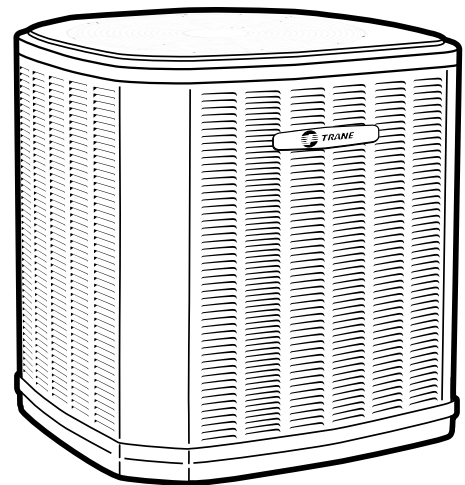




Product Data

Split System Heat Pump

5TWA4036A3000A
5TWA4042A3000A
5TWA4048A3000A
5TWA4060A3000A
5TWA4036A4000A
5TWA4042A4000A
5TWA4048A4000A
5TWA4060A4000A



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



Product Specifications

OUTDOOR UNIT ^(a)	5TWA4036A3000A	5TWA4042A3000A	5TWA4048A3000A	5TWA4060A3000A
POWER CONNS. - V/PH/HZ ^(b)	208/230/3/60	208/230/3/60	208/230/3/60	208/230/3/60
MIN. BRCH. CIR. AMPACITY	16.6	18.1	18.1	22.8
BR. CIR. PROT. RTG. - MAX. (AMPS)	25	30	30	35
COMPRESSOR	CLIMATUFF®- SCROLL	CLIMATUFF®- SCROLL	CLIMATUFF®- SCROLL	CLIMATUFF®- SCROLL
R.L. AMPS - L.R. AMPS	12.8 - 97.5	12.2 - 102.8	12.2 - 120.4	16.0 - 156.4
OUTDOOR FAN	PROPELLER	PROPELLER	PROPELLER	PROPELLER
DIA. (IN.) - NO. USED	27.5 - 1	27.5 - 1	27.5 - 1	27.5 - 1
NO. MOTORS - HP	1 - 1/8	1 - 1/3	1 - 1/3	1 - 1/3
F.L. AMPS	0.64	2.80	2.80	2.80
OUTDOOR COIL - TYPE	SPINE FIN™	SPINE FIN™	SPINE FIN™	SPINE FIN™
REFRIGERANT				
LBS. - R-454B (O.D. UNIT)	5 LBS., 10 OZ	7 LBS., 14 OZ	8 LBS., 9 OZ	8 LBS., 6 OZ
LINE SIZE - IN. O.D. GAS ^{(c) (d)}	3/4	7/8	7/8	7/8
LINE SIZE - IN. O.D. LIQ.	5/16	5/16	5/16	5/16
CHARGING SPECIFICATIONS				
SUBCOOLING	10°F	10°F	10°F	10°F
DIMENSIONS	H X W X D	H X W X D	H X W X D	H X W X D
CRATED (IN.)	38.5 x 35 x 37.9	50.5 x 35 x 37.9	50.5 x 35 x 37.9	50.5 x 35 x 37.9
WEIGHT				
SHIPPING (LBS.)	256	301	301	301
NET (LBS.)	222	251	251	251
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	BAYECMT004	BAYECMT004	BAYECMT004	BAYECMT004
Sound enclosure	BAYSDEN003	BAYSDEN004	BAYSDEN004	BAYSDEN004
Seacoast Kit	BAYSEAC001	BAYSEAC001	BAYSEAC001	BAYSEAC001
Low Ambient Kit	BAYLOAM107	BAYLOAM103	BAYLOAM103	BAYLOAM103
Service Valve Panel Cover	TAYSVPANL0044AA	TAYSVPANL0046AA	TAYSVPANL0046AA	TAYSVPANL0046AA
Refrigerant Lineset ^(e)				

(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 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

