



/// 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 railway and industry D- & D-U relay series
- 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.

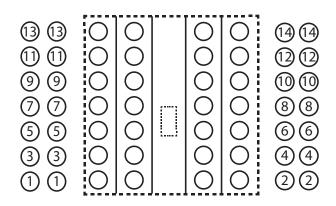
Application

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 railway and industry D- & D-U relay series.

Connection diagram

Bottom view



Railway compliancy

EN 50155 IEC 60571 EN 45545-2 NF F16-101/102 NF F 62-002 EN 60947-5-1 IEC 61810

Industry compliancy



Technical specifications

Socket V33

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!

Mors Smitt Asia Ltd. Unit B & C, 25/F., Casey Aberdeen House 38 Heung Yip Road, Wong Chuk Hang Hong Kong Tel: +852 2343 555 sales.msa@wabtec.com

Wabtec Netherlands B.V. Darwinstraat 10, 6718 XE Ede, Netherlands Tel: +31 (0)88 600 4500 sales.msbv@wabtec.com Mors Smitt France SAS 2 Rue de la Mandinière 72300 Sablé-sur-Sarthe, France Tel: +33 (0) 243 92 82 00 sales.msf@wabtec.com

Mors Smitt Technologies Ltd. 1010 Johnson Drive, Buffalo Grove, IL 60089-6918, USA Tel: +1 847 777 6497 salesmst@wabtec.com Mors Smitt UK Ltd. Graycar Business Park, Burton on Trent, DE13 8EN, UK Tel: +44 (0)1283 357 263 sales.msuk@wabtec.com

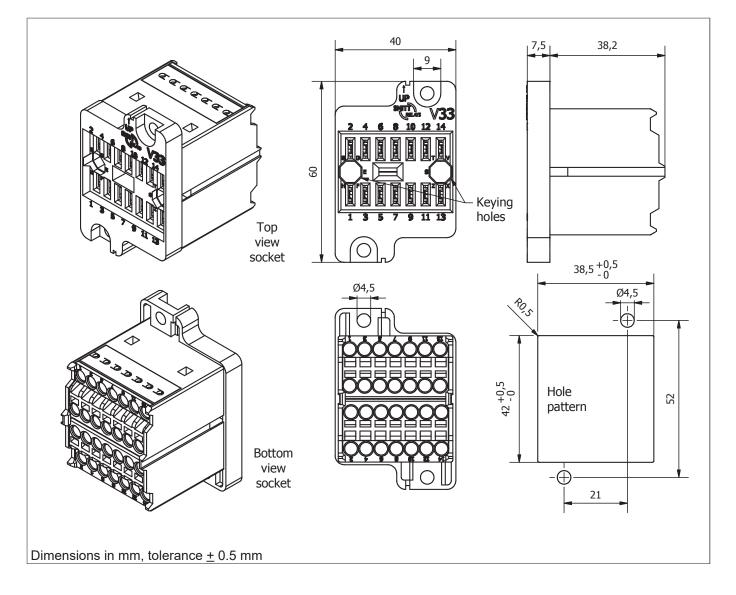
RMS Mors Smitt 6 Anzed Court, Mulgrave, VIC 3170, Australia Tel: +61 (0)3 8544 1200 sales.rms@wabtec.com

