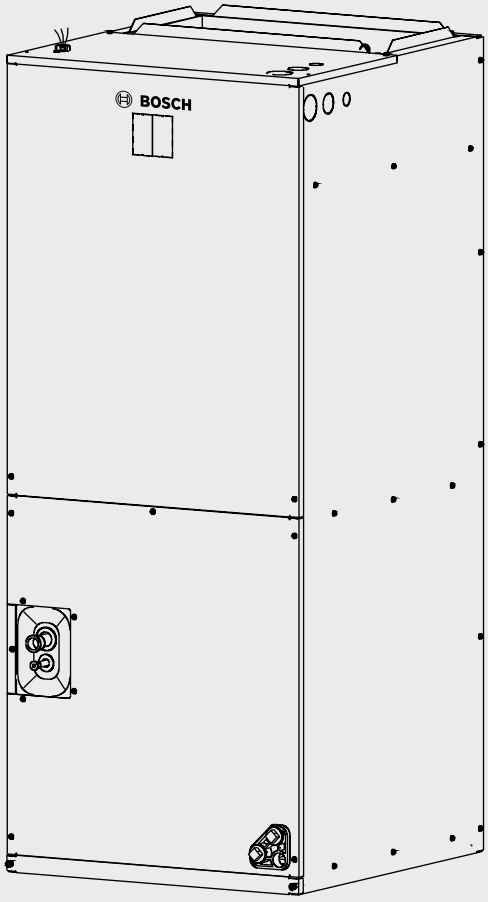
BOSCH

Product Specifications

Bosch IDS Heat Pump
Premium Series Air Handler

2-3-4-5 Ton Capacity | R454B



BTC 762008302 B / 04.2026

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 Product Features **4**
1.1 Features and Benefits 4
1.2 Limited Warranty 4

2 Nomenclature **5**

3 Product Specifications **6**

4 Dimensions **7**

5 Airflow Performance **8**

6 Heater Kit Data **9**

1 Product Features

1.1 Features and Benefits

- Premium efficiency – Up to 20 SEER2, up to 9.5 HSPF2
- Fully Communicating system when paired with R-454B IDS Light & Plus and IDS Premium Connected condensing unit
- All aluminum evaporator coil for superior corrosion resistance
- Constant torque multi-speed ECM blower motor - designed for two stage operation
- 5, 8, 10, 15, 20 kW electric heat accessory kits available for supplemental or emergency heating needs
- Easy to install – compatible with most standard 24 VAC heat pump thermostats
- Factory-installed TXV metering
- Multi-position Installation - upflow or horizontal right standard; field convertible to horizontal left or downflow
- Multiple electrical entry locations
- Dual front panel design for ease of maintenance
- Blower and coil easy slide out for ease of maintenance
- Fully-insulated cabinet design
- Horizontal and vertical condensate drain pans standard
- Condensate drain pan is polymer with UVC inhibitor
- Primary and secondary condensate drain fittings
- Factory-sealed cabinet certified to achieve 2% or less air leakage rate at 1.0 inch water column
- Integrated filter rack with tool-less door access
- AHRI and ETL Listed

1.2 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-climate.us for full warranty terms and conditions.

** Warranty Labor Allowance Schedule details are available on https://claims.bosch-homecomfort.us/

2 Nomenclature

1	2	3	4	5	6-7	8	9	10	11	12	13-14	15
B	**I**	**V**	**B**	**–**	**36**	**M**	**C**	**B**	**–**	**M**	**19**	**X**

Compressor Type
E — EVI Inverter Compressor
S — Standard Inverter Compressor
X — No compressor

Efficiency
15 — 15 SEER2
18 — 18 SEER2
19 — 19 SEER2
20 — 20 SEER2

Power Supply
M — 208/230V 1Ph, 60Hz

Refrigerant
N — R410a
B — R454B

Internet Connected
X — Non-Connected
T — Connected
C — Communication Capable (IDU)

