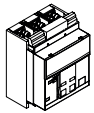
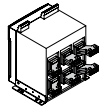


# Automatic Circuit Breakers

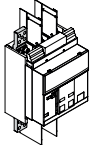
## 3.17 SACE Emax2 – Accessories



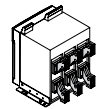
Front terminal – F



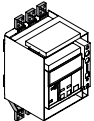
Horizontal rear spread terminal – SHR



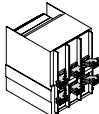
Extended front terminal – EF



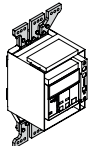
Vertical rear spread terminal – SVR



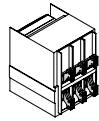
Extended front terminal – EF



Horizontal rear terminal – SHR



Front spread terminal – ES



Vertical rear spread terminal – SVR

### Kit for terminals – loose supply for fixed circuit-breaker

Size	Version	Iu Max	Type	3 Pieces	4 Pieces
				Code	Code
E1.2	F	1600	Kit EF*	1SDA073967R1	1SDA073968R1
E1.2	F	1600	Kit F*	1SDA073973R1	1SDA073974R1
E1.2	F	1600	Kit ES*	1SDA073979R1	1SDA073980R1
E1.2	F	1600	Kit Adjustable HR/VR	1SDA073989R1	1SDA073990R1
E2.2	F	2000	Kit SHR*	1SDA074049R1	1SDA074050R1
E2.2	F	2500	Kit SHR*	1SDA074055R1	1SDA074056R1
E2.2	F	2000	Kit SVR*	1SDA074061R1	1SDA074062R1
E2.2	F	2500	Kit SVR*	1SDA074067R1	1SDA074068R1
E4.2	F	4000	Kit F Upper*	1SDA074130R1	1SDA074131R1
E4.2	F	4000	Kit F Lower*	1SDA074132R1	1SDA074133R1

### Kit for terminals – loose supply for fixed part of withdrawable circuit-breaker

Size	Version	Iu Max	Type	3 Poles	4 Poles
				Code	Code
E1.2	W	1600	Kit EF	1SDA073943R1	1SDA073944R1
E1.2	W	1600	Kit Adjustable HR/VR	1SDA073949R1	1SDA073950R1
E1.2	W	1600	Kit ES	1SDA073955R1	1SDA073956R1
E1.2	W	1600	Kit SHR	1SDA073961R1	1SDA073962R1
E2.2	W	2000	Kit SHR	1SDA074049R1	1SDA074050R1
E2.2	W	2500	Kit SHR	1SDA074055R1	1SDA074056R1
E2.2	W	2000	Kit SVR	1SDA074061R1	1SDA074062R1
E2.2	W	2500	Kit SVR	1SDA074067R1	1SDA074068R1
E2.2	W	2500	Kit F Upper	1SDA074090R1	1SDA074091R1
E2.2	W	2500	Kit F Lower	1SDA074092R1	1SDA074093R1
E4.2	W	3200	Kit Adjustable HR/VR	1SDA074019R1	1SDA074020R1
E4.2	W	4000	Kit Adjustable HR/VR	1SDA074025R1	1SDA074026R1



# Notes

3

A large, empty grid area for taking notes, consisting of many small squares. The grid is bounded by a thick black border on the top and bottom.

## SECTION 4

**Switches**

## Switch-disconnectors

**Switch-disconnectors OT**

Switch-disconnectors	4.1
Accessories	4.2

**Change-over, bypass and transfer switches OT, OT\_Y and OTM**

Manual change-over switches	4.3
Bypass switches	4.4
Motorized change-over switches	4.5
Accessories	4.6

**Automatic transfer switches**

Compact ATS	4.7
TruONE® ATS OXB200...1600	4.8

**Switch-disconnectors OTDC and OTDCP**

Front operated switch-disconnectors	4.9
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**Enclosed switches**

Plastic enclosed switch-disconnectors	4.10
---------------------------------------	------

**Switch fuses OS**

Din-type	4.11
BS-type	4.12
Accessories	4.13

<b>Fuse switch XLP</b>	4.14
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<b>Fuse switch ZLBM</b>	4.15
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<b>Fuse switch OFAZ / OFAX</b>	4.16
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## Switch-disconnectors

### 4.1 Front operated switch-disconnectors, IEC

#### Switch-disconnectors, base and DIN-rail mounting, IEC

Including protected terminal clamps IP20, except OT125FL\_ types.



