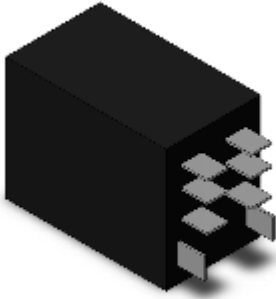


Solid State Relays G3□-VD

# G3H-203SN-VD DC5-24



Image

Solid State Relay, Photocoupler, Applied output load: 3 A at 100 to 240 VAC, Rated input voltage: 5 to 24 VDC, With Zero cross function, With Operating indicator, Plug-in terminal, Certified by UL, CSA, and EN (TÜV certification)

Product classification	Relay compatible
Zero cross function	Equipped
Operating indicator	Equipped
Rated voltage	5 to 24 VDC
Rated load voltage	100 to 240 VAC
Load current	0.1 to 3 A (at 40 °C)
Terminal structure	Plug-in terminal

Ratings / Performance

As of November 15, 2024

### Ratings

Product classification		Relay compatible
Isolation method		Photocoupler
Zero cross function		Equipped
Operating indicator		Equipped
Terminal structure		Plug-in terminal
Mounting		Socket
Input	Rated voltage	5 to 24 VDC
	Operating voltage range	4 to 28 VDC
	Input impedance	15 mA max. (Constant-current input circuit)
	Operate voltage	4 V max.DC
	Release voltage	1 V min.DC
Output	Rated load voltage	100 to 240 VAC
	Load voltage range	75 to 264 VAC
	Load current	0.1 to 3 A (at 40 °C)
	Inrush current resistivity	45 A (60 Hz 1 cycle)

### Performance

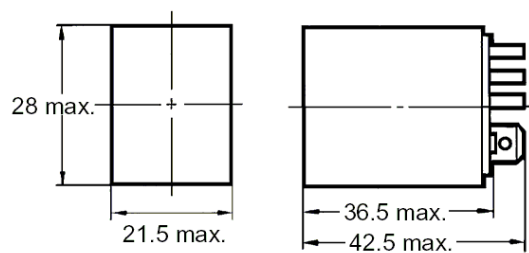
Operate time	1/2 cycle of load power source + 1 ms max.
Release time	1/2 cycle of load power source + 1 ms max.
Output ON voltage drop	1.6 V max. (RMS)
Leakage current	5 mA max. (at 100 VAC) 10 mA max. (at 200 VAC)
Insulation resistance	100 MΩ min. (at 500 VDC)
Dielectric strength	2000 VAC 50/60 Hz 1 min

<b>Vibration resistance</b>	10 to 55 to 10 Hz, 0.75 mm single amplitude (1.5 mm double amplitude)
<b>Shock resistance</b>	1000 m/s <sup>2</sup>
<b>Ambient temperature (Operating)</b>	-30 to 80 °C (with no freezing or condensation)
<b>Ambient temperature (Storage)</b>	-30 to 100 °C (with no freezing or condensation)
<b>Ambient humidity (Operating)</b>	45 to 85 %
<b>Weight</b>	Approx. 50 g
<b>Other feature</b>	Certified by UL, CSA, and EN (VDE)
<b>Connecting socket</b>	PT08/ PTF08A/ PT08-0/ PT08QN/ PTF-08-PU/ PTFZ-08-E

