

# Common Terminals XW2R-COM

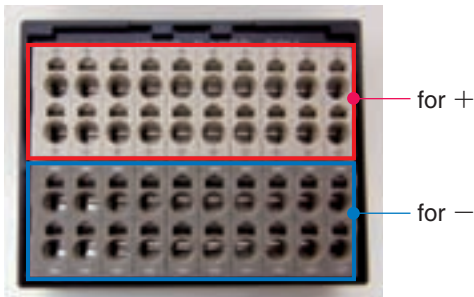
CSM\_XW2R-P\_M\_B-COM\_DS\_E\_1\_1

Space-saving and less wiring work of power supply wiring are achieved.

- Common wiring is already wired on the PCB, transition wiring is unnecessary.
- Wiring is completed by one action.
- Models available with +, -, + - Mix.

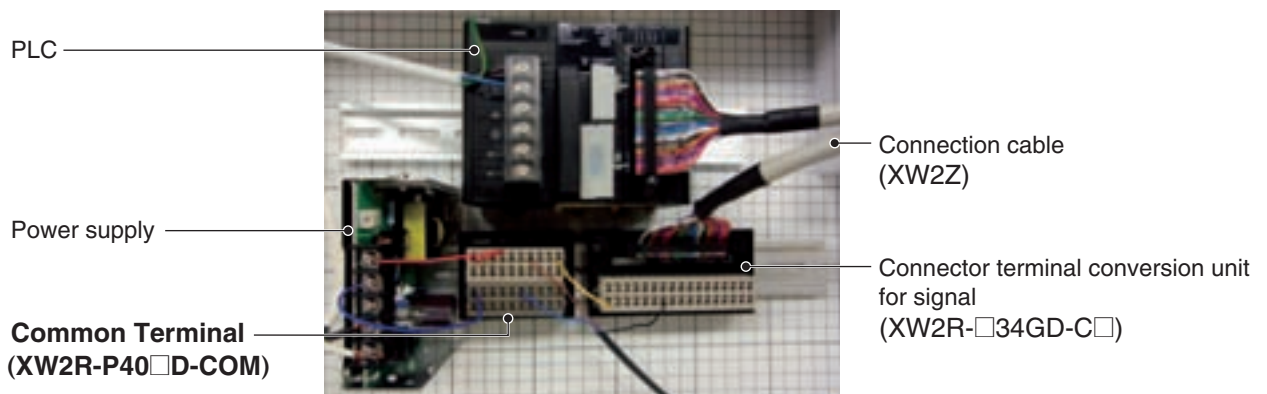


## Application Example



**Each terminal connected by PCB.**  
→ Bus-bar and transition wiring are unnecessary.

## Connection Examples






## Model list

XW2R - P 40 □ D - COM

Wiring method		Terminal number of poles		Type of connector		Mounting method		Power supply terminals (Common terminals)	
P	Push-in spring	40	40 poles	P	+ Common	D	DIN Track mounting	COM	Provided
				M	- Common				
				B	+ - Mix				

# XW2R

## Ordering Information

Appearance	Specification	Number of poles	Model
	+ Common terminal	40	XW2R-P40PD-COM
	- Common terminal		XW2R-P40MD-COM
	+ - Mix terminal		XW2R-P40BD-COM

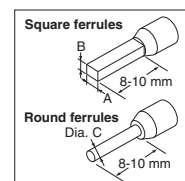
## Ratings and Specifications

Rated current	10A(Unit total)
Rated voltage	125VDC/240VAC
Insulation resistance	100MΩmin. (at 500VDC)
Ambient operating temperature	0 to 55°C
Applicable wires	Applicable wire sizes Ferrule:AWG24 to 14 (0.2mm <sup>2</sup> to 2mm <sup>2</sup> ) Stranded or solid wire:AWG 28 to 14 (0.08mm <sup>2</sup> to 2mm <sup>2</sup> ) (Outer diameter of insulation must be 4 mm max)
	Stripped length AWG28-16: 8 to 10 mm AWG14: 9 to 10 mm

### Details on Crimp Terminals

#### Applicable Ferrules

- Use ferrules of the lengths and thicknesses specified below. If other lengths or thicknesses are used, connection may not be possible or it may not be possible to insert or remove the posts.

