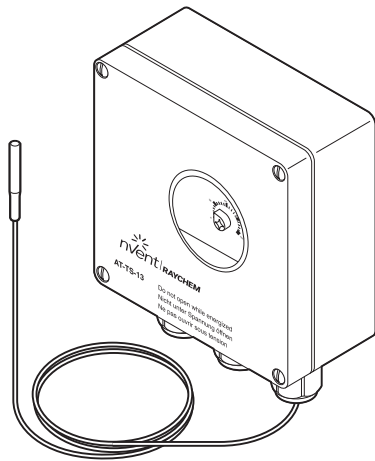


# AT-TS-13 and AT-TS-14

## CONNECT AND PROTECT

### Surface sensing thermostat, electronic

#### PRODUCT OVERVIEW

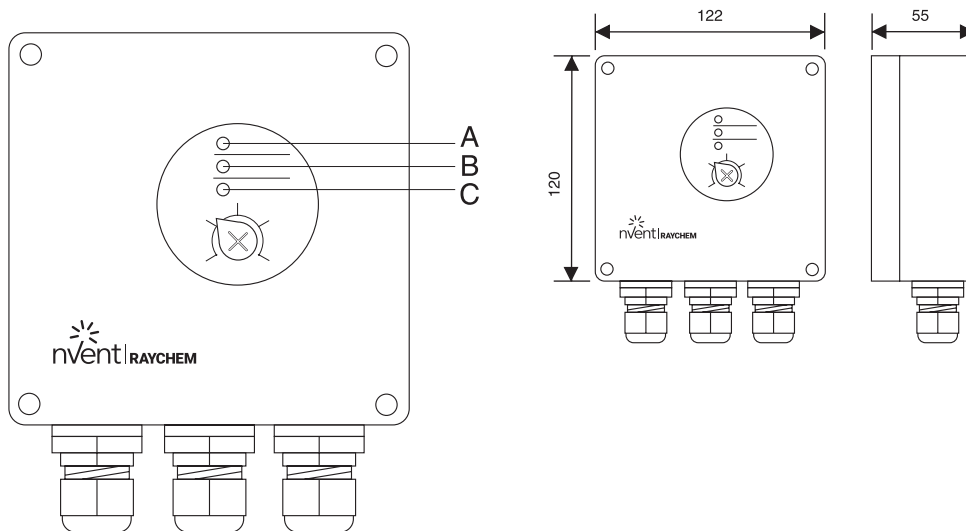


nVent RAYCHEM AT-TS thermostats provide temperature control in safe area. The temperature set point can be checked through a window in the lid. LED's are providing an indication when cables are energized (Heating ON) or when the temperature sensor is defect (sensor break or sensor short-circuit).

The temperature sensor has a length of 3 meter and can be shortened for ambient sensing operating. Direct connection of the heating cable is possible. Connection kits need to be ordered separately. The thermostat is available in 2 temperature ranges.

#### PRODUCT SPECIFICATIONS

##### Dimensions (in mm)



- A Green LED Heating cable on
- B Red LED Sensor break
- C Red LED Sensor short-circuit

## Technical details

	nVent RAYCHEM AT-TS-13	nVent RAYCHEM AT-TS-14
Supply voltage	230 Vac +10% -15% 50/60 Hz	230 Vac +10% -15% 50/60 Hz
Max. switching current	16 A, 250 Vac	16 A, 250 Vac
Max. conductor size	2.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>
Switching differential	0.6 K to 1 K	0.6 K to 1 K
Switching accuracy	± 1 K at 5°C (calibration point)	2 K at 60°C (calibration point)
Switch type	SPST (normally open)	SPST (normally open)
Adjustable temperature range	-5°C to +15°C	0°C to +120°C

## Housing

Temperature setting	inside	inside
Exposure temperature	-20°C to +50°C	-20°C to +50°C
Ingress protection	IP65 according to EN 60529	IP65 according to EN 60529
Entries	1 x M20 for supply cable (Ø 8-13 mm) 1 x M25 for heating element (Ø11-17 mm) 1 x M16 for the sensor	1 x M20 for supply cable (Ø 8-13 mm) 1 x M25 for heating element (Ø 11-17 mm) 1 x M16 for the sensor
Material	ABS	ABS
Lid fixing	nickel-plated quick release screws	nickel-plated quick release screws
Mounting	SB-110 and SB-111 or surface mount	SB-110 and SB-111 or surface mount

## Temperature sensor

	AT-TS-13	AT-TS-14
Type	PTC KTY 83-110	PTC KTY 83-110
Length sensor cable	3 m	3 m
Diameter sensor cable	5.5 mm	5.5 mm
Diameter sensor head	6.5 mm	6.5 mm
Sensor material	PVC	Silicone
Max. exposure temperature sensor cable	80°C	160°C

