

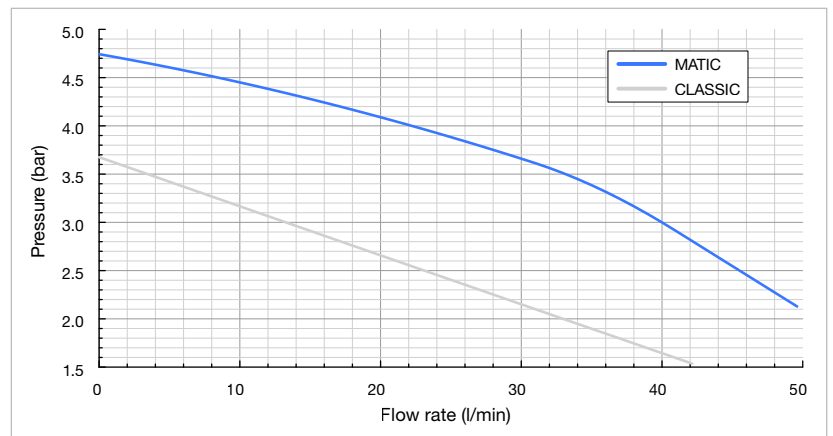


# MATIC Water

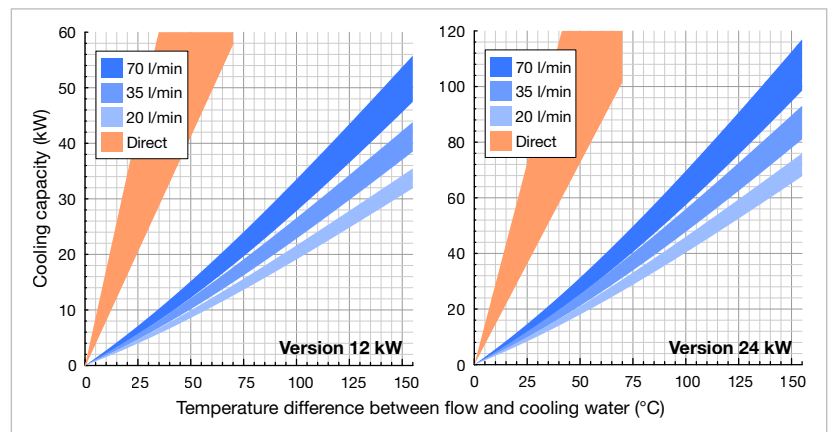
160 12 B  
160 24 B

- Energy-efficient and ecological
- Modular and easy to expand
- Predefined actions
- Configurable recipes
- Intelligente Connectivity
- Predictive Maintenance

## Pump characteristic curve

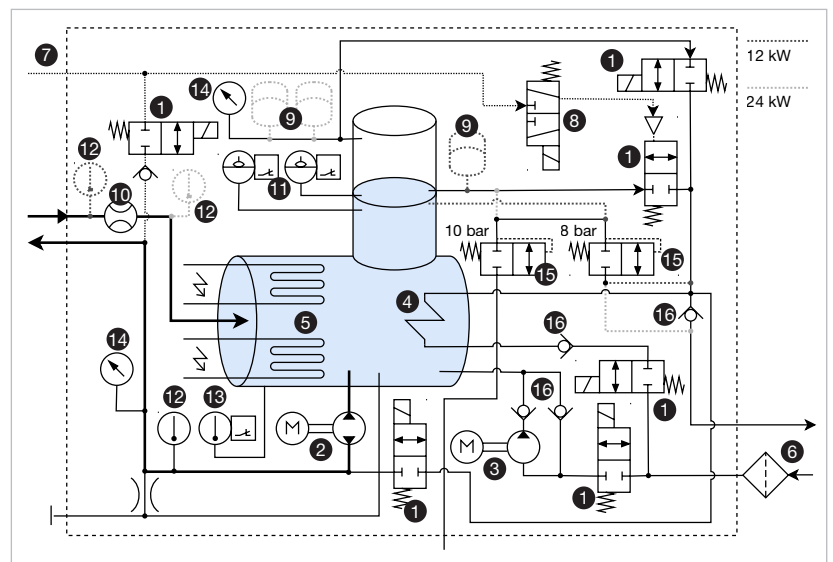


## Cooling capacity



Power specifications 12 kW at min. 12 l/min @ 2 bar; at max. 25 l/min @ 8 bar cooling water  
Power specifications 24 kW at min. 21 l/min @ 2 bar; at max. 42 l/min @ 8 bar cooling water

