



IMD-2R

IMD-2R, Monitoring relay for offline insulation. It controls and monitors the insulation resistance of the receivers that are occasionally disconnected from the electrical network,

Code: P33020. **CONSULTAR DISPONIBILIDAD**

Description

It is an **IMD** (insulation monitoring device), ohmic insulation relay, which is used to protect and monitor the insulation ($k\Omega$, $M\Omega$) between the phase/s of the receiver and the protection cable reference. It is not a permanent monitor (at rated voltage of the electrical installation). It is only used for loads disconnected from the voltage system. If it detects an installation fault, it prevents the connection of the network, anticipating a trip of the other protections through a circuit breaker with control coil.

Application

Ideal for critical continuous service electrical installations:

- Tunnels
- Street lights
- Pumping systems
- Generators
- Hospitals
- etc.



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Specifications

AC power supply

| | |
|-----------------------|---------------|
| Installation category | CAT III 300 V |
| Consumption | 2,2 ... 7 VA |
| Frequency | 50 ... 60 Hz |
| Nominal voltage | 90 ... 276 V~ |

DC power supply

| | |
|-----------------------|----------------|
| Installation category | CAT III 300 V |
| Consumption | 1,3 ... 1,9 W |
| Nominal voltage | 90 ... 276 Vdc |

Mechanical characteristics

| | |
|----------------------------------|--------------------|
| Size (mm) width x height x depth | 35 x 112 x 84 (mm) |
| Envelope | Polycarbonate V0 |
| Weight (kg) | 0,16 |

Environmental characteristics

| | |
|--|----------------|
| Protection class | IP 20 |
| Relative humidity (without condensation) | 5 ... 95 % |
| Storage temperature | -30 ... +80 °C |
| Working temperature | -10 ... +55 °C |

Electrical characteristics

| | |
|-----------------|----------|
| Earthing system | TT-TN-IT |
|-----------------|----------|

Measurement circuit with insulation monitoring

| | |
|--|--|
| Impedance Z_i at 50 Hz | 0,43 M Ω |
| DC (R_i) internal resistance | 0,35 M Ω |
| Maximum I_m measured current (With $R_F = 0 \Omega$) | 10 μ A |
| Permanent allowable extraneous voltage (U_{fg}) | 300 Vcc |
| Response time (t_{an}) = $0.5 \times R_{an}$ and $C_e = 1 \mu$ F | < 2 s |
| Peak value measuring voltage (U_m) | 10 Vcc |
| Response value (R_{an}) | 100 k Ω ... 10 M Ω \pm 15% |
| Hysteresis | + 25% |

Standards

| | |
|--|--|
| Electrical safety, Maximum height (m) | 2000 |
| Electrical safety, Contamination level/class | Category 2 |
| Standards | IEC 61557-1, IEC 61557-8, IEC 61326-1, IEC 61010-1 |



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User interface

| | |
|--------------|-------------------------------|
| LED | 7 LED: ON, AL1 (LED bar), AL2 |
| Keyboard | 3 keys |
| Display type | LCD (Backlight bicolor) |

PE connection fault measurement

| | |
|-----------------|-------------------------|
| Fault detection | Open circuit (> 100 kΩ) |
|-----------------|-------------------------|

Digital relay outputs

| | |
|------------------------------|---|
| Quantity | 2 |
| Maximum current | 5 A |
| Maximum open contact voltage | 250 V~ |
| Electrical life | 1 x 10 ⁵ ciclos (250 Vca / 5A) |
| Mechanical life | 15 x 10 ⁶ Cycles |
| Maximum switching capacity | 1250 VA |



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Dimensions



Connections

