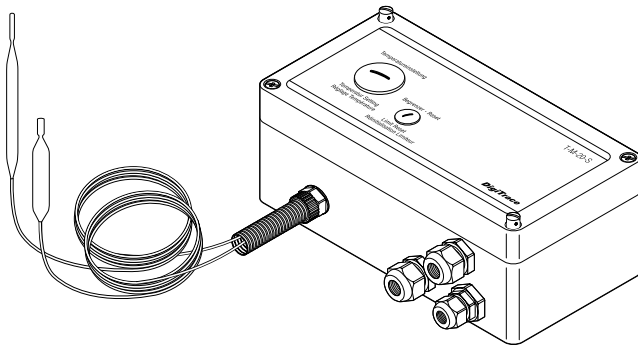


# Raychem T-M-20-S/+X+Y

## SURFACE SENSING THERMOSTAT WITH LIMITER



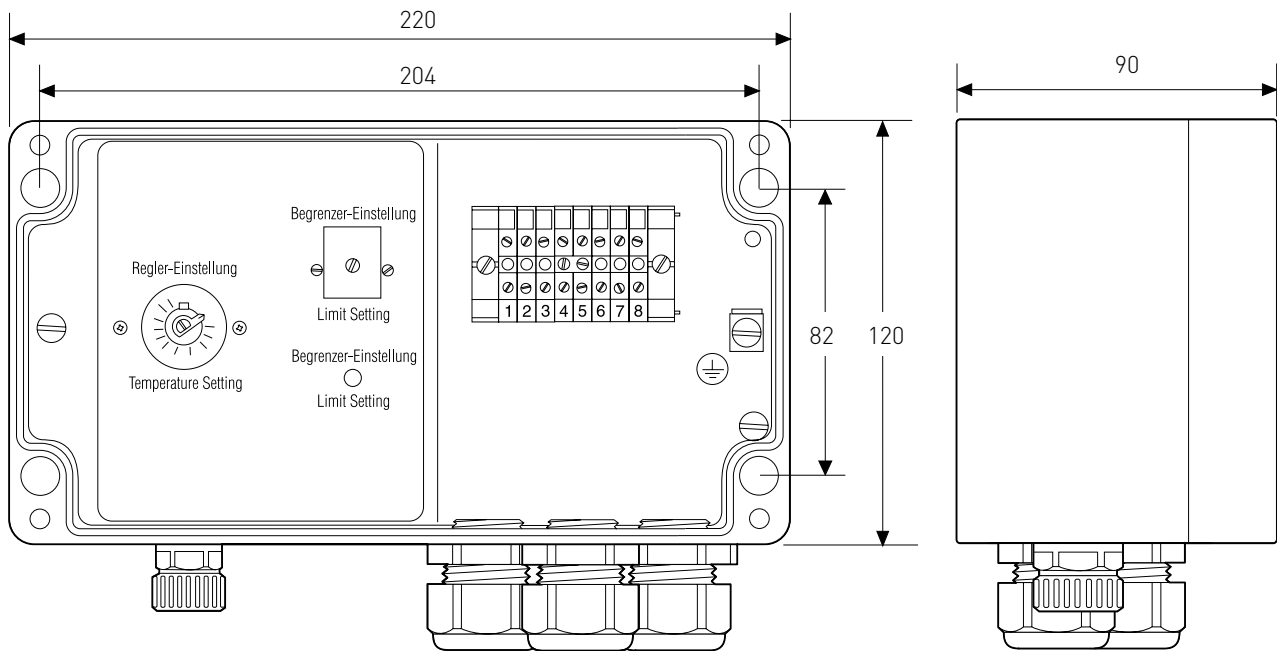
A surface sensing thermostat providing temperature control and temperature limiter in safe areas. The high limit cut-out prevents the heating system exceeding a preset maximum temperature should the control function fail to operate or an unsafe process temperature occur.

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.

<b>GENERAL</b>		<b>T-M-20-S/0+50C</b>	<b>T-M-20-S/0+200C</b>	<b>T-M-20-S/+50+300C</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)****OUTPUT PARAMETERS**

Control relay

Limiter relay

**T-M-20-S/0+50C**

Change-over switch (SPDT)

Change-over switch with possibility for external alarm (SPDT)

**T-M-20-S/0+200C****T-M-20-S/+50+300C****ENCLOSURE**

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 enclosureGrey,  
polyester enclosureGrey,  
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)

**TEMPERATURE SENSOR**

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

V4A Stainless Steel

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

**MOUNTING METHOD**

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**