



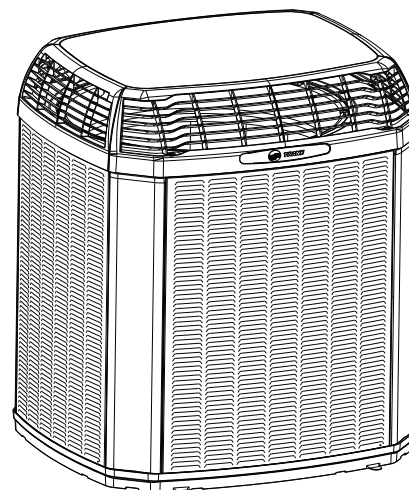
Product Data

TRANE Link Variable Speed Heat Pumps

5TWV0X24A1000A/B
5TWV0X36A1000A/B
5TWV0X48A1000A/B
5TWV0X60A1000A/B



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 Air Conditioners

This outdoor unit contains the TRANE 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 DuraTuff™ base.

WeatherGuard™ II Top Shields Unit.

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.

SeaCoast Shield.

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)}	5TWV0X24A1000A	5TWV0X24A1000B	5TWV0X36A1000A	5TWV0X36A1000B
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	19	26	26
BR. CIR. PROT. RTG. – REC/MAX. (AMPS)	30	20/30	40	30/40
COMPRESSOR	ROTARY	ROTARY	SCROLL	SCROLL
NO. USED – NO. SPEEDS	1-VARIABLE	1-VARIABLE	1-VARIABLE	1-VARIABLE
MRC	17.8	17.8	18	18
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	30.8	30.8
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) ^(e)	6 LB-8 OZ	6 LB-8 OZ	9 LB-8 OZ	9 LB-8 OZ
FACTORY SUPPLIED	YES	YES	YES	YES
RATED LINE SIZE – IN. O.D. GAS ^(f)	1/2	1/2	5/8	5/8
RATED LINE SIZE – IN. O.D. LIQ. ^(f)	5/16	5/16	5/16	5/16
CHARGING SPECIFICATIONS				
SUBCOOLING	10°	10°	8°	8°
DIMENSIONS				
CRATED (IN.)	50 x 30 x 33	50 x 30 x 33	55 x 35 x 38	55 x 35 x 38
WEIGHT				
SHIPPING (LBS.)	211	211	248	248
NET (LBS.)	192	192	222	222

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

^(b) Rated in accordance with AHRI standard 270/275.

^(c) Calculated in accordance with Natl. Elec. Codes. Use only HACR circuit breakers or fuses.

^(d) NA means no start components. Yes means quick start kit components. PTC means positive temperature coefficient starter.

^(e) This value approximate. For more precise value see unit nameplate.

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



Product Specifications

Heat Pump Models

OUTDOOR UNIT ^{(a) (b)}	5TWV0X48A1000A	5TWV0X48A1000B	5TWV0X60A1000A	5TWV0X60A1000B
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	32	32	43	40
BR. CIR. PROT. RTG. – REC/MAX. (AMPS)	50	35/50	60	40/60
COMPRESSOR	SCROLL	SCROLL	ROTARY	ROTARY
NO. USED – NO. SPEEDS	1-VARIABLE	1-VARIABLE	1-VARIABLE	1-VARIABLE
MRC	22.4	22.4	46.1	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	27.5-1	27.5-1	27.5-1	27.5-1
TYPE DRIVE – NO. SPEEDS	DIRECT-VARIABLE	DIRECT-VARIABLE	DIRECT-VARIABLE	DIRECT-VARIABLE
NO. MOTORS – HP	1-1/2	1-1/2	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	2.3	2.3	2.3	2.3
OUTDOOR COIL – TYPE	SPINE FIN	SPINE FIN	SPINE FIN	SPINE FIN
ROWS – F.P.I.	2-24	2-24	2-24	2-24
FACE AREA (SQ. FT.)	30.8	30.8	30.8	30.8
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) ^(e)	11 LB-0 OZ	11 LB-0 OZ	11 LB-10 OZ	11 LB-10 OZ
FACTORY SUPPLIED	YES	YES	YES	YES
RATED LINE SIZE – IN. O.D. GAS ^(f)	7/8	7/8	3/4	3/4
RATED LINE SIZE – IN. O.D. LIQ. ^(f)	5/16	5/16	5/16	5/16
CHARGING SPECIFICATIONS				
SUBCOOLING	8°	8°	8°	8°
DIMENSIONS				
CRATED (IN.)	55 x 35 x 38	55 x 35 x 38	55 x 35 x 38	55 x 35 x 38
WEIGHT				
SHIPPING (LBS.)	268	268	306	306
NET (LBS.)	242	242	280	280

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

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

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

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

(e) This value approximate. For more precise value see unit nameplate.

