# ELECTRONIC DENSITY MONITOR MDS-E01

# Digital instrument to measure and control of the gas density, designed for application in High and Medium voltage electric plants.

The MDS-E01 measures pressure and temperature and, using the input state equation of the gas, calculate the density value

On the local display it's possible to see, pressing the frontal key, the instant values of pressure, temperature and density (normally indicated as the corresponding pressure value at 20°C).

**MDS-E01** has nr.4 settable alarm thresholds referred to density values, nr.4 led lights on the frontal shown the alarm status. The instrument has, on request, an analogue output signal.

Digital filters and a software realized under specific know how in this applications, allow to reduce errors measurement due to fast temperature transients.

The instrument is fully protected against strong electromagnetic disturbances.

### **Technical features**

Range of pressure:  $-1 \div 2/6/10/16$  bar(g) Range of temperature:  $-25 \div 60^{\circ}$ C

Range of extended temperature : -45 ÷ 60°C Accuracy pressure measurement: 0.2% f.s. Accuracy density measurement: 1% FS

Voltage supply: 12V dc Protection degree: IP66

Thresholds: nr.4 settable with relays output with

settable hysteresis

Relays output: 24 V ca/cc - 0,5 A Dielectric Insulation : 500 V Leakage: <10<sup>-6</sup> Pa\*m³/sec

Standard: EN61000-6-2/3; EN61010-1

#### **Construction features**

Pressure sensor: strain gauge sensor

Temperature sensor: thermo resistance PT100 Pressure connection material and body: INOX

Case: polycarbonate

Electric Connection: internal terminal board and

external cable gland

Display: 5 led digit height 14 mm

Pressure connection type: flange with double O-ring gasket; ½" tread Gas male; other connection

on request.



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#### **MEASUREMENT INSTRUMENTS**

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