

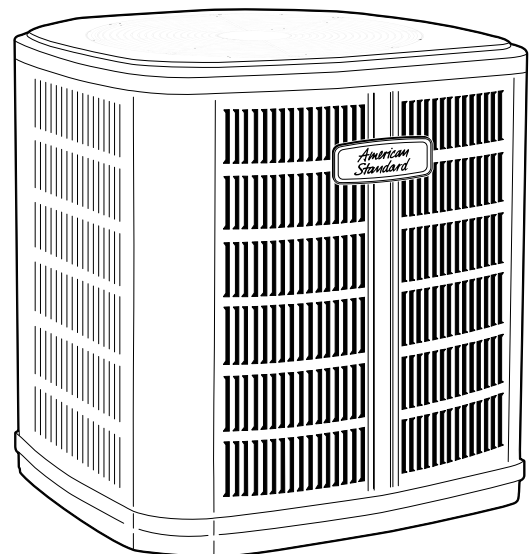
BUILT TO A HIGHER STANDARD[®]

American Standard[®]
HEATING & AIR CONDITIONING

Product Data

Split System Cooling

5A7A4018A1000A
5A7A4024A1000A
5A7A4030A1000A/B
5A7A4036A1000A/B
5A7A4042A1000A
5A7A4048A1000A/B
5A7A4060A1000A/B



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

Product Specifications

| Model No. ^(a) | 5A7A4018A1000A | 5A7A4024A1000A | 5A7A4030A10000A/B | 5A7A4036A1000A/B |
|---|--------------------|--------------------|-----------------------|-----------------------|
| 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 | 9 | 14 | 15/17 | 18 |
| BR. CIR. PROT. RTG. - MAX. (AMPS) | 20 | 25 | 25 | 30 |
| COMPRESSOR | DURATION® - SCROLL | DURATION® - SCROLL | DURATION® - SCROLL | DURATION® - SCROLL |
| RL AMPS - LR AMPS | 6.9 - 45 | 10.3 - 60 | 12.5 - 67 / 12.7 - 76 | 13.5 - 75 / 13.5 - 83 |
| Outdoor Fan FL AMPS | 0.71 | 0.71 | 0.85 | 0.85 |
| Fan HP | 1/8 | 1/8 | 1/8 | 1/8 |
| Fan Dia (inches) | 23 | 23 | 23 | 23 |
| Coil | SPINE FIN™ | SPINE FIN™ | SPINE FIN™ | SPINE FIN™ |
| Refrigerant R-454B | 3 LBS., 12 OZ | 3 LBS., 10 OZ | 3 LBS., 8 OZ | 3 LBS., 8 OZ |
| VALVE CONNECTION SIZE - IN. O.D. GAS | 3/4 | 3/4 | 3/4 | 3/4 |
| VALVE CONNECTION SIZE - IN. O.D. LIQ | 5/16 | 5/16 | 5/16 | 5/16 |
| LINE SIZE - IN. O.D. GAS ^(c) | 3/4 | 3/4 | 3/4 | 7/8 |
| LINE SIZE - IN. O.D. LIQ. | 5/16 | 5/16 | 5/16 | 5/16 |
| Charge Spec. Subcooling | 10°F | 10°F | 10°F | 10°F |
| Dimensions H x W X D Crated (IN.) | 42 x 30 x 33 | 38 x 30 x 33 | 42 x 30 x 33 | 38 x 30 x 33 |
| Weight - Shipping (lbs.) | 220 | 183 | 220 | 183 |
| Weight - Net (lbs.) | 184 | 156 | 184 | 156 |
| Optional Accessories: | | | | |
| Anti-short Cycle Timer | TAYASCT501A | TAYASCT501A | TAYASCT501A | TAYASCT501A |
| Evaporator Defrost Control | AY28X079 | AY28X079 | AY28X079 | AY28X079 |
| Rubber Isolator Kit | BAYISLT101 | BAYISLT101 | BAYISLT101 | BAYISLT101 |
| Extreme Condition Mount Kit | BAYECMT023 | BAYECMT023 | BAYECMT023 | BAYECMT023 |
| Start Kit | BAYKSKT263 | BAYKSKT263 | BAYKSKT263 | BAYKSKT263 |
| Crankcase Heater Kit | BAYCCHT302 | BAYCCHT302 | BAYCCHT302 | BAYCCHT302 |
| Seacoast Kit | BAYSEAC001 | BAYSEAC001 | BAYSEAC001 | BAYSEAC001 |
| Low Ambient Kit | BAYLOAM103 | BAYLOAM103 | BAYLOAM103 | BAYLOAM103 |
| Service Valve Panel Cover | TAYSVPANL0032AA | TAYSVPANL0032AA | TAYSVPANL0044AA | TAYSVPANL0044AA |
| Refrigerant Lineset ^(d) | | | | |

