Zeitrelaissockel PYF-14-PU-L PYF-14-PU-L





Bezeichnung	PYF-14-PU-L
Betriebstemperatur	-40°C +70°C
Zertifizierung	VDE0627 (IEC 61984), UL508 (UL1059), CSA C22.2 Nr.14 (CSA C22.2 Nr.158)
Belastbarkeit	6 A
Kontaktkonfiguration	14 polig
Relaistyp	Zeitrelais H3Y, Zeitrelais H3YN

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# **Push-In Plus technology Sockets** PYF-DD-PU/P2RF-DD-PU

# Sockets with Push-In Plus technology to Save Work Added to Series for MY and **G2R-S Relays**

- Push-In Plus technology are used to save wiring work in comparison with traditional screw terminals. (Wiring time is reduced by 60%\* in comparison with traditional screw terminals.)
- No screw loosening means maintenance-free application.
- · Light insertion force and strong pull-out strength to achieve both less wiring work and high reliability.
- 'Hand-free' structure that holds an inserted screwdriver to achieve easier wiring work for stranded wires.
- Two wires can be independently inserted into each terminal hole.
- DIN Track mounting or screw mounting.
- \* According to OMRON actual measurement data from November 2015.

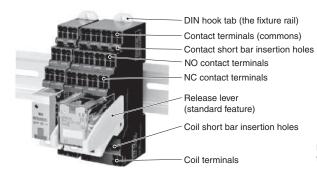
Refer to Safety Precautions on page 6.

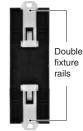


For the most recent information on models that have been certified for safety standards, refer to your OMRON website.

#### Features

- · Coil terminals and contact terminals are completely separated in an organized wiring layout.
- A Release Lever is provided as a standard feature.
- DIN terminal numbers are indicated. The double fixture rail with DIN hook tabs attached to the top and bottom lets you mount the socket from either the top or bottom.
- Front-in short bar enables easy installation without interference in duct when wiring.
- Please refer short bar correspondence table in page 5 for further information of short bar
- There are screw mounting holes in the DIN hooks on the PYF-D-PU and P2RF-D-PU. Pull out the DIN hook tabs to mount the Sockets with screws.





Back of Push-In Plus technology Socket

The fixture rails can be pulled out to mount the Relays with screws.





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Zeitrelaissockel PYF-14-PU-L

PYF-14-PU-L



## PYF-D-PU/P2RF-D-PU

### **Ordering Information**

#### Sockets

Annlieght	a madal (turical avenue)	Socket		
Аррисари	e model (typical example)	No. of poles	Model *	
General Purpose Relays	MY Series	MY2	2	PYF-08-PU
General Purpose Relays	wir Series	MY4		PYF-14-PU
Timers	H3Y Series	H3Y(N)-2-B	2	PYF-08-PU-L
	H3YN Series	H3Y(N)-4-B	4	PYF-14-PU-L
General Purpose Relays	G2R-D-S (S) Series	G2R-1-S (S)	1	P2RF-05-PU
Timers	H3RN Series	H3RN-1-B		
General Purpose Relays	G2R-D-S (S) Series	G2R-2-S (S)		P2RF-08-PU
Timers	H3RN Series	H3RN-2-B	2	
Liquid Leakage Sensors K7L Series		K7L-□B		

Note: Refer to your OMRON website for information on other applicable models of the Products Related to Common Sockets and DIN Tracks. \* The PYF-0-PU-L Sockets do not have release levers.

## Accessories (Order Separately)

#### Short Bars

Pitch	Applicable models	No. of poles	Colors	Model *	Minimum order (quantity)	
	7.75 mm PYFPU and P2RFPU		2		PYDN-7.75-020	
7.75		3	]	PYDN-7.75-030		
7.75 mm		4	Red (R)	PYDN-7.75-040	10	
		20	Blue (S) Yellow (Y)	PYDN-7.75-200	10	
31.0 mm	PYF-DD-PU	8		PYDN-31.0-080		
15.5 mm	P2RF-DD-PU	8		PYDN-15.5-080		

Note: Use the Short Bars for crossover wiring within one Socket or between Sockets \* Replace the box ( $\Box$ ) in the model number with the code for the covering color.

#### Labels

Applicable models	Model	Minimum order (sheet) (quantity per sheet)	
PYF-O-PU and P2RF-O-PU	XW5Z-P4.0LB1	5 (1 sheet/60 pieces)	

#### Parts for DIN Track Mounting

P2RF-DD-PU

Ambient operating temperature

Between contact terminal of same polarity

Between contact terminals of different polarity

Between coil and

contact terminals

Ambient operating humidity

Continuous carry current '

Insulation resistance Weight (approx.)

