

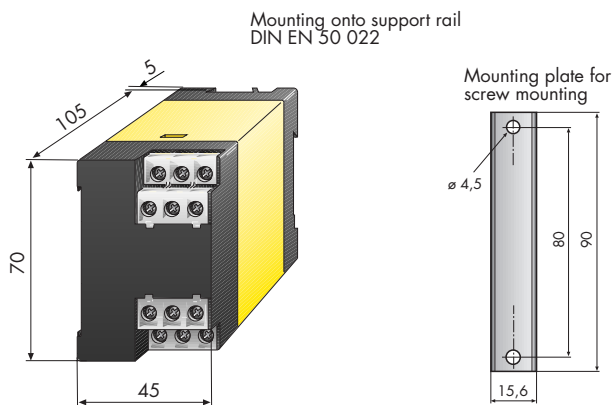


for current monitoring in DC networks



- ⇒ **electronic measuring relay**
- ⇒ **indicates increasing current**
- ⇒ **impulse-voltage proof and HF-noise resistant**
- ⇒ **output relay with two change-over contacts**
- ⇒ **built-in operation-LED**
- ⇒ **built-in indication-LED**
- ⇒ **steplessly adjustable:**
 - response value**
 - response time**
 - hysteresis**
- ⇒ **compact 45 mm casing**
- ⇒ **response values:**
 - 2 ... 20 mA / 0,5 ... 5 mA**
 - 6 ... 60 mV / 50 ... 500 mV**
 - 0,5 ... 5 A**
 - 0,1 ... 10 A**

Dimension Diagram

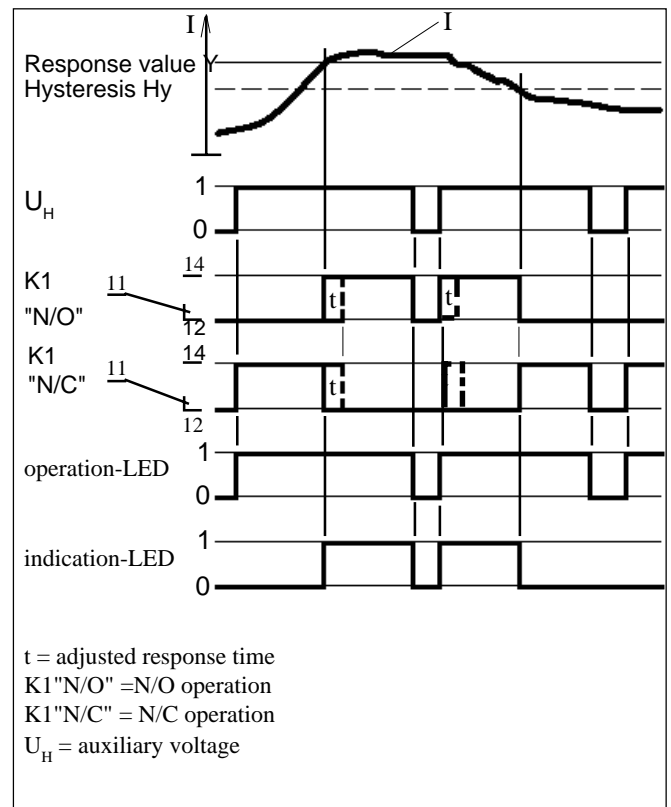


Function

If the monitored current exceeds the adjusted response value "Y" the red indication-LED signals "I>Y" and at the end of the adjustable response time "t" the output relay K1 reacts.

If the current falls below the adjusted response value together with the adjustable hysteresis "Hy" the output relay reacts and the red indication-LED extinguishes at the end of the switch-back retardation of approx. 70 ms.

The function of the output relay is selectable between circuit-closing and circuit-opening connection (see wiring diagram).



Technical Data CSG141

Nominal insulation voltage	DC 300 V
Contact circuit	AC 250 V
Insulation group	C
Test voltage	2500 V

Auxiliary voltage U_H AC50...60Hz 85...125 V / 100...145 V / 185...275 V
(other values on request)

Max. self-consumption 3 VA

Response value steplessly adjustable

0,5-5 mA	2-20 mA	6-60 mV	50-500 mV	0,5-5 A	1-10 A
Load					
12 Ω	3 Ω	1 kΩ	8,2 kΩ	10 mΩ	10 mΩ
Overload capacity					
0,5 A 1s	0,5A 1s	30V 1s	50V 1s	40A 1s	40A 1s
continuous working					
0,2 A	0,2 A	6 V	10 V	12 A	12 A
Temperature influence					<0.05% / °C

