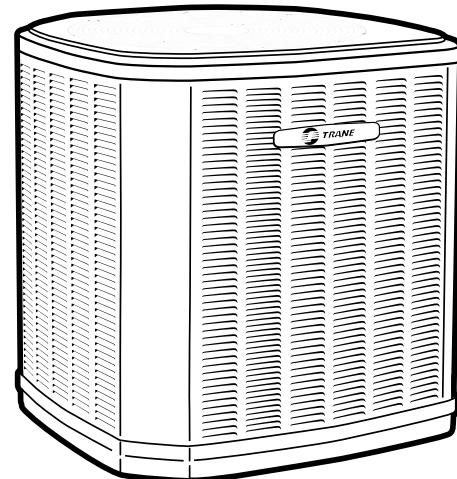




Product Data

Split System Heat Pump

4TWR4018G1000A
4TWR4024G1000A
4TWR4030G1000A
4TWR4036G1000A
4TWR4042G1000A
4TWR4048G1000A
4TWR4060G1000A



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

March 2019

22-1765-13E-EN

IR Ingersoll Rand



Product Specifications

Model No. ^(a)	4TWR4018G1000A	4TWR4024G1000A	4TWR4030G1000A	4TWR4036G1000A
POWER CONNS. — V/PH/HZ ^(b)	208/230/1/60	208/230/1/60	208/230/1/60	208/230/1/60
MIN. BRCH. CIR. AMPACITY	12	14	17	19
BR. CIR. PROT. RTG. — MAX. (AMPS)	20	25	25	30
COMPRESSOR	CLIMATUFF®- SCROLL	CLIMATUFF®- SCROLL	CLIMATUFF®- SCROLL	CLIMATUFF®- SCROLL
RL AMPS — LR AMPS	9 — 56	10.9 — 62.9	12.8 — 67.8	14.7 — 72.2
Outdoor Fan FL AMPS	0.54	0.64	0.71	0.64
Fan HP	1/12	1/8	1/8	1/8
Fan Dia (inches)	23	23	27.5	27.5
Coil	SPINE FIN™	SPINE FIN™	SPINE FIN™	SPINE FIN™
Refrigerant R-410A	6 LBS., 1 OZ	6 LBS., 2 OZ	6 LBS., 13 OZ	7 LBS., 1 OZ
LINE SIZE — IN. O.D. GAS ^{(c) (d)}	3/4	3/4	3/4	3/4
LINE SIZE — IN. O.D. LIQ.	3/8	3/8	3/8	3/8
Charge Spec. Subcooling	10°F	10°F	8°F	10°F
Dimensions H x W X D Crated (IN.)	30.1 x 30 x 26.7	34 x 33 x 30.1	34.4 x 35.1 x 38.7	34.4 x 38.7 x 35.1
Weight — Shipping (lbs.)	161	191	248	248
Weight — Net (lbs.)	141	163	216	216
Optional Accessories:				
Anti-short Cycle Timer	TAYASCT501A	TAYASCT501A	TAYASCT501A	TAYASCT501A
Evaporator Defrost Control	NA	NA	NA	AY28X084
Rubber Isolator Kit	BAYISLT101	BAYISLT101	BAYISLT101	BAYISLT101
Extreme Condition Mount Kit	BAYECMT023	BAYECMT023	BAYECMT004	BAYECMT004
Start Kit	—	—	BAYKSKT263	BAYKSKT263
Crankcase Heater Kit	BAYCCHT302	BAYCCHT302	BAYCCHT302	BAYCCHT302
Seacoast Kit	BAYSEAC001	BAYSEAC001	BAYSEAC001	BAYSEAC001
Low Ambient Kit	BAYLOAM107	BAYLOAM107	BAYLOAM107	BAYLOAM103
Refrigerant Lineset ^(e)	TAYREFLN7*	TAYREFLN7*	TAYREFLN7*	TAYREFLN7*
Sound Enclosure	BAYSDEN003	BAYSDEN003	BAYSDEN003	BAYSDEN003
Service Valve Panel Cover	TAYSVPANL0022AA	TAYSVPANL0032AA	TAYSVPANL0032AA	TAYSVPANL3343AA

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

(b) Calculated in accordance with N.E.C. Only use HACR circuit breakers or fuses.

