SMART POWER

2-pole OTDC switch-disconnectors for 1500V DC

Small sized with increased efficiency and performance

OTDC315...800F_ and OTDC250...600UF_
DC switch-disconnectors optimized for photovoltaic (PV) and Energy Storage Systems (ESS) applications. In PV they're used inside string combiners and inverters. In ESS as main switch of energy storage Power Conversion Systems (PCS) and in the battery section to protect battery racks.

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OTDC Series

Highlights of the new OTDC "M" series:

- Tested according to IEC60947-3 and UL98B
- IEC, UL, EAC and CCC approval
- Ratings according to utilization category DC-PV2 and mechanical endurance 10.000 operating cycles
- Disconnect up to three PV circuits with one single switch
- Rated conditional short-circuit current for the unique ESS-types 30kA
- Optimized arc chamber with long opening angle with patented DMB© - Dual Magnetic Breaking
- Inspection window for a direct view of the contact position
- Symmetrical pole design enables independent polarity
- Grounded and un-grounded types available

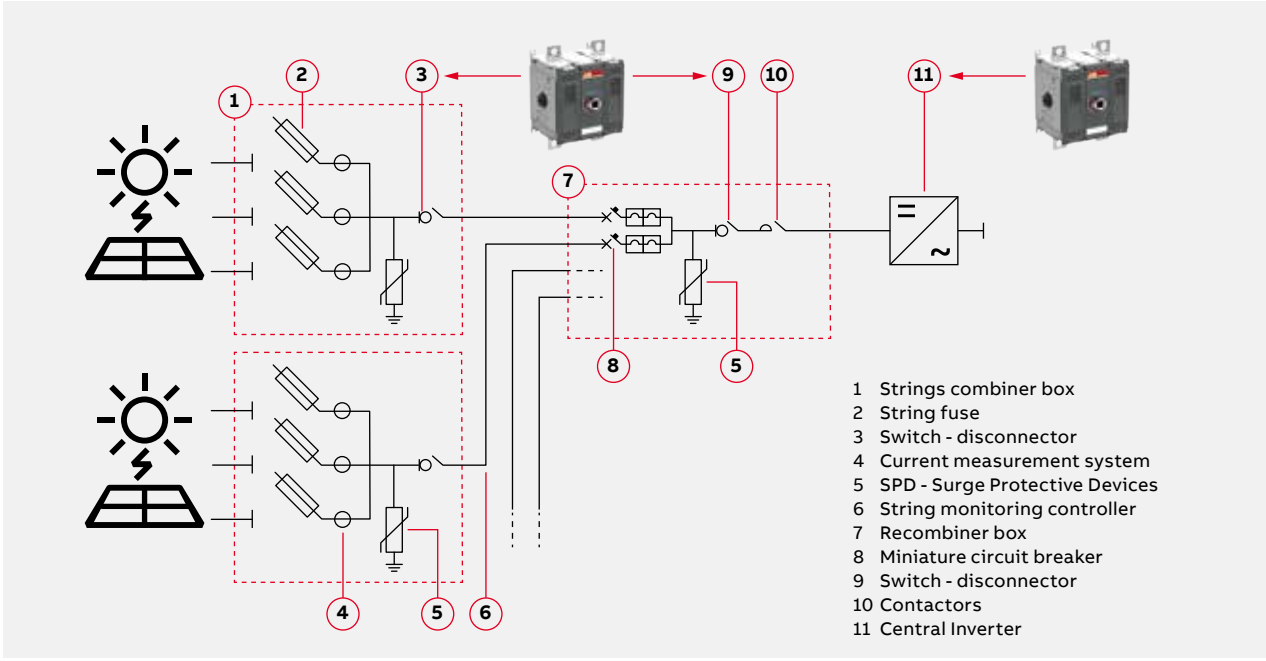
Space saving
2-pole OTDC for 1500V DC measuring just 150mm wide and 122mm high makes the OTDC range up to 30% smaller than most of the devices availa-ble in the market.

Energy efficiency
2-pole 1500V DC concept is helping manufacturers to improve their systems efficiency, reducing power losses up to 35%.

Speed up your projects
The modular design makes it possible to operate with just one switch up to three 1500V DC strings.

