



R290 M thermal Nature Heat Pump



N-limits performance

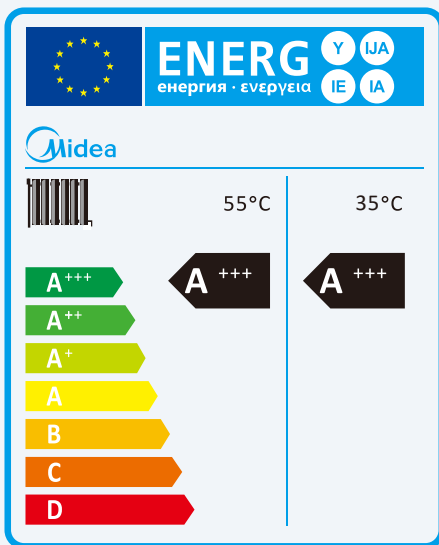
Wide operating range with multiple applications



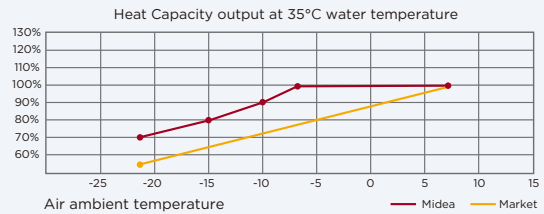
Superior eco-performance

Highest ERP rating

η_s Seasonal space heating energy efficiency
 η_s average up to A+++ at 35°C
 η_s average up to A+++ at 55°C



Powerful heating output at low ambient temperatures



- 100% Heating capacity output at -7°C
- ≥80% Heating capacity output at -15°C
- ≥70% Heating capacity output at -22°C



The above data is a general representation of the Nature series product line. For model-specific data, refer to Engineering data book.

Industry-leading 80°C leaving water temperature



80°C leaving water satisfies all household demands

Noise-reduction technology for serene comfort



Quiet Mark technically assesses and certifies the quietest solutions to unwanted noise.

Ultra-quiet performance



20dB(A)
Ticking watch



30dB(A)
Soft Whisper



32dB(A)
Nature Series Heat Pump



40dB(A)
Refrigerator hum




70dB(A)
Washing machine

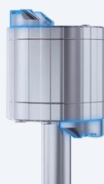


Source: Centers for Disease Control.

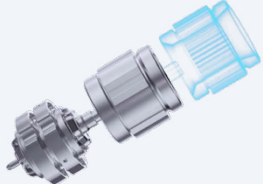
Ultra-quiet compressor design



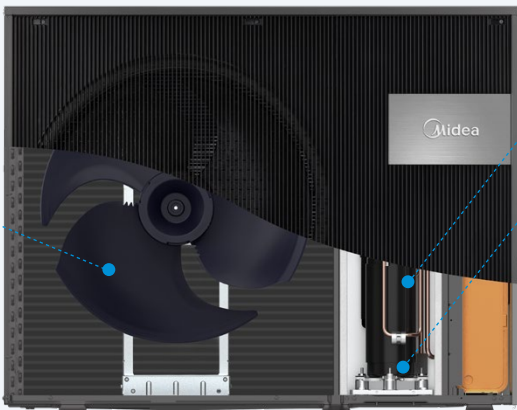
Double M-bracket reduces vibration



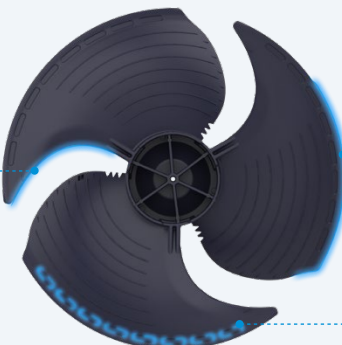
Counter-balance design achieves the optimal balance coefficient



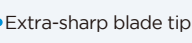
Low deflection rotor with high natural frequency



