

Product Data

Side Discharge HP Models

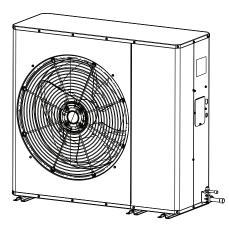
For coastal applications where units are installed within one (1) mile of salt water, epoxy coated models are recommended. These models have an 8 week lead time after order.

4TWL6018A1000A
4TWL6024A1000A
4TWL6030A1000A
4TWL6036A1000A
4TWL6042A1000A
4TWL6048A1000A
4TWL6060A1000A

4TWL6018A1COTA 4TWL6024A1COTA 4TWL6030A1COTA 4TWL6036A1COTA

Epoxy Coated Model

4TWL6042A1COTA 4TWL6048A1COTA 4TWL6060A1COTA



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





SAFETY SECTION

Important — This document contains 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

REFRIGERANT OIL!

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

These units use R-410A refrigerant which operates at 50–70% higher pressures than R-22. Use only R-410A approved service equipment. Refrigerant cylinders are painted a "Rose" color to indicate the type of refrigerant and may contain a "dip" tube to allow for charging of liquid refrigerant into the system. All R-410A systems use a POE oil that readily absorbs moisture from the atmosphere. To limit this "hydroscopic" action, the system should remain sealed whenever possible. If a system has been open to the atmosphere for more than 4 hours, the compressor oil must be replaced. Never break a vacuum with air and always change the driers when opening the system for component replacement. For specific handling concerns with R-410A and POE oil, reference Retrofit Bulletin TRN-APG02–EN.

A CAUTION

HOT SURFACE!

May cause minor to severe burning. Failure to follow this Caution could result in property damage or personal injury.

Do not touch top of compressor.

A CAUTION

CONTAINS REFRIGERANT!

Failure to follow proper procedures can result in personal illness or injury or severe equipment damage.

System contains oil and refrigerant under high pressure. Recover refrigerant to relieve pressure before opening system.

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.

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A WARNING

SERVICE VALVES!

Failure to follow this warning will result in abrupt release of system charge and may result in personal injury and/or property damage.

Extreme caution should be exercised when opening the Suction and Liquid Line Service Valve. Turn valve stem counterclockwise only until the stem contacts the rolled edge. No torque is required.

A WARNING

BRAZING REQUIRED — IF USING MECHANICAL CONNECTIONS, ENSURE LEAK TEST IS NEGATIVE!

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

if using existing refrigerant lines make certain that all joints are brazed, not soldered.

Important: If using other than copper pipe, follow manufacturer's installation instructions. Joints must be brazed or other UL/IMC/URMC approved joint that meets pressure requirements.

