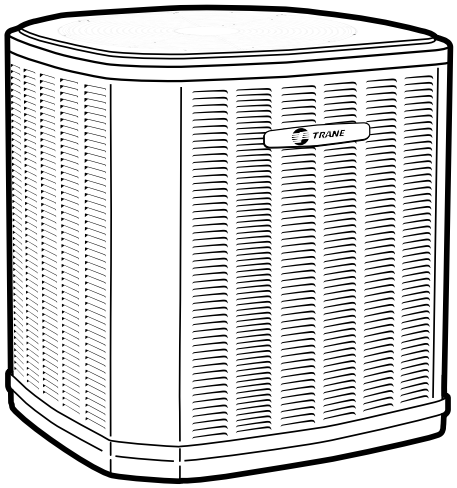
Product and Submittal Data

Split System Heat Pump

5TWR5018A1000A
5TWR5024A1000A
5TWR5030A1000A
5TWR5036A1000A
5TWR5042A1000A
5TWR5048A1000A
5TWR5060A1000A



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

June 2025

ODR-PSD017A-EN

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Data Notes

This document supersedes and includes data from the documents listed below.

Table 1. Data notes

Literature Number	Title
22-1993-1*-EN	Split System Heat Pump 5TWR5 Product Data
5TWR5018A-SUB-1*	Submittal Split System Heat Pump 5TWR5018A1000A
5TWR5024A-SUB-1*	Submittal Split System Heat Pump 5TWR5024A1000A
5TWR5030A-SUB-1*	Submittal Split System Heat Pump 5TWR5030A1000A
5TWR5036A-SUB-1*	Submittal Split System Heat Pump 5TWR5036A1000A
5TWR5042A-SUB-1*	Submittal Split System Heat Pump 5TWR5042A1000A
5TWR5048A-SUB-1*	Submittal Split System Heat Pump 5TWR5048A1000A
5TWR5060A-SUB-1*	Submittal Split System Heat Pump 5TWR5060A1000A

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Product Specifications

Table 2. 5TWR5018 – 5TWR5036

Model No. [a] [b]	5TWR5018A1000A	5TWR5024A1000A	5TWR5030A1000A	5TWR5036A1000A
Power Conns. – V/Ph/Hz [c]	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
No. Used – No. Stages	1 – 1	1 – 1	1 – 1	1 – 1
Volts/Ph/Hz	208/230/1/60	208/230/1/60	208/230/1/60	208/230/1/60
RL Amps [d] – LR Amps	7.8 - 47.5	9.1 - 75.9	10.4 - 71.0	13.5 - 75
Factory Installed				
Start Components [e]	NO (Uses BAYSKT263)	NO (Uses BAYSKT263)	NO (Uses BAYSKT263)	NO (Uses BAYSKT263)
Insulation/Sound Blanket	NO	NO	NO	NO
Compressor Heat	NO	NO	NO	NO
Outdoor Fan	PROPELLER	PROPELLER	PROPELLER	PROPELLER
DIA. (in.) Used	23 – 1	23 – 1	23 – 1	27.5 – 1
Type Drive – No. Speeds	DIRECT – 1	DIRECT – 1	DIRECT – 1	DIRECT – 1
CFM @ 0.0 (in.) W.G. [f]	2980	2980	2820	4230
No. Motors – HP	1 – 1/8	1 – 1/8	1 – 1/8	1 – 1/8
Motor Speed R.P.M.	850	850	850	850
Volts/Ph/Hz	208/230/1/60	208/230/1/60	208/230/1/60	200/230/1/60
F.L. Amps	0.77	0.77	0.77	0.64
Outdoor Coil – Type	SPINE FIN™	SPINE FIN™	SPINE FIN™	SPINE FIN™
Rows – F.P.I.	1 – 24	1 – 24	1 – 24	1 – 24
Face Area (Sq. Ft.)	18.75	18.75	18.75	24
Tube Size (in.)	3/8	3/8	3/8	3/8
Refrigerant Control	Expansion Valve	Expansion Valve	Expansion Valve	Expansion Valve
Refrigerant				
LBS. – R-454B (O.D. Unit) [g]	4 LBS., 12 OZ	4 LBS., 10 OZ	4 LBS., 10 OZ	5 LBS., 10 OZ
Factory Supplied	YES	YES	YES	YES
Line Size – (in.) O.D. Gas [h] [i]	3/4	3/4	3/4	3/4
Line Size – (in.) O.D. Liq.	5/16	5/16	5/16	5/16
Charging Specifications				
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
Net (lbs.)	174	174	174	222
Optional Accessories:				
Anti-short Cycle Timer	TAYASCT501A	TAYASCT501A	TAYASCT501A	TAYASCT501A
Evaporator Defrost Control	—	—	—	—
Rubber Isolator Kit	BAYISLT101	BAYISLT101	BAYISLT101	BAYISLT101

