

Duct Sensor CO₂ / Temperature Sensor

Duct air quality sensor for detection of CO₂ only or CO₂ and temperature combined. 4 to 20 mA outputs.



Type Overview

| Type | Output Signal Active CO ₂ | Output Signal Active Temperature |
|----------|-----------------------------------------|----------------------------------------|
| 22DC-53 | 4...20 mA | - |
| 22DTC-53 | 4...20 mA | 4...20 mA |

Technical Data

| | | |
|------------------------|---------------------------------|--------------------------------------------------------------------------------------------------------------------|
| Electrical Data | Power Supply DC | 15...24 V, ±10%, 1.5 W |
| | Cable Entry | cable gland PG11 Ø6 to 10 mm, with strain relief Ø6 to 8 mm, 1/2" conduit adapter included |
| Functional Data | Sensor Technology | NDIR (non dispersive infrared) with stainless steel wire mesh filter, dual channel calibration |
| | Output Signal Active Note | current output: max. 500 Ω load |
| | Media | air |
| Measuring Data | Measured Values | CO ₂ temperature |
| | Measuring Range CO ₂ | 0 to 2000 ppm |
| | Accuracy CO ₂ | ±(50 ppm + 3% of measuring value) |
| | Accuracy temperature passive | ±0.5 °C @ 21 °C |
| | Operating Condition Air Flow | min. 1 ft/s [0.3 m/s] max. 33 ft/s [10 m/s] |
| | | |
| Materials | Cable Gland | PA6, black |
| | Housing | cover: lexan, Belimo orange NCS S0580-Y6OR base: lexan, Belimo orange NCS S0580-Y6OR seal: 0467 NBR70, black |
| | Probe Material | PA6, black |

| | | |
|--------------------|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| Safety Data | Ambient Humidity | 85% RH non-condensing |
| | Ambient Temperature | 32°F to 120°F [0°C to 50°C] |
| | Medium Temperature | 32°F to 120°F [0°C to 50°C] |
| | Operating Condition Air Flow | min. 1 ft/s [0.3 m/s] max. 33 ft/s [10 m/s] |
| | 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 |
| | 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 | 0.26 lbs |
| | | |

Remarks

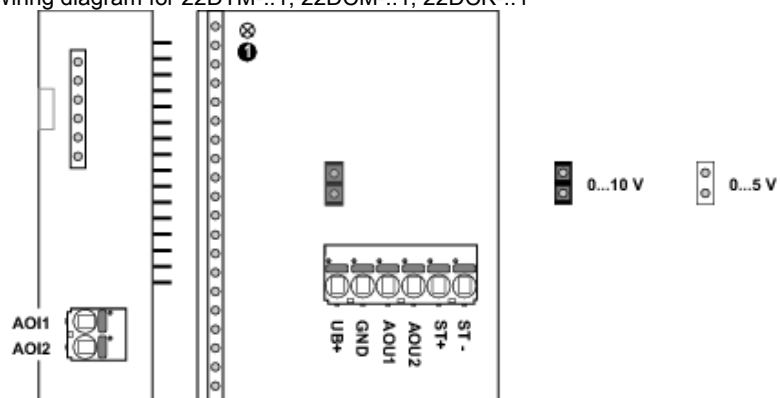
Information Self-Calibration Feature CO₂ All gas sensors are subject to drift caused by components, resulting in regular re-calibration or replacement units. However the dual channel technology integrates automatic self-calibration technology vs common used ABC-Logic sensors. Dual channel self-calibration technology is ideally suited for applications operating 24/7 hours such as hospitals or other commercial applications. Manual calibration is not required.

Accessories

| | | | |
|-----------------------------|--------------------------------------------------------------|-----------------------------------------------------|-------------|
| Optional Accessories | Scope of Delivery | mounting flange cable gland nut conduit 1/2" NPT | |
| | Description | | Type |
| | mounting flange for duct humidity and CO ₂ sensor | | A-22D-A34 |

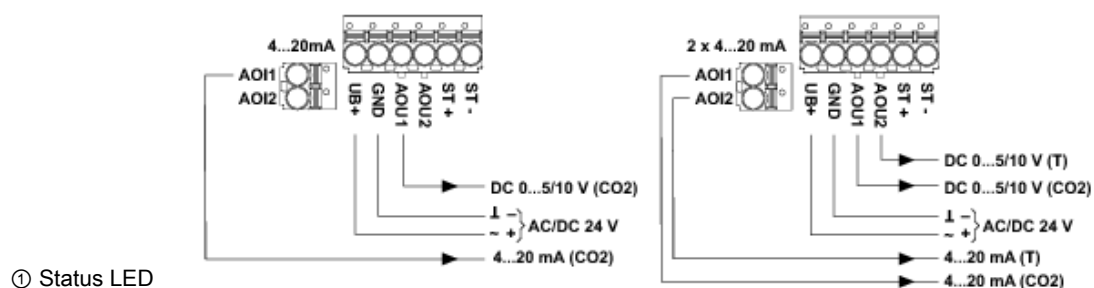
Wiring Diagram

Wiring diagram for 22DTM-..1, 22DCM-..1, 22DCK-..1



22DC-13 / 22DC-53

22DTC-13 / 22DTC-53



Dimensions