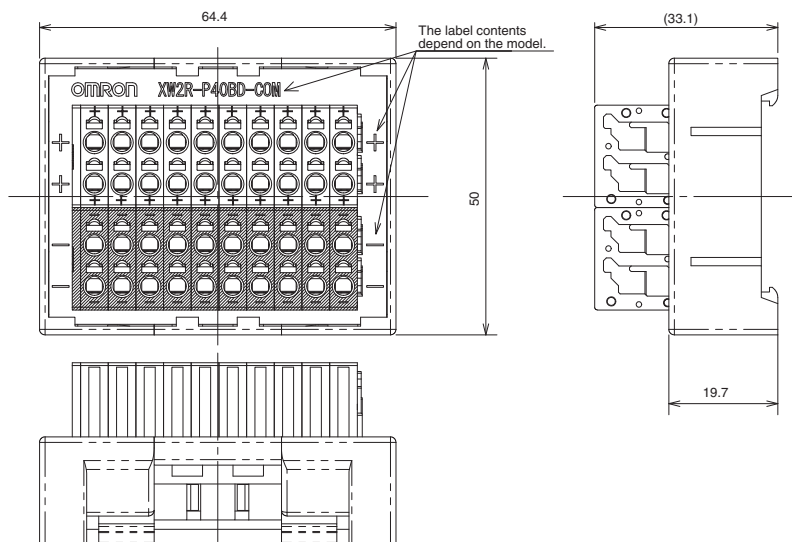


- Ferrule Dimensions

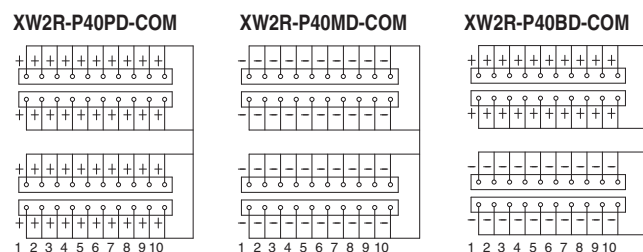
Square ferrules	Dimension A (Width)	2.7 mm max.	The cross-sectional area after crimping must be 4.8 mm <sup>2</sup> or less
	Dimension B (Height)	2 mm max.	
Round ferrules	Dimension C (Diameter)	2 mm dia. max. (after crimping)	

Refer to page 3 for information on Square/Round ferrule and use tool.

## Dimensions



## Wiring Diagram



## Label Contents

XW2R-P40PD-COM	Upper	+	+	+	+	+	+	+	+	+	+
	Lower	+	+	+	+	+	+	+	+	+	+
XW2R-P40MD-COM	Upper	-	-	-	-	-	-	-	-	-	-
	Lower	-	-	-	-	-	-	-	-	-	-
XW2R-P40BD-COM	Upper	+	+	+	+	+	+	+	+	+	+
	Lower	-	-	-	-	-	-	-	-	-	-
		1	2	3	4	5	6	7	8	9	10

## Safety Precautions

### Precautions for Correct Use

#### Wiring Precautions

- Do not perform wiring work, remove connectors, or connect connectors while power is being supplied. Electric shock or damage to the device may result.
- Double-check all wiring before turning ON the power supply.
- After wiring, route the cable so that force is not applied directly to the connections.

#### Wires for Terminal Blocks

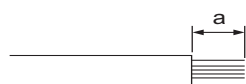
- Do not damage the cores when stripping the insulation from them.
- Always twist stranded wires together before connecting them.
- Do not presolder wires. It may not be possible to connect them or remove them.

