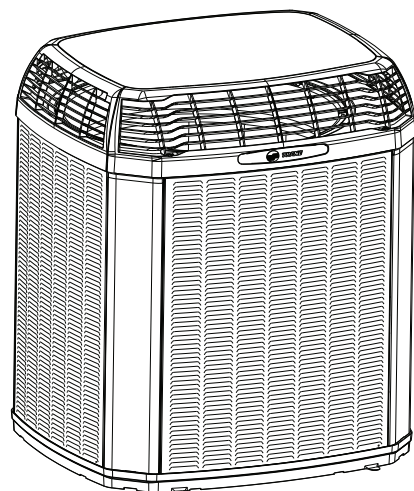




Product and Submittal Data

Split System Heat Pump

5TWX5018A1000A
5TWX5024A1000A
5TWX5030A1000A
5TWX5036A1000A
5TWX5042A1000A
5TWX5048A1000A
5TWX5060A1000A



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



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Data Notes

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

Table 1. Data notes

Literature Number	Title
22-1994-1*-EN	Split System Heat Pump 5TWX5 Product Data
5TWX5018A-SUB-1*	Submittal Split System Heat Pump 5TWX5018A1000A
5TWX5024A-SUB-1*	Submittal Split System Heat Pump 5TWX5024A1000A
5TWX5030A-SUB-1*	Submittal Split System Heat Pump 5TWX5030A1000A
5TWX5036A-SUB-1*	Submittal Split System Heat Pump 5TWX5036A1000A
5TWX5042A-SUB-1*	Submittal Split System Heat Pump 5TWX5042A1000A
5TWX5048A-SUB-1*	Submittal Split System Heat Pump 5TWX5048A1000A
5TWX5060A-SUB-1*	Submittal Split System Heat Pump 5TWX5060A1000A



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Product Specifications

Table 2. 5TWX5018 – 5TWX5036

Model No. (a) (b)	5TWX5018A1000A	5TWX5024A1000A	5TWX5030A1000A	5TWX5036A1000A
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	CLIMATAUFF® - 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 BAYKSKT263)	No (Uses BAYKSKT263)	No (Uses BAYKSKT263)	No (Uses BAYKSKT263)
Insulation/ Sound Blanket	NO	NO	NO	NO
Compressor Heat	NO	NO	NO	NO
Outdoor Fan	PROPELLER	PROPELLER	PROPELLER	PROPELLER
DIA. (in.) – No. 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	0.64	0.64	0.64	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	16.3	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.)	42.9 x 30 x 33	42.9 x 30 x 33	42.9 x 30 x 33	43.8 x 35 x 37.9
Weight				
Shipping (lbs.)	218	218	218	266

Table 2. 5TWX5018 – 5TWX5036 (continued)

Net (lbs.)	184	184	184	232
Optional Accessories:				
Anti-short Cycle Timer	TAYASCT501A	TAYASCT501A	TAYASCT501A	TAYASCT501A
Evaporator Defrost Control	—	—	—	—
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	BAYLOAM107
Refrigerant Lineset ⁽ⁱ⁾				

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

(b) Rated in 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 value shown is the branch circuit selection current.

(e) No means no start components. Yes means quick start kit components. PTC means positive temperature coefficient 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. 5TWX5042 – 5TWX5060

Model No. ^{(a) (b)}	5TWX5042A1000A	5TWX5048A1000A	5TWX5060A1000A
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 BAYKSKT263)	No (Uses BAYKSKT263)	No (Uses BAYKSKT263)
Insulation/ Sound Blanket	NO	NO	NO
Compressor Heat	NO	NO	NO
Outdoor Fan	PROPELLER	PROPELLER	PROPELLER
DIA. (in.) – No. 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	200/230/1/60	200/230/1/60



Product Specifications

Table 3. 5TWX5042 – 5TWX5060 (continued)

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
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.)	55.8 x 35 x 37.9	55.8 x 35 x 37.9	55.8 x 35 x 37.9
Weight			
Shipping (lbs.)	311	311	311
Net (lbs.)	261	261	261
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
Refrigerant Lineset ⁽ⁱ⁾			

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

(b) Rated in 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 value shown is the branch circuit selection current.

