



Powering Innovation



PROTECTION + AUTOMATION + CONTROL

**MULTISHOT AUTO RECLOSE RELAY**  
**PROGRAMMABLE FOR SINGLE SHOT, TWO, THREE OR FOUR SHOTS**  
**JRV 142**

**JVS ELECTRONICS PVT. LTD.**

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## FEATURES

- ◆ Software based design
- ◆ Built- in Auto / Manual selection facility
- ◆ Fast reset facility
- ◆ No. of shots selectable
- ◆ High accuracy and stability
- ◆ Drawout case

## APPLICATION

The auto reclose function is normally used in feeder protection relays that are protecting an overhead line. Most of the overhead line faults are temporary in nature. Upto 85% can be cleared by using the auto reclose function.



## PRINCIPLE OF OPERATION

The relay receives the fault initiation from the protection relay and that triggers the auto reclose function. After tripping the circuit breaker (CB), the Auto reclose function can reclose the CB. Normally, the first reclose (or shot) is so short in time, that the consumer cannot notice anything. However, the fault will be cleared and the feeder will continue in normal service. Even though the basic principle of Auto reclose is simple, there are a lot of different timers and parameters that have to be set.

## TECHNICAL DATA

### RATINGS

|              |   |                           |
|--------------|---|---------------------------|
| No. of shots | : | 4shot, 2shot, 1 shot      |
| Aux. Supply  | : | 30VDC<br>110VDC<br>220VDC |

### SETTING

|                    |   |                               |
|--------------------|---|-------------------------------|
| 4- shot STD        |   |                               |
| Reclaim time       | : | 1 - 255s in steps of 1s       |
| DT1, DT2, DT3, DT4 | : | 0.25s - 60s in steps of 0.25s |
| Fast reset         | : | 0 - 15 sin steps of 1s        |
| 3- shot STD        |   |                               |
| Reclaim time       | : | 200 - 300s in steps of 1s     |
| Dead Time 1        | : | 10s - 60s in steps of 1s      |
| Dead Time 2        | : | 30s - 180s in steps of 1s     |
| Fast reset         | : | 0 - 15 sin steps of 1s        |

2- shot STD  
Reclaim time : 1 - 255s in steps of 1s  
Dead Time 1 : 0.25s - 60s in steps of 0.25s  
Dead Time 2 : 0.25s - 60s in steps of 0.25s  
Fast reset : 0 - 15 sin steps of 1s

1- shot STD  
Reclaim time : 6 -69s in steps of 1s  
Dead Time 1 : 0.1s-1.6s in steps of 0.1s

### **BURDEN**

Aux. Supply : Less than 5W (Non operated)  
Less than 7W (Operated)

### **ACCURACY**

Operating Time :  $\pm 5\%$  or  $\pm 30\text{ms}$  whichever is higher

### **CONTACT RATINGS**

TRIP / ALARM : 10A at 24V DC/230V AC  
Lockout Relay &  
Reclose Relay

### **CONTACT DURABILITY**

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

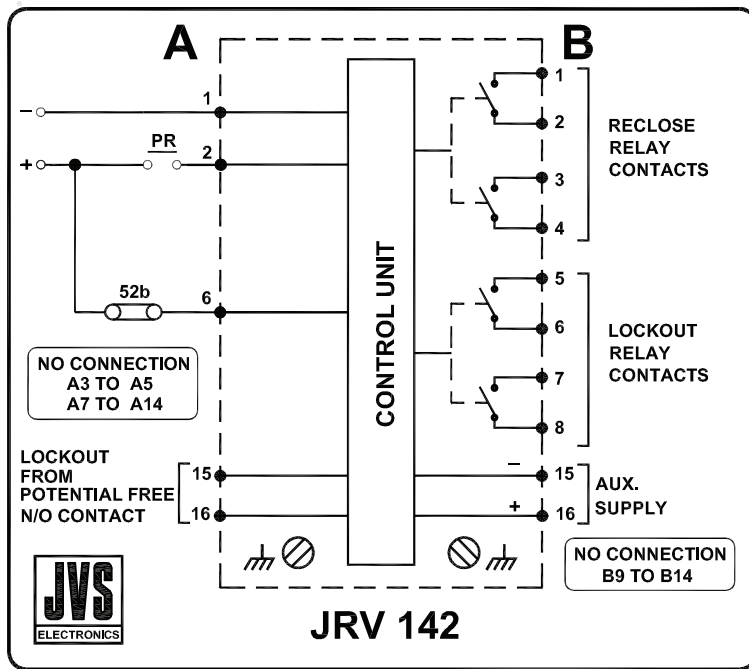
### **INSULATION**

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

### **MECHANICAL DESIGN**

Weight : 2500 gms. (approx)  
Case Size : 144sq mm, depth 232mm  
Installation : Flush mounting  
Panel cutout : 138mm x 138mm

**TERMINAL DIAGRAM**



**ORDERING INFORMATION**

Relay rating type : JRV 142 (4 Shot Standard)

Aux. Supply : 30V DC  
110V DC  
220V DC