

/// Socket, spring clamp terminal, panel mount

Sockets for extreme reliability, within long endurance applications and harsh environments

V33

Socket



Features

- Panel / flush mount
- Sturdy spring clamp terminals
- Twin connection per relay contact
- Suitable for all D-platform relays (railway and industry)
- Easy & quick installation (up to 75% reduction of wiring time)
- Positive mechanical keying
- Trifurcated female receiver for tight grip relay pin
- Clear terminal ID

Description

The V33 is a panel/flush mount relay socket. The V33 socket has a base with two highly reliable spring clamp terminals per relay contact, so looping/daisy chaining can be done on the socket and no external connector or terminal is needed.

The spring clamp terminal makes a quick connection possible by pressing the spring with a flat-bladed screwdriver and inserting the stripped wire. Solid and (fine) stranded wires up to 2.5mm² can be inserted in the spring clamp terminal. This quick & easy wiring method saves up to 75% wiring time. Pinning on the socket complies with the pinning on the relay.

To prevent fault relay placement the socket can be equipped with mechanical keying to accept only designated identical keyed relays.

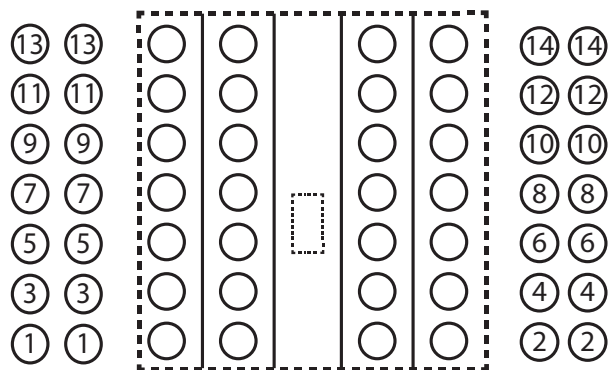
Application

The V33 relay socket is suitable for general railway and industry applications with a space saving design. Installation and replacement of relays is made easy and cost saving. No maintenance is required for the user.

Suitable for all D-platform relays (railway and industry).