OUTDOOR UNIT ^(a)	5TWA4036A4000A	5TWA4042A4000A	5TWA4048A4000A	5TWA4060A4000A
POWER CONNS. - V/PH/HZ ^(b)	460/3/60	460/3/60	460/3/60	460/3/60
MIN. BRCH. CIR. AMPACITY	6.8	8.6	9.4	11
BR. CIR. PROT. RTG. - MAX. (AMPS)	15	15	15	15
COMPRESSOR	CLIMATUFF®- SCROLL	CLIMATUFF®- SCROLL	CLIMATUFF®- SCROLL	CLIMATUFF®- SCROLL
R.L. AMPS - L.R. AMPS	5.1 - 44.3	5.8 - 50	6.4 - 50	7.7 - 69
OUTDOOR FAN	PROPELLER	PROPELLER	PROPELLER	PROPELLER
DIA. (IN.) - NO. USED	27.5 -1	27.5 -1	27.5 -1	27.5 -1
NO. MOTORS - HP	1 - 1/8	1 - 1/3	1 - 1/3	1 - 1/3
F.L. AMPS	0.38	1.4	1.4	1.4
OUTDOOR COIL - TYPE	SPINE FIN™	SPINE FIN™	SPINE FIN™	SPINE FIN™
REFRIGERANT				
LBS. - R-454B (O.D. UNIT)	5 LBS., 10 OZ	7 LBS., 14 OZ	8 LBS., 9 OZ	8 LBS., 6 OZ
LINE SIZE - IN. O.D. GAS ^{(c) (d)}	3/4	7/8	7/8	7/8
LINE SIZE - IN. O.D. LIQ.	5/16	5/16	5/16	5/16
CHARGING SPECIFICATIONS				
SUBCOOLING	10°F	10°F	10°F	10°F
DIMENSIONS	H X W X D	H X W X D	H X W X D	H X W X D
CRATED (IN.)	38.5 x 35 x 37.9	50.5 x 35 x 37.9	50.5 x 35 x 37.9	50.5 x 35 x 37.9
WEIGHT				
SHIPPING (LBS.)	256	301	301	301
NET (LBS.)	222	251	251	251
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	BAYECMT004	BAYECMT004	BAYECMT004	BAYECMT004
Sound enclosure	BAYSDEN003	BAYSDEN004	BAYSDEN004	BAYSDEN004
Crankcase kit	BAYCCHT302	BAYCCHT301	BAYCCHT301	BAYCCHT301
Start Kit	BAYKSKT263	BAYKSKT263	BAYKSKT263	BAYKSKT263
Seacoast Kit	BAYSEAC001	BAYSEAC001	BAYSEAC001	BAYSEAC001
Low Ambient Kit	BAYLOAM107	BAYLOAM103	BAYLOAM103	BAYLOAM103
Service Valve Panel Cover	TAYSVPANL3343AA	TAYSVPANL0046AA	TAYSVPANL0046AA	TAYSVPANL0046AA
Refrigerant Lineset ^(e)				

^(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 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
5TWA4036A3	76	78	75	77	75	70	64	61	56
5TWA4042A3	74	72	72	71	69	70	62	57	52
5TWA4048A3	74	72	72	71	69	70	62	57	52
5TWA4060A3	76	78	75	77	75	70	64	61	56
5TWA4036A4	76	78	75	77	75	70	64	61	56
5TWA4042A4	74	72	72	71	69	70	62	57	52
5TWA4048A4	74	72	72	71	69	70	62	57	52
5TWA4060A4	76	78	75	77	75	70	64	61	56

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.

