OMRON

Push-In Plus Terminal Block Relay Series

PYF-PU (Sockets for MY-GS-R relays)
P2RFZ-PU (Sockets for G2R-S Relays)
G2RV-ST/G3RV-ST (Slim I/O Relays)
G70V (I/O Relay Terminals)

- Push-In Plus terminal blocks for easy wiring
- Installation with either top or bottom facing up for more flexible in-panel wiring
- A compact design and unique structure help reduce work from designing to maintenance

New Value for Control Panels

Control Panels: The Heart of Manufacturing Sites

Recent evolution in control panel design and manufacturing are benefiting panel builders as well as end users and machine builders, resulting in an evolution within production facilities that reduces total cost of ownership. With the goal of making panel manufacturing simpler and more efficient, we have developed new techniques and technologies for panel design, panel manufacturing and wiring. Our Value Design for Panel concept guides the development of control panel products that reduce time and labor costs, power consumption, and control cabinet size.

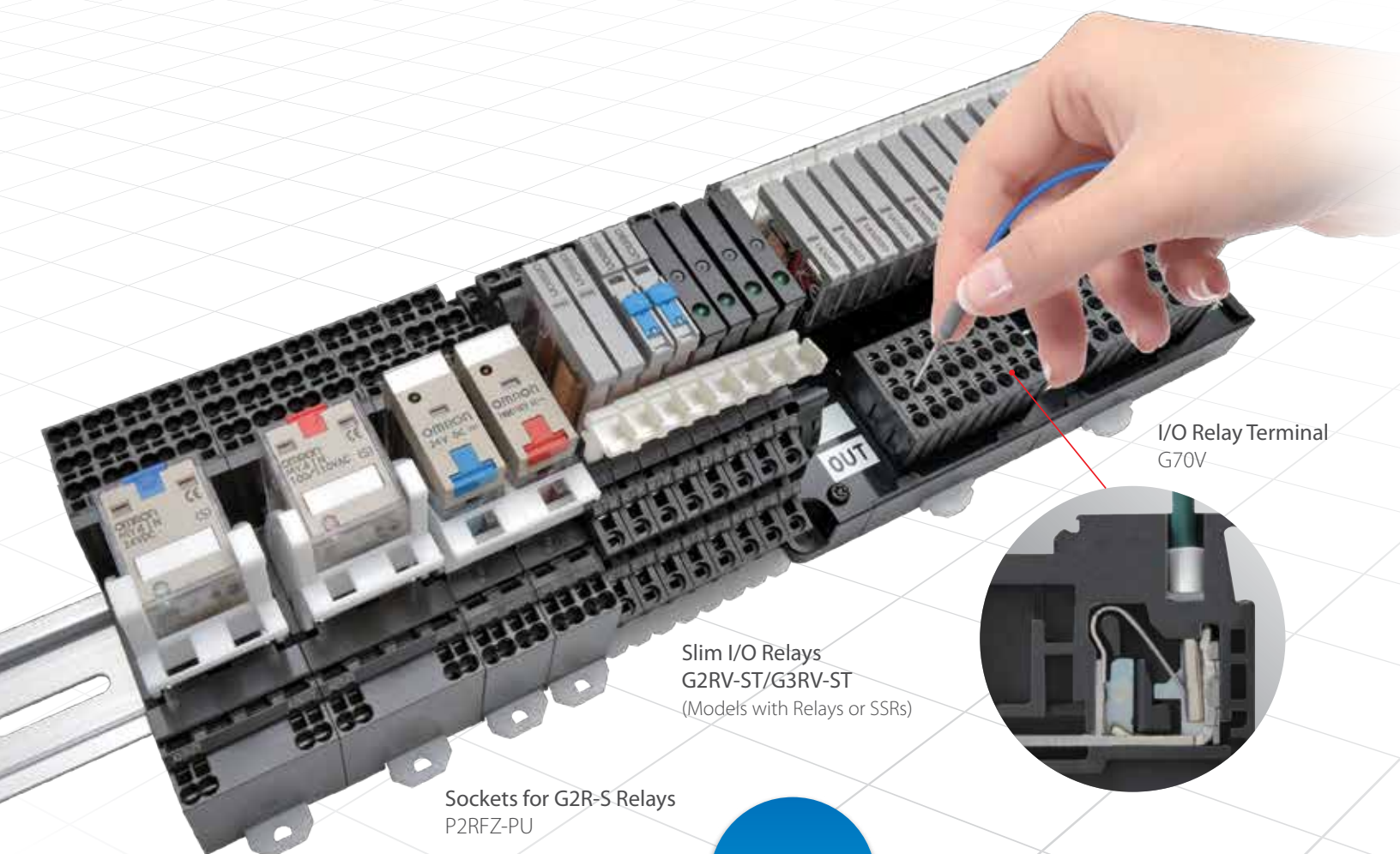### Value Design for Panel Concept Advantages

