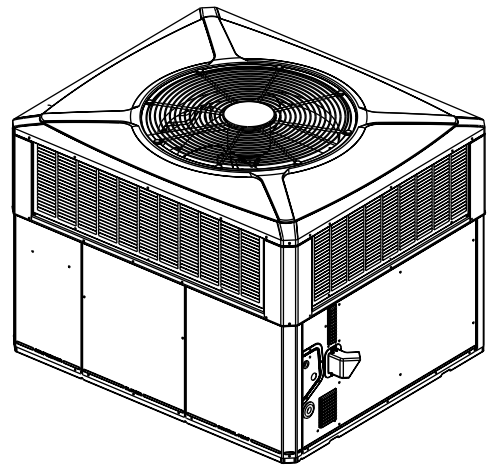


Product and Submittal Data

Single Packaged Gas/Electric Entry, Convertible, 2 to 5 Ton, R-454B

A5PG3024A1060A
A5PG3030A1070A
A5PG3036A1070A
A5PG3042A1090A
A5PG3048A1090A
A5PG3060A1115A



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

Introduction

Trane offers a complete family of packaged gas/electric heating and cooling systems, designed to provide the unbeatable combination of energy efficiency and lower operating costs. In warm weather, the package gas/electric system functions as an all-electric, high efficiency air conditioner. In cold weather, it operates as a natural gas or propane gas furnace, offering the best of both energy worlds.

Because cooling and heating functions are all contained in a single cabinet, a single packaged convertible gas/electric system is 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 American Standard thermostat control, and air distribution ducts, you have a highly efficient, total home comfort system.

Single Packaged Convertible Gas/Electric 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 Convertible Gas/Electric 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
A5PG3024A-SUB-1*	Single Packaged Gas Heating / Electric Cooling Model A5PG3024A1060A Submittal
A5PG3030A-SUB-1*	Single Packaged Gas Heating / Electric Cooling Model A5PG3030A1060A Submittal
A5PG3036A-SUB-1*	Single Packaged Gas Heating / Electric Cooling Model A5PG3036A1060A Submittal
A5PG3042A-SUB-1*	Single Packaged Gas Heating / Electric Cooling Model A5PG3042A1060A Submittal
A5PG3048A-SUB-1*	Single Packaged Gas Heating / Electric Cooling Model A5PG3048A1060A Submittal
A5PG3060A-SUB-1*	Single Packaged Gas Heating / Electric Cooling Model A5PG3060A1060A Submittal

Table of Contents

Optional Equipment Listing 4

Product Specifications 5

Indoor Fan Performance 7

Wiring Diagram..... 11

Full Perimeter Roof Mounting Curb..... 17

Optional Equipment — Outside Air Damper 19

Optional Equipment — Filter Rack 20

Dimensional Data..... 21

Mechanical Specifications 23

Optional Equipment Listing

Table 2. Optional equipment listing

454 Model Number	Use With
Hinged Filter Access Door (A5PG3024-36)	BAYACCDOR1A []
Hinged Filter Access Door (A5PG3042-60)	BAYACCDOR2A []
Adapter Curb (Cabinet A/B) (A5PG3024-36)	BAYADAP050A []
Adapter Curb (Cabinet C) (A5PG3024-36)	BAYADAP051A []
Adapter Curb (Cabinet A/B) (A5PG3042-60)	BAYADAP052A []
Adapter Curb (Cabinet C) (A5PG3042-60)	BAYADAP053A []
Adapter Curb (Cabinet D) (A5PG3042-60)	BAYADAP054A []
Anti-Short Cycle Timer (A5PG3024-60)	BAYASCT001 []
Crankcase Heater (230V) (Scroll) (A5PG3042-60)	BAYCCHT102A []
Crankcase Heater (230V) (Scroll) (A5PG3024-36)	BAYCCHT103A []
Flat Roof Full Perimeter Curb (Insulated) (A5PG3024-36)	BAYCURB050A []
Flat Roof Full Perimeter Curb (Insulated) (A5PG3042-60)	BAYCURB051A []
Extreme Conditions Mounting Kit (Used on BAYCURB and BAYADAP) (A5PG3024-60)	BAYEXMK001A []
Extreme Conditions Mounting Kit (Used on BAYUTIL) (A5PG3024-60)	BAYEXMK002B []
Extreme Conditions Mounting Kit (Used on Slab Mounts) (A5PG3024-60)	BAYEXMK003A []
1-2" Filter Frame-Requires one 18x25 filter (not included) (A5PG3024-36)	BAYFLTR101C []
1-2" Filter Frame-Requires one 18x20, and one 18x18 filter (not included) (A5PG3042-60)	BAYFLTR201C []
LP Conversion Kit (All 70k Models)	BAYLPKT101C []
LP Conversion Kit (All 60k and 90k Models)	BAYLPKT103A []
LP Conversion Kit (All 115k Models)	BAYLPKT104A []

Product Specifications

Table 3. Product specifications

MODEL	A5PG3024	A5PG3030	A5PG3036	A5PG3042	A5PG3048	A5PG3060
RATED Volts/PH/Hz	208-230/1/60					
Performance Cooling BTUH ^(a)	24000	28400	36800	40000	47500	58500
Indoor Airflow (CFM)	820	920	1190	1500	1670	1700
Power Input (KW)	LOCATED ON UNIT NAMEPLATE					
EER2/SEER2 (BTU/Watt-Hr.)	10.6/13.4	10.6/13.4	10.6/13.4	10.6/13.4	10.6/13.4	10.6/13.4
Sound Power Rating [dB(A)] ^(b)	66.6	70	71.4	74.6	72.5	76
PERFORMANCE HEATING^(c)						
Input BTUH-1st Stage (Natural Gas) ^(d)	LOCATED ON UNIT NAMEPLATE					
AFUE	81					
Temp. Rise — Min/Max (°F)	30 / 60	30 / 60	30 / 60	35 / 65	35 / 65	30 / 60
Orifice Qty/Drill Sz. (Natural Gas)	2 / #37	2 / #33	2 / #33	3 / #37	3 / #37	3 / #32
POWER CONN. — V/Ph/Hz	208-230/1/60					
Min. Brch. Cir. Ampacity ^(e)	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	13.32	15.49	15.63	20.54	22.99
Tube Size (in.)	3/8					
INDOOR COIL — TYPE	MCHE					RTPF
Rows/F.P.I	2/16					4/15
Face Area (sq. ft.)	2.70	2.70	2.70	3.90	3.90	5.00
Tube Size Width (in.)	0.81	0.81	1.00	0.81	0.81	0.38
Refrigeration Control	EXPANSION VALVE					
Drain Conn. Size (in.)	3/4 FEMALE NPT					
OUTDOOR FAN — TYPE	PROPELLER					
DIA. (IN.)	23.4	23.4	23.4	28.3	28.3	28.3
DRIVE/NO. SPEEDS	DIRECT / 1					
CFM @ 0.0 in. w.g. ^(f)	2350	2800	3080	3400	3400	4800
Motor— HP/R.P.M	1/12 / 810	1/6 / 825	1/5 / 825	1/4 / 825	1/4 / 825	1/3 / 825
Volts/Ph/Hz	208-230/1/60					
F.L. Amps/L.R Amps	LOCATED ON UNIT NAMEPLATE					

Product Specifications

Table 3. Product specifications (continued)

MODEL	A5PG3024	A5PG3030	A5PG3036	A5PG3042	A5PG3048	A5PG3060
INDOOR FAN — TYPE	CONSTANT TORQUE ECM					
Dia. x Width (in.)	10.62 X 10.62					11.87 X 10.62
Drive/No. Speeds	DIRECT / 4					
CFM @ 0.0 in. w.g. ^(g)	SEE FAN PERF TABLE					
Motor— HP/R.P.M.	1/3 / 1050	1/2 / 1050	3/4 / 1050	3/4 / 1050	3/4 / 1050	1 / 1050
Volts/Ph/Hz	208–230/1/60					
F.L. Amps	LOCATED ON UNIT NAMEPLATE					
COMBUSTION FAN-TYPE	CENTRIFUGAL					
Drive/No. Speeds	DIRECT / 1					
Motor— HP/R.P.M.	1/34 / 3345	1/34 / 3290	1/34 / 3290	1/34 / 3075	1/34 / 3075	1/34 / 3055
Volts/Ph/Hz	230/1/60					
FLA	LOCATED ON UNIT NAMEPLATE					
FILTER / FURNISHED	NO					
Type Recommended	THROWAWAY					
Recmd. Face Area (sq. ft) ^(h)	4.0			5.3		
REFRIGERANT	R-454B					
Charge (lbs.)	LOCATED ON UNIT NAMEPLATE					
Subcooling	12 ° F	10 ° F	12 ° F	12 ° F	10 ° F	13 ° F
DIMENSIONS	H X W X L					
Crated (in.)	46 X 45 X 52	48 X 45 X 52	48 X 45 X 52	46 X 47 X 62	50 X 47 X 62	50 X 47 X 62
WEIGHT						
Shipping (lbs.) / Net (lbs.)	436 / 362	455 / 381	443 / 379	564 / 460	564 / 460	589 / 485

^(a) Rated in accordance with AHRI Standard 210/240. AHRI standard rating conditions are: 80 D.B.67 W.B. entering air to indoor coil. 95 D. B. entering air to outdoor coil.

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

^(c) Ratings shown are for elevations up to 2000 ft. For higher elevations reduce ratings at a rate of 4% per 1000 ft. elevation.

^(d) Convertible to LPG.

^(e) This value is approximate. For more precise value, see Unit Nameplate.

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

^(g) Based on U.S. Government Standard Tests.

^(h) 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.

