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Relay series with push-in plus technology

PYF-PU, P2RF-PU, G2RV-SR/ G3RV-SR, G70V
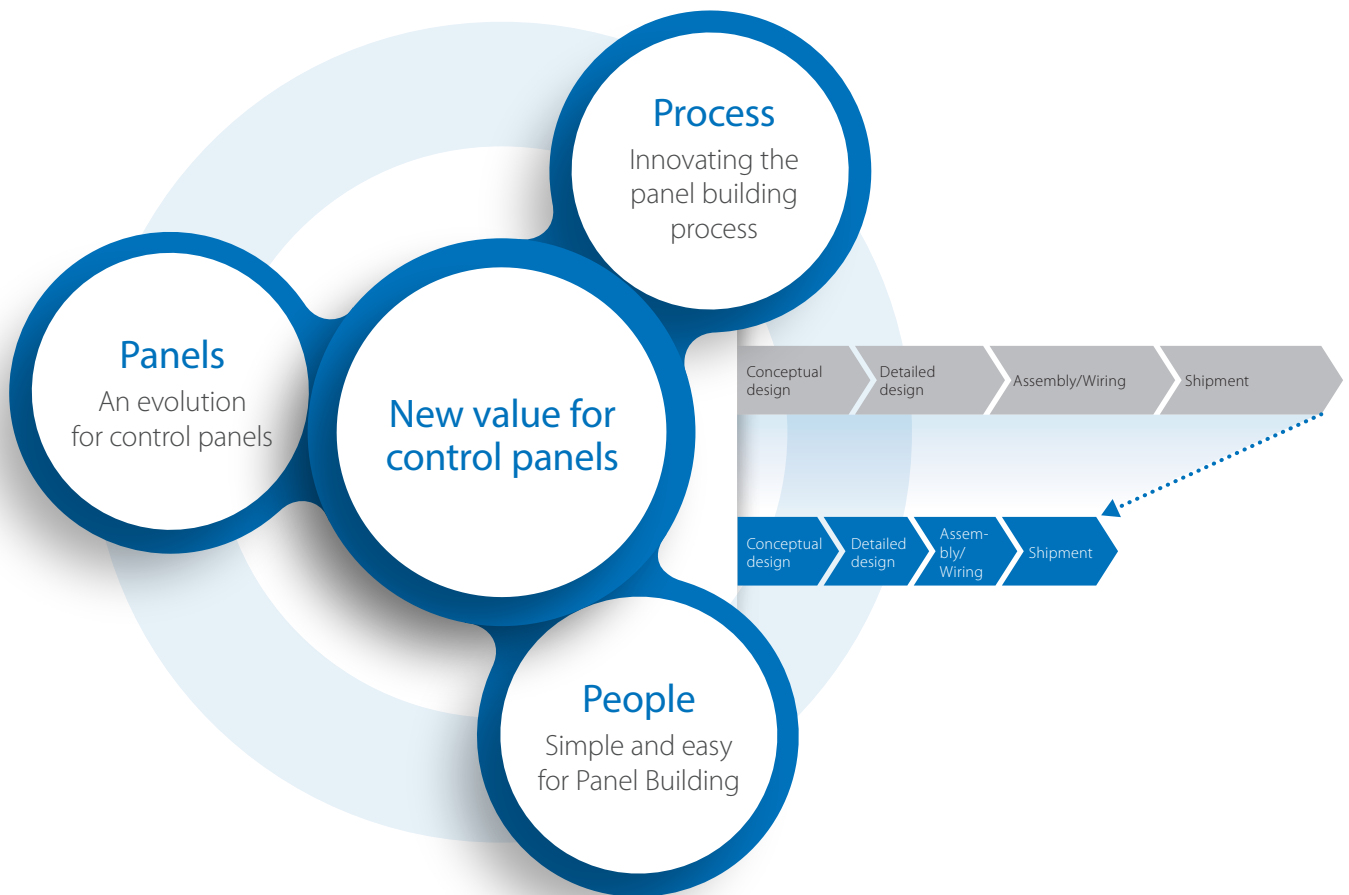
- Push-in plus technology for easy wiring
- More flexible in-panel wiring
- Compact design and unique structure

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New value for control panels