Performance
M — Max Performance Heat Pump
R — Regular Heat Pump
X — AC only

Nominal Capacity
18 — 18x1,000BTU/H
24 — 24x1,000BTU/H
27 — 27x1,000BTU/H
30 — 30x1,000BTU/H
36 — 36x1,000BTU/H
60 — 60x1,000BTU/H

Series
A — A Series
B — B Series

Unit Type
W — Wall Mounted (Air Handler)
C — Ceiling Mounted (Air Handler)
V — Vertical Discharge (Condenser) / Vertical Multi-position (Air Handler)
H — Horizontal Discharge (Packaged Unit, Side Discharge Condenser)
B — Field Convertible: Downflow/horizontal (Packaged Unit)

Application
O — Outdoor
I — Indoor
P — Packaged

Brand
B — Bosch

Figure 1

3 Product Specifications

	BIVB24	BIVB36	BIVB48	BIVB60
System Capacity[1]				
Nominal Cooling (BTU/h)	24000	34200	47000	52000
Nominal Heating (BTU/h)	24000	34200	48000	55000
Blower				
Diameter (mm)	10-5/8" (270)	10-63/64" (279)	10-63/64" (279)	10-63/64" (279)
Width (mm)	8-5/32" (207)	10-43/64" (271)	10-43/64" (271)	10-43/64" (271)
Fan Motor				
Horsepower (HP)	1/3	1/2	3/4	3/4
Full Load Amps	2.6	3.3	4.5	5.6
Refrigeration System				
Refrigerant Line Size				
Liquid Line Size (O.D.)	3/8"	3/8"	3/8"	3/8"
Suction Line Size (O.D.)	3/4"	3/4"	7/8"	7/8"
Refrigerant Connection Size				
Liquid Line Size (O.D.)	3/8"	3/8"	3/8"	3/8"
Suction Line Size (O.D.)	3/4"	3/4"	7/8"	7/8"
Expansion Device [TXV=Thermal Expansion Valve]	TXV			
Decibels dB(A)				
Low Speed	55.8	59.7	65.3	68.5
Medium Speed	62.5	66.1	71.4	70.8
High Speed	66.9	70.4	75.4	73.7
Electrical Data				
Voltage-Phase-Hz	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60
Minimum Circuit Ampacity [2]	3.3	4.2	5.7	7.0
Max. Overcurrent Protection [3]	10	10	10	10
Min / Max Volts	187V/253V			
Air Filter				
Air Filter Sizes	18" x 20"	18" x 20"	20" x 22"	20" x 22"
Weight				
Net Weight (without packaging)(lbs)	118	121	151	160
Gross Weight (including packaging)(lbs) [4]	146	149	184	193
Dimensions				
Unit D x W x H (in.)	21-5/8"×19-5/8"×46-1/2"	21-5/8"×19-5/8"×46-1/2"	24"×22"×54-1/2"	24"×22"×54-1/2"
Unit D x W x H (in.)(with pallet and packaging)	25-3/8"×22-5/16"×52-9/16"	25-3/8"×22-5/16"×52-9/16"	27-11/16"×24-11/16"×60-5/8"	27-11/16"×24-11/16"×60-5/8"
Indoor Coil				
Net face area-sq.ft.	4.02	4.02	5.99	5.99
Tube diameter	9/32" (7 mm)	9/32" (7 mm)	9/32" (7mm)	9/32" (7mm)
No.of rows	4	4	4	5
Fins per inch	17	17	17	17