^(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 Manual for Small Split Cooling and Heat Pump Systems Application Guide* (SS-APG006*-EN) for long line sets or specialty applications (xx denotes latest revision).

^(d) 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) | 5A7A4042A1000A/B | 5A7A4048A1000A/B | 5A7A4060A1000A/B |
|---|--------------------------------|--------------------------------|--------------------------------|
| POWER CONNS. - V/PH/HZ ^(b) | 208/230/1/60 | 208/230/1/60 | 208/230/1/60 |
| MIN. BRCH. CIR. AMPACITY | 21 | 23 / 26 | 28 / 30 |
| BR. CIR. PROT. RTG. - MAX. (AMPS) | 30 | 35 / 45 | 50 |
| COMPRESSOR | DURATION [®] - SCROLL | DURATION [®] - SCROLL | DURATION [®] - SCROLL |
| RL AMPS - LR AMPS | 14.7 - 109 | 17.3 - 126 / 19.6 - 118 | 21.8 - 143 / 23.4 - 134 |
| Outdoor Fan FL AMPS | 1.05 | 1.05 | 0.93 |
| 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-454B | 5 LBS., 1 OZ | 6 LBS., 10 OZ | 5 LBS., 15 OZ |
| VALVE CONNECTION SIZE - IN. O.D. GAS | 7/8 | 7/8 | 7/8 |
| VALVE CONNECTION SIZE - IN. O.D. LIQ | 5/16 | 5/16 | 5/16 |
| LINE SIZE - IN. O.D. GAS ^(c) | 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.) | 42.5 x 35 x 38 | 50.5 x 35 x 38 | 50.5 x 35 x 38 |
| Weight - Shipping (lbs.) | 246 | 307 | 302 |
| Weight - Net (lbs.) | 212 | 257 | 252 |
| Optional Accessories: | | | |
| Anti-short Cycle Timer | TAYASCT501A | TAYASCT501A | TAYASCT501A |
| Evaporator Defrost Control | AY28X079 | AY28X079 | AY28X079 |
| 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 ^(d) | | | |

^(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 Manual for Small Split Cooling and Heat Pump Systems Application Guide* (SS-APG006*-EN) for long line sets or specialty applications (xx denotes latest revision).

^(d) 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

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 |
| 5A7A4018A | 73 | 79 | 69 | 67 | 70 | 70 | 64 | 59 | 53 |
| 5A7A4024A | 71 | 78 | 72 | 69 | 68 | 66 | 61 | 58 | 53 |
| 5A7A4030A | 73 | 79 | 69 | 67 | 70 | 70 | 64 | 59 | 53 |
| 5A7A4036A | 71 | 78 | 72 | 69 | 68 | 66 | 61 | 58 | 53 |
| 5A7A4042A | 71 | 78 | 72 | 69 | 68 | 66 | 61 | 58 | 53 |
| 5A7A4048A | 71 | 81 | 75 | 71 | 70 | 68 | 63 | 58 | 53 |
| 5A7A4060A | 71 | 81 | 75 | 71 | 70 | 68 | 63 | 58 | 53 |

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 start-up. 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.

