NEW

MIDEA MARS M2





reddot design award

R290 ECO FRIENDLY

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For tomorrow

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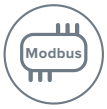
Mars M2 R290

Reversible air-to-water Monobloc heat pump providing heating, cooling and domestic hot water preparation. Ideal for new buildings or for replacing existing heating systems.

- Range of units: 18/22/26/30/35/40 kW
- Operation at extremely low outdoor temperatures, down to -25°C
- Maximum water temperature in heating mode: 85°C
- Electronic expansion valve for precise control of refrigerant flow
- GMCC Twin Rotary (18-22 kW) and Hitachi Scroll (26-40 kW) compressors with EVI vapour injection
- Inverter-technology fan motor



Refrigerant R290



Communication protocol Modbus RTU



Inverter technology



Max. heating water temperature


Water flow sensor


Mobile app



COP coefficient


Water pressure sensor


Cascade connection up to 6 units



Energy efficiency (35°C/ 55°C)*


Gas separator



7-year warranty

The Midea Mars M2 heat pump is an advanced, new-generation solution distinguished by a supply temperature of up to 85°C. This is a key parameter that significantly widens the range of applications of the unit – especially in retrofit projects where high water temperature must be maintained in existing radiator installations, as well as in buildings that require a reliable source of high-temperature domestic hot water.

Thanks to DC inverter technology, the Mars M2 heat pump precisely adjusts its output to the current heat demand of the building, ensuring high energy efficiency, stable operation and reduced electricity consumption. The EVI (Enhanced Vapor Injection) system used in the unit enables effective operation at low outdoor temperatures, improving heating capacity and making it possible to reach a higher heating water temperature.

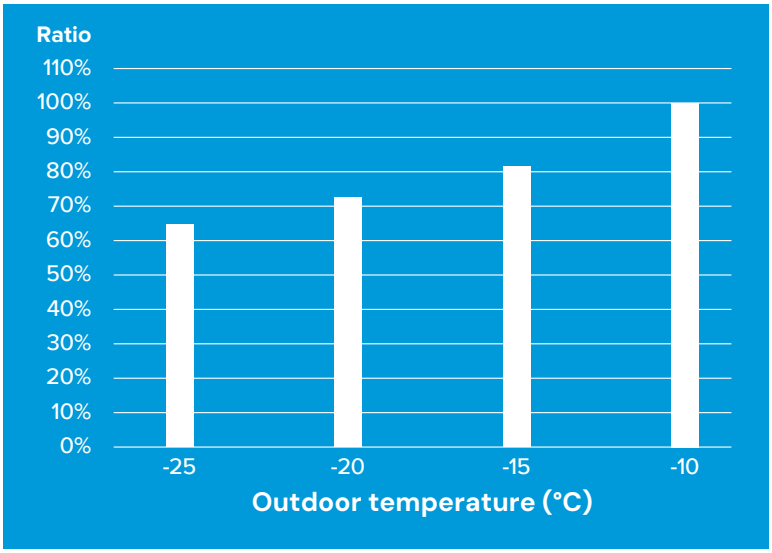
* Selected models

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High heating capacity at low outdoor temperatures

Advanced Mars M2 technology maintains high heating capacity across a wide range of outdoor temperatures, supporting reliable operation of the heating system in winter.

Actual heating capacity relative to rated heating capacity at a leaving water temperature (LWT) of 55°C.



- Heating capacity **100%** at outdoor temperature **-10°C**
- Heating capacity **≥ 80%** at outdoor temperature **-15°C**
- Heating capacity **≥ 70%** at outdoor temperature **-20°C**
- Heating capacity **≥ 65%** at outdoor temperature **-25°C**

Thoughtful design, enhanced safety

The Mars M2 design includes solutions that reduce the risk associated with a possible leak of the R290 refrigerant.

