

VICOTEC410

Air quality measuring device

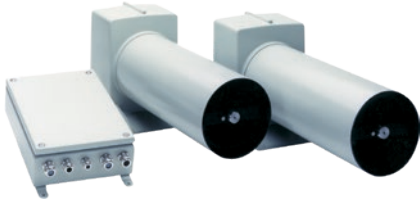
For ventilation control in road tunnels

- Direct measurement, nearly without time lag
- Low operating and maintenance costs
- Flexible system integration with analog outputs or PROFIBUS



VICOTEC410:

For ventilation control in road tunnels



Product Description

The VICOTEC410 product family of compact analyzers detect visibility and/or carbon monoxide concentrations in road tunnels:

- VICOTEC411 for determination of visibility
- VICOTEC412 for CO measurement
- VICOTEC414 for the simultaneous measurement of visibility and CO concentration.

These measurement devices request maintenance only when sensors are

contaminated – reducing maintenance costs to a minimum. The VICOTEC411 monitors visibility in a tunnel and thus provides information on visibility conditions. A continuous, practically real-time control signal serves for efficient ventilation control. The VICOTEC412 monitors CO pollution directly within the tunnel atmosphere. The VICOTEC414 offers a combined measurement device for simultaneous monitoring of visibility and CO concentration.

At a glance

- Automatic adjustment function (AutoAdjust)
- Contamination check
- Menu-driven operation via evaluation unit

Your benefits

- Direct measurement, nearly without time lag
- Low operating and maintenance costs (especially for VICOTEC411)
- Flexible system integration with analog outputs or PROFIBUS

Fields of application

- Ventilation control in tunnels



More Information online

For more information, enter the link or scan the QR code to get direct access to technical data, operating instructions, software, application examples, and much more.

www.endress.com/vicotec410



Technical data

The exact device specifications and performance data of the product may deviate from the information provided here, and depend on the application in which the product is being used and the relevant customer specifications.

VICOTEC410

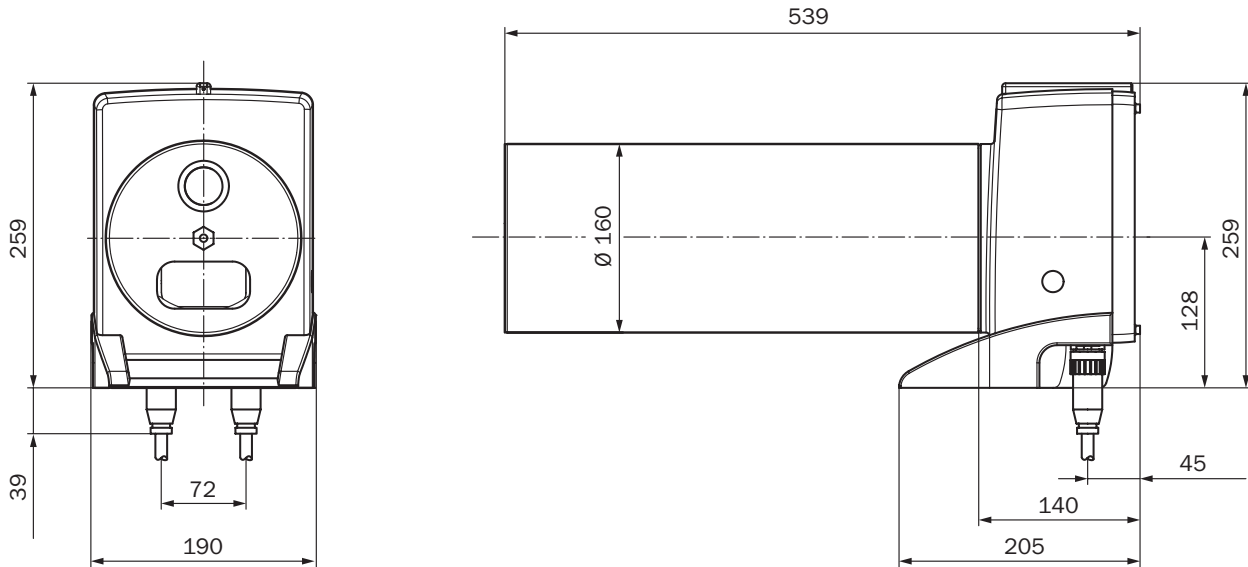
Measured values	Visibility (K-value), CO
Measurement principles	Transmittance measurement Gas filter correlation
Measuring distance	10 m
Measurement ranges	
Visibility (K-value)	0 ... 15 km ⁻¹
CO	0 ... 300 ppm
Repeatability	
Visibility (K-value)	± 0.1 km ⁻¹
CO	± 2 ppm
Ambient temperature	-30 °C ... +60 °C
Storage temperature	-30 °C ... +85 °C
Electrical safety	CE
Enclosure rating	IP 65
Analog outputs	2 outputs: 0/2/4 ... 20 mA
Digital outputs	3 relay contacts: 125 V AC, 60 W / 150 V DC, 30 W Preset for failure, maintenance and alert
Digital inputs	1 input: 5 V, 2 mA For external maintenance switch
PROFIBUS DP	✓
Type of fieldbus integration	RS-422
Operation	Menu-driven operation via control unit
Model	VICOTEC411 (only visibility) VICOTEC412 (only CO) VICOTEC414 (visibility and CO)
Dimensions (W x H x D)	
Sensor	190 mm x 259 mm x 539 mm (for details see dimensional drawings)
RCU410 control unit	254 mm x 349 mm x 122 mm (for details see dimensional drawings)
Connection unit	125 mm x 103 mm x 57 mm (for details see dimensional drawings)
Connection unit with separate power supply	163 mm x 111 mm x 57 mm (for details see dimensional drawings)
Power supply	
Voltage	190 V AC ... 260 V AC, ± 10 % 95 V AC ... 130 V AC, ± 10 %
Frequency	50 Hz / 60 Hz
Power consumption	VICOTEC411: ≤ 45 VA VICOTEC412: ≤ 80 VA VICOTEC414: ≤ 90 VA
Corrective functions	Zero point adjustment
Test functions	Reference point check