Table 1

[1] *Tested and rated in accordance with AHRI Standard 210/240.*

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

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

[4] *Weight values are estimated.*

4 Dimensions

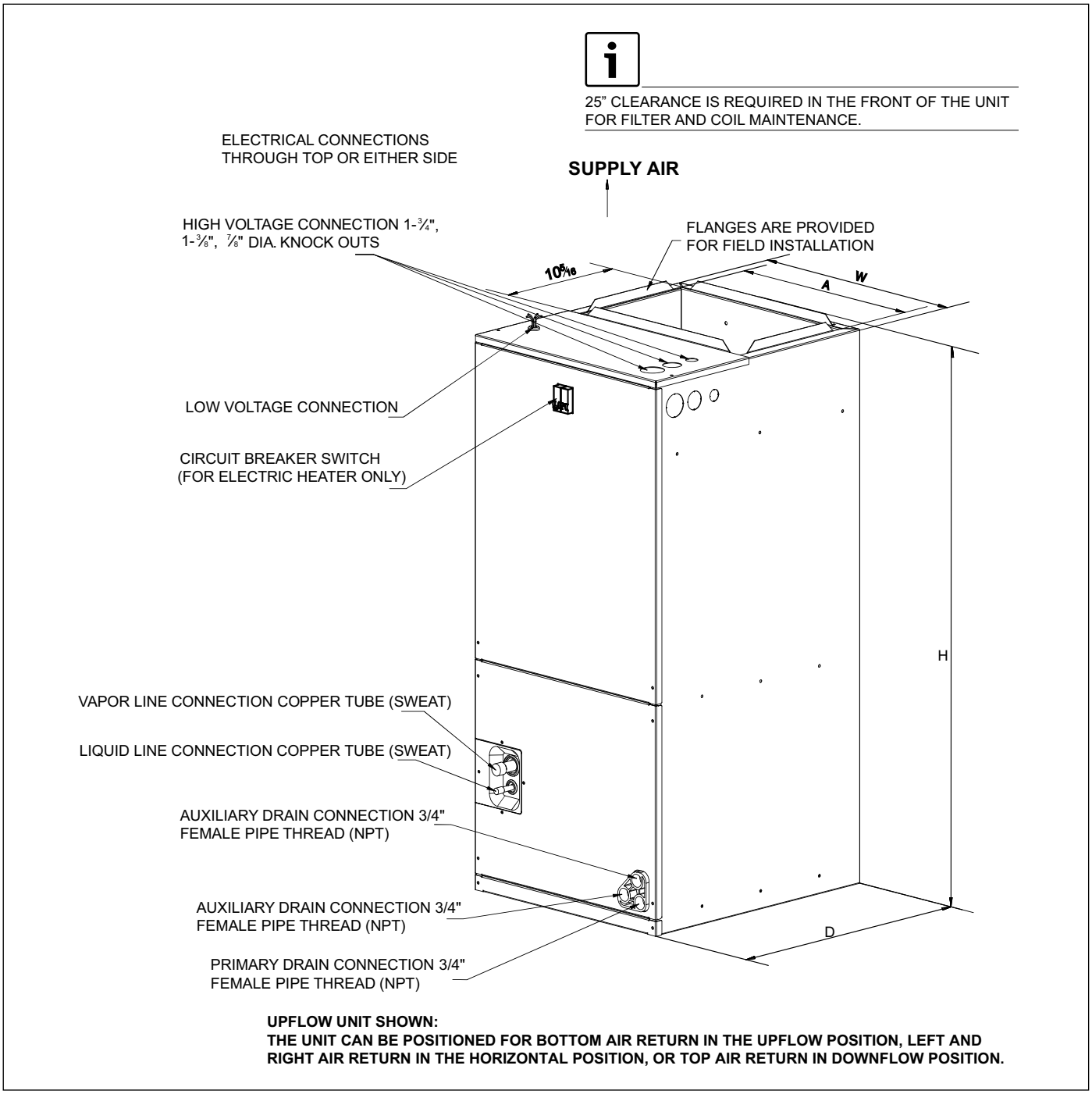


Figure 2

Model Size	Dimensions Inch [mm]				
	Unit Height "H"	Unit Width "W"	Unit Length "D"	Supply Duct "A"	Liquid Line / Vapor Line
24	46-1/2 [1180]	19-5/8 [500]	21-5/8 [550]	18 [456]	3/8 / 3/4 [9.5]/[19]
36	46-1/2 [1180]	19-5/8 [500]	21-5/8 [550]	18 [456]	3/8 / 3/4 [9.5]/[19]
48	54-1/2 [1385]	22 [560]	24 [610]	19-1/2 [496]	3/8 / 7/8 [9.5]/[22]
60	54-1/2 [1385]	22 [560]	24 [610]	19-1/2 [496]	3/8 / 7/8 [9.5]/[22]

