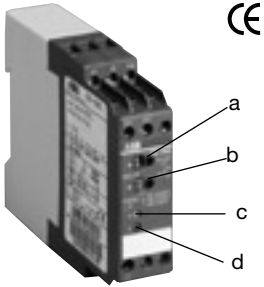
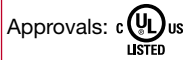


AC/DC Overcurrent Monitors, Single-Phase CM-SRS Relay Output



- a Hysteresis adjustment
- b Threshold value adjustment
- c R: yellow LED - relay status
- d U: green LED - supply voltage
- Monitoring of AC or DC currents
3 ranges: 3 mA ...1 A
- Switching hysteresis adjustable from 5...30 %
- 3 supply voltage versions
- 1 SPDT contact
- 2 LEDs for status indication



Description

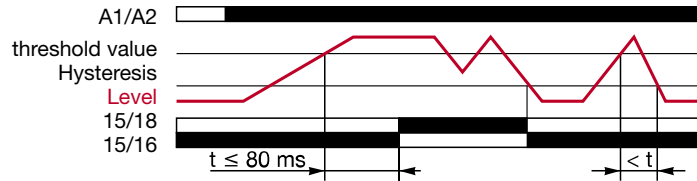
Overcurrent Monitoring

The current being monitored is applied to the terminals B1, B2 or B3 and C. The output relay energizes if the monitored current exceeds the threshold value.

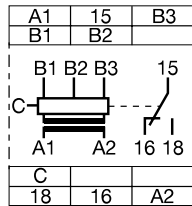
The relay de-energizes if the current falls below the threshold (threshold value minus hysteresis range). The CM-SRS current monitor is used to monitor overcurrents.

The hysteresis range can be adjusted from 5 to 30 % related to the trip point. The measuring, output and supply circuits are electrically isolated to prevent interference. Since one measuring cycle takes only 80 ms, current changes can be quickly detected.

Function



Connection



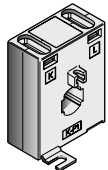
- A1-A2 Supply voltage
- B1/C Meas. range: 3-30 mA
- B2/C Meas. range: 10-100 mA
- B3/C Meas. range: 0.1-1 A
- 15-16/18 Output contacts

A1	15	B3
B1	B2	
B1	B2	B3
C		15
A1	A2	16 18
C		
18	16	A2

Accessories



Current Transform



See accessory pages for specifications.

Ordering Table

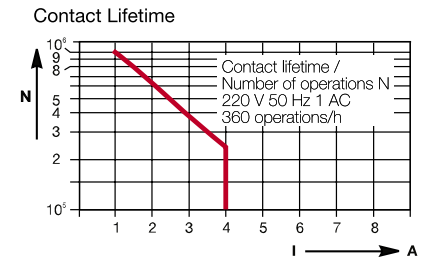
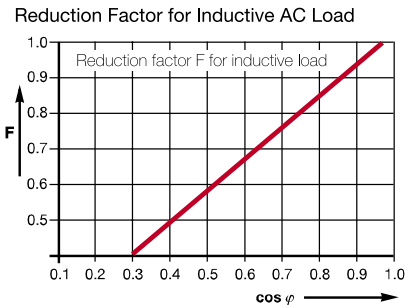
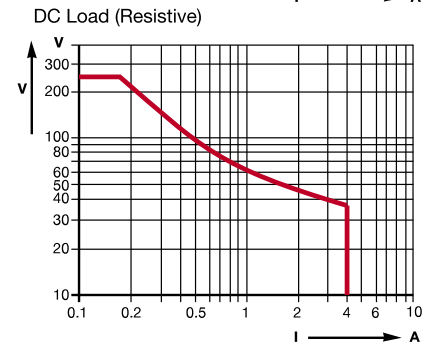
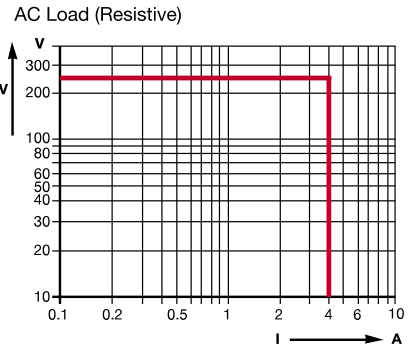
Type	Supply voltage 50/60 Hz	Part Number
Measuring ranges: 3-30 mA; 10-100 mA; 0.1-1 A, no time delay		
CM-SRS	24 V AC	1SVR 430 841 R 9100
	110...130 V AC	1SVR 430 841 R 0100
	220...240 V AC	1SVR 430 841 R 1100

AC/DC Overcurrent Monitors, Single-Phase CM-SRS Relay Output

Technical Data

Input		
Supply voltage - power consumption	A1-A2	24 V AC - 1 VA
	A1-A2	42...48 V AC - 1 VA
	A1-A2	110...130 V AC - 1 VA
		220...240 V AC - 1 VA
Tolerance of supply voltage		-15 % ... +10 %
Supply voltage frequency		50...60 Hz
Measuring Circuit		
Measuring current input	B1/C, B2/C, B3/C	B1 B2 B3
Input resistance		3...30 mA 10...100 mA 0.1...1 A
Possible permanent overload		33 Ohm 10 Ohm 1 Ohm
Pulse overload for $t < 1$ s		50 mA 150 mA 1.5 A
		300 mA 1 A 10 A
Hysteresis (ref. to the response value) adjustable		5...30 %
Response time		80 ms
Error over the temperature range		≤ 0.06 % / °C
Error over the supply voltage range		≤ 0.5 %
Display of Operational Status		
Supply voltage		LED, green
Output relay energized		LED, yellow
Output		
Rated voltage	15-16/18 VDE0100, IEC 60947-1	Relay, 1 SPDT contact
Rated switching voltage max.		250 V
Rated switching current	AC 12 (resistive)	250 V AC
	AC 15 (inductive)	4 A (at 230 V)
	DC 12 (resistive)	3 A (at 230 V)
	DC 13 (inductive)	4 A (at 24 V)
		2 A (at 24 V)
Maximum mechanical life		30 x 10 ⁶ operations
Maximum electrical life (acc. to AC 12 / 230 V / 4 A)		3 x 10 operations
Short-circuit proof, max. fuse rating		10 A / fast acting
General Data		
Rated impulse withstand voltage V_{imp}		4 kV
Operating temperature		-20°C ... +60°C
Storage temperature		-40°C ... +85°C
Mounting to DIN rail (EN 50022)		Snap-on mounting/Screw mounting with an adapter
Cable size stranded with wire end ferrule		2 x 14 AWG (2 x 2.5 mm ²)
Weight		Approx. 0.33 lb (150 g)

Relay Output Load Limit Curves



Mechanical View