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

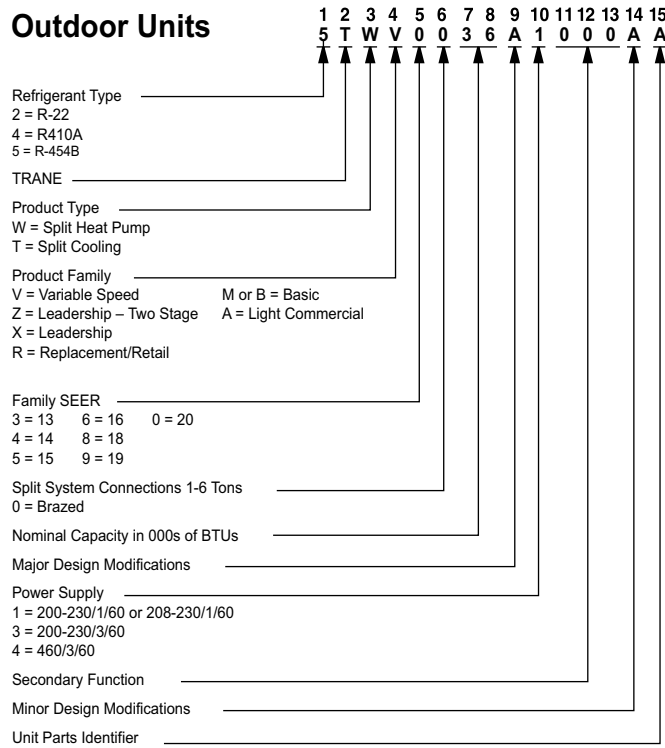
AHRI Standard 210/240 Rating Conditions

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 outdoor 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