(c) Reference the outdoor unit ship-with literature for refrigerant piping length and lift guidelines. Reference the refrigerant piping software pub # 32-3312-xx or refrigerant piping application guide SS-APG006-xx for long line sets or specialty applications (xx denotes latest revision).

(d) Trane outdoor condensing units are factory charged with the system charge required for the outdoor condensing unit and 15 feet of tested connecting lines. If connecting line length exceeds 15 feet, then final refrigerant charge adjustment is necessary. Each additional foot over 15 feet requires 0.6 ozs of refrigerant. See the Installer's Guide for full charging instructions.

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



Product Specifications

Model No. ^(a)	4TWR4042G1000A	4TWR4048G1000A	4TWR4060G1000A
POWER CONNS. — V/PH/HZ ^(b)	280/230/1/60	280/230/1/60	280/230/1/60
MIN. BRCH. CIR. AMPACITY	25	26	32
BR. CIR. PROT. RTG. — MAX. (AMPS)	40	45	50
COMPRESSOR	CLIMATUFF®- SCROLL	CLIMATUFF®- SCROLL	CLIMATUFF®- SCROLL
RL AMPS — LR AMPS	19.2 — 124	19.6 — 130	24.4 — 144
Outdoor Fan FL AMPS	1.05	1.05	1.05
Fan HP	1/5	1/5	1/5
Fan Dia (inches)	27.5	27.5	27.5
Coil	SPINE FIN™	SPINE FIN™	SPINE FIN™
Refrigerant R-410A	7 LBS., 8 OZ	8 LBS., 2 OZ	9 LBS., 14 OZ
LINE SIZE — IN. O.D. GAS ^{(c) (d)}	7/8	7/8	1 1/8
LINE SIZE — IN. O.D. LIQ.	3/8	3/8	3/8
Charge Spec. Subcooling	10°F	10°F	10°F
Dimensions H x W X D Crated (IN.)	34.4 x 38.7 x 35.1	38.4 x 38.7 x 35.1	51 x 38.7 x 35.1
Weight — Shipping (lbs.)	248	256	315
Weight — Net (lbs.)	216	222	278
Optional Accessories:			
Anti-short Cycle Timer	TAYASCT501A	TAYASCT501A	TAYASCT501A
Evaporator Defrost Control	NA	NA	NA
Rubber Isolator Kit	BAYISLT101	BAYISLT101	BAYISLT101
Extreme Condition Mount Kit	BAYECMT004	BAYECMT004	BAYECMT004
Start Kit	BAYKSKT263	BAYKSKT263	BAYKSKT263
Crankcase Heater Kit	BAYCCHT301	BAYCCHT301	BAYCCHT301
Seacoast Kit	BAYSEAC001	BAYSEAC001	BAYSEAC001
Low Ambient Kit	BAYLOAM107	BAYLOAM107	BAYLOAM107
Refrigerant Lineset ^(e)	TAYREFLN3*	TAYREFLN3*	TAYREFLN3*
Sound Enclosure	BAYSDEN004	BAYSDEN004	BAYSDEN004
Service Valve Panel Cover	TAYSVPANL0032AA	TAYSVPANL3343AA	TAYSVPANL0046AA

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

(b) Calculated in accordance with N.E.C. Only use HACR circuit breakers or fuses.

(c) Reference the outdoor unit ship-with literature for refrigerant piping length and lift guidelines. Reference the refrigerant piping software pub # 32-3312-xx or refrigerant piping application guide SS-APG006-xx for long line sets or specialty applications (xx denotes latest revision).

