



iWM4 Series Wall-Mount

Cooling capacity: 18 – 36 kBTU/h



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Features:

- Direct-drive, multi-speed motors allow air volume variation for heating / cooling.
 - Multi-speed ECM motor
 - Multi-speed PSC motor
- Thermoplastic drain pan with bottom primary and secondary drain connections.
- Built-in filter rack.
- Wall-hanging bracket provided.
- Front or bottom return available.
- Optional heating elements of 5kW, 8kW, and 10kW.
- All aluminum coil

1 Nomenclature

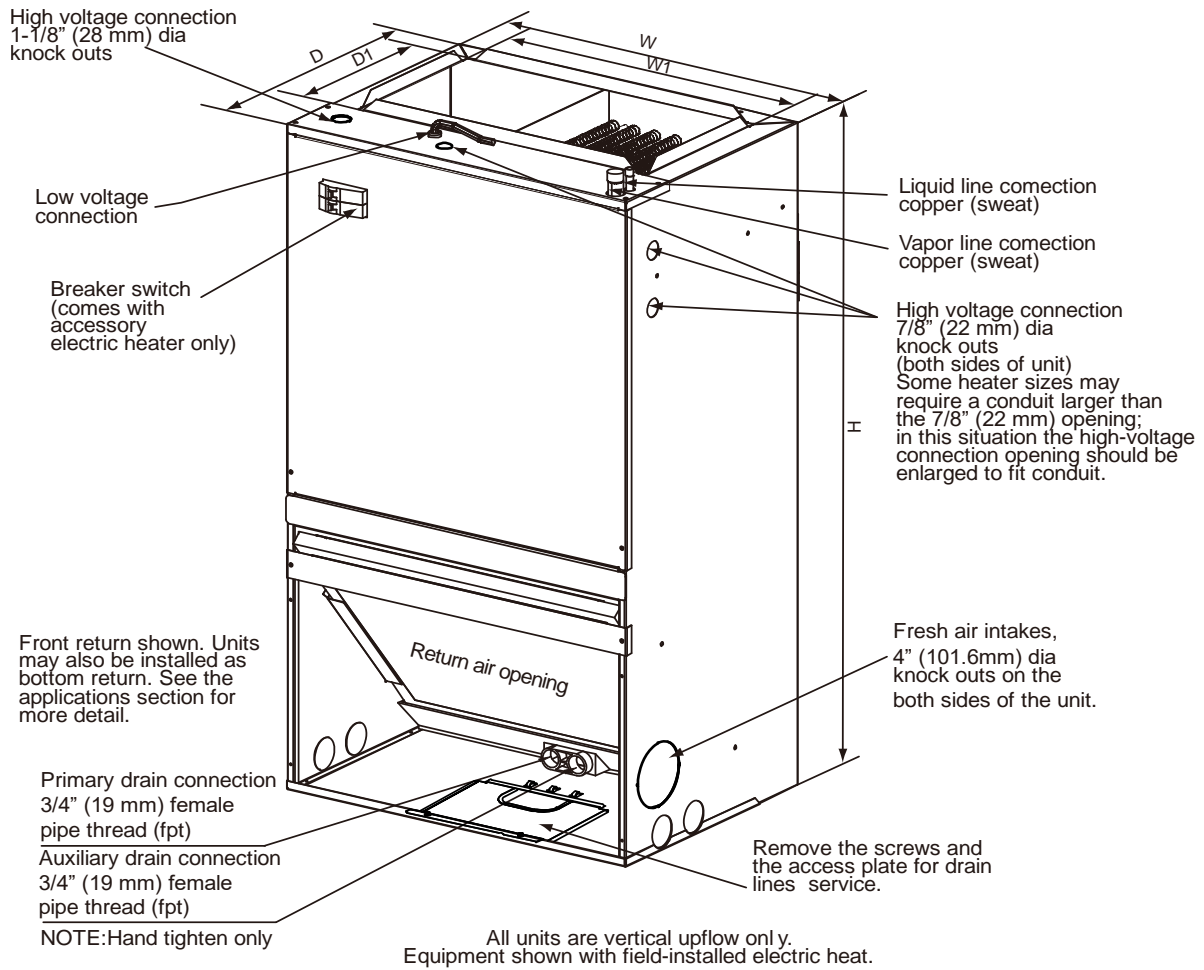
i	W	M	4	A	1	8	1			
1	2	3	4	5	6	7	8	9	10	11

