

Temperature Control Unit

TT-108 K

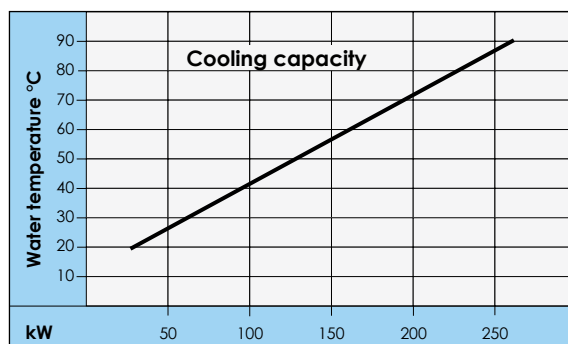
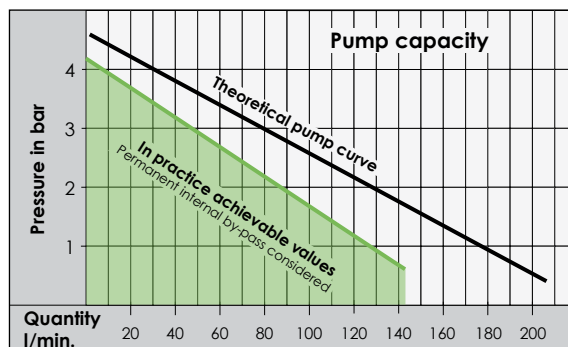
Powerful water temperature control unit with direct cooling
(enormous cooling capacity)

Operational use: with water up to 90°C mould weight up to 1'800 kg



Features included

- Self-optimizing temperature controller with digital display of the set and actual temperature. With high precision regulation in $1/10^\circ$ range; can be adjusted to read $^\circ\text{C}$ or $^\circ\text{F}$.
- Automatic temperature control - difference between set and actual temperature activates an alarm.
- Submersible seal less pump manufactured from bronze.
- Pressure is indicated by manometer.
- Automatic water filling.
- Corrosion resistant unit (longevity).
- All components in contact with water are made from stainless steel or bronze.
- 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 castors.



Particularities

- Digital flow indication with control of the minimum flow.
- Reversing switch for temperature regulation at the mould.
- Automatic mould drain.
- Leakstopper device - unit can be used in pressure or vacuum mode. No medium is lost on leaking tools, therefore ensuring continued production.

Operating principle

This model has only a direct cooling. Once the cooling starts, cooling water is pumped into the tank of the unit. The excess water in the tank leaves the temperature control unit through the overflow tube. It is important that the backflow has no counter pressure.

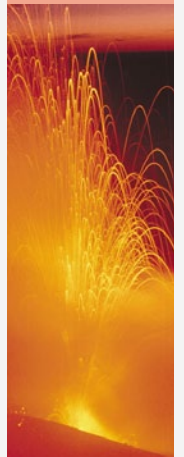


TOOL-TEMP®

Technical data: **There are 4 different models available**

Temperature range	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
Cooling capacity	approx. 260 kW at 90°C			
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	40 litres			
Filling	automatic			
Connections	1" BSP male thread			
<i>Medium</i>				
<i>Cooling water inlet</i>	water filter ½" BSP female thread			
<i>Cooling water outlet</i>	1½" BSP male thread			
Dimensions (LxWxH)	1'250 x 480 x 1'400 mm, incl. castors			
Weight	approx. 160 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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