Connection diagram

Bottom view



Railway compliance

EN 50155
 IEC 60571
 EN 45545-2
 NF F16-101/102
 NF F 62-002

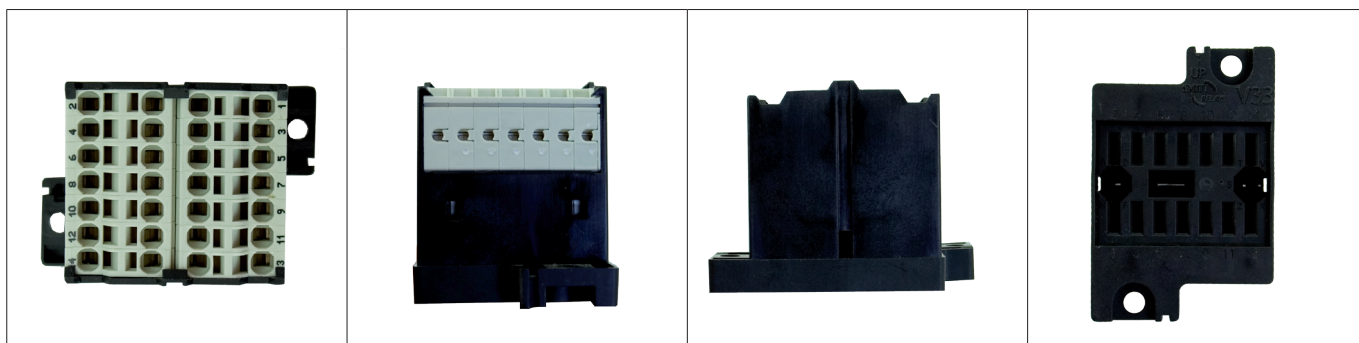
Industry compliance

EN 60947-5-1
 IEC 61810

Technical specifications

Technical characteristics

| | |
|-----------------------------------|--|
| Contact rating | 10 A |
| Dielectric strength | IEC 60255, IEC 60571 2500 V, 50 Hz, 1 min |
| Protecting category | IEC 60529 IP20 (relay side) |
| Mounting | Panel mounting |
| Max. ambient temperature | 80 °C |
| Weight | 69 g |
| Dimensions | 60 x 40 x 45.7 mm (depth is 38 mm from front of panel) |
| Wire size | 0.08 - 2.5 mm ² |
| Wire stripping length | 9-10 mm |
| Material | Polyamide 66 , 30% glass |
| Socket contacts | Spring terminal |
| Max. torque value mounting screws | 1 Nm |
| Accessories | A104 Key receptable |



For more detailed technical specifications, drawings and ordering information, go to the product page on www.morssmitt.com

 **Over 10 million Mors Smitt relays in use in applications worldwide!**

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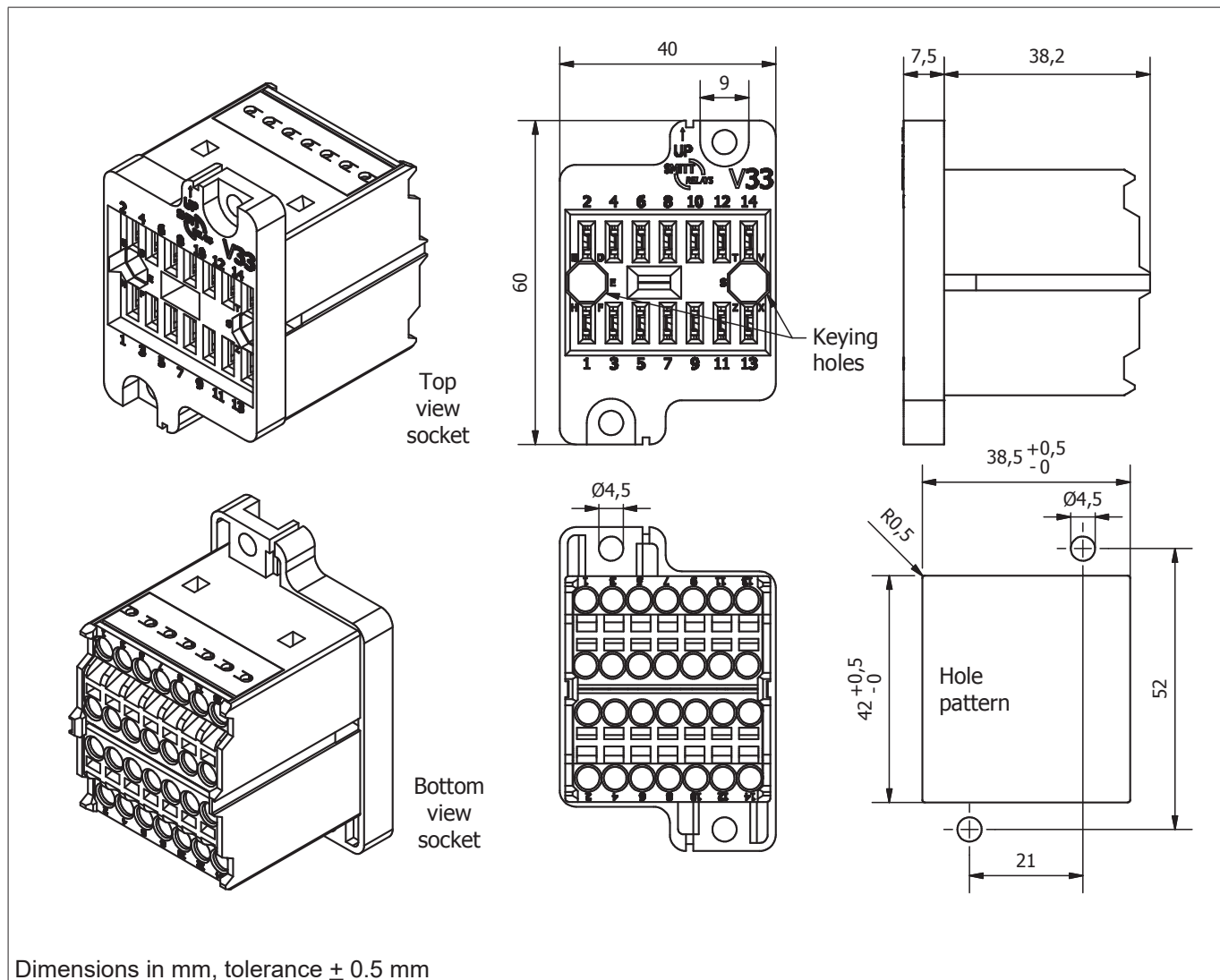
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Socket V33

