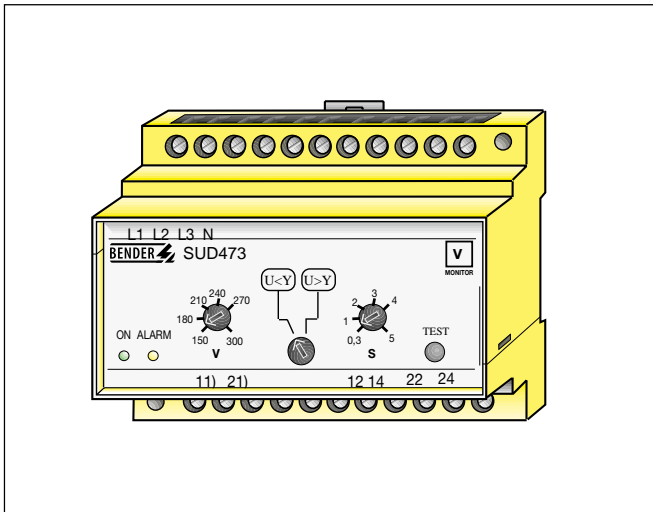


- Over or under voltage selectable
- 3/N AC systems



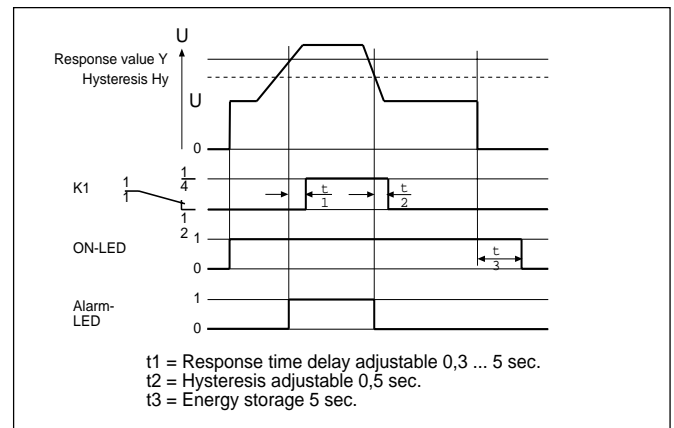
- Electronic measuring relay
- Indicates under or overvoltage
- No additional auxiliary voltage required
- Impulse-voltage proof and HF-noise resistant
- Output relay with two change-over contacts
- Built-in operation-LED
- Built-in indication-LED
- Adjustment range
- Compact 45 mm casing
- Built in energy storage for 5 sec.

Function

Over voltage relay $U > Y$

If one, two or all star voltages increase the adjusted response value "Y", the output relay drops out and the red indication-LED signals "L1,L2,L3 - N > Y"

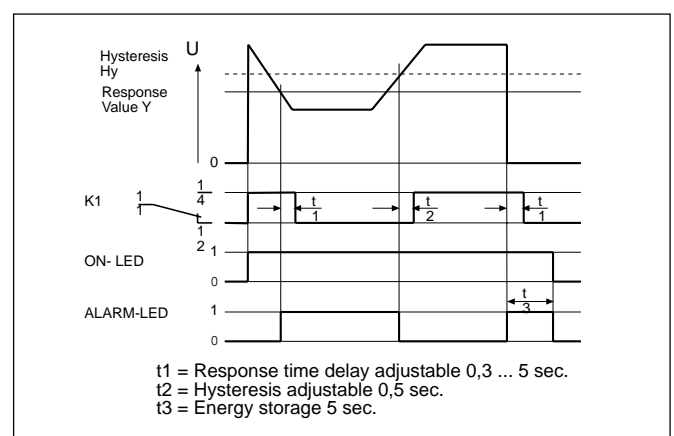
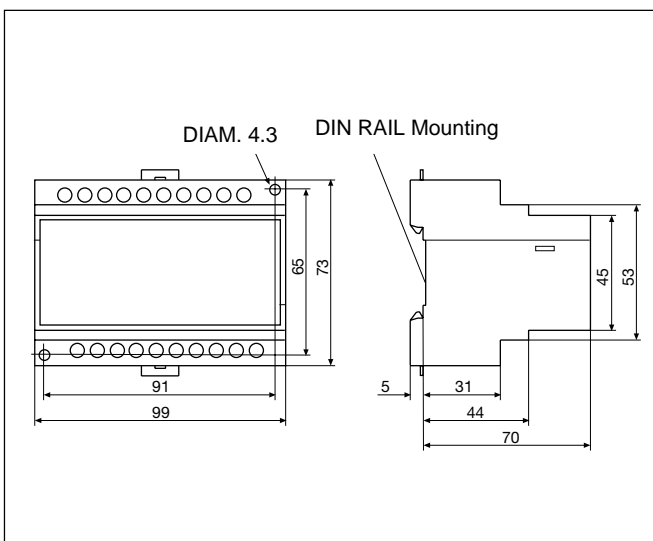
If the adjusted response value together with the fixed hysteresis "Hy" is decreased, the output relay and the red indication-LED extinguishes.



