

Instruction Manual

Vibracon
LVL-B1, LVL-B2

IECEX: Ex ta/tc IIIC T170°C Da/Dc

IECEX DEK 11.0068



SI004240-B

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

SI004240-B/98/EN/13.13
71215852



Vibracon LVL-B1, LVL-B2

Associated documentation

This document is an integral part of the following documents: KA00227O
The documents which are supplied and correspond to the device type apply.

Supplementary documentation

Explosion-protection manual

Manufacturer's certificates

IECEx certificate

Certificate number: IECEx DEK 11.0068

Applied standards:

- IEC 60079-0:2011
- IEC 60079-31:2008

Designation

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

**Designation according to IECEx
Equipment protection level (EPL)**

Da/Dc

Designation of type of protection

Ex ta/tc IIIC T170°C Da/Dc

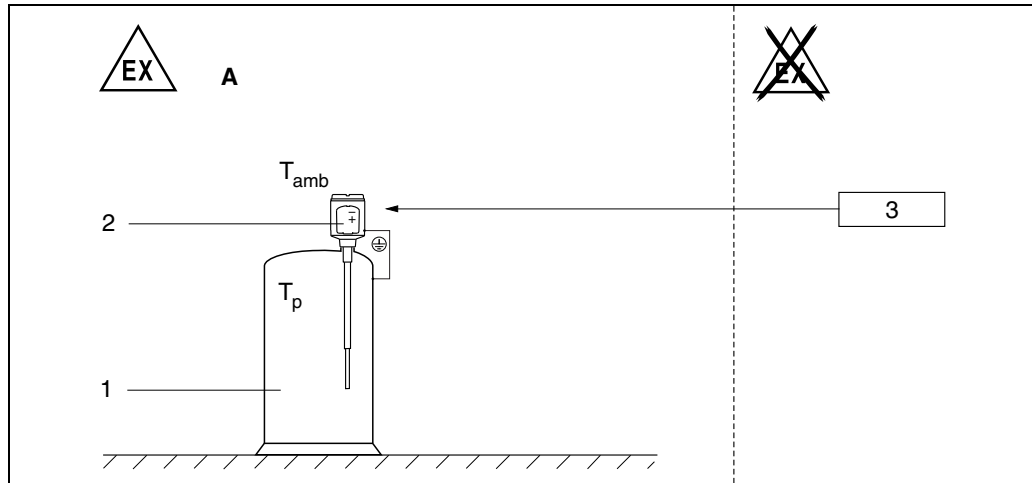


Figure 1

- A Zone 22
- 1 Tank, hazardous area Zone 20
- 2 Electronic insert
- 3 Supply voltage
- T_{amb} Ambient temperature
- T_p Process temperature

Electrical connection data:

Electronic insert	Supply voltage U_b	Relay circuit
FEM22 (E5)	10 ... 45 V DC	–
FEM24 (WA)	19 ... 253 V AC or 19 ... 55 V DC	253 V AC/6 A, 1500 VA/cos $\varphi = 1$, 750 VA/cos $\varphi > 0.7$

Maximum surface temperature:

Ambient temperature T_{amb}	Surface temperature: housing (under fault condition)	Process temperature T_p	Surface temperature: Zone 20 (under fault condition)
-40 °C ... +70 °C	T 90 °C	-40 °C ... +150 °C	T 170 °C

**Safety instructions:
Installation**

- Install the device according to the manufacturer's instructions and any other valid standards and regulations.
- The electronics enclosure of the level limit switch is suitable for level of protection Dc, while the sensor is suitable for level of protection Da.
- Do not operate the device outside the specified electrical, thermal and mechanical parameters.
- Changes in electrical and mechanical parts of the equipment could harm the type of explosion protection and are not allowed for the user.
- The housing of transmitter is equipped with a ground terminal; users must ensure that it is reliably connected to ground during installation and use.
- Max. heat developed at the device surface in level of protection Da under fault conditions: ≤ 20 K (measured when device covered with a layer of dust greater than 50 mm).
- Max. heat developed at the housing surface in level of protection Dc under fault conditions: ≤ 20 K.
- Support extension tube of the device if a dynamic load is expected.
- Only install the devices in media for which the wetted materials have sufficient durability.
- Use a process connection seal that meets the material compatibility and temperature requirements.
- After mounting and connecting the sensor, check that a degree of protection of at least IP65 to EN 60529 has been attained (screw the cover tight and fix the cover fastener, mount cable glands correctly).
- Only use cable glands or blind-plugs with Ex approval and ingress protection of IP6X.
- Do not open in an explosive atmosphere.

Accessory high pressure sliding sleeve

- The high pressure sliding sleeve can be used for a continuous setting of the switch point and is suited for zone division if mounted properly (see manual).



EN

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With regard to the supply of products, the current issue of the following document is applicable: The General Terms of Delivery for Products and Services of the Electrical Industry, published by the Central Association of the "Elektrotechnik und Elektroindustrie (ZVEI) e.V." including the supplementary clause: "Erweiterter Eigentumsvorbehalt".

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