

### **Product Data**

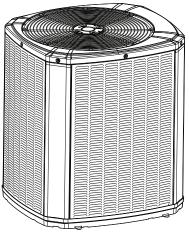
# TRANE Link Variable Speed Heat Pumps

5TWV8X24A1000A 5TWV8X36A1000A 5TWV8X48A1000A 5TWV8X60A1000A





The Diagnostics Mobile App is available by scanning a QR code above, the one located inside this unit or by searching for the Trane or American Standard Diagnostics App in your App Store®. This system must include a A/T HUI2360A200U thermostat and a TSYS2C60A2VVU system controller to operate and is Link communicating only.



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





### **Mechanical Specification Options**

#### General

This unit is designed to operate at outdoor ambient temperatures from 55° F to 120° F in cooling. From - 0° F to 66° F in heating (heat pumps only). Only AHRI approved indoor matches are approved for use with these models.

#### **TRANE Link Heat Pumps**

This outdoor unit contains the TRANE Link Heat Pumps digital communication with Plug-n-Play set up.

#### Casing

Unit casing is constructed of heavy gauge. G60 galvanized steel and painted with a weather-resistant powder paint on all louvered panels and prepaint on all other panels. Corrosion and weatherproof CMBP-G30 DuraTuff™ base.

#### **Refrigerant Controls**

Refrigeration system controls include condenser fan, compressor inverter drive and high and low pressure switches. A factory supplied, field installed filter is standard.

#### Compressor

Inverter driven compressor with variable output capacities. Noise enclosure minimizes sound levels. Compressor protections reduce operating speed and current draw to maintain operation while protecting the compressor.

#### Condenser Coil

The Spine Fin™ 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 built in freeze protection that will allow cooling operation below 55°F but will reduce capacity or shut down completely to prevent operation under adverse conditions.

#### **Comfort Control**

This system must include a A/T HUI2360A200U thermostat and a TSYS2C60A2VVU system controller to operate and is Link communicating only.



### **Product Specifications**

#### **Heat Pump Models**

OUTDOOR UNIT (a) (b) POWER CONNS. – V/PH/HZ (c) MIN. BRCH. CIR. AMPACITY BR. CIR. PROT. RTG. – MAX. (AMPS) COMPRESSOR NO. USED – NO. SPEEDS	5TWV8X24A 208/230/1/60 19.0 30	5TWV8X36A 208/230/1/60 27.0	5TWX8X48A 208/230/1/60 36.0	5TWV8X60A 208/230/1/60 43.0		
MIN. BRCH. CIR. AMPACITY BR. CIR. PROT. RTG. – MAX. (AMPS) COMPRESSOR	19.0	27.0		<u> </u>		
BR. CIR. PROT. RTG. – MAX. (AMPS) COMPRESSOR	30	-	36.0	43.0		
COMPRESSOR		40		43.0		
		40	50	60		
NO. USED - NO. SPEEDS	ROTARY	ROTARY	ROTARY	ROTARY		
	1-VARIABLE	1-VARIABLE	1-VARIABLE	1-VARIABLE		
MRC	17.8	27.1	39.2	46.1		
FACTORY INSTALLED						
START COMPONENTS (d)	NA	NA	NA	NA		
INSULATION/SOUND BLANKET	YES	YES	YES	YES		
COMPRESSOR HEAT	YES	YES	YES	YES		
OUTDOOR FAN						
DIA. (IN.) - NO. USED	23 — 1	23 — 1	27.5 — 1	27.5 — 1		
TYPE DRIVE - NO. SPEEDS	DIRECT — VARIABLE	DIRECT — VARIABLE	DIRECT — VARIABLE	DIRECT — VARIABLE		
NO. MOTORS - HP	1 - 1/3	1 - 1/3	1 — 1/2	1 — 1/2		
MOTOR SPEED R.P.M.	200 — 1200	200 — 1200	200 — 1200	200 — 1200		
VOLTS/PH/HZ	245-385/3/60	245-385/3/60	245-385/3/60	245-385/3/60		
MOC	1.5	1.5	2.3	2.3		
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.)	19.77	19.77	27.87	27.87		
TUBE SIZE (IN.)	3/8	3/8	3/8	3/8		
REFRIGERANT	R-454B	R-454B	R-454B	R-454B		
LBS. – R-454B (O.D. UNIT) <sup>(e)</sup>	6 lb – 8 oz	6 lb – 7 oz	9 lb — 7 oz	9 lb — 10 oz		
FACTORY SUPPLIED	YES	YES	YES	YES		
RATED LINE SIZE – IN. O.D. GAS <sup>(f)</sup>	1/2	5/8	3/4	3/4		
${\sf RATED\ LINE\ SIZE-IN.\ O.D.\ LIQ.\ (f)}$	5/16	5/16 5/16		5/16		
CHARGING SPECIFICATIONS						
SUBCOOLING	10°	10°	10°	10°		
DIMENSIONS	HXWXD	HXWXD	HXWXD	HXWXD		
CRATED (IN.)	46 X 30 X 33 46 X 30 X 33		46 X 35 X 38 46 X 35 X 38			
WEIGHT						
WEIGHT				264		
SHIPPING (LBS.)	200	213	254	264		

