

# Disconnect switches OTDC16...250, OT315...630

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# Disconnect switches up to 1000 VDC

## Disconnect switches<sup>®</sup>







Catalog number	OT40FD9N2	OT80FD8	OTDC100U11
General purpose amp rating	28	55	100
Max operating voltage	600 VDC	600 VDC	1000 VDC
Approvals	UL508	UL508	UL98B







Catalog number	OTDC100U02	OTDC100US02	OTDC100US11
General purpose amp rating	100	100	100
Max operating voltage	1000 VDC	1000 VDC	1000 VDC
Approvals	UL98B	UL98B	UL98B

 $<sup>\</sup>ensuremath{\mathbb{O}}$  Lugs are integral to the switch for 16-80A. No separate lug kit accessory is required.







Catalog number	OTDC180US22	OTDC200U02	OTDC200US02
General purpose amp rating	180	200	200
Max operating voltage	1000 VDC	1000 VDC	1000 VDC
Approvals	UL98B	UL98B	UL98B





Catalog number	OTDC200U11	OTDC200US11
General purpose amp rating	315	400
Max operating voltage	1000 VDC	1000 VDC
Approvals	UL98B	UL98B

# Disconnect switches up to 1000 VDC

## Disconnect switches





Catalog number	OTDC16F3/OTDC25F3/	OTDC16F4/OTDC25F4/
	OTDC32F3	OTDC32F4
General purpose amp rating	16/25/32	16/25/32
Max operating voltage	1000 VDC	1000 / 2x660 VDC
Approvals	IEC	IEC



Catalog number	OTDC16F2/OTDC25F2/
	OTDC32F2
General purpose amp rating	16/25/32
Max operating voltage	660 VDC
Approvals	IEC







Catalog number	OT315E23	OT315E33	OT400E23
General purpose amp rating	315	315	400
Max operating voltage	800 VDC	1000 VDC	800 VDC
Approvals	IEC	IEC	IEC







Catalog number OT400E33 OT630E23 OT630E33   General purpose amp rating 400 630 630   Max operating voltage 1000 VDC 800 VDC 1000 VDC	Approvals	IEC	IEC	IEC
General purpose amp rating 400 630 630	Max operating voltage	1000 VDC	800 VDC	1000 VDC
Catalog number OT400E33 OT630E23 OT630E33	General purpose amp rating	400	630	630
	Catalog number	OT400E33	OT630E23	OT630E33

# Switches for photovoltaic applications Up to 1000 VDC



#### ABB's switch offering for PV applications

The switch offering includes disconnect switches designed for photovoltaic applications. Disconnect switches 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, IEC.

▶ Reliable PV systems at a wide voltage range

OTDC disconnect switches can be DIN rail or screw mounted. Tunnel terminals capture fine stranded wires and they are wide enough to allow wires up to 16 mm<sup>2</sup>. Short-circuit bars are preinstalled as standard.

Simple and fast installation

OTDC...32 switches 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 makequick brake).

Safe and reliable operation

ABB offers a whole range of products dedicated to photovoltaic applications, able to fulfill all installation requirements: from the strings on the direct current side to the grid connection point on the alternate current side.



# Technical data OTDC16...160, OTDC100...OT80

#### Technical data according to IEC 60947 for disconnect switches OTDC and OT

Switch size		Α	OTDC16	OTDC25	OTDC32	OTDC100	OTDC160
Rated insulation voltage U <sub>i</sub>	Pollution degree 2	V	12501)	12501)	12501)	1500	1500
	Pollution degree 3	V	10001)	10001)	10001)	1500	1500
Dielectric strength	50 Hz 1 min	kV	6	6	6		
Rated impulse withstand voltage		kV	8	8	8	12	12
Rated thermal current I <sub>th</sub>	In open air, normal conditions2)	Α	25	32	45	100	160
	In enclosure 40°C	Α	25	32	45	100	160
	In enclosure 60°C	Α	25	32	32	80	125
with minimum cable or bar cross section	Cu	mm²	4	6	10	35	70
Rated operational current / poles in series	500 V	Α				100/1	160/1
DC-21B	550 V		······	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·		
	660 V	Α	16/2	25/2	32/2		
	800 V	<b>.</b>					
	1000 V	Α	16/3	25/3	32/3	100/2	160/2
	1000 V / 2x660 V <sup>3</sup>	Α	16/4	25/4	32/4		
Rated short-time withstand current, 1000 V, 1 s	R.M.Svalue I	kA	0.4	0.6	0.8	5	5
Rated short circuit making capacity, 1000 V	Peak value I <sub>cm</sub>	kA				5	5
	Max. distance from switch frame						
	to nearest busbar / cable support	mm	······•	· · · · · · · · · · · · · · · · · · ·		150	150
Power loss / pole	At rated current	W	0.15	0.3	0.5	2	4
Cable size	Cu	mm²	2.516	2.516	2.516		
Terminal bolt size	Metric thread diameter × length	mm				M8x25	M8x25
Terminal tightening torque	Counter torque required	Nm				15-22	15-22

