8 RDH DENSITY MINIM-MOISTURE DEVICE





Description

These instruments are used to monitor micro-water content, density, pressure and temperature of SF_6 gas in sealed tanks, able to achieve real-time remote monitoring. Smart compensation technology is applied for real-time tracking of non-linear gas pressure changes and micro-water changes in SF_6 gas, ensuring accurate measurement and wide range of applications. It is suitable for monitoring the high voltage system. The integrated design and effectively ensure the air tightness. It can provide multiple solutions to support new substations and the intelligent transformation of existing substations.

Application

SF_6 Gas Insulated Switchgear (GIS)
SF_6 Insulated Circuit Breakers
SF_6 Insulated Pole-Mounted Switch
SF_6 Insulated Transformers
SF_6 Insulated Mutual Inductor

Features

1. Integrated design for collection device, which can effectively ensure air tightness.
2. The collection device occupies only one vent, reducing the risk of leaks.
3. Remote-style density monitor and dew point sensor are integrated to achieve on-site collection and processing, and report the density, pressure, temperature and micro-water content information simultaneously.
4. Digital signal output, communicate with the backend server via RS485, facilitating on-site networking and commissioning.

Options

1. Measurement range
2. Wide temperature range -60°C to +60°C
3. Can detect SF_6, Air, N_2, $SF_6 + N_2$ and other gases

Technical Data

1 . Scale range: Pressure: 0 to 1MPa abs	4 . Ambient conditions:
Dew point: -50°CDP to 60°CDP	-40°C to +60°C, relative humidity ≤ 95%RH
2 . Accuracy:	5 . Leakage rate:
(related to the measuring span; SF_6 in gas phase)	≤1 × 10^{-9} Pa·m^3/s (Helium leakage inspection)
a) At 20°C: Class 1.0	6 . Process connection: M20 × 1.5, (customizable)
b) -40°C to +60°C: Class 2.5	7 . Installation method: radial or axial
Dew point: ±3°CDP	8 . Pressure interface: flange interface
3 . Degree of protection: IP65	10 . Weight: 2.5kg

Main electrical performance indicators and specifications of the remote transmission part

1. Power supply: DC 24V
2. Power consumption: < 2W
3. Communication mode: RS485
4. Protocol: ModBus RTU
5. Baud rate: 9600bps
6. Anti-electromagnetic interference:
   IEC61000-4-2: level 4 (15kV)
   IEC61000-4-3: level 3 (10V / m)
   IEC61000-4-4: level 4 (4kV)
   IEC61000-4-5: level 3 (+/- 2kV)
   IEC61000-4-6: level 3 (10V)
   IEC61000-4-8: level 5 (100A / m)

Dimensions

