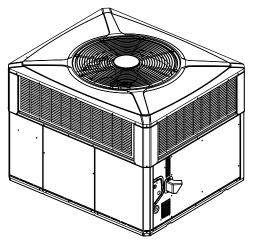


Product Data

EarthWise™ Hybrid Dual Fuel Packaged System

Single Packaged Dual Fuel, Priority, Convertible, 2 - 5 Ton, 60 - 115 KBTU, R-454B

5DCZ5024A1060A 5DCZ5030A1070A 5DCZ5036A1070A 5DCZ5042A1090A 5DCZ5048A1090A 5DCZ5060A1115A



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





SAFETY SECTION

Important — This document contains a wiring diagram, a parts list, and service information. This is customer property and is to remain with this unit. Please return to service information pack upon completion of work.

A WARNING

HAZARDOUS VOLTAGE!

Failure to follow this Warning could result in property damage, severe personal injury, or death.

Disconnect all electric power, including remote disconnects before servicing. Follow proper lockout/tagout procedures to ensure the power cannot be inadvertently energized.

A WARNING

SAFETY AND ELECTRICAL HAZARD!

Failure to follow this Warning could result in property damage, severe personal injury, or death.

These servicing instructions are for use by qualified personnel only. To reduce the risk of electrical shock, do not perform any servicing other than that contained in these operating instructions unless you are qualified to do so.

A CAUTION

SHARP EDGE HAZARD!

Failure to follow this Caution could result in property damage or personal injury. Be careful of sharp edges on equipment or any cuts made on sheet metal while installing or servicing.

A WARNING

UNIT CONTAINS R-454B REFRIGERANT!

Proper service equipment is required. Failure to use proper service tools may result in equipment damage or personal injury.

A WARNING

SERVICE!

USE ONLY R-454B REFRIGERANT AND APPROVED COMPRESSOR OIL.

A WARNING

SAFETY HAZARD!

Children should be supervised to ensure that they do not play with the appliance.

A WARNING

SAFETY HAZARD!

This appliance is not to be used by persons (including children) with reduced physical, sensory, or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning the use of the appliance by a person responsible for their safety.

©2024 Trane 22-2013-1A-EN



A CAUTION

GROUNDING REQUIRED!

Failure to inspect or use proper service tools may result in equipment damage or personal injury.

Reconnect all grounding devices. All parts of this product that are capable of conducting electrical current are grounded. If grounding wires, screws, straps, clips, nuts, or washers used to complete a path to ground are removed for service, they must be returned to their original position and properly fastened.

A WARNING

RISK OF FIRE!

Flammable refrigerant used. To be repaired only by trained service personnel. Do not puncture refrigerant tubing.

Dispose of refrigerant in accordance with federal and/or local regulations.

A WARNING

SAFETY HAZARD!

Operating the unit without the access panels properly installed may result in severe personal injury or death.

Do not operate the unit without the evaporator fan access panel or evaporator coil access panel in place.

A WARNING

LEAK DETECTION SYSTEM!

LEAK DETECTION SYSTEM installed. Unit must be powered except for service.

A WARNING

WARNING!

This product can expose you to chemicals including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Important: Wear appropriate gloves, arm sleeve protectors and eye protection when servicing or maintaining this equipment.

Important: Air filters and media wheels or plates shall meet the test requirements in UL 900.



Table of Contents

Single Packaged Dual Fuel/Electric Cooling System	5
Optional Equipment Listing	6
Product Specifications	7
Indoor Fan Performance	9
Wiring Diagrams	12
Full Perimeter Roof Mounting Curb	16
Optional Equipment — Filter Rack	18
Optional Equipment — Economizer	19
Optional Equipment — Outside Air Damper	20
Determine Unit Clearances	21
Mechanical Specifications	23



Single Packaged Dual Fuel/Electric Cooling System

Introducing the new Trane Packaged Convertible Dual Fuel System.

Packaged Convertible Dual Fuel System

Trane offers a complete family of dual fuel heating and cooling systems, designed to keep you comfortable all year long, regardless of the weather, while keeping your operating costs as low as possible. The heat pump operates efficiently as both an air conditioner and a heater. In the summer, the heat pump cools your home just like any other air conditioner by pulling the heat from the inside and releasing it outdoors. In the winter, it captures the heat that is always present in the outdoor air and transfers it indoors. The gas furnace provides additional heating capacity for cooler weather.

Single Packaged Convertible Dual Fuel Systems are easy and versatile to install.

Because cooling and heating functions are all contained in a single cabinet, Trane packaged dual fuel 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 a *CONT402, 802, or 803 comfort control, and air distribution ducts, you have a highly efficient, total home comfort system.

Single Packaged Dual Fuel 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 Climatuff® 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.



Optional Equipment Listing

${\tt OPTIONAL\ EQUIPMENT\ FOR\ 5DCZ5\ PACKAGED\ UNITS\ (check\ mark\ [\checkmark]\ indicates\ accessories\ included)}$

