024-36)	BAYADAP051A []
Adapter Curb (Cabinet A/B) (A5PH3042-60)	BAYADAP052A []
Adapter Curb (Cabinet C) (A5PH3042-60)	BAYADAP053A []
Adapter Curb (Cabinet D) (A5PH3042-60)	BAYADAP054A []
Anti-Short Cycle Timer (A5PH3024-60)	BAYASCT001 []
Crankcase Heater (230V) (Scroll) (A5PH3042-60)	BAYCCHT102A []
Crankcase Heater (230V) (Scroll) (A5PH3024-36)	BAYCCHT103A []
Flat Roof Full Perimeter Curb (Insulated) (A5PH3024-36)	BAYCURB050A []
Flat Roof Full Perimeter Curb (Insulated) (A5PH3042-60)	BAYCURB051A []
Extreme Conditions Mounting Kit (Used on BAYCURB & BAYADAP) (A5PH3024-60)	BAYEXMK001A []
Extreme Conditions Mounting Kit (Used on BAYUTIL) (A5PH3024-60)	BAYEXMK002B []
Extreme Conditions Mounting Kit (Used on Slab Mounts) (A5PH3024-60)	BAYEXMK003A []
1-2" Filter Frame-Requires one 18x25 filter (not included) (A5PH3024-36)	BAYFLTR101C []
1-2" Filter Frame-Requires one 18x20, and one 18x18 filter (not included) (A5PH3042-60)	BAYFLTR201C []
Supplementary Electric Heater - 1ph 5kW (A5PH3024-60)	BAYHTRG105A []
Supplementary Electric Heater - 1ph 8kW (A5PH3024-60)	BAYHTRG108A []
Supplementary Electric Heater - 1ph 10kW (A5PH3024-60)	BAYHTRG110A []
Supplementary Electric Heater - 1ph 15kW (A5PH3030-60)	BAYHTRG115A []
Supplementary Electric Heater - 1ph 20kW (A5PH3048-60)	BAYHTRG120A []
Supplementary Electric Heater - 1ph 25kW (A5PH3060)	BAYHTRG125A []
Single Power Entry Kit (A5PH3024-42)	BAYSPEK060J []
Single Power Entry Kit (A5PH3024-60)	BAYSPEK062J []
Single Power Entry Kit (A5PH3030-60)	BAYSPEK063J []

Product Specifications

Table 3. Product specifications

MODEL	A5PH3024	A5PH3030	A5PH3036	A5PH3042	A5PH3048	A5PH3060
RATED Volts/PH/Hz	208–230/1/60					
Performance Cooling BTUH ^(a)	23800	29600	35200	43000	48000	57000
Indoor Airflow (CFM)	740	990	1150	1440	1650	1970
Power Input (KW)	2.11	2.55	3.11	3.65	4.34	5.00
EER2/SEER2 (BTU/Watt-Hr.) ^(b)	10.6/13.4					
Sound Power Rating [dB(A)] ^(c)	66.4	70	70.9	71.5	72.5	80
PERFORMANCE HEATING	208–230/1/60					
(High Temp.) BTUH	21000	26400	34000	39000	45000	56000
Power Input (KW)	1.76	2.23	2.85	3.33	3.93	4.78
(Low Temp.) BTUH	12800	15800	21400	24400	29400	34800
Power Input (KW)	1.63	2.04	2.62	3.12	3.66	4.36
HSPF2 (BTUH/Watt-Hr)	6.7	6.7	6.7	6.7	6.7	6.7
POWER CONN. — V/Ph/Hz	208–230/1/60					
Min. Brch. Cir. Ampacity ^(d)	LOCATED ON UNIT NAMEPLATE					
Fuse Size — Max. (amps)	LOCATED ON UNIT NAMEPLATE					
Fuse Size — Recmd. (amps)	LOCATED ON UNIT NAMEPLATE					
COMPRESSOR	SCROLL					
VOLTS/PH/HZ	208–230/1/60					
R.L. Amps — L.R. Amps	LOCATED ON UNIT NAMEPLATE					
OUTDOOR COIL — TYPE	SPINE FIN					
Rows/F.P.I	2 / 24					
Face Area (sq. ft.)	13.32	15.49	15.49	20.54	20.54	23
Tube Size (in.)	3/8					
Refrigerant Control	EXPANSION VALVE					
INDOOR COIL — TYPE	PLATE FIN					
Rows/F.P.I 3 / 15	3/15	4/15	4/15	3/15	3/15	4/15
Face Area (sq. ft.)	3.5			5.0		
Tube Size (in.)	3/8					
Refrigeration Control	EXPANSION VALVE					
Drain Conn. Size (in.)	3/4" FEMALE NPT					
OUTDOOR FAN — TYPE	PROPELLER					
DIA. (IN.)	23.4			28.3		
DRIVE/NO. SPEEDS	DIRECT / 1					
CFM @ 0.0 in. w.g. ^(e)	2550	3270	3250	4400	4400	5500
Motor — HP/R.P.M	1/12 / 825	1/6 / 825	1/5 / 825	1/4 / 825	1/4 / 825	1/3 / 825

Product Specifications

Table 3. Product specifications (continued)

MODEL	A5PH3024	A5PH3030	A5PH3036	A5PH3042	A5PH3048	A5PH3060
Volts/Ph/Hz	208–230/1/60					
F.L. Amps/L.R Amps	LOCATED ON UNIT NAMEPLATE					
INDOOR FAN — TYPE	CONSTANT TORQUE ECM					
Dia. x Width (in.)	10.62 X 10.62	10.62 X 10.62	10.62 X 10.62	10.62 X 10.62	10.62 X 10.62	11.87 X 10.62
Drive/No. Speeds	DIRECT / 4					
CFM @ 0.0 in. w.g. ^(f)	SEE FAN PERFORMANCE TABLE					
Motor — HP / R.P.M.	1/2 / 1050	1/2 / 1050	1/2 / 1050	3/4 / 1050	3/4 / 1050	1 / 1050
Volts/Ph/Hz	208–230/1/60					
F.L. Amps	LOCATED ON UNIT NAMEPLATE					
FILTER / FURNISHED	NO					
Type Recommended	THROWAWAY					
Recmd. Face Area (sq. ft) ^(g)	4.0			5.3		
REFRIGERANT	R-454B					
Charge (lbs.)	LOCATED ON UNIT NAMEPLATE					
Subcooling	12°	12°	12°	12°	12°	8°
DIMENSIONS	H X W X L					
Crated (in.)	46 X 45 X 52	48 X 45 X 52	48 X 45 X 52	50 X 47 X 62	50 X 47 X 62	52 X 47 X 62
WEIGHT						
Shipping (lbs.) / Net (lbs.)	403 / 329	434 / 359	444 / 369	554 / 450	535 / 431	596 / 492

^(a) Rated in accordance with AHRI Standard 210/240.

^(b) Rated in accordance with D.O.E. test procedure.

^(c) Sound Power values are not adjusted for AHRI 270-95 tonal corrections.

^(d) Calculated in accordance with currently prevailing Nat'l Electrical Code.

^(e) Standard Air — Dry Coil — Outdoor.

^(f) Standard Air — Dry Coil — Indoor

^(g) Filters must be installed in return air stream. Square footages listed are based on 300 f.p.m. face velocity. If permanent filters are used size per manufacturer's recommendation with a clean resistance of 0.05" W.C.