(e) No means no start components. Yes means quick start kit components. PTC means positive temperature coefficient 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
5TWX5018A	71	77	72	68	68	69	60	53	47
5TWX5024A	71	77	72	68	68	69	60	53	47
5TWX5030A	71	77	72	68	68	69	60	53	47
5TWX5036A	70	75	69	68	68	66	62	57	51
5TWX5042A	72	77	75	72	70	67	62	59	52
5TWX5048A	72	77	75	72	70	67	62	59	52
5TWX5060A	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.

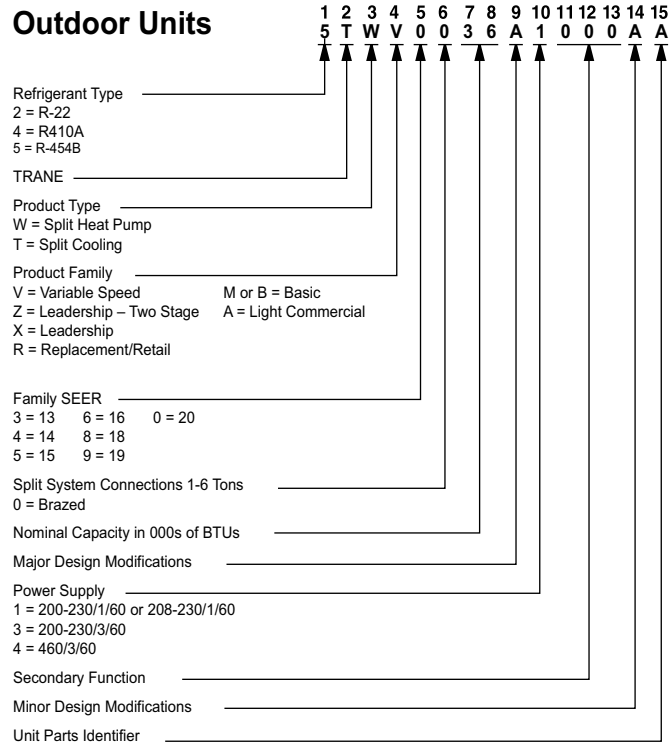
AHRI Standard Capacity Rating Conditions

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.