OPTIONAL EQUIPMENT FOR SDC25 PACKAGED UNITS (CHECK MARK [7] INC	ilicates accessories ilicitatea)
Hinged Filter Access Door (DCZ5024-36)(a)	BAYACCDOR1A[]
Hinged Filter Access Door (DCZ5048-060)(a)	BAYACCDOR2A[]
Roof Curb Full Perimeter (5DCZ5024-36)(b)	BAYCURB050A[]
Roof Curb Full Perimeter (5DCZ5048-060)(b)	BAYCURB051A[]
Roof Curb Utility Extension Kit (BAYCURB050A)	BAYUTIL101B[]
Roof Curb Utility Extension Kit (BAYCURB051A)	BAYUTIL102B[]
Outside Air Control for V S Economizer (5DCZ5024-060)(c)	BAYOSAC001C[]
0-25% Motorized Outside Air Damper (5DCZ5024-36)	BAYDMPR101A[]
0-25% Motorized Outside Air Damper (5DCZ5048-060)	BAYDMPR102A[]
0-25% Manual Fresh Air Damper (5DCZ5024-36) ^(d)	BAYOSAH001A[]
0-25% Manual Fresh Air Damper (5DCZ5048-060) ^(d)	BAYOSAH002A[]
0-100% Mod Economizer w/Baro Relief (5DCZ5024-36)(d)(e) (f)	BAYECON107A[]
0-100% Mod Economizer w/Baro Relief (5DCZ5048-060)(d)(e)(f)	BAYECON108A[]
0-100% Horizontal Economizer (5DCZ5024-36)(d)(e)	BAYECON207A[]
0-100% Horizontal Economizer (5DCZ5048-060)(d)(e)	BAYECON208A[]
Economizer Relay Kit (required for Heat Pump applications)	BAYRLAY006B[]
Enthalpy Control for Economizer (solid state)	BAYENTH001A[]
Remote Potentiometer (All-BAYECON***A)	BAYSTAT023[]
1"-2" Filter Frame (5DCZ5024-36) (20 x 25 filter not included) ^(d)	BAYFLTR101B[]
1"-2" Filter Frame (5DCZ5048-060) (20 x 20,20X18 filter not included)(d)	BAYFLTR201B[]
Evaporator Defrost Control (Low Ambient Cooling) Kit ^(g)	BAYLOAM011A[]
Head Pressure Control (Low Ambient Cool) (208/240v) Kit ^(g)	BAYLOAM105A[]
Crankcase Heater Scroll(5DCZ5048, 60)(230v)(g)	BAYCCHT102A[]
Crankcase Heater Scroll (5DCZ5024-36)(230v)(g)	BAYCCHT103A[]
Crankcase Heater Scroll (5DCZ5048, 60)(460v)	BAYCCHT404B[]
Crankcase Heater Scroll (5DCZ5024-36)(460v)	BAYCCHT405A[]
Adapter Curb 5DCZ5024-36 to BAYCURB030,38	BAYADAP050A[]
Adapter Curb 5DCZ5024-36 to BAYCURB033	BAYADAP051A[]
Adapter Curb 5DCZ5048-60A to BAYCURB030,38	BAYADAP052A[]
Adapter Curb 5DCZ5048-60A to BAYCURB033	BAYADAP053A[]
Adapter Curb 5DCZ5048-60A to BAYCURB034	BAYADAP054A[]
12" Duct Shroud Covers Horizontal 5DCZ5024-060 ^(h)	BAYCOVR112A[]
18" Duct Shroud Covers Horizontal 5DCZ5024-060(h)	BAYCOVR118A[]
Extreme Condition Mounting Kit - All BAYCURB & BAYADAP	BAYEXMK001A[]
Extreme Condition Mounting Kit - All BAYUTIL	BAYEXMK002A[]
Extreme Condition Mounting Kit - All Slab Mounts	BAYEXMK003A[]
Lifting Lug Kit (All Models)	BAYLIFT002B[]
LP Conversion Kit (All 115K Models)	BAYLPKT100B[]
LP Conversion Kit (All 60K, 90K Models)	BAYLPKT101B[]
LP Conversion Kit (All 70K Models)	BAYLPKT102B[]
	= =

⁽a) BAYACCDOR1A requires BAYFLTR101B & BAYACCDOR2A requires BAYFLTR201B. They are not backward compatible to BAYFLTR101/201A.

⁽b) Ships knocked down.

 $[\]begin{tabular}{ll} \textbf{(c)} & \textbf{BAYOSAC001C} \ \textbf{is not compatible with BAYACCDOR1A} \ \textbf{or BAYACCDOR2A}. \end{tabular}$

⁽d) Must use internal filter frame when economizer or fresh air kit is used.

⁽e) Dry bulb control standard with economizer.

⁽f) Downflow only

 $^{^{(}g)}$ Low Ambient cooling requires crankcase heater (BAYCCHT——A).

⁽h) BAYCOVR112,118A will not cover 18" square-to-round applications.



Product Specifications

MODEL	5DCZ5024	5DCZ5030	5DCZ5036	5DCZ5042	5DCZ5048	5DCZ5060
RATED Volts/PH/Hz			208-230/	1/60		•
Performance Cooling BTUH(a)						
BTUH (High)	23400	29600	35400	42000	47000	57500
Indoor Airflow (CFM)	810	880	1100	1410	1600	1780
Power Input (KW)	1.94	2.64	3.12	3.55	4.09	5.06
BTUH (Low)	19200	24000	27800	34400	36600	46000
Indoor Airflow (CFM)	630	710	830	1090	1280	1290
Power Input (KW)	1.08	1.52	1.77	2.01	2.28	2.83
EER2 / SEER2	11.5/15.2	11.2/15.2	11.5/15.2	11.5/15.2	11.5/15.2	11.5/15.2
Sound Power Rating [dB(A)](b)	66.8	67.3	70	72	72	80
HP Heating Performance						
(High Temp.) BTUH/COP (High)	22200/3.57	28800/3.47	33800/3.46	39000/3.76	42500/3.63	56500/3.29
Power Input (KW)	1.82	2.43	2.86	3.04	3.43	5.03
(Low Temp.) BTUH/COP (High)	13800	18600	21800	25600	28000	37800
Power Input (KW)	1.63	2.17	2.58	2.73	3.16	4.49
(High Temp.) BTUH/COP (Low)	16000/3.52	20800/3.46	23600/3.32	28600/3.84	31400/3.85	40000/3.26
Power Input (KW)	1.33	1.76	2.08	2.18	2.39	3.59
(Low Temp.) BTUH/COP (Low)	8600/2	12200/2.13	14000/2.09	16600/2.34	17200/2.2	24000/2.07
Power Input (KW)	1.26	1.68	1.96	2.08	2.29	3.4
HSPF2 (BTUH/Watt-Hr)(c)	7.2	7.2	8.1	7.2	8.1	7.2
Gas Heating Performance(d)						
Input BTUH - 1st Stage (Nat. Gas)	48600	56000	56000	72000	72000	92000
Input BTUH - 2nd Stage (Nat. Gas)	60000	70000	70000	90000	90000	115000
AFUE			81			
Temp. Rise-Min/Max (°F)	40 / 70	30 / 60	30 / 60	30 / 60	30 / 60	30 / 60
Orifice Qty / Drill Size (Nat. Gas) ^(e)	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 ^(f)		l	OCATED ON UNIT	NAMEPLATE		
Fuse Size — Max. (amps)		l	OCATED ON UNIT	NAMEPLATE		
COMPRESSOR			2 STAGE SC	CROLL		
VOLTS/PH/HZ			208-230/	1/60		
R.L. Amps — L.R. Amps			OCATED ON UNIT			
OUTDOOR COIL — TYPE			SPINE F			
Rows/F.P.I		1= 10	2 / 24		I	T
Face Area (sq. ft.)	15.49	15.49	15.49	23.57	23.57	23.57
Tube Size (in.)			3/8	TNI		
INDOOR COIL — TYPE Rows/F.P.I	4/15	4/15	PLATE F 4/15	4/15	4/15	4/15
Face Area (sq. ft.)	4/ 13	3.45	4/13	4/13	5.0	4/13
Tube Size (in.)		3.43	3/8		3.0	
Refrigeration Control			EXPANSION	\/\1\/F		
Drain Conn. Size (in.)			3/4" FEMAL			
Drain Comi. Size (m.)			3/4 FEMAL	LINEI		



