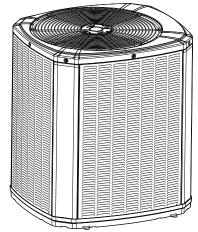


# **Product Data**

# TRANE Link Variable Speed Heat Pumps

4TWV7X24A1000A 4TWV7X36A1000A 4TWV7X48A1000B 4TWV7X60A1000A



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



The Diagnostics Mobile App is available by scanning a QR code 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.





# **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)	4TWV7X24A1000A	4TWV7X36A1000A	4TWV7X48A1000B	4TWV7X60A1000A	
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	19.4	27.0	42.0	46.1	
BR. CIR. PROT. RTG. — REC. (AMPS)	25	30	40	50	
BR. CIR. PROT. RTG MAX. (AMPS)	25	30	50	50	
COMPRESSOR	SCROLL	SCROLL	SCROLL	SCROLL	
NO. USED - NO. SPEEDS	1-VARIABLE	1-VARIABLE	1-VARIABLE	1-VARIABLE	
R.L. AMPS (d) – L.R. AMPS	11.5 - 10.2	18.1 - 10.2	20.3 - 12.0	27.5 - 12.0	
FACTORY INSTALLED					
START COMPONENTS (e)	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	
CFM @ 0.0 IN. W.G. (f)	2680	2850	4467	4757	
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	208/230/1/60	208/230/1/60	208/230/1/60	208/230/1/60	
F.L. AMPS	1.35	1.35	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	23.75	27.87	30.80	
TUBE SIZE (IN.)	3/8	3/8	3/8	3/8	
REFRIGERANT	R410-A	R410-A	R410-A	R410-A	
LBS R-410A (O.D. UNIT) (g)	7 lb – 6 oz	8 lb – 13 oz	10 lb – 8 oz	13 lb – 2 oz	
FACTORY SUPPLIED	YES	YES	YES	YES	
RATED LINE SIZE - IN. O.D. GAS (h)	5/8	3/4	7/8	7/8	
RATED LINE SIZE — IN. O.D. LIQ. (h)	3/8	3/8	3/8	3/8	
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	50 X 35 X 38	
WEIGHT					
SHIPPING (LBS.)	225	238	268	285	
NET (LBS.)	204	217	243	259	

<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) 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.

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

<sup>(</sup>f) Standard Air – Dry Coil – Outdoor

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

 $<sup>^{(</sup>h)}$  Max. linear length 150 ft.; Max. lift – Suction 50 ft.; Max. lift – Liquid 50 ft.



# **Sound Data**

Model	Mode Speed	A-Weighted	Full Octave Sound Power [dB]								
		Speed	Sound Power Level [dB(A)]	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
4TWV7X24A	Cool	Min	55	70.9	50.3	51.8	52.3	50.4	42.0	37.7	39.9
	Cool	Max	66	76.3	65.2	62.7	64.1	60.5	55.7	49.5	45.0
	Heat	Min	61	69.8	52.9	52.8	57.5	55.2	51.9	47.4	46.5
	Heat	Max	70	75.9	66.0	64.7	67.3	65.6	57.0	52.2	47.7
4TWV7X36A	Cool	Min	56	71.5	51.5	54.7	54.4	52.2	43.1	36.8	38.5
	Cool	Max	71	74.1	69.4	65.9	70.5	65.1	59.4	54.2	49.5
	Heat	Min	61	68.3	52.1	53.9	57.6	55.1	52.9	45.1	47.8
	Heat	Max	75	78.7	70.3	76.3	73.0	68.7	61.1	57.3	53.6
4TWV7X48A —	Cool	Min	62	70.6	55.0	55.9	55.8	59.0	49.9	41.1	42.9
	Cool	Max	74	75.7	71.9	73.0	74.2	68.5	63.4	59.1	54.3
	Heat	Min	63	72.1	59.3	58.7	60.3	58.6	51.3	46.0	45.2
	Heat	Max	76	77.9	74.5	77.0	75.4	69.5	64.4	60.8	56.2
4TWV7X60A	Cool	Min	58	69.7	59.5	57.6	55.1	52.0	45.0	41.6	42.3
	Cool	Max	73	83.9	73.7	73.1	71.2	67.9	64.4	58.9	51.8
	Heat	Min	61	71.9	61.3	59.0	61.3	56.2	48.7	45.1	45.5
	Heat	Max	74	85.8	75.7	74.4	73.2	68.5	63.6	59.6	55.9

