

# Voltage Relay for three-phase current

## also for alternating current networks

SW31V



Modern electrical switchgear for energy generation and distribution, for treatment and processing machines and for a variety of other drives are usually equipped with measuring and control-engineering devices.

However, the use of such devices demands that the supplied mains voltage deviates only slightly from the nominal value as otherwise the required accuracy of the

When the mains voltage is applied, the integrated relay picks up if the voltage value preset for the network to be monitored is not undercut. If the set limit is undercut, the relay releases.

Type SW voltage monitors comply with Class III acc. VDE 0435 Part 303, Para. 4.8.2, for static measuring relays (SMR).

Undervoltage monitors (↓) for three-phase current networks with N and alternating voltage networks. The switching point lies at approx. 80% UNom. Hysteresis is approx. 5%. The voltages of the 3 phases are measured against the neutral conductor.

A green LED indicates the unit is ready for service. During undervoltage (<80%), the relay (2 change-over contacts) releases and the green LED goes out.

The housing can be snapped onto 35 mm mounting rails and is perfectly suited for installation in distribution cabinets.

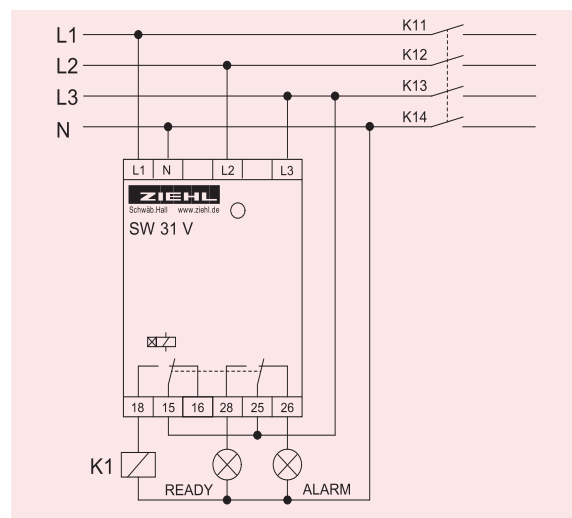
measurements or the actuating signal is not attained, or downstream units are destroyed by overvoltage.

SW series voltage monitors from ZIEHL are used to monitor the mains voltage in direct, alternating and three-phase current networks for undervoltage and/or overvoltage. If the nominal voltage deviates by various values which, depending on the consumer, are not allowed to be undercut, the involved system needs to be disconnected, or at least the operator needs to be optically or acoustically warned.

Features:

- Monitoring three-phase current networks 3 AC 400 V with neutral conductor
- Monitoring alternating current networks AC 230 V (connect inputs L1/2/3)
- Monitoring own power supply
- Switching point fixed 80 %
- Output relay 2 change-over contacts
- Panel mounted housing, 35 mm wide

Order-number: **S22281**



### Technical Data

Rated Supply Voltage  $U_s$   
Frequency

AC 230 V, +10...-30%, < 5 VA  
50/60 Hz

Output Relay  
Type of contact  
Test conditions  
Rated ambient temperature range  
Hysteresis  
Delay relay, undervoltage at voltage breakdown

2change-over contacts  
**Typ 2** see "general technical informations"  
see "general technical informations"

-20°C...+55°C  
approx. 5%  $U_{Nenn}$

L1/N: ca. 400 ms, L2/L3: ca. 1 s

Dimensions H x W x D  
Protection housing/terminals

Design V2: 90x35x58 [mm], mounting height 55 mm  
IP 30 / IP 20