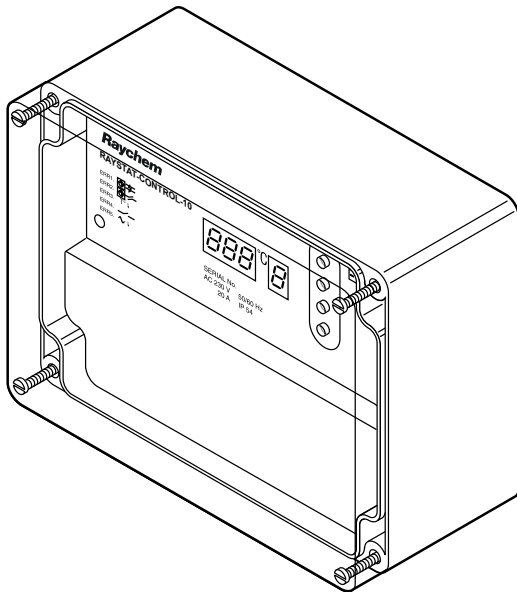


# **Raychem** RAYSTAT-CONTROL-10

## SURFACE SENSING PROGRAMMABLE THERMOSTAT WITH ALARM RELAY



The RAYSTAT-CONTROL-10 surface sensing thermostat is designed to provide user friendly measurement and control for heating cables. The thermostat has a 25 A control relay (that can be arranged to be volt free) and a 2 A volt free SPDT alarm relay.

Parameter and eventual alarm conditions are shown on the digital display and settings can be programmed easily, even without power supply.

The RAYSTAT-CONTROL-10 thermostat is supplied with a Pt100 sensor. This sensor has a 3 m long silicone extension cable giving freedom to locate the electronics remote from the sensor.

Two M25 entries allow for the power cable and heating cable to be connected directly into the unit. The units can be mounted on the pipe using the SB-100 or SB-101 support bracket.

### GENERAL

Application	Surface sensing
Area of use	Ordinary area (indoors, outdoors) Sensing in zone 1 or zone 2 possible with MONI-PT100-EXE (seperately available)
Ambient operating temperature range	-20°C to +40°C
Supply voltage (nominal)	230 V +10% -10%, 50/60 Hz
Internal power consumption	≤ 14 VA

### ENCLOSURE

	IP65
Base and lid	Grey polycarbonate base Transparent lid
Lid fixing	4 captive screws
Entries	2 x M25, 1 x M20, 1 x M16 Direct entry of heating cable into unit with M25 connection kit
Gland plug	1 x M20

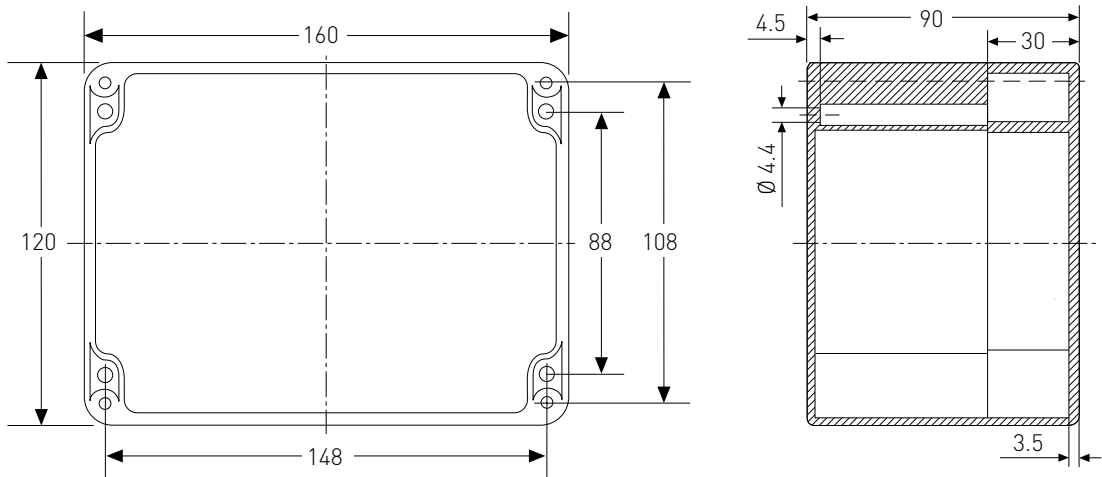
### APPROVALS



(Russia, Kazakhstan, Belarus)

For other countries contact your local Pentair representative.

DIMENSIONS (IN MM)



TEMPERATURE SENSOR

Type	3-wire Pt 100 according to IEC Class B
Maximum exposure temperature	200°C
Area of use	Ordinary area

Sensor can be extended with a 3-wire shielded cable of max. 20 Ω per conductor (max. 150 m with a 3 x 1.5 mm<sup>2</sup> cable). Sensing in hazardous area zone 1 or zone 2 can be done with MONI-PT100-EXE. The sensor cable should be shielded if it is laid in cable ducts or in the vicinity of high-voltage carrying cables. The shield of the extension cable should be grounded at the controller end only.