Outdoor Units



Wiring Diagram

Figure 1. 036A3 Model

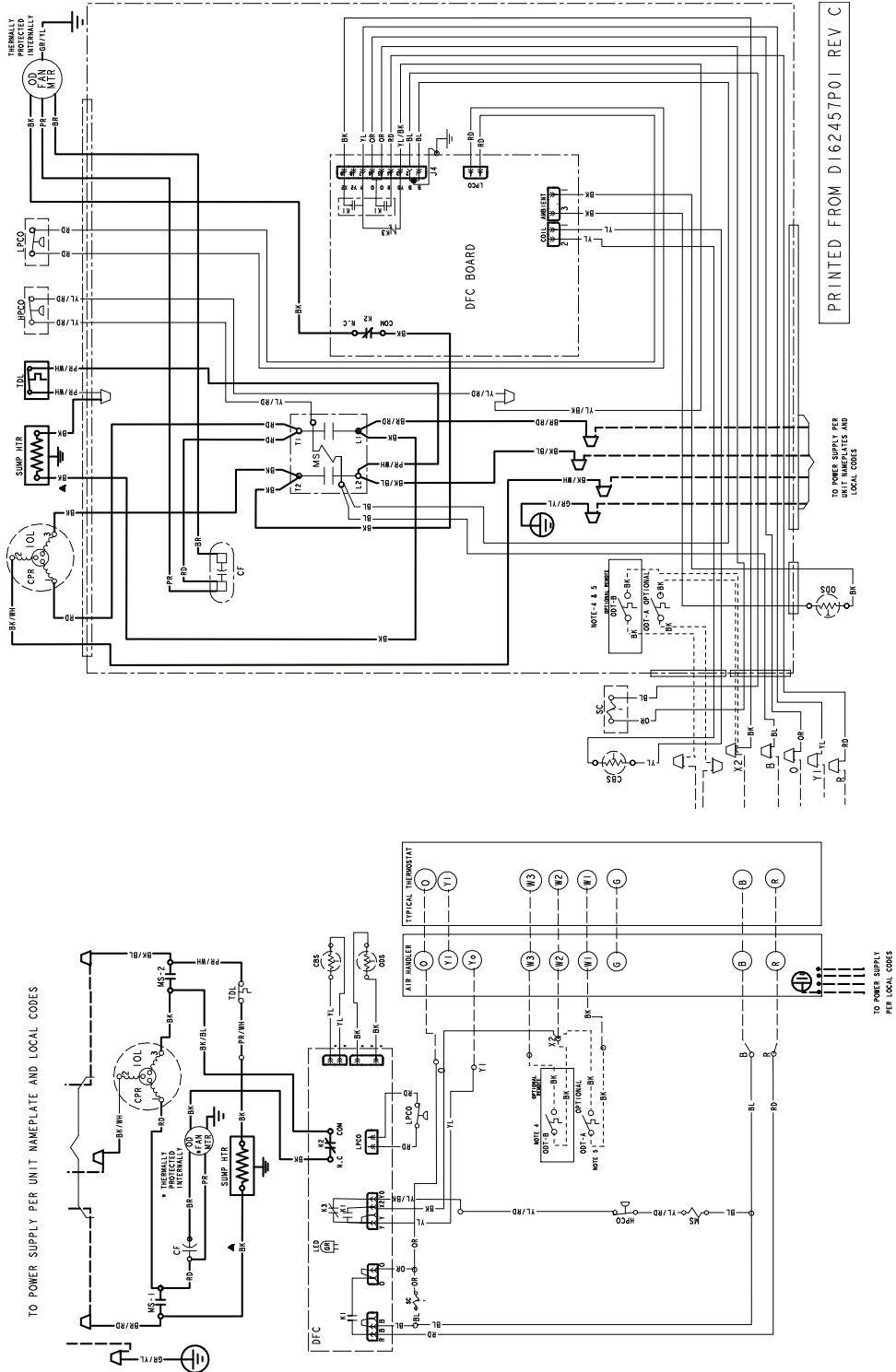