<sup>1)</sup> When used with external handle. For use with direct mounted handle, see installation instructions for restrictions

#### Technical data in accordance to UL98B for disconnect switches

Suitable for use in Photovoltaic Systems in accordance with Article 690 of the NEC.

Switch size			OT40	OT80	OTDC100 ①	OTDC180	OTDC200
Voltage rating		VDC	600	600	1000	1000	1000
Current rating		Α	28	55	100①	2x180	200
Rated ambient temperature		°C	-40+40	-40+40	-20+50	-20+50	-20+50
Short circuit rating at 1000 VDC		kA	_	_	5	5	5
	Class of fuse		-	_	Circuit breaker	Circuit breaker	Circuit breaker
Mechanical endurance	Divide by two for operation cycles	Oper.	20,000	20,000	20,000	20,000	20,000
Wire range		AWG	#18-14	#18-14	#4-300 MCM	#4-300 MCM	#4-300 MCM

<sup>2)</sup> Normal conditions defined in IEC 60947-1-6.1

<sup>3) 1000</sup> V with all the poles connected in series, 600 V with 2 poles in series

# Technical data OTDC200...OT630

Switch size		Α	OTDC200	OTDC250	OT315	OT400	OT630
Rated insulation voltage U <sub>i</sub>	Pollution degree 2	V	1500	1500	1 000	1 000	1 000
	Pollution degree 3	V	1500	1500	1 000	1 000	1 000
Dielectric strength	50 Hz 1 min	kV			10	10	10
Rated impulse withstand voltage		kV	12	12	12	12	12
Rated thermal current I <sub>th</sub>	In open air, normal conditions2)	Α	200	250	315	400	630
	In enclosure 40°C	Α	200	250	315	400	630
	In enclosure 60°C	Α	160	200	280	320	500
with minimum cable or bar cross section	Cu	mm²	95	120	185	240	2x185
Rated operational current / poles in series	500 V	Α	200/1	250/1			
DC-21B	550 V				315/4	400/4	600/4
	660 V	Α					
	800 V				315/5	400/5	600/5
	1000 V	Α	200/2	250/2	315/6	400/6	600/6
	1000 V / 2x660 V <sup>3</sup>	Α					
Rated short-time withstand current, 1000 V, 1 s	R.M.Svalue I	kA	5	5	15	15	20
Rated short circuit making capacity, 1000 V	Peak value I <sub>cm</sub>	kA	5	5			
	Max. distance from switch frame						
	to nearest busbar / cable support	mm	150	150			
Power loss / pole	At rated curren	W	6	9.5	6.5	10	25
Cable size	Cu	mm²					
Terminal bolt size	Metric thread diameter × length	mm	M8x25	M8x25	M10x30	M10x30	M12x40
Terminal tightening torque	Counter torque required	Nm	15-22	15-22	30-44	30-44	50-75

# Ordering information Front operated disconnect switches

#### OTDC16...32F2



OTDC16...32F3



OTDC16...32F4



## Disconnect switches OTDC\_, base or DIN-rail mounting

Types OTDC16...32 include protected terminal clamps, IP20. Shafts and handles need to be ordered separetely. The type and the ordering numbers are for one piece.

