

G9KA-1A1B-E PCB High Power Relay

Carrying/breaking 300 A max at 1,000 VAC with N.C. auxiliary contact

As getting higher capacity of PCB relays, customers prefer to replace contactors with PCB relays. However, it was an issue that most of PCB relays did not have auxiliary contact option. With requests from several customers, Omron determined to add auxiliary contact option to G9KA-1A-E.



This relay would be especially suitable (but not limited) for applications which requires higher reliability such as PV/ESS Inverters, Fast EV chargers and Power Supply/UPS, proposing smaller space needed and less labor cost in assembly needed compared to conventional contactors.

Features & Benefits

Reliable Auxiliary Contact

- Conformed to mirror contact structure specified by IEC/EN 60947-4-1 Annex F7.2
- Bifurcated crossbar gold plated contact can provide min. switching load of 5 VDC 1 mA (reference value)

Applicable for Reliable Systems

High reliability of auxiliary contact is one of keys to be applied to systems which requires high reliability of operation.

High Carry Current & Low Contact Resistance

Same as existing G9KA, 300 A of rated carry current & max. 0.2 m Ohm of contact resistance of main contacts are one of highest spec in PCB relays

Easy to replace Contactors

Designers can replace conventional contactors with auxiliary contact with less design modifications.

High Carry Current & Low Contact Resistance

PCB mounting

Smaller Space needed & Less Labor Cost in assembly needed by replacing Contactors with this relay

Applications



PV Generation



UPS



Energy Storage System



EV Charger

Specifications

Model Number	G9KA-1A1B-E
Contact Form	SPST-NO + SPST-NC (1a1b)
Max. Switching Voltage	Main 1,000 VAC Aux 30 VDC
Max. Switching Current	Main 300 A Aux 1 A
Contact Resistance	Main 0.2 m Ohm max.
Contact Gap	Main: 4.0 mm min.
Coil Power Consumption	6,000 mW (1,012 mW at 41% holding)
Outline Dimensions (Max values)	56.7 mm x 61.0 mm x (H) 58.4 mm

Model Number Variations

Model Number	Description
G9KA-1A1B-E DC12	High-Capacity Model (1,000 VAC 300A), with N.C. Auxiliary Contact, Coil Voltage of 12 VDC
G9KA-1A1B-E DC24	High-Capacity Model (1,000 VAC 300A), with N.C. Auxiliary Contact, Coil Voltage of 24 VDC