Table 2. 5TWR5018 – 5TWR5036 (continued)

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 (j)				

(a) Certified in accordance with the Air-Source Unitary Air-conditioner Equipment certification program, which is based on AHRI standard 210/240.
(b) Rated n accordance with AHRI standard 270.
(c) Calculated in accordance with N.E.C. Only use HACR circuit breakers or fuses.
(d) This value shown for compressor RLA on the unit nameplate and on this specification sheet is used to compute minimum branch circuit ampacity and max. fuse size. The values shown is the branch ircuit selection current.
(e) No means no start components. Yes means quick start kit components. PTC means positive temperature co-efficient starter. Optional kit shown.
(f) Standard Air– Dry Coil– Outdoor.
(g) This value approximate. For more precise value see unit nameplate.
(h) 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-xx) for long line sets or specialty applications (xx denotes latest revision).
(i) 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.
(j) 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.

Table 3. 5TWR5042 – 5TWR5060

Model No. (a) (b)	5TWR5042A1000A	5TWR5048A1000A	5TWR5060A1000A
Power Conns. – V/Ph/Hz (c)	208/230/1/60	208/230/1/60	208/230/1/60
Min. BRCH. CIR. Ampacity	24	25	33
BR. CIR. PROT. RTG. – Max. (Amps)	40	40	50
Compressor	CLIMATUFF® - SCROLL	CLIMATUFF® - SCROLL	CLIMATUFF® - SCROLL
No. Used – No. Stages	1 – 1	1 – 1	1 – 1
Volts/Ph/Hz	208/230/1/60	208/230/1/60	208/230/1/60
RL Amps (d) – LR Amps	16.9 – 104.7	18.1 – 95.0	22.3 - 136.6
Factory Installed			
Start Components (e)	NO (Uses BAYSKT263)	NO (Uses BAYSKT263)	NO (Uses BAYSKT263)
Insulation/Sound Blanket	NO	NO	NO
Compressor Heat	NO	NO	NO
Outdoor Fan	PROPELLER	PROPELLER	PROPELLER
DIA. (in.) Used	27.5 – 1	27.5 – 1	27.5 – 1
Type Drive – No. Speeds	DIRECT – 1	DIRECT – 1	DIRECT – 1
CFM @ 0.0 (in.) W.G. (f)	4992	4992	4992
No. Motors – HP	1 – 1/3	1 – 1/3	1 – 1/3
Motor Speed R.P.M.	850	850	850
Volts/Ph/Hz	200/230/1/60	208/230/1/60	208/230/1/60
F.L. Amps	2.80	2.80	2.80
Outdoor Coil – Type	SPINE FIN™	SPINE FIN™	SPINE FIN™
Rows – F.P.I.	2 - 24	2 - 24	2 - 24
Face Area (Sq. Ft.)	30.8	30.8	30.8
Tube Size (in.)	3/8	3/8	3/8
Refrigerant Control	Expansion Valve	Expansion Valve	Expansion Valve
Refrigerant			
LBS. – R-454B (O.D. Unit) (g)	7 LBS., 14 OZ	8 LBS., 9 OZ	8 LBS., 6 OZ

Table 3. 5TWR5042 – 5TWR5060 (continued)

Factory Supplied	YES	YES	YES
Line Size – (in.) O.D. Gas [h] [i]	7/8	7/8	7/8
Line Size – (in.) O.D. Liq.	5/16	5/16	5/16
Charging Specifications			
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
Net (lbs.)	251	251	251
Optional Accessories:			
Anti-short Cycle Timer	TAYASCT501A	TAYASCT501A	TAYASCT501A
Evaporator Defrost Control	—	—	—
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 [j]			