NOTE: Rated in accordance with AHRI Standard 270



# **Optional Accessories:**

Model	4TWV7X24A	4TWV7X36A	4TWV7X48A	4TWV7X60A
Rubber Isolator Kit	BAYISLT101	BAYISLT101	BAYISLT101	BAYISLT101
Snow Leg — Base & Cap 4" High	BAYLEGS002	BAYLEG2002	BAYLEGS002	BAYLEGS002
Snow Leg — 4" Extension	BAYLEGS003	BAYLEGS003	BAYLEGS003	BAYLEGS003
Extreme Condition Mounting Kit	BAYECMT023	BAYECMT023	BAYECMT004	BAYECMT004
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**

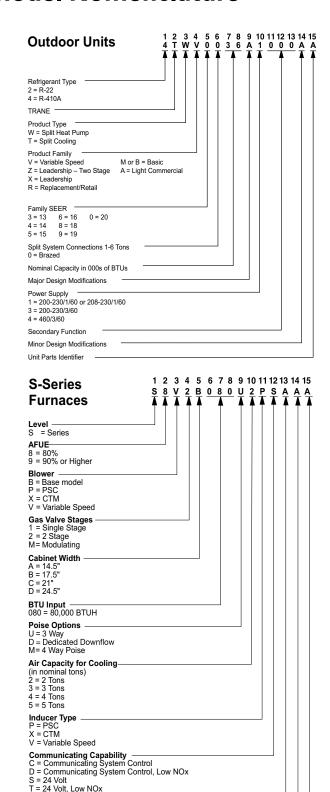
### **AHRI STANDARD 210/240 RATING CONDITIONS**

- 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.

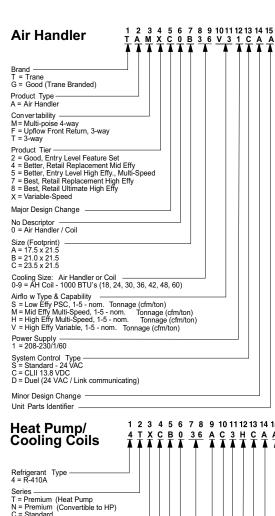


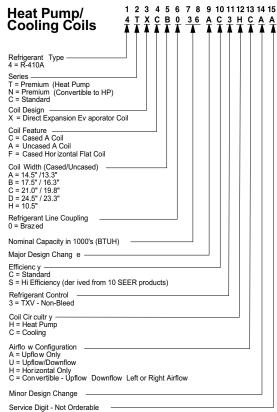
# **Model Nomenclature**



Major Design Change Minor Design Change

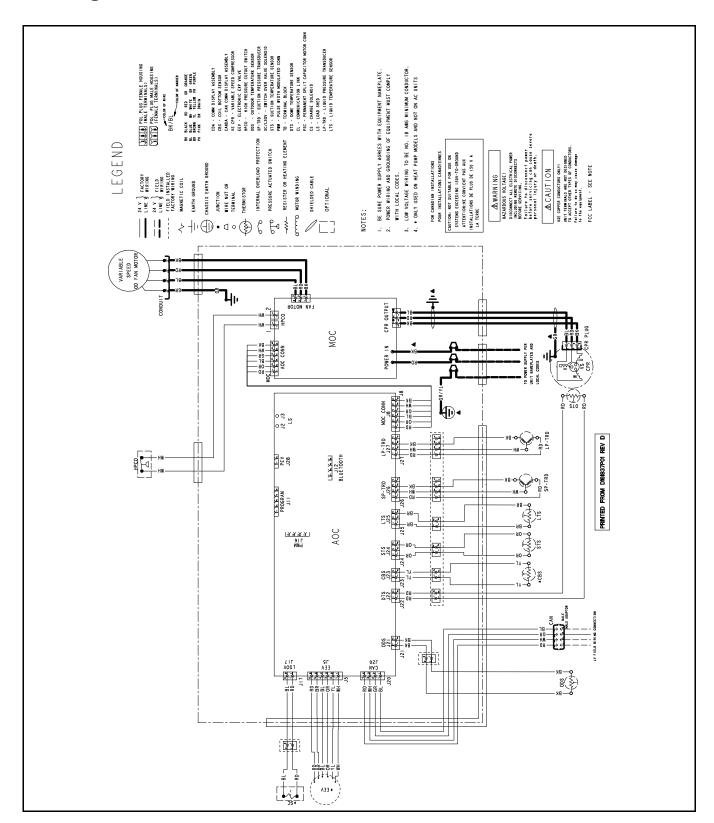
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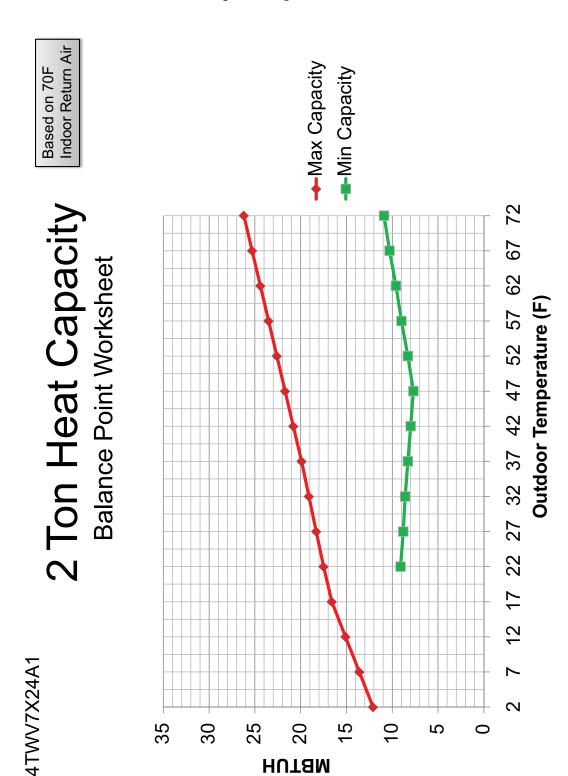


