TRD-H

Electronic Temperature Controller plug-in system

Version TRD-H1
Version TRD-H3

Special Features

- **10 A version with 7-pin coupling socket**

- **20 A version with 5-pin coupling socket**

- **Wall mount housing**

Application

The TRD-H series are ready-to-plug-in, on-off electronic temperature controllers which are especially suitable for controlling electrically heated sample lines of the 3/4/5-N/M/H series.

Description

The TRD-H series on-off electronic temperature controller is mounted in a wall mount housing. A heated sample line with multi-pin plug for power supply and PT100 sensor cable is easily connected to the multi-pin socket inside of the temperature controller housing.
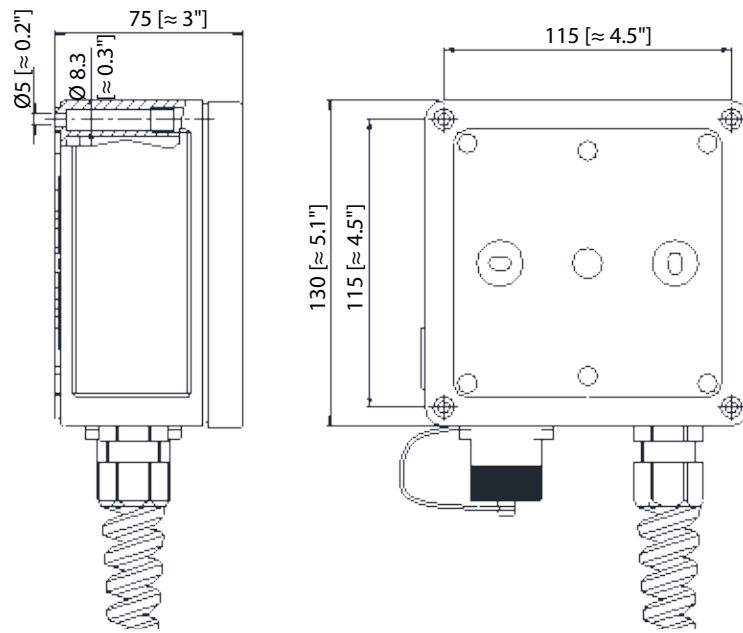
The temperature controller including plug connection is available in two power versions. The standard controller TRD-H1 can be used up to 10 A and the TRD-H3 up to 20 A. Both versions are equipped with a hybrid relay, a combination of a mechanical relay and a semiconductor switch. The TRD-H1 has a 7-pin and the TRD-H3 a 5-pole multi-pin socket.

The temperature sensor input is designed for PT-100 sensors and is equipped with a sensor breakage protection.

The user interface of the temperature controller consists of a display with LED indicators and three operating buttons. During operation the display shows the actual measured temperature. The buttons are used to adjust the required operating temperature.

The temperature controller has a transparent cover to avoid any unintended adjustments of the set values. With the transparent cover, the setpoint adjustment and switching function can be checked at any time.

Technical specifications and illustrations are without obligation, subject to modifications. 06.20 - 1.01.02

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Temperature Controller series TRD-H

Dimensions in mm [Inches]

Technical Data

Temperature controller	TRD-H1	TRD-H3
Part No.	03B7100	03B7110
Switching capacity relay K1	10 A	20 A
Adjustable temperature range	0 to +390 °C [32 to 734 °F] (adjustable)	
Display range/Resolution	-50 to +400 °C [-58 to 752 °F]	
Accuracy	± 1K, ± 2 Digits (-50 to 400 °C [-58 to 752 °F])	
Display indicator	LED, red, 11 mm	
Control type	On-off controller	
Alarmrelais K2	8 A/max. 250 VAC	
Temperature sensor input	PT100 DIN; 2-wires with sensor breakage protection	
Ambient temperature	-25 to +55 °C [-13 to 131 °F]	
Storage temperature	-30 to +60 °C [-22 to 140 °F]	
Plug for heated gas sample line	7-pin socket: switching power supply voltage and PT100-Sensor	5-pin socket: switching power supply voltage and PT100-Sensor
Electrical connections	2.5 m [≈ 8.2 ft] connection cable with 1.5 mm² cross section, power plug	2.5 m [≈ 8.2 ft] connection cable with 2.5 mm² cross section, no power plug
Power consumption	Max. 5 W	
Power supply	90 to 260 V AC, 50/60 Hz	
Housing type/International protection type	Wall mount housing/IP 66 EN60529	
Housing material	Polycarbonate (PC)	
Dimensions in mm [Inches]	See drawing	
Weight	1.2 kg [≈ 2.65 lbs]	

Option	TRD-H1	TRD-H3
Part No. 03B7099	Power supply of the portable gas sample probe PSP 4000	