





**PROTECTION + AUTOMATION + CONTROL** 

# SINGLE POLE, NON-DIRECTIONAL O/C OR E/F RELAY JRC 012

### 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 setting range
- Wide auxiliary supply
- Low burden

#### **Application**

The relay provides Over Current or Earth fault protection of Generators, Motors, Transformers, Feeder etc., and where definite time protection is required.



#### PRINCIPLE OF OPERATION

The relay provides Over Current or Earth fault protection for power systems. Relay operating time is determined by the set definite time. The relay measures the current from input CT and if it exceeds the set threshold, it extends a trip signal after the operating time, which is determined by set definite time. The relay output contacts are self reset type. TEST button facilitates testing of relay contacts for trip and alarm circuits.

## TECHNICAL DATA RATINGS

Current rating : 1A / 5A

Auxiliary Supply : 20 to 60V DC

75 to 175V AC / DC175 to 300V DC

: 185 to 250V AC

**SETTINGS** 

Over Current Settings : 50-200% Earth fault setting : 2.5-80%

Definite time setting : 0 to 25s in steps of 0.1s

**OVER LOAD RATINGS** 

Current input : 2 times Rated continuous

20 times Rated for 3s40 times Rated for 1s

**BURDEN** 

Current input : 0.2 VA at Rated 5A Aux. Supply : 0.05 VA at Rated 1A

: Less than 3W (Non Operated)

: Less than 5W (Operated)

#### **ACCURACY**

Operating value : ±5%

Operating Time :  $\pm 5\%$  or  $\pm 20$ ms
Instantaneous time : Less than 40ms

#### **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 contact

#### **MECHANICAL DESIGN**

Weight : 2000 gms. (approx)

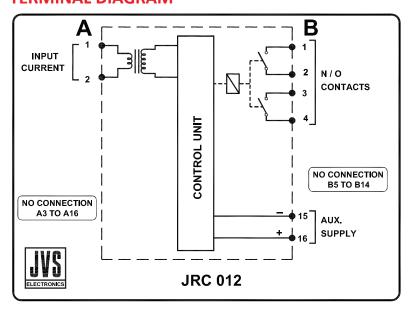
Case Size : 144sq mm, depth 232mm

Installation : Flush mounting Panel cutout : 138mm x 138mm

#### STANDARD COMPLIANCE

Accuracy Test : IEC 60255-151 Insulation Test : IEC 60255-27

#### **TERMINAL DIAGRAM**



#### **ORDERING INFORMATION**

Current rating : 1A / 5A

Relay Type : JRC 012 (E/F) For Earth fault Protection

JRC 012 (O/C) For Over Current Protection

Aux. Supply : 20 to 60V DC

75 to 175V AC/DC 175 to 300V DC 185 to 250V AC