MateAir Series

Large Room Precision Cooling



Introduction

ACwatt s MateAir series is an advanced cooling solution for mediumto large data centers, communication rooms, battery rooms, UPS rooms, and industrial equipment rooms. It provides efficient and reliable temperature control, ensuring a secure and stable environment for critical infrastructure and precision equipment.

Features

High Efficiency

- Full frequency conversion system design, high sensible heat ratio, high energy efficiency ratio.
- Efficient DCVF compressor and EC fan provide a stepless dynamic cooling output.
- Utilize a V or A-shaped evaporator for high heat exchange efficiency.
- Variable-speed outdoor unit, the system operates consistently in high-efficiency mode.
- R410A refrigerant, international standard, environmentally friendly.

Simple

- 7" HMI colour touchscreen for easy operation and real-time display of information.
- Standard RS485 interface, optional SNMP interface, supports management of at least 64 units.
- Hierarchical password permissions, facilitating operation and maintenance management.
- Modular design, convenient for disassembly and assembly, no need to cut copper pipes.

Reliable

- High-strength structural frame, sturdy and durable.
- Strict quality control of components to ensure quality.
- Rigorous testing and validation to guarantee operational safety.
- Multi-voltage compatibility reduces frequent start-stop operations of the devices.

Indoor Model(MA Series)	025	030	035	040	045	050	060
Total Cooling Capacity（kW）	27.1	30.6	36.3	41.2	45.3	51.2	60.2
Sensible Cooling Capacity（kW）	24.9	27.6	33.4	38.1	41.2	47.1	54.1
Air Volume（m³/h）	8550	9550	11100	12100	12550	13100	14000
Compressor Type	DC Variable Frequency Compressor（Single System）						
Compressor Number（pcs）	1	1	1	1	1	1	1
Fan Type	High Efficiency EC Fans						
Fan Number（pcs）	1	1	1	1	1	1	1
EEV	High Efficiency Electronic Expansion Valve						
Refrigerant	R410A						
Heating Capacity（kW）	6	6	6	9	9	9	9
Humidification Capacity（kg/h）	5	5	5	10	10	10	10
Power Supply Type	380V/3N~50Hz						
FLA (A)	36.5	40.8	41.6	45.7	50.0	54.5	64.6
Indoor Unit Weight（kg）	320	325	350	370	370	470	470
Dimension W×D×H (mm)	900*995*1975					1100*995*1975	
FA Series Outdoor Unit							
Outdoor Model（Nominal condition）	FA035APN	FA040APN	FA050APN	FA058APN	FA068APN	FA068APN	FA090APN
Power Supply Type	380V/3N~50Hz						
Outdoor Weight(kg)	126	135	140	150	166	166	185
Dimension W×D×H (mm)	1376×980×738		1576×1274×748	1776×1274×748	1976×1274×738		2576×1274×748

Indoor Model(MA Series)	060	070	080	090	100	110	120
Total Cooling Capacity（kW）	60.9	72.2	82.1	90.5	102.1	110.2	120.0
Sensible Cooling Capacity（kW）	55.0	66.5	76.0	82.1	94.0	100.1	108.0
Air Volume（m³/h）	19000	22000	24000	25000	26000	27000	28000
Compressor Type	DC Variable Frequency Compressor（Dual System）						
Compressor Number（pcs）	2	2	2	2	2	2	2
Fan Type	High Efficiency EC Fans						
Fan Number（pcs）	2	2	2	2	2	2	2
EEV	High Efficiency Electronic Expansion Valve						
Refrigerant	R410A						
Heating Capacity（kW）	9	9	12	12	12	12	12
Humidification Capacity（kg/h）	10	10	10	10	10	10	10
Power Supply Type	380V/3N~50Hz						
FLA (A)	68.6	70.3	78.6	86.8	96.0	106.0	116.0
Indoor Unit Weight（kg）	600	650	690	690	880	880	880
Dimension W×D×H (mm)	1800*995*1975				2200*995*1975		
FA series Outdoor Unit							
Outdoor Model（Nominal condition）	FA090DPN	FA050APN*2	FA058APN*2	FA068APN*2	FA068APN*2	FA078APN*2	FA090APN*2
Power Supply Type	380V/3N~50Hz						
Outdoor Weight(kg)	185	140*2	150*2	166*2	166*2	176*2	185*2
Dimension W×D×H (mm)	2576×1274×748	(1576×1274×748) *2	(1776×1274×748) *2	(1976×1274×738) *2		(2176×1274×738)*2	(2576×1274×748)*2

Note：
1. The above parameters are based on indoor return air working conditions of 24 °C, 50% RH, outdoor ambient temp. 35 °C;
2. The upper air supply unit has two air supply methods: Upflow air supply and top front air supply;
3. The default fan of the Downflow supply fan is sunken type, and the recommended net height of the floor is ≥ 400mm;
4. Customized products can be provided, if you need more parameters, please contact our company.

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