(c) Copyright 2020

(a) Gorg/Instructors and the end of the end



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

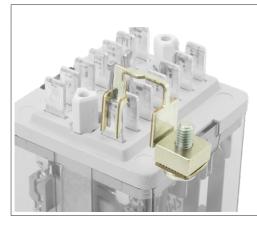
Industry compliancy

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

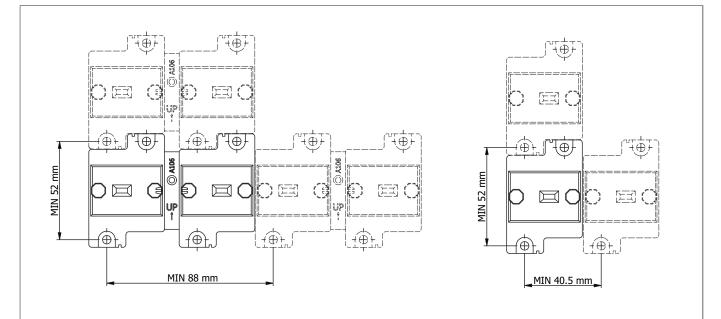




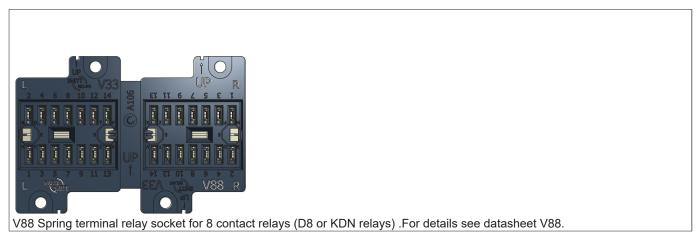
Tri-furcated female receiver for tight grip relay pin



Optimum use of space



V88 socket







Mechanical keying relay and socket (optional)





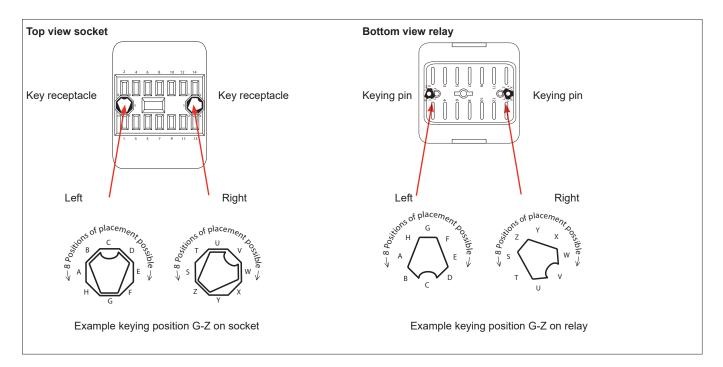
Function:

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

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

The D-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 examples.





Installation and inspection

Installation

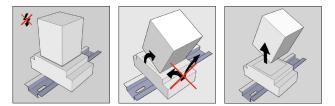
Before installation or working on the relay: disconnect the power supply first!

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.



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





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

Mors Smitt Asia Ltd. Unit B & C, 25/F., Casey Aberdeen House 38 Heung Yip Road, Wong Chuk Hang Hong Kong Tel: +852 2343 555 sales.msa@wabtec.com

Wabtec Netherlands B.V. Darwinstraat 10, 6718 XE Ede, Netherlands Tel: +31 (0)88 600 4500 sales.msbv@wabtec.com

(c) Copyright 2020

Mors Smitt France SAS 2 Rue de la Mandinière 72300 Sablé-sur-Sarthe, France Tel: +33 (0) 243 92 82 00 sales.msf@wabtec.com

Mors Smitt Technologies Ltd. 1010 Johnson Drive, Buffalo Grove, IL 60089-6918, USA Tel: +1 847 777 6497 salesmst@wabtec.com Mors Smitt UK Ltd. Graycar Business Park, Burton on Trent, DE13 8EN, UK Tel: +44 (0)1283 357 263 sales.msuk@wabtec.com

RMS Mors Smitt 6 Anzed Court, Mulgrave, VIC 3170, Australia Tel: +61 (0)3 8544 1200 sales.rms@wabtec.com

All rights reserved. Nothing from this edition may be multiplied, or made public in any form or manner, either electronically, mechanically, by photocopying, recording, or in any manner, without prior written consent from Mors Smitt. This also applies to accompanying drawings and diagrams. Due to a policy of continuous development Mors Smitt reserves the right to alter the equipment specification and description outlined in this datasheet without prior notice and no part of this publication shall be deemed to be part of any contract for the equipment unless specifically referred to as an inclusion within such contract. Mors Smitt does not warrant that any of the information contained herein is complete, accurate, free from potential errors, or fit for any part/s use of the information in this document.