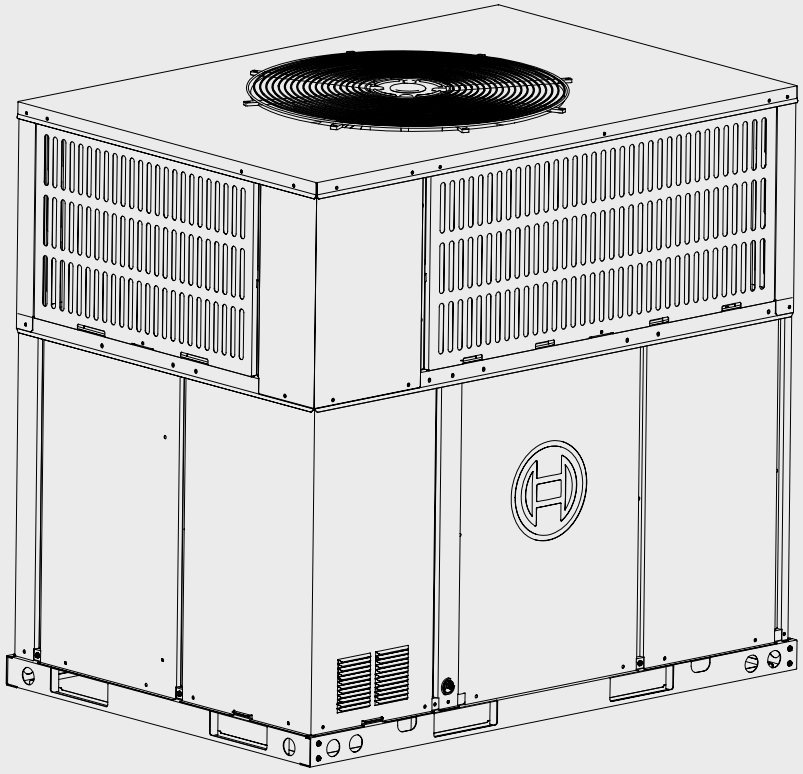
BOSCH

Product Specifications

Bosch IDP Heat Pump

Premium Series Packaged Unit

18 SEER2 | 3 & 5 Ton Capacity | R454B



BTC 762008309 A / 02.2025

ENERGY STAR

AHRI CERTIFIED® www.ahridirectory.org
Unitary Small HP
AHRI Standard 210/240
Certification applies only when the complete system is listed with AHRI.

C ETL LISTED US
Intertek

Table of Contents

1 Key to Symbols and Safety Instructions

1.1 Key to Symbols

Warnings

In warnings, signal words at the beginning of a warning are used to indicate the type and seriousness of the ensuing risk if measures for minimizing danger are not taken.

The following keywords are defined and can be used in this document:

DANGER

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

WARNING

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION

CAUTION indicates a hazardous situation which, if not avoided, could result in minor to moderate injury.

NOTICE

NOTICE is used to address practices not related to personal injury.

Important information

The info symbol indicates important information where there is no risk to people or property.

1 Product Features

1.1 Features and Benefits

- Superior efficiency
  - IDP 3T rated at 18 SEER2, 11 EER2, 8.1 HSPF2
  - IDP 5T rated at 19 SEER2, 11.2 EER2, 9 HSPF2
- Fully modulating Inverter Drive precisely matches the heating/cooling load
- Inverter Compressor (33%-114% speed), modulation in 1% increments
- Provides up to 4-stage indoor fan control
- 2-way design allows for horizontal and downflow installations, air return/ supply are convertible
- Easy to install – compatible with most standard 24 VAC heat pump thermostats

1.2 Standard Features

- Product designed to use R454B refrigerant
- Intelligent Oil Return Technology
- Inverter Driven Rotary Compressor
- Crankcase Heater Standard
- Compressor Sound Blanket
- Multiple System Protection:
  - High pressure switch and low pressure transducer
  - Compressor liquid return protection
  - Compressor high or low compression ratio protection
  - Compressor high temperature protection
  - High / low voltage protection and over current protection
  - IPM and electronic control board high temperature protection
- Outdoor coil is capable of withstanding 1000 hour salt spray test according to ASTM B117 standard
- AHRI certified; ETL listed

1.3 Cabinet Features

- Baked-on powder paint finish
- Wire fan discharge grille
- Steel louver coil guard

1.4 Limited Warranty

For Products installed in a one or two family residential dwelling, BTC warrants that all compressors and internal components incorporated into the Product at the time of shipment by BTC shall remain free from defects in workmanship and materials for ten (10) years* from the Commencement Date. If the Warranty Registration process has been completed and BTC determines that the Product or any part of the Product has a defect in workmanship or materials, BTC shall pay labor charges associated with the repair or replacement of the part in accordance with the Warranty Labor Allowance Schedule** for the period of ninety (90) days from the Commencement Date.

** Please refer to www.bosch-homecomfort.us for full warranty terms and conditions.*
*** Warranty Labor Allowance Schedule details are available on https://claims.boschhomecomfort.us*

1.5 Online Help Resources

Alternatively, please visit our Service & Support webpage to find FAQs, videos, service bulletins, and more; www.bosch-homecomfort.us/service or use your cellphone to scan the code below.

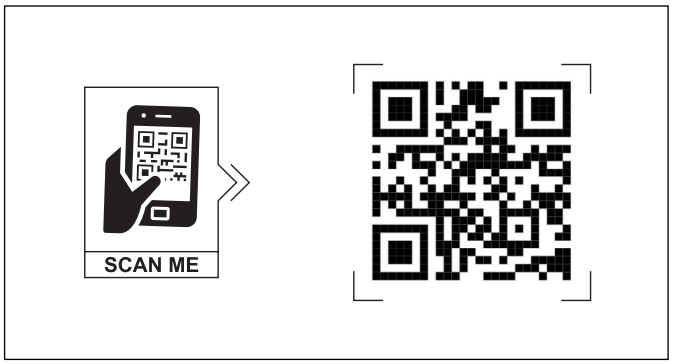


Figure 1

2 Nomenclature

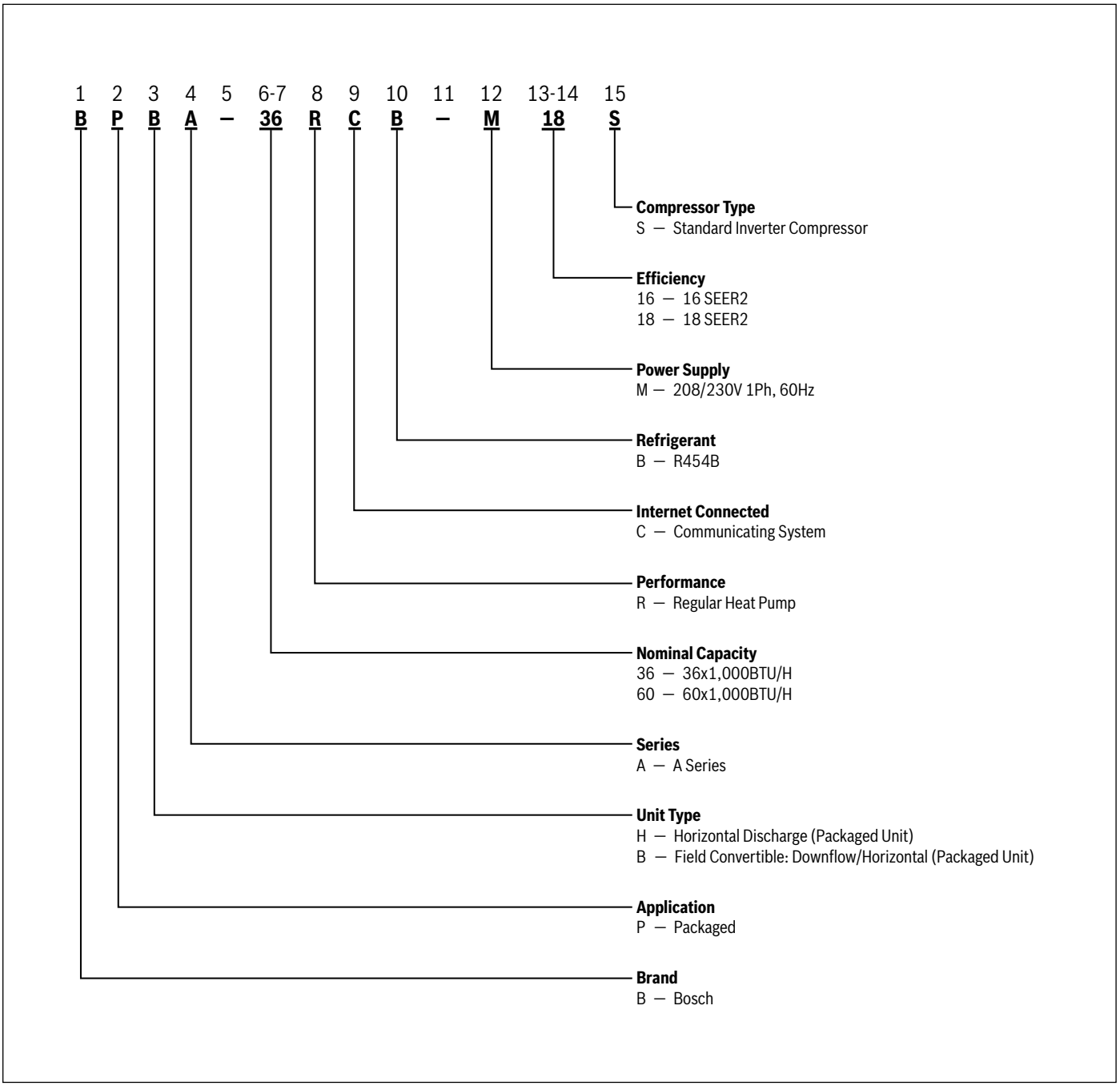


Figure 2

3 Product Specifications

	BPBA-36RCB-M18S	BPBA-60RCB-M18S
Electrical Data		
Rated Volts/PH/Hz	208-230/1/60	208-230/1/60
Min / Max Volts	187/253	187/253
Performance Cooling	23℉ - 125 ℉	23℉ - 125 ℉
BTUH (High)	34200	57000
Indoor Airflow (CFM)	1200	1700
Power Input (KW)	3.10	5.08
SEER2/ EER2-HI	18.0/11.0	19.0/11.2
Performance Heating	-4℉ - 86℉	-4℉ - 86℉
(High Temp.) BTUH / COP (High)	36000/3.6	57000/3.6
Power Input (KW)	2.93	4.64
HSPF2 (BTU / Watt-Hr.)	8.1	9.0
Power Conn. - V/Ph/Hz	208-230/1/60	208-230/1/60
Min. Brch. Cir. Ampacity[1]	30.0	42.0
Max. Overcurrent Protection[2]	45.00	60.00
Min. / Max. Volts	187/253	187/253
Fuse Size - Max. / Recmd. (amps)	35	50
Compressor	Rotary	Rotary
Volts/Ph/Hz	208-230/1/60	208-230/1/60
R.L. Amps	19.0	27.0
Outdoor Coil - Type	Finned Tube Exchanger	Finned Tube Exchanger
Rows/F.P.I.	2+3 / 17	3+3 / 17
Face Area (sq.ft.)	13.91	20.16
Tube Size (in.)	9/32	9/32
Circuitry Type	Interlaced	Interlaced
Refrigerant Control	EEV	EEV
Indoor Coil - Type	Finned Tube Exchanger	Finned Tube Exchanger
Rows/F.p.i.	4 / 17	4 / 17
Face Area (Sq.ft.)	3.96	6.13
Tube Size (In.)	9/32	9/32
Circuitry Type	Interlaced	Interlaced
Drain Conn. Size (In.)	3/4 NPTI	3/4 NPTI
Outdoor Fan - Type	Propeller	Propeller
Dia. (in.)	23-5/8	26
Drive/No. Speeds	Direct / 10	Direct / 10
CFM @0.0 in. w.g.	3162	4017
Motor - HP/R.P.M.	1/4 / 200~950	1/4 / 200~830
Volts/Ph/Hz	208-230/1/60	208-230/1/60
F.L. Amps/L.R. Amps	1.8	2.0

Table 1

[1] *Wire size should be determined in accordance with National Electrical Codes; extensive wire runs will require larger wire sizes.*

[2] *Must use time-delay fuses or HACR-type circuit breakers of the same size as noted.*

There are two condenser coils, one has 3 rows, and the other has 2 /3 rows.

Always check the rating plate for electrical data on the unit being installed.

	BPBA-36RCB-M18S	BPBA-60RCB-M18S
Indoor Fan - Type	Centrifugal	Centrifugal
Dia x Width (in.)	11.0 X 10.7	11.0 X 10.7
Drive/No. Speeds	Direct / 5	Direct / 5
CFM @0.0 in. w.g.	See Airflow Performance Table	See Airflow Performance Table
Motor - HP/R.P.M.	1/2 / 1050	3/4 / 1050
Volts/Ph/Hz	208-230/1/60	208-230/1/60
F.L. Amps/L.R. Amps	3.9	5.3
Filter / Furnished	No	No
Type Recommended	Throwaway	Throwaway
Recmd. Face Area (L x W x D)	16×10×1	16×14×1
Refrigerant / Charge (lbs. - oz.)	R454B / 6-3	R454B / 10-9
Dimensions		
Unit only L x W x H (in.)	50-11/16×46-13/16×35-1/16	51-9/16×51-7/16×44-13/16
Weight [3]		
Net lb. (kg)	403 (182)	551(250)
Gross lb. (kg)	422 (191)	568 (258)

Table 2

[3] *Weight values are estimated.*

Always check the rating plate for electrical data on the unit being installed.