#### Disconnect switches OT\_ - base or DIN rail mounting, UL98B

Number of poles Up to 600VDC	Rated operat. current [A]	Catalog number	Weight/ unit [kg]
9	28	OT40FD9N2	
8	55	OT80FD8	

#### Up to 660 VDC, IEC

Number of poles	I <sub>th</sub> (open) [A]	Rated operat. current [A] DC 21B / 660 V	Catalog number	Weight/ unit [kg]
2	25	16	OTDC16F2	0.15
2	32	25	OTDC25F2	0.15
2	45	32	OTDC32F2	0.15

#### Up to 1000 VDC, IEC

Number of poles	I <sub>th</sub> (open) [A]	Rated operat. current [A] DC 21B / 1000 V	Catalog number	Weight/ unit [kg]
3	25	16	OTDC16F3	0.20
3	32	25	OTDC25F3	0.20
3	45	32	OTDC32F3	0.20

#### Up to 1000 VDC or 2x660 VDC1), IEC

Number of poles	I <sub>th</sub> (open) [A]	Rated operat. current [A] DC 21B / 1000 V		Weight/ unit [kg]
4	25	16	OTDC16F4	0.25
4	32	25	OTDC25F4	0.25
4	45	32	OTDC32F4	0.25

<sup>1) 1000</sup> V with all poles in series, 660 V with 2 poles in series

# Ordering information Front operated disconnect switches

OTDC16...32FT2



OTDC16...32FT3



OTDC16...32FT4



## Disconnect switches OTDC\_, door mounting

Types OTDC16...32 include protected terminal clamps, IP20. Shafts and handles need to be ordered separetely. The type and the ordering numbers are for one piece.

#### Up to 660 VDC, IEC

Number of poles	I <sub>th</sub> (open) [A]	Rated operat. current [A] DC 21B / 660 V	Catalog number	Weight/ unit [kg]
2	25	16	OTDC16FT2	0.15
2	32	25	OTDC25FT2	0.15
2	45	32	OTDC32FT2	0.15

#### Up to 1000 VDC, IEC

Number of poles	I <sub>th</sub> (open) [A]	Rated operat. current [A] DC 21B / 1000 V	Catalog number	Weight/ unit [kg]
3	25	16	OTDC16FT3	0.20
3	32	25	OTDC25FT3	0.20
3	45	32	OTDC32FT3	0.20

#### Up to 1000 VDC or 2x660 VDC1), IEC

Number of poles	I <sub>th</sub> (open) [A]	Rated operat. current [A] DC 21B / 1000 V		Weight/ unit [kg]
4	25	16	OTDC16FT4	0.25
4	32	25	OTDC25FT4	0.25
4	45	32	OTDC32FT4	0.25

<sup>1) 1000</sup> V with all poles in series, 660 V with 2 poles in series

# Ordering information Front operated disconnect switches

#### OTDC100...200US02



#### OTDC100...200U02



OTDC100...200US11



OTDC100...200U11



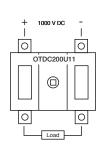
## Disconnect switches OTDC\_, UL-types, base mounting

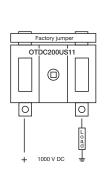
#### Up to 1000 VDC

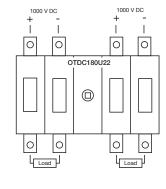
Including terminal bolt kit, the handle and shaft have to be ordered separately, see pages 18...19. OTDC100...200US02 types are equipped with a short circuit link.

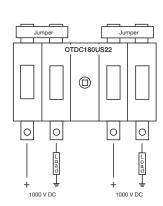
Number of poles	Rated current [A] UL98B, 1000 V	Catalog number	Weight/ unit [kg]
Mechanism at the	e end of the switch, incl	udes the short circuit link	
2	100	OTDC100US02	1.2
2	200	OTDC200US02	1.2
Mechanism at the	e end of the switch		
2	100	OTDC100U02	1.1
2	200	OTDC200U02	1.1
Mechanism between	een the poles, includes	the short circuit link	
2	100	OTDC100US11	1.2
4	100	OTDC100US22	2.4
4	180	OTDC180US22	2.4
2	200	OTDC200US11	1.2
Mechanism between	een the poles		
2	100	OTDC100U11	1.1
2	200	OTDC200U11	1.1

#### Wiring diagrams









# Ordering information Front operated disconnect switches

#### OT315...400E23



#### OT630E23



OT630E23



OTDC100...250E02



#### OT315-400E33



#### OT630E33



## Disconnect switches OTDC\_ and OT\_, base mounting

#### Up to 800 VDC, IEC

Types OT315...630 including terminal bolt kit, a black ON-OFF plastic handle and shaft as standard, base mounting. The handle is IP65 protected, padlockable in the OFF-position and with door interlock in the ON-position. The shaft is adjustable for a depth of installation ranges.