Item

Dielectric

strength

Туре		Model	Minimum order (quantity)		
DIN Tracks	1 m	PFP-100N			
DIN TRACKS	0.5 m	PFP-50N			
End Plate *		PFP-M	10		
Spacer		PFP-S	10		

Refer to your OMRON website for details on the PFP-D. \* When mounting DIN rail, please use End Plate (Model PFP-M).

Model P2RF-05-PU P2RF-08-PU

6 A

4,000 VAC, 1 min 4,000 VAC, 1 min

45 a

1,000 MΩ min. (at 500 VDC)

1,000 VAC, 1 min

3,000 VAC, 1 min

-40 to 70°C

1,000 VAC, 1 min

5 to 85%

10 A

40 g

The continuous carry current of 10 A for P2RF-05-PU is for an ambient temperature of 55°C. At an ambient temperature of 70°C, the value is 7 A. The continuous carry current of 6 A for P2RF-08-PU is for an ambient temperature of 55°C. At an ambient temperature of 70°C, the value is 5 A.

## **Ratings/Characteristics**

#### **Characteristics**

#### PYF-DD-PU(-L)

Item	Model	PYF-08-PU (-L)	PYF-14-PU (-L)	
Ambient operating temperature		-40 to 70°C		
Ambient of	perating humidity	5 to 85%		
Continuou	us carry current *	10 A	6 A	
Dielectric 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 resistance		1,000 MΩ min. (at 500 VDC)		
Weight (a	Weight (approx.) 80 g 87 g			

\* The continuous carry current of 10 A for PYF-08-PU(-L) is for an ambient temperature of 55°C. At an ambient temperature of 70°C, the value is 7 A.

#### **Applicable Standards**

UL 508, CSA C22.2 No.14, TÜV (EN 61984)

Note: The continuous carry current of the PYF-08-PU and P2RF-05-PU for TÜV certification is 10 A at an ambient temperature of 55°C and 7 A at an ambient temperature of 70°C.
 The continuous carry current of the P2RF-08-PU for TÜV certification is 6 A at an ambient temperature of 55°C and 5 A at an ambient temperature of 70°C.

2

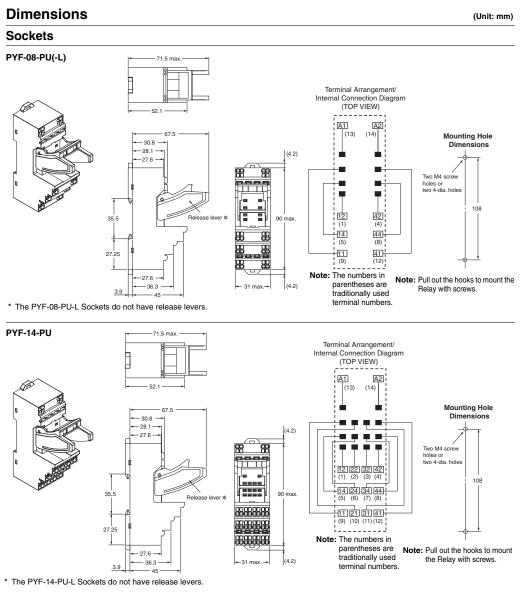
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# Datenblatt Zeitrelaissockel PYF-14-PU-L

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# PYF-14-PU-L

## PYF-D-PU/P2RF-D-PU



Mounting Heights PYF-08-PU friction (3.9)PYF-14-PU 

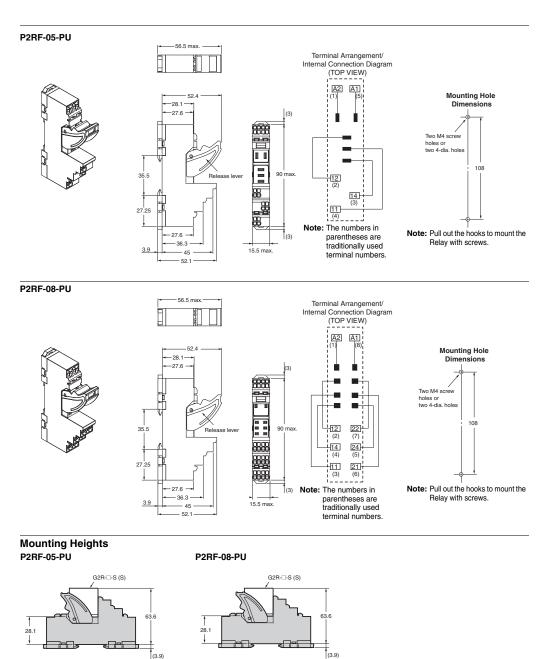
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Zeitrelaissockel PYF-14-PU-L PYF-14-PU-L



