

! FAC-24D

Isolation Monitoring 24 Vcc

• Description and Applications

The FAC-24D detects, in 24Vdc direct current installations, the lack of insulation of the two poles, (+) and (-), against ground. It has its main application in battery installations. In general, in any direct current installation where you want to detect a possible ground fault. Such as, for example, in isolated photovoltaic installations, electric forklifts, sports or military boats, etc.

• Functional Characteristics

- Connects an output relay at the moment the defect is detected.
- TEST button to simulate a ground fault.
- RESET button to check that the fault is correct.
- Red LED, indicates that insulation failure has occurred.
- Green diode, indicates that the equipment is active.
- It is powered by the installation itself.

• Constructive Characteristics

- Plastic box for DIN rail installation.
- Terminals on front cover.
- Potential free output contact.

• Technical Data

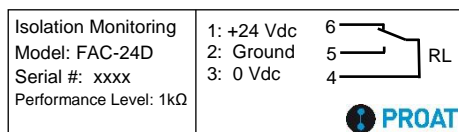
- Operating range: Vdc to 18 to 35 Vdc
- Consumption at rest: 0.5 W (at VN)
- Consumption with defect: <2W
- Response time: <10s
- Actuation level: 1KΩ.
- or Temp. Operation -15°C to +60°C
- CE regulations
- IEC 61557-8
- Relay contact properties:
 - Permanent current: 5A.
 - Max. voltage switching: 230 Vac.
 - Pot. Max. Switching: 440VA.



• Models:

Reference	Nominal Voltage V _N	Operating Margin
FAC-12D	12 V _{DC}	9...18 V _{DC}
FAC-24D	24 V _{DC}	18...32 V _{DC}

• Terminal connection



- Connection diagram

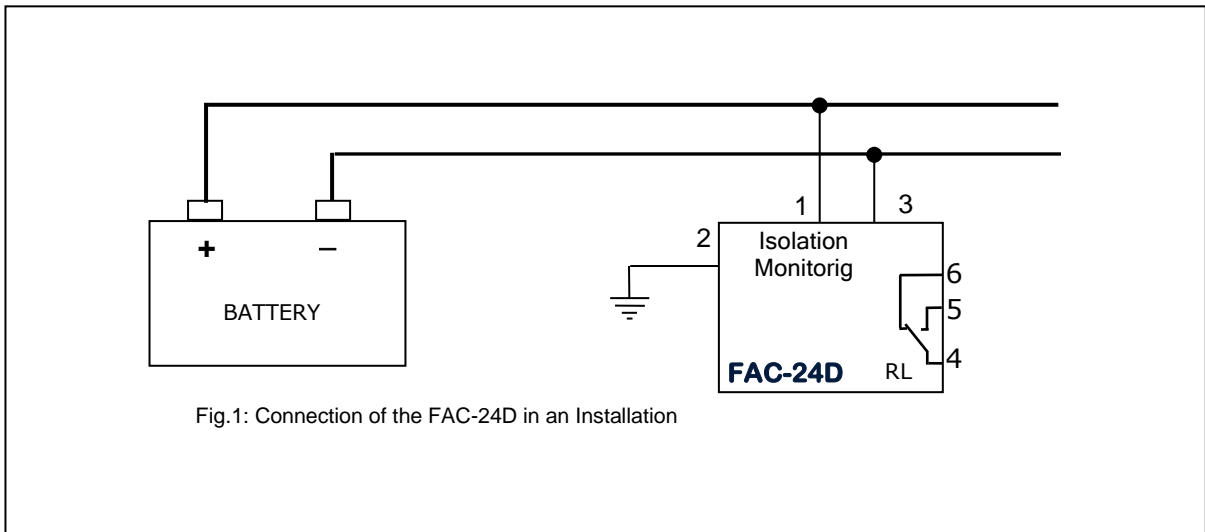
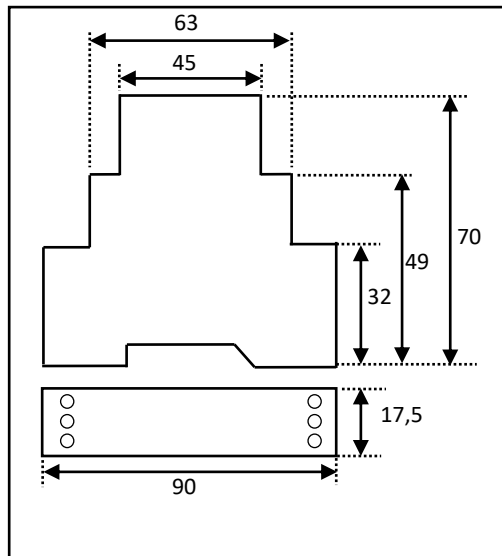


Fig.1: Connection of the FAC-24D in an Installation

- Case dimensions (millimeters)



Technical Data FAC-24D

Dielectric Test	
Input VDC to outputs contacts	3k VDC

Voltage Range	
Monitoring voltage U_N	18...32Vdc
Power consumption	≤6VA

Response values	
Isolation level I_n	1 k Ω
Measure Error (I_n)	±10%
Response time T_R	<5s
Timing Failure	10 second
Switching Time R_L	<100 ms

Measuring circuit	
Internal resistance R_+	>5 k Ω
Internal resistance R_-	>5 k Ω
Impedance to ground	>5k Ω
Monitoring voltage U_N	24Vdc+15%
Leakage capacitance	<5 μ F

Frontal view	
Signals type	1 leds
Fault	Led red

Test button	Yes
Reset button	Yes

Factory Settings	
Isolation level	1 k Ω

Switching Elements	
Number of switching elements	1
Type of outputs	NA
Voltage outputs	Voltage free
Rated contact voltage	250VAC/300VDC
Making capacity	5A/0,1A
Electrical service life, number of cycles	20,000,000
Breaking Capacity	2A-AC239V
	0,4-0,2 - DC220V

General Data	
Operation Mode	Continuously
Mounting	DIN rail
Connection	screw M2,5
Maximum torque	0,4 Nm
Protection grade	IP20
Flammability class	UL94V-0
Weight	310g.aprox.
Operation temperature	-20°C...+55°C
Storage temperature	-25°C...+80°C
Relative Humidity (without condensation)	<95%
Setting values method	front opening

Ruling	
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
IEC Standard	IEC 61557-8