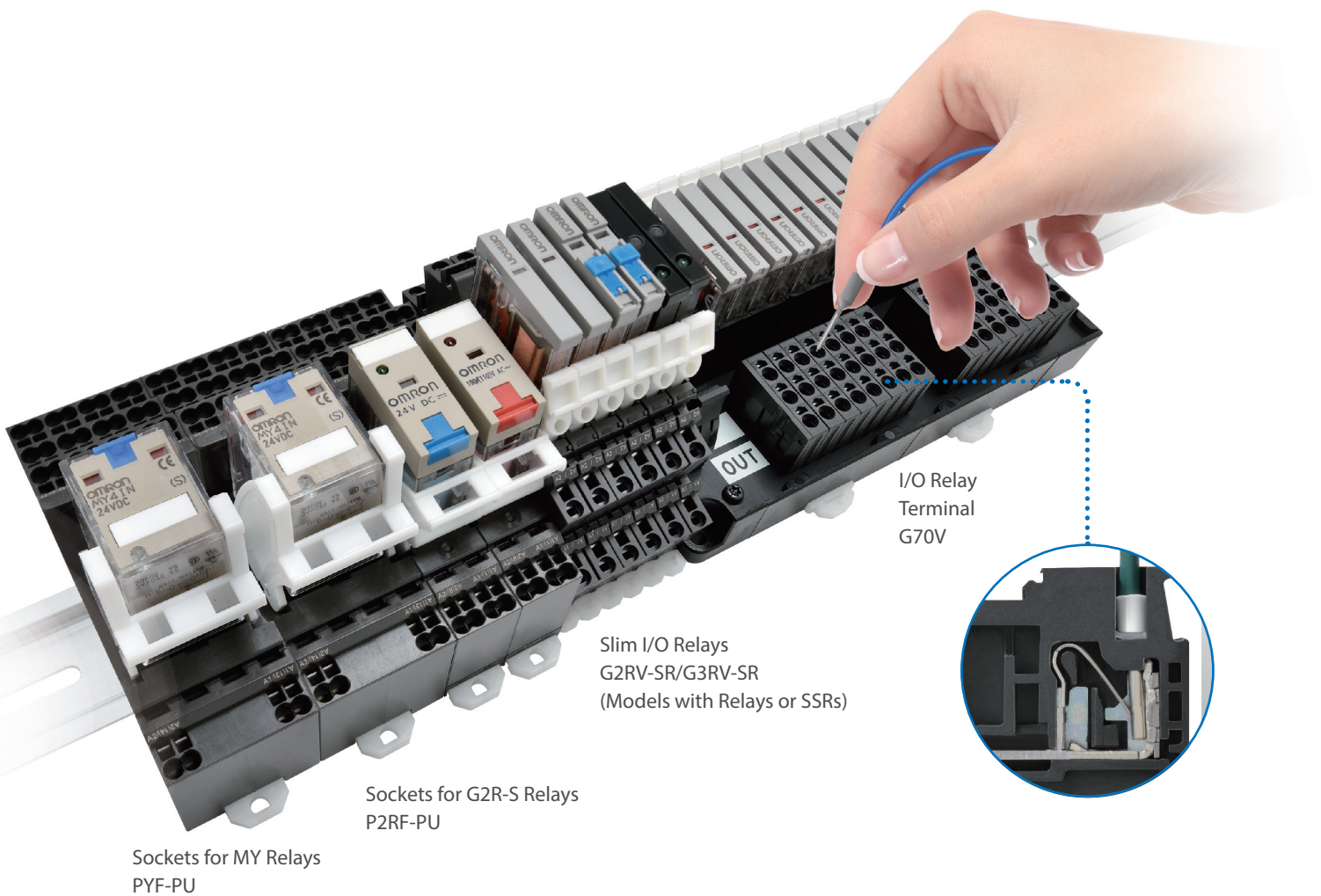## Control panels: The heart of manufacturing sites

Evolution in control panels results in large evolution in production facilities. And if control panel design, control panel manufacturing processes, and human interaction with them are innovated, control panel manufacturing becomes simpler and takes a leap forward. We will continue to achieve a control panel evolution and process innovation through many undertakings starting with the shared Value Design for Panel *1 concept for the specifications of products used in control panels.