Indoor Fan Performance

Table 4. Airflow – model A5PG3024A1060

A5PG3024A1060		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
Constant Circulation	CFM	APPROXIMATELY 40-50% COOLING OR HEATING AIRFLOW										
	WATTS											
Cooling - Low	CFM	-	900 (891)	846 (838)	794 (786)	729 (722)	-	-	-	-	-	-
	WATTS	-	114 (115)	121 (122)	128 (129)	138 (138)	-	-	-	-	-	-
Cooling - Med	CFM	-	-	-	890 (881)	836 (828)	777 (769)	707 (700)	-	-	-	-
	WATTS	-	-	-	158 (159)	167 (167)	175 (176)	185 (186)	-	-	-	-
Cooling - High	CFM	-	-	-	-	908 (899)	863 (854)	818 (810)	773 (765)	731 (724)	-	-
	WATTS	-	-	-	-	248 (249)	256 (258)	264 (266)	274 (276)	282 (284)	-	-
Heating - Low	CFM	1123 (1123)	1059 (1059)	994 (994)	943 (943)	889 (889)	-	-	-	-	-	-
	WATTS	143 (143)	152 (152)	160 (160)	167 (167)	175 (175)	-	-	-	-	-	-
Heating - High	CFM	-	-	1122 (1122)	1069 (1069)	1022 (1022)	974 (974)	922 (922)	871 (871)	809 (809)	-	-
	WATTS	-	-	213 (213)	221 (221)	229 (229)	238 (238)	245 (245)	253 (253)	261 (261)	-	-

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

Table 5. Airflow – model A5PG3030A1070

A5PG3030A1070		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
Constant Circulation	CFM	APPROXIMATELY 40-50% COOLING OR HEATING AIRFLOW										
	WATTS											
Cooling - Low	CFM	1051 (1041)	994 (984)	939 (930)	889 (880)	840 (831)	-	-	-	-	-	-
	WATTS	126 (126)	134 (135)	142 (143)	150 (150)	158 (158)	-	-	-	-	-	-
Cooling - Med	CFM	-	-	1108 (1097)	1070 (1059)	1027 (1017)	975 (965)	920 (911)	875 (866)	-	-	-
	WATTS	-	-	239 (240)	247 (248)	256 (258)	267 (269)	274 (276)	282 (284)	-	-	-
Cooling - High	CFM	-	-	-	-	1099 (1088)	1059 (1048)	1017 (1007)	968 (959)	-	-	-
	WATTS	-	-	-	-	259 (260)	268 (270)	278 (279)	289 (290)	-	-	-
Heating - Low	CFM	1148 (1136)	1103 (1091)	1061 (1050)	1022 (1012)	982 (972)	932 (922)	-	-	-	-	-
	WATTS	199 (197)	208 (205)	216 (214)	224 (222)	233 (230)	243 (241)	-	-	-	-	-
Heating - High	CFM	-	-	-	1158 (1147)	1122 (1111)	1084 (1073)	1039 (1028)	988 (978)	-	-	-
	WATTS	-	-	-	301 (298)	310 (307)	320 (317)	331 (328)	343 (339)	-	-	-

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

Indoor Fan Performance

Table 6. Airflow – model A5PG3036A1070

A5PG3036A1070		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
Constant Circulation	CFM	APPROXIMATELY 40-50% COOLING OR HEATING AIRFLOW										
	WATTS											
Cooling - Low	CFM	-	1272 (1259)	1243 (1231)	1214 (1202)	1186 (1174)	1154 (1142)	1116 (1105)	1072 (1061)	-	-	-
	WATTS	-	352 (354)	361 (363)	372 (374)	382 (384)	392 (394)	404 (406)	416 (418)	-	-	-
Cooling - Med	CFM	-	-	-	-	1349 (1336)	1319 (1306)	1277 (1264)	1242 (1230)	1199 (1187)	1160 (1148)	1124 (1113)
	WATTS	-	-	-	-	489 (492)	500 (503)	511 (514)	523 (526)	537 (540)	548 (551)	558 (561)
Cooling - High	CFM	-	-	-	-	-	1326 (1299)	1296 (1270)	1263 (1238)	1225 (1201)	1183 (1159)	1150 (1127)
	WATTS	-	-	-	-	-	516 (519)	527 (530)	539 (542)	552 (555)	566 (569)	575 (578)
Heating - Low	CFM	1185 (1173)	1141 (1130)	1099 (1088)	1055 (1044)	1009 (999)	968 (958)	920 (911)	854 (846)	808 (800)	731 (724)	624 (618)
	WATTS	241 (238)	251 (248)	260 (258)	270 (267)	279 (277)	289 (286)	299 (296)	311 (308)	320 (316)	306 (303)	284 (282)
Heating - High	CFM	1386 (1373)	1354 (1340)	1311 (1298)	1276 (1263)	1238 (1225)	1198 (1186)	1164 (1153)	1069 (1058)	805 (797)	689 (682)	596 (590)
	WATTS	386 (382)	399 (395)	409 (405)	419 (415)	430 (425)	441 (437)	452 (448)	432 (428)	320 (317)	303 (300)	298 (295)

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

Table 7. Airflow – model A5PG3042A1090

A5PG3042A1090		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
Constant Circulation	CFM	APPROXIMATELY 40-50% COOLING OR HEATING AIRFLOW										
	WATTS											
Cooling - Low	CFM	1358 (1345)	1393 (1379)	1348 (1334)	1296 (1283)	1253 (1241)	-	-	-	-	-	-
	WATTS	224 (228)	233 (238)	242 (247)	252 (257)	262 (267)	-	-	-	-	-	-
Cooling - Med	CFM	1521 (1506)	1490 (1475)	1448 (1433)	1391 (1377)	1362 (1348)	1338 (1325)	1315 (1302)	1307 (1293)	1254 (1241)	-	-
	WATTS	306 (312)	316 (322)	327 (333)	337 (344)	348 (354)	359 (366)	369 (377)	382 (389)	395 (403)	-	-
Cooling - High	CFM	-	-	-	-	1529 (1514)	1491 (1476)	1467 (1453)	1425 (1411)	1385 (1371)	1345 (1331)	-
	WATTS	-	-	-	-	455 (464)	467 (477)	477 (487)	490 (499)	503 (513)	513 (523)	-
Heating - Low	CFM	1419 (1426)	1380 (1387)	1341 (1348)	1295 (1301)	1249 (1255)	1204 (1210)	1160 (1166)	1115 (1120)	1069 (1074)	1015 (1020)	961 (966)
	WATTS	240 (241)	250 (251)	259 (260)	269 (270)	279 (281)	291 (292)	302 (303)	312 (314)	323 (325)	333 (335)	348 (349)
Heating - High	CFM	1559 (1567)	1524 (1531)	1483 (1491)	1443 (1450)	1401 (1408)	1363 (1370)	1319 (1326)	1276 (1282)	1233 (1239)	1195 (1201)	1147 (1152)
	WATTS	313 (315)	324 (325)	335 (337)	346 (347)	356 (358)	367 (368)	379 (381)	392 (394)	403 (405)	415 (417)	428 (430)

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

Table 8. Airflow – model A5PG3048A1090

A5PG3048A1090		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
Constant Circulation	CFM	APPROXIMATELY 40-50% COOLING OR HEATING AIRFLOW										
	WATTS											
Cooling - Low	CFM	1583 (1567)	1542 (1526)	1502 (1487)	1460 (1445)	1415 (1401)	-	-	-	-	-	-
	WATTS	302 (308)	313 (320)	324 (330)	332 (339)	346 (352)	-	-	-	-	-	-
Cooling - Med	CFM	1763 (1745)	1723 (1706)	1689 (1672)	1648 (1632)	1609 (1593)	1568 (1552)	1527 (1512)	1488 (1473)	1447 (1433)	-	-
	WATTS	414 (422)	426 (434)	436 (444)	448 (457)	459 (468)	471 (480)	483 (493)	495 (505)	510 (520)	-	-
Cooling - Med High	CFM	-	1786 (1768)	1757 (1739)	1729 (1712)	1700 (1683)	1675 (1658)	1648 (1632)	1624 (1608)	1504 (1489)	-	-
	WATTS	-	577 (589)	591 (603)	604 (616)	617 (629)	631 (644)	643 (656)	655 (668)	599 (611)	-	-
Cooling - High	CFM	-	-	-	-	-	1769 (1751)	1728 (1711)	1688 (1671)	1652 (1635)	1545 (1530)	-
	WATTS	-	-	-	-	-	613 (625)	631 (644)	643 (656)	647 (660)	611 (623)	-
Heating - Low	CFM	1419 (1426)	1380 (1387)	1341 (1348)	1295 (1301)	1249 (1255)	1204 (1210)	1160 (1166)	1115 (1120)	1069 (1074)	1015 (1020)	961 (966)
	WATTS	240 (241)	250 (251)	259 (260)	269 (270)	279 (281)	291 (292)	302 (303)	312 (314)	323 (325)	333 (335)	348 (349)
Heating - High	CFM	1559 (1567)	1524 (1531)	1483 (1491)	1443 (1450)	1401 (1408)	1363 (1370)	1319 (1326)	1276 (1282)	1233 (1239)	1195 (1201)	1147 (1152)
	WATTS	313 (315)	324 (325)	335 (337)	346 (347)	356 (358)	367 (368)	379 (381)	392 (394)	403 (405)	415 (417)	428 (430)
Note: Cooling airflow must not exceed 1800 CFM due to condensate blowoff.												

