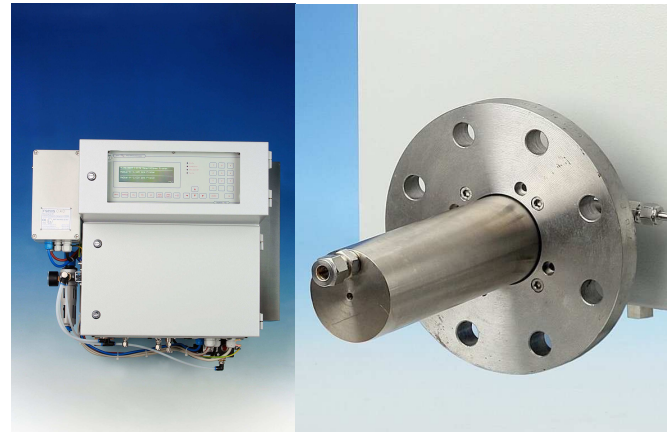


Thermo-FID MK II 2/3G Ex pz II T2-T4 (Zone 2)

Flameionisationsdetektor – Measuring head incl. IP65

Technische Daten

Models	MK II 2/3G Ex pz II T2-T4
Weight ATEX Zone 2	53 kg
Dimension	W = 570 mm H = 620 mm D = 465 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)	IP65
Probe tube	300 mm (optional up to 1500<mm)



Der Thermo FID-MK II 2/3G Ex pz II Zone 2 following ATEX 94/9/EG is an accredited Zone 2 application. With a measuring head attached directly without any filter or sample gas conditioning to a DIN gauge connection. Over a status signal or by the remote control function it is possible to control and see the analyser function in real-time. The housing is in protection class IP65. (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
Dilution probe	1:10...1:40 (Standard)
Response time (T90)	< 2.5 s if measured value > 20 mg org.C/m ³ < 5.0 s if measured value < 20 mg org.C/m ³
Samplegas (self-drawn)	ca. 25 l/h with 1013 hPa alternative ca. 2l/h; ca. 8l/h; ca.40l/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) at the measuring head of the probe	T2: 0 °C to 200 °C T3: 0 °C to 165 °C T4: 0 °C to 100 °C
Instrumentair	3.0 Bar to 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 / < 80 ml/min Quality 5.0
Burnerair	Synthetic air external 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	Synthetic air external 1.0 Bar to 2.5 Bar or Nitrogen 2.0 Bar to 2.5 Bar/ < 130NI/h Quality 5.0
Nominal Voltage	115 V ± 10 % oder 230 V ± 10 %; 48 Hz bis 62 Hz; < 880 W

Additional Information for the MK II 2/3G Ex pz II

Order data

Thermo-FID MK II 2/3G Ex pz II T2-T4 (Zone 2)	Incl. IP65 ATEX 94/9/EG	207.041200
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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 air as burnerair	407.020048

Options

Dilution probe 1:10/ 1:20	Dilution probe MK	707.030059.B
Back Purge Sample Filter	N2 or air for MK	407.980094
Flame Trap ATEX 94/9/EG	In Line Flame Trap FS 30 II 2G Ex d IIC	407.030103