Dimensions



Railway compliancy

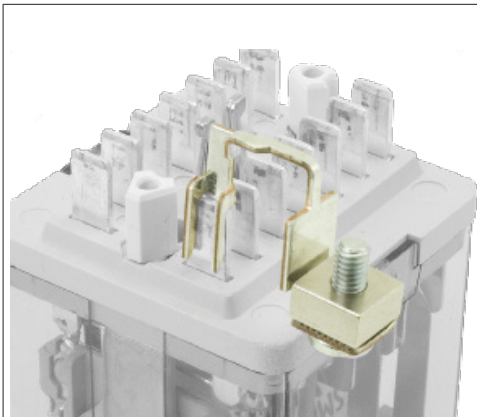
| | |
|----------------|--|
| EN 50155 | Railway applications - Rolling stock - Electronic equipment |
| IEC 60571 | Railway applications - Electronic equipment used on rolling stock |
| NF F16-101/102 | Railway rolling stock - Fire behavior |
| EN 45545-2 | Railway applications - Fire protection on railway vehicles Part 2: Requirements for fire behavior of materials and components |
| NF F 62-002 | Railway rolling stock - On-off contact relays and fixed connections |

Industry compliancy

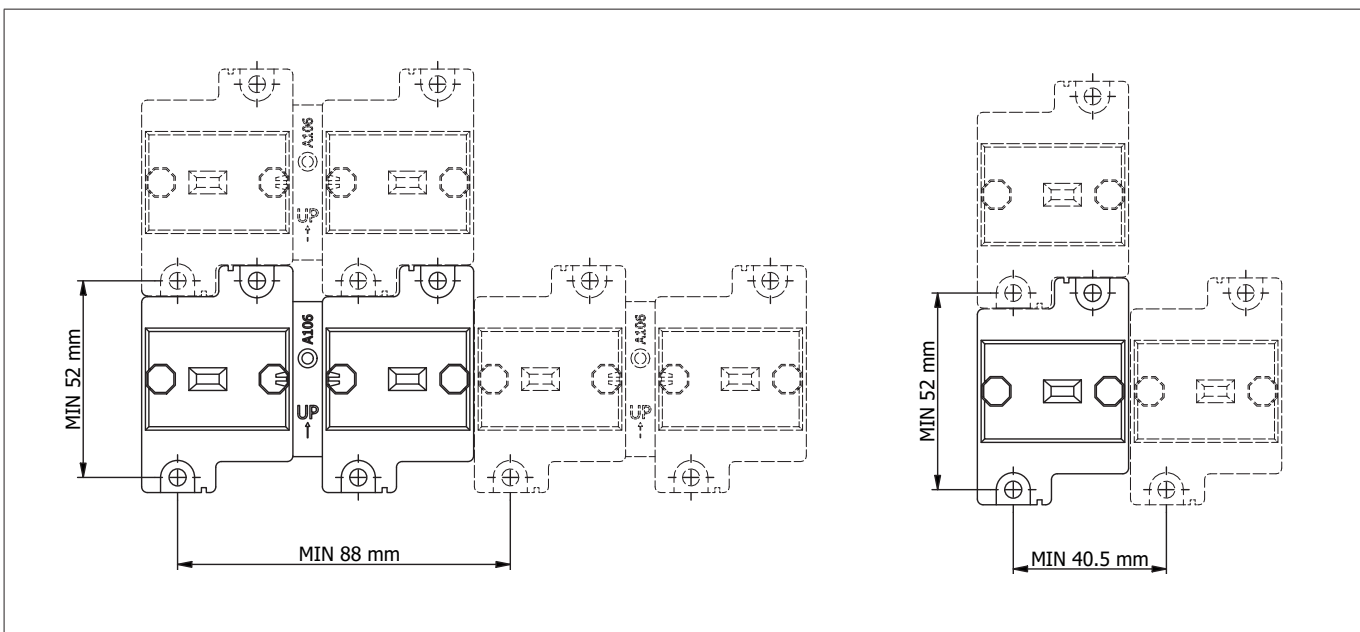
| | |
|--------------|--|
| EN 60947-5-1 | Electromechanical control circuit devices and switching elements |
| IEC 61810 | Electromechanical elementary relays |

