

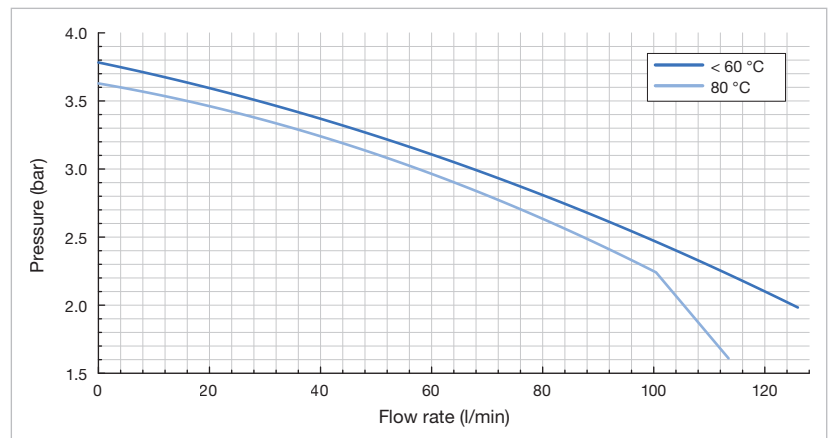


# MATIC Water

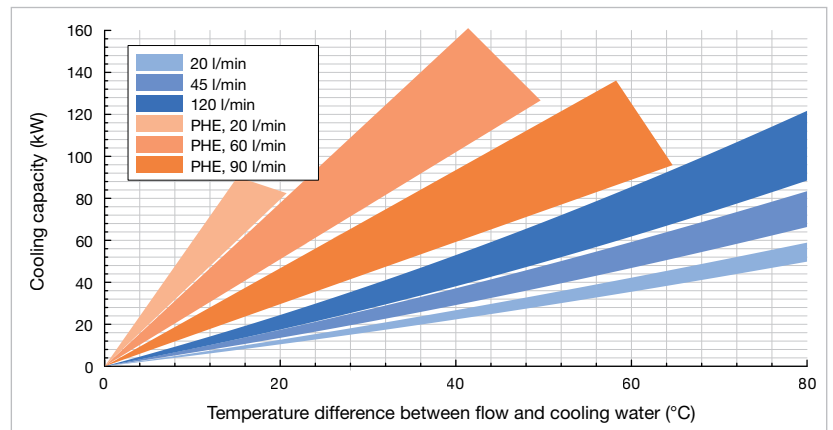
- 90 18 K
- 90 27 K
- 90 36 K
- 90 45 K

- Energy-efficient and ecological
- Modular and easy to expand
- Predefined actions
- Configurable recipes
- Intelligent connectivity
- Predictive Maintenance

## Pump characteristic curve



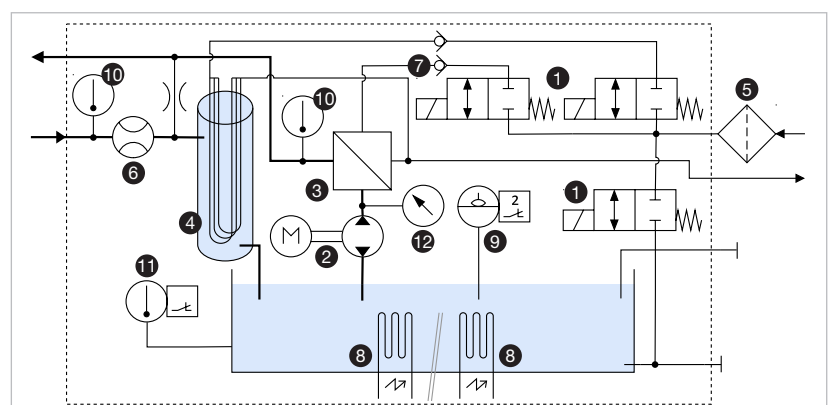
## Cooling capacity



Performance data min. at 40 l/min @ 1.5 bar; max. at 80 l/min @ 6 bar cooling water