Process
Innovating the panel building process

Panels
An evolution for control panels

New value for control panels

| Conceptual design | Detailed design | Assembly/Wiring | Shipment |

| Conceptual design | Detailed design | Assembly/Wiring | Shipment |

People
Simple and easy for Panel Building

Value Design for Panel

*1 Value Design for Panel
Our shared Value Design for Panel (herein after referred to as Value Design) concept for the specifications of products used within control panels will create new value for our control panel customers. Combining multiple products that share the Value Design concept will further increase the value provided.

Less wiring and work with the new relay series with push-in plus technology

I/O Relay
Terminal
G70V

Slim I/O Relays
G2RV-SR/G3RV-SR
(Models with Relays or SSRs)

Sockets for G2R-S Relays
P2RF-PU

Sockets for MY Relays
PYF-PU

Wiring in a single step

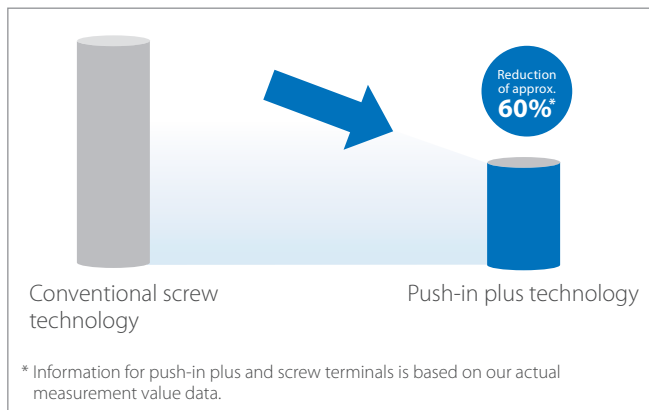Our new model with push-in plus technology enables easy insertion of ferrules or solid wires without using any tools.

We provide many accessories that make I/O products more convenient.

Push-in plus technology for easy wiring

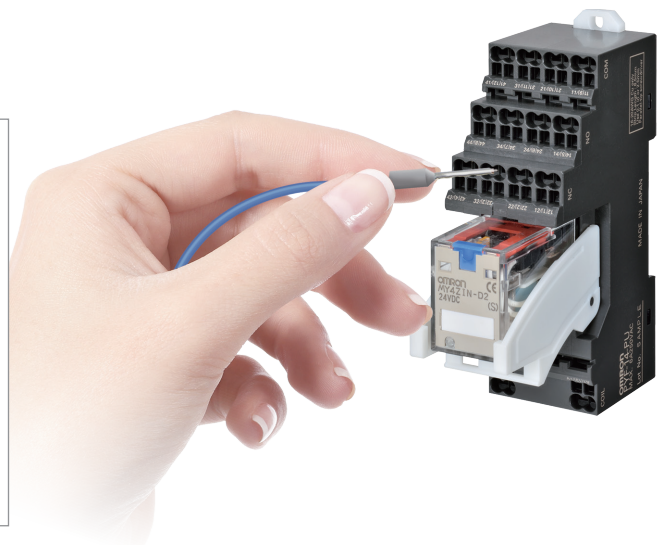### Fast wiring via push-in plus technology

Just insert the wires – no tools required. Do all your wiring in less than half the time needed with screw type terminals.

Greatly reduce wiring with push-in plus technology.

Reduction of approx. **60%***

Conventional screw technology

Push-in plus technology

* Information for push-in plus and screw terminals is based on our actual measurement value data.

Screwdriver held in place to free both of your hands

Optimized shape to hold the screwdriver was created by the resin parts and the spring. Work goes smoothly when connecting stranded wires directly to the terminal because it's easier to aim at the desired terminal.

Easy to insert

Our push-in plus technology is as easy as inserting to an earphone jack – reducing your work load while improving wiring quality at the same time.