<sup>(</sup>a) Certified in accordance with the Air-Source Unitary Air-conditioner Equipment certification program, which is based on AHRI standard 210/240.

<sup>(</sup>b) Rated in accordance with AHRI standard 270/275.

<sup>(</sup>c) Calculated in accordance with Natl. Elec. Codes. Use only HACR circuit breakers or fuses.

<sup>(</sup>d) NA means no start components. Yes means quick start kit components. PTC means positive temperature coefficient starter.

 $<sup>\</sup>ensuremath{^{\text{(e)}}}$  This value approximate. For more precise value see unit nameplate.

<sup>(</sup>f) The maximum length of refrigerant lines from outdoor to indoor varies depending on application. See Installer's Guide Table 4 for allowable applications.



### **Sound Data**

	Model Mode	Speed	A-Weighted Sound Power Level [dB(A)]	Full Octave Sound Power [dB]							
Model				63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
5TWV8X24A	Cool	Min	55	67.2	51.8	55.0	55.3	47.6	40.1	37.2	36.7
	Cool	Max	67	72.5	65.6	62.5	67.4	62.5	53.5	50.0	45.4
	Heat	Min	54	64.4	48.8	53.9	52.9	47.9	42.2	40.6	41.0
	Heat	Max	74	76.9	73.7	71.7	73.0	70.2	62.9	58.2	52.8
5TWV8X36A	Cool	Min	58	68.3	58.0	59.3	54.6	53.0	48.0	43.7	41.9
	Cool	Max	74	73.5	75.0	70.2	74.1	68.1	61.7	59.7	52.8
	Heat	Min	56	67.6	56.6	58.6	53.0	50.0	45.9	45.5	45.6
	Heat	Max	76	74.8	77.2	72.0	73.0	72.7	65.4	60.7	56.3
5TWV8X48A	Cool	Min	59	68.6	56.3	65.3	53.6	50.7	45.1	37.3	37.4
	Cool	Max	74	83.9	76.7	73.2	72.7	69.0	64.2	59.2	50.3
	Heat	Min	58	67.5	57.9	62.3	54.9	50.8	46.7	41.8	41.0
	Heat	Max	76	82.5	78.1	74.0	75.2	69.8	65.8	61.9	54.5
ETIM (OV.CO.)	Cool	Min	66	64.5	57.8	67.7	64.9	62.7	50.4	41.5	42.7
	Cool	Max	76	77.0	80.8	76.0	75.3	70.1	64.0	62.3	54.7
5TWV8X60A	Heat	Min	64	68.9	58.8	67.4	64.6	57.9	47.7	43.0	43.8
	Heat	Max	76	91.4	76.3	76.3	73.2	71.2	65.2	64.2	56.5

**Note:** Rated in accordance with AHRI Standard 270.



### **Optional Accessories:**

Rubber Isolator Kit	BAYISLT101
Snow Leg — Base & Cap 4" High	BAYLEGS002
Snow Leg — 4" Extension	BAYLEGS003
SmartCharge™ Tool	BAYCAKT002
Extreme Condition Mounting Kit	BAYECMT023
Refrigerant Lineset (a)	

<sup>(</sup>a) 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.