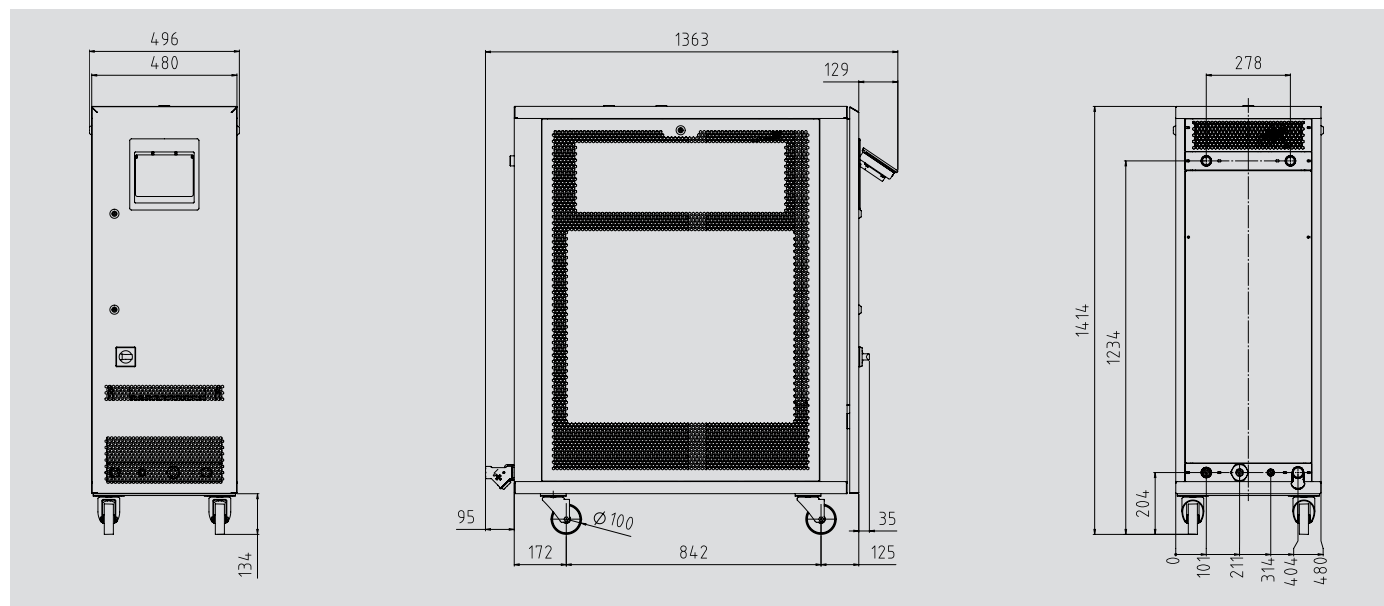


## Fluidic diagram



1 2-2-way valve (normally closed) 2 Circulation pump with reversible pumping direction 3 PlateHeat exchanger 4 Shell and tube heat exchanger 5 Filter 6 Flow sensor 7 Non-return valve 8 Heaters element 9 Level sensor 10 Temperature sensor 11 Safety temperature limiter 12 Pressure sensor

# Technical data



Water	
<b>Maximum temperature</b>	<b>90 °C</b>
<b>Heat output</b>	<b>18 kW      27 kW      36 kW      45 kW</b>
<b>Cooling capacity</b>	See diagram
<b>Filling volume (heat transfer fluid)</b>	Minimum 26 liters, maximum 40 liters
<b>Pump</b>	<b>Type K</b>
Pressure and flow rate	See diagram
Rated power of the motor	<b>Type K: 2.2 kW</b>
<b>Control system</b>	IRIS
Temperature measurement	3-wire Pt100 (F0.15 to IEC 60751), flow and return
Pump pressure measurement	Piezoresistive pressure transmitter
Flow measurement (heat transfer medium)	Vane wheel sensor with inductive pick-up
Languages	DE, EN, ES, FR, IT, NL (expandable)
<b>Interfaces</b>	Module IO1: RS232, RS485, CL 20 mA, CAN (accessories)
OPC-UA (Standard)	Module IO2: Profibus, Profinet, EtherNet/IP (accessories)
	Module IO3: 0-10 V, 0/4-20 mA, external measurement (accessories)
<b>Number of extension module slots</b>	2
<b>Connections</b>	
Heat transfer medium (flow and return)	1" BS external thread
Cooling water, inlet	1" BS internal thread, with water filter
Cooling water, outlet	1" BS external thread
<b>Empty weight</b>	180 kg
<b>Color</b>	RAL 7035 light gray
<b>Surroundings</b>	
Temperature range	5-40 °C
Relative humidity	40-80 % RH (non-condensing, no ice formation)
<b>Installation</b>	Inside, ventilation openings must be at least 10 cm clear
<b>Continuous sound pressure level</b>	< 70 dB (A)
<b>Power supply</b>	380-480 V, 50/60 Hz or alternatively 200-240 V, 50/60 Hz
	<b>Pump type K</b>
<b>Connected load</b>	21.1 kW      30.1 kW      39.1 kW      48.1 kW
<b>Conductor cross-section of connection cable</b>	
200-240 V	16 mm <sup>2</sup> 25 mm <sup>2</sup> not available      not available
380-480 V	10 mm <sup>2</sup> 16 mm <sup>2</sup> 25 mm <sup>2</sup> 25 mm <sup>2</sup>
<b>Protection class device</b>	IP44, IP54 optional
<b>Labeling</b>	CE, UL-ready