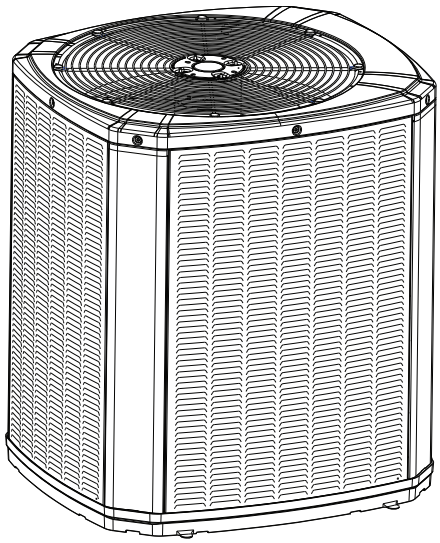
Product Data

Variable Speed ComfortLink™ II Heat Pumps

4TWV8024A1000B
4TWV8036A1000B
4TWV8037A1000B
4TWV8048A1000B
4TWV8049A1000B
4TWV8060A1000B



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

April 2020

22-1892-1F-EN

Mechanical Specification Options

General

This unit is designed to operate at outdoor ambient temperatures from 55° F to 120° F in cooling. From —10° F to 66° F in heating (heat pumps only). Only AHRI approved indoor matches are approved for use with these models.

ComfortLink™ II Heat Pumps

This outdoor unit contains the ComfortLink™ II Heat Pumps digital communication with 2 wire connection to outdoor and 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 contactor and high and low pressure switches. A factory supplied, field installed filter is standard.

Compressor

Inverter driven scroll compressor with 25 to 100% output capacity on heat pumps and 30 to 100% output capacity on air conditioners. Noise enclosure minimizes sound levels and built in compressor protection protects compressor will 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

The 1050/950/850 Control is required and provides Plug-n-Play setup and 3 wire connection.

Product Specifications

Heat Pump Models

OUTDOOR UNIT [a] [b]	4TWV8024A1000B	4TWV8036A1000B	4TWV8037A1000B
POWER CONNS. — V/PH/HZ [c]	208/230/1/60	208/230/1/60	208/230/1/60
MIN. BRCH. CIR. AMPACITY	17.0	25.0	26.0
BR. CIR. PROT. RTG. — MAX. (AMPS)	25	35	40
COMPRESSOR	SCROLL	SCROLL	SCROLL
NO. USED — NO. SPEEDS	1–VARIABLE	1–VARIABLE	1–VARIABLE
R.L. AMPS [d] — L.R. AMPS	11.5 — 10.2	18.1 — 10.2	18.4– 10.2
FACTORY INSTALLED			
START COMPONENTS [e]	NA	NA	NA
INSULATION/SOUND BLANKET	YES	YES	YES
COMPRESSOR HEAT	YES	YES	YES
OUTDOOR FAN			
DIA. (IN.) — NO. USED	23 — 1	23 — 1	27.5 — 1
TYPE DRIVE — NO. SPEEDS	DIRECT — VARIABLE	DIRECT — VARIABLE	DIRECT — VARIABLE
CFM @ 0.0 IN. W.G. [f]	2680	2850	3670
NO. MOTORS — HP	1 — 1/3	1 — 1/3	1 — 1/3
MOTOR SPEED R.P.M.	200 — 1200	200 — 1200	200 — 1200
VOLTS/PH/HZ	208/230/1/60	208/230/1/60	208/230/1/60
F.L. AMPS	2.8	2.8	2.8
OUTDOOR COIL — TYPE	SPINE FIN™	SPINE FIN™	SPINE FIN™
ROWS — F.P.I.	1 – 24	1 – 24	1 – 24
FACE AREA (SQ. FT.)	19.77	23.75	27.87
TUBE SIZE (IN.)	3/8	3/8	3/8
REFRIGERANT	R410–A	R410–A	R410–A
LBS. — R-410A (O.D. UNIT) [g]	7 lb — 6 oz	8 lb – 13 oz	10 lb — 5 oz
FACTORY SUPPLIED	YES	YES	YES
LINE SIZE — IN. O.D. GAS [h]	5/8	3/4	3/4
LINE SIZE — IN. O.D. LIQ. [h]	3/8	3/8	3/8
CHARGING SPECIFICATIONS			
SUBCOOLING	10°	10°	9°
DIMENSIONS	H X W X D	H X W X D	H X W X D
CRATED (IN.)	46 X 30.1 X 33	46 X 30.1 X 33	46.4 x 35.1 x 38.7
WEIGHT			
SHIPPING (LBS.)	225	238	263
NET (LBS.)	204	217	238

[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] 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] NA means no start components. Yes means quick start kit components. PTC means positive temperature coefficient starter.
[f] Standard Air — Dry Coil — Outdoor
[g] This value approximate. For more precise value see unit nameplate.
[h] Max. linear length 150 ft.; Max. lift — Suction 50 ft.; Max. lift — Liquid 50 ft.

Heat Pump Models Cont.