Supplementary Electric Heaters

Table 4. Supplementary electric heaters

UNIT MODEL	ELECTRIC HEATER MODEL	RATED VOLT-AGE	PHASE	AMPS	HEATER CAPACITY		NO. OF STAGES	KW/STAGE		MCA	MAX. FUSE OR HACR CKT BKR SIZE (a)	CANADA ONLY MAX. CKT BKR SIZE (b)
					KW	BTUH		1	2			
&TCC&024-060+1 &WCC&024-060+1 &TCY&024-060+1 &WCY&024-060+1 &WCZ&024-060+1 A5PA&024-060+1 A5PH&024-060+1	BAYHTRG105	208/240	1	18/21	3.76/5.0	12800/ 17100	1	3.76/ 5.0	-	23/26	25/30	25/30
&TCC&024-060+1 &WCC&024-060+1 &TCY&024-060+1 &WCY&024-060+1 &WCZ&024-060+1 A5PA&024-060+1 A5PH&024-060+1	BAYHTRG108	208/240	1	29/33	6.0/8.0	20500/ 27300	1	6.0/8.0	-	36/41	40/45	40/45
&TCC&024-060+1 &WCC&024-060+1 &TCY&024-060+1 &WCY&024-060+1 &WCZ&024-060+1 A5PA&024-060+1 A5PH&024-060+1	BAYHTRG110	208/240	1	36/42	7.5/10.0	25600/ 34100	1	7.5/ 10.0	-	45/52	45/60	45/60
&TCC&030-060+1 &WCC&030-060+1 &TCY&030-060+1 &WCY&030-060+1 &WCZ&036+1 &WCZ&048+1 &WCZ&060+1 A5PA&030-060+1 A5PH&030-060+1	BAYHTRG115	208/240	1	54/63	11.27/ 15.0	38500/ 51200	2	7.5/ 10.0	3.76/ 5.0	68/78	70/80	70/80
&TCC&048-060+1 &WCC&048-060+1 &TCY&042-060+1 &WCY&042-060+1 &WCZ&048-060+1 A5PA&048-060+1 A5PH&048-060+1	BAYHTRG120#	208/240	1	72/83	15.0/ 20.0	51200/ 68300	2	7.5/ 10.0	7.5/ 10.0	90/ 104	90/110	90/110
&TCC&060+1 &WCC&060+1 &TCY&042-060+1 &WCY&042-060+1 &WCZ&048-060+1 A5PA&060+1 A5PH&060+1	BAYHTRG125#	208/240	1	90/ 104	18.78/ 25.0	64100/ 85300	2	11.26/ 15.0	7.5/ 10.0	113/ 130	125/150	125/150
&W/TCY4036-060+3 &WCZ&036-060+3	BAYHTRV305	208/240	3	10/ 12	3.76/ 5.0	12800/ 17100	1	3.76/ 5.0	—	13/ 15	15/15	15/15
&W/TCY4036-060+3 &WCZ&036-060+3	BAYHTRV308	208/240	3	17/ 19	6.0/ 8.0	20500/ 27300	1	6.0/ 8.0	—	21/ 24	25/25	25/25
&W/TCY4036-060+3 &WCZ&036-060+3	BAYHTRV310	208/240	3	21/ 24	7.5/ 10.0	25600/ 34100	1	7.5/ 10.0	—	26/ 30	30/30	30/30
&W/TCY4036-060+3 &WCZ&036-060+3	BAYHTRV315	208/240	3	31/ 36	11.27/ 15.0	38500/ 51200	2	7.5/ 10.0	3.76/ 5.0	39/ 45	40/45	40/45
&W/TCY4048-060+3 &WCZ&048-060+3	BAYHTRV320	208/240	3	42/ 48	15.0/ 20.0	51200/ 68300	2	7.5/ 10.0	7.5/ 10.0	52/ 60	60/60	60/60
&W/TCY4048-060+3 &WCZ&048-060+3	BAYHTRV325#	208/240	3	52/ 60	18.78/ 25.0	64100/ 85300	2	11.26/ 15.0	7.5/ 10.0	65/ 75	70/80	70/80

Supplementary Electric Heaters

Table 4. Supplementary electric heaters (continued)

UNIT MODEL	ELECTRIC HEATER MODEL	RATED VOLT-AGE	PHASE	AMPS	HEATER CAPACITY		NO. OF STAGES	KW/STAGE		MCA	MAX. FUSE OR HACR CKT BKR SIZE ^(a)	CANADA ONLY MAX. CKT BKR SIZE ^(b)
					KW	BTUH		1	2			
&WCZ&036-060#4	BAYHTRV405	480	3	6	5.0	17100	1	5.0	—	8	15	15
&WCZ&036-060#4	BAYHTRV408	480	3	10	8.0	27300	1	8.0	—	13	15	15
&WCZ&036-060#4	BAYHTRV410	480	3	12	10.0	34100	1	10.0	—	15	15	15
&WCZ&036-060#4	BAYHTRV415	480	3	18	15.0	51200	2	10.0	5.0	23	25	25
&WCZ&048-060#4	BAYHTRV420	480	3	24	20.0	68300	2	10.0	10.0	30	30	30
&WCC&036-060#3	BAYHTRG305	208/240	3	10/12	3.76/5.0	12800/17100	1	3.76/5.0	-	13/15	15/15	15/15
&WCC&036-060#3	BAYHTRG308	208/240	3	17/19	6.0/8.0	20500/27300	1	6.0/8.0	-	21/24	25/25	25/25
&WCC&036-060#3	BAYHTRG310	208/240	3	21/24	7.5/10.0	25600/34100	1	7.5/10.0	-	26/30	30/30	30/30
&WCC&036-060#3	BAYHTRG315	208/240	3	31/36	11.27/15.0	38500/51200	2	7.5/10.0	3.76/5.0	39/45	40/45	40/45
&WCC&048-060#3	BAYHTRG320	208/240	3	42/48	15.0/20.0	51200/68300	2	7.5/10.0	7.5/10.0	52/60	60/60	60/60
&WCC&048-060#3	BAYHTRG325#	208/240	3	52/60	18.78/25.0	64100/85300	2	11.26/15.0	7.5/10.0	65/75	70/80	70/80
&WCC&036-060#4	BAYHTRG405	480	3	6	5.0	17100	1	5.0	-	8	15	15
&WCC&036-060#4	BAYHTRG408	480	3	10	8.0	27300	1	8.0	-	13	15	15
&WCC&036-060#4	BAYHTRG410	480	3	12	10.0	34100	1	10.0	-	15	15	15
&WCC&036-060#4	BAYHTRG415	480	3	18	15.0	51200	2	10.0	5.0	23	25	25
&WCC&048-060#4	BAYHTRG420	480	3	24	20.0	68300	2	10.0	10.0	30	30	30

1. Any power supply and circuits must be wired and protected in accordance with local electrical codes.
2. The values listed in the above table are for the electric heater only.
3. Field wiring must be rated at least 75° C.
4. * indicates an alpha character.
5. † indicates model letter.
6. # Heater uses fuses.
7. & indicates a digit.

ALL VALUES ARE FOR THE ELECTRIC HEATER ONLY

^(a) The HACR circuit breaker is for U.S.A. installations only.

^(b) For Canada installation reference only.

BAYSPEK - Single Power Entry Kit

Table 5. BAYSPEK — Single power entry kit

SINGLE CIRCUIT POWER AMPACITY AND OVER CURRENT PROTECTION				
UNIT MODEL	SINGLE POWER ENTRY KIT	HEATER MODEL	MIN CKT AMP	MAX OVER-CURRENT DEVICE
A5PH3024A	BAYSPEK60	BAYHTRG105	45	50
	BAYSPEK62	BAYHTRG108	60	60
		BAYHTRG110	71	80
A5PH3030A	BAYSPEK60	BAYHTRG105	47	50
	BAYSPEK62	BAYHTRG108	62	70
		BAYHTRG110	73	80
	BAYSPEK63	BAYHTRG115	99	100
A5PH3036A	BAYSPEK60	BAYHTRG105	52	60
	BAYSPEK62	BAYHTRG108	67	70
		BAYHTRG110	78	80
	BAYSPEK63	BAYHTRG115	104	110
A5PH3042A	BAYSPEK60	BAYHTRG105	57	70
	BAYSPEK62	BAYHTRG108	72	80
		BAYHTRG110	83	90
	BAYSPEK63	BAYHTRG115	109	110
A5PH3048A	BAYSPEK62	BAYHTRG105	62	70
		BAYHTRG108	77	90
		BAYHTRG110	88	100
	BAYSPEK63	BAYHTRG115	114	125
		BAYHTRG120	140	150
A5PH3060A	BAYSPEK62	BAYHTRV105	67	80
		BAYHTRV108	83	100
		BAYHTRV110	93	100
	BAYSPEK63	BAYHTRV115	119	125
		BAYHTRV120	145	150

Indoor Fan Performance (230V)

Table 6. Indoor fan performance – model A5PH3024A1

A5PH3024A1		EXTERNAL STATIC PRESSURE (IN.WG) Horizontal Airflow [Down Airflow]										
Motor Speed		0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1
LOW	Watts	63 [63]	70 [71]	77 [77]	-	-	-	-	-	-	-	-
	CFM	899 [890]	820 [811]	755 [747]	-	-	-	-	-	-	-	-
MED-LOW (a)	Watts	-	83 [84]	91 [91]	97 [98]	-	-	-	-	-	-	-
	CFM	-	886 [877]	818 [810]	756 [749]	-	-	-	-	-	-	-
MED-HIGH	Watts	-	-	-	127 [127]	134 [135]	142 [143]	-	-	-	-	-
	CFM	-	-	-	886 [877]	820 [812]	748 [741]	-	-	-	-	-
HIGH	Watts	-	-	-	-	-	195 [195]	204 [204]	214 [214]	-	-	-
	CFM	-	-	-	-	-	867 [858]	798 [790]	741 [734]	-	-	-

Note: Airflow must not exceed 900 CFM due to condensate blowoff.

(a) Factory Default Settings.