Table 2

5 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

Air Handler Model Size	Motor Speed		CFM Wet Coil Without Filter and Electric Heat									
			External Static Pressure-Inches W.C.[kPa]									
			0	0.1	0.2	0.3	0.4	0.5	0.58	0.6	0.7	0.8
24	Tap 1	Power / W	74	79	85	90	96	101	106	107	113	118
		CFM	695	638	580	525	465	409	365	354	303	252
	Tap 2	Power / W	99	104	110	116	122	128	133	134	140	146
		CFM	792	745	695	648	600	549	506	497	447	397
	Tap 3	Power / W	139	146	152	159	166	173	179	180	187	193
		CFM	934	890	845	798	757	716	685	676	636	596
	Tap 4	Power / W	174	181	187	195	202	210	215	216	224	232
		CFM	1029	986	943	900	860	821	791	784	746	706
	Tap 5	Power / W	205	212	219	226	234	242	248	250	257	264
		CFM	1096	1055	1014	975	935	897	867	859	825	792
36	Tap 1	Power / W	113	120	128	135	142	148	153	155	161	168
		CFM	998	925	823	735	667	596	537	516	440	373
	Tap 2	Power / W	162	170	177	187	196	203	208	210	217	225
		CFM	1176	1117	1059	957	874	808	753	751	693	626
	Tap 3	Power / W	214	224	233	241	254	263	270	272	279	287
		CFM	1327	1271	1218	1165	1066	990	938	925	873	821
	Tap 4	Power / W	284	294	304	313	323	337	346	348	357	366
		CFM	1479	1430	1380	1334	1284	1186	1126	1112	1054	1005
	Tap 5	Power / W	353	362	372	381	390	400	413	416	427	437
		CFM	1586	1543	1498	1454	1411	1360	1284	1265	1197	1143
48	Tap 1	Power / W	211	220	230	239	247	257	268	269	279	289
		CFM	1424.8	1373	1326.4	1269.8	1221.7	1157.5	1088.4	1075.9	1010.6	951.1
	Tap 2	Power / W	295	307	316	325	334	342	350	352	364	380
		CFM	1605	1556	1512	1468	1422	1380	1337	1325	1272	1195
	Tap 3	Power / W	400	413	423	434	442	453	461	463	472	485
		CFM	1789	1748	1707	1665	1622	1578	1542	1534	1493	1447
	Tap 4	Power / W	510	522	534	545	558	569	577	578	589	599
		CFM	1953	1923	1881	1843	1791	1742	1717	1717	1675	1643
	Tap 5	Power / W	624	638	653	665	677	690	700	701	711	711
		CFM	2137	2096	2044	2013	1967	1918	1885	1875	1825	1783
60	Tap 1	Power / W	206	215	224	232	240	250	264	266	275	284
		CFM	1419	1365	1311	1262	1213	1156	1060	1043	975	913
	Tap 2	Power / W	285	297	307	317	326	335	342	345	363	376
		CFM	1603	1554	1510	1463	1419	1374	1343	1327	1233	1154
	Tap 3	Power / W	390	400	411	421	432	443	450	452	462	474
		CFM	1788	1746	1705	1664	1619	1577	1544	1534	1493	1444
	Tap 4	Power / W	493	507	532	532	545	555	565	568	579	588
		CFM	1951	1911	1834	1833	1795	1761	1728	1719	1678	1649
	Tap 5	Power / W	619	629	640	653	666	677	687	689	699	708
		CFM	2087	2055	2023	1982	1941	1909	1879	1873	1837	1807

Table 3

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

NOTES:

1. The high stage airflow must be used as the rated airflow for the full load operation of machine.
2. The rated airflow of systems without electric heater kits requires between 300 and 450 cubic feet of air per minute (CFM).
3. The rated airflow of systems with electric heater kits requires between 350 and 450 cubic feet of air per minute (CFM).
4. The air distribution system has the greatest effect on airflow. Therefore, the contractor should use only industry-recognized procedures.
5. Duct design and construction should be carefully done. System performance can be lowered dramatically through poor design or workmanship.
6. 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.
7. 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).

