

# AquaMaster 45 Inverter P

Powerful ground source  
heat pump with R290

Efficient and powerful ground-to-water  
heat pump with an output up to 35 kW.  
Ready for cascades with total power  
up to 500 kW.



#### All-in-one

Unique ground-to-water compact heat pump with minimum installation space.

#### Total safety

With integral R290 leak detector and automatic shut down of the unit. Check valves in the cooling circuit.

#### R290 propane refrigerant

The use of propane increases efficiency and, consequently, energy savings.

#### Unique possibility of cascades up to 500 kW

Perfect solution also for buildings with heat loss of 35, 70, 100, 200, 300 or even more kW. Up to 16 units can be connected to the cascade.

**A<sup>+++</sup>** Energy efficiency



Czech (EU)  
product



Heating water  
temperature  
up to 75 °C



Output up  
to 35 kW



Online  
control

## KEY FEATURES

- Compact ground-to-water heat pump for residential and commercial application
- Power up to 35 kW (BOW35) from one compressor
- Total cascade power of hundreds of kW



- Use for **heating and cooling of the building** including SHW preparation
- **Extensive intelligent optional equipment:** internet connection (monitoring and logging), modbus/BMS, integrated MID electric meter or heat meter, communication with PV Inverter and Batteries, smart grid etc.
- Passive cooling module (optional equipment)



- Integrated circulation pumps for primary and secondary circuit incl. a 3-way valve
- Optional circulation pump on the side primary circuit with a 2-way zonal valve



- SHW temperature up to 65 °C
- Max heating water temperature 75 °C
- **Anti-legionella function from compressor only.** No backup heater required

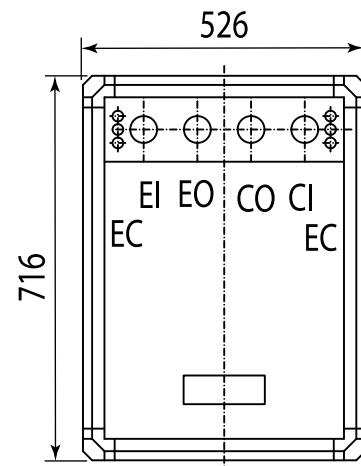
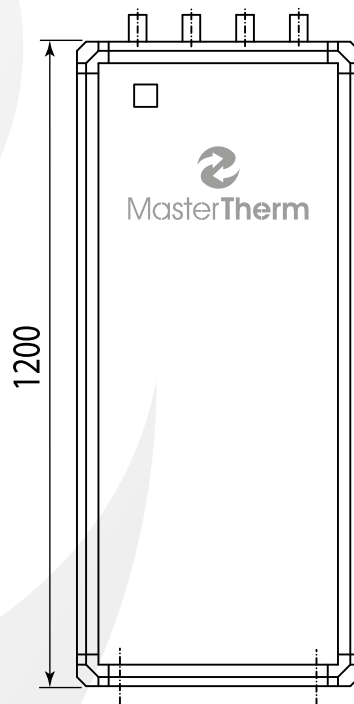
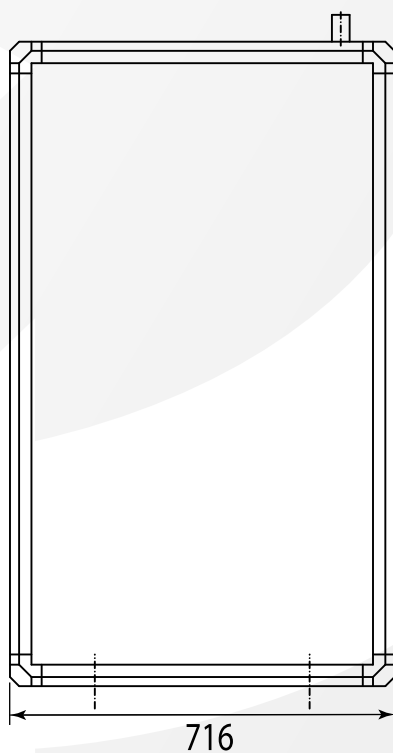




Model	Performance at B0W35	Heat loss of the object $Q_z$	Seasonal energy efficiency of heating at a 35 °C low temperature operation		Seasonal energy efficiency of heating at a 55 °C medium temperature operation		Maximum heating	Order number (according to heating circuit control)	
	kW		SCOP	Class	SCOP	Class		°C	Regulation STANDARD (µPC)
<b>AquaMaster Inverter 45IP</b>	5-35	up to 35	TBA	TBA	TBA	TBA	75	AQ45IP-301U	AQ45IP-311U

Find more at [www.mastertherm.eu](http://www.mastertherm.eu)

<b>Designed for</b>	single-circuit heating systems	multiple-circuit heating systems
<b>Main heating circuit</b>	yes	yes
<b>Auxiliary heating circuit</b>	-	independently 2 incl. mixing
<b>Space temperature</b>	in 1 zone	in 2 zones
<b>Hot water treatment</b>	yes	yes
<b>Option</b>	-	up to 6 heating circuits



EO – Water / Brine Outlet 5/4" OD  
 EI – Water / Brine Inlet 5/4" OD  
 CO – Heating Water Outlet 1" OD  
 CI – Heating Water Inlet 1" OD  
 EC – Electrical connection 2x PG16, 4x PG13.5

**Unique Master Therm software for heat pump control**

- Custom application for controlling the cooling circuit and peripherals- Equithermal MaR (measurement and regulation)
- Advanced **temperature feedback control in the building** based on internal room temperature sensors
- Control via touchscreen terminal or **online application**
- Includes **remote service monitoring** and diagnostics
- Control of up to 6 heating circuits, including the possibility of connecting a swimming pool or solar panel
- Cooperation with photovoltaics: **in-built connection to PV inverter**
- Smart tariff & Smart Grid: **automatic optimization of heat pump's operation based on future spot electricity prices**

