



Instructions in accordance with directive 2014/34/EU

CEC 15 ATEX 030

Display type VISY-TD Display Ex d

Edition: 03.2018

I Range of application

The display VISY-TD Display Ex d is constructed in a flameproof enclosure and is used to indicate data from one or more tanks. The display is suitable for use in a potentially explosive atmosphere.

II Standards

The equipment is designed in accordance with the following European standards

EN 60079-0:2012 + A11:2013	Equipment – General requirements
EN 60079-1:2014	Equipment protection by flameproof enclosures "d"
EN 60079-14:2014	Electrical installations design, selection and erection
EN 60079-31:2014	Equipment dust ignition protection by enclosure "t"

III Instructions for safe ...

III.a ... use

The display can be used in gas and dust explosion hazardous area (Zone 1 and Zone 21) for all gas groups (IIA, IIB and IIC) as well as for all dust groups (IIIA, IIIB and IIIC). In addition, only use with gases of temperature class T4 to T1 is permitted and the maximum surface temperature for dusts is 135 °C. The permissible ambient temperature range is -25 °C to +60 °C.

III.b ... assembling and dismantling

Assembling and dismantling must solely be carried out with the power disconnected! After switching off the auxiliary power, the enclosure may be opened immediately. Before opening the flame-proof enclosure, make sure that there is no potentially explosive atmosphere.

For changing the battery, it is necessary to open the enclosure. Care must be taken that the sealing surfaces and threads are not damaged. To open, first loosen the threaded pin on the edge of the cap. Then the cap can be unscrewed.

To replace the battery, do the following:

- Unscrew the two screws (M3 × 6) of the display cover;
- Lift the display cover with the appropriate magnet;
- Replace the battery;
- Reposition the display cover;
- Tighten the two screws (M3 × 6) again.

After the necessary work, the enclosure must be closed again. For this, the cover must be screwed onto the enclosure and secured with the threaded pin.



III.c ... installation

The wiring must be carried out only with the power disconnected. Special rules and regulations, including EN 60079-14 and local installation regulations, must be observed.

The display may only be installed in locations where the IP66 enclosure protection can be complied with.

The display comes with a cable that is already connected inside the enclosure. This allows the display to be connected to another device without being opened.

Name of the wires of the connection cable:

Wire	Signal
white	not used
brown	Communication A
green	Communication B
yellow	not used
grey	not used
pink	not used
blue	not used
red	Power supply, +12 V
black	Power supply, GND
violet	not used
grey / pink	not used
red / blue	not used

Table IIIc: Name of the wires of the 12-pole connection cable

Unused wires of the connection cable are to be isolated individually in a suitable manner.

III.d ... adjustment

No Ex-relevant adjustments are required for operating the display.

III.e ... putting into service

Before putting into service, all devices must be checked of right installation and connection. The electrical supply, as well as connected devices, must be checked.

III.f ... maintenance (servicing and emergency repair)



The device is generally maintenance-free. In case of a defect, it must be sent back to FAFNIR or one of its representations.

The repair of the flame-proof routes is not provided.

Battery replacement is described in section III.b. Further information in section V.



IV Equipment marking

- 1 Manufacturer: FAFNIR GmbH, 22525 Hamburg
- 2 Type designation: VISY-TD Display Ex d
- 3 Certificate number: CEC 15 ATEX 030
- 4 Ex marking:  II 2 G Ex d IIC T4 Gb
II 2 D Ex tb IIIC T 135 °C Db IP66
- 5 CE marking:  0044
- 6 Warning marking: WARNING – DO NOT OPEN WHEN ENERGIZED
- 7 Technical Data: $T_a = -25\text{ °C} \dots +60\text{ °C}$
P.S.: 12 V_{CC} ± 5 %
bat 9 V
3 VA

V Technical data

The auxiliary power for the display is

- Supply voltage: $U = 12\text{ V}_{DC} \pm 5\%$
Power input: $P = 3\text{ W}$

Only batteries with the following rated values may be used:

- Electrochemical system: Alkaline
Nominal voltage: $U_N = 9\text{ V}$
Type: 6LR61

The signal voltage of the communication interface RS-485 (2-poles) is

- Signal voltage: $U < 12\text{ V}$

The display may be used in the following ambient temperature range:

- Ambient temperature: $T_a = -25\text{ °C} \dots +60\text{ °C}$

The display achieves an enclosure protection of:

- Degree of protection: IP66

VI Special conditions of use

None.