(d) Trane outdoor condensing units are factory charged with the system charge required for the outdoor condensing unit and 15 feet of tested connecting lines. If connecting line length exceeds 15 feet, then final refrigerant charge adjustment is necessary. Each additional foot over 15 feet requires 0.6 ozs of refrigerant. See the Installer's Guide for full charging instructions.

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

Sound Power Level

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
4TWR4018G1	73	72	66	64	66	71	64	56	47
4TWR4024G1	71	77	72	68	68	69	60	53	47
4TWR4030G1	72	77	72	69	68	65	60	57	52
4TWR4036G1	75	84	75	70	72	67	62	57	50
4TWR4042G1	72	79	70	68	67	64	59	56	51
4TWR4048G1	72	81	73	68	72	67	62	57	51
4TWR4060G1	72	81	72	68	71	68	64	59	54

Note: Rated in accordance with AHRI Standard 270-2008 *For Reference Only



Accessory Description and Usage

Anti-Short Cycle Timer — Solid state timing device that prevents compressor recycling until five (5) minutes have elapsed after satisfying call or power interruptions. Use in area with questionable power delivery, commercial applications, long lineset, etc.

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 — Five (5) 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.

Extreme Condition Mount Kit — Bracket kits to securely mount condensing unit to a frame or pad without removing any panels. Use in areas with high winds, or on commercial roof tops, etc.

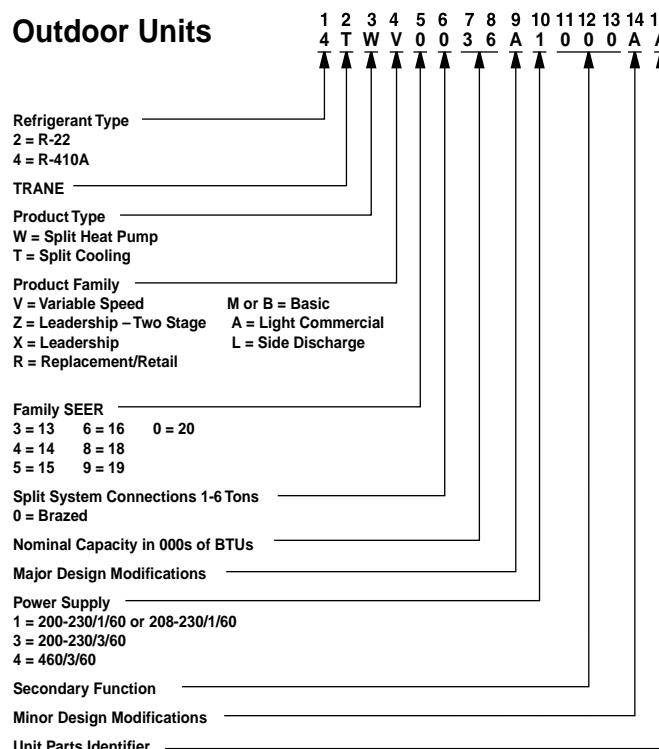
AHRI Standard Capacity Rating Conditions

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.
2. High Temperature Heating 47°F DB, 43°F WB air entering outdoor coil, 70°F DB air entering indoor coil.
3. Low Temperature Heating 17°F DB air entering indoor coil.
4. Rated indoor airflow for heating is the same as for cooling.

