

# Temperature Control Unit

# TT-118 K

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

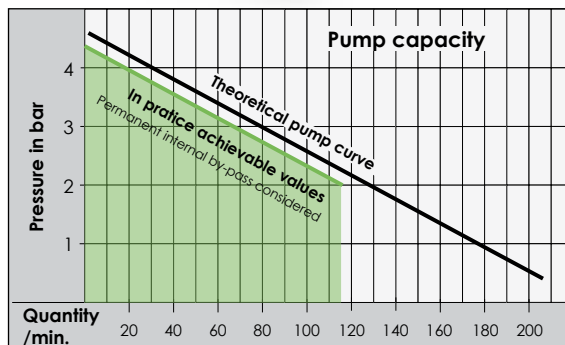
Operational use: with water from 25°C up to 90°C

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



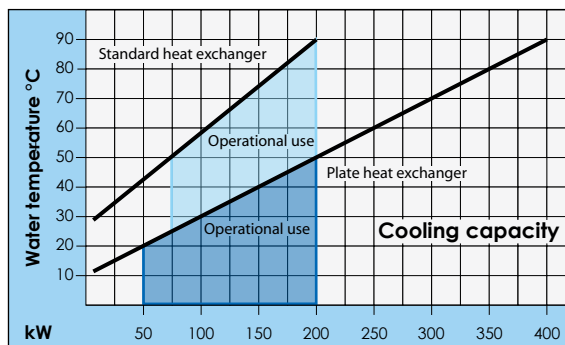
## Features included

- 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 refill.
- 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.



# TOOL-TEMP®

## Technical data:

There are 4 different models available

<b>Temperature range</b>	25°C up to 90°C with water			
<b>Temperature control</b>	self-optimizing, electronic microprocessor controller MP-888 with digital display of the set and actual value. Automatic temperature monitoring.			
<b>Flow control</b>	electronically, with digital display and automatic control of the minimum flow.			
<b>Heating capacity</b>	<b>18 kW</b>	<b>27 kW</b>	<b>36 kW</b>	<b>45 kW</b>
<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
<b>Cooling capacity</b>	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>			
<b>Pump capacity</b>	motor 2,2 kW			
<i>Pressure mode</i>	max. 4,5 bar / max. 200 l/min.			
<i>Vacuum mode</i>	vacuum max. 8 mH <sub>2</sub> O			
<b>Content of unit</b>	min. 26 litres, max. 40 litres			
<b>Connections</b>				
<i>Medium</i>	1" BSP male thread			
<i>Cooling water</i>	1" BSP male thread, inlet with water filter 1" BSP female thread			
<b>Dimensions (L×W×H)</b>	1'240 × 480 × 1'400 mm, incl. castors			
<b>Weight</b>	approx. 180 kg empty			
<b>Colour</b>	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

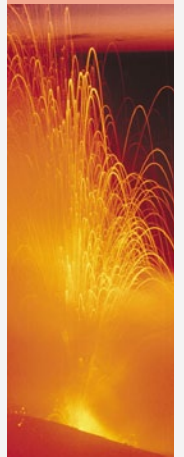
- 0 - 5 V, 0 - 10 V, 4 - 20 mA

#### 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



**TOOL-TEMP**