Held firmly in place

Even though less insertion force is required than other relays series with push-in technology, the wires are held firmly in place – thanks to the advanced mechanism design and manufacturing technology.
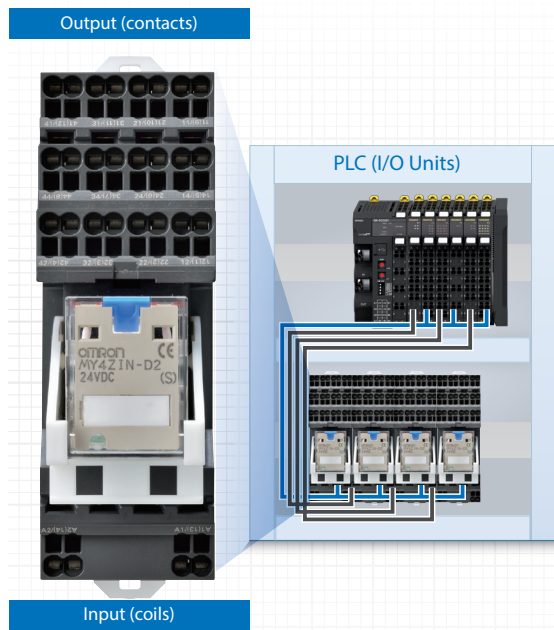
No retightening required

Retightening screws is often necessary for screw terminals, but with push-in plus, there is no (re) tightening.
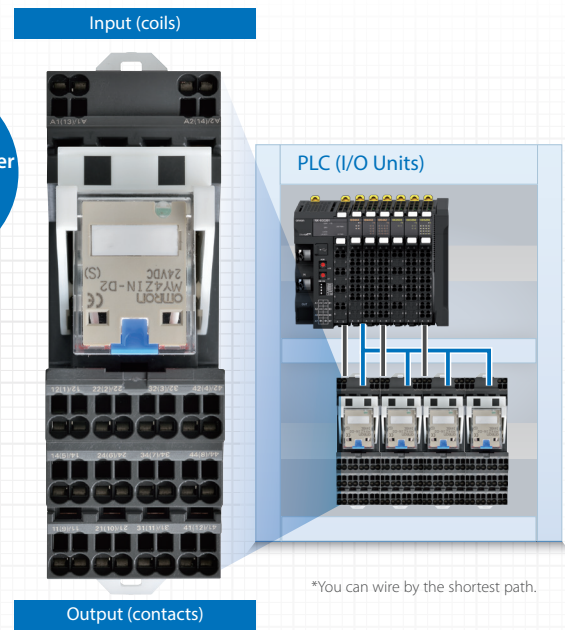
There are no installation direction restrictions, which enables flexible, efficient wiring inside panels.

Specified installation direction (previous Industry standard)

No installation direction restrictions

Output (contacts)

Input (coils)

PLC (I/O Units)

Installation is possible with either top or bottom facing up.

PLC (I/O Units)

Input (coils)

Output (contacts)

*You can wire by the shortest path.

The ability to be installed with either top or bottom facing up simplifies designing and reduces wiring. A unified height of 90 mm enables sharing short bars, reduces work in managing stocks, and reduces design work.

And the fixture rails can be pulled out to mount the Relays with screws.
(Applicable models: PYF-PU and P2RF-PU)

Standard feature release levers

All Relays in the Relays series with push-in plus technology come with release levers as standard for easy Relay locking and releasing.
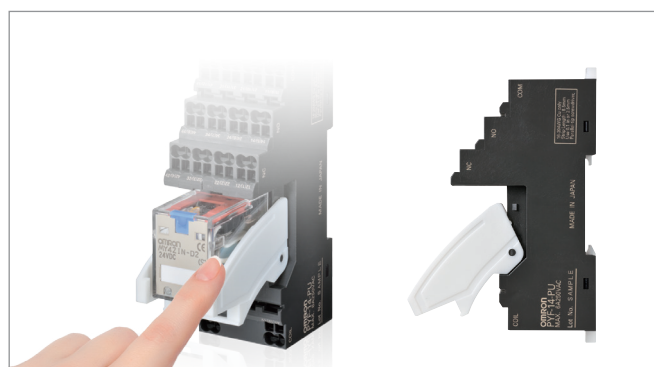
Certified for main safety standards

Globally applicable design for reliable use in most countries around the world.

Relay series with push-in plus technology

G2RV-SR

Compact design and unique structure help reduce work, from designing to maintenance.

G2RV Relays, which were optimally designed for in-panel applications, can be used to downsize panels by 25% over our previous Relays.

Comparison with previous Omron Relay

25%

Smaller in size

PAT. Stopper for preventing incorrect operation

Protective cover ••••••••

Latching lever
Reduces circuit checking, operation confirmation, and inspection work.

