

Temperature Control Unit

TT-188

Powerful small temperature control unit

Operational use: with water up to 90°C
with oil up to 150°C

mould weight up to 600 kg
mould weight up to 300 kg

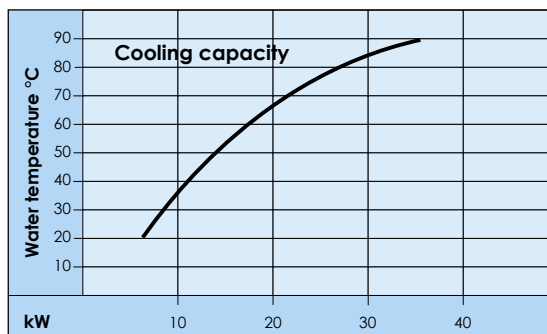
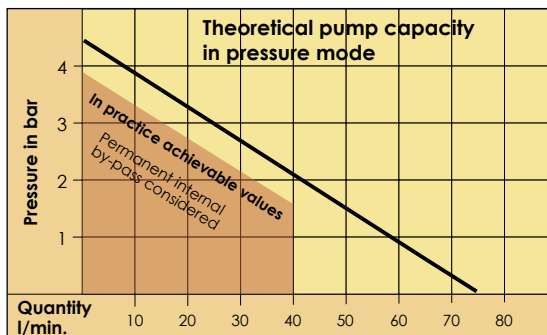
With electronic flow control

can be used with water or oil operation and also in the leakstopper mode



Features included

- Digital flow indication with control of the minimum flow.
- Automatic temperature control - difference between set and actual temperature activates an alarm.
- Submersible seal less pump manufactured from bronze.
- Self-optimizing temperature control unit with digital display of the set and actual temperature. With high precision regulation in $1/10^\circ$ range; can be adjusted to read °C or °F.
- 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.
- Automatic water refill or manual oil refill.
- Lime scale free heat exchanger.
- Long life expectancy due to corrosion free unit.
- All components in contact with water are made of stainless steel or bronze.
- Heating switchable in stages – switchable from 3 kW oil operation to 9 kW water operation.
- Safety devices:
 - Level control with two different levels: pre-warning with indication lamp and acoustic alarm; the unit continues to operate. If further liquid is missing, the unit stops
 - Separate mechanical safety thermostat and electronic temperature limiter installed in the controller
 - Main switch, automatic cutout, transformer and motor protection switch
- Horn in case of failure: the alarm for the level pre-warning is indicated with a continuous sound, all others with an intermittent sound.
- All failures are visually indicated.
- Castors.



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Technical data

Temperature range	with water up to 90°C	with oil up to 150°C
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)	9 kW water operation	3 kW oil operation
<i>Switchable in stages</i>	3 / 6 / 9 kW	none, 3 kW
Cooling capacity	35 kW at 90°C	
Pump capacity	motor 0,75 kW	
<i>Pressure mode</i>	max. 4,5 bar / max. 75 l/min.	
<i>Vacuum mode</i>	vacuum max. 8 mH ₂ O (water column)	
Content of unit	min. 5 litres / max. 7 litres	
Connections		
<i>Medium</i>	1/2" BSP female thread	
<i>Cooling water</i>	3/8" BSP male thread, inlet with water filter 3/8" BSP female thread	
Dimensions	Length: 670 mm x Width: 260 mm x Height: 650 mm, incl. castors	
Weight	approx. 55 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 read °F.

Electronic temperature controller MP-888

The electronic controller can be operated to read °C or °F. The analogue interfaces 0 – 5 V, 0 – 10 V and 4 – 20 mA are standard included in the controller – there is no additional price for them.

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



Set temperature / required temperature
Adjustable in 1/10° range

Actual temperature / effective temperature displayed in 1/10° range

Indication of flow rate in different units, possible are litres per minute with 1/10 litres display. Switchable from English gallons to American gallons. As soon as the flow falls below a minimum, the alarm is activated.

Flow control with automatic or manual pre-adjusted mode:

Automatic: The electronic flow control measures the actual flow, generates automatically a minimum flow and as soon as the flow falls below this value, the alarm will be activated.

Manual: The minimum flow can be adjusted manually. As soon as the flow falls below this value, the alarm will be activated.



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