Under voltage relay $U < Y$

If one, two or all star voltages decrease the adjusted response value "Y", the output relay drops out and the red indication-LED signals "L1,L2,L3 - N > Y"

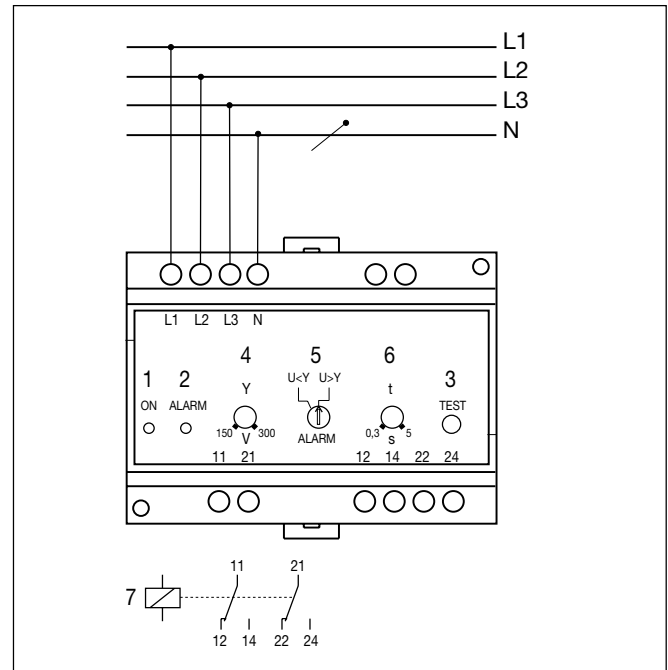
If the adjusted response value together with the fixed hysteresis "Hy" is increased, the output relay and the red indication-LED extinguishes.



Technical Data SUD473

Nominal insulation voltage	AC 400 V
Contact circuits	AC 250 V
Insulation group	C
Test voltage	2500 V
Operation class	permanent operation
Rated mains voltage U_N	3 AC 50...60 Hz 110/230/400V
Max. admissible mains voltage	$1,15 \times U_N$
Operating range	$0 \dots 1,15 \times U_N$
Operating range of the LEDs	$0,2 \times U_N \dots U_N$ max.
Max. self-consumption	3VA
Response value adjustable	0,7...1,3UN
Temperature influence	< 0,05 % / °C
Switching hysteresis approx.	2,5...3,5 % of UN
Response time delay	adjustable 0,3...5sec.
Switch components	two change-over contacts
Switch capacity max.	33 W, 1100 VA
Nominal contact voltage	220 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	NC operation
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	2 x (1...1,5 mm ²) 16 AWG
fine braid with end sleeve	2 x (0,75...1,5 mm ²) 16 AWG
Casing	
Behavior in fire according to	UL 94 V - 0
Fixing	on support rail according to DIN EN 50 022 or screw mounting*
Protection class according to DIN 40 050	
Internal components	IP 50
Terminals	IP 10
with terminal covers	IP 20
Wiring diagram	Z 320 099
Weight	approx. 300 g

Wiring diagram



Legend to the wiring diagram

- 1 On LED
- 2 Alarm LED
- 3 Test Push button
- 4 Dial for adjustable response value
- 5 Selector dial for over or undervoltage mode
- 6 Dial for adjustable time delay
- 7 Alarm relay contacts SPDT

Order Information

Type	Nominal Voltage	Response Values	Art.-Nr.
SUD473	3/N AC 110 V	40 ... 80 V	933 220
	3/N AC 230 V	80 ... 170 V	933 171
	3/N AC 400 V	150 ... 300 V	933 703

BENDER Industrial Products

700 Fox Chase, Coatesville PA 19320
 Tel. (800) 356-4266 - Fax. (610) 383-7100
www.benderrelay.com