



# Temperature Control Unit

# TT-380 ATEX

High temperature control unit designed for the appropriate use in explosion-hazardous areas

The unit is constructed under ATEX-Directive 94/9/EG and is suitable for permanent temperatures up to maximum +350°C with heat transfer oil.

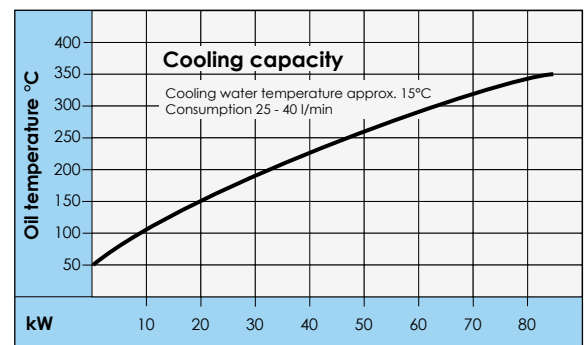
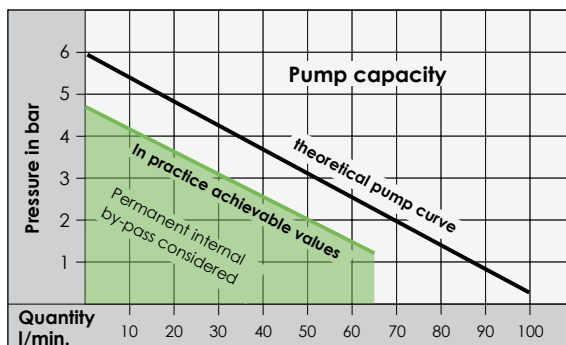


## Features included

- With the set value transmitter the self-optimizing temperature controller can be adjusted. The actual value display shows the current temperature in 1/10°-range.
- Automatic temperature control.
- Heating switchable in stages.
- Lime scale free heat exchanger made of stainless steel.
- High temperature pump with axial face seal and triple bearing system.
- Hot oil circuit with by-pass, which ensures internal circulation if valves are closed.
- No oil cracking because of special construction of the heating elements.
- Automatic level control for dry run protection.
- Fault indicator.
- Automatic cut-outs in the pressure resistant encapsulated room.
- Electronic temperature limiter in the controller.
- Mechanical temperature limiter with safety thermostat.
- Additional safety thermostat for each heating element.

## Optional

- Equipped with the controller MP-988: External control via Profibus.
- Steam condenser at the outlet of the cooling water. This avoids an outburst of steam at the cooling water outlet.



## Available temperature classes

### Temperature classes

- T1
- T2
- T3
- T4
- T5 + T6

### max. surface temperature according T-class

- 450°C
- 300°C
- 200°C
- 135°C

The responding temperature of the safety thermostat is 40°C below the max. surface temperature.

### max. temperature of the heat transfer oil

- 350°C
- 260°C
- 160°C
- 95°C
- not available

All versions are allowed for Zone 1 and 2

## HEADQUARTERS & MANUFACTURER

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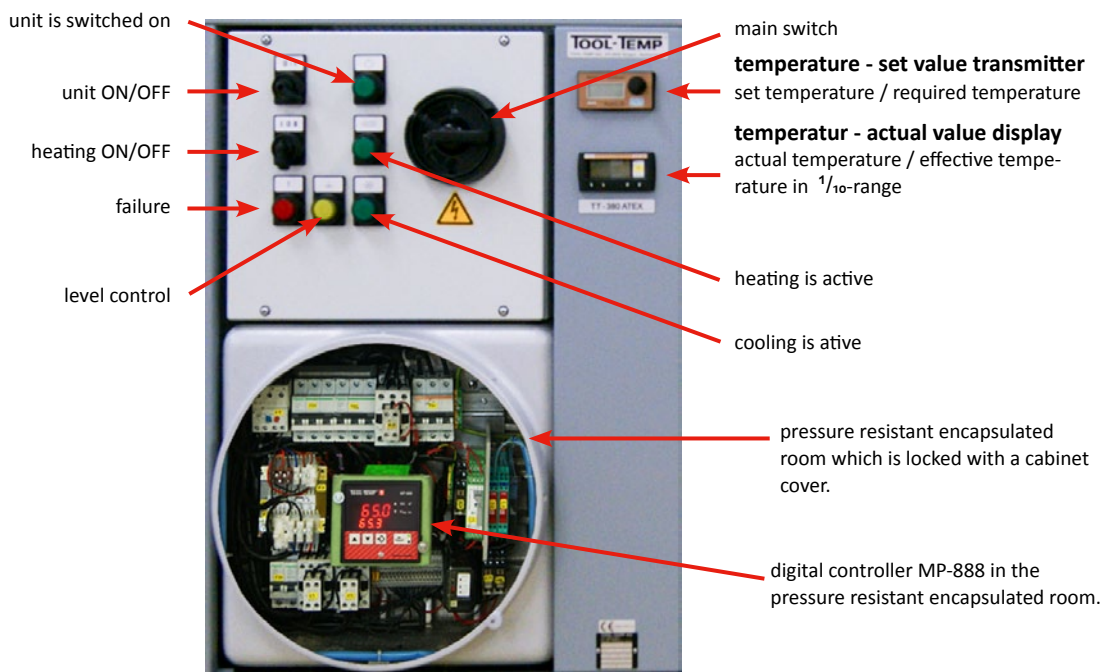


# TOOL-TEMP®

## Technical Data

<b>Temperature range</b>	approx. 350°C (depending on the ATEX requirements)	
<b>Temperature control</b>	self-optimizing microprocessor controller MP-888 with digital display of the set and actual value. The controller is adjusted by the set value transmitter. Automatic temperature monitoring on the actual value display.	
<b>ATEX-identification (94/9/EG)</b>	equipment group II, category 2 G (IIC Tx)	
<b>Heating capacity</b>	<b>9 kW</b>	<b>18 kW</b>
<i>Switchable in stages</i>	-	9/9
<b>Cooling capacity</b>	approx. 40 kW at 220°C - see diagram	
<b>Pump capacity</b>	motor 2,2 kW	
<i>Pressure mode</i>	max. 6 bar / max. 100 l/min.	
<b>Expansion tank capacity</b>	46 Liter	
<b>Filling amount</b>	min. 25 litres (heat transfer oil up to 250°C, synthetic heat transfer oil up to 350°C)	
<b>Expansion volume</b>	approx. 36 litres	
<b>Connections</b>		
<i>Oil circuit</i>	¾" BSP female thread	
<i>Cooling water</i>	inlet	water filter 1" BSP female thread
	outlet	1" BSP male thread
<b>Dimensions (L×W×H)</b>	1'650 × 790 × 1'540 mm, incl. feets	
<b>Weight</b>	approx. 430 kg empty	
<b>Colour</b>	silvergrey RAL 7001	

## Front view



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 size.

