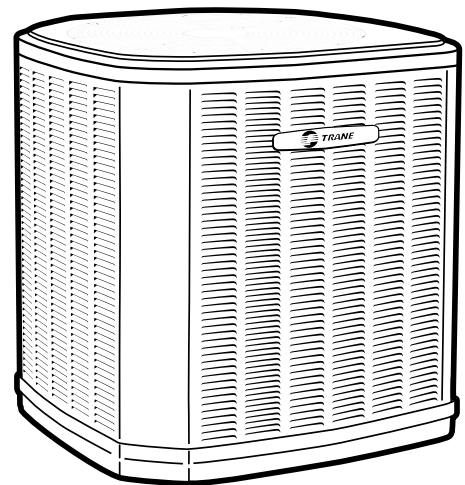




Product Data

Split System Heat Pump

5TWR4018A1000A
5TWR4024A1000A
5TWR4030A1000A
5TWR4036A1000A
5TWR4042A1000A
5TWR4048A1000A
5TWR4060A1000A



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



Product Specifications

| Model No. ^(a) | 5TWR4018A1000A | 5TWR4024A1000A | 5TWR4030A1000A | 5TWR4036A1000A |
|---|---------------------|---------------------|---------------------|---------------------|
| 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 | 13 | 16 | 19 |
| BR. CIR. PROT. RTG. – MAX. (AMPS) | 20 | 20 | 25 | 30 |
| COMPRESSOR | CLIMATUFF® - SCROLL | CLIMATUFF® - SCROLL | CLIMATUFF® - SCROLL | CLIMATUFF® - SCROLL |
| RL AMPS – LR AMPS | 7.8 - 47.5 | 9.1 - 75.9 | 10.4 - 71.0 | 14.1 - 83.2 |
| Outdoor Fan FL AMPS | 0.64 | 0.64 | 0.64 | 0.64 |
| Fan HP | 1/8 | 1/8 | 1/8 | 1/8 |
| Fan Dia (inches) | 23 | 23 | 23 | 27.5 |
| Coil | SPINE FIN™ | SPINE FIN™ | SPINE FIN™ | SPINE FIN™ |
| Refrigerant R-454B | 4 LBS., 12 OZ | 4 LBS., 10 OZ | 4 LBS., 10 OZ | 5 LBS., 10 OZ |
| LINE SIZE – IN. O.D. GAS ^{(c) (d)} | 3/4 | 3/4 | 3/4 | 3/4 |
| LINE SIZE – IN. O.D. LIQ. | 5/16 | 5/16 | 5/16 | 5/16 |
| Charge Spec. Subcooling | 9°F | 12°F | 12°F | 10°F |
| Dimensions H x W X D Crated (IN.) | 38.1 X 30 X 33 | 38.1 X 30 X 33 | 38.1 X 30 X 33 | 38.5 X 35 X 37.9 |
| Weight – Shipping (lbs.) | 208 | 208 | 208 | 256 |
| Weight – Net (lbs.) | 174 | 174 | 174 | 222 |
| Optional Accessories: | | | | |
| Anti-short Cycle Timer | TAYASCT501A | TAYASCT501A | TAYASCT501A | TAYASCT501A |
| Evaporator Defrost Control | NA | NA | NA | NA |
| Rubber Isolator Kit | BAYISLT101 | BAYISLT101 | BAYISLT101 | BAYISLT101 |
| Extreme Condition Mount Kit | BAYECMT023 | BAYECMT023 | BAYECMT004 | BAYECMT004 |
| Start Kit | – | BAYKSKT263 | BAYKSKT263 | BAYKSKT263 |
| Crankcase Heater Kit | BAYCCHT302 | BAYCCHT302 | BAYCCHT302 | BAYCCHT302 |
| Seacoast Kit | BAYSEAC001 | BAYSEAC001 | BAYSEAC001 | BAYSEAC001 |
| Low Ambient Kit | BAYLOAM107 | BAYLOAM107 | BAYLOAM107 | BAYLOAM107 |
| Service Valve Panel Cover | TAYSVPANL3343AA | TAYSVPANL3343AA | TAAYSVPANL0044AA | TAYSVPANL0044AA |
| Refrigerant Lineset ^(e) | | | | |

^(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) The outdoor condensing units are factory charged with the system charge required for the outdoor condensing unit, ten (10) feet of tested connecting line, and the smallest rated indoor evaporative coil match. Always verify proper system charge via subcooling (TXV/EEV) or superheat (fixed orifice) per the unit nameplate.

