



Powering Innovation



PROTECTION + AUTOMATION + CONTROL

**EARTH LEAKAGE RELAY
(SETTING RANGE 0.3 TO 1.8A)
JRC 172**

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

- ◆ Solid state reliability
- ◆ Built in Test facility
- ◆ Very low primary current sensing
- ◆ Core balance current transformer supplied along with the unit

APPLICATION

The relay used for protection of LV/MV distribution systems requiring very high sensitivity for earth faults.



PRINCIPLE OF OPERATION

The relay measures the earth leakage current from the CBCT and if it exceeds the threshold, it extends a trip signal after the operating time.

TECHNICAL DATA

RATINGS

Relay setting

JRC 172	:	0.3A to 1.8A in steps of 0.1A
Definite time setting	:	0 - 1.5 sec in steps of 0.1sec

Operating characteristics

Operating time		
Instantaneous	:	Less than 40 milli seconds
Definite time setting	:	0 - 1.5 sec in steps of 0.1sec

OVER LOAD RATING

Over load continuous	:	Withstands continuous primary fault current of 400 A.
Short time	:	Withstands primary fault current of 1200A for 10seconds

BURDEN

Aux. Supply	:	Less than 5W
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ACCURACY

Drop-off / pick-up	:	Between 80% to 95%
Operating Time	:	±5% or ±30ms whichever is higher

CONTACT RATINGS

TRIP / ALARM C/O	:	5A at 24V DC/ 230V AC
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CONTACT DURABILITY

Loaded contact	:	10,000 operations min.
Unloaded contact	:	100,000 Operations

INSULATION

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

MECHANICAL DESIGN

Type	:	JRC 172 Flush Mounting
Panel cutout dimension	:	43 X 91 mm (WxH)

STANDARD COMPLIANCE

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

ORDERING INFORMATION

Relay rating type	:	JRC 172
Aux. Supply	:	110V AC, 220V AC
Inner diameter of CBCT	:	70mm, 100mm are standard, Customization of CBCT is applicable.