Slim I/O Relay/Slim I/O Solid State Relay

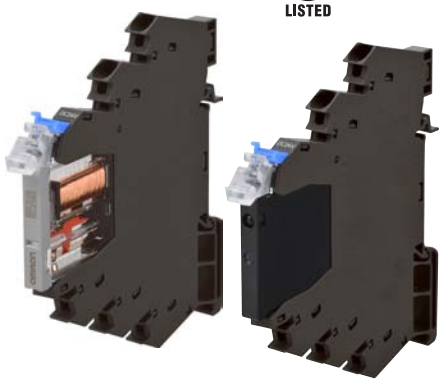
# G2RV-ST/G3RV-ST



## Slim I/O relay realizes space saving thanks to high-density mounting and ultra-slim body

- 60% space saving from G2R series with 6.2 mm width.
- 60%* reduction in wiring time and user-friendly with a low insertion force thanks to Push-In Plus Technology.
- Larger hole and angled structure contribute to efficient wiring and standardization of wires up to AWG14, 2.5 $mm^2$.
- Easy maintenance with improved LED visibility and color stopper voltage line identification.
- Low cutting force of short bars contribute to reducing health issues such as Tenosynovitis.

✻According to OMRON actual measurement data for both push-in plus terminal blocks and screw terminal blocks.



For the recent information on models that have been certified for safety standards, refer to your OMRON website.

⚠ Refer to *Safety Precautions* on page 22.

## Slim I/O Relay Types



## Common matter



## Common features of G2RV-ST/G3RV-ST

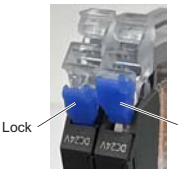
### Wiring standardization is also supported by 2.5 $mm^2$ compatibility

DC common wiring also provides support for 2.5 $mm^2$ dia./AWG14 (2.0 $mm^2$) needs

### Wiring work efficiency improvement

Easy to see and easy insertion thanks to large-diameter wiring holes and tilted structure.

### Maintainability is enhanced by color stoppers




Both easy replacement and detachment prevention of relays are achieved by locking and unlocking of stopper.

Designed so that wires are hard come out even if release levers are touched unintentionally.

Coil voltage line identification
Red: AC
Blue: DC
White: Multi (e.g. 24 VAC/VDC)

### Work judgment support is provided through mounting feeling enhancement.

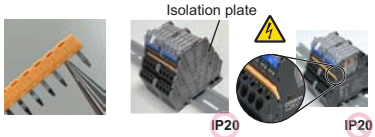
Work efficiency is enhanced by DIN rail sliding performance and short bar improvements.

DIN rail tolerance is also supported through elasticity.

Insertion feeling to let you know when mounting is complete.

### Easy and safe

Short bar cutting force has been decreased to reduce the burden during assembly. Electrification of the short bar fracture plane is prevented by an isolation plate.




Note. Cutting force of 25 kg, so easily cut by needle-nose pliers

### Visibility is enhanced by release lever LED

Visibility from the front is improved by a structure where the actual release lever lights and by expanding the light emission area.

Note. The third relay from the right is equipped with a label.

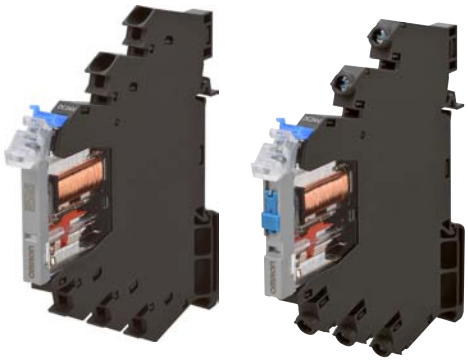
Slim I/O Relay

# G2RV-ST

## Slim I/O relay realizes space saving thanks to high-density mounting and ultra-slim body

- 60% space saving from G2R series with 6.2 mm width technology.
- 60%*1 reduction in wiring time and user-friendly with a low insertion force thanks to Push-In Plus Technology.
- Max. 6 A realized even with close-contact mounting.
- Au-plated contacts suitable for micro loads with a failure rate P value*2 of 1 mA at 100 mVDC.
- A transparent case that allows for easy on-site visual checks of contact state abnormalities.
- Easy relay replacement with a terminal structure that does not bend easily.
- Operation check using a test switch reduces inspection time.
- A coil surge absorption circuit equipped as standard.

*1. According to OMRON actual measurement data for both push-in plus terminal blocks and screw terminal blocks.
*2. Reference value



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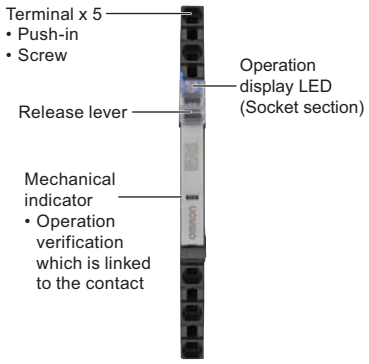
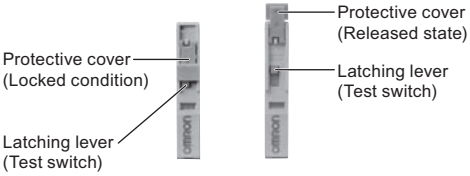
Refer to *Safety Precautions* on page 22.

