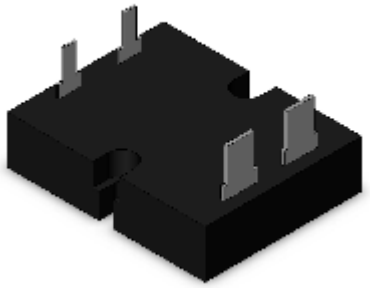
Solid State Relays

G3NE-210T-US DC12



Image

Solid State Relay, Phototriac, Applied output load: 10 A at 100 to 240 VAC, With Zero cross function, #110 input terminals, Certified by UL, CSA, and EN (TUV), Rated input voltage: 12 VDC

Product classification	For single-phase heater
Zero cross function	Equipped
Operating indicator	None
Rated voltage	12 VDC
Rated load voltage	100 to 240 VAC
Load current	0.1 to 10 A (With heat sink at 40 ℃) 0.1 to 5 A (Without a heat sink at 40 ℃)
Terminal structure	Tab terminal (Input: #110, Output: #250)

Ratings / Performance

As of July 25, 2024

Ratings

Product classification		For single-phase heater
Number of phases		Single-phase
Isolation method		Phototriac
Zero cross function		Equipped
Operating indicator		None
Terminal structure		Tab terminal (Input: #110, Output: #250)
Mounting		Screw mounting
Input	**Rated voltage**	12 VDC
	Operating voltage range	9.6 to 14.4 VDC
	Input impedance	600 Ω±20%
	Operate voltage	9.6 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 10 A (With heat sink at 40 ℃) 0.1 to 5 A (Without a heat sink at 40 ℃)
	Inrush current resistivity	150 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	2 mA max. (at 100 VAC) 5 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 ℃ (with no freezing or condensation)
Ambient temperature (Storage)	-30 to 100 ℃ (with no freezing or condensation)
Ambient humidity (Operating)	45 to 85 %
Weight	Approx. 37 g
Other feature	Certified by UL, CSA, and EN (TUV)

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Outline drawing

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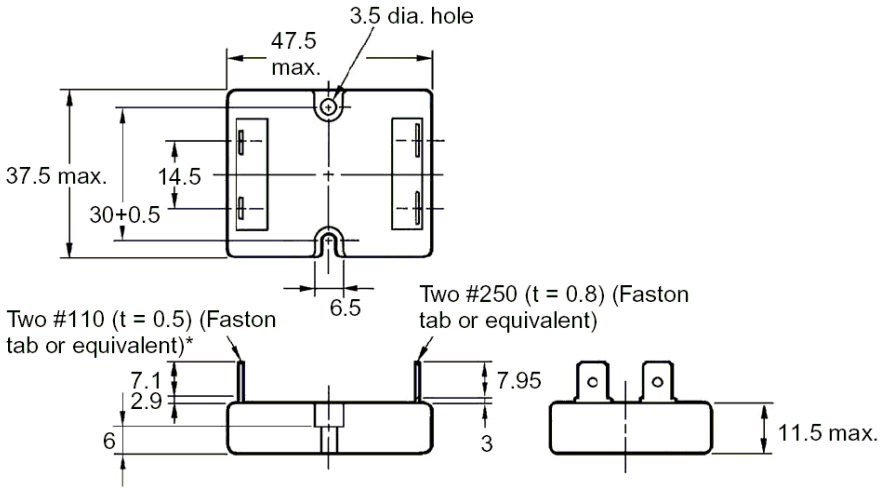
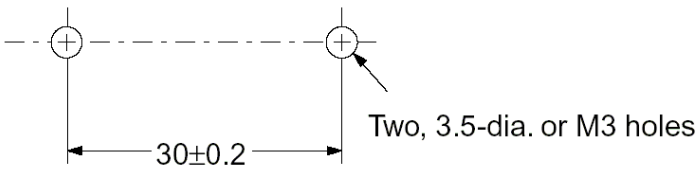


Mounting holes



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Connection diagra

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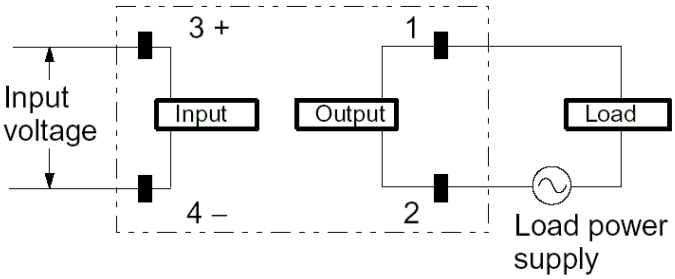
Terminal arrangement and internal connection



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Characteristic chart

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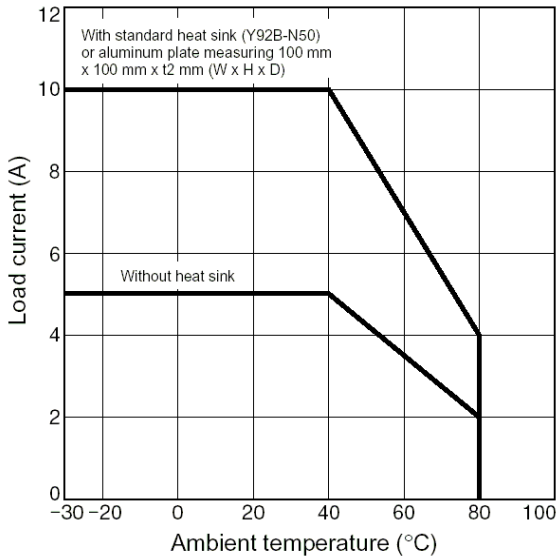
Load current-ambient temperature

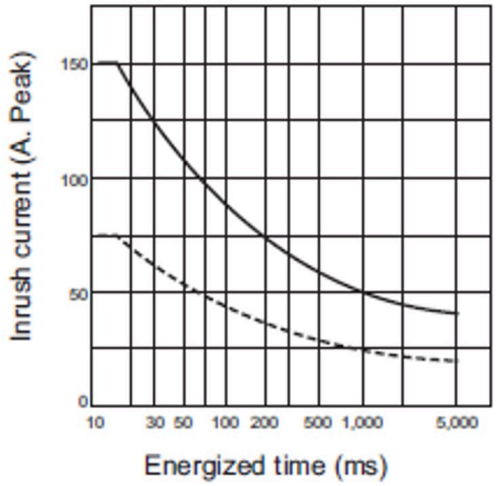


Inrush current resistivity (Non-repetitive)

One Cycle Surge Current: Non-repetitive

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

G3NE-210T(L)(-2)-US



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