

# V22BR socket - Screw terminal, wall mount

## Datasheet



### Description

The V22BR is a surface / wall mount relay socket with extra space for ring tabs. The V22BR socket has one screw terminal per relay contact suitable for two wires up to 2.5 mm<sup>2</sup> and 9 mm ring tabs, so looping/daisy chaining can be done on the socket and no external connector or terminal is needed.

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

### Application

The V22BR relay socket is suitable for general railway applications with a space saving design, where extra space for ring tabs is necessary. Installation and replacement of relays is made easy and cost saving. No maintenance is required for the user.

Suitable for all D-U relay series.

### Features

- Surface / wall mount
- Sturdy screw terminals
- Suitable for 9 mm ring tabs
- Suitable for all D-U relay series
- Up to two wires of 2.5 mm<sup>2</sup> per connection terminal
- Positive mechanical keying
- Bifurcated female receiver for tight grip relay pin
- Clear terminal ID

### Benefits

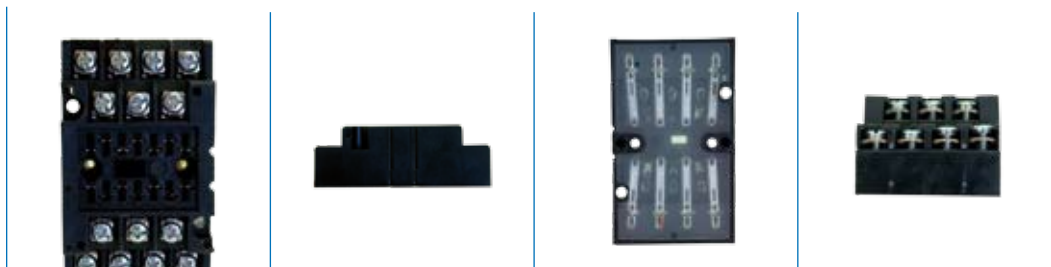
- Proven reliable
- Long term availability
- Easy to maintain
- Low life cycle cost
- No maintenance

### Railway compliancy

- EN 50155 Electronic equipment used on rolling stock for railway applications
- IEC 60571 Electronic equipment used on railway vehicles
- NF F 16-101/102, TS 45545-2 Fire behaviour - Railway rolling stock
- NF F 62-002 On-off contact relays and fixed connections