#### XW2R-P□□ type (Square/Round ferrule)

Type of terminal	Manufacturer	Size	Recommend ferrule	Recommend crimp tool
Square ferrule	Phoenix Contact	AWG24	AI0.25-8□□	CRIMFOX6
		AWG22	AI0.34-8TQ	
		AWG20	AI0.5-10WH AI0.5-8WH	
		AWG18	AI0.75-10GY AI0.75-8GY	
		AWG16	AI1.5-10BK	
		AWG14	AI2.5-8BU	
	Weidmuller	AWG24	H0.25/12	PZ6 roto
		AWG22	H0.34/12	
		AWG20	H0.5/14	
		AWG18	H0.75/14	
		AWG16	H1.5/14	
		AWG14	H2.5/15D	
Round ferrule	Nichifu	AWG22- AWG16	TGV TC-1.25-9T	NH11 NH32 NH65

Note: □□ of ferrule model is for color (Ex: YE = Yellow)

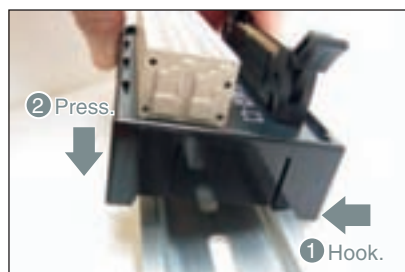
#### When an electric wire is connected directly (J,E,P type)



Model	Strip length "a"
XW2R-J□□	9 mm
XW2R-E□□	7 mm
XW2R-P□□	AWG28-16: 8 to 10 mm
	AWG14: 9 to 10 mm

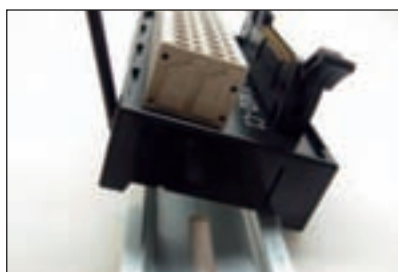
#### Mounting Units to and Removing Units from DIN Track

##### Mounting Procedure



- Hook the Unit on the DIN Track.
- Press the Unit onto the DIN Track to secure it.

##### Removal Procedure

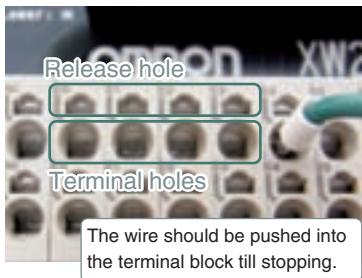


- Insert a flat-blade screwdriver into the DIN Track lock.
- Move the screwdriver like a lever to free the lock.

## Connecting Spring cramp Terminals

### Using Ferrules

#### How to insert wire

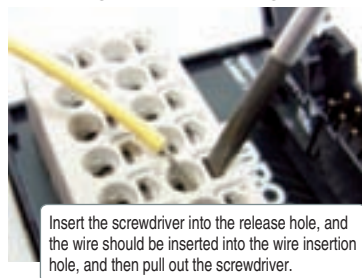


#### How to release wire



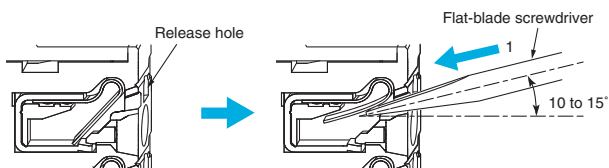
### Using Stripped Wires

#### Inserting and Removing Wires

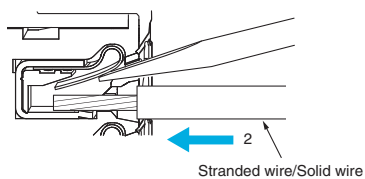


#### Inserting Wires

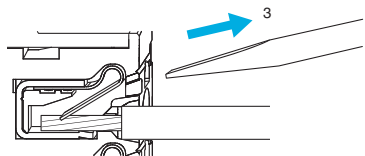
1. Press the a flat-blade screwdriver diagonally into the release hole. Press at an angle of  $10^\circ$  to  $15^\circ$ . If you press in the screwdriver correctly, you will feel the spring in the release hole.



2. Leave the flat-blade screwdriver pressed into the release hole and insert the stranded wire or the solid wire into the terminal hole. Insert the stranded wire or the solid wire until the stripped portion is no longer visible to prevent shorting.