(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]							
				63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
5TWV0X24A	Cool	Min	52	64.2	48.8	52.0	52.3	44.6	37.1	34.2	33.7
	Cool	Max	64	69.5	62.6	59.5	64.4	59.5	50.5	47.0	42.4
	Heat	Min	51	61.4	45.8	50.9	49.9	44.9	39.2	37.6	38.0
	Heat	Max	71	73.9	70.7	68.7	70.0	67.2	59.9	55.2	49.8
5TWV0X36A	Cool	Min	53	63.6	51.2	52.5	51.5	48.2	43.4	34.7	38.3
	Cool	Max	69	82.2	70.3	68.3	65.6	65.5	58.3	53.3	48.9
	Heat	Min	55	63.8	52.9	55.9	53.4	49.1	44.4	40.4	42.1
	Heat	Max	74	79.0	77.8	75.0	71.8	69.9	63.3	59.5	53.7
5TWV0X48A	Cool	Min	56	64.8	54.6	56.2	53.6	52.4	47.4	38.0	33.0
	Cool	Max	73	79.7	74.4	72.7	71.3	68.4	63.7	58.2	49.8
	Heat	Min	57	64.8	54.9	56.4	53.6	51.3	48.7	45.5	40.1
	Heat	Max	75	82.1	75.5	74.5	72.2	69.7	65.4	61.2	52.8
5TWV0X60A	Cool	Min	63	62.1	56.5	60.2	61.7	61.6	45.4	37.4	38.2
	Cool	Max	74	75.5	74.2	73.1	73.5	68.6	63.6	59.2	51.8
	Heat	Min	61	64.6	56.0	57.4	58.2	59.1	46.4	42.6	39.2
	Heat	Max	73	87.3	77.8	72.0	71.2	67.2	63.3	60.4	52.1

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)	

^(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

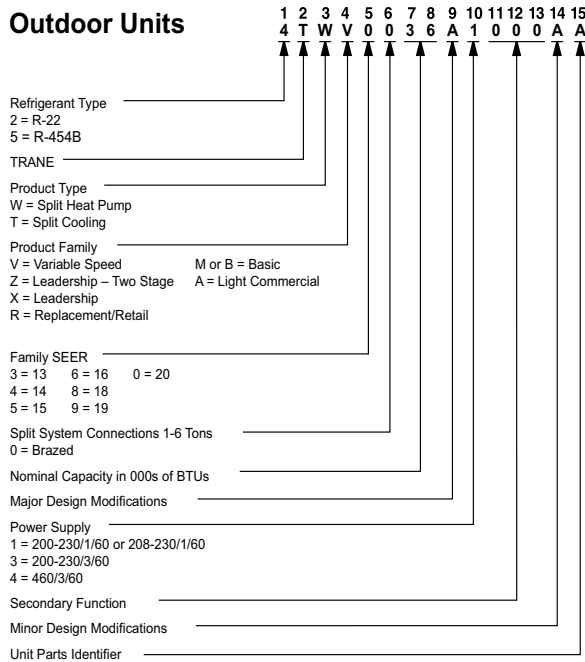
- Cooling 80°F DB, 67°F WB air entering indoor coil, 95°F DB air entering outdoor coil.
- High Temperature Heating 47°F DB, 43°F WB air entering outdoor coil, 70°F DB entering indoor coil.
- Low Temperature Heating 17°F DB, 15°F WB air entering outdoor coil, 70°F DB air entering indoor coil.
- Rated 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.

