

Solid State Relays for Heaters

G3PJ

Providing Strong,
Slim Alternatives for Control Panels

- Top-class slim design
- Better temperature characteristics and reinforced insulation for safety standard compliance
- Push-In Plus terminal blocks for easy wiring

Providing Strong, Slim Alternatives for Control Panels

Easier Designing and Wiring While Maintaining the Previous 22.5-mm Width to Help Save Space

Close Mounting Even with this Top-class Slim Design

Size reductions in Solid State Relays mean you can downsize control panels and cooling equipment. And close mounting helps you save even more space.

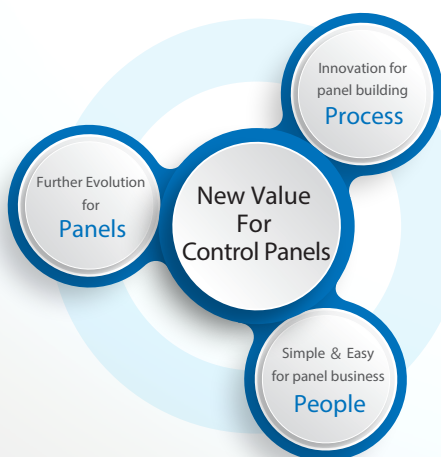
*Mounted either to DIN Tracks or with screws.

Slimmer by
up to
50%

Carrying current
of 25 A at ambient
temperature of 40°C
(with close mounting of three SSRs)
* Compared with previous OMRON models



Note: A reduction of approx. 50% is achieved when comparing a system of three closely mounted OMRON G3PJ units and a system of three closely mounted conventional OMRON G3PE-245B (or G3PE-545B) units, with both systems carrying a current of 25 A at an ambient temperature of 40°C.



New Value For Control Panels



Our shared Value Design for Panel (herein after referred to as "Value Design") concept for the specifications of products used in control panels will create new value to our customer's control panels. Combining multiple products that share the Value Design concept will further increase the value provided to control panels.

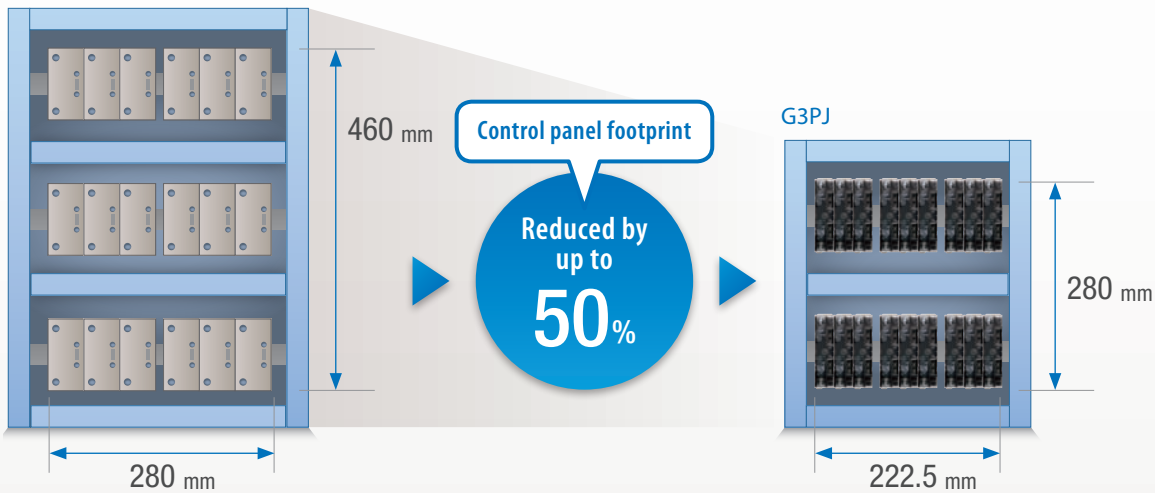
Control Panels: The Heart of Manufacturing Sites.

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. OMRON will continue to achieve a control panel evolution and process innovation through many undertakings starting with the shared Value Design for Panel concept for the specifications of products used in control panels.

Control Panels That Use Many SSRs Can Be Greatly Downsized

Previous OMRON SSRs



Example: Installation of 18 SSRs constituted for three-phase heaters (6 channels)

Note: A reduction of approx. 50% is achieved when comparing a system of three closely mounted OMRON G3PJ units and a system of three closely mounted conventional OMRON G3PE-245B (or G3PE-545B) units, with both systems carrying a current of 25 A at an ambient temperature of 40°C.

Better Temperature Characteristics and Reinforced Insulation for Safety Standard Compliance

UL-listed components, so you can reduce the time required for the UL application process.

- Using new components or upgraded components is easy.
- You can procure the components even when an urgent need arises for adjustments or problem-solving.