OUTDOOR UNIT (a) (b)	4TWV8048A1000B	4TWV8049A1000B	4TWV8060A1000B
POWER CONNS. — V/PH/HZ (c)	208/230/1/60	208/230/1/60	208/230/1/60
MIN. BRCH. CIR. AMPACITY	28.0	29.0	37.0
BR. CIR. PROT. RTG. — MAX. (AMPS)	40	45	50
COMPRESSOR	SCROLL	SCROLL	SCROLL
NO. USED — NO. SPEEDS	1–VARIABLE	1–VARIABLE	1–VARIABLE
R.L. AMPS (d) — L.R. AMPS	20.3 — 12.0	21.1 — 12.0	27.5 — 12.0
FACTORY INSTALLED			
START COMPONENTS (e)	NA	NA	NA
INSULATION/SOUND BLANKET	YES	YES	YES
COMPRESSOR HEAT	YES	YES	YES
OUTDOOR FAN			
DIA. (IN.) — NO. USED	27.5 — 1	27.5 — 1	27.5 — 1
TYPE DRIVE — NO. SPEEDS	DIRECT — VARIABLE	DIRECT — VARIABLE	DIRECT — VARIABLE
CFM @ 0.0 IN. W.G. (f)	4467	4517	4757
NO. MOTORS — HP	1 — 1/3	1 — 1/3	1 — 1/3
MOTOR SPEED R.P.M.	200 — 1200	200 — 1200	200 — 1200
VOLTS/PH/HZ	208/230/1/60	208/230/1/60	208/230/1/60
F.L. AMPS	2.8	2.8	2.8
OUTDOOR COIL — TYPE	SPINE FIN™	SPINE FIN™	SPINE FIN™
ROWS — F.P.I.	1 – 24	1 – 24	1 – 24
FACE AREA (SQ. FT.)	27.87	27.87	30.80
TUBE SIZE (IN.)	3/8	3/8	3/8
REFRIGERANT	R410–A	R410–A	R410–A
LBS. — R-410A (O.D. UNIT) (g)	10 lb — 8 oz	11 lb — 10 oz	13 lb — 2 oz
FACTORY SUPPLIED	YES	YES	YES
LINE SIZE — IN. O.D. GAS(h)	7/8	7/8	7/8
LINE SIZE — IN. O.D. LIQ. (h)	3/8	3/8	3/8
CHARGING SPECIFICATIONS			
SUBCOOLING	10°	10°	10°
DIMENSIONS	H X W X D	H X W X D	H X W X D
CRATED (IN.)	46.4 x 35.1 x 38.7	46.4 x 35.1 x 38.7	51 X 35.1 X 38.7
WEIGHT			
SHIPPING (LBS.)	268	275	285
NET (LBS.)	243	250	259

(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) 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) NA means no start components. Yes means quick start kit components. PTC means positive temperature coefficient starter.
(f) Standard Air — Dry Coil — Outdoor
(g) This value approximate. For more precise value see unit nameplate.
(h) Max. linear length 150 ft.; Max. lift — Suction 50 ft.; Max. lift — Liquid 50 ft.

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
4TWV8024A	Cool	Min	54	70.9	50.3	51.8	52.3	50.4	42.0	37.7	39.9
	Cool	Max	65	76.3	65.2	62.7	64.1	60.5	55.7	49.5	45.0
	Heat	Min	60	69.8	52.9	52.8	57.5	55.2	51.9	47.4	46.5
	Heat	Max	69	75.9	66.0	64.7	67.3	65.6	57.0	52.2	47.7
4TWV8036A	Cool	Min	56	71.5	51.5	54.7	54.4	52.2	43.1	36.8	38.5
	Cool	Max	70	74.1	69.4	65.9	70.5	65.1	59.4	54.2	49.5
	Heat	Min	60	68.3	52.1	53.9	57.6	55.1	52.9	45.1	47.8
	Heat	Max	74	78.7	70.3	76.3	73.0	68.7	61.1	57.3	53.6
4TWV8037A	Cool	Min	56	71.5	51.5	54.7	54.4	52.2	43.1	36.8	38.5
	Cool	Max	70	74.1	69.4	65.9	70.5	65.1	59.4	54.2	49.5
	Heat	Min	60	68.3	52.1	53.9	57.6	55.1	52.9	45.1	47.8
	Heat	Max	74	78.7	70.3	76.3	73.0	68.7	61.1	57.3	53.6
4TWV8048A	Cool	Min	61	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	62	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
4TWV8049A	Cool	Min	61	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	62	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
4TWV8060A	Cool	Min	57	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

Model	Mode	Speed	Sound Pressure in dBA			
			at 3′	at 5′	at 10′	at 15′
4TWV8024A	Cool	Min	47	42	36	33
	Cool	Max	58	53	47	44
	Heat	Min	53	48	42	39
	Heat	Max	62	57	51	48
4TWV8036A	Cool	Min	49	44	38	35
	Cool	Max	63	58	52	49
	Heat	Min	53	48	42	39
	Heat	Max	67	62	56	53
4TWV8037A	Cool	Min	49	44	38	35
	Cool	Max	63	58	52	49
	Heat	Min	53	48	42	39
	Heat	Max	67	62	56	53

Sound Data

Model	Mode	Speed	Sound Pressure in dBA			
			at 3′	at 5′	at 10′	at 15′
4TWV8048A	Cool	Min	54	49	43	40
	Cool	Max	67	62	56	53
	Heat	Min	55	50	44	41
	Heat	Max	69	64	58	55
4TWV8049A	Cool	Min	54	49	43	40
	Cool	Max	67	62	56	53
	Heat	Min	55	50	44	41
	Heat	Max	69	64	58	55
4TWV8060A	Cool	Min	50	45	39	36
	Cool	Max	66	61	55	52
	Heat	Min	54	49	43	40
	Heat	Max	67	62	56	53

NOTE: Rated in accordance with AHRI Standard 275

Optional Accessories:

Model	4TWV8024A	4TWV8036A	4TWV8037A	4TWV8048A	4TWV8049A	4TWV8060A
Rubber Isolator Kit	BAYISLT101	BAYISLT101	BAYISLT101	BAYISLT101	BAYISLT101	BAYISLT101
Snow Leg — Base & Cap 4" High	BAYLEGS002	BAYLEG2002	BAYLEGS002	BAYLEGS002	BAYLEGS002	BAYLEGS002
Snow Leg — 4" Extension	BAYLEGS003	BAYLEGS003	BAYLEGS003	BAYLEGS003	BAYLEGS003	BAYLEGS003
Extreme Condition Mounting Kit	BAYECMT023	BAYECMT023	BAYECMT004	BAYECMT004	BAYECMT004	BAYECMT004
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