Product Specifications

MODEL	5DCZ5024	5DCZ5030	5DCZ5036	5DCZ5042	5DCZ5048	5DCZ5060				
OUTDOOR FAN — TYPE			PROPELL	.ER						
DIA. (IN.)		23.4		28.0	28.0	28.3				
DRIVE/NO. SPEEDS		DIRECT / 1								
CFM @ 0.0 in. w.g.(g)	2550	3000	3000	4200	4200	5500				
Motor — HP/R.P.M	1/12/810	1/12 /810	1/6/830	1/6/830	1/6/830	1/3/825				
Volts/Ph/Hz			208-230/	1/60						
F.L. Amps/L.R Amps		L	OCATED ON UNIT	NAMEPLATE						
INDOOR FAN — TYPE			CENTRIFU	IGAL						
Dia. x Width (in.)	10 x 10	10 x 10	10 x 10	11 x 10	11 x 10	11 x 10				
Drive/No. Speeds			DIRECT/VAR	RIABLE						
CFM @ 0.0 in. w.g.(h)		S	SEE FAN PERFORM	IANCE TABLE						
Motor — HP / R.P.M.	1/2/VARIABLE	1/2/VARIABLE	1/2/VARIABLE	3/4/VARIABLE	3/4/VARIABLE	1/VARIABLE				
Volts/Ph/Hz			208-230/	1/60						
F.L. Amps		L	OCATED ON UNIT	NAMEPLATE						
COMBUSTION FAN — TYPE			CENTRIFU	IGAL						
Drive/No. Speeds			DIRECT	/ 2						
Motor — HP / R.P.M.	1/20 / 3350 /2600									
Volts/Ph/Hz			208-230/	1/60						
FLA		L	OCATED ON UNIT	NAMEPLATE						
FILTER / FURNISHED			NO							
Type Recommended			THROWA	WAY						
Recmd. Face Area (sq. ft)	4.0 5.3									
REFRIGERANT		_	R-454	3						
Charge (lbs.)		L	OCATED ON UNIT	NAMEPLATE						
Subcooling	8° F	7° F	11° F	10° F	10° F	8° F				

⁽a) Certified in accordance with the Unitary Air-Conditioner Equipment certification program, which is based on AHRI Standard 210/240. Noise calculated in accordance with AHRI Standard 270.

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

⁽c) 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.

⁽d) All models are certified to UL 1995. Ratings shown are for elevations up to 2000 ft. For higher elevations reduce ratings at a rate of 4% per 1000 ft. elevation.

⁽e) Convertible to LPG.

 $^{^{(}f)}$ This value is approximate. For more precise value, see Unit Nameplate.

⁽g) Standard Air — Dry Coil — Outdoor. (h) Based on U.S. Government Standard Tests.



Indoor Fan Performance

Table 1. Indoor Fan Performance

	5DCZ50 (060					Horizor	ntal Airflo	w [Coolii	ng Down /	Airflow]			
	Motor S	peed	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
	350 CFM/ Ton	Low	-	590 [601]	583 [588]	575 [571]	571 [562]	566 [563]	546 [549]	525 [525]	507 [517]	488 [504]	-
	Setting	High	-	721 [734]	724 [731]	727 [722]	717 [706]	706 [702]	701 [706]	695 [695]	678 [692]	660 [681]	-
	400 CFM/ Ton	Low	-	627 [638]	624 [622]	621 [619]	615 [617]	608 [613]	593 [600]	578 [588]	559 [575]	540 [554]	-
	Setting	High	-	801 [815]	806 [803]	811 [808]	806 [808]	800 [807]	789 [798]	777 [791]	745 [766]	712 [731]	-
	450 CFM/ Ton	Low	-	672 [676]	673 [676]	673 [678]	664 [668]	654 [656]	648 [646]	641 [642]	620 [641]	599 [632]	-
	Setting	High	-	880 [885]	888 [892]	895 [902]	894 [900]	893 [896]	883 [881]	872 [874]	817 [844]	761 [803]	-
	5DCZ50 (070					Horizor	ntal Airflo	w [Coolii	ng Down /	Airflow]			
	Motor S	peed	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
	350 CFM/ Ton	Low	-	703 [705]	713 [712]	715 [712]	705 [703]	689 [691]	673 [682]	658 [670]	646 [653]	627 [633]	606 [610]
1 PHASE	Setting	High	-	888 [892]	900 [901]	911 [912]	914 [913]	912 [909]	898 [897]	881 [887]	865 [874]	847 [857]	785 [783]
230V UNITS	400 CFM/ Ton Setting	Low	-	762 [757]	771 [767]	776 [775]	775 [766]	756 [752]	739 [740]	723 [729]	711 [718]	701 [700]	682 [677]
		High	-	998 [990]	1013 [1008]	1020 [1013]	1025 [1016]	1023 [1015]	1021 [1011]	1015 [1000]	990 [986]	963 [966]	849 [833]
	450 CFM/ Ton	Low	-	842 [835]	852 [848]	862 [856]	863 [857]	854 [847]	836 [834]	820 [822]	803 [810]	788 [795]	760 [743]
	Setting	High	-	1146 [1120]	1153 [1127]	1157 [1133]	1158 [1137]	1159 [1139]	1159 [1138]	1156 [1135]	1144 [1125]	1034 [1040]	922 [927]
	5DCZ50 (070					Horizor	ntal Airflo	w [Coolii	ng Down /	Airflow]			
	Motor S	peed	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
	350 CFM/ Ton	Low	-	812 [808]	821 [816]	829 [818]	826 [811]	818 [795]	804 [777]	791 [762]	778 [751]	770 [742]	751 [723]
	Setting	High	-	1056 [1055]	1069 [1068]	1074 [1073]	1076 [1073]	1077 [1074]	1076 [1063]	1070 [1063]	1060 [1052]	1029 [1020]	893 [905]
	400 CFM/ Ton	Low	-	894 [892]	903 [898]	913 [904]	915 [904]	913 [891]	905 [873]	887 [860]	874 [845]	859 [833]	793 [803]
	Setting	High	-	1196 [1199]	1199 [1205]	1203 [1208]	1205 [1210]	1208 [1211]	1209 [1209]	1208 [1207]	1202 [1198]	1114 [1099]	994 [984]
	450 CFM/ Ton	Low	-	990 [988]	1002 [994]	1009 [1004]	1013 [1005]	1012 [1003]	1009 [997]	1000 [983]	989 [969]	974 [943]	866 [863]
	Setting	High	-	1369 [1381]	1370 [1381]	1372 [1383]	1374 [1381]	1375 [1382]	1375 [1369]	1370 [1373]	1300 [1298]	1199 [1194]	1091 [1085]



