

Temperature Control Unit

TT-118 K

Temperature control unit with very high cooling capacity over the entire operation range

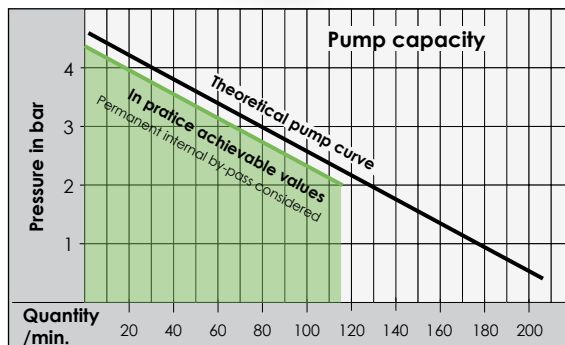
Operational use: with water from 25°C up to 90°C

- Rollers
- Plates
- Double walled vessels
- Other large consumers



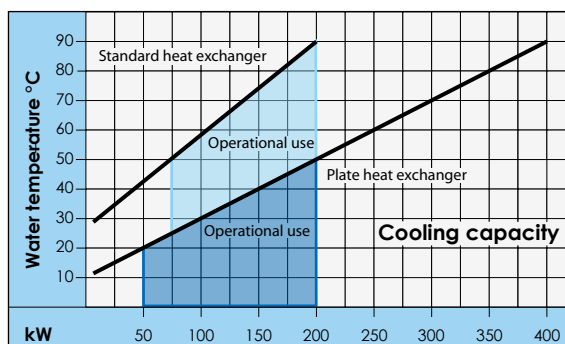
Features included

- 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.
- Submersible seal less pump manufactured of bronze.
- Pressure is indicated by manometer.
- Automatic water filling.
- Lime scale free heat exchanger.
- Corrosion resistant unit (longevity).
- All components in contact with water are made of stainless steel or bronze.
- Heating switchable in stages - the unnecessary heating capacity will switch off automatically once the required temperature has been reached, meaning it only regulates with the needed heating power.
- Safety devices:
 - 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 castors.



Unit equipped with 2 heat exchangers:

- Standard heat exchanger from 50°C up to 90°C
- Plate heat exchanger below 50°C



Particularities

- Digital flow indication with control of the minimum flow.
- Reversing switch for temperature regulation at the mould.
- Time-limited water refill.
- Leakstopper device – unit can be used in pressure or vacuum mode. No water is lost at leaking tools, therefore ensuring continuous production.
- Optional with digital interface controller MP-988.

HEADQUARTERS & MANUFACTURER

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Technical data:

There are 4 different models available

Temperature range	25°C up to 90°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	18 kW	27 kW	36 kW	45 kW
<i>Switchable in stages</i>	9 / 9	9 / 9 / 9	9 / 9 / 9 / 9	9 / 9 / 9 / 18
<i>Autom. switch off</i>	no	yes	yes	yes
Cooling capacity	increased cooling capacity by switching to the plate heat exchanger standard heat exchanger: 200 kW at 90°C plate heat exchanger: 400 kW at 90°C <i>at cooling water temperature approx. 12°C</i>			
Pump capacity	motor 2,2 kW			
<i>Pressure mode</i>	max. 4,5 bar / max. 200 l/min.			
<i>Vacuum mode</i>	vacuum max. 8 mH ₂ O			
Filling amount	min. 26 litres, max. 40 litres			
Connections				
<i>Medium</i>	1" BSP male thread			
<i>Cooling water</i>	1" BSP male thread, inlet with water filter 1" BSP female thread			
Dimensions (L×W×H)	1'240 × 480 × 1'400 mm, incl. castors			
Weight	approx. 180 kg empty			
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 °F.

Electronic temperature controllers

The electronic controllers MP-888 and MP-988 can be operated to read °C or °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



Analog interfaces

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

Digital interface controller MP-988 (Optional)



Analog interfaces

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

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



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