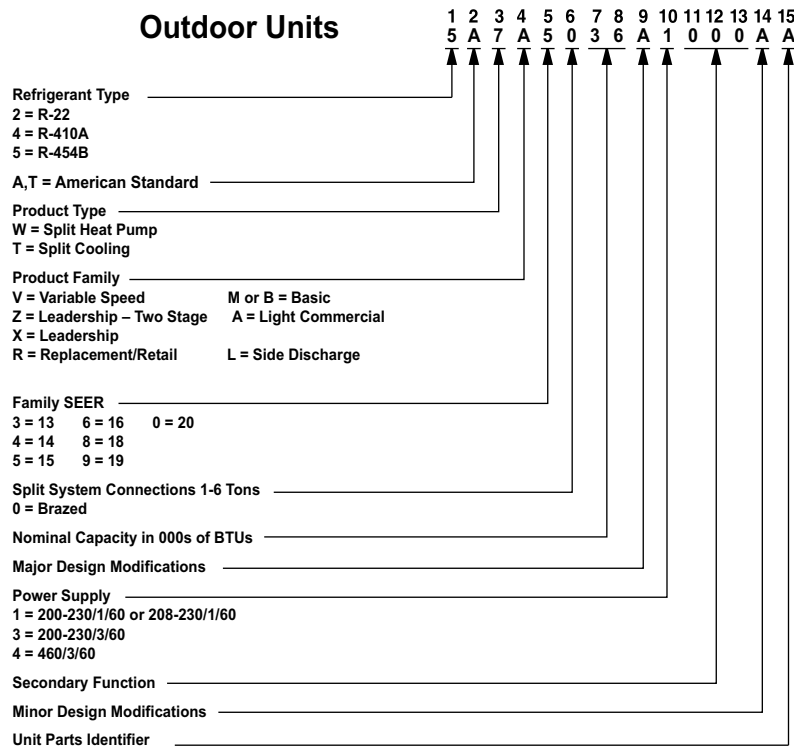
AHRI Standard Capacity Rating Conditions

