## **Screwless Clamp Terminal Sockets**

# PYF S/P2RF- S

CSM\_PYF\_\_S/P2RF-\_\_-S\_DS\_E\_2\_3

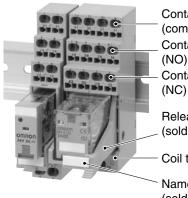
# New Screwless Terminal Sockets Added for MY and G2R Relays.

- Simplified wiring without tightening screws.
- Two wires can be independently wired for each terminal.
- Coil terminals and contact terminals are completely separated in an organized wiring layout.
- Release Levers and Nameplates are available (sold separately).



#### **Features**

#### Structured for Easy Wiring



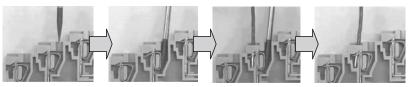
Contact terminal (common) Contact terminal (NO) Contact terminal

Release Lever (sold separately)

Coil terminals

Nameplate (sold separately)

#### Complete Wiring in Three Steps



Insert a screwdriver.

Screwdriver inserted.

Insert the wire.

Remove screwdriver to complete wiring.

- A spring holds the wire in place to reduce wiring work by 30% (according to OMRON comparison) and eliminates the need to manage torque.
- DIN terminal numbers also indicated.

## **Ordering Information**

#### **Sockets**

| Applicable model (typical example) | Socket    |  |
|------------------------------------|-----------|--|
|                                    | Model     |  |
| MY2                                | PYF08S    |  |
| MY4                                | PYF14S    |  |
| G2R-1-S                            | P2RF-05-S |  |
| G2R-2-S                            | P2RF-08-S |  |

#### **Options (Order Separately)**

| Applicable Socket | Release Bar | Nameplates | Socket Bridges with Red Insulation | Socket Bridges with Blue Insulation |
|-------------------|-------------|------------|------------------------------------|-------------------------------------|
|                   | Model       | Model      | Model                              | Model                               |
| PYF08S            | PYCM-08S    |            | PYDM-08SR                          | PYDM-08SB                           |
| PYF14S            | PYCM-14S    | R99-11     | PYDM-14SR                          | PYDM-14SB                           |
| P2RF-05-S         | P2CM-S      |            | P2RM-SR                            | P2RM-SB                             |
| P2RF-08-S         | P2CIVI-3    |            | FZNW-9N                            | r2nivi-3D                           |

Note: Pieces per Package Nameplates: 100 Socket Bridges: 50

## **Ratings/Characteristics**

### **Characteristics**

#### PYF□□S

| Item                   | Model   | PYF08S           | PYF14S           |  |
|------------------------|---|------------------|------------------|--|
| Ambient op             | erating temperature                             | −55 to 70°C      |                  |  |
| Ambient op             | erating humidity                                | 5% to 85%        |                  |  |
| Continuous             | carry current*                                  | 10 A 5 A         |                  |  |
| Dielectric<br>strength | Between contact terminals of same polarity      | 2,000 VAC, 1 min | 2,000 VAC, 1 min |  |
|                        | Between contact terminals of different polarity | 2,000 VAC, 1 min | 2,000 VAC, 1 min |  |
|                        | Between coil and contact terminals              | 2,000 VAC, 1 min | 2,000 VAC, 1 min |  |
| Insulation re          | nsulation resistance 1,1,000 M $\Omega$ min.    |                  |                  |  |
| Weight (app            | <b>eight (approx.)</b> 46 g 62 g                |                  | 62 g             |  |

<sup>\*</sup>The continuous carry current of 10 A for the PYF08S is for an ambient temperature of 55°C. At an ambient temperature of 70°C, the value is 7 A.