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



Schematic Diagrams

Figure 1. 1.5, 2.0, 2.5 & 3.5 Ton Models

LEGEND

ACR A/C RECTIFIER
 CBS COIL BOTTOM SENSOR
 CF FAN CAPACITOR
 CN WIRE CONNECTOR
 CPR COMPRESSOR
 CR RUN CAPACITOR
 CS STARTING CAPACITOR
 CSR CAPACITOR SWITCHING RELAY
 DFC DEFROST CONTROL
 EEV ELECTRONIC EXP VALVE
 EEVVC ELECTRONIC EXP VALVE CONTROL
 F INDOOR FAN RELAY
 HPCO HIGH PRESSURE CUTOUT SWITCH
 IOC INTERNAL OVERLOAD PROTECTOR
 LPCO LOW PRESSURE CUTOUT SWITCH
 MS COMPRESSOR MOTOR CONTACTOR
 ODA OUTDOOR ANTICIPATOR
 ODT OUTDOOR DELAY THERMOSTAT
 ODS OUTDOOR TEMPERATURE SENSOR
 ODT OUTDOOR THERMOSTAT
 P-TDR PRESSURE TRANSDUCER
 SC SWITCH OVER VALVE SOLENOID
 SM SYSTEM ON-OFF SWITCH
 TDL DISCHARGE LINE THERMOSTAT
 TDR TIME DELAY RELAY (5 SEC DELAY ON)
 TNS TRANSFORMER
 TEMP SENSOR, TEMPERATURE
 Y2C HIGH CAPACITY CONTROL RELAY

COLOR OF WIRE
 BK/BL COLOR OF MARKER
 BK BLACK RD RED OR ORANGE
 BL WHITE YL YELLOW GR GREEN
 BR BROWN YL YELLOW PR PURPLE
 PK PINK

POL. PLUG FEMALE HOUSING (MALE TERMINALS)
 POL. PLUG MALE HOUSING (FEMALE TERMINALS)
 RELAY CONTACT (N.C.)
 THERMISTOR
 TEMP ACTUATED SWITCH
 INTERNAL OVERLOAD PROTECTION
 PRESSURE ACTUATED SWITCH
 RESISTER OR HEATING ELEMENT
 MOTOR WINDING

FOR CANADIAN INSTALLATIONS
 POUR INSTALLATIONS CANADIENNES
 CAUTION: NOT SUITABLE FOR USE ON
 SYSTEMS EXCEEDING 150V TO GROUND
 ATTENTION: NE CONVIENT PAS AUX
 INSTALLATIONS DE PLUS DE 150 V A
 LA TERRE

WARNING
 HAZARDOUS VOLTAGE!
 DISCONNECT ALL ELECTRICAL POWER
 INCLUDING REMOTE DISCONNECTS
 BEFORE SERVICING.
 Failure to disconnect power
 before servicing can cause severe
 personal injury or death.

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.

TO POWER SUPPLY PER UNIT NAMEPLATE AND LOCAL CODES

SEE SERVICE FACTS FOR OPTIONAL START KIT ACCESSORY!

NOTES:

1. 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.
4. ODT-B MUST BE SET LOWER THAN ODT-A
5. IF ODT-A IS NOT USED, ADD JUMPER BETWEEN W1 AND W2 AT AIR HANDLER