OT100...125F3

No. of poles	$I_{th}$ (open) [A]	Cable cross section [mm <sup>2</sup> ]	Rated operat. currents AC22A/ AC23A 400V [A/A]	Type	Order number
3	25	0.75...10	16/16	OT16F3	1SCA104811R1001
3	32	0.75...10	25/20	OT25F3	1SCA104857R1001
3	40	0.75...10	40/23	OT40F3	1SCA104902R1001
3	63	1.5...35	63/45	OT63F3	1SCA105332R1001
3	80	1.5...35	80/75	OT80F3	1SCA105798R1001
3	115	10...70	100/80	OT100F3	1SCA105004R1001
3	125	10...70	125/90	OT125F3	1SCA105033R1001
3	160	70	160/160	OT160G03P	1SCA135139R1001
3	160	70	160/160	OT160G03K	1SCA138208R1001

#### Switch-disconnectors, door mounting, IEC

Include protected terminal clamps, IP20.

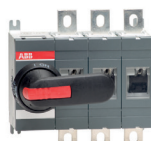


OT100...125FT3

No. of poles	$I_{th}$ (open) [A]	Cable cross section [mm <sup>2</sup> ]	Rated operat. currents AC22A/ AC23A 400V [A/A]	Type	Order number
3	25	0.75...10	16/16	OT16FT3	1SCA104838R1001
3	32	0.75...10	25/20	OT25FT3	1SCA104884R1001
3	40	0.75...10	40/23	OT40FT3	1SCA104940R1001
3	63	1.5...35	63/45	OT63FT3	1SCA105382R1001
3	80	1.5...35	80/75	OT80FT3	1SCA105431R1001
3	115	10...70	100/80	OT100FT3	1SCA105023R1001
3	125	10...70	125/90	OT125FT3	1SCA105060R1001

#### Switch-disconnectors, with pistol handle, base mounting, IEC

Including 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 can be adjusted to different installation depths.



OT315...400E03P



OT630...800E03P

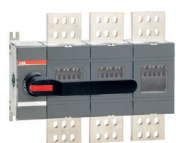
No. of poles	$I_{th}$ (open) [A]	Rated operat. currents AC22A/ AC23A 400V [A/A]	Type	Order number
3	200	200/200	OT200E03P	1SCA022712R0800
3	250	250/250	OT250E03P	1SCA022710R0100
3	315	315/315	OT315E03P	1SCA022718R8510
3	400	400/400	OT400E03P	1SCA022718R8780
3	630	630/630	OT630E03P	1SCA022718R8940
3	800	800/800	OT800E03P	1SCA022718R9410

## Switch-disconnectors

### 4.1 Front operated switch-disconnectors, IEC



OT1000...1250E03P



OT2000...2500E03P



OT3200...4000E03P

#### Shafts and handles included as standard

Suitable for switches	Shaft	Handle	Terminal bolts
OT160EV...250_P	OXp6X210	OHB65J6	M8x25
OT315...400_P	OXp12X185	OHB95J12	M10x30
OT630...800_P	OXp12X185	OHB125J12	M12x40

No. of poles	$I_{th}$ (open) [A]	Rated operat. currents AC22A/ AC23A 400V [A/A]	Type	Order number
3	1000	1000/1000	OT1000E03P	1SCA022860R5930
3	1250	1250/1250	OT1250E03P	1SCA022860R6230
3	1600	1600/1250	OT1600E03P	1SCA022860R6580
3	2000	2000/-	OT2000E03P	1SCA108036R1001
3	2500	2500/-	OT2500E03P	1SCA104972R1001
3	3200	3200/3200	OT3200E03P	1SCA128481R1001
3	3800	3800/3800	OT4000E03P	1SCA124848R1001

#### Shafts and handles included as standard

Suitable for switches	Shaft	Handle	Terminal bolts
OT1000...1250_P	OXp12X280	OHB274J12	M12x50
OT1600_P	OXp12X280	OHB274J12	M12x50
OT2000...2500_P	OXp12X280	OHB274J12	M12x50
OT3200...4000P	OXp12X280	OHB274J12	M12x60

#### Switch-disconnectors with direct mount handle, base mounting, IEC

Including a black Test-OFF-ON plastic handle and shaft as standard.

The handle is padlockable in the OFF-position.