Specifications for Value Design products focus on uniform mounting height and depth, reduced overall volume and side-by-side mounting to make room for more components. Wiring capabilities without tools using front access Push-In Plus wiring terminals decreases installation time.

A panel built around Value Design Concept products provides competitive advantages for panel builders, machine builders and end users. Combining multiple products that share the Value Design Concept increases the value to all stakeholders involved with control panel design and use.

Process

Innovation for panel building

Further Evolution for

Panels

New Value For Control Panels

Simple & Easy for

People

Process

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

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

Panels

People

A New Standard for Reducing Work in Control Panels

Less wiring and less work by combining a wide range of relay models with the new easy-to-use Push-In Plus terminal block relay series.

I/O Relay Terminal
G70V

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

Sockets for G2R-S Relays
P2RFZ-PU

Sockets for MY-GS-R
PYF-PU

Wiring in a Single Step Push-In Plus terminal blocks enable easy insertion of ferrules without any tools.
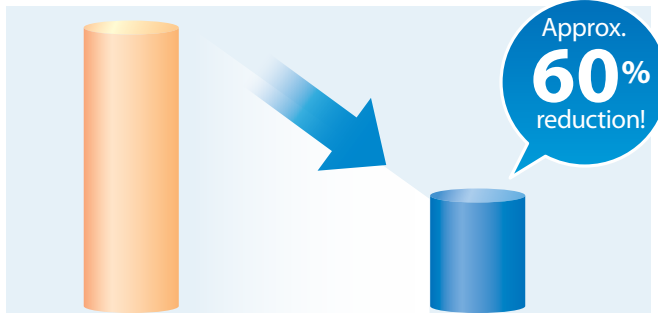
OMRON provides many accessories that make I/O products more convenient.

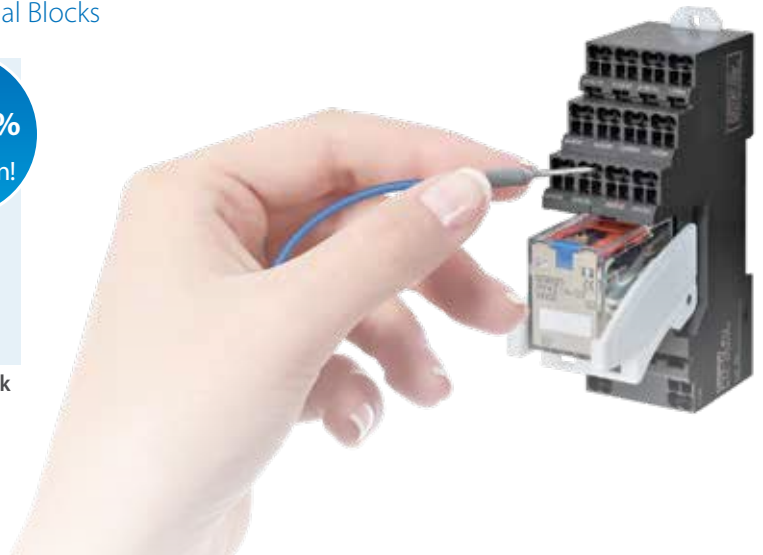# Push-In Plus Terminal Blocks for Easy Wiring

Just Insert Wires: No Tools Required
Now you can use Push-In Plus terminal blocks to reduce the time and work involved in wiring.

Greatly Reduce Wiring Work with Push-In Plus Terminal Blocks

Approx.
60%
reduction!

Conventional screw terminal blocks   OMRON Push-In Plus terminal block
*Based on actual measurement data.

Screwdriver Held in Place to Free Both Your Hands

Optimized to hold a screwdriver while connecting stranded wires directly to the terminal.

