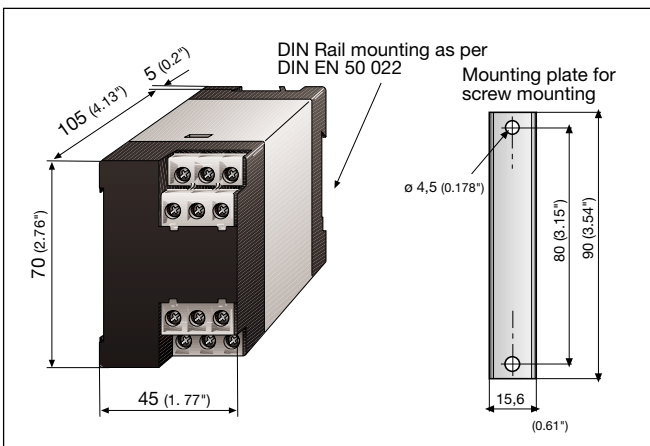




- electronic measuring relay
- indicates decreasing current
- impulse-voltage proof and HF-noise resistant
- output relay with two change-over contacts
- built-in operation-LED
- built-in indication-LED
- adjustable:
  - response value
  - response time
  - hysteresis
- compact 45 mm casing
- response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

### Dimension diagram

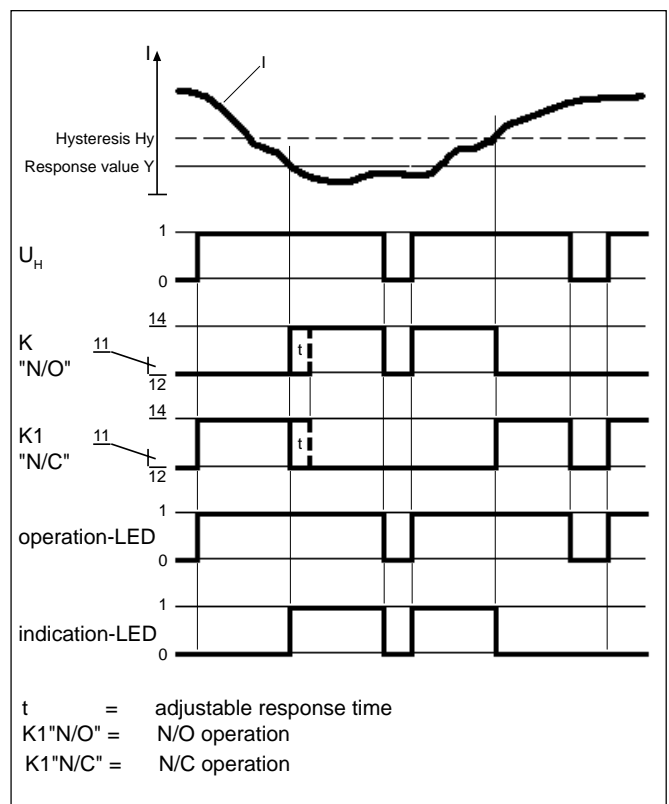


### Function

If the monitored current falls below 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 value exceeds 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 CSG140

Nominal insulation voltage	DC 300 V
Contact circuit	AC 250 V
Insulation group	C
Test voltage	2000 V
Auxiliary voltage $U_H$ (other values on request)	AC 50...60 Hz 85...125 V/100...145 V / 185...275 V
Max. self-consumption	3 VA

Response value (adjustable)	0,5-5mA	2-20mA	6-60mV	50-500mV	0,5-5A	1-10A
Load	12 $\Omega$	3 $\Omega$	1 k $\Omega$	8,2 k $\Omega$	10 m $\Omega$	10 m $\Omega$
Overload capacity	0,5 A 1s	0,5A 1s	30V 1s	50V 1s	40A 1s	40A 1s
Continuous working	0,2A	0,2A	6V	10V	12A	12A
Temperature influence	<0.05% / °C					

Switching hysteresis adjustable 2 ... 10 %

Response retardation adjustable	0.1 ... 10 sec
Ready to trip time max.	0.2 sec
Off-delay	ca. 70 ms
Repeat accuracy	< $\pm$ 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

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

Terminal screws	M 3.5
Wire cross section	
single wire	2x (1 ... 1.5 mm <sup>2</sup> ) 16 AWG
fine braid with end sleeve	2x (0.75 ... 1.5 mm <sup>2</sup> ) 16 AWG

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

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

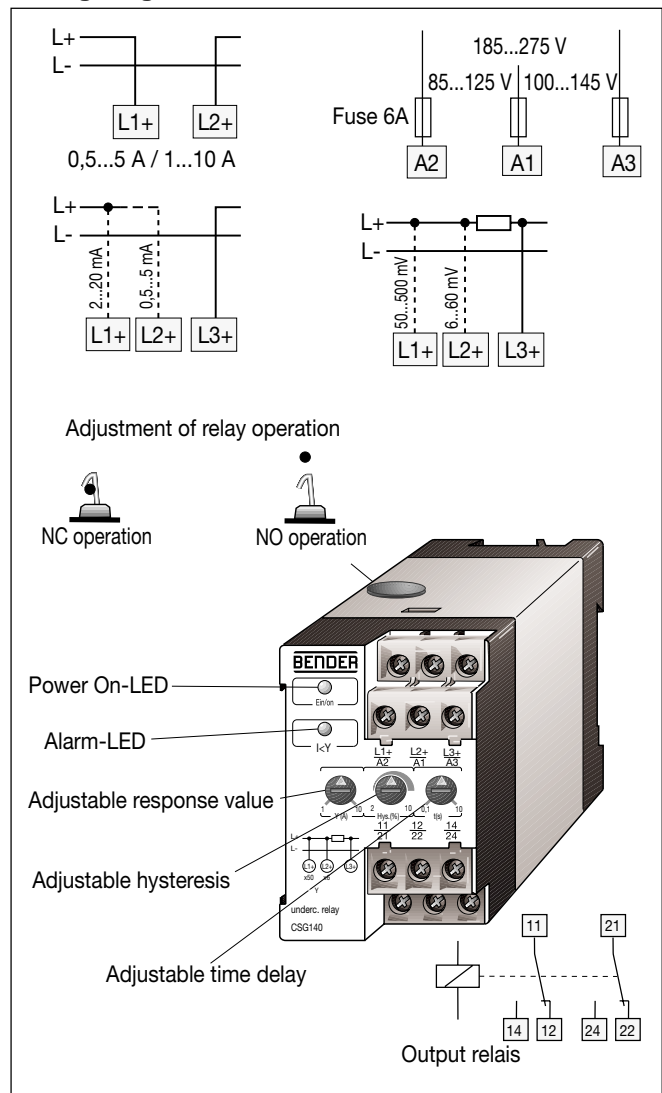
Weight approx. 250 g

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

## Ordering details

Type	Response value	Art. No.
CSG140	0,5...5 A	943 606
	0,5...5 mA/2...20 mA	943 601
	1...10 mA	943 604
	6...60 mV/50...500 mV	943 608

## Wiring diagrams



## Legend to wiring diagram

K1 Output relay with two change over contacts

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

$U_H$	Terminal
85...125 V	A2 - A1
100...145 V	A1 - A3
175...275 V	A2...A3

## BENDER Industrial Products

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