Temperature Control Unit

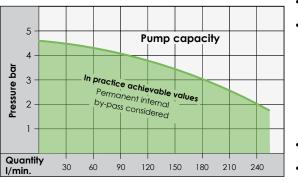


Powerfull pressurised water unit with very high cooling capacity for temperature up to 130°C

Operational use: rollers, plates and other heavy duty use



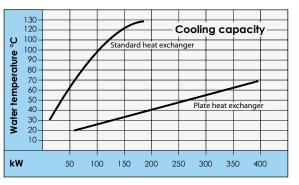
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Unit equipped with 2 heat exchangers:

Standard heat exchanger from 80°C up to 130°C

Plate heat exchanger below 80°C



Features included

- Self-optimizing temperature controller with digital display of the set and actual temperature. With high precision regulation in ¹/₁₀° range; can be adjusted to read °C or °F.
- Automatic temperature control difference between set and actual temperature activates an alarm.
- Digital flow indication with control of the minimum flow.
- Indication of the pressure to the mould and of the system pressure.
- Automatic pressure discharge, aeration and water filling.
- · Lime scale free heat exchanger.
- All components in contact with water are made from stainless steel.
- · Heating switchable in stages.
- Safety devices:
 - Automatic level control for dry run protection.
 - Electronic temperature limiter in the controller and separate mechanical safety thermostat.
 - Main switch, transformer and motor protection switch.
 - Horn in case of failure.
- All failures are visually indicated.
- Unit on feets.

Options

- Equipped with the controller MP-988 allows over 30 different digital interfaces: RS-232, RS-485, Current Loop 20mA, CAN-bus, Profibus etc.
- Digital clock timer.
- External command of the controller.
- Collective alarm.

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Technical data

Temperature range	up to 130°C with water	
Temperature control	self-optimizing, electronic microprocessor controller MP-888 with digital display of the set and actual value. Automatic temperature monitoring.	
Flow control	electronically, with digital display and automatic control of the minimum flow.	
Heating capacity Switchable in stages	48 kW 8/8/8/8/8 automatic shut down of the heating capacity which is not required.	
Cooling capacity	increased cooling capacity by switching to the plate heat exchanger standard heat exchanger approx. 180 kW at 130°C plate heat exchanger approx. 400 kW at 70°C	
Pump capacity	motor 4 kW max. 4,5 bar / max. 250 l/min	
Filling	automatic	
Connections Medium Cooling water	female thread flange DN-25 1½" BSP female thread	
Dimensions (LxWxH)	1'710 x 790 x 1'540 mm	
Weight (empty)	approx. 650 kg	
Colour	silvergrey RAL 7001	

All possible voltages are available from 3 x 200 V to 3 x 600 V and 50/60 Hz. The units are available conform to UL/CSA specifications. For the USA market the units are equipped with NPT-thread connections and the controller is adjusted to indicate $^{\circ}$ F.

Electronic temperature controllers

The electronic controllers MP-888 and MP-988 can be operated to read $^{\circ}$ C or $^{\circ}$ F. The analog interfaces 0-5 V, 0-10 V and 4-20 mA are standard included in the controllers - **without additional costs.**

The self-optimizing feature on these controllers allows a very high regulating accuracy even at high temperatures and adheres to the set temperatures independently of the consumer size.

Flow control:

The indication of the flow rate is possible in litres or gallons per minute. As soon as the flow falls below a minimum, the alarm is activated.

Standard controller MP-888



(required temperature) — Actual temperature —

(effective temperature)

Indication of the flow

Set temperature



Digital interface controller MP-988 (Optional)

Digital interface

- RS-485, RS-232, Current Loop 20 mA, CAN-bus, Profibus
- Incl. all existing machine protocols
- Temperature difference monitoring

Indication of up to three temperatures

Analog interfaces

• 0 - 5 V, 0 - 10 V, 4 - 20 mA

Analog interfaces

0 - 5 V, 0 - 10 V, 4 - 20 mA



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