Easy to Insert

OMRON's Push-In Plus terminal blocks are easy to insert. They help reduce wiring time and improve quality.

Same Strength as Screw Terminals

The advanced Push-In Plus terminal design and manufacturing technology produce a spring that provides better workability and reliability.
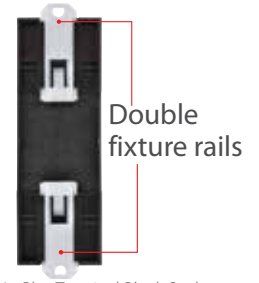Wires are held firmly in place with the same strength as screw terminal blocks.

No Retightening Required

Unlike screw terminal blocks, Push-In Plus terminals, require no retightening for inspections, shipping, or maintenance.

PYF-PU, P2RFZ-PU, G2RV-ST/G3RV-ST

Installation with Either End Up
for More Flexible In-panel Design

Double fixture rails

Back of Push-In Plus Terminal Block Socket

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)

PLC (I/O Units)

Installation is possible with either top or bottom facing up.

Input (coils)

Input (coils)

PLC (I/O Units)

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.

Fixture rails can be pulled out for screw mounting. (Applicable models: PYF-PU and P2RFZ-PU)
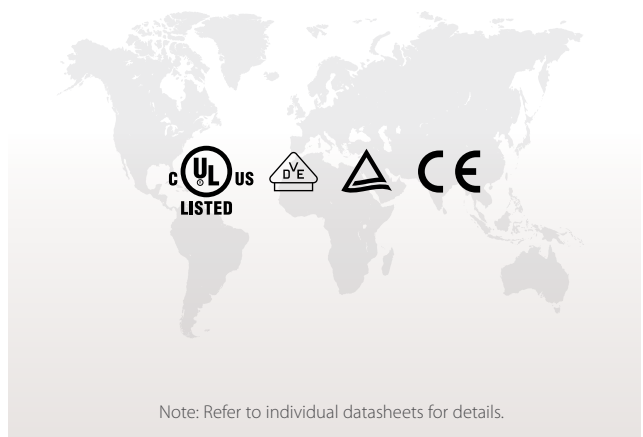
Standard-feature Release Levers

All Relays in the Push-In Plus Terminal Block Relay Series come with release levers as standard for easy Relay locking and releasing.

Certified for Global Safety Standards

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

c UL us LISTED   DVE   CE

Note: Refer to individual datasheets for details.

G2RV-SR

Compact Design and Unique Structure Help Reduce Work from Design to Maintenance

G2RV Relays were optimized for in-panel applications and can reduce panel size by 25%.

Previous OMRON Relay

Comparison with previous OMRON Relay
25%
Smaller in size

Protective cover

PAT. Stopper for preventing incorrect operation

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

Mechanical indicator
Linked to contacts to enable operation confirmation.

80 mm

90 mm

Transparent case
Easy confirmation of Relay contact state

Release lever
Easy Relay locking and releasing

Plug-in terminals
Provide reliability because the terminals do not bend during replacement work.
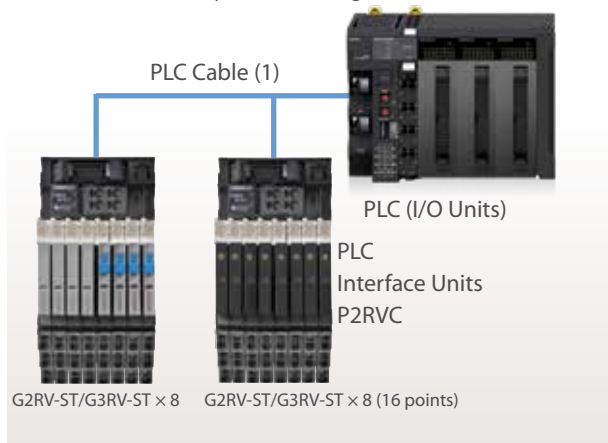
With latching lever   Basic model

