MVAAM

Auxiliary Relays

The Type MVAAM is a low burden auxiliary relay. The relays can be used where a scheme demands several contacts for event recording, alarm initiation, contact logic arrangements, etc.

The relay can be supplied fitted with normal duty contacts and/or with heavy duty blow-out contacts.

Features

- Compact design.
- Mechanically stable.
- Hand and self reset versions available.
- Wide voltage range.
- Optional operation indicator.

Description

These relays are attracted armature units of compact design with a positive action and a high degree of mechanical stability. They are voltage operated. All relays comply with BS142.

Contacts

Contacts are of a silver/copper alloy, shaped and positioned to ensure a very reliable, low resistance make or break type.

Normal duty changeover contacts are also available.

Alternatively, heavy duty magnetic blowout contacts are recommended for breaking heavy or highly inductive dc loads. Breaking capacity curves for these contacts are shown in Figure 1. Where these are fitted the number of contacts available is reduced.

Customer Benefits

- Wide voltage setting range
- High degree of mechanical stability
- Selection of hand reset or self reset contacts

Technical data

Standard coil rating

24/30V, 48/50V, 110/125V or 220/250V dc or 220/240V, 240/250V 50Hz ac.

Other coil ratings are available on request.

DC relays operate satisfactorily between 75%-120% of rated volts.

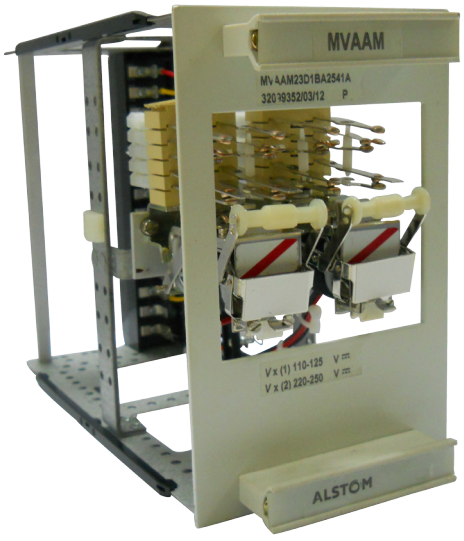
AC relays operate satisfactorily between 80%-115% of rated volts.

Burdens

3W per element at all rated voltages.

Operating times

The operating times of type MVAAM relays are dependent on the coil rating and the number of contacts. The typical operating time is 25 ms.



MVAAM relay withdrawn from case

Table 1 - MVAAM relay versions

Sl. NO	Case size	Type ref	No. of elements	Contacts per element			Flag	Remarks
				Make	Break	Change -over		
1	2	MVAAM11	1	2	-	2	Yes	Basic building block-All contacts / coils wired out separately.
2	2	MVAAM11	1	2	-	2	No	Same as above and can be used for contact multiplication.
3	2	MVAAM11	1	2	-	2	No	With 60-100 msec delay on dropoff.
4	2	MVAAM11	1	2	-	2	Yes	With 30-40 msec delay on pickup.
5	2	MVAAM11	1	2	-	2	Yes	With 60-100 msec delay on dropoff.
6	2	MVAAM21	2	-	-	2	Flag on both units	Both units in front, one below other basic building block.
7	2/3	MVAAM21	2/3	-	-	4	No	With 80-120 msec delay on dropoff.
8	2	MVAAM11	1	1	1	-	Yes	With 30-40msec delay on pickup. Both contacts with blow out magnet. (For special application as required)
9	2	MVAAM11	1	1	-	-	No	With 30-40msec delay on pickup. Both contacts with blow out magnet. (For special application as required)
				Versions with hand reset contacts				
1	2	MVAAM13	1	2	-	2	Yes	For special application as required
2	4	MVAAM23	4	2	-	2	Yes	For special application as required

Contact ratings

Type of contact	Current	Make and carry continously	Make and carry for 3 seconds	Break
Standard and changeover	AC	1250VA with maxima of 5A and 660V	7500VA with maxima of 30A and 660V	1250VA with maxima of 5A and 660V
Standard and changeover	DC	1250W with maxima of 5A and 660V	7500W with maxima of 30A and 660V	100W (resistive) 50W (inductive) with maxima of 5A and 660V
Heavy duty	DC	1250W with maxima of 5A and 660V	7500W with maxima of 30A and 660V	See curves
Maximum rate of operation, 600 per hour				

DC operated units can be fitted with one or two copper slugs to give a time delay on operation and reset, operation only or reset only. Units with two copper slugs have short time rated coils. If the operating time for a particular application is important, this should be specified with order or enquiry.