Table 7. Indoor fan performance – model A5PH3030A1

A5PH3030A1		EXTERNAL STATIC PRESSURE (IN.WG) Horizontal Airflow [Down Airflow]										
Motor Speed		0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1
LOW	Watts	119 [120]	128 [128]	136 [137]	145 [145]	-	-	-	-	-	-	-
	CFM	1065 [1054]	1012 [1002]	951 [942]	894 [855]	-	-	-	-	-	-	-
MED-LOW (a)	Watts	-	157 [158]	167 [167]	175 [176]	186 [186]	196 [197]	-	-	-	-	-
	CFM	-	1102 [1091]	1046 [1035]	993 [983]	938 [928]	877 [868]	-	-	-	-	-
MED-HIGH	Watts	-	-	-	-	240 [242]	252 [253]	263 [264]	273 [274]	-	-	-
	CFM	-	-	-	-	1085 [1074]	1032 [1022]	978 [969]	934 [925]	-	-	-
HIGH	Watts	-	-	-	-	-	308 [308]	319 [319]	329 [329]	340 [340]	350 [350]	-
	CFM	-	-	-	-	-	1116 [1105]	1069 [1058]	1031 [1021]	968 [958]	926 [917]	-

Note: Airflow must not exceed 1125 CFM due to condensate blowoff.

(a) Factory Default Settings.

Table 8. Indoor fan performance – model A5PH3036A1

A5PH3036A1		EXTERNAL STATIC PRESSURE (IN.WG) Horizontal Airflow [Down Airflow]										
Motor Speed		0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1
LOW	Watts	145 [146]	152 [153]	159 [159]	-	-	-	-	-	-	-	-
	CFM	1145 [1133]	1098 [1087]	1047 [1037]	-	-	-	-	-	-	-	-
MED-LOW (a)	Watts	195 [196]	202 [203]	210 [211]	218 [220]	227 [228]	-	-	-	-	-	-
	CFM	1268 [1255]	1226 [1213]	1177 [1166]	1125 [1114]	1072 [1062]	-	-	-	-	-	-
MED-HIGH	Watts	-	-	326 [326]	339 [339]	350 [350]	360 [360]	369 [369]	381 [381]	392 [392]	401 [401]	-
	CFM	-	-	1347 [1334]	1304 [1291]	1266 [1253]	1225 [1213]	1176 [1164]	1133 [1122]	1093 [1082]	1059 [1048]	-
HIGH	Watts	-	-	-	-	342 [343]	351 [353]	361 [363]	372 [373]	-	-	-
	CFM	-	-	-	-	1308 [1295]	1261 [1248]	1216 [1204]	1172 [1160]	-	-	-

Note: Airflow must not exceed 1350 CFM due to condensate blowoff.

(a) Factory Default Settings.

Table 9. Indoor fan performance – model A5PH3042A1

A5PH3042A1		EXTERNAL STATIC PRESSURE (IN.WG) Horizontal Airflow [Down Airflow]										
Motor Speed		0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1
LOW	Watts	257 [262]	263 [268]	272 [277]	282 [288]	292 [298]	-	-	-	-	-	-
	CFM	1411 [1397]	1355 [1342]	1295 [1282]	1239 [1226]	1189 [1177]	-	-	-	-	-	-
MED-LOW (a)	Watts	-	324 [330]	335 [342]	346 [353]	358 [365]	370 [377]	382 [390]	393 [401]	-	-	-
	CFM	-	1572 [1556]	1536 [1521]	1499 [1484]	1462 [1447]	1429 [1415]	1392 [1378]	1355 [1341]	-	-	-
MED-HIGH	Watts	-	-	386 [394]	398 [406]	410 [418]	421 [429]	431 [440]	438 [447]	-	-	-
	CFM	-	-	1581 [1565]	1538 [1523]	1497 [1482]	1461 [1446]	1424 [1409]	1386 [1373]	-	-	-
HIGH	Watts	-	-	-	-	540 [551]	552 [563]	565 [576]	575 [586]	-	-	-
	CFM	-	-	-	-	1576 [1560]	1533 [1518]	1496 [1481]	1458 [1443]	-	-	-

Note: Airflow must not exceed 1575 CFM due to condensate blowoff.

(a) Factory Default Settings.

Indoor Fan Performance (230V)

Table 10. Indoor fan performance – model A5PH3048A1

A5PH3048A1		EXTERNAL STATIC PRESSURE (IN.WG) Horizontal Airflow [Down Airflow]										
Motor Speed		0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1
LOW	Watts	359 [367]	371 [378]	383 [390]	404 [412]	406 [414]	418 [426]	429 [438]	440 [449]	-	-	-
	CFM	1649 [1632]	1616 [1600]	1581 [1565]	1516 [1501]	1509 [1494]	1475 [1460]	1441 [1427]	1408 [1394]	-	-	-
MED-LOW (a)	Watts	-	475 [485]	487 [497]	499 [509]	512 [522]	524 [534]	537 [548]	549 [560]	563 [574]	-	-
	CFM	-	1803 [1785]	1774 [1756]	1742 [1725]	1709 [1692]	1678 [1661]	1644 [1628]	1612 [1596]	1578 [1562]	-	-
MED-HIGH	Watts	-	-	536 [547]	559 [570]	562 [573]	575 [586]	588 [600]	600 [612]	612 [625]	-	-
	CFM	-	-	1789 [1771]	1731 [1713]	1724 [1707]	1693 [1676]	1661 [1645]	1630 [1614]	1600 [1584]	-	-
HIGH	Watts	-	-	-	-	601 [613]	613 [625]	631 [644]	643 [656]	647 [660]	-	-
	CFM	-	-	-	-	1806 [1788]	1769 [1751]	1728 [1711]	1688 [1671]	1652 [1635]	-	-

Note: Airflow must not exceed 1800 CFM due to condensate blowoff.

(a) Factory Default Settings.

Table 11. Indoor fan performance – model A5PH3060A1

A5PH3060A1		EXTERNAL STATIC PRESSURE (IN.WG) Horizontal Airflow [Down Airflow]										
Motor Speed		0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1
LOW	Watts	515 [511]	523 [521]	533 [533]	544 [546]	554 [558]	-	-	-	-	-	-
	CFM	1857 [1875]	1831 [1841]	1800 [1805]	1766 [1766]	1737 [1730]	-	-	-	-	-	-
MED-LOW (a)	Watts	-	632 [631]	644 [643]	655 [654]	666 [665]	677 [676]	689 [687]	699 [697]	714 [712]	728 [726]	741 [739]
	CFM	-	2059 [2070]	2020 [2031]	1990 [2001]	1960 [1971]	1928 [1939]	1895 [1905]	1871 [1881]	1828 [1838]	1786 [1796]	1748 [1758]
MED-HIGH	Watts	-	759 [758]	769 [771]	779 [786]	788 [801]	803 [815]	816 [829]	830 [839]	845 [849]	860 [858]	874 [872]
	CFM	-	2058 [2063]	2032 [2034]	2003 [1999]	1974 [1965]	1943 [1931]	1911 [1894]	1877 [1869]	1843 [1846]	1807 [1795]	1771 [1759]
HIGH	Watts	-	910 [908]	921 [919]	932 [930]	941 [942]	956 [960]	969 [971]	983 [988]	997 [997]	1010 [1001]	1021 [1018]
	CFM	-	2177 [2184]	2152 [2150]	2127 [2104]	2105 [2073]	2071 [2027]	2041 [1998]	2009 [1961]	1975 [1937]	1940 [1905]	1903 [1890]

Note: Airflow must not exceed 2250 CFM due to condensate blowoff.

(a) Factory Default Settings.