OT315...400E03K



OT630...800E03K

No. of poles	$I_{th}$ (open) [A]	Rated operat. currents AC22A/ AC23A 400V [A/A]	Type	Order number
3	200	200/160	OT160EV03K	1SCA120513R1001
3	200	200/200	OT200E03K	1SCA022763R4820
3	250	250/250	OT250E03K	1SCA022763R5040
3	315	315/315	OT315E03K	1SCA022763R5630
3	400	400/400	OT400E03K	1SCA022763R5390
3	630	630/630	OT630E03K	1SCA022779R4940
3	800	800/800	OT800E03K	1SCA022779R5160
3	1000	1000/1000	OT1000E03K	1SCA108353R1001
3	1250	1250/1250	OT1250E03K	1SCA108356R1001
3	1600	1600/1250	OT1600E03K	1SCA108352R1001
3	2000	2000/-	OT2000E03K	1SCA108359R1001
3	2500	2500/-	OT2500E03K	1SCA108361R1001

#### Shafts and handles included as standard

Suitable for switches	Handle	Terminal bolts
OT160EV...250_K	OTV250EK	M8x25
OT315...400_K	OTV400EK	M10x30
OT630...800_K	OTV800EK	M12x40
OT1000...1250_K	OTV1000EK	M12x50
OT1600_K	OTV1000EK	M12x60
OT2000...2500_K	OTV1000EK	M12x60

## Switch-disconnectors

### 4.2 Accessories – Handles

#### Handle knobs, for base and DIN-rail mounted switches

Mounting directly to the switch, no shaft needed.



Colour	Handle length [mm]	Suitable for switches	Type	Order number
Padlockable in 0-position with one padlock with bail diameter 5 mm				
Black	40	OT63...125F	OHBS2	1SCA109089R1001
Red	40	OT63...125F	OHS2	1SCA108598R1001
Non-padlockable				
Black	39	OT16...125F	OHBS3	1SCA108320R1001
Red	39	OT16...125F	OHS3	1SCA108667R1001
Black	72	OT63...125F	OHBS9	1SCA108665R1001
Red	72	OT63...125F	OHS9	1SCA108666R1001

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

For shaft diameter 6 mm, door drilling 22.5 mm.

Indication I-O and ON-OFF.



Colour	Suitable for switches	Type	Order number
IP65 handles, NEMA 1, 3R, 12			
Padlockable with max. 3 padlocks with bail diameter 5...8 mm, door interlock in ON-position, defeatable			
Black	OT16...125F	OHBS2AJ	1SCA105213R1001
Red-yellow	OT16...125F	OHYS2AJ	1SCA105296R1001
Padlockable with max. 3 padlocks with bail diameter 5...8 mm, door interlock in ON-position			
Black	OT16...125F	OHBS2AJ1	1SCA105215R1001
Red-yellow	OT16...125F	OHYS2AJ1	1SCA105297R1001

#### Selector type handle with metal hasp

IP65 handles, NEMA 1, 3R, 12

Padlockable with max. 3 padlocks, door interlock in the ON-position, defeatable			
Black	OT16...125F	OHBS2AJEH	1SCA108230R1001
Padlockable with max. 3 padlocks, door interlock in the ON-position, non-defeatable			
Black	OT16...125F	OHBS2AJ1EH	1SCA105217R1001

#### Selector type handles, for door mounted switches

Indication I-O and ON-OFF. No separate shaft needed.



Colour	Suitable for switches	Type	Order number
Padlockable with max. 3 padlocks, IP65, hole distance 36/48 mm, NEMA 1, 3R, 12			
Black	OT16...125FT	OHBS2RJ	1SCA105232R1001
Red-yellow	OT16...125FT	OHYS2RJ	1SCA105323R1001

## Switch-disconnectors

### 4.2 Accessories – Handles



OZ331\_B



OZ331\_RY

#### Round padlockable handles, for base and DIN-rail mounted switches

Padlockable in 0-position, max 3 padlocks with max 8 mm hasp diameter.  
Indication I-O and ON-OFF

Colour	Suitable for switches	Type	Order number
One hole mounting handle, IP65, NEMA 4X outdoor, size 66x66			
Black	OT16...125F_	OZ331SPB	1SCA112983R1001
Red-yellow	OT16...125F_	OZ331SPRY	1SCA113097R1001

#### Pistol type handles, for base and DIN-rail mounted switches

IP65, 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.



