

## Din rail mountable thermostat for roof & gutter de-icing and snow melting heating cables

### PRODUCT OVERVIEW



The nVent RAYCHEM GM-TA thermostat is designed for operation with nVent RAYCHEM roof & gutter de-icing and snow melting heating cables with lengths up to 30 m.

It is an electronic thermostat with double temperature setpoint. The control relay switches the heating on when the actual ambient temperature is between the two temperature setpoints. It is compatible with nVent RAYCHEM self-regulating heating cable

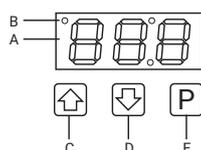
- GM-2X
- GM-2XT
- Frostop-Black

Or nVent RAYCHEM Constant Wattage heating cable GM-2CW

### PRODUCT FEATURES

- Electronic temperature control with ambient temperature sensor (sensor for outdoor installation)
- DIN-Rail mountable (35 mm) for panel installation
- Easy-to-read digital display for temperature and alarm
- Double temperature set points
- Post heating time from 30 min up to 3 hours selectable
- Read-out of actual ambient temperature
- Switch over alarm relay

### DISPLAY



A-LED Display (Temperature and Alarm)

B-Heating cable operation

C-Increase value (increase temperature set point)

D-Reduce value (reduce temperature set point)

E-Program mode selection ON/OFF/Test and parameter settings

## TECHNICAL DATA

Supply voltage	230 Vac, +10%/–10%, 50 Hz
Relay control heating cable	potential-free (max 230 Vac +10%), max 16 A (resistive load)
Relay alarm	potential-free (max 230 Vac +10%), switch-over contact, max 8 A
Power consumption	max 5 VA
Terminal size	max 2,5 mm <sup>2</sup> , screwed
Parameter settings	Programmable in non-volatile memory
Storage temperature	–20°C to +50°C
Switching hysteresis	+/–1K
Ambient temperature-range operation	–25°C to +40°C
Accuracy	+/– 1,5 K including temperature sensor

## PROGRAMMABLE PARAMETERS

		Default factory settings
2 temperature setpoints	Range I: 0°C to +6°C Range II: –25°C to –5°C	2°C –10°C
Post heating time	0 to 3 hours	0,5 hours
Sensor adjustment	–10 K to +10 K	0 K
Operating modus	On: normal operation : thermostat active Off: relay off (open) Test: 30 minutes control relay on (closed)	

## ERROR MESSAGES BY MONITORING

E01	Sensor defect (short circuit or open loop)
E02	Internal error

## HOUSING

Color	Black with red front
Dimensions	51,5 mm x 87, 5 mm x 58 mm W/H/D
Material	ABS
IP rating	IP 20 (IP 30 in panel)
Installation	DIN rail mountable 35 mm
Minimum installation temperature	5°C

## TEMPERATURE SENSOR (GM-TA-AS (PCN 1244-017965) included with GM-TA)

Mounting	Wall mounting / Outdoor
Type	Sensor type 202AT +/-1% NTC 2 KOhm@25°C
Terminals	2x 1,5mm <sup>2</sup>
Enclosure material	Polycarbonate
IP rating	IP 65
Enclosure dimensions	50 mm x 52 mm x 26 mm (W/H/D)
Gland	M16 x 1,5
Exposure temperature	–30°C to +40°C
Accuracy	+/–1 K

## APPROVALS



## SYSTEM INFORMATION

nVent RAYCHEM GM-TA thermostat is designed for use with heating cables GM-2X(T), Frostop - Black , GM-2CW. Maximum circuit length is limited to 30 m.

**ORDERING INFORMATION**

Product: GM-TA  
 PCN: 1244-017783

**ACCESSORIES**

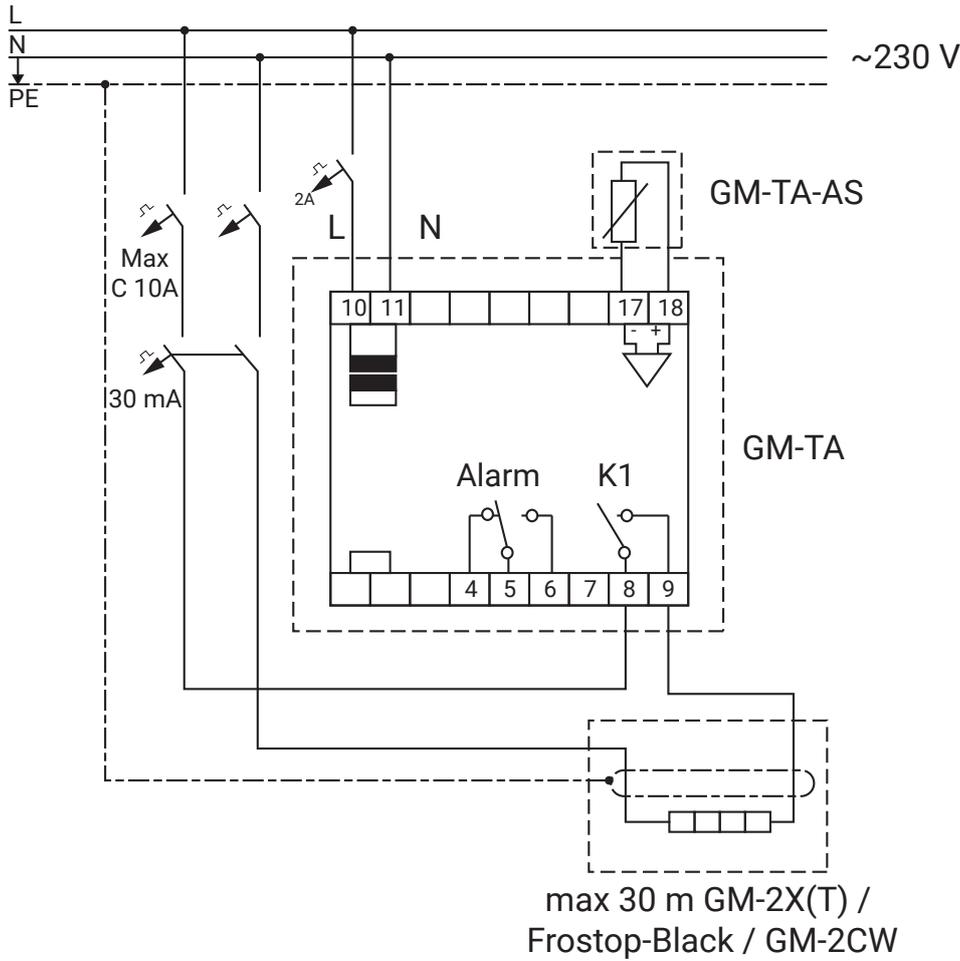


GM-TA-AS (PCN 1244-017965) Spare sensor: sensor type 202AT +/-1% NTC 2 KOhm@25°C



GM-TA-OUTDOOR Box (PCN 1244-017966): Plastic enclosure for outdoor-installation of GM-TA thermostat

**ELECTRICAL SCHEME**



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