

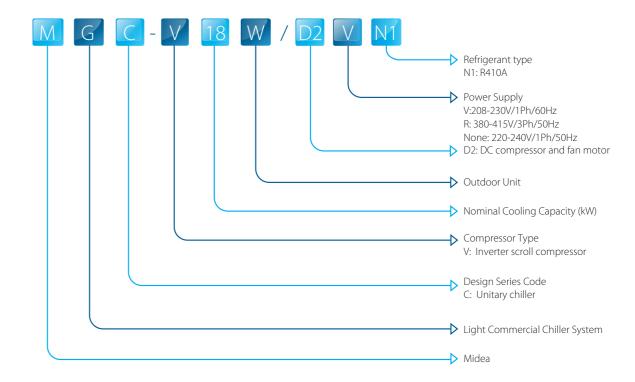
Aqua Mini Chiller

Midea DC Inverter Air-cooled Mini Chiller has unitary structure design and hydraulic module is built in the outdoor unit. It is air-cooled water heat pump chiller so there is no need of cooling water tower at the condensing side.

It can freely combine with fan coil units and floor heating. These units are designed for residential applications or light commercial applications that require cold or hot water.

They are silent and compact units, easy to install and maintain. Their high energy efficiency and high reliability ensure low running cost. So they are widely applied in apartments, villas, small business office buildings as well as restaurants, etc.

Nomenclature





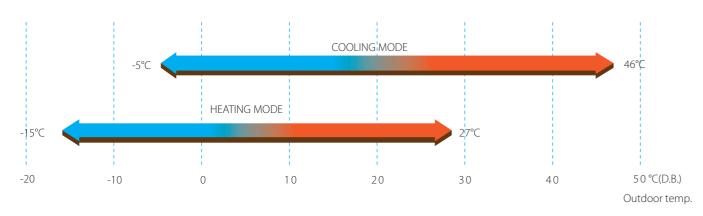
Features

Wide application range >>>

Freely combine with fan coil units and floor coils. Home owners may choose the best types according to their design taste (for interior) or functional needs.



Wide operation temperature range



Wide range of outlet water temperature The water outlet temperature is 4-55°C.

High efficiency >>>

DC inverter compressor

Twin rotary DC inverter compressor is used. The output of the outdoor unit can be adjusted precisely according to the energy demanded.



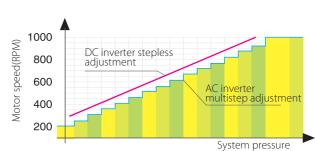
(Twin Rotary) structure

- High efficiency DC motor:
- Creative motor core design
- -Concentrated type stator
- Wider operating frequency range
- Better balance and Extremely Low Vibration: - Twin eccentric cams
- 2 balance weights
- Highly Stable Moving Parts:
- Optimal material matching rollers and vanes
- Optimize compressor drive technology
- Highly robust bearings
- Compact structure

DC fan motor

High efficiency DC fan motor saved power up to 50%.

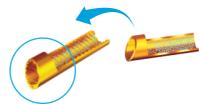




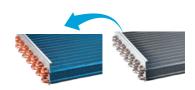
High performance heat exchanger



Original design New design



High efficiency inner-threaded pipe, enhance heat transfer.



Hydrophilic fins + inner-threaded pipes

The new designed window fins enlarge the heat-exchanging area, decrease the air resistance, save more power and enhance heat exchange performance.

Hydrophilic film fins and inner-threaded copper pipes optimize heat exchange efficiency.

The specially coated blue fins enhance durability and protect against corrosion from air, water and other corrosive agents, assures a longer coil service life.

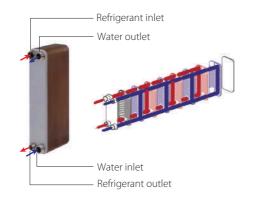


Aqua Mini Chiller

- **EXV** is used for stable and accurate gas flow control.
- High efficiency plate heat exchanger

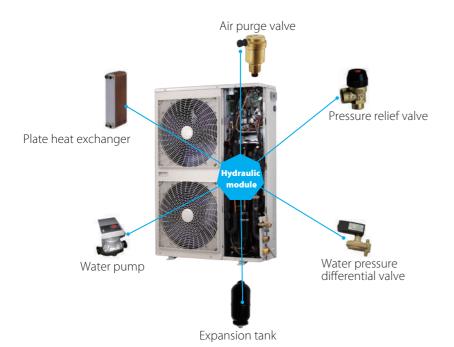
 Plate heat exchanger uses metal plates to transfer heat between refrigerant and water. The fluids are exposed to a much larger surface area because the fluids spread out over the plates, so both heat transfer efficiency and heat exchanger speed are greatly improved.

