smart
GasDetection
Technologies

GfG

EC28 D Transmitter

Ex-compliant with Display for Toxic Gases, O_2 and H_2

SIL Ex

GfGsafety.com

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Whenever toxic gases, hydrogen or oxygen are to be monitored and current measured values are to be displayed locally, the EC28 D transmitter combined with GfG's proven control units is the solution of choice. The ATEX-certified design means it can be used even in potentially explosive atmospheres. The hardware of the EC28 D complies with the European Functional Safety Standard DIN EN 61508-2: 2011 for many gases. The SI levels (up to SIL3) in single-channel (1oo1) or redundant (1oo2) use are listed in the overview of gases.

Communication and Service
Communication is carried out via a 4 to 20 mA signal. The Smart Sensor technology enables fast and uncomplicated replacement of the sensor.

Display and Control Buttons
The EC28 D transmitter features a 2.2 inch LC display and three control buttons. In normal operation, the display shows the measured value or information on faults or alarms. In addition, the operating parameters (sample gas, measuring range, limit values, etc.) can be called up via the operating keys.

Remote Control RC2 (optional)
If the EC28 D has to be mounted in a difficult-to-access location, the RC2 remote control facilitates servicing and adjustments (one-man adjustment). It displays the same information that is shown on the transmitter's display.

Reliable Measurement & Minimal Operating Costs
The sensor and built-in temperature compensation ensure the highest measuring accuracy. The long sensor service life and low maintenance requirements ensure minimal operating costs.

Variants for Every Application
The basic version of the EC28 is sufficient for many applications. For specific requirements, the EC28 is also available in a wide variety of versions:

EC28	basic version for a wide range of electrochemical sensors
EC28 D	with display for showing the current measured values
EC28 DA	with display, bright LED warning lights and integrated alarm horn
EC28 DAR	with display, alarm horn and relay for additional external alarm devices
EC28 B	with Modbus interface
EC28 DB	with Modbus interface and display
EC28 DAB	with Modbus interface, display, bright LED lights and integrated alarm horn
EC28 i	intrinsically safe
EC28 Di	intrinsically safe and with display

Together with GfG's sophisticated controllers, all versions of the EC28 are the perfect choice for detecting a wide range of gases.

Overview of Gases and SI Levels:

Gas		1oo1	1oo2	Gas		1oo1	1oo2	Gas		1oo1	1oo2
» Ammonia	(NH_3)	2	3	» Diborane	(B_2H_6)	1	2	» Oxygen	(O_2)	2	3
» Arsine	(AsH_3)	-	-	» Ethylene oxide	(C_2H_4O)	-	-	» Sulphur dioxide	(SO_2)	-	-
» Bromine gas	(Br_2)	-	-	» Hydrogen fluoride	(HF)	1	2	» Hydrogen sulphide	(H_2S)	1	2
» Chlorine	(Cl_2)	1	2	» Carbon monoxide	(CO)	2	3	» Silane	(SiH_4)	1	2
» Chlorine dioxide	(ClO_2)	2	3	» Ozon	(O_3)	2	3	» Nitrogen dioxide	(NO_2)	1	2
» Hydrogen chloride	(HCl)	1	2	» Phosgene	$(COCl_2)$	-	-	» Nitrogen monoxide	(NO)	1	2
» Hydrogen cyanide	(HCN)	1	2	» Phosphine	(PH_3)	1	2	» Hydrogen	(H_2)	-	-

Technical Data EC28 D:

Measuring principle:	Electrochemical (EC)	**Humidity:**	5 to 90 % r. h. [1]	**Weight:**	800 g
Measuring range:	Sensor dependent	**Air pressure:**	80 to 120 kPa [1]	**Approvals /**	
Gas supply:	Diffusion or gassing per calibration adapter	**Output signal:**	4-20 mA	**Certifications:**	
		Power supply:	18 to 30 V DC	Markings & Type	
Lifetime of		**Housing:**	Plastic	of Protection:	⟨Ex⟩ II 2G Ex emb [ib] IIC T4 Gb
the sensor:	Sensor dependent	**Protection class:**	IP64		-20 °C ≤ Ta ≤ +50 °C
Response time:	Sensor dependent	**Dimensions:**	115 x 203 x 55 mm	Functional	
Temperature:	-20 to +50 °C [1]		(W x H x D)	Safety (SIL):	DIN EN 61508-2: 2011

[1] Sensor dependent

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