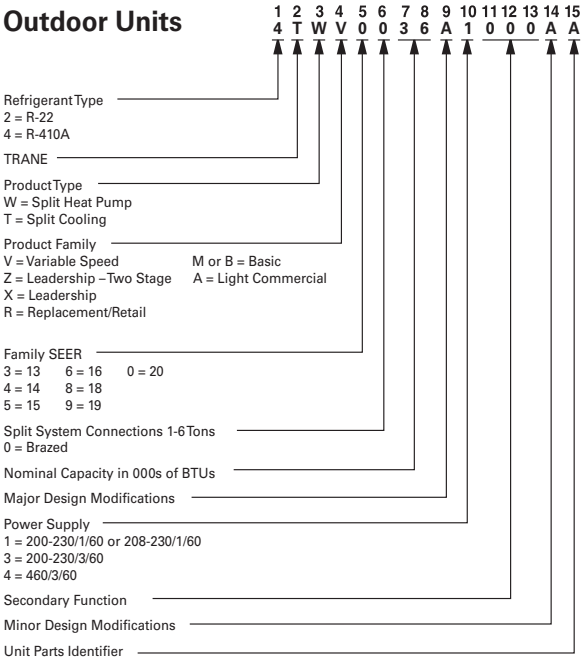
AHRI STANDARD 210/240 RATING CONDITIONS

- 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.

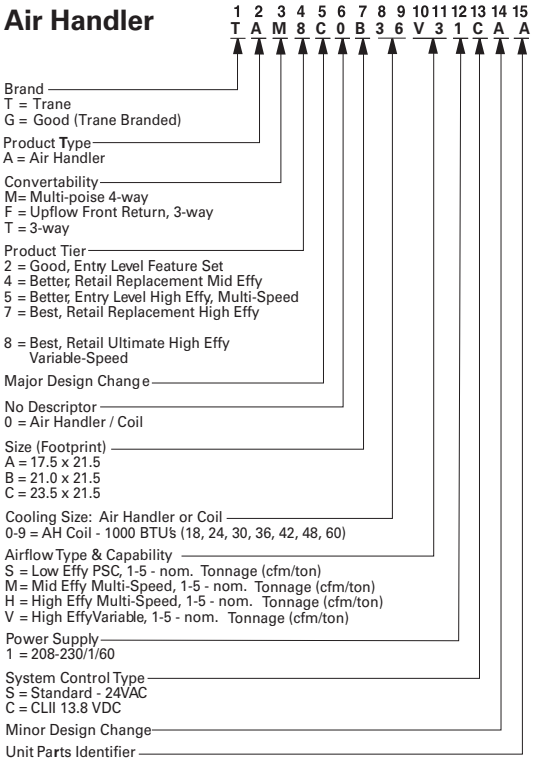
AHRI STANDARD 270 RATING CONDITIONS — (Noise rating numbers are determined with the unit in cooling operation) Standard Noise Rating number is at 95°F outdoor air.

