ZILA Elektronik

# $CO_2$-Sensors

# Infrared measuring for $CO_2$ (industry) ZMF-100-IR

## Specification

**features**

- output: 4...20 mA or 0-10 V
- measuring ranges: 0..3000 ppm or 0..6000 ppm or 0..10000 ppm or 0..50000 ppm
- supply voltage: 24 V DC / 100 mA
- technology: infrared absorption measuring

- heating time: ca. 5 min
- response time: ca. 30 sec
- accuracy: +/- 2%
- reproducible: +/- 1%
- case: aluminium (red) IP40
- weight: ca. 500g

**Advantage**

- excellent long time stability, rugeddnes and attractive price performance relationship
- wearfree (Life time 5 years)
- little sensitiveness opposite outer influences, like air pressure fluctuations and vibrations

**Basics**

- Carbon dioxide is a gaseous component of the earth's atmosphere and is breathed out by the man. The $CO_2$ concentration applies to the quality of room air as an important indicator.

**Measuring principle**

- NDIR - Not Dispersive Infrared-Absorptionmeasuring
- Frequency range: 427 / 435 nm
- Gas access: with Diffusion

**Operating Conditions:**

- operating temperature: -10...+50 °C
- temperature area: -40...+100 °C
- relative humidity: 15..95 %

## ZMF-100 IR


## Applications

- Climate measuring systems
- Ventilation controls
- Environmental supervision
- Radiator and cold technology
- SPS, Limit indicator

- $CO_2$ Concentrations:

200 - 400 ppm - fresh, natural surroundings air

900-1000 ppm - limiting value for room air

>1000 ppm - Start of concentration weakness

ZILA Elektronik GmbH D-98544 Zella-Mehlis Meiningerstr.46 Tel: +49 3682 8974-20 Fax: +49 3682 8974-22 info@zila.de www.zila.de

# Technical Data

## Dimensions (mm)

**Case dimensions**

Lenght: 90 mm

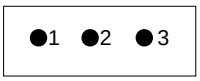
Breadth: 85 mm

Height: 65 mm

**Connection line**

Protected cable with 3 x 1,5 mm² Cu +
function earth with maximum 100 OHM cable resistance

## Assignment




1 0 V
2 4 - 20 mA
3 + 24 V

on the solderless lugs seen