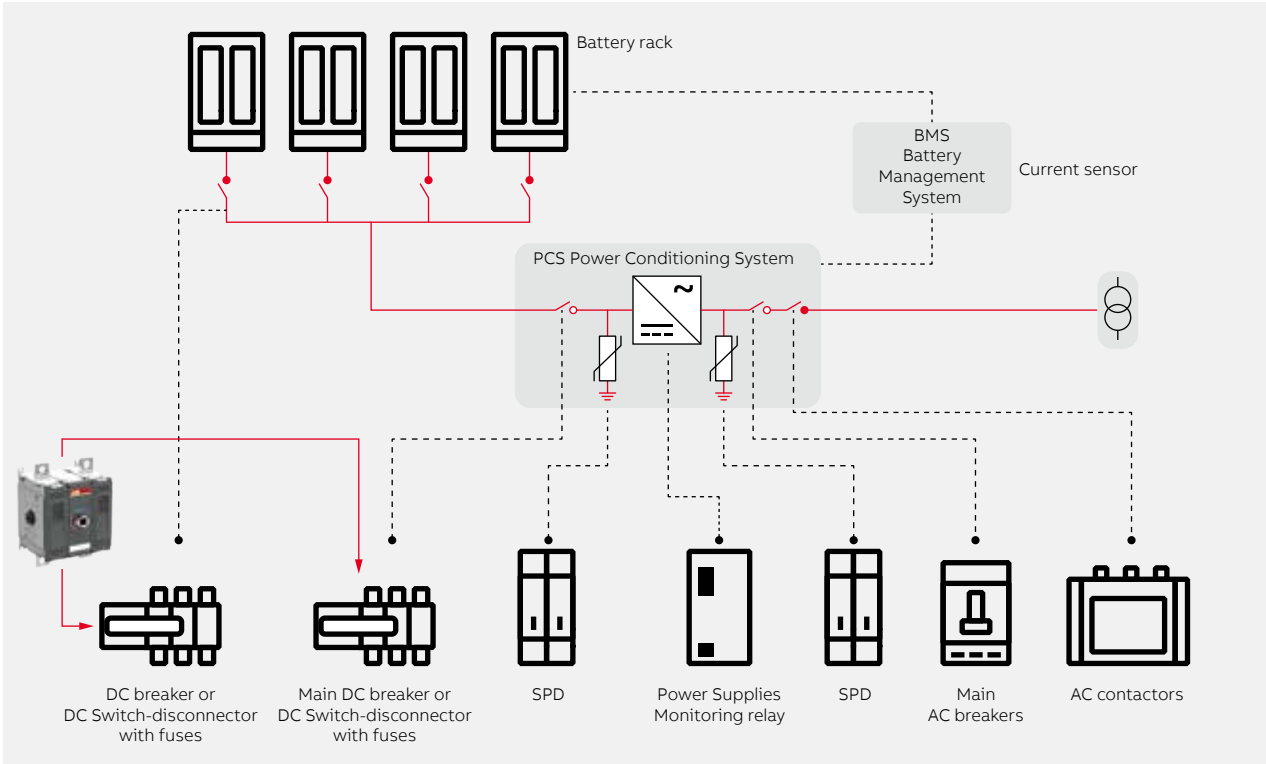
High performance
The DC-PV2 ratings for the OTDC range offer a robust and high performing switch with exceptional mechanical en-durance. Unique design of the pole has been optimized to break high DC volt-ages with ease.

01

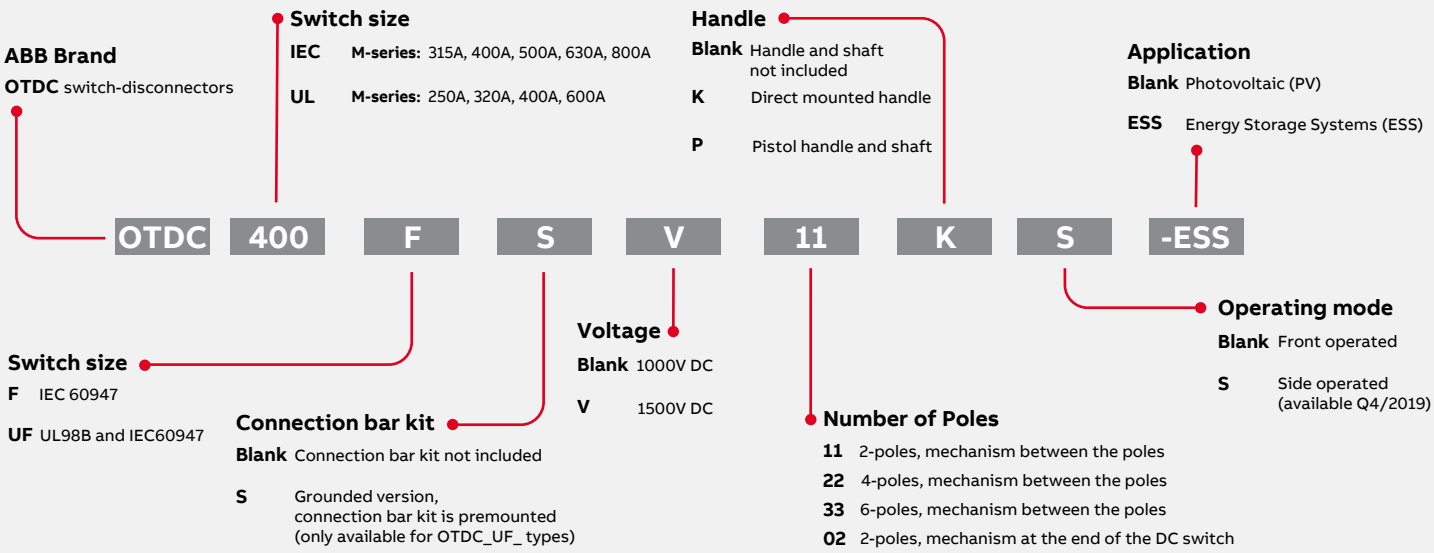


PV application
OTDC can be used in the centralized topology in the string combiner and re-combiner box or directly in the central inverter. See figure 01.
In addition, in a decentralized topology, OTDC can be used in the separate string combiner box before string inverter or integrated into the 1MPPT string inverters.

