SMARTFUSE 2

Smart fuse system for monitoring and fault detection in low-voltage networks



- Automatic power supply restart to minimise downtime
- Fault location with connected households
- Early warning of potential network overloads
- Secure remote access via mobile data network
- Compact 1-phase or 3-phase system
- NEW: 4G modem
- NEW: warning mechanism for high fault currents by phase angle control
- **NEW:** easyGO mode for quick and easy setup
- NEW: prelocation now always integrated

DESCRIPTION

Preventive warning and monitoring

How can I know in advance when my low voltage network is overloaded? How can I minimise downtime? Using the SmartFuse2 in monitoring mode, you can monitor your power supply live. Current and voltage are measured in real time and displayed graphically. Set your own current warning threshold at which the SmartFuse2 will warn you automatically. You will receive a message via SMS or e-mail within a few seconds, so you have enough time to take countermeasures.

Automatic recovery of the power supply

How do I avoid the need for technician operations at weekends or at night? How do I reduce the operating times of my technician teams? With the SmartFuse2, you can decide for yourself how often the intelligent fuse should switch on automatically. This means that you can ensure the power supply despite intermittent faults until you have found and eliminated the cause, without having to engage technicians.

Prelocation

The SmartFuse2 shows the calculated fault distance in direct meters. No interpretation of a TDR pattern is necessary! In addition, the 3-phase system provides you with an accurate statement of the fault type: phase-to-N, phase-to-earth, phase-to-phase (phase-to-phase faults are named with the specific phases). Prelocation can be done using the SmartFuse2 with connected consumers, saving you time and money.

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Sicherung	250 A	Sicherur	ng 250 A	Sicherung	250 A	
Wiederzu.	0/5	Wiederz	u. 0/5	Wiederzu.	0/5	
Kabeltyp		Kabeltyp		Event-Protokoll		
U:	221 V	U:	224 V	14:33:47 PM A: Au	s, auto., Ipeak =	290 A
E	<5 A	l:	113 A	14:33:47 PM A: Ein	ı, man., 204 A	
Ipeak	198A	Imax	118 A	14:33:19 PM A: Fehlerortung, 61 m, Ipeak = 277 A		
A -		14:33:19 PM A: Aus, auto., Ipeak = 287 A				287 A
	7	5	U/I	Logger		
	83m		26	02 2018		, Ipeak = 280 A
	0.5111	60			300	291 A
SmartFuse 2	.300	40 05:3702: 28				
KVS Blumenst	traße					
		An Mary Mark Marker Markey 1 4 4				
		0 00:00:00 01:23:20 02:46:40 04:09:59 05:33:44 06:57:06 08:20:26 09:43:46 11:07:06				

Pinpointing

Avoid the use of cable test vans, or shockwave generators. Use the power available on the grid. Your consumers can remain connected to the grid while you use the SmartFuse2 to automatically 'thump' the fault to flashover in a timed period. With the help of the digiPHONE+2 or the FaultSniffer2 you can locate the fault precisely.

NOTE: After the fifth successful pinpointing, the system has already been amortised, as you saved several hours of time and resources per operation (compared to conventional methods).

Megger.

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GENERAL*

Triggering threshold Reclose attempts Waiting time until reclose Surge energy control

Operating and storage conditions:

Operating temperature Operating humidity Storage temperature

Memory for mains failure Supply voltage for power and control module

Power consumption Overvoltage category

POWER MODULE*

Load current Short-circuit/surge current Internal fuses Cut-out capacity Display Housing dimensions (L x W x H) Weight Protection rating Compatibility

CONTROL MODULE*

Control system Memory Display

Interfaces

Housing dimensions (L x W x H)

Weight Protection rating Connections

ADAPTER MODULE*

Protection rating Dimensions (L x W x H)

Weight

REMOTE CONTROL*

Power supply Protection rating Dimensions (L x W x H)

Weight (with batteries)

* We reserve the right to make technical changes.

20 A to 250 A 0 ... unlimited 1 ... 120 seconds 2 - 50 half-waves

-20 °C ... +50 °C 50% at +40 °C, 90% at +20 °C -25 °C ... +70 °C Non-volatile event memory

Directly via power module 100 V ... 240 V 50 Hz / 60 Hz 100 V ... 240 V 50 Hz / 60 Hz 20 VA + 1 W/A load current to EN 60664: CAT IV 300 V

max. 250 A continuous current max. 9000 A Load circuit: 800 A HC-type; internal supply: 1.25 A F 200 kA LED for indicating the switching status 130 x 155 x 82 mm (excluding grip lugs) 3.0 kg / 6.61 lbs. IP 20 Fuse holder NH02 or NH03 (B \leq 82 mm/3.23 in.)

Colour touch display Micro SD card, 16 GB Illuminated touch display (3.7 in.) LED for indicating the operating status (when the cover is closed) GSM/UMTS modem (SIM card required) Integrated GPS receiver (external optional) USB 2.0 WLAN / LAN Wireless module (remote control activation) 160 x 103 x 97 mm 6.3 in. x 4 in. x 3.8 in. 900 g / 1.98 lbs. IP 42 Neutral conductor connection External trigger output (for reflectometer) Connection coupling for power module

IP 42 160 x 80 x 90 mm 6.3 in. x 3.1 in. 3.5 in. 450 g / 0.99 lbs.

2 alkaline batteries, 1.5 V/LR 6 (AA) IP 40 140 x 63 x 30 mm 5.5 in. x 2.5 in. x 1.2 in. 150 g / 0.11 lbs.

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ORDERING INFORMATION					
Product	Description	Order no.			
Sets:					
SmartFuse2 set 1-phase (SFC 250-2-1P-VS)	1x control module, 1x power module, 1x remote control, transport case incl. accessories	1013489			
SmartFuse2 set 3-phase (SFC 250-2-3P-VS)	1x control module, 3x power module, 1x adapter module, 1x remote control, transport case incl. accessories	1013490			
Upgrade set:					
SmartFuse2 expansion set from 1- to 3-phase (SFC 250-2-AS-VS)	2x power module, 1x adapter module	1013491			
Options:					
Remote control	Tablet for optimal user comfort	1008357			
1 Set mounting adapter NH2/NH3 (1 set per power module is required)	For fuse boards $B \le 82 \text{ mm}$	2009960			
External GPS-antenna (3m long)	To improve the GPS signal e.g. in houses, or transformer stations	2007960			
Backup fuse 800 A (HC-Typ)	Replacement for the internal protection fuse of the power module	90007524			



1 control module 1 power module



1 control module 3 power module



1 adapter module



SmartFuse2 fits into practically any control cabinet, with the NH2/NH3 fork adapter.

SALES OFFICE

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SmartFuse2_DS_EN_V04

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