Model Nomenclature

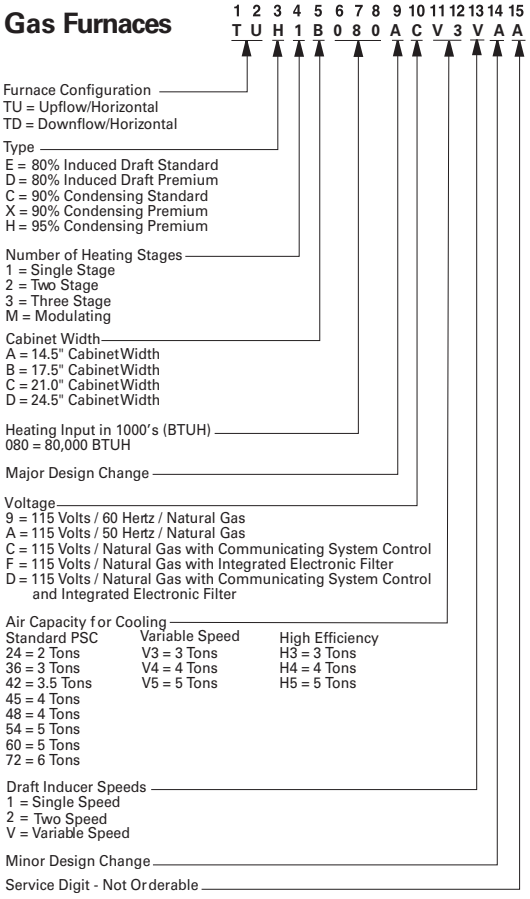
Outdoor Units



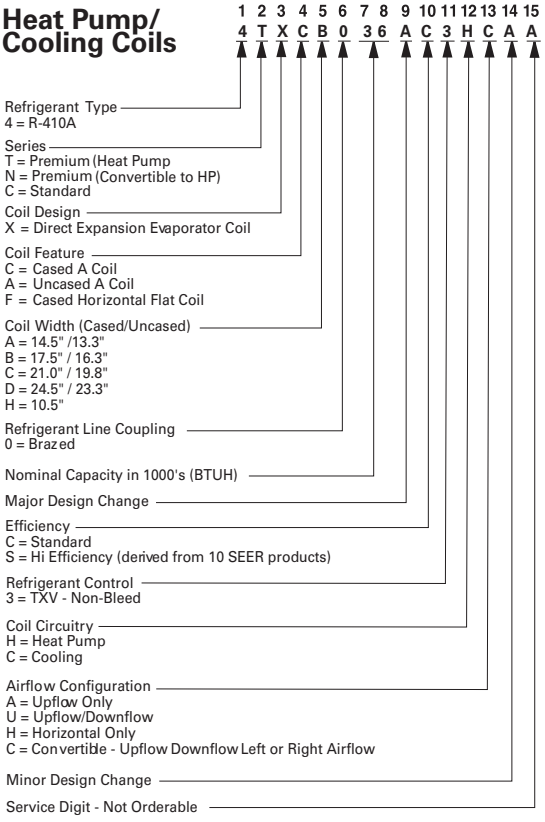
Air Handler



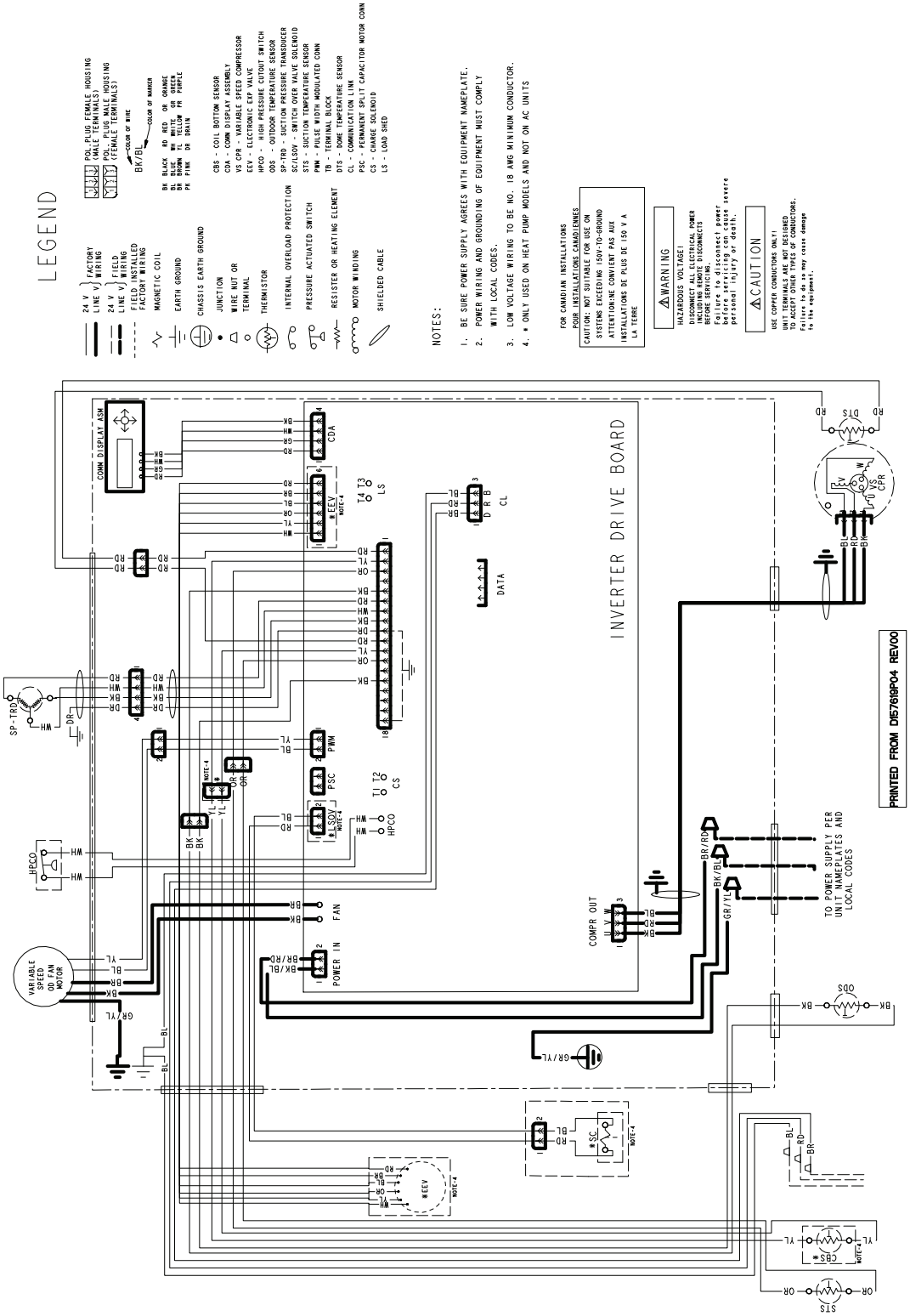
Gas Furnaces



Heat Pump/ Cooling Coils



Wiring — D157619P04

