



Powering Innovation



PROTECTION + AUTOMATION + CONTROL

COMBINED UNDER VOLTAGE & OVER VOLTAGE RELAY

JRV 014

JVS ELECTRONICS PVT. LTD.

#121, Manchanayakanahalli,
Bangalore Mysore Highway, Bidadi,
Ramanagara District - 562 109, Karnataka, India
+91 94808 26272, +91 94808 26260
bangalore@jvselectronics.in, www.jvselectronics.in

FEATURES

- ◆ Software based design
- ◆ Wide auxiliary supply
- ◆ Low burden



APPLICATION

The relay provides Under and Over voltage protection of Motors, Generators, Capacitor Banks etc.

PRINCIPLE OF OPERATION

The Relay, JRV 014, provides under & over voltage protection for power systems. The Relay operating time is determined by the set definite time. The relay measures the voltage from input PT and if the voltage is below the set threshold, under voltage stage operates and if the voltage is above the set threshold, over voltage stage operates and it extends a trip signal after the operating time, which is determined by set definite time. The relay output contacts are self reset type. The TEST button facilitates testing of relay contacts for the trip and alarm circuits.

TECHNICAL DATA

RATINGS

Voltage rating	:	110V / 230V /415 AC
Auxiliary supply	:	20 to 60V DC 75 to 150V DC 175 to 300V DC / 185-250V AC

SETTINGS

Under voltage setting	:	30 to 95% in steps of 5%
Over voltage setting	:	100 to 170% in steps of 5%
Definite time	:	0 to 25s in steps of 0.1s

OVER LOAD RATINGS

Voltage input	:	2 times Rated continuous
---------------	---	--------------------------

BURDEN

Voltage input	:	Less than 2VA at Rated
Auxiliary supply	:	Less than 3W (Non Operated) Less than 5W (Operated)

ACCURACY

Operating value	:	±5%
Operating time	:	± 5% or ± 20ms
Instantaneous Time	:	Less than 40ms
Drop-off to pickup ratio	:	80% to 95%

CONTACT RATINGS

Relay rating : 10A at 24V DC/230V AC

CONTACT DURABILITY

Loaded contact : 10,000 operations min.

Unloaded contact : 20,000 operations min.

INSULATION

1. 2KV RMS, 50 Hz for 1 minute / 2.5 KV for 1 sec . Between all terminals and cases.

2. 1 KV RMS, 50 Hz for 1 minute across open contacts

MECHANICAL DESIGN

Weight : Approx. 1500 gms

Case size : 144sqmm with a depth of 117mm

Installation : Flush mounting

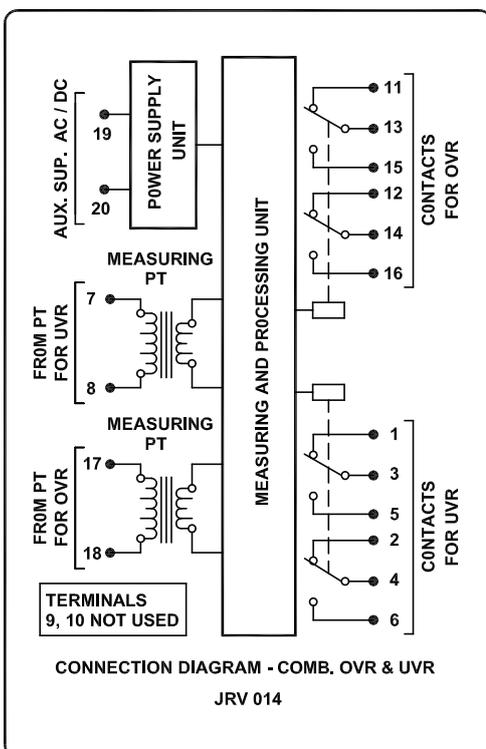
Panel cutout : 138 X 138 mm

STANDARD COMPLIANCE

Accuracy Test : IEC 60255-151

Insulation Test : IEC 60255-27

TERMINAL DIAGRAM



ORDERING INFORMATION

Voltage rating : 110V / 230V / 415V AC

Relay type : JRV 014

Auxiliary supply : 20 to 60V DC

75 to 150V DC

175 to 300V DC / 185-250V AC