ZMJ100PR
Density Monitor

ZMJ100PR Density Monitor

Description

ZMJ100PR Density Monitor is used to monitor the density of SF_6 gas in the sealed gas tanks, which can locally display the gas density on-site, and send alarm signals when the density reaches the set values. Furthermore, it can transmit the real-time SF_6 gas density data remotely, to achieve online remote monitoring function. Ideally suited for the high voltage systems. It can be used in the new substation building and the renovation and upgrading of existing substation.

Application

- SF_6 Gas Insulated Swithchgear (GIS)
- SF_6 Insulated Circuit Breaker
- SF_6 Insulated Pole-Mounted Switch
- SF_6 Insulated Transformer
- SF_6 Insulation Current Transformers or Voltage Transformers
- SF_6 Insulated Bus System

Features

- With temperature compensation, ensuring higher measuring accuracy.
- Mechatronics design, has precision mechanical structure, and has real-time remote transmission function of electronic signals and on-site dispalyand control.
- RS485 bus interface, easy to do the system expan sion, and to achieve telemetry, remote control func tions.
- Strong EMC capability.
- Suited for different indoor and outdoor installation requirements.
- AISI 304 hermetically sealed stainless steel case.
- The connecting parts are made of AISI 316 stainless steel.
- The field display value and output signal are not affected by the external environment such as alti tude.
- Up to sets of contacts, can achieve a variety ofas double 4options such alarm and double lock forsafer and more reliable monitoring.

Options

- Withstand voltage: 2.5kV，50/60 Hz 1min
- Oil filled or not
- Can detect SF_6, Air, N_2, SF_6+N_2 and other gases
- Communication: 4-20mA(Two wire)
- Wider temperature range: optional -40°C ~ +60°C or -60°C ~ +60°C
- Optional measurement accuracy：±1.6%FS（+20±1°C），±2.4%FS（-20°C～ +60°C）（gas phase）

Technical Parameters for Remote Module			
Operating voltage	10~30VDC	EMC tests	IEC61000-4-2: Level 4 IEC61000-4-3: Level 3 IEC61000-4-4: Level 4 IEC61000-4-5: Level 3 IEC61000-4-6: Level 3 IEC61000-4-8: Level 5
Power consumption	<0.5W		
Communication mode	RS485		
Communication protocol	Modbus RTU		
Baud rate	9600bps		

Technical parameters	
Case diameter	100mm
Scale range	-0.1 ~ 0.9MPa(customizable)
Accuracy	±1.0%FS（+20±1°C），±1.8%FS（-20°C～ +60°C）（gas）
Degree of protection	IP65
Ambient condition	-20°C ~ +60°C realative humidity ⩽ 95%
Leakage rate	⩽ 1×10^{-9} Pa·m^3/s (Helium leakage inspection)
Process connection	M20 x 1.5 (customizable)
Installation method	Radial or axial
Electrical connection	Pluggable connector, wire diameter 1~ 2.5 mm^2 (1.5mm^2 recommended)
Insulation property	Insulation resistance: >100MΩ (DC500V) Power frequency with stand voltage: 2kV, 50/60Hz, 1min
Contact type	Magnetic snap-action switch (80% Ag, 20% Ni, 10μm gold plated)
Impact rating	50g(Oil-filled), 30 g(Non-oil-filled)
Contact electrical parameters	30W/ 50VA，1A. max. 220VDC/ 380V 50/ 60Hz max.
Watch glass	Laminated safety glass
Weight	≈ 1.2kg
Pressure element	Bourdon tube

Dimensions