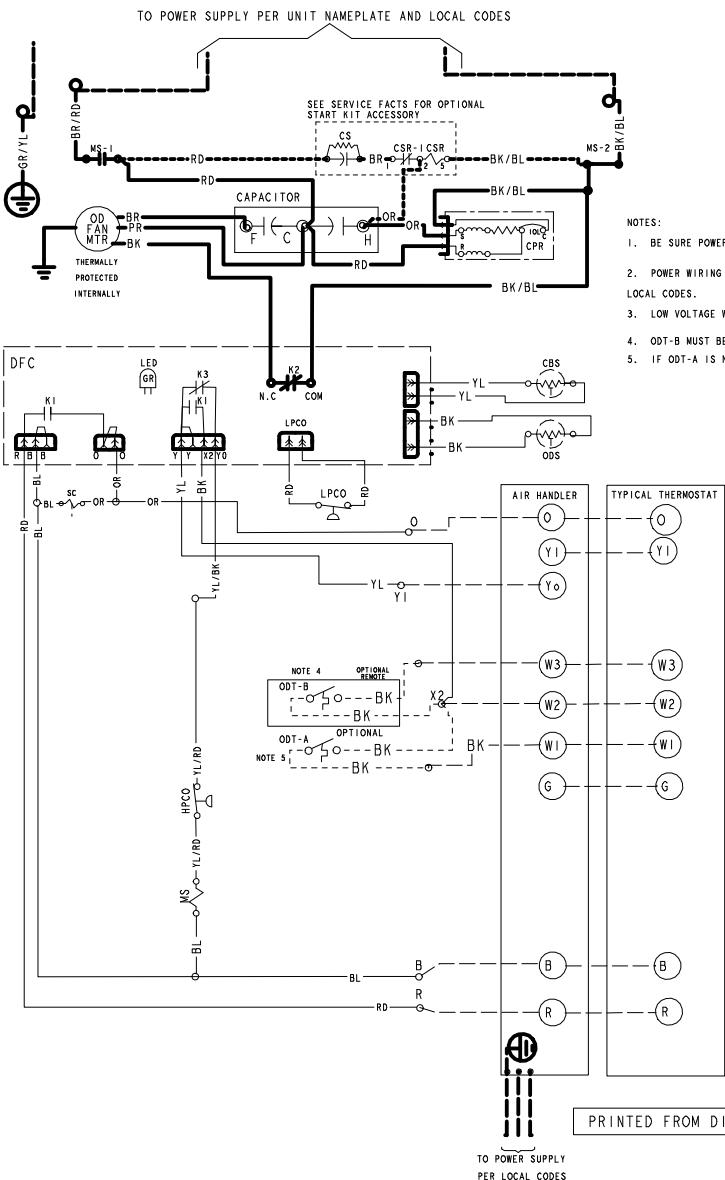


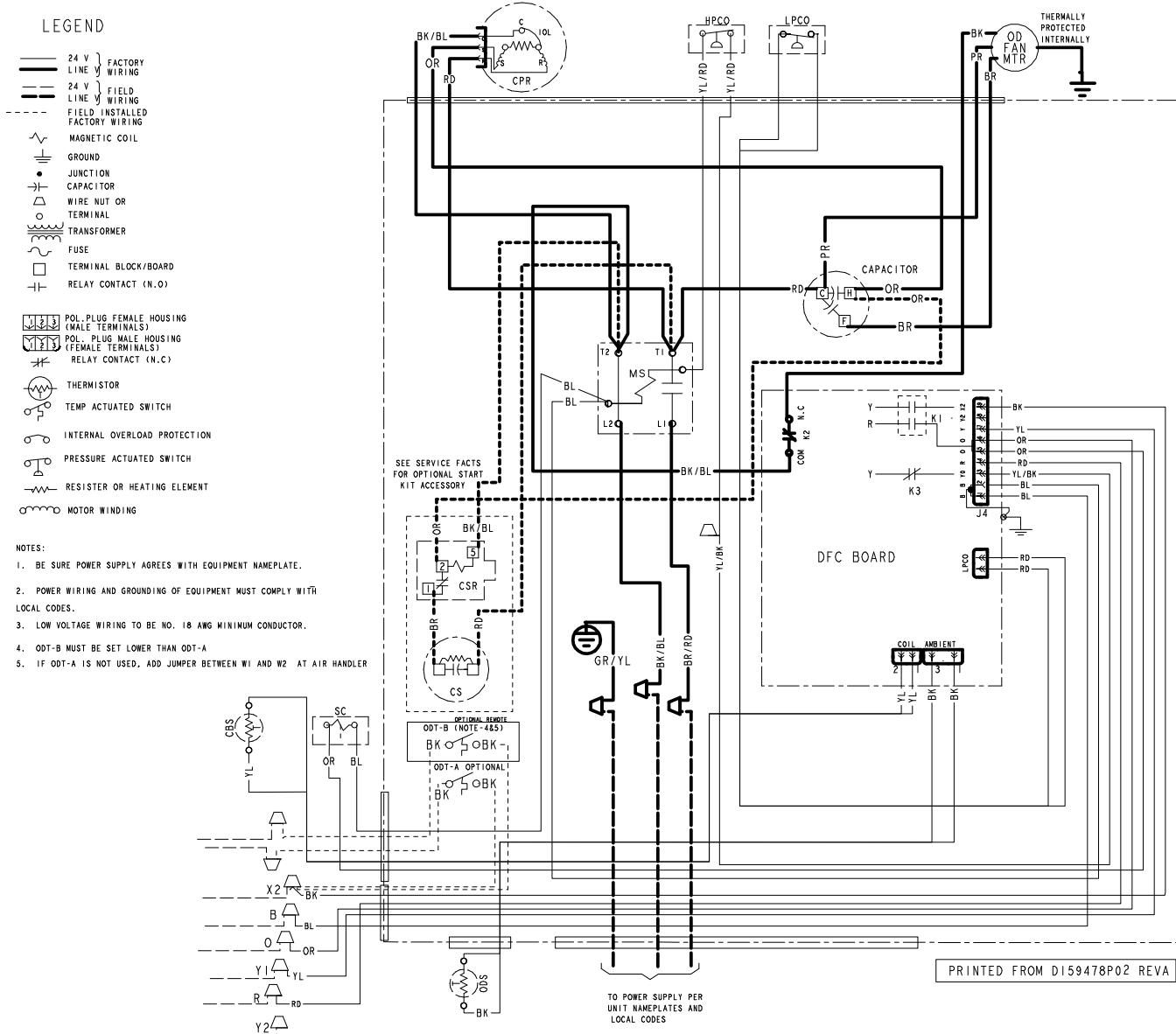
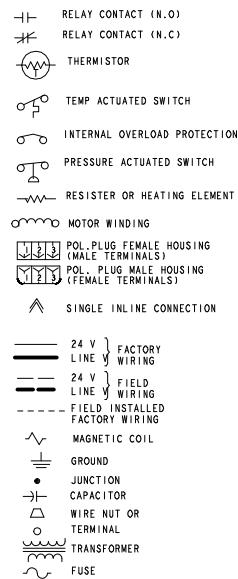
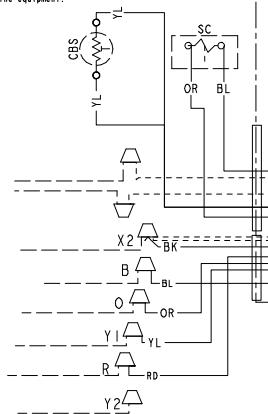
Figure 2. 1.5, 2.0, 2.5 & 3.5 Ton Models


Figure 3. 3.0 Ton
LEGEND

WARNING

HAZARDOUS VOLTAGE!
DISCONNECT ALL ELECTRICAL POWER
THROUGH MAIN DISCONNECTS
BEFORE SERVICING.
Failure to disconnect power
before servicing can cause severe
personal injury or death.

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.



