

EnergoM-DU-H2 SERIES INSULATION MONITORING RELAY

DC INSULATION MONITORING



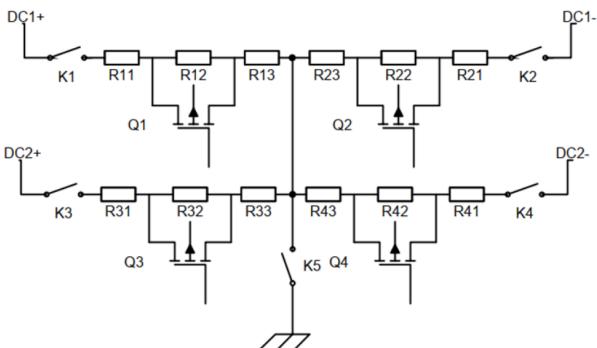
Introduction

EnergoM-DU-H2 series is used in on-line monitoring insulation resistance of the DC floating system (Dual DC system shared one ground). Dual DC channels are controlled independently, two DC insulation monitoring non-interference in each other. Users can enable or disable the insulation monitoring function of each DC channel and acquire insulation resistance values by RS485 communication.

EnergoM-DU-H2 series adopts Dual-DC channels independent control scheme. Users can control dual-channel startup, close and data reading respectively according to the communication protocol.

| | |
|----------------|-------------------------|
| EnergoM-DU-H2 | RS485, Private protocol |
| EnergoM-DU-H2Z | RS485, Modbus RTU |

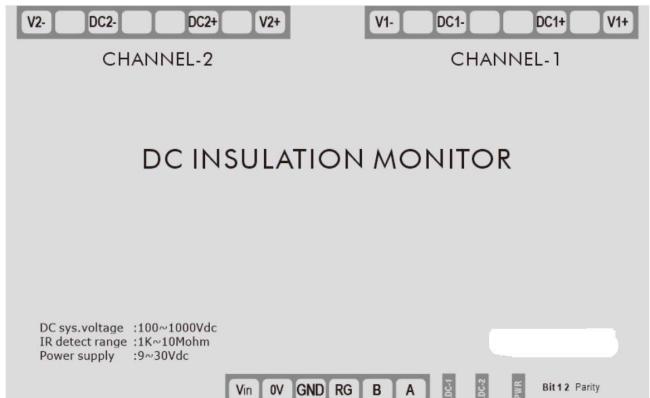
Working Principle



Main Features

- Dual-channels independent control.
- Remote monitoring and management.
- Monitor positive and negative poles.
- Ground insulation resistance.
- DC voltage monitoring.
- Vehicle side DC voltage monitoring optional.
- Voltage reverse polarity alarm.

Terminal Definition



Technical Characteristics

| Basic parameters | | | |
|---|--|------------------|----------|
| Power supply | 10-30VDC, Power 6W | | |
| DC voltage range | 100V~1000V | | |
| DC voltage measurement accuracy | $\leq 2\%$ +0.3% | | |
| Insulation resistance measurement range | 1KΩ~10MΩ (DC System voltage:100V~1000V) | | |
| Insulation monitoring accuracy (When :DC voltage:100V-1000V) | CY range | Resistance range | Accuracy |
| | 0~0.8μF | ≤60KΩ | ≤3KΩ |
| | | 60KΩ<R≤1MΩ | ≤5% |
| | 0.8μF ~3μF | ≤60KΩ | ≤6KΩ |
| | | 60KΩ<R≤1MΩ | ≤20% |
| Off-line pressure test | <2mA | | |
| Communication | RS485,Modbus RTU/ Private protocol | | |
| Dimension | 145*95*40mm,Din-rail:35mm | | |
| Standard | IEC 61851-23 (2014-03):2014-11 | | |
| Humidity | 85% | | |
| Storage environment | - 40°C ~125°C | | |
| Operating environment | - 40°C ~75°C | | |

| Other parameters | | | |
|-----------------------------|------------------------|-------|--|
| Pressure point | Maximum voltage rating | Time | |
| DC+/DC- to GND | 4200VDC/3000VAC | ≤1min | |
| Power supply +/- to GND | 4200VDC/3000VAC | ≤1min | |
| RS485 A/B to GND | 4200VDC/3000VAC | ≤1min | |
| DC+/DC- to power supply +/- | 4200VDC/3000VAC | ≤1min | |
| DC+/DC- to A/B | 4200VDC/3000VAC | ≤1min | |