

BUILT TO A HIGHER STANDARD<sup>®</sup>

*American Standard*<sup>®</sup>

HEATING & AIR CONDITIONING

# Product Data

## American Standard Link Variable Speed Air Conditioners

5A7V8X24A1000A

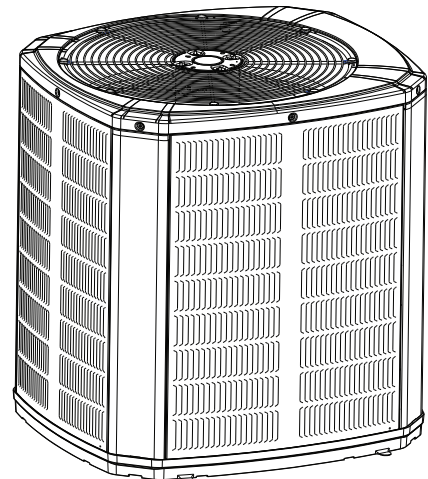
5A7V8X36A1000A

5A7V8X48A1000A

5A7V8X60A1000A



*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<sup>®</sup>. 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.

### American Standard Link Air Conditioners

This outdoor unit contains the American Standard Link Air Conditioners 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 DuraBase™.

### 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

## Air Conditioner Models

<b>OUTDOOR UNIT</b> <sup>(a) (b)</sup>	5A7V8X24A	5A7V8X36A	5A7V8X48A	5A7V8X60A
POWER CONNS. — V/PH/HZ <sup>(c)</sup>	208/230/1/60	208/230/1/60	208/230/1/60	208/230/1/60
MIN. BRCH. CIR. AMPACITY	19.0	27.0	36.0	43.0
BR. CIR. PROT. RTG. — MAX. (AMPS)	30	40	50	60
<b>COMPRESSOR</b>	ROTARY	ROTARY	ROTARY	ROTARY
NO. USED — NO. SPEEDS	1-VARIABLE	1-VARIABLE	1-VARIABLE	1-VARIABLE
MRC	17.8	27.1	39.2	46.1
<b>FACTORY INSTALLED</b>				
START COMPONENTS <sup>(d)</sup>	NA	NA	NA	NA
INSULATION/SOUND BLANKET	YES	YES	YES	YES
COMPRESSOR HEAT	YES	YES	YES	YES
<b>OUTDOOR FAN</b>				
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
<b>OUTDOOR COIL — TYPE</b>	SPINE FIN <sup>™</sup>	SPINE FIN <sup>™</sup>	SPINE FIN <sup>™</sup>	SPINE FIN <sup>™</sup>
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
<b>REFRIGERANT</b>	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
RATED LINE SIZE — IN. O.D. LIQ. <sup>(f)</sup>	5/16	5/16	5/16	5/16
<b>CHARGING SPECIFICATIONS</b>				
SUBCOOLING	10°	10°	10°	10°
<b>DIMENSIONS</b>	H X W X D	H X W X D	H X W X D	H X W X D
CRATED (IN.)	46 X 30 X 33	46 X 30 X 33	46 X 35 X 38	46 X 35 X 38
<b>WEIGHT</b>				
SHIPPING (LBS.)	197	210	251	261
NET (LBS.)	176	189	226	236

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

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

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

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

<sup>(e)</sup> This value approximate. For more precise value see unit nameplate.

<sup>(f)</sup> 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]							
				63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
5A7V8X24A	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
5A7V8X36A	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
5A7V8X48A	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
5A7V8X60A	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

**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 <sup>(a)</sup>	

<sup>(a)</sup> 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

## Outdoor Units

# Outdoor Units

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	4	A	6	V	0	0	3	6	A	1	0	0	0	A	A
Refrigerant Type															
2 = R-22															
4 = R-454B															
A, T = American Standard															
Product Type															
6, W = Split Heat Pump															
7, T = Split Cooling															
Product Family															
V = Variable Speed															
Z = Leadership – Two Stage															
X = Leadership															
R = Replacement/Retail															
Family SEER															
3 = 13															
6 = 16															
0 = 20															
4 = 14															
8 = 18															
5 = 15															
9 = 19															
Split System Connections 1-6 Tons															
0 = Brazed															
Nominal Capacity in 1000s of BTUs															
Major Design Modifications															
Power Supply															
1 = 200-230/1/60 or 208-230/1/60															
3 = 200-230/3/60															
4 = 460/3/60															
Secondary Function															
Minor Design Modifications															
Unit Parts Identifier															

