Midea Building Technologies Division

Midea Group

B-R454B_Basefit(623AG&646AG) 5-12.5Ton 202607

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Midea reserves the right to change the specifications of the product, and to withdraw or replace products without prior notification or public announcement. Midea is constantly developing and improving its products.

Quality Assurance ISO 9001

Environmental Management ISO 14001

Occupational Health and Safety Management ISO 45001

Midea

Packaged Rooftop-BaseFit Series

Cooling & Gas 5-12.5 Tons ,
208/230V, 60Hz
460V, 60Hz



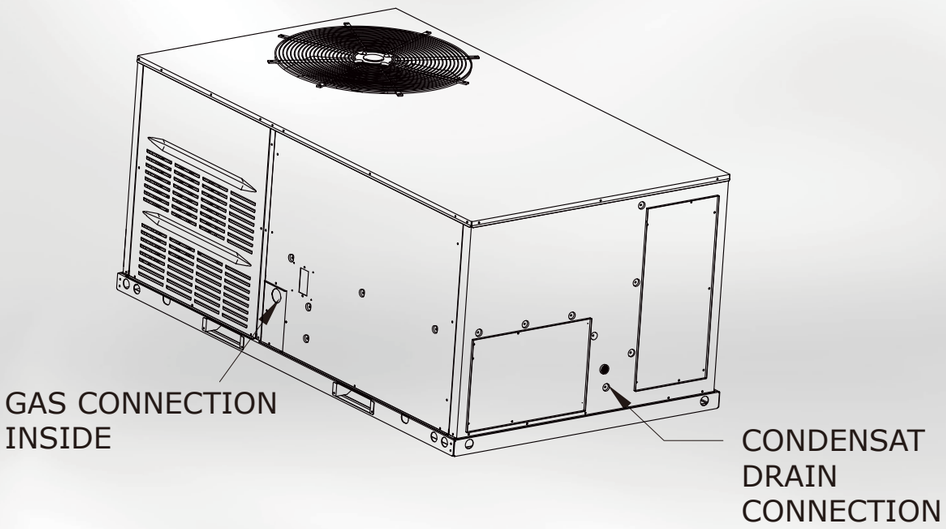
AHRI CERTIFIED® www.ahridirectory.org
Unitary Small AC
AHRI Standard 210/240
Certification applies only when the complete system is listed with AHRI.

C ETL LISTED US
Intertek

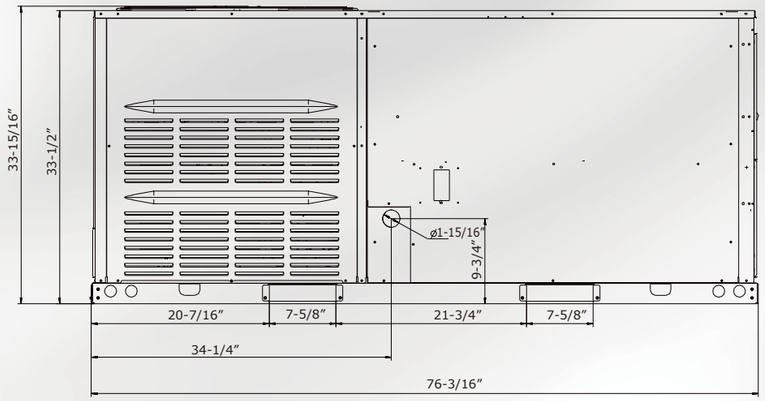
Features

1. Ambient temp range 0~125°F.
2. Customizable high static pressure motor, with a maximum static pressure up to 500Pa.
3. Constant airflow technology enables adaptive duct static pressure adjustment (5 Ton model only).
4. Eco-friendly R454B refrigerant with low GWP value.
5. DC outdoor fan motor design, maintaining head pressure, improving system reliability, especially in low ambient conditions.
6. Curb fit: Designed as a direct replacement utilizing the same footprint as competitors.
7. Interchangeable side and bottom discharge for flexible installation.
8. The compressor, control box, and motor can be maintained on the same side of the unit. Flip-over design control box for easy maintenance.
9. All units equipped with refrigerant filter drier, effectively isolating moisture and impurities in the refrigerant system.
10. Gas pipe maintenance is more flexible, can directly move out follow the guide rail.

