

No Attenuation

Boost heating/cooling modes ensure ESG-Inv M Series Pool Heat Pump has no attenuation of capacity. Boost heating mode has no attenuation of capacity at **15°C** ambient temperature compares with normal mode at **27°C** ambient temperature

Note:

The curve on the left is for MSC-70D2N8-A, only for reference.
Only MSC-160D2N8-A and MSC-200D2N8-A have boost cooling mode



Heating&Cooling

ESG-Inv M Series contains **heating and cooling and automatic** modes, covering a wide range of operating environment temperature and target water temperature



Cooling Mode

Heating Mode



Pool System Centralized Control

ESG-Inv M Series is compatible with all centralized control pool systems using **Modbus protocol**



IOT&APP

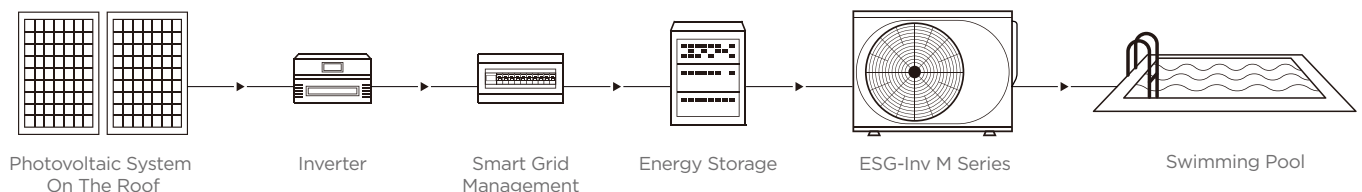
App controls and **IOT** platforms are designed to ensure user ease of operation and reduce equipment maintenance costs

Note: IOT platform is expected to be available in April.



SG-Ready

SG-ready ensures that ESG-Inv M Series uses as much clean energy as possible from the smart grid and stores the energy in the swimming pool. When the smart grid is fully supplied with clean energy, ESG-Inv M Series consume close to zero carbon





Smart Memory

Power-off memory function restores the ESG-Inv M Series to preset parameters after restart



Silence Mode

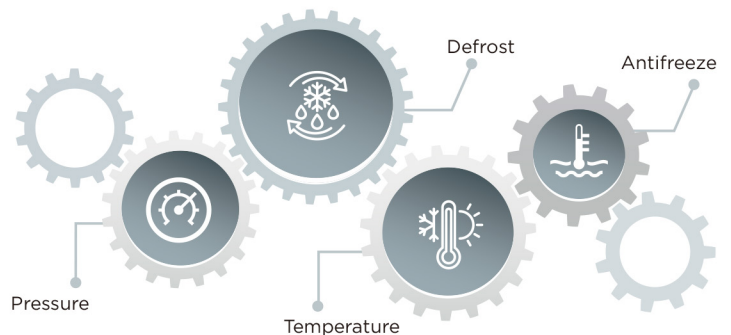
Silence mode level 2: 38dB(A) sound pressure at 1m with 60% capacity

Note: For MSC-70D2N8-A, Ambient temperature DB 27/WB 24.3°C, Water outlet temperature 28°C



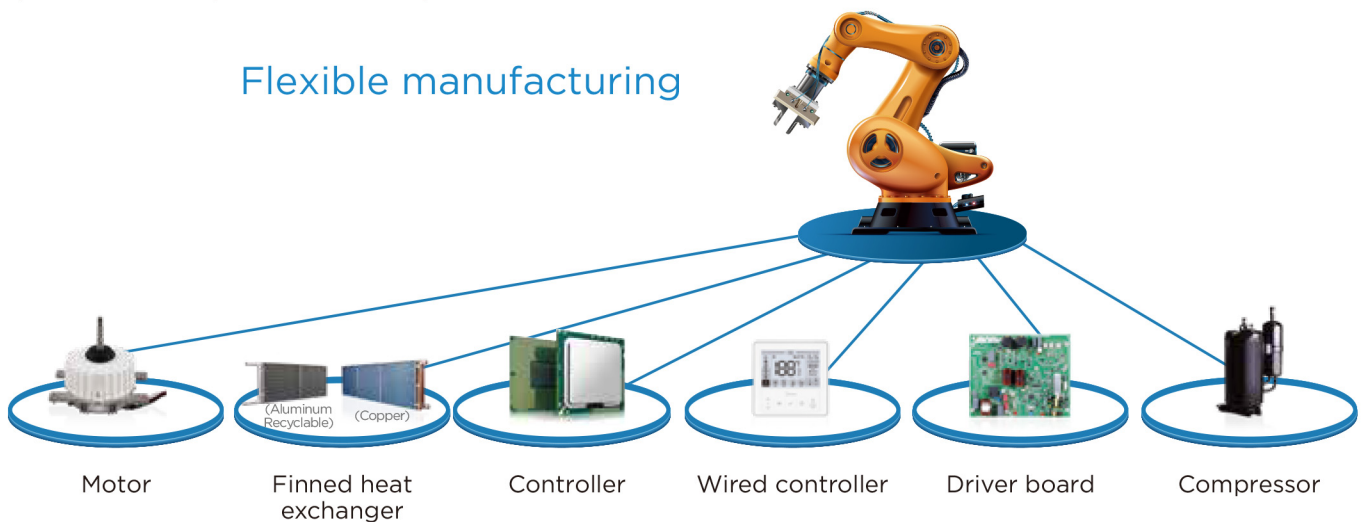
System Protection

ESG-Inv M Series have more than 10 protection functions including defrost/pressure/temperature/antifreeze to ensure that the unit runs in a long-term healthy state