## PYF-D-PU/P2RF-D-PU



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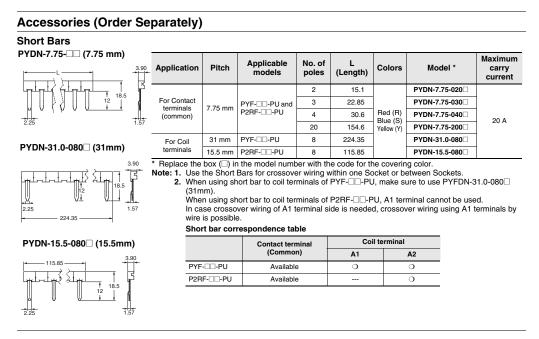
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Zeitrelaissockel PYF-14-PU-L PYF-14-PU-L



## PYF-DD-PU/P2RF-DD-PU



#### Parts for DIN Track Mounting

Refer to your OMRON website for details on the PFP- $\square.$ 

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Zeitrelaissockel PYF-14-PU-L

PYF-14-PU-L



## PYF-D-PU/P2RF-D-PU

#### **Safety Precautions**

Be sure to read the *Common Precautions for All Relays* in the website at the following URL: http://www.ia.omron.com/.

#### Warning Indications

	Indicates a potentially hazardous situation which, if not avoided, will result in minor or moderate injury, or may result in serious injury or death. Additionally there may be significant property damage.
Precautions for Safe Use	Supplementary comments on what to do or avoid doing, to use the product safely.
Precautions for Correct Use	Supplementary comments on what to do or avoid doing, to prevent failure to operate, malfunction, or undesirable effects on product performance.

#### Meaning of Product Safety Symbols

Used to warn of the risk of electric shock under specific conditions.

#### 

Make sure that the Socket does not have an electrical charge before you perform wiring or maintenance work. Electrical shock may occur.



#### Precautions for Safe Use

#### Transportation

Do not use a Socket that has fallen to the floor or ground. The

- performance of a Socket that has been dropped may be reduced.Do not drop the Socket or subject it to abnormal vibration or shock during transportation or mounting. Doing so may result in
- deterioration of performance, malfunction, or failure. • Do not transport a Socket when it is not packaged. Damage or failure may occur.

#### **Operating and Storage Environments**

- Do not use or store Sockets in the following locations. Doing so
  may result in deterioration of performance.
- Locations subject to ambient storage temperatures outside the range • 40 to 70°C
- Locations subject to relative humidity outside the range 5% to 85%
- Locations subject to high temperature or high humidity
  Locations in which condensation may occur due to rapid changes in temperature
- Do not use or store Sockets in environments that contain silicone gas, sulfidizing gas (e.g., SO<sub>2</sub> or H<sub>2</sub>S), or organic gas, or near materials that contain silicone. Doing so may cause the contacts to be unstable or to fail.
- Do not use a Socket in a location subject to ultraviolet light (such as a location subject to direct sunlight). Printing may fade, the Socket may rust or corrode, and plastic parts may deteriorate.
- Before you start wiring, make sure that the Socket is securely attached and mounted to a DIN Track. If the Socket is not stable, it may fall and possibly injure a worker.
- Insert the flat-blade screwdriver fully to the bottom of the release hole. If the flat-blade screwdriver is not inserted correctly, the wire may not be connected correctly.
- If there is lubrication, such as oil, on the tip of the flat-blade screwdriver, the flat-blade screwdriver may fall and possibly injure a worker.
- When crossover wiring by wire and short bar, make sure not to insert wrong position, it may cause short circuit, malfunction or failure.

#### **Push-In Plus technology**

- Do not attempt to wire anything to the release holes.
- When you insert a flat-blade screwdriver into a release hole, do not tilt or twist the screwdriver. The terminal may be damaged.
- · Insert a screwdriver into the release holes at an angle. The
- terminal may be damaged if the screwdriver is inserted straight in. • Do not allow the flat-blade screwdriver to fall when you are holding
- it in a release hole. • Do not bend a wire past its natural bending radius or pull on it with

To prevent wire materials from smoking or igniting, use the wiring materials given in the following table.

	Stripping length		
Recommended wires	Ferrules used	Ferrules not used	
0.5 to 1.5 mm <sup>2</sup> /AWG20 to AWG16 (Ferrules: 0.5 to 1.0 mm <sup>2</sup> /AWG 20 to AWG 18)	10 mm	8 mm	

Note: Please use Ferrules with UL certification (R/C).