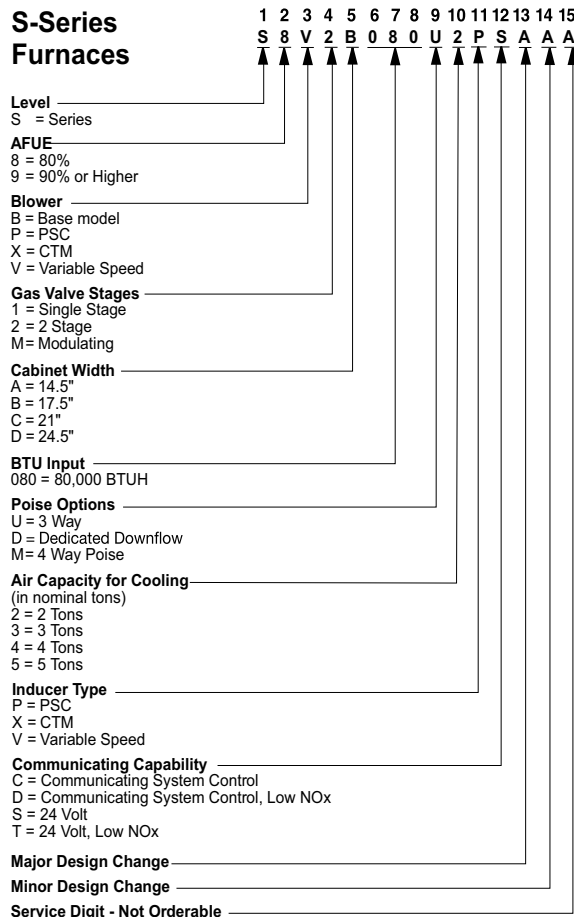


Model Nomenclature

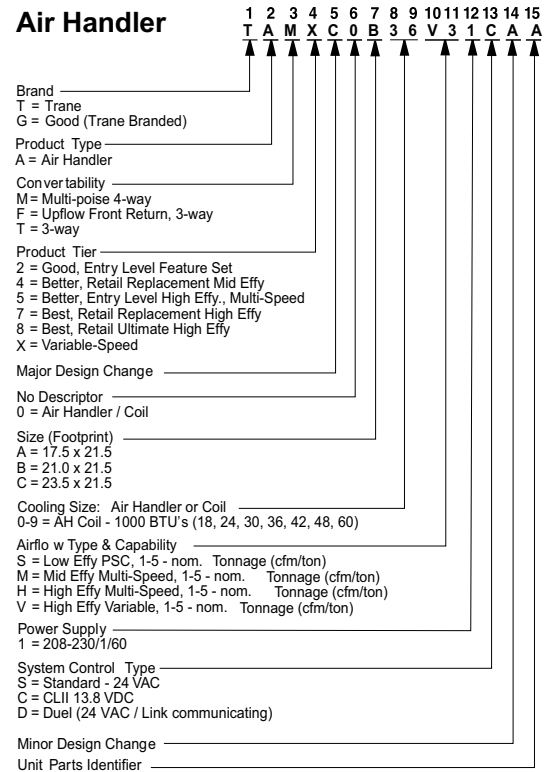
Outdoor Units



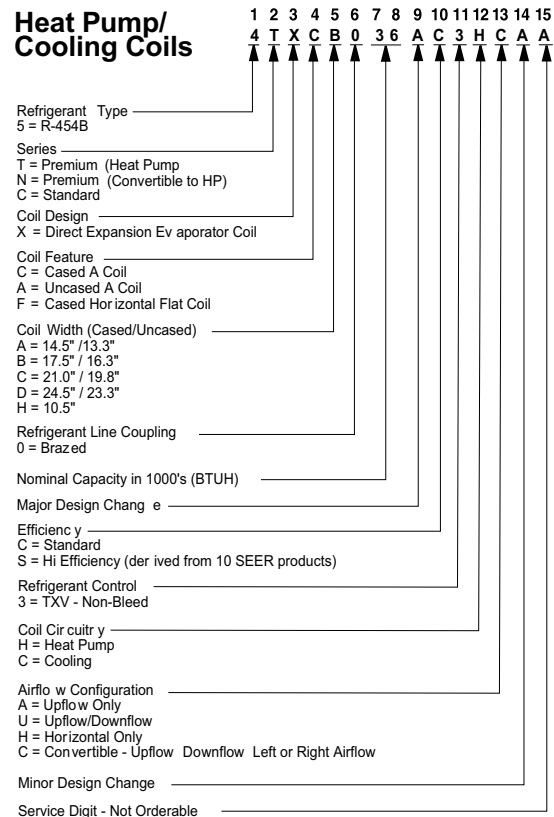
S-Series Furnaces

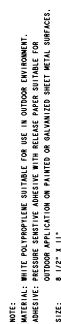


Air Handler



Heat Pump/ Cooling Coils



[illegible]

