



# MDV [ R ] Series

## Heating Water System

**Integrative**

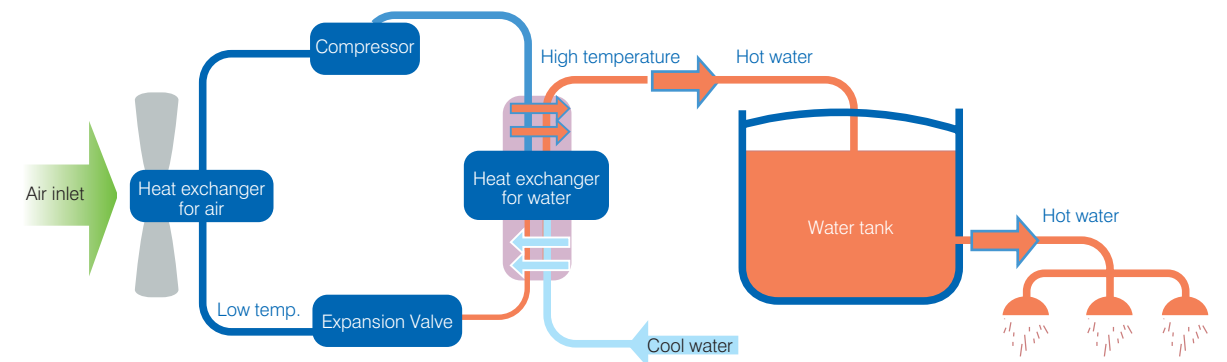
Integrated design of main unit and tank makes it very conveniently using only by connecting the water inlet and outlet pipes.

## Overview of heating water system R407C R22

Based on reverse Carnot cycle principle, heating water system is one of the most advanced water heater with the highest COP. Heating water system generally consists of compressor, evaporator, expansion valve, strainer, accumulator tank, condenser, water tank.



## The sketch of system connection



# Heating Water System

## Environmental Protection

- Heating water system is environmentally friendly and low energy consuming.

## Economical

- Less additional operation charge; No need for transportation and storage of fuel; simple maintenance and reparation.
- COP up to 4.0.

## Safety

- Heating water system does not need storage of fuel and fuel pipe, therefore, it is free of fuel leakage, fire and explosion.
- The unit has multi-protection functions: high-pressure protection, low-pressure protection, overflow and overload protection for compressor, startup delay, water switch, water temperature overhigh protection and water level protection of water tank.

## Convenience

- Automatic intelligent controlling system defrosts automatically in cold winter.
- Outdoor installation; no special equipment room needed.

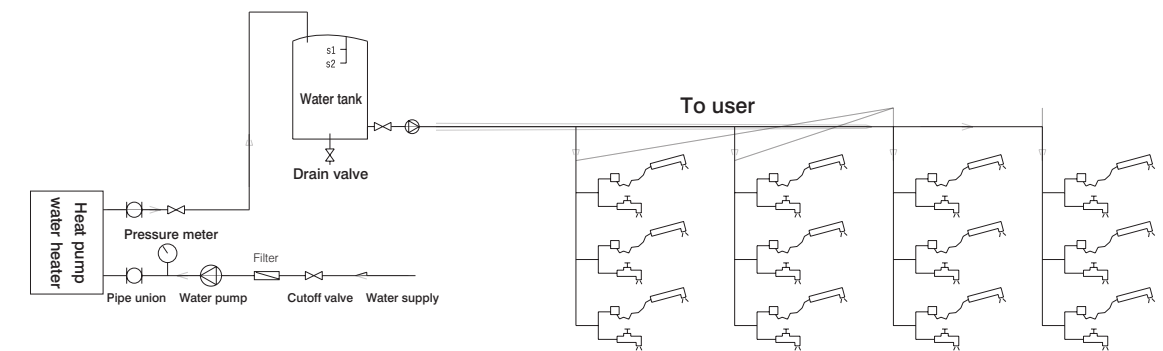
## Durability

- Famous brand compressor and plate heat exchanger equipped.
- Quintuple antirust technique ensures excellent durability.

