

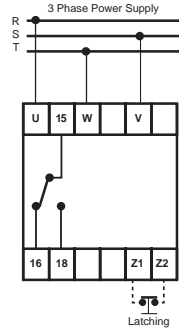


3 Phase Supply Monitoring Relay - Voltage Window Comparator

P230P



WIRING EXAMPLE



Application Examples

- Detection of Phase Failure.
- Detection of balanced over-voltage or under-voltage.
- Phase monitoring of voltage transformers to ensure the voltage integrity of control circuits in high voltage panels.
- Monitoring of the line supply in rural areas for over- and under-voltage protection.
- Monitoring of supply voltage from standby generator sets to ensure a constant voltage supply.
- Monitoring the voltage output of UPS systems.

ORDERING CODE

TYPE	SUPPLY VOLTAGE	AC/DC	RELAY CONTACTS	Fn
P230PD	400	A	S	3

Technical Specification

Power Supply:

Supply voltage (phase-to-phase):
115, 230 (ie. 220, 230 or 240), 400 (380, 400 or 415),
525VAC $\pm 20\%$

Response:

Time delay on trip & recovery (one adjustment, ie. trip time = recovery time): adjustable from 0,1 to 10 seconds.

Voltage Sensing:

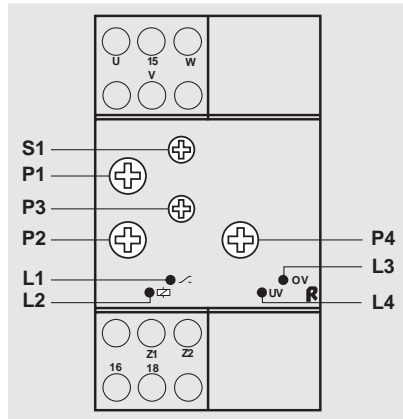
The unit is calibrated to trip on the RMS value of the supply voltage (assuming no AC waveform distortion)

Repetitive accuracy: 1%

Hysteresis: 2% fixed (relative to its supply voltage)

Latching disabled during power-up: adjustable from 0-10 sec

Description of Controls



P1: **The Overvoltage Setpoint** is adjusted on P1 (+5% to +20%).

P2: **The Undervoltage Setpoint** is adjusted on P2 (-5% to -20%).

Note: The scales for overvoltage and undervoltage setpoints are calibrated in percentage deviation from the nominal supply voltage.

P3: **Start-up delay** (for disabling latching) is set on P3. This time is adjustable from 0 to 10 seconds.

P4: **Adjustable Time Delay on Trip & Recovery** is adjusted on P4 from 0,1 to 10 seconds. As there is only one adjustment, the time set is the same for time delay on trip and on recovery

S1: For 220, 230 & 240VAC or 380, 400 & 415VAC power supplies, the supply voltage is set on S1.

L1: The yellow "**Relay ON**" LED will illuminate when the relay is energised, and switches off if the unit registers a fault condition.

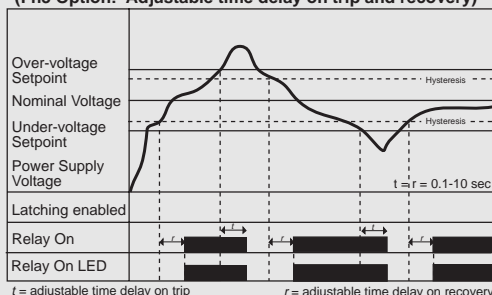
L2: The green "**Power ON**" LED illuminates when power is supplied to the unit.

L3: The red "**OV**" LED will illuminate whenever the voltage exceeds the overvoltage setpoint.

L4: The red "**UV**" LED will illuminate whenever the voltage drops below the undervoltage setpoint.

Operational Diagrams

Example of P230P voltage monitoring without latching (Fn3 Option: Adjustable time delay on trip and recovery)



Example of P230P voltage monitoring with latching (Fn3 Option: Adjustable time delay on trip and recovery)