R-448B REFRIGERANT CHARGING CHART									
LIQUID TEMPERATURE (°F)	DESIGN SUBCOOLING (°F)					LIQUID GAS PRESSURE (PSI)			
	8	9	10	11	12	13	14	15	16
35	170	172	173	178	181	184	187		
40	164	167	169	174	177	180	183		
45	160	163	165	170	173	176	179		
50	156	159	161	166	169	172	175		
55	152	155	157	162	165	168	171		
60	148	151	153	158	161	164	167		
65	144	147	149	154	157	160	163		
70	140	143	145	150	153	156	159		
75	136	139	141	146	149	152	155		
80	132	135	137	142	145	148	151		
85	128	131	133	138	141	144	147		
90	124	127	129	134	137	140	143		
95	120	123	125	130	133	136	139		
100	116	119	121	126	129	132	135		
105	112	115	117	122	125	128	131		
110	108	111	113	118	121	124	127		
115	104	107	109	114	117	120	123		
120	100	103	105	110	113	116	119		
125	96	99	101	106	109	112	115		
130	92	95	97	102	105	108	111		
135	88	91	93	98	101	104	107		
140	84	87	89	94	97	100	103		
145	80	83	85	90	93	96	99		
150	76	79	81	86	89	92	95		
155	72	75	77	82	85	88	91		
160	68	71	73	78	81	84	87		
165	64	67	69	74	77	80	83		
170	60	63	65	70	73	76	79		
175	56	59	61	66	69	72	75		
180	52	55	57	62	65	68	71		
185	48	51	53	58	61	64	67		
190	44	47	49	54	57	60	63		
195	40	43	45	50	53	56	59		
200	36	39	41	46	49	52	55		
205	32	35	37	42	45	48	51		
210	28	31	33	38	41	44	47		
215	24	27	29	34	37	40	43		
220	20	23	25	30	33	36	39		
225	16	19	21	26	29	32	35		
230	12	15	17	22	25	28	31		
235	8	11	13	18	21	24	27		
240	4	7	9	14	17	20	23		

- NOTES:
- BE SURE POWER SUPPLY AGREES WITH EQUIPMENT MAKE/TYPE.
 - POWER WIRING AND GROUNDING OF EQUIPMENT MUST COMPLY WITH LOCAL CODES.
 - LOW VOLTAGE WIRING TO BE NO. 18 AWG MINIMUM CONDUCTOR.
 - ONLY USED ON HEAT PUMP MODELS AND NOT ON AC UNITS.
 - COMPRESSOR/FAN MOTOR/HPCO/FERRITE HARNESSES

CAUTION: NOT SUITABLE FOR USE ON
SYSTEMS EXCEEDING 150V-TO-GROUND
ATTENTION: NE CONVIENT PAS AUX
INSTALLATIONS DE PLUS DE 150 V A
TERRAIN

⚠ WARNING
 HAZARDOUS VOLTAGE!
 DISCONNECT ALL ELECTRICAL POWER
 INCLUDING REMOTE DISCONNECTS
 BEFORE SERVICING.
 Failure to disconnect power
 before servicing can cause severe

CAUTION
USE COPPER CONDUCTORS ONLY!
SPIT TERMINALS ARE NOT DESIGNED
TO ACCEPT OTHER TYPES OF CONDUCTORS.
Failure to do so may cause damage
to the equipment.