Legend		
No.	Code	Remarks
1	i	Brand: iAir
2	W	Discharge type: V: Vertical Air Handler W: Wall Mounted/ Vertical P: Pancake
3	M	Installation type: B: Multiple Position Installation M: Vertical Position Installation C: Cased (pancake) U: Uncased (pancake)
4	4	Motor type: 4: PSC Motor 5: ECM Motor
5	A	Future Use
6-7	18	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; 60/61: 60 kBtu/h; Cabinet Size
8	1	Cabinet Version Number
9	Not used	
10	Not used	
11	Not used	
12	Not used	

2 Specifications

	iWM4A181	iWM4A241	iWM4A311	iWM4A361
NOMINAL RATING				
Cooling (BTU/h)	18,000	24,000	30,000	36,000
External Static Pressure(in.w.c)	0.7	0.6	0.6	0.6
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	1.3	1.6	2.3
Max. Overcurrent Protection	15	15	15	15
FAN MOTOR				
Motor Type	PSC	PSC	PSC	PSC
Capacitor (uF)	6	6	15	10
Horsepower (HP)	1/6	1/4	1/3	1/2
Rated RPM	1075	1075	1075	1075
Full Load Amps (FLA)	0.8	1.0	1.28	1.8
FAN BLOWER				
Material	Metal	Metal	Metal	Metal
Type	Centrifugal	Centrifugal	Centrifugal	Centrifugal
Diameter(in.)	10-3/4	10-3/4	10-3/4	10-3/4
Height(in.)	6	6	8	8
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)	50	54	54	54
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 Size	Dimensions- In.					Unit Weight / Shipping Weight Lbs.
	Unit Height H	Unit Width W	Unit Width W1	Unit Depth D	Unit Depth D1	
PSC 18K/24K	36-1/2	20-1/2	17-2/5	15	9-1/2	88 / 101
PSC 30K/36K	39-1/2	22	18-4/5	19	9-1/2	106 / 123

4 Airflow Data

PSC MODEL	BLOWER SPEEDS	EXTERNAL STATIC PRESSURE (in.w.c.)								
		0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
18	High	813	775	731	692	653	609	560	501	424
	Med	695	656	620	581	540	498	440	380	-
	Low	603	562	525	485	443	393	-	-	-
24	High	947	895	847	799	753	704	655	592	530
	Med	845	801	759	716	675	626	573	510	-
	Low	676	640	602	563	523	499	-	-	-
30	High	1367	1312	1252	1192	1131	1063	990	908	821
	Med	1211	1165	1114	1065	1016	960	899	833	748
	Low	992	952	912	873	828	782	728	656	627
36	High	1397	1345	1290	1263	1196	1116	1051	980	907
	Med	1298	1252	1198	1147	1094	1037	976	910	842
	Low	1149	1105	1056	1008	960	909	856	791	726

--- Shaded boxes represent airflow outside the required 300-450 cfm/ton, which are not recommended.

NOTES:

1. Airflow based upon dry coil at 230V with no electric heat and factory---approved filter.
2. Airflow is equivalent for front or bottom return configurations.