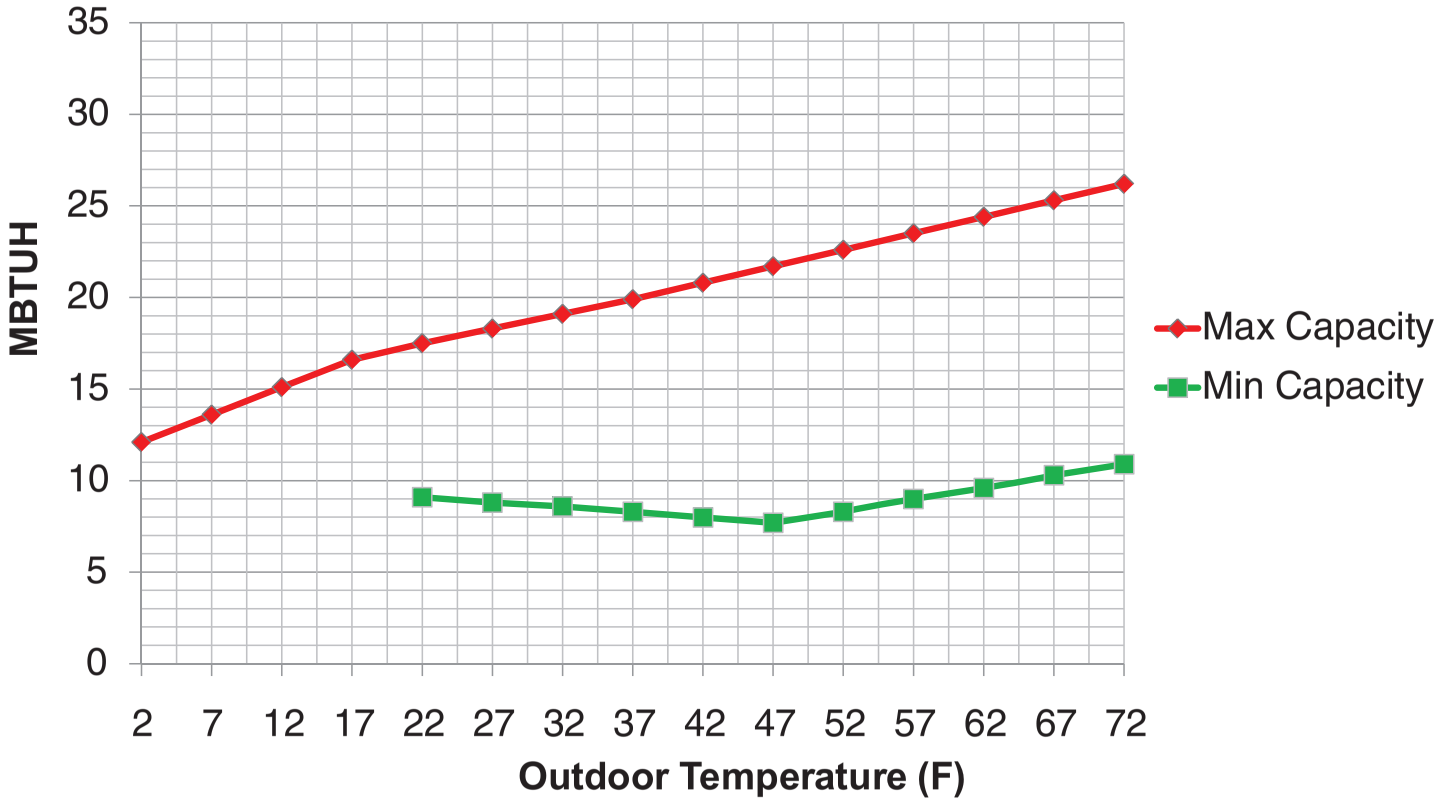


4TWV8024A1

2 Ton Heat Capacity

Balance Point Worksheet

Based on 70F
Indoor Return Air

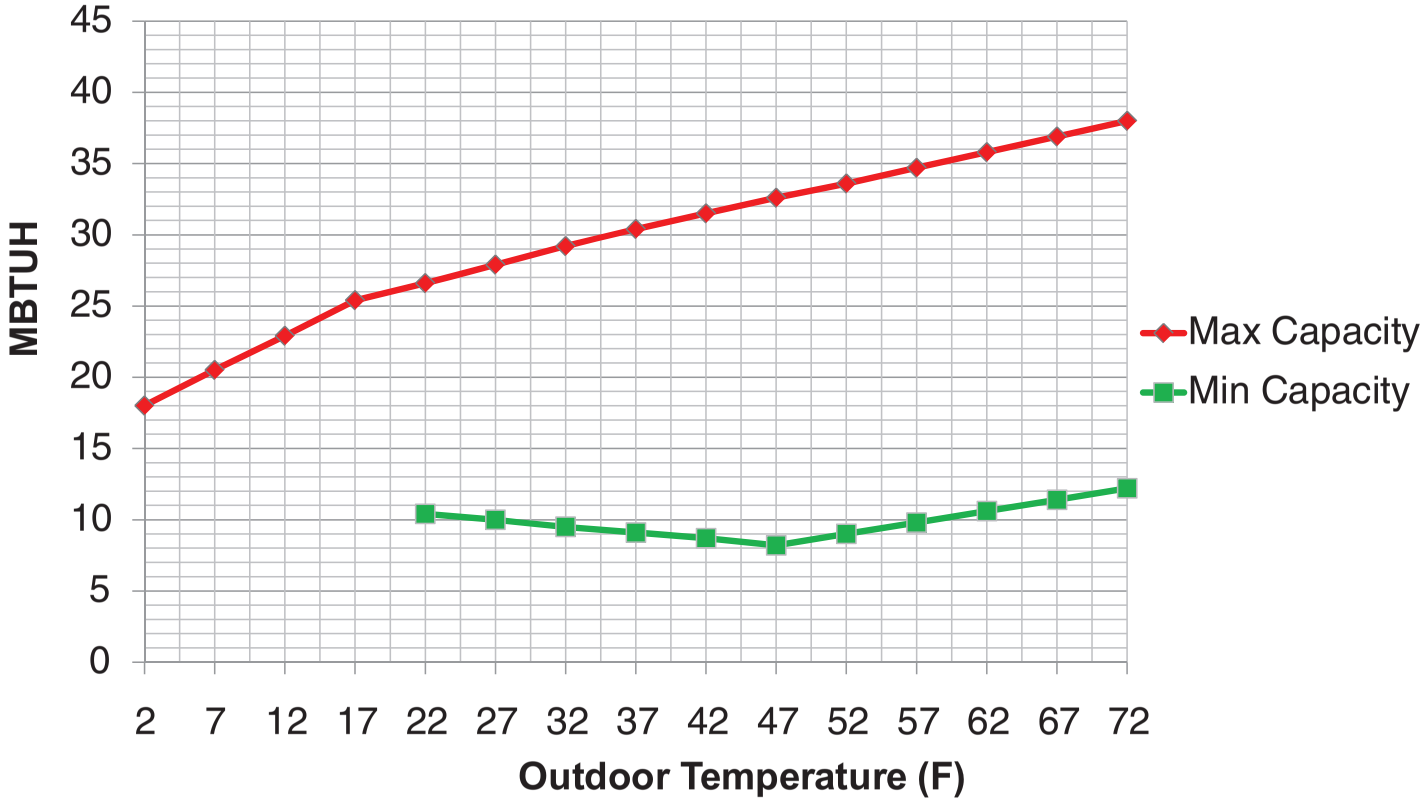


4TWV8036A1

3 Ton Heat Capacity

Balance Point Worksheet

Based on 70F
Indoor Return Air

