

### 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:

- o Tunnels
- Street lights
- Pumping systems
- $\circ$  Generators
- Hospitals
- o etc.

## Circutor

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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 Zi at 50 Hz	0,43 ΜΩ
DC (Ri) internal resistance	0,35 ΜΩ
Maximum Im measured current (With RF = 0 $\Omega)$	10 µA
Permanent allowable extraneous voltage (Ufg)	300 Vcc
Response time (tan) = 0.5 x Ran and Ce = 1 $\mu F$	< 2 s
Peak value measuring voltage (Um)	10 Vcc
Response value (Ran)	100 k $\Omega$ 10 M $\Omega$ $\pm$ 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 <sup>5</sup> ciclos (250 Vca / 5A)
Mechanical life	15 x 10 <sup>6</sup> Cycles
Maximum switching capacity	1250 VA

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# Dimensions

# Connections

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