^(e) 25, 30, 35 and 50 foot linesets available. For a complete listing of lineset options available from equipment or supply stores, refer to the Trane Residential and Light Commercial Product Handbook.



Product Specifications

| Model No. ^(a) | 5TWR4042A1000A | 5TWR4048A1000A | 5TWR4060A1000A |
|---|---------------------|---------------------|---------------------|
| POWER CONNS. – V/PH/HZ ^(b) | 280/230/1/60 | 280/230/1/60 | 280/230/1/60 |
| MIN. BRCH. CIR. AMPACITY | 24 | 25 | 33 |
| BR. CIR. PROT. RTG. – MAX. (AMPS) | 40 | 40 | 50 |
| COMPRESSOR | CLIMATUFF® - SCROLL | CLIMATUFF® - SCROLL | CLIMATUFF® - SCROLL |
| RL AMPS – LR AMPS | 16.9 - 104.7 | 18.1 - 95.0 | 22.3 - 136.6 |
| Outdoor Fan FL AMPS | 2.80 | 2.80 | 2.80 |
| Fan HP | 1/3 | 1/3 | 1/3 |
| Fan Dia (inches) | 27.5 | 27.5 | 27.5 |
| Coil | SPINE FIN™ | SPINE FIN™ | SPINE FIN™ |
| Refrigerant R-454B | 7 LBS., 14 OZ | 8 LBS., 9 OZ | 8 LBS., 6 OZ |
| LINE SIZE – IN. O.D. GAS ^{(c) (d)} | 7/8 | 7/8 | 7/8 |
| LINE SIZE – IN. O.D. LIQ. | 5/16 | 5/16 | 5/16 |
| Charge Spec. Subcooling | 10°F | 10°F | 10°F |
| Dimensions H x W X D Crated (IN.) | 50.5 X 35 X 37.9 | 50.5 X 35 X 37.9 | 50.5 X 35 X 37.9 |
| Weight – Shipping (lbs.) | 301 | 301 | 301 |
| Weight – Net (lbs.) | 251 | 251 | 251 |
| 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 | BAYLOAM103 | BAYLOAM103 | BAYLOAM103 |
| Service Valve Panel Cover | TAYSVPANL0046AA | TAYSVPANL0046AA | TAYSVPANL0046AA |
| Refrigerant Lineset ^(e) | | | |

^(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) The outdoor condensing units are factory charged with the system charge required for the outdoor condensing unit, ten (10) feet of tested connecting line, and the smallest rated indoor evaporative coil match. Always verify proper system charge via subcooling (TXV/EEV) or superheat (fixed orifice) per the unit nameplate.

^(e) 25, 30, 35 and 50 foot linesets available. For a complete listing of lineset options available from equipment or supply stores, refer to the Trane Residential and Light Commercial Product Handbook.



Sound Power Level

| 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 |
| 5TWR4018A | 71 | 77 | 72 | 68 | 68 | 69 | 60 | 53 | 47 |
| 5TWR4024A | 71 | 77 | 72 | 68 | 68 | 69 | 60 | 53 | 47 |
| 5TWR4030A | 71 | 77 | 72 | 68 | 68 | 69 | 60 | 53 | 47 |
| 5TWR4036A | 70 | 75 | 69 | 68 | 68 | 66 | 62 | 57 | 51 |
| 5TWR4042A | 72 | 77 | 75 | 72 | 70 | 67 | 62 | 59 | 52 |
| 5TWR4048A | 72 | 77 | 75 | 72 | 70 | 67 | 62 | 59 | 52 |
| 5TWR4060A | 72 | 77 | 75 | 72 | 70 | 67 | 62 | 59 | 52 |

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.

