

# New generation of heat pumps Gorenje

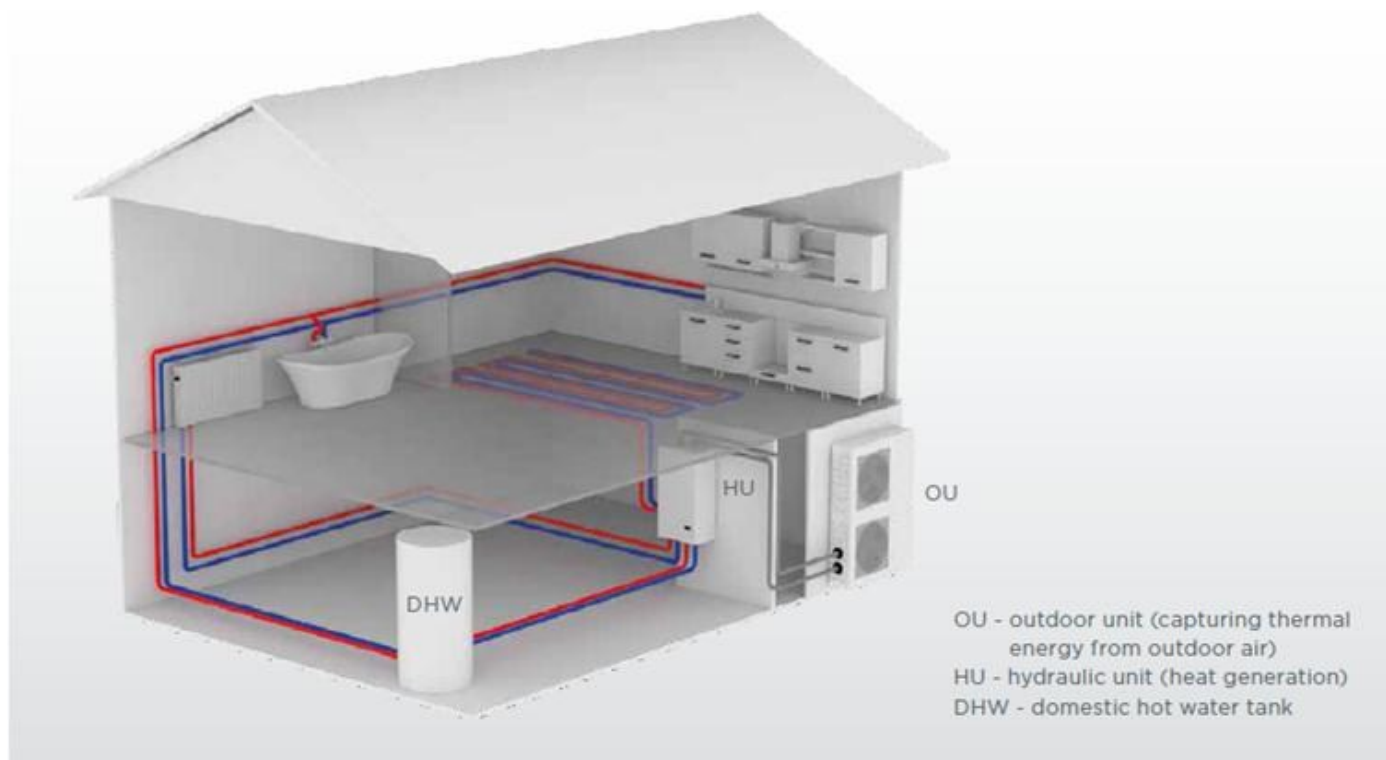
## Product information

Model name: **Aerogor ECO Inverter 10 A**

Type: air to water (DC Inverter)



## Heating system with heat pump air to water (Aerogor **ECO** Inverter 10 A)



## Operating modes - (Aerogor **ECO** Inverter 10 A)



HEATING MODE



DOMESTIC HOT WATER



ACTIVE COOLING



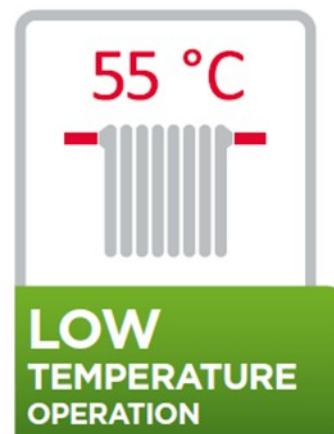
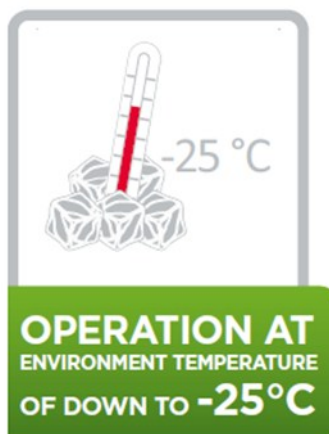
# ADVANTAGES AND CHARACTERISTICS

