

# MVAX 11

## Tripping and Interposing Supervision Relay

The MVAX 11 relay supervises the trip circuit of tripping relays such as the MVAJ or interposing control relay type MVAW.

### Simple and robust

The relay is an attracted armature unit of simple and robust construction having a positive action without chatter.

It has two dropping resistors R1 and R2 of equal ohmic value, connected in series with the coil. Under healthy conditions the relay coil is energised via the dropping resistor R2 as shown in figure 1 (interposing relay circuit) and in figure 2 (tripping relay circuit).

If the circuit being supervised becomes open circuited or if the supply fails, the relay will become deenergised and an alarm or visual indication will be given. To prevent the alarm being given when the circuit being supervised is operated, the relay coil is maintained via the dropping resistor R1. For this purpose, an additional normally open contact is required from either the push button in figure 1 or tripping relay contact in the case of figure 2.

## Key Benefits

- Compact design
- No false alarms due to protection operation
- Continuous monitoring of trip circuit



Monitoring Relay Trip Coils to Ensure Maximum Protection Integrity

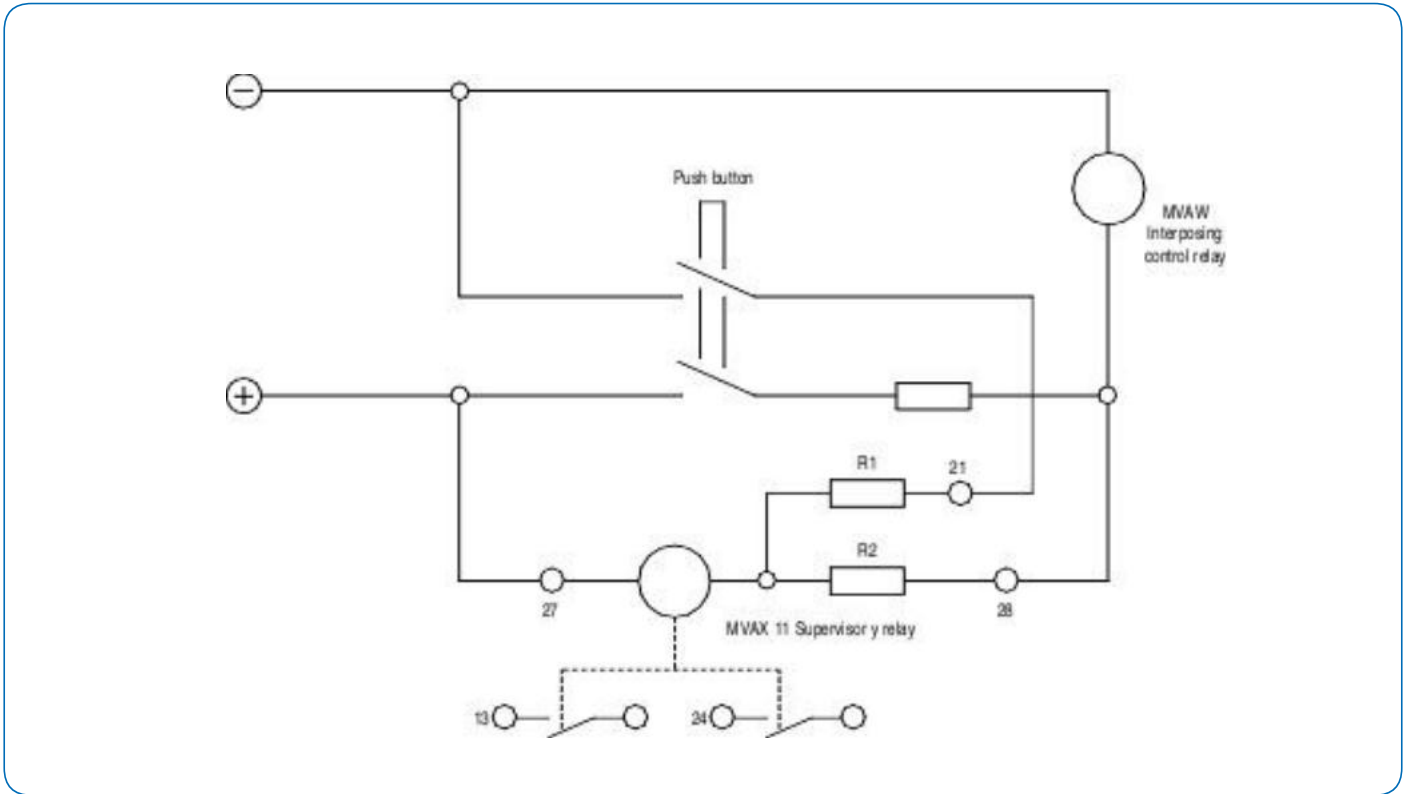


Figure 1 Supervision of interposing control relay type MVAW

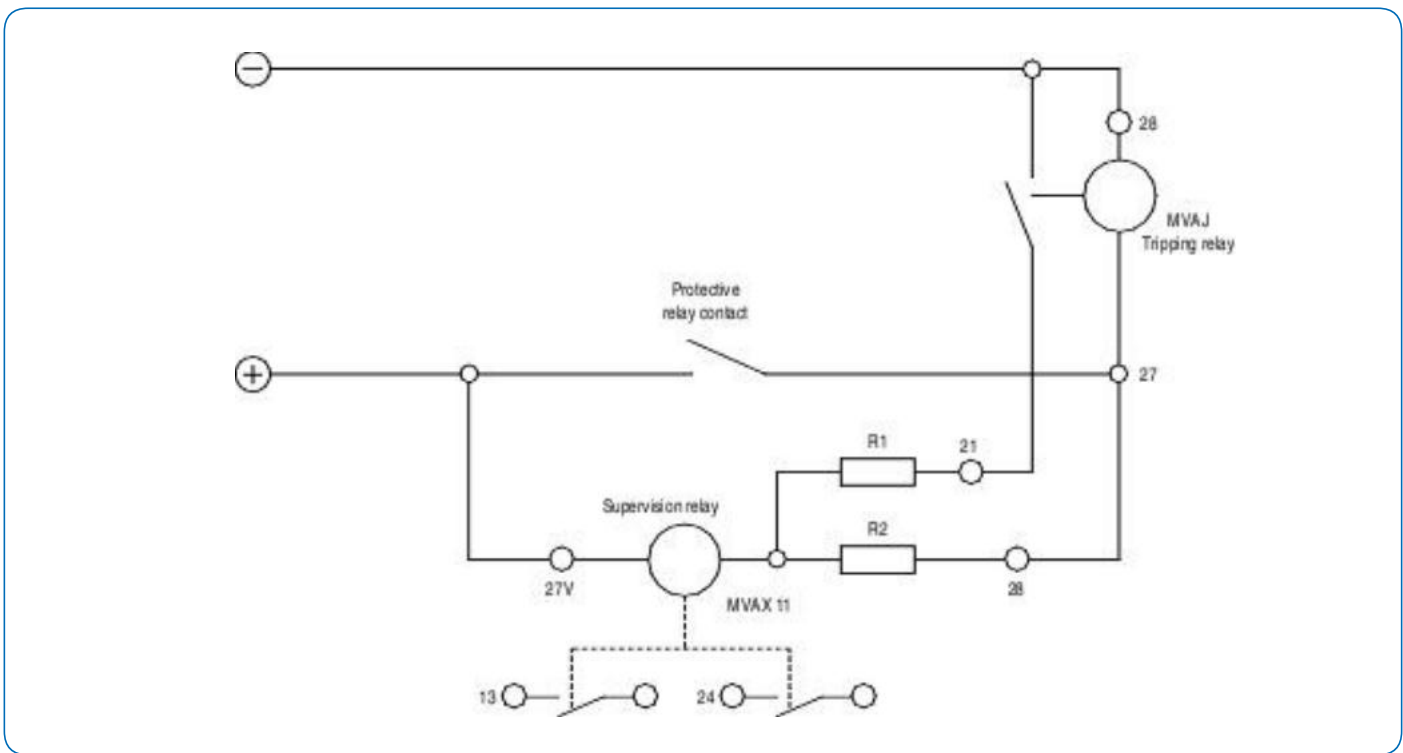


Figure 2 Supervision of tripping relay type MVAJ

## Technical Data

### Voltage Ratings

The relay is available for use on any of the following standard supplies: 30/34, 48/54, 110/125, 220/250, dc volts.

