



Powering Innovation



PROTECTION + AUTOMATION + CONTROL

NUMERICAL VOLTAGE UNBALANCE MONITORING RELAY (3 PHASE 4WIRE WITH PHASE REVERSAL AND NEUTRAL SNAP) JNV 026

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FEATURES

- ◆ Software based design
- ◆ Trips on neutral snap
- ◆ Programmable Active / Inhibit facility
- ◆ Programmable Rated voltages.
- ◆ Wide range of time delay setting

Application

JNV 026 is a numerical unbalance voltage relay, with under voltage(UV), over voltage(OV) and Neutral snap which is used for three phase systems etc.



PRINCIPLE OF OPERATION

JNV 026 measures and displays 3 phase voltages (R,Y,B phases). It calculates percentage of unbalance voltage and if it exceeds the set unbalance voltage, the relay operates after the elapse of operating time. Under voltage fault will be detected when voltage on any phase is less than the set Under voltage limit, the relay operates after elapse of under voltage operating time. Over voltage fault is detected when voltage on any phase is more than the set Over voltage limit, the relay operates after elapse of over voltage operating time. Neutral snap will be detected when Neutral is disconnected.

TECHNICAL DATA

RATINGS

Rated voltage and Aux. supply : 220V AC / 110V AC
Frequency : 50Hz

SETTINGS

Rated voltage (Vn) : 220 to 250 V in steps of 10V (for 220V rated)
110 to 125V in steps of 5V (for 110V rated)
Unbalance voltage : 1 to 10% in steps of 1%
UBV time delay : 0 - 300s in steps of 1s
Under voltage : Vn -50V in steps of 1V (for rated voltage 220V)
Vn -25V in steps of 1V (for rated voltage 110V)
UV time delay : 0 - 300s in steps of 1s
Over voltage : Vn +25V in steps of 1V for rated voltage
220V & 110V
OV time delay : 0 - 300s in steps of 1s
Active / Inhibit facilities : Active / Inhibit facilities for UV, OV, UBV

OVER LOAD RATINGS

Over load : 2 times rated voltage continuously.

BURDEN

Aux. Supply : 10 VA max.
 Voltage Input : 0.1 VA max.

ACCURACY

Operating value : $\pm 5\%$
 Operating time : $\pm 5\%$

CONTACT RATINGS

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

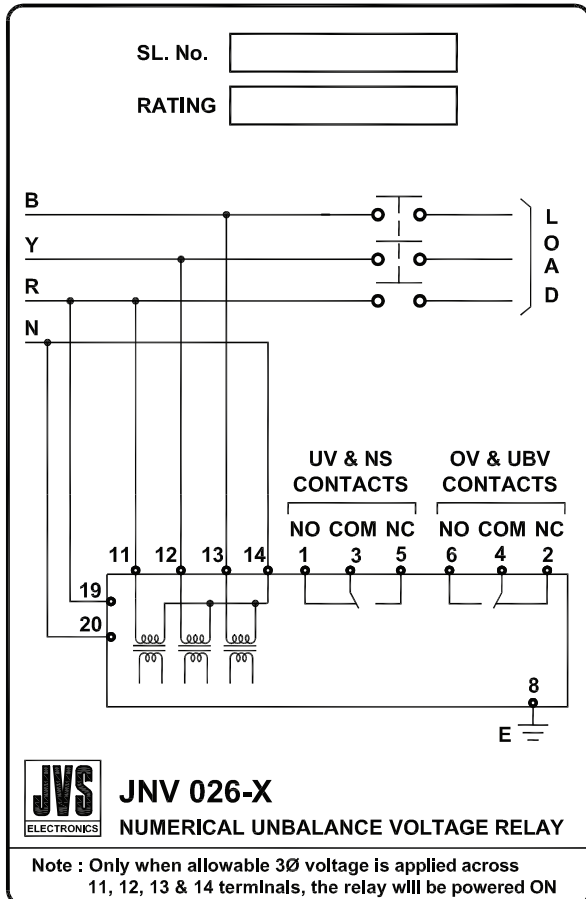
CONTACT DURABILITY

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

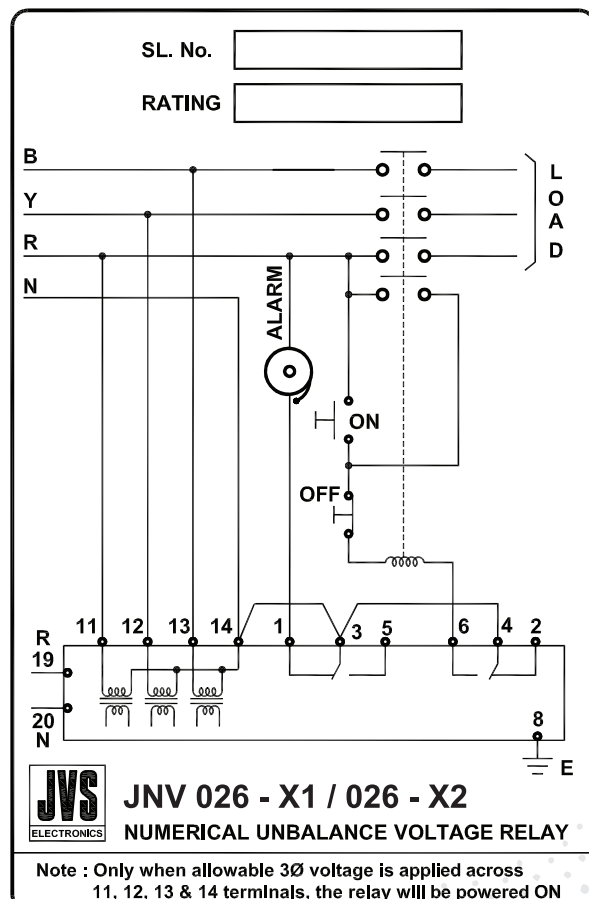
MECHANICAL DESIGN

Weight : 2500gms. Approx.
 Case size : 144 mm, depth 117mm
 Installation : Flush mounting
 Panel cuttout : 138 x 138 mm

TERMINAL DIAGRAM



JNV 026-X



JNV 026-X1 & JNV 026-X2

ORDERING INFORMATION

Relay Type : JNV 026X (rated 220V AC with Neutral snap)
JNV 026X1 (rated 220V AC with Neutral snap & Phase reversal)
JNV 026X2 (rated 110V AC with Neutral snap & Phase reversal)

For JNV 026X :

1. Separate output relay for Under voltage and Neutral snap faults.
2. Separate output relay for Over voltage & Unbalance voltage faults.

For JNV 026X1 & JNV 026X2 :

1. Common output relay for Under voltage, Over voltage, Unbalance voltage, phase reversal & Neutral snap faults.