#### P2RF-□□-S

| Item                     | Model   | P2RF-05-S        | P2RF-08-S        |
|--------------------------|---|------------------|------------------|
| Ambient op               | perating temperature                            | -40 to 70°C      |                  |
| Ambient op               | erating humidity                                | 5% to 85%        |                  |
| Continuous carry current |   | 10 A 5 A         |                  |
| Dielectric<br>strength   | Between contact terminals of same polarity      | 1,000 VAC, 1 min | 1,000 VAC, 1 min |
|                          | Between contact terminals of different polarity |                  | 3,000 VAC, 1 min |
|                          | Between coil and contact terminals              | 4,000 VAC, 1 min | 4,000 VAC, 1 min |
| Insulation I             | Insulation resistance 1,000 MΩ min.             |                  |                  |
| Weight (ap               | Neight (approx.) 36 g 40 g                      |                  | 40 g             |

## **Ratings for Safety Standard Certification**

#### PYF□□S

| Standard                           | File No.                 |  |
|------------------------------------|--------------------------|--|
| VDE0627 (EN61984)                  | Certificate No. 40015509 |  |
| UL508 (UL1059)                     | E87929 Vol.3             |  |
| CSA C22.2 No.14 (CSA C22.2 No.158) | LR31928                  |  |

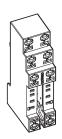
#### P2RF-□□-S

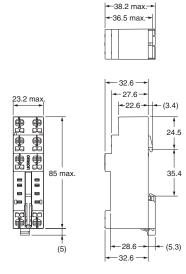
| Standard                           | File No.                 |  |
|------------------------------------|--------------------------|--|
| VDE0627 (EN61984)                  | Certificate No. 40002313 |  |
| UL508 (UL1059)                     | E87929 Vol.3             |  |
| CSA C22.2 No.14 (CSA C22.2 No.158) | LR31928                  |  |

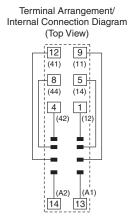
Dimensions (Unit: mm)

#### **Sockets**

#### PYF08S

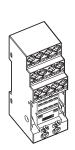


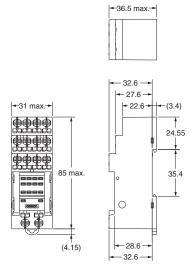


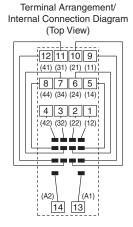


Note: Figures in parentheses indicate DIN standard numbers.

#### PYF14S

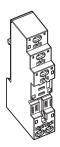


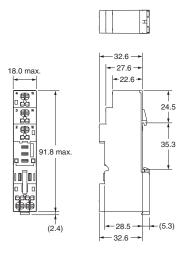


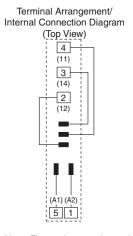


Note: Figures in parentheses indicate DIN standard numbers.

#### P2RF-05-S

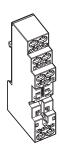


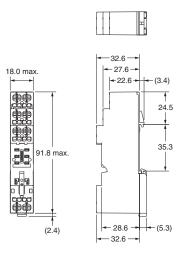


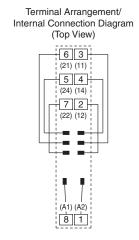


Note: Figures in parentheses indicate DIN standard numbers.

#### P2RF-08-S



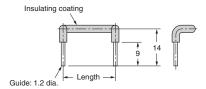




Note: Figures in parentheses indicate DIN standard numbers.

## **Accessories (Order Separately)**

#### **Socket Bridges**

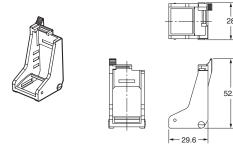


| Applicable<br>Sockets | Model     | Length (mm) | Insulation color |
|-----------------------|-----------|-------------|------------------|
| PYF08S                | PYDM-08SR | 19.7        | Red              |
|                       | PYDM-08SB | 19.7        | Blue             |
| PYF14S                | PYDM-14SR | 27.5        | Red              |
|                       | PYDM-14SB | 27.5        | Blue             |
| P2RF-□□-S             | P2RM-SR   | 14.3        | Red              |
|                       | P2RM-SB   |             | Blue             |

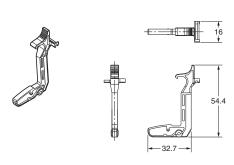
Note: Use the Socket Bridges for relay coil bridge wiring.