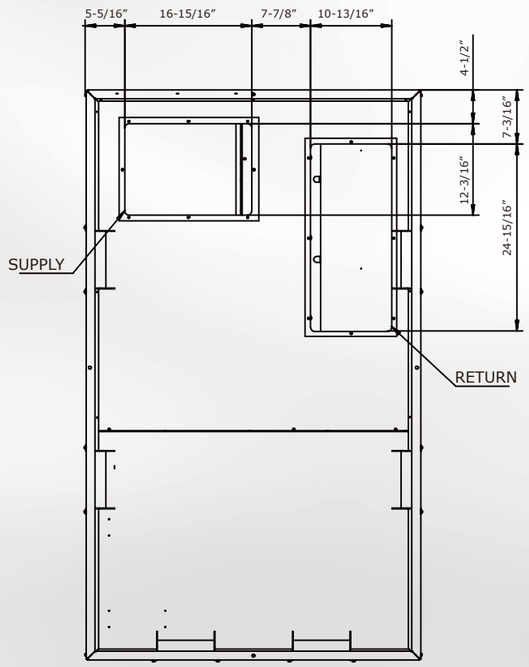
Over view(5Ton)



Front view(in inches)(5Ton)

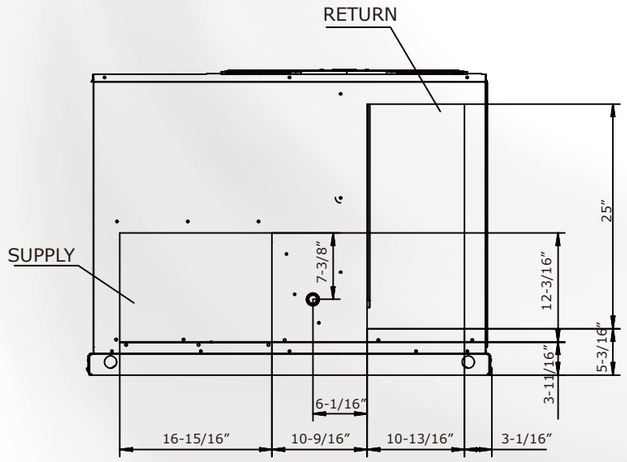


Bottom view(in inches)(5Ton)

