

### Surface sensing Thermostat with limiter

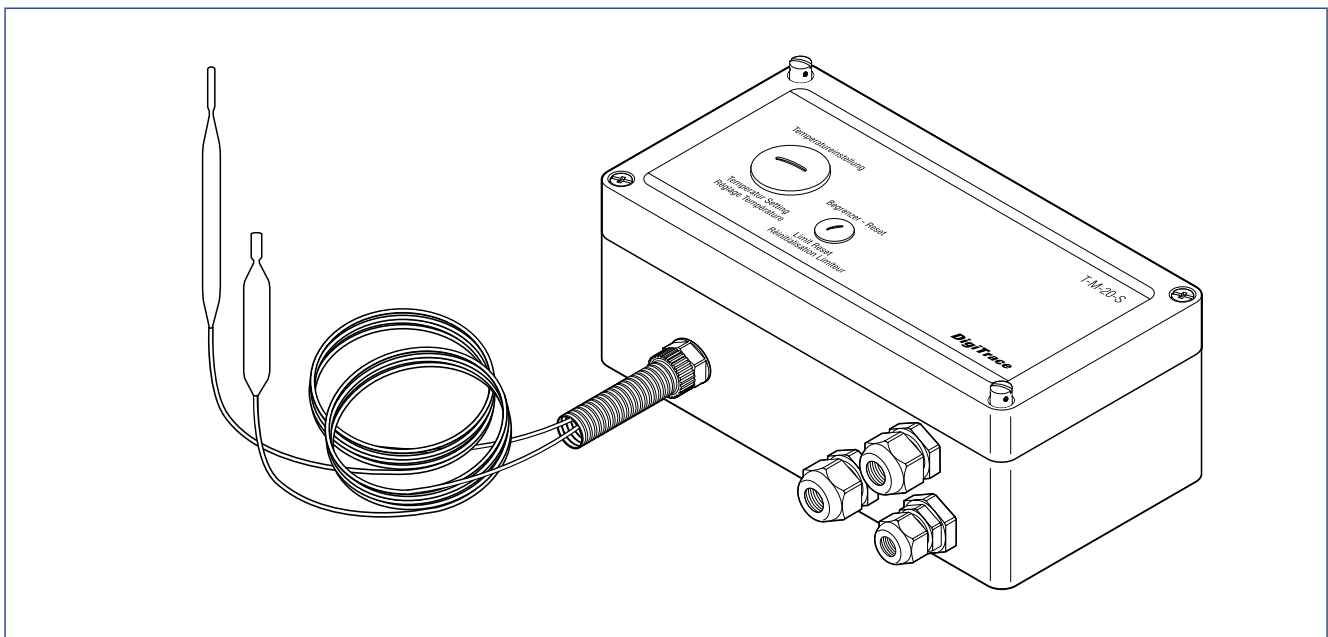
A surface sensing thermostat providing temperature control and temperature limiter in safe areas. The high limit cut-out prevents the heating system exceeding a preset maximum temperature should the control function fail to operate or an unsafe process temperature occur.

Temperature set point adjustment and limiter reset can be completed, without opening the enclosure, via removable plugs in the lid.

Both 2 meter long stainless steel fluid filled bulb and capillary are protected at the enclosure by a flexible conduit.

