

# AquaMaster 45 Inverter P

Powerful ground source  
heat pump with R290

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



#### All-in-one

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

#### Safety first

With integral R290 leak detector and automatic shut down of the unit. Ventilation box as factory equipment.

#### Unique possibility of cascades with more than 500 kW

Perfect solution also for large-scale buildings with heat loss of hundreds of kW. Up to 16 units can be connected into 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



- Ventilation box as recommended 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



- 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)



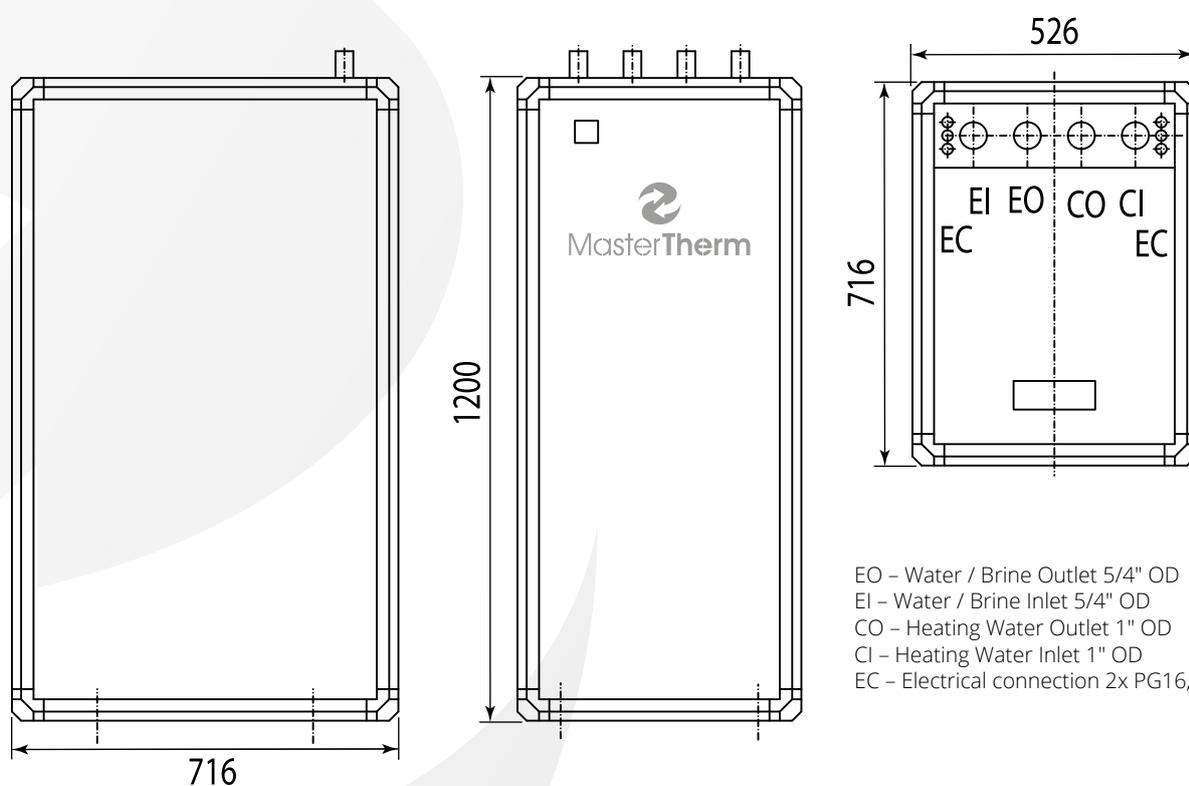
- SHW temperature up to 65 °C
- Max heating water temperature 75 °C
- **Anti-legionella function from compressor only.** No backup heater required





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
	kW		SCOP	Class	SCOP	Class		
<b>AquaMaster Inverter 45IP</b>	5-35	up to 35	TBA	TBA	TBA	TBA	75	AQ45IP-311U
<b>Designed for</b>								multiple-circuit heating systems
<b>Main heating circuit</b>								yes
<b>Auxiliary heating circuit</b>								independently 2 incl. mixing
<b>Space temperature</b>								in 2 zones
<b>Hot water treatment</b>								yes
<b>Option</b>								up to 6 heating circuits

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



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 pump control

- Custom application for controlling the cooling circuit and peripherals
- Equithermal MaR (measurement and regulation) system
- Advanced **feedback control of building temperature** 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 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**

