

PCF ELETTRONICA Srl

PCF YOUR PARTNER IN VOC MONITORING

MOD. 110 H, H.T. TCOV ANALYSER

HIGH TEMPERATURE TOTAL HYDROCARBON ANALYZER (TCOV)

Made in compliance with UNI 12619 and UNI EN 13526 standards.

TUV accredited in accordance with the provisions of Italian Decree 152/06 part V titles I and II

Topics:

- FID Flame Ionization Detector, RISCATO AT 180 ° C.
- Programming interview from the display
- Integrated self-diagnosis system.
- High response speed, from 0 to 90% of the scale in 1 second.

FID DETECTOR

The FID detector is a 'carbon atom counter'.

The sample is sent to a micro flame fed with hydrogen and air. The organic carbon contained in the measurement gas is split into carbon ions and hydrogen ions.

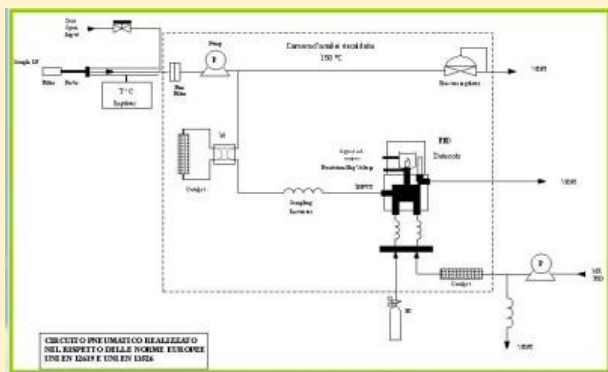
The H ions bind to the oxygen in the air generating water, while the C ions that are formed as a result of the oxidation $C_x = CO$, are proportional to the concentration of hydrocarbons present; moving in an electrostatic field (anode and cathode) they are attracted to one of the polarities, triggering an ionic current proportional to the concentration of the sample.



Mod. 110 H Front Panel



Display (details)



WORKING PRINCIPLE

The PCF Mod. 110 H analyzer is manufactured in compliance with UNI EN 13526 and UNI EN 12619 standards for the continuous determination of organic compounds (VOC, TOC) in emissions.

The sample is transferred to the flame ionization detector, through a probe complete with a ceramic filter with $3\mu\text{m}$ porosity and a hot transport tube (temperature 150 - 200 ° C). A second sintered steel filter, placed on the hot head pump, provides a further safeguard of the analytical circuit. The analyzer is equipped with a touch screen display for dialogue with the operator, continuously providing operating data, statuses, alarms, as well as storing the collected data.

The acquired data can be downloaded via the RS 232 output and / or USB flash memory. Connections to process peripherals with remote control and supervision and printers can also be made. An automatic device interrupts the flow of hydrogen in the event of the flame extinguishing.

TECHNICAL SPECIFICATIONS

The specified characteristics were obtained experimentally.

- Detector	: FID (Flame Ionization Detector) for high temperatures (180°C).
- Measuring range	: 0 – 10.000 mg/m ³ .
- Measuring scales	: 0-100/1000/10000 mg/m ³ . others possible, e. g. 0- 20/200/2000 mg/m ³ .
- Background noise	: ± 0,25 % of f.s.d.
- LDL (Lower Detectable Limit)	: ± 0,5 % of f.s.d.
- Precision	: ± 1 % of f.s.d.
- ZERO Signal Variation (24 h)	: ± 0,5 % of f.s.d.
- SPAN Signal Variation (24 h.)	: ± 1 % of f.s.d.
- Response time	: sec to 90 % of f.s.d.
- Sample Flow Rate	: 1,000 ml/min .
- Temperature of sample circuit	: 180 – 200 °C .
- Working Temperature	: 5 – 40 °C .
- Display	: 2 lines x 40 characters.
- Alarms	: High Concentration. : FID Flame OFF : Automatic interception of H ₂ , when FID flame OFF
- Services	: Idrogeno (H ₂) IP, 30 cc/min : Aria UPP, 300 cc/min
- Analogue Outputs	: 0 – 2 Volt e 4-20 mA
- Digital Outputs	: RS-232 and USB.
- Power Supply	: 230V 50Hz (possible 110 Vac 60Hz).
- Dimensions	: 19" Rack Module 483x 185 x 450 mm (19"x7.3"x17.7" WxHxD) .
- Weight	: 12 Kg.

Given the speed of response, this analyzer finds excellent application for the detection of L.E.L. (Lower Explosion Limit)

and processing with solvent-based processes and other chemical products, emissions on afterburners and incinerators.

CODICE

085 - 0001
052 - 1001
048 - 0001
041 - 5011

042 - 1001
042 - 1002

085 - 0101
085 - 0102

DESCRIZIONE

Mod. 110 H, COV/THC Hot FID monitor
Hydrogen Generator
Mod. 9588 UPP Air Generator
10 lt Calibration Gas Cylinder
with Precision Pressure Reducer.
Electrically Heated Sampling Line
Electrically Heated Sampling Line Temperature
Controller
Mod.110 H Consumables Kit
Mod.110 H Spare Parts Kit