ZMJ80XDR
Density Monitor

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Description

ZMJ80XDR Density Monitors are used to monitor SF_6 gas density in sealed tanks. They are applied to indicate the gas density and to provide signal outputs 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. They are designed to monitor High Voltage systems. They can provide multiple solutions to support new substations and the renovation and upgrading of existing substations.

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

Options

- Different measuring range
- Measuring Medium: SF_6, Air, N_2, SF_6+N_2 and other gases
- Operating temperature: Optional -40°C ~ +60°C

Features

- Higher accuracy from reference chamber temperature compensation technology.
- Suitable for indoor or outdoor installation.
- Micro-switch that can switch freely between normally open and normally closed points.
- Up to 3 set of contacts, multiple options such as double alarm and double lock, safer and more reliable monitoring.
- High shock resistance. No need to fill oil, no potential oil leakage.
- Normally closed contact will not false alarm due to vibration.
- RS485 bus interface, easy to expand current system for telemetry and remote control functions.
- Strong EMC capability.
- ±1%FS display in full range, higher remote transmission module accuracy, higher indication and remote data consistency accuracy.
- More accurate gauge indication values and contact switching values throughout the temperature range.

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 4 IEC61000-4-6: Level 3 IEC61000-4-8: Level 5 IEC61000-4-9: Level 5 IEC61000-4-10: Level 5
Power consumption	<0.5W		
Communication mode	RS485		
Communication protocol	Modbus RTU		
Baud rate	9600bps		

Technical parameters	
Scale range	-0.1 ~ 0.9MPa
Accuracy of set pressure point	±1.0%FS（+20±1°C） ±1.6%FS（-30°C～ +60°C）（gas）
Accuracy of indication	±1.0%FS（+20±1°C） ±1.8%FS（-20°C～ +60°C）（gas） ±2.3%FS（-30°C～ -20°C）（gas）
Accuracy of transmitter	Pressure：±0.5%FS Temperature：±1°C Pressure at 20°C：±1.0%FS
Degree of protection	IP65
Ambient condition	-30°C ~ +60°C , relative humidity：⩽ 95%RH
Leakage rate	⩽ 1×10^{-9} Pa·m^3/s(Helium leak detection)
Process connection	M20×1.5, (customizable)
Installation method	Radial or axial
Electrical connection	Contact connection: pluggable connector, wire diameter 0.2 ~ 2.5 mm^2 Remote connection: pluggable connector, wire diameter 0.2 ~ 1.5 mm^2
Insulation property(contact part)	Insulation resistance: >100MΩ (DC500V) Withstand voltage: 2kV, 50/60Hz, 1min
Contact type	Microswitch
Impact rating	50g
Contact electrical parameters	10(1.5)A, 250V AC 0.1(0.05)A, 250V DC
Window glass	Laminated safety glass
Weight	≈ 1.4kg
Pressure element	Bellow and Bourdon Tube

Dimensions