Table 9. Airflow – model A5PG3060A1115

A5PG3060A1115		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
Constant Circulation	CFM	APPROXIMATELY 40-50% COOLING OR HEATING AIRFLOW										
	WATTS											
Cooling - Low	CFM	1857 (1831)	1831 (1802)	1800 (1765)	1766 (1728)	-	-	-	-	-	-	-
	WATTS	515 (524)	523 (533)	533 (545)	544 (558)	-	-	-	-	-	-	-
Cooling - Med	CFM	2031 (2003)	2003 (1975)	1974 (1946)	1940 (1913)	1907 (1880)	1874 (1848)	1837 (1811)	1805 (1780)	1771 (1746)	-	-
	WATTS	594 (611)	609 (627)	624 (642)	639 (658)	653 (672)	667 (686)	681 (701)	695 (715)	709 (730)	-	-
Cooling - High	CFM	2083 (2054)	2058 (2030)	2032 (2010)	2003 (1976)	1974 (1946)	1943 (1911)	1911 (1879)	1877 (1848)	1843 (1817)	1807 (1781)	-
	WATTS	749 (770)	759 (781)	769 (790)	779 (804)	788 (819)	803 (832)	816 (845)	830 (858)	845 (872)	860 (887)	-
Heating - Low	CFM	1827 (1815)	1792 (1790)	1757 (1757)	1721 (1712)	1685 (1679)	1646 (1648)	1605 (1613)	1570 (1574)	-	-	-
	WATTS	492 (510)	505 (520)	517 (532)	529 (549)	541 (560)	553 (570)	566 (582)	577 (596)	-	-	-
Heating - High	CFM	-	1927 (1910)	1894 (1875)	1861 (1839)	1824 (1803)	1788 (1773)	1750 (1736)	1711 (1704)	1674 (1661)	1639 (1622)	-
	WATTS	-	614 (630)	627 (634)	639 (647)	651 (660)	664 (672)	677 (685)	689 (698)	702 (712)	715 (726)	-
Note: Cooling airflow must not exceed 2250 CFM due to condensate blowoff.												

Indoor Fan Performance

To set indoor motor for the desired speed options, connect the motor leads in the taps as shown below:

Table 10. Motor wiring A5PG3024-42, A5PG3060

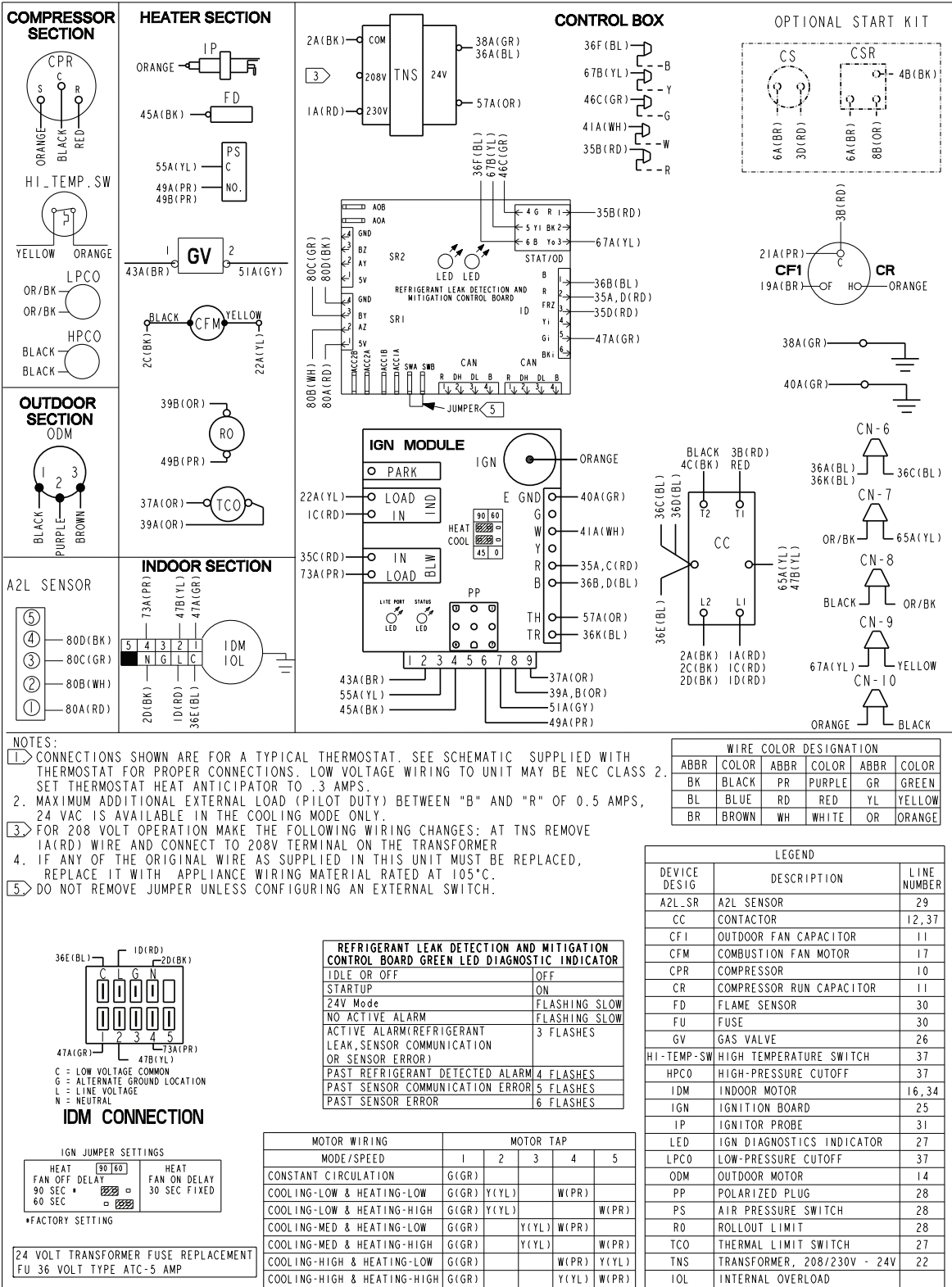
MOTOR WIRING	MOTOR TAP				
MODE/SPEED	1	2	3	4	5
CONSTANT CIRCULATION	G (GR)	-	-	-	-
COOLING-LOW and HEATING-LOW	G (GR)	Y (YL)	-	W (PR)	-
COOLING-LOW and HEATING-HIGH	G (GR)	Y (YL)	-	-	W (PR)
COOLING-MED and HEATING-LOW	G (GR)	-	Y (YL)	W (PR)	-
COOLING-MED and HEATING-HIGH	G (GR)	-	Y (YL)	-	W (PR)
COOLING-HIGH and HEATING-LOW	G (GR)	-	-	W (PR)	Y (YL)
COOLING-HIGH and HEATING-HIGH	G (GR)	-	-	Y (YL)	W (PR)
G signal (GR - green wire), Y signal (YL - yellow wire), W signal (PR - purple wire)					

Table 11. Motor wiring A5PG3048

MOTOR WIRING	MOTOR TAP				
MODE/SPEED	1	2	3	4	5
CONSTANT CIRCULATION	G (GR)	-	-	-	-
COOLING-LOW and HEATING-LOW	G (GR)	Y (YL)	-	W (PR)	-
COOLING-LOW and HEATING-HIGH	G (GR)	Y (YL)	-	-	W (PR)
COOLING-MED LOW and HEATING-LOW	G (GR)	-	Y (YL)	W (PR)	-
COOLING-MED LOW and HEATING-HIGH	G (GR)	-	Y (YL)	-	W (PR)
COOLING-MED HIGH and HEATING-LOW	G (GR)	W (PR)	-	Y (YL)	-
COOLING-MED HIGH and HEATING-HIGH	G (GR)	-	W (PR)	Y (YL)	-
COOLING-HIGH and HEATING-LOW	G (GR)	W (PR)	-	-	Y (YL)
COOLING-HIGH and HEATING-HIGH	G (GR)	-	W (PR)	-	Y (YL)
G signal (GR - green wire), Y signal (YL - yellow wire), W signal (PR - purple wire)					

