



Powering Innovation



PROTECTION + AUTOMATION + CONTROL

TWO STAGE NEUTRAL DISPLACEMENT RELAY

JRV 064

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FEATURES

- ◆ Software based design
- ◆ Instantaneous/ Definite time selection
- ◆ Insensitive to voltages at third harmonic frequencies
- ◆ Wide setting range
- ◆ Wide auxiliary range

APPLICATION

Neutral Displacement Relay is used for protection of motors, generators and capacitor banks.

PRINCIPLE OF OPERATION

NDR is a voltage operated relay and get's sensing voltage from open delta secondary of potential transformer.

Whenever there is a ground fault in one phase, the voltage in other two phases will rise and generate a sensing voltage which is continuously monitored in the relay. When this voltage exceeds the set value the internal relay operates. The Relay contacts can be used for Alarm & Trip purpose.

The Relay contacts are self reset type and indications are latched. The RESET button provided on the front of relay to clear these latched indications. The TEST button is provided to test the relay contacts for the trip and alarm circuits.



TECHNICAL DATA

RATINGS

Voltage rating	:	63.5V / 110V AC
Auxiliary supply	:	20 to 60V DC 75 to 150V DC 175 to 300V DC / 185-250V AC

SETTINGS

Voltage setting	:	
Setting range (for Stage 1 and 2)	:	2.5% to 80% in steps of 2.5%
Definite time	:	
Setting range (for Stage 1 and 2)	:	0 to 25sec in steps of 0.1sec

OVER LOAD RATINGS

Voltage input	:	2 times Rated continuous
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BURDEN

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

ACCURACY

Operating value	:	±5%
Operating time	:	± 5% or± 30msec
Instantaneous Time	:	Less than 40ms
Drop-off to pick up ratio	:	80% to 95%

CONTACT RATINGS

Ratings : 10A at 24V DC / 230V AC

CONTACTS DURABILITY

Unloaded contact : 1,00,000 Operations

Loaded contact : 10,000 Operations

INSULATION

1. 2KV RMS, 50 Hz for 1 minute / 2.5 KV for 1s . 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

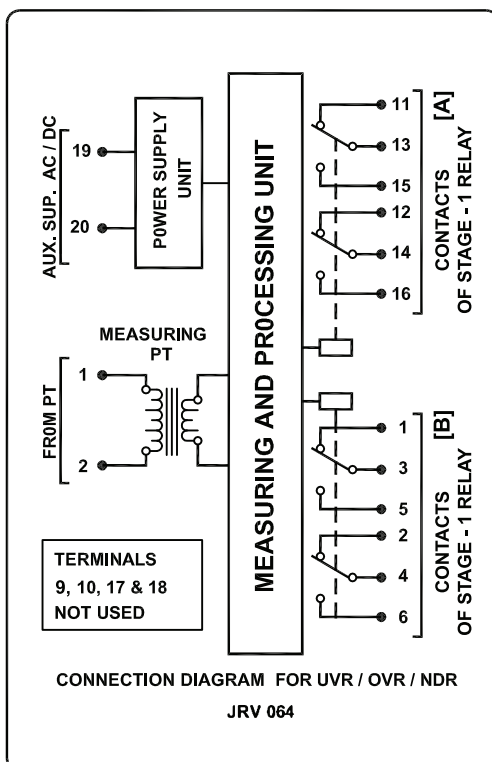
Panel cutout : 138 X 138 mm

STANDARD COMPLIANCE

Accuracy Test : IEC 60255-151

Insulation Test : IEC 60255-27

TERMINAL DIAGRAM



ORDERING INFORMATION

Voltage rating : 63.5V/ 110V AC

Relay type : JRV 064 (Two Stage NDR)

Auxiliary supply : 20-60V DC

75-150V AC/DC

175-300 V DC / 185-250V AC