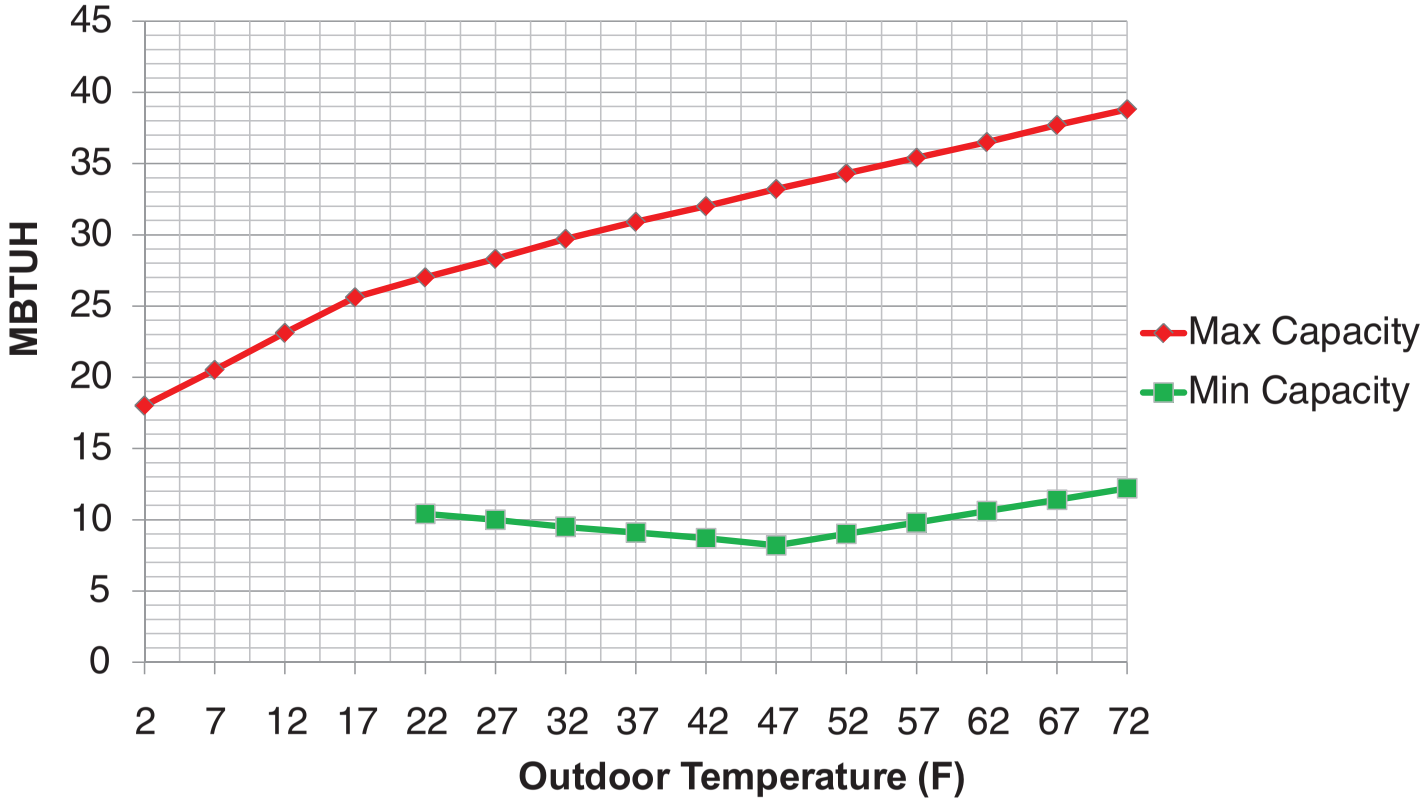


4TWV8037A1

3 Ton Heat Capacity

Balance Point Worksheet

Based on 70F
Indoor Return Air

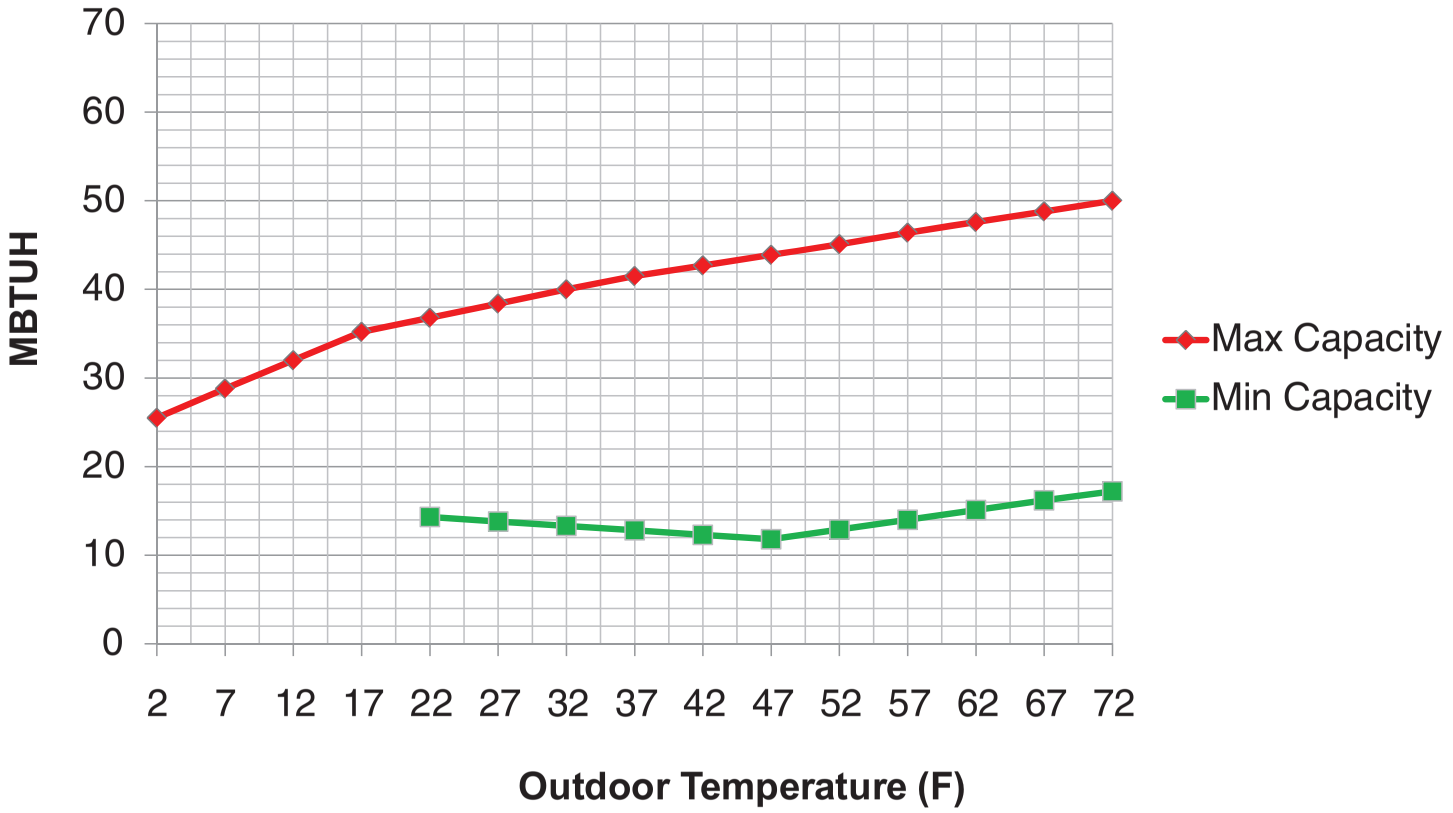


4TWV8048A1

4 Ton Heat Capacity

Balance Point Worksheet

Based on 70F