Figure 1. A5PH3024A – 42A



Figure 2. A5PH3024A – 42A

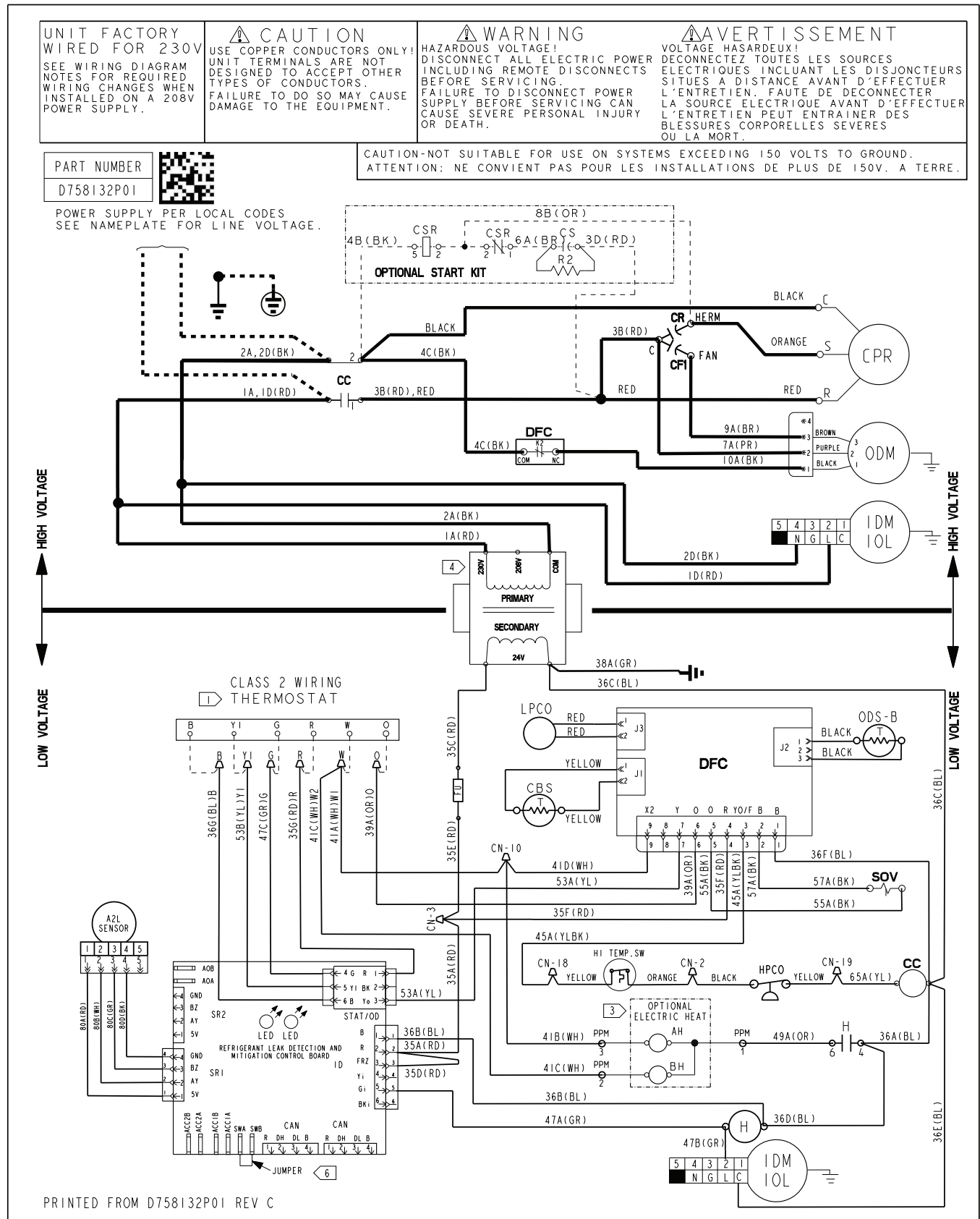
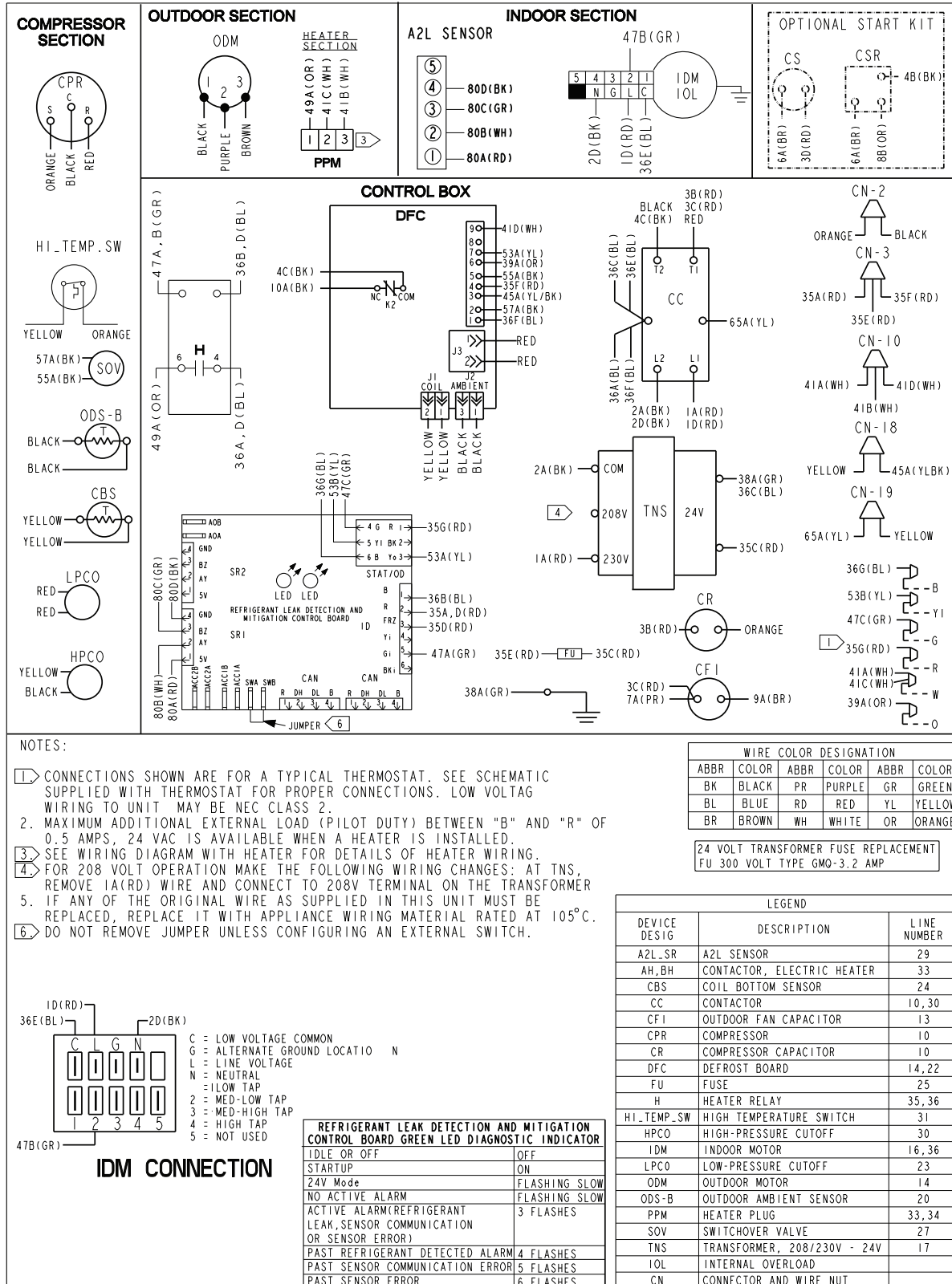


