

**HVAC**CONTROLS & POWER

FLOOR HEATING

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HYDRONIC

# Thermostat for Heating Cable in Gutters



# **ETR**

- Electronic on/off control up to 16A / 3,600W.
- 3 LEDs show actual operation.
- Adjustable start/stop differential.
- Delivered incl. outdoor sensor.
- For DIN-rail mounting.

#### **Application:**

The ETR is a thermostat for economical control of de-icing cables in gutters in smaller buildings e.g. family houses.

Icicles are formed within certain temperature ranges, and to neutralize this, heating cables are used where there is a tendency for ice to form. The critical temperature may be different from one building to another, or one position to another.

The ETR is easy adjustable, and LED indicators assist in setting up the correct temperatures.

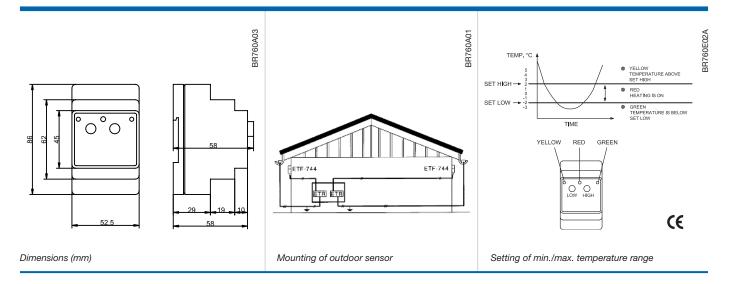
#### Thermostat control:

Type ETR is an electronic on/off thermostat with control of temperature by means of an NTC sensor. The heating output is switched on and off with a differential of only 0.4°C. Red LED indicates when heating is on.

#### PRODUCT PROGRAMME

| TYPE                       | PRODUCT   |
|----------------------------|---|
| ETR/F-1447A<br>ETR/F-1447P | Thermostat with relay SPST 16A, incl. outdoor sensor Thermostat with relay SPCO 10A, potential-free contact, incl. outdoor sensor |
| ACCESSORIES                |   |
| ETNK                       | Cover box for wall mounting   |
| ETF-744/99                 | Outdoor sensor  |
|                            |   |





#### Adjustment of the system:

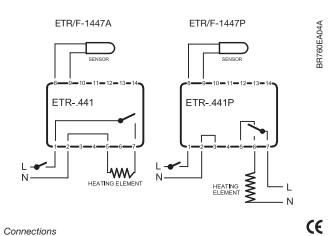
The system is installed as per the connection diagram. HIGH should be set to +2°C and LOW to -2°C.

When icing occurs, note which of the LEDs is energized:

- If Yellow LED is energized, turn HIGH up until Red LED is energized.
- If Green is energized, turn LOW down until Red LED is energized.

After a few adjustments the correct setting will be achieved, and no icing will occur, irrespective of how cold the temperature will be. The system will function automatically with the minimum consumption of energy.

**Note:** If icing occurs while the Red LED is energized, the heating is either insufficient, or is interrupted.



## TECHNICAL DATA

| 230V ±10% 50/60 Hz                      |
|---|
| ETR/F-1447A: SPST 16A, 3,600W           |
| ETR/F-1447P: SPCO potential-free 10A,   |
| max 2200W                               |
| 0.4°C                                   |
|   |
| * HIGH (max. temp.): +10/0°C            |
| LOW (min. temp.): 0/-10°C               |
| LOW ETR/F-1447A: 0/-15°C                |
| 3VA                                     |
| -20/+50°C                               |
| IP20                                    |
| 190g                                    |
| 86/52.5/58 mm                           |
| Yellow - The sensor temperature is      |
| above the selected temperature          |
| range.                                  |
| Red - The relay is ON.                  |
| Green - The sensor temperature is below |
| the selected temperature range.         |
|   |

#### **MOUNTING**

## **Mounting of Thermostat**

DIN-rail mounting in a switch board. A cover box for separate wall mounting is available.

#### **Mounting of Outdoor Sensor**

The sensor is mounted under the roof eaves.