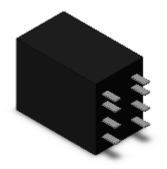




Solid State Relays G3 -VD

G3FD-X03SN-VD DC5-24



Solid State Relay, Photocoupler, Applied output load: 3 A at 4 to 48 VDC, Rated input voltage: 5 to 24 VDC, with operating indicator

Product classification	Relay compatible
Operating indicator	Equipped
Rated voltage	5 to 24 VDC
Rated load voltage	4 to 48 VDC
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
Operating indicator		Equipped
Terminal structure		Plug-in terminal
Mounting Socket		Socket
Input I	Rated voltage	5 to 24 VDC
	Operating voltage range	4 to 28 VDC
	Input impedance	1.5 kΩ+20% -10% Maximum operating range
	Operate voltage	4 V max.DC
	Release voltage	1 V min.DC
Output	Rated load voltage	4 to 48 VDC
	Load voltage range	3 to 52.8 VDC
	Load current	0.1 to 3 A (at 40 °C)
	Inrush current resistivity	18 A (10 ms)

Performance

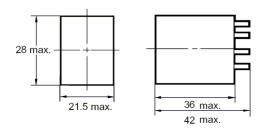
Operate time	0.5 ms max.
Release time	2 ms max.
Output ON voltage drop	1.5 V max.
Leakage current	5 mA max. (at 50 VDC)
Insulation resistance	100 MΩ min. (at 500 VDC)
Dielectric strength	1500 VAC 50/60 Hz 1 min
Vibration resistance	10 to 55 to 10 Hz, 0.75 mm single amplitude (1.5 mm double amplitude)
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	

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Outline drawing

As of July 25, 2024



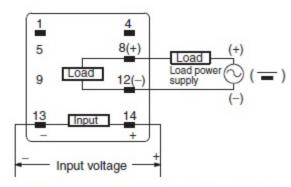
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Connection diagra

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Terminal arrangement and internal connection

Terminal Arrangement/ Internal Connections



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

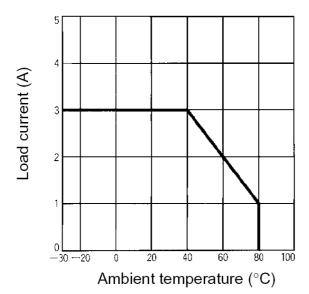
- With AC input, the input side has no polarity.
- The load is possible to connect either + side or - side.

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Characteristic chart

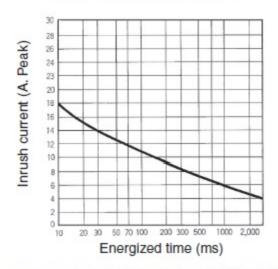
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Load current-ambient temperature



Inrush current resistivity (Non-repetitive)

G3FD-X03SN-VD/X03S-VD



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

As of July 25, 2024