Number of poles	I <sub>th</sub> (open) [A]	Rated operat. current [A] DC 21 / 800 V	Catalog number	Weight/ unit [kg]
Mechanis	m between t	he poles		
5	315	315	OT315E23	4.4
5	400	400	OT400E23	4.4
5	630	600	OT630E23	7.8
5	630	600	OT630E2	7.8

#### Up to 1000 VDC, IEC

Types OTDC100...250 including terminal bolt kit, the handle and shaft have to be ordered separately, see pages 18...19. Types OT315...630 including terminal bolt kit, a black ON-OFF plastic handle and shaft as standard. The handle is IP65 protected, padlockable in the OFF-position and with door interlock in the ON-position. The shaft is adjustable for a depth of installation ranges.

Number of poles	I <sub>th</sub> (open) [A]	Rated operat. current [A] DC 21 / 1000 V	Catalog number	Weight/ unit [kg]
Mechanisn	n at the end	d of the switch		
2	100	100	OTDC100E02	1.1
2	160	160	OTDC160E02	1.1
2	200	200	OTDC200E02	1.1
2	250	250	OTDC250E02	1.1
Mechanisn	n between	the poles		
6	315	315	OT315E33	4.4
6	400	400	OT400E33	4.4
6	630	600	OT630E33	11.3
6	630	600	OT630E33	11.3

OH\_ 1\_ S00395A



OH\_ 3\_ S00687A



OH\_ 2\_



OHBS2\_AJEH



## Selector type handles for base and DIN-rail mounted switches

Indication I-O and ON-OFF, for shaft diameter 6 mm, door drilling 22.5 mm. The catalog numbers are for one piece.

Onland	Catalog	
Color	number	
IP 54 handles, NEMA 1, suitab	le for switches OTDC1632F	
Black	OHBS1AH	
Yellow-red	OHYS1AH	
Silver	OHSS1AH	
Grey	OHGS1AH	
Door interlock in ON-position.		
Black	OHBS1AH1	
Yellow-red	OHYS1AH1	
Silver	OHSS1AH1	
Grey	OHGS1AH1	
Padlockable with one padlock	with bail diameter 56.3 mm.	
Black	OHBS3AH	
Yellow-red	OHYS3AH	
Silver	OHSS3AH	
Grey	OHGS3AH	
Padlockable with one padlock	with bail diameter 56.3 mm, door interlock in ON	N-position.
Black	OHBS3AH1	
Yellow-red	OHYS3AH1	
Silver	OHSS3AH1	
Grey	OHGS3AH1	

#### IP 65 handles, NEMA 1, 3R, 12, suitable for switches OTDC16...32F

Padlockable with max. 3 padlocks with bail diameter 5...8 mm, door interlock in ON-position, defeatable.

Black	OHBS2AJ	
Yellow-red	OHYS2AJ	
Silver	OHSS2AJ	
Grey	OHGS2AJ	
Padlockable with max. 3 padlocks with bail diameter 58 mm, door interlock in ON-position.		
Black	OHBS2AJ1	
Yellow-red	OHYS2AJ1	
Silver	OHSS2AJ1	
Grey	OHGS2AJ1	

#### Selector type handle with metal hasp

IP65 handles, NEMA 1, 3R, 12, suitable for switches OTDC16...32F

Padlockable with max. 3 padlocks, door interlock in the ON-position, defeatable.

OHBS2AJEH Black













## Selector type handles, for door mounted switches

Indication I-O and ON-OFF. No separate shaft needed. The catalog numbers are for one piece.

Color	Catalog number	
Coop on mounting doe	w duilling 00 5 mm for OTDC16 20ET	
	r drilling 22,5 mm, for OTDC1632FT	
No padlocking, IP54, NEMA	1	
Black	OHBS1PH	
Red-yellow	OHYS1PH	
Silver	OHSS1PH	
Grey	OHGS1PH	
Padlockable with one padloc	ck, IP54, NEMA 1	
Black	OHBS3PH	
Red-yellow	OHYS3PH	•
Silver	OHSS3PH	
Grey	OHGS3PH	•
Padlockable with max. 3 page	dlocks, IP65, NEMA 1, 3R, 12	
Black	OHBS2PJ	
Red-yellow	OHYS2PJ	•
Silver	OHSS2PJ	•••••••••••••••••••••••••••••••••••••••
Grey	OHGS2PJ	•