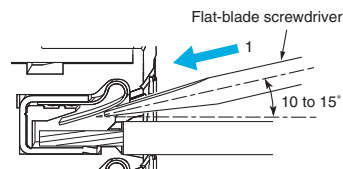


3. Remove the flat-blade screwdriver from the release hole.

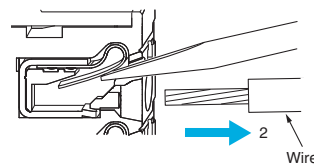


#### Removing Wires

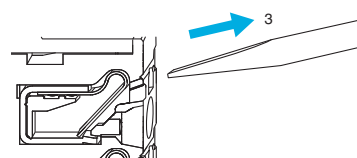
1. Press the flat-blade screwdriver diagonally into the release hole. Press at an angle of  $10^\circ$  to  $15^\circ$ . If you press in the screwdriver correctly, you will feel the spring in the release hole.



2. Leave the flat-blade screwdriver pressed into the release hole and pull out the wire.

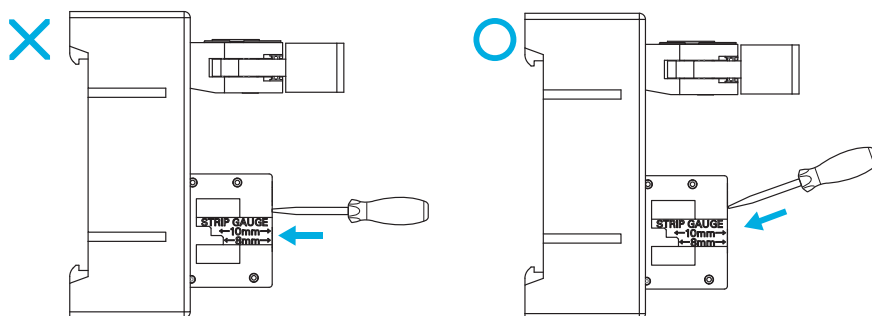


3. Remove the flat-blade screwdriver from the release hole.

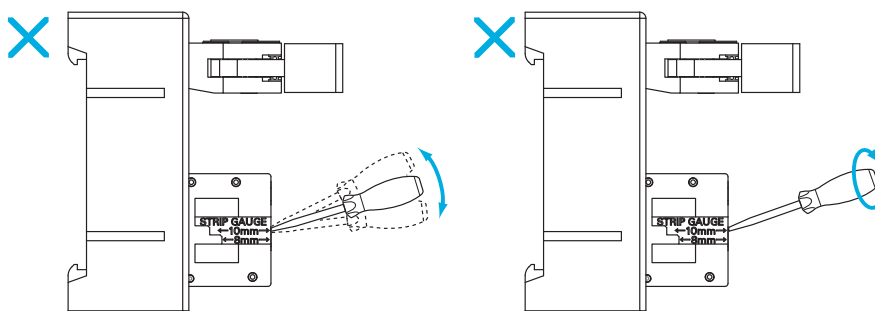


### Precautions for Safe Use

- Do not press the flat-blade screwdriver straight into the release hole. Doing so may break the terminal block.



- When you insert a flat-blade screwdriver into a release hole, press it down with a force of 30 N max. Applying excessive force may damage the terminal block.
- Do not tilt or twist the flat-blade screwdriver while it is pressed into the release hole. Doing so may break the terminal block.



- Make sure that all wiring is correct.
- Do not bend the cable forcibly. Doing so may sever the cable.

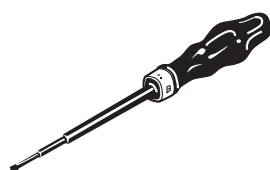
### Use tool

- Select a use tool from following table.

Model	Use tool	Specialized tool and dimension
XW2R-J□□	Phillips screwdriver	JIS#2
XW2R-E□□	Flat-blade screwdriver	Model XW4Z-00B Head of screwdriver is 0.4 x 2.5mm max.
XW2R-P□□		

### Flat-blade screwdriver

Model
XW4Z-00B



### Bending Radius of Connecting Cables

- To prevent damaging the Connecting Cables, use the following minimum bending radii as guidelines.

XW2Z - □ □ □ □ □

End of model number	Minimum bending radius
BF-L, EE-L, FF-L	66 mm
A	67.2 mm
EE	83 mm
B, D, K, L, N	88 mm

### For checking electrical continuity

- XW2R-E□□ type: There is no electrical continuity in the screw, Please confirm it at hole for confirming continuity or wiring part.

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