Figure 2. 042A3, 048A3, and 060A3 Models

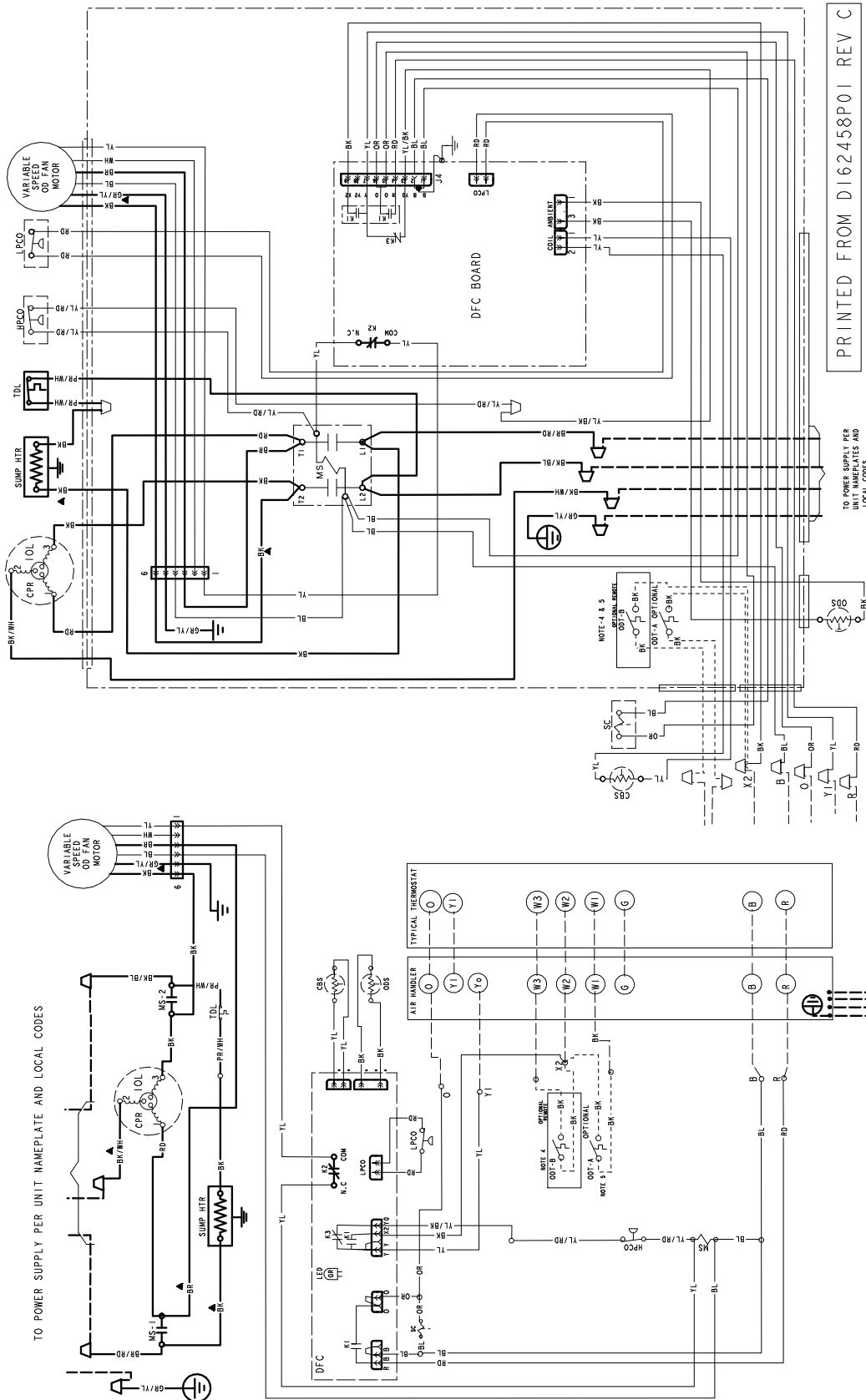