Indoor Return Air

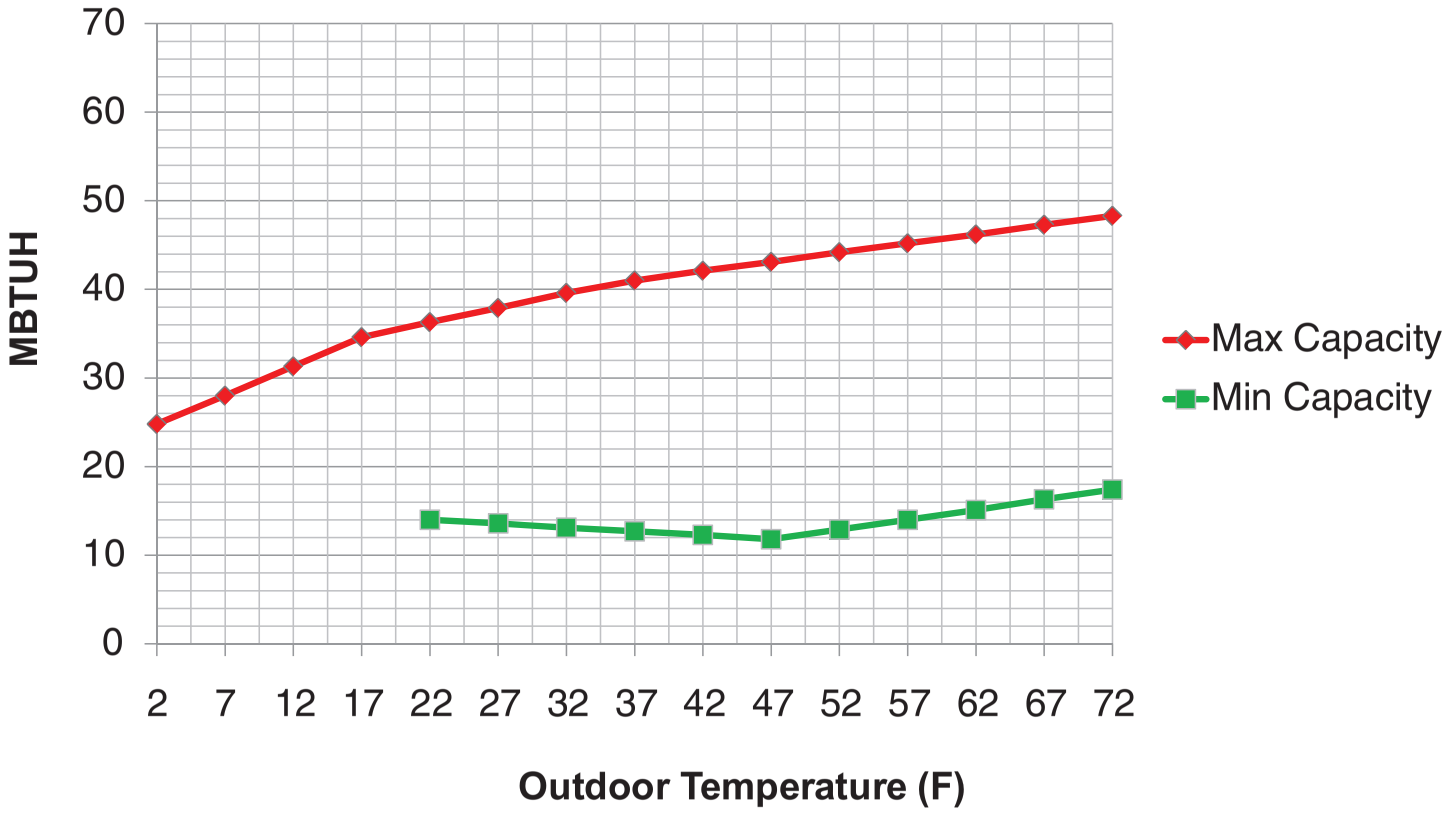


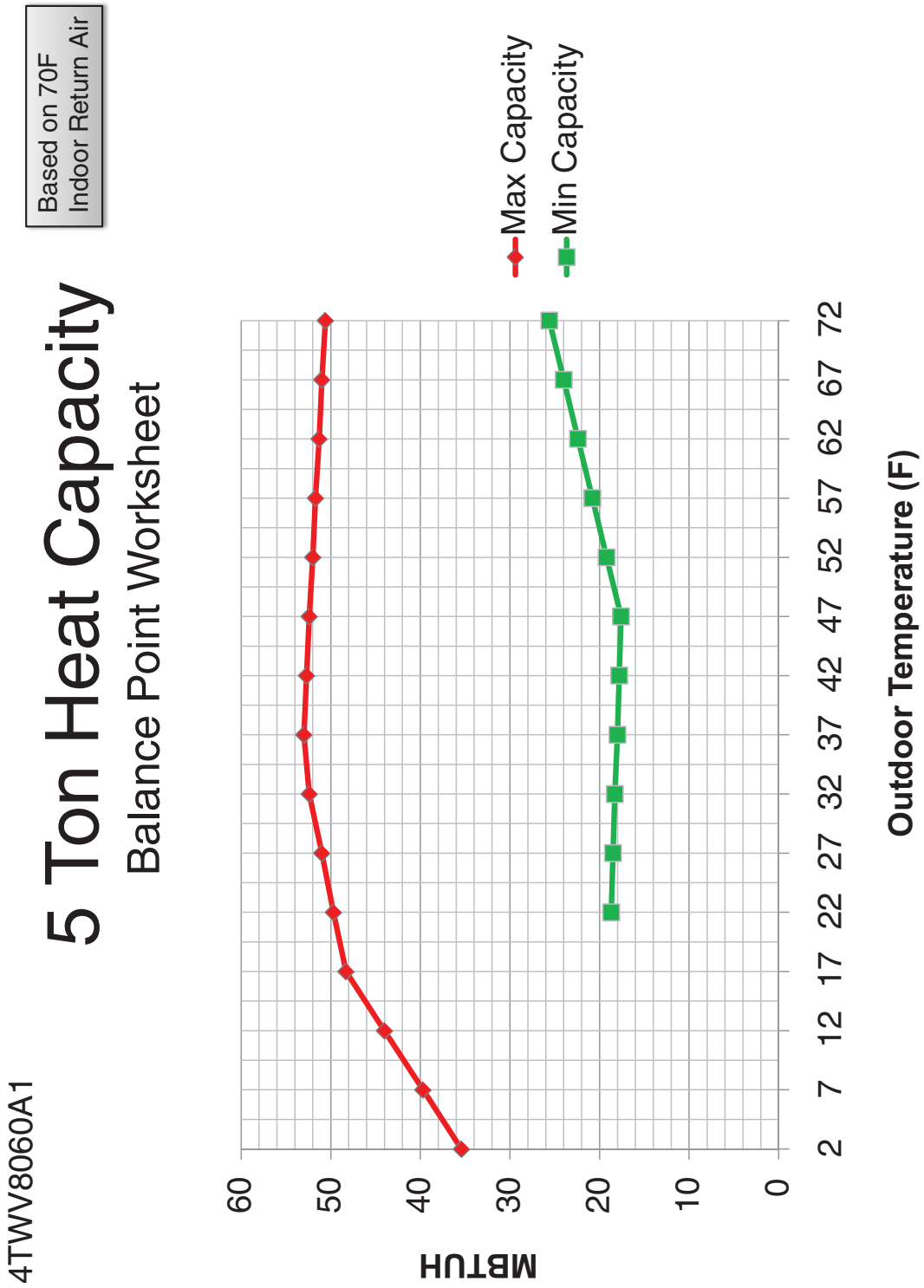
4TWV8049A1

4 Ton Heat Capacity

Balance Point Worksheet

Based on 70F
Indoor Return Air




4TWV8060A1
5 Ton Heat Capacity
Balance Point Worksheet
Based on 70F
Indoor Return Air
Max Capacity
Min Capacity
MBTUH
60
50
40
30
20
10
0
2
7
12
17
22
27
32
37
42
47
52
57
62
67
72
Outdoor Temperature (F)

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.

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