Product data sheet



System VISIC100SF

VISIC100SF

AIR QUALITY MEASURING DEVICES

SICK
Sensor Intelligence.



Ordering information

Type	Part no.
System VISIC100SF	On request

Our regional sales organization will help you to select the optimum device configuration.

Other models and accessories ➜ www.sick.com/VISIC100SF

Detailed technical data

Technical specifications

Measured values	Visibility (K-value), CO, NO, NO_2
Measurement principles	Scattered light forward, electrochemical cell
Measuring ranges	
Visibility (K-value)	0 ... 15 km^{-1}
CO	0 ... 300 ppm
NO	0 ... 100 ppm
NO_2	0 ... 5 ppm
Response time (t_{90})	≤ 60 s
Accuracy	
CO:	± 2 ppm < 60 ppm
CO:	± 5 ppm 60 ppm < x < 150 ppm
CO:	± 9 ppm 150 ppm < x < 300 ppm
NO:	≤ 3 % Of measuring range full scale (according EN 50545)
NO_2:	≤ 2 % Of measuring range full scale (according EN 50545)
Resolution	
Visibility (K-value)	0.001 km^{-1}
CO	0.5 ppm
NO	0.5 ppm
NO_2	0.05 ppm
Repeatability	
Visibility (K-value)	≤ 2 %
Ambient temperature	
	–20 °C ... +55 °C
Storage temperature	
Measuring device without electrochemical cells:	–30 °C ... +85 °C
CO, NO and NO_2 sensor:	+5 °C ... +20 °C

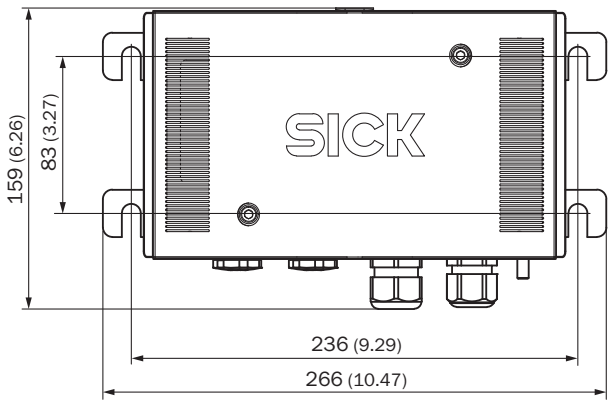
Ambient pressure	860 hPa ... 1,080 hPa
Ambient humidity	10 % ... 100 % Relative humidity; non-condensing
Conformities	ASTRA "Guideline - Ventilation of Road Tunnels" (2008) RABT 2006 RVS 09.02.22
Electrical safety	CE
Test functions	Contamination monitoring of glass pane Drift and plausibility check Automatic self-test Functional monitoring of the optional heating
Options	CO sensor NO sensor NO_2 sensor Internal heating TAD control unit Connection unit

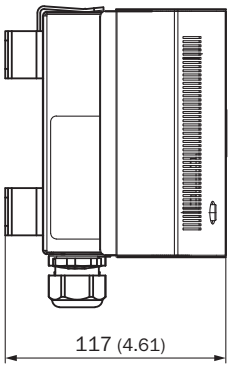
Classifications

ECLASS 5.0	27150305
ECLASS 5.1.4	27150305
ECLASS 6.0	27150305
ECLASS 6.2	27150305
ECLASS 7.0	27150305
ECLASS 8.0	27150305
ECLASS 8.1	27150305
ECLASS 9.0	27150305
ECLASS 10.0	27150305
ECLASS 11.0	27150305
ETIM 5.0	EC001190
ETIM 6.0	EC001190
ETIM 7.0	EC001190
ETIM 8.0	EC001190
UNSPSC 16.0901	41115406

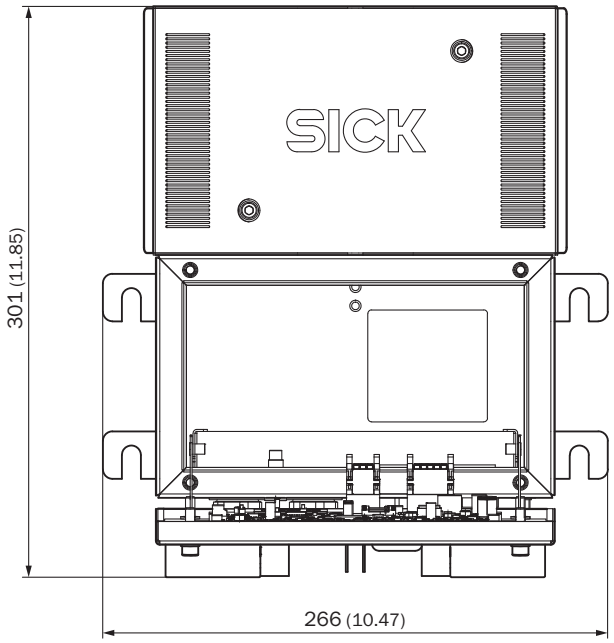
Dimensional drawing (Dimensions in mm (inch))

