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Screwless Clamp Terminal Socket
P2RF□□S

- Screwless clamping greatly contributes to reducing wiring time.
- No over or under tightening of cable connection so better contact reliability is achieved.
- Double wiring possible on all the terminals, and easy bridge and branch connections.
- Use either solid or stranded wires from 0.2 to 1.5 mm^2 (AWG24 to AWG16).
- Safe terminal arrangement: Coil terminals separated from contact terminals.
- Unique ejector enables easy relay replacement.
- Nameplate available
- Finger-protection



Ordering Information

■ List of Models

	1-pole for G2R1S	2-pole for G2R2S
Socket	P2RF-05-S	P2RF-08-S
Clip & Release Lever	P2CM-S	
Nameplate	R99-11	
Socket Bridge	P2RM-SR, P2RM-SB	

Specifications

■ Ratings/Characteristics

Item	P2RF05S	P2RF08S	Remarks
Relay	G2R-1-S Series	G2R-2-S Series	---
Dimensions (W×H×D)	18×92×38.2 max.		---
Rated voltage	250 VAC		---
Rated carry current	10 A at 70°C	5 A at 70°C	VDE0627
Applicable wires	0.2 to 1.5 mm^2 (AWG24 to AWG16) Solid wire, Standard wire		---
Number of wire connections	2 wires per terminal (1 wire per hole)		---
Clamping force	10 N min. (0.2 mm^2), 40 N min. (1.5 mm^2)		EN60999

■ Approved Standards

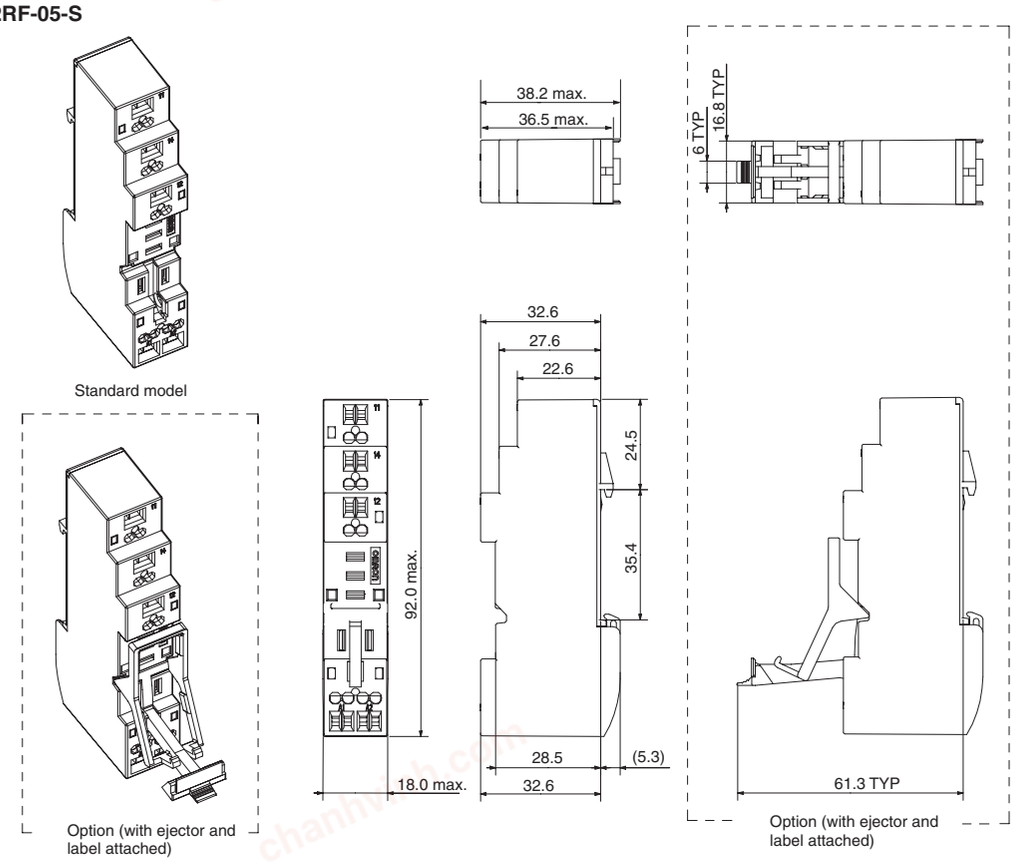
Standard	File No. (status)
VDE0627 (IEC664, EN60999)	40002313UG
UL508 (UL1059)	E87929
CSA C22.2 No. 14 (CSA C22.2 No. 158)	LR31928 (1281408)