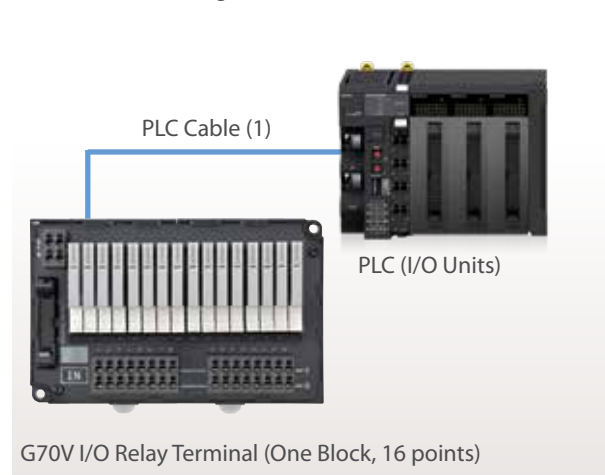## G2RV-ST/G3RV-ST/G3RV-SR, G70V

Reduce Wiring with PLC Cables

Using a PLC Interface Unit with G2RV-ST/G3RV-ST Slim I/O Relays
You can connect 8 I/O points directly with just one PLC cable to effectively reduce wiring work.

PLC Cable (1)

PLC (I/O Units)

PLC Interface Units P2RVC

G2RV-ST/G3RV-ST × 8   G2RV-ST/G3RV-ST × 8 (16 points)

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)

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

Product Lineup

MY-GS-R series

	MY-GS-R		G2R-S Series	
Model	PYF-08-PU	PYF-14-PU	P2RFZ-05-PU	P2RFZ-08-PU
No. of poles	2 poles	4 poles	1 pole	2 poles
Appearance				

Slim I/O Relays

	Basic model	With latching lever	For microloads (gold-plated contacts)	Solid State Relays (SSRs)
Model	G2RV-ST500[1]	G2RV-ST501[1]	G2RV-ST500-AP[1]	G3RV-ST500[1]
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				

1: Relays are also available with screw terminals.

I/O Relay Terminals

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

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-9-9	XW5Z-EP12	P2RVC / P2RV	XW2Z
Transistor output	Reducing wiring and device connections	Insulation	Reducing wiring	Reducing wiring
Applicable models	PYF-PU P2RFZ-PU G2RV-ST G3RV-ST	G2RV-ST G3RV-ST	G2RV-ST G3RV-ST	G70V

Create New Value in Control Panels

Value Design for Panel

Switch Mode Power Supplies
S8VK-S

Uninterruptible Power Supply (UPS)
S8BA

Power Monitor
KM-N2

Digital Temperature Controllers
E5CC-B/E5EC-B

Measuring and Monitoring Relays
K8DT

Solid-state Timers
H3DT

Solid-state Timers
H3Y-9-B/H3YN-B

Solid-state Timers
H3RN-9B

Liquid Leakage Sensor Amplifiers
K7L-99B

Sockets MY Series
H3Y-9-B and H3YN-B
PYF-PU-9

Sockets for G2R-S
H3RN-9-B and K7L-99B
P2RF-PU

Slim I/O Relays
G2RV-SR

Slim I/O Relays
G3RV-ST

I/O Relay Terminals
G70V

Solid State Relays for Heaters
G3PJ

DIN Track Terminal Block
XW5T

Refer to datasheets for additional details.

OMRON AUTOMATION AMERICAS HEADQUARTERS • Chicago, IL USA • 847.843.7900 • 800.556.6766 • automation.omron.com

OMRON CANADA, INC. • HEAD OFFICE
Toronto, ON, Canada • 416.286.6465 • 866.986.6766 • automation.omron.com

OMRON ELECTRONICS DE MEXICO • HEAD OFFICE
Ciudad de México • 52.55.5901.4300 • 01.800.386.6766 • mela@omron.com

OMRON ELECTRONICS DE MEXICO • SALES OFFICE
San Pedro Garza García, N.L. • 81.12.53.7392 • 01.800.386.6766 • mela@omron.com

OMRON ELECTRONICS DE MEXICO • SALES OFFICE
Eugenio Garza Sada,León, Gto • 01.800.386.6766 • mela@omron.com

OMRON ELETRÔNICA DO BRASIL LTDA • HEAD OFFICE
São Paulo, SP, Brasil • 55 11 5171-8920 • automation.omron.com

OMRON ARGENTINA • SALES OFFICE
Buenos Aires, Argentina • +54.11.4521.8630 • +54.11.4523.8483
mela@omron.com

OTHER OMRON LATIN AMERICA SALES
+54.11.4521.8630 • +54.11.4523.8483 • mela@omron.com