### Caution

The MVAX 11 is not suitable for use with single stacked MVAJ 11, MVAJ051, MVAJ101, MVAJ102, MVAJ201, MVAJ202 relays or special trip relays MVAJ 26 and MVAJ 56. Also, the MVAX11 is only suitable for use with high burden MVAJ103/4/5, MVAJ203/4/5 relays of voltage ratings up to 110/125 Vdc. The MVAX11 is suitable for use with low burden MVAJ103/4/5, MVAJ203/4/5 relays of any voltage rating.

### Thermal Withstand

The relay will withstand 120% higher nominal volts continuously.

### Burdens

The relay burden for voltage ratings below 220/250 V is less than 2 W. For 220/250 V, the burden is 4 W.

### Pilot Resistance

When used with the MVAW interposing control relay, the pilot resistance can be as high as 200 ohms on the 50 to 250 volt ranges but only up to 60 ohms on the 30 volt range. When used with the MVAJ tripping relay the recommended pilot resistance should not be greater than 5 per cent of the MVAJ tripping circuit resistance.

### Safety Resistor

The relay is fitted with a safety resistor to avoid operation of the supervised circuit if the MVAX 11 relay coil becomes short-circuited.

### Resetting

At 120% of nominal volts the MVAJ or MVAW relay will reset even if the MVAX 11 relay coil or the safety resistor becomes short-circuited.

### Pick up

With maximum pilot resistance the relay will pick up at less than 80% of lower nominal volts.

### Contacts

The number of contacts available is 4 in any combination with up to 2 normally closed.

- Make and carry continuously 7500 VA subject to maxima of 30 A and 300 Vdc
- Make and carry for 3 s, 1250 VA with maxima of 5 A and 300 Vdc
- Break 50 W dc resistive, 25 W inductive (L/R = 0.045)

### Time delay

There is a short time delay on the drop-off of the MVAX 11 to prevent alarm operation under transient conditions.

### Operation Indicator

A hand reset reverse mechanical indicator can be provided if required.

### Case

Type MVAX 11 relays are housed in size 2 cases (see Figure 3).

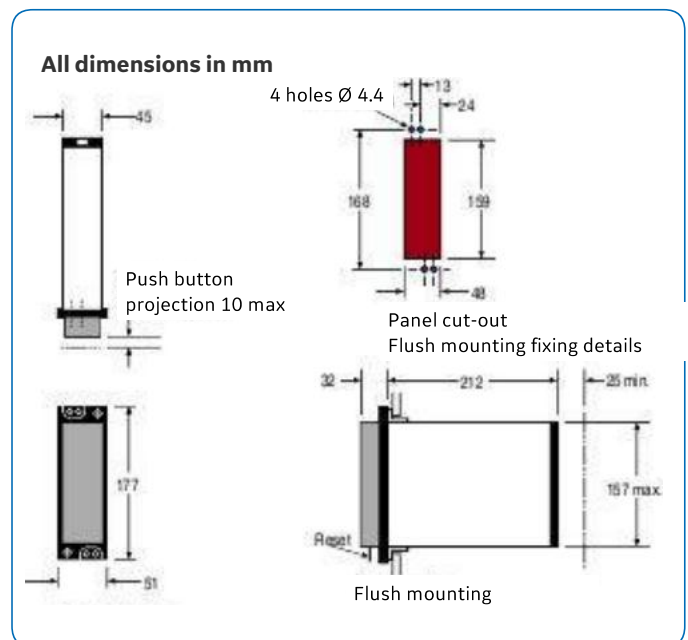


Figure 3 Case outline size 2

## Device Track Record - Auxilliary Relays

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Over 180,000 MVAJ tripping relays delivered since launch in 1983

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Over 150,000 MVAA auxiliary relays delivered since launch in 1983

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Over 330,000 PRiMA auxiliaries delivered since launch in 1994

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Nearly 300,000 MVAX relays delivered since 1983

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## Ordering Options

**MVAX11A1**



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### Flag type

Self reset reverse flag	C
Hand reset reverse flag	D

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### Number of contacts

2 standard contacts	A
4 standard contacts	B

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### Auxiliary supply Vx

30/34 Vdc	025
48/54 Vdc	050
110/125 Vdc	075
220/250 Vdc	100

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### Contact arrangement

4 Make	4
3 Make 1 Break	5
2 Make 2 Break	6
1 Make 3 Break	7

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For more information please contact  
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### Worldwide Contact Center

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