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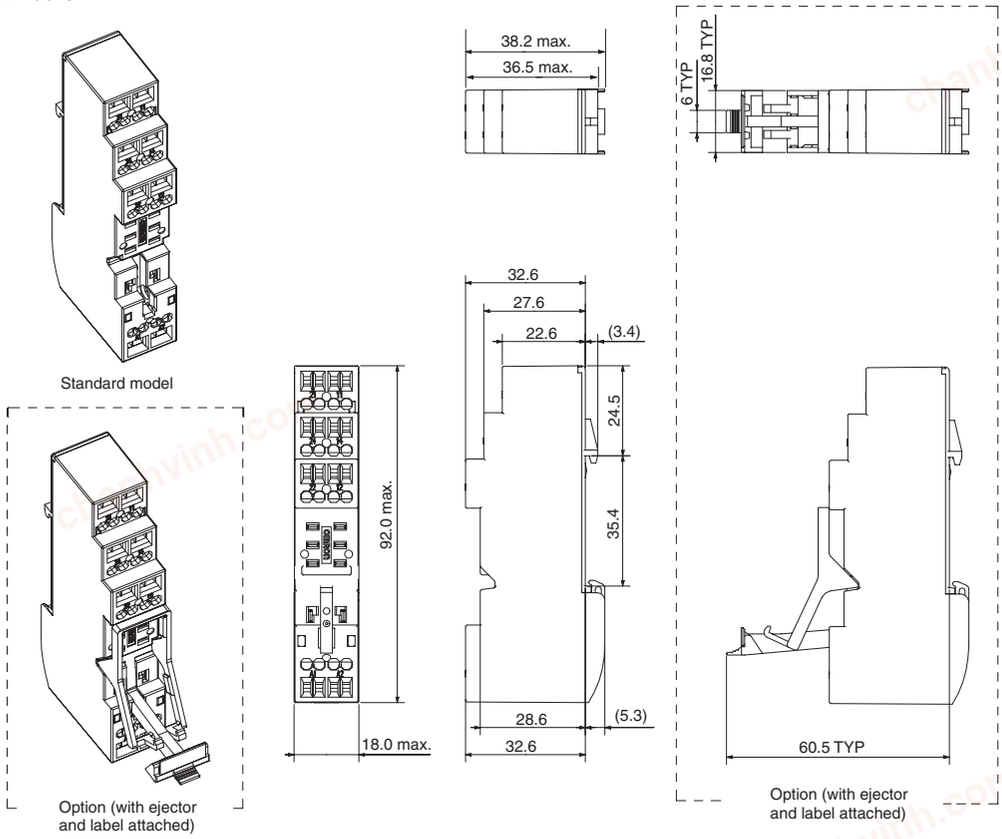
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Dimensions

P2RF-05-S

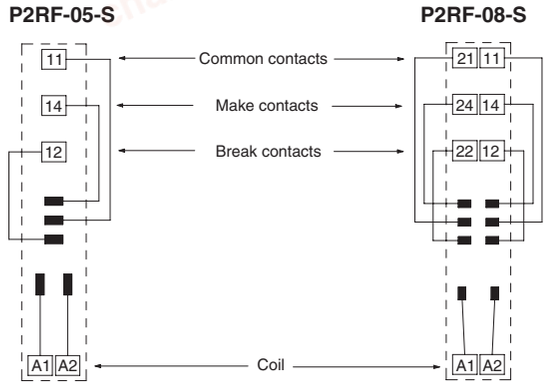


P2RF-08-S



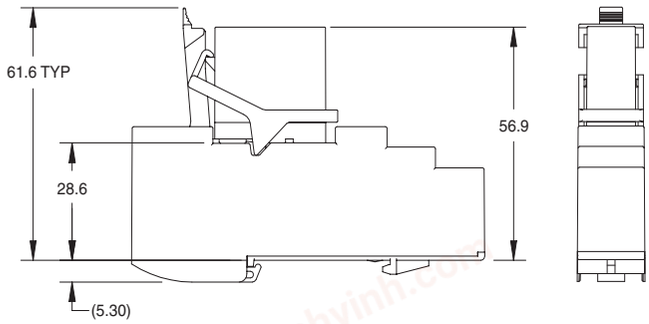
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Terminal Arrangement

