

Safety Instructions

Indumax CLS54

Supplement to BA01591C

Safety instructions for electrical equipment for explosion-hazardous areas

ATEX II 1G Ex ia IIC T3/T4/T6 Ga



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Associated documentation  Operating Instructions for Indumax CLS54, BA01591C

Supplementary documentation  Competence Brochure CP00021Z

- Explosion Protection: Guidelines and General Principles
- www.endress.com

Certificates EU Declaration of Conformity EC_00441
Type-examination certificate BVS 07 ATEX E 158 X

Identification The nameplate provides you with the following information on your device:

- Manufacturer identification
- Extended order code
- Serial number
- Safety information and warnings
- Ex marking on hazardous area versions

► Compare the information on the nameplate with the order.

Type code

Type	Version						
Indumax CLS54-	G	a ¹⁾	b ²⁾	c ³⁾	2 ⁴⁾	+	d ⁵⁾

- 1) Process connection (no Ex relevance)
- 2) Optional additional equipment (no Ex relevance)
- 3) Cable length (no Ex relevance), 1: Fixed cable 5 m, 2: Fixed cable 10 m, 3: Fixed cable 20 m, 4: Fixed cable 5-50 m
- 4) Temperature sensor Pt1000
- 5) Measuring point identification (no Ex relevance)

Certificates and approvals **Ex approvals**
II 1G Ex ia IIC T3/T4/T6 Ga

Notified body
DEKRA Testing and Certification GmbH
Bochum

Safety instructions Sensors with ATEX approval have been developed and manufactured in accordance with the applicable European standards and guidelines and are suitable for use in hazardous areas. The Declaration of Conformity confirms compliance with the harmonized European standards for using the sensors in hazardous areas.

- The sensor must be connected and operated in accordance with the Operating Instructions of the sensor and of the transmitter to be connected. All sensor operating data must be observed.
- Full compliance with regulations for electrical systems in explosive atmospheres (EN/IEC 60079-14) is mandatory when using the devices and sensors.
- The sensor must be connected and operated in accordance with the Operating Instructions of the sensor and of the transmitter to be connected. All sensor operating data must be observed.
- Compliance with the specified ambient and medium temperature ranges is a requirement for safe use.
- The sensors may be operated in an environment specified as Ex Zone 0 (1G).
- The sensors may only be used in liquid media with a conductivity >10 nS/cm.

- Avoid electrostatic charge. Metallic process connection parts have to be mounted electrostatically conductive at the mounting location ($R \leq 1 \text{ M}\Omega$).
- The sensors may be operated in an environment specified as Ex Zone 0 (1G).
- The maximum permitted length of the measuring cable is 50 m.

Temperature tables

	Temperature class		
Type	T3	T4	T6
Indumax CLS54-G*****	$-10^\circ\text{C} \leq T_a \leq 125^\circ\text{C}^{1)}$	$-10^\circ\text{C} \leq T_a \leq 105^\circ\text{C}$	$-10^\circ\text{C} \leq T_a \leq 55^\circ\text{C}$

1) 150°C for maximum 60 min.

The temperature tables apply only under the installation conditions described in Operating Instructions BA01591C. If the installation conditions cannot be met, the maximum process temperature T_p must not exceed the maximum ambient temperature T_a .

The ambient temperature range for this sensor is always $-20^\circ\text{C} \leq T_a \leq +60^\circ\text{C}$.

Connection

The sensor may only be connected to the following transmitter:

- Liquiline M type CM42 transmitter
EU type-examination certificates TÜV 13 ATEX 7459 X, TÜV 14 ATEX 7510 X, TÜV 14 ATEX 7509 X.
Sensor module FSLI1, terminals 111 to 113, as well as 215 to 218.
- Liquiline type CM42B transmitter
EU type-examination certificate TÜV 24 ATEX 9071 X.
VSLI1/Conductive I module (field wiring terminals: 11, 12, 13, 15, 16, 17, 18, 20).

Installation conditions



Operating Instructions for Indumax CLS50D/CLS50, BA00182C



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