Figure 3. A5PH3048A



Wiring Diagrams

Figure 4. A5PH3048A

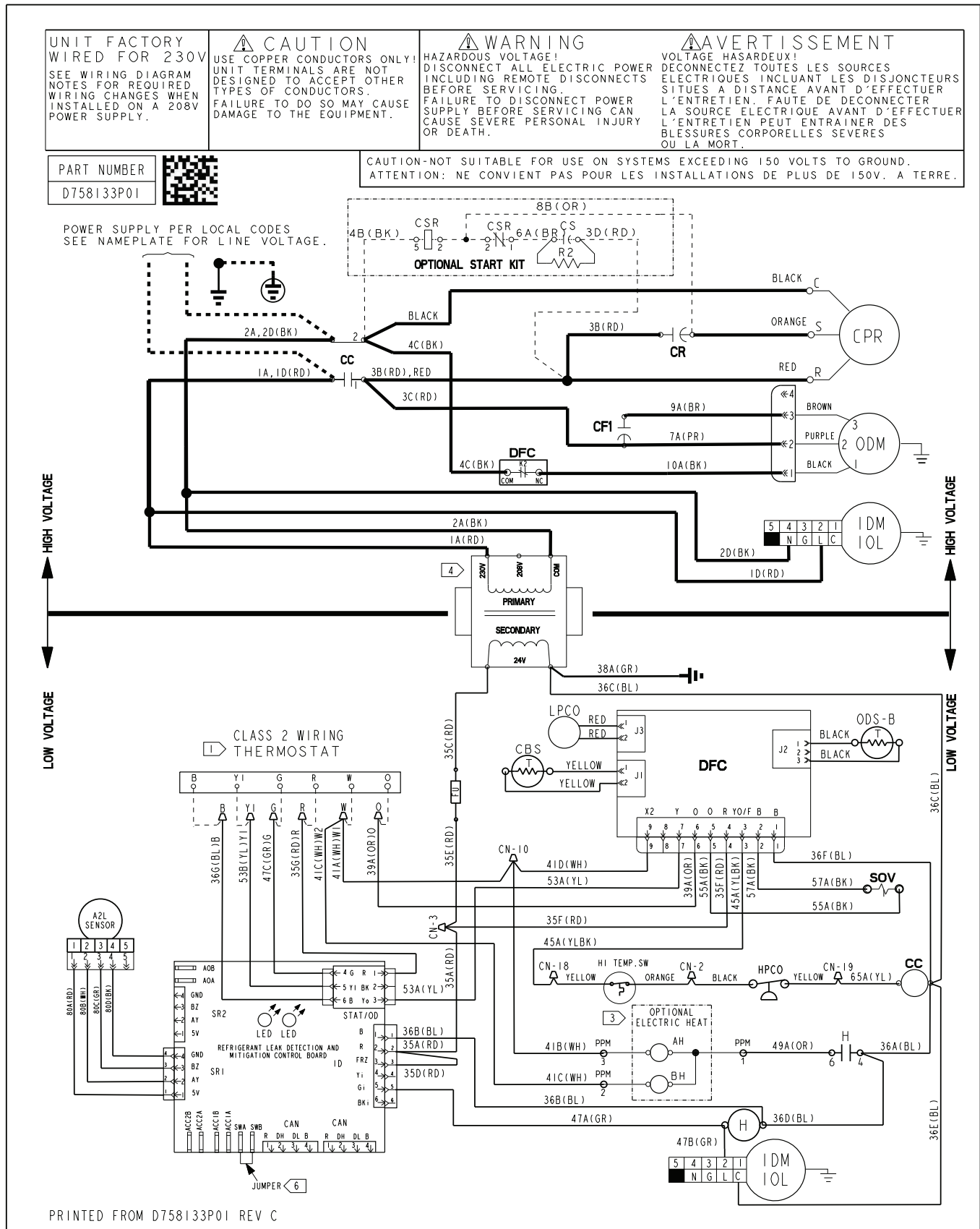
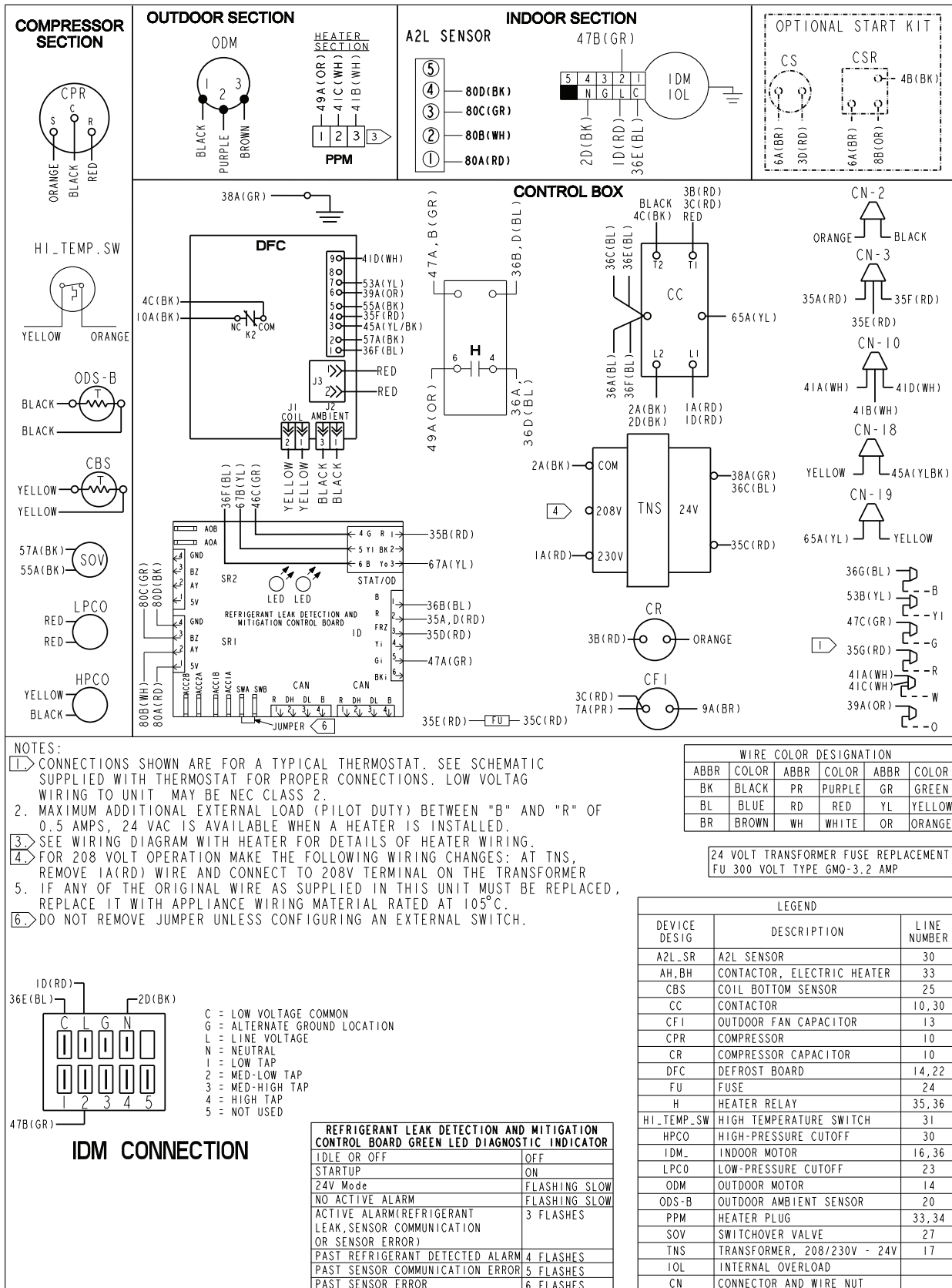
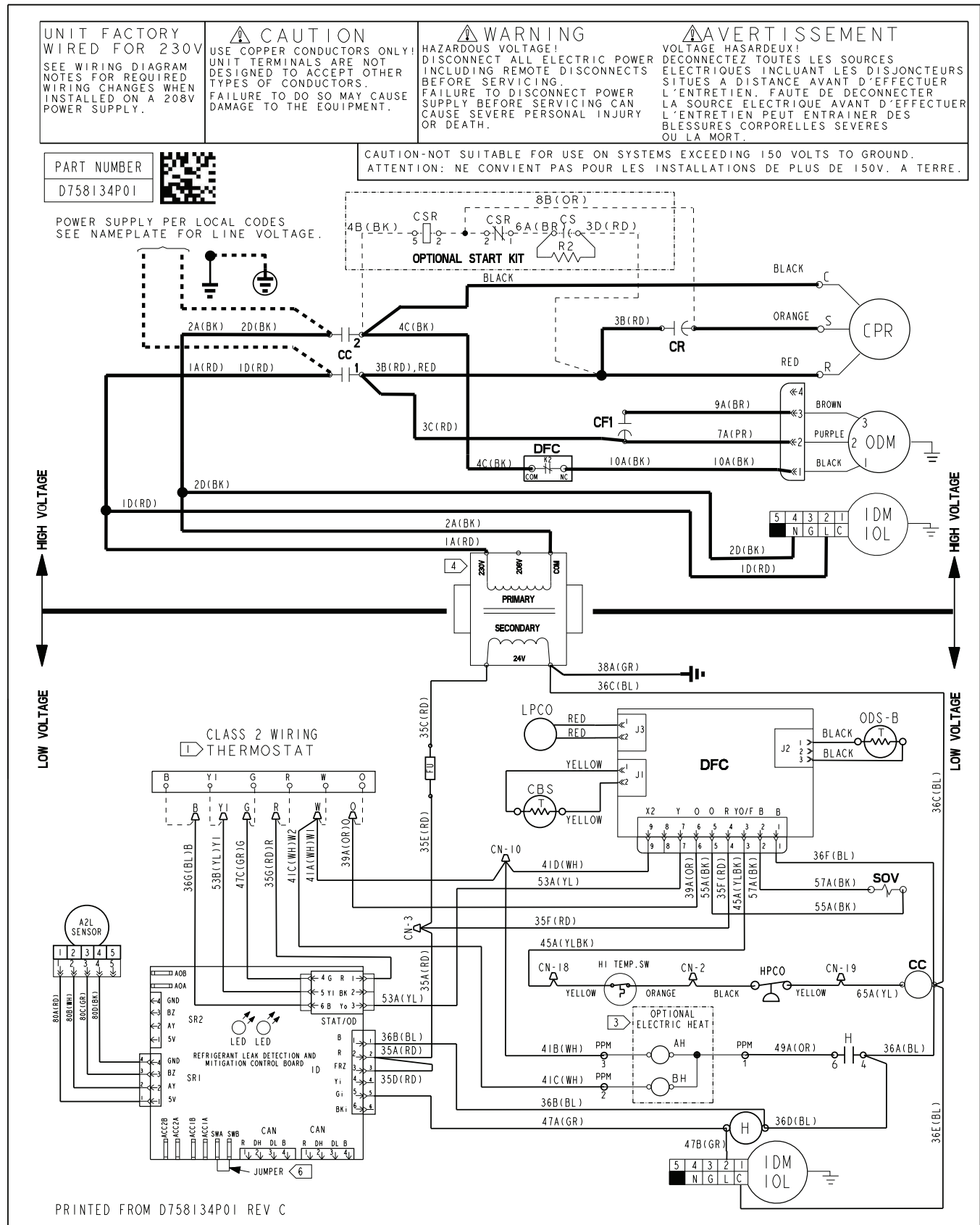


