

EA 111 - Socket

Datasheet



Description

The EA 111 socket is a surface / wall and 35 mm rail mount relay socket. The socket has 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 2.5 mm² can be inserted in the spring clamp terminals. This quick & easy wiring method saves up to 75% wiring time compared with classic technology, like screw terminals.

Hexagonal plastic keys and round plastic plugs are provided for relay type coding, not inserted.

The EA 111 A socket is suitable for all A relays and modules.
The EA 111 B socket is suitable for all B relays and modules.
The EA 111 E socket is suitable for all E relays and modules.

Application

The EA 111 socket is designed for surface mount or self-clicking on 35 mm rail.

Features

- Front connection
- Sturdy spring clamp terminals
- Twin connection per relay contact
- Up to 2.5 mm² wire terminal
- No internal soldering / connections
- Wire locking spring
- For surface or 35 mm rail
- A 111 A suitable for all A-relays
- A 111 B suitable for all B-relays
- A 111 E suitable for all E-relays

Benefits

- Easy and quick connection: strip wire, press cage clamp and insert wire
- Long life cycle, no maintenance
- Easy to inspect, replace

Industry compliancy

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

EA111 socket

Technical specifications



Technical characteristics

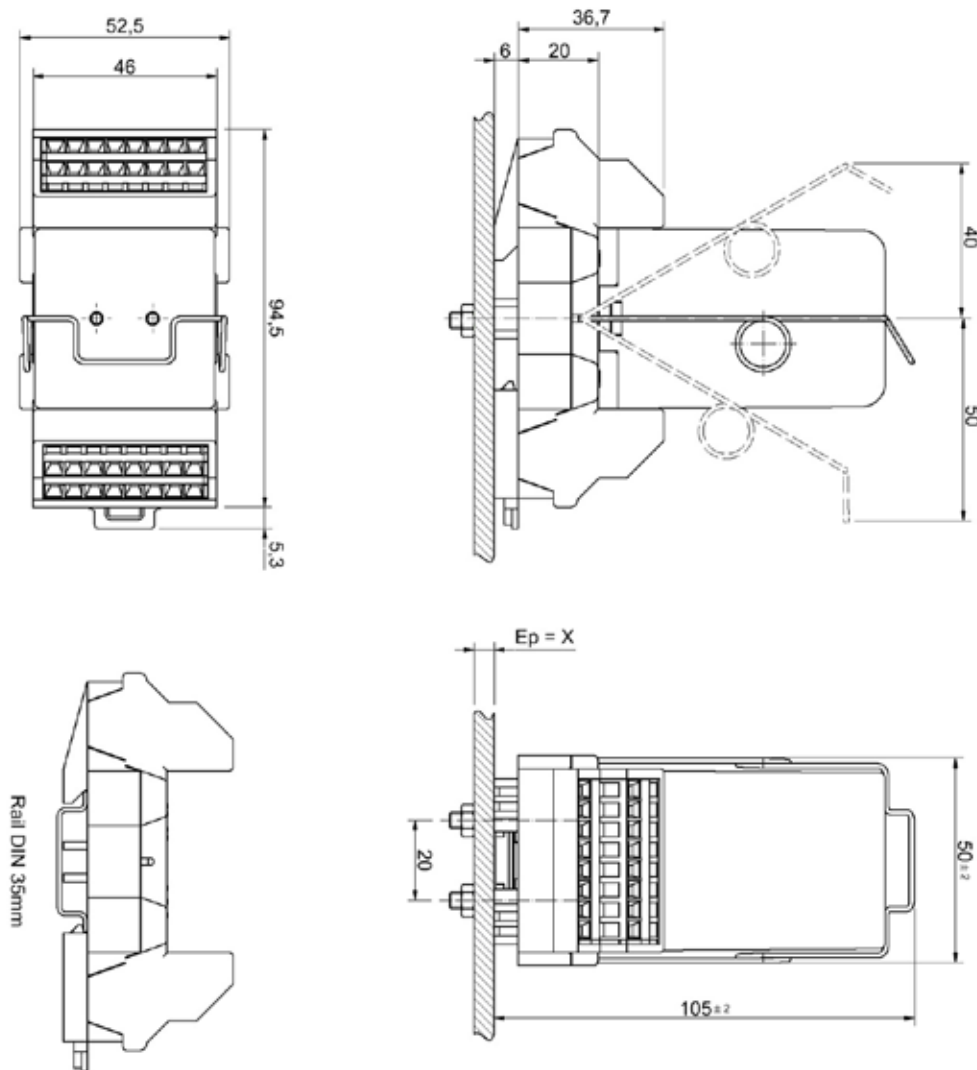
Contact rating	12 A
Dielectric strength	NF F 62002-2, 2625 VAC, 50 Hz, 1 min
Insulation resistance	1000 MΩ, NF F 62002-2
Insulation coordination	OV2, PD3 EN 50124
Protecting category	EN 60529, IP20
Shock & vibration	IEC 61373 Cat I Class B
Mounting	35 mm rail or panel mount
Max. ambient temperature	80 °C
Min. ambient temperature	-40 °C
Weight	115 g (without retaining clip and keying)
Dimensions	Refer to drawing
Wire size	up to 2.5 mm ²