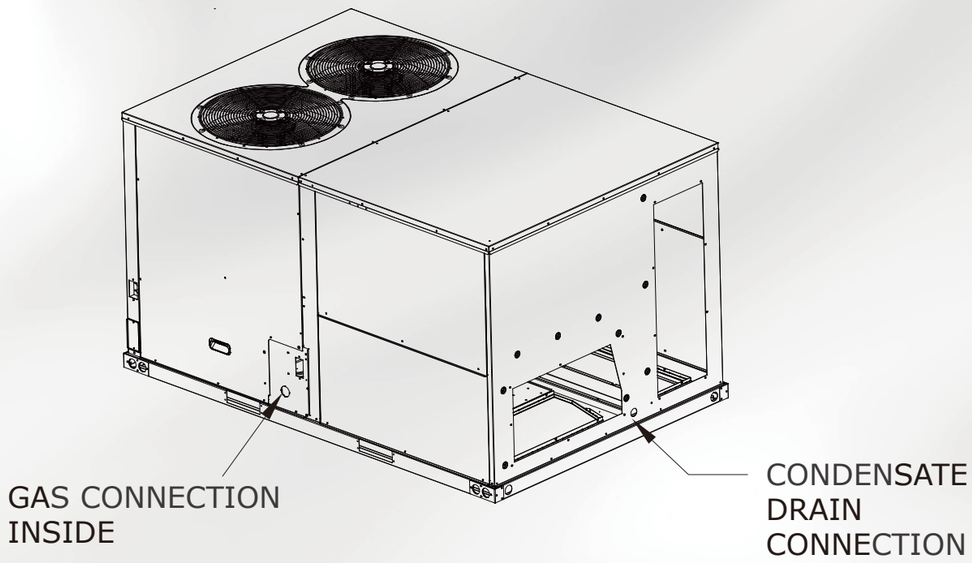


Notes:
1.Through the base gas and electrical is not standard on all units.
2.Verify weight, connection, and all dimension with installer documents before installation.

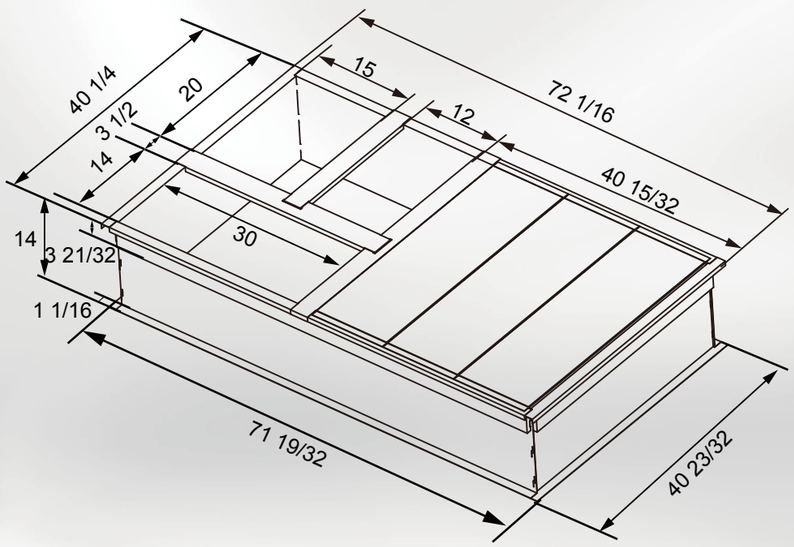
Back view(horizontal configuration)(in inches)(5Ton)



Over view(7.5-112.5Ton)

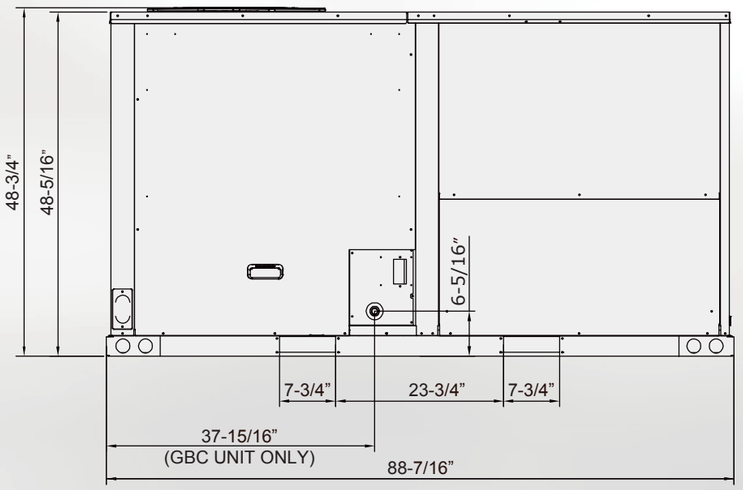


Roof curb(in inches)(5Ton)