Filter Sizes	
Unit Size	Filter Size In.
18, 24	16x20x1
30, 36	20x20x1

5 Wiring Diagrams

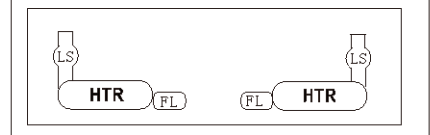
SCHEMATIC DIAGRAM

SEE RATING PLATE FOR VOLTS&HERTZ

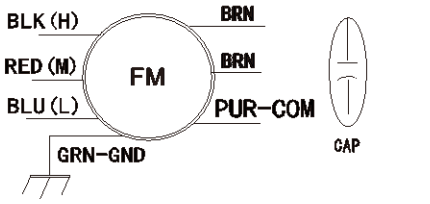
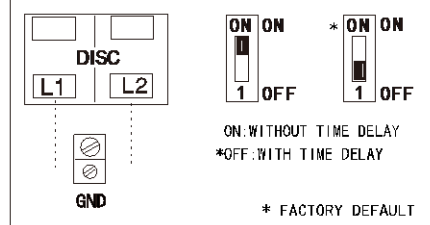
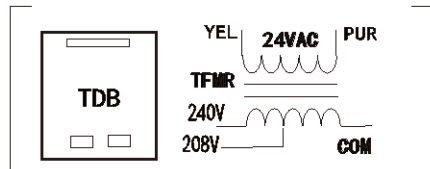
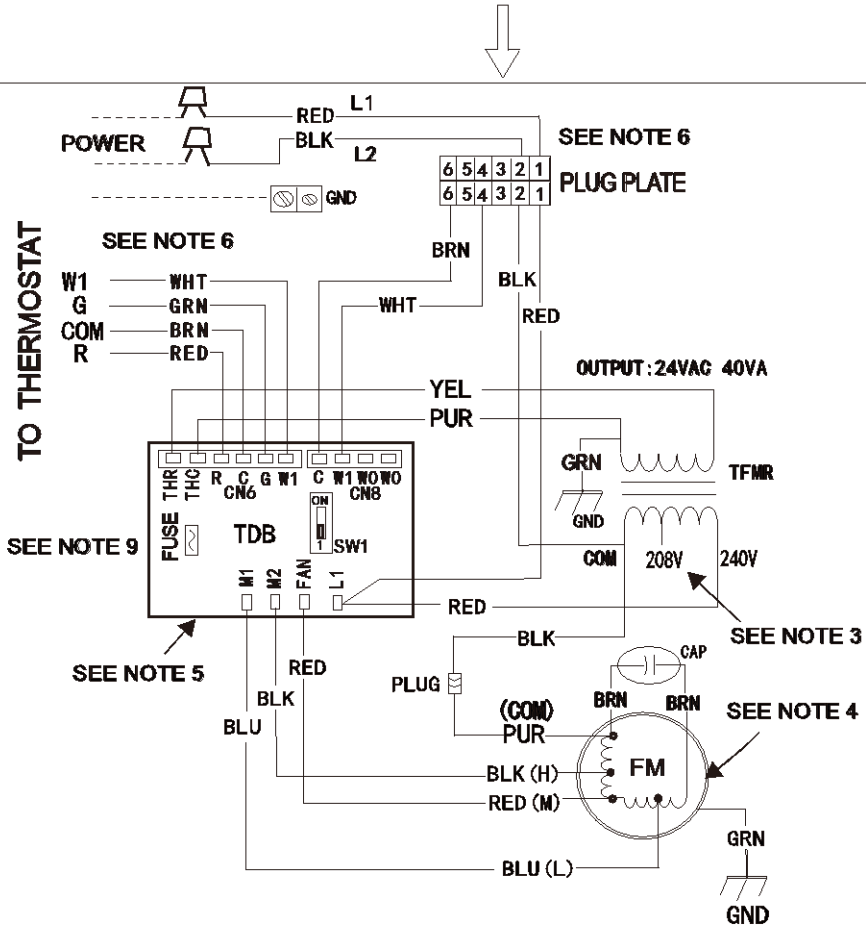
CAUTION:
NOT SUITABLE FOR USE ON SYSTEMS EXCEEDING 150V TO GROUND
ATTENTION:
NE CONVIENT PAS AUX INSTALLATIONS DE PLUS DE 150V A LA TERRE

W1 WHITE
R RED
C BROWN
G GREEN
CAP AND SEAL THE UNUSED WIRE

COMPONENT ARRANGEMENT



ELECTRIC HEAT WIRING CONNECTION (WHEN APPLIED)



TDB TIME DELAY BOARD
TFMR TRANSFORMER
FM FAN MOTOR
CAP FAN CAPACITOR
GND GROUND
- - - FIELD POWER WIRING

- NOTES:**
- 1: Use copper wire (75°C min), to be wired in accordance with N.E.C. and local codes.
 - 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 "FAN" on the TDB; For HI speed connect FM black wire to "FAN"; For LOW speed connect FM blue wire to "FAN" and FM red wire to "M1" or "M2". Always connect the unused FM wire to "M1" or "M2".
 - 5: TDB has a 90-100s off delay when "G" or "W1" is de-energized. If blower off delay is disable in any mode, please dial SW1 to "ON".
 - 6: Connect R to R, G to G, etc. See outdoor or indoor instructions for details.
 - 7: Cooling controls wiring not used with electric heaters, connect the plug to electric heaters kit when applied.
 - 8: N.E.C., class 2, 24 volts.
 - 9: The Fuse Model Is 32V/3A. Fuse Manufacturer: Littelfuse or Btel, fuse part number: 0257003 or BF4.

16023000011607 V. B



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Note: Product specifications change from time to time as product improvements and developments are released and may vary from those in this document.

