

CAPDIS[®]-S1+(R4.5)

FAIL-SAFE

Integrated capacitive voltage detecting system



Fail-Safe-Functions

- **Voltage detecting system (VDS) for high voltage**
Detection of voltage condition in high voltage equipment according to IEC 61243-5. Integrated continuous three phase voltage indication.
- **No battery required, no maintenance required**
For voltage detecting and self test no external power supply or battery is required
- **Complete insulation monitoring of capacitive divider**
Primary and secondary isolation monitoring and of capacitive divider. Isolation problems are indicated on display.
- **Inherent safety**
The CAPDIS-S1+ includes a self test which offers inherent safety; no external test device is required. Self test function according to patent DE 103 04 396. The test is activated by the Test-button and does not need any auxiliary supply. This test allows to distinguish between voltage absence and any device fault. This test is mandatory for safe detection of voltage absence! Optional broken signal lead detection.
- **Adjustable for Smart-Grid applications**
Secondary part of capacitive divider is adjustable by user. Correct adjustment is important to use CAPDIS[®] in combination with Smart-Grid Systems such as IKI-50. Six steps to set the correct value are available. In case of a non-correct setting, the mismatch is indicated.
- **Integrated 3-phase test point**
Acc. to the LR-specification in IEC 61243-5.
The test point can be used for phase comparison and phase sequence test, e.g. by universal tester type CAP-Phase.
- **Integrated Y-Interface**
To connect CAPDIS[®] to Smart-Grid Systems such as IKI-50 or IKI-22.

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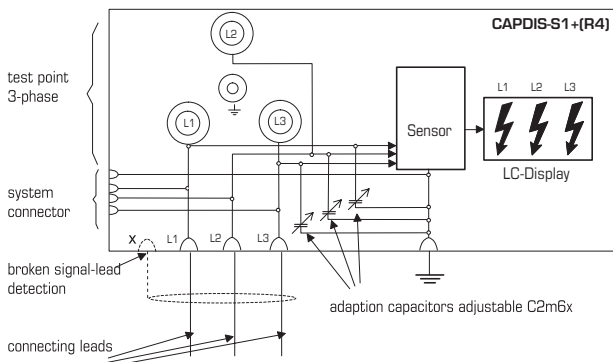


universal C2m-Module

Function and Technical Data

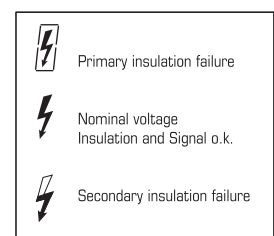
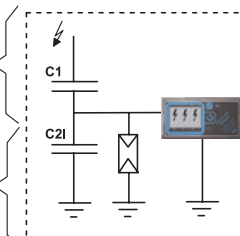
Applied standard	IEC 61243-5 (VDS)				
	Indication LCD	Indication during normal operation with nominal voltage	Explanation	Indication during bringing into service with nominal voltage	Indication with pressed Test-button
		Overvoltage	Insulation problem at primary part of divider or $U \gg 1.2 \times U_n$	C2m < Min.	CAPDIS [®] OK
		Nominal voltage present	Signal OK Insulation OK $U > 0.45 \times U_n$	C2m correct	internal error
		Voltage present	Insulation problem at secondary part of divider $0.1 \times U_n < U < 0.45 \times U_n$	C2m > Max.	internal error
	No indication	No voltage	Short circuit at connecting leads $U < 0.1 \times U_n$	C2m \gg Max.	internal error
	ERROR		System error	System error	broken lead (with optional broken lead detection)
Housing	front panel mount, h x w x d = 48 x 96 x 37 mm, for cut 45 x 92 mm				
Operating temperature	- 25 °C to +75 °C, storage temperature: - 30 °C to +70 °C, IP 54				
Connectors for signal leads	fast-on receptacles 4.8 x 0.8 mm				
Required data for order	rated voltage UN, capacitance of coupling electrode C1				
Item no.	2502145 CAPDIS-S1+ / R4.5 with signal lead test				
Universal C2m-Modules	2501155 Low values (100, 470, 570, 1000, 3300, 4700 pF) 2501156 Medium values (330, 2200, 2530, 6800, 10000, 16800 pF) 2501157 High values (330, 2200, 2530, 10000, 22000, 32000 pF)				further values on request

Insulation monitoring of capacitive divider with CAPDIS



CAPDIS observes:

1. Insulation resistance primary side
2. Insulation resistance secondary side



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