Figure 3. 036A4 Model

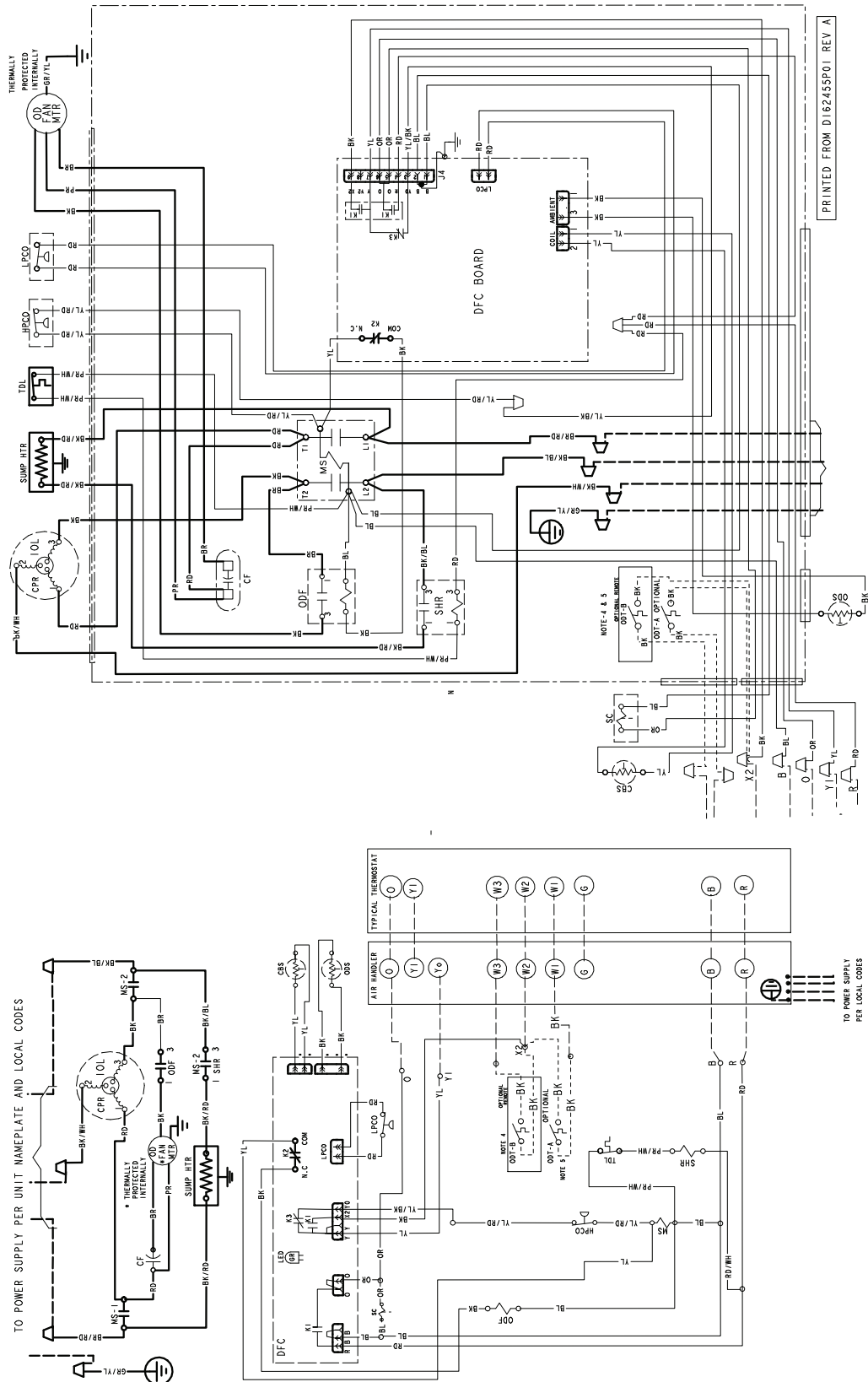
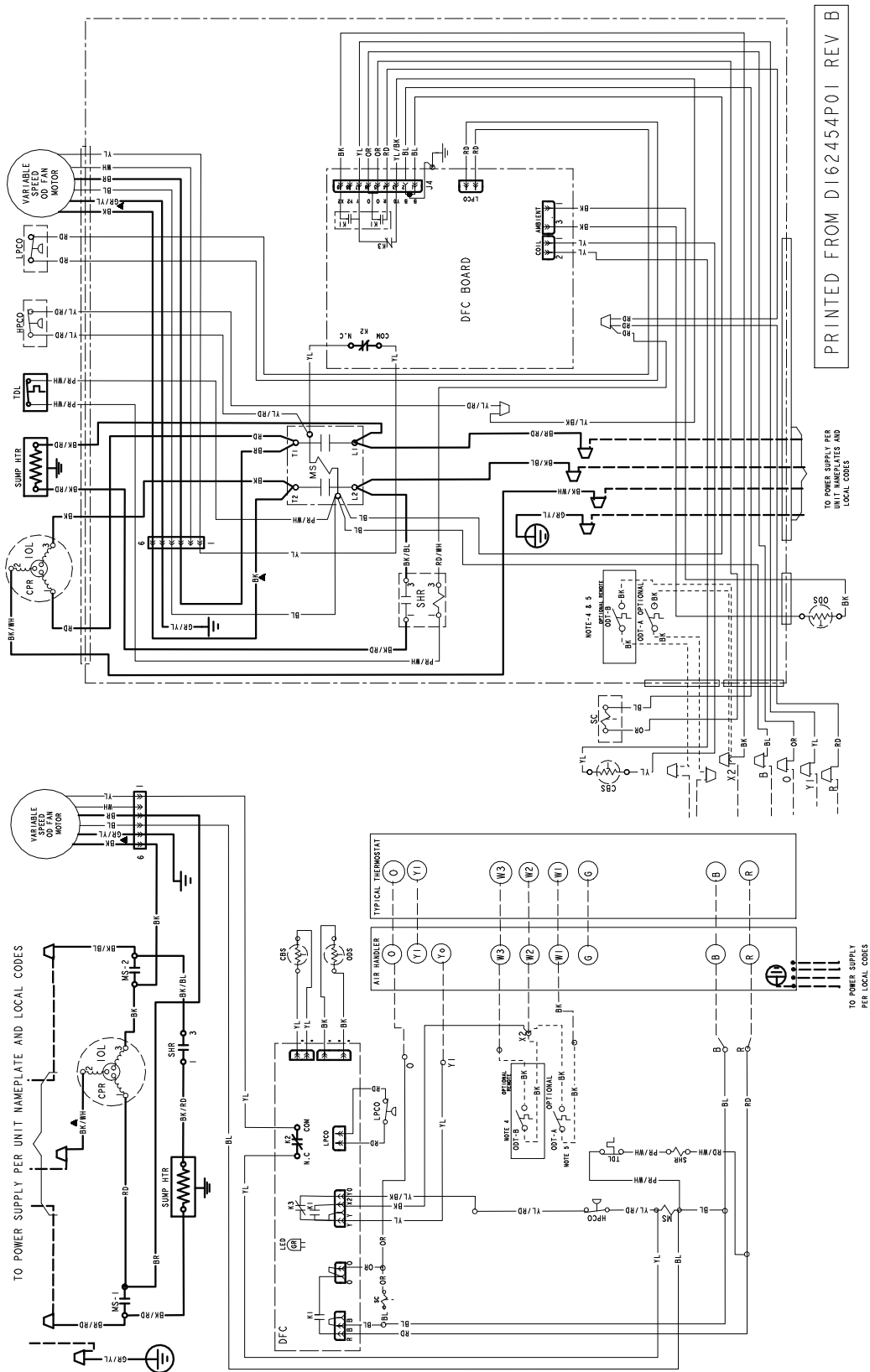