EA111 socket

Technical specifications

Dimensions (mm)

Socket for A-relays



There are 2 types of socket fixation:

Front fixation

- 2x CHC head M4x (25 + X)
- 2x spring lock washers $\varnothing 4$ (Outer $\varnothing 7$ maximum)
- 2x weld nuts M4 (for panel)

Rear fixation

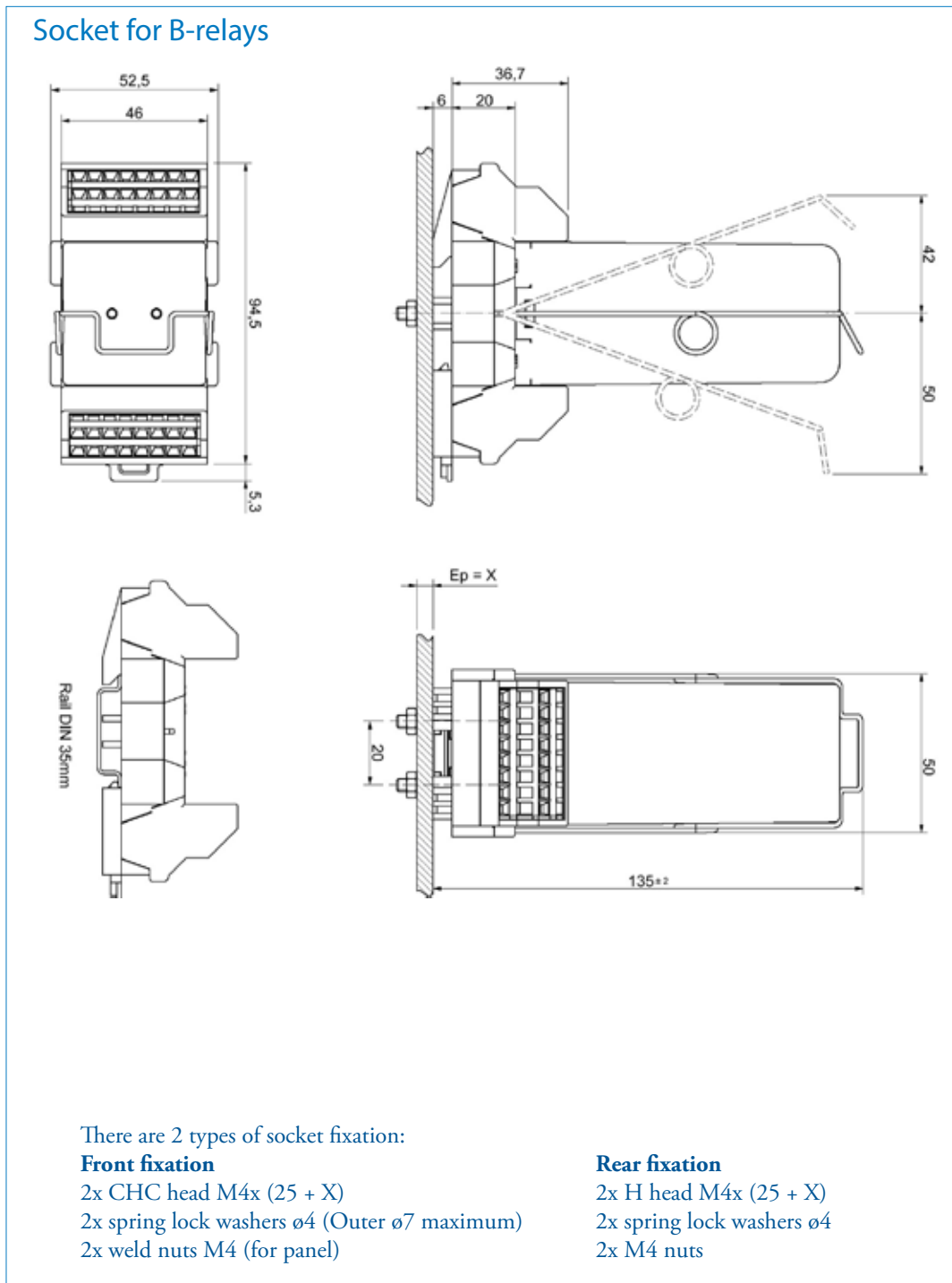
- 2x H head M4x (25 + X)
- 2x spring lock washers $\varnothing 4$
- 2x M4 nuts