As of November 15, 2024

Outline drawing

As of November 15, 2024



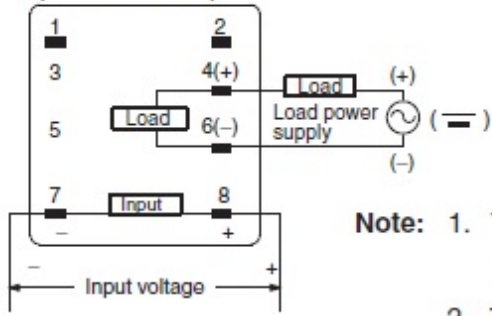
As of November 15, 2024

Connection diagram

As of November 15, 2024

Terminal arrangement and internal connection

**(Bottom View)**



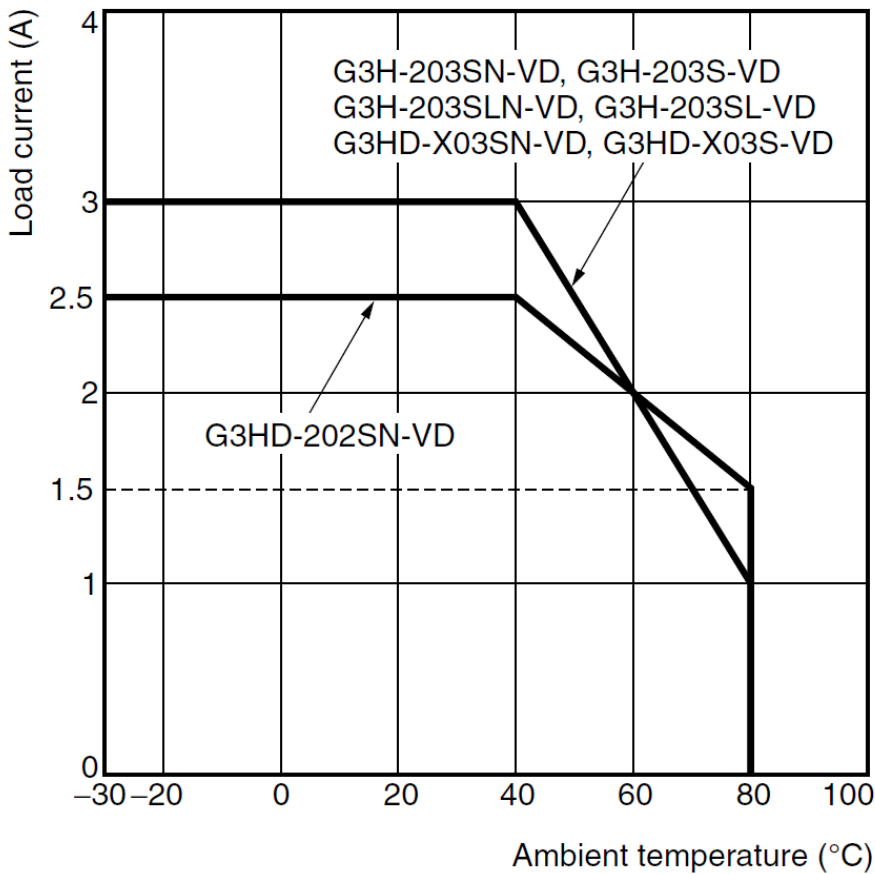
- Note:**
1. The plus and minus symbols shown in the parentheses are for DC loads.
  2. The coil has no polarity.
  3. The load is possible to connect either + side or - side.

As of November 15, 2024

**Characteristic chart**

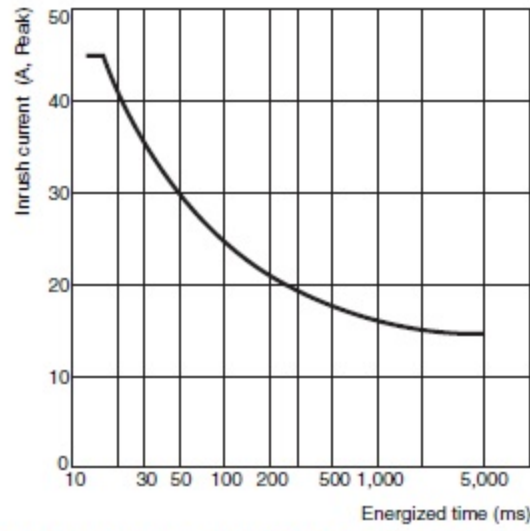
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Load current-ambient temperature



Inrush current resistivity (Non-repetitive)

**G3H-203SN-VD/203S-VD/203SLN-VD/  
G3H-203SL-VD**



Keep the inrush current to half the rated value if it occurs repetitively.

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