

Switches for photovoltaic applications

Up to 1000 VDC



ABB's switch offering for PV applications

The switch offering includes switch-disconnectors designed for photovoltaic applications. Switch-disconnectors are typically used to isolate individual strings or arrays of solar panels and battery banks. They can also be used as the main switch for the whole photovoltaic system.

ABB's switches are compact in size, have high DC voltage ratings and unique safety features. The range goes from 16 to 630 Amperes.

OTDC16...32 Amperes

OTDC from 16...32 Amperes have various DC voltage ratings within the same footprint area. Thanks to its modular design the rated operational voltage can be scaled according to your needs, up to 1000 V.

- ▶ Reliable PV systems at a wide voltage range

OTDC switch-disconnectors can be DIN rail or screw mounted. Tunnel terminals capture fine stranded wires and

they are wide enough to allow wires up to 16 mm². Short-circuit bars are pre-installed as standard.

- ▶ Simple and fast installation

OTDC16...32 is also available in a plastic enclosure, suitable for outdoor use. Enclosed OTDCP is made of material resistant to UV light and water exposure. The enclosure

has a high degree of protection, IP65. Cover interlock and padlockable handle ensure safe usage.

OTDC...32 switches, with or without enclosure, meet the standard's thermal requirements, even in exceptionally high operating ambient temperatures. The power losses are very low, minimizing the waste of energy.

- ▶ Suitable for warm locations
- ▶ Maximum energy efficiency of PV systems

OTDC100...250 Amperes

OTDC switches from 100...250 Amperes are the only 2-pole solution in the market with an operational voltage of 1000 VDC. This is possible thanks to carefully optimized arc plates and dual magnetic breaking.

- ▶ Breaking power optimized across the entire current range

As a result of a symmetric design, the connections are independent of polarity. The switch works in both ways.

- ▶ Simplicity in installation

OTDC is the only DC switch in the market that has visible contacts. The operation of the switch is not vulnerable to voltage peaks and it is independent of the user (quick make-quick brake).

- ▶ Safe and reliable operation