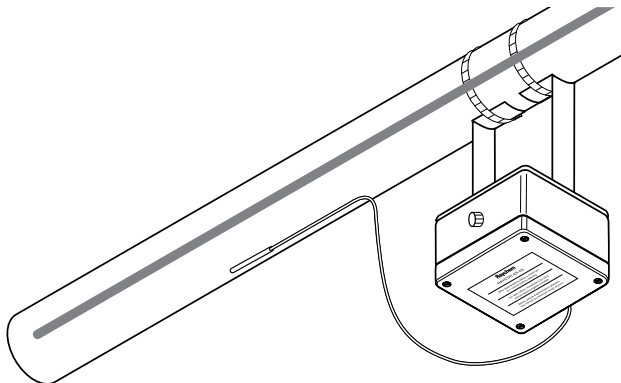


Raychem ETS-05

SURFACE SENSING ELECTRONIC THERMOSTAT



PRODUCT OVERVIEW


The Raychem ETS-05 electronic surface sensing thermostat provides accurate temperature control for heating cables. The ETS-05 is available in two versions. The ETS-05-L2-E is for temperatures up to 199°C, while the ETS-05-H2-E can be used for temperatures up to 499°C. The maximum nominal load is 32 A for both thermostats. Temperature setting is accurate via digital rotary switches inside the enclosure.

The ETS-05 has a LED indicator which indicates the status of the thermostat (powered on/off), the status of the heat-tracing cable (powered on/off) and the status of the sensor. In case of sensor failure the thermostat can switch to an on or off state, depending upon the users requirement.

PRODUCT CHARACTERISTICS

	ETS-05-L2-E	ETS-05-H2-E
Application	Surface sensing	Surface sensing
Area of use	Hazardous area: Zone 1 or Zone 2 (Gas) or Zone 21 or Zone 22 (Dust) Ordinary	

APPROVALS CERTIFICATION

Raychem – ETS-05 Electronic Thermostat  II 2(1)G II 2D
 Ex e ia mb (Ga) IIC T5 Gb
 Ex tb IIIC T100°C Db
 Ta-40 to +60°C Supply = 99-121V (ETS-05-x1-x) or 195-230V (ETS-05-x2-x)
 Maximum switched current 32A Resistive
 IECEx BAS 13.0071
 Baseefa13ATEX0137
 Um=253V
 Max. Current = 0.5A
 Prospective short circuit current 1500A



TC RU C-BE.ME92.B.00480
 Ex e mb ia [Ga] IIC T5 Gb
 Ex tb IIIC T100°C Db IP66

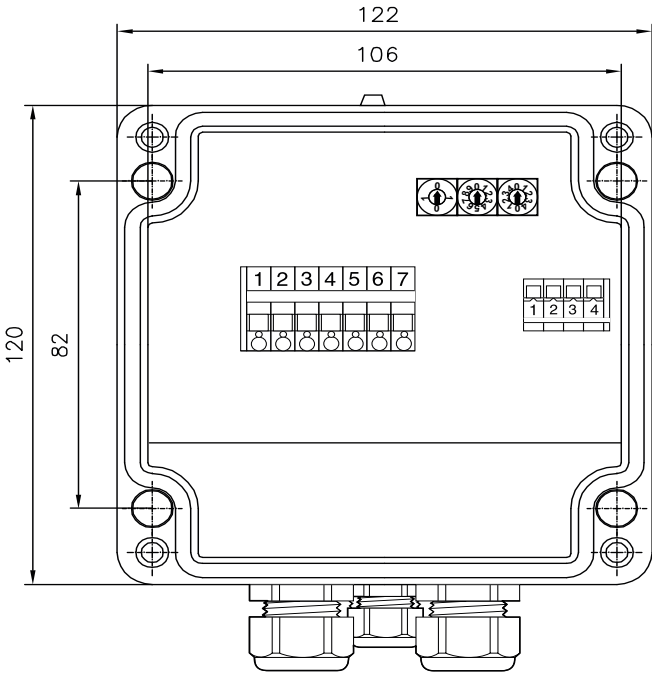
PRODUCT SPECIFICATION

Temperature setpoint range	0°C to 199°C	0°C to 499°C
Temperature measurement range	-55°C to 260°C	-55°C to 585°C
Maximum sensor lead resistance	20 Ohm	20 Ohm
Ingress protection	IP66	IP66
Switching accuracy	±1 K at 5°C	±1 K at 5°C, 2°C at 499°C
Switching differential (Hysteresis)	≈ 3°C	≈ 3°C
Output relay	Single Pole change over type (SPST)	Single Pole change over type (SPST)
Switching capacity	32 A resistive load	32 A resistive load
Ambient temperature range	-40°C to + 60°C	-40°C to + 60°C
Supply voltage	230 V +10% / -15% 50/60 Hz	230 V +10% / -15% 50/60 Hz
Internal power consumption	3 VA	3 VA
Terminal size	max. 6 mm ²	max. 6 mm ²
Cable entries	2 x M25: 1 x M25 gland for power cable in 1 x M25 rain plug for heating cable out	2 x M25: 1 x M25 gland for power cable in 1 x M25 rain plug for heating cable out
Sensor	M16 gland with 3 wire PT100 flexible sensor, 2 m long	M16 gland with 3 wire PT100, stainless steel sensor, 2 m long,

