

High-power Solid State Relays

G3PH

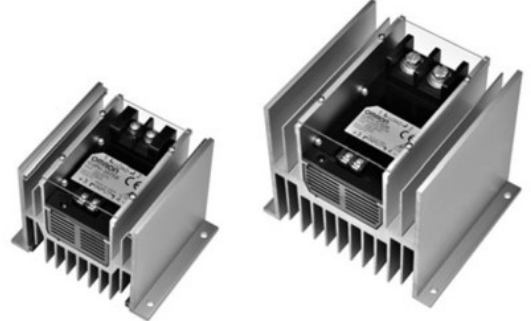
High-power, Load-control SSRs with High Current of 75 or 150 A and High Voltage of 240 or 480 VAC



- RoHS compliant.
- Models also available with no zero cross.
- Replaceable power elements.
- Conforms to cULus standards and EN standards (TÜV certification).



Refer to *Safety Precautions for All Solid State Relays*.



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

Ordering Information

Solid State Relays

| Insulation method | Operation indicator | Zero cross function | Applicable output load* | Rated input voltage | Model |
|-------------------|----------------------|-----------------------|---------------------------|---------------------|-----------------------------|
| Photocoupler | Yes (yellow) | Yes | 75 A, 100 to 240 VAC | 5 to 24 VDC | G3PH-2075B DC5-24 |
| | | | | 100 to 240 VAC | G3PH-2075B AC100-240 |
| | | | 150 A, 100 to 240 VAC | 5 to 24 VDC | G3PH-2150B DC5-24 |
| | | | | 100 to 240 VAC | G3PH-2150B AC100-240 |
| | | No | 75 A, 100 to 240 VAC | 5 to 24 VDC | G3PH-2075BL DC5-24 |
| | | | | 100 to 240 VDC | G3PH-2150BL DC5-24 |
| | | | 150 A, 100 to 240 VAC | 5 to 24 VDC | G3PH-5075B DC5-24 |
| | | | | 100 to 240 VDC | G3PH-5150B DC5-24 |
| | | Yes | 75 A, 180 to 480 VAC | 5 to 24 VDC | G3PH-5075B AC100-240 |
| | | | | 100 to 240 VAC | G3PH-5150B AC100-240 |
| | | | 150 A, 180 to 480 VAC | 5 to 24 VDC | G3PH-5075BL DC5-24 |
| | | | | 100 to 240 VAC | G3PH-5150BL DC5-24 |
| No | 75 A, 180 to 480 VAC | 5 to 24 VDC | G3PH-5075BL DC5-24 | | |
| | | 150 A, 180 to 480 VAC | G3PH-5150BL DC5-24 | | |

Note: The Thyristor Module is built in.

*The applicable output load depends on the ambient temperature. For details, refer to *Load Current vs. Ambient Temperature* in *Engineering Data* on page 2.

Options (Order Separately)

Thyristor Module

| Name | Applicable output load* | Applicable models | Model |
|------------------|-------------------------|-------------------|-------------------|
| Thyristor Module | 75 A, 75 to 264 VAC | G3PH-2075B(L) | G32A-P2075 |
| | 150 A, 75 to 264 VAC | G3PH-2150B(L) | G32A-P2150 |
| | 75 A, 150 to 528 VAC | G3PH-5075B(L) | G32A-P5075 |
| | 150 A, 150 to 528 VAC | G3PH-5150B(L) | G32A-P5150 |

*The applicable output load depends on the ambient temperature. For details, refer to *Load Current vs. Ambient Temperature* in *Engineering Data* on page 2.

Specifications

Ratings

Input (at an Ambient Temperature of 25°C)

| Rated voltage | Operating voltage | Impedance (input current) | Voltage level | |
|----------------|-------------------|---------------------------|----------------------|----------------------|
| | | | Must operate voltage | Must release voltage |
| 5 to 24 VDC | 4 to 30 VDC | (5 mA max.)* | 4 VDC max. | 1.0 VDC min. |
| 100 to 240 VAC | 75 to 264 VAC | 41 kΩ ±20% | 75 VAC max. | 20 VAC min. |

*A constant-current circuit is used for the input current to the G3PH.

Output

| Model | Item | Applicable load | | |
|---------------|------|--------------------|--------------------|----------------------|
| | | Rated load voltage | Load voltage range | Load current* |
| G3PH-2075B(L) | | 100 to 240 VAC | 75 to 264 VAC | 1 to 75 A (at 40°C) |
| G3PH-2150B(L) | | 100 to 240 VAC | 75 to 264 VAC | 1 to 150 A (at 40°C) |
| G3PH-5075B(L) | | 180 to 480 VAC | 150 to 528 VAC | 1 to 75 A (at 40°C) |
| G3PH-5150B(L) | | 180 to 480 VAC | 150 to 528 VAC | 1 to 150 A (at 40°C) |

*The load current depends on the ambient temperature. For details, refer to *Load Current vs. Ambient Temperature* in *Engineering Data* on page 2.