



FAC/055, FAC/120 and FAC/200 Insulation Monitor for batteries installations

• Applications

FAC equipment detect, in DC installations of 48, 120 or 200 Vdc, insulation fault on conductors (+) and (-) against ground. The main application is in batteries installations, continuous-alternate rectifiers, etc. Generally, in any DC installation in which you want to detect the possible connection to ground. For example, recreational ships, or military, High Voltage Sub-stations, etc., that use DC to power protection and measurement equipment, etc.

• Functional Features

- Instantly connect an output relay, just in the moment of fault detection.
- Test button for simulates ground connection of (+) and (-).
- LED, indicates if default is (+) or (-)
- Powering with own instal.lacions.

• Constructive Features

- Plastic enclosure with DIN rail installation
- Frontal board terminals.
- Potential free output contact.

• Technical Data

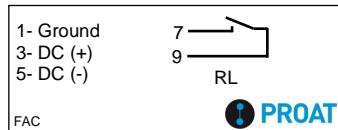
- Operating margin: $V_{dc} + 15\%$ to $V_{dc}/2$
- Consumption at rest: 0.5 W (VN)
- Consumption with default: <6W
- Response time: <50ms
- Default max. resistance: 80 K Ω
- CE Standard
- Relay Contact properties:
 - Max. Switching Voltage: 230 Vac
 - Max. Switching Power: 1000VA.
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• Models

Models	Nominal Voltage VN	Voltage margin without power supply
FAC/055	48 VDC	24...55 VDC
FAC/120	120 VDC	60...138 VDC
FAC/200	200 VDC	100...230 VDC

• Terminals





- **Wiring Diagram**

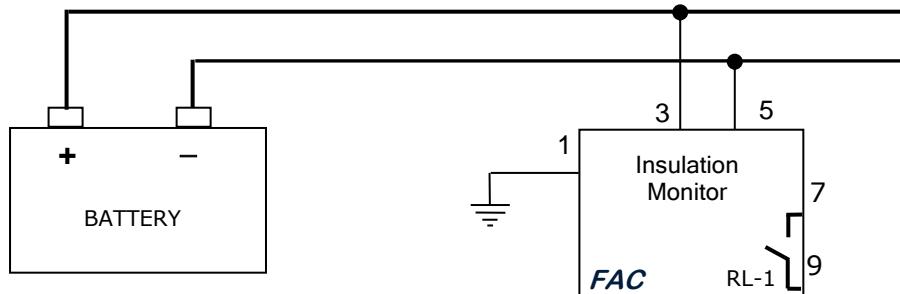
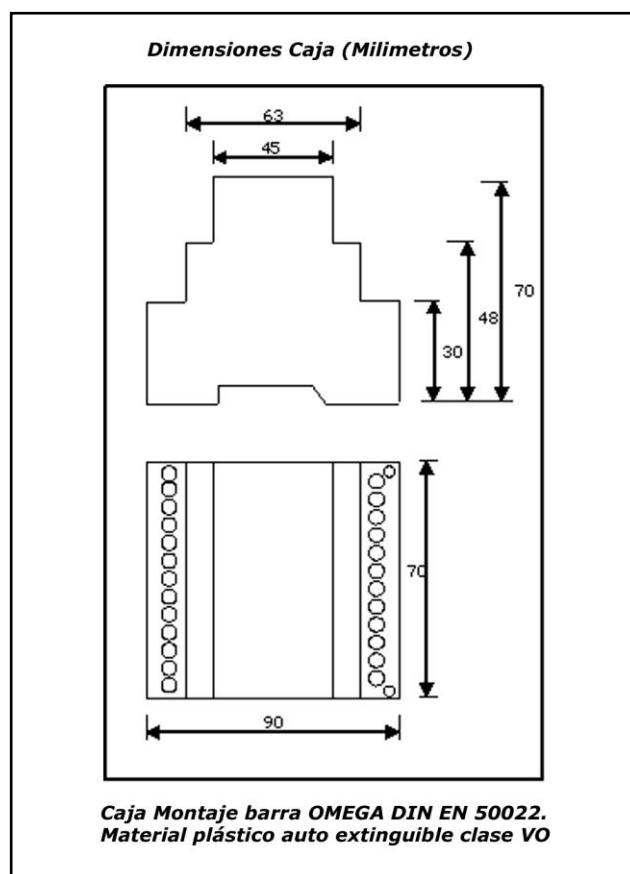


Fig.1: FAC connections in an installation

- **Case dimensions (millimeters)**





Technical Data FAC

Dielectric Test		Switching Elements	
Input VDC to outputs contacts	3k VDC	Number of switching elements	1
Voltage Range		Type of outputs	NA
Monitoring voltage UN	0,5*UN...UN+15%	Voltage outputs	Voltage free
Power consumption	≤6VA	Rated contact voltage	250VAC/300VDC
Response values		Making capacity	5A/0,1A
Isolation level In	80 kΩ	Electrical service life, number of cycles	20,000,000
Measure Error (In)	±10%	Breaking Capacity	2A-AC239V
Response time TR	<100 ms		0,4-0,2 - DC220V
Timing Failure	1 second		
Switching Time RL	<100 ms		
Measuring circuit		General Data	
Internal resistance R+	>56 kΩ (Vn=120)	Operation Mode	Continuously
Internal resistance R-	>56 kΩ (Vn=120)	Mounting	DIN rail
Impedance to ground	>300 KΩ	Connection	screw M2,5
Monitoring voltage UN	UN+15%	Maximum torque	0,4 Nm
Leakage capacitance	>1000 μF	Protection grade	IP20
Frontal view		Flammability class	UL94V-0
Signals type	2 leds	Weight	310g.aprox.
Fault (+)	Led red	Operation temperature	-20°C...+55°C
Fault (-)	Led red	Storage temperature	-25°C...+80°C
Test button	Yes	Relative Humidity (without condensation)	<95%
Reset button	Yes	Setting values method	front opening
Factory Settings		Ruling	
Isolation level	80 kΩ	Electrical safety requirements	UNE-EN 61010-1 UNE-EN 61010-2-0081
		Electrical safety requirements	UNE-EN 61000-6-1
		Electromagnetic compatibility (CEM)	UNE-EN 61000-6-3/A1
		Directive Europe	2006/95/CE
		Directive Europe	2004/108/CE

FAC/055 Isolation Monitor (171023)



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