

# Safety Instructions

## **Memosens CLS15E, CLS16E, CLS21E, CLS82E**

EAC Ex 0Ex ia IIC T3/T4/T6 Ga X

Safety instructions for electrical apparatus in explosion-hazardous areas





# Memosens CLS15E, CLS16E, CLS21E, CLS82E

EAC Ex 0Ex ia IIC T3/T4/T6 Ga X

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**Associated documentation**

This document is an integral part of



Operating Instructions Memosens CLS21E, BA02020C



Operating Instructions Memosens CLS15E, BA02018C



Operating Instructions Memosens CLS16E, BA02019C



Operating Instructions Memosens CLS82E, BA02027C

**Supplementary documentation**

Competence Brochure CP00021Z

- Explosion Protection: Guidelines and General Principles
- [www.endress.com](http://www.endress.com)

**Certificate**

EAC certificate, certificate number: EAЭC KZ 7500525.01.01.02089

**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	**	**	a <sup>1)</sup>	***	+
CLS15E	- GA	**	**	a <sup>1)</sup>	***	+
CLS16E	- GA	**	**	***	+	*
CLS21E	- GA	**	**	***	+	*
CLS82E	- GA	**	**	***	+	*
	EAC Ex 0Ex ia IIC T3/T4/T6 Ga X	No Ex relevance				

1) a = A, B

**Certificates and approvals**

- EAC Ex, 0Ex ia IIC T3/T4/T6 Ga X
- Zone 0
- The product has been certified in accordance with Directive TR CU 012/2011 valid within the Eurasian Economic Area (EAEU). The EAC conformity mark has been affixed to the product.

**Certification Body**

ТОО/ЖШС "Т-Стандарт"

**Safety instructions**

- It is not permitted to operate the sensor under electrostatically critical process conditions. Considerable steam and dust clouds that act directly on the Memosens sensor head must be avoided at all times.
- Ex-protected digital sensors with Memosens technology are identified by an orange-red ring on the terminal head.
- The electrical connection information provided in the Operating Instructions must be adhered to.
- The CLS15E-type sensors with non-metal process connections and the CLS21E-type sensors may only be employed for measurement in liquids with a minimum conductivity of 10 nS/cm.
- When using devices and sensors, the regulations for electrical systems in explosion-hazardous areas must be observed (EN/IEC 60079-14).

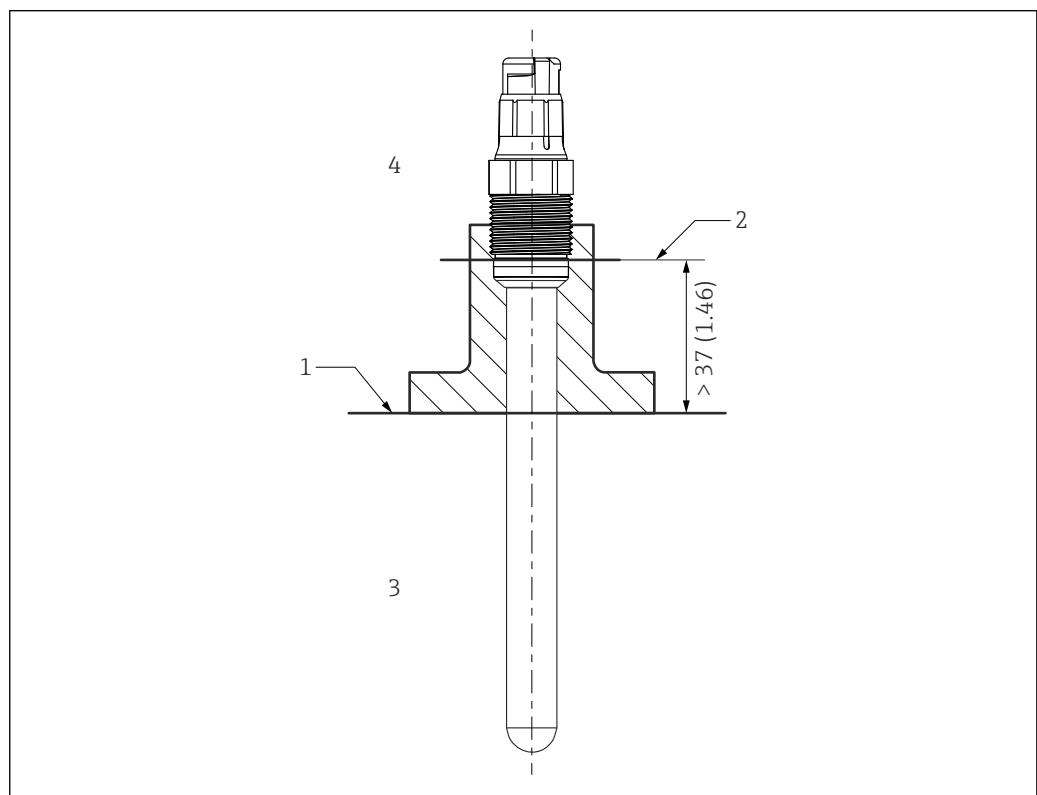
**Temperature tables**

The above temperature table applies only under the following installation conditions, which are described in the following graphic →  1. If the installation conditions cannot be met, the maximum process temperature  $T_p$  must not exceed the maximum ambient temperature  $T_a$ .

**Connection****Ex specification**

The CLSxxE-type conductivity sensors are approved and are suitable for use in explosion-hazardous environments.

- The approved CLSxxE-type digital conductivity sensors have an intrinsically safe input with the following parameter set:  
 $P_i = 180 \text{ mW}$
- The approved CLSxxE-type digital conductivity sensors may only be connected to a Memosens cable or a compact transmitter with an intrinsically safe output with the following parameter set:  
 $P_0 \text{ max. } 180 \text{ mW}$

**Installation conditions**

 1 Installation conditions

- 1 Limit
- 2 Distance between plug-in head (lower edge) and process medium, without ring and thrust collar
- 3 Process temperature  $T_p$
- 4 Ambient temperature  $T_a$







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