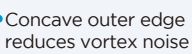
Ultra-silent axial fan design



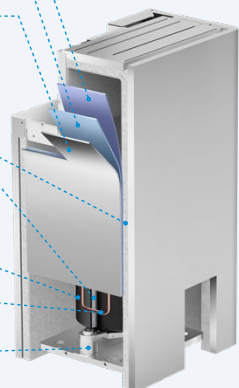
Drooped leading edge improves blade surface flow field



Extra-sharp blade tip



Concave outer edge reduces vortex noise



- Steel plate
- Damping material
- Steel plate
- Multi-component composite broadband sound-absorbing material
- Compressor acoustic enclosure
- Low-frequency response pipe
- Two-stage vibration isolation design with full modal decoupling

Robust protection of electrical components

Explosion-proof electrical components





Fuse



Relay



Varistor

IP55 fully sealed control box



Intelligent thermal management



Enhanced convective airflow design

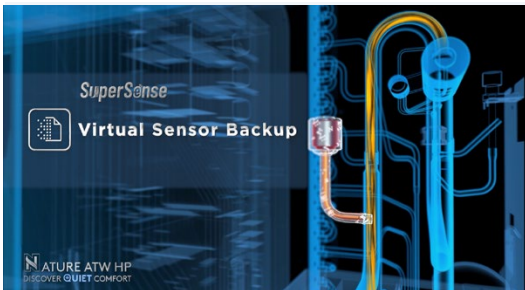


Irregular-shaped heat sink



Temperature simulation

Smart sensor technology




- Equipped with **Up to 15 sensors** to monitor real-time parameters
- Backup **virtual sensors** ensure continuous operation in case of a sensor malfunction, allowing for uninterrupted functionality until repairs can be made.

Energy metering


An energy-metering function is able to calculate the share of energy derived from renewable sources. End users have the option to receive customized energy analyses through an app, user interface, and web portal


Conventional



➔

Midea





- **Large error rate** with water side calculation
- **Unstable** communication signals
- **Costly retrofit**

- **High accuracy** with Midea-pioneered algorithm
- **Stable** sensor signaling
- **Zero additional costs** with built-in algorithm

Above data are test qualified by Midea Group

Nurturing a greener, more sustainable future

A safe bet for the long term solution

Achieving EU carbon neutrality with Refrigerant 290

GWP=3

Lower global warming impact

ODP=0

Ozone layer neutral

Outstanding refrigerant properties

- Superior thermodynamic performance
- High thermal efficiency in a variety of conditions
- Requires less charging compared to other types of refrigerants



Noteworthy intelligent tools

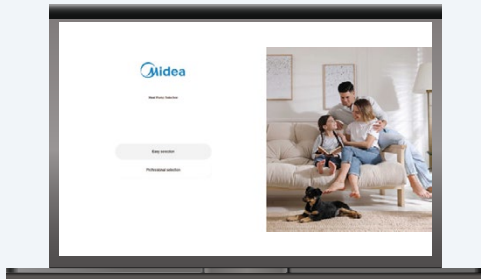
Comprehensive dealer support tools

Heat pump selection provides comprehensive design

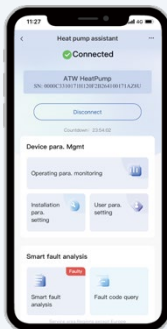
Heat Pump Selection software

<https://www.midea-hpselection.com/>

- Website design
- Dedicated section for professionals (Eurovent certification)
- Easy-select consumer section
- Sophisticated configuration tool
- Energy-usage comparison tool



Multiple after-sales service and support platforms



LetsLink Heat Pump Assistant

APP

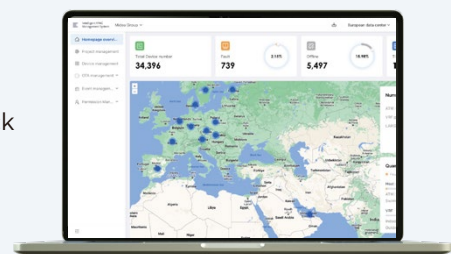
Heat pump remote connection and control from anywhere

