

Duct Averaging Temperature Sensor

Active sensor (0 to 5/10 V) for measuring the averaging temperature in duct applications. NEMA 4X / IP65 rated enclosure. Supplied with one continuous sensing element across the whole length of the probe to ensure optimum accuracy and eliminate air stratification problems.



Type Overview

| Type | Output Signal Active Temperature | Probe Length |
|----------|----------------------------------|--------------|
| 22MT-524 | DC 0...5 V, DC 0...10 V | 10 ft [3 m] |
| 22MT-525 | DC 0...5 V, DC 0...10 V | 20 ft [6 m] |

Technical Data

| | | | | |
|------------------------|-----------------------------|--|----------------|---|
| Electrical Data | Power Supply DC | 15...24 V, ±10%, 0.4 W | | |
| | Power Supply AC | 24 V, ±10%, 0.8 VA | | |
| | Electrical Connection | removable spring loaded terminal block max. 11 GA [2.5 mm ²] | | |
| | Cable Entry | cable gland PG11 Ø6 to 10 mm, with strain relief Ø6 to 8 mm, 1/2" conduit adapter included | | |
| Functional Data | Multirange | 8 fields selectable | | |
| | Output Signal Active Note | output DC 0 to 5/10 V with jumper adjustable voltage output: min. 5 kΩ load | | |
| | Media | air | | |
| Measuring Data | Measured Values | temperature | | |
| | Measuring range temperature | Active sensor: range selectable Attention: max. measuring temperature is restricted by max. medium temperature (see Safety data) Setting range [°C] range [°F] Factory setting | | |
| | S0 | -50°C to 50°C | -30°F to 130°F | |
| | S1 | -10°C to 120°C | 0°F to 250°F | |
| | S2 | 0°C to 50°C | 40°F to 140°F | |
| | S3 | 0°C to 250°C | 30°F to 480°F | |
| | S4 | -15°C to 35°C | 0°F to 100°F | |
| | S5 | 0°C to 100°C | 40°F to 240°F | |
| | S6 | -20°C to 80°C | 40°F to 90°F | ✓ |
| | S7 | 0°C to 160°C | 0°F to 150°F | |
| | Accuracy temperature active | ±0.5 °C @ 21 °C | | |

| | | |
|--------------------|-------------------------------------|---|
| Materials | Cable Gland | PA6, black |
| | Housing | cover: lexan, Belimo orange NCS S0580-Y6OR base: lexan, Belimo orange NCS S0580-Y6OR seal: 0467 NBR70, black |
| Safety Data | Ambient Humidity | 85% RH non-condensing |
| | Ambient Temperature | -30°F to 120°F [-35°C to 50°C] |
| | Medium Temperature | -60°F to 175°F [-50°C to 80°C] |
| | Housing Surface Temperature (Tsurf) | max. 160°F [70°C] |
| | Protection Class IEC/EN | III safety extra-low voltage (selv) |
| | Protection Class UL | UL Class 2 Supply |
| | EU Conformity | CE Marking |
| | Certification IEC/EN | IEC/EN 60730-1 and IEC/EN 60730-2-9 |
| | Certification UL | cULus acc. to UL60730-1A/-2-9, CAN/CSA E60730-1:02/-2-9, CE acc. to 2004/108/EC and 2006/95/EC, NEMA 4X, IP65, UL Enclosure Type 4X |
| | Degree of Protection IEC/EN | IP65 |
| | Degree of Protection NEMA/ UL | NEMA 4X |
| | Quality Standard | ISO 9001 |
| Weight | 0.25 lbs | |

Safety Notes

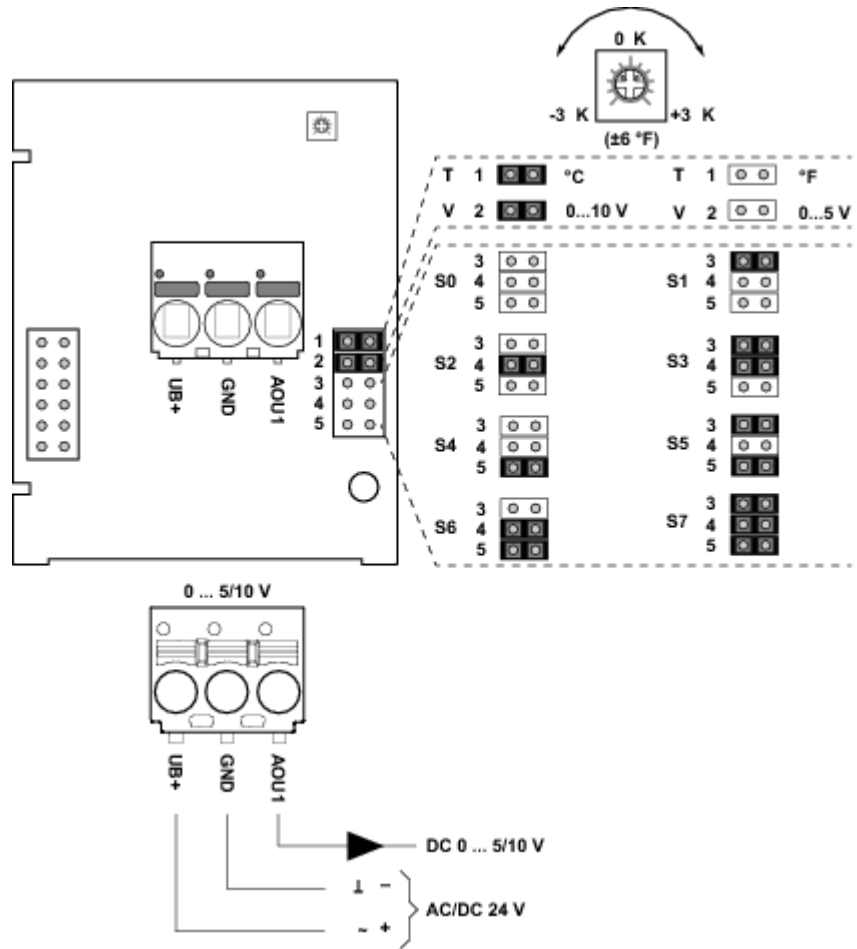

The installation and assembly of electrical equipment should only be performed by authorized personnel.

The product should only be used for the intended application. Unauthorized modifications are prohibited! The product must not be used in relation with any equipment that in case of a failure may threaten, directly or indirectly, human health or life or result in danger to human beings, animals or assets. Ensure all power is disconnected before installing. Do not connect to live/operating equipment.

Please comply with

- Local laws, health & safety regulations, technical standards and regulations
- Condition of the device at the time of installation, to ensure safe installation
- This data sheet and installation manual

Wiring Diagram



the adjustment of the measuring ranges is made by changing the bonding jumpers
the output value in the new measuring range is available after 2 seconds

| Setting | range [°C] | range [°F] | Factory setting |
|---------|----------------|----------------|-----------------|
| S0 | -50°C to 50°C | -30°F to 130°F | |
| S1 | -10°C to 120°C | 0°F to 250°F | |
| S2 | 0°C to 50°C | 40°F to 140°F | |
| S3 | 0°C to 250°C | 30°F to 480°F | |
| S4 | -15°C to 35°C | 0°F to 100°F | |
| S5 | 0°C to 100°C | 40°F to 240°F | |
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Dimensions