Figure 5. A5PH3060A



Wiring Diagrams

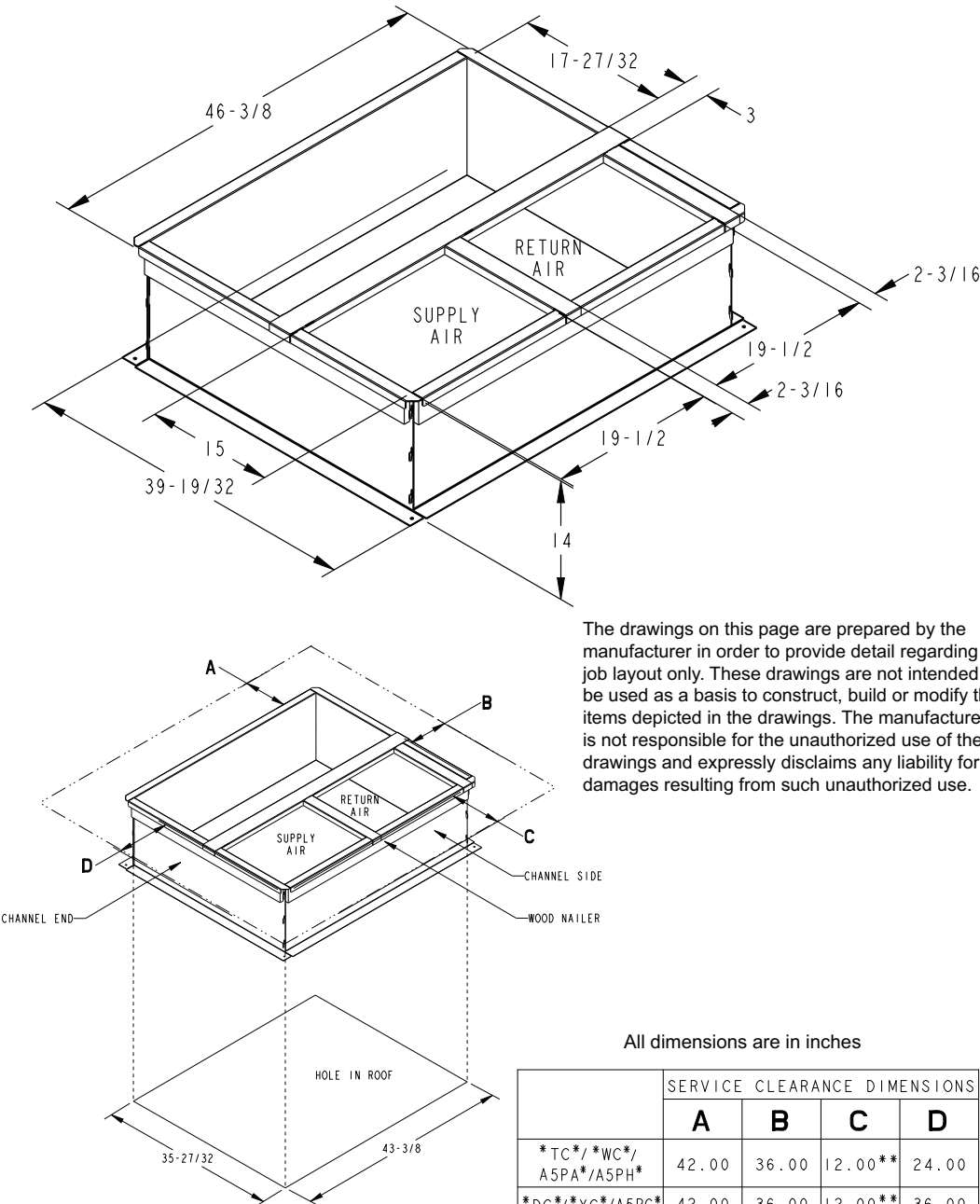
Figure 6. A5PH3060A



Full Perimeter Roof Mounting Curb

Figure 7. 2.0 to 3.0 ton models

BAYCURB050B Full Perimeter Roof Mounting Curb

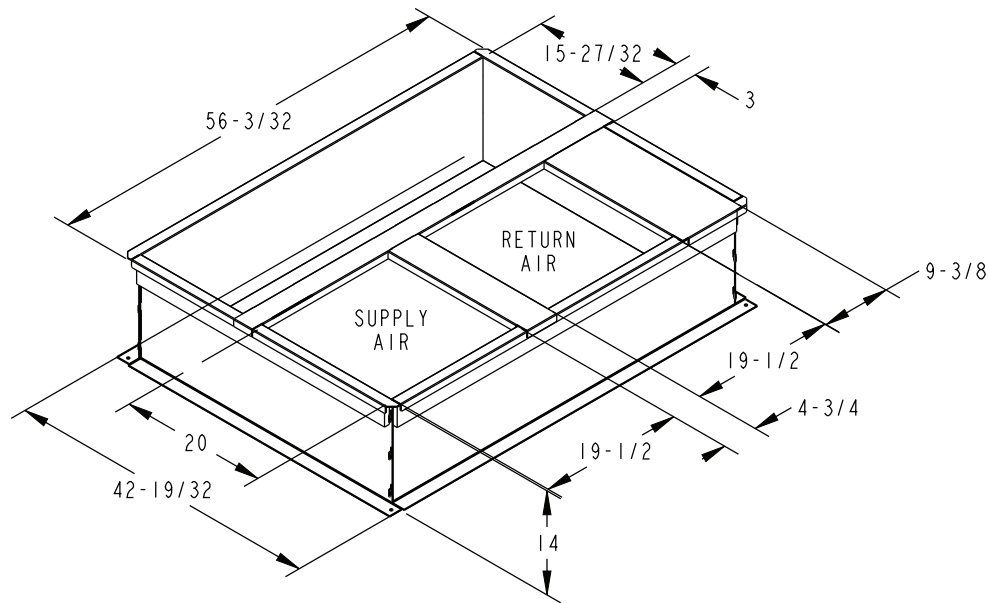


**42.00 WITH ECONOMIZER WITH 25% FRESH AIR ACCESSORY

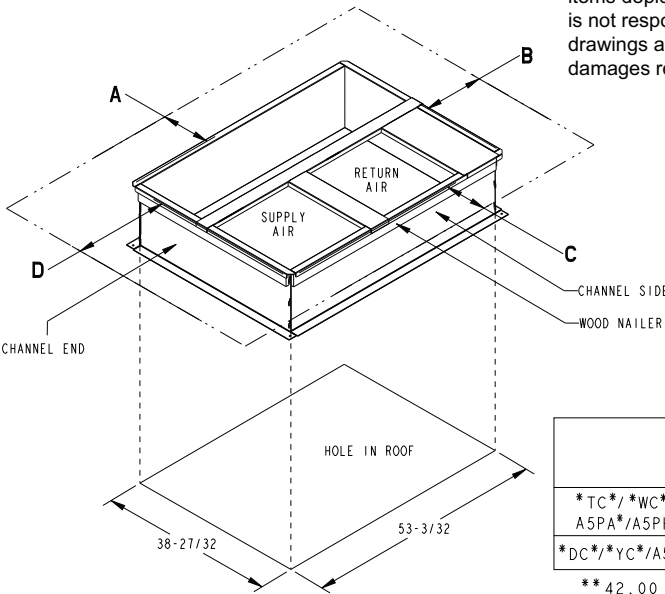
Full Perimeter Roof Mounting Curb

Figure 8. 3.5 to 5.0 ton models

BAYCURB051B Full Perimeter Roof Mounting Curb



The drawings on this page are prepared by the manufacturer in order to provide detail regarding job layout only. These drawings are not intended to be used as a basis to construct, build or modify the items depicted in the drawings. The manufacturer is not responsible for the unauthorized use of these drawings and expressly disclaims any liability for damages resulting from such unauthorized use.



All dimensions are in inches

	SERVICE CLEARANCE DIMENSIONS			
	A	B	C	D
TC/*WC*/ A5PA*/A5PH*	42.00	36.00	12.00**	24.00
DC/*YC*/A5PG*	42.00	36.00	12.00**	36.00

**42.00 WITH ECONOMIZER WITH 25% FRESH AIR ACCESSORY

Optional Equipment — Outside Air Damper

Table 12. BAYOSAH001 and 002A outside air damper
(Replaces filter/coil access panel)

	Manual Fresh Air Model	Unit Application Models	A	B	C	D
	BAYOSAH001A	2.0 — 3.0 Ton	22-7/16"	20-11/16"	12-3/8"	9-3/16"
	BAYOSAH002A	3.5 — 5.0 Ton	25-3/16"	20-11/16"	12-3/8"	9-3/16"

