

SP 115

- Wind velocity relay with outputs for instruments.
- Measuring range: 5-67 M.P.H. opto-electronic pulse generator, type PV 01.
- The relay operates at wind velocity within the set limits for 10 min.
- The relay releases instantly when one of the limits is exceeded.
- 10 A SPDT output relay.
- LED-indication: relay on.
- AC or DC power supply.

SP 115 = 11-pin circular plug

SPECIFICATIONS

Measuring range
5-67 m.p.h.

Hysteresis
1 m/sec. within the range.

Delay on operate
During normal operation pins 7 and 11 are interconnected causing a delay of 10 min. During adjustment the delay can be reduced to 20 sec. by interrupting the interconnection between pins 7 and 11.

Measuring voltage
Pins 6 and 7: 24 VDC.
Pin 6 positive.

Setting
2 built-in potentiometers with absolute scales in m/sec.
Upper knob: Maximum value from 10 to 30 m/sec.
Lower knob: Minimum value from 2 to 10 m/sec.

Pulse generator (anemometer)
Rotating opto-electronic pulse generator, type PV 01. Power supply from the SP 115.

Inputs for pulse generator, type PV 01
Pins 5, 6 and 7.
Pin 6 positive.
Pin 5 (yellow): Signal input
Pin 6 (red): +24 VDC.
Pin 7 (black): -

Connection for instruments
Connection for 2 moving-coil instruments with full scale deflection of 1 mA. Nominal internal resistance of 3000Ω.
Instant value: Pins 7-8
Average value: Pins 7-9
Pin 7: Common negative.

Ordering key
11-pin circular plug
SP 115 XXX = 10 A SPDT

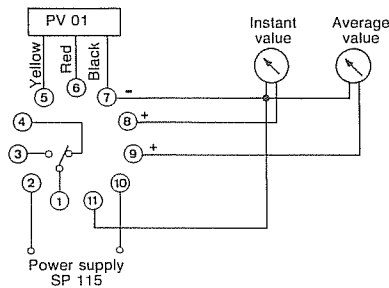
XXX = power supply
024 = 20- 28 VAC
115 = 95-135 VAC
230 = 195-265 VAC
724 = 20- 28 VDC

Accessories

Bases.
Hold down spring.
Mounting rack.
Base covers.
Front mounting bezel.

Opto-electronic pulse generator (anemometer), type PV 01.
Moving-coil instruments, type ID 270 with scales calibrated to 0-30 m/sec.

WIRING DIAGRAM



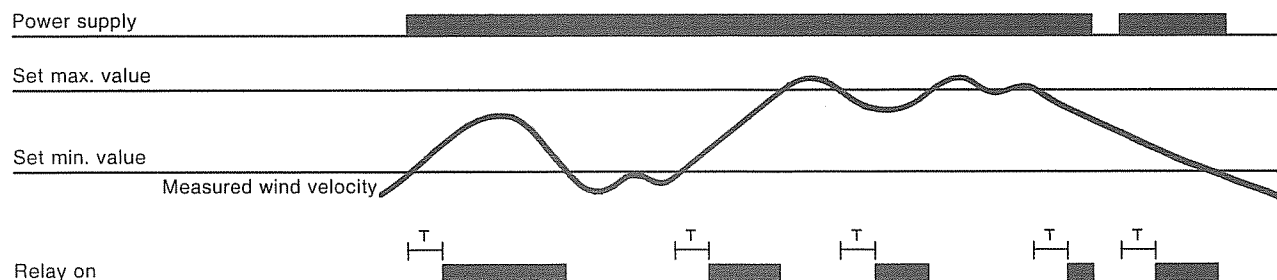
MODE OF OPERATION

With an anemometer, type PV 01 (opto-electronic pulse generator) the wind velocity relay, type SP 115 can be used for remote display of velocities up to 30 m/sec. (equalling 67 mph). Instant and average value of the wind velocity can be displayed on two moving-coil instruments with a full-scale deflection of 1 mA. The SP 115 has a min. scale (5-22 mph) and a max. scale (22-67 mph). Average value is measured in the min. range and instant value in the max. range.

The relay operates at wind velocity within the set min. and max. limits of 10 minutes. The relay releases instantly when one of the limits is exceeded. The relay will not operate again, until the wind velocity is within the set limits of 10 minutes.

This mode of operation is used to avoid both commutating and overloading of wind-driven generators (windmills).

OPERATION DIAGRAM



WIND RELAY