- Ideal for busy service providers
- Enables faster service and eliminates unnecessary service calls
- Control various operations, monitor set parameters remotely
- Get reports with historical data
- Fault-code queries and troubleshooting

Intelligent HVAC Management System

Centralized, 24/7 monitoring of multiple units

- Enables complete control of all installed units
- Real-time status updates for multiple units with a single click
- Get access to historical data
- No limit to the number of connected devices and user accounts
- No need to carry multiple devices



Noteworthy intelligent tools

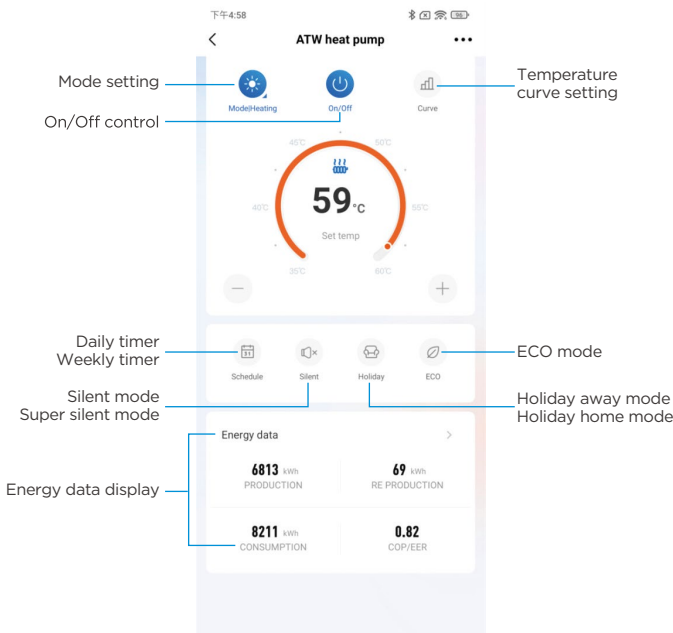
Multiple control options for end user

Control from anywhere at your fingertips



SmartHome

APP



Monitoring

- System status
- Real-time temperature
- Energy consumption data

Convenient modes

- Silent mode
- Eco mode
- Holiday mode

Scheduling

- On/off operation
- Holiday settings
- Hot water heating control

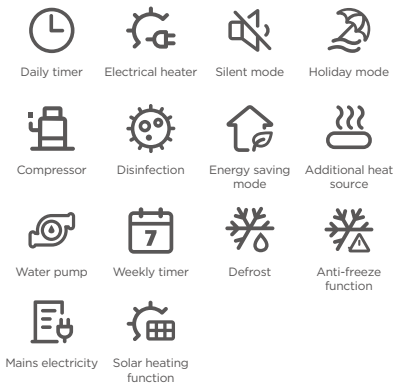


Intuitive and easy-to-use for best experience

New User Interface



- Color display
- Intuitive interface
- Touch-key design
- Liquid crystal display
- Built-in Wi-Fi module
- Modbus protocol
- APP control
- Non-polarized wiring



Nature series specifications(draft)