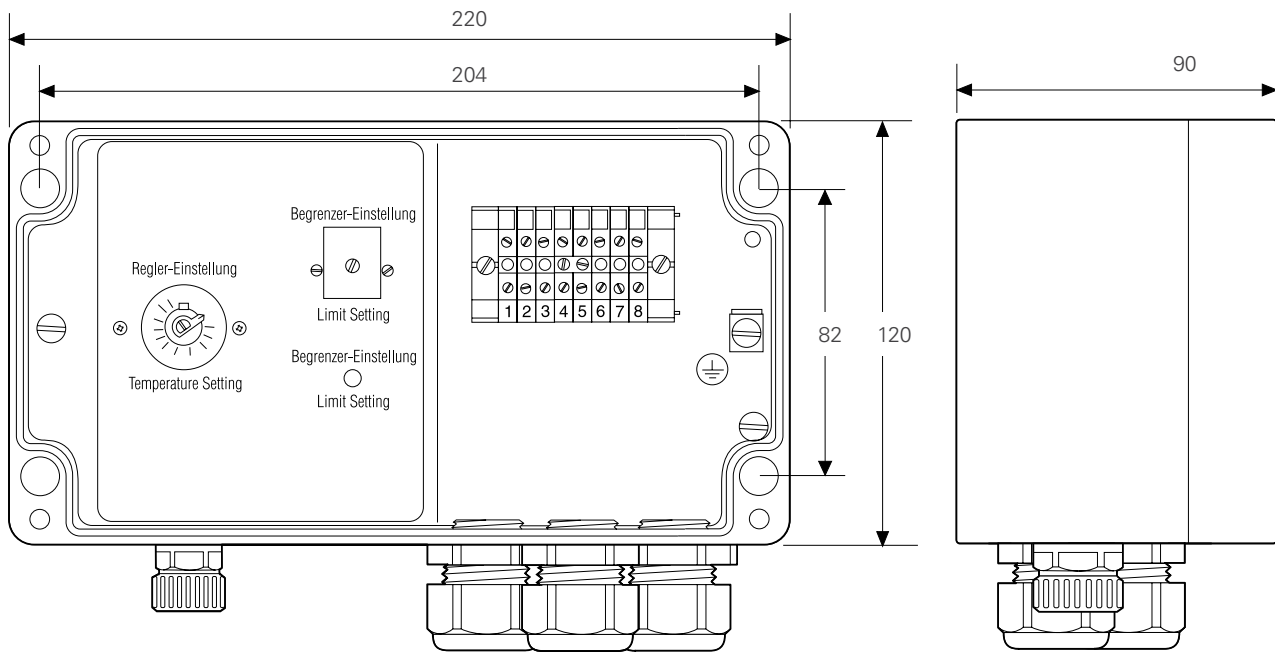
Direct connection of the heating cable is possible.

The thermostat is available in 3 temperature ranges. 0–50°C; 0–200°C; 50–300°C.



		T-M-20-S/0+50C	T-M-20-S/0+200C	T-M-20-S/+50+300C
<b>General</b>				
Area of use		Ordinary area	Ordinary area	Ordinary area
<b>Product specification</b>				
Max rated voltage (nom)		230 Vac	230 Vac	230 Vac
Temperature setting	Controller	0°C to +50°C	0°C to +200°C	+50°C to +300°C
	Limiter	+20°C to +150°C	+130°C to +200°C	+20°C to +400°C
Switching type		Single pole change over (SPDT) 100,000 cycles at 16 A (controller) 500 cycles at 10 A (limiter)		
Switching capacity	Controller	Max 16 A at 230 Vac	Max 16 A at 230 Vac	Max 16 A at 230 Vac
	Limiter	Max 10 A at 230 Vac	Max 10 A at 230 Vac	Max 10 A at 230 Vac
Breaking capacity	Controller	3700 VA	3700 VA	3700 VA
	Limiter	2300 VA	2300 VA	2300 VA
Hysteresis/Differential		2.5% of temperature range	2.5% of temperature range	2.5% of temperature range
Accuracy		±0.5% of setpoint in upper third of temperature range (at 22°C ambient)		
Setting		Internal dial, through lid	Internal dial, through lid	Internal dial, through lid
Terminal size		4 mm <sup>2</sup>	4 mm <sup>2</sup>	4 mm <sup>2</sup>
Ambient operating temp. range		–20°C to +80°C	–20°C to +80°C	–20°C to +80°C