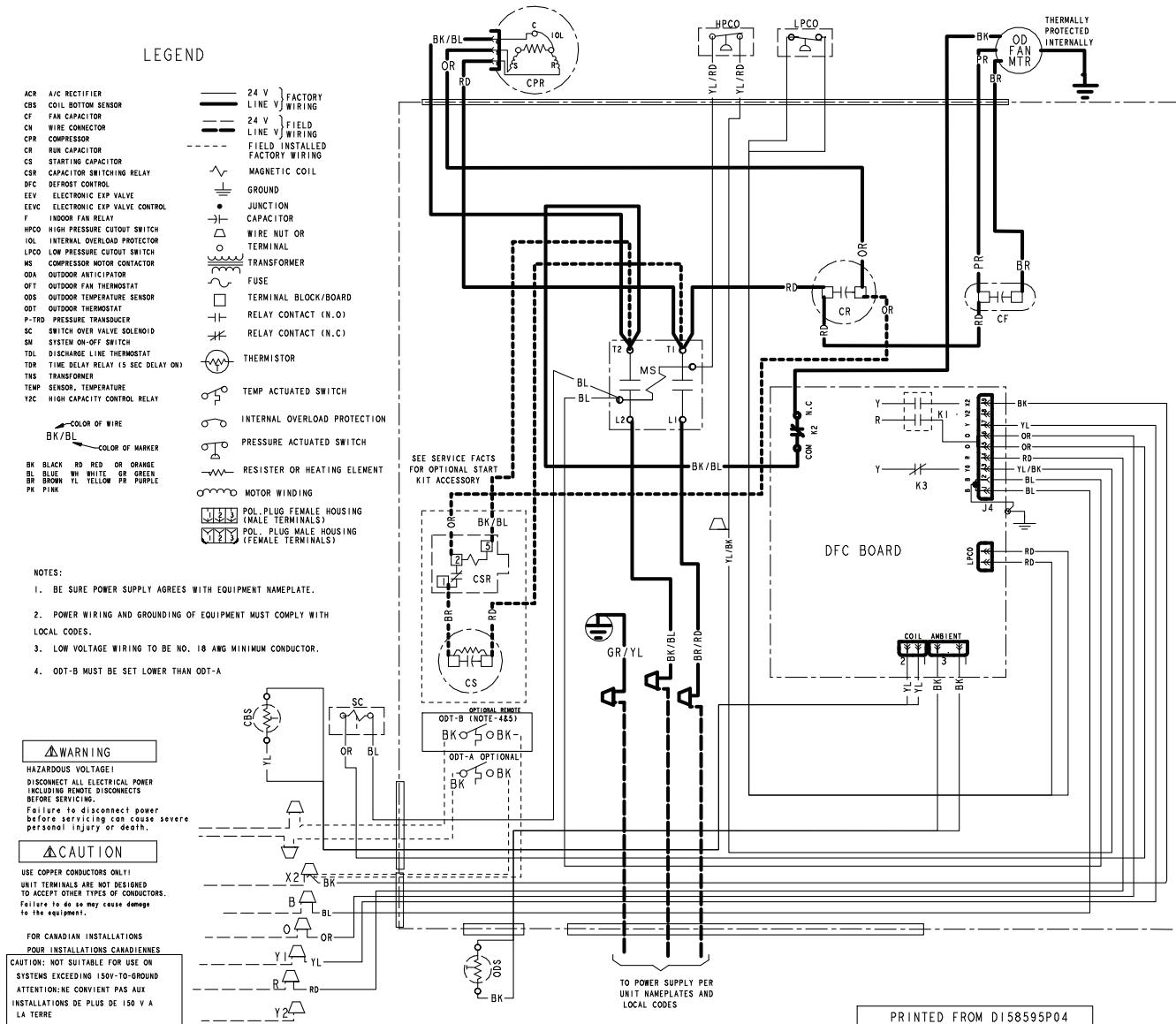
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TO POWER SUPPLY PER
UNIT NAMEPLATES AND
LOCAL CODES