80 mm

90 mm

Transparent case
Easy confirmation of Relay contact state

Release lever
Easy Relay locking and releasing

Mechanical indicator
Linked to contacts to enable operation confirmation.

Plug-in terminals
Provide reliability because the terminals don't bend during replacement work.

With latching lever | Basic model

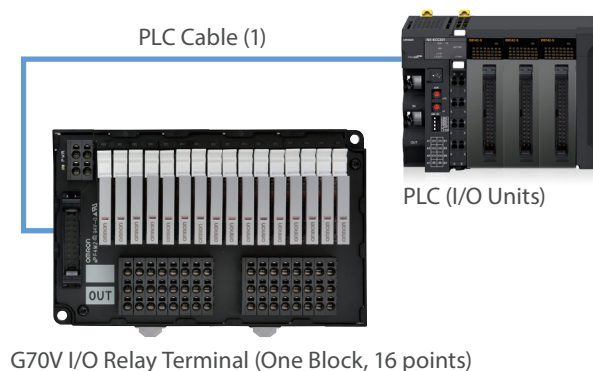## G2RV-SR/G3RV-SR, G70V - PLC cables reduce wiring even further.

Using a PLC interface with G2RV-SR/ G3RV-SR slim I/O relays

You can connect 8 I/O points directly with just one PLC cable to effectively reduce wiring work.
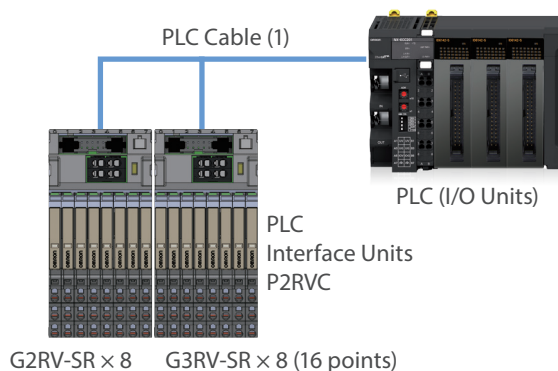
Using a G70V I/O Relay Terminal

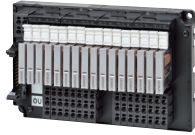You can connect 16 I/O points with just one PLC cable to reduce wiring work.

PLC Cable (1)

PLC (I/O Units)

PLC Interface Units P2RVC

G2RV-SR × 8   G3RV-SR × 8 (16 points)

PLC Cable (1)

PLC (I/O Units)

G70V I/O Relay Terminal (One Block, 16 points)

Product Lineup

Sockets for Relays
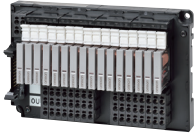
	MY Series		G2R-S Series	
Model	PYF-08-PU	PYF-14-PU	P2RF-05-PU	P2RF-08-PU
No. of poles	2 poles	4 poles	1 pole	2 poles
Appearance	Panel	Panel	Panel	Panel

Slim I/O Relays

	Basic model	With latching lever	For microloads (gold-plated contacts)	Solid State Relays (SSRs)
Model	G2RV-SR500*	G2RV-SR501*	G2RV-SR500-AP*	G3RV-SR500*
AC load	6 A at 250 VAC	6 A at 250 VAC	50 mA at 30 VAC	2 A at 100 to 250 VAC
DC load	6 A at 30 VDC	6 A at 30 VDC	50 mA at 36 VDC	3 A at 5 to 24 VDC
Appearance	Panel	Panel	Panel	Panel

*Relays are also available with screw terminals.

Slim I/O Relays

	For inputs		For outputs	
Model	G70V-SID16P-1	G70V-SID16P	G70V-SOC16P-1	G70V-SOC16P
Transistor output	PNP	NPN	PNP	NPN
Appearance	Panel	Panel	Panel	Panel

Replacement parts and accessories available for different applications

Accessories that make I/O products more convenient

	Short Bars	Separator Plate	PLC Interface Units / PLC Cables	Cables for I/O Relay Terminal
Model	PYDN-□-□	XW5Z-EP12	P2RVC / P2RV	XW2Z
Application	Reducing wiring and device connections	Insulation	Reducing wiring	Reducing wiring
Applicable models	PYF-PU P2RF-PU G2RV-SR G3RV-SR	G2RV-SR G3RV-SR	G2RV-SR G3RV-SR	G70V

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Would you like to know more?

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