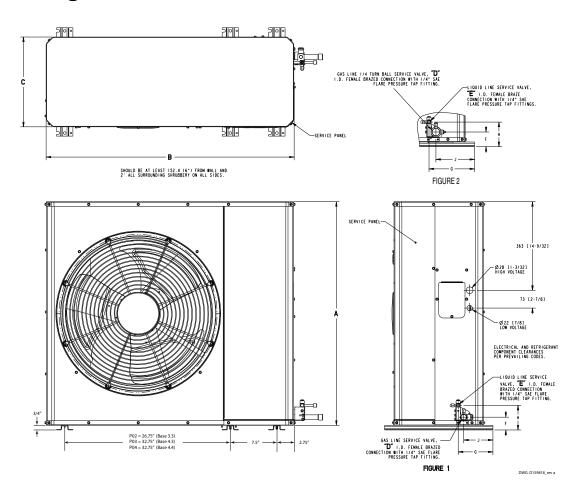


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Outline Drawing



Model	Base	Α	В	С	D	Е	F	G	Н	J
4TWL6018A	3.3	934 (36-3/4)	1016 (40)	368 (14-1/2)	19 (3/4)	10 (3/8)	53 (2-1/16)	142 (5-19/32)	101 (3-31/32)	120 (4-23/32)
4TWL6024A	3.3	934 (36-3/4)	1016 (40)	368 (14-1/2)	19 (3/4)	10 (3/8)	53 (2-1/16)	142 (5-19/32)	101 (3-31/32)	120 (4-23/32)
4TWL6030A	3.3	934 (36-3/4)	1016 (40)	368 (14-1/2)	19 (3/4)	10 (3/8)	53 (2-1/16)	142 (5-19/32)	101 (3-31/32)	120 (4-23/32)
4TWL6036A	4.3	934 (36-3/4)	1194 (47)	445 (17-1/2)	22 (7/8)	10 (3/8)	53 (2-1/16)	187 (7-11/32)	101 (3-31/32)	159 (6-1/4)
4TWL6042A	4.3	934 (36-3/4)	1194 (47)	445 (17-1/2)	22 (7/8)	10 (3/8)	53 (2-1/16)	187 (7-11/32)	101 (3-31/32)	159 (6-1/4)
4TWL6048A	4.3	934 (36-3/4)	1194 (47)	445 (17-1/2)	22 (7/8)	10 (3/8)	53 (2-1/16)	187 (7-11/32)	101 (3-31/32)	159 (6-1/4)
4TWL6060A	4.4	1086 (42-3/4)	1194 (47)	445 (17-1/2)	22 (7/8)	10 (3/8)	60 (2-3/8)	187 (7-11/32)	101 (3-31/32)	159 (6-1/4)



Sound Power Level Table

MODEL	A-Weighted Sound Power Level [dB(A)]	Full Octave Sound Power(dB)							
		63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
4TWL6018A1	69	72	70	72	66	65	59	52	44
4TWL6024A1	69	72	72	71	66	65	59	53	43
4TWL6030A1	70	72	76	72	68	65	60	52	44
4TWL6036A1	71	72	77	74	68	65	59	53	46
4TWL6042A1	71	75	75	73	68	66	60	53	46
4TWL6048A1	74	75	80	77	70	68	62	54	48

Note: Rated in accordance with AHRI Standard 270 *For Reference Only

MODEL	Sound Pressure [dB(A)]						
	3 ft	5 ft	10 ft	15 ft			
4TWL6018A1	62	58	51	48			
4TWL6024A1	62	58	51	48			
4TWL6030A1	63	58	52	49			
4TWL6036A1	64	59	53	50			
4TWL6042A1	64	59	53	50			
4TWL6048A1	67	62	56	53			

Note: Rated in accordance with AHRI Standard 275



Product Specifications

Model No. (a)	4TWL6018A1XXXA	4TWL6024A1XXXA	4TWL6030A1XXXA	4TWL6036A1XXXA	
POWER CONNS. — V/PH/HZ	208-230/1/60	208-230/1/60	208-230/1/60	208-230/1/60	
MIN. BRCH. CIR. AMPACITY	13	13	13	19	
BR. CIR. PROT. RTG. — MAX. (AMPS)	20	20	20	30	
COMPRESSOR	CLIMATUFF®- SCROLL	CLIMATUFF®- SCROLL	CLIMATUFF®- SCROLL	CLIMATUFF®- SCROLL	
R.L. AMPS — L.R. AMPS	10.1 — 56	10.1 — 52	9.4 — 72.5	14.7 — 75	
OUTDOOR FAN	PROPELLER	PROPELLER	PROPELLER	PROPELLER	
DIA. (IN.)	23	23	27.5	27.5	
NO. MOTORS — HP	1 - 1/8	1 — 1/8	1 - 1/8	1 — 1/8	
F.L. AMPS	0.67	0.67	0.81	0.81	
OUTDOOR COIL — TYPE	PLATE FIN	PLATE FIN	PLATE FIN	PLATE FIN	
REFRIGERANT	5 LBS., 14 OZ	5 LBS., 14 OZ	6 LBS, 14 OZ	7 LBS, 3 OZ	
LINE SIZE — IN. O.D. GAS (c)	3/4	3/4	3/4	7/8	
LINE SIZE — IN. O.D. LIQ. (c)	3/8	3/8	3/8	3/8	
CHARGING SPECIFICATIONS					
SUBCOOLING	8°F	10°F	10°F 8°F		
DIMENSIONS	HXWXD	HXWXD	HXWXD	HXWXD	
CRATED (IN.)	34.75 X 47.5 X 20.0	34.75 X 47.5 X 20.0	40.88 X 54.5 X 23.0	40.88 X 54.5 X 23.0	
WEIGHT					
SHIPPING (LBS.)	186	186	222	225	
NET (LBS.)	166	166	195	198	
OPTIONAL ACCESSORIES					
Evaporator Defrost Control	AY28X079	AY28X079	AY28X079	AY28X079	
Rubber Isolator Kit	BAYISLT101	BAYISLT101	BAYISLT101	BAYISLT101	
Start Kit	BAYKSKT263	BAYKSKT263	BAYKSKT263	BAYKSKT263	
Crankcase Heater Kit	BAYCCHT302RES	BAYCCHT302RES	BAYCCHT302RES	BAYCCHT302RES	
Snow Leg Kit 4"	BAYLEGS004	BAYLEGS004	BAYLEGS004	BAYLEGS004	
Snow Leg Kit 7"	BAYLEGS007	BAYLEGS007 BAYLEGS00		BAYLEGS007	
Scroll Compressor Enclosure	BAYSDEN003	BAYSDEN003 BAYSDEN00		BAYSDEN003	
Low Ambient Kit	BAYLOAM107A	BAYLOAM107A	BAYLOAM107A	BAYLOAM107A	
Wall Mount Kit	BRK05033 ^(d)	BRK05033	BRK05033	BRK05033	
Wind Baffle Kit	BAYWIND100	BAYWIND100	BAYWIND100	BAYWIND101	
Refrigerant Lineset (e)	TAYREFLN7*	TAYREFLN7*	TAYREFLN7*	TAYREFLN7*	
Evaporator Defrost Control	AY28X079	AY28X079	AY28X079	AY28X079	
	<u>l</u>		<u> </u>	<u> </u>	