4 AHRI 210/240 Performance Data

Nominal HP System Tonnage	Heat Pump Model	Cooling Capacity (BTU/h)			Heating Capacity			CFM	
		Total	EER2[2]	SEER2[1]	Hi	HSPF2[3]	Low[4]		
5	BRBA-60HWD1N1-M18	57000	11.2	18.0	57000	9.0	46500	1900	❄
3	BRBA-36HWD1N1-M18	34200	10.6	18.0	36000	8.1	24000	1250	

Table 3

[1] *Seasonal Energy Efficiency Ratio 2; Certified per AHRI 210/240*

[2] *Energy Efficiency Ratio 2; Certified per AHRI 210/240*

[3] *HSPF2 = Heating Seasonal Performance Factor 2; Certified per AHRI 210/240*

[4] *Jumper cut or dip switch off*

*Items in **bold** boxes meet the requirements for ENERGY STAR*

❄ *Denotes combinations that meet ENERGY STAR v6.1 Cold Climate*

5 Extended Performance Data

5.1 BPBA-36RCB-M18S for Cooling

BPBA-36RCB-M18S For Cooling																			
Indoor Airflow (SCFM)	Outdoor DB(°F)	IWB (°F)	59				63				67				71				
		IDB (°F)	70	75	80	85	70	75	80	85	70	75	80	85	70	75	80	85	
750	65	TC	32.91	33.19	33.92	34.20	34.83	35.11	35.47	35.76	36.02	36.20	36.58	37.86	\	37.21	38.40	38.69	
		S/T	0.99	1.00	1.00	1.00	0.63	0.86	1.00	1.00	0.39	0.58	0.76	0.94	\	0.39	0.54	0.69	
		kW	1.81	1.82	1.83	1.83	1.83	1.85	1.87	1.88	1.88	1.91	1.95	1.97	\	1.95	1.96	1.98	
	75	TC	31.53	31.90	32.18	32.54	32.91	33.19	33.55	34.00	34.38	34.75	35.19	35.84	\	36.30	36.77	37.13	
		S/T	1.00	1.00	1.00	1.00	0.62	0.85	1.00	1.00	0.39	0.58	0.76	0.94	\	0.39	0.54	0.69	
		kW	2.01	2.04	2.05	2.06	2.06	2.08	2.08	2.10	2.11	2.15	2.19	2.23	\	2.22	2.25	2.27	
	85	TC	30.06	30.52	30.89	31.07	31.35	31.72	32.00	32.44	32.91	33.27	33.55	33.82	\	34.75	35.01	35.39	
		S/T	1.00	1.00	1.00	1.00	0.63	0.86	1.00	1.00	0.39	0.58	0.76	0.95	\	0.39	0.54	0.70	
		kW	2.36	2.39	2.42	2.44	2.39	2.41	2.45	2.45	2.41	2.43	2.44	2.47	\	2.45	2.47	2.50	
	95	TC	26.85	27.23	28.42	28.97	29.41	29.70	30.06	30.34	31.25	31.53	31.82	32.08	\	33.27	33.55	33.82	
		S/T	1.00	1.00	0.99	1.00	0.63	0.87	1.00	1.00	0.39	0.58	0.72	1.00	\	0.39	0.55	0.71	
		kW	2.59	2.63	2.67	-0.68	2.62	2.66	2.69	2.70	2.62	2.66	2.70	2.73	\	-0.68	2.70	2.73	
	105	TC	26.95	27.31	27.86	28.14	27.86	28.14	28.42	28.79	29.70	30.06	29.98	30.52	\	30.42	30.99	31.53	
		S/T	0.99	1.00	0.99	1.00	0.63	0.87	1.00	1.00	0.39	0.59	0.78	1.00	\	0.39	0.57	0.74	
		kW	2.78	2.81	2.83	2.83	2.83	2.87	2.90	2.93	2.94	2.96	2.95	3.02	\	3.26	3.28	3.30	
	115	TC	20.81	20.99	21.45	21.72	21.45	21.72	21.90	22.18	23.65	23.74	24.02	24.20	\	24.38	24.46	24.56	
		S/T	1.00	1.00	1.00	1.00	0.64	0.88	1.00	1.00	0.40	0.62	0.86	1.00	\	0.40	0.62	0.84	
		kW	2.43	2.44	2.48	2.48	2.48	2.50	2.53	2.56	2.59	2.60	2.62	2.64	\	2.65	2.66	2.67	
950	65	TC	34.24	34.53	35.29	35.58	36.24	36.53	36.91	37.20	37.48	37.67	38.06	39.39	\	38.72	39.96	40.25	
		S/T	0.99	1.00	1.00	1.00	0.63	0.86	1.00	1.00	0.39	0.58	0.76	0.94	\	0.39	0.54	0.69	
		kW	1.93	1.94	1.96	1.96	1.96	1.98	2.00	2.01	2.01	2.04	2.09	2.11	\	2.08	2.10	2.12	
	75	TC	32.81	33.19	33.48	33.86	34.24	34.53	34.91	35.38	35.77	36.15	36.62	37.29	\	37.77	38.25	38.63	
		S/T	1.00	1.00	1.00	1.00	0.62	0.85	1.00	1.00	0.39	0.58	0.76	0.94	\	0.39	0.54	0.69	
		kW	2.15	2.18	2.19	2.20	2.20	2.22	2.23	2.25	2.26	2.30	2.35	2.39	\	2.38	2.41	2.43	
	85	TC	31.28	31.76	32.14	32.33	32.62	33.00	33.29	33.76	34.24	34.62	34.91	35.19	\	36.15	36.43	36.82	
		S/T	1.00	1.00	1.00	1.00	0.63	0.86	1.00	1.00	0.39	0.58	0.76	0.95	\	0.39	0.54	0.70	
		kW	2.52	2.55	2.58	2.60	2.55	2.57	2.61	2.62	2.57	2.59	2.61	2.64	\	2.61	2.64	2.67	
	95	TC	27.94	28.33	29.57	30.14	30.61	30.90	31.28	31.57	32.52	32.81	33.10	33.38	\	34.62	34.91	35.19	
		S/T	1.00	1.00	0.99	1.00	0.63	0.87	1.00	1.00	0.39	0.58	0.74	1.00	\	0.39	0.55	0.71	
		kW	2.77	2.81	2.85	1.00	2.80	2.84	2.87	2.89	2.80	2.84	2.88	2.92	\	1.00	2.89	2.92	
	105	TC	28.04	28.42	28.99	29.28	28.99	29.28	29.57	29.95	30.90	31.28	31.19	31.76	\	31.66	32.24	32.81	
		S/T	0.99	1.00	0.99	1.00	0.63	0.87	1.00	1.00	0.39	0.59	0.78	1.00	\	0.39	0.57	0.74	
		kW	2.97	3.00	3.03	3.03	3.03	3.07	3.10	3.13	3.14	3.16	3.15	3.22	\	3.48	3.50	3.52	
	115	TC	21.65	21.84	22.32	22.60	22.32	22.60	22.79	23.08	24.61	24.70	24.99	25.18	\	25.37	25.46	25.56	
		S/T	1.00	1.00	1.00	1.00	0.64	0.88	1.00	1.00	0.40	0.62	0.86	1.00	\	0.40	0.62	0.84	
		kW	2.59	2.61	2.65	2.65	2.65	2.67	2.70	2.73	2.77	2.78	2.80	2.82	\	2.83	2.84	2.85	
1050	65	TC	34.90	35.19	35.97	36.26	36.94	37.23	37.62	37.92	38.20	38.40	38.79	40.15	\	39.47	40.73	41.03	
		S/T	0.99	1.00	1.00	1.00	0.63	0.86	1.00	1.00	0.39	0.58	0.76	0.94	\	0.39	0.54	0.69	
		kW	1.99	2.00	2.02	2.02	2.02	2.04	2.06	2.07	2.07	2.10	2.15	2.17	\	2.14	2.16	2.18	
	75	TC	33.44	33.83	34.12	34.51	34.90	35.19	35.58	36.06	36.46	36.85	37.33	38.01	\	38.50	38.99	39.37	
		S/T	1.00	1.00	1.00	1.00	0.62	0.85	1.00	1.00	0.39	0.58	0.76	0.94	\	0.39	0.54	0.69	
		kW	2.21	2.24	2.25	2.26	2.26	2.28	2.30	2.32	2.33	2.37	2.42	2.46	\	2.45	2.48	2.50	
	85	TC	31.88	32.37	32.76	32.95	33.25	33.64	33.93	34.41	34.90	35.29	35.58	35.87	\	36.85	37.13	37.53	
		S/T	1.00	1.00	1.00	1.00	0.63	0.86	1.00	1.00	0.39	0.58	0.76	0.95	\	0.39	0.54	0.70	
		kW	2.60	2.63	2.66	2.68	2.63	2.65	2.69	2.70	2.65	2.67	2.69	2.72	\	2.69	2.72	2.75	
	95	TC	28.48	28.87	30.14	30.72	31.20	31.50	31.88	32.18	33.15	33.44	33.74	34.02	\	35.29	35.58	35.87	
		S/T	1.00	1.00	0.99	1.00	0.63	0.87	1.00	1.00	0.39	0.58	0.74	1.00	\	0.39	0.55	0.71	
		kW	2.85	2.89	2.93	1.84	2.88	2.92	2.95	2.98	2.88	2.92	2.96	3.01	\	1.84	2.98	3.01	
	105	TC	28.58	28.97	29.55	29.84	29.55	29.84	30.14	30.53	31.50	31.88	31.79	32.37	\	32.27	32.86	33.44	
		S/T	0.99	1.00	0.99	1.00	0.63	0.87	1.00	1.00	0.39	0.59	0.78	1.00	\	0.39	0.57	0.74	
		kW	3.06	3.09	3.12	3.12	3.12	3.16	3.19	3.22	3.23	3.26	3.25	3.32	\	3.58	3.60	3.62	
	115	TC	22.07	22.26	22.75	23.04	22.75	23.04	23.23	23.52	25.08	25.18	25.47	25.66	\	25.86	25.95	26.05	
		S/T	1.00	1.00	1.00	1.00	0.64	0.88	1.00	1.00	0.40	0.62	0.86	1.00	\	0.40	0.62	0.84	
		kW	2.67	2.69	2.73	2.73	2.73	2.75	2.78	2.81	2.85	2.86	2.88	2.90	\	2.91	2.92	2.93	

Table 4

TC refers to total capacity S/T: refers to the ratio of sensible heat and total capacity kW: refers to total input power

BPBA-36RCB-M18S For Cooling																		
Indoor Airflow (SCFM)	Outdoor DB(°F)	IWB (°F)	59				63				67				71			
		IDB (°F)	70	75	80	85	70	75	80	85	70	75	80	85	70	75	80	85
1200	65	TC	35.9	36.2	37	37.3	38	38.3	38.7	39	39.3	39.5	39.9	41.3	\	40.6	41.9	42.2
		S/T	0.99	1.00	1.00	1.00	0.63	0.86	1.00	1.00	0.39	0.58	0.76	0.94	\	0.39	0.54	0.69
		kW	2.08	2.09	2.12	2.12	2.12	2.14	2.16	2.17	2.17	2.2	2.26	2.28	\	2.24	2.27	2.29
	75	TC	34.4	34.8	35.1	35.5	35.9	36.2	36.6	37.1	37.5	37.9	38.4	39.1	\	39.6	40.1	40.5
		S/T	1.00	1.00	1.00	1.00	0.62	0.85	1.00	1.00	0.39	0.58	0.76	0.94	\	0.39	0.54	0.69
		kW	2.32	2.35	2.36	2.37	2.37	2.39	2.41	2.43	2.44	2.48	2.54	2.58	\	2.57	2.6	2.62
	85	TC	32.8	33.3	33.7	33.9	34.2	34.6	34.9	35.4	35.9	36.3	36.6	36.9	\	37.9	38.2	38.6
		S/T	1.00	1.00	1.00	1.00	0.63	0.86	1.00	1.00	0.39	0.58	0.76	0.95	\	0.39	0.54	0.70
		kW	2.72	2.75	2.78	2.8	2.75	2.77	2.81	2.83	2.77	2.79	2.82	2.85	\	2.81	2.85	2.88
	95	TC	29.3	29.7	31	31.6	32.1	32.4	32.8	33.1	34.1	34.4	34.7	35	\	36.3	36.6	36.9
		S/T	1.00	1.00	0.99	1.00	0.63	0.87	1.00	1.00	0.39	0.58	0.76	1.00	\	0.39	0.55	0.71
		kW	2.99	3.03	3.07	3.1	3.02	3.06	3.09	3.12	3.02	3.06	3.1	3.15	\	3.1	3.12	3.15
	105	TC	29.4	29.8	30.4	30.7	30.4	30.7	31	31.4	32.4	32.8	32.7	33.3	\	33.2	33.8	34.4
		S/T	0.99	1.00	0.99	1.00	0.63	0.87	1.00	1.00	0.39	0.59	0.78	1.00	\	0.39	0.57	0.74
		kW	3.2	3.23	3.27	3.27	3.27	3.31	3.34	3.37	3.38	3.41	3.4	3.47	\	3.75	3.77	3.79
	115	TC	22.7	22.9	23.4	23.7	23.4	23.7	23.9	24.2	25.8	25.9	26.2	26.4	\	26.6	26.7	26.8
		S/T	1.00	1.00	1.00	1.00	0.64	0.88	1.00	1.00	0.40	0.62	0.86	1.00	\	0.40	0.62	0.84
		kW	2.79	2.82	2.86	2.86	2.86	2.88	2.91	2.94	2.99	3	3.02	3.04	\	3.05	3.06	3.07
1350	65	TC	36.41	36.72	37.53	37.83	38.54	38.85	39.25	39.56	39.86	40.06	40.47	41.89	\	41.18	42.50	42.80
		S/T	0.99	1.00	1.00	1.00	0.63	0.86	1.00	1.00	0.39	0.58	0.76	0.94	\	0.39	0.54	0.69
		kW	2.11	2.12	2.15	2.15	2.15	2.17	2.19	2.20	2.20	2.23	2.29	2.31	\	2.27	2.30	2.32
	75	TC	34.89	35.30	35.60	36.01	36.41	36.72	37.12	37.63	38.04	38.44	38.95	39.66	\	40.17	40.67	41.08
		S/T	1.00	1.00	1.00	1.00	0.62	0.85	1.00	1.00	0.39	0.58	0.76	0.94	\	0.39	0.54	0.69
		kW	2.35	2.38	2.39	2.40	2.40	2.42	2.44	2.46	2.47	2.52	2.58	2.62	\	2.61	2.64	2.66
	85	TC	33.27	33.77	34.18	34.38	34.69	35.09	35.40	35.91	36.41	36.82	37.12	37.43	\	38.44	38.75	39.15
		S/T	1.00	1.00	1.00	1.00	0.63	0.86	1.00	1.00	0.39	0.58	0.76	0.95	\	0.39	0.54	0.70
		kW	2.76	2.79	2.82	2.84	2.79	2.81	2.85	2.87	2.81	2.83	2.86	2.89	\	2.85	2.89	2.92
	95	TC	29.72	30.12	31.44	32.05	32.56	32.86	33.27	33.57	34.59	34.89	35.20	35.50	\	36.82	37.12	37.43
		S/T	1.00	1.00	0.99	1.00	0.63	0.87	1.00	1.00	0.39	0.58	0.80	1.00	\	0.39	0.55	0.71
		kW	3.03	3.07	3.11	1.00	3.06	3.10	3.13	3.17	3.06	3.10	3.15	3.20	\	1.00	3.17	3.20
	105	TC	29.82	30.22	30.83	31.14	30.83	31.14	31.44	31.85	32.86	33.27	33.17	33.77	\	33.67	34.28	34.89
		S/T	0.99	1.00	0.99	1.00	0.63	0.87	1.00	1.00	0.39	0.59	0.78	1.00	\	0.39	0.57	0.74
		kW	3.25	3.28	3.32	3.32	3.32	3.36	3.39	3.42	3.43	3.46	3.45	3.52	\	3.81	3.83	3.85
	115	TC	23.02	23.22	23.73	24.04	23.73	24.04	24.24	24.54	26.17	26.27	26.57	26.78	\	26.98	27.08	27.18
		S/T	1.00	1.00	1.00	1.00	0.64	0.88	1.00	1.00	0.40	0.62	0.86	1.00	\	0.40	0.62	0.84
		kW	2.83	2.86	2.90	2.90	2.90	2.92	2.95	2.98	3.03	3.04	3.06	3.08	\	3.09	3.10	3.11