Multi-level protection of the R290 refrigerant circuit	Separation of the refrigerant and water circuits
Enclosed electrical control box housing, IP55 rated	Structural separation of the refrigerant and water circuit compartments
Cable entries that reduce the risk of water, dust and R290 refrigerant getting inside the box	An integrated measuring system enables ongoing monitoring of water temperature, pressure and flow, supporting control of the unit's operating parameters.
Explosion-proof electrical components, used to reduce the risk of ignition	Integrated gas separator with air vent

TECHNICAL DATA

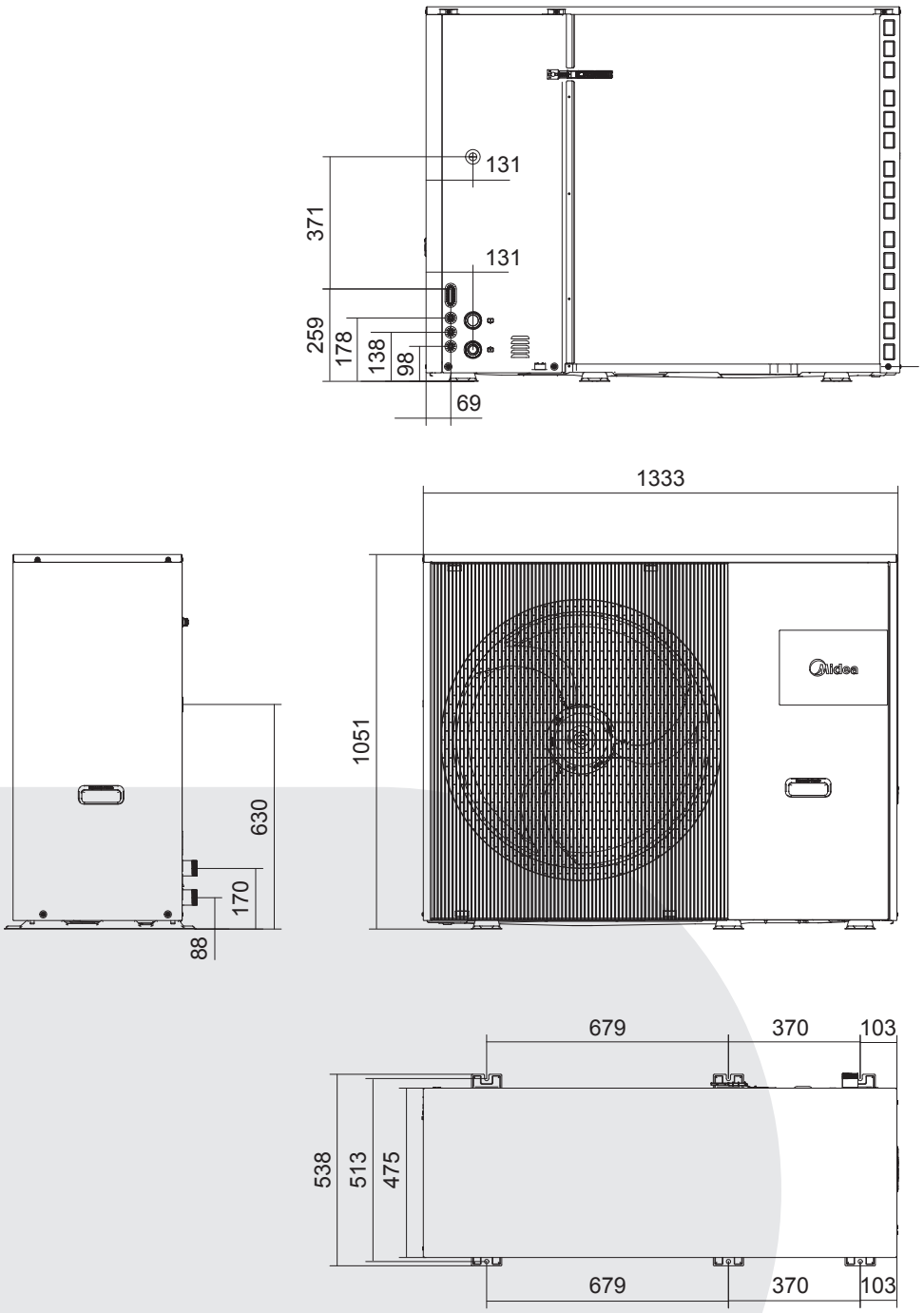
Model			MHC-V18WD2RN7	MHC-V22WD2RN7	MHC-V26WD2RN7-A2	MHC-V30WD2RN7-A2	MHC-V35WD2RN7-A2	MHC-V40WD2RN7-A2
Heating A7W35	Heating capacity	kW	18	22	26	30	35	39
	Power input	kW	3.91	5.11	5.45	6.67	8.40	10.54
	COP	-	4.60	4.30	4.77	4.50	4.17	3.70
Heating A7W45	Heating capacity	kW	18	22	26	30	35	39
	Power input	kW	4.73	6.11	6.82	8.26	10.05	11.90
	COP	-	3.80	3.60	3.81	3.63	3.48	3.28
Heating A7W55	Heating capacity	kW	18	22	26	30	35	39
	Power input	kW	5.62	7.10	7.85	9.57	11.75	14.00
	COP	-	3.20	3.10	3.31	3.13	2.98	2.79
Cooling A35W7	Cooling capacity	kW	18	22	26	30	32	32
	Power input	kW	6.31	8.15	8.40	10.70	11.98	11.98
	EER	-	2.85	2.70	3.10	2.80	2.67	2.67
Cooling A35W18	Cooling capacity	kW	18	22	26	30	35	39
	Power input	kW	3.83	5.24	5.60	6.80	8.50	9.85
