

V16 socket - Screw terminal, wall/rail mount

Datasheet



Description

The V16 is a surface / wall and 35 mm rail mount relay socket. The V16 socket is suitable for two stripped wires up to 3.3 mm², so looping/daisy chaining can be done on the socket and no external connector or terminal is needed.

Equipped with an integrated retaining clip.

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

Application

The V16 relay socket is suitable for general railway applications with a space saving design. Installation and replacement of relays is easy and cost saving. No maintenance is required for the user.

Suitable for all CU relay series.

Features

- Surface / wall and 35 mm rail mount
- Screw terminals
- Integrated retaining clip
- Space saving
- Suitable for all CU relay series
- Up to two wires of 3.3 mm² per connection terminal
- Positive mechanical keying
- Optional diode or double zener protection device
- Bifurcated female receiver for tight grip relay pin
- Clear terminal ID

Benefits

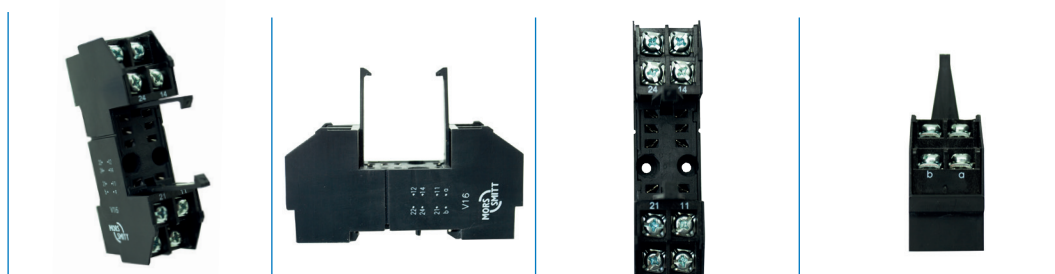
- Proven reliable
- Long term availability
- Easy to maintain
- Low life cycle cost
- No maintenance

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, EN 45545-2 Fire behaviour - Railway rolling stock
- IEC 60715 Dimensions of low voltage switchgear and controlgear
- NF F 62-002 On-off contact relays and fixed connections

V16 socket

Technical specifications



Technical characteristics

Contact rating		8 A
Non-repetitive peak current		NF F 62 002, 200 A / 10 ms
Dielectric strength		IEC 60255 / IEC 60571 - 4000 V, 50 Hz, 1 min between coil and contacts - 2500 V, 50 Hz, 1 min between contacts sets - 2500 V between terminals and mounting plate
Mounting		Surface / wall mounting or 35 mm rail mounting
Max. ambient temperature		80 °C
Weight		52 g
Dimensions (l x w x h)		87 x 23 x 63 mm
Wire size		0.34 - 3.3 mm ²
Wire stripping length		6-7 mm
Material		Polyamide 66 , 30% glass
Integrated retaining clip		Standard with 2 clips, optional with 1 clip for easier removal of relay (option G)
Electronic components		Back EMF protection diode BYW56 (+ at a) (optional) Double zener diode 1.5KE...CA (optional)
Max. torque value	mounting screws	0.6 Nm
	terminal screws	1.13 Nm
Accessories		A104 key receptacle A171 CU extractor

Environmental characteristics*

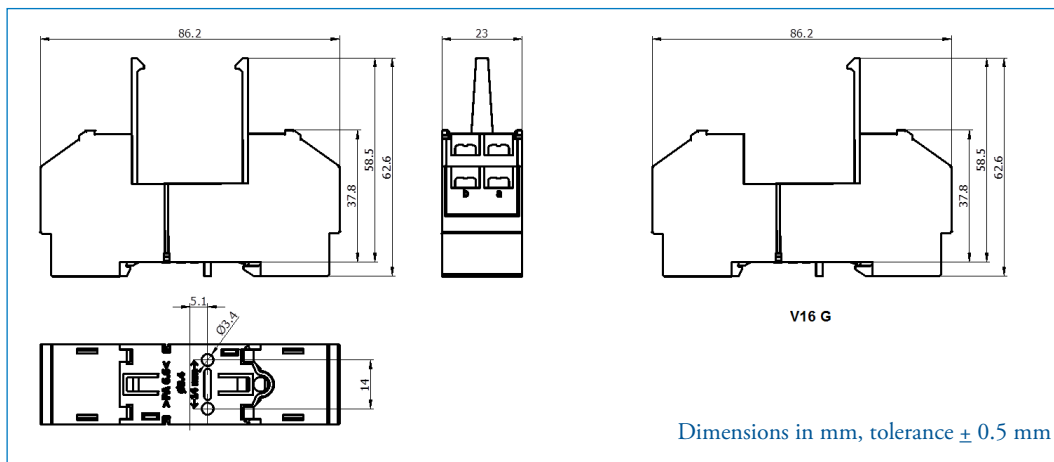
Protecting category	IEC 60529, IP10 (up to wire size 1.54 mm ²)
Vibration	IEC 61373, Category I, Class B, Body mounted
Shock	IEC 61373, Category I, Class B, Body mounted
Fire & smoke	NF F 16-101, NF F16-102, EN 45545-2

* Applicable for all configurations including option G



V16 socket Instructions

Drawings



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. Don't install the socket with the metal spring on top of the rail (make sure text "24 14 21 11" is not upside down).

