Product data sheet
Characteristics

IMDIFL12MC
insulation fault locator Vigilohm IFL12MC, up to 12 channels for IT earthing/ungrounded, capacitance value, Modbus RS485, 100 to 440V power supply



Main

Range	Vigilohm
Device short name	IFL12MC
Product or component type	Insulation fault locator
Earthing system	IT HRG
Device application	Marine and offshore Industry Infrastructure Power generation Port, airport, railway
Application	Large
Electrical circuit type	Power circuit Control/Command circuit
Network pollution level	Capacitive
Poles description	1P + N 3P 3P + N
Network rated voltage	0…480 V - AC at 45...440 Hz (device connected to phase) 0…830 V - AC at 45...440 Hz (device connected to neutral) 480…1000 V - AC at 45...440 Hz (device connected to phase with PHT1000 subassembly) 830…1000 V - AC at 45...440 Hz (device connected to neutral with PHT1000 subassembly) 0…480 V - DC 480…1000 V - DC (device connected with PHT1000)
Number of channels	12

Complementary

Threshold setting	Alarm: 200 Ohm...200 kOhm
Type of measurement	History of alarms Network insulation resistance, range: 200 Ohm...250 kOhm Earth leakage capacitance, range: 0.1...15 µF
Accuracy	+/- 15 %
Type of setting	Alarm threshold: settable per feeder
Configurable filtering time	5 s 40 s 400 s
Response time	1 s 1/5th of set filtering time 8 s 1/5th of set filtering time 80 s 1/5th of set filtering time
Time delay range	0...120 min for signalling circuit
Power quality analysis	Transient capture

Monitoring function	Detection of toroids connection automatic Detection of toroids connection manual mode Detection of IM400 injection current permanent
Test function	Auto test at start and every 5h Remote test Manual
Overvoltage category	III 300 V II 600 V
IP degree of protection	Case: IP20 Front face: IP54
Material	Thermoplastic

Physical

Type of installation	Indoor
Operating altitude	<= 3000 m
Relative humidity	5…92 %
Ambient air temperature for operation	-25…70 °C
Ambient air temperature for storage	-40…85 °C
Pollution degree	2
Mounting mode	Flush-mounted (panel) Clip-on (DIN rail)
Mounting position	Vertical Horizontal
Connections - terminals	Power supply: removable screw terminal block 0.2…2.5 mm² Output relay: removable screw terminal block 0.2…2.5 mm² Toroids inputs: removable screw terminal block 0.2…1.5 mm² Communication: removable screw terminal block 0.2…2.5 mm² Voltage inputs: removable screw terminal block 0.2…2.5 mm²
Net weight	0.305 Kg
Cut-out dimensions	92 x 104 mm
Height	110 Mm
Width	108 Mm
Depth	59 Mm

Communications & Management

Display type	LCD display
Information displayed	Resistance value Capacitance value Evolution of resistance in graph
User language	Spanish German Italian Russian French Chinese English Portuguese
Local signalling	Yellow indicator light: insulation fault Yellow flashing indicator light: communication Green/Red indicator light: product status Green indicator light: satisfactory insulation LCD display: transient fault
Signal contacts composition	1 C/O standard or fail-safe
Signalling circuit voltage	250 V - AC at 6 A 48 V - DC at 1 A
Communication port protocol	Modbus RS485
Data recording	Alarm logs

Power Requirements

[Us] rated supply voltage	100...300 V (LN) AC 50/60 Hz tolerance: +/- 15 % 100...440 V AC 50/60 Hz tolerance: +/- 15 % 80…120 V (LN) AC 400 Hz tolerance: +/- 15 % 100...440 V DC tolerance: +/- 15 %
Power consumption in VA	26 VA
Power consumption in W	10 W
Overcurrent protection	1 A

Standards

Standards	IEC 60364-4-41 IEC 61010-1 IEC 60364-5-51 IEC 61557-9 IEC 61557-15 IEC 61326-2-4 UL 61010-1
Product certifications	CE[RETURN]DNV-GL[RETURN]EAC[RETURN]UL[RETURN]cULus
Environmental characteristic	Exposure to damp heat not in service conforming to IEC 60068-2-30 Exposure to damp heat in service conforming to IEC 60068-2-56 Salt mist conforming to IEC 60068-2-52 Long-term storage class 1K22 conforming to IEC 60721-3-1 Transport class 2K11 conforming to IEC 60721-3-2 Stationary use at weather protected locations class 3K24 conforming to IEC 60721-3-3
Mechanical robustness	Long-term storage class 1M11 conforming to IEC 60721-3-1 Transport class 2M4 conforming to IEC 60721-3-2 Stationary use class 3M11 conforming to IEC 60721-3-3

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	9.7 Cm
Package 1 Width	18.2 Cm
Package 1 Length	13.5 Cm
Package 1 Weight	550.0 G
Unit Type of Package 2	S03
Number of Units in Package 2	8
Package 2 Height	30.0 Cm
Package 2 Width	30.0 Cm
Package 2 Length	40.0 Cm
Package 2 Weight	5.2 Kg

Offer Sustainability

Recyclability potential, in %	8
Total lifecycle Carbon footprint	648 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	98.205
Carbon footprint of the manufacturing phase [A1 to A3]	98 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.15364
Carbon footprint of the distribution phase [A4]	0.2 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.30142
Carbon footprint of the installation phase [A5]	0.3 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	548.78
Carbon footprint of the use phase [B2, B3, B4, B6]	549 kg CO2 eq.
Mercury free	Yes
Sustainable packaging	No
Carbon footprint of the end-of-life phase [C1 to C4]	0.74526
Carbon footprint of the end-of-life phase [C1 to C4]	0.7 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Total lifecycle Carbon footprint	648

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
SCIP Number	D3328ed4-45d1-46a9-bf4a-dba261badb1a
REACh Regulation	Reference contains Substances of Very High Concern above the threshold
EU RoHS Directive	Compliant By Exemption
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which
End of life manual availability	End Of Life Information
Take-back	No
WEEE Label	The product must be disposed on European Union markets following specific waste collection and

Contractual warranty

Warranty (in months)	18

Product Life Status : Commercialised