Indoor Fan Performance

Table 2. Indoor Fan Performance

	5DCZ50 (090					Horizor	ntal Airflo	w [Coolii	ng Down	Airflow]			
	Motor S	peed	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
	350 CFM/ Ton	Low	-	990 [980]	982 [971]	970 [957]	957 [945]	944 [937]	935 [920]	916 [902]	892 [881]	868 [860]	845 [837]
	Setting	High	-	1246 [1251]	1245 [1245]	1240 [1240]	1237 [1238]	1233 [1227]	1222 [1217]	1215 [1207]	1206 [1194]	1196 [1182]	1185 [1168]
	400 CFM/ Ton	Low	-	1103 [1096]	1096 [1089]	1088 [1080]	1077 [1068]	1072 [1061]	1060 [1048]	1048 [1035]	1033 [1019]	1012 [1002]	991 [983]
	Setting	High	-	1407 [1103]	1408 [1096]	1403 [1088]	1403 [1077]	1398 [1072]	1390 [1060]	1379 [1048]	1368 [1033]	1359 [1012]	1349 [991]
	450 CFM/ Ton	Low	-	1234 [1241]	1232 [1236]	1227 [1229]	1221 [1228]	1218 [1216]	1207 [1208]	1200 [1197]	1190 [1187]	1181 [1176]	1171 [1163]
	Setting	High	-	1571 [1587]	1575 [1589]	1584 [1586]	1580 [1579]	1575 [1573]	1568 [1561]	1563 [1551]	1556 [1539]	1547 [1529]	1540 [1516]
	5DCZ50 (090			•		Horizor	ntal Airflo	w [Coolii	ng Down	Airflow]			
1 PHASE	Motor S	peed	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
	350 CFM/ Ton Setting	Low	-	954 [948]	973 [977]	977 [977]	973 [970]	966 [969]	957 [975]	950 [979]	944 [962]	-	-
230V UNITS		High	-	1363 [1354]	1390 [1396]	1396 [1396]	1390 [1386]	1379 [1384]	1368 [1393]	1358 [1399]	1349 [1375]	-	-
	400 CFM/ Ton	Low	-	1121 [1102]	1106 [1106]	1104 [1109]	1106 [1113]	1108 [1116]	1108 [1119]	1104 [1120]	1097 [1118]	-	-
	Setting	High	-	1601 [1574]	1580 [1580]	1577 [1585]	1580 [1589]	1583 [1594]	1583 [1599]	1577 [1601]	1567 [1597]	-	-
	450 CFM/ Ton	Low	-	1223 [1295]	1254 [1277]	1268 [1272]	1271 [1273]	1268 [1274]	1264 [1273]	1261 [1272]	1258 [1273]	-	-
	Setting	High	-	1747 [1851]	1792 [1824]	1811 [1817]	1816 [1818]	1812 [1820]	1806 [1819]	1801 [1817]	1797 [1819]	-	1
	5DCZ50 (11					Horizor	ntal Airflo	w [Coolii	ng Down	Airflow]			
	Motor S	peed	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
	350 CFM/ Ton	Low	-	1163 [1259]	1238 [1219]	1259 [1208]	1256 [1207]	1246 [1206]	1240 [1199]	1237 [1188]	1230 [1185]	-	-
	Setting	High	-	1662 [1799]	1768 [1742]	1799 [1726]	1794 [1725]	1780 [1723]	1771 [1712]	1767 [1698]	1757 [1692]	-	-
	400 CFM/ Ton	Low	-	1443 [1410]	1427 [1393]	1422 [1386]	1422 [1384]	1423 [1383]	1422 [1380]	1418 [1368]	1410 [1344]	-	1
	Setting	High	-	2062 [2015]	2038 [1990]	2031 [1980]	2032 [1977]	2034 [1976]	2032 [1971]	2025 [1955]	2015 [1920]	-	-

Table 3. Auxiliary Heating Airflow, Horizontal or Downflow from 0.2 to 0.6" wg

			Nominal Airflow										
Switch Settings		Selection	5DCZ	25024	5DCZ	25030	5DCZ5036						
			Low Stage High Stage		Low Stage	High Stage	Low Stage	High Stage					
7-OFF	8-OFF	Α	600	850	875	1190	850	1130					
7-ON	8-OFF	В	625	900	915	1270	890	1200					
7-OFF	8-ON	С	650	925	980	1345	950	1300					
7-ON	8-ON	D	700	975	1050	1430	1020	1380					

Table 4. Auxiliary Heating Airflow, Horizontal or Downflow from 0.2 to 0.6" wg

Switch Settings			Nominal Airflow										
		Selection	5DCZ	25042	5DCZ	25048	5DCZ5060						
			Low Stage High Stage		Low Stage	High Stage	Low Stage	High Stage					
7-OFF	8-OFF	Α	1180	1500	1075	1375	1375	1800					
7-ON	8-OFF	В	1220	1600	1100	1450	1450	1900					
7-OFF	8-ON	С	1260	1650	1150	1500	-	-					
7-ON	8-ON	D	1300	1720	1200	1575	-	-					



Wiring Diagrams

UNIT FACTORY
WIRED FOR 230V
SEE WIRING DIAGRAM
NOTES FOR REQUIRED
WIRING CHANGES WHEN
INSTALLED ON A 208V
POWER SUPPLY. A CAUTION

/USE COPPER CONDUCTORS ONLY
UNIT TERMINALS ARE NOT
DESIGNED TO ACCEPT OTHER
TYPES OF CONDUCTORS.
FAILURE TO DO SO MAY CAUSE
DAMAGE TO THE EQUIPMENT. A WARNING
DISCONNECT ALL ELECTRIC POWER
INCLUDING REMOTE DISCONNECTS
BEFORE SERVICING.
FAILURE TO DISCONNECT POWER
SUPPLY BEFORE SERVICING CAN
CAUSE SEVERE PERSONAL INJURY
OR BEATH. MAVERTISSEMENT

LITAGE HASARDEUX!