## HEAT PUMP Aerogor **ECO** Inverter

DC Inverter compressor allows optimum adjustment to actual requirements for heating or cooling.

- Low operating expenses resulting from a high COP according to the EN 14511 standard, ranging from 3.8 to 4.7 (A7/W35).
- Maximum heating water temperature of up to 55 °C allows installation of the heat pump in systems with radiator heating.

- Advanced regulation unit allows connection to solar panels and use of heat generated by them.
- performance range from 4 to 10,5 kW,
- Operating range from –25 °C to +45 °C,
- lower heating costs resulting from
- Excellent comfort owing to reversible performance for both heating and cooling.



# Outdoor unit - HEAT PUMP Aerogor **ECO** Inverter 10 A

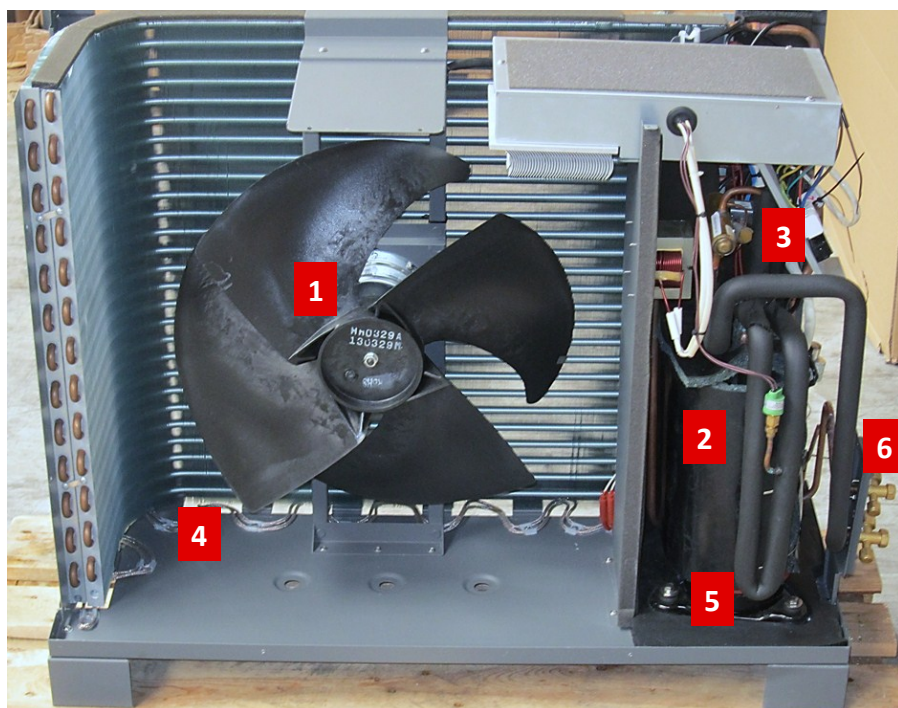


## Indoor unit - Hydrobox Aerogor **ECO** Inverter 10 A





## Main components of outdoor unit - HEAT PUMP Aerogor ECO Inverter 10 A



- 1** DC Inverter Fan Motor
- 2** Panasonic DC Inverter Compressor
- 3** Electronic expansion valve EEV
- 4** Evaporator Heater
- 5** Compressor Crankcase heater
- 6** Gas piping connections 3/8" - 1/2"