## S-Series Furnaces

# S-Series Furnaces

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

S 8 V 2 B 0 8 0 U 2 P S A A A

**Level**  
S = Series

**AFUE**  
8 = 80%  
9 = 90% or Higher

**Blower**  
B = Base model  
P = PSC  
X = CTM  
V = Variable Speed

**Gas Valve Stages**  
1 = Single Stage  
2 = 2 Stage  
M = Modulating

**Cabinet Width**  
A = 14.5"  
B = 17.5"  
C = 21"  
D = 24.5"

**BTU Input**  
080 = 80,000 BTU/H

**Poise Options**  
U = 3 Way  
D = Dedicated Downflow  
M = 4 Way Poise

**Air Capacity for Cooling**  
(in nominal tons)  
2 = 2 Tons  
3 = 3 Tons  
4 = 4 Tons  
5 = 5 Tons

**Inducer Type**  
P = PSC  
X = CTM  
V = Variable Speed

**Communicating Capability**  
C = Communicating System Control  
D = Communicating System Control, Low NOx  
S = 24 Volt  
T = 24 Volt, Low NOx

**Major Design Change**

**Minor Design Change**

**Service Digt - Not Orderable**

## Air Handler

# Air Handler

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	T	A	M	X	C	0	B	3	6	V	3	1	C	A	A

Brand \_\_\_\_\_  
T = Trane  
G = Good (Trane Branded)

Product Type \_\_\_\_\_  
A = Air Handler

Convertability \_\_\_\_\_  
M = Multi-poise 4-way  
F = Upflow Front Return, 3-way  
T = 3-way

Product Tier \_\_\_\_\_  
2 = Good, Entry Level Feature Set  
4 = Better, Retail Replacement Mid Effy  
5 = Better, Entry Level High Effy, Multi-Speed  
7 = Best, Retail Replacement High Effy  
8 = Best, Retail Ultimate High Effy  
X = Variable-Speed

Major Design Change \_\_\_\_\_

No Descriptor \_\_\_\_\_  
0 = Air Handler / Coil

Size (Footprint) \_\_\_\_\_  
A = 17.5 x 21.5  
B = 21.0 x 21.5  
C = 23.5 x 21.5

Cooling Size: Air Handler or Coil \_\_\_\_\_  
0-9 = AH Coil - 1000 BTU's (18, 24, 30, 36, 42, 48, 60)

Airflow w Type & Capability \_\_\_\_\_  
S = Low Effy PSC, 1-5 - nom. Tonnage (cfm/ton)  
M = Mid Effy Multi-Speed, 1-5 - nom. Tonnage (cfm/ton)  
H = High Effy Multi-Speed, 1-5 - nom. Tonnage (cfm/ton)  
V = High Effy Variable, 1-5 - nom. Tonnage (cfm/ton)

Power Supply \_\_\_\_\_  
1 = 208-230/1/60

System Control Type \_\_\_\_\_  
S = Standard - 24 VAC  
C = CLII 13.8 VDC  
D = Duel (24 VAC / Link communicating)

Minor Design Change \_\_\_\_\_

Unit Parts Identifier \_\_\_\_\_

## Heat Pump/ Cooling Coils

# Heat Pump/ Cooling Coils

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	4	T	X	C	B	O	3	6	A	C	3	H	C	A	A

Refrigerant Type \_\_\_\_\_  
4 = R-454B

Series \_\_\_\_\_  
T = Premium (Heat Pump)  
N = Premium (Convertible to HP)  
C = Standard

Coil Design \_\_\_\_\_  
X = Direct Expansion Evaporator Coil

Coil Feature \_\_\_\_\_  
C = Case A Coil  
A = Uncased A Coil  
F = Cased Horizontal Flat Coil

Coil Width (Cased/Uncased) \_\_\_\_\_  
A = 14.5"/13.3"  
B = 17.5"/16.3"  
C = 21.0"/19.8"  
D = 24.5"/23.3"  
H = 10.5"

Refrigerant Line Coupling \_\_\_\_\_  
O = Brazed

Nominal Capacity in 1000's (BTUH) \_\_\_\_\_

Major Design Change \_\_\_\_\_

Efficiency \_\_\_\_\_  
C = Standard  
S = Hi Efficiency (Derived from 10 SEER products)

Refrigerant Control \_\_\_\_\_  
3 = TXV - Non-Bleed

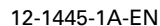
Coil Circuitry \_\_\_\_\_  
H = Heat Pump  
C = Cooling

Airflow Configuration \_\_\_\_\_  
A = Upflow Only  
U = Upflow/Downflow  
H = Horizontal Only  
C = Convertible - Upflow, Downflow, Left or Right Upflow

Minor Design Change \_\_\_\_\_

Service Digit - Not Orderable \_\_\_\_\_

## Wiring



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