



SHIRKE
ELECTRO PVT.LTD.

SWITCH TO **RELIABILITY**



DC ISOLATOR SWITCHES

This Isolator switch is used for Isolating d.c. source coming from Photovoltaic Arrays to grid-connect inverters. Positioned adjacent to the inverter this Isolator switch is required to provide a means of manually isolating the entire PV array during system installation or any subsequent maintenance. It provides the benefit of isolating d.c. as well as a.c. circuits with the same single switch. Hence simplifying and reducing the number of devices in the installation

Photovoltaic-installations are to be equipped with DC-isolators according to IEC 60364-7-712/ IEC 60947. Switch disconnectors (SI) ensures a reliable switching for 16A @1000v and 32A @600V for DC21B utilisation category.



Switch design is aesthetically sound and robust using flame retardant engineering plastic for heavy duty working.

Silver plated wiping self cleaning contacts ensure longer life.

IP 65 protection helps it to withstand extreme and polluted environmental conditions under PD3.

Various mounting options like Din Rail, Front panel single hole, and Rear mounting are available.

Combination of d.c. & a.c. in one switch is available. This reduces the number of devices in the circuit

Switch has been tested as per IEC 60947-3 : 2012.

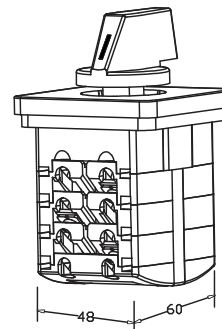
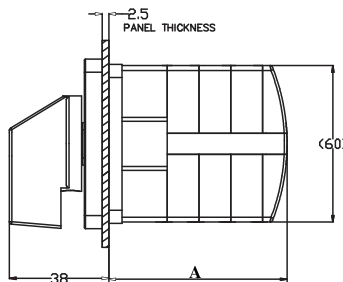
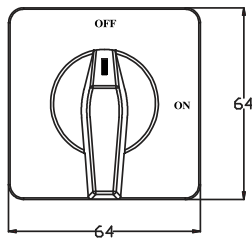
DC ISOLATOR SWITCHES

Construction

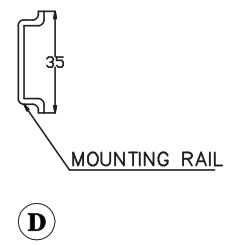
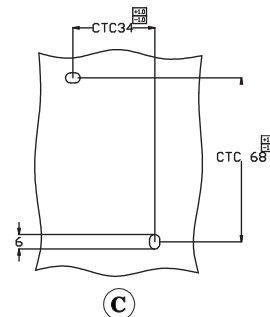
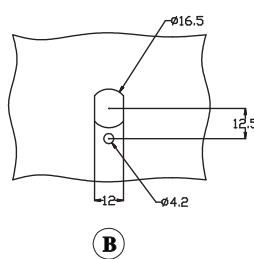
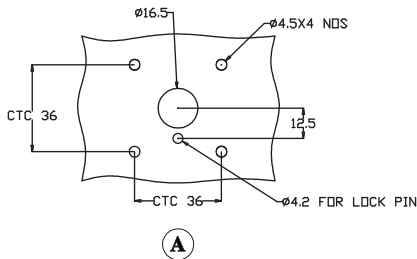
DC isolator switch is a snap action operator independent switch. The operator cannot control the contact displacement after certain degree of knob rotation as the snap action mechanism triggers the contacts to changeover during switching between ON and OFF positions. Silver plated electrolytic copper terminals and contacts ensures high electrical and thermal conductivity.

DC Solar Isolators use a rotary knife contact mechanism, so when the unit is operated, the handle movement gives a double make-break per contact set. As d.c load switching creates electrical arcing, the switch is designed for faster arc extinguishing capability hence enhancing the life of the switch operations. The knife contacts used are self-cleaning hence reliable for positive change over throughout its life. The contacts are vibration resistant with reduced contact resistance. This contact system ensures that power loss per pole is kept as low as possible and consistent over the life of the product. Our isolator has advantage over other conventional style isolators where entrapment of contaminants and then subsequent compression on lateral operation can lead to variable and increasing contact resistance, and hence per pole losses.

The engineering plastic used is flame retardant & adhere to highest fire safety parameter. The overall design of a solar isolator is satisfactory for use in installations classified as either DC-21A, DC-21B or DC-22A and so suitable for a high number of "off load" operations (without current) and also a high number of operating cycles "on load" (with current).



PANEL CUTOUT DETAILS



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