Table 5

TC refers to total capacity S/T: refers to the ratio of sensible heat and total capacity kW: refers to total input power

5.2 BPBA-36RCB-M18S for Heating

BPBA-36RCB-M18S For Heating																			
Indoor Airflow (SCFM)	ID(°F)	OD(°F)	72	67	62	57	52	47	42	37	32	27	22	17	12	7	2	0	-4
750	60	TC	36.69	36.3	35.79	35.24	35.14	34.13	32.72	30.77	30.25	28.82	26.99	25.33	24.82	23.13	21.54	21.03	17.13
		kW	2.26	2.36	2.47	2.74	2.87	2.96	2.87	2.83	2.74	3.39	3.27	3.18	3.58	3.4	3.2	3.11	2.71
	70	TC	29.56	29.12	28.91	28.7	28.47	28.22	27.69	27.19	26.52	26.4	25.46	24.79	24.24	22.5	21.02	19.63	16.71
		kW	1.83	1.86	1.95	2.19	2.26	2.39	2.49	2.64	2.83	3.65	3.54	3.4	3.82	3.61	3.39	3.28	2.88
	75	TC	26.76	26.51	26.18	25.55	25.06	24.43	24.02	23.9	23.62	23.42	23.11	22.77	22.45	21.92	20.14	19.91	16.01
		kW	1.55	1.6	1.68	1.93	2	2.09	2.18	2.33	2.61	2.93	3.43	3.5	3.65	3.67	3.42	3.4	2.9
	80	TC	21.67	21.61	21.4	21.31	20.85	20.82	20.48	20.33	20.31	19.78	19.58	19.24	19.09	18.48	17.37	15.96	14
		kW	1.39	1.45	1.44	1.6	1.69	1.75	1.92	2.04	2.27	2.64	2.97	3.06	3.18	3.12	2.76	2.63	2.33
950	60	TC	37.57	37.18	36.65	36.1	35.98	34.95	33.52	31.51	30.97	29.52	27.63	25.93	25.42	23.69	22.06	21.53	17.53
		kW	2.3	2.4	2.51	2.78	2.91	3	2.91	2.87	2.78	3.43	3.31	3.22	3.62	3.44	3.24	3.15	2.75
	70	TC	30.28	29.82	29.61	29.4	29.15	28.9	28.37	27.85	27.16	27.04	26.08	25.39	24.82	23.04	21.52	20.11	17.11
		kW	1.87	1.9	1.99	2.23	2.3	2.43	2.53	2.68	2.87	3.69	3.58	3.44	3.86	3.65	3.43	3.32	2.92
	75	TC	27.4	27.15	26.82	26.17	25.66	25.03	24.6	24.48	24.18	23.98	23.67	23.31	22.99	22.44	20.62	20.39	16.39
		kW	1.59	1.64	1.72	1.97	2.04	2.13	2.22	2.37	2.65	2.97	3.47	3.54	3.69	3.71	3.46	3.44	2.94
	80	TC	22.19	22.13	21.92	21.83	21.35	21.32	20.96	20.81	20.79	20.26	20.06	19.7	19.55	18.92	17.79	16.34	14.34
		kW	1.43	1.49	1.48	1.64	1.73	1.79	1.96	2.08	2.31	2.68	3.01	3.1	3.22	3.16	2.8	2.67	2.37
1050	60	TC	38.01	37.62	37.08	36.53	36.4	35.36	33.92	31.88	31.33	29.87	27.95	26.23	25.72	23.97	22.32	21.78	17.73
		kW	2.32	2.42	2.53	2.8	2.93	3.02	2.93	2.89	2.8	3.45	3.33	3.24	3.64	3.46	3.26	3.17	2.77
	70	TC	30.64	30.17	29.96	29.75	29.49	29.24	28.71	28.18	27.48	27.36	26.39	25.69	25.11	23.31	21.77	20.35	17.31
		kW	1.89	1.92	2.01	2.25	2.32	2.45	2.55	2.7	2.89	3.71	3.6	3.46	3.88	3.67	3.45	3.34	2.94
	75	TC	27.72	27.47	27.14	26.48	25.96	25.33	24.89	24.77	24.46	24.26	23.95	23.58	23.26	22.7	20.86	20.63	16.58
		kW	1.61	1.66	1.74	1.99	2.06	2.15	2.24	2.39	2.67	2.99	3.49	3.56	3.71	3.73	3.48	3.46	2.96
	80	TC	22.45	22.39	22.18	22.09	21.6	21.57	21.2	21.05	21.03	20.5	20.3	19.93	19.78	19.14	18	16.53	14.51
		kW	1.45	1.51	1.5	1.66	1.75	1.81	1.98	2.1	2.33	2.7	3.03	3.12	3.24	3.18	2.82	2.69	2.39
1200	60	TC	38.69	38.29	37.74	37.18	37.05	35.99	34.52	32.45	31.89	30.4	28.45	26.7	26.18	24.4	22.72	22.17	18.05
		kW	2.37	2.47	2.58	2.85	2.98	3.07	2.98	2.94	2.85	3.5	3.38	3.29	3.69	3.51	3.31	3.22	2.82
	70	TC	31.18	30.71	30.49	30.28	30.02	29.76	29.22	28.68	27.97	27.85	26.86	26.15	25.56	23.73	22.16	20.71	17.62
		kW	1.94	1.97	2.06	2.3	2.37	2.5	2.6	2.75	2.94	3.76	3.65	3.51	3.93	3.72	3.5	3.39	2.99
	75	TC	28.22	27.96	27.62	26.95	26.42	25.78	25.33	25.21	24.9	24.69	24.38	24	23.67	23.11	21.23	21	16.88
		kW	1.66	1.71	1.79	2.04	2.11	2.2	2.29	2.44	2.72	3.04	3.54	3.61	3.76	3.78	3.53	3.51	3.01
	80	TC	22.85	22.79	22.57	22.48	21.99	21.95	21.58	21.43	21.41	20.86	20.66	20.29	20.13	19.48	18.32	16.83	14.77
		kW	1.5	1.56	1.55	1.71	1.8	1.86	2.03	2.15	2.38	2.75	3.08	3.17	3.29	3.23	2.87	2.74	2.44
1350	60	TC	39.46	39.05	38.49	37.92	37.79	36.7	35.21	33.09	32.52	31	29.01	27.23	26.7	24.88	23.17	22.61	18.41
		kW	2.53	2.63	2.74	3.01	3.14	3.23	3.14	3.1	3.01	3.66	3.54	3.45	3.85	3.67	3.47	3.38	2.98
	70	TC	31.8	31.32	31.09	30.88	30.62	30.35	29.8	29.25	28.52	28.4	27.39	26.67	26.07	24.2	22.6	21.12	17.97
		kW	2.1	2.13	2.22	2.46	2.53	2.66	2.76	2.91	3.1	3.92	3.81	3.67	4.09	3.88	3.66	3.55	3.15
	75	TC	28.78	28.51	28.17	27.48	26.94	26.29	25.83	25.71	25.39	25.18	24.86	24.48	24.14	23.57	21.65	21.42	17.21
		kW	1.82	1.87	1.95	2.2	2.27	2.36	2.45	2.6	2.88	3.2	3.7	3.77	3.92	3.94	3.69	3.67	3.17
	80	TC	23.3	23.24	23.02	22.92	22.42	22.38	22.01	21.85	21.83	21.27	21.07	20.69	20.53	19.86	18.68	17.16	15.06
		kW	1.66	1.72	1.71	1.87	1.96	2.02	2.19	2.31	2.54	2.91	3.24	3.33	3.45	3.39	3.03	2.9	2.6

Table 6

TC refers to total capacity kW: refers to total input power

5.3 BPBA-60RCB-M18S for Cooling

BPBA-60RCB-M18S For Cooling																		
Indoor Airflow (SCFM)	Outdoor DB (℉)	IWB (℉)	59				63				67				71			
		IDB (℉)	70	75	80	85	70	75	80	85	70	75	80	85	70	75	80	85
1200	65	TC	52.35	54.60	55.10	55.80	57.25	58.05	59.35	59.05	60.00	61.40	61.60	62.90	\	63.85	64.15	64.55
		S/T	0.85	1.00	1.00	1.00	0.57	0.76	0.97	1.00	0.38	0.55	0.73	0.89	\	0.37	0.52	0.67
		kW	2.84	2.93	3.00	3.03	2.86	2.95	2.84	3.07	2.88	2.97	3.08	3.15	\	3.00	3.13	3.16
	75	TC	48.50	48.70	48.90	49.10	55.60	55.90	56.30	56.40	62.40	62.70	59.05	63.05	\	61.10	61.40	61.80
		S/T	0.85	1.00	1.00	1.00	0.57	0.76	0.97	1.00	0.38	0.55	0.73	0.89	\	0.37	0.52	0.67
		kW	3.32	3.32	3.32	3.32	3.47	3.47	3.47	3.47	4.01	4.01	4.01	4.01	\	3.97	4.00	4.04
	85	TC	44.75	44.95	45.25	45.05	52.65	52.55	52.25	52.55	54.40	55.90	56.40	57.05	\	57.35	57.65	58.05
		S/T	0.85	1.00	1.00	1.00	0.57	0.76	0.97	1.00	0.38	0.55	0.73	0.89	\	0.37	0.52	0.67
		kW	3.60	3.63	3.63	3.65	3.78	3.78	3.83	3.84	3.78	3.79	3.86	3.89	\	3.86	3.90	3.95
	95	TC	45.55	47.25	47.90	48.50	49.50	50.20	50.65	51.25	52.35	53.05	53.65	54.10	\	56.10	56.60	57.15
		S/T	0.85	1.00	1.00	1.00	0.57	0.76	0.97	1.00	0.38	0.55	0.65	0.89	\	0.37	0.52	0.67
		kW	4.07	4.13	4.20	4.25	4.09	4.15	4.24	4.27	4.11	4.17	4.27	4.34	\	4.21	4.27	4.33
	105	TC	44.55	45.35	46.15	46.75	46.75	47.20	47.90	48.50	49.60	50.30	50.65	51.35	\	50.40	50.45	51.15
		S/T	0.85	1.00	1.00	1.00	0.57	0.76	0.97	1.00	0.38	0.55	0.73	0.89	\	0.38	0.53	0.68
		kW	4.49	4.58	4.63	4.68	4.51	4.58	4.67	4.72	4.53	4.60	4.70	4.76	\	4.67	4.73	4.81
	115	TC	40.65	41.20	41.80	42.60	42.40	43.60	44.95	45.75	45.35	46.05	47.40	48.10	\	45.85	47.15	48.50
		S/T	0.85	1.00	1.00	1.00	0.60	0.82	1.00	1.00	0.42	0.62	0.81	0.99	\	0.39	0.58	0.81
		kW	4.90	4.92	4.92	4.98	4.97	5.02	5.06	5.12	5.04	5.08	5.16	5.23	\	5.19	5.23	5.30
1500	65	TC	54.9	57.3	57.8	58.5	60.1	60.9	62.2	61.9	63	64.4	64.6	65.9	\	67	67.3	67.7
		S/T	0.85	1.00	1.00	1.00	0.57	0.76	0.97	1.00	0.38	0.55	0.73	0.89	\	0.37	0.52	0.67
		kW	3.13	3.22	3.29	3.33	3.15	3.24	3.11	3.37	3.17	3.26	3.38	3.45	\	3.29	3.43	3.48
	75	TC	50.9	51.1	51.3	51.5	58.3	58.6	59	59.1	65.4	65.7	61.9	66.2	\	64.1	64.4	64.8
		S/T	0.85	1.00	1.00	1.00	0.57	0.76	0.97	1.00	0.38	0.55	0.73	0.89	\	0.37	0.52	0.67
		kW	3.64	3.64	3.64	3.64	3.82	3.82	3.82	3.82	4.4	4.4	4.4	4.4	\	4.36	4.39	4.43
	85	TC	47	47.2	47.5	47.3	55.2	55.1	54.8	55.1	57.1	58.6	59.1	59.9	\	60.2	60.5	60.9
		S/T	0.85	1.00	1.00	1.00	0.57	0.76	0.97	1.00	0.38	0.55	0.73	0.89	\	0.37	0.52	0.67
		kW	3.95	3.98	3.99	4.01	4.14	4.16	4.21	4.22	4.14	4.17	4.24	4.27	\	4.24	4.28	4.33
	95	TC	47.8	49.5	50.3	50.9	51.9	52.6	53.2	53.8	54.9	55.6	56.2	56.8	\	58.8	59.3	60
		S/T	0.85	1.00	1.00	1.00	0.57	0.76	0.97	1.00	0.38	0.55	0.70	0.89	\	0.37	0.52	0.67
		kW	4.46	4.54	4.61	4.66	4.48	4.56	4.65	4.69	4.5	4.58	4.68	4.76	\	4.62	4.69	4.75
	105	TC	46.8	47.6	48.4	49	49	49.6	50.3	50.9	52	52.7	53.2	53.9	\	52.8	53	53.7
		S/T	0.85	1.00	1.00	1.00	0.57	0.76	0.97	1.00	0.38	0.55	0.73	0.89	\	0.38	0.53	0.68
		kW	4.93	5.02	5.08	5.13	4.95	5.03	5.12	5.17	4.97	5.05	5.15	5.23	\	5.12	5.2	5.28
	115	TC	42.6	43.3	43.9	44.7	44.5	45.7	47.2	48	47.6	48.3	49.8	50.5	\	48.1	49.4	50.9
		S/T	0.85	1.00	1.00	1.00	0.60	0.82	1.00	1.00	0.42	0.62	0.81	0.99	\	0.39	0.58	0.81
		kW	5.37	5.4	5.4	5.46	5.45	5.5	5.56	5.62	5.52	5.58	5.66	5.74	\	5.69	5.74	5.81
1700	65	TC	56.6	59.1	59.6	60.3	62	62.8	64.1	63.8	65	66.4	66.6	67.9	\	69.1	69.4	69.8
		S/T	0.85	1.00	1.00	1.00	0.57	0.76	0.97	1.00	0.38	0.55	0.73	0.89	\	0.37	0.52	0.67
		kW	3.32	3.41	3.48	3.53	3.34	3.43	3.29	3.57	3.36	3.45	3.58	3.65	\	3.48	3.63	3.69
	75	TC	52.5	52.7	52.9	53.1	60.1	60.4	60.8	60.9	67.4	67.7	63.8	68.3	\	66.1	66.4	66.8
		S/T	0.85	1.00	1.00	1.00	0.57	0.76	0.97	1.00	0.38	0.55	0.73	0.89	\	0.37	0.52	0.67
		kW	3.85	3.85	3.85	3.85	4.05	4.05	4.05	4.05	4.66	4.66	4.66	4.66	\	4.62	4.65	4.69
	85	TC	48.5	48.7	49	48.8	56.9	56.8	56.5	56.8	58.9	60.4	60.9	61.8	\	62.1	62.4	62.8
		S/T	0.85	1.00	1.00	1.00	0.57	0.76	0.97	1.00	0.38	0.55	0.73	0.89	\	0.37	0.52	0.67
		kW	4.18	4.21	4.23	4.25	4.38	4.41	4.46	4.47	4.38	4.42	4.49	4.52	\	4.49	4.53	4.58
	95	TC	49.3	51	51.9	52.5	53.5	54.2	54.9	55.5	56.6	57.3	57.9	58.6	\	60.6	61.1	61.9
		S/T	0.85	1.00	1.00	1.00	0.57	0.76	0.97	1.00	0.38	0.55	0.73	0.89	\	0.37	0.52	0.67
		kW	4.72	4.81	4.88	4.93	4.74	4.83	4.92	4.97	4.76	4.85	4.95	5.04	\	4.89	4.97	5.03
	105	TC	48.3	49.1	49.9	50.5	50.5	51.2	51.9	52.5	53.6	54.3	54.9	55.6	\	54.4	54.7	55.4
		S/T	0.85	1.00	1.00	1.00	0.57	0.76	0.97	1.00	0.38	0.55	0.73	0.89	\	0.38	0.53	0.68
		kW	5.22	5.31	5.38	5.43	5.24	5.33	5.42	5.47	5.26	5.35	5.45	5.54	\	5.42	5.51	5.59
	115	TC	43.9	44.7	45.3	46.1	45.9	47.1	48.7	49.5	49.1	49.8	51.4	52.1	\	49.6	50.9	52.5
		S/T	0.85	1.00	1.00	1.00	0.60	0.82	1.00	1.00	0.42	0.62	0.81	0.99	\	0.39	0.58	0.81
		kW	5.68	5.72	5.72	5.78	5.77	5.82	5.89	5.95	5.84	5.91	5.99	6.08	\	6.02	6.08	6.15