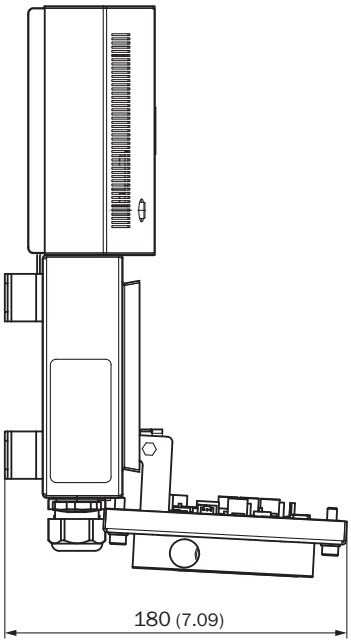
VISIC100SF sensor unit closed



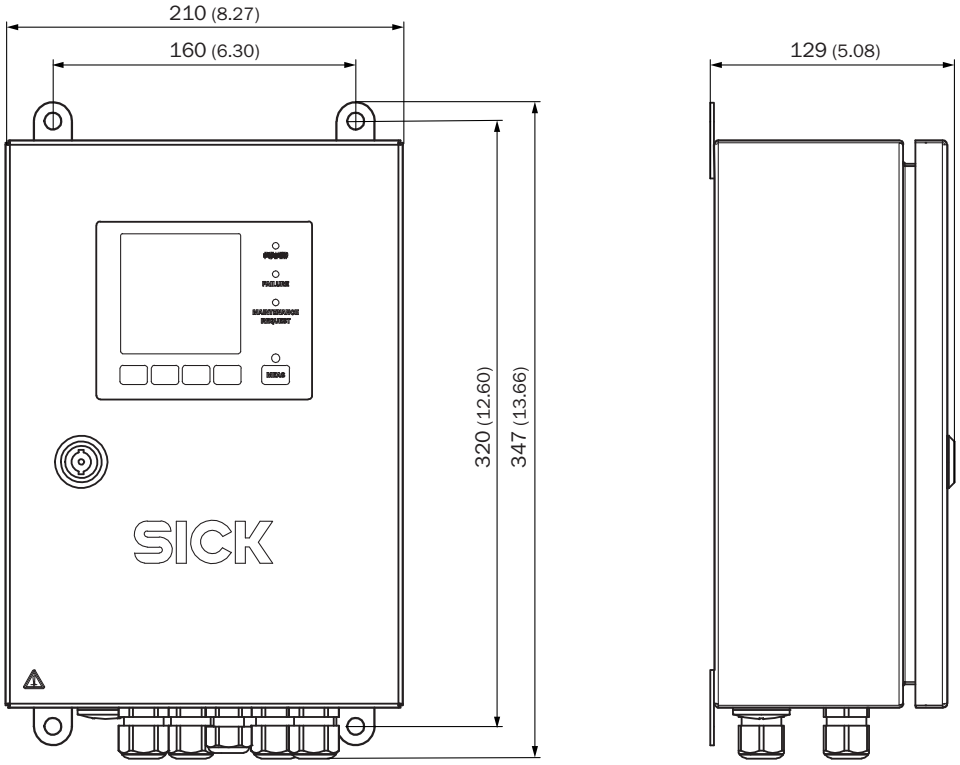


VISIC100SF sensor unit open with clipped-on front cover

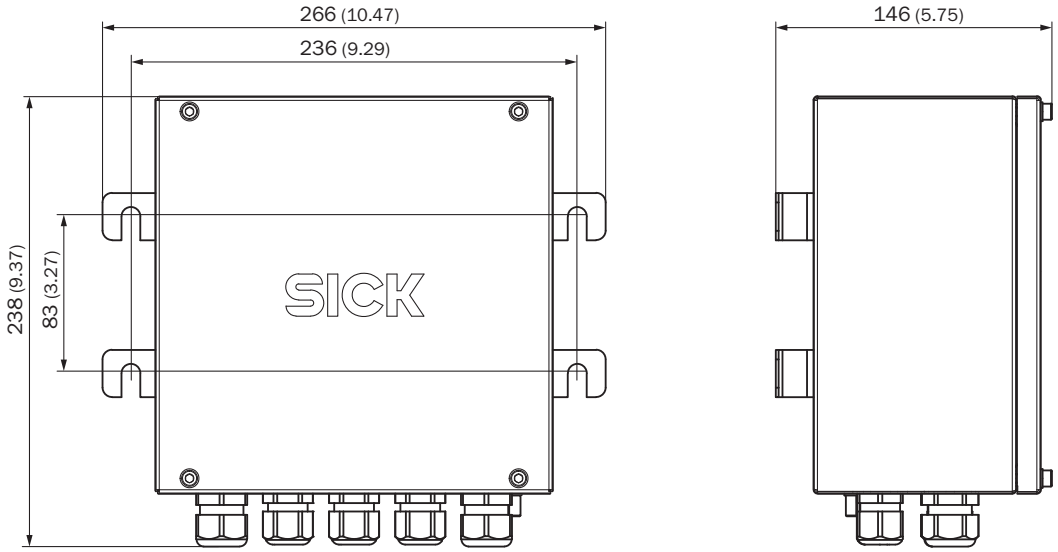




TAD control unit

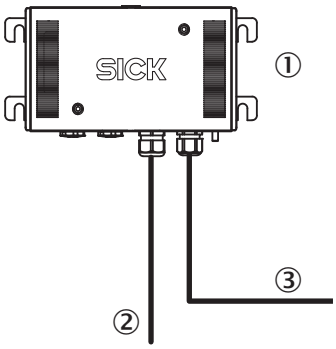


VISIC100SF connector unit



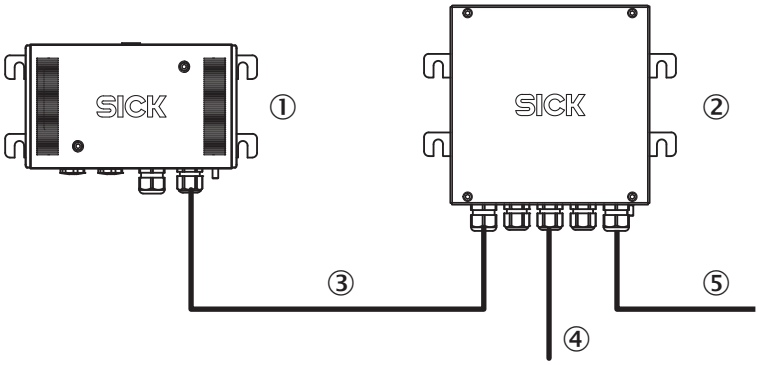
Connection types

Standard version



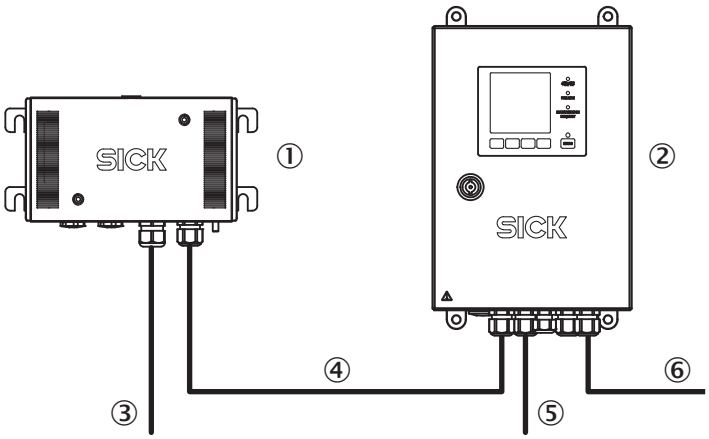
① VISIC100SF sensor unit
② Power supply (24 V)
③ Analog and digital signals or data bus

Version with terminal box



① VISIC100SF sensor unit
② VISIC100SF connector unit
③ Analog and digital signals or data bus, incl. power supply (24 V)
④ Power supply (230 V)
⑤ Analog and digital signals or data bus

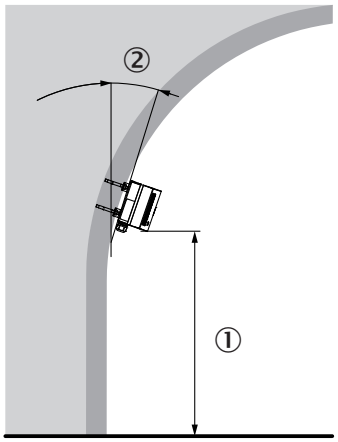
Version with TAD control unit



① VISIC100SF sensor unit
② TAD control unit
③ Power supply (24 V)
④ Analog and digital signals or data bus (max. length = 1,200 m)
⑤ Power supply (230 V)
⑥ Analog and digital signals or data bus

Instruction for installation

VISIC100SF sensor unit: allowed inclination and installation heigth



① The mounting heigth depends on the application. SICK recommends an installation above the splash water zone.
② Maximum allowed inklination angle = 45 °

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com