

600V/50A High Power Relay

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New!

Features

High Capacity

600VDC/50A switching.

Bi-Directional Polarity

Both normal and reverse polarity direction switching is available.
Great option for charge/discharge application!

Safety Standard

Comply with the safety standard that is required for ESS (**UL60947-4-1 / EN 61810-10**).

Low CR

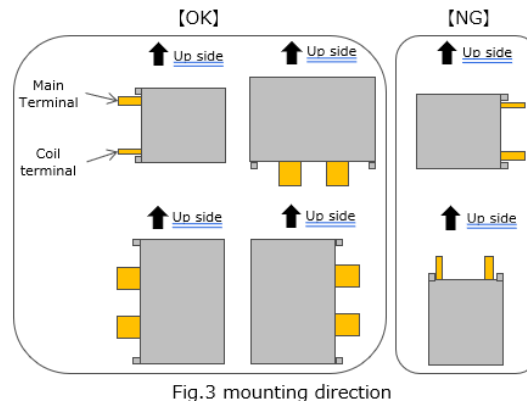
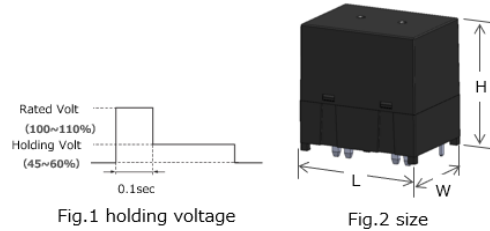
Low contact resistance (initial less than $5m\Omega$) suppresses heat generation.



Specifications

	G9KB
Terminal	1a
Contact gap	>3.6mm
Contact resistance	$\leq 5m\Omega$ (*1)
Rated voltage/current	DC600V/50A
E-Life (Resistive load)	+/- 2,000ops with rated load Use a Zener or diode with coil. Recommendation of Zener diode voltage is 3 times of rated coil voltage.
Switching direction	Both
M-Life	1,000,000回
Coil voltage	12VDC / 24VDC (Holding voltage: 45~60%)
Coil power consumption	Approx. 2.8W (@45% of rated voltage: 0.57W, refer to Fig.1)
Amb. Temperature	-40°C ~ +85°C
Size	L 50.5 x W 37.0 x H 50.5 mm (refer to Fig.2)
Mounting direction	Refer to Fig.3
Terminal type	PCB
Structure	Flux tight
Safety standard	UL60947-4-1, EN61810-1, CQC

(*1) measurement condition : DC6V 20A (after 5sec) voltage drop method



Applications

Bidirectional high power switching systems are our target.

- Residential ESS
- V2H (Vehicle to Home)
- EV fast charger PDU (Power Distribution Unit)



Residential ESS



V2H



EV fast charger PDU

PCB High Power Relay G9KB

New!

Difference between “a polarity relay” and “a bidirectional relay”

- In the case of polarity relays (without bidirectional switching capability), 2 relays are necessary in order to switch bidirectional loads.
- In the case of bidirectional relays (G9KB), 1 relay can switch the reverse load as well. So [designs can be simpler, and PCB space can be saved by using G9KB!](#)