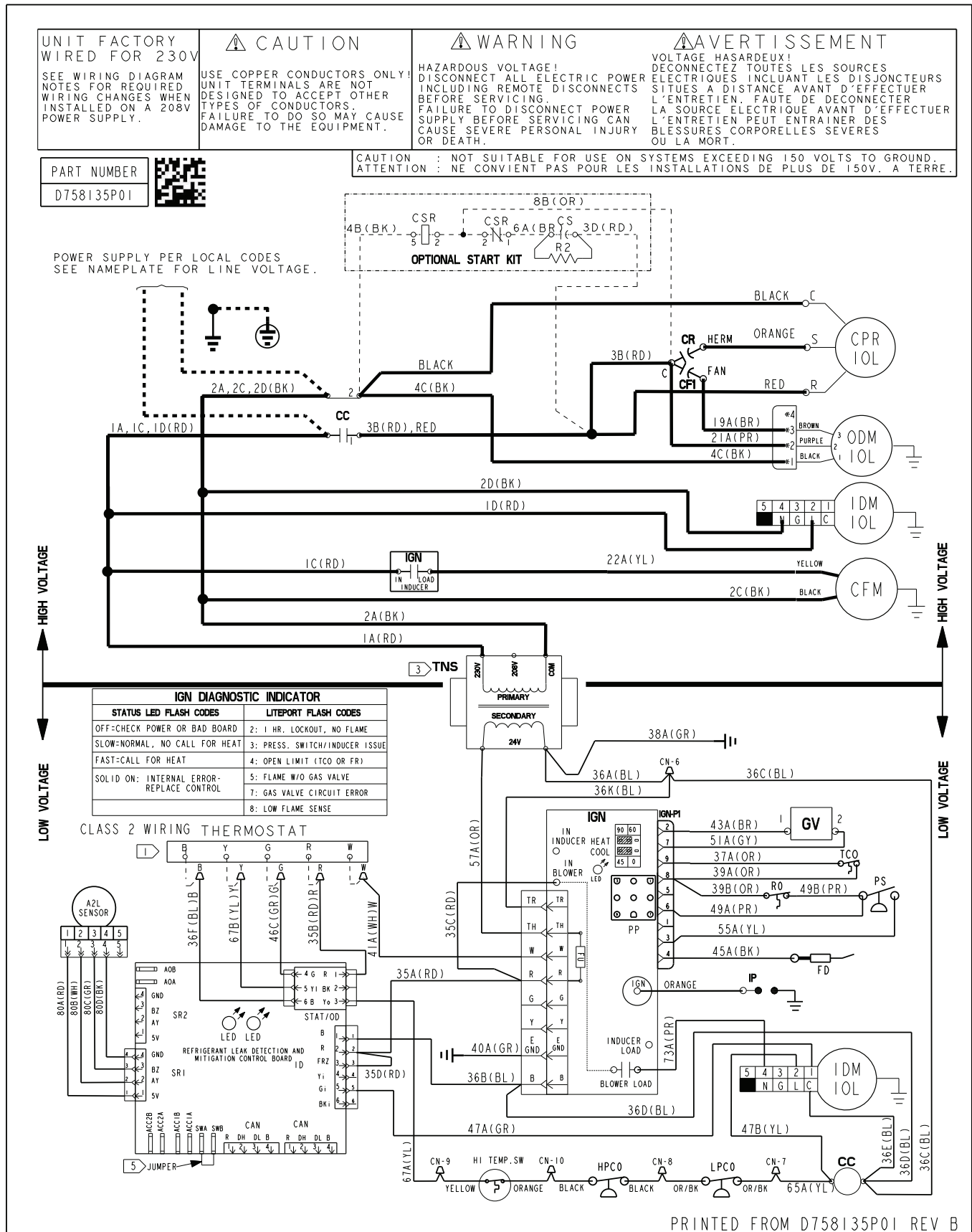
Wiring Diagram

Figure 1. A5PG3024A – 42A



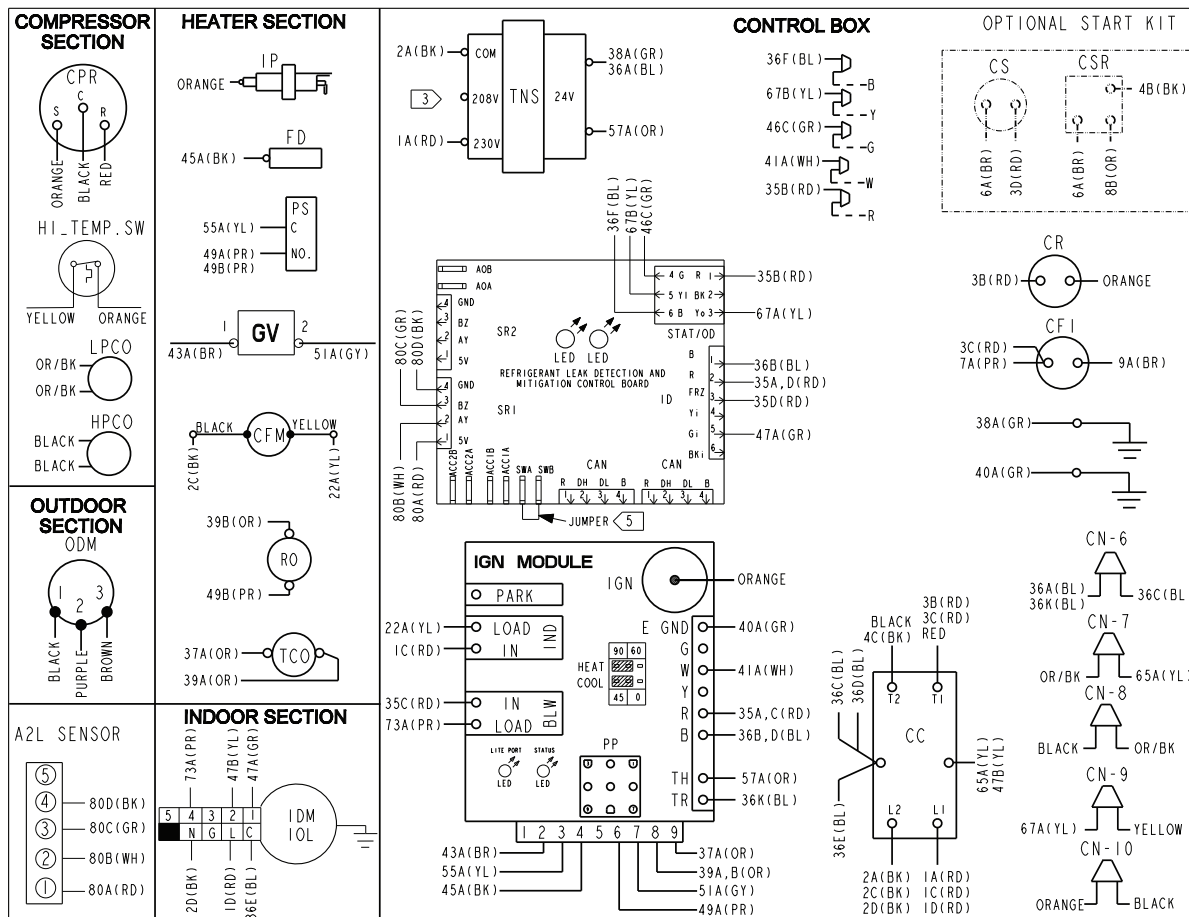
Wiring Diagram

Figure 2. A5PG3024A – 42A



PRINTED FROM D758135P01 REV B

Figure 3. A5PG3048A

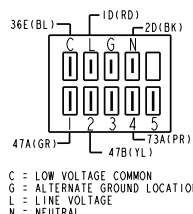


NOTES:

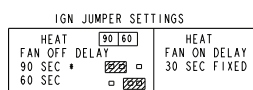
1. CONNECTIONS SHOWN ARE FOR A TYPICAL THERMOSTAT. SEE SCHEMATIC SUPPLIED. WITH THERMOSTAT FOR PROPER CONNECTIONS. LOW VOLTAGE WIRING TO UNIT MAY BE NEC CLASS 2. SET THERMOSTAT HEAT ANTICIPATOR TO .3 AMPS.
2. MAXIMUM ADDITIONAL EXTERNAL LOAD (PILOT DUTY) BETWEEN "B" AND "R" OF 0.5 AMPS, 24 VAC IS AVAILABLE IN THE COOLING MODE ONLY.
3. FOR 208 VOLT OPERATION MAKE THE FOLLOWING WIRING CHANGES: AT TNS, REMOVE 1A(RD) WIRE AND CONNECT TO 208V TERMINAL ON THE TRANSFORMER
4. IF ANY OF THE ORIGINAL WIRE AS SUPPLIED IN THIS UNIT MUST BE REPLACED, REPLACE IT WITH APPLIANCE WIRING MATERIAL RATED AT 105°C.
5. DO NOT REMOVE JUMPER UNLESS CONFIGURING AN EXTERNAL SWITCH.

WIRE COLOR DESIGNATION					
ABBR	COLOR	ABBR	COLOR	ABBR	COLOR
BK	BLACK	PR	PURPLE	GR	GREEN
BL	BLUE	RD	RED	YL	YELLOW
BR	BROWN	WH	WHITE	OR	ORANGE

LEGEND		
DEVICE DESIG	DESCRIPTION	LINE NUMBER
A2L_SR	A2L SENSOR	30
CC	CONTACTOR	13, 37
CFI	OUTDOOR FAN CAPACITOR	13
CFM	COMBUSTION FAN MOTOR	18
CPR	COMPRESSOR	10
CR	COMPRESSOR RUN CAPACITOR	10
FD	FLAME SENSOR	30
FU	FUSE	30
GV	GAS VALVE	25
HI-TEMP-SW	HIGH TEMPERATURE SWITCH	37
HPCO	HIGH-PRESSURE CUTOFF	37
IDM	INDOOR MOTOR	16, 34
IGN	IGNITION BOARD	25
IP	IGNITOR PROBE	31
LED	IGN DIAGNOSTICS INDICATOR	27
LPCO	LOW-PRESSURE CUTOFF	37
ODM	OUTDOOR MOTOR	13
PP	POLARIZED PLUG	28
PS	AIR PRESSURE SWITCH	28
RO	ROLLOUT LIMIT	28
TCO	THERMAL LIMIT SWITCH	27
TNS	TRANSFORMER, 208/230V - 24V	22
IOI	INTERNAL OVERLOAD	



IDM CONNECTION



•FACTORY SETTING

REFRIGERANT LEAK DETECTION AND MITIGATION CONTROL BOARD GREEN LED DIAGNOSTIC INDICATOR	
IDLE OR OFF	OFF
STARTUP	ON
24V Mode	FLASHING SLOW
NO ACTIVE ALARM	FLASHING SLOW
ACTIVE ALARM(REFRIGERANT LEAK, SENSOR COMMUNICATION OR SENSOR ERROR)	3 FLASHES
PAST REFRIGERANT DETECTED ALARM	4 FLASHES
PAST SENSOR COMMUNICATION ERROR	5 FLASHES
PAST SENSOR ERROR	6 FLASHES

MOTOR WIRING	MOTOR TAP				
MODE/SPEED	1	2	3	4	5
CONSTANT CIRCULATION	G(GR)				
COOLING-LOW & HEATING-LOW	G(GR)	Y(YL)		W(PR)	
COOLING-LOW & HEATING-HIGH	G(GR)	Y(YL)			W(PR)
COOLING-MED LOW & HEATING-LOW	G(GR)		Y(YL)	W(PR)	
COOLING-MED LOW & HEATING-HIGH	G(GR)		Y(YL)		W(PR)
COOLING-MED HIGH & HEATING-LOW	G(GR)	W(PR)		Y(YL)	
COOLING-MED HIGH & HEATING-HIGH	G(GR)		W(PR)	Y(YL)	
COOLING-HIGH & HEATING LOW	G(GR)	W(PR)			Y(YL)
COOLING-HIGH & HEATING HIGH	G(GR)		W(PR)		Y(YL)