Socket V33

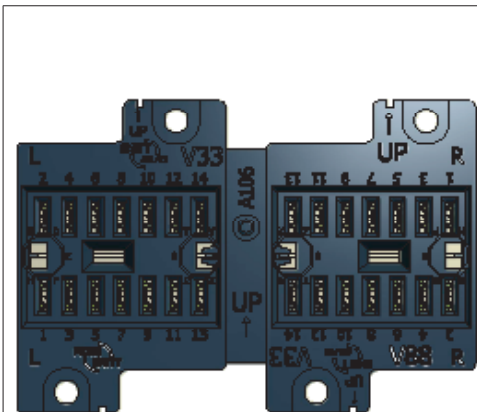
Tri-furcated female receiver for tight grip relay pin



Optimum use of space



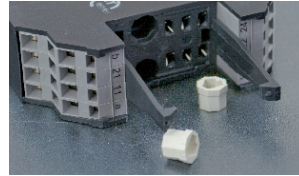
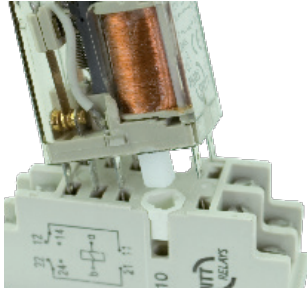
V88 socket



V88 Spring terminal relay socket for 8 contact relays (D8 or KDN relays) .For details see datasheet V88.

Socket V33

Mechanical keying relay and socket (optional)



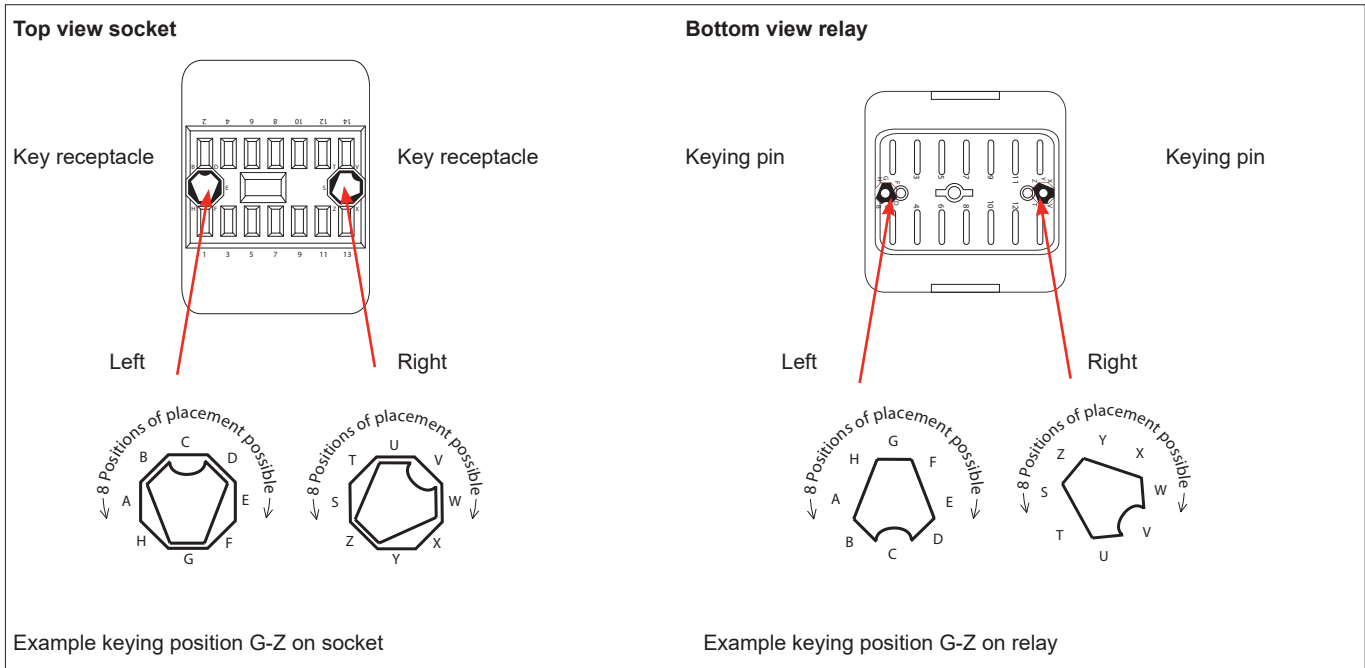
Function:

