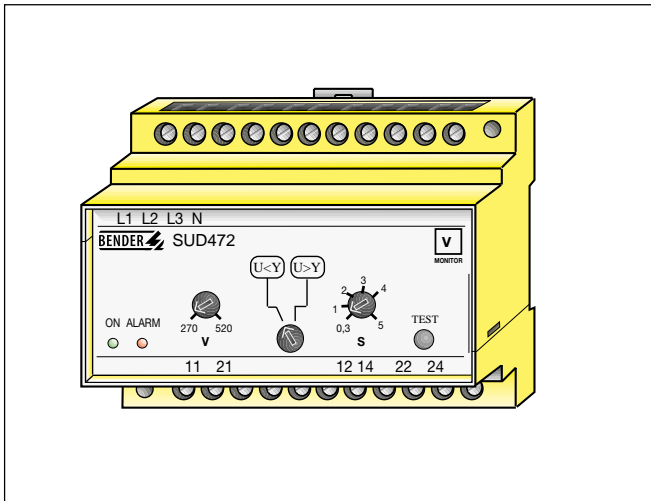


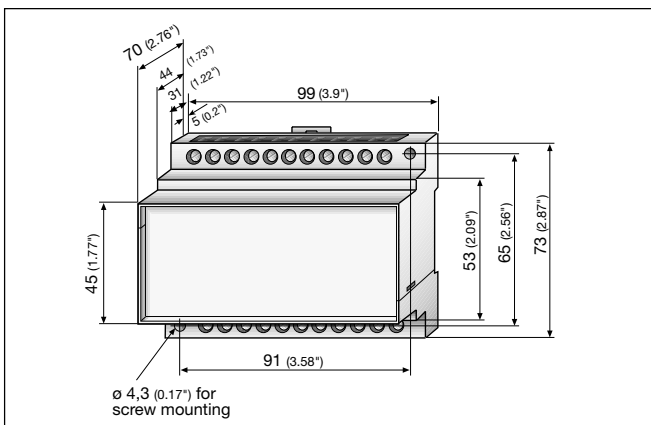


- 3Ph systems without Neutral
- Multiple ranges from 70 VAC to 520 VAC



- electronic measuring relay for three phase AC voltages
- signals overvoltage or undervoltage
- additional supply voltage is not required
- alarm relay with two change-over contacts
- built-in power on and alarm LEDs
- compact industrial housing with clear lid
- adjustable:
response value, response time, hysteresis

Dimension diagram

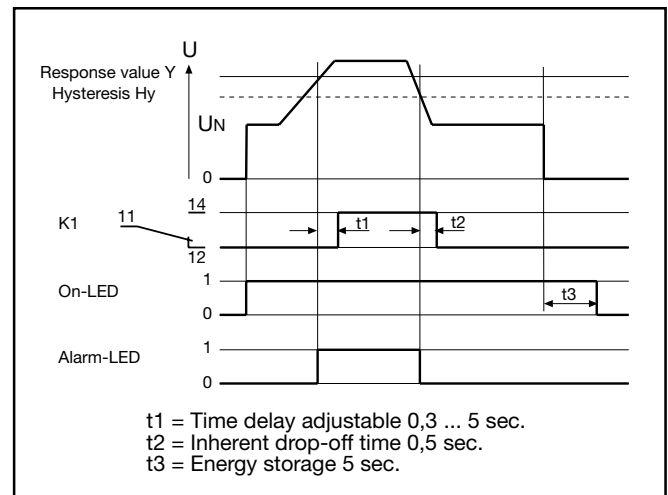


Function1

1. Use as an overvoltage relay $V > Y$

The red alarm LED L1, L2, L3 > Y will illuminate and the alarm relays (11-12/14 & 21-22/24, normally de-energized) will change state in accordance to the diagram below, if the response value "Y" is reached or passed on either L1, L2 or L3. This event can be delayed through a potentiometer on the front trim by 0.3 to 5 seconds.

The SUD472 will return to a normal operating mode as soon as the overvoltage condition is no longer present.

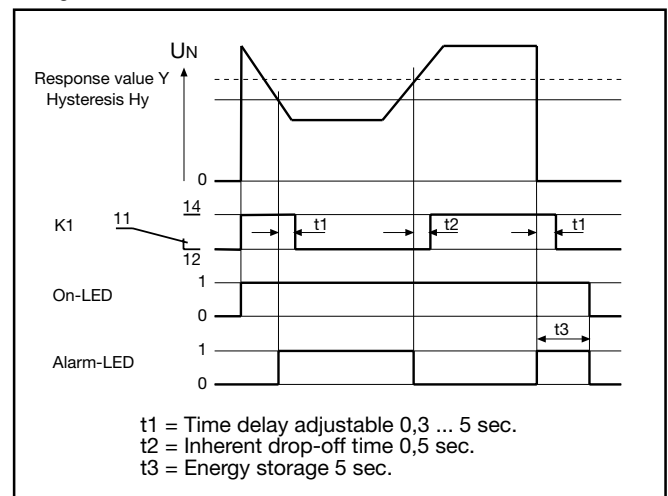


Function2

1. Use as an overvoltage relay $V > Y$

The red alarm LED L1, L2, L3 < Y will illuminate and the alarm relays (11-12/14 & 21-22/24, normally energized) will change state in accordance to the diagram below, if the response value "Y" is reached or decreased on either L1, L2 or L3. This event can be delayed through a potentiometer on the front trim by 0.3 to 5 seconds.