02



ESS application
OTDC can be used as main switch to protect DC-side of Energy Storage Power Conversion (PCS), battery section, or prior to the battery rack.
See figure 02.



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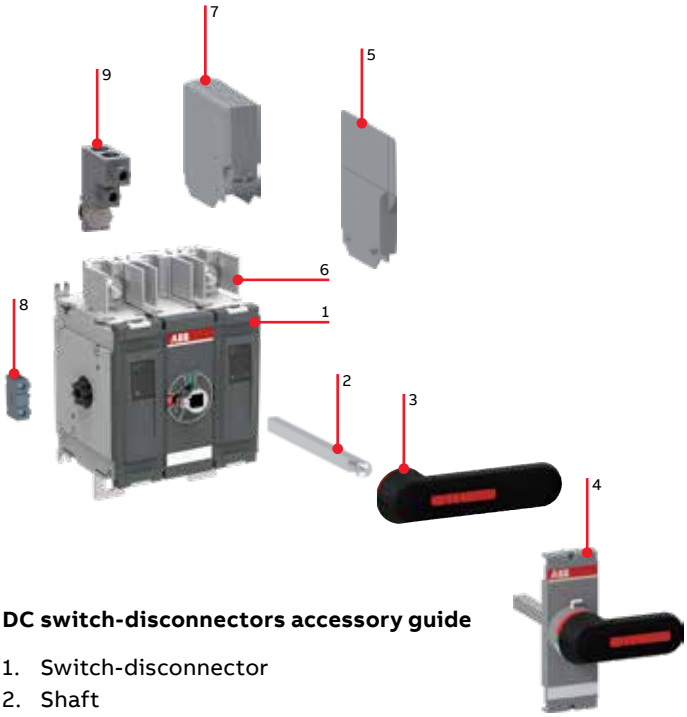
03

Type designation key
for OTDC315…800F
& OTDC250…600UF

OTDC250…600, 1000 VDC and 1500 VDC



DC switch-disconnectors accessory guide

1. Switch-disconnector
2. Shaft
3. Pistol handle
4. Direct mount handle
5. Phase barrier
6. Connection bar
7. Shroud
8. Auxiliary contact
9. Mechanical lug

Please note that not all listed accessories are automatically included in your order.

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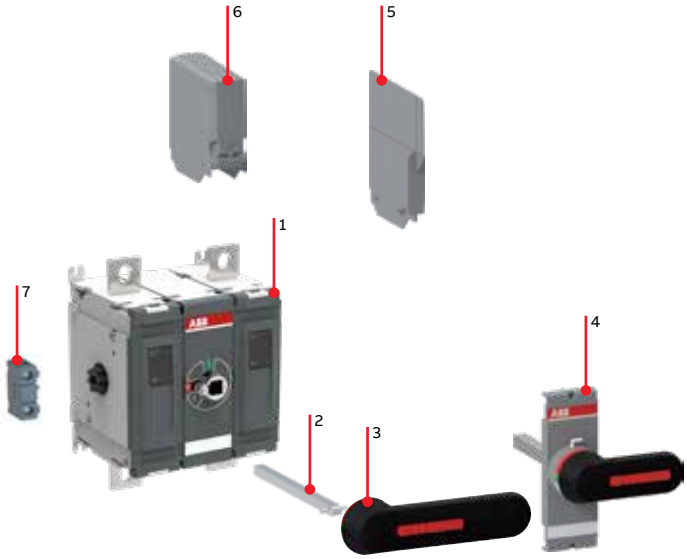
NOTE: The information in this image applies to both IEC and UL versions of the depicted product.

OTDC315…800, 1000 VDC and 1500 VDC



DC switch-disconnectors accessory guide

1. Switch-disconnector
2. Shaft
3. Pistol handle
4. Direct mount handle
5. Phase barrier
6. Terminal shrouds
7. Auxiliary contact

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NOTE: The information in this image applies to IEC version of the depicted product.

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Find the address of your local sales organization on the ABB homepage:

www.abb.com/contacts

For more information go to our website:

OTDC switch-disconnectors 16A-1600A

More information on the available OTDC types and technical ratings from the OTDC catalog or directly from the OTDC websites.

OTDC switch-disconnectors catalog

OTDC250...800_F website

9AKK107492A6191 - 7/2019