LONDECTEZ TOUTES
LECTRIOUES INCLUANT LES DISJONCTEURS
LECTRIOUES INCLUANT LES DISJONCTEURS
TUES A DISTANCE AVANT D'EFFECTUER
ENTRETIEN. FAUTE DE DECONNECTER
SOURCE ELECTRIQUE AVANT D'EFFECTUER
ENTRETIEN SUNTE ELECTRIQUE DES
ESSURES CORPORELLES SEVERESOU LA MORT 4 ---CAUTION: NOT SUITABLE FOR USE ON SYSTEMS EXCEEDING 150 VOLTS TO GROUND. ATTENTION: NE CONVIENT PAS POUR LES INSTALLATIONS DE PLUS DE 150V. A TERRE PART NUMBER D758136P01 POWER SUPPLY PER LOCAL CODES SEE NAMEPLATE FOR LINE VOLTAGE. 4B(BK) CSR CSR CSR 3D(RD) 10-OPTIONAL START KIT 12-13---BLACK 15---CPR CF1 17---I OL 18--c 20---21---9A(BR) PURPLE 2 ODM IA.IB.IC(RD) 3B(RD), RED DFC 7A(PR) 23---IOA(BK) 24---25---26---LCM FAN 2C (BK) 23A(BK) 28---22A(BL) MOTOR 29---IC(RD) 31---32---₩ * 2
BLUE(LO)
RED CFM Ì 34---35---CLASS 2 WIRING 37----38A(GR) THERMOSTAT 38---B Y/YI W2/X2 39----VOLTAGE 40--w2/x2 IN 90 60 INDUCER HEAT 200 0 COOL 200 0 45 0 5 69A(BL) 69B(BL)2 C ₹ ē 42---35E(RD) 73A(OR)0 CN-4 35M(RD) 43----67B(YL)Y 2 43A(BR) or Ö 9 37A(OR) U 0 A2L SENSOR 45---0 0 0 8 0 0 0 6 49A(PR) 46-12345 47---3 55A(YL) 48----4 75A(BK) 80A(RD) 80B(WH) 80C(GR) 80D(BK) 50---4 G R I >> 5 YI BK Z >> 6 TA(YL) 41D(WH) AOB
AOA

AOA

AOA

BZ
SR2
AY
VDD
REFR 51---ORANGE GRO L

STATION

AT SR2

OND REPRISEMENT LEAR SETCTION AND REPRISEMENT LEAR SETCION AND REPRISEMEN 53----40A(GR) CN-3 36E(BL) (RD) 54---BLOWER ~H 1~ 56---57φ****/φ 35F(RD) 59---36D(BL) 60-36B(BL) 62-63---Вф 64--sov WIO 65---36B(BL) 2 W20 73B(OR) 73A(OR) W.30 67---R_G 68— 73C(OR) 8 8IB(YL/RD) 4 70 ---PLETTOMO (M) 6 65B(YL) 3 YELLOW 35H(RD) 9 72---10 7.3-8 (YL / RD) DFC 75---ICMC 76 ---6 42A(BL) 78---CN-10 HI TEMP.SW CC HPC0 79---OZO ORANGE

Figure 1. 5DCZ5024A-48A

12 22-2013-1A-EN

PRINTED FROM D758136P01 REV

TRANE

Figure 2. 5DCZ5024A-48A

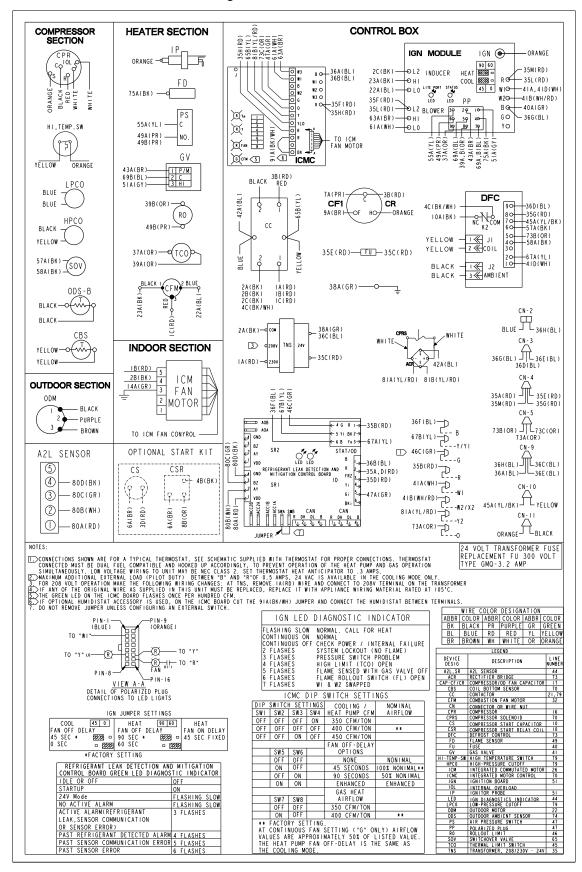
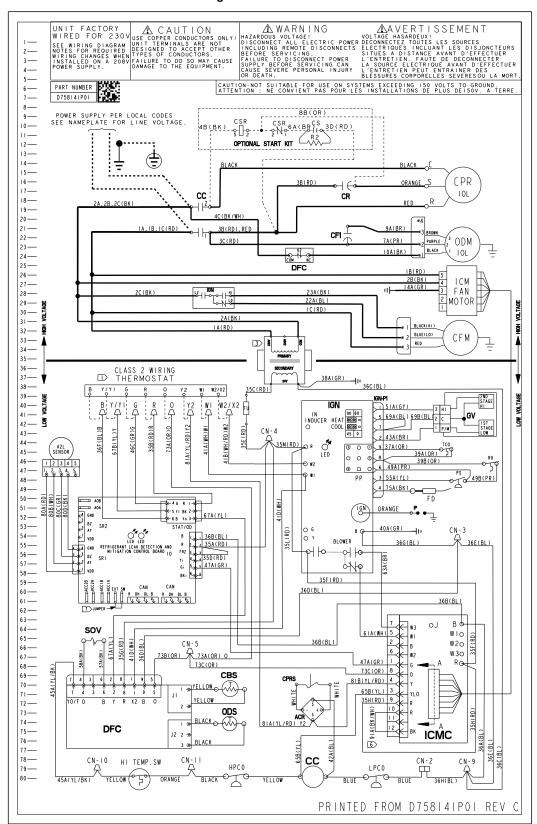