6 Heater Kit Data

Heat Kit Model	Air Handler Model	(kW)Electric Heat	MIN. Circuit Ampacity		MAX.Fuse or Breaker (HACR) Ampacity		Fan speed				
			240 VAC	208 VAC	240 VAC	208 VAC	1	2	3	4	5
EHK-05B	24	5	28.7	25.2	30	30	●	●	●	●	●
EHK-08B		7.5	41.7	36.5	45	40	X	X	●	●	●
EHK-10B		10	54.7	47.8	60	50	X	X	●	●	●
EHK-05B	36	5	29.4	25.9	30	30	●	●	●	●	●
EHK-08B		7.5	42.4	37.2	45	40	X	●	●	●	●
EHK-10B		10	55.4	48.5	60	50	X	X	●	●	●
EHK-15B		15	55.4/26.1	48.5/22.6	60/30	50/25	X	X	●	●	●
EHK-20B		20	55.4/52.1	48.5/45.2	60/60	50/50	X	X	X	●	●
EHK-05B	48	5	30.6	27.1	35	30	●	●	●	●	●
EHK-08B		7.5	43.6	38.4	45	40	●	●	●	●	●
EHK-10B		10	56.6	49.7	60	50	X	●	●	●	●
EHK-15B		15	56.6/26.1	49.7/22.6	60/30	50/25	X	X	●	●	●
EHK-20B		20	56.6/52.1	49.7/45.2	60/60	50/50	X	X	X	●	●
EHK-05B	60	5	31.7	28.2	35	30	X	X	●	●	●
EHK-08B		7.5	44.7	39.5	45	40	X	X	●	●	●
EHK-10B		10	57.7	50.8	60	60	X	X	●	●	●
EHK-15B		15	57.7/26.1	50.8/22.6	60/30	60/25	X	X	●	●	●
EHK-20B		20	57.7/52.1	50.8/45.2	60/60	60/50	X	X	X	●	●

Table 4 Suitable heat kits for AHU multi position installation

- Heat kit suitable for AHU 4-way position installation.
- Ampacities for MCA and Fuse/breaker including the blower motor
- Heat pump systems require a specified airflow. Each ton of cooling requires between 350 and 450 cubic feet of air per minute (CFM), or 400 CFM nominally.

Heater Kit Accessories

Model	Description	24	36	48	60
EHK05B	5 kW Heat Kit, Double Pole Breaker	●	●	●	●
EHK08B	7.5 kW Heat Kit, Double Pole Breaker	●	●	●	●
EHK10B	10 kW Heat Kit, Double Pole Breaker	●	●	●	●
EHK15B	15 kW Heat Kit, Double Pole Breaker	X	●	●	●
EHK20B	20 kW Heat Kit, Double Pole Breaker	X	●	●	●

Table 5

[● means available, X means not available]

Online Help Resources

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

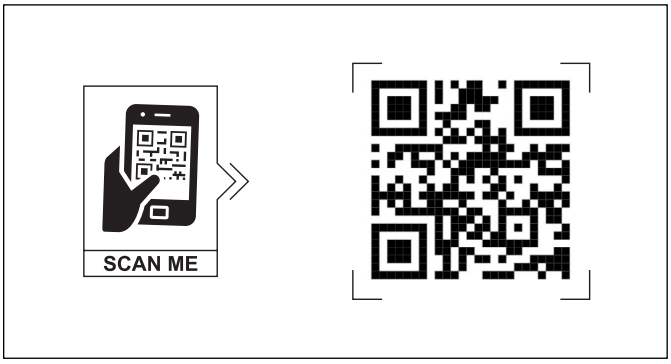


Figure 3

NOTES:

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Bosch Thermotechnology Corp. reserves the right to make changes without notice due to continuing engineering and technological advances.