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. 018A – 048A Models

TO POWER SUPPLY PER UNIT NAMEPLATE AND LOCAL CODES

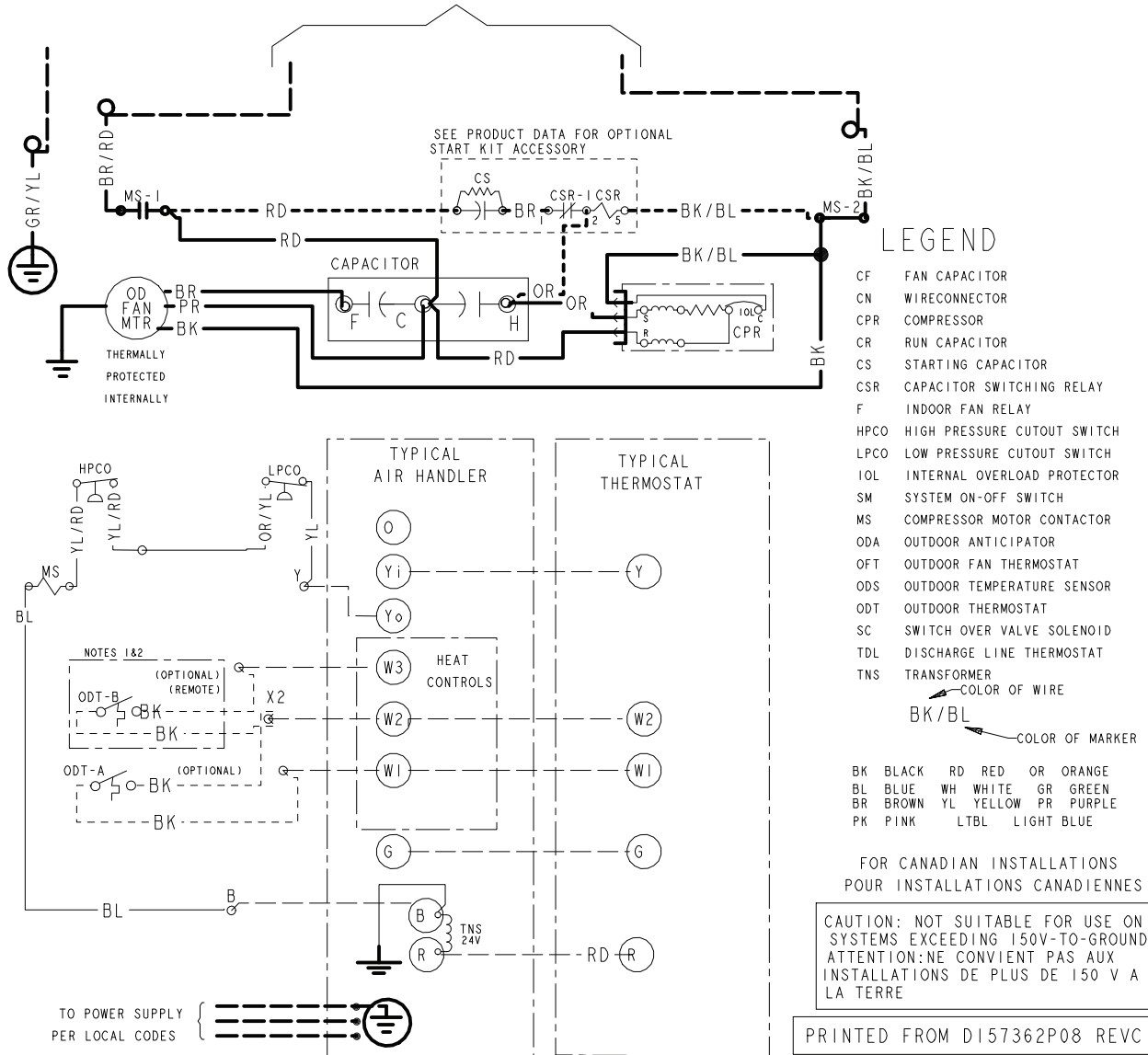


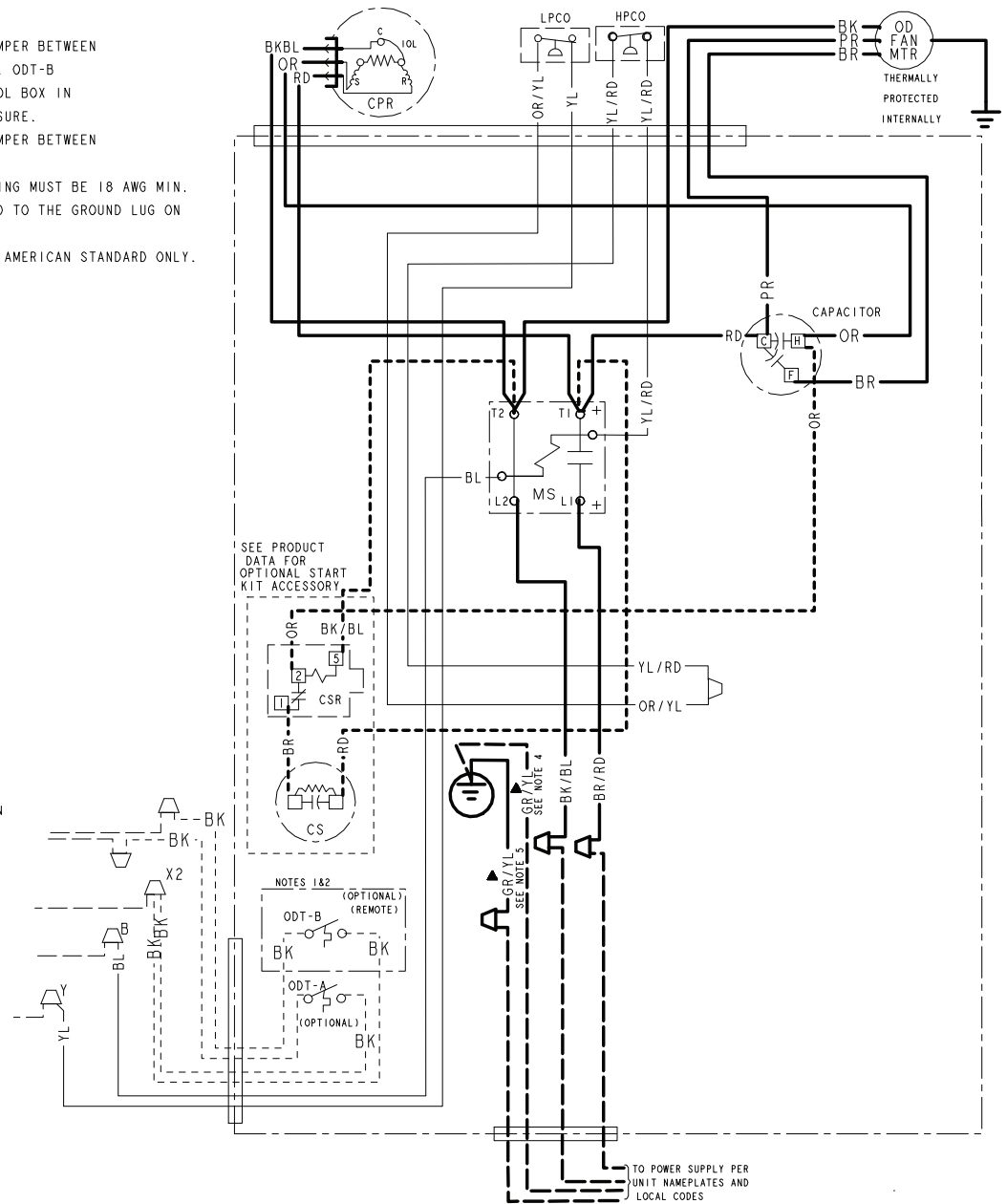
Figure 2. 018A – 048A Models

NOTES:

1. IF ODT-B IS NOT USED. ADD JUMPER BETWEEN W2 & W3 AT AIR HANDLER. IF USED, ODT-B MUST BE MOUNTED REMOTE OF CONTROL BOX IN AN APPROVED WEATHER PROOF ENCLOSURE.
2. IF ODT-A IS NOT USED. ADD JUMPER BETWEEN W1 & W2 AT AIR HANDLER.
3. LOW VOLTAGE (24 V) FIELD WIRING MUST BE 18 AWG MIN.
- ▲ 4. FIELD GROUND MUST BE ATTACHED TO THE GROUND LUG ON THE RUNTRU AND AMERISTAR UNITS.