## Features

### Standard model/Micro load

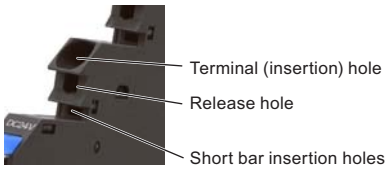


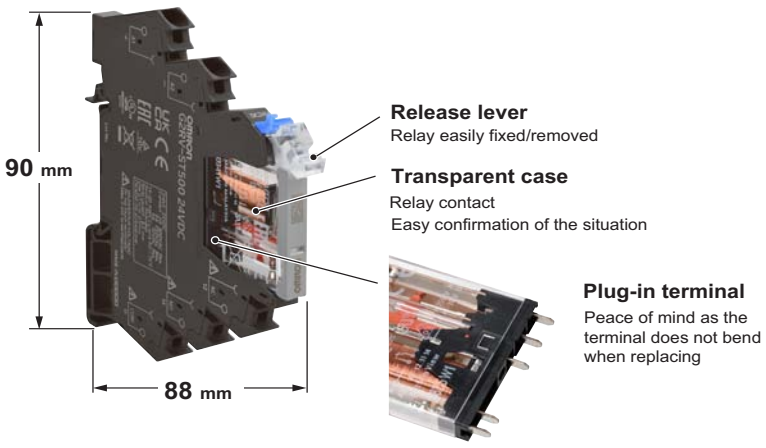

### With latching lever (Test switch)




• Circuit check operation Confirmation, reducing the inspection effort

### Push-In Plus technology




**Release lever**
Relay easily fixed/removed

**Transparent case**
Relay contact
Easy confirmation of the situation



**Plug-in terminal**
Peace of mind as the terminal does not bend when replacing

# Model Number Structure

## Model Number Legend

**G2RV-ST** □□ □ - □ □
(1) (2) (3) (4) (5) (6)

**(1) Basic model name**
G2RV: Slim I/O Relay

**(2) Sub type**
ST: Slim relay + integrated low profile socket

**(3) Terminal (wire connection)**
50: Push-In Plus Terminal
70: Screw terminal

**(4) Latching lever (test switch)**
0: Without latching lever
1: With latching lever

**(5) Contact structure**
Blank: Standard
AP: Microloads

**(6) Rated input voltage**
12, 24 VDC
24, 48 VAC/VDC
100, 110, 200, 230 VAC

# Ordering Information

| Terminal (Wire connection) | Classification | Latching lever (Test switch) | Rated input voltage (V) | | Model |
|---|---|---|---|---|---|
| Push-In Plus Terminal | Standard | No | DC | 12 | **G2RV-ST500 12 VDC** |
| | | | | 24 | **G2RV-ST500 24 VDC** |
| | | | AC/DC | 24 | **G2RV-ST500 24 VAC/VDC** |
| | | | | 48 | **G2RV-ST500 48 VAC/VDC** |
| | | | AC | 100 | **G2RV-ST500 100 VAC** |
| | | | | 110 | **G2RV-ST500 110 VAC** |
| | | | | 200 | **G2RV-ST500 200 VAC** |
| | | | | 230 | **G2RV-ST500 230 VAC** |
| | | Yes | DC | 24 | **G2RV-ST501 24 VDC** |
| | | | AC/DC | 24 | **G2RV-ST501 24 VAC/VDC** |
| | Microloads | No | DC | 12 | **G2RV-ST500-AP 12 VDC** |
| | | | | 24 | **G2RV-ST500-AP 24 VDC** |
| | | | AC/DC | 24 | **G2RV-ST500-AP 24 VAC/VDC** |
| | | | | 48 | **G2RV-ST500-AP 48 VAC/VDC** |
| | | | AC | 100 | **G2RV-ST500-AP 100 VAC** |
| | | | | 110 | **G2RV-ST500-AP 110 VAC** |
| | | | | 200 | **G2RV-ST500-AP 200 VAC** |
| | | | | 230 | **G2RV-ST500-AP 230 VAC** |
| Screw terminal | Standard | No | DC | 12 | **G2RV-ST700 12 VDC** |
| | | | | 24 | **G2RV-ST700 24 VDC** |
| | | | AC/DC | 24 | **G2RV-ST700 24 VAC/VDC** |
| | | | | 48 | **G2RV-ST700 48 VAC/VDC** |
| | | | AC | 100 | **G2RV-ST700 100 VAC** |
| | | | | 110 | **G2RV-ST700 110 VAC** |
| | | | | 200 | **G2RV-ST700 200 VAC** |
| | | | | 230 | **G2RV-ST700 230 VAC** |
| | | Yes | DC | 24 | **G2RV-ST701 24 VDC** |
| | | | AC/DC | 24 | **G2RV-ST701 24 VAC/VDC** |
| | Microloads | No | DC | 12 | **G2RV-ST700-AP 12 VDC** |
| | | | | 24 | **G2RV-ST700-AP 24 VDC** |
| | | | AC/DC | 24 | **G2RV-ST700-AP 24 VAC/VDC** |
| | | | | 48 | **G2RV-ST700-AP 48 VAC/VDC** |
| | | | AC | 100 | **G2RV-ST700-AP 100 VAC** |
| | | | | 110 | **G2RV-ST700-AP 110 VAC** |
| | | | | 200 | **G2RV-ST700-AP 200 VAC** |
| | | | | 230 | **G2RV-ST700-AP 230 VAC** |

**Note:** Sockets are not sold individually.