

# Screwless – the reliable connection!

Screwless clamp technology drastically reduces wiring time, eliminates routine maintenance, and ensures a very reliable connection. That's why Omron now introduces a new range of screwless I/O units for the CJ1 PLC series.



Advanced Industrial Automation

Designed and manufactured in Europe according to Omron's high quality standards, the CJ1 screwless I/O units are an ideal alternative for panel makers and machine builders who want to reduce installation time and add an extra dimension in secure, reliable connections for all their control wiring.

## Versatile and reliable

Omron's screwless I/O terminals accept a wide range of wires, solid or stranded, with or without ferrules, from 0.08 to 1.5 mm<sup>2</sup>. The common power supply terminals even accept two wires each, for easier power distribution.

Because the spring-loaded clamps secure the wires in their sockets, the wiring will not come loose through shock or vibration. This eliminates the routine task of re-tightening screws during regular inspection. During testing and commissioning, the spring clamps can be contacted to verify the signal levels. Yet the terminal is always safe to touch, whether wires are inserted or not.

## Easy to use

Individual wires are easy to attach and detach from the terminal block, simply by inserting a screwdriver in the release hole. Traditional screw terminals must be tightened at the correct torque; with Omron's screwless I/O, the contact pressure is always right. A special insert in our clamping spring protects it from being over-stressed, making sure the spring always stays in shape.

The new screwless I/O terminal is interchangeable with existing connectors, and can be used on any existing CJ1 unit that uses the classic 18-point screw terminal block. And they are just as convenient to attach or detach; no tools required!

Connecting wires to conventional screw terminals requires a lot of work.  
See why it makes sense to use Omron screwless I/O units for all your I/O!



### Wiring a conventional screw terminal

<b>Step 1</b>	<b>Step 2</b>	<b>Step 3</b>	<b>Step 4</b>	<b>Step 5</b>	<b>Step 6</b>
• Strip wire	• insert wire into terminal	• crimp terminal	• loosen screw	• insert terminal	• tighten screw with the correct torque

### Wiring Omron's screwless I/O!

<b>Step 1</b>	<b>Step 2</b>	<b>Step 3</b>	<b>Step 4</b>	
• Strip wire	• push to open	• insert wire	• close and ready	

### Omron's CJ1 screwless I/O features at a glance:

- Drastically reduces wiring time
- Accepts a wide range of wiring gauges
- Easy to attach and detach; no tools required
- Easy to test signals, even while wiring is connected
- Construction prevents over-stressing of clamping spring
- Interchangeable with existing CJ1 screw terminals
- Safe - no metal parts can be touched by fingers

### The new CJ1 screwless I/O terminal block is supplied with the following units

Model	Type	Specification
CJ1W-ID211 (SL)	16 DC inputs	24V DC, 7mA
CJ1W-OC201 (SL)	8 relay outputs	250V AC, 2A, (max. 16A total)
CJ1W-OC211 (SL)	16 relay outputs	250V AC, 2A, (max. 8A total, one common)
CJ1W-OD211 (SL)	16 transistor outputs (sink)	12-24V DC, 0.5A, (max. 5A total, one common)
CJ1W-OD212 (SL)	16 transistor outputs (source)	24V DC, 0.5A, (max. 5A total, one common)
CJ1W-AD041-V1 (SL)	4 analogue inputs	1 to 5V, 0 to 10V, 0 to 5V, -10 to 10V, 4 to 20mA
CJ1W-AD081-V1 (SL)	8 analogue inputs	1 to 5V, 0 to 10V, 0 to 5V, -10 to 10V, 4 to 20mA
CJ1W-DA021 (SL)	2 analogue outputs	1 to 5V, 0 to 10V, 0 to 5V, -10 to 10V, 4 to 20mA
CJ1W-DA041 (SL)	4 analogue outputs	1 to 5V, 0 to 10V, 0 to 5V, -10 to 10V, 4 to 20mA
CJ1W-DA08C (SL)	8 analogue outputs (current)	4 to 20mA
CJ1W-DA08V (SL)	8 analogue outputs (voltage)	1 to 5V, 0 to 10V, 0 to 5V, -10 to 10V
CJ1W-MAD42 (SL)	4 analogue outputs + 2 analogue outputs	1 to 5V, 0 to 10V, 0 to 5V, -10 to 10V, 4 to 20mA
CJ1W-TS561 (SL)	6 thermocouple inputs	Type J / Type K selectable
CJ1W-TS562 (SL)	6 RTD inputs	Pt100 / Pt1000 selectable

### Spare screwless terminal blocks

CJ-WM01-18P-5
Set of 5 screwless terminal blocks
Suitable for all CJ1 I/O units with 18-point terminals blocks (except thermocouple units with external cold-junction compensation sensor, e.g. CJ1W-TC00_)

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Please send me further information on the CJ1 PLC series.

Please call to discuss the CJ1 Screwless I/O.

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