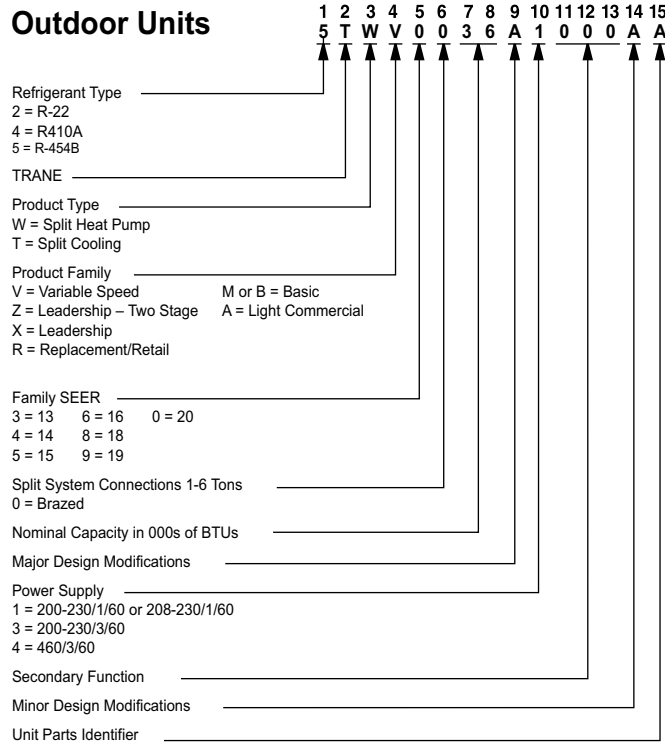
AHRI Standard Capacity Rating Conditions

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.

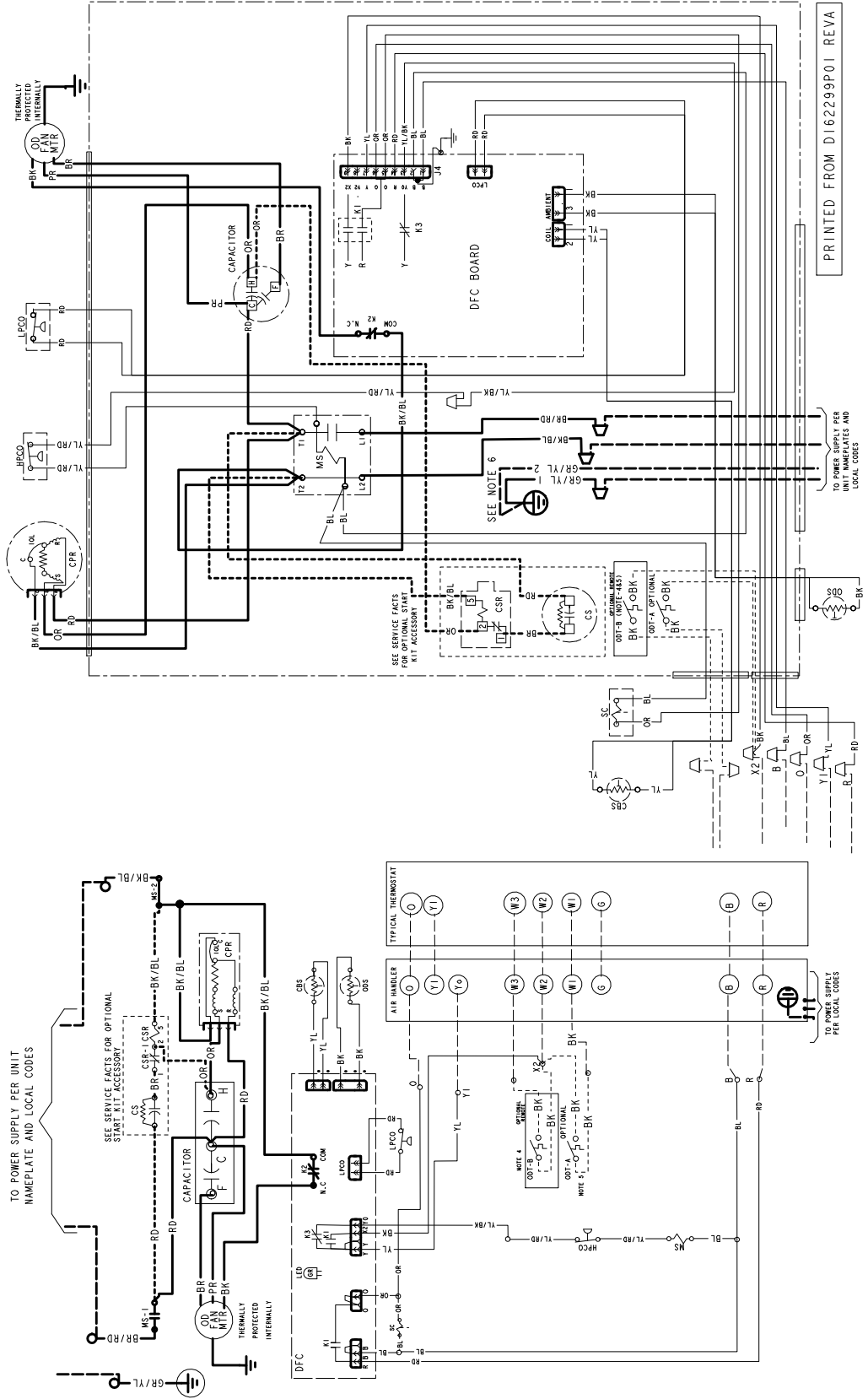
AHRI Standard 270 Rating Conditions — (Noise rating numbers are determined with the unit in cooling operations.) Standard Noise Rating number is at 95°F outdoor air.