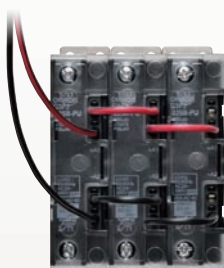
Push-In Plus Terminal Blocks for Easy Wiring

Just Insert Wires: No Tools Required

Now you can use Push-In Plus terminals to reduce the time and work involved in wiring.

Double Wiring

Easy crossover wiring for three-phase heaters.

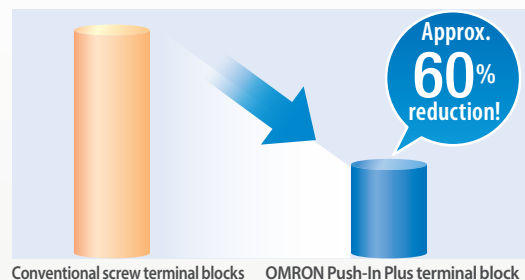


Push-In Plus Terminal Block

Less work required for wiring.


*SSRs are also available with screw terminals for inputs.

*Only input terminals use Push-In Plus terminal blocks.



*Information for Push-In Plus and screw terminal blocks is based on OMRON's actual measurement value data.

Product Lineup

Model	Input voltage	Rated load voltage	Rated load current (ambient temperature of 40°C)		Surge current resistivity (I ² t)	SCCR(UL 508)	Dielectric strength	Input terminal form*	
			Close mounting (three SSRs)	Separate mounting					
 G3PJ-215B-PU	12 to 24 VDC	24 to 240 VAC	15 A	18 A	260A ² s	5 kA	2.5 kV	Push-In Plus terminal block	
G3PJ-225B-PU			25 A	27 A	1,260A ² s				
G3PJ-515B-PU		100 to 480 VAC	15 A	23 A	1,350A ² s	10 kA	4.0 kV		
G3PJ-525B-PU			25 A	27 A	6,600A ² s				
G3PJ-215B		24 to 240 VAC	24 to 240 VAC	15 A	18 A	260A ² s	5 kA	2.5 kV	Screw terminals
G3PJ-225B				25 A	27 A	1,260A ² s			
G3PJ-515B		100 to 480 VAC	100 to 480 VAC	15 A	23 A	1,350A ² s	10 kA	4.0 kV	
G3PJ-525B				25 A	27 A	6,600A ² s			

*M4 screws are used for the output terminals.

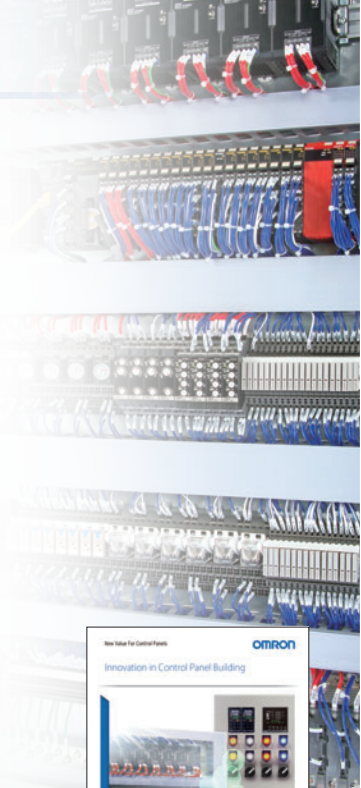
Refer to the G3PJ Solid State Relays for Heaters Datasheet (Cat. No. J210) for details.

Products That Create New Value in Control Panels

Value Design
for
Panel



Switch Mode Power Supplies
S8VK-S



Uninterruptible Power Supply (UPS)
S8BA



Power Monitors
KM-N2/KM-N3



Measuring and Monitoring Relays
K8DT



Solid-state Timers
H3DT



Solid-state Timers
H3Y(N)-B



Solid-state Timers
H3RN-B



Liquid Leakage Sensor Amplifiers
K7L-B



Sockets for Relays with Forcibly Guided Contacts
(for G7SA)
P7SA-PU



Common Sockets
(for MY/H3Y(N)-B)
PYF-PU(-L)




Common Sockets
(for G2R-S/H3RN-B/K7L-B)
P2RF-PU



Slim I/O Relays
G2RV-SR



Slim I/O Relays
G3RV-SR



I/O Relay Terminals
G70V



Pushbutton Switches Push-In Plus Terminal Block Series
A22N-P/A30N-P/M22N-P



Solid State Relays for Heaters
G3PJ



DIN Track Terminal Block
XW5T



Digital Temperature Controllers
E5CC-B/E5EC-B

Panel Assist Web

www.ia.omron.com/solution/panel/





Innovation in Control Panel Building
Cat. No. Y218

Before you place an order, please read and understand "Agreement for Using the Product" available on Omron's latest "Best control devices Omron", "General Brochure" or Omron's website.

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