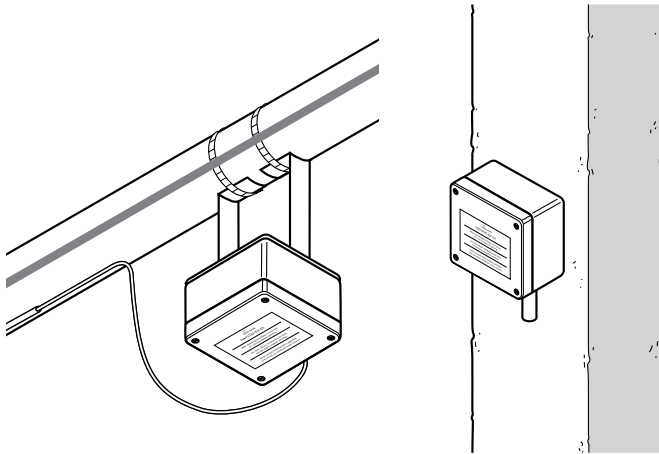


# RAYSTAT-EX-03 AND RAYSTAT-EX-04



**RAYCHEM**

## SURFACE AND AMBIENT SENSING, ELECTRONIC



These electronic surface sensing and ambient thermostats provide accurate temperature control for heating cables.

The units can be supplied at nominal voltages of either 110 V 50/60 Hz or 230 V 50/60 Hz and have a double pole switch rated at 16 A. The switch contacts can be arranged to be volt free. Temperature setting is accurate via digital thumb wheel switches inside the enclosure.

The surface sensing version is supplied with a Pt 100 sensor and a 2 m long stainless steel sheathed extension cable giving freedom to locate the electronics remote from the sensor. The ambient version is supplied with a local Pt 100 sensor and a wind shield.

The enclosure is manufactured from high impact resistant glass filled polyester offering IP66 protection.

For pipe temperatures up to 215°C, the units can be mounted on the pipe using a support bracket.

### APPLICATION

**nVent RAYCHEM RAYSTAT-EX-03**

**nVent RAYCHEM RAYSTAT-EX-04**

Surface sensing

Ambient sensing

### THERMOSTAT


Area of use

Hazardous area: Zone 1 or Zone 2 (Gas) or Zone 21 or Zone 22 (Dust) Ordinary

### APPROVALS CERTIFICATION

Baseefa11ATEX0071X

IECEx BAS 11.0036X

 II 2 GD

When the unit is powered with a supply voltage  $\geq 99$  and  $\leq 230$  Va.c.

Ex e mb ia IIC T6 Ta  $-50^{\circ}\text{C}$  to  $+60^{\circ}\text{C}$  Gb

Ex tb IIIC T85°C Ta  $-50^{\circ}\text{C}$  to  $+60^{\circ}\text{C}$  Db IP66

When the unit is powered with a supply voltage  $> 230 \leq 253$  Va.c.

Ex e mb ia IIC T5 Ta  $-50^{\circ}\text{C}$  to  $+60^{\circ}\text{C}$  Gb

Ex tb IIIC T100°C Ta  $-50^{\circ}\text{C}$  to  $+60^{\circ}\text{C}$  Db IP66



TC RU C-BE.ИМ43.В.01764 000 "ТехИмпорт"