OUTPUT RELAYS

Control relay	Single pole single throw relay, rating: 25 A at 250 Vac
Alarm relay	Single pole double throw relay, rating: 2 A at 250 Vac, voltfree

PROGRAMMABLE PARAMETER SETTINGS

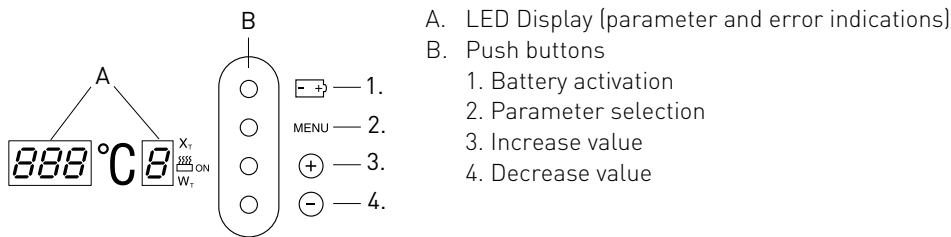
Temperature setting	0°C to +150°C
Hysteresis	1 K to 5 K
Low Temperature Alarm	-40°C to +148°C
High Temperature Alarm	+2°C to +150°C or switched OFF
Heater Operation if Sensor Error	ON or OFF
Volt Free Operation	YES or NO

Parameters can be programmed without power supply (internal battery) and parameters are stored in non-volatile memory.

DIAGNOSED ALARMS

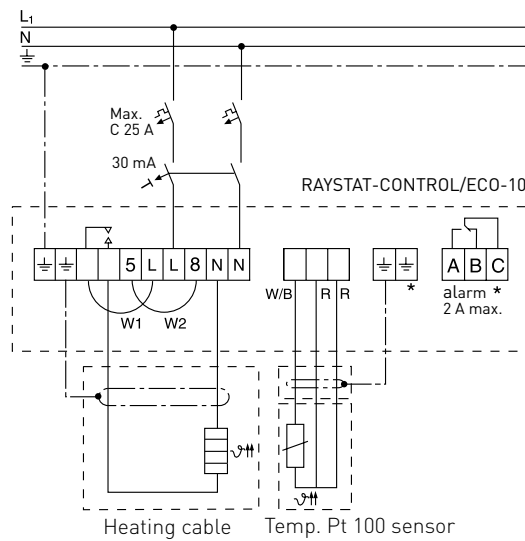
Sensor errors	Sensor short/Sensor open circuit
Low temperature	High temperature/Low temperature
Voltage errors	Low supply voltage/Output voltage fault

DISPLAY LAYOUT

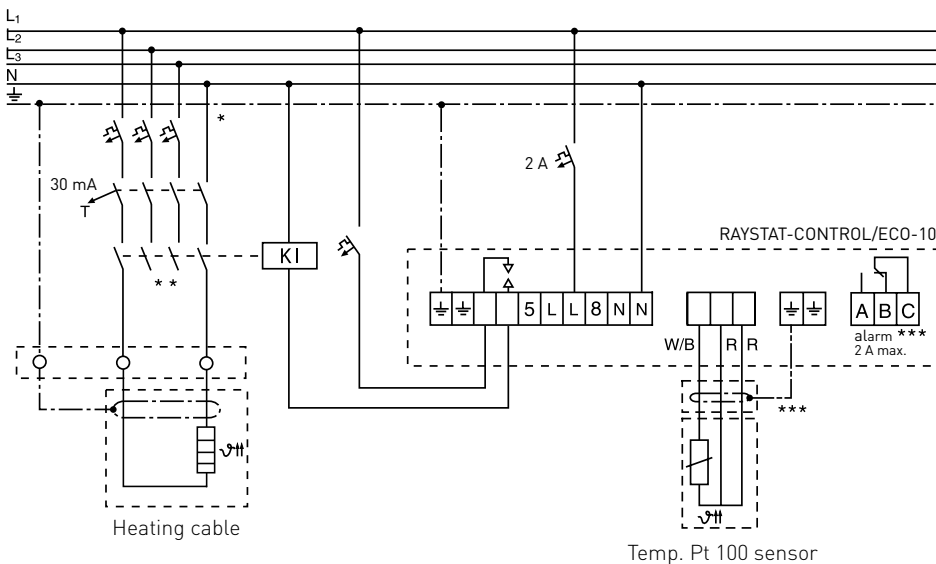


## CONNECTION DETAILS

### Normal operation



### VOLTAGE FREE OPERATION: REMOVE LINKS W1 AND W2



- \* Electrical protection by circuit-breaker may be needed for local circumstances, standards and regulations.
- \*\* Depending on the application, one- or three-pole circuit-breakers or contactors may be used.
- \*\*\* Optional

### CONNECTION TERMINALS

Supply	3 terminals for 0.75 mm <sup>2</sup> to 4 mm <sup>2</sup>
Pt 100 connection	4 terminals for 0.75 mm <sup>2</sup> to 2.5 mm <sup>2</sup>
Control relay connection	3 terminals for 0.75 mm <sup>2</sup> to 4 mm <sup>2</sup>
Alarm relay connection	3 terminals for 0.75 mm <sup>2</sup> to 2.5 mm <sup>2</sup>

### MOUNTING METHOD

Support bracket	Surface mounting with 4 fixing holes on 148 x 108 mm centres, M4 clearance SB-100, SB-101
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### ORDERING DETAILS

Part description	RAYSTAT-CONTROL-10
PN (Weight)	828810-000 0.8 kg)

### ACCESSORIES

PA Reducer	Reducer M25 (M)/M20 (F)
PN	184856-000