Warning!

- To remove relays from the socket, employ left and right lever movements. Up/down movement may cause damage to the relay.

When plugging the relay into the socket, the female bifurcated receivers will automatically cut through possible 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.

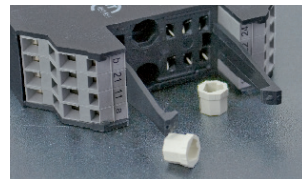
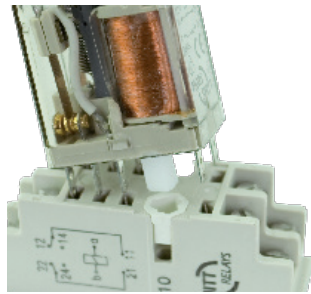
When returning products for investigation, please provide all information on the RMA form. Send defective products back to the manufacturer for repair or replacement. Normal wear and tear or external causes are excluded from warranty.



V16 socket

Keying

Mechanical keying relay and socket (optional)



Function:

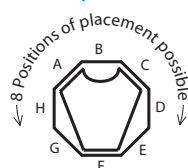
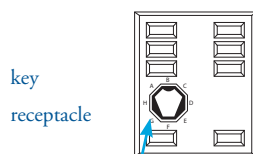
- To prevent wrong installation
- To prevent damage to equipment
- To prevent unsafe situations

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 or coil voltage.

The CU-series relay socket keying option gives 8 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 pin into the relay. The sockets are supplied with loose key receptacles. Inserting the keys into the socket is very simple and self explaining.

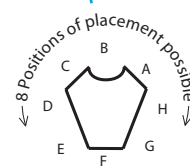
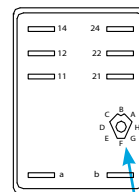
Remark: sockets and relay shown are only examples.

Top view socket



Example keying position B on socket

Bottom view relay

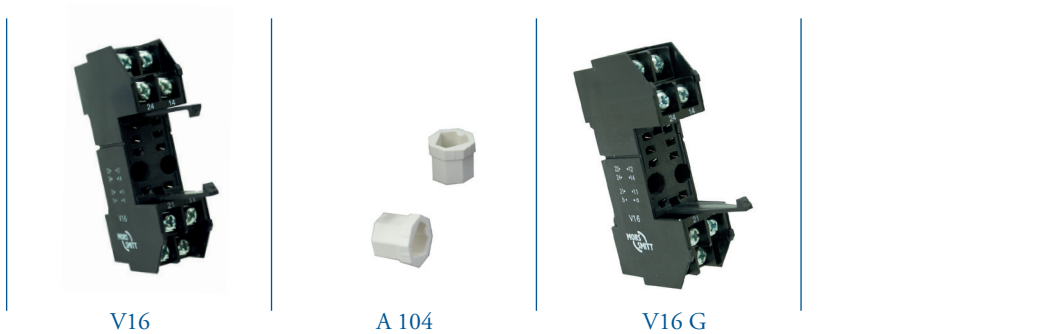


Example keying position B on relay



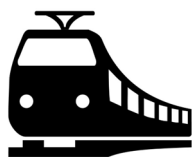
V16 socket

Ordering possibilities



Art. no.	Code	Standard
338001500	V16	Relay socket, screw terminal, 2 retaining clips
338001501	V16-D	.... with diode
338001502	V16-Q1	.... with double zener (nom. voltage relay: 12 V - 30 V)
338001503	V16-Q2	.... with double zener (nom. voltage relay: 30 V - 45 V)
338001504	V16-Q3	.... with double zener (nom. voltage relay: 45 V - 65 V)
338001505	V16-Q4	.... with double zener (nom. voltage relay: 65 V - 90 V)
338001506	V16-Q5	.... with double zener (nom. voltage relay: 90 V - 150 V)
Option G		
Art. no.	Code	
338001507	V16-G	Relay socket, screw terminal, 1 retaining clip
338001508	V16-DG	.... with diode
338001509	V16-GQ1	.... with double zener (nom. voltage relay: 12 V - 30 V)
338001510	V16-GQ2	.... with double zener (nom. voltage relay: 30 V - 45 V)
338001511	V16-GQ3	.... with double zener (nom. voltage relay: 45 V - 65 V)
338001512	V16-GQ4	.... with double zener (nom. voltage relay: 65 V - 90 V)
338001513	V16-GQ5 with double zener (nom. voltage relay: 90 V - 150 V)
378690100	A104	Key receptacle





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