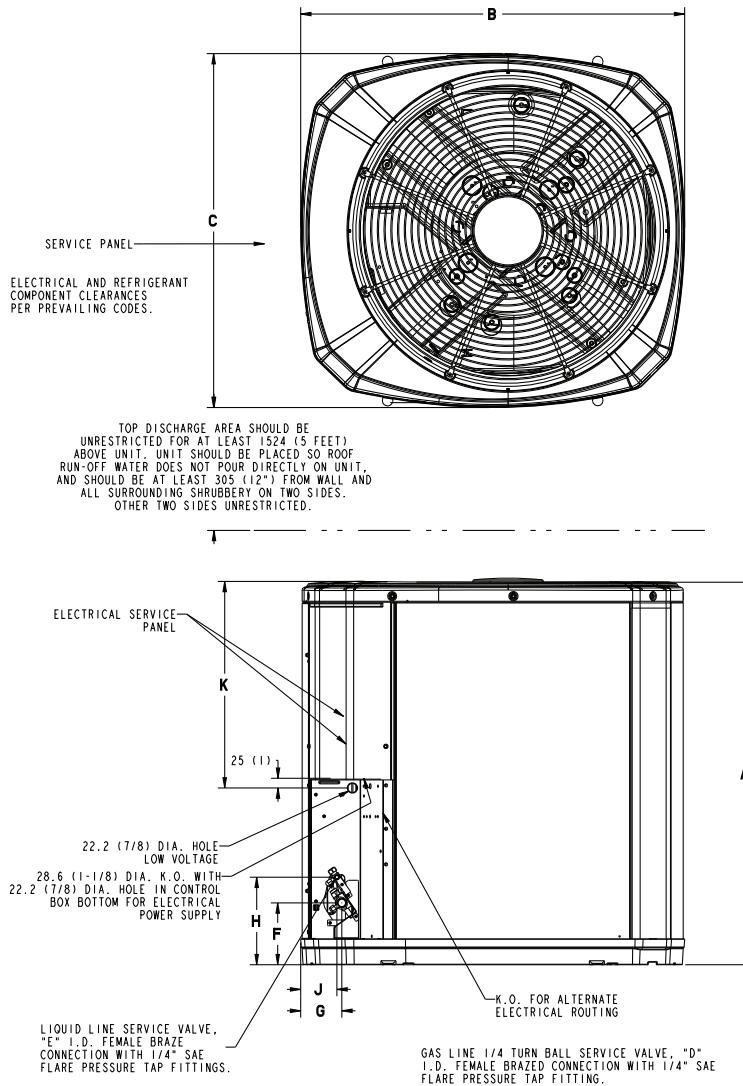
Schematic Diagrams

Figure 4. 4 and 5 Ton Models





Outline Drawing



Model	Base	A	B	C	D	E	F	G	H	J	K
4TWR4018G	2	730 (28-3/4)	724 (28-1/2)	651 (25-5/8)	3/4	3/8	127 (5)	57 (2-1/4)	194 (7-5/8)	38 (1-1/2)	457 (18)
4TWR4024G	3	730 (28-3/4)	829 (32-5/8)	756 (29-3/4)	3/4	3/8	127 (5)	76 (3)	197 (7-3/4)	60 (2-3/8)	508 (20)
4TWR4030G	4	741 (29-1/8)	946 (37-1/4)	870 (34-1/4)	3/4	3/8	143 (5-5/8)	83 (3-1/4)	206 (8-1/8)	70 (2-3/4)	508 (20)
4TWR4036G	4	741 (29-1/8)	946 (37-1/4)	870 (34-1/4)	3/4	3/8	156 (6)	98 (3-7/8)	219 (8-5/8)	86 (3-3/8)	508 (20)
4TWR4042G	4	741 (29-1/8)	946 (37-1/4)	870 (34-1/4)	7/8	3/8	143 (5-5/8)	83 (3-1/4)	206 (8-1/8)	70 (2-3/4)	508 (20)
4TWR4048G	4	841 (33-1/8)	946 (37-1/4)	870 (34-1/4)	7/8	3/8	143 (5-5/8)	98 (3-7/8)	219 (8-5/8)	86 (3-3/8)	508 (20)
4TWR4060G	4	1147 (45-1/8)	946 (37-1/4)	870 (34-1/4)	7/8	3/8	152 (6)	98 (3-7/8)	219 (8-5/8)	86 (3-3/8)	813 (32)



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 repainted. 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 outdoor coil provides low airflow resistance and efficient heat transfer. The coil is protected on all four sides by louvered panels.

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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