Universal voltage monitor SW32V

Over- and undervoltage for DC-, AC- and 3AC voltages

SW32V

Part number: **S222276**

The voltage relay SW32V is a high-grade voltage monitor with a wide measuring-range for monitoring DC-, AC- and 3-phase voltages for over- and/or undervoltage.
In 3-phase power networks phase-symmetry and phase-sequence can also be monitored.
The limits are set in Volts. Thus the device can be used at different nominal voltages.

The digital display shows the measured value as well as it helps setting the limits, switching-delays and switching functions.

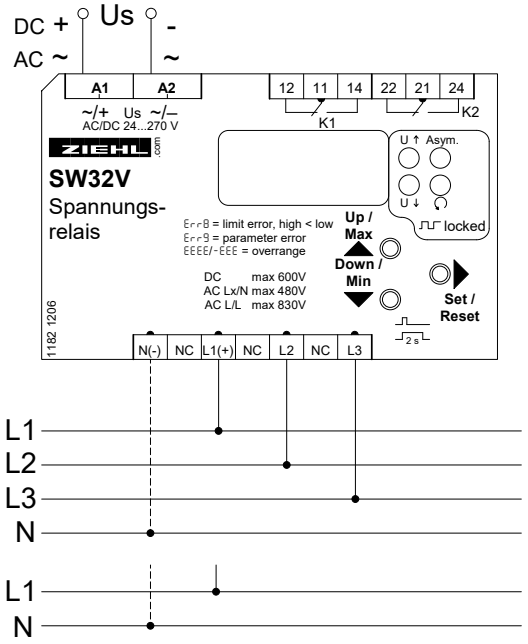
Application:
As voltage monitor in equipment for generation or ditribution of electric energy, especially in photovoltaic plants and block heating stations,
Monitoring of voltage in machines and plants to protect them from damage caused by failure or deviation of voltage.

Description

General:
- monitoring of voltage in DC networks DC 10…600 V
- monitoring of voltage in AC networks AC 15…480 V
- monitoring of voltage in 3-phase networks with/without neutral 3AC 26…830 V
- preset values for grid- and plant protection acc. to VDE-AR-N 4110:2018-11
- Asymmetry (5…50%) and phase-sequence-monitoring selectable
- measuring of True RMS
- 2 alarms / relays, each with 1 changeover-contact
- setting of limits and hysteresis in VOLT
- simulation-function to test settings
- codelock against manipulation of settings
- universal power supply AC/DC 24-270 V
- housing for DIN-rail-mount, 70 mm wide, height 55 mm

Display:
- 3 digit display for measured values and settings
- MIN/MAX-values of measured voltages
- 4 LEDs for alarm
- 4 LEDs for displayed inputs
- 2 LEDs for states or relays
- resolution <100V: 0,1V

Switching functions:
- overvoltage with hysteresis, switching- and switch-back time
- undervoltage with hysteresis, switching- and switch-back time
- asymmetry / phase-sequence
- relay-function normally opened mode/normally closed mode, reclosing lock



Technical Data SW32V

Power Supply	Rated supply voltage Us	AC/DC 24-270 V, 0/45...100 Hz, <5VA DC: 20,4...297 V, AC: 20,4...297 V
Relay-Output		2 change-over contacts **type 2** see "general technical informations"
Measuring Input	Measuring voltage DC	DC 10...600 V
	Measuring voltage phase/phase	AC 26...830 V
	Measuring voltage phase/neutral	AC 15...480 V
	Frequency	40...100 Hz
	Measuring time DC	DC average over 50 ms
	Measuring time AC	< 50 ms
	Measuring accuracy DC	>100V: 0,5% of value ± 1 Digit <100V: 0,5% of value ± 5 Digit (res. 0,1V)
	Measuring accuracy AC with N	>100V: 0,8% of value ± 1Digit <100V: 0,8% of value ± 5Digit (res. 0,1V)
	without N	>100V: 1,0% of value ± 1Digit <100V: 1,0% of value ± 5Digit (res. 0,1V)
	Hysteresis	adjustable 0,1...130 V
	Range asymmetry	5...50%
	Hysteresis asymmetry	fest 1%
	Error asymmetry	± 15% of set value
	Switching delay	0,05...99,9 s
	Switch-back delay	0...999 s
	Time until ready after applying Us	≤ 300 ms (+ switch-back delay)
Test Conditions		EN 60255
	Rated impulse voltage	6000 V
	Overvoltage catagory	III
	Pollution degree	2
	Rated Insulation voltage	AC 690 V
	Operation time	100 %
	Permissible ambient temperature	-20 °C...+55 °C
		EN 60 068-2-2 dry heat
	EMC - immunity	EN 61 000-6-2
	EMC - emission	EN 61 000-6-4
Housing	Design	V4
	Dimensions (h x w x d)	90 x 70 x 58 mm, mounting height 55 mm
	Protection housing	IP 30
	Protection terminals	IP20
	Attachment	DIN-rail 35 mm or screws M4
	Weight	app. 200 g