Table 7

TC refers to total capacity S/T: refers to the ratio of sensible heat and total capacity kW: refers to total input power

BPBA-60RCB-M18S For Cooling																		
Indoor Airflow (SCFM)	Outdoor DB (°F)	IWB (°F)	59				63				67				71			
		IDB (°F)	70	75	80	85	70	75	80	85	70	75	80	85	70	75	80	85
1900	65	TC	57.86	60.43	60.93	61.63	63.40	64.20	65.56	65.26	66.46	67.86	68.13	69.43	\	70.63	70.93	71.40
		S/T	0.85	1.00	1.00	1.00	0.57	0.76	0.97	1.00	0.38	0.55	0.73	0.89	\	0.37	0.52	0.67
		kW	3.32	3.41	3.48	3.53	3.34	3.43	3.29	3.57	3.36	3.45	3.58	3.65	\	3.48	3.63	3.69
	75	TC	53.70	53.90	54.10	54.30	61.43	61.73	62.20	62.30	68.93	69.23	65.26	69.83	\	67.56	67.86	68.33
		S/T	0.85	1.00	1.00	1.00	0.57	0.76	0.97	1.00	0.38	0.55	0.73	0.89	\	0.37	0.52	0.67
		kW	3.85	3.85	3.85	3.85	4.05	4.05	4.05	4.05	4.66	4.66	4.66	4.66	\	4.62	4.65	4.69
	85	TC	49.56	49.76	50.06	49.86	58.16	58.06	57.76	58.06	60.23	61.73	62.30	63.20	\	63.50	63.80	64.20
		S/T	0.85	1.00	1.00	1.00	0.57	0.76	0.97	1.00	0.38	0.55	0.73	0.89	\	0.37	0.52	0.67
		kW	4.18	4.21	4.23	4.25	4.38	4.41	4.46	4.47	4.38	4.42	4.49	4.52	\	4.49	4.53	4.58
	95	TC	50.43	52.13	53.03	53.70	54.70	55.40	56.10	56.76	57.86	58.56	59.23	59.93	\	61.93	62.50	63.30
		S/T	0.85	1.00	1.00	1.00	0.57	0.76	0.97	1.00	0.38	0.55	0.71	0.89	\	0.37	0.52	0.67
		kW	4.72	4.81	4.88	4.93	4.74	4.83	4.92	4.98	4.76	4.85	4.96	5.05	\	4.89	4.98	5.04
	105	TC	49.36	50.16	51.03	51.63	51.63	52.33	53.03	53.70	54.80	55.50	56.10	56.86	\	55.60	55.90	56.66
		S/T	0.85	1.00	1.00	1.00	0.57	0.76	0.97	1.00	0.38	0.55	0.73	0.89	\	0.38	0.53	0.68
		kW	5.23	5.32	5.39	5.44	5.25	5.34	5.43	5.48	5.27	5.36	5.46	5.55	\	5.43	5.52	5.60
	115	TC	44.90	45.70	46.30	47.10	46.90	48.16	49.76	50.63	50.16	50.93	52.53	53.23	\	50.73	52.03	53.70
		S/T	0.85	1.00	1.00	1.00	0.60	0.82	1.00	1.00	0.42	0.62	0.81	0.99	\	0.39	0.58	0.81
		kW	5.69	5.73	5.73	5.79	5.78	5.83	5.90	5.96	5.85	5.92	6.00	6.09	\	6.03	6.09	6.16
2000	65	TC	58.5	61.1	61.6	62.3	64.1	64.9	66.3	66	67.2	68.6	68.9	70.2	\	71.4	71.7	72.2
		S/T	0.85	1.00	1.00	1.00	0.57	0.76	0.97	1.00	0.38	0.55	0.73	0.89	\	0.37	0.52	0.67
		kW	3.33	3.42	3.49	3.54	3.35	3.44	3.3	3.58	3.37	3.46	3.59	3.66	\	3.49	3.64	3.7
	75	TC	54.3	54.5	54.7	54.9	62.1	62.4	62.9	63	69.7	70	66	70.6	\	68.3	68.6	69.1
		S/T	0.85	1.00	1.00	1.00	0.57	0.76	0.97	1.00	0.38	0.55	0.73	0.89	\	0.37	0.52	0.67
		kW	3.86	3.86	3.86	3.86	4.06	4.06	4.06	4.06	4.67	4.67	4.67	4.67	\	4.63	4.66	4.7
	85	TC	50.1	50.3	50.6	50.4	58.8	58.7	58.4	58.7	60.9	62.4	63	63.9	\	64.2	64.5	64.9
		S/T	0.85	1.00	1.00	1.00	0.57	0.76	0.97	1.00	0.38	0.55	0.73	0.89	\	0.37	0.52	0.67
		kW	4.19	4.22	4.24	4.26	4.39	4.42	4.47	4.48	4.39	4.43	4.5	4.53	\	4.5	4.54	4.59
	95	TC	51	52.7	53.6	54.3	55.3	56	56.7	57.4	58.5	59.2	59.9	60.6	\	62.6	63.2	64
		S/T	0.85	1.00	1.00	1.00	0.57	0.76	0.97	1.00	0.38	0.55	0.70	0.89	\	0.37	0.52	0.67
		kW	4.73	4.82	4.89	4.94	4.75	4.84	4.93	4.99	4.77	4.86	4.97	5.06	\	4.9	4.99	5.05
	105	TC	49.9	50.7	51.6	52.2	52.2	52.9	53.6	54.3	55.4	56.1	56.7	57.5	\	56.2	56.5	57.3
		S/T	0.85	1.00	1.00	1.00	0.57	0.76	0.97	1.00	0.38	0.55	0.73	0.89	\	0.38	0.53	0.68
		kW	5.24	5.33	5.4	5.45	5.26	5.35	5.44	5.49	5.28	5.37	5.47	5.56	\	5.44	5.53	5.61
	115	TC	45.4	46.2	46.8	47.6	47.4	48.7	50.3	51.2	50.7	51.5	53.1	53.8	\	51.3	52.6	54.3
		S/T	0.85	1.00	1.00	1.00	0.60	0.82	1.00	1.00	0.42	0.62	0.81	0.99	\	0.39	0.58	0.81
		kW	5.7	5.74	5.74	5.8	5.79	5.84	5.91	5.97	5.86	5.93	6.01	6.1	\	6.04	6.1	6.17

Table 8

TC refers to total capacity S/T: refers to the ratio of sensible heat and total capacity kW: refers to total input power

5.4 BPBA-60RCB-M18S for Heating

BPBA-60RCB-M18S For Heating																			
Indoor Airflow (SCFM)	ID(℉)	OD(℉)	72	67	62	57	52	47	42	37	32	27	22	17	12	7	2	0	-4
1200	60	TC	55.31	54.53	54.22	53.92	53.58	50.82	47.57	44.35	48.45	36.54	40.94	35.85	37.74	34.95	31.36	30.75	26.95
		kW	4.43	4.54	4.77	4.66	4.62	4.57	4.39	4.24	4.13	5.16	5.07	4.89	5.81	5.57	5.36	5.22	4.81
	70	TC	46.25	46.09	46.27	46.12	46.02	45.83	44.83	43.46	45.05	39.63	39.7	35.1	37.2	34.53	30.9	30.55	26.57
		kW	3.17	3.43	3.66	3.98	4.22	4.33	4.75	4.58	4.43	5.5	5.4	5.25	6.26	5.96	5.71	5.57	5.13
	75	TC	41.56	41.16	40.66	40.51	40.28	39.94	39.58	39.5	39.23	40.19	38.47	35.01	36.64	34.25	30.83	30.45	25.28
		kW	2.89	2.94	3.11	3.38	3.55	3.84	4.05	4.31	4.6	4.84	5.31	5.46	6.08	6.18	5.92	5.78	5.31
	80	TC	35.53	35.54	35.03	34.78	34.59	34.15	33.79	33.51	33.28	34.06	33.6	30.08	30.96	29.77	29.41	28.61	24.11
		kW	2.36	2.46	2.59	2.96	3.07	3.25	3.44	3.58	3.97	4.17	4.51	4.68	4.97	5.35	5.7	5.49	5.12
1500	60	TC	62.84	61.96	61.6	61.27	60.89	57.74	54.05	50.4	49.53	47.04	46.52	40.73	42.87	39.71	35.62	34.94	30.63
		kW	4.55	4.66	4.89	4.78	4.74	4.69	4.51	4.36	4.25	5.28	5.19	5.01	5.93	5.69	5.48	5.34	4.93
	70	TC	52.55	52.38	52.57	52.41	52.29	52.07	50.94	49.37	47.51	46.86	45.1	39.87	42.27	39.23	35.1	34.71	30.19
		kW	3.29	3.55	3.78	4.1	4.34	4.45	4.87	4.7	4.55	5.62	5.52	5.37	6.38	6.08	5.83	5.69	5.25
	75	TC	47.22	46.77	46.2	46.03	45.77	45.37	44.97	44.87	44.57	45.67	43.71	39.78	41.64	38.92	35.03	34.59	28.72
		kW	3.01	3.06	3.23	3.5	3.67	3.96	4.17	4.43	4.72	4.96	5.43	5.58	6.2	6.3	6.04	5.9	5.43
	80	TC	40.38	40.39	39.8	39.52	39.3	38.8	38.4	38.07	37.81	38.7	38.18	34.18	35.18	33.82	33.42	32.51	27.4
		kW	2.48	2.58	2.71	3.08	3.19	3.37	3.56	3.7	4.09	4.29	4.63	4.8	5.09	5.47	5.82	5.61	5.24
1700	60	TC	67.86	66.91	66.52	66.17	65.76	62.35	58.37	54.43	50.25	54.04	50.24	43.98	46.29	42.88	38.46	37.73	33.08
		kW	4.63	4.74	4.97	4.86	4.82	4.77	4.59	4.44	4.33	5.36	5.27	5.09	6.01	5.77	5.56	5.42	5.01
	70	TC	56.75	56.57	56.77	56.6	56.47	56.23	55.01	53.31	49.15	51.68	48.7	43.05	45.65	42.36	37.9	37.48	32.6
		kW	3.37	3.63	3.86	4.18	4.42	4.53	4.95	4.78	4.63	5.7	5.6	5.45	6.46	6.16	5.91	5.77	5.33
	75	TC	50.99	50.51	49.89	49.71	49.43	48.99	48.56	48.45	48.13	49.32	47.2	42.96	44.97	42.03	37.83	37.35	31.01
		kW	3.09	3.14	3.31	3.58	3.75	4.04	4.25	4.51	4.8	5.04	5.51	5.66	6.28	6.38	6.12	5.98	5.51
	80	TC	43.61	43.62	42.98	42.68	42.44	41.9	41.47	41.11	40.83	41.79	41.23	36.91	37.99	36.52	36.09	35.11	29.59
		kW	2.56	2.66	2.79	3.16	3.27	3.45	3.64	3.78	4.17	4.37	4.71	4.88	5.17	5.55	5.9	5.69	5.32
1900	60	TC	70.57	69.58	69.18	68.81	68.38	64.84	60.7	56.6	52.25	56.2	52.24	45.73	48.13	44.59	39.99	39.23	34.4
		kW	4.63	4.74	5.09	4.86	4.82	4.77	4.59	4.44	4.33	5.36	5.27	5.09	6.01	5.77	5.56	5.42	5.01
	70	TC	56.75	56.57	59.03	56.6	56.47	56.25	55.01	53.31	49.15	51.68	48.7	43.05	45.65	42.36	37.9	37.48	32.6
		kW	3.37	3.63	3.98	4.18	4.42	4.53	4.95	4.78	4.63	5.7	5.6	5.45	6.46	6.16	5.91	5.77	5.33
	75	TC	50.99	50.51	51.88	49.71	49.43	49	48.56	48.45	48.13	49.32	47.2	42.96	44.97	42.03	37.83	37.35	31.01
		kW	3.09	3.14	3.43	3.58	3.75	4.04	4.25	4.51	4.8	5.04	5.51	5.66	6.28	6.38	6.12	5.98	5.51
	80	TC	43.61	43.62	44.69	42.68	42.44	41.91	41.47	41.11	40.83	41.79	41.23	36.91	37.99	36.52	36.09	35.11	29.59
		kW	2.56	2.66	2.91	3.16	3.27	3.45	3.64	3.78	4.17	4.37	4.71	4.88	5.17	5.55	5.9	5.69	5.32
2000	60	TC	71.93	70.92	70.51	70.14	69.7	66.09	61.87	57.69	53.26	57.28	53.25	46.61	49.06	45.45	40.76	39.99	35.06
		kW	4.82	4.93	5.16	5.05	5.01	4.96	4.78	4.63	4.52	5.55	5.46	5.28	6.2	5.96	5.75	5.61	5.2
	70	TC	60.15	59.96	60.17	59.99	59.85	59.6	58.31	56.5	52.09	54.78	51.62	45.63	48.38	44.9	40.17	39.72	34.55
		kW	3.56	3.82	4.05	4.37	4.61	4.72	5.14	4.97	4.82	5.89	5.79	5.64	6.65	6.35	6.1	5.96	5.52
	75	TC	54.04	53.54	52.88	52.69	52.39	51.92	51.47	51.35	51.01	52.27	50.03	45.53	47.66	44.55	40.09	39.59	32.87
		kW	3.28	3.33	3.5	3.77	3.94	4.23	4.44	4.7	4.99	5.23	5.7	5.85	6.47	6.57	6.31	6.17	5.7
	80	TC	46.22	46.23	45.55	45.24	44.98	44.41	43.95	43.57	43.27	44.29	43.7	39.12	40.26	38.71	38.25	37.21	31.36
		kW	2.75	2.85	2.98	3.35	3.46	3.64	3.83	3.97	4.36	4.56	4.9	5.07	5.36	5.74	6.09	5.88	5.51