- ▲ 5. GROUND CONNECTION FOR TRANE/ AMERICAN STANDARD ONLY.

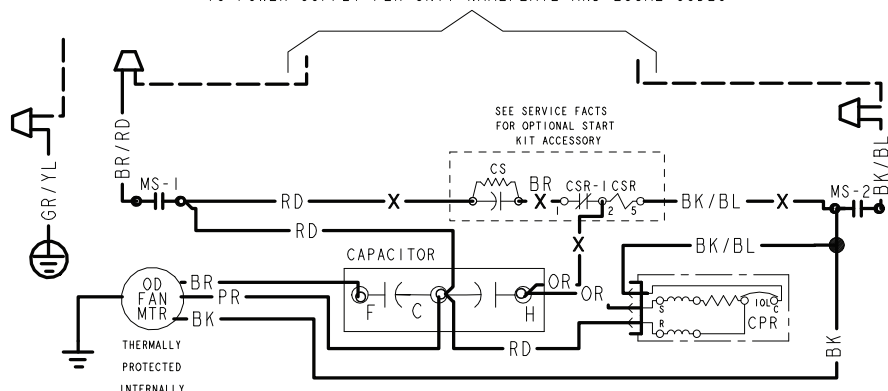
LEGEND

- 24 V } FACTORY
LINE WIRING
- - - 24 V } FIELD
LINE WIRING
- - - FIELD INSTALLED
FACTORY WIRING
- ⎓ MAGNETIC COIL
- ⏏ GROUND
- JUNCTION
- ⊕ CAPACITOR
- ⊞ WIRE NUT OR
- TERMINAL
- ⏏ TRANSFORMER
- ⏏ FUSE
- ⏏ TERMINAL BLOCK/BOARD
- ⏏ RELAY CONTACT (N.O.)
- ⏏ RELAY CONTACT (N.C.)
- ⏏ THERMISTOR
- ⏏ TEMP ACTUATED SWITCH
- ⏏ INTERNAL OVERLOAD PROTECTION
- ⏏ PRESSURE ACTUATED SWITCH
- ⏏ RESISTOR OR HEATING ELEMENT
- ⏏ MOTOR WINDING
- ⏏ POL. PLUG FEMALE HOUSING (MALE TERMINALS)
- ⏏ POL. PLUG MALE HOUSING (FEMALE TERMINALS)