EA 111 socket

Technical specifications

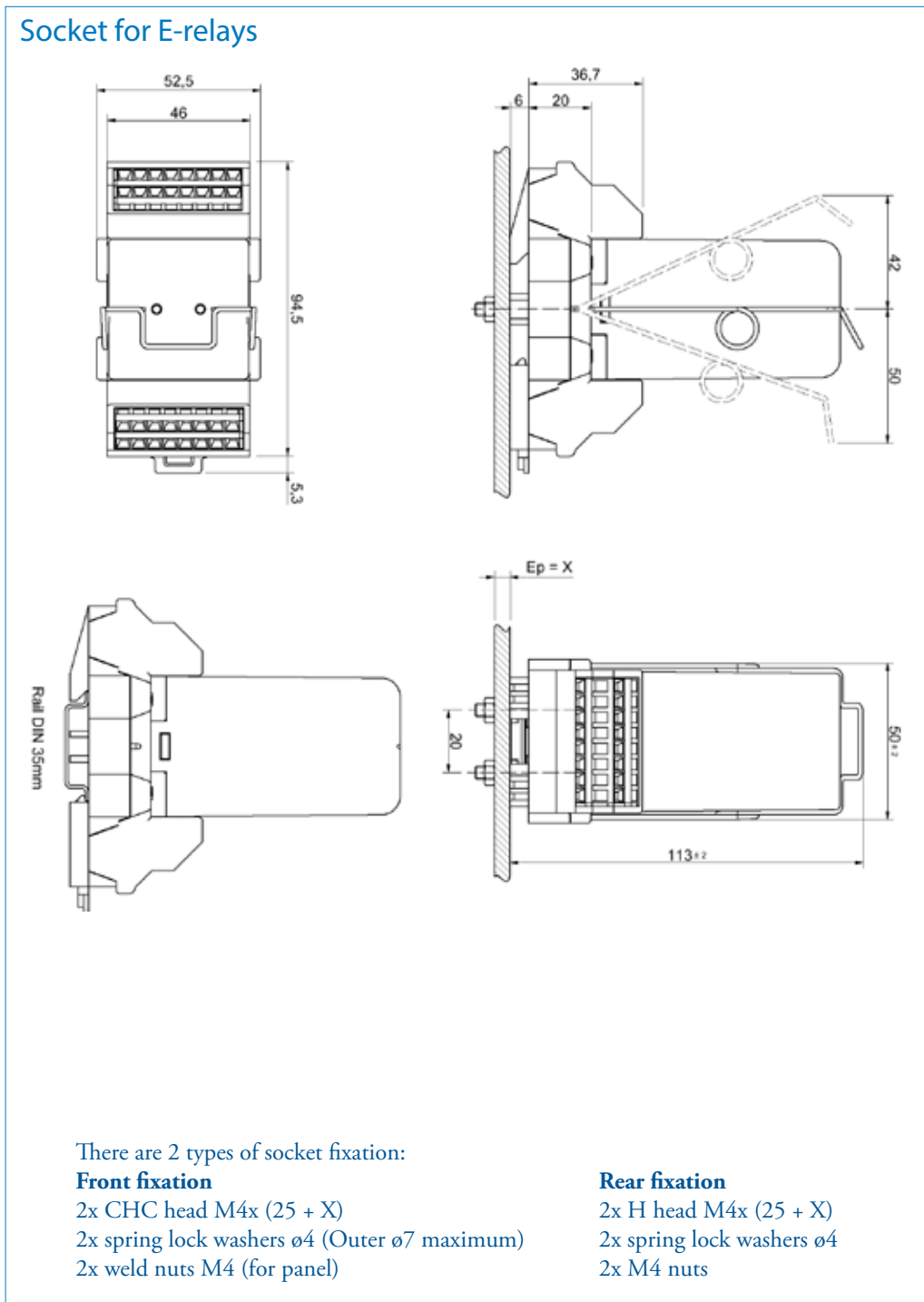
Dimensions (mm)