Model Nomenclature



Wiring Diagram

Figure 1. 5TWR4018A, 24A, 30A, 36A Models

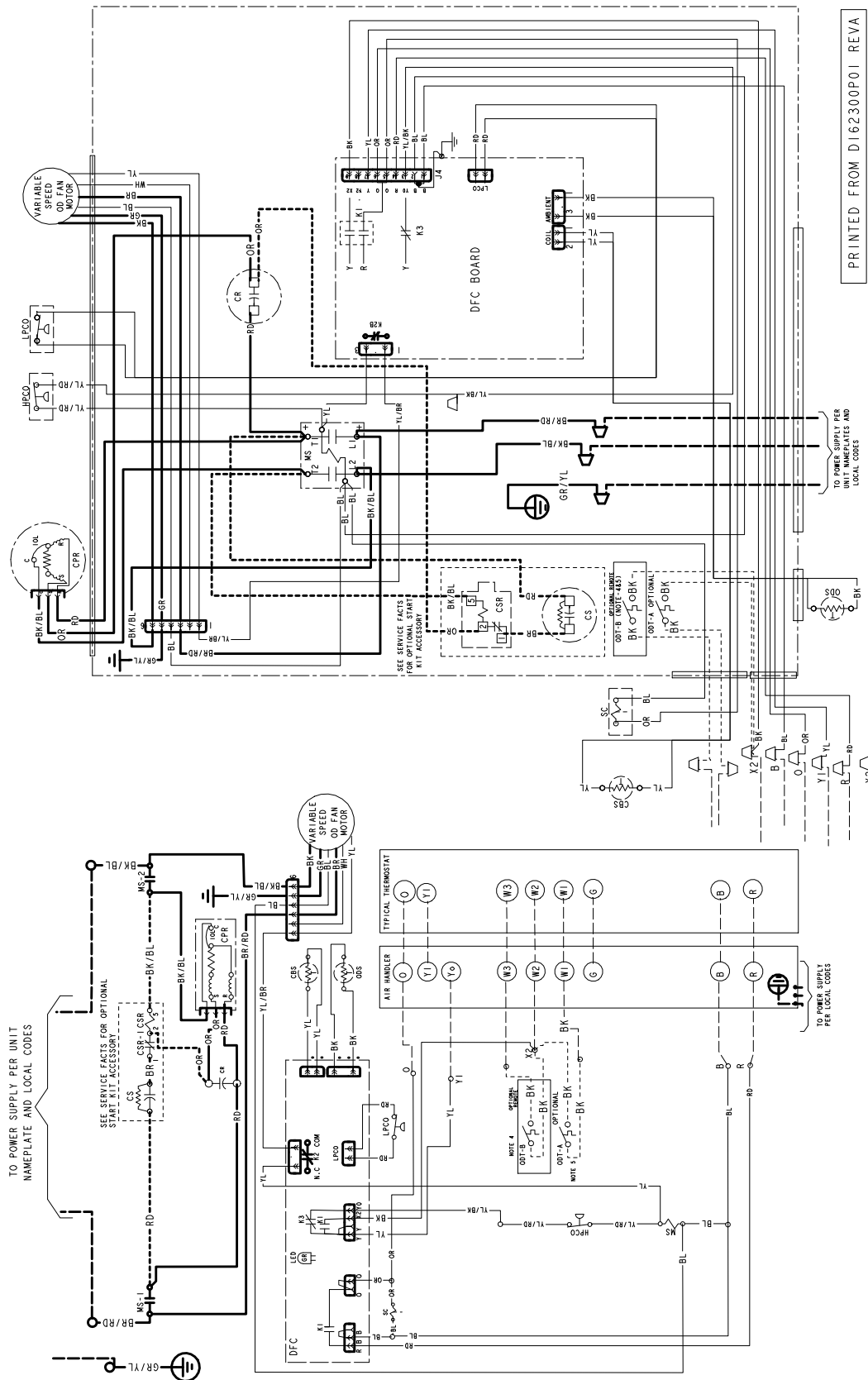


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TO POWER SUPPLY PER UNIT NAMEPLATE AND LOCAL CODES

TO POWER SUPPLY PER UNIT NAMEPLATE AND LOCAL CODES

Figure 2. 5TWR4042A, 48A, 60A Models



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Wiring Diagram

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
6. THE GROUND CONNECTIONS SHOWN HERE ARE 2 SEPARATE WIRES, DO NOT CRIMP TOGETHER "GR/YL 1" WIRE IS FOR GROUND LUG AND " GR/YL 2" IS FOR GROUND WIRE/WIRE NUT OPTION.

LEGEND

| | | | | | |
|--|--------------------------------|--|---|-------|-----------------------------------|
| | 24 V } FACTORY WIRING | | RELAY CONTACT (N.O) | ACR | A/C RECTIFIER |
| | LINE } FACTORY WIRING | | RELAY CONTACT (N.C) | CBS | COIL BOTTOM SENSOR |
| | 24 V } FIELD WIRING | | THERMISTOR | CF | FAN CAPACITOR |
| | LINE } FIELD WIRING | | TEMP ACTUATED SWITCH | CN | WIRE CONNECTOR |
| | FIELD INSTALLED FACTORY WIRING | | PRESSURE ACTUATED SWITCH | CPR | COMPRESSOR |