	EER	-	4.70	4.20	4.64	4.41	4.12	3.96
Seasonal space heating energy efficiency class[1]	Leaving water temp. 35°C	-	A+++					A++
	Leaving water temp. 55°C	-	A++		A+++	A++		
SCOP[2]	Leaving water temp. 35°C	-	4.75	4.60	4.95	4.92	4.48	4.32
	Leaving water temp. 55°C	-	3.78	3.76	3.84	3.79	3.63	3.47
Seasonal energy efficiency (ηs)	Leaving water temp. 35°C	%	187.0	181.1	194.9	193.8	176.3	169.7
	Leaving water temp. 55°C	%	148.0	146.9	150.7	148.7	142.4	135.6
Annual electricity consumption	Leaving water temp. 35°C	kWh	7 723	9 804	10 858	12 595	16 131	18 661
	Leaving water temp. 55°C	kWh	9 884	11 997	13 984	16 346	19 899	23 246
Power supply	Voltage / phases / frequency	(V/~/Hz)	380-415/3/50					
	Minimum circuit ampacity (MCA)	(A)	17	18	30	32	34	
Operating range, outdoor air temp.	Cooling	°C	-15~52					
	Heating	°C	-25~35					
	DHW	°C	-25~46					
Operating range, leaving water temp.	Cooling	°C	5~25					
	Heating	°C	25~85					
	DHW	°C	20~75					
Sound power level[3]		dB(A)	64		69	74	75	76
Sound pressure level[4]		dB(A)	53.6	58.7	56.8	61.6	61.4	64.1
Refrigerant	Type / charge	-/kg	R290/1.8		R290/2.9			
	CO_2 equivalent	kg	5.4		8.7			
Water connection size	Supply	inch	1"		5.4"			
	Return	inch	1"		5.4"			
Water flow range		m3/h	0.8-3.71	0.8-4.2	1.2-7.2			
Dimensions	Unit (W/H/D)	mm	1330×1050×538		1384×1816×523			
	Shipping (W/H/D)	mm	1390×1235×570		1480×2000×570			
Weight	net	kg	179		275			
	gross	kg	204		310			