Table 9

TC refers to total capacity kW: refers to total input power

6 Airflow Performance

Airflow performance data is based on cooling performance with a coil and no filter in place. Check the performance table for appropriate unit size selection.

External static pressure should stay within the minimum and maximum limits shown in the table below in order to ensure proper operation of both cooling, heating, and electric heating operation.

Model	Motor Speed*		SCFM										
			External Static Pressure-Inches W.C.										
			0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
3 Ton	Tap (1)	SCFM	863	782	720	644	549	452	381	334	306	261	231
		Current/A	1.41	1.44	1.46	1.48	1.51	1.55	1.57	1.59	1.62	1.65	1.67
		Power/W	100	110	110	120	120	130	130	134	140	144	150
	Tap (2)	SCFM	1144	1071	1003	955	897	836	763	686	608	546	493
		Current/A	1.93	1.96	1.99	2.02	2.06	2.1	2.13	2.17	2.21	2.26	2.3
		Power/W	190	200	205	210	220	220	230	230	240	249	250
	Tap (3)	SCFM	1291	1238	1159	1109	1068	1020	970	910	828	758	689
		Current/A	2.38	2.43	2.47	2.5	2.55	2.59	2.63	2.66	2.71	2.75	2.8
		Power/W	267	270	280	288	290	300	301	310	320	321	330
	Tap (4)	SCFM	1467	1419	1360	1293	1248	1212	1169	1124	1075	1022	964
		Current/A	3.1	3.15	3.19	3.24	3.28	3.33	3.38	3.42	3.46	3.5	3.58
		Power/W	374	380	390	399	400	410	420	420	430	436	450
	Tap (5)	SCFM	1537	1492	1440	1377	1327	1284	1230	1174	1115	1055	971
		Current/A	3.44	3.5	3.54	3.59	3.63	3.65	3.64	3.63	3.63	3.62	3.64
		Power/W	430	438	440	450	453	460	460	452	450	450	450
5 Ton	Tap (1)	SCFM	1324	1256	1182	1108	1042	971	894	806	743	688	614
		Current/A	1.76	1.81	1.88	1.94	1.99	2.05	2.12	2.19	2.24	2.28	2.34
		Power/W	170	180	190	200	210	220	230	240	250	259	265
	Tap (2)	SCFM	1426	1365	1298	1231	1161	1097	1027	953	876	813	761
		Current/A	1.99	2.05	2.11	2.17	2.23	2.3	2.38	2.46	2.53	2.58	2.63
		Power/W	210	220	230	240	250	260	270	280	290	300	310
	Tap (3)	SCFM	1604	1550	1494	1431	1372	1312	1253	1190	1126	1068	999
		Current/A	2.52	2.58	2.66	2.73	2.8	2.87	2.95	3.03	3.11	3.2	3.27
		Power/W	290	300	310	320	330	341	355	370	380	391	404
	Tap (4)	SCFM	1934	1892	1884	1797	1743	1690	1643	1591	1541	1485	1431
		Current/A	3.38	3.93	4.01	4.09	4.18	4.27	4.34	4.43	4.52	4.61	4.7
		Power/W	490	500	511	529	540	551	562	580	590	602	619
	Tap (5)	SCFM	2033	1985	1939	1892	1838	1788	1740	1687	1640	1593	1530
		Current/A	4.35	4.42	4.48	4.56	4.65	4.73	4.81	4.9	4.99	5.08	5.11
		Power/W	567	575	586	599	610	620	634	650	660	676	680

Table 10

Bold outlined areas represent airflow outside of the required 300-450 cfm ton range.

NOTES:

1. This table is only used to select the **highest blower speed**.
2. The rated airflow of systems without electric heater kits requires between 300 and 450 cubic feet of air per minute (CFM). The rated airflow of systems with electric heater kits requires between 350 and 450 cubic feet of air per minute (CFM).
3. The air distribution system has the greatest effect on airflow. Therefore, the contractor should use only industry-recognized procedures.
4. Duct design and construction should be carefully done. System performance can be lowered dramatically through poor design or workmanship.
5. Air supplier ducts should be located along the perimeter of the conditioned space and properly sized. Improper location or insufficient air flow may cause drafts or noise in the ductwork.
6. Installers should balance the air distribution system to ensure proper quiet airflow to all rooms in the home. An air velocity meter or airflow hood can be used to balance and verify branch and system airflow (CFM).

7 Sound Data

Size (Tons)	Mode	SoundPower Level [dB(A)]	Full Octave Linear Sound Power Level dB-Center Frequency-Hz								
			100	125	250	500	1000	2000	4000	8000	10000
60 (5)	Cooling	62.7 (Low)	51.3	55.7	49.2	51.6	51.2	45.6	42.7	40.1	38.3
		73.1 (Rated)	57.6	60.0	58.3	60.7	61.6	58.9	55.4	50.9	45.3
		73.8 (High)	57.5	58.0	58.9	60.1	62.4	59.0	56.0	51.3	47.0
	Heating	63.1 (Low)	51.4	51.3	51.1	53.6	51.9	47.3	42.7	37.7	36.1
		73.7 (Rated)	59.4	65.2	59.5	60.2	61.3	58.1	53.6	48.6	44.1
		73.3 (High)	59.4	59.4	60.5	60.3	61.3	58.5	54.2	48.9	45.1
36 (3)	Cooling	59.9 (Low)	49.8	46.9	43.8	52.7	47.0	42.9	42.0	36.0	38.7
		73.0 (Rated)	55.5	53.6	57.7	63.9	62.1	59.5	54.6	46.9	46.1
		73.2 (High)	55.4	54.0	57.5	63.9	62.2	59.6	55.9	48.0	46.7
	Heating	60.4 (Low)	49.8	47.7	44.5	53.4	47.5	43.4	41.5	33.4	37.3
		73.4 (Rated)	56.0	54.8	57.6	64.9	63.1	60.0	53.2	44.3	43.1
		73.8 (High)	56.3	55.2	59.0	65.0	63.2	60.4	54.8	45.8	44.2

Table 11 IDP Sound power level

8 Electrical Data

Size (Tons)	Voltage - Phase - Frequency	Compressors (each)	OD Fan Motors (each)	Supply Blower Motor	Unit Circuit	
		RLA	FLA	FLA	MCA[1] (Amps)	Max Fuse[2]/ Breaker[3] Size (Amps)
60 (5.0)	208/230-1-60	27A	2.0A	5.3A	42.0	50
36 (3.0)	208/230-1-60	19A	1.8A	3.9A	30.0	35

Table 12 Electrical Data Without Electric Heat

Size (Tons)	Heat Kit Model	(kW) 208/240V	Stages	"FLA (Amps) 208/240V"	Dual Point		Single Point	
					MCA[1] (Amps) 208/240V	Max Fuse[2]/ Breaker[3] Size (Amps)* 208/240V	MCA[1] (Amps) 208/240V	Max Fuse[2]/ Breaker[3] Size (Amps)** 208/240V
60 (5 Ton)	EHK-05J	3.8/5	1	18.1/20.8	23/26	25/30	64/68	70/80
	EHK-08J	5.6/7.5	1	27.1/31.3	34/40	35/40	75/81	90/90
	EHK-10J	7.5/10.0	1	36.1/41.7	46/53	50/60	87/94	100/100
	EHK-15J	11.3/15	2	54.2/62.5	68/79	70/80	109/120	110/125
	EHK-20J	15/20	2	72.2/83.3	91/105	100/110	132/146	150/150
36 (3 Ton)	EHK-05J	3.8/5	1	18.1/20.8	23/26	25/30	52/56	60/60
	EHK-08J	5.6/7.5	1	27.1/31.3	34/40	35/40	64/69	70/70
	EHK-10J	7.5/10.0	1	36.1/41.7	46/53	50/60	75/82	80/90
	EHK-15J	11.3/15	2	54.2/62.5	68/79	70/80	98/108	100/110

Table 13 Electrical Data With Electric Heat

[1] Minimum Circuit Ampacity.

[2] Maximum Over Current Protection per Standard UL 60335.

[3] Fuse or HACR circuit breaker size field installed.

** Max Fuse/Breaker Sizes are for electric heater ONLY (dual point electric heat). DOES NOT include breaker size for the unit.*

*** Max Fuse/Breaker Sizes include breaker size for the unit AND electric heat (single point electric heat).*

Refer to Electric Heat Kit Installation Manual, some heater kits include fuses from the manufacturer.

9 Dimensions

9.1 3 Ton Model

9.1.1 Unit Dimensions

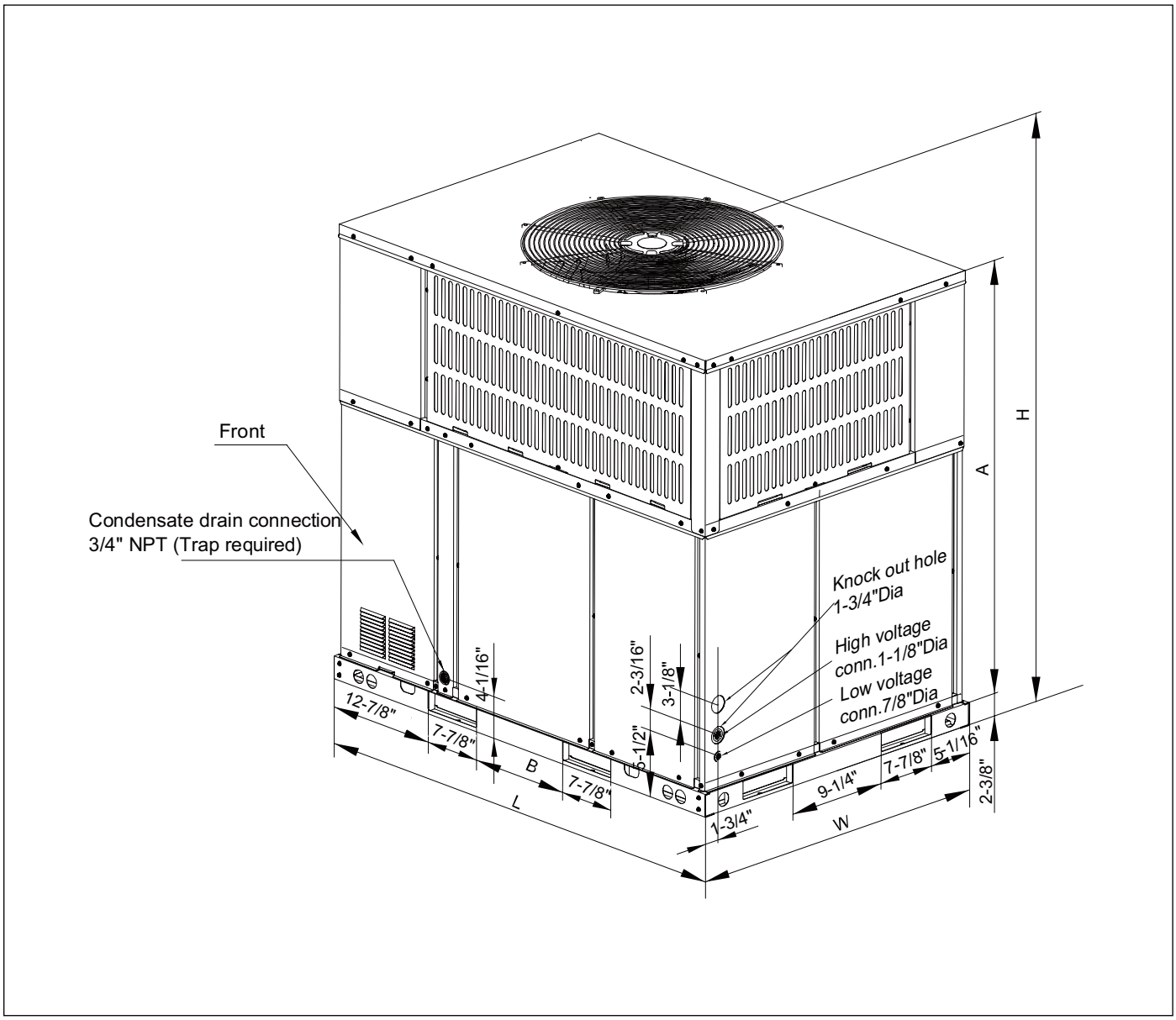


Figure 3

Heat Pump Model	L	W	H	A	B
3 Ton	50-11/16"	35-1/16"	46-13/16"	44-1/16"	9-1/4"