| | MAGNETIC COIL | | MOTOR WINDING | CR | RUN CAPACITOR |
| | GROUND | | POL. PLUG FEMALE HOUSING (MALE TERMINALS) | CS | STARTING CAPACITOR |
| | JUNCTION | | POL. PLUG MALE HOUSING (FEMALE TERMINALS) | CSR | CAPACITOR SWITCHING RELAY |
| | CAPACITOR | | SINGLE INLINE CONNECTION | DFC | DEFROST CONTROL |
| | WIRE NUT OR TERMINAL | | | EEV | ELECTRONIC EXP VALVE |
| | TRANSFORMER | | | EEVC | ELECTRONIC EXP VALVE CONTROL |
| | FUSE | | | F | INDOOR FAN RELAY |
| | TERMINAL BLOCK/BOARD | | | HPCO | HIGH PRESSURE CUTOFF SWITCH |
| | | | | IOL | INTERNAL OVERLOAD PROTECTOR |
| | | | | LPCO | LOW PRESSURE CUTOFF SWITCH |
| | | | | MS | COMPRESSOR MOTOR CONTACTOR |
| | | | | ODA | OUTDOOR ANTICIPATOR |
| | | | | OFT | OUTDOOR FAN THERMOSTAT |
| | | | | ODS | OUTDOOR TEMPERATURE SENSOR |
| | | | | ODT | OUTDOOR THERMOSTAT |
| | | | | P-TRD | 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
 COLOR OF MARKER
 BK BLACK RD RED OR ORANGE
 BL BLUE WH WHITE GR GREEN
 BR BROWN YL YELLOW PR PURPLE
 PK PINK

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.