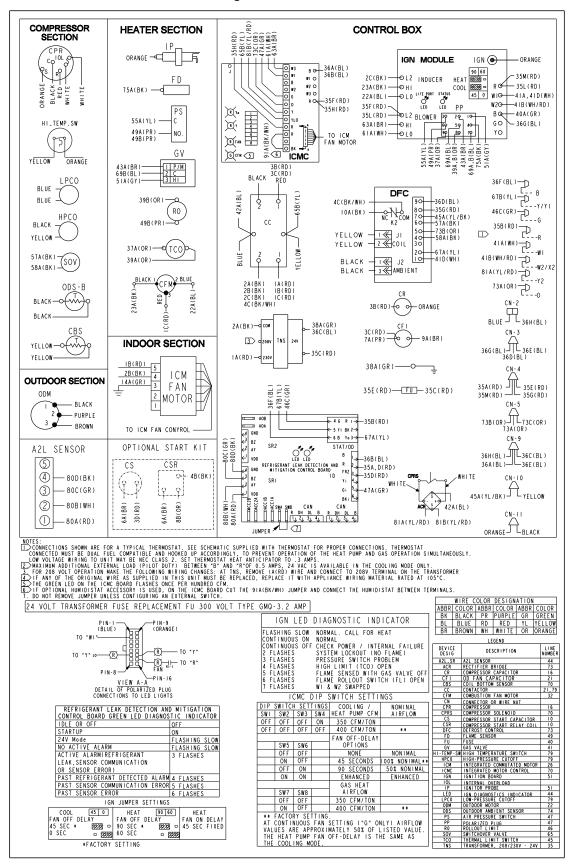


Figure 3. 5DCZ5060A



TRANE

Figure 4. 5DCZ5060A





Full Perimeter Roof Mounting Curb

Figure 5. 2.0 - 3.0 Ton Models

BAYCURB050A Full Perimeter Roof Mounting Curb

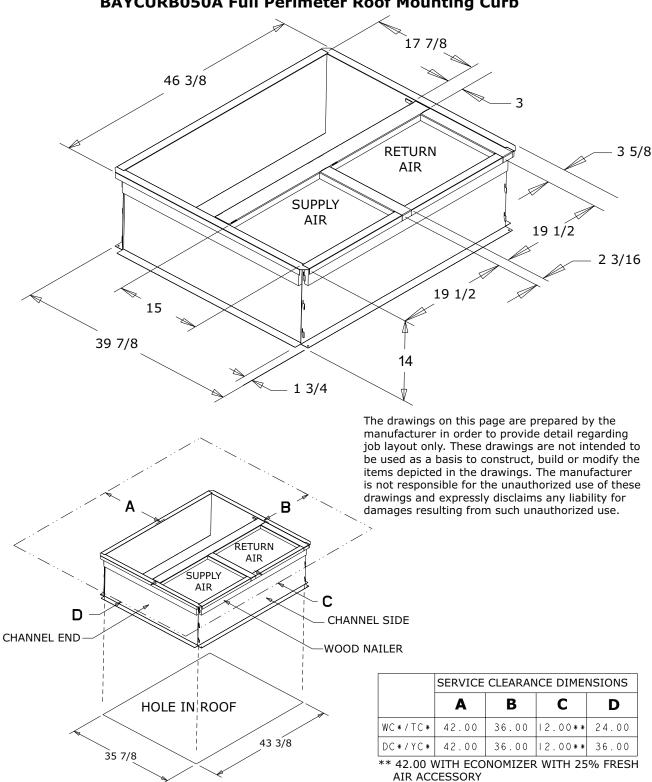
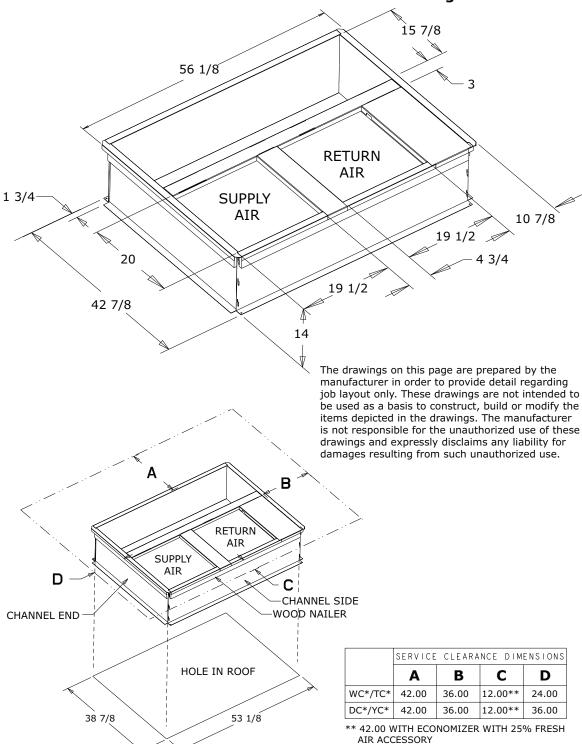




Figure 6. 3.5 - 5.0 Ton Models

BAYCURB051A Full Perimeter Roof Mounting Curb





Optional Equipment — Filter Rack

Figure 7. BAYFLTR101 Filter Rack (2.0 – 3.0 Ton Models)
BAYFLTR201 (3.5 – 5.0 Ton Models)
(Mounts in Filter/Coil Section)