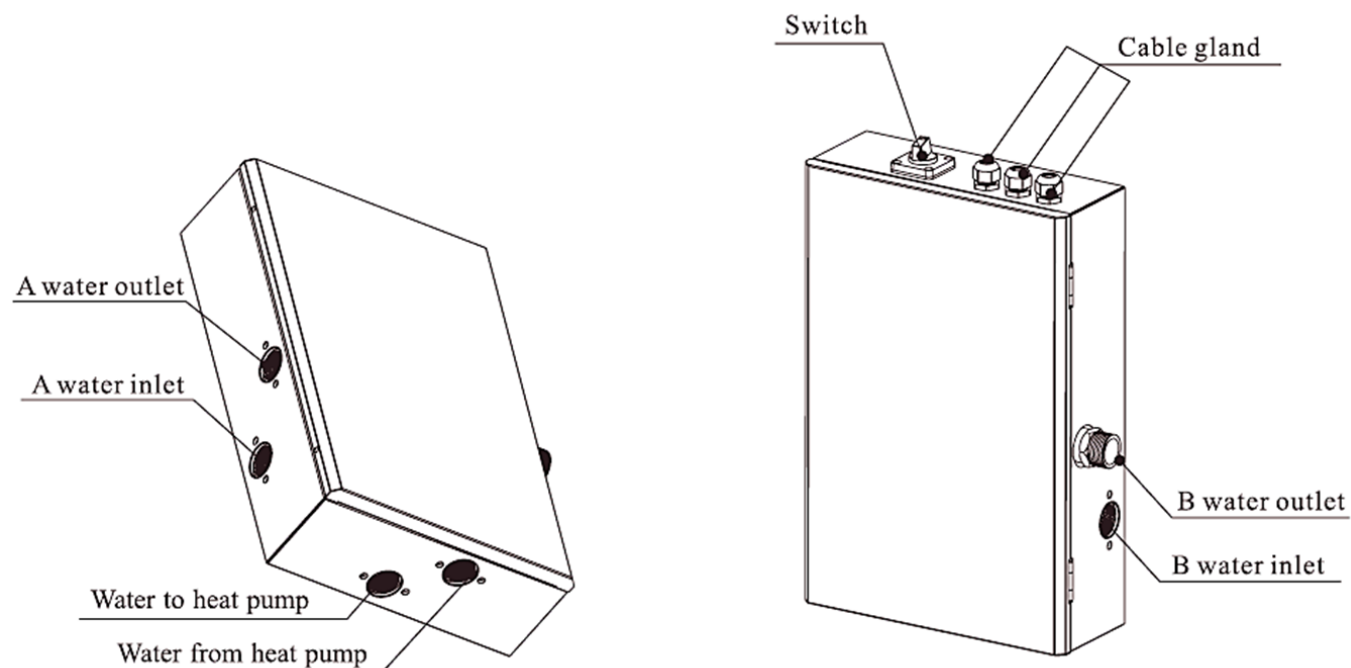
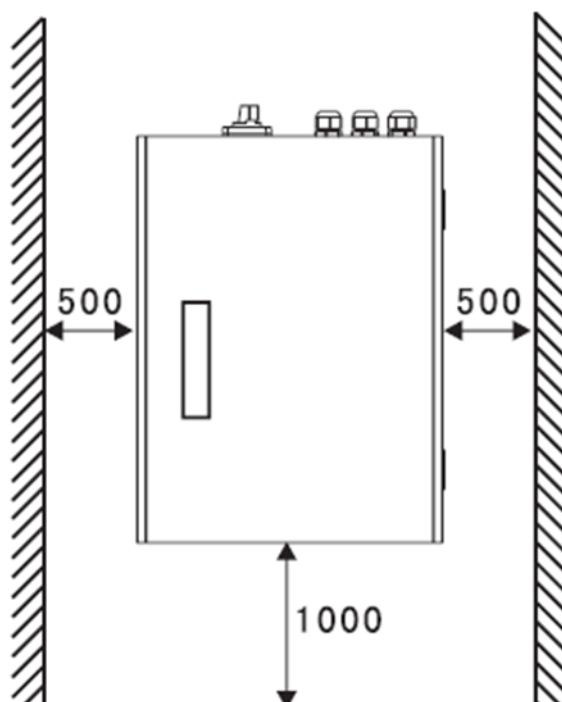
## Main components of indoor unit - Hydrobox for Aerogor ECO Inverter 10 A

- 1** Plate heat exchanger
- 2** Circulating pump A energy class (HALM HEP Plus 25-60 130 E)
- 3** Receiver tank
- 4** Indoor PC board
- 5** Electrical flow heater 3 kW
- 6** Water inlet/outlet - piping connections
- 7** Refrigerant connection size 3/8" - 1/2"



