Midea MPCP Series Ceiling-mounted

Cooling capacity: 18 - 36 kBTU/h

Contents:

Features：

- Cabinet - Our cabinet have the reliability of durable and corrosion-resistant. It also helps prevent energy loss and virtually eliminates condensation.
- All-Aluminum coil-It provides excellent heat transfer and efficiency.
- Compare to the conventional copper coils, it is more durable and have less chance of refrigerant leaking into the atmosphere.
- Integrated Drain Pan-Made from rust resistant material, this unique drain pan is gently sloped to eliminate standing water.
- Variable Speed Blower Motor. It- means we provide gradual startup and shutdown for operation which can decrease the energy consumption. We also have the advantages of higher air quality, more consistent temperature for added comfort.
- Blower compartment- It can reduce sound for quiet operation and save energy.
- Exquisite design-Super slim appearance and compact structure will save much installation space.

1 Nomenclature

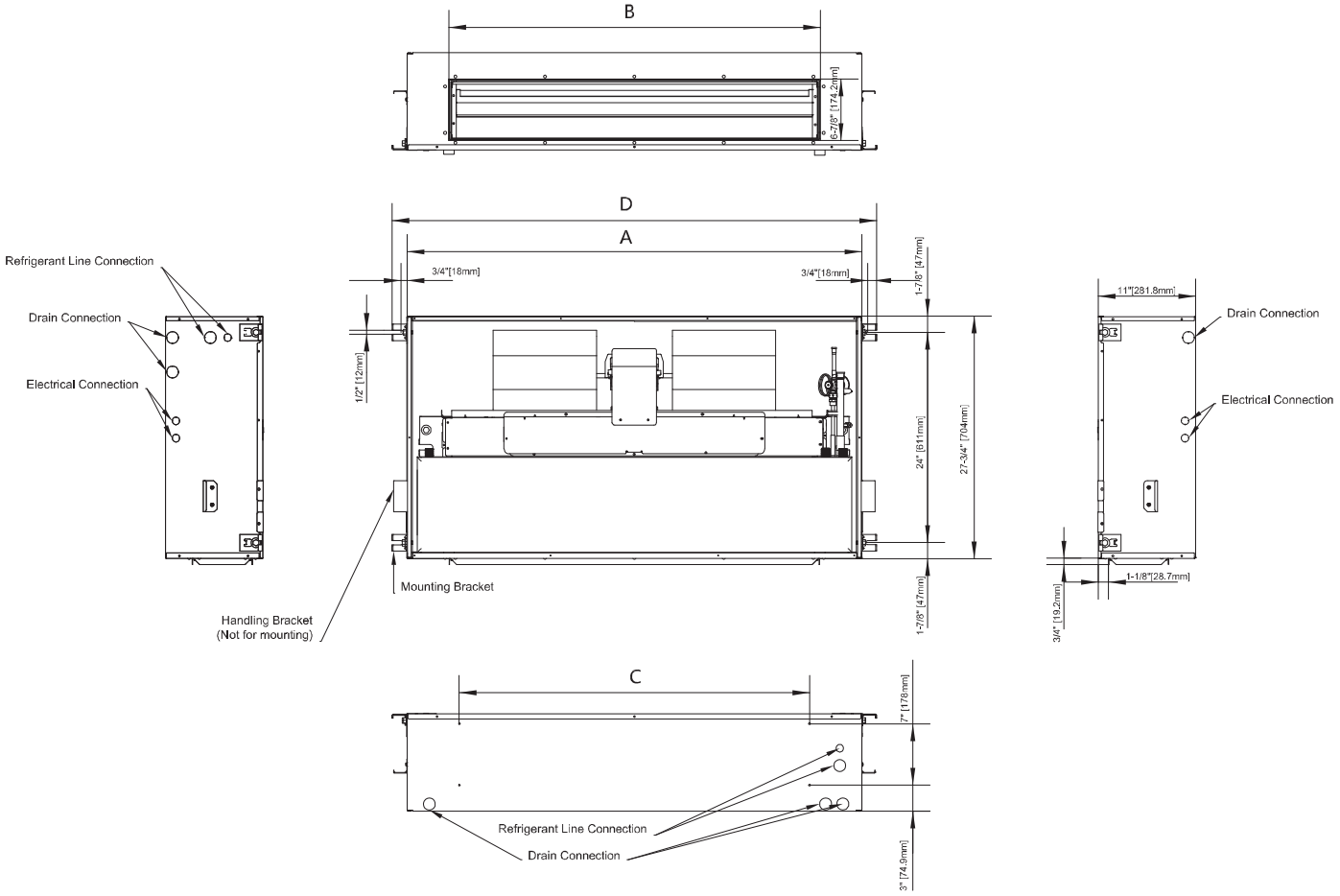
M	P	C	P	24	A	1	M	N1	T	A
1	2	3	4	5	6	7	8	9	10	11