Table 14 Unit Dimensions

Heat Pump Model	Net Weight	Gross Weight
3 Ton	403 lbs (183 kg)	422 lbs (192 kg)

Table 15 Unit Weights

9.1.2 Dimensions - Back and Bottom

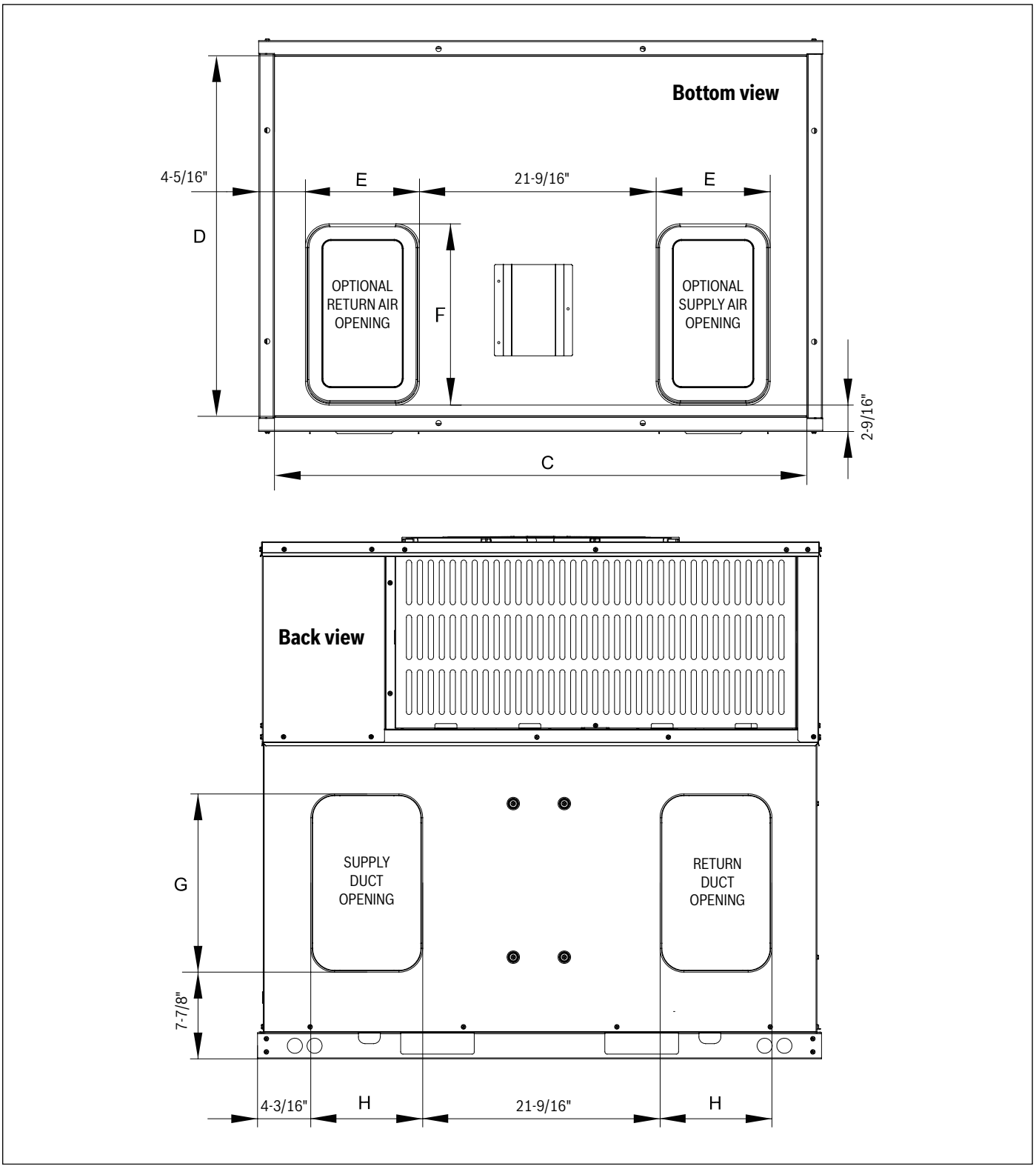
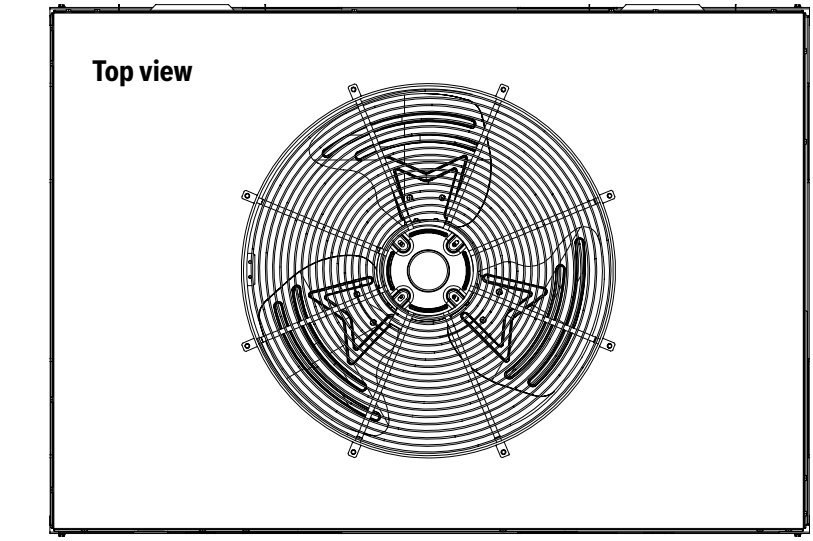


Figure 4

Heat Pump Model	C	D	E	F	G	H
3 Ton	47-13/16"	32-1/4"	9-15/16"	15-7/8"	15-3/4"	9-3/4"

Table 16 Dimensions - Back and Bottom

9.1.3 Dimensions - Left and Top



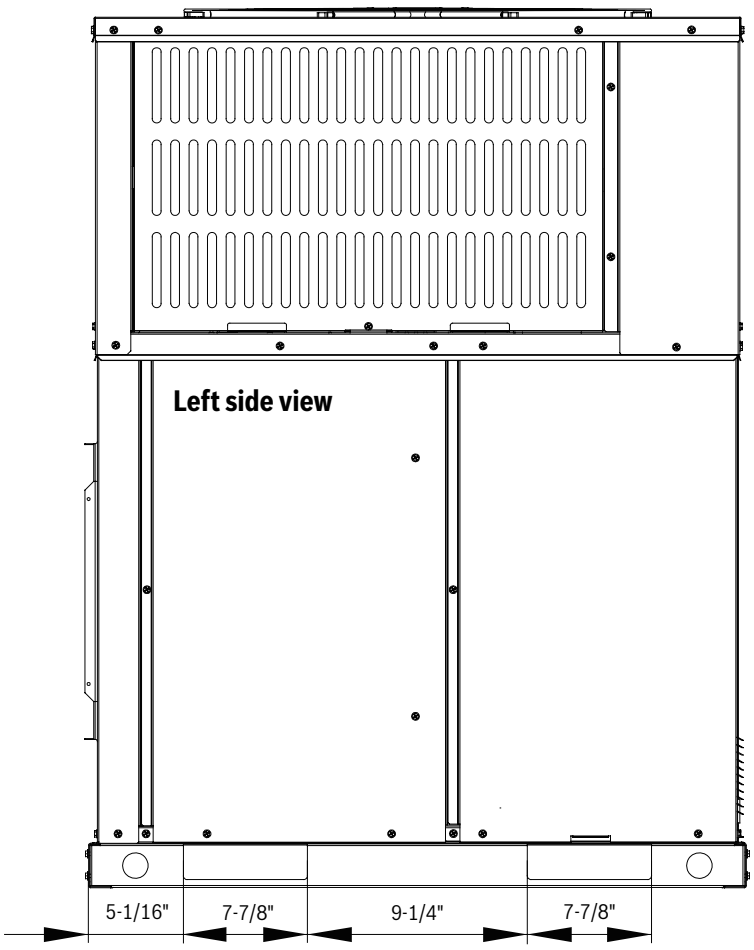


Figure 5

9.2 5 Ton Model

9.2.1 Unit Dimensions

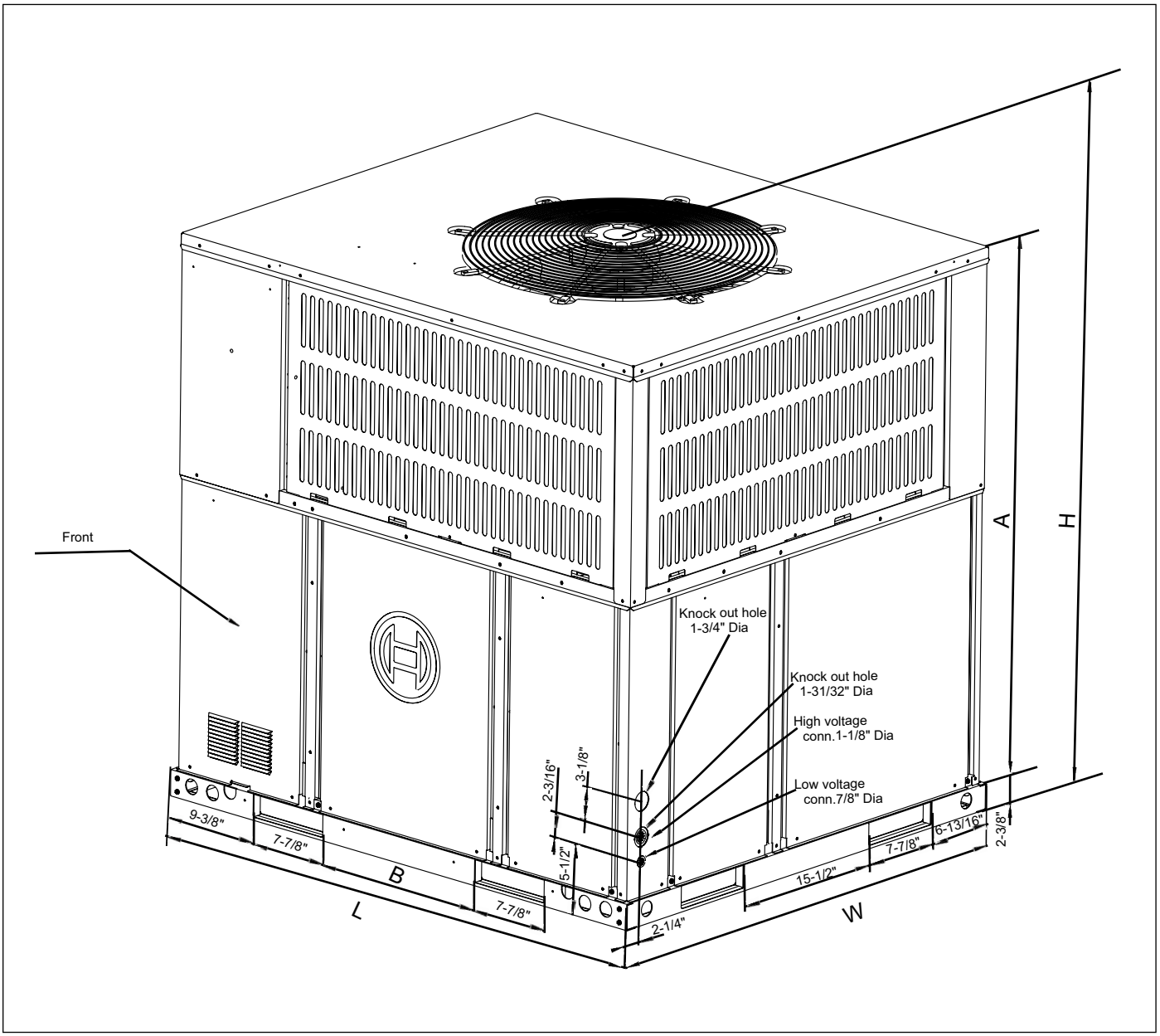


Figure 6

Heat Pump Model	L	W	H	A	B
5 Ton	51-9/16"	44-13/16"	51-7/16"	47-5/16"	17-3/16"

Table 17 Unit Dimensions

Heat Pump Model	Net Weight	Gross Weight
5 Ton	551 lbs (250 kg)	568 lbs (258 kg)