#### **General Data**

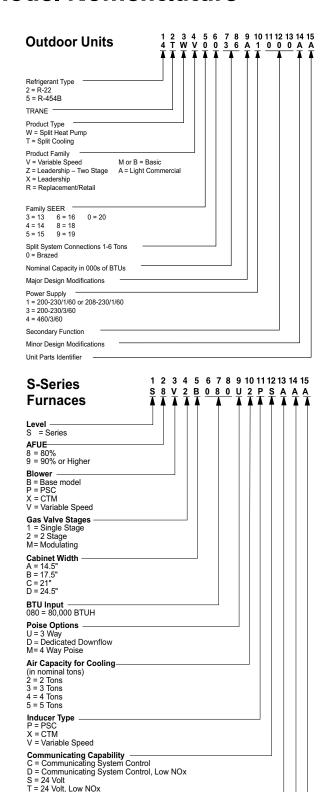
#### **AHRI STANDARD 210/240 RATING CONDITIONS**

- Cooling 80°F DB, 67°F WB air entering indoor coil, 95°F DB air entering outdoor coil.
- High Temperature Heating 47°F DB, 43°F WB air entering outdoor coil, 70°F DB entering indoor coil.
- Low Temperature Heating 17°F DB, 15°F WB air entering outdoor coil, 70°F DB air entering indoor coil.
- 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 operation) Standard Noise Rating number is at 95°F outdoor air.