Legend		
No.	**Code**	**Remarks**
1	M	Brand: Midea brand
2	P	Discharge type: V: Vertical Air Handler H: Wall Mounted P: Pancake
3	C	Installation type: M: Multiple Position Installation V: Vertical Position Installation C: Cased (pancake) U: Uncased (pancake)
4	P	Motor type: P: PSC Motor E: ECM Motor
5	24	Capacity: 18: 18 kBtu/h; 24: 24 kBtu/h; 30: 30 kBtu/h; 36: 36 kBtu/h; 42: 42 kBtu/h; 48: 48 kBtu/h; 60: 60 kBtu/h;
6	A	Cabinet Size
7	1	Cabinet Version Number
8	M	Power supply type: M: 1-Phase; X: 3- Phase
9	N1	Refrigerant type: N1: R410A
10	T	Valve type: O: Orifice(Piston) T: TXV E: EEV(Reserved)
11	A	Version Number

2 Specifications

	MPCP18A1MN1TA	MPCP24A1MN1TA	MPCP30B1MN1TA	MPCP36B1MN1TA
NOMINAL RATING				
Cooling (BTU/h)	18,000	24,000	36,000	48,000
External Static Pressure(in.w.g)(Pa)	45	45	60	60
ELECTRICAL DATA				
Voltage / Phase(60Hz)	208/230/1	208/230/1	208/230/1	208/230/1
Min. / Max. Voltage	187/253	187/253	187/253	187/253
Min. Circuit Amps	1.7	1.7	2.8	2.8
Max. Overcurrent Protection	15	15	15	15
FAN MOTOR				
Motor Type	PSC	PSC	PSC	PSC
Capacitor (uF)	6	6	10	10
Horsepower (HP)	1/8	1/8	1/3	1/3
Rated RPM	1075	1075	1600	1600
Full Load Amps (FLA)	1.04	1.04	1.8	1.8
FAN BLOWER				
Material	Metal	Metal	Metal	Metal
Type	Centrifugal	Centrifugal	Centrifugal	Centrifugal
Diameter(in.)	7	7	7	7
Height(in.)	8	8	9	9
EVAPORATOR COIL				
Type	Tube & Fin	Tube & Fin	Tube & Fin	Tube & Fin
Tube Material	Aluminum	Aluminum	Aluminum	Aluminum
Tube Size(in.)	9/32	9/32	9/32	9/32
SOUND POWER (dB)	51	51	59	59
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	3/4	3/4

3 Dimensions



Model	Dimensions (in.)				Unit Operating Weight (lbs.)
	A	B	C	D	
MPCP18A1MN1TA	39-3/4	30-3/8	28	43-3/8	110
MPCP24A1MN1TA	39-3/4	30-3/8	28	43-3/8	110
MPCP30B1MN1TA	51-3/4	42-1/6	40	55-3/8	137
MPCP36B1MN1TA	51-3/4	42-1/6	40	55-3/8	137