#### **Release Levers**

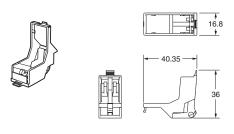
#### PYCM-14S



#### PYCM-08S

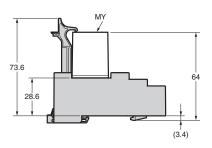


#### P2CM-S

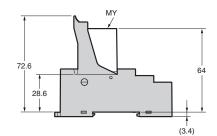


#### **Mounting Heights**

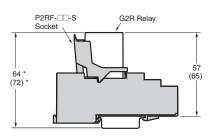
#### PYF08S



#### PYF14S



#### P2RF-□□-S



Figures of height in () is with G2R Relays with Latching Lervers. Values indicated with asterisks are for when using a PFP-N Track. The values increase by approximately 9 mm when using a PFP-N Track.

### **Safety Precautions**

#### **Precautions for Safe Use**

 Do not move the screwdriver up, down, or from side to side or rotate it while it is inserted in the hole. Doing so may damage internal components in the Socket.

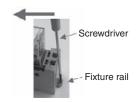


- Do not insert more than one wire into the same hole. Doing so may cause abnormal heating.
- There are two internally connected wiring holes for each terminal.
- Insert the screwdriver along the hole wall as shown below.

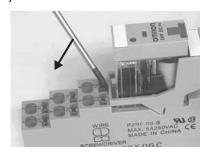


Screwdriver

 When you remove a Socket from a support rail, insert the end of a screwdriver into the fixture and move the screwdriver as shown by the arrow in the following figure.



When you use a Release Lever to remove a Relay from a P2RF——-S Socket, insert a screwdriver at the location shown in the following figure and move the Release Lever in the direction indicated by the arrow to release the lock on the release lever.



#### **Precautions for Correct Use**

#### **Wiring Tools**

#### **Applicable Screwdriver**



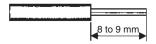


You cannot use a screwdriver with a thick shaft.

Applicable Screwdriver (Example) VESSEL No.9900 - (-) 2.5  $\times$  75

#### **Applicable Wires**

- You can use either solid wires or stranded wires. Applicable wire size: 0.2 to 1.5 mm<sup>2</sup> (AWG24 to AWG16)
- · Strip 8 to 9 mm of insulation from the ends of the wires.

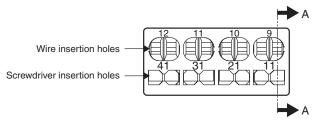


- If you insert stranded wires without ferrules, make sure that the wires are twisted when you insert them.
- If you use bare ferrules, always attach insulating sleeves.
- If you insert a wire with a sheath outer diameter of 2.2 mm or less, do not insert the wire far enough so that the sheath is engaged inside the hole, as shown below.

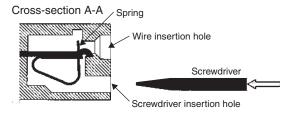


- Two wires with a sheath outer diameter of 3.2 mm or larger cannot be inserted for the same terminal at the same time.
- Use heat-shrinking tubes to indicate wire numbers.

#### Wiring



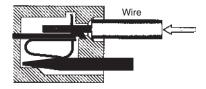
 Insert a screwdriver into a screwdriver insertion hole on the Socket.



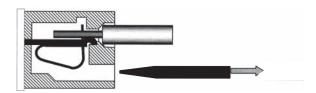
(2) Press the screwdriver in until it reaches the stopper inside the Socket. The spring at the back of the wire insertion hole will be completely open in this condition. The screwdriver will be held in place even if you remove your hand.



(3) With the screwdriver held in place, insert the wire or ferrule into the wire insertion hole.



(4) Remove the screwdriver. The spring will hold the wire. This concludes the connection procedure.



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