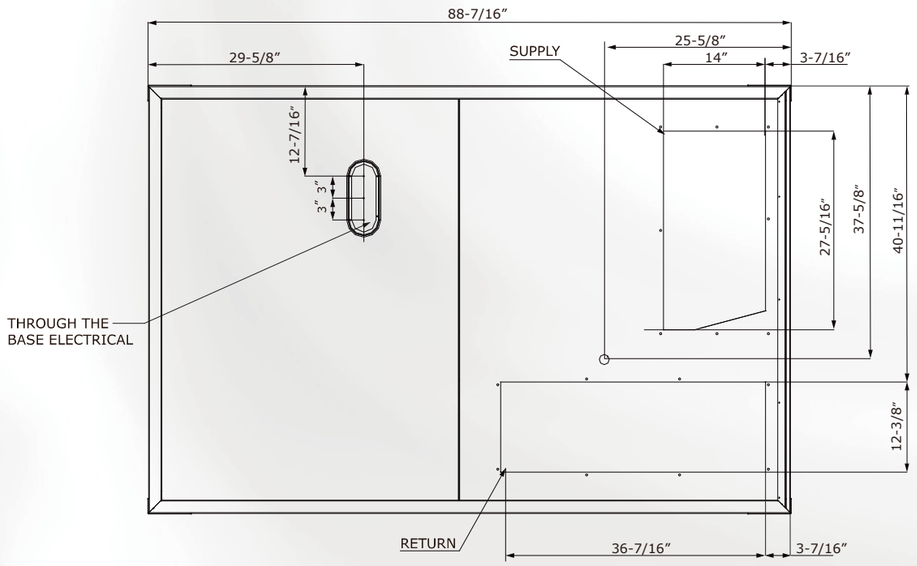


Note: The roof curb is not supplied by Midea.

Front view(in inches)(7.5-12.5Ton)

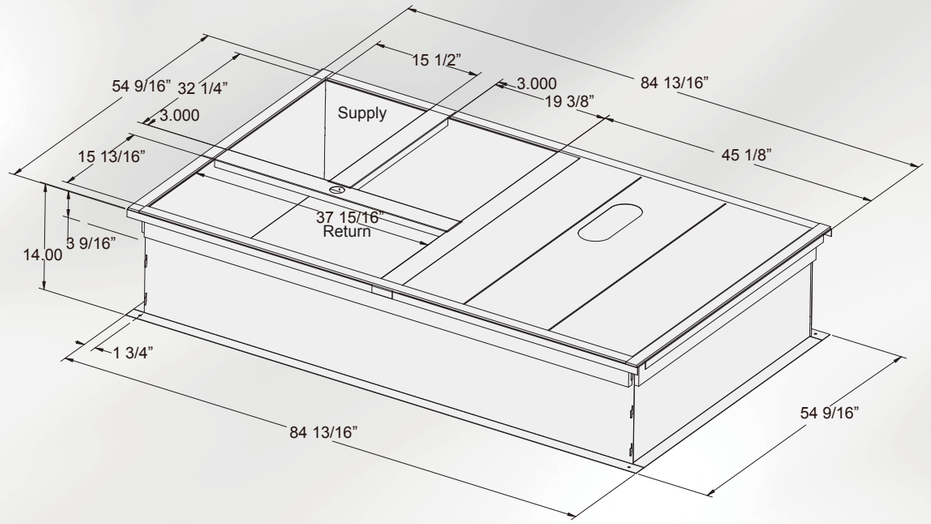


Bottom view(in inches)(7.5-12.5Ton)



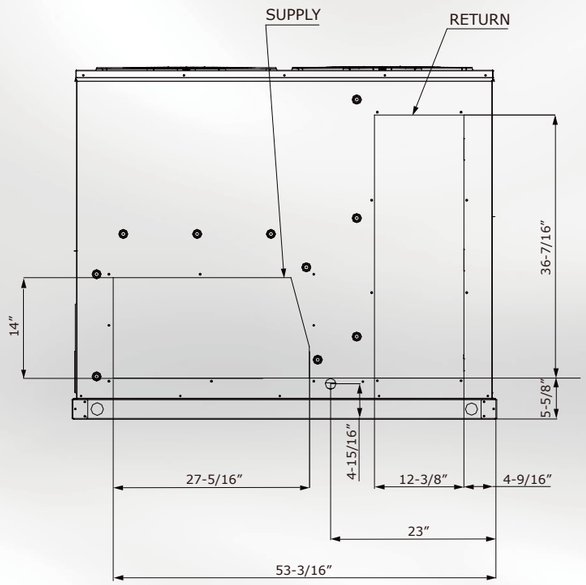
Notes:
1.Through the base gas and electrical is not standard on all units.
2.Verify weight, connection, and all dimension with installer documents before installation.

