



Powering Innovation



PROTECTION + AUTOMATION + CONTROL

TRIP CIRCUIT SUPERVISION RELAY

JRV 111

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FEATURES

- ◆ Low supervision current
- ◆ Continuous monitoring of complete trip circuit independent of the circuit breaker position
- ◆ Detects faults in the supervised circuits such as loss of voltage, circuit breakage
- ◆ Sensing by electronic circuit

APPLICATION

Trip Circuit Supervision Relay (TCSR) is used for monitoring healthiness of the circuit breaker (CB) trip circuit, CB trip coil and CB power supply.

PRINCIPLE OF OPERATION

TCSR monitors the healthiness of the trip circuit of breaker. Basically the circuit drives a small current through the breaker trip coil and monitor it continuously. If there is any failure in the trip circuit or trip coil circuit, the relay will sense and operate it's output contacts. About 400ms delay is introduced to prevent false indication during circuit breaker operation. A test button is provided to test the relay contacts for trip and alarm in healthy condition only.

The facility for monitoring two trip coils with independent power supply is provided in one enclosure.

TECHNICAL DATA

RATINGS

Voltage rating	:	24V,30V,48V,110V OR 220V DC
Supervision current	:	12 mA(maximum)

BURDEN

Auxiliary supply	:	10 Watts(maximum)
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ACCURACY

Operating time	:	Appx. 400ms
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CONTACT RATINGS

Contacts	:	5A at 24V DC/ 230V AC
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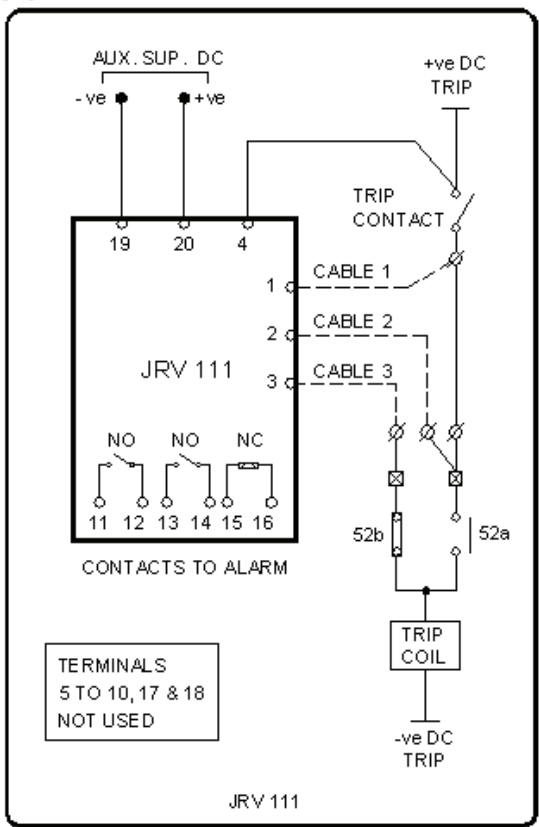
CONTACTS DURABILITY

Unloaded contact	:	1,00,000 Operations.
Loaded contact	:	10,000 Operations

MECHANICAL DESIGN

Weight	:	Approx. 2 Kg
Case size	:	144 sq mm with a depth of 110 mm
Installation	:	Flush mounting
Panel cutout	:	138 X 138 mm

TERMINAL DIAGRAM



ORDERING INFORMATION

Voltage rating : 24, 30,48, 110 or 220V DC
 Relay type : JRV 111