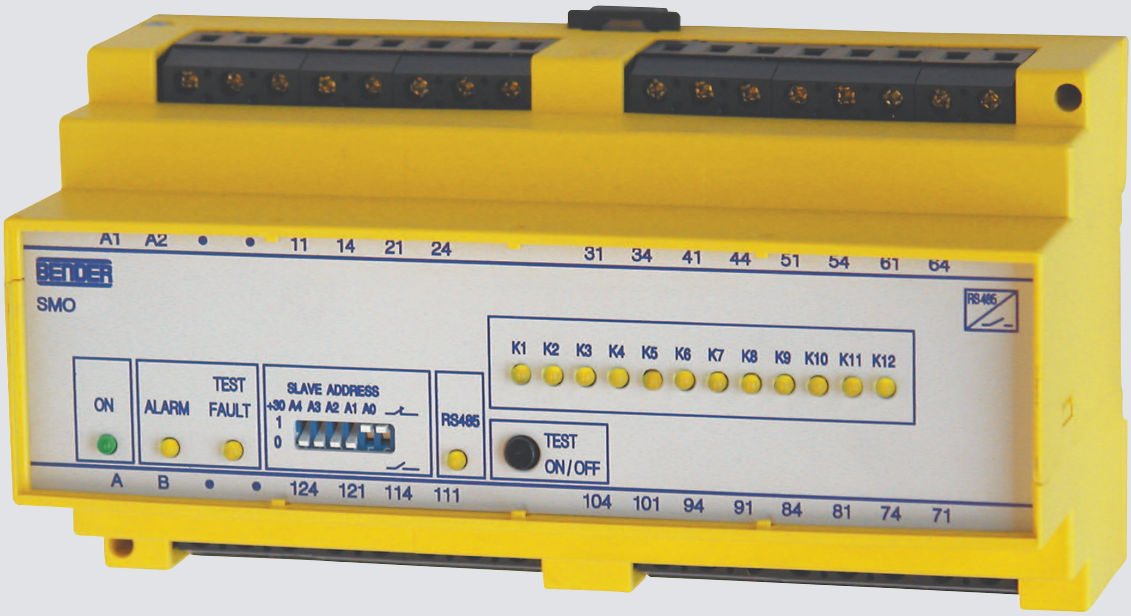
BENDER
The Power in Electrical Safety©

Signal converter SMO482P-12



TDB108014de/07.2009

Signal converter SMO482P-12

Signal converter SMO482-12

Device features

- 12 relay outputs for different channels of Bender devices with communication capabilities
- Operating principle selectable: N/O or N/C operation
- LED for each channel
- Test button to check the relay function
- LEDs: Power On, ALARM, TEST/FAULT
- RS-485 interface (BMS bus)

Product description

The signal converter SMO482P-12 converts BMS bus alarm messages to relay contact messages. The relay contacts are also suitable for very low currents (> 5 mA). Each relay output of the SMO482P-12 can be assigned to any channel of any device with communication capability.

Application

- For the conversion of BMS signals from EDS, RCMS and MEDICS systems in relay messages, e.g. to control signals and information
- Specific control and/or selective disconnection of faulty circuits with EDS and RCMS systems
- Information transfer to central process control and building control systems

Function

The channels of the SMO482P-12 are assigned to the respective channels of monitoring and control devices of two changeover modules. When an evaluator sends a message in case of a fault in a channel, this message is transferred to the SMO482P-12 via the BMS bus. The SMO482P-12 converts this message to the assigned relay message. Several SMO482P-12 must not be assigned to one channel of the evaluator.

The assignment parameters can be set via the **parameterization** of SMO482P-12.

Note: A BMS bus master is required to operate the SMO482P-12 .