[a] Certified in accordance with the Air-Source Unitary Air-conditioner Equipment certification program, which is based on AHRI standard 210/240.
[b] Rated n accordance with AHRI standard 270.
[c] Calculated in accordance with N.E.C. Only use HACR circuit breakers or fuses.
[d] This value shown for compressor RLA on the unit nameplate and on this specification sheet is used to compute minimum branch circuit ampacity and max. fuse size. The values shown is the branch ircuit selection current.
[e] No means no start components. Yes means quick start kit components. PTC means positive temperature co-efficient starter. Optional kit shown.
[f] Standard Air– Dry Coil– Outdoor.
[g] This value approximate. For more precise value see unit nameplate.
[h] 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-xx) for long line sets or specialty applications (xx denotes latest revision).
[i] 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.
[j] 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

Table 4. 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
5TWR5018A	71	77	72	68	68	69	60	53	47
5TWR5024A	71	77	72	68	68	69	60	53	47
5TWR5030A	71	77	72	68	68	69	60	53	47
5TWR5036A	70	75	69	68	68	66	62	57	51
5TWR5042A	72	77	75	72	70	67	62	59	52
5TWR5048A	72	77	75	72	70	67	62	59	52
5TWR5060A	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 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

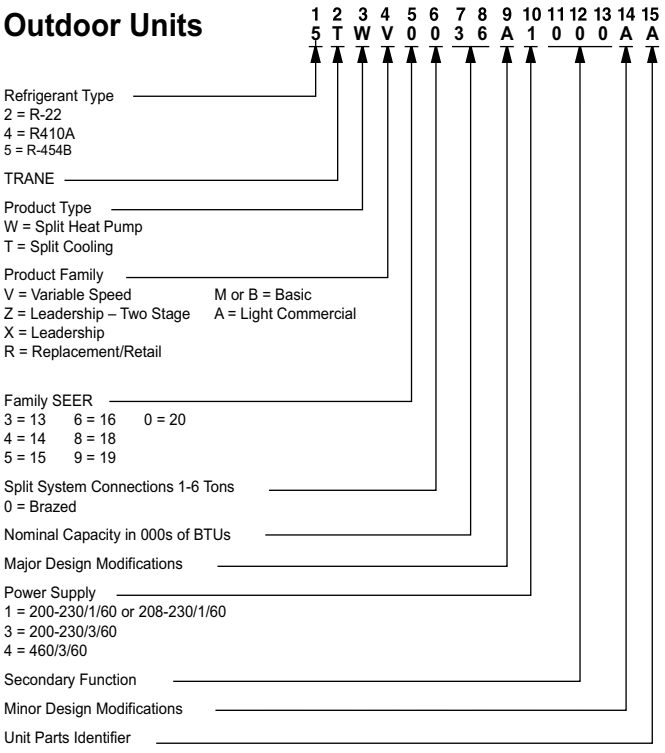
AHRI Standard 210/240 Rating Conditions

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.