# V22BR socket

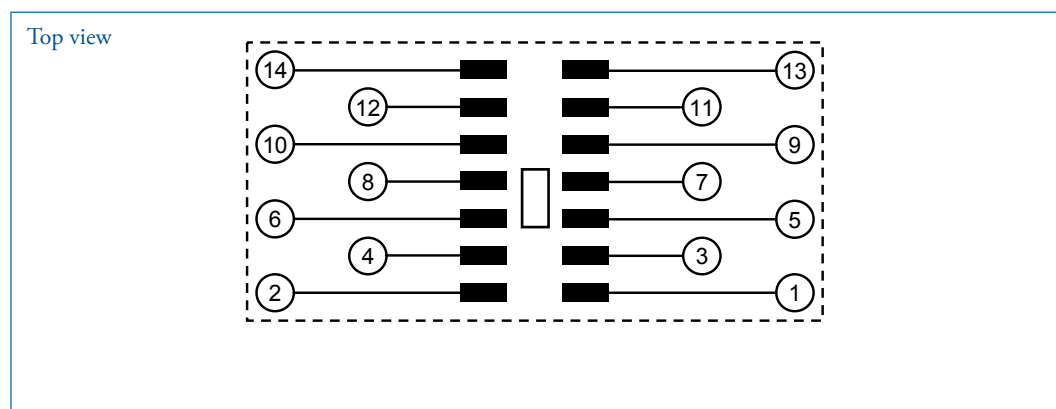
## Technical specifications



## Technical characteristics

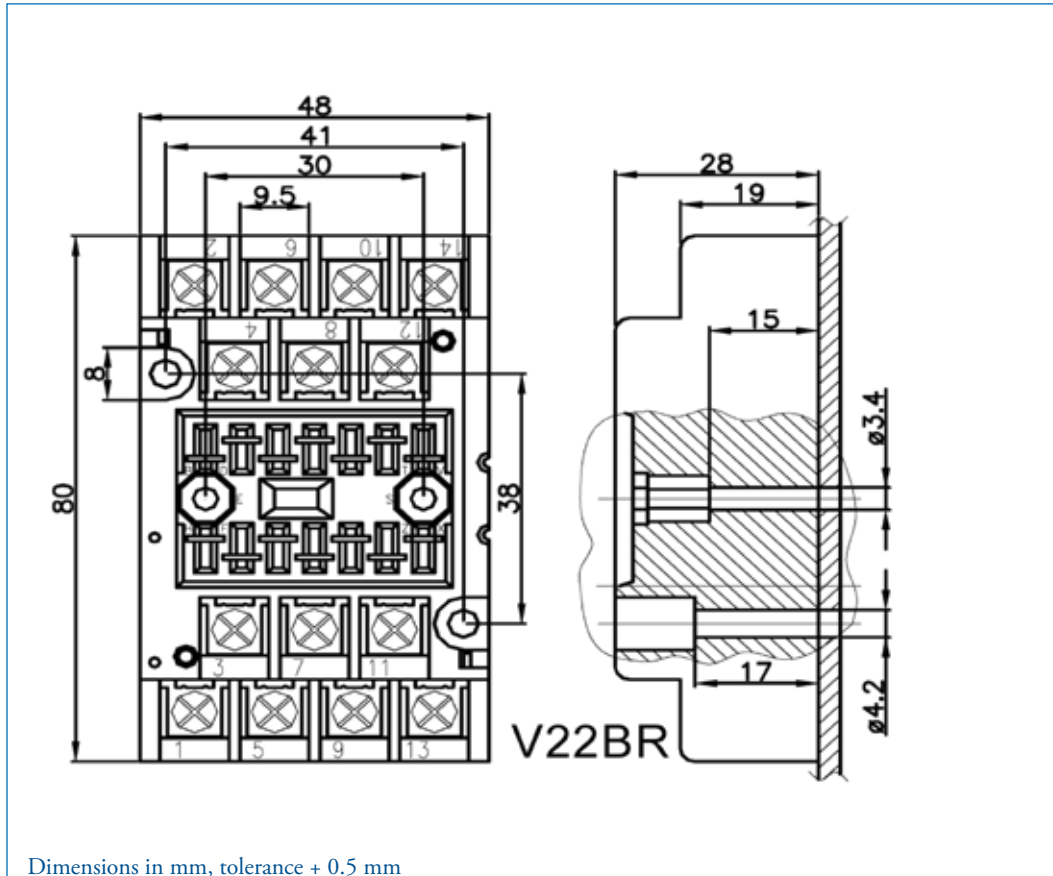
Contact rating	10 A
Dielectric strength	IEC 60255 / IEC 60571, 2500 V, 50 Hz, 1 min
Protecting category	IEC 60529, IP10 (relay side)
Mounting	Surface / wall mount
Max. ambient temperature	80 °C
Weight	108 g
Dimensions	80 x 48 x 28 mm
Wire size	2 x 2.5 mm <sup>2</sup> maximum
Material	Polyamide 66, 30% glass
Socket contacts	Screw
Max. torque value mounting screws	1 Nm
Max. torque value terminal screws	1 Nm
Accessories	A104 Key receptacle

## Connection diagram



# V22BR socket

## Drawings & dimensions



# V22BR socket

## Technical specifications

V92BR Panel / flush mount for 8 contact relays (D8 or KDN series)

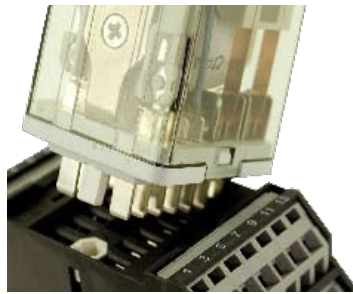


For details see datasheet V92BR.



