Compact flame monitor with fibre optic system

Application with

- flexible fibre optic system
 D-LL 703
- or rigid fibre optic system D-LL 704

Features

- Wide sensitivity range
- For ambient temperatures from -40 °C up to +85 °C
- Dual channel design throughout
- Measurement of flame flicker frequency
- Selective to individual burners and fuels

Applications

- Burners with difficult installation conditions for conventional flame sensors or on those whose ambient temperature near the sighting tube is too high
- Power stations
- Chemical industry
- Refineries
- Cement plants
- Waste incinerators
- Steam generators
- Heating plants

Certifications

- DVGW
- FM Class 7610
- CSA
- SIL3
- GOST-R
- APAVE
- AGA: AS 4625
- ATEX, IECEx
- Marine Certifications



Functional description

The D-LX 720 compact flame monitor is electronically identical to the D-LX 200. It analyses flame radiation using the integrated flame sensor signal.

Current output 0/4...20 mA available for further analysis.

Flame properties and parameters of the flame monitor can be transmitted to a PC via a RS485 and an IrDA interface.



User interface of the flame monitor software

Design

- IIntegrated compact device
- Cable gland
- Plug connection (/MP)

Accessories

- LED bar graph display for the flame intensity (D-ZS 129)
- Terminal box for connecting the flame monitor (D-ZS 140-12)
- Installation flange for D-LL 703 fibre optic system (D-ZS 703)
- Welding flange for D-LL 704 fibre optic system (D-ZS 704)
- Power supply unit for supply of up to two D-LX 720 (D-NG 24/05)



















DURAG smart solutions for GROUP combustion and environment

Operational mode	Intermittent operation and continuous operation	Threshold switches	Flame intensity and flicker frequency
Safety	Self-monitoring and fail-safe	D-LX 720 /8xEx	
Auxiliary supply	24 VDC	/84Ex	II 2G Ex d IIC T6 or T5 Gb
Protection class	IP66/68, IP65 (/MP)	/85Ex	II 2D Ex tb IIIC T85°C or T100°C Db Cl. I, Div. 1, Gr. A, B, C, D T6/T5
Flame relay	1x NO contact, 24 VDC, 0.5 A	, 55 = 1	Cl. II, Div. 1, Gr. E, F, G T6/T5; Cl. III
Status relay	1x NO contact, 24 VDC, 0.5 A		Type 4 Hazardous locations: indoor/outdoor
Safety time	1, 2, 3, 5 s	/86 Ex	Cl. I, Div. 2, Gr. A, B, C, D T6/T4 Cl. II, Div. 2, Gr. E, F, G T6/T4; Cl. III
Ranges	2	/87Ex	Type 4 Hazardous locations: indoor/outdoor II 3G Ex nAnC IIC T6 or T4 Gc
Communication	LED, Modbus RTU, IrDA	/O/LX	II 3D Ex tc IIIC T85 °C or T135 °C Dc
Analogue output	0/420 mA	Protection class	IP66
Ambient temperature range	-40+85°C	Dimensions	0120 mm, length 229 mm
Dimensions Weight	85x85 mm, length approx. 175 mm approx. 1.25 kg	Weight	ca. 3.2 kg
Spectral ranges	UV, IR	T _{max} (/86 Ex, /87 Ex)	+65°C