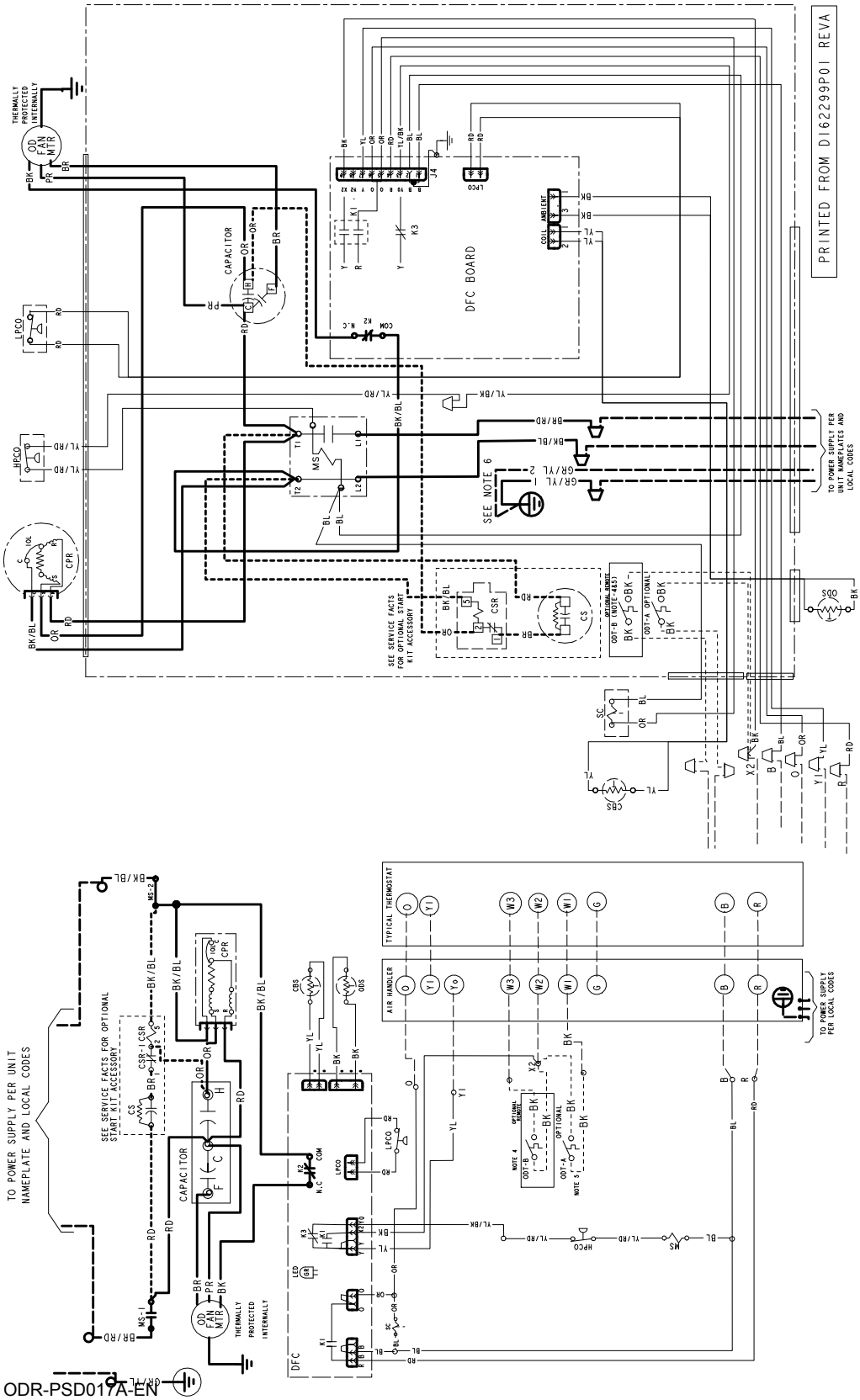
Model Nomenclature

Outdoor Units



Wiring Diagram

Figure 1. 5TWR5018A, 24A, 30A, 36A models



Wiring Diagram

Figure 2. 5TWR5042A, 48A, 60A models

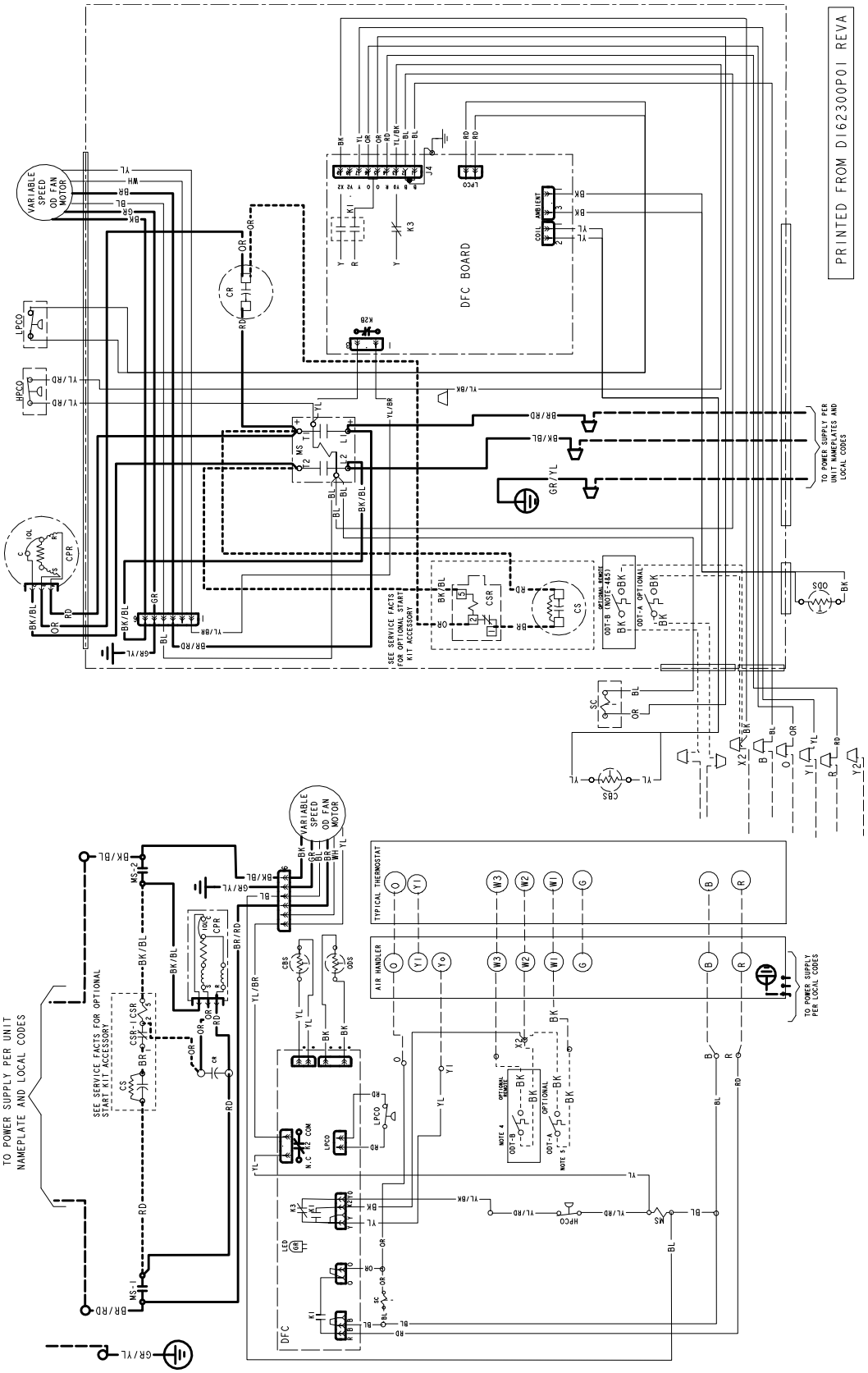