Switching hysteresis steplessly adjustable 2 ... 10 %

Response retardation steplessly adjustable 0.1 ... 10 sec
Ready to trip time max. 0.2 sec
Off-delay ca. 70 ms
Repeat accuracy < ± 1.5 %
Temperature influence <0.2 % / °C

Switch components two free change-over contacts
Switch capacity max. 33 W, 1100 VA
Nominal contact voltage 230 V
Permanent current 5 A
Break capacity at AC 230 V and cos. phi = 0,4 3 A
at DC 110 V and L/R = 0 0.3 A

Operating principle N/C or N/O operation
Adjustment by factory N/O operation

Wiring diagram 0,5-5mA/2-20mA Z 320 114
6-60mV/50-500mV Z 320 113
0,5-5A / 1-10A Z 320 115

Admissible ambient temperature when operating -15°C ... +50°C
258 K ... 323 K
when stored -20°C ... +70°C
253 K ... 343 K

Tests according to VDE 0435, part 303 and IEC 255-4
Impulse voltage strength class III
HF-noise resistance class III
Climatic class according to DIN 40 040 F

Mounting indifferent

Type of connection terminal screws with self-lifting clamp-washers
M 3.5

Terminal screws
Wire cross section
single wire 2x (1 ... 1.5 mm²) 16 AWG
fine braid with end sleeve 2x (0.75 ... 1.5 mm²) 16 AWG

Protection class according to DIN 40 050
Internal components IP 50
Terminals IP 10
with terminal covers IP 20

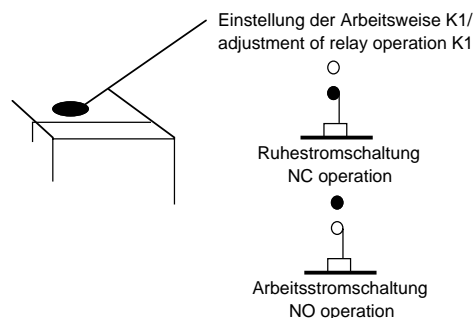
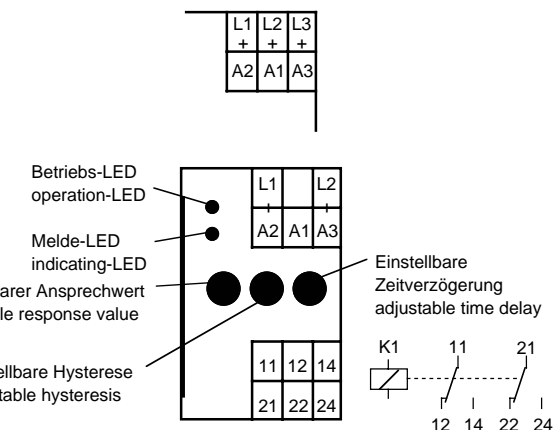
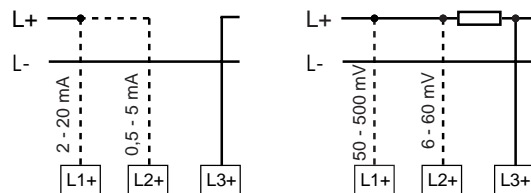
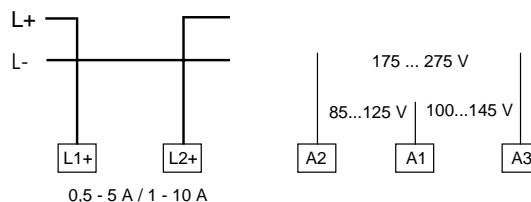
Casing
Behaviour in fire according to UL 94 V - 0
Fixing on supporting rail according to DIN EN 50 022 or screw mounting*

Weight approx. 250 g

* Accessories for screw mounting:
Mounting plate art.-no.: 300 102

Ordering details		
Type	Reponse value	Art.-No.
CSG141	0,5...5 A	943 605
	0,5...5 mA/2...20 mA	943 602
	1...10 A	943 603
	6...60 mV/50...500 mV	943 607

Wiring Diagrams



Legend to wiring diagram

K1 Output relay with two free change over contacts

The auxiliary voltage for the internal electronic has to be connected to the terminals A1/A2/A3.

UH	Terminal
85...125 V	A2 - A1
100...125 V	A1 - A3
175...275 V	A2 - A3

Other values on request

Right to modifications reserved