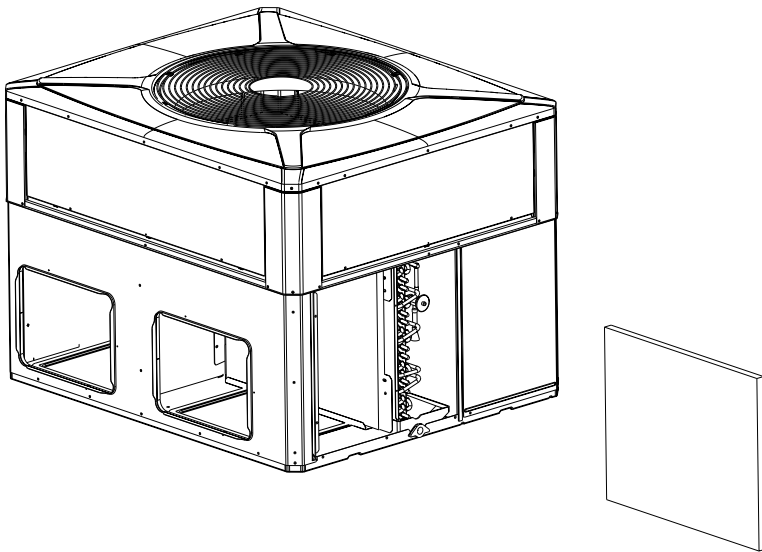
Table 13. BAYDMPR101 and 102A, 25% motorized outside air damper
(Mounts over horizontal return air opening)

	Manual Fresh Air Model	Unit Application Models	A	B	C	D	E
	BAYDM-PR101A	2.0 — 3.0 Ton	15-13/16"	11-13/16"	10-1/4"	11-1/2"	12-1/4"
	BAYDM-PR102A	3.5 — 5.0 Ton	18-3/16"	15-1/8"	10-1/4"	11-1/2"	12-1/4"

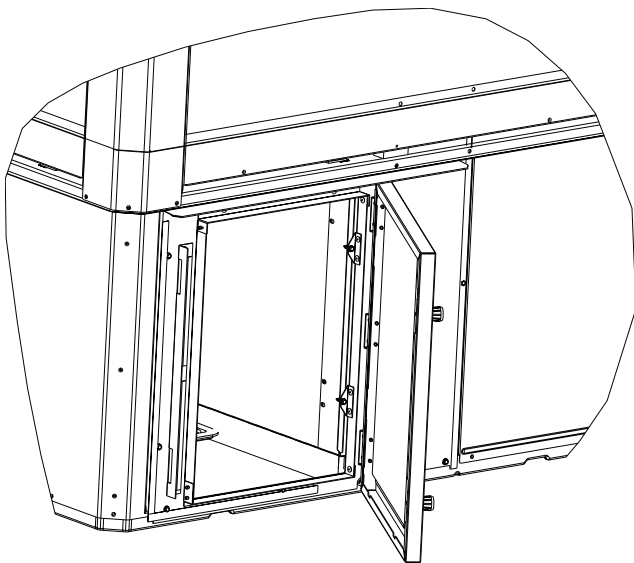
Note: The drawings on this page are prepared by the manufacturer in order to provide detail regarding job layout only. These drawings are not intended to be used as a basis to construct, build or modify the items depicted in the drawings. The manufacturer is not responsible for the unauthorized use of these drawings and expressly disclaims any liability for damages resulting from such unauthorized use.

Optional Equipment — Filter Rack

**Figure 9. BAYFLTR101 filter rack (2.0 to 3.0 ton models)
BAYFLTR201 (3.5 to 5.0 ton models)
(Mounts in filter/coil section)**



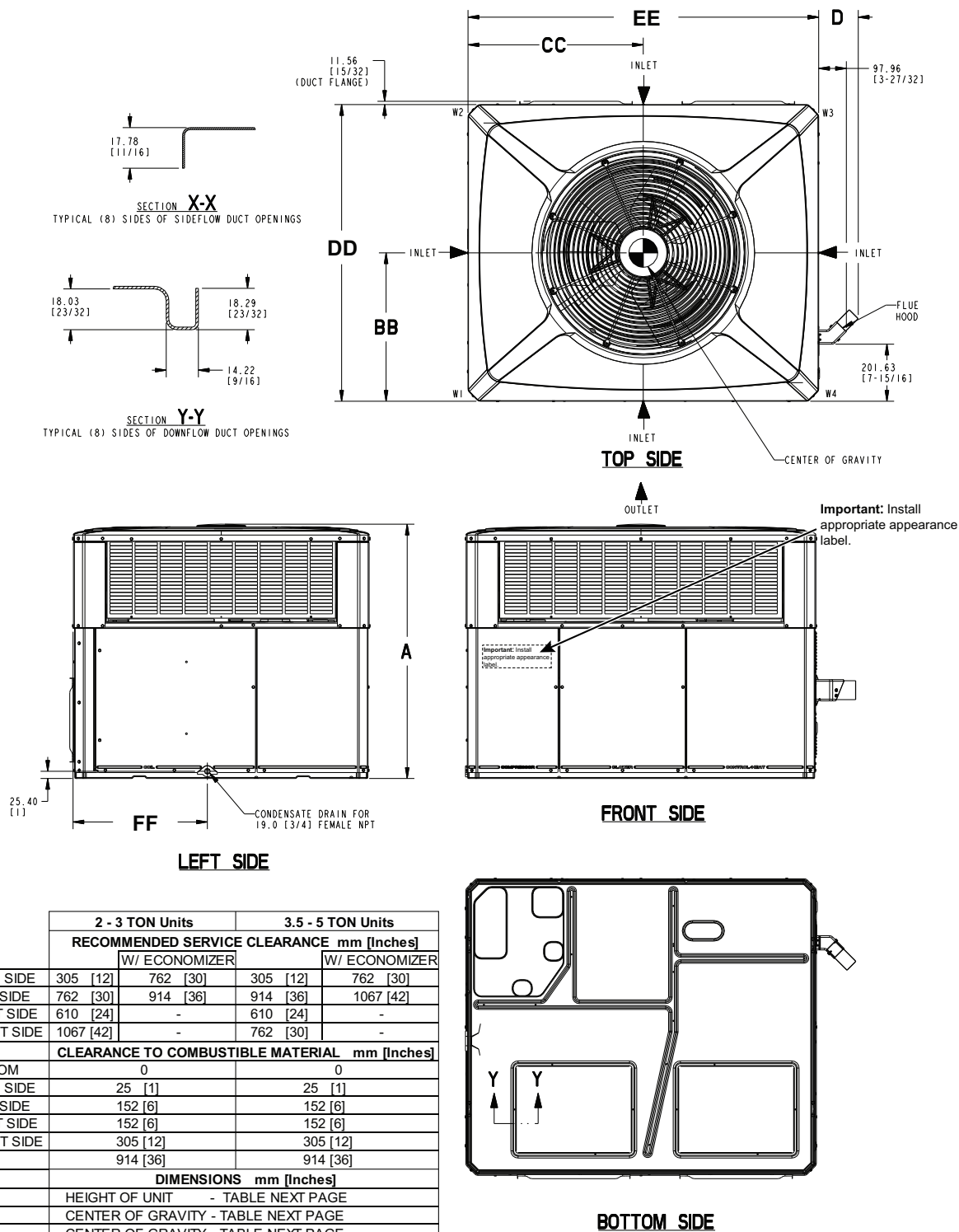
**Figure 10. BAYACCDOR1A hinged filter access door (2.0 to 3.0 ton models)
BAYACCDOR2A (3.5 to 5.0 ton models)
(Replaces filter/coil access panel)**



Note: The drawings on this page are prepared by the manufacturer in order to provide detail regarding job layout only. These drawings are not intended to be used as a basis to construct, build or modify the items depicted in the drawings. The manufacturer is not responsible for the unauthorized use of these drawings and expressly disclaims any liability for damages resulting from such unauthorized use.