1Ex e mb ia IIC T5 Gb X

Ex tb IIIC T100°C Db X

Ta  $-50^{\circ}\text{C}$ ... $+60^{\circ}\text{C}$  IP66

Made in GB

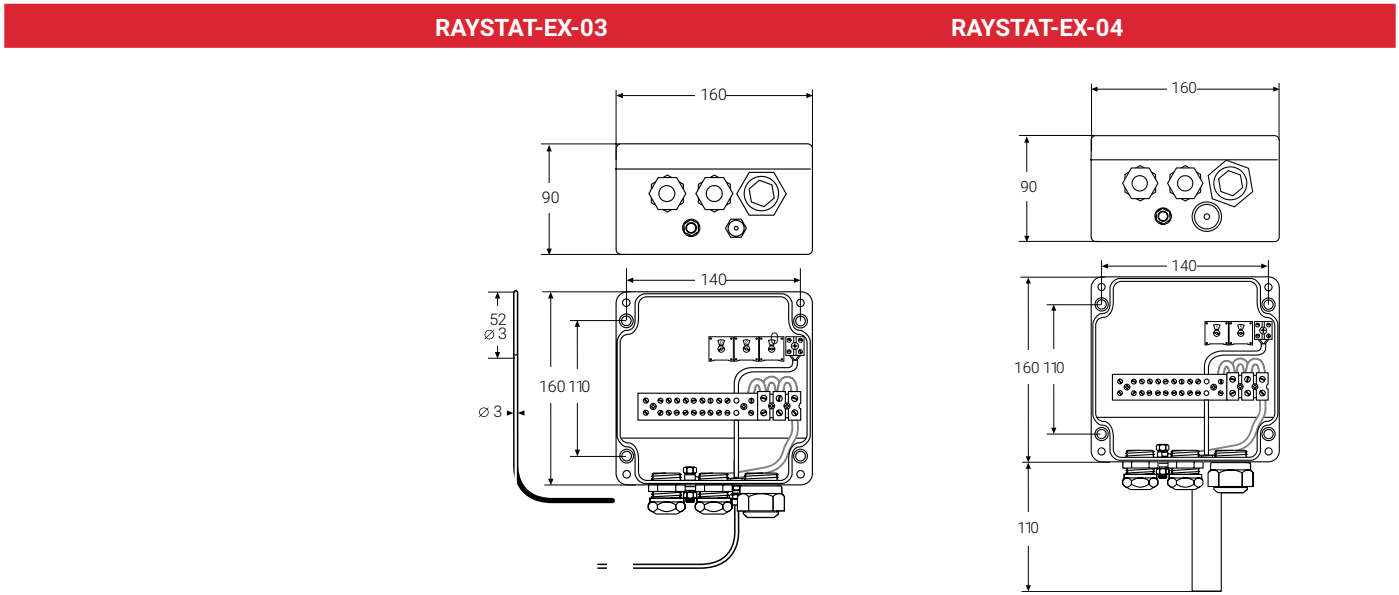
### PRODUCT SPECIFICATION

Temperature range	0°C to 499°C	0°C to 49°C
Ingress protection	IP66	IP66
Switching accuracy	$\pm 1$ K at 5°C $\pm 1\%$ of setpoint above 100°C	$\pm 1$ K at 5°C
Switching differential (Hysteresis)	$\approx 1^{\circ}\text{C}$ at 100°C $\approx 2^{\circ}\text{C}$ at 200°C $\approx 5^{\circ}\text{C}$ at 499°C	$\approx 1^{\circ}\text{C}$
Output relay	Dual pole change over type (DPDT) (optional volt free)	Dual pole change over type (DPDT) (optional volt free)

**PRODUCT SPECIFICATION (CONTINUED)**

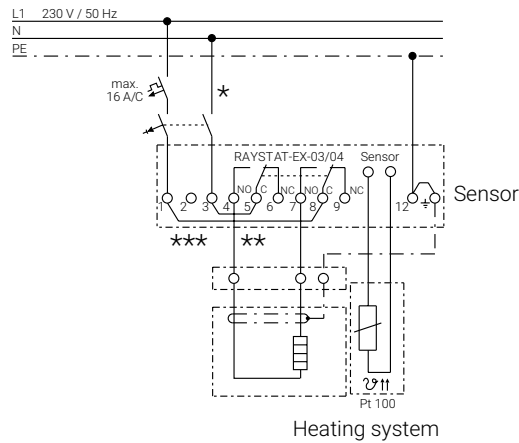
Switching capacity	16 A 110 Vac ±10% 50/60 Hz 16 A 230/253 Vac ±10% 50/60 Hz resistive load	16 A 110 Vac ±10% 50/60 Hz 16 A 230/253 Vac ±10% 50/60 Hz resistive load
Ambient temperature range	-50°C to +60°C	-50°C to +60°C
Supply voltage	110 Vac ±10% 50/60 Hz 230/253 Vac ±10% 50/60 Hz	110 Vac ±10% 50/60 Hz 230/253 Vac ±10% 50/60 Hz
Internal power consumption	110 Vac ~ 4 VA, 230/253 Vac ~ 3 VA	
Terminal size	max. 4 mm <sup>2</sup>	max. 4 mm <sup>2</sup>

**DIMENSIONS (IN MM)**



**TYPICAL WIRING DIAGRAM FOR DIRECT SWITCHING**

- \* Circuit breaker configurations may vary according to local standards/requirements
- \*\* Link 1-8 and/or 3-5 can be removed to provide potential-free contacts
- \*\*\* Terminal 2: 110 Vac input terminal



Cable entries	2 x M20 glands (cable Ø 7.5 – 13 mm) 1 x M25 with M25(M)/M20(F) adaptor and (M20) plug	2 x M20 glands (cable Ø 7.5 – 13 mm) 1 x M25 with M25(M)/M20(F) adaptor and (M20) plug
Sensor	2 wire Pt 100, stainless steel sensor, 2 m long	2 wire Pt 100, stainless steel sensor, complete with wind shield

**MOUNTING METHOD**

nVent RAYCHEM support bracket SB-100 or SB-101, SB125 or surface mounting with 4 fixing holes on 110x140 mm centres	nVent RAYCHEM support bracket SB-100 or SB-101, SB125 or surface mounting with 4 fixing holes on 110x140 mm centres
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**ORDERING DETAILS**

Part Description	RAYSTAT-EX-03	RAYSTAT-EX-04
PN (Weight)	333472-000 (3.0 kg)	462834-000 (3.1 kg)

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