#### Screw mounting, hole distance 36 mm, for OTDC16...32FT

No padlocking, IP54, NEMA 1

Black

Red-yellow	OHYS1RH
Silver	OHSS1RH
Grey	OHGS1RH
Padlockable with one padlock, IP54, NE	EMA 1
Black	OHBS3RH
Red-yellow	OHYS3RH
Silver	OHSS3RH
Grey	OHGS3RH
Padlockable with max. 3 padlocks, IP65	5, hole distance 36/48 mm, NEMA 1, 3R, 12
Black	OHBS2RJ
Red-yellow	OHYS2RJ
Silver	OHSS2RJ
Grey	OHGS2RJ

OHBS1RH

OHY\_ S00836A







OHB\_P



## Pistol type handles

#### OH\_ handles: IP 65, NEMA 1,3R, 12

Padlockable with three padlocks in OFF-position, door interlock in ON-position. Screw fixing from the back side of the handle. No screws on the front ensures double insulation. The type and the ordering numbers are for one piece.

	Handle	Suitable		Weight/
	length	for	Catalog	unit
Color	[mm]	switches	number	[kg]
For shaft d	liameter 6 n	nm, indication in types OHB and OHY:	I-0, ON-OFF, in types OHG: I-0.	
Black	65	OTDC100250_	OHB65J6	0.12
Yellow-red	65	OTDC100250_	OHY65J6	0.12
Grey	65	OTDC100250_	OHG65J6	0.12
Black	80	OTDC100250_	OHB80J6	0.14
Yellow-red	80	OTDC100250_	OHY80J6	0.14
Grey	80	OTDC100250_	OHG80J6	0.14
For shaft d	liameter 6 n	nm, indication: Test-OFF-ON/Test-0-I		
Black	65	OTDC100250_	OHB65J6T	0.12
Yellow-red	65	OTDC100250_	OHY65J6T	0.12
For shaft d	liameter 12	mm, indication OHB and OHY: I-0, ON-	-OFF, in types OHG: I-0	
Black	95	OT315400_	OHB95J12	0.16
Yellow-red	95	OT315400_	OHY95J12	0.16
Grey	95	OT315400_	OHG95J12	0.16
Black	125	OT630_	OHB125J12	0.17
Yellow-red	125	OT630_	OHY125J12	0.17
Grey	125	OT630_	OHG125J12	0.17
Black	145	OT630_	OHB145J12	0.17
Yellow-red	145	OT630_	OHY145J12	0.17
Grey	145	OT630_	OHG145J12	0.17
Black	2x150	OT630_	OHB150J12P	0.35
For shaft d	liameter 12	mm, indication: Test-OFF-ON/Test-0-I		
Black	95	OT315400	OHB95J12T	0.16
Yellow-red	95	OT315400	OHY95J12T	0.16
Black	125	OT630_	OHB125J12T	0.17
Yellow-red	125	OT630_	OHY125J12T	0.17

Door interlocking in ON-position means that the door can not be opened, when the handle is in ON-position.

This can be defeated in IP65 types to allow authorized personnel access for inspection.

NEMA 4, 4x pistol handles available on request.

Handles padlockable in all positions available on request.





## Handles for direct mounting

Handle

	length	for	Catalog	unit
Color	[mm]	switches	number	[kg]
Indication Test-C	OFF-ON/Test-O-I.			
Padlockable with	three padlocks in OFF-	position. Includes shaft and med	chanism cover.	
Black	65	OTDC100250	OTDV250EK	0.10
Red-yellow	65	OTDC100250	OTDVY250EK	0.10
Black	95	OT315400	OTV400EK	0.20
Red-yellow	95	OT315400	OTVY400EK	0.20
Black	125	OT630800	OTV800EK	0.30
Red-yellow	125	OT630800	OTVY800EK	0.30

Suitable





 $OXP6X_{-}$ 



### Extended shafts

The type and ordering numbers are for one piece.