## Dimensions (in mm)



	T-M-20-S/0+50C	T-M-20-S/0+200C	T-M-20-S/+50+300C	
<b>Output parameters</b>				
Control relay	Change-over switch (SPDT)			
Limiter relay	Change-over switch with possibility for external alarm (SPDT)			
<b>Enclosure</b>				
Protection	IP65	IP65	IP65	
Dimension	222 x 120 x 90 mm	222 x 120 x 90 mm	222 x 120 x 90 mm	
Materials body and lid	Grey, polyester enclosure	Grey, polyester enclosure	Grey, polyester enclosure	
Lid fixing	4 captive screws, stainless steel			
Entries	3 entries: 1 x M25 Reducer M25 (M)/M20 (F) incl. M20 gland (Ø 8–13 mm) 1 x M20 gland (Ø 8–13 mm) 1 x M20 gland (Ø 8–13 mm)			
<b>Temperature sensor</b>				
Type	Fluid filled capillary, 2 meter long			
Dimensions				
Controller	Ø	8 mm	8 mm	8 mm
	Length sensing element	166 mm	78 mm	56 mm
Limiter	Ø	6 mm	6 mm	6 mm
	Length sensing element	80 mm	78 mm	176 mm
Material	V4A Stainless Steel			
Exposure temperature	Controller	–40°C to +60°C	–20°C to +230°C	–20°C to +345°C
	Limiter	–40°C to +170°C	–20°C to +230°C	–40°C to +500°C
Minimum bending radius	10 mm for capillary, the sensor cannot be bent			
<b>Mounting method</b>				
Support bracket	SB-120 or surface mount			

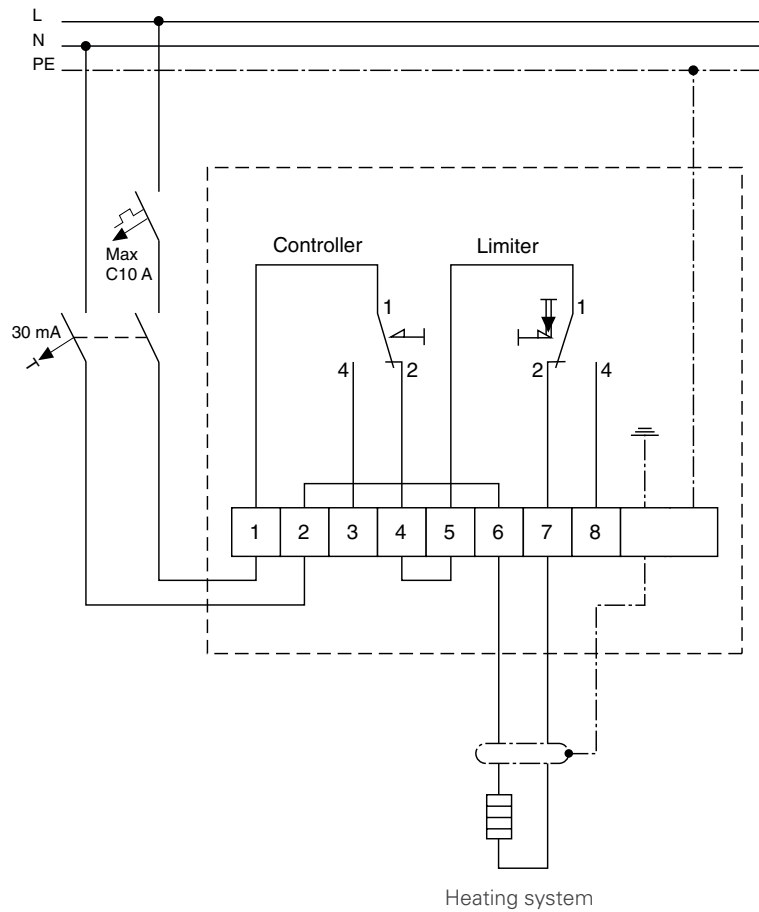
**Ordering details**

Ordering references	PN Number	Weight
T-M-20-S/0+50C	260448-000	1.9 kg
T-M-20-S/0+200C	750502-000	1.9 kg
T-M-20-S/+50+300C	608706-000	1.9 kg

**Meaning of reference: T-M-20-S/+x+y**

- T= thermostat
- M= mechanical thermostat
- 20= control thermostat + limiter
- S= surface sensing
- x= min temperature of control range
- y= max temperature of control range

**Connection details**



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