Wiring Diagram

Figure 4. A5PG3048A

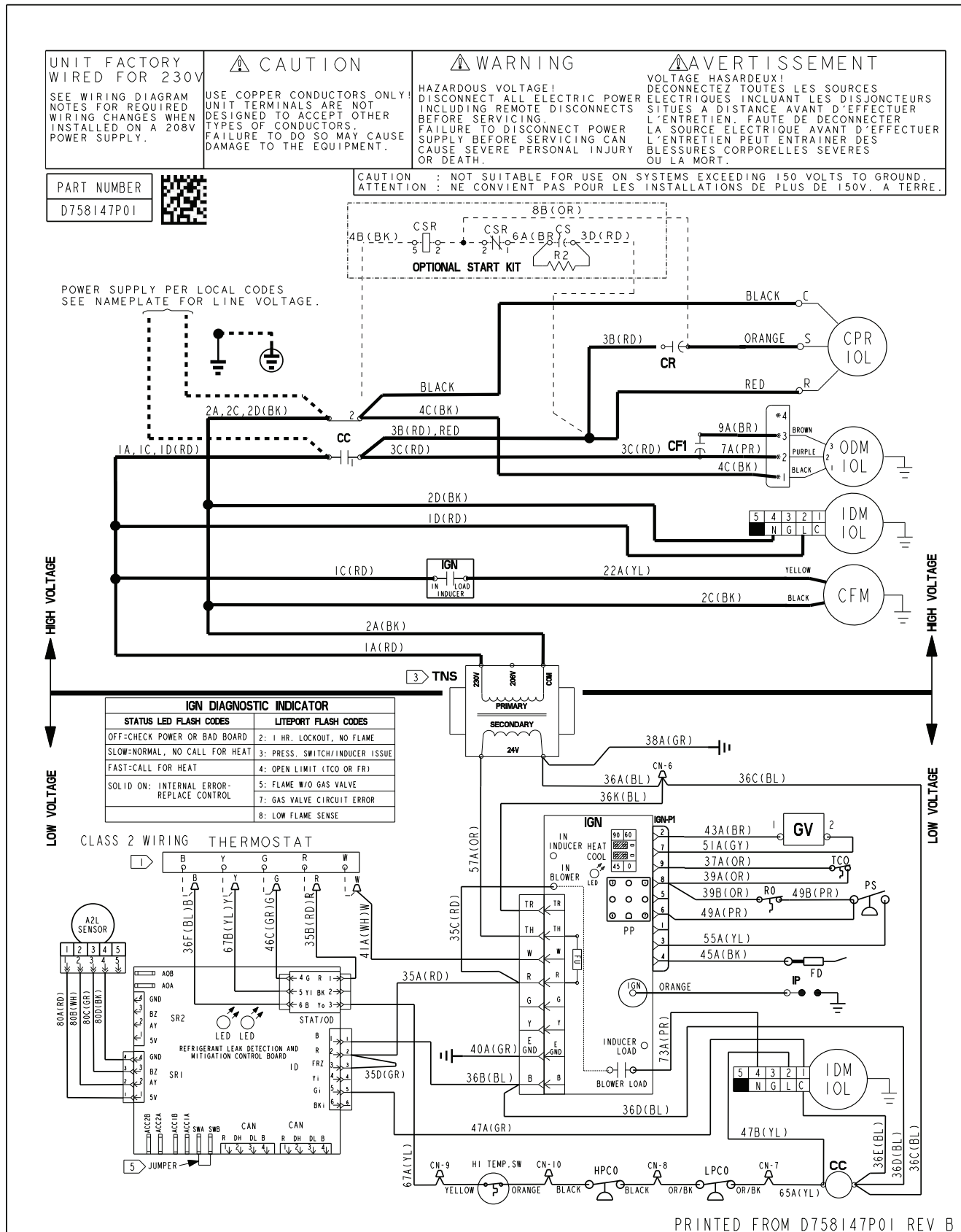
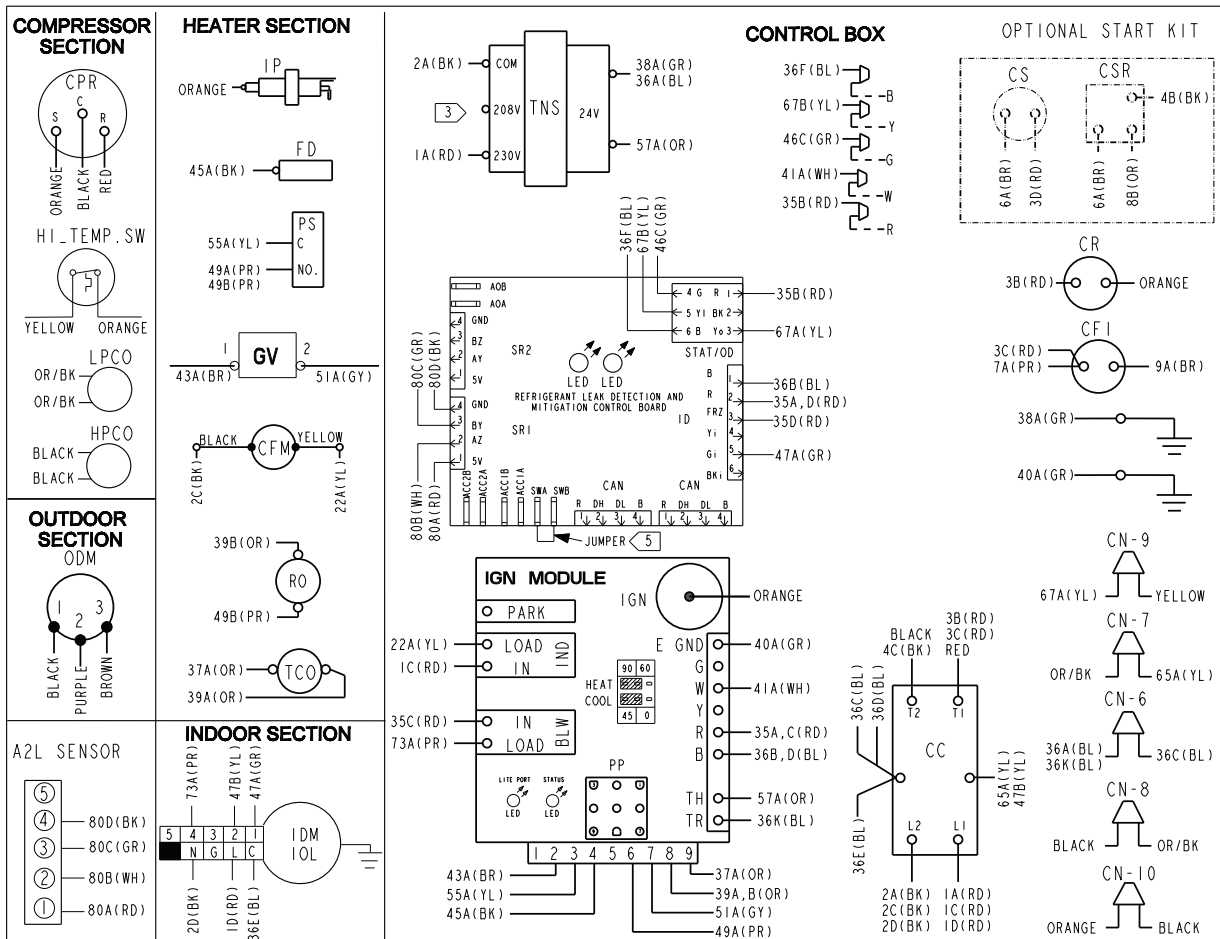


Figure 5. A5PG3060A



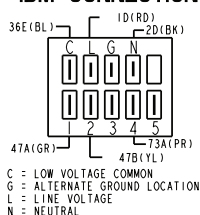
NOTES:

1. CONNECTIONS SHOWN ARE FOR A TYPICAL THERMOSTAT. SEE SCHEMATIC SUPPLIED WITH THERMOSTAT FOR PROPER CONNECTIONS. LOW VOLTAGE WIRING TO UNIT MAY BE NEC CLASS 2. SET THERMOSTAT HEAT ANTICIPATOR TO .3 AMPS.
2. MAXIMUM ADDITIONAL EXTERNAL LOAD (PILOT DUTY) BETWEEN "B" AND "R" OF 0.5 AMPS, 24 VAC IS AVAILABLE IN THE COOLING MODE ONLY.
3. FOR 208 VOLT OPERATION MAKE THE FOLLOWING WIRING CHANGES: AT TNS, REMOVE 1A(RD) WIRE AND CONNECT IT TO 208V TERMINAL ON THE TRANSFORMER
4. IF ANY OF THE ORIGINAL WIRE AS SUPPLIED IN THIS UNIT MUST BE REPLACED, REPLACE IT WITH APPLIANCE WIRING MATERIAL RATED AT 105°C.
5. DO NOT REMOVE JUMPER UNLESS CONFIGURING AN EXTERNAL SWITCH.