Roof curb (in inches)(7.5-12.5Ton)



Note: The roof curb is not supplied by Midea.

Back view(horizontal configuration)(in inches)(7.5-12.5Ton)



Specifications

Model		MRB-050V90 (140) GWN10-X(G)	MRB-050V90 (140) GWN10-Z(G)	MRB-075S125 (180/225) GWN10-X(G)	MRB-075S125 (180/225) GWN10-Z(G)	MRB-100S180 (225/250) GWN10-X(G)	MRB-100S180 (225/250) GWN10-Z(G)	MRB-125S180 (225/250) GWN10-X(G)	MRB-125S180 (225/250) GWN10-Z(G)
POWER SUPPLY		208/230V, 60Hz,3Ph	460V, 60Hz,3Ph	208/230V, 60Hz,3Ph	460V, 60Hz,3Ph	208/230V, 60Hz,3Ph	460V, 60Hz,3Ph	208/230V, 60Hz,3Ph	460V, 60Hz,3Ph
NOMINAL CAPACITY	Cooling Rated Capacity (BTU/h)	58,000	58,000	90,000	90,000	120,000	120,000	140,000	140,000
	Rated EER (Btu/h.W)	11	11	11.4	11.4	11	11.2	10.8	11
	SEER	13.4	13.4	14.6	14.6	14.6	14.6	14	14
INDOOR AIR FLOW	ESP (Pa)	0 -250	0 -250	0 -250	0 -250	0 -250	0 -250	0 -250	0 -250
	Air Volume (CFM)	1,800	1,800	3,200	3,200	3,600	3,600	4,000	4,000
SOUND LEVEL	dB(A)	82	82	83	83	84	84	84	84
REFRIGERANT	Type	R454B	R454B	R454B	R454B	R454B	R454B	R454B	R454B
	Volume (lbs-oz)	3.26	3.26	3.75 + 3.09	3.75 + 3.09	5.07 + 4.41	5.07 + 4.41	6.83 + 5.07	6.83 + 5.07
	Volume (kg)	1.48	1.48	1.7+1.4	1.7+1.4	2.3+2.0	2.3+2.0	3.1+2.3	3.1+2.3
COMPRESSOR	Type	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
	Quantity	1	1	2	2	2	2	2	2
Operation Ambient Temperature	°F	0~125.6	0~125.6	0~125.6	0~125.6	0~125.6	0~125.6	0~125.6	0~125.6
	℃	-17.8~52	-17.8~52	-17.8~52	-17.8~52	-17.8~52	-17.8~52	-17.8~52	-17.8~52
INDOOR COIL	Type	Tube-fin	Tube-fin	Micro channel	Micro channel	Micro channel	Micro channel	Micro channel	Micro channel
INDOOR FAN	Type	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal
	Motor type	ECM	ECM	PSC	PSC	PSC	PSC	PSC	PSC
	Drive type	Direct	Direct	Belt	Belt	Belt	Belt	Belt	Belt
	Quantify	1	1	1	1	1	1	1	1
OUTDOOR COIL	Type	Micro channel	Micro channel	Micro channel	Micro channel	Micro channel	Micro channel	Micro channel	Micro channel
OUTDOOR FAN	Type	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial
	Motor type	ECM	ECM	DC	DC	DC	DC	DC	DC
	Drive type	Direct	Direct	Direct	Direct	Direct	Direct	Direct	Direct
	Quantify	1	1	2	2	2	2	2	2
WEIGHT	Net(kg)	252/257	254/259	465/475/480	465/475/480	495/500/500	496/501/501	540/545/545	544/549/549
	Net(lbs)	555.5/566.5	559.9/570.9	1025/1047/1058	1025/1047/1058	1092/11103/1103	1093/1104/1104	1190/1201/1201	1198/1209/1209
	Gross(kg)	270/275	272/277	493/503/508	493/503/508	523/528/528	524/529/529	568/573/573	572/577/577
	Gross(lbs)	595.1/606.2	599.6/610.6	1087/1109/1120	1087/1109/1120	1153/1164/1164	1155/1165/1165	1252/1263/1263	1261/1272/1272
Threaded Drain Pipe Connection		3/4 NPT	3/4 NPT	3/4 NPT	3/4 NPT	3/4 NPT	3/4 NPT	3/4 NPT	3/4 NPT
SHIPPING PER STD 40HQ		34	34	14	14	14	14	14	14

