

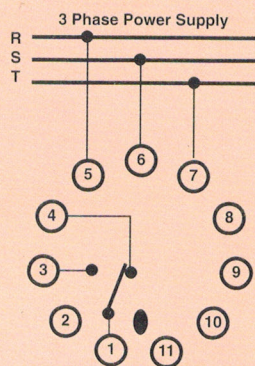
■ Wiring and Connection

Power Supply: The three phases R, S and T are to be connected to pins 5, 6 and 7 respectively.

Relay Contacts: to be connected:
1 + 3 normally open,
1 + 4 normally closed.

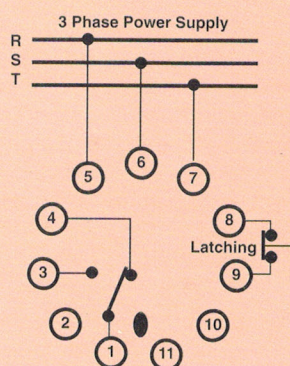
Latching: Latching to be enabled by interconnecting pin 8 and pin 9 (eg. push-to-open reset button).

SP-230/SP-231



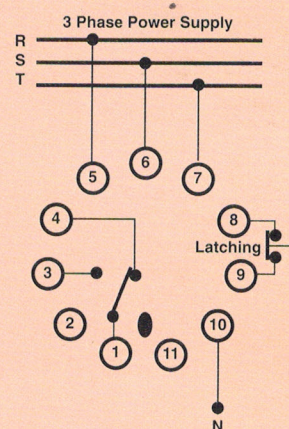
APPLICATION 1
Without latching

SP-230/SP-231



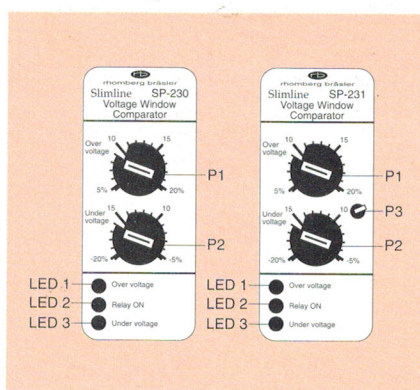
APPLICATION 2
With latching

SP-232



APPLICATION 3

■ Description of Controls



P1: **The Over-voltage Threshold** is adjusted on P1.

P2: **The Under-voltage Threshold** is adjusted on P2.

Note: The scales for over-voltage and under-voltage threshold settings are calibrated in percentage deviation from nominal supply voltage.

LED 1: The red LED marked "**Over-voltage**" illuminates whenever the supply voltage exceeds the set over-voltage threshold.

LED 2: The green LED marked "**Relay ON**" illuminates when the relay is energised, ie. under normal supply conditions.

LED 3: The red LED marked "**Under-voltage**" illuminates whenever the supply voltage drops below the set under-voltage threshold.

■ Technical Specification

Power Supply:

Supply voltage (phase-to-phase): 12, 24, 110, 230, 400, 415, 525VAC \pm 20%

Power consumption: 3VA (approx.)
6VA for 415,525VAC (approx.)

Voltage Sensing:

Calibrated to respond to the RMS of a sinusoidal waveform.

Repetitive accuracy: 1%.

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

Response delay: 1 second.

Latching disabled during power-up: approx.10 seconds.