Output contact arrangements

See Table 1.

Case

See Table 1.

Insulation

The relay meets the requirements of IS.3231: 196/IEC 255-5 Series C-2KV for 1 minute.

Information required with order

1. Type of relay.
2. Coil Voltage Rating
3. Type and combination of contacts
4. Whether Operation indicator required
5. Pick up and drop off time (if applicable)
6. Hand reset or self reset

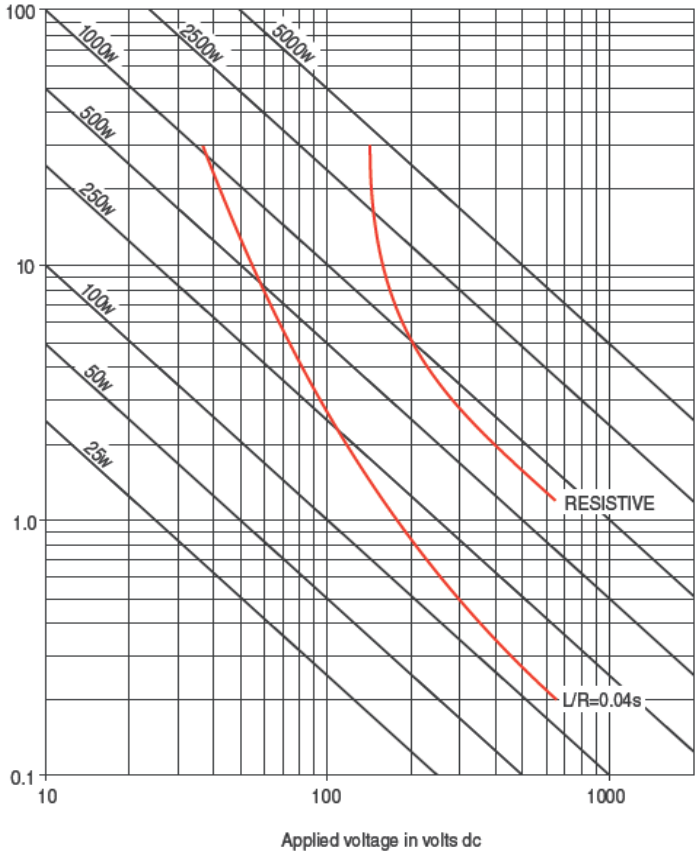


Figure 1: Curves for breaking capacity of heavy duty blow-out contacts

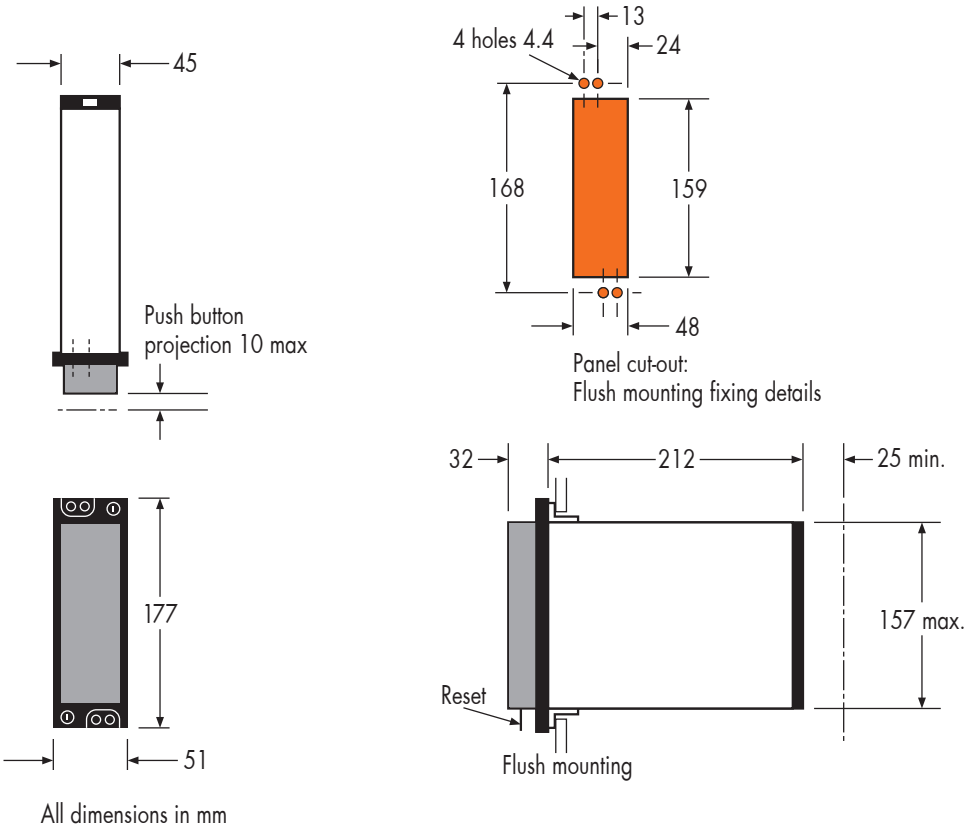
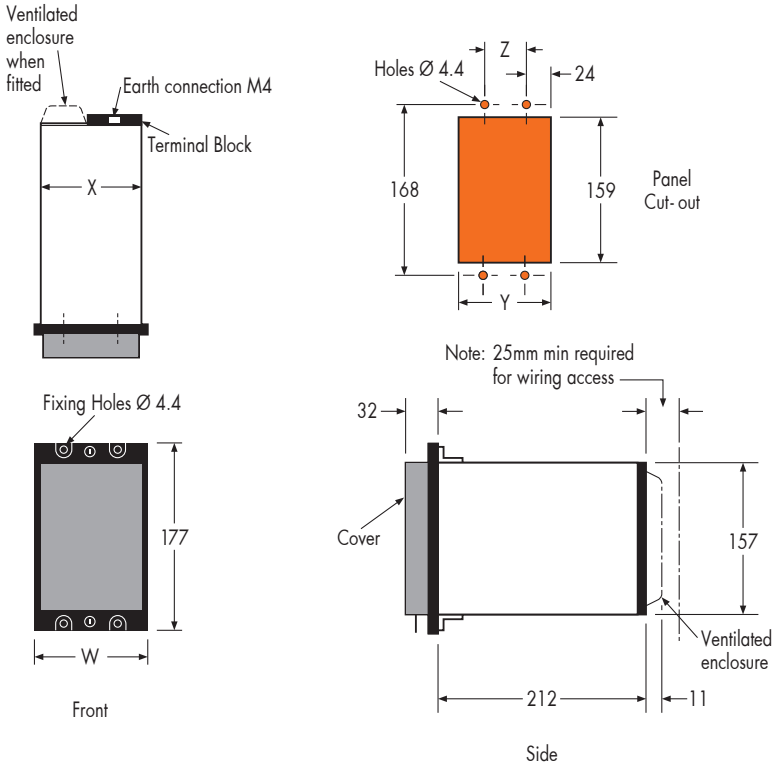


Figure : Case Outline Size 2



Case Size					
Dimensions in mm	3	4	6	8	16
w	77	103	155	206	414
x	71	97	149	200	408
y	73	99	151	203	411
z	26	51.8	103.6	155.4	362.6

Figure: Case and panel cut-out dimensions for relay case sizes 3 to 16

ALSTOM T&D INDIA LIMITED
Pallavaram Works
19/1, G.S.T. Road,
Pallavaram, Chennai - 600 043
Tel: 91-44-2264 8000
Fax: 91-44-2264 0040

ALSTOM T&D Worldwide Contact Centre:
http://www.alstom.com/contactcentre/
Tel.: +44 (0) 1785 250 070

www.grid.alstom.com

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