



# Requirements for photovoltaic inverter relay gap





## Overview

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5mm contact gap (compliant to European Photovoltaic Standard VDE0126) ● The clearance distance between contact and coil is bigger than 6. ● Low coil holding voltage contributes to saving energy of equipment. ● UL insulation system: ● 1. In the interface to the power grid, electro mechanical relays on the AC side of the inverter play a critical role as switching devices and to provide necessary safety 'circuit-break' solar relays. These state-of-the-art ZETTLER components have been successfully integrated into many. IM-NE801A is a two-pole PCB power relay for new energy power generation (EV Charger, Solar Inverter, Energy Storage System). It features a high-capacity resistive switching load rating of 40A@277VAC for 50K cycles (@32A 230VAC) or 20K cycles (@40A 230VAC). The relay also features a mirror contact. Technically the benefits of the increased efficiency when driving relays are: • Reduces temperature in the inverter casing • Reduces ventilation / heat-sinking costs • Enables the reduction of casing • Enables system reliability improvements Benefits for a 3 phase hypothetical 2kWp inverter system. y of operation, with/with on of coil voltage to 4.



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### [Photovoltaic\\_ProductSheet-Jan2025 copy](#)

The diagram below shows a simplified block diagram of a suitable PV insulation resistance test circuit for a single solar panel or array that may be developing more than 600 VDC in full sunlight.

### [HF161F-W , SOLAR RELAY , Power Relay , Relays , HONGFA](#)

1.5mm contact gap (compliant to European Photovoltaic Standard VDE0126) The clearance distance between contact and coil is bigger than 6.4mm, the creepage distance is bigger than 8mm.



### **Energy-saving 35A 40A DPST-NO PCB Double Pole High Power Solar Relay**

IM-NE801A has a 2 Form A (DPST-NO) contact arrangement in a PCB board mountable small case size. It features the 3mm contact gap and 4kV surge breakdown required by photovoltaic standard ...

### **Protection of 100% Inverter-dominated Power Systems with Grid**

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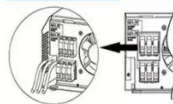
FRT strategies for GFM IBRs with focus on correct operation of protection relays, protection relay functions that respond correctly to fault currents measured in IBR-dominated systems,



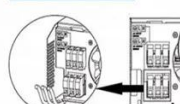
Parallel (Parallel operation up to 6 unit (only with battery connected))



AC input wires



AC output wires



## General Purpose Solar Relays

After the energization time of 100ms with the rated coil voltage, the coil requires a reduction to 40% 50% of the rated coil voltage. The relay connections and wiring have to be designed with an ...

## Smart Relays for Solar Inverters

Texas Instruments relay drivers bring innovation for solar inverters and help accelerate payback time. This flyer looks especially at two specific Panasonic relays: ALFG and HE.



## [Power PCB Relay PCFN Solar, 1.8 mm contact gap](#)

Catalog and product specification according to IEC 61810-1 and to be used only together with the 'Definitions' section. Catalog and product data is subject to the terms of the disclaimer and all ...



## PV Standard Large Contact Gap 40A



## PCB Two-pole AC Power Relay ...

IM-NE801A has a normally open contact gap of 3mm, which makes this relay VDE0126 compliant with European photovoltaic standards and meets the 4kV surge breakdown voltage between contacts ...



## SOLAR RELAYS

Equally importantly, as the demand for higher kVA capacities of solar inverters continues to expand, higher continuous and maximum switching currents need to be accommodated by relays used in ...

## SOLAR RELAYS

This 30 A DPST high power PCB relay is suitable for PV inverter applications of up to 7.5 kVA (single phase) / 21 kVA (three phase) and deployment levels of up to 7000 m (5000 m standard contact gap ...





## Contact Us

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