# Wiring





# **Balance Point Heat Capacity Worksheets**

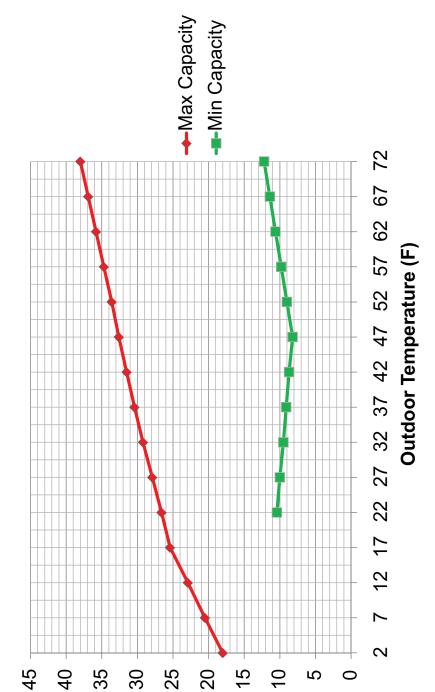




4TWV7X36A

# 3 Ton Heat Capacity Balance Point Worksheet

Based on 70F Indoor Return Air



22-1987-1B-EN 9

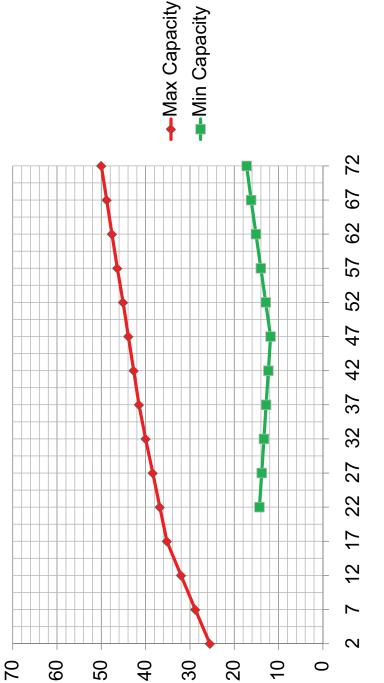
**HUTAM** 



4TWV7X48A1

# 4 Ton Heat Capacity Balance Point Worksheet

Based on 70F Indoor Return Air



# Outdoor Temperature (F)

10 22-1987-1B-EN

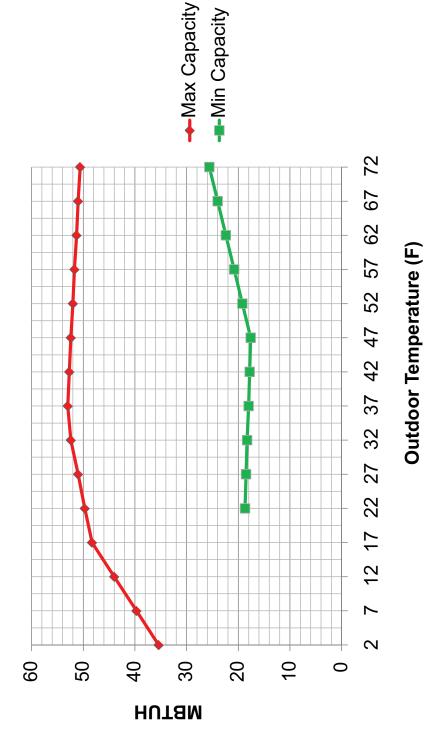
**HUTAM** 



4TWV7X60A1

# 5 Ton Heat Capacity Balance Point Worksheet







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