Performance is determined based on the following conditions:
(1) Seasonal space heating energy efficiency class tested under average (temperate) climate conditions
(2) Seasonal energy efficiency SCOP determined for average (temperate) climate conditions
(3) Sound power level test in accordance with EN12102-1
(4) Sound pressure level measured at a distance of 1 m from the unit above the floor in a semi-anechoic chamber (A7W55)
Related standards and legislation: EN14511; EN14825; EN50564; EN12102; (EU) No 811/2013; (EU) No 813/2013;

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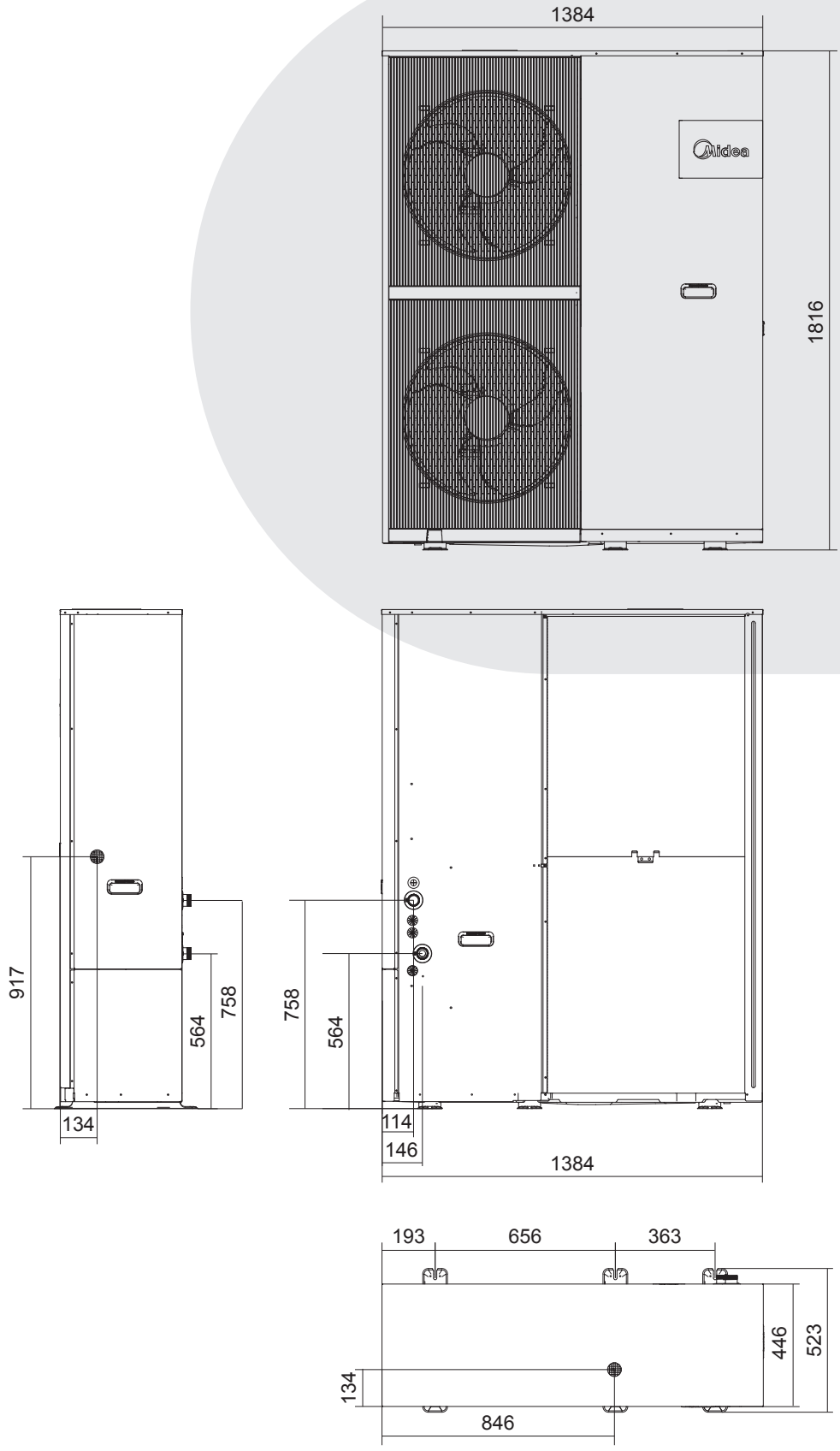
UNIT DIMENSIONS

MHC-V18WD2RN7, MHC-V22WD2RN7



Dimensions in mm

MHC-V26WD2RN7-A2, MHC-V30WD2RN7-A2, MHC-V35WD2RN7-A2, MHC-V40WD2RN7-A2



Dimensions in mm

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