4 Airflow Data

Model	Motor Speed	CFM Wet Coil without Filter or Electric Heat, Cased, Back Return							
		External Static Pressure-Inches W.C.[kPa]							
		0[0]	0.05[.0125]	0.1[.025]	0.15[.0375]	0.2[.050]	0.25[.0625]	0.3[.075]	0.35[.0875]
18K	L	714	679	636	585	527	461	387	306
	M	829	790	743	690	628	559	483	399
	H	876	830	776	723	662	593	517	432
24K	L	714	679	636	585	527	461	387	306
	M	829	790	743	690	628	559	483	399
	H	876	830	776	723	662	593	517	432
Model	Motor Speed	CFM Wet Coil without Filter or Electric Heat, Cased, Back Return							
		External Static Pressure-Inches W.C.[kPa]							
		0[0]	0.1[.025]	0.15[.0375]	0.2[.050]	0.3[.075]	0.4[.100]	0.5[.125]	0.6[.150]
30K	L	1191	1096	1047	997	894	787	675	560
	M	1299	1201	1151	1101	1000	897	793	687
	H	1435	1323	1268	1214	1107	1003	902	804
36K	L	1191	1096	1047	997	894	787	675	560
	M	1299	1201	1151	1101	1000	897	793	687
	H	1435	1323	1268	1214	1107	1003	902	804

Model	Motor Speed	CFM Wet Coil without Filter or Electric Heat, Cased, Bottom Return							
		External Static Pressure-Inches W.C.[kPa]							
		0[0]	0.05[.0125]	0.1[.025]	0.15[.0375]	0.2[.050]	0.25[.0625]	0.3[.075]	0.35[.0875]
18K	L	726	689	645	593	531	464	392	315
	M	845	801	753	692	627	559	487	411
	H	887	832	773	711	644	573	498	419
24K	L	726	689	645	593	531	464	392	315
	M	845	801	753	692	627	559	487	411
	H	887	832	773	711	644	573	498	419
Model	Motor Speed	CFM Wet Coil without Filter or Electric Heat, Cased, Bottom Return							
		External Static Pressure-Inches W.C.[kPa]							
		0[0]	0.1[.025]	0.15[.0375]	0.2[.050]	0.3[.075]	0.4[.100]	0.5[.125]	0.6[.150]
30K	L	1200	1095	1042	989	880	768	655	539
	M	1305	1208	1158	1106	998	884	764	638
	H	1423	1327	1276	1224	1113	994	867	733
36K	L	1200	1095	1042	989	880	768	655	539
	M	1305	1208	1158	1106	998	884	764	638
	H	1423	1327	1276	1224	1113	994	867	733

--- Shaded boxes represent airflow outside the required 300-450 cfm/ton.

NOTES:

1. Airflow data is without filter or electric heat accessory. Heater adds 0.05 ---in. static.
2. Use wet coil data for determining cooling airflow.
3. Accessory louver panel adds 0.05 ---in. Static.
4. When electric heater is working only, 300CFM for each ton is sufficient except 30K work with 10KW heat（≧900SCFM）