**Motorizde 3 way valve kit ECV - 25 L1W for Aerogor ECO Inverter 10 A**

(For the application with DHW tank)

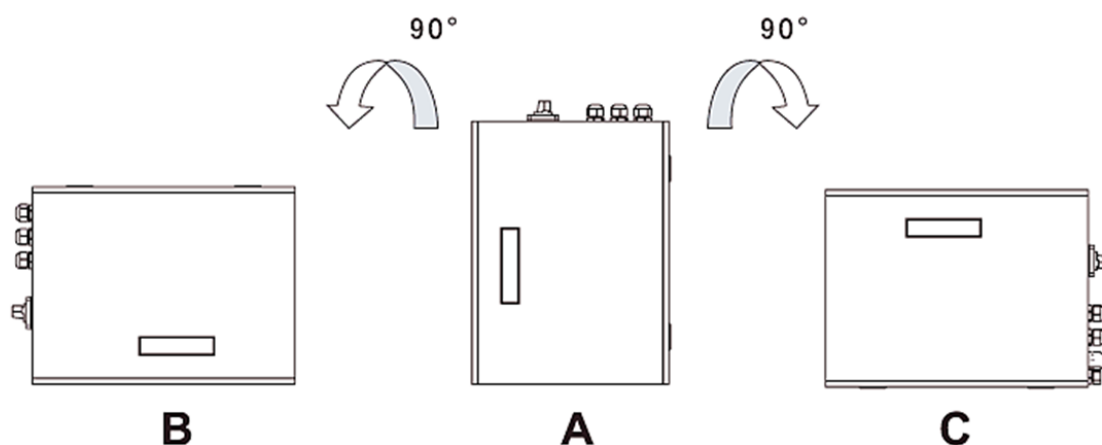
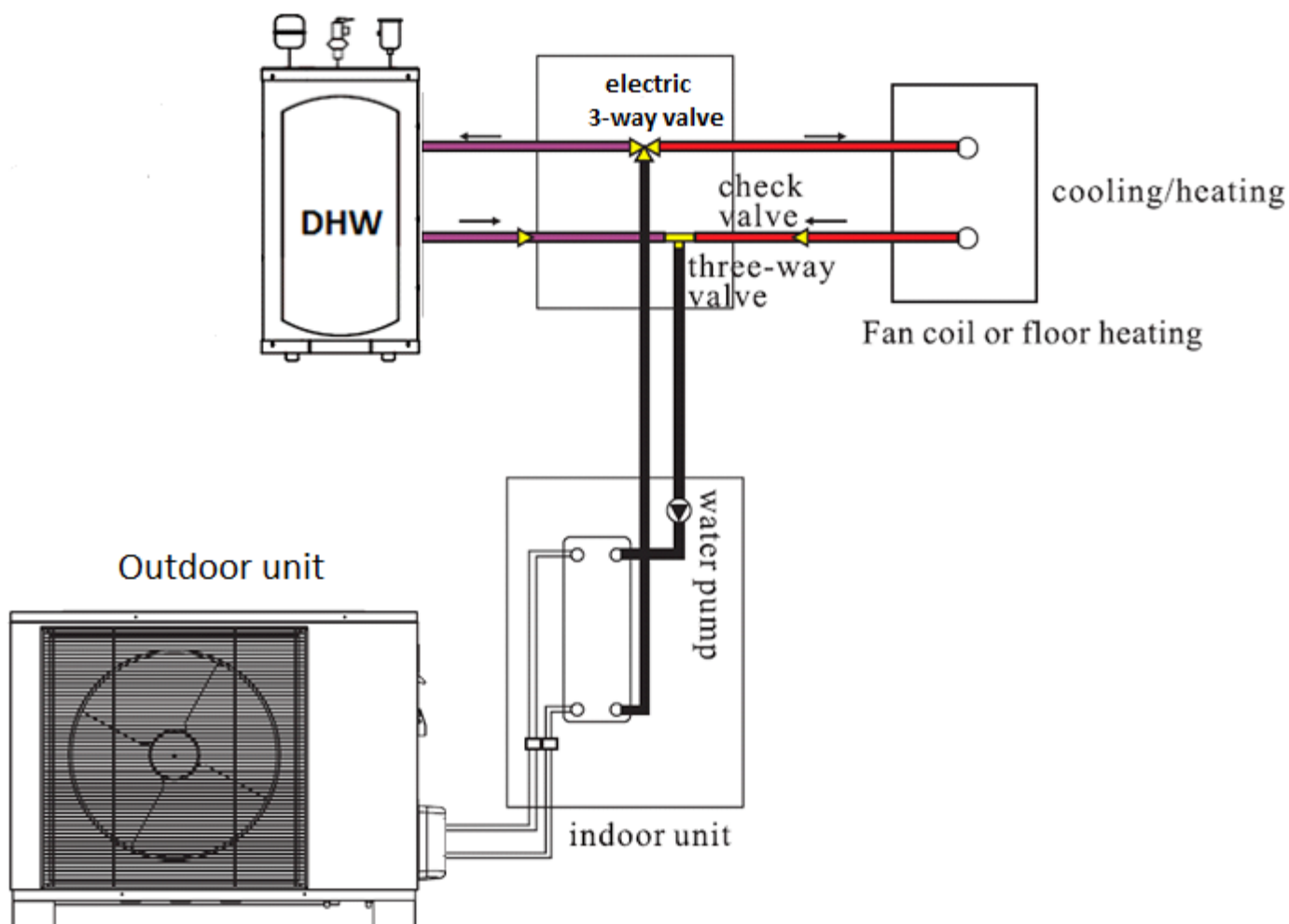
**ECV—25L1W: water connections and electrical connections****ECV—25L1W: Installation location**