Model			MHC-V8WD2N7-B	MHC-V10WD2N7-B	MHC-V12WD2N7-B	MHC-V14WD2N7-B	MHC-V16WD2N7-B	MHC-V8WD2RN7-B	MHC-V10WD2RN7-B	MHC-V12WD2RN7-B	MHC-V14WD2RN7-B	MHC-V16WD2RN7-B		
Power supply		V/Ph/Hz	220-240/1/50					380-415/3/50						
Heating A7W35	Capacity	W	8000	9500	12100	14000	15500	8000	9500	12100	14000	15500		
	Rated input	W	1524	1919	2444	2979	3444	1524	1919	2444	2979	3444		
	COP		5.25	4.95	4.95	4.70	4.50	5.25	4.95	4.95	4.70	4.50		
Heating A7W45	Capacity	W	8100	9500	12300	14100	15500	8100	9500	12300	14100	15500		
	Rated input	W	2025	2436	3154	3760	4247	2025	2436	3154	3760	4247		
	COP		4.00	3.90	3.90	3.75	3.65	4.00	3.90	3.90	3.75	3.65		
Heating A7W55	Capacity	W	8000	9500	11900	13800	16000	8000	9500	11900	13800	16000		
	Rated input	W	2388	2969	3662	4381	5246	2388	2969	3662	4381	5246		
	COP		3.35	3.20	3.25	3.15	3.05	3.35	3.20	3.25	3.15	3.05		
Heating A-7W35	Capacity	W	7000	8000	10000	12000	13100	7000	8000	10000	12000	13100		
	Rated input	W	2154	2540	3175	4286	4852	2154	2540	3175	4286	4852		
	COP		3.25	3.15	3.15	2.80	2.70	3.25	3.15	3.15	2.80	2.70		
Cooling A35W18	Capacity	W	8300	10000	12000	14000	15000	8300	10000	12000	14000	15000		
	Rated input	W	1581	2174	2609	3182	3529	1581	2174	2609	3182	3529		
	COP		5.25	4.60	4.60	4.40	4.25	5.25	4.60	4.60	4.40	4.25		
Cooling A35W7	Capacity	W	7450	8100	11500	12400	14000	7450	8100	11500	12400	14000		
	Rated input	W	2224	2613	3770	4133	5185	2224	2613	3770	4133	5185		
	COP		3.35	3.10	3.05	3.00	2.70	3.35	3.10	3.05	3.00	2.70		
SCOP	Average climate, W35°C		A+++											
			5.35	5.33	4.94	4.76	4.72	5.35	5.33	4.94	4.76	4.72		
SEER	Average climate, W55°C		A+++											
			4.06	4.01	3.96	3.85	3.86	4.06	4.01	3.96	3.85	3.86		
SEER	Average climate, W7°C		5.61	5.53	4.99	4.97	4.98	5.61	5.53	4.99	4.97	4.98		
	Average climate, W18°C		7.63	7.67	7.03	6.94	6.87	7.63	7.67	7.03	6.94	6.87		
ErP sound power level		dB	53	54	55	57	59	53	54	55	57	59		
Sound pressure (1m)	Heating A7W35	dB(A)	40	41	43	46	49	40	41	43	46	49		
	Cooling A35W18	dB(A)	39	41	42	43	44	39	41	42	43	44		
Refrigerant	Type (GWP)		R290 (3)											
	Charged volume	g	1100			1500			1100			1500		
Unit dimensions (H×W×D)		mm	1051×1330×475											
Packing dimensions (H×W×D)		mm	1235×1390×570											
Net/Gross weight		kg	148/170			169/191			153/175			169/191		
Water side connection			G1 1/4" BSP											
Outdoor air temperature range	Cooling	°C	-5 - 46											
	Heating	°C	-25 - 35											
	DHW	°C	-25 - 46											
Water setting temperature range	Cooling	°C	5 - 25											
	Heating	°C	25 - 80											
	DHW	°C	20 - 70											

Note:
data above based on test reference standard EN14511; EN14825; EN50564; EN 12102; (EU) No:811

Midea Building Technologies Division Midea Group

HN-M202401V1

Address: Midea Headquarters Building, 6 Midea Avenue, Shunde, Foshan, Guangdong, China

Postal code: 528311

mbt.midea.com / global.midea.com

Midea reserves the right to change the specifications of the product, and to withdraw or replace products without prior notification or public announcement. Midea is constantly developing and improving its products.

Check ongoing validity of certificate: www.eurovent-certification.com

Please note that all the pictures in the document are for reference only. Actual products may vary.