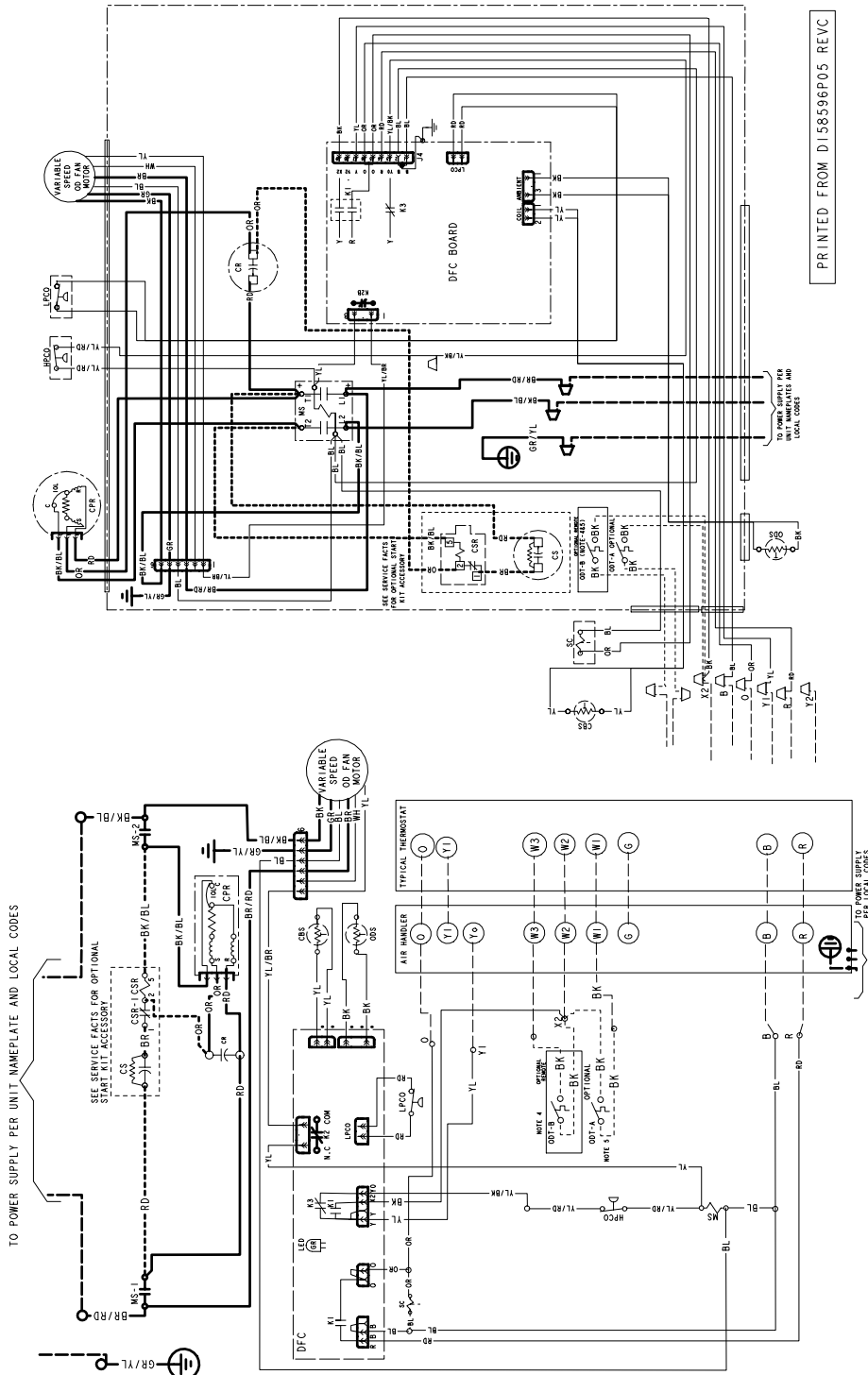
Model Nomenclature





Wiring Diagrams

Figure 1. 018A, 024A, 030A, and 036A models



Wiring Diagrams

Figure 2. 042A, 048A, and 060A models

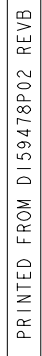








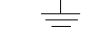

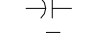




Figure 3. Legend and warnings
NOTES:












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
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.

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 1/4" X 11"

LEGEND

	24 V	} FACTORY LINE WIRING
	LINE	
	24 V	} FIELD LINE WIRING
	LINE	
	FIELD INSTALLED FACTORY WIRING	
	MAGNETIC COIL	
	GROUND	
	JUNCTION	
	CAPACITOR	
	WIRE NUT OR TERMINAL	
	TRANSFORMER	
	FUSE	
	TERMINAL BLOCK/BOARD	
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	
EEVC	ELECTRONIC EXP VALVE CONTROL	
F	INDOOR FAN RELAY	

	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)	
	SINGLE INLINE CONNECTION	
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	BLUE	WH	WHITE	GR	GREEN
BR	BROWN	YL	YELLOW	PR	PURPLE
PK	PINK				

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

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

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.