WIRE COLOR DESIGNATION					
ABBR	COLOR	ABBR	COLOR	ABBR	COLOR
BK	BLACK	PR	PURPLE	GR	GREEN
BL	BLUE	RD	RED	YL	YELLOW
BR	BROWN	WH	WHITE	OR	ORANGE

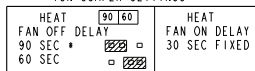
LEGEND		
DEVICE DESIG	DESCRIPTION	LINE NUMBE
A2L_SR	A2L SENSOR	30
CC	CONTACTOR	12, 31
CF1	OUTDOOR FAN CAPACITOR	13
CFM	COMBUSTION FAN MOTOR	17
CPR	COMPRESSOR	10
CR	COMPRESSOR RUN CAPACITOR	10
FD	FLAME SENSOR	30
FU	FUSE	30
GV	GAS VALVE	25
HI-TEMP-SW	HIGH TEMPERATURE SWITCH	37
HPCO	HIGH-PRESSURE CUTOFF	37
IDM	INDOOR MOTOR	16, 34
IGN	IGNITION BOARD	25
IP	IGNITOR PROBE	31
LED	IGN DIAGNOSTICS INDICATOR	27
LPCO	LOW-PRESSURE CUTOFF	37
ODM	OUTDOOR MOTOR	13
PP	POLARIZED PLUG	28
PS	AIR PRESSURE SWITCH	28
RO	ROLLOUT LIMIT	28
TCO	THERMAL LIMIT SWITCH	27
TNS	TRANSFORMER, 208/230V - 24V	22
IOL	INTERNAL OVERLOAD	

IDM CONNECTION



C = LOW VOLTAGE COMMON
G = ALTERNATE GROUND LOCATION
L = LINE VOLTAGE
N = NEUTRAL

IGN JUMPER SETTINGS



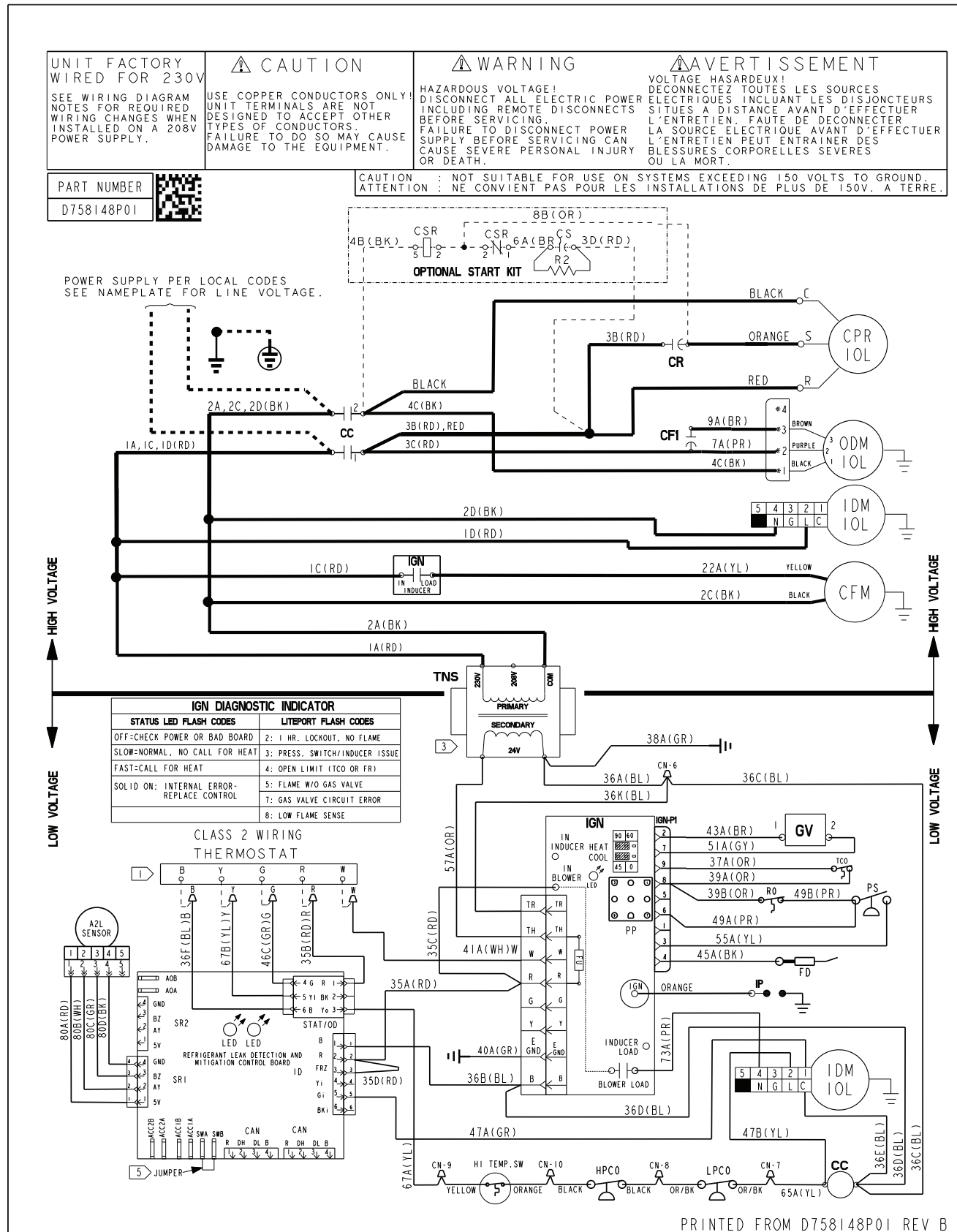
*FACTORY SETTING

REFRIGERANT LEAK DETECTION AND MITIGATION CONTROL BOARD GREEN LED DIAGNOSTIC INDICATOR	
IDLE OR OFF	OFF
STARTUP	ON
24V Mode	FLASHING SLOW
NO ACTIVE ALARM	FLASHING SLOW
ACTIVE ALARM(REFRIGERANT LEAK, SENSOR COMMUNICATION OR SENSOR ERROR)	3 FLASHES
PAST REFRIGERANT DETECTED ALARM	4 FLASHES
PAST SENSOR COMMUNICATION ERROR	5 FLASHES
PAST SENSOR ERROR	6 FLASHES

MOTOR WIRING	MOTOR TAP				
MODE/SPEED	1	2	3	4	5
CONSTANT CIRCULATION	G(GR)				
COOLING-LOW & HEATING-LOW	G(GR)	Y(YL)		W(PR)	
COOLING-LOW & HEATING-HIGH	G(GR)	Y(YL)			W(PR)
COOLING-MED & HEATING-LOW	G(GR)		Y(YL)	W(PR)	
COOLING-MED & HEATING-HIGH	G(GR)		Y(YL)		W(PR)
COOLING-HIGH & HEATING-LOW	G(GR)			W(PR)	Y(YL)
COOLING-HIGH & HEATING-HIGH	G(GR)			Y(YL)	W(PR)