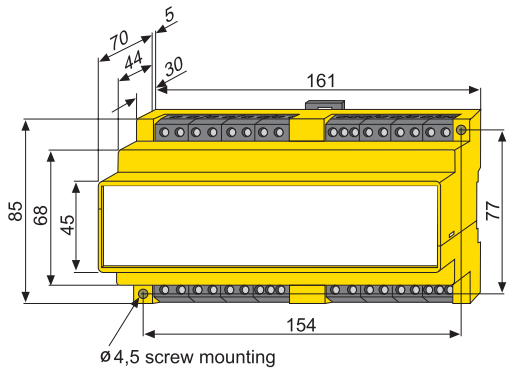
Ordering information

Supply voltage U_S	Type	Art. No.
AC 230 V	SMO482P-12*	B 9501 2039 P

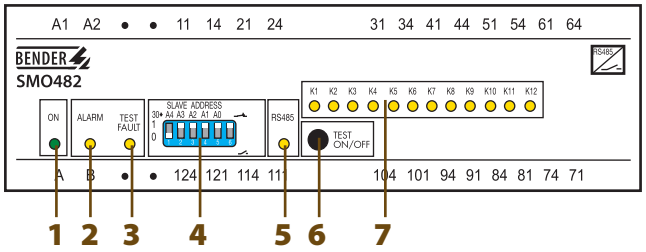
* Channels can be factory-programmed as per customer request (Option P)

Dimension diagram X480

Dimensions are given in mm



Operating elements



1 - LED “ON”: operation indicator

2 - LED “ALARM”: LED lights whilst an alarm (not an operating message) is present at one of the channels and during the test mode.

3 - LED “TEST/FAULT”: lights when no device parameter have been set and during the test mode. The LED flashes in case of an impermissible address.

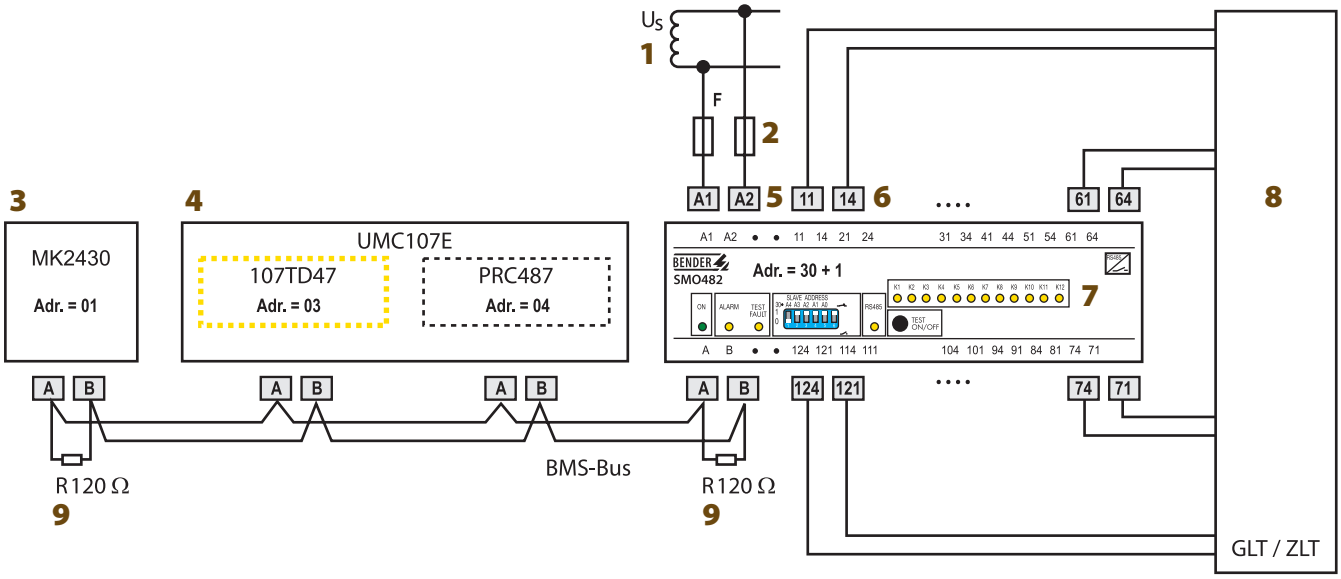
4 - DIP switch, to set the device address of SMO482-12 (address = parameter value + 30) and the operating mode of the alarm relay.