Dimensional Data

Figure 4. Dimensional data

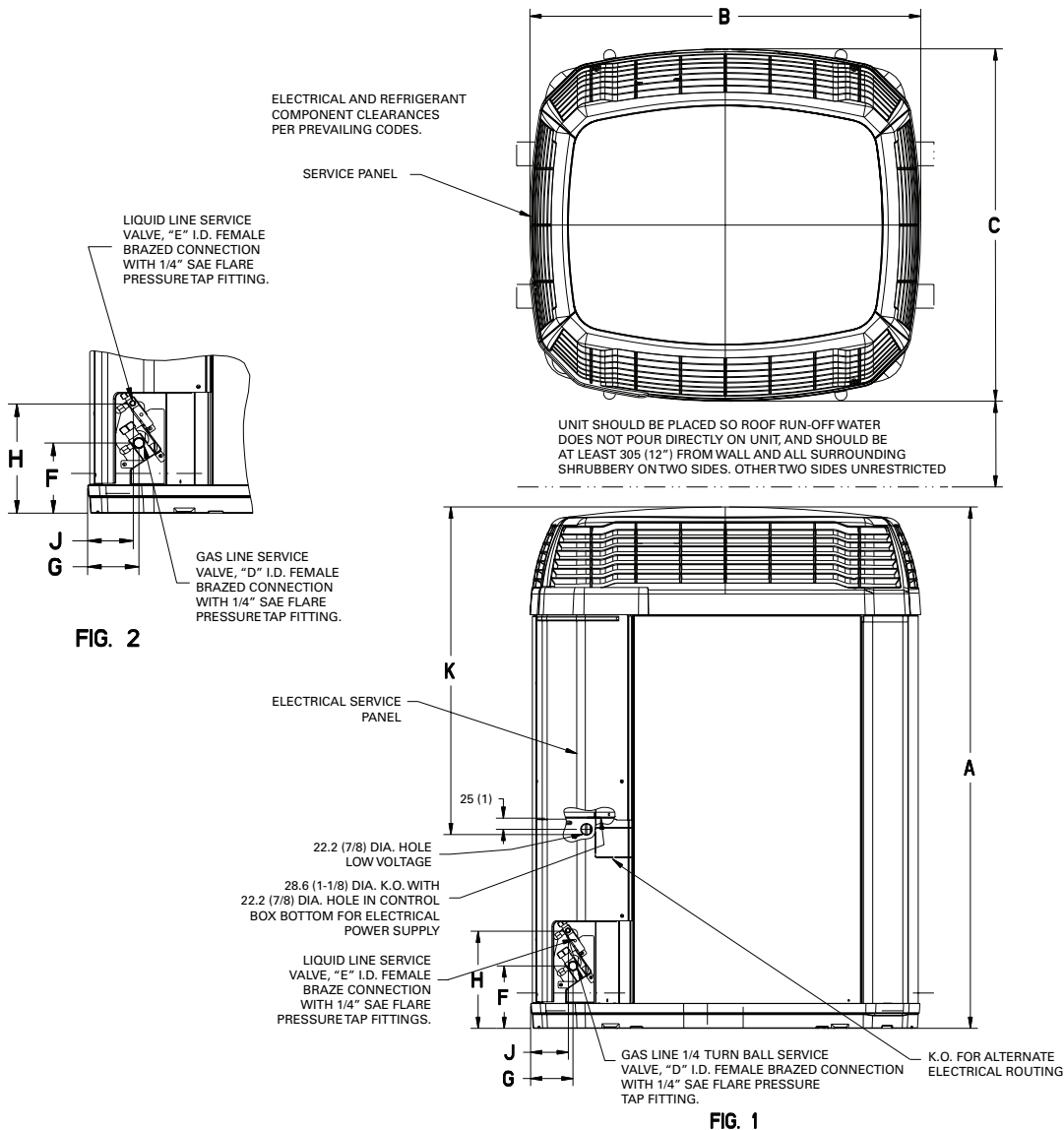


Table 5. Unit dimensions

Model	Base	A	B	C	D	E	F	G	H	J	K
5TWX5018A	3	975.106 (38.39)	829 (32-5/8)	756 (29-3/4)	3/4	5/16	143 (5-5/8)	92 (3-5/8)	219 (8-5/8)	86 (3-3/8)	651.106 (25.64)
5TWX5024A	3	975.106 (38.39)	829 (32-5/8)	756 (29-3/4)	3/4	5/16	143 (5-5/8)	92 (3-5/8)	219 (8-5/8)	86 (3-3/8)	651.106 (25.64)
5TWX5030A	3	975.106 (38.39)	829 (32-5/8)	756 (29-3/4)	3/4	5/16	143 (5-5/8)	92 (3-5/8)	219 (8-5/8)	86 (3-3/8)	651.106 (25.64)
5TWX5036A	4	1001.00 (39.400)	946 (37-1/4)	870 (34-1/4)	3/4	5/16	143 (5-5/8)	98 (3-5/8)	219 (8-5/8)	79 (3-1/8)	668.024 (26.31)
5TWX5042A	4	1307.024 (51.435)	946 (37-1/4)	870 (34-1/4)	3/4	5/16	143 (5-5/8)	98 (3-5/8)	219 (8-5/8)	86 (3-3/8)	668.024 (26.31)
5TWX5048A	4	1307.024 (51.435)	946 (37-1/4)	870 (34-1/4)	7/8	5/16	143 (5-5/8)	98 (3-5/8)	219 (8-5/8)	86 (3-3/8)	668.024 (26.31)
5TWX5060A	4	1307.024 (51.435)	946 (37-1/4)	870 (34-1/4)	7/8	5/16	143 (5-5/8)	98 (3-5/8)	219 (8-5/8)	86 (3-3/8)	668.024 (26.31)



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.

The addition of the BAYLOAM108 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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