Table 18 Unit Weights

9.2.2 Dimensions - Back and Bottom

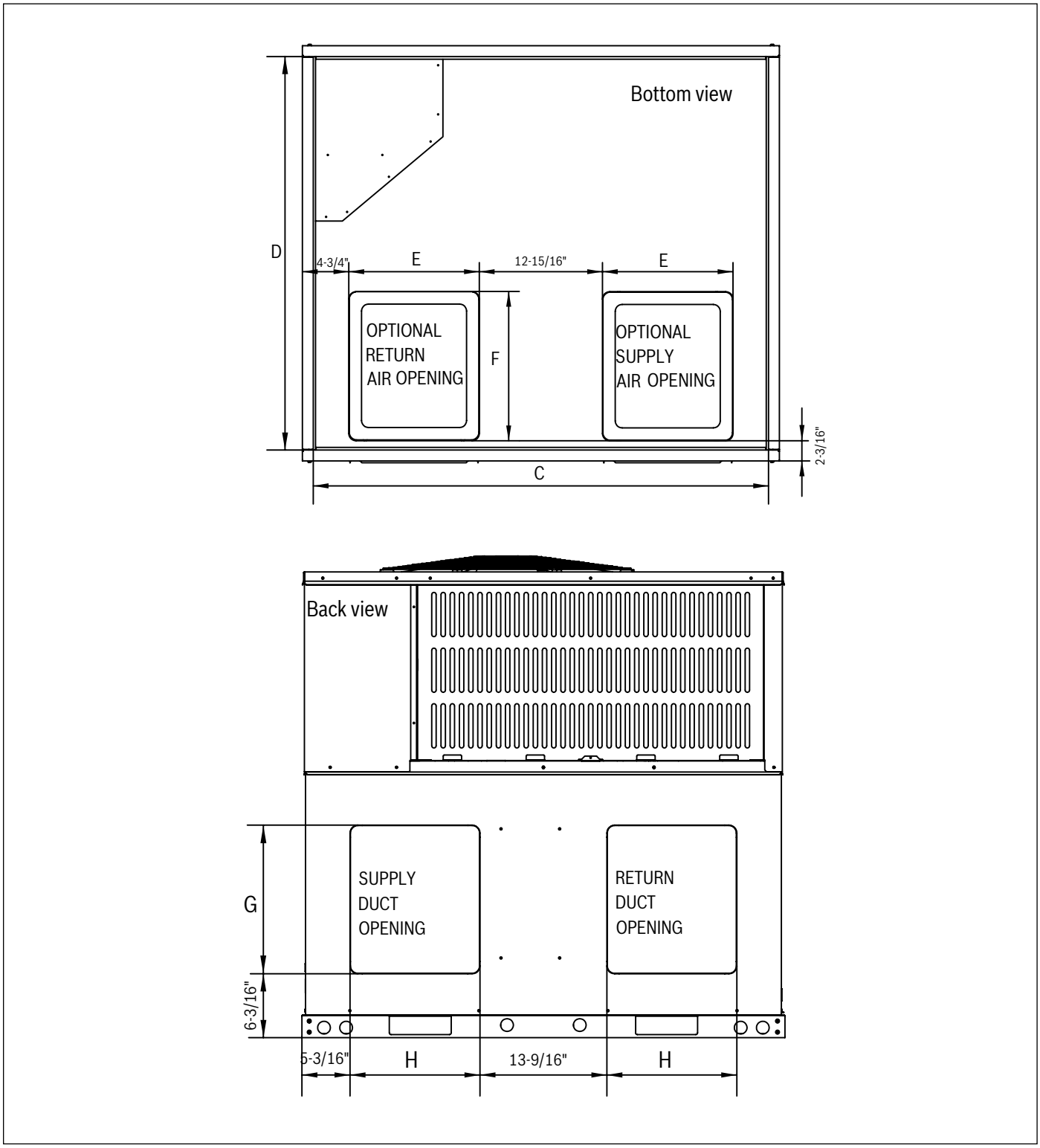


Figure 7

Heat Pump Model	C	D	E	F	G	H
5 Ton	49-1/4"	42-1/2"	14-1/8"	16-1/8"	15-7/8"	13-7/8"

Table 19 Dimensions - Back and Bottom

9.2.3 Dimensions - Right and Top

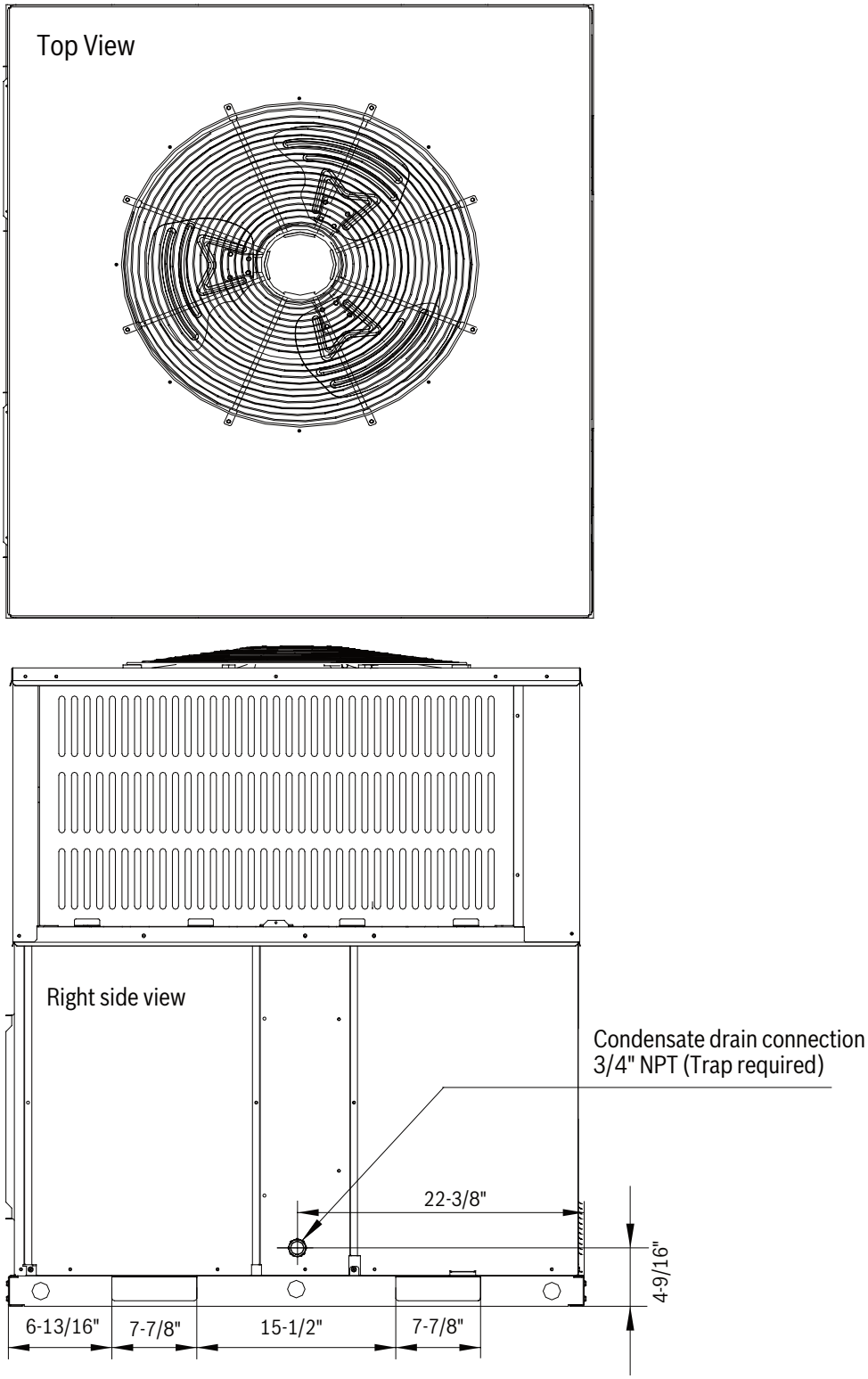


Figure 8

10 Rooftop Installation - Curb Mounting

The manufacturer does not supply roof curbs, they must be field supplied. Refer to Figure 9 & Figure 10 for recommended roof curb dimensions. On applications when a roof curb is used, the unit must be positioned on the curb so the front of the unit is tight against the curb.

The default orientation from the factory is for horizontal airflow. Convert the unit to downflow using the following procedure:

1. Remove sheet metal screws from both the supply air and return air panels.
2. Add foam tape on the perimeter of the non painted side of each panel.
3. Move and re-secure the panels to the downflow location using the sheet metal screws from step 1.

For more information, refer to the the Conversion Kit Manual included with each heat pump unit.

Install the field-supplied roof mounting curb according to the Installation Instructions supplied with the curb. Install insulation, cant strips, roofing, and flashing. Ductwork must be attached to curb .

NOTICE

Property damage, product damage, improper operation!

The gasketing of the unit to the roof curb is critical for a water tight seal. Install gasketing material supplied with the field supplied roof curb. Improperly applied gasketing also can result in air leaks and poor unit performance.

NOTICE

Product damage!

The unit must be secured to the curb by installing screws through the bottom of the curb flange and into the unit base rails.

For units applied with a roof curb, the minimum clearance may be reduced from 1 inch to 1/2 inch between combustible roof curb material and supply air duct.

NOTICE

Property damage!

Failure to follow this caution may result in property damage. Ensure there is sufficient clearance for saw blade when cutting the outer horizontal flange of the roof curb so there is no damage to the roof or flashing.

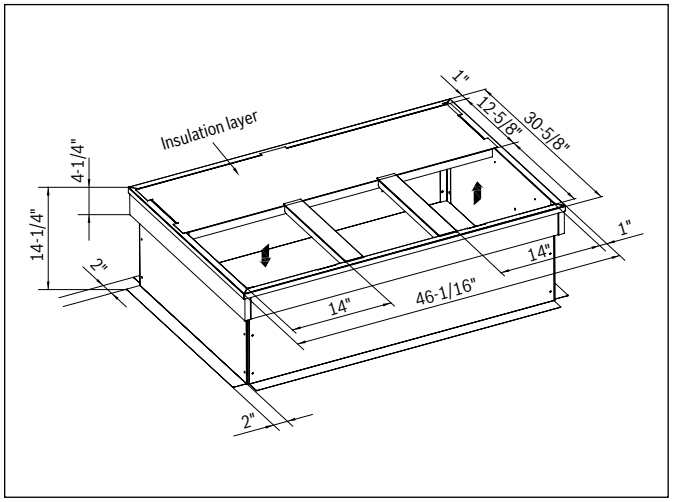


Figure 9 3T Roof Curb Dimensions

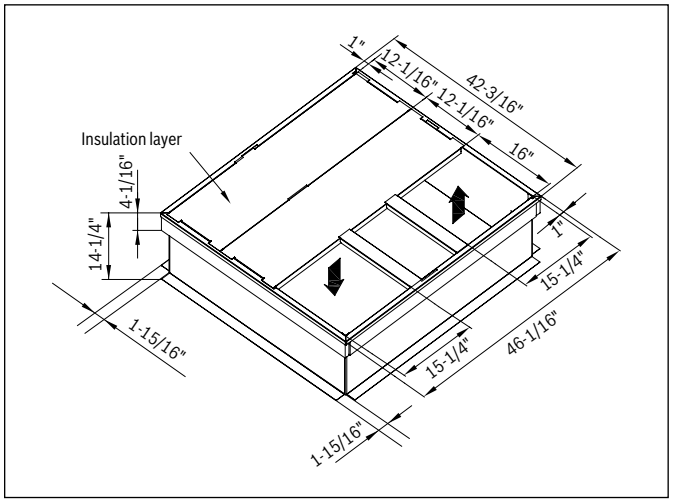
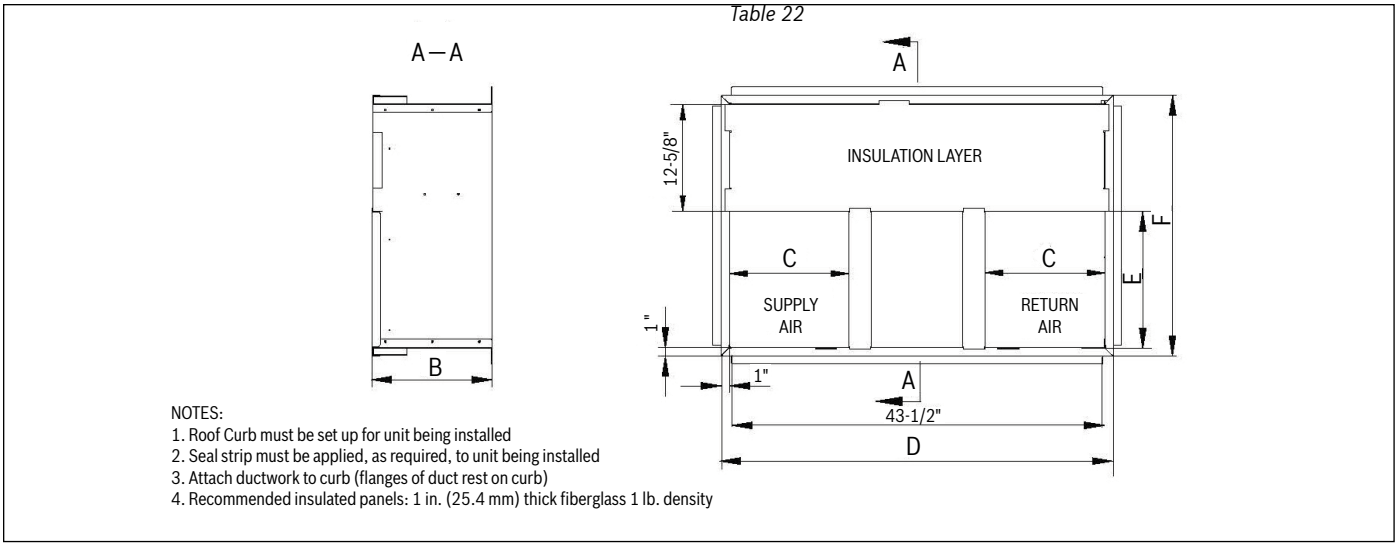