⁽a) Certified in accordance with the Air-Source Unitary Air-conditioner Equipment certification program, which is based on AHRI standard 210/240.

⁽b) Calculated in accordance with Natl. Elec. Codes. Use only HACR circuit breakers or fuses.

⁽c) Standard line lengths — 150', Standard lift — 50' Suction and Liquid line. For Greater lengths and lifts refer to refrigerant piping software Pub#32–3312–0* (* denotes latest revision).

⁽d) Available from Trane Parts

⁽e) * = 15, 20, 25, 30, 40 and 50 foot lineset available.

OUTDOOR UNIT (a)	4TWL6042A1XXXA	4TWL6048A1XXXA	4TWL6060A1XXXA	
POWER CONNS. — V/PH/HZ (b)	208-230/1/60	208-230/1/60	208-230/1/60	
MIN. BRCH. CIR. AMPACITY	25	26	29	
BR. CIR. PROT. RTG. — MAX. (AMPS)	40	45	50	
COMPRESSOR	CLIMATUFF®- SCROLL	CLIMATUFF®- SCROLL	CLIMATUFF®- SCROLL	
R.L. AMPS — L.R. AMPS	19.2 — 124	19.6 — 130	22.2 — 127.9	
OUTDOOR FAN	PROPELLER	PROPELLER	PROPELLER	
DIA. (IN.)	27.5	27.5	27.5	
NO. MOTORS — HP	1 — 1/5	1 — 1/5	1 - 1/4	
F.L. AMPS	1.19	1.05	1.3	
OUTDOOR COIL — TYPE	PLATE FIN	PLATE FIN	PLATE FIN	
REFRIGERANT	7 LBS, 10 OZ	7 LBS, 13 OZ.	8 LBS, 5 OZ.	
LINE SIZE — IN. O.D. GAS (c)	7/8	7/8	7/8	
LINE SIZE — IN. O.D. LIQ. (c)	3/8	3/8	3/8	
CHARGING SPECIFICATIONS				
SUBCOOLING	10°F	8°F	10°F	
DIMENSIONS	HXWXD	HXWXD	HXWXD	
CRATED (IN.)	40.88 X 54.5 X 23.0	46.88 X 54.5 X 23.0	46.88 X 54.5 X 23.0	
WEIGHT				
SHIPPING (LBS.)	244	266	267	
NET (LBS.)	217	239	240	
OPTIONAL ACCESSORIES				
Evaporator Defrost Control	AY28X079	AY28X079	AY28X079	
Rubber Isolator Kit	BAYISLT101	BAYISLT101	BAYISLT101	
Start Kit	BAYKSKT263	BAYKSKT263	BAYKSKT263	
Crankcase Heater Kit	BAYCCHT302RES	BAYCCHT302RES	BAYCCHT302RES	
Snow Leg Kit 4"	BAYLEGS004	BAYLEGS004	BAYLEGS004	
Snow Leg Kit 7"	BAYLEGS007	BAYLEGS007	BAYLEGS007	
Scroll Compressor Enclosure	BAYSDEN003	BAYSDEN003	BAYSDEN003	
Low Ambient Kit	BAYLOAM107A	BAYLOAM107A	BAYLOAM107A	
Wall Mount Kit	BRK05033 ^(d)	BRK05033	BRK05033	
Wind Baffle Kit	BAYWIND100	BAYWIND100	BAYWIND100	
Refrigerant Lineset (e)	TAYREFLN7*	TAYREFLN7*	TAYREFLN7*	
Evaporator Defrost Control	AY28X079	AY28X079	AY28X079	
		l	l .	