**Motorizde 3 way valve kit ECV - 25 L1W for Aerogor ECO Inverter 10 A**

(For the application with DHW tank)

**ECV—25L1W: Installation direction**

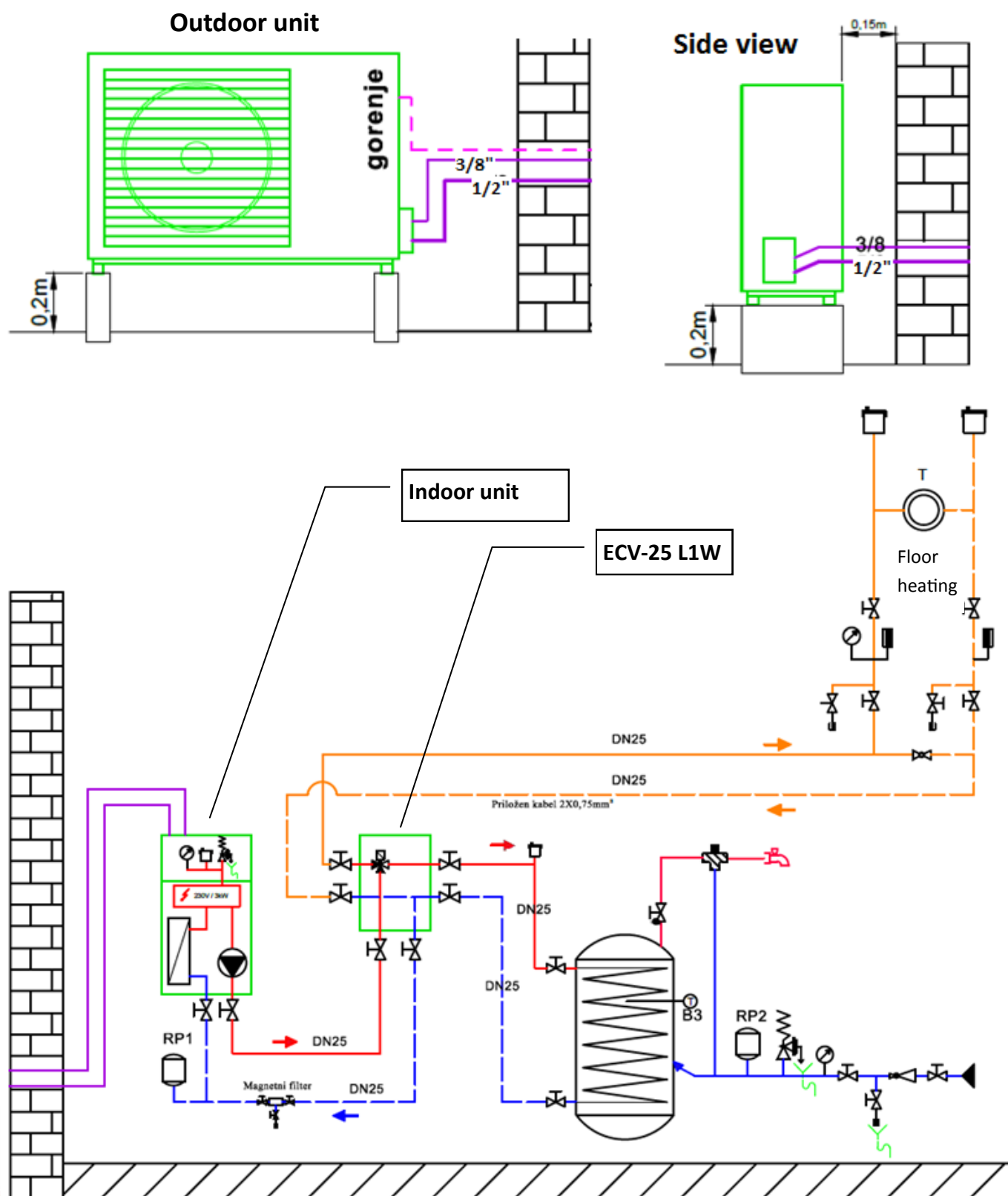
The product can be installed in three ways. Please refer to drawings bellow.

