

Temperature Control Unit

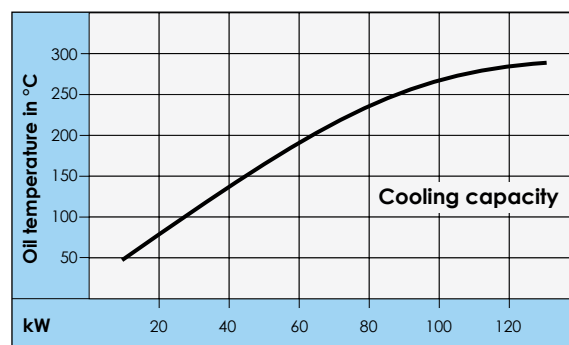
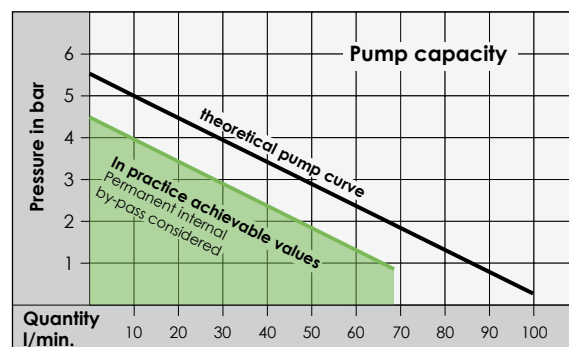
TT-OIL300_{12kW}

Compact, powerful oil unit up to 300°C for:
moulds, small rollers and plates

Option: Safety and leak free with the seal less magnetic drive pompe made by TOOL-TEMP

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.
- Digital flow indication with control of the minimum flow.
- Indication of the pump pressure.
- Reversing switch for temperature controlling at the mould.
- Leakstopper device – unit can be used in pressure or vacuum mode. No medium is lost on leaking tools, therefore ensuring continued production.
- Automatic mould drain.
- Lime scale free heat exchanger.
- Leak free high temperature pump with axial face seal.
- Hot oil circuit with by-pass, which ensures internal circulation if valves are closed.
- Large expansion tank; with safety shutdown in case of overflow.
- No oil cracking because of special construction of the heating elements.
- 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.



Option

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

HEADQUARTERS & MANUFACTURER

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Technical data

Temperature range	up to 300°C with heat transfer oil TOOL-THERM SH-3
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	12 kW
Cooling capacity	approx. 130 kW at 290°C circulating temperature
Pump capacity	motor 1,8 kW
<i>Pressure mode</i>	max. 5,5 bar / max. 100 l/min
<i>Vacuum mode</i>	vacuum max. 8 mH ₂ O
<i>Model Z</i>	pump with axial face seal and triple bearing system
<i>Model A</i>	pump with seal less magnetic drive
Temperature measurement at the mould	yes
Leakstopper and mould drain	yes
Expansion tank capacity	21 litres
Filling amount	9 litres
Expansion volume	17 litres
Connections	
<i>Oil circuit</i>	¾" BSP female thread
<i>Cooling water</i>	inlet with water filter ¾" BSP female thread outlet with non-return valve ¾" BSP female thread
Dimensions (L×W×H)	1'130 × 390 × 995 mm, incl. castors
Weight	approx. 150 kg empty
Colour	silvergrey RAL 7001, front RAL 7016

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



Set temperature
(required temperature)

Actual temperature
(effective temperature)

Indication of the flow

Analog interfaces

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

Digital interface controller MP-988 (Optional)



Digital interface

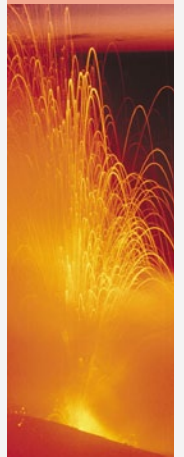
- RS-485, RS-232, Current Loop 20 mA, CAN-bus, Profibus
- Incl. all existing machine protocols

Temperature difference monitoring

Indication of up to three temperatures

Analog interfaces

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



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