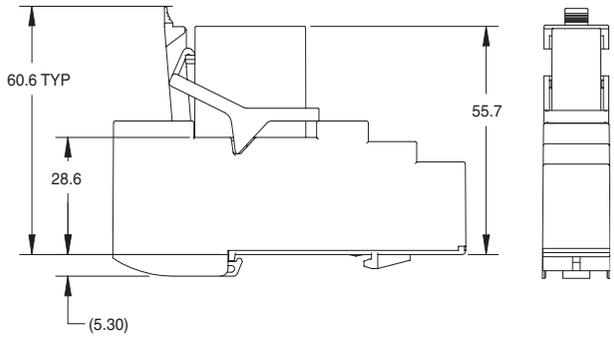


Mounting Height (With Lever)

P2RF-05-S

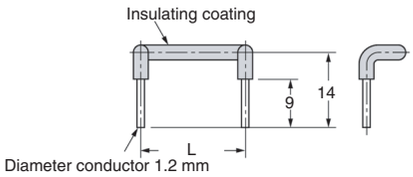


P2RF-08-S



■ Accessories (Option)

Socket Bridge for P2RF-S



List of models

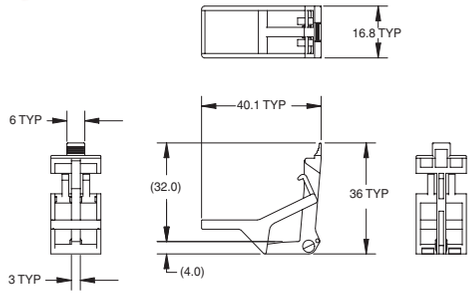
Model number	Length L (mm)	Color of insulating coating
P2RM-SR	14.3	Red
P2RM-SB		Blue

Specification

Item	Characteristic
Rated ON current	10 A
Rated insulation voltage	250 VAC
Temperature rise	35°C max.
Dielectric strength	3,000 VAC for 1 minute
Ambient operating temperature	–55 to 70°C

Clip and Release Lever for P2RF-S

P2CM-S



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Installation

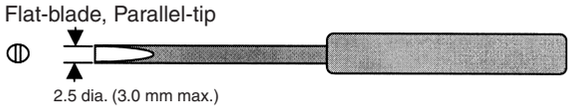
■ Tools

A flat-blade screwdriver should be used to mount the cables.

Applicable Screwdriver

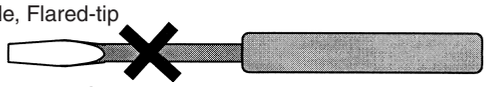
● Flat-blade, Parallel-tip, 2.5 mm diameter (3.0 mm max.)

● Flat-blade, Parallel-tip



2.5 dia. (3.0 mm max.)

● Flat-blade, Flared-tip



Cannot be used.

Examples:	FACOM AEF.2.5×75E	(AEF. 3×75E)
	VESSEL No. 9900-(-)2.5×75	(No. 9900-(-)3×100)
	WAGO 210-119	
	WIHA 260/2.5×40	(260/3×50)

*Chamfering the tip of the driver improves insertion when used as an exclusive tool.

■ Applicable Wires

Applicable Wire Sizes

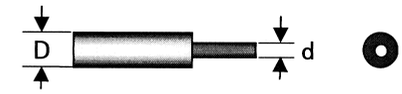
0.2 to 1.5 mm², AWG24 to AWG16

Applicable Wire Type

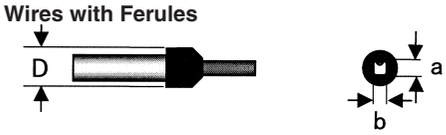
Solid wires, standard wires, flexible wires, or wires with ferules can be used.

(See note 1.) < 2.2 ≤ Diameter D (mm) ≤ 3.2 (3.5: see note 2.)

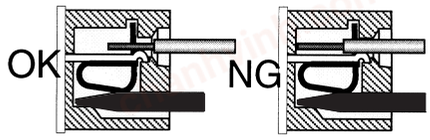
Conductor diameter d (mm) or length of sides a and b (mm) ≤ 1.9



Wires with Ferules



Note: 1. If the outer diameter D of the wire is less than 2.2 mm and the exposed conductor length is less than 8mm potentially bad connection might occur in case wire is pushed to far inside. Please see following drawing.