EA 111 socket

Technical specifications

Dimensions (mm)



EA 111 socket

Technical specifications

Mechanical keying relay and socket (optional)



Function:

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

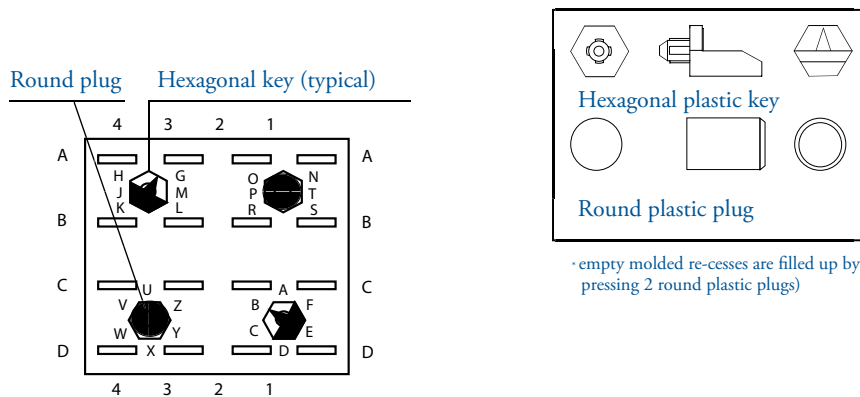
Using keyed relays and sockets prevents a relay being inserted in a wrong socket. For example it prevents placing a 24 VDC relay in a 110 VDC circuit.

Upon ordering the customer simply indicates the need for the optional keying. Mors Smitt will assign a code based on the power supply specified. In that case, keying will be mounted by Mors Smitt else, the socket is supplied with loose key to be inserted by customer.

Remark: sockets and relay types are only examples.

Keying explanation

Socket (top view) keyed for BG (72 VDC)



Keying of relay to socket is accomplished by pressing 2 hexagonal keys and 2 round plugs into molded-in recesses on the socket. Relay keying is done in factory.

Insert keys that arrows point to the correct keying letters on socket - see example shown.



EA 111 socket

Instructions

Installation & inspection

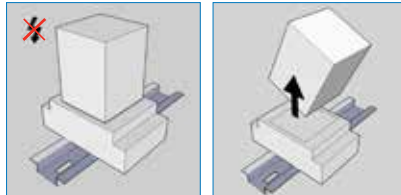
Installation

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

Install socket and connect wiring according to the terminal identification. Plug the relay into the socket and then use the retaining spring to lock the relay in its position.

Warning!

To remove relay from the socket, employ sideways movement. Up and down movement may cause damage to relay terminal.



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.

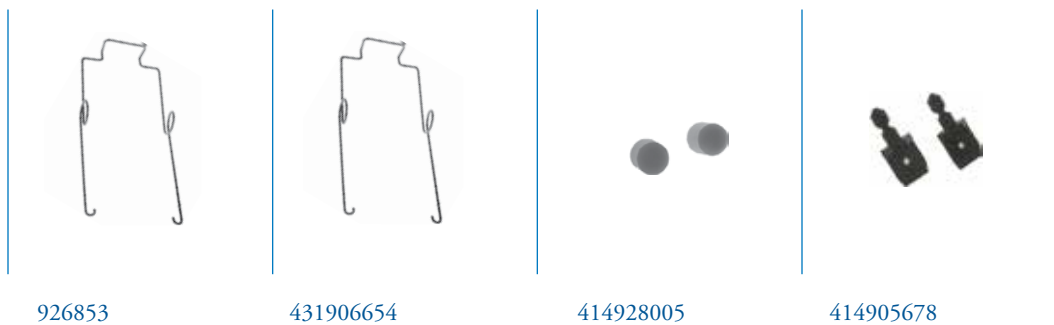
When returning products for investigation, please provide all information on the RMA form. Send defective products back to the manufacturer for repair or replacement. Normal wear and tear or external causes are excluded from warranty.



EA 111 socket

Spare parts

Spare parts & part numbers



Parts only for sockets

926853	Wire locking spring for A
431906654	Wire locking spring for B
929039	Wire locking spring for E
414928005	Round plastic plugs

Parts for relays and sockets

414905678	Hexagonal plastic keys
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EA 111 socket

Ordering scheme



1. Socket model 2. Connection 3. Relay cover

1. Socket model

EA

2. Connection type

111 Spring clamp terminal

3. Relay cover

A	A type relays and modules with wire locking spring
B	B type relays and modules with wire locking spring
E	E type relays and modules with wire locking spring





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