Wiring Diagram

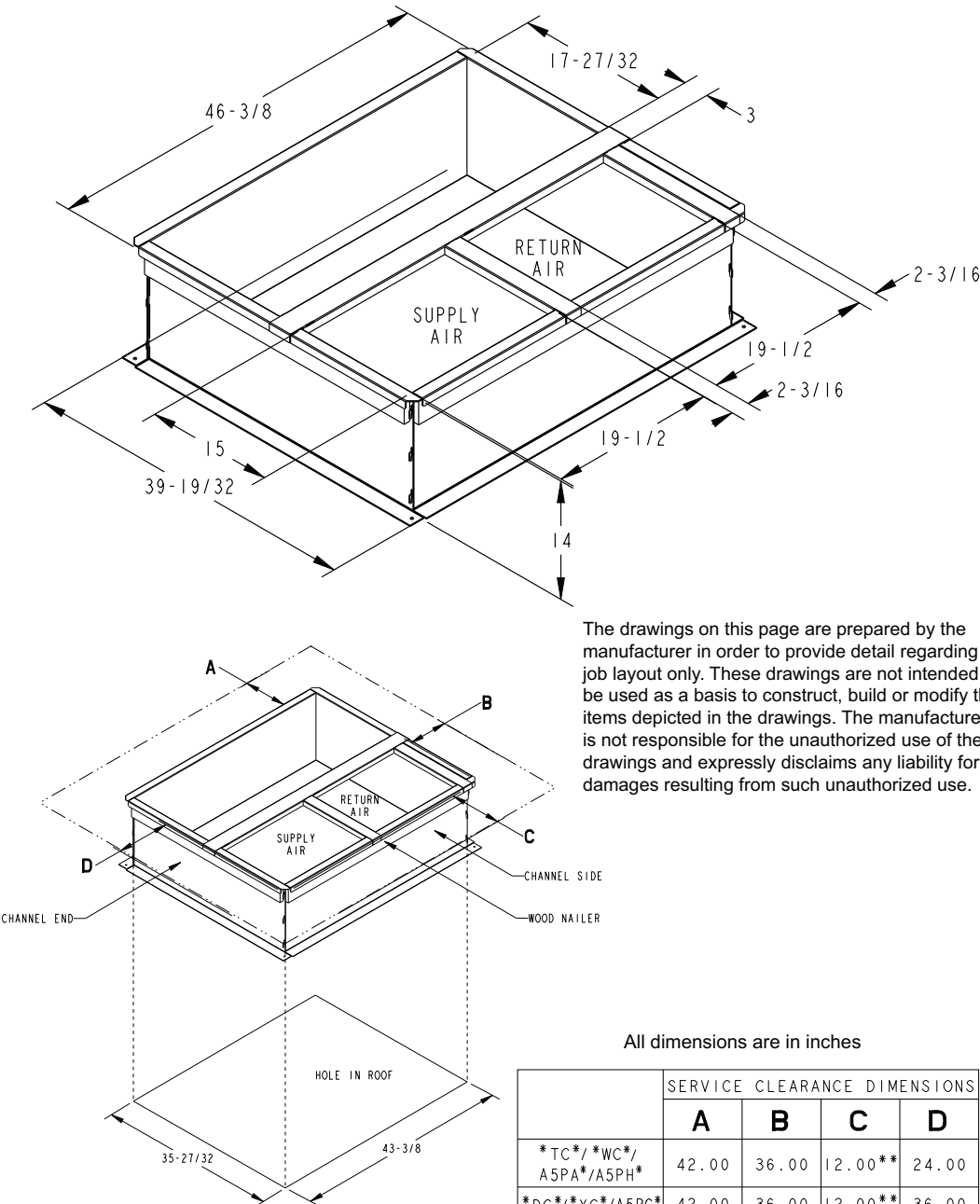
Figure 6. A5PG3060A



Full Perimeter Roof Mounting Curb

Figure 7. 2.0 to 3.0 ton models

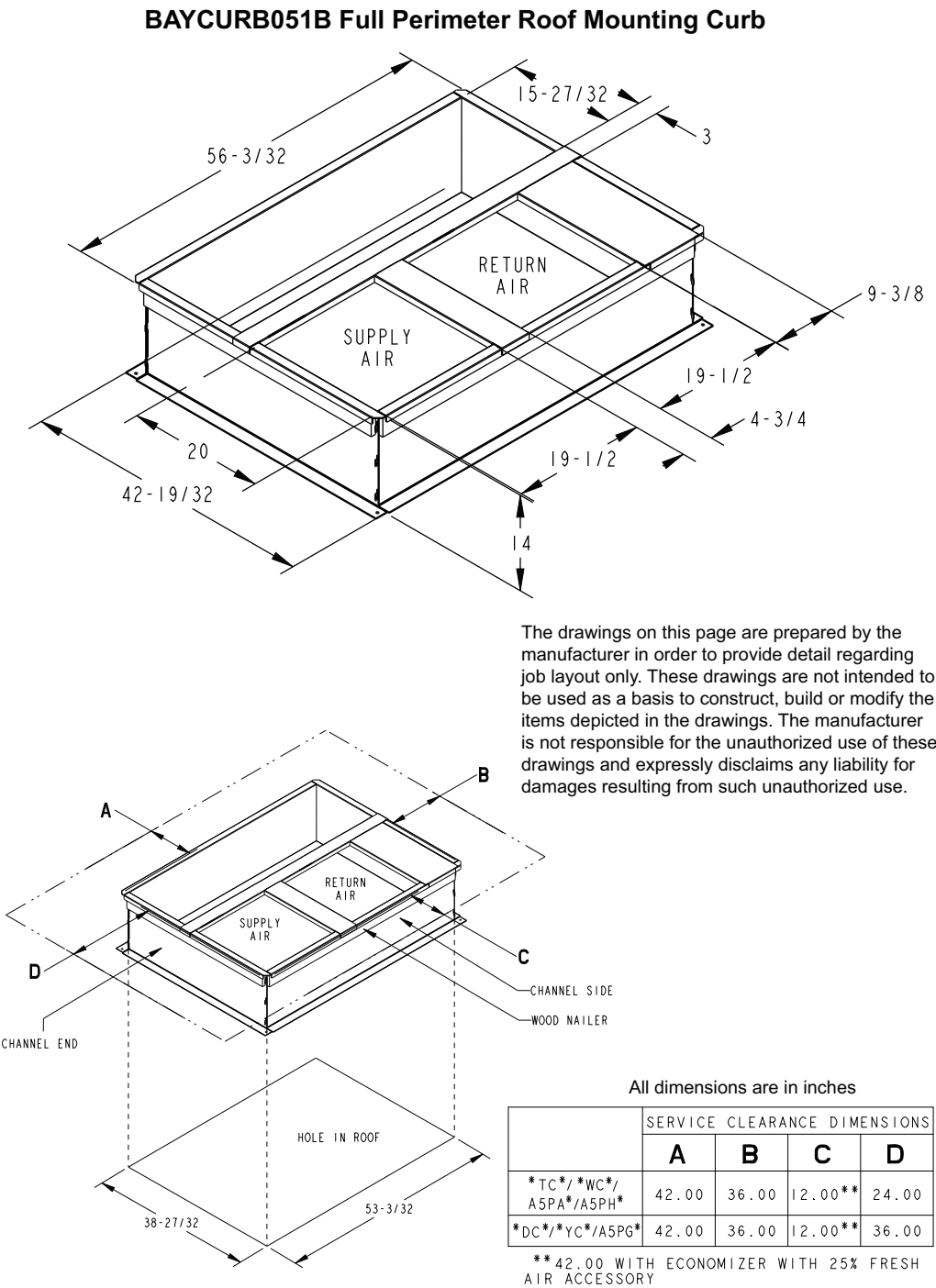
BAYCURB050B Full Perimeter Roof Mounting Curb



**42.00 WITH ECONOMIZER WITH 25% FRESH AIR ACCESSORY

Full Perimeter Roof Mounting Curb

Figure 8. 3.5 to 5.0 ton models



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"

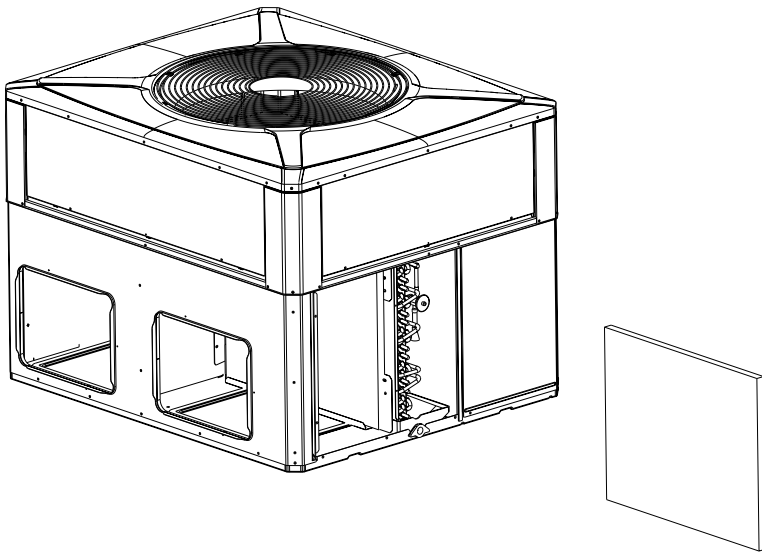
Table 13. BAYDMPR101 and 102A, 25% motorized outside air damper
(Mounts over horizontal return air opening)

	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"

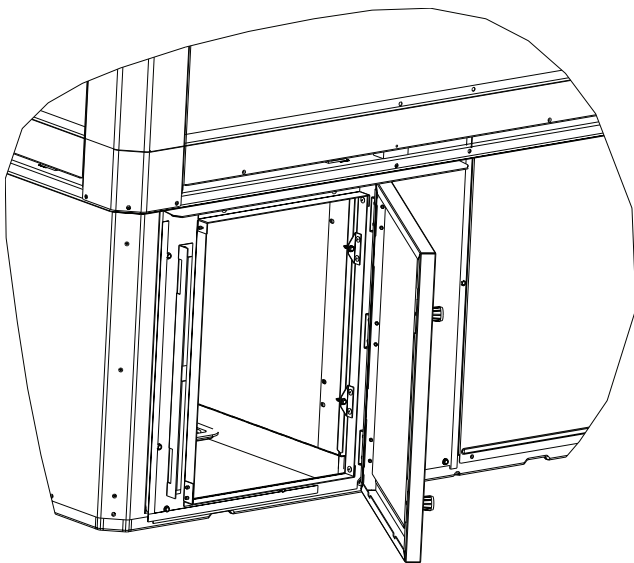
Note: The drawings on this page are prepared by the manufacturer in order to provide detail regarding job layout only. These drawings are not intended to be used as a basis to construct, build or modify the items depicted in the drawings. The manufacturer is not responsible for the unauthorized use of 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)**



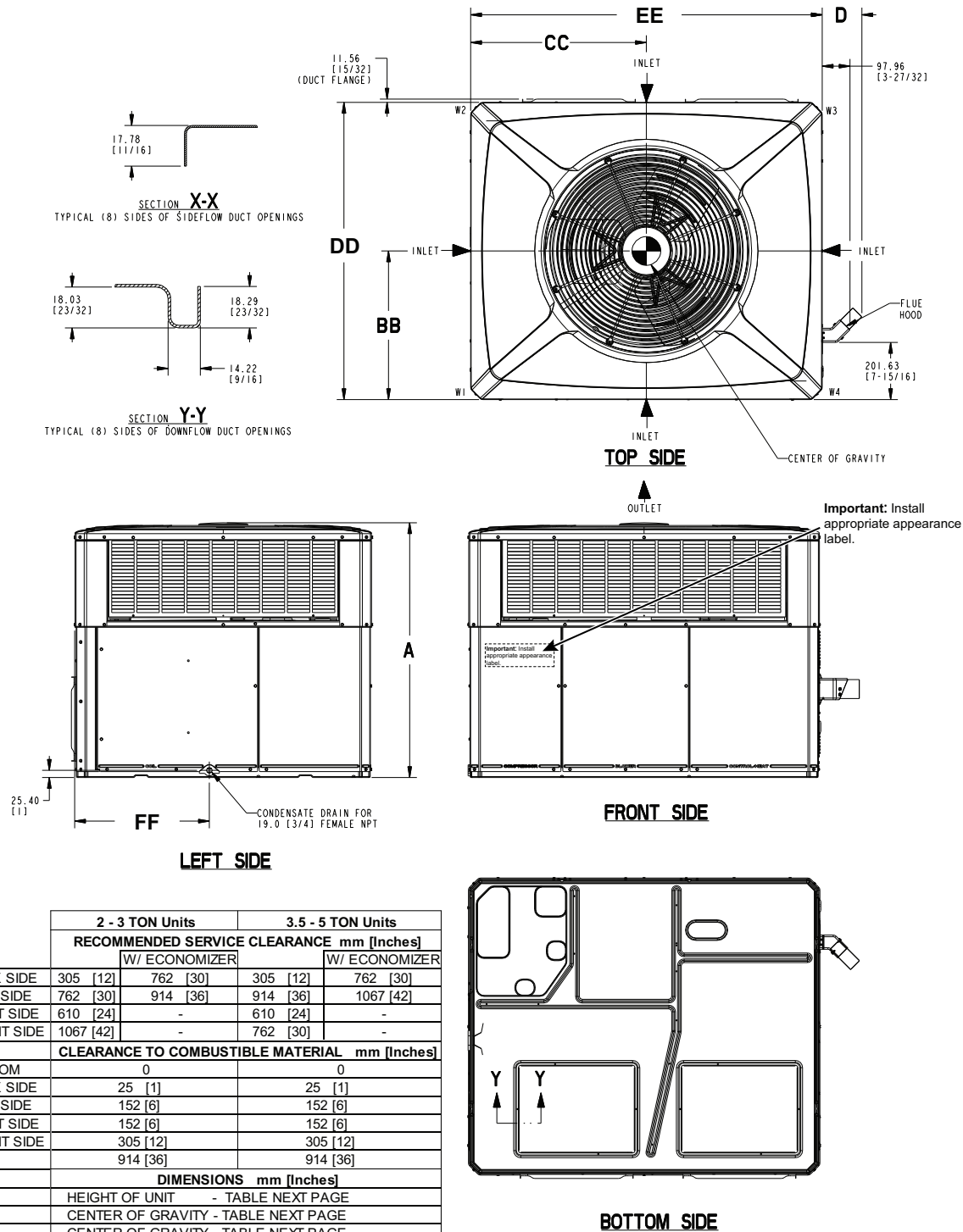
**Figure 10. BAYACCDOR1A hinged filter access door (2.0 to 3.0 ton models)
BAYACCDOR2A (3.5 to 5.0 ton models)
(Replaces filter/coil access panel)**



