

### Features

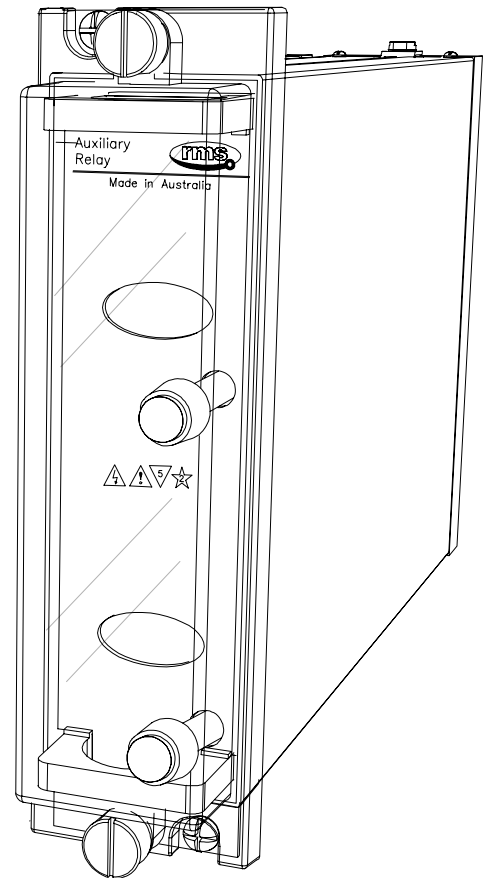
- Low burden
- Self reset contacts
- Hand reset flag indicator
- 6 contacts - specify M or B
- Draw out case
- Two elements in one case
- Equivalent function to MVAA21
- 6RM202 specification

### Application

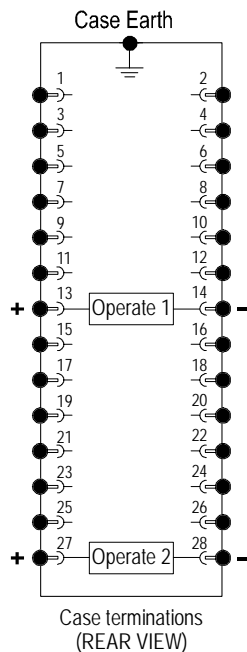
The operating element for the 6R MATRIX Auxiliary Relay functional elements are designated 6RM & are based on our 6R Series relays.

The type 6RA Series elements are low burden auxiliary relays which can be used where a scheme demands several contacts for event recording, alarm initiation, contact logic arrangements, etc.

Contacts are constructed from silver / copper alloy, shaped & positioned to ensure very reliable, low resistance operation. Over travel of the contacts during each operation causes a wiping action ensuring a clean "make".



2M28 draw out case



Relay 1	6RA21-6 Terminal Numbers					
Contacts	1-3	2-4	5-7	6-8	9-11	10-12
6M	M	M	M	M	M	M
5M+1B	M	M	M	M	M	B
4M+2B	M	M	M	M	B	B
3M+3B	M	M	M	B	B	B
2M+4B	M	M	B	B	B	B
1M+5B	M	B	B	B	B	B
6B	B	B	B	B	B	B

Relay 2	6RA21-6 Terminal Numbers					
Contacts	15-17	16-18	19-21	20-22	23-25	24-26
6M	M	M	M	M	M	M
5M+1B	M	M	M	M	M	B
4M+2B	M	M	M	M	B	B
3M+3B	M	M	M	B	B	B
2M+4B	M	M	B	B	B	B
1M+5B	M	B	B	B	B	B
6B	B	B	B	B	B	B

**BURDEN (Maximum)**

Operating burden is <2W at nominal voltage.

**THERMAL RATING**

All operate & reset circuits are designed to withstand continuous application of 120% of nominal voltage

**OPERATING TIME**

All contact configurations: 75ms maximum

**FLAG OPERATION**

Each relay element is supplied with a flag (target) indicator. The indicator consists of a high visibility solid dayglow orange mechanical flag.

Operation: Drops on coil energisation.  
Reset: Hand reset.

**OPERATING VOLTAGE RANGE**

Guaranteed operation between 75% & 120% of nominal rated operating voltage.

**NOMINAL OPERATING VOLTAGES**

24, 32, 48, 110, 125, 220, 240 & 250V DC available.