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.

DEFROST FAULT CODES

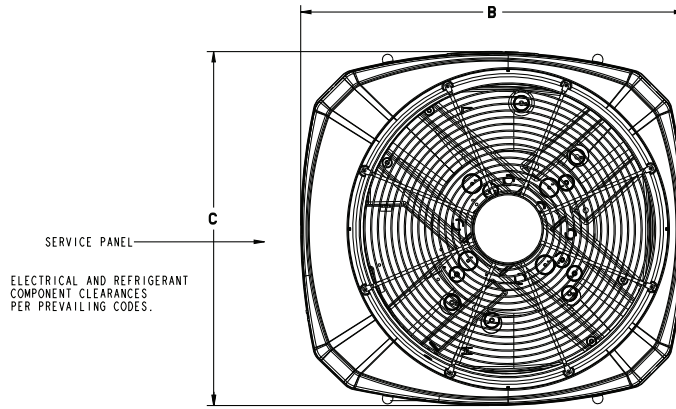
| LED FAULT CODES | FAULT DESCRIPTION |
|-----------------|---|
| 1 flash | Ambient Temp Sensor is out of range (open/shorted) |
| 2 flash | Coil Temp Sensor is out of range (open/shorted) |
| 3 flash | Low Pressure Switch is open |
| 4 flash | Hard Lock Out (can only be cleared with power cycle) |
| 5 flash | Soft Lock Out |
| 6 flash | Defrost cycles too close together |
| 7 flash | In Timed Defrost mode. Check Ambient sensor placement and verify SOV is operating properly. |
| 8 flash | In Timed Defrost mode. Check Coil sensor placement and verify SOV is operating properly. |
| 9 flash | Low Ambient Soft Lockout. Outdoor temperature dropped below 3F. (OFF at -7F/ON at 3F) |

See Service Facts for more information on Fault Codes

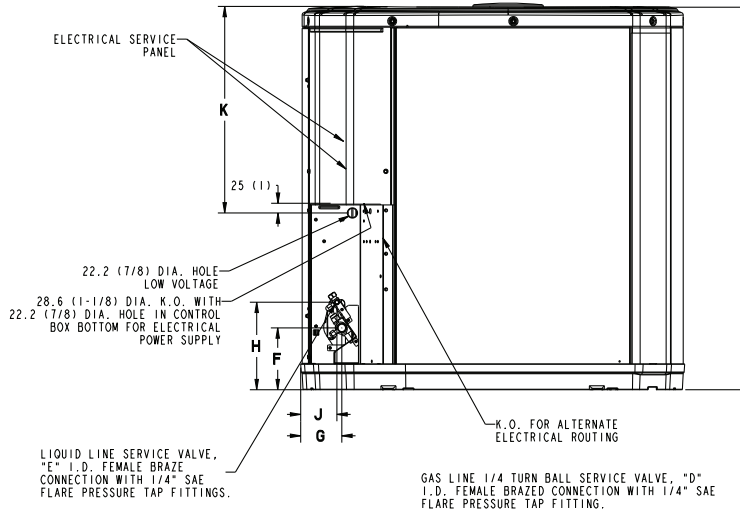
| R-454B REFRIGERANT CHARGING CHART | | | | | | | | |
|-----------------------------------|----------------------------|-----|-----|-----|-----|-----|-----|--|
| LIQUID TEMP (°F) | DESIGN SUBCOOLING (°F) | | | | | | | |
| | 8 | 9 | 10 | 11 | 12 | 13 | 14 | |
| | LIQUID GAGE PRESSURE (PSI) | | | | | | | |
| 55 | 170 | 172 | 175 | 178 | 181 | 184 | 187 | |
| 60 | 184 | 187 | 190 | 194 | 197 | 200 | 203 | |
| 65 | 200 | 203 | 206 | 210 | 213 | 217 | 220 | |
| 70 | 217 | 220 | 223 | 227 | 230 | 234 | 238 | |
| 75 | 234 | 238 | 241 | 245 | 249 | 252 | 256 | |
| 80 | 252 | 256 | 260 | 264 | 268 | 272 | 276 | |
| 85 | 272 | 276 | 280 | 284 | 288 | 292 | 297 | |
| 90 | 292 | 297 | 301 | 305 | 309 | 314 | 318 | |
| 95 | 314 | 318 | 323 | 327 | 332 | 336 | 341 | |
| 100 | 336 | 341 | 346 | 351 | 355 | 360 | 365 | |
| 105 | 360 | 365 | 370 | 375 | 380 | 385 | 390 | |
| 110 | 385 | 390 | 396 | 401 | 406 | 412 | 417 | |
| 115 | 412 | 417 | 422 | 428 | 433 | 439 | 445 | |
| 120 | 439 | 445 | 450 | 456 | 462 | 468 | 474 | |
| 125 | 468 | 474 | 480 | 486 | 492 | 498 | 504 | |