5 - LED “RS-485”: lights in case of activities on the BMS bus

6 - “TEST ON/OFF” button: Pressing the button once: will change over the operating mode of all alarm relays, the LEDs ALARM, TEST/FAULT and K1…K12 light. Pressing the button again: will change over from the test mode to normal operating condition.

7 - LED “K1…K12”: LED lights whilst a pending alarm or operating message is present for the respective alarm relay.

Wiring diagram



1 - U_S (IT system)

2 - Short-circuit protection supply voltage 6 A fuse is recommended

3 - Alarm indicator and test combination MK2430

4 - Changeover and monitoring module UMC107E

5 - Power supply

6 - 11/14…121/124: Connection contact of the 12 alarm relays

7 - Signal converter SMO482P-12

8 - GLT = Building Control System
ZLT = Central Control System

9 - Terminating resistor BMS bus

Technical data

Insulation coordination acc. to IEC 60664-1

Rated insulation voltage	AC 250 V
Rated impulse voltage/pollution degree	4 kV/3

Supply voltage

Supply voltage U_S	AC 230 V
Frequency range U_S	50…60 Hz
Operating range U_S	0.8…1.15 x U_S
Power consumption	≤ 8 VA

Displays

LEDs	16 (ON, Alarm, TEST/FAULT, RS-485, K1…K12)

Operating elements

Button	TEST ON/OFF

Interface

Interface/protocol	RS-485/BMS
Baud rate	9.6 kbit/s
Cable length	≤ 1200 m
Recommended cable (shielded, shield connected to PE on one side)	min. J-Y(St)Y 2 x 0.6
Terminating resistor (connectable via DIP switch)	120 Ω (0.25 W)
Device address, BMS bus	30 + (1…30)
Factory setting device address	30 + 1;

Switching elements

Number	12 x 1 N/O contacts
Operating principle	N/C operation/N/O operation selectable
Factory setting	N/O operation

Contact data acc. to IEC 60947-5-1

Rated operational voltage U_e	AC 230 V/DC 220 V
Rated operational current I_e	AC 5 A/DC 0.2 A
Utilization category	AC 14/DC 12
Electrical service life, number of cycles	10.000
Minimum contact load	1 mA at AC/DC > 10 V

Environment/EMC

EMC immunity	acc. to EN 61000-6-2
EMC emission	acc. to EN 61000-6-4
Classification of climatic conditions acc. to IEC 60721	
Stationary use	3K5
transport	2K3
storage	1K4
Operating temperature	- 25…+ 55 °C
Classification of mechanical conditions acc. to IEC 60721	
Stationary use	3M4
transport	2M2
storage	1M3

Connection

Connection	screw-type terminals
Connection properties	
rigid/flexible/conductor sizes	0.2…4/0.2…2.5 mm²/AWG 22…12
flexible with ferrule, without/with plastic sleeve	0.25…2 mm²

Other

Operating mode	continuous operation
Mounting	any position
Stripping length	8 mm
Tightening torque	0.5 Nm
Degree of protection, internal components (IEC 60529)	IP 30
Degree of protection, terminals (IEC 60529)	IP 20
Type of enclosure/dimension diagram	X470
Screw mounting	2 x M4
DIN rail mounting acc. to	IEC 60715
Flammability class	UL94V-0
Product standards	DIN EN 50178 for AC 230 V
Operating manual	BP108014
Weight	≤ 580 g

BENDER
The Power in Electrical Safety©

Bender GmbH & Co. KG
P.O. Box 1161 • 35301 Gruenberg • Germany
Londorfer Strasse 65 • 35305 Gruenberg • Germany
Tel.: +49 6401 807-0 • Fax: +49 6401 807-259
E-Mail: info@bender.de • www.bender.de

BENDER Group