#### Disposal

• If you dispose of any Sockets, do not place them in a fire.

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excessive force. Doing so may break the wires. • Do not insert more than one wire into each terminal insertion hole

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# utomation Gmbl

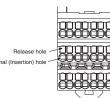
## PYF-D-PU/P2RF-D-PU

#### Precautions for Correct Use

- Do not transport the Socket under the following conditions. Doing so may occasionally result in damage, malfunction, or deterioration of performance characteristics.
- Locations subject to high temperature or high humidity
  Locations subject to condensation due to rapid changes in temperature
- Do not use or store the Socket in the following locations. Doing so may occasionally result in damage, malfunction, or deterioration of performance characteristics.
- · Locations subject to shock or vibration
- Do not use the Socket in a location where it may be subjected to solvents or alkali liquids.
- · Do not insert short bar in the hole for wire or screw driver, it may cause the result of failure of pull out. If insert short bar in the hole for wire or screw driver and try to pull out, it may cause damage for short bar or socket.

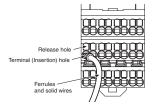
#### **Push-In Plus technology**

1. Connecting Wires to the Push-In Plus Terminal Part Names of the Terminal



#### **Connecting Wires with Ferrules and Solid Wires**

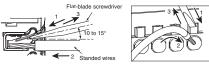
Insert the solid wire or ferrule straight into the terminal until the end strikes the terminal



• If a wire is difficult to connect because it is too thin, use a flat-blade screwdriver in the same way as when connecting stranded wire.

#### **Connecting Stranded Wires**

- Use the following procedure to connect the wires to the terminal. 1. Hold a flat-blade screwdriver at an angle and insert it into the release hole.
- The angle should be between 10° and 15°. If the flat-blade screwdriver is inserted correctly, you will feel the spring in the release hole
- With the flat-blade screwdriver still inserted into the release hole, insert the wire into the terminal hole until it strikes the terminal.
- 3. Remove the flat-blade screwdriver from the release hole



#### **Checking Connections**

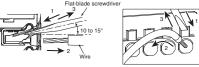
- After the insertion, pull gently on the wire to make sure that it will not come off and the wire is securely fastened to the terminal.
- To prevent short circuits, insert the stripped part of a stranded or solid wire or the conductor part of a ferrule until it is hidden inside the terminal insertion hole. (See the following diagram.)



#### 2. Removing Wires from the Terminal

Use the following procedure to remove wires from the terminal. The same method is used to remove stranded wires, solid wires, and ferrules

- 1. Hold a flat-blade screwdriver at an angle and insert it into the release hole
- 2. With the flat-blade screwdriver still inserted into the release hole, remove the wire from the terminal insertion hole.
- 3. Remove the flat-blade screwdriver from the release hole

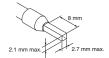


#### 3. Recommended Ferrules and Crimp Tools **Recommended ferrules**

Applicable wire		Ferrule	Rec	ecommended ferrules		
(mm²)	(AWG)	Conduct or length (mm)	Phoenix Contact product	Weidmuller product	Wago product	
0.5	20	8	AI0.5-8	H0.5/14	FE-0.5-8N-WH	
0.75	18	8	AI0.75-8	H0.75/14	FE-0.75-8N-GY	
1	18	8	AI1-8	H1.0/14	FE-1.0-8N-RD	
Recommended crimp tool			CRIMPFOX6 CRIMPFOX6-F CRIMPFOX10S	PZ6 roto	Variocrimp4	

\*1. Make sure that the outer diameter of the wire coating is smaller than the inner diameter of the insulation sleeve of the

recommended ferrule. \*2. Make sure that the ferrule processing dimensions conform to the following figures.





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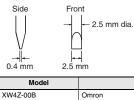
PYF-14-PU-L



## PYF-D-PU/P2RF-D-PU

#### Recommended Flat-blade Screwdriver

Use a flat-blade screwdriver to connect and remove wires. Use the following flat-blade screwdriver. The following table shows manufacturers and models as of 2015/Dec.



XW42-00B	Onion
ESD 0.40×2.5	Wera
SZF 0.4×2.5	Phoenix Contact
0.4×2.5×75 302	Wiha
AEF.2.5×75	Facom
210-719	Wago <sup>*1</sup>
SDI 0.4×2.5×75	Weidmuller*1
98 20 25	KNIPEX <sup>*1</sup>

Manufacturer

<sup>11</sup> Insulated types of Flat-blade Screw driver, strongly recommended to prevent from an electric shock.



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