Figure 10 5T Roof Curb Dimensions

Table 22

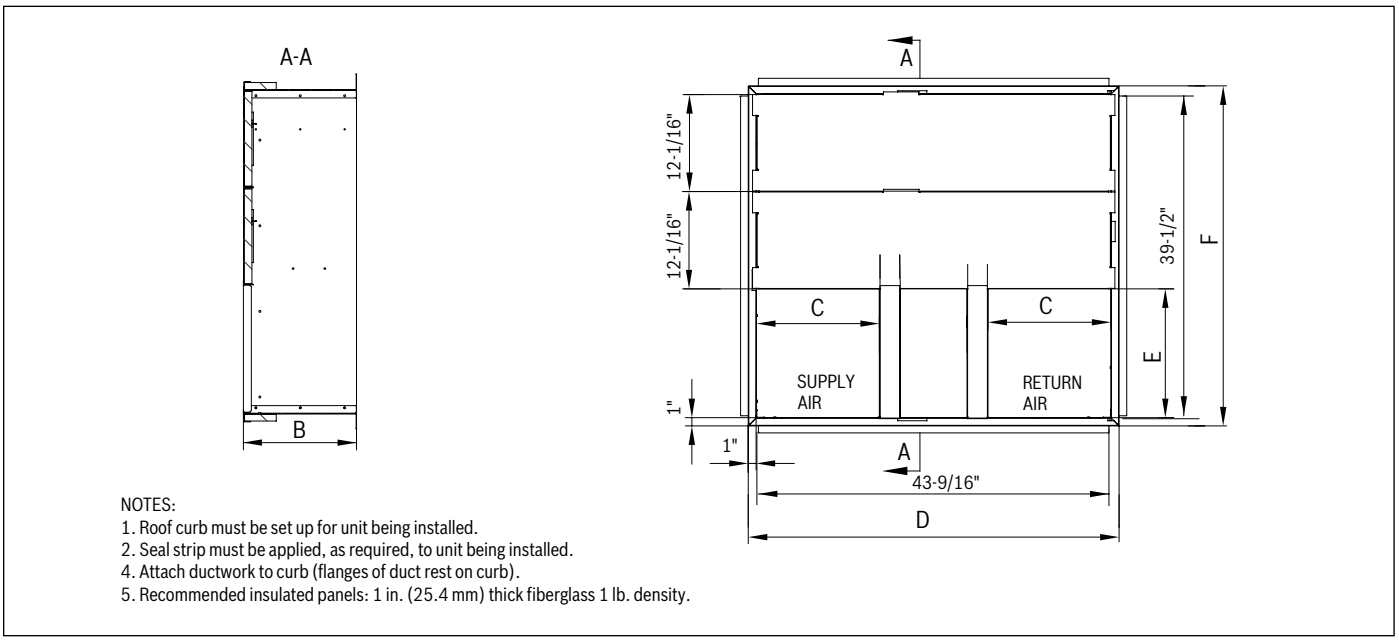


NOTES:
1. Roof Curb must be set up for unit being installed
2. Seal strip must be applied, as required, to unit being installed
3. Attach ductwork to curb (flanges of duct rest on curb)
4. Recommended insulated panels: 1 in. (25.4 mm) thick fiberglass 1 lb. density

Figure 11 3T Roof Curb Details

	B	C	D	E	F
CURB	14-1/4"	14"	46-1/16"	16"	30-5/8"

Table 20 3T Roof Curb Details - inches



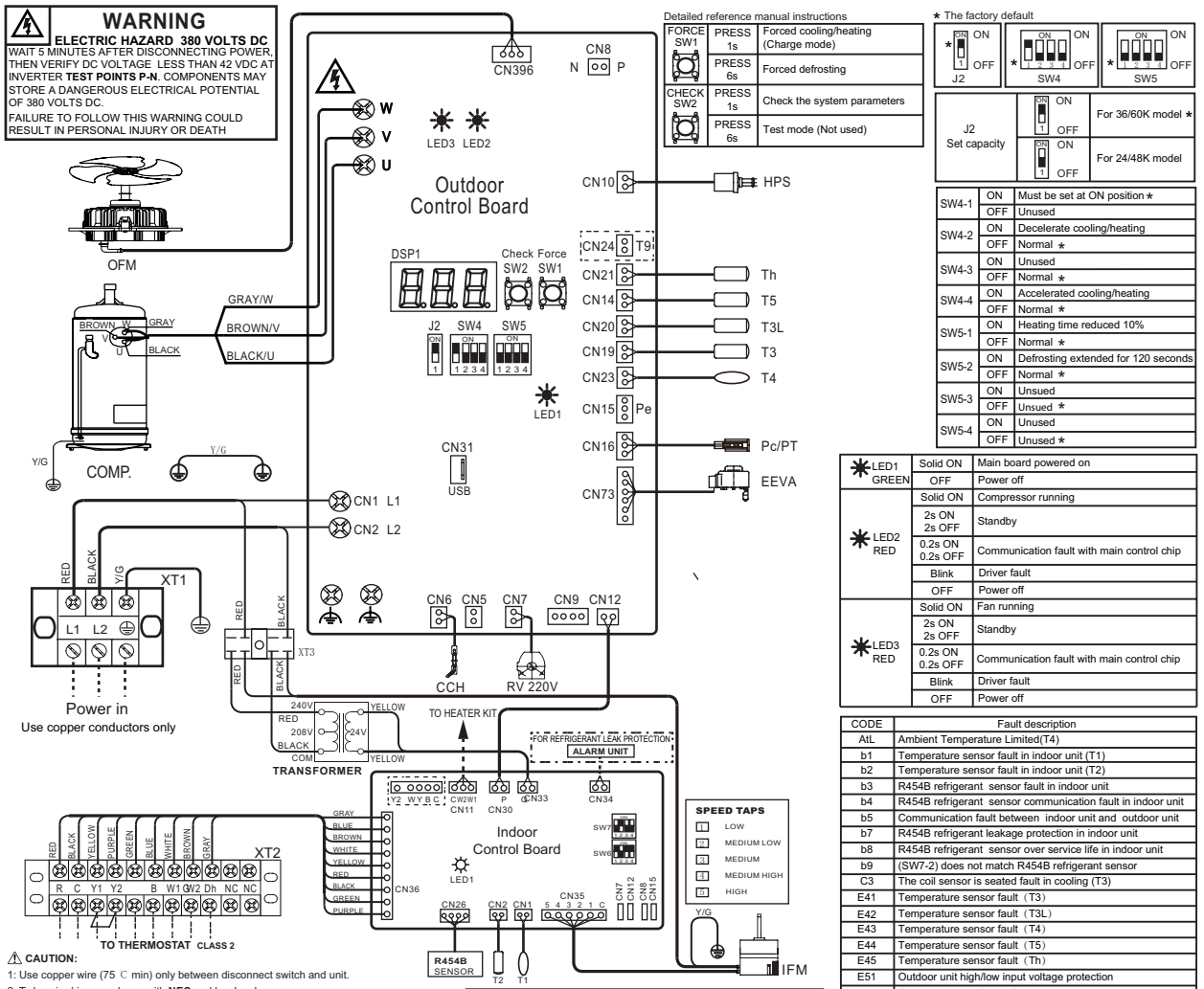
NOTES:
1. Roof curb must be set up for unit being installed.
2. Seal strip must be applied, as required, to unit being installed.
4. Attach ductwork to curb (flanges of duct rest on curb).
5. Recommended insulated panels: 1 in. (25.4 mm) thick fiberglass 1 lb. density.

Figure 12 5T Roof Curb Details

	B	C	D	E	F
CURB	14-1/4"	15-1/4"	46-1/16"	16"	42-3/16"

Table 21 5T Roof Curb Details - inches

11 Wiring Diagram



SW4-1	ON	Must be set at ON position *
	OFF	Unused
SW4-2	ON	Decelerate cooling/heating
	OFF	Normal *
SW4-3	ON	Unused
	OFF	Normal *
SW4-4	ON	Accelerated cooling/heating
	OFF	Normal *
SW5-1	ON	Heating time reduced 10%
	OFF	Normal *
SW5-2	ON	Defrosting extended for 120 seconds
	OFF	Normal *
SW5-3	ON	Unused
	OFF	Unused *
SW5-4	ON	Unused
	OFF	Unused *

LED1 GREEN	Solid ON	Main board powered on
	OFF	Power off
LED2 RED	Solid ON	Compressor running
	2s ON 2s OFF	Standby
	0.2s ON 0.2s OFF	Communication fault with main control chip
	Blink	Driver fault
	OFF	Power off
LED3 RED	Solid ON	Fan running
	2s ON 2s OFF	Standby
	0.2s ON 0.2s OFF	Communication fault with main control chip
	Blink	Driver fault
	OFF	Power off

CODE	Fault description
AtL	Ambient Temperature Limited(T4)
b1	Temperature sensor fault in indoor unit (T1)
b2	Temperature sensor fault in indoor unit (T2)
b3	R454B refrigerant sensor fault in indoor unit
b4	R454B refrigerant sensor communication fault in indoor unit
b5	Communication fault between indoor unit and outdoor unit
b7	R454B refrigerant leakage protection in indoor unit
b8	R454B refrigerant sensor over service life in indoor unit
b9	(SW7-2) does not match R454B refrigerant sensor
C3	The coil sensor is seated fault in cooling (T3)
E41	Temperature sensor fault（T3）
E42	Temperature sensor fault（T3L）
E43	Temperature sensor fault（T4）
E44	Temperature sensor fault（T5）
E45	Temperature sensor fault（Th）
E51	Outdoor unit high/low input voltage protection
E52	Outdoor unit high/low DC bus voltage protection
E7	Compressor discharge sensor is seated fault (T5)
E81	EEVA coil fault
EA	Control program does not match drive program in outdoor unit
Eb	Outdoor unit（SW4-1） does not match indoor unit
F1	High pressure switch protection (HPS)
F2	5 times (P21/o37) protection in 100 minutes, system lockout
F4	Pressure sensor fault
H01	Drive chip Communication fault in outdoor unit
J00-JCF	Compressor drive fault
n00-nCF	Fan drive fault
o37	Lack of refrigerant
P0	Compressor IPM temperature protection(TF)
P1	High pressure switch protection (HPS)
P11	High pressure protection in heating (PT)
P21	Low pressure protection in cooling (PT)
P31	Outdoor unit input over current protection
P32	Compressor over current protection
P4	High compressor discharge temperature protection (T5)
P5	Condensor coil temperature protection in cooling (T3)
PF	Evaporator freezing protection
PH	Low discharge superheat protection

CODE	Description
	Forced operation mode
‾ (top)	Running indication under high pressure
_ (bottom)	Running indication under low pressure
A	Running indication under return oil mode
C	Running indication under current limited condition
d	Running indication under T5 limited condition
F	Running indication under COMP. IPM Temp. limited condition
r	Running indication under compressor ratio limited condition
U	Running indication under low voltage limited condition
dF	Running indication under defrost mode

⚠ CAUTION:

1: Use copper wire (75 ℃ min) only between disconnect switch and unit.

2: To be wired in accordance with **NEC** and local codes.

3: If any of the original wires, as supplied, must be replaced. Use the same or equivalent type wires.

4: If the input voltage is 208 V, please change the transformer tap by taking the red wire to **208V** terminal.

5: When using two-stage thermostat,remove the wire between Y1 and Y2.

6: The rated operating condition of **ALARM** is 24 VAC/1A or 30 VDC/1A or 250 VAC/1A. Please refer to the manual for wiring methods.

	DIP SWITCH		Y1 OR G (MIN)	Y1+Y2 OR W1/W2 (MAX)
SW6-1,2 FAN SPEED TAPS	24/48K	COOL	1	2
		HEAT	1	3
		COOL	1	3
		HEAT	2	4
	36/60K	COOL	2	4
		HEAT	3	5
		COOL	3	5
		HEAT	3	5
SW6-3	ANTI-COOL AIR			*
	NON-ANTI-COOL AIR			
SW6-4	AUTO FAN CONTROL			*
	TWO STAGE FAN CONTROL			
SW7-1	UNUSED			
	UNUSED			*
SW7-2	R454B REFRIGERANT SENSOR			*
	NON-R454B REFRIGERANT SENSOR			
SW7-3 SW7-4	UNUSED			*

HPS	High pressure switch
Pc/PT	High pressure sensor
T1	Inlet airflow temp. sensor
T2	Indoor unit coil temp. sensor
T3	Outdoor coil temp. sensor
T3L	Outdoor coil outlet temp. sensor
T4	Ambient temp. sensor
T5	Comp. discharge temp. sensor
Th	Comp. suction temp. sensor
EEVA	A electronic expansion valve
RV	Reversing valve
CCH	Compressor crankcase heating
IFM	Indoor fan motor
OFM	Outdoor fan motor
COMP.	Compressor
Temp.	Temperature
T9	Reserved

INDOOR CONTROL BOARD LED1	CONTENT
STEADY ON	NORMAL OPERATION
OFF	POWER SUPPLY FAILURE
KEEP FLASHING	REFRIGERANT LEAK PROTECTION
1 FLASH/CYCLE	TEMPERATURE SENSOR FAULT (T1)
2 FLASH/CYCLE	TEMPERATURE SENSOR FAULT (T2)
3 FLASH/CYCLE	R454B REFRIGERANT SENSOR FAULT
4 FLASH/CYCLE	R454B REFRIGERANT SENSOR COMMUNICATION FAULT
5 FLASH/CYCLE	COMMUNICATION FAULT BETWEEN IDU AND ODU
8 FLASH/CYCLE	R454B REFRIGERANT SENSOR OVER SERVICE LIFE
9 FLASH/CYCLE	(SW7-2) DOES NOT MATCH R454B REFRIGERANT SENSOR

Number	Point check content
0	Outdoor unit capacity: RH5=Heat pump 5 ton
1	Outdoor unit mode:0-standby,2-cooling,3-heating
2	Outdoor unit set compressor speed
3	System last fault code
4	T3:outdoor coil temp.(°F)
5	T3L: outdoor coil outlet temp.(°F)
6	T4:outdoor ambient temp.(°F)
7	T5:compressor discharge temp. (°F)
8	Th:compressor suction temp.(°F)
9	TF:compressor IPM temp.(°F)
10	Pe:evaporating pressure(psig)
11	Pc:condensing pressure(psig)
12	Tes:target evaporating temp.(°F) (only for cooling mode)
13	Te:evaporating temp. (°F)
14	Tcs:target condensing temp.(°F) (only for heating mode)
15	Tc:condensing temp.(°F)
16	Target value of the compressor discharge superheat(°F) (only for heating mode)
17	Compressor discharge superheat(°F)
18	Compressor suction superheat(°F)
19	Openings of EEVA(P)
20	Fan speed stage
21	Outdoor unit fan current(A)
22	Compressor current(A)
23	Outdoor unit input current(A)
24	Outdoor unit input voltage(V)
25	Outdoor unit DC bus voltage(V)
26	Outdoor unit power(0.1kW)
27	Continuous running time of the compressor(min)
28	Outdoor unit main control software version
29	Indoor unit Heat Kit Stage
30	T1: inlet airflow temp.(°F)
31	T2: indoor unit coil temp.(°F)
32	Indoor unit software version
33	Reserved
34	Reserved
35	Remark"--"

Figure 13

NOTES:

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www.bosch-homecomfort.us

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