Outline Drawing



TOP DISCHARGE AREA SHOULD BE UNRESTRICTED FOR AT LEAST 1524 (5 FEET) ABOVE UNIT. UNIT SHOULD BE PLACED SO ROOF RUN-OFF WATER DOES NOT POUR DIRECTLY ON UNIT, AND SHOULD BE AT LEAST 305 (12") FROM WALL AND ALL SURROUNDING SHRUBBERY ON TWO SIDES. OTHER TWO SIDES UNRESTRICTED.



| Model | Base | A | B | C | D | E | F | G | H | J | K |
|-----------|------|------------------|-----------------|-----------------|-----|------|----------------|---------------|----------------|---------------|-------------|
| 5TWR4018A | 3 | 832 (32-3/4) | 829 (32-5/8) | 756 (29-3/4) | 3/4 | 5/16 | 127 (5) | 76 (3) | 197 (7-3/4) | 60 (2-3/8) | 508 (20) |
| 5TWR4024A | 3 | 832 (32-3/4) | 829 (32-5/8) | 756 (29-3/4) | 3/4 | 5/16 | 127 (5) | 76 (3) | 197 (7-3/4) | 60 (2-3/8) | 508 (20) |
| 5TWR4030A | 3 | 832 (32-3/4) | 829 (32-5/8) | 756 (29-3/4) | 3/4 | 5/16 | 127 (5) | 76 (3) | 197 (7-3/4) | 60 (2-3/8) | 508 (20) |
| 5TWR4036A | 4 | 841 (33-1/8) | 946 (37-1/4) | 870 (34-1/4) | 3/4 | 5/16 | 143 (5-5/8) | 98 (3-7/8) | 219 (8-5/8) | 86 (3-3/8) | 508 (20) |
| 5TWR4042A | 4 | 1147 (45-1/8) | 946 (37-1/4) | 870 (34-1/4) | 7/8 | 5/16 | 152 (6) | 98 (3-7/8) | 219 (8-5/8) | 86 (3-3/8) | 813 (32) |
| 5TWR4048A | 4 | 1147 (45-1/8) | 946 (37-1/4) | 870 (34-1/4) | 7/8 | 5/16 | 152 (6) | 98 (3-7/8) | 219 (8-5/8) | 86 (3-3/8) | 813 (32) |
| 5TWR4060A | 4 | 1147 (45-1/8) | 946 (37-1/4) | 870 (34-1/4) | 7/8 | 5/16 | 152 (6) | 98 (3-7/8) | 219 (8-5/8) | 86 (3-3/8) | 813 (32) |



Mechanical Specification Options

General

The outdoor condensing units are factory charged with the system charge required for the outdoor condensing unit, ten (10) feet of tested connecting line, and the smallest rated indoor evaporative coil match. 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 60335-2-40. 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 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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