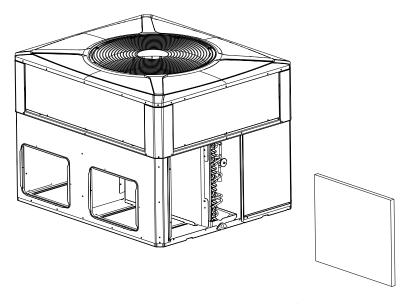
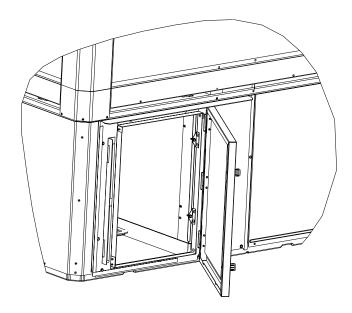


Figure 8. BAYACCDOR1A Hinged Filter Access Door (2.0 – 3.0 Ton Models)

BAYACCDOR2A (3.5 – 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.



Optional Equipment — Economizer

Table 5. BAYECON107, 108A Down Discharge Economizer and Rain Hood (Mounts Over Horizontal Return Air Opening)

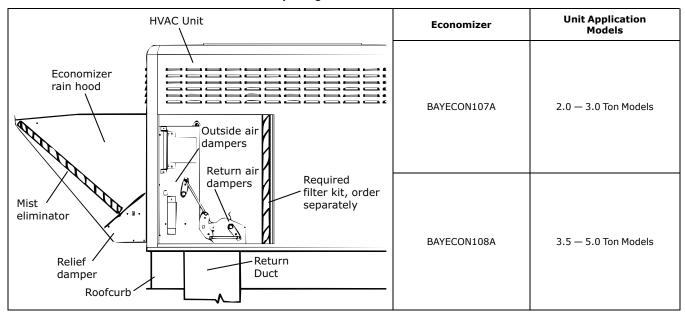
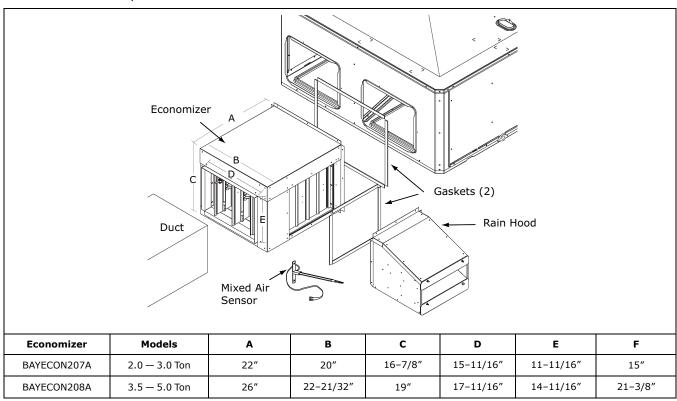


Table 6. BAYCON207, 208A Horizontal Economizer and Rain Hood



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 — Outside Air Damper

Table 7. BAYOSAH001 and 002A Outside Air Damper (Replaces Filter/Coil Access Panel

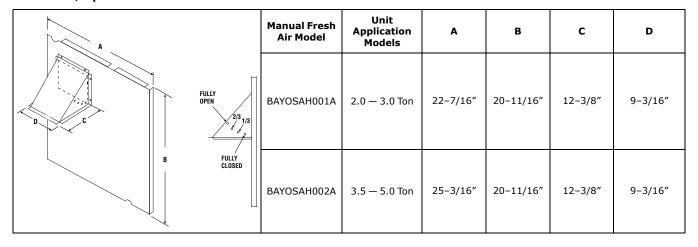


Table 8. BAYDMPR101 and 102A, 25% Motorized Outside Air Damper (Mounts Over Horizontal Return Air Opening)

: A		Manual Fresh Air Model	Unit Application Models	A	В	С	D	E
	C B	BAYDM- PR101A	2.0 — 3.0 Ton	15-13/16"	11-13/16"	10-1/4"	11-1/2"	12-1/4"
E		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.



TOP

Α BB

CC

DD -Depth

EE -Width

FF

1286.26 [50-5/8]

499.49 [19-21/32]

Determine Unit Clearances

EE D 🛏 CC ||1.56 ||15/32| (DUCT FLANGE) INLET - 97.96 [3-27/32] 17.78 SECTION X-X
TYPICAL (8) SIDES OF SIDEFLOW DUCT OPENINGS DD — INLET — 18.03 [23/32] 18.29 [23/32] BB SECTION Y-Y
TYPICAL (8) SIDES OF DOWNFLOW DUCT OPENINGS TOP SIDE -CENTER OF GRAVITY OUTLET Α **]**; FRONT SIDE -CONDENSATE DRAIN FOR 19.0 [3/4] FEMALE NPT FF LEFT SIDE 4 - 5 TON Units 2 - 3 TON Units RECOMMENDED SERVICE CLEARANCE mm [Inches] W/ ECONOMIZER W/ ECONOMIZER BACK SIDE | 305 [12] 762 [30] 305 [12] 762 [30] LEFT SIDE 762 [30] 914 [36] 914 [36] 1067 [42] RIGHT SIDE 914 [36] 914 [36] FRONT SIDE 1067 [42] 1067 [42] CLEARANCE TO COMBUSTIBLE MATERIAL mm [Inches] BOTTOM 0 0 **BACK SIDE** 25 [1] 25 [1] LEFT SIDE 152 [6] 152 [6] 305 [12] **RIGHT SIDE** 305 [12] FRONT SIDE 305 [12] 305 [12] 914 [36] DIMENSIONS mm [Inches] HEIGHT OF UNIT - TABLE NEXT PAGE CENTER OF GRAVITY - TABLE NEXT PAGE **BOTTOM SIDE** CENTER OF GRAVITY - TABLE NEXT PAGE 34.94 [5-5/16] 1094.99 [43-1/18] 135.39 [5-11/32]

Figure 9. Space on Sides Requirements

represents the base as viewed looking

Note: The view labeled "Bottom side"

up from underneath the unit.