The SUD472 will return to a normal operating mode as soon as the under voltage condition is no longer present. The red alarm LED will extinguish.



Technical data SUA472

Monitored System
 Nominal system voltage U_N 3Ph AC 110, 230 or 400V
 Power consumption max. < 3 VA

Response values 0.7 ... 1.3Un
 Influence of ambient temperature < 0.05 % / °C
 Switching hysteresis 3 ... 4 %
 Delay on response, (adjustable) 0.3 ... 5 sec.
 Operating mode (for under voltage operation) N/Open operation
 Operating mode (for overvoltage operation) N/Closed operation

Contact circuit
 Alarm relays SPDT dry contacts
 Contact class acc. to DIN IEC 60255 Teil 0-20 IIB
 Rated contact voltage AC 250 V/DC 300 V
 Admissible number of operations 12000 cycles
 Making capacity UC 5 A
 Breaking capacity
 at AC 230 V and $\cos \phi = 0.4$ AC 2 A
 at DC 220 V and $L/R = 0.04$ s DC 0.2 A

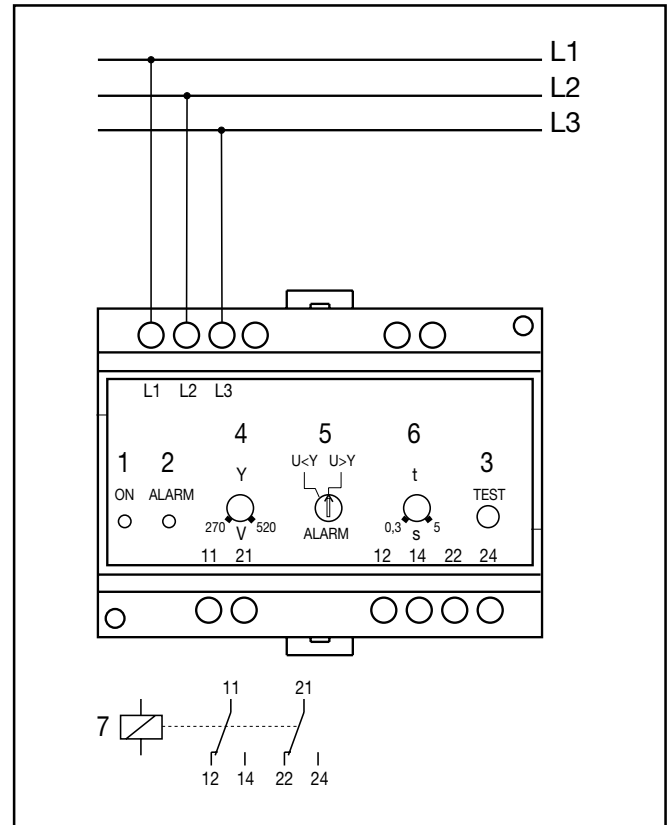
Type tests
 Test of the Electromagnetic Compatibility (EMC)
 Interferences acc. prEN 50082-2
 (only for industrial use)
 Mechanical tests
 Shock resistance acc. to IEC 6068-2-27 15g / 11 ms
 Bumping acc. to IEC 6068-2-29 40g / 6 ms
 Vibration strength acc. to IEC 6068-2-6 10...150 Hz / 0.15 mm - 2g

Environmental conditions
 Ambient temperature, during operation -5°C...+50°C
 Storage temperature range -25°C...+60°
 Climatic class acc. to IEC 721 3K5, except condensation and formation of ice

General data
 Operation class continuous operation
 Mounting any position
 Type of connection Terminal block
 Wire cross section
 single wire AWG 2 x 1 ... 1.5 mm²
 fine braid AWG 16 2 x 0.75 ... 1.5 mm²

Rapid mounting DIN Rail or screw mounting
 Protection class acc. to EN 60529
 Internal components IP 50
 Terminals/with terminal covers IP 20
 Type of casing X470
 Flammability class UL94V-0
 Weight approx. 210 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

Type	UN	Response settings	Hz	Time delay	Art#
SUD472	3AC110V	AC 70-140	50-60Hz	0.3-5	B933219
SUD472	3AC230V	AC 150-300	50-60Hz	0.3-5	B933170
SUD472	3AC400V	AC 270-520	50-60Hz	0.3-5	B933702

UN Nominal voltage of the monitored system

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