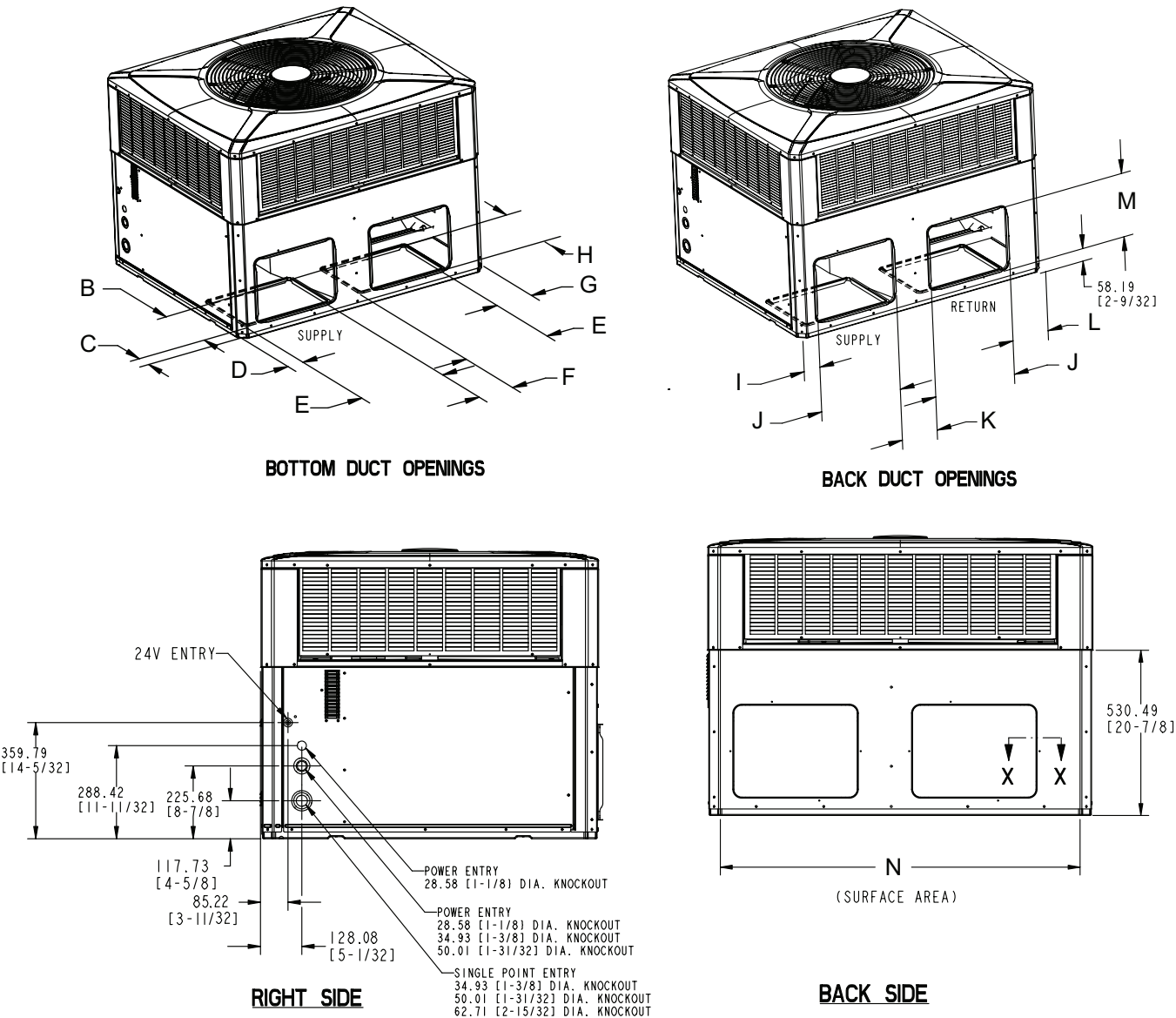
Dimensional Data

Figure 11. Space on sides requirements



Note: The view labeled "Bottom side" represents the base as viewed looking up from underneath the unit.

Figure 12. Bottom and back duct openings



	Height mm [in]	PHYSICAL DIMENSIONS mm [in]												
	A -Height	B	C	D	E	F	G	H	I	J	K	L	M	N
A5PH3024	898.53 [35 - 3/8]	304.80 [12.0]	75.41 [2.93]	75.41 [2.93]	406.40 [16.0]	167.89 [6.61]	173.46 [6.8]	304.80 [12.0]	79.50 [3.13]	398.22 [15.68]	176.07 [6.93]	177.55 [6.99]	296.62 [11.68]	1155.45 [45.49]
A5PH3030	949.33 [37 - 3/8]													
A5PH3036														
A5PH3042	1000.13 [39 - 3/8]	457.20 [18.0]	75.41 [2.97]	75.41 [2.97]	381.00 [15.0]	244.09 [9.61]	318.75 [12.55]	381.00 [15.0]	79.50 [3.13]	449.02 [17.68]	176.07 [6.93]	322.84 [12.71]	372.82 [14.68]	1402.34 [55.21]
A5PH3048	1050.93 [41 - 3/8]													
A5PH3060														

	Corner Weights KG [LBS]				SHIPPING WEIGHT KG [LBS]	UNIT WEIGHT KG [LBS]	Center Of Gravity mm [inch]	
	W1	W2	W3	W4			BB	CC
A5PH3024	53.5 [118]	33.3 [73]	24.1 [53]	38.3 [84]	182.8 [403]	149.2 [329]	430.0 [16.9]	565.3 [22.3]
A5PH3030	56.7 [125]	50.3 [110]	16.6 [37]	39.2 [86]	196.9 [434]	162.8 [359]	413.5 [16.3]	581.0 [22.9]
A5PH3036	61.8 [136]	37.3 [82]	26.6 [59]	41.7 [92]	201.4 [444]	167.4 [369]	430.0 [17.0]	535.0 [21.1]
A5PH3042	67.1 [148]	47.6 [105]	39.5 [87]	49.9 [110]	251.3 [554]	204.1 [450]	449.6 [17.7]	641.8 [25.3]
A5PH3048	71.7 [158]	40.8 [90]	30.8 [68]	52.2 [115]	242.7 [535]	242.7 [535]	414.0 [16.3]	635.0 [25.0]
A5PH3060	80.3 [177]	47.2 [104]	35.8 [79]	59.9 [132]	270.3 [596]	270.3 [596]	414.0 [16.3]	635.0 [25.0]

Mechanical Specifications

General

The units shall be horizontal airflow as shipped and convertible to downflow. All units shall be factory assembled, piped, internally wired and fully charged with refrigerant. Units shall be certified to UL 60335. All units shall be factory run tested to check cooling operation, fan and blower rotation and control or TXV sequence. Units shall be designed to operate at ambient temperatures between 115°F and 55°F in cooling as manufactured. Cooling performance shall be rated in accordance with AHRI standards.

Unit Casing

All components shall be mounted in a weather-resistant steel cabinet with an enamel finish. Access panels shall be provided for unit controls and indoor coil and fans. Indoor air section compartment shall be completely insulated with fireproof, permanent, odorless fiber material. Knockouts shall be provided for utility and control connections. Drain connections shall be provided to accommodate indoor water runoff.

Compressor

The compressor shall be hermetically sealed, high efficiency scroll compressors. Internal overcurrent and over temperature protection, internal pressure relief shall be standard. Other features include centrifugal oil pump, low vibration and noise.

Refrigeration System

All units shall have refrigerant control. Service pressure tap ports and a refrigerant line filter shall be standard.

Evaporator Coil Internally enhanced 3/8-in. OD seamless copper tubing mechanically bonded to aluminum fins, factory pressure and leak tested at 480 to 650 PSIG. All units have TXV to control refrigerant flow.

Condenser Coil

The Spine Fin™ condenser coil shall be continuously wrapped, corrosion resistant all aluminum with minimum brazed joints. This coil is 3/8-in. OD seamless aluminum tubing glued to a continuous aluminum fin. Coils are lab tested to withstand 2,000 pounds of pressure per square inch. The outdoor coil provides low airflow resistance and efficient heat transfer. The coil is protected on all four sides by louvered panels.

Indoor Air Fan

Constant Torque, forward-curved, centrifugal wheel in a Composite Vortica® Blower housing. Motor shall have thermal overload protection and permanently lubricated motor bearings. Motor/blower assembly isolated from unit with rubber mounts.

Outdoor Fan

One direct-drive, statically and dynamically balanced propeller fan shall be used in a draw-through vertical discharge configuration. Permanently lubricated weather proof motor shall have built-in thermal overload protection.

System Controls

System controls include condenser fan, evaporator fan and compressor contactors.

Accessories Roof Curb

The roof curb shall be designed to mate with the unit and provide support and complete weathertight installation when properly installed. Adhesive back polyurethane sealing strips shall be provided to ensure an airtight seal between supply and return openings of the curb and unit. The roof curb design allows field fabricated ductwork to be connected directly to the curb. Curb ships knocked down for field assembly, and includes factory installed wood nailer strips.

Electric Heaters

Each heater assembly shall include power supply fusing if over 48 amps, automatic resetting limit switches and heat limiters for thermal protection. Heaters shall be provided with polarized plugs for quick connection to unit low voltage wiring. Electric heat modules shall be UL listed.

Single Source Power Entry

This accessory when used with electric heat accessory shall allow single source power connection to unit and heater combination. Single source power entry kits shall have specific matching heater(s). Kit shall include high voltage terminal blocks, fuse blocks and fuses, cut-to-length interconnecting wiring, and junction box (if required) to provide power sources with fuse protection as required for both the unit and accessory heater. Kit components shall install within the heater cabinet in the heater access section. Single source branch power circuit shall be protected and wired in accordance with local codes.

Manual Outside Air Dampers

Rain hood and screen shall be field installed. Suitable for up to 25% outside air.

Start Kit

Extra compressor starting capacity for single phase equipment.

Control Options

Standard Indoor Thermostats

Two stage heating/cooling or one stage heating/cooling thermostats shall be available in either manual or automatic changeover.

Programmable Electronic Night Setting Thermostat

Programmable electronic thermostat shall provide heating setback and cooling setup with 7-day programming capability. 1H/1C or 2H/2C models available.

About Trane and American Standard Heating and Air Conditioning

Trane and American Standard create comfortable, energy efficient indoor environments for residential applications. For more information, please visit www.trane.com or www.americanstandardair.com.



The AHRI Certified mark indicates company participation in the AHRI Certification program. For verification of individual certified products, go to ahridirectory.org.

The manufacturer has a policy of continuous data improvement and it reserves the right to change design and specifications without notice. We are committed to using environmentally conscious print practices.