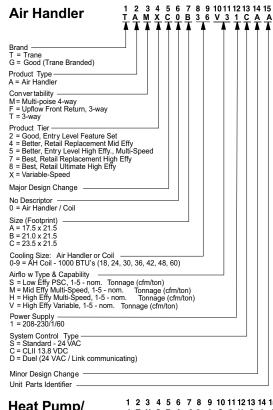


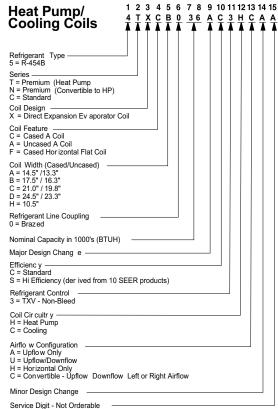
### **Model Nomenclature**



Major Design Change Minor Design Change

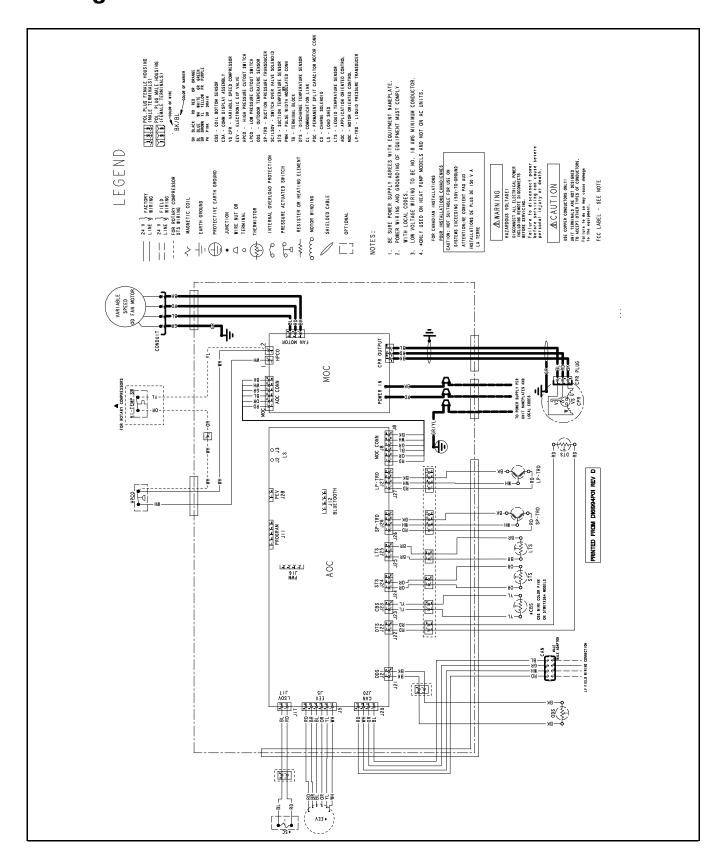
Service Digit - Not Orderable





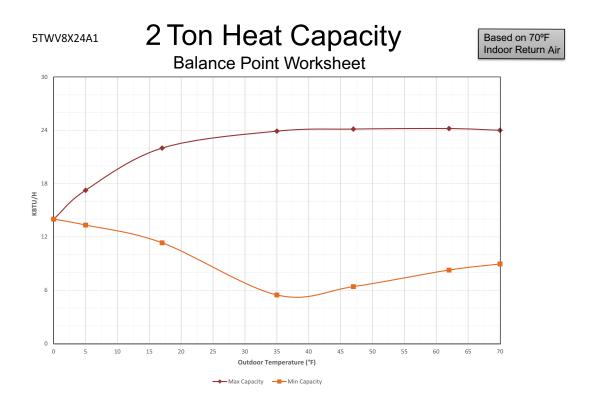


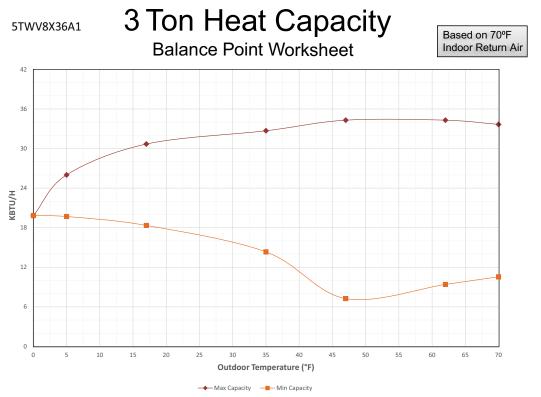
# Wiring



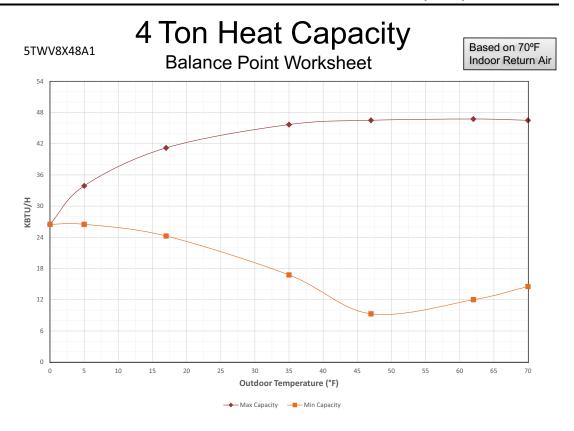


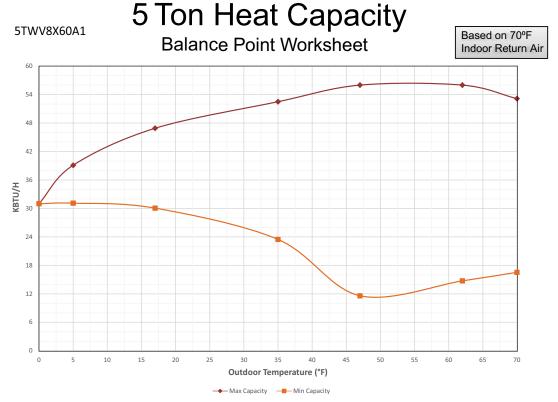
## **Balance Point Heat Capacity Worksheets**













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