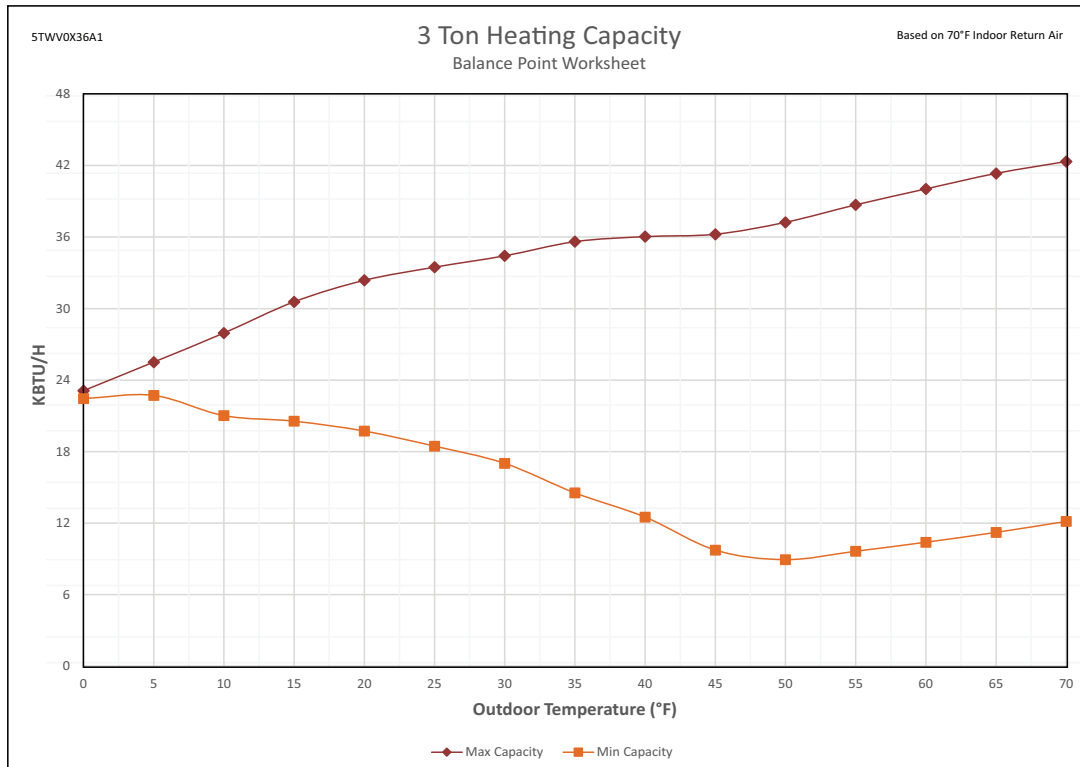
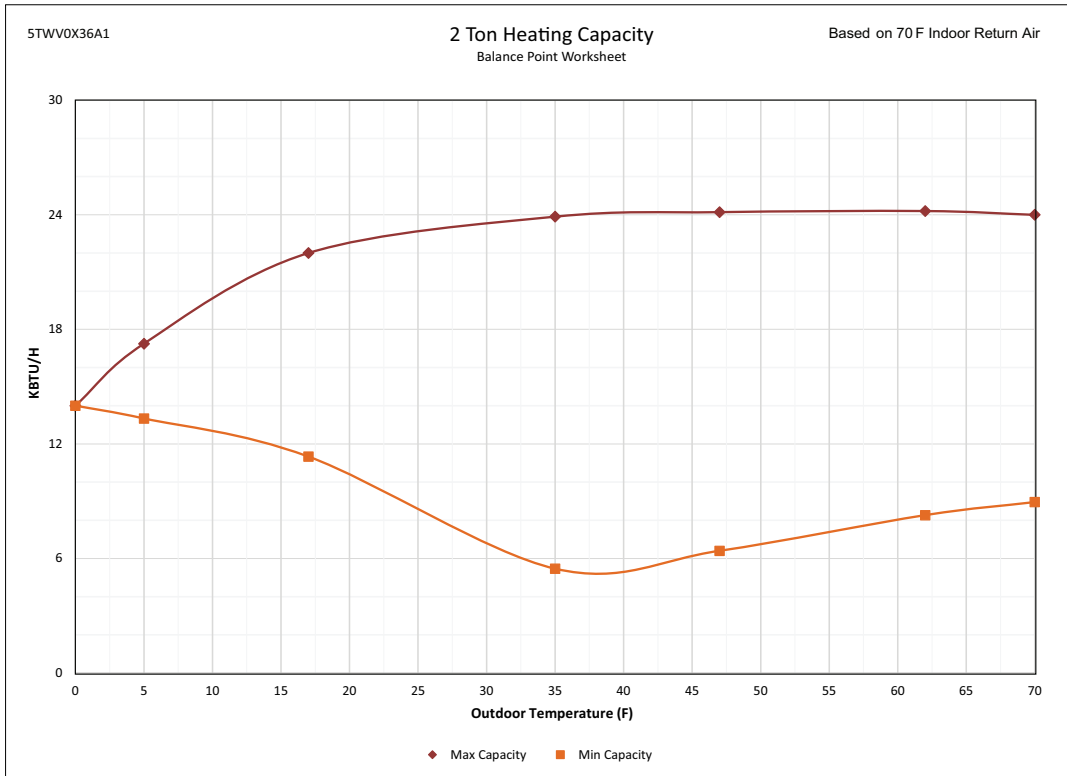
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