Shaft	Society			Weight/
length	H	Н	Catalog	unit
[mm]		[mm]	number	[kg]

#### For selector type handles

Suitable for switches OTDC16...32F, shaft diameter 6 mm

85	See	OXS6X85	0.02
105	dimension	OXS6X105	0.02
120	drawings	OXS6X120	0.03
130		OXS6X130	0.03
160		OXS6X160	0.04
180		OXS6X180	0.04
250		OXS6X250	0.05
330		OXS6X330	0.05

#### For pistol type handles

Suitable for switches OTDC100...250\_, shaft diameter 6 mm <sup>1)</sup>

130	109174	OXP6X130	0.04
150	129194	OXP6X150	0.05
161	140205	OXP6X161	0.05
210	189254	OXP6X210	0.06
290	269334	OXP6X290	0.08

<sup>1)</sup> Longer shafts on request

Weight/



### Extended shafts

The catalog numbers are for one piece.

Shaft length [mm]	H [mm]	Catalog number	Weight/ unit [kg]
	1		
For pistol typ	pe handles		
Suitable for sw	itches OT315400_, shaft of	diameter 12 mm	
166	146226	OXP12X166	0.2
185	165245	OXP12X185	0.2
250	230310	OXP12X250	0.28
280	260340	OXP12X280	0.3
325	305385	OXP12X325	0.36
395	445525	OXP12X395	0.43
465	439519	OXP12X465	0.51
535	515595	OXP12X535	0.59
Suitable for sw	itches OT630_, shaft diame	ter 12 mm	
250	230345	OXP12X250	0.28
280	260375	OXP12X280	0.3
325	305420	OXP12X325	0.36
395	375490	OXP12X395	0.43
465	445560	OXP12X465	0.51
535	515630	OXP12X535	0.59
Suitable for sw	itches OT630E_P31 with OF	IB150J12P handle, shaft diame	eter 12 mm
250	222336	OXP12X250	0.28
280	252366	OXP12X280	0.3
325	297411	OXP12X325	0.36
395	367481	OXP12X395	0.43
465	437551	OXP12X465	0.51
535	507621	OXP12X535	0.59

OXP\_-45



OEZXY91



OTDCB250/6



#### Extended shafts

#### Twisted shafts for pistol type handles

The shaft position is rotated 45 degrees. The catalog numbers are for one piece.

Shaft length [mm]	H [mm]	Catalog number	Weight/ unit [kg]
Suitable for switches	OTDC100250_, sl	haft diameter 6 mm	
130	109174	OXP6X130-45	0.04
150	129194	OXP6X150-45	0.05
210	189254	OXP6X210-45	0.06
290	269334	OXP6X290-45	0.08
Suitable for switches	OT315400_, shaf	t diameter 12 mm	
250	230310	OXP12X250-45	0.28
280	260340	OXP12X280-45	0.3
325	305385	OXP12X325-45	0.36
395	445525	OXP12X395-45	0.43
465	439519	OXP12X465-45	0.51
535	515595	OXP12X535-45	0.59

## Mounting accessories

#### Short-circuit link

Includes as standard in types OTDC100...200US02.

Switch size [mm]	Catalog number	Weight/ unit [kg]
OTDC100250	OEZXY91	

#### Phase separators

Grey plastic plate for maintaining 1" clearance between the phases without terminal shrouds. Snap-on mounting. Includes as standard in OTDC100...200U\_ types.

Switch size [mm]	Catalog number	Weight/ unit [kg]
OTDC100250	OTDCB250/6	

#### **Terminal lugs**

Switch size [mm]	Catalog number	Weight/ unit [kg]
OTDC100200	OZXA-200	

#### OHZX10

# .0.

#### Shaft accessories



### OHZX14



#### Shaft alignment ring

Improves the handle operation if a handle and a shaft have been poorly aligned. The type and the ordering numbers are for one piece.

#### For pistol type handles OH\_65...275J6...12

Black	OHZX10	0.23
For selector type handles OH_13		
Black	OHZX11	0.23

#### Extension ring for pistol type handles OHB

				*
Black			OHZX14	0.06

## 602211A

OXT20X210X



#### Shaft tube

Supporting 12 mm shafts longer than 280 mm.

	OXT20x210X	1.5

#### OETLZX95, OESAZX167

#### Shaft extension socket

For extending the shaft of combination attachment.

The type and the ordering numbers are for one piece.

Shaft diameter [mm]	Catalog number	Weight/ type [kg]
6	OESAZX167	0.03
12	OETLZX95	0.04

#### OETLZK19



#### Adapter for extension socket

The adapter can be placed inside the extension socket OETLZX95.

6	OFTI 7K19	0.02
<u> </u>	OLIEZIVIO	0.02

OA1G, OA3G01



OEA28



## Auxiliary contact blocks, IP20

Contact numbering according to EN 50013.