⁽a) Certified in accordance with the Air-Source Unitary Air-conditioner Equipment certification program, which is based on AHRI standard 210/240.

 ⁽b) Calculated in accordance with Natl. Elec. Codes. Use only HACR circuit breakers or fuses.
 (c) Standard line lengths — 150′, Standard lift — 50′ Suction and Liquid line. For Greater lengths and lifts refer to refrigerant piping software Pub#32–3312–0* (* denotes latest revision)..

⁽d) Available from Trane Parts

⁽e) * = 15, 20, 25, 30, 40 and 50 foot lineset available.



Accessory Description and Usage

Evaporation Defrost Control — SPST Temperature actuated switch that cycles the condenser off as indoor coil reaches freeze-up conditions. Used for low ambient cooling to 30°F with TXV.

Rubber Isolators — Six (6) large rubber donuts to isolate condensing unit from transmitting energy into mounting frame or pad. Use on any application where sound transmission needs to be minimized.

Hard Start Kit — Start capacitor and relay to assist compressor motor startup. Use in areas with marginal power supply, on long linesets, low ambient conditions, etc.

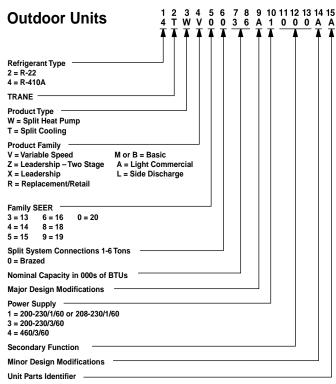
AHRI Standard Capacity Rating Conditions

AHRI Standard 210/240 Rating Conditions

1. Cooling 80°F DB, 67°F WB air entering indoor coil, 95°F DB air entering outdoor coil.

AHRI Standard 270 Rating Conditions — (Noise rating numbers are determined with the unit in cooling operations.) Standard Noise Rating number is at 95°F outdoor air.

Model Nomenclature





Wiring

SYSTEMS EXCEEDING 150V-TO-GROUND ATTENTION:NE CONVIENT PAS AUX

INSTALLATIONS DE PLUS DE 150 V A LA TERRE

R. R.D

Figure 1. 1.5 & 2.5 Ton Models THERMALLY PROTECTED INTERNALLY LPC0 وكيا TI 6mmg LEGEND L/RD-L/RD-ACR A/C RECTIFIER

CBS COIL BOTTOM SENSOR

CF FAM CAPACITOR

WHIRE COMMETCOR

CPF COMPESSOR

CR HULL CAPACITOR

CS STARTING CAPACITOR

CS CAPACITOR

CS STARTING CAPACITOR

CS STARTING CAPACITOR

CS CAPACITOR

MICHORY

MICH CPR 24 V FACTORY WIRING 24 V FIELD LINE V WIRING FIELD INSTALLED FACTORY WIRING MAGNETIC COIL GROUND → JUNCTION
→ CAPACITOR
△ WIRE NUT OR
O TERMINAL

TRANSFORMER

FUSE C) HHI OR TERMINAL BLOCK/BOARD ⊣⊢ RELAY CONTACT (N O) RELAY CONTACT (N.C) ₩ THERMISTOR 050 TEMP ACTUATED SWITCH -BL 00 INTERNAL OVERLOAD PROTECTION L2 q 2 PRESSURE ACTUATED SWITCH SEE SERVICE FACTS FOR OPTIONAL START KIT ACCESSORY 9 BK BLACK RD RED OR ORANGE BL BLUE WH WHITE GR GREEN BR BROWN YL YELLOW PR PURPLE PK PINK RESISTER OR HEATING ELEMENT **-**VV-К3 ACCOUNT MOTOR WINDING POL. PLUG FEMALE HOUSING
(MALE TERMINALS)