- To prevent wrong installation
- To prevent damage to equipment
- To prevent unsafe situations

Using keyed relays and sockets prevents a relay being inserted in a wrong socket. For example it prevents placing a 24 VDC relay in a 110 VDC circuit. Positive discrimination is possible per different function, coil voltage, timing, monitoring, safety and non-safety.

The D- relays socket keying option gives $8 \times 8 = 64$ possibilities. Upon ordering the customer simply indicates the need for the optional keying. Mors Smitt will assign a code to the relay and fix the pins into the relay. The sockets are supplied with loose key receptacles. Inserting the keys into the socket is very simple and self explaining.

Remark: Sockets and relay shown are examples.



Installation and inspection

Installation

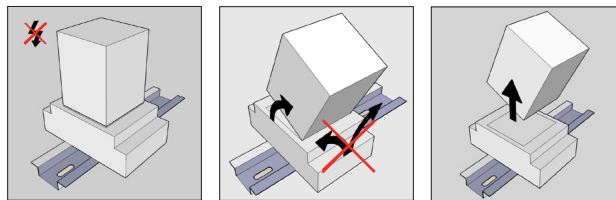
Before installation or working on the relay: disconnect the power supply first!

Install socket and connect wiring according to the terminal identification. Plug relay into the socket ensuring there is no gap between the bottom of relay and the socket. Reverse installation into the socket is not possible due to the mechanical blocking snap-lock feature.

No external retaining clip needed as the 'snap-lock' will hold the relay into the socket under all circumstances and mounting directions (according shock & vibration requirements IEC 61373, Category I, Class B, Body mounted).

Warning!

- To remove relays from the socket, employ up and down lever movements. Sideway movement may cause damage to the coil wires.



When plugging the relay into the socket, the female bifurcated or trifurcated receivers will automatically cut through the corrosion on the pins and guarantee a reliable connection.

Inspection

If the socket does not work after inspection of the correct wiring and relay connection, replace the unit with a similar model.

When returning products for investigation, please provide all information on the RMA form. Send defective products back to the manufacturer for repair or replacement. Normal wear and tear or external causes are excluded from warranty.

Socket V33

Ordering codes

| | | | | |
|---|---|---|--|--|
|  |  |  | | |
| V33 | V88 | A104 | | |

| Article no. | Code | Description |
|-------------|------|---|
| 338000570 | V33 | Spring terminal relay socket |
| 338001700 | V88 | Spring terminal relay socket for 8 contact relays |
| 378690100 | A104 | Key receptacle |

Socket
V33

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