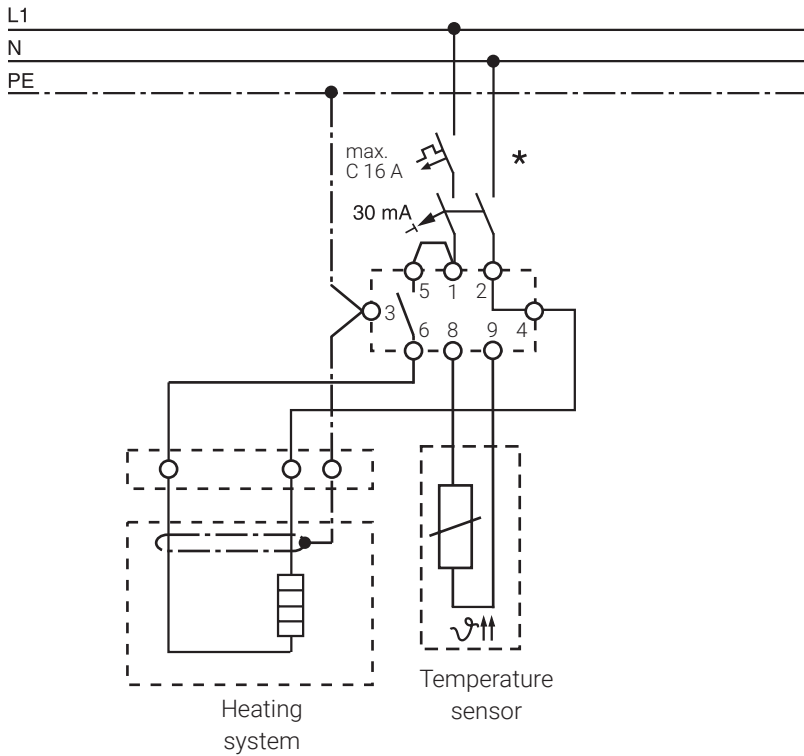
The sensor cable may be extended to a maximum of 100 m using a 2-conductor wire with a cross-section of 1.5 mm<sup>2</sup>. The sensor cable should be shielded if it is laid in cable ducts or in the vicinity of high-voltage carrying cables. The shield of the extension cable should be grounded at the controller end only.

## Output parameters

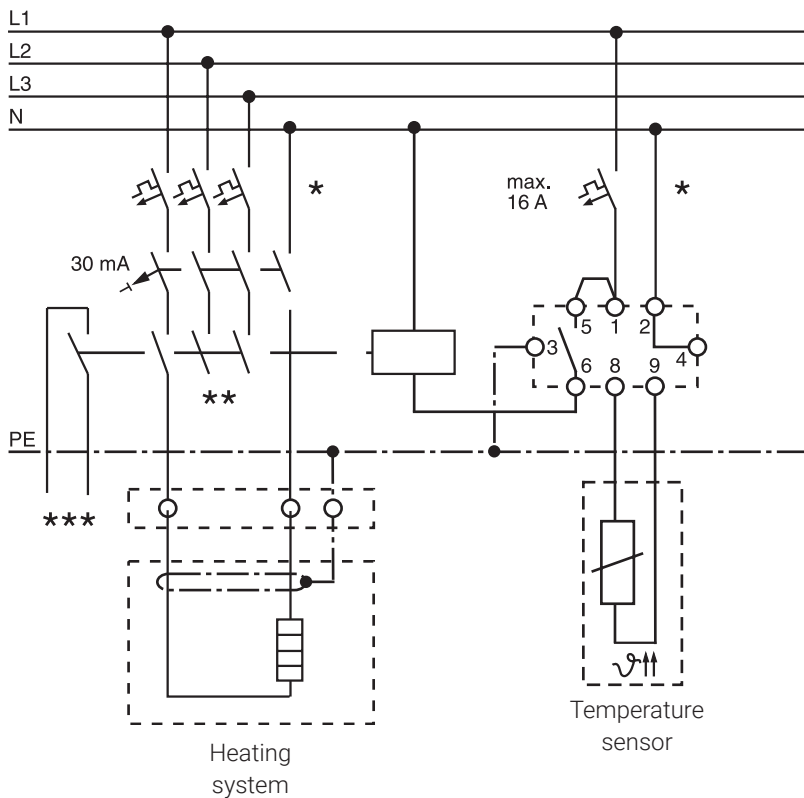
Alarm on LED	Green LED: Heating Cable ON Red LED: Sensor break Red Led: Sensor short-circuit	Green LED: Heating Cable ON Red LED: Sensor break Red Led: Sensor short-circuit
--------------	---	---

## Wiring diagram for thermostat

### AT-TS-13 or AT-TS-14



### AT-TS-13/14 with contactor



\* Two- or four-pole 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: Potential-free circuit-breaker for connection to the BMS

## APPROVALS

For use in ordinary area (indoors & outdoors)

### Product certification



## ORDERING INFORMATION

Part description	AT-TS-13	AT-TS-14
PN (Weight)	728129-000 (0.44 kg)	648945-000 (0.44 kg)

### Accessories

PA Reducer	Reducer M25 (M)/M20 (F)	Reducer M25 (M)/M20 (F)
PN	184856-000	184856-000
Spare temperature sensor (AT-TS-13 and AT-TS-14)	HARD-69 (Max. exposure temperature 160°C)	HARD-69
PN (Weight)	133571-000 (180 g)	133571-000 (180 g)

### North America

Tel +1.800.545.6258  
Fax +1.800.527.5703  
thermal.info@nVent.com

### Europe, Middle East, Africa

Tel +32.16.213.502  
Fax +32.16.213.604  
thermal.info@nVent.com

### Asia Pacific

Tel +86.21.2412.1688  
Fax +86.21.5426.3167  
cn.thermal.info@nVent.com

### Latin America

Tel +1.713.868.4800  
Fax +1.713.868.2333  
thermal.info@nVent.com



Our powerful portfolio of brands:

**CADDY ERICO HOFFMAN RAYCHEM SCHROFF TRACER**