POL. PLUG MALE HOUSING
(FEMALE TERMINALS) ВК 2 CSR DFC BOARD Ş. ₩ NOTES: I. BE SURE POWER SUPPLY AGREES WITH EQUIPMENT NAMEPLATE. 2. POWER WIRING AND GROUNDING OF EQUIPMENT MUST COMPLY WITH LOCAL CODES. 3. LOW VOLTAGE WIRING TO BE NO. 18 AWG MINIMUM CONDUCTOR. GR 4. ODT-B MUST BE SET LOWER THAN ODT-A 4 cs đ ODT-B (NOTE-485) BK 0 5 0BK -**∆**WARNING ODT-A OPTIONAL BK ZOBK HAZARDOUS VOLTAGE! DISCONNECT ALL ELECTRICAL POWER INCLUDING REMOTE DISCONNECTS BEFORE SERVICING. \triangle Failure to disconnect power before servicing can cause severe personal injury or death. 7 **∆**CAUTION USE COPPER CONDUCTORS ONLY!
UNIT TERMINALS ARE NOT DESIGNED
TO ACCEPT OTHER TYPES OF CONDUCTORS.
Foilure to do so may cause damage
to the equipment. в 🖯 0 D OR <u>Υ Ι</u>Δ _Υι POUR INSTALLATIONS CANADIENNES
CAUTION: NOT SUITABLE FOR USE ON

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TO POWER SUPPLY PER UNIT NAMEPLATES AND LOCAL CODES

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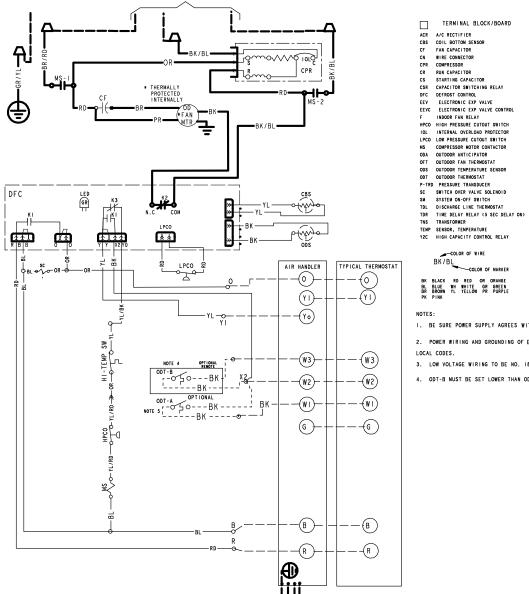


Figure 2. 2.0, 3.0 & 3.5 Ton Models

TERMINAL BLOCK/BOARD

COLOR OF WIRE -COLOR OF MARKER

BLACK RD RED OR ORANGE
BLUE WH WHITE GR GREEN
BROWN YL YELLOW PR PURPLE
PINK

I. BE SURE POWER SUPPLY AGREES WITH EQUIPMENT NAMEPLATE.

2. POWER WIRING AND GROUNDING OF EQUIPMENT MUST COMPLY WITH

3. LOW VOLTAGE WIRING TO BE NO. 18 AWG MINIMUM CONDUCTOR.

4. ODT-B MUST BE SET LOWER THAN ODT-A

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TO POWER SUPPLY PER LOCAL CODES d159503p02

