450e Product Information TOW2- Series (T) Outdoor Temperature Passive Sensor



The TOW2-Series is designed to measure temperature in outdoor areas, plant rooms, cold stores, greenhouses, production plants and warehouses. The Temperature sensor is sealed in an external sensor pocket for a fast response of temperature changes. The temperature output is resistive, passive type.



Use

Compatible to all common HVAC DDC and Analog Controls systems, with/without Building Automation System

Temperature measuring in outdoor areas, stores, warehouses, production plants and greenhouses

Used in all common HVAC applications

Used in Commercial and Industrial Buildings

Features

Sensor with passive output

Stainless steel sensor pocket

Professional and practical product design, withstands rough environmental conditions

Easy to use, install and maintain

Product Range

| | Sensor Output | | | | | |
|---------|---------------|--------|--------|---------------|--------|--------|
| Model | PT100 | PT1000 | NTC10k | NTC10k Pre | NTC20k | Ni1000 |
| TOW2.BF | • | | | | | |
| TOW2.BG | | • | | | | |
| TOW2.BP | | | • | | | |
| TOW2.BQ | | | | • | | |
| TOW2.BR | | | | | • | |
| TOW2.BK | | | | | | • |

| | Sensor Specification | Measured | Temperature | |
|-------------------------|--------------------------|--|---|--|
| _ | | Sensor Characteristics | Passive | |
| <u>.</u> 5 | | Sensor Output (s) | See Product Range, Page 1 | |
| Sensor Specification | | Measuring Current | <1mA | |
| g g | | Accuracy | | |
| Sensor ecificat | | Type TOW2.BF/BG | \pm 0.3K @ 0 $^{\circ}\text{C}$ DIN EN 60751, class B | |
| ωğ | | Type TOW2.BP/BQ/BR | ± 0.5K @ 0°C | |
| () | | Type TOW2.BK | \pm 0.4K @ 0 $^{\circ}\mathrm{C}$ DIN EN 43760, class B | |
| | | Measuring Range (s) | -40°C+150°C | |
| | Electrical Information | Terminal Clamp | Screw terminal, max. 1.5mm ² | |
| | Mechanical Information | Sensor Pocket Diameter | 6mm | |
| | | Sensor Pocket Length | 35mm | |
| | | Cable Entry | M16, Ø6Ø8mm cables | |
| | | Sensing Element Position | external, top of the sensor pocket | |
| | User Interface | None | | |
| | Color and Materials | Housing Cover | White ABS, RAL9001 (Cream White) | |
| | | Housing Bottom | White ABS, RAL9001 (Cream White) | |
| _ | | Lock Screws | Zinc ZLO410, Fast Connectors 90° | |
| <u> </u> | | Cable Gland | White PA6, RAL9001 (Cream White) | |
| Technical Information | | Gland Rubber Seal | White TBS, RAL9010 (Pure White) | |
| Ĕ | Environmental Conditions | Operation Temperature | -25°C+70°C | |
| يَ | | Operation Humidity | 100% r.h., with condensation | |
| <u> </u> | | Transport Temperature | -35°C+70°C | |
| <u>a</u> | | Transport Humidity | < 90% r.h. | |
| <u>:</u> | Storage Temperature | | -10 °C+70 °C | |
| ڲ | | Storage Humidity | < 85% r.h., no condensation | |
| မ | Norms and Directives | IP- Rating | IP65 to IEC60529 | |
| - | | Safety Class | III to EN 60 730 | |
| | | Product Standard 1 | Automatic Electric. Controls for household and similar u | |
| | | RoHS Compatibility | RoHS 2011/65/EC | |
| | | Operation Climatic Condition | IEC 60 721-3-4 | |
| | | Operation Mechanical Condition | IEC 60 721-3-2 to class2M2 | |
| | | Transport to Climatic Condition | IEC 60 721-3-2 | |
| | | Transport Mechanical Condition | IEC 60 721-3-2 to class2M2 | |
| | | Storage Climatic Condition | IEC 60 721-3-1 | |
| | | Storage Mechanical Condition | IEC 60 721-3-1 to class2M2 | |
| | Terminal Connection | | | |
| onnection | | | | |
| ပိ | | <u>da loda (aldab</u> | | |
| | | 2 wire 3 wire 4 wire | | |
| | | Standard Option Option | | |
| | Accessories | Accessory not included in delivery | Sun/rain protection with 2 rawlplugs and 2 screws | |
| | Shipping & Handling | Minimum Order | 1 box with 2 pieces, multiple of 2 pieces | |
| 10 | Chipping & Handing | Product Dimension (L x W x H) / ~Weight | 110mm x 50mm x 45mm / 75gr. | |
| <u>.ĕ</u> | | Package Material | Rigid Cardboards Packaging | |
| Ē | | Transport and Storage dimension (L x W x H) / ~Weight | 195mm x 95mm x 65mm / 200gr. | |
| ₩ | | anoport and otorago annonation (E X ** X 11) / "Weight | 13311111 A 3311111 A 03111111 / 200gt. | |
| Miscellanies | Order Notes | Order Code | See Product Range, Page 1, e.g. TOW2.BF | |
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