The core components of ESG-Inv M Series are made by Tropical Group, also known as flexible manufacturing. Flexible manufacturing ensures stable delivery in the supply chain and offers partners more possibilities for product customization

Flexible manufacturing



Parameter Table

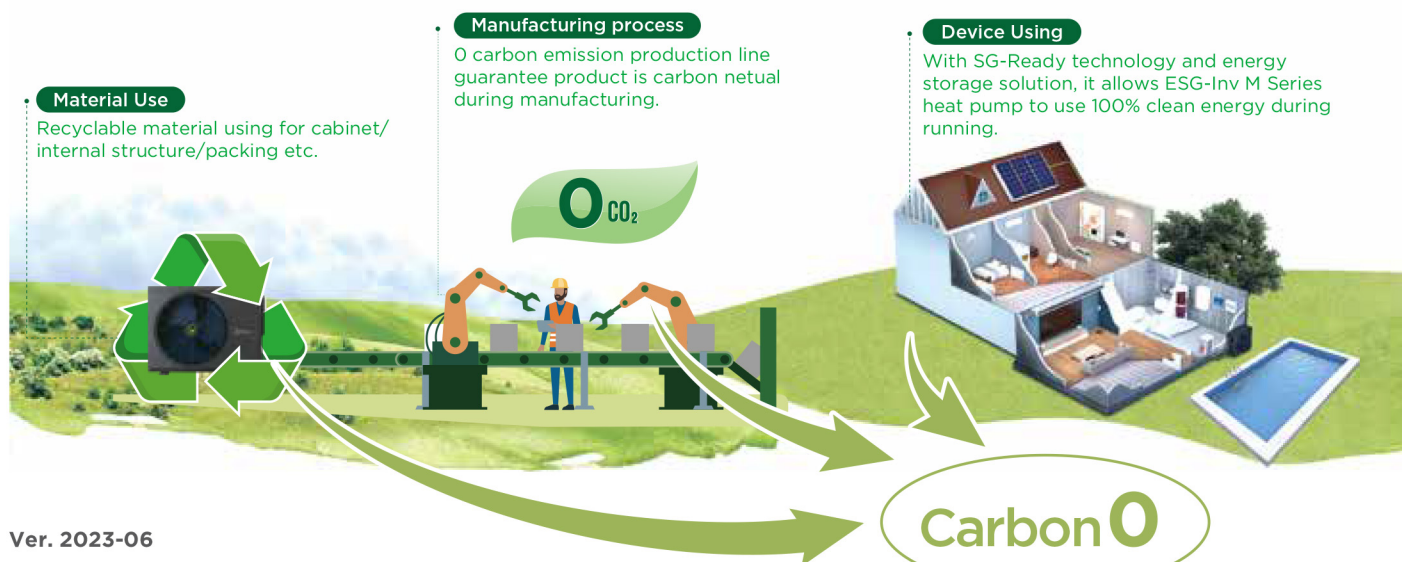
Model		MSC-70D2 N8-A	MSC-90D2 N8-A	MSC-120D2 N8-A	MSC-160D2 N8-A	MSC-200D2 N8-A
Power supply		220-240V~ 50Hz			220-240V~ 50Hz	
Boost heating capacity ¹	kW	10.3	12.8	14.5	18.7	21.8
Heating capacity ¹	kW	7.16	9.15	12.5	16.0	18.8
COP ¹		7.5	6.8	7.0	6.0	5.2
Boost heating capacity ²	kW	7.3	9.3	10.5	15.0	17.0
COP ²		4.69	4.45	4.6	3.8	3.6
Cooling capacity ³	kW	4.5	5.2	7.0	7.8	8.6
EER ³		4.0	3.35	4.0	3.0	2.6
Max power	kW	2.2	2.6	2.8	4.2	5.3
Max current	A	10.5	11.0	12.0	18.0	23.0
Refrigerant type		R32				
Sound pressure level (1m) ¹	dB(A)	41.0	43.0	49.0	50.0	54.0
Silence mode level 1 sound pressure level (1m) ¹	dB(A)	39.0	39.0	40.0	41.0	42.0
Water flow	m ³ /h	3.1	3.9	5.4	6.9	8.3
Water pressure drop	kPa	4.6	7.3	13.8	23.0	33.0
Water connection	mm	φ50	φ50	φ50	φ50	φ50

Note:

1. Ambient temperature DB 27/WB 24.3°C, Water outlet temperature 28°C.

2. Ambient temperature DB 15/WB 12°C, Water outlet temperature 28°C.

3. Ambient temperature DB 35°C, Water outlet temperature 28°C.



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Tropical Building Technologies Division
Tropical Group