Figure 4. 042A4, 048A4, and 060A4 Models



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TO POWER SUPPLY PER UNIT NAMEPLATE AND LOCAL CODES

TO POWER SUPPLY PER LOCAL CODES

Figure 5. Legends and Warnings

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, IF ODT-B IS NOT USED, ADD JUMPER BETWEEN W2 AND W3 AT AIR HANDLER, IF USED, ODT-B MUST BE MOUNTED REMOTE OF CONTROL BOX IN AN APPROVED WEATHERPROOF ENCLOSURE
5. IF ODT-A IS NOT USED, ADD JUMPER BETWEEN W1 AND W2 AT AIR HANDLER

LEGEND

<p>— 24 V } FACTORY LINE WIRING</p> <p>— 24 V } FIELD LINE WIRING</p> <p>--- FIELD INSTALLED FACTORY WIRING</p> <p>□ TERMINAL BLOCK/BOA</p> <p>⏏ RELAY CONTACT (N.C)</p> <p>⏏ RELAY CONTACT (N.C)</p> <p>⊕ THERMISTOR</p> <p>⊕ MOTOR WINDING</p> <p>⊕ MAGNETIC COIL</p> <p>⊕ GROUND</p> <p>● JUNCTION</p> <p>⊕ CAPACITOR</p> <p>△ WIRE NUT OR</p> <p>○ TERMINAL</p> <p>⊕ FUSE</p>	<p>← COLOR OF WIRE</p> <p>BK/BL ← COLOR OF MARKER</p> <table border="0"> <tr> <td>BK BLACK</td> <td>RD RED</td> <td>OR ORANGE</td> </tr> <tr> <td>BL BLUE</td> <td>WH WHITE</td> <td>GR GREEN</td> </tr> <tr> <td>BR BROWN</td> <td>YL YELLOW</td> <td>PR PURPLE</td> </tr> <tr> <td>PK PINK</td> <td></td> <td></td> </tr> </table> <p>⊕ TRANSFORMER</p> <p>⊕ INTERNAL OVERLOAD PROTECTION</p> <p>⊕ PRESSURE ACTUATED SWITCH</p> <p>⊕ RESISTER OR HEATING ELEMENT</p> <p>⊕ POL. PLUG FEMALE HOUSING (MALE TERMINALS)</p> <p>⊕ POL. PLUG MALE HOUSING (FEMALE TERMINALS)</p> <p>⊕ SINGLE INLINE CONNECTOR</p> <p>HPCO HIGH PRESSURE CUTOUT SWITCH</p> <p>IOL INTERNAL OVERLOAD PROTECTOR</p> <p>LPCO LOW PRESSURE CUTOUT SWITCH</p> <p>MS COMPRESSOR MOTOR CONTACTOR</p> <p>ODA OUTDOOR ANTICIPATOR</p>	BK BLACK	RD RED	OR ORANGE	BL BLUE	WH WHITE	GR GREEN	BR BROWN	YL YELLOW	PR PURPLE	PK PINK			<p>ACR A/C RECTIFIER</p> <p>CBS COIL BOTTOM SENSOR</p> <p>CF FAN CAPACITOR</p> <p>CN WIRE CONNECTOR</p> <p>CPR COMPRESSOR</p> <p>CR RUN CAPACITOR</p> <p>CS STARTING CAPACITOR</p> <p>CSR CAPACITOR SWITCHING RELAY</p> <p>DFC DEFROST CONTROL</p> <p>EEV ELECTRONIC EXP VALVE</p> <p>EEVC ELECTRONIC EXP VALVE CONTROL</p> <p>F INDOOR FAN RELAY</p> <p>OFT OUTDOOR FAN THERMOSTAT</p> <p>ODS OUTDOOR TEMPERATURE SENSOR</p> <p>ODT OUTDOOR THERMOSTAT</p> <p>P-TRD PRESSURE TRANSDUCER</p> <p>SC SWITCH OVER VALVE SOLENOID</p> <p>SHR SUMP HEATER RELAY</p> <p>SM SYSTEM ON-OFF SWITCH</p> <p>TDL DISCHARGE LINE THERMOSTAT</p> <p>TNS TRANSFORMER</p> <p>TEMP SENSOR, TEMPERATURE</p> <p>Y2C HIGH CAPACITY CONTROL RELAY</p>
BK BLACK	RD RED	OR ORANGE												
BL BLUE	WH WHITE	GR GREEN												
BR BROWN	YL YELLOW	PR PURPLE												
PK PINK														