Required CFM Range for Heat Pump Operation

Size	CFM	
	Min	Max
18	450	675
24	600	900
30	750	1125
36	900	1350

5 Wiring Diagram

MPCP18A1MN1TA; MPCP24A1MN1TA; MPCP30B1MN1TA; MPCP36B1MN1TA

SCHEMATIC DIAGRAM

SEE RATING PLATE FOR VOLTS&HERTZ

FIELD POWER WIRING

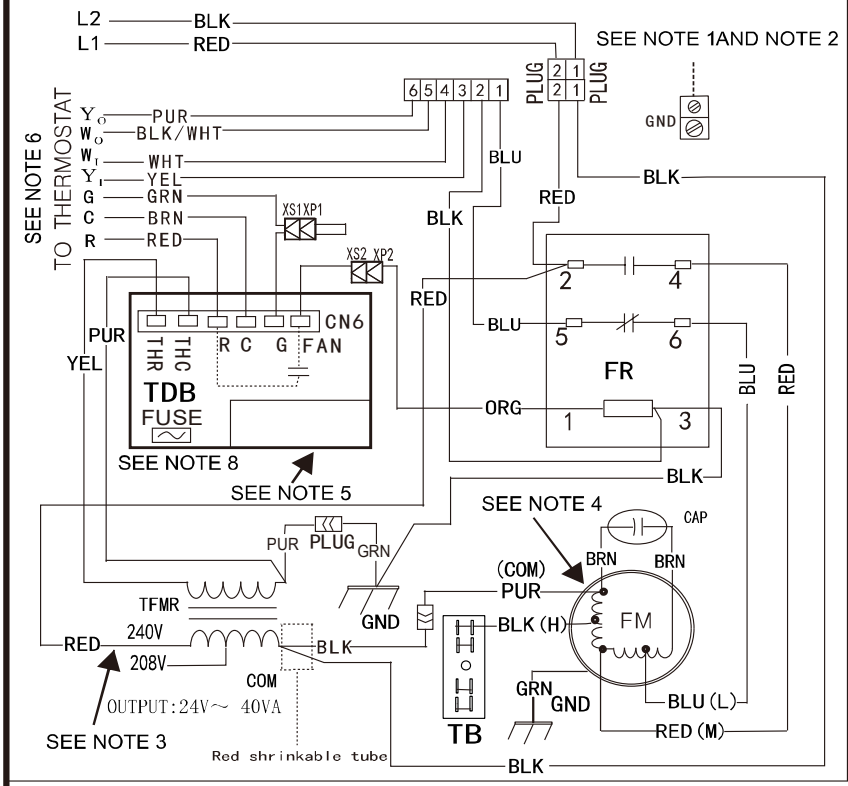
CAUTION:
NOT SUITABLE FOR USE ON SYSTEMS EXCEEDING 150V TO GROUND
ATTENTION:
NE CONVIENT PAS AUXINSTALLATIONS DE PLUS DE 150VALA TERRE

TO THERMOSTAT		TO OUTDOOR UNIT	
W_1	WHITE	W_0	BLACK/WHITE
Y_1	YELLOW	Y_0	PURPLE
R	RED		
C	BROWN		
G	GREEN		

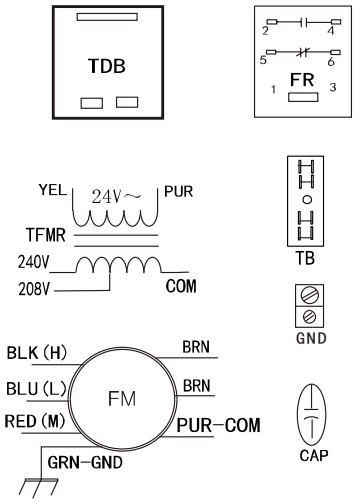
CAP AND SEAL THE UNUSED WIRE

ELECTRIC HEAT WIRING

CONNECTION (WHEN APPLIED)



COMPONENT ARRANGEMENT



FR	FAN RELAY
TDB	TIME DELAY BOARD
TFMR	TRANSFORMER
FM	FAN MOTOR
CAP	FAN CAPACITOR
GND	GROUND
TB	TERMINAL BLOCK

NOTES:
1: Use copper wire(75℃ min） only between disconnect switch and unit, To be wired in accordance with N.E.C. and local codes. Fan coils equipped with electric heater connect power supply to terminal block .Cooling controls wiring not used with electric heaters.
2: If any of the original wire as supplied must be replaced,use the same or equivalent type wire.
3: Remove the red lead from “240V” terminal and then connect the red lead to “208V” terminal on the transformer for 208 volts.
4: Factory default fan speed is Medium,FM red wire connected to FR #4;For HI speed connect FM black wire to FR #4;For LOW speed connect FM blue wire to FR #4,and FM red wire connected to FR #6 . Always connect the unused FM wire to the dummy terminal block.
5: TDB has a 90-100s off delay when “G” is de-energized.
6:Connect R to R, G to G, etc. See outdoor or indoor instructions for details.
7:N.E.C.Class 2,24volts.
8:The Model Of The Fuse Is 32V/3A.Fuse Manufacturer: Littelfuse, fuse part number: 0257003.

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