The type and and the ordering numbers are for one piece.

Suitable			Weight/
for		Catalog	unit
switches	Function	number	[kg]

#### Mounting on the left side of the switch or under the mechanism cover

#### Mounting on the left side of the switch:

Max. 8 auxiliary contact blocks with the OEA28 module.

#### Mounting under the mechanism cover:

OTDC100...250: Max. 4 test contacts or 2 test contacts + 2 test indication contacts.1)

OT315...630: Max. 4 test contacts + 4 test indication contacts.<sup>1)</sup>

The test contacts can be used as standard auxiliary contacts as well.

OTDC100250, OT315630	1NO	OA1G10	0.03
OTDC100250, OT315630	1NC	OA3G01	0.03

#### Module for auxiliary contacts

Screw mounting to the left side of the switch.

Suitable for switches	Catalog number	Weight/ unit [kg]
OTDC100250, OT315630	OEA28	0.04

<sup>1)</sup> Contact numbering:

21 (61) (31) (71) 22 (62) (32) (72) (83) (43) (53) 13 (84) (44) (54) 14

#### Performance data according to IEC 60947-5-1

For OA1G\_, OA3G\_

	AC15		DC12		DC13	
Ue/[V]	le/[A]	Ue/[V]	le/[A]	P/[W]	le/[A]	P/[W]
230	6	24	10	240	2	50
400	4	72	4	290	0.8	60
415	4	125	2	250	0.55	70
690	2	250	0.55	140	0.27	70
		440	0.1	44		

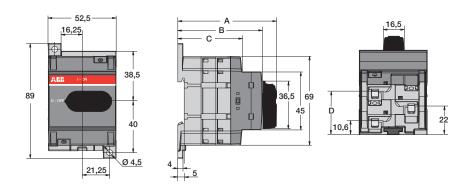
<sup>&</sup>lt;sup>2)</sup> Auxiliary contacts OA1G\_ are available in larger packing as well.

A bulk package includes 50 auxiliary contacts. Type number: add a suffix: /B, e.g. OA1G01/B.

Early break type auxiliary contacts means that in the switches, the NO aux.contacts break before the main contacts open.

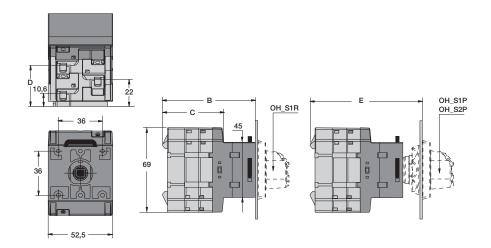
# Dimension drawings Disconnect switches

#### OTDC16...32F\_, base or DIN-rail mounting



OTDC1632F_					
Dimension [mm]					
Number of poles	Α	В	С	D	
2	66,2	54,1	38,3	22	
3	77,6	65,5	49,7	33,4	
4	89	76,9	61,1	44,8	

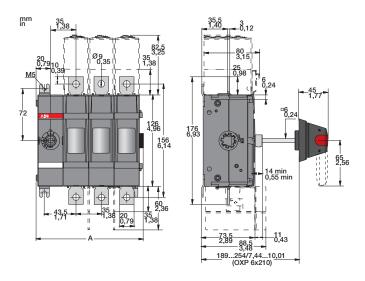
#### OTDC16...32FT\_, door mounting

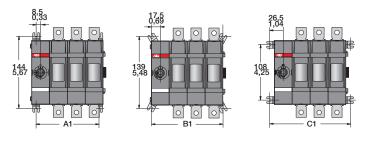


OTDC32FT_							
[mm]	В	С	D	E			
FT2	64,1	38,3	22	79,9			
FT3	75,5	49,7	33,4	91,3			
FT4	86,9	61,1	44,8	102,7			

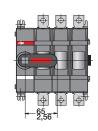
# Dimension drawings Disconnect switches

