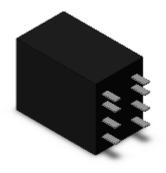




Solid State Relays G3 -VD

G3F-203SN-VD DC5-24



Solid State Relay, Photocoupler, Applied output load: 3 A at 100 to 240 VAC, Rated input voltage: 5 to 24 VDC, Zero cross function, with operating indicator

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

Image

Ratings / Performance

As of July 25, 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)
	inrush current resistivity	45 A (60 HZ 1 cycle)

Performance

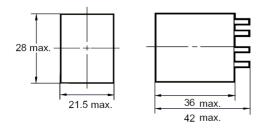
Operate time	ate time 1/2 cycle of load power source + 1 ms max.	
Release time	time 1/2 cycle of load power source + 1 ms max.	
Output ON voltage drop	1.6 V max. (RMS)	
Leakage current	5 mA max. (at 100 VAC) 10 mA max. (at 200 VAC)	
Insulation resistance	100 MΩ min. (at 500 VDC)	
Dielectric strength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

Vibration resistance	10 to 55 to 10 Hz, 0.75 mm single amplitude (1.5 mm double amplitude)
Shock resistance	1000 m/s ²
Ambient temperature (Operating)	-30 to 80 °C (with no freezing or condensation)
Ambient temperature (Storage)	-30 to 100 °C (with no freezing or condensation)
Ambient humidity (Operating)	45 to 85 %
Weight	Approx. 50 g
Other feature	Certified by UL, CSA, and EN (VDE)
Connecting socket	PYF-08-PU/ PY08-02/ PYFZ-08/ PYFZ-08-E
Weight Other feature	Approx. 50 g Certified by UL, CSA, and EN (VDE)

As of July 25, 2024

As of July 25, 2024

Outline drawing



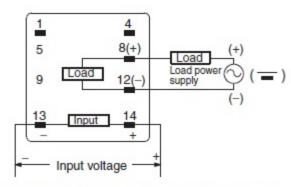
As of July 25, 2024

Connection diagra

As of July 25, 2024

Terminal arrangement and internal connection

Terminal Arrangement/ Internal Connections



Note: 1. The plus and minus symbols shown in parentheses are for DC loads.

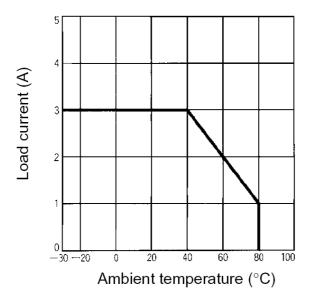
- With AC input, the input side has no polarity.
- The load is possible to connect either + side or - side.

As of July 25, 2024

Characteristic chart

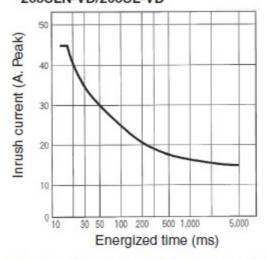
As of July 25, 2024

Load current-ambient temperature



Inrush current resistivity (Non-repetitive)

G3F-203SN-VD/203S-VD/202SN-VD/ 203SLN-VD/203SL-VD



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

As of July 25, 2024