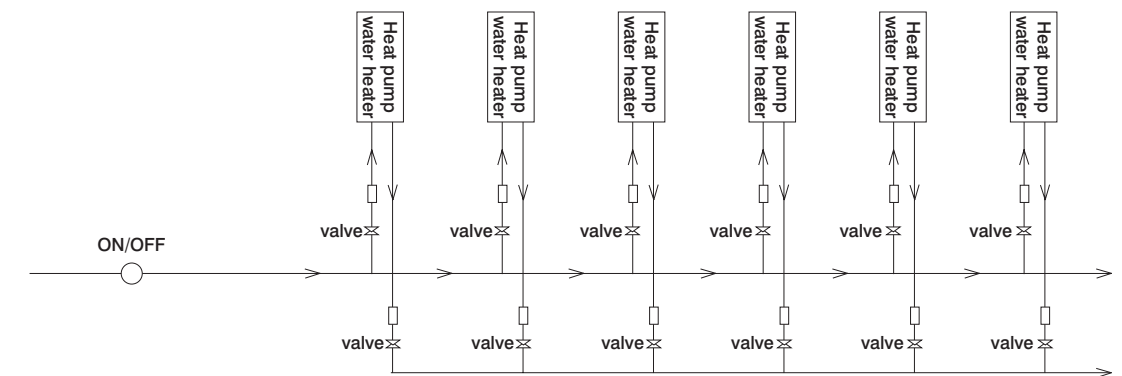
## Widely applicable

- Within the temperature range from -10 to 40°C, the heating water system can work all year around, and perform well against bad weather.

## Installation sketch for single unit



## Installation sketch for multi units



## Pipe choice

Number of unit (set)	1~3	4~6	7~9	10~12	13~16
Pipe diameter (inch)	1~1 $\frac{1}{4}$	1 $\frac{1}{4}$ ~1 $\frac{1}{2}$	1 $\frac{1}{2}$ ~2	2~3	3~4

# Heating Water System

## Specification

Model		MGH-F35W/S	MGH-F17.5W/S	MGH-F9W	MGH-F7W
Heating capacity	kW	35	17.5	9.0	7.0
Rated power	kW	9.0	4.5	2.3	2.0
Rated current	A	16.6	8.6	11.0	10.0
Hot water volume	m <sup>3</sup> /h	1.0	0.5	0.26	0.16
Max power	kW	11.8	5.8	3.1	2.3
Max current	A	20.2	9.8	14.8	14.0
Specification, power supply		380V 3N ~ 50HZ		220V 1N ~ 50HZ	
Controlling method		Manual,Auto and failure alarm			
Compressor (power x quantity)		4.25kW x 2	4.25kW x 1	2.2kW x 1	1.9kW x 1
Refrigerant		R22/R407C			
Refrigerant charge		2300g x 2	2200g x 1	1300g x 1	1000g x 1
Specification of water system	Outlet water temp	60 (default)			
	Heat exchanger(water side)	stainless steel plate heat exchanger			tube-tube heat exchanger
	Diameter,water inlet pipe	DN25	DN20	DN15	DN15
	Diameter,water outlet pipe	DN25	DN20	DN15	DN15
	Max compression resistance	1.0Mpa	1.0Mpa	1.0Mpa	0.8Mpa
Heat exchanger (gas side)	Type	innergroove copper pipe,hydrophilic aluminum coil			
	Motor power	250W x 2	150W x 2	125W	100W
	Type of air outlet	Vertical air discharge	Side air discharge	Vertical air discharge	Side air discharge
Demension	Length	1290mm	940mm	555mm	900mm
	Width	750mm	340mm	555mm	530mm
	Height	1540mm	1245mm	840mm	1200mm
Weight	kg	290	135	77	70
Noise level	dB(A)	58	54	52	50