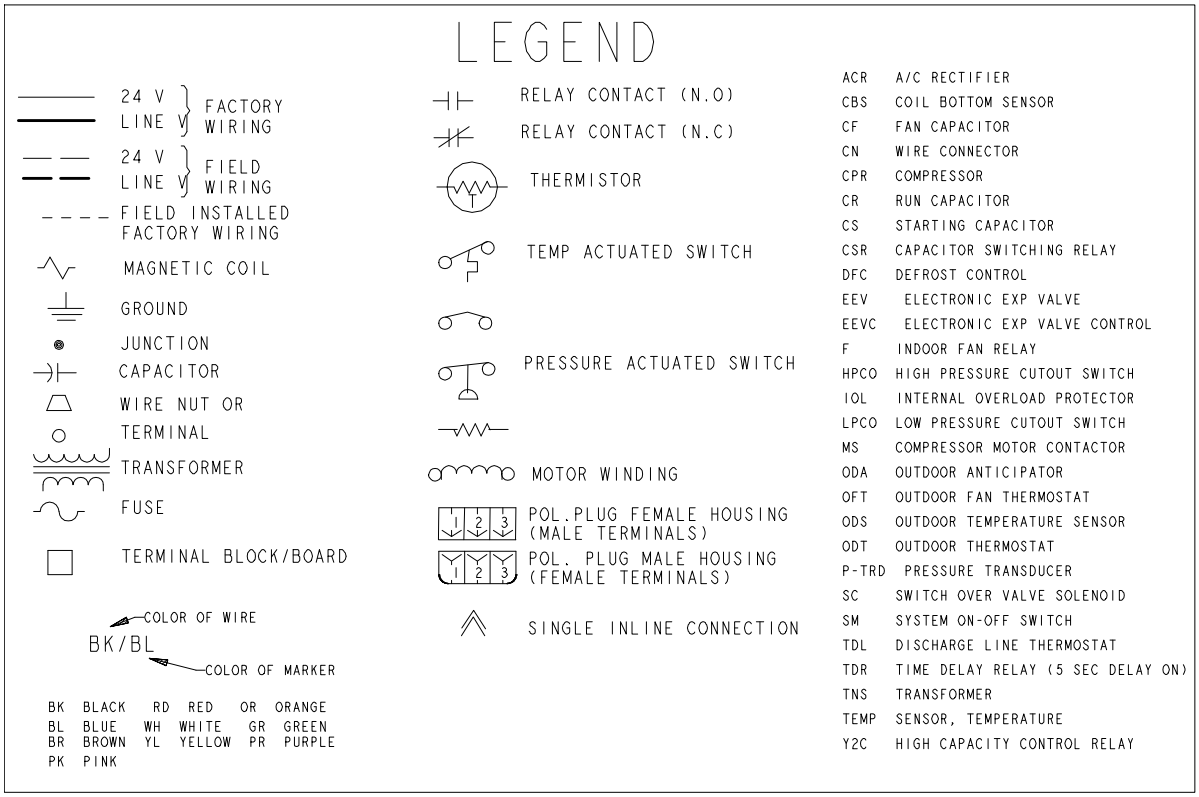


Figure 3. Legend and warnings

NOTES:

1. BE SURE POWER SUPPLY AGREESWITH 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.



⚠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.

