Gas Density Switch (GDS)
Model 851.52.063 HS

Applications
- Gas density monitoring of closed SF₆ tanks
- For outdoor use
- For high voltage switchgear

Special features
- Density switch with reference chamber and gas compensation.
- Micro switch inside the reference chamber; without influence of atmospheric pressure change and altitude; no recalibration necessary

Description

Working ranges
Permissible filling pressure:
11.0 bar abs. / 20 °C
Maximum pressure of reference chamber:
7.5 bar abs. / 20 °C
Minimum pressure of reference chamber:
4.0 bar abs. / 20 °C

Permissible temperature ranges
Ambient: -40 ... +80 °C (gas phase)
Storage: -40 ... +80 °C

Alarm contacts / Contact rating
Up to four micro switches, to make or break as ordered, switching points non adjustable and secured
Contact rating: 5 A / 250 V AC, 50 Hz

Switching distance
Maximum switching point distance: 1.6 bar
Minimum switching point distance: 0.1 bar
Switching hysteresis: typical 0.1 bar, Switching point setting as per specification

Switching accuracy of reference contact
at 20 °C: 60 mbar
at -20 ... +60 °C: 80 mbar

High-voltage test
2 kV, 50 Hz, 1s (wiring versus case)

Electrical connection
Cable box with cable gland M20 x 1.5
Connection cross-section max. 2.5 mm²
Process connection
Stainless steel, bottom, per EN 837, G ½ B (male), 27 mm flats

Pressure element
Stainless steel, welded
Gas tight: leakage rate $\leq 1 \cdot 10^{-8} \text{ mbar} \cdot \text{l/s}$
Test method: spectrometry of helium mass

Ingress protection
IP 65 per EN 60 529 / IEC 529

Weight
approx. 1.0 kg

Dimensions in mm

Case (reference chamber)
Stainless steel, welded with process connection, via glass bushing to electric connection box
Filling: SF6 gas
Gas tight: leakage rate $\leq 1 \cdot 10^{-8} \text{ mbar} \cdot \text{l/s}$
Test method: spectrometry of helium mass
The reference chamber pressure is defined by the lowest switching point

Options
- Compensation of gas mixtures
- Electrical connection with plug
- Other process connection
- Permissible ambient temperature -50 ... +80 °C
- Micro switches with higher contact rating

Ordering information
Model / Alarm contacts switching point, function and working direction / Options

Specifications and dimensions given in this leaflet represent the state of engineering at the time of printing. Modifications may take place and materials specified may be replaced by others without prior notice.