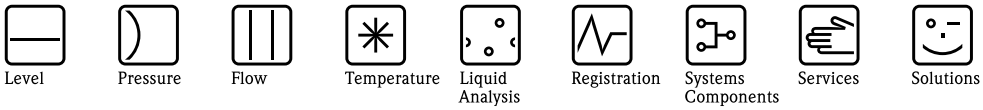

Safety Instructions

Cerabar M
PMC41/45, PMP41/45/46/48

4...20 mA HART, PROFIBUS PA

Zone 0/Zone 1
Ex ia IIC T6...T4
IECEx TUN05.0003

XB013P-A

Safety instructions for electrical apparatus for explosion-hazardous areas according to IEC standards

XB013P-A/00/en/11.06
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Cerabar M
PMC41/45, PMP41/45/46/48

Associated Documentation

This document is an integral part of the following Operating Instructions:
– 4...20 mA HART: BA201P/00
– PROFIBUS PA: BA222P/00

The Operating Instructions which are supplied and correspond to the device type apply.

Supplementary Documentation

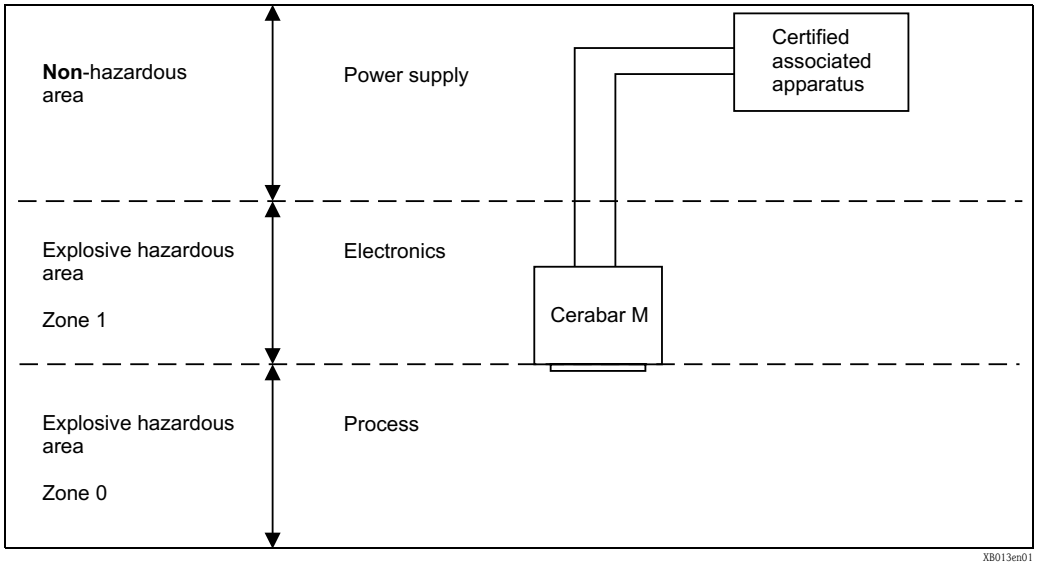
Explosion-protection brochure:
SD215F/00

Designation

Explanation of the labelling and type of protection can be found in the explosion protection brochure.

Designation of explosion protection **Zone 0/Zone 1** **Ex ia IIC T6...T4**

Safety instructions:
Installation



Electronic: 4...20 mA HART			
Type of protection	**Ambient temperature range at housing**	**Electrical data (HART)**	
Zone 0/Zone 1 Ex ia IIC T6	–40°C ≤ Ta ≤ +40°C	Pi ≤ 0.8 W	Ui ≤ 30 V DC Ci ≤ 10 nF Li = 0
Zone 0/Zone 1 Ex ia IIC T4	–40°C ≤ Ta ≤ +70°C	Pi ≤ 1 W	

Electronic: PROFIBUS PA (FISCO field device)		
Type of protection	**Ambient temperature range at housing**	**Electrical data (PROFIBUS PA)**
Zone 0/Zone 1 Ex ia IIC T6	–40°C ≤ Ta ≤ +40°C	Ui ≤ 24 V DC Ii ≤ 250 mA Pi ≤ 1.2 W or Ui ≤ 17.5 V DC Ii ≤ 500 mA Pi ≤ 5.5 W Ci ≤ 5 nF Li ≤ 10 µH (suitable for connection to a fieldbus system according to the FISCO-model)
Zone 0/Zone 1 Ex ia IIC T4	–40°C ≤ Ta ≤ +70°C	

Safety instructions: General

- Comply with the installation and safety instructions in the Operating Instructions.
- Install the device according to the manufacturer's instructions and any other valid standards and regulations (e.g. IEC 60079-14).
- Only install the devices in media for which the wetted materials have sufficient durability.
- For plastic process connections or plastic coatings, avoid electrostatic charging of the plastic surfaces.
- The type of protection changes as follows when the devices are connected to certified intrinsically safe circuits of Category ib: Ex ib IIC T6 and Ex ib IIC T4. Do not operate the sensor in Zone 0 if the transmitter is connected to an intrinsically safe circuit of Category Ex ib.
- In hazardous areas, intrinsically safe equipment shall only be operated on certified intrinsically safe circuits. The intrinsic safety can be jeopardised if, prior to the installation in the Ex-area, the device is operated with circuits which did not guarantee the Ui and Pi values indicated in the tables above.

Safety instructions: Zone 0

- Only operate devices in potentially explosive vapour/air mixtures under atmospheric conditions: $-20°C \leq T \leq +60°C$ and $0.8 \text{ bar} \leq p \leq 1.1 \text{ bar}$
- If no potentially explosive mixtures are present, or if additional protective measures have been taken, e.g. according to IEC 60079-14 or EN 1127-1, the transmitters may be operated under other than atmospheric conditions in accordance with the manufacturer's specifications.
- Associated apparatus with galvanic isolation between the intrinsically safe and non-intrinsically safe circuits are preferred.

For PMC41 and PMC45, the following also applies:

- On installations requiring overvoltage protection to comply with national regulations or standards (e.g. IEC 60079-14), this device shall be installed using an overvoltage protector.

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