⚠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.

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

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

Dimensional Data

Figure 4. Dimensional data

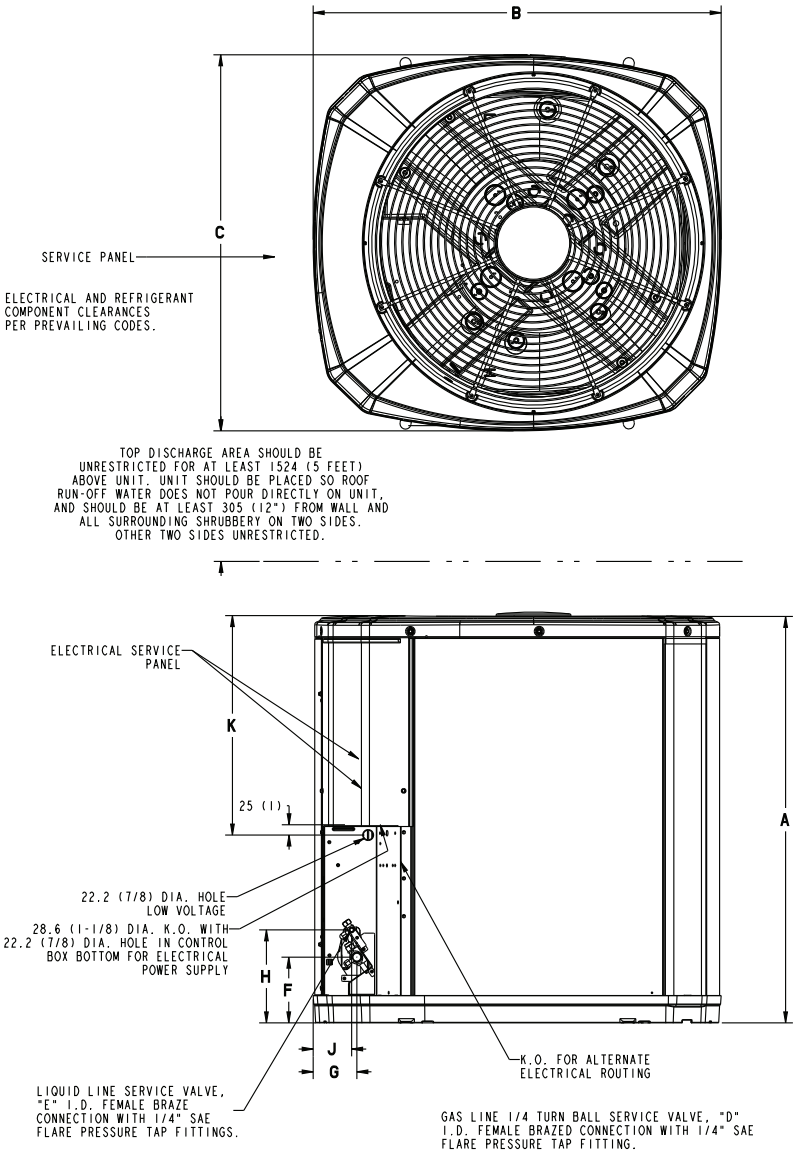


Table 5. Unit dimensions

Model	Base	A	B	C	D	E	F	G	H	J	K
5TWR5018A	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)
5TWR5024A	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)
5TWR5030A	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)
5TWR5036A	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)
5TWR5042A	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)
5TWR5048A	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)
5TWR5060A	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.

Notes

Trane - by Trane Technologies (NYSE: TT), a global innovator - creates comfortable, energy efficient indoor environments for commercial and residential applications. For more information, please visit trane.com or tranetechnologies.com.

The AHRI Certified mark indicates Trane U.S. Inc. participation in the AHRI Certification program. For verification of individual certified products, go to ahridirectory.org.

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Supersedes (New)