22-2013-1A-EN 21

1169.92 [46-1/16]

1531.87 [60-5/16]

575.06 [22-5/8]

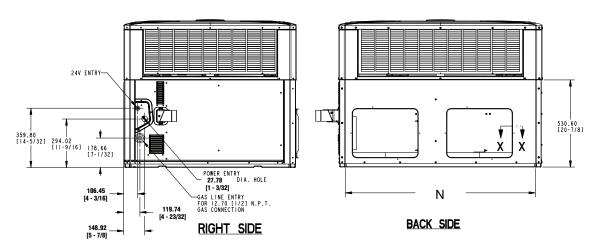


1 Μ 58.19 [2-9/32] Ε

Figure 10. Bottom and Back Duct Openings

BOTTOM DUCT OPENINGS

BACK DUCT OPENINGS



	Height mm [in]		PHYSICAL DIMENSIONS mm [in]											
	A -Height	В	С	D	E	F	G	Н	I	J	K	L	М	N
5DCZ5024A														
5DCZ5030A	949.33 [37 - 3/8]	304.80	84.46	82.16	406.40	167.89	180.20	304.80	86.25	398.22	176.07	184.29	296.62	1108.75
5DCZ5036A		[12.0]	[3.32]	[3.23]	[16.0]	[6.61]	[7.1]	[12.0]	[3.40]	[15.68]	[6.93]	[7.26]	[11.68]	[43.50]
5DCZ5042A														
5DCZ5048A	1050.93 [41 - 3/8]	457.20 [18.0]	85.60 [3.37]	84.12 [3.31]	381.00 [15.0]	244.09 [9.61]	327.45 [12.89]	381.00 [15.0]	88.21 [3.47]	449.02 [17.68]	176.07 [6.93]	331.54 [13.05]	372.82 [14.68]	1402.34 [55.21]
5DCZ5060A														

		Corner Weights KG/LBS				UNIT WEIGHT	Center Of Gravity mm[inch]			
	W1	W2	W3	W4	WEIGHT KG/LBS	KG/LBS	ВВ	СС		
5DCZ5024A	60.8 [134]	37.2 [82]	30.4 [67]	50.3 [111]	222.3 [490]	178.7 [394]	386.1 [15.2]	558.8 [22.0]		
5DCZ5030A	62.6 [138]	37.2 [82]	30.4 [67]	50.3 [111]	224.1 [494]	180.5 [398]	386.1 [15.2]	558.8 [22.0]		
5DCZ5036A	61.3 [140]	37.2 [82]	30.4 [67]	50.3 [111]	222.7 [491]	179.2 [395]	386.1 [15.2]	558.8 [22.0]		
5DCZ5042A	71.8 [158]	46.3 [102]	42.2 [93]	73.5 [162]	291.9 [644]	233.8 [516]	419.1 [16.5]	706.1 [27.8]		
5DCZ5048A	84.0 [185]	46.3 [102]	42.2 [93]	73.5 [162]	304.0 [670]	246.0 [542]	419.1 [16.5]	706.1 [27.8]		
5DCZ5060A	84.0 [185]	47.2 [104]	43.1 [95]	75.7 [169]	308.1 [679]	250.0 [551]	398.8 [15.7]	711.2 [28.0]		



Mechanical Specifications

General

All units shall be factory assembled, piped, internally wired and fully charged with refrigerant. All units shall be designed to operate at outdoor ambient temperatures as high as 115°F. Cooling capacities shall be rated in accordance with A.H.R.I. standards. The unit design is certified to UL Standard 1995 and ANSI Z21.47/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 is constructed of heavy gauge, galvanized steel and painted with a weather-resistant powder paint.

Shipped for horizontal application, convertible to downflow.

Casings -All panels shall be heavy gauge steel, gasketed and insulated. Foil-faced insulation shall be in the heat exchanger section. Foil-faced insulation shall be in the evaporator section. Base pan shall be heavy gauge steel. WEATHERGUARD™ exterior corrosion resistant screws shall be used for added resistance to rust and corrosion.

Controls - Refrigeration cycle controls shall include condenser fan, evaporator fan and compressor contactors. Compressors shall be equipped with a combination internal winding thermostat/current overload. Internal high pressure relief shall also be provided.

Refrigeration System

Compressors - The Climatuff® compressor features internal over temperature and pressure protector, total dipped hermetic motor. Other features include: centrifugal oil pump, and low vibration and noise.

Evaporator Coil -Internally enhanced 3/8-inch 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 refrigeration 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 inch 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 - Direct-drive, forward-curved, centrifugal wheel in a Composite Vortica® Blower housing. Motor shall have thermal overload protection. Permanently lubricated motor bearings. Motor/blower assembly isolated from unit with rubber mounts.

Condenser Fan -Direct-drive, draw through propeller type. Weather-proofed permanent split capacitor fan motor shall have built-in thermal overload and permanently lubricated motor bearings.

Low Ambient - Standard refrigerant system operation down to 55°F. Low ambient accessory required for operation to 0°F ambient condition.

Gas-Fired Heating System - 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.

Electronic Ignition System - Main burner is lit each time thermostat calls for gas heat. Flame sensor proves flame and keeps the main burners on. Should a loss of flame occur, the main valve closes and the spark recurs within 0.8 second. 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.

Accessories (U.S. Domestic Models)

Roof Curb - The roof curb shall be designed to mate with the unit and provide support and complete weather-tight installation when properly installed. Curb shall ship knocked down for field assembly, and include wood nailer strips.



Mechanical Specifications

Modulating Economizer - This accessory shall be field installed and be composed of the following items: 0-100% fresh air damper, damper drive motor fixed dry bulb enthalpy control, and low voltage polarized plug for electrical connections. Solid state enthalpy or differential enthalpy control is optional. Economizer operations shall be controlled by the preset position of the enthalpy control. A barometic relief damper shall be standard with the economizer and provide a pressure operated damper that shall be gravity closing and prohibit entrance of outside air on equipment "off" cycle.

Manual Fresh Air Hood - Manual outside air provides a fixed outside air quantity from 0 to 25 percent. Includes hood and birdscreen.

Low Ambient Control - Control allows cycling of compressor under low ambient cooling conditions. Required for cooling operation to 0°F.

Propane Gas

Conversion Kit - For conversion from natural gas to LP gas.



Trane - by Trane Technologies (NYSE: TT), a global innovator - creates comfortable, energy efficient indoor environments for commercial and residential applications. For more information, please visit trane. com or tranetechnologies.com.





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

Trane 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.