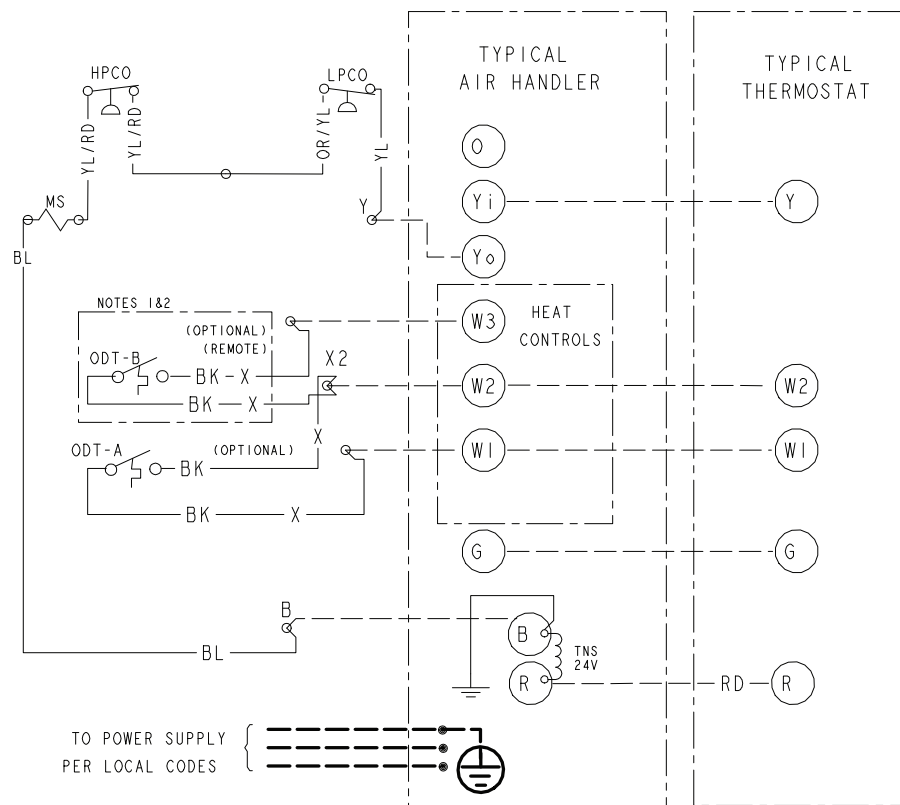


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TO POWER SUPPLY PER UNIT NAMEPLATE AND LOCAL CODES



LEGEND



- | | |
|------|-----------------------------|
| CF | FAN CAPACITOR |
| CN | WIRE CONNECTOR |
| CPR | COMPRESSOR |
| CR | RUN CAPACITOR |
| CS | STARTING CAPACITOR |
| CSR | CAPACITOR SWITCHING RELAY |
| ODT | OUTDOOR THERMOSTAT |
| HPCO | HIGH PRESSURE CUTOUT SWITCH |
| LPCO | LOW PRESSURE CUTOUT SWITCH |
| MS | COMPRESSOR MOTOR CONTACTOR |
| TNS | TRANSFORMER |
| IOL | INTERNAL OVERLOAD PROTECTOR |

 COLOR OF WIRE
 BK/BL
 COLOR OF MARKER

| | | | | | |
|----|-------|----|--------|----|--------|
| BK | BLACK | RD | RED | OR | ORANGE |
| BL | BLUE | WH | WHITE | GR | GREEN |
| BR | BROWN | YL | YELLOW | PR | PURPLE |
| PK | PINK | | | | |