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

⚠ WARNING

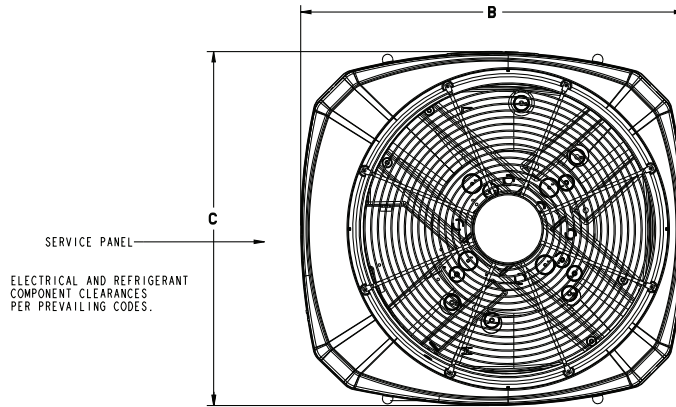
HAZARDOUS VOLTAGE!
DISCONNECT ALL ELECTRICAL POWER INCLUDING REMOTE DISCONNECTS BEFORE SERVICING.
Failure to disconnect power before servicing can cause severe personal injury or death.

⚠ CAUTION

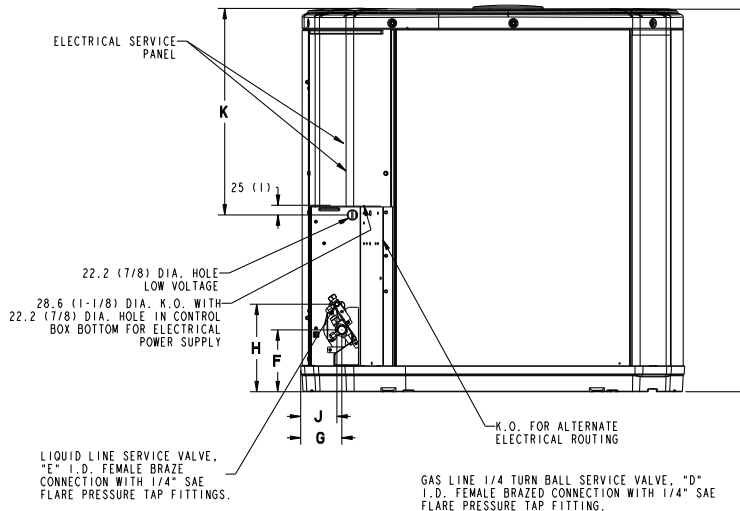
USE COPPER CONDUCTORS ONLY!
UNIT TERMINALS ARE NOT DESIGNED TO ACCEPT OTHER TYPES OF CONDUCTORS. Failure to do so may cause damage to the equipment.

- ▲ NOTE:
- MATERIAL: WHITE POLYPROPYLENE SUITABLE FOR USE IN OUTDOOR ENVIRONMENT.
 - ADHESIVE: PRESSURE SENSITIVE ADHESIVE WITH RELEASE PAPER SUITABLE FOR OUTDOOR APPLICATION ON PAINTED OR GALVANIZED SHEET METAL SURFACES
 - SIZE: 6 1/2" X 11"

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.



LIQUID LINE SERVICE VALVE, "E" I.D. FEMALE BRAZE CONNECTION WITH 1/4" SAE FLARE PRESSURE TAP FITTINGS.

GAS LINE 1/4 TURN BALL SERVICE VALVE, "D" I.D. FEMALE BRAZED CONNECTION WITH 1/4" SAE FLARE PRESSURE TAP FITTING.

Model	Base	A	B	C	D	E	F	G	H	J	K
5TWA4036-A3000A	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)
5TWA4042-A3000A	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)
5TWA4048-A3000A	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)
5TWA4060-A3000A	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)
5TWA4036-A4000A	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)
5TWA4042-A4000A	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)
5TWA4048-A4000A	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)
5TWA4060-A4000A	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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