2. If the outer diameter D of the wire exceeds 3.2 mm, it might be difficult to use double wiring.

Examples of Applicable Wires (Confirmed Using Catalog Information)

Type of wire	Conductor type	See note 1, above.	Recommended wire sizes	See note 2, above.
Equipment wire 2491X	Flexible		0.5, 0.75, 1.0 mm²	1.5 mm²
BS6004	Solid	0.5 mm²		
Switchgear BS6231	Solid		1.0 mm²	1.5 mm²
Switchgear BS6231	Flexible		0.5, 0.75 mm²	1.0 mm²
Tri-rated control and switchgear	Flexible		0.5, 0.75, 1.0, 1.5 mm²	
Conduit	Standard		1.5 mm²	
UL1007	Flexible	18AWG	16AWG	
UL1015	Flexible		18AWG, 16AWG	
UL1061	Flexible	18AWG		
UL1430	Flexible	18AWG	16AWG	

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■ Wiring

Use wires of the applicable sizes specified above. The length of the exposed conductor should be 8 to 9 mm.

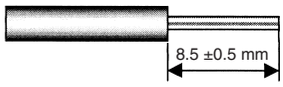


Fig. 1 Exposed Conductor Length

Use the following wiring procedure.

1. Insert the specified screwdriver into the release hole located beside the wire connection hole where the wire is to be inserted.

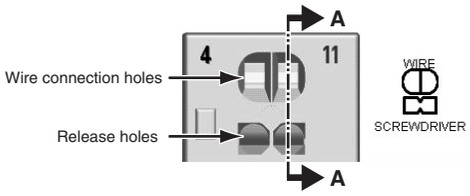


Fig. 2 Wire Connection Holes and Release Holes

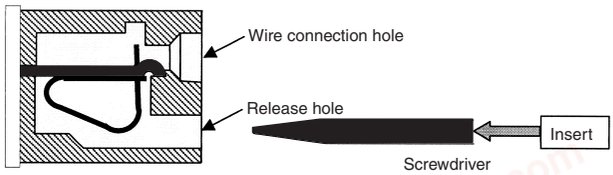
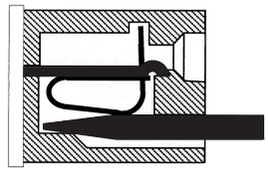
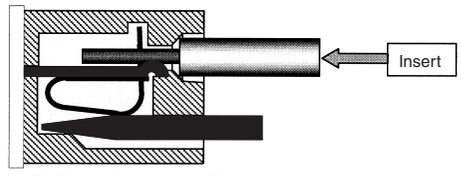


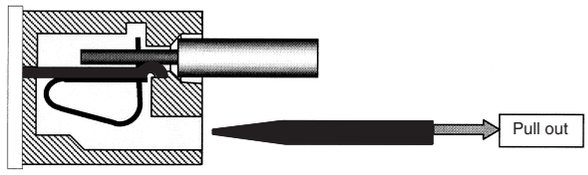
Fig. 3 Section A-A of Fig. 2



2. Insert the exposed conductor into the wire connection hole.



3. Pull out the screwdriver.



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Precautions

Precautions for Connection

- Do not move the screwdriver up, down, or from side to side while it is inserted in the hole. Doing so may cause damage to internal components (e.g., deformation of the clamp spring or cracks in the housing) or cause deterioration of insulation.
- Do not insert the screwdriver at an angle. Doing so may break the side of socket and result in a sort-circuit.



- Do not insert two or more wires in the hole. Wires may come in contact with the spring causing a temperature rise or be subject to sparks. (There are two wiring holes for each terminal.)



- Insert the screwdriver along the hole wall as shown below.



- If lubricating liquid, such as oil, is present on the tip of screwdriver, the screwdriver may fall out resulting in injury to the operator.
- Insert the screwdriver into the bottom of the hole. It may not be possible to connect cables properly if the screwdriver is inserted incorrectly.

General Precautions

- Use the clip to prevent relays floating or falling out of the socket.
- Do not use the product if it has been dropped on the ground. Dropping the product may adversely affect performance.
- Confirm that the socket is securely attached to the mounting track before wiring. If the socket is mounted insecurely it may fall and injure the operator.
- Ensure that the socket is not charged during wiring and maintenance. Not doing so may result in electric shock.
- Do not pour water or cleansing agents on the product. Doing so may result in electric shock.
- Do not use the socket in locations subject to solvents or alkaline chemicals.
- Do not use the socket in locations subject to ultraviolet light (e.g., direct sunlight). Doing so may result in markings fading, rust, corrosion, or resin deterioration.
- Do not dispose of the product in fire.

Removing from Mounting Rail

To remove the socket from the mounting rail, insert the tip of screwdriver in the fixture rail, and move it in the direction shown below.



ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.
To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

Cat. No. J132-E2-02-X In the interest of product improvement, specifications are subject to change without notice.