LEGEND

- | | | | |
|-------------|------------|----------------------|----------------------|
| 24 V | FACTORY | 24 VOLTAGE | 24 VOLTAGE |
| LINE | WIRING | LINE WIRING | LINE WIRING |
| FIELD | FIELD | FIELD | FIELD |
| LINE | FIELD | LINE FIELD | LINE FIELD |
| FOR | FOR | FOR | FOR |
| ROTARY | ROTARY | ROTARY | ROTARY |
| COMPRESSOR | COMPRESSOR | COMPRESSOR | COMPRESSOR |
| MAGNETIC | COIL | MAGNETIC COIL | MAGNETIC COIL |
| EARTH | GROUND | EARTH GROUND | EARTH GROUND |
| PROTECTIVE | GROUND | PROTECTIVE GROUND | PROTECTIVE GROUND |
| JUNCTION | JUNCTION | JUNCTION | JUNCTION |
| OR | OR | OR | OR |
| TERMINAL | TERMINAL | TERMINAL | TERMINAL |
| TERMINATOR | TERMINATOR | TERMINATOR | TERMINATOR |
| INTERNAL | OVERLOAD | INTERNAL OVERLOAD | INTERNAL OVERLOAD |
| PROTECTION | PROTECTION | PROTECTION | PROTECTION |
| TEMPERATURE | ACTUATED | TEMPERATURE ACTUATED | TEMPERATURE ACTUATED |
| PROTECTOR | PROTECTOR | PROTECTOR | PROTECTOR |
| RESISTOR | OR | RESISTOR OR | RESISTOR OR |
| HEATING | ELEMENT | HEATING ELEMENT | HEATING ELEMENT |
| WINDING | WINDING | WINDING | WINDING |
| SELECTED | CABLE | SELECTED CABLE | SELECTED CABLE |
| OPTIONAL | OPTIONAL | OPTIONAL | OPTIONAL |