Order information

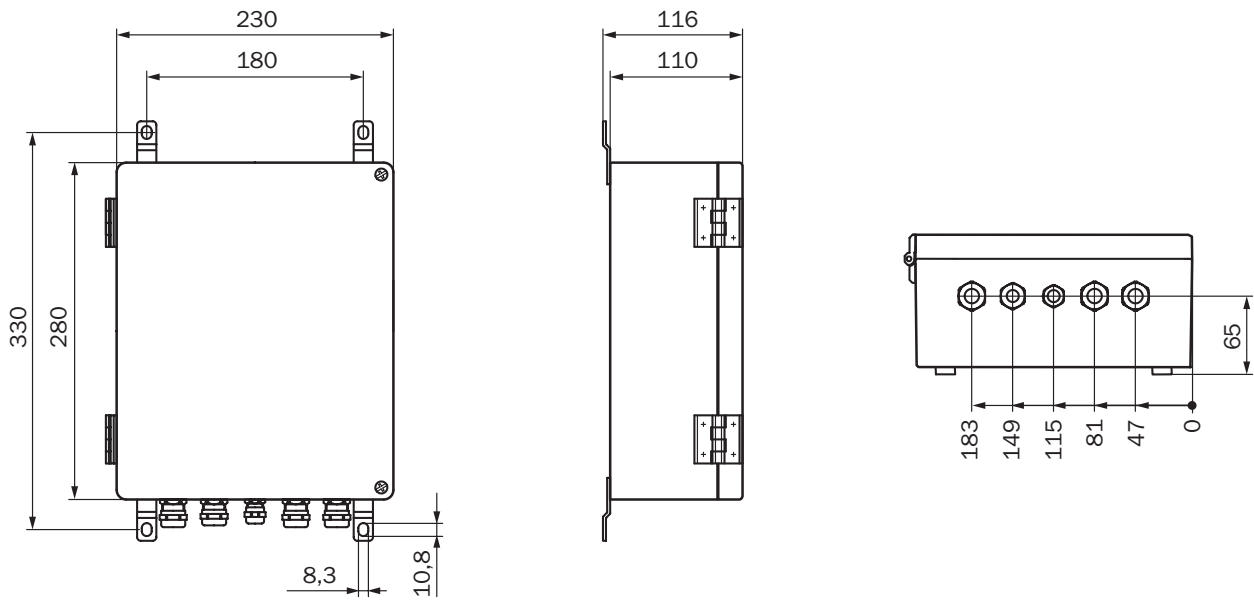
Our regional sales organization will be glad to advise you on which device configuration is best for you.

Dimensional drawings

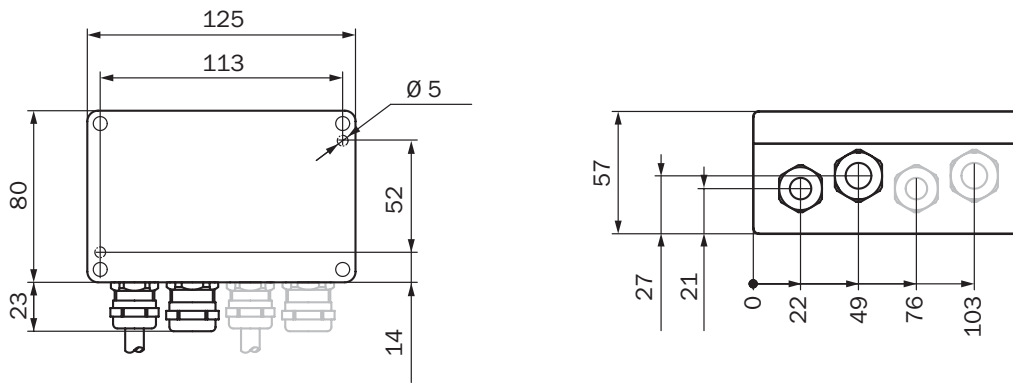
VICOTEC410 sender/receiver unit



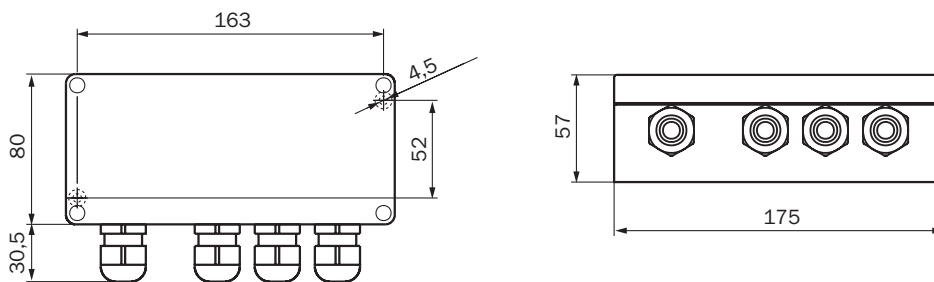
RCU410 control unit



VICOTEC410 connection unit



VICOTEC410 connection unit with separate power supply



www.addresses.endress.com

Eco-friendly produced and printed on paper
from sustainable forestry.

IN 8015709 / EHS / EN / 02.00