**ECV—25L1W: Application system sketch of Aerogor ECO Inverter 10 A with ECV-25L1W + DHW + floor heating systems**

# OPTION 1: Application system sketch with HWT (without buffer tank)

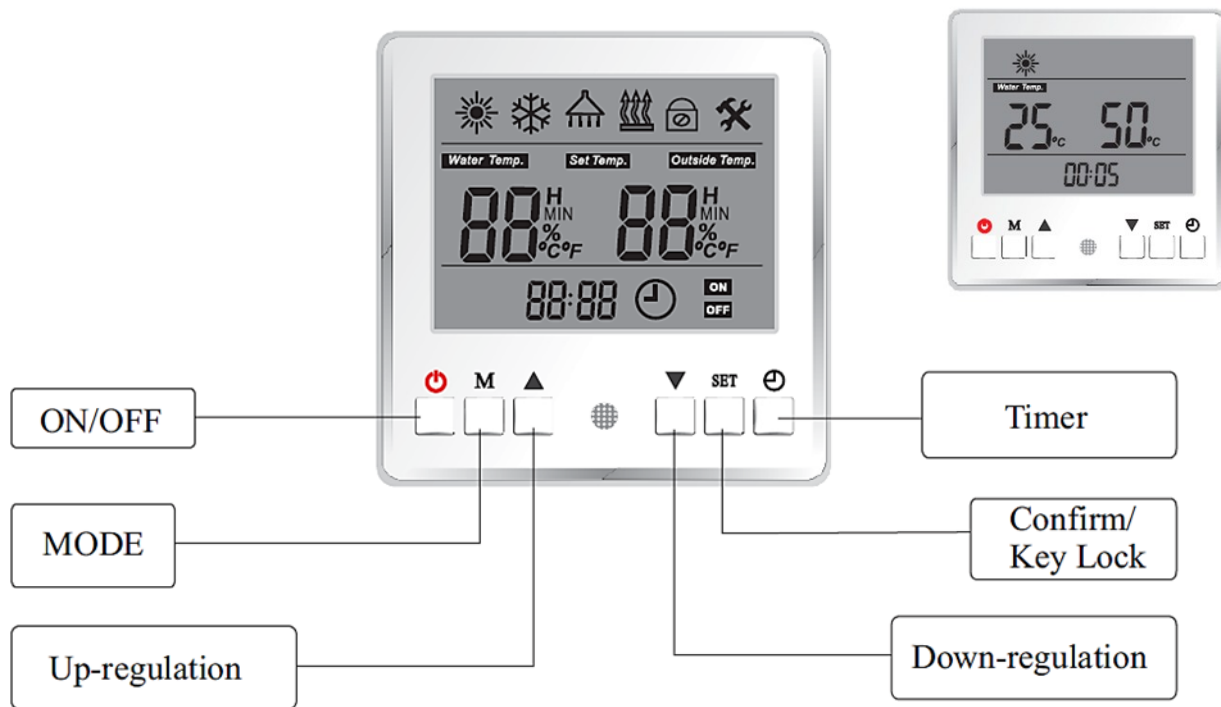
(recommended for **underfloor heating systems**)

HEAT PUMP Aerogor **ECO** Inverter 10 A





## USER FRIENDLY CONTROL UNIT



## The control of the heating system with the control unit

## 1. The basic configuration controlled one direct heating circuit

- The control of the DIRECT heating circuit: Set the temperature ( $T_{set}$ ) on a flow or return pipe (eg. 30°C or 35°C ) or control operation of heat pump with room temperature (in this case is necessary to install the controller in space - attached is 10 m communication cable )

2. For applications with DHW tank is necessary to install Motorized 3-way valve kit (ECV 25), which include a three-way valve and PCB control, which assume the function of the main control unit.