**CONTACTS**

6 contacts  
User to specify combination of make & break contacts

# Ordering Codes

Generate the required ordering code as follows:  
e.g. 6RA21-6-D-4M2B



**1 NOMINAL OPERATE VOLTAGE**

- |   |         |   |         |
|---|---------|---|---------|
| A | 24V DC  | E | 125V D  |
| B | 32V DC  | G | 220V DC |
| C | 48V DC  | H | 240V DC |
| D | 110V DC | F | 250V DC |

**2 CONTACT ARRANGEMENT** (Not to exceed maximum)

Specify the number of "MAKES" followed by M; i.e. 4M  
Specify the number of "BREAKS" followed by B; i.e. 2B

**6R RELAY CONTACT RATINGS**

**Make & Carry Continuously**

3,000 VA AC resistive with maximums of 660V & 12A  
3,000 W DC resistive with maximums of 660V & 12A

**Make & Carry for 3 Seconds**

7,500 VA AC resistive with maximums of 660V & 30A  
7,500 W DC resistive with maximums of 660V & 30A

**AC Break Capacity**

3,000 VA AC resistive with maximums of 660V & 12A

**DC Break Capacity (Amps)**

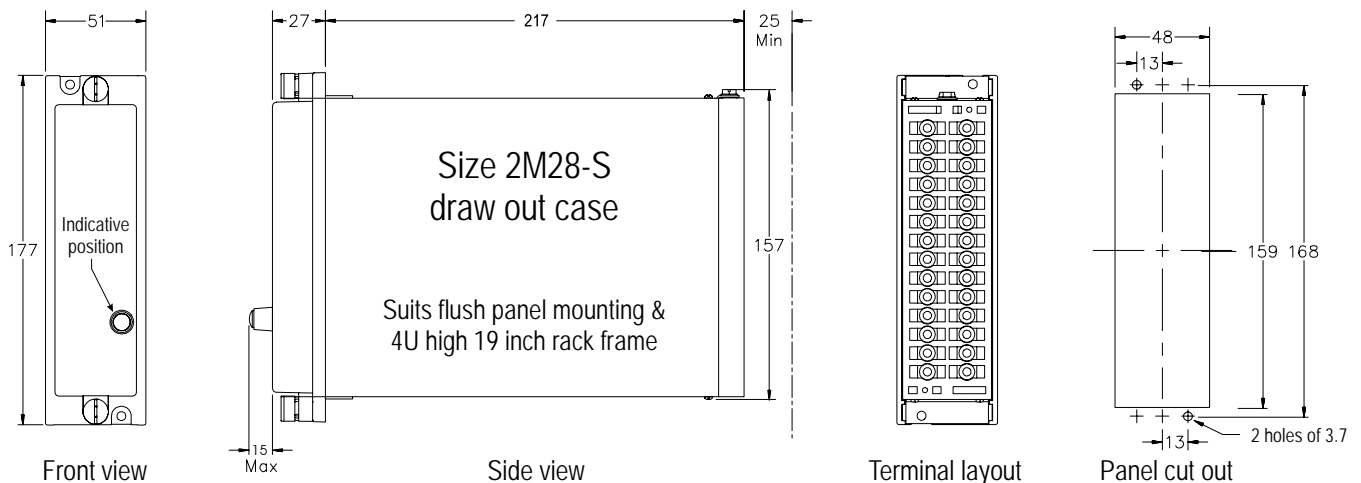
Voltage		24V	48V	125V	250V
Resistive rating		12	2	0.5	0.25
L/R=40ms	Maximum break	12	1	0.25	0.15

**INSULATION WITHSTAND** in accordance with IEC 255-5:  
2KV RMS & 1.2/50 5KV impulse between:

- ◆ all terminals & frame
- ◆ each contact group
- ◆ all contacts & coil

**CASE SIZE**

2M28-S draw out case



## **Australian Content**

Unless otherwise stated the product(s) quoted are manufactured by RMS at our production facility in Melbourne Australia. Approximately 60% of our sales volume is derived from equipment manufactured in house with a local content close to 90%. Imported components such as semi-conductors are sourced from local suppliers & preference is given for reasonable stock holding to support our build requirements.

## **Quality Assurance**

RMS holds NCSI (NATA Certification Services International), registration number 6869 for the certification of a quality assurance system to AS/NZS ISO9001-2000. Quality plans for all products involve 100% inspection and testing carried out before despatch. Further details on specific test plans, quality policy & procedures may be found in section A4 of the RMS product catalogue.

## **Product Packaging**

Protection relays are supplied in secure individual packing cardboard boxes with moulded styrene inserts suitable for recycling. Each product & packing box is labeled with the product part number, customer name & order details.

## **Design References**

The products & components produced by RMS are based on many years of field experience since Relays Pty Ltd was formed in 1955. A large population of equipment is in service throughout Australia, New Zealand, South Africa & South East Asia attesting to this fact. Specific product & customer reference sites may be provided on application.

## **Product Warranty**

All utility grade protection & auxiliary relay products, unless otherwise stated, are warranted for a period of 24 months from shipment for materials & labour on a return to factory basis. Repair of products damaged through poor application or circumstances outside the product ratings will be carried out at the customer's expense.

## **Standard Conditions of Sale**

Unless otherwise agreed RMS Standard Terms & Conditions (QF 907) shall apply to all sales. These are available on request or from our web site.



## **Relay Monitoring Systems Pty Ltd**

6 Anzed Court, Mulgrave, Victoria 3170, AUSTRALIA

Tel: 61 3 9561 0266 Fax: 61 3 9561 0277 Email: [rms@rmspl.com.au](mailto:rms@rmspl.com.au) Web: [www.rmspl.com.au](http://www.rmspl.com.au)