Figure 3. 2.0, 3.0 & 3.5 Ton Models

LEGEND

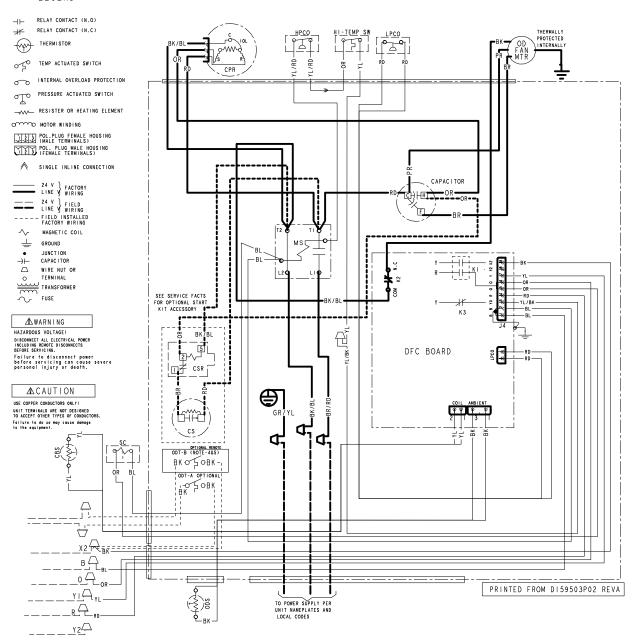


Figure 4. 4.0 Ton Model

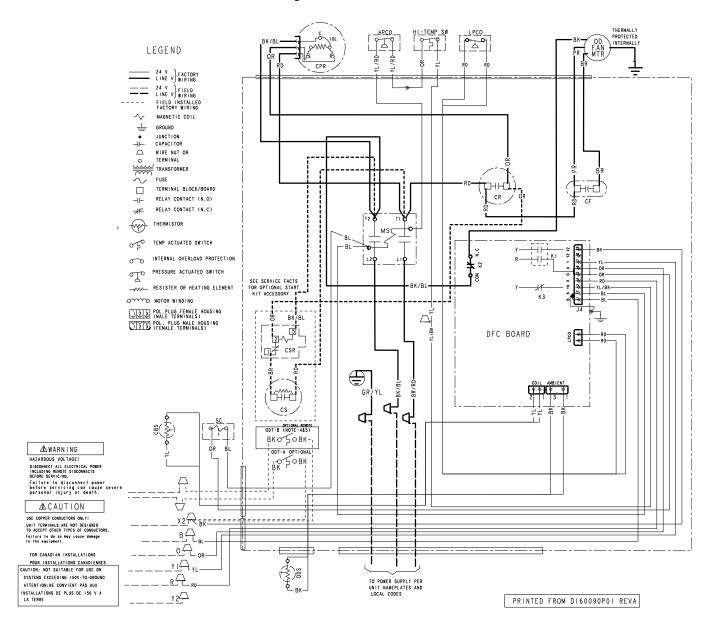
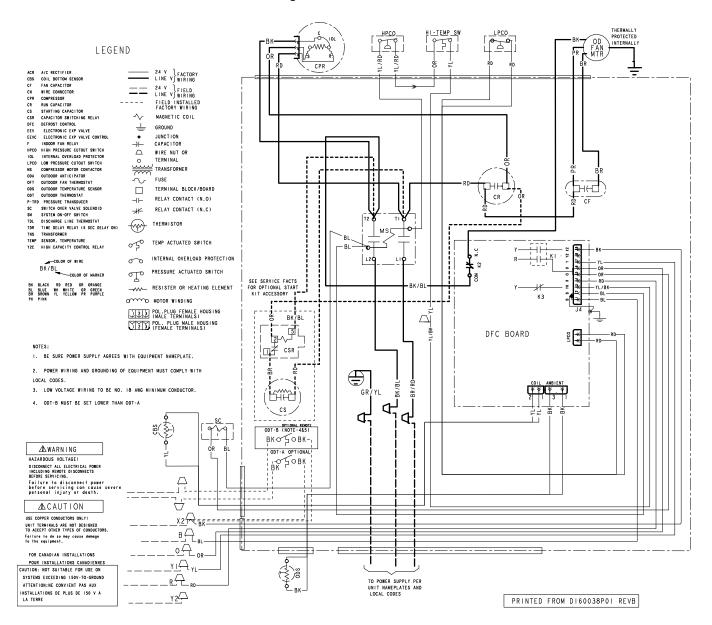


Figure 5. 5.0 Ton Models





Mechanical Specification Options

General

The Outdoor Units are fully charged from the factory for up to 15 feet of piping. This unit is designed to operate at outdoor ambient temperatures as high as 115°F. Cooling capacities are matched with a wide selection of air handlers and furnace coils that are AHRI certified. The unit is certified to UL 1995. Exterior is designed for outdoor application.

Casing

Unit casing is constructed of heavy gauge, galvanized steel and painted with a weather-resistant powder paint finish. The corner panels are prepainted. All panels are subjected to our 1,000 hour salt spray test.

Refrigerant Controls

Refrigeration system controls include condenser fan, compressor contactor and low and high pressure switches. A factory supplied, field installed liquid line drier is standard.

Compressor

The compressor features internal over temperature and pressure protection. Other features include: Centrifugal oil pump and low vibration and noise.

Condenser Coil

The aluminum plate fin, copper tube outdoor coil provides low airflow resistance and efficient heat transfer. The coil is protected with a corrosion resistant mesh coil guard.

Low Ambient Cooling

As manufactured, this system has a cooling capacity to 55°F. The addition of an evaporator defrost control permits operation to 40°F. The addition of an evaporator defrost control with TXV permits low ambient cooling to 30°F.

The addition of the BAYLOAM107A low ambient kit permits ambient cooling to 20°F.

Thermostats—Cooling only and heat/cooling (manual and automatic change over). Sub-base to match thermostat and locking thermostat cover.



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