Dimensions

Model Size	Unit Width "W" in. [mm]	Unit Height "H" in. [mm]	Unit Length "D" in. [mm]
50	76-3/16 [1935]	33-15/16 [862]	45-1/16 [1145]
75/100/125	88-7/16 [2246]	48-3/4 [1238]	58-7/8 [1495]

Gas Heat Data:

Heating Input Rate—Btu/h	90,000/67,500	140,000/105,000	125,000	180,000	225,000	250,000
Minimum and Maximum Inlet Supply Gas Pressure Natural/LP	(4.5/11.0)/(10.5/14)	(4.5/11.0)/(10.5/14)	4.5/11.0	4.5/11.0	4.5/11.0	4.5/11.0
Manifold Gas Pressure[a]	3.0/1.7	3.4/1.9	3.5	3.9	3.6	3.5
Combustion Blower Suction Pressure (1st Stage)	-1.0 to -1.5	-1.0 to -1.5	-1.3 to -1.7	-1.3 to -1.7	-1.1 to -1.5	-1.1 to -1.5
Combustion Blower Suction Pressure (2nd Stage)	-1.0 to -1.5	-1.0 to -1.5	-1.3 to -1.7	-1.3 to -1.7	-1.1 to -1.5	-1.1 to -1.5
Minimum Flame Sensing Current[b]	5.0 Micro Amps DC					
Normal Sensing Current Range	8.0 to 16 Micro Amps DC					
Flue Gas Temperature Rise Above Ambient	150 °F to 220 °F	170 °F to 250 °F	230 °F to 300 °F			
Flue Gas Content -%CO_2	4.5 % to 8.5 %(Natural Gas) 5.0 % to 9.5 %(Propane)		7.0 % to 8.0 %(Natural Gas) 7.5 % to 9.0 %(Propane)			
Minimum Supply Air Temperature Across Heat Exchanger	40 °F					

(a) Staged gas heat units have a positive pressure gas valve. Never adjust the staged gas pressure valve to a negative pressure.
(b) A voltage reading across pens (V+) and (V-) is equatable to the flame sensing current. One volt equals one micro amp.

Piping

Length of Pipe (ft)	Iron Pipe Size (IPS) Inches				
	1/2" Pipe	3/4" Pipe	1" Pipe	1¼" Pipe	1½" Pipe
15	76	176	345	750	1220
30	52	120	241	535	850
45	43	99	199	435	700
60	38	86	173	380	610
75	35	77	155	345	545

NOTE: Capacity of Pipe of Different Diameters and Lengths in Cu. Ft. Per Hr. with Pressure Drop of 0.3" and Specific Gravity of 0.60.

Specific gravity multipliers

Specific Gravity	Multipliers
0.5	1.1
0.55	1.04
0.6	1
0.65	0.96