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.

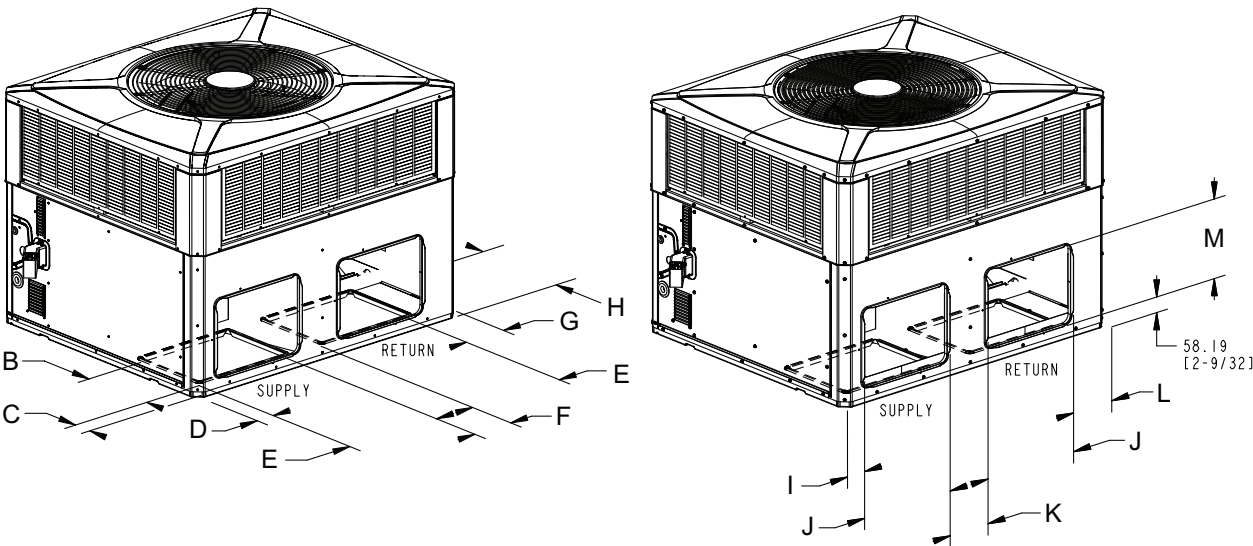
Dimensional Data

Figure 11. Space on sides requirements



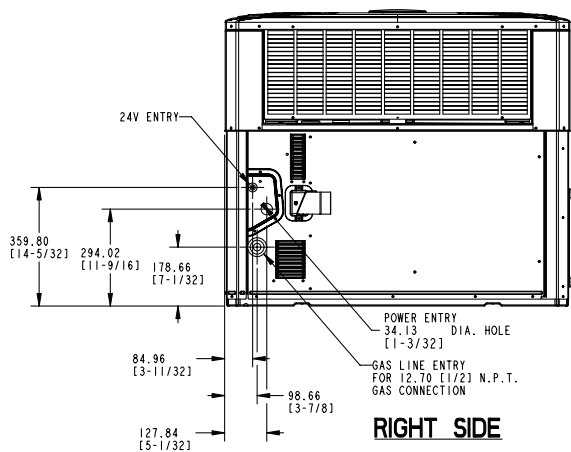
Note: The view labeled "Bottom side" represents the base as viewed looking up from underneath the unit.

Figure 12. Bottom and back duct openings

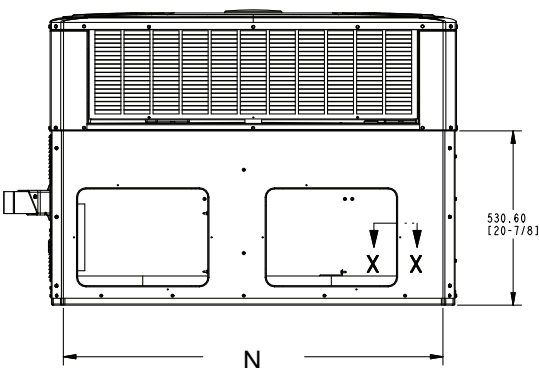


BOTTOM DUCT OPENINGS

BACK DUCT OPENINGS



RIGHT SIDE



BACK SIDE

		PHYSICAL DIMENSIONS mm[in]												
	HEIGHT-A mm[inch]	B	C	D	E	F	G	H	I	J	K	L	M	N
A5PG3024	898.53 [35-3/8]	304.80 [12]	75.41 [2.93]	75.41 [2.93]	406.40 [16]	167.89 [6.61]	173.46 [6-27/32]	304.80 [12]	79.50 [3.13]	398.22 [15.68]	176.07 [6.93]	177.55 [6.99]	296.62 [11.68]	1155.45 [45.49]
A5PG3030	949.33 [37-3/8]													
A5PG3036														
A5PG3042	898.53 [35-3/8]	457.20 [18]	75.41 [2.97]	75.41 [2.97]	381.00 [15]	244.09 [9.61]	318.75 [12.55]	381.00 [15]	79.50 [3.13]	449.02 [17.68]	176.07 [6.93]	322.84 [12.71]	372.82 [14.68]	1402.34 [55.21]
A5PG3048	1000.13 [39-3/8]													
A5PG3060														

	Corner Weights KG/LBS				SHIPPING WEIGHT KG/LBS	UNIT WEIGHT KG/LBS	Center Of Gravity mm[inch]	
	W1	W2	W3	W4			BB	CC
A5PG3024	60.3 [133]	36.8 [81]	26.1 [58]	41.0 [90]	197.8 [436]	164.2 [362]	479.8 [18.9]	527.8 [20.8]
A5PG3030	63.5 [140]	38.7 [85]	27.5 [61]	43.1 [95]	206.4 [455]	172.8 [381]	406.5 [16.0]	594.1 [23.4]
A5PG3036	63.3 [140]	38.3 [84]	27.1 [60]	43.2 [95]	200.9 [443]	171.9 [379]	414.3 [16.3]	697.6 [27.5]
A5PG3042	72.8 [160]	47.2 [104]	35.2 [78]	53.6 [118]	255.8 [564]	208.8 [460]	470 [18.5]	731.0 [28.8]
A5PG3048	75.2 [165]	45.0 [99]	33.8 [75]	54.4 [120]	255.6 [564]	208.4 [460]	433 [17.0]	743.3 [29.3]
A5PG3060	79.7 [176]	46.3 [102]	34.9 [77]	59.0 [130]	267.1 [589]	219.9 [485]	414 [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. Units shall be designed to operate at ambient temperatures as high as 115°F. Cooling performance shall be rated in accordance with AHRI standards. The YC heating/cooling unit design is certified to ANSI 221.47/CSA 2.3, specifically for outdoor applications using natural gas or propane. All units shall be designed for outdoor rooftop or ground level installation.

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 (2—4 Ton Models) All aluminum micro channel, extruded tubes, mechanically bonded to aluminum fins, and factory pressure tested at 480 PSIG and leak tested at 250 to 300 PSIG. All units have TXV to control refrigerant flow.

Evaporator Coil (5 Ton Model) Internally enhanced 3/8" OD seamless copper tubing mechanically bonded to aluminum fins, factory pressure tested at 480 PSIG and leak tested at 250 to 300 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" 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.

Heating System

Gas-Fired Heating Section

Models shall provide completely assembled, wired and piped gas fired heating systems within unit. Design certified by UL, specifically for outdoor application. Threaded gas connection on the unit.

Electric Ignition System

Main burner is lit each time thermostat calls for heat. Flame sensor proves flame and keeps the main burner on. Should a loss of flame occur, the main valve closes and the spark recurs within 0.8 seconds. When thermostat is satisfied, main burner is extinguished.

Forced Combustion Blower

Insures flame stability under varying wind conditions. Gives higher combustion efficiency and location flexibility.

Heat Exchanger

Stainless steel tubes. Free floating design.

Burners

Stainless steel. Multi-port inshot.

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.