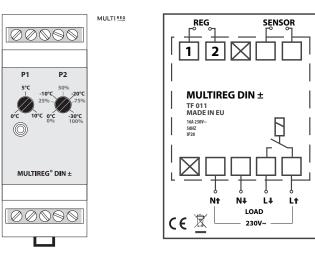
## MULTIREG DIN±



## Installers manual



Multireg DIN± is a thermostat designed for controlling heating cables in gutters, steps, walkways, driveways and other outdoor areas, in order to prevent ice buildup. May also be used for frost protection of water pipes.

## THERMOSTAT FEATURES

- External sensor
- Power regulation 0-100%

## MODE 1: DIN± THERMOSTAT

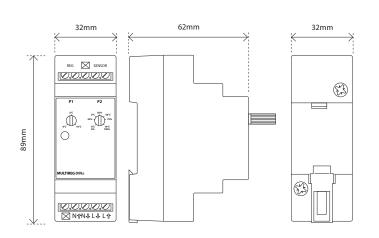
Ice is formed only within a certain temperature range, and by using a heating cable this ice formation can be prevented. The Multireg DIN± thermostat is designed to control the heat supply only within the critical range, so that de-icing is achieved with the least possible use of energy. The critical temperature range may vary from place to place. Therefore, the thermostat is equipped with manual start and stop temperature settings. The thermostat is placed inside, e.g. in the fuse box, and the sensor outside, e.g. on a wall.

After the thermostat has been installed, you may adjust the interval set points. For example, set P1 temperature to  $+1^{\circ}$ C and P2 temperature to  $-7^{\circ}$ C. If ice still forms and the green LED is lit, the P2 setting should be turned to a lower value until the red LED turns on. After a few minor adjustments, a setting is reached where no ice/icicles are formed, and the system controls itself with minimal energy consumption. If icicles are formed while the red LED is lit, the heat supply may be low or interrupted. In case of sensor failure, the LED will flash red 4 x per second.

The thermostat must be connected to electrical systems in accordance with the provided wiring diagram. The thermostat must be connected to a residual current disrupter with a maximum trigger current of 30mA. The thermostat can withstand a load of max 16A/3600W at 230V. At higher loads, the thermostat must control a contactor. The thermostat does not have galvanic isolation between high current and low current. The sensor must therefore be regarded as live (230V) and must be installed in accordance with current requirements for high current installations.

## **MODE 2: POWER REGULATOR**

When connecting terminals 1 and 2 (REG), Multireg DIN± becomes a power regulator. P1 can be set between 0°C and 10°C. P2 can be set between 0-100%. This feature works well for frost protection of water pipes. The thermostat can for instance be set to switch on at 1°C, and the power level can be set according to local needs.



## MULTI **reg**

## PRODUCT INFO Multireg DIN±

#### FEATURES

- · Roof gutter thermostat
- · External outdoor sensor
- Power regulation 0 100%

## **TECHNICAL DATA**

| Rated voltage       | 230V 50/60Hz               |
|---------------------|----------------------------|
| Max. load           | 3600W/16A (resistive load) |
| Width               | 2 modules – DIN-rail       |
| Power consumption   | ~0,5W                      |
| Power regulator     | Time cycle 0 - 30 min      |
| Ambient temperature | -30°C to 60°C              |
| Temperature range   | -30°C to 10°C              |
| Hysteresis          | ±0,5°C                     |
| Sensor values       | 10°C 18,6 kΩ               |
|                     | 15°C 15,1 kΩ               |
|                     | 20°C 12,2 kΩ               |
|                     | 25°C 10,0 kΩ               |
| Included in package | Art. no. 54 301 07         |
|                     | Plastic cover for wall     |
| Size (LxWxD)        | 89 x 32 x 62mm             |
| IP Code             | IP 20                      |
|                     |                            |

## Approvals

EN 60730-1, EN 60730-2-9, EMC 2014/30/EU, RoHS 2011/65/EU LVD 2014/35/EU

CE

## VEDLIKEHOLD

The device is maintenance-free, but must never be covered.

| ART. NO.  | PRODUCT                            |
|-----------|------------------------------------|
| 54 301 66 | Multireg DIN± thermostat 3600W 16A |
| 54 301 76 | IceControl air sensor TF AIS       |

Thermo-Floor AS can not be held liable for typographical errors, other errors or omittances in our information.

> Product specifications may change without further notice.

All electrical installations must be carried out by a licensed electrician.

The product must be installed in accordance with national building codes and our installers manual.

# ThermoFloor

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