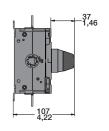
#### OTDC100...250E02, OTDC100...200U02





OTDC100, 160, 200, 250E01...04K OTDC 100, 200U01...04K

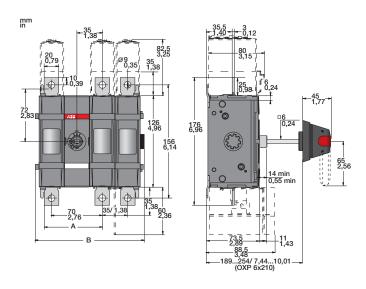


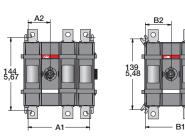


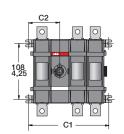
## OTDC100, 160, 200, 250E01...04

OTDC 100, 20000104						
[mm	/in] 01	02	03	04		
Α	78/3,07	113/4,45	148/5,83	183/7,21		
A1	52/2,05	87/3,43	122/4,81	157/6,18		
B1	70/2,76	105/4,14	140/5,51	175/6,89		
C1	88/3,46	123/4,85	158/6,22	193/7,6		

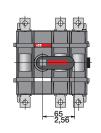
#### OTDC100...250E11, OTDC100...200U11

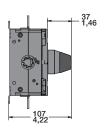






#### OTDC100, 160, 200, 250E11...22K OTDC 100, 200U11...22K

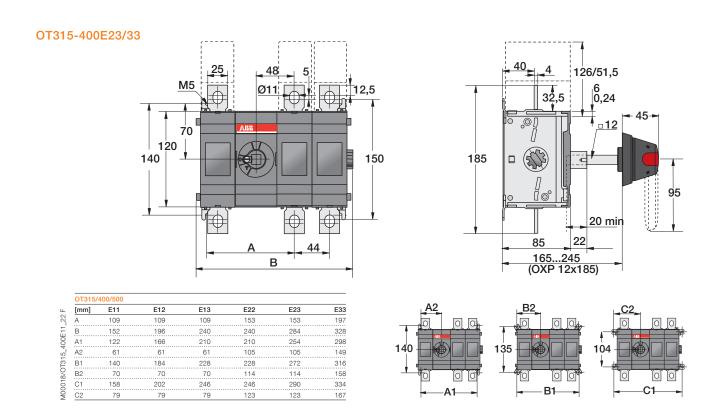




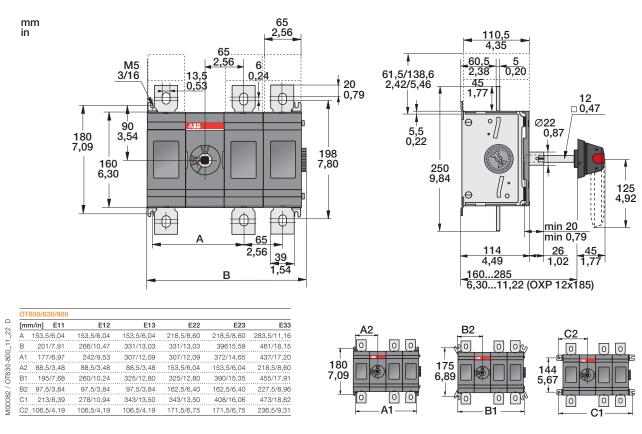
### OTDC100, 160, 200, 250E11...22

OTDC100, 200U1122						
[mm/in	] 11	12	13	22		
Α	80/3,15	80/3,15	80/3,15	115/4,53		
В	115,5/4,55	150,5/5,93	185,5/7,31	185,5/7,31		
A1	87/3,43	122/4,81	157/6,18	157/6,18		
A2	43,5/1,71	43,5/1,71	43,5/1,71	78,5/3,09		
B1	105/4,14	140/5,51	175/6,89	175/6,89		
B2	52,5/2,07	52,5/2,07	52,5/2,07	87,5/3,44		
C1	123/4,85	158/6,22	193/7,6	193/7,6		
C2	61,5	61,5	61,5	96,5		

## Dimension drawings Disconnect switches

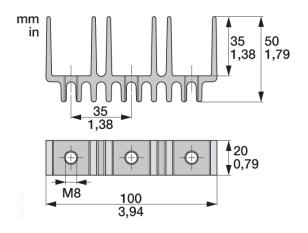


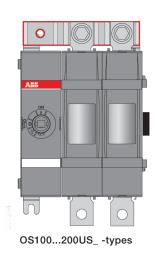
#### OT630E23/33

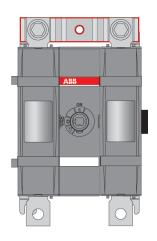


# Dimension drawings Enclosed disconnect switches, accessories

#### OEZXY91







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