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

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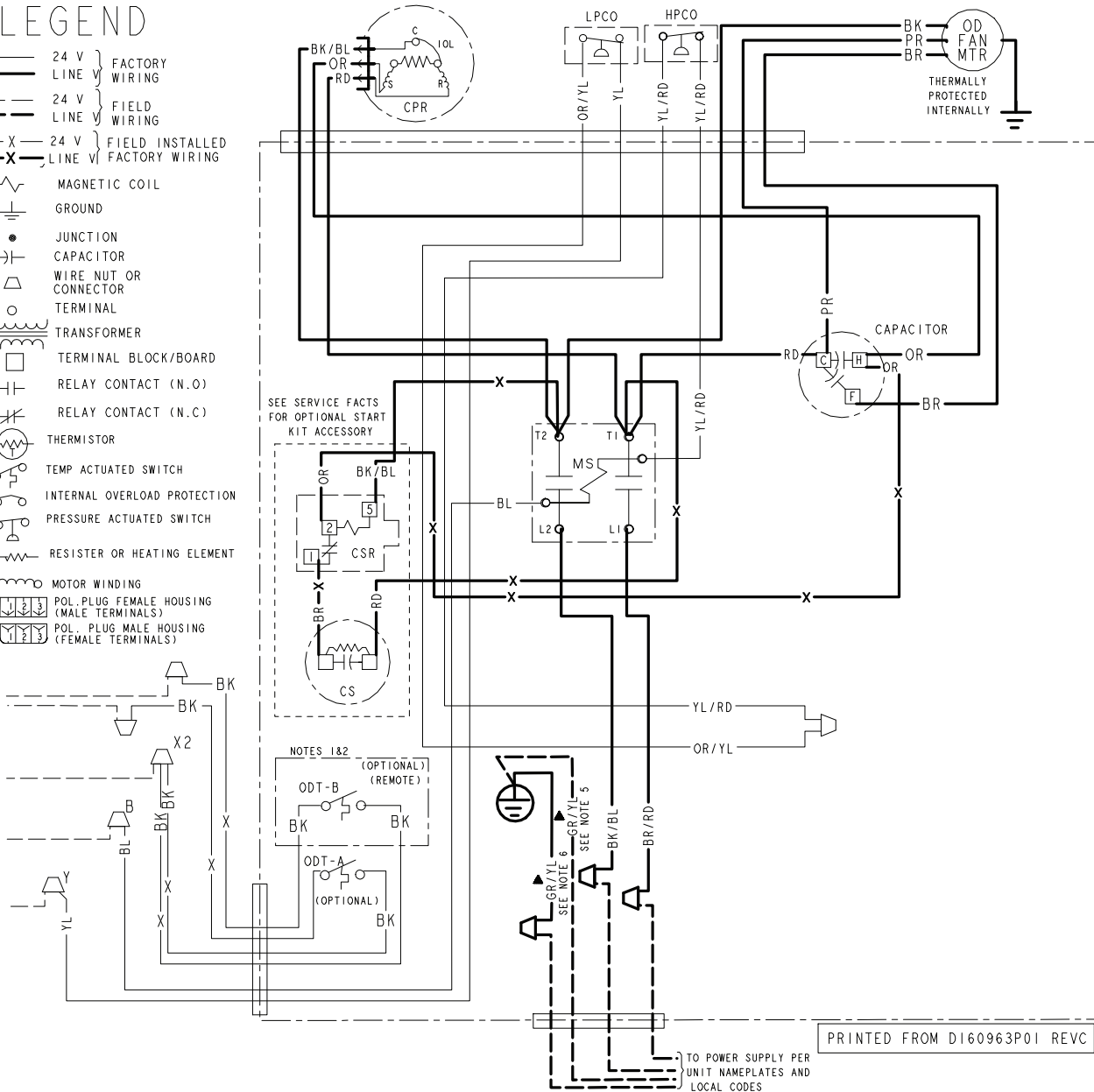
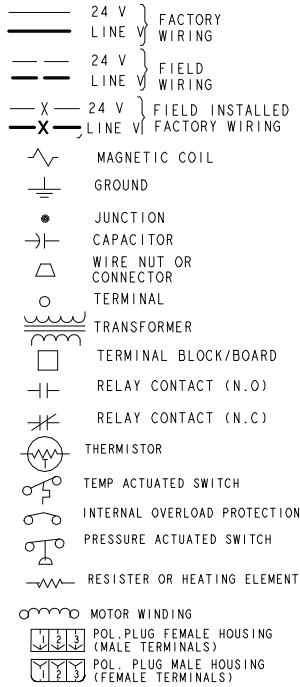
Schematic Diagrams

