

Thermo-FID FE II 2/3G Ex pz IIc T2-T4 Gc (Zone 2)

Flameionisationdetektor – Fieldhousing incl. IP65

Technical data

Model	FE II 2/3 G Ex pz IIc T2-T4 Gc
Weight	38 kg
Abmessungen	W = 570 mm H = 590 mm D = 410 mm
Measured value display	selectable
	ppm
	mg/m ³
	g/m ³
	Vol%
	%LEL
Linearity	< 4% above measurement range
Measured value output	0(4)mA to 20mA; burden 600Ω galvanically isolated
Ambient temperature	-5°C to 40°C
Air humidity	< 90% rel. humidity, + 20°C
	< 50% rel. humidity, + 40°C
Geographical altitude	0 to 1500 m above NN
Protection class (DIN40050) FE IP65	IP65



Completely mounted analyser in a fieldhousing for the rough applications in the field. Especially for wall fastening or a panel construction within analytical chambers. Over a status signal or by the remotecontrol-function it is possible to control and see the analyser function in real-time. The Zone 2 version for the Ex-applications complies the standard

*II 2/3G Ex pz II following ATEX 94/9/EG.
(Leakage control; Exhaust Emission control; Plant monitoring)*

General application

The Thermo-FID is applied in a variety of applications for all kind of industries, environmental protection and as well for research and development. The implementations reach from a LEL-control, over emission and immission control to analytical exhaust control for the chemical industry and in the field of engine-development. Furthermore there is process optimisation and the FID is also used in the field of analytical control of TLV- and TRC- values.

Technical design

The electronic system of the FID allows several extra functions. The integrated CPU allows a menu-driven handling as well as a full automatic self-control and failure analysis of the system. On the alphanumeric display are shown several operation and service instructions in clear text which give an easy maintenance process. The process-controlled and dynamic amplifier analysis always within the optimum range. The amplified signals are digitised directly at the detector and get transmitted as digital data to the CPU for the analysis. Therefore there is no distortion of the little currents because of badly shielded or too long signal ways.

Accreditation	17. BImSchV / TA Air (936/806016) QAL 1 (DIN EN 14181 and DIN EN ISO 14956) MCerts (Sira MC 050062/02)
EG- prototype verification certificate	BVS 09 ATEX E 144 X (ATEX 94/9/EG)
Vacuum system	Injectors
Measurement range	1 mg org.C/m ³ to 100000 mg org.C/m ³
Detection limit	< 0.1 mg org.C/m ³
Response time (T90)	< 0.5 s bei Messwert > 20 mg org.C/m ³ < 5.0 s bei Messwert < 20 mg org.C/m ³
Reproducibility	± 1%
Samplegas (self-drawn)	ca. 25 l/h with 1013 hPa alternative ca. 2l/h; ca. 5l/h; ca.60l/h
Samplegas-pressure	800 mBar to 1100 mBar (abs.)
Detector-temperature	T2: 110 °C to 200 °C T3: 130 °C to 165 °C T4: 95 °C to 100 °C
Supplementary heating system (PT100)	T2: 0 °C to 200 °C T3: 0 °C to 165 °C T4: 0 °C to 100 °C
Instrumentair	3.0 Bar bis 3.9 Bar / < 2 Nm ³ /h for the prepurgetime 3.5 Nm ³ /h Quality to ISO8573-1 minimum 1.2.1
Fuel gas	Hydrogen 0.7 Bar to 1.0 Bar / < 80 ml/min Quality 5.0
Burnerair	Synthetic air 1.0 Bar to 2.5 Bar
Calibrationgas	2.0 Bar to 2.5 Bar / < 130 NI/h concentration 60 % to 80 % of the measurement range in relation to C3H8
Zeropointgas	synthetische Luft 1.0 Bar bis 2.5 Bar or Nitrogen 2.0 Bar to 2.5 Bar/ < 130NI/h Quality 5.0
Nominal voltage	115 V ± 10 % or 230 V ± 10 %; 48 Hz to 62 Hz; < 250 W
Supplementary heating system (Probe, external catalyst)	115 V ± 10 % or 230 V ± 10 %; 48 Hz to 62 Hz; < 1000 W

Additional Information for FE II 2/3G Ex pz II



FE II 2/3G Ex pz II T2-T4



FE with a steam relaxation unit

Order data

Thermo-FID ,FE' II 2/3G Ex pz II T2-T4 (Zone 2)	incl. IP 65 for ATEX 94/9/EG	207.021200
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Standard (included within the system for zone 2)

Status- and alarmboard	4 x 0/4-20mA galv. separation/ 4 potentialfree alarmcontacts	407.950033.D
Synthetic Air for Burnerair	Conversion kit external and synthetic ai ras burnerair	407.020048

Options

Dilution probe 1:10/ 1:20	Dilution probe heated without enclosure for FE	407.040203
Inlinestripper	-	207.930000
Steam relaxation unit	With condenser for FE	407.970080
Flame Trap ATEX 94/9/EG	In Line Flame Trap FS 30 II 2G Ex d IIC	407.030103