 Multi protections including voltage protection, current protection, anti-freezing protection and water flow protection ensure system safety running.



Easy installation >>>

- . Compact structure design and leak-tight refrigerant circuit save you much installation labor.
- * The chillers are equipped with a hydronic module integrated into the unit chassis, limiting the installation to straight-forward operations like connection of the power supply, the water supply and the air distribution FCUs.
- * The units are equipped with axial fans so they can be installed directly outdoors.



Easy control >>>

Remote ON/OFF and remote cool/heat functions.



- Controller built-in in unit panel used to perform all related operations as the user interface as well as fast diagnosis of possible incidents and their history.
 - ON/OFF & Mode selection
 - Temperature adjust
 - Timer setting
 - Fast diagnosis



- Optional wired controller for easy operation.
 - Touch key operation
 - LCD displays operation parameters
 - Multiple timers
 - Real-time clock



Note: When the wired controller is connected, the built-in controller is only for display, check and diagnosis functions.



Specifications

Model			MGC-V10W/D2VN1	MGC-V18W/D2VN1
Power supply		V/Ph/Hz	208-230/1/60	
Cooling ¹	Capacity	kBtu/h	36.0(10.0-37.0)	58.0(13.0-62.0)
		kW	10.5(2.9-10.8)	17.0(3.8-18.1)
	Input	kW	3.11	5.60
	EER		3.39	3.10
Heating ²	Capacity	kBtu/h	38.0(11.0 -41.0)	63.0(14.0-65.0)
		kW	11.0(3.2-12.0)	18.5(4.0-19.0)
	Input	kW	3.14	5.78
	COP		3.50	3.20
Max input current		A	8.9	9.6
ompressor	Туре		Rotary	
Outdoorfan	Motor type		DC motor	
	Air flow	CFM(m³/h)	4,120(7,000)	4,120(7,000)
vir heat exchanger	Туре		Fin-coil	
Water heat exchanger	Туре		Plate	
	Water volume	L	0.7	1.06
	Water flow	CFM(m³/h)	1.01(1.72)	1.72(2.92)
	Water pressure drop	kPa	18	23
Water pump	Pump head	m	8	8
	Water volume	L/min	4	4
Expansion tank volume		L	3	3
Refrigerant	Туре		R410A	
	Charged volume	lbs/kg	6.2/2.8	7.5/3.4
Throttle type			Electronic expansion valve	
Sound pressure level ³		dB(A)	56	60
Unit net dimension (WxHxD)		inch	38-3/16×52-1/4×31-1/2	
		mm	970×1,327×400	
Packing dimension (WxHxD)		inch	42-19/32×57-21/64×17-1/8	
		mm	1,082×1,456×435	
Net/Gross weight		Ibs	243/267	247/271
		kg	110/121	112/123
The Max and Min. wate rinlet pressure ⁴		kPa	500	/150
ipe connections	Water inlet/outlet	inch	1-1/4"	
Controller			Electronic controller (standar	rd), wired controller (optional)
Ambient	ent Cooling		-5-46	
temperature range	Heating	°⊂	-15-27	
Water outlet temperature range	Cooling	°⊂	4-20	
	Heating	°C	30-55	

- 1. Cooling: Chilled water inlet/outlet temperature: 12/7°C, outdoor ambient temperature 35°C DB.
- 2. Heating: Warm water inlet/outlet temperature: 40/45°C, outdoor ambient temperature 7°C DB/6°C WB . 3. At 1m in open field fan side (sound pressure).
- 4. The maximum and minimum operating pressure values refer to the activation of the pressure switches.

Unit Dimensions (Unit: mm)