Figure 4. 060A Models

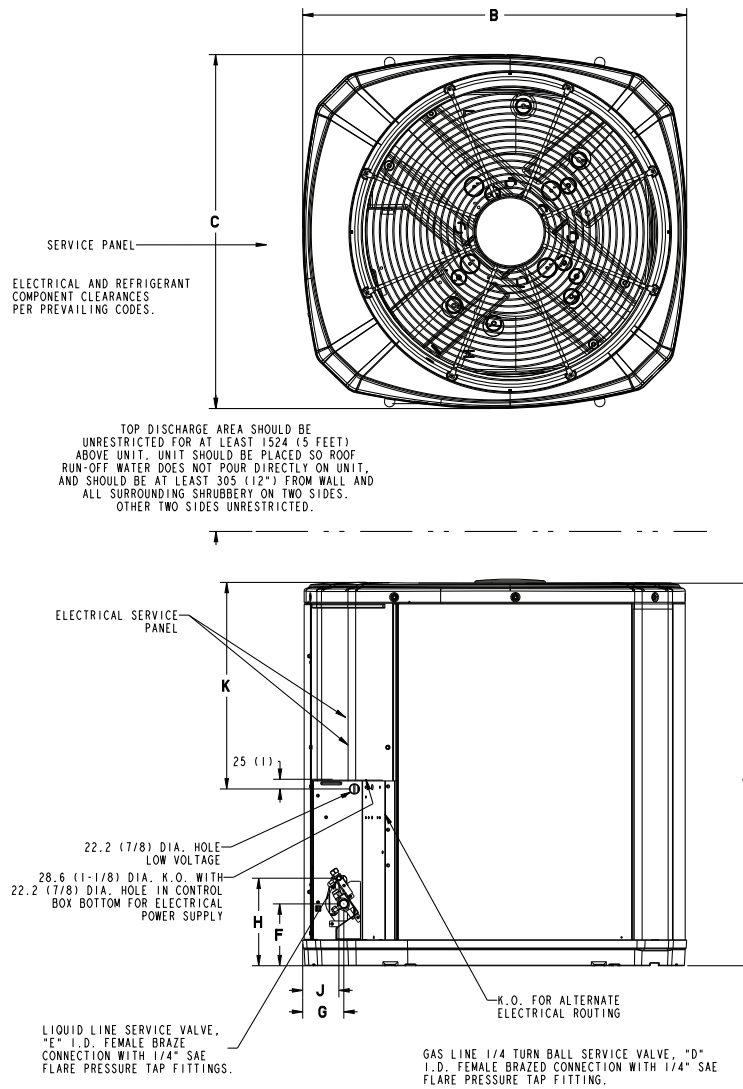
NOTES:

1. IF ODT-B IS NOT USED. ADD JUMPER BETWEEN W2 & W3 AT AIR HANDLER. IF USED, ODT-B MUST BE MOUNTED REMOTE OF CONTROL BOX IN AN APPROVED WEATHER PROOF ENCLOSURE.
2. IF ODT-A IS NOT USED. ADD JUMPER BETWEEN W1 & W2 AT AIR HANDLER.
3. LOW VOLTAGE (24 V) FIELD WIRING MUST BE 18 AWG MINIMUM.
4. USE COPPER CONDUCTORS ONLY!
- ▲ 5. FIELD GROUND MUST BE ATTACHED TO THE GROUND LUG ON THE RUNTRU AND AMERISTAR UNITS.
- ▲ 6. GROUND CONNECTION FOR TRANE/ AMERICAN STANDARD ONLY.

LEGEND



Outline Drawing



| Model | Base | A | B | C | D | E | F | G | H | J | K |
|-----------|------|------------------|-----------------|-----------------|-----|------|----------------|---------------|----------------|---------------|-------------|
| 5A7A4018A | 3 | 933 (36-3/4) | 829 (32-5/8) | 756 (29-3/4) | 3/4 | 5/16 | 143 (5-5/8) | 92 (3-5/8) | 210 (8-1/4) | 79 (3-1/8) | 508 (20) |
| 5A7A4024A | 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) |
| 5A7A4030A | 3 | 933 (36-3/4) | 829 (32-5/8) | 756 (29-3/4) | 3/4 | 5/16 | 143 (5-5/8) | 92 (3-5/8) | 210 (8-1/4) | 79 (3-1/8) | 508 (20) |
| 5A7A4036A | 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) |
| 5A7A4042A | 4 | 943 (37-1/8) | 946 (37-1/4) | 870 (34-1/4) | 7/8 | 5/16 | 143 (5-5/8) | 98 (3-7/8) | 219 (8-5/8) | 86 (3-3/8) | 508 (20) |
| 5A7A4048A | 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) |
| 5A7A4060A | 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.

BUILT TO A HIGHER STANDARD®

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HEATING & AIR CONDITIONING

About American Standard Heating and Air Conditioning

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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.