LED STATUS INDICATIONS

Green: ETS-05 powered on, heat-tracing cable off	Green: ETS-05 powered on, heat-tracing cable off
Yellow: ETS-05 powered on, heat-tracing cable on	Yellow: ETS-05 powered on, heat-tracing cable on
Red flashing: Sensor failure - controller in fail safe mode	Red flashing: Sensor failure - controller in fail safe mode

DIMENSIONS (IN MM)

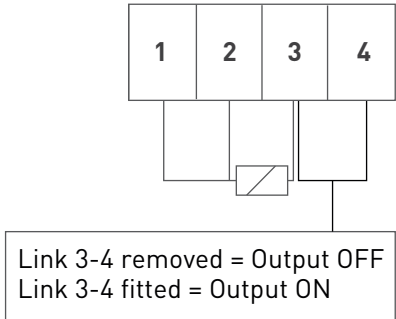


Power Terminals

1	2	3	4	5	6	7
Line Out	Neutral Out	Neutral Supply	230V Supply	Earth	Earth	Earth

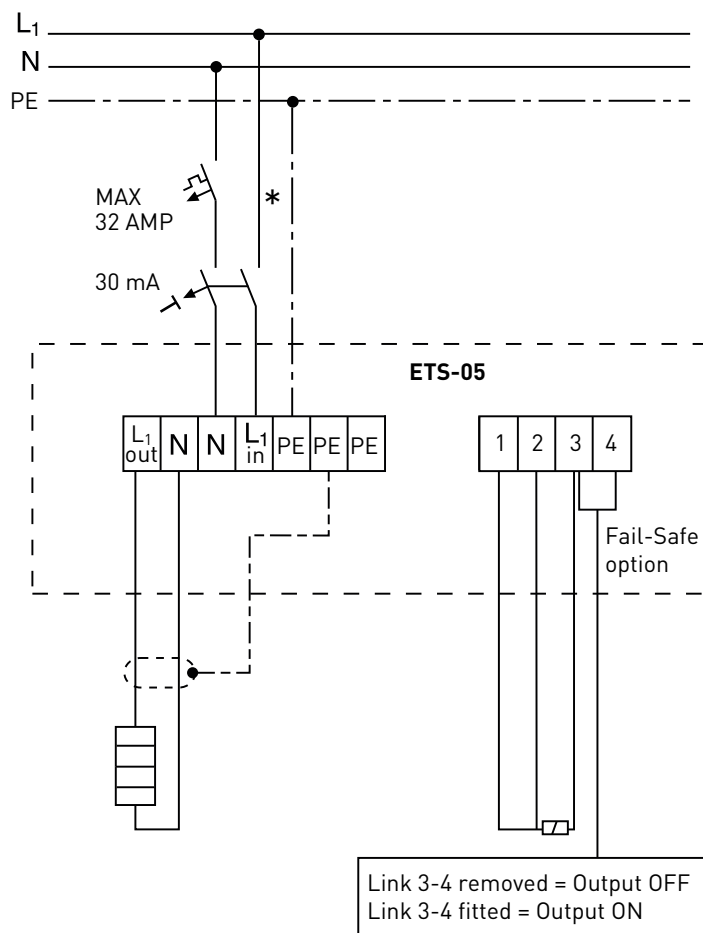
Terminals 2 and 3 are joined electrically
Terminals 5, 6 and 7 are joined electrically

Sensor/Failure Mode Select Terminals



Terminals 1 to 3 allow for the connection of a three wire PT100 sensor.
Terminals 3 to 4 allow the user to select the default heating status on sensor error.
Without a link fitted the heating will turn OFF if a sensor error is detected (default)
With a link fitted the heating will turn ON if a sensor error is detected

TYPICAL WIRING DIAGRAM FOR DIRECT SWITCHING



MOUNTING METHOD

Support bracket SB-100, SB-101, SB-110, SB-111, SB-130 or surface mounting with 4 fixing holes on 106 x 82 mm centres

Support bracket SB-100, or SB-101, SB-110, SB-111, SB-130 or surface mounting with 4 fixing holes on 106 x 82 mm centres

ORDERING DETAILS

Product Name	ETS-05-L2-E	ETS-05-H2-E
Part number	1244-014367	1244-014368



WWW.PENTAIRTHERMAL.COM

EUROPE, MIDDLE EAST, AFRICA

Tel: +32.16.213.511
Fax: +32.16.213.603
thermal.info@pentair.com

UNITED KINGDOM

Tel: 0800 969 013
Fax: 0800 968 6241
salesthermaluk@pentair.com

IRELAND

Tel: 1800 654 241
Fax: 1800 654 240
salesie@pentair.com

Pentair is owned by Pentair or its global affiliates. All other trademarks are the property of their respective owners. Pentair reserves the right to change specifications without prior notice.

© 1998-2016 Pentair.