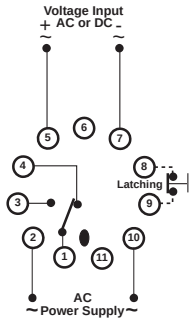
RHOMBERG

Voltage Monitoring Relay Single Phase AC (rms) / DC

SP 201

WIRING EXAMPLE
(requires optional S3-B base)



SLIMLINE

Application Examples

- Automatic control for the charging cycle of battery chargers.
- Monitoring voltage on Tachogenerators for over-speed.
- Monitoring the discrimination voltage between neutral and earth to ensure that the neutral does not 'float'.
- Monitoring voltage supplies from voltage transformers in control panels.
- Monitoring the battery voltage on underground locomotives for recharging purposes.
- Monitoring system trip circuits on high voltage switchgear.
- Monitoring conditions of fuses which are not accessible.

ORDERING CODE

TYPE		SUPPLY VOLTAGE		AC/DC		RELAY CONTACTS
SP201	/	240		AC	-	S

Note: SP201 supersedes SP200

Technical Specification

Power Supply:
AC: 12, 24, 110, 240 (ie. 220-240), 400, 415, 525V ±15%
DC: 10-30V, 48, 60, 110V ± 15% (no galvanic isolation)

Response:
Time delay on trip: adjustable from 0,1 to 10 seconds.
Latching disabled during power-up: approx. 10 seconds.

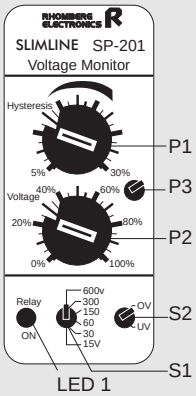
Voltage Input:

Repetitive accuracy: 1%.

Hysteresis: 5% to 30% (adjustable)

Range	Input Impedance	Max. Input Voltage
0-15V	500k ohm	700V
0-30V	500k ohm	700V
0-60V	500k ohm	700V
0-150V	500k ohm	700V
0-300V	500k ohm	700V
0-600V	500k ohm	700V

Description of Controls



P1: **Hysteresis** ie. the difference between the tripping point and the recovery point is set between 5% and 30% on P1. (Hysteresis relates to the set-point of P2)

P2: **The Voltage Threshold** (tripping point) is adjusted on P2. Maximum setting of 100% corresponds with the voltage level set on S1.

P3: **Adjustable Time Delay on Trip** is set on P3 from 0,1 to 10 seconds.

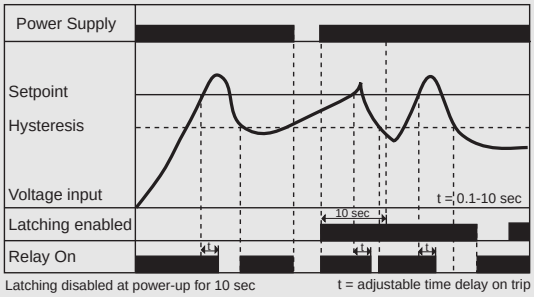
S1: **The Voltage Range** is set on S1.

S2: **Function** Selection is provided by S2. If set to "OV" the unit operates as an over-voltage detector. If set to"UV" the unit operates as an under-voltage detector.

LED 1: The LED illuminates to indicate that the relay is energised. The LED will be off if the unit registers a fault condition (over-voltage/under-voltage) or the power supply to the unit is interrupted.

Operational Diagrams

Example of SP201 Overvoltage Monitoring



Example of SP201 Undervoltage Monitoring