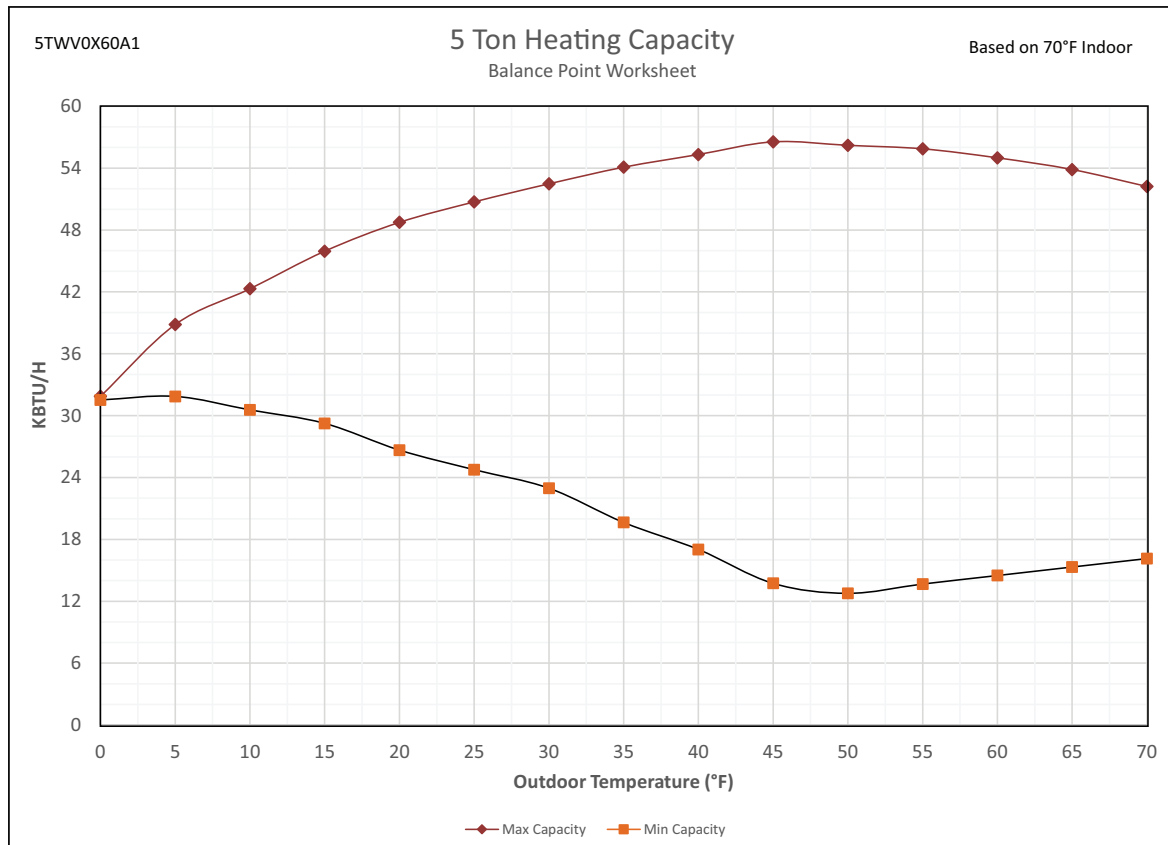
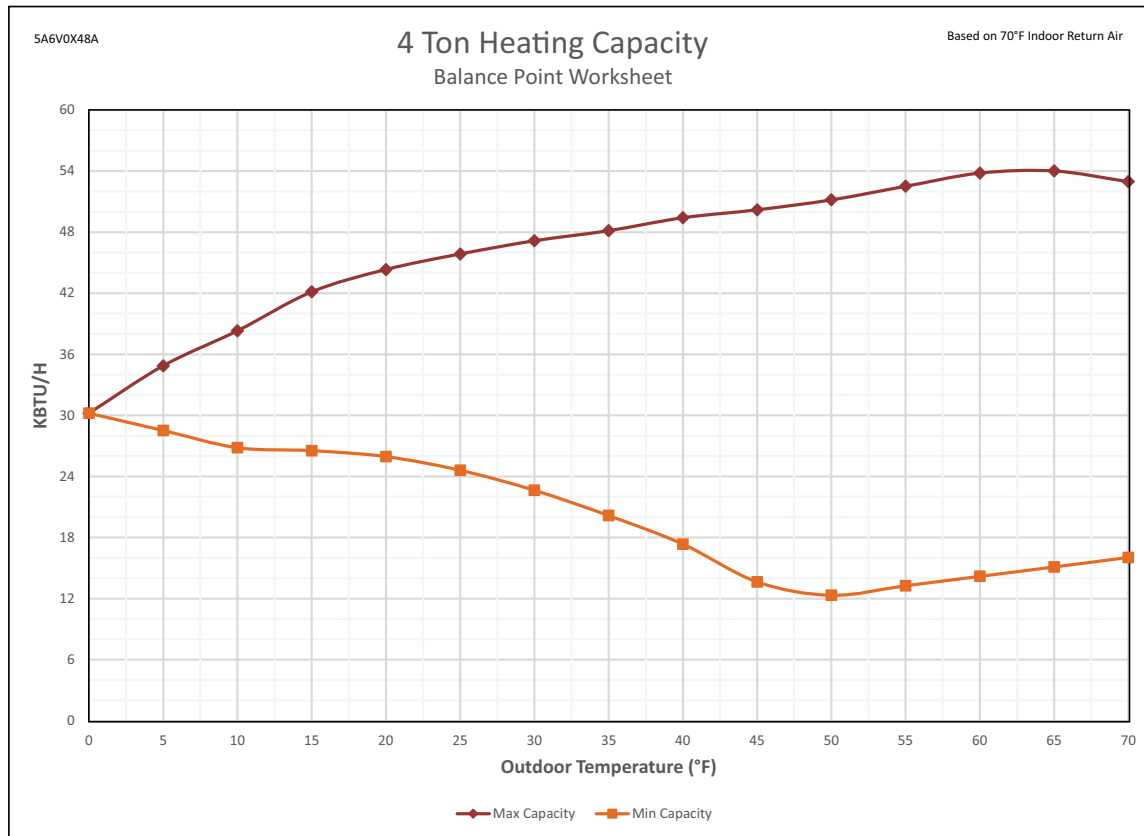


Balance Point Heat Capacity Worksheets





Balance Point Heat Capacity Worksheets





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.

Trane has a policy of continuous data improvement and it reserves the right to change design and specifications without notice. We are committed to using environmentally conscious print practices.