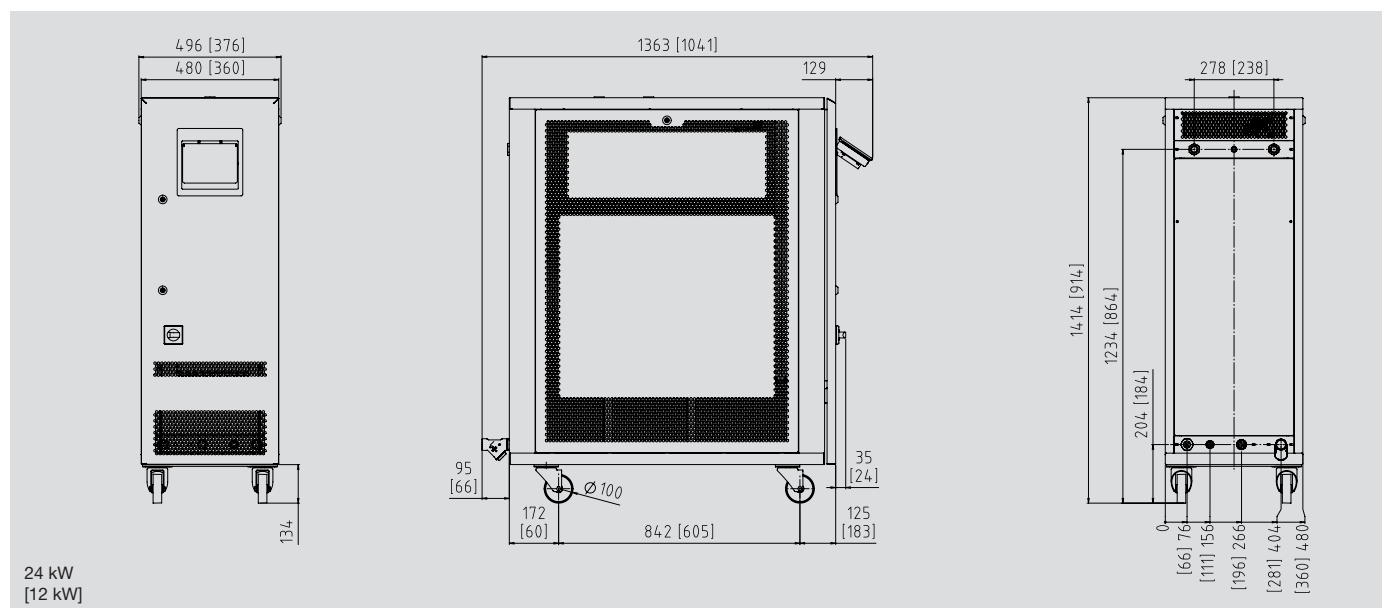
## Fluidic diagram



1 2-2 way valve (normally closed), 2 Circulation pump with reversible pump direction, 3 Printer-Elevation pump, 4 Cooling coil, 5 Heating element, 6 Filter, 7 Compressed air feed, 8 Pilot valve for pneumatic 2-2 way valve, 9 Expansion vessel, 10 Flow sensor, 11 Level sensors, 12 Temperature sensor, 13 Safety temperature limiter, 14 Pressure sensor, 15 Pressure relief valve, 16 Non-return valve



# Technical data



24 kW  
[12 kW]

	MATIC Water 160 12 B	MATIC Water 160 24 B
<b>Maximum temperature</b>	<b>160 °C</b>	
<b>Heat output</b>	<b>12 kW</b>	<b>24 kW</b>
<b>Cooling capacity</b>	See diagram	
<b>Pump</b>	<b>Type B</b>	
Pressure and flow rate	See diagram	
Rated power of the motor	1.5 kW	
<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>	1	2
<b>Connections</b>		
Heat transfer medium (flow and return)	¾" BS internal thread	¾" BS internal thread
Cooling water, inlet	¾" BS internal thread, with water filter	1" BS external thread, with water filter
Cooling water, outlet	¾" BS internal thread	1" BS external thread
Compressed air	¼" BS internal thread	¼" BS internal thread
Emptying	¾" BS internal thread	½" BS internal thread
<b>Empty weight</b>	120 kg	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>12 kW version</b>	<b>24 kW version</b>
<b>Connected load</b>	14.3 kW	26.3 kW
<b>Conductor cross-section of connection cable</b>		
200-240 V	10 mm <sup>2</sup>	25 mm <sup>2</sup>
380-480 V	6 mm <sup>2</sup>	16 mm <sup>2</sup>
<b>Protection class device</b>	IP44, IP54 optional	
<b>Labeling</b>	CE, UL-ready	