Note: If there is no requirements for regulation of DHW, then Motorized 3-way valve kit is not needed.

For heating systems with mixing heating circuit is needed additional equipment:

- Mixing valve
- Circulating pump
- Extension Module RVS 46.530/101 (code: 414321)
- Sensor of ambient temperature QAC 34/101, sensor for flow pipe (outlet water temperature) NTC 10 K

## Advanced room unit:

- Wired – QAA75.611/701 (code: 414328) Language package: EN, CZ, SK, PL, TK, RU, HU, SI, GR, SR
- Wireless – QAA78.611/701 (code: 414329) Language package: EN, CZ, SK, PL, TK, RU, HU, SI, GR, SR
- Wired – QAA75.611/301 (code: 414324) Language package: EN, DE, GR, IT, NL, ES, PT, DK, SE, FI
- Wireless – QAA78.611/301 (code: 414325) Language package: EN, DE, GR, IT, NL, ES, PT, DK, SE, FI
- Wirelles Antena AVS71.390/109 (code: 355449)

## Technical specification - HEAT PUMP Aerogor ECO Inverter 10 A

Model		Aerogor ECO Inverter 10 A	
Power Supply		V/Hz/Ph	220-240/50/1
Refrigerant / mass		Type/kg	R410A/1.94
Fuse		A	16/C
Heating mode (A7/W35)			
Max. Heating Capacity <sup>(1)</sup>		kW	10.5
C.O.P <sup>(1)</sup>		W/W	3.79
Heating Capacity Min./Max. <sup>(1)</sup>		kW	4.5/10.5*
Heating Power Input Min./Max. <sup>(1)</sup>		kW	0.91/3.05*
C.O.P Min./Max. <sup>(1)</sup>		W/W	3.8/4.71*
Cooling mode (A35/W7)			
Max. Cooling Capacity <sup>(2)</sup>		kW	6.74
E.E.R <sup>(2)</sup>		W/W	2.65
Cooling Capacity Min./Max. <sup>(2)</sup>		kW	2.17/6.74
Cooling Power Input Min./Max. <sup>(2)</sup>		W	0.92/3.13
E.E.R Min./Max. <sup>(2)</sup>		W/W	2.15/3.00
Circuit Max. Pressure		bar	38
Compressor	Type	DC Inverter Twin Rotary	
	Quantity/System	1	
Fan	Quantity	1	
	Airflow	m <sup>3</sup> /h	3200
	Rated power	W	160
Noise Level	Indoor/Outdoor	dB(A)	35/55
Water Side Heat Exchanger	Type	Plate Heat Exchanger	
	Water Pressure Drop	kPa	30
	Piping Connection	Inch	G1"
Allowable Water Flow	Min. Water Flow	L/S (m <sup>3</sup> /h)	0.32 (1.15)
	Rated Water Flow		0.53 (1.90)
	Max. Water Flow		0.63 (2.27)
Net Dimension(L×D×H)	Outdoor Unit	mm	763*414*1044
	Indoor Unit	mm	414*220*720
Packing Dimension(L×D×H)	Outdoor Unit	mm	805*480*1140
	Indoor Unit	mm	450*250*585
Net Weight	Outdoor	Kg	70
	Indoor Unit	Kg	28
Packing Weight	Outdoor	Kg	72.5
	Indoor Unit	Kg	30

(1) Heating condition: water inlet/outlet temperature: 30°C/35°C, Ambient temperature: DB 7°C/WB 6°C; EN 14511

(2) Cooling condition: water inlet/outlet temperature: 12°C/7°C, Ambient temperature: 35°C. EN 14511

\*At maximum compressor frequency 85 Hz and condition A7/W35. Influence of defrost cycle is not included in test results. Due to the impact of defrost cycle heating capacity and COP could decline for approx. 10%.