# V22BR socket Keying

## Mechanical keying relay and socket (optional)



Function:

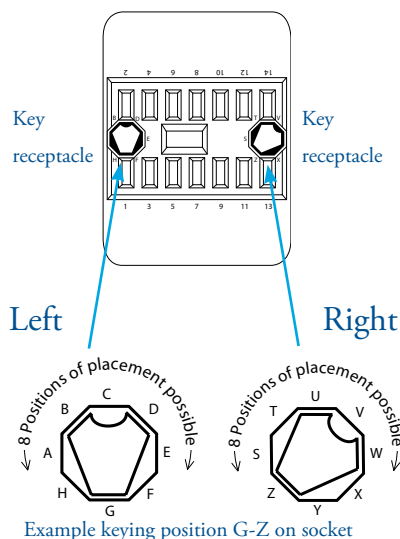
- To prevent wrong installation
- To prevent damage to equipment
- To prevent unsafe situations

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.

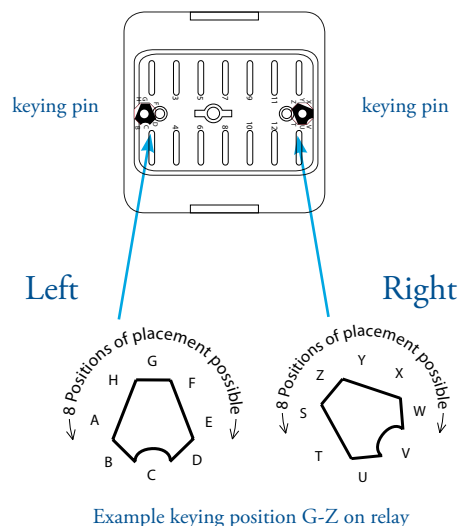
The D-Series relay socket keying option gives  $8 \times 8 = 64$  possibilities. Upon ordering the customer simply indicates the need for the optional keying. Mors Smitt will assign a code to the relay and fix the pins into the relay. The sockets are supplied with loose key receptacles. Inserting the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

Remark: sockets and relay shown are only examples.

Top view socket



Bottom view relay



# V22BR socket

## Instructions

### Installation & inspection

#### Installation

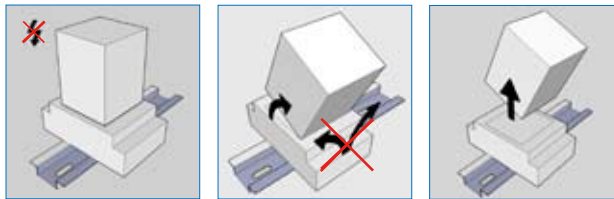
Before installation or working on the relay: disconnect the power supply first!

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). If regulations require an external retaining clip, this is available as well. For more information see the datasheet of the retaining clips.

#### 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 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.



# V22BR socket

## Ordering possibilities



V22BR



V92BR



A104

Article nr	Code	Description
338000302	V22BR	Screw terminal relay socket
338003920	V92BR	Screw terminal relay socket for 8 contact relays
378690100	A104	Key receptacle





[www.morssmitt.com](http://www.morssmitt.com)



Mors Smitt France SAS

Tour Rosny 2, Avenue du Général de Gaulle,

F - 93118 Rosny-sous-Bois Cedex, FRANCE

T +33 (0)1 4812 1440, F +33 (0)1 4855 9001

E [sales@msrelais.com](mailto:sales@msrelais.com)

Mors Smitt Asia Ltd.

# 807, Billion Trade Centre, 31 Hung To Road

Kwun Tong, Kowloon, HONG KONG SAR

T +852 2343 5555, F +852 2343 6555

E [info@morssmitt.hk](mailto:info@morssmitt.hk)

Mors Smitt B.V.

Vrieslantlaan 6, 3526 AA Utrecht,

NETHERLANDS

T +31 (0)30 288 1311, F +31 (0)30 289 8816

E [sales@nieaf-smitt.nl](mailto:sales@nieaf-smitt.nl)

Mors Smitt Technologies Inc.

420 Sackett Point Road

North Haven, CT 06473, USA

T +1 (203) 287 8858, F +1 (888) 287 8852

E [mstechnologies@msrelais.com](mailto:mstechnologies@msrelais.com)

Mors Smitt UK Ltd.

Doulton Road, Cradley Heath

West Midlands, B64 5QB, UK

T +44 (0)1384 567 755, F +44 (0)1384 567 710

E [info@morssmitt.co.uk](mailto:info@morssmitt.co.uk)