OHY\_



OHB\_

Colour	Handle length [mm]	Type	Order number
Suitable for switches OT16...125F, for shaft diameter 6 mm			
Indication in types OHB and OHY: I-O, ON-OFF			
Black	45	OHB45J6	1SCA022380R8770
Red-yellow	45	OHY45J6	1SCA022380R8930
Suitable for switches OT160EV...250, for shaft diameter 6 mm			
Indication in types OHB and OHY: I-O, ON-OFF			
Black	65	OHB65J6	1SCA022380R9660
Red-yellow	65	OHY65J6	1SCA022380R9820
Black	80	OHB80J6	1SCA022381R0240
Red-yellow	80	OHY80J6	1SCA022381R0410
Suitable for switches OT315...400, for shaft diameter 12 mm			
Indication OHB and OHY: I-O, ON-OFF			
Black	95	OHB95J12	1SCA022381R0830
Red-yellow	95	OHY95J12	1SCA022381R1050
Suitable for switches OT630...800, for shaft diameter 12 mm			
Indication OHB and OHY: I-O, ON-OFF			
Black	125	OHB125J12	1SCA022381R1560
Red-yellow	125	OHY125J12	1SCA022381R1720

#### Direct mount handles for base mounted switches

Includes a shaft and a mechanism cover. Indication Test-OFF-ON/Test-O-I.  
Padlockable with three padlocks in OFF-position.



OTV400EK



OTV1000EPK

Colour	Handle length [mm]	Suitable for switches	Type	Order number
Black	65	OT160EV...250	OTV250EK	1SCA022763R2700
Red-yellow	65	OT160EV...250	OTVY250EK	1SCA022772R7910
Black	95	OT315...400	OTV400EK	1SCA022763R2960
Red-yellow	95	OT315...400	OTVY400EK	1SCA022772R7830
Black	125	OT630...800	OTV800EK	1SCA022804R6340
Red-yellow	125	OT630...800	OTVY800EK	1SCA022810R2780
Black	274	OT1000...4000	OTV1000EK	1SCA106608R1001
Black	2x200	OT1000...2500	OTV1000EPK	1SCA121085R1001

## Switch-disconnectors

### 4.2 Accessories – Handles

#### Pistol type handles, for base and DIN-rail mounted switches

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.



OHB150/200J12P



OHB274/330J12

Colour	Handle length [mm]	Type	Order number
Suitable for switches OT1000...2500, for shaft diameter 12 mm, IP65			
Indication OHB and OHY: I-O, ON-OFF			
Black	2x150	OHB150J12P	1SCA022865R9430
Red-yellow	2x150	OHY150J12P	1SCA101586R1001
Black	2x200	OHB200J12P	1SCA022865R9510
Red-yellow	2x200	OHY200J12P	1SCA101587R1001
Suitable for switches OT1000...4000, for shaft diameter 12 mm, IP65			
Indication OHB and OHY: I-O, ON-OFF			
Black	274	OHB274J12	1SCA115920R1001
Red-yellow	274	OHY274J12	1SCA115919R1001
Black	330	OHB330J12	1SCA115922R1001

#### Stainless steel handles, for base mounted switches

Stainless steel handles, indication I-O/ON-OFF, padlockable with 3 padlocks in the OFF-position, door interlock in the ON-position, IP66



OHM65L6



OHM65J6E00S

Colour	Handle length [mm]	Type	Order number
For shaft diameter 6 mm			
Grey	65	OHM65L6	1SCA022739R1070
For shaft diameter 12 mm			
Grey	175	OHM175L12	1SCA022739R1230
Grey	275	OHM275L12	1SCA022832R4840
Grey	2x200	OHM200L12P	1SCA104439R1001

#### Handles for side operated switch-disconnectors

For mounting on the side of the enclosure. Padlockable with three padlocks in the OFF-position, door interlock in the ON-position, IP65. The position indications are rotated 90°.



OHY65J6E00S

Colour	Handle length [mm]	Type	Order number
For shaft diameter 6 mm, IP65			
Plastic handles, black and red-yellow: I-O/ON-OFF			
Black	65	OHB65J6E00S	1SCA022382R9850
Red-yellow	65	OHY65J6E00S	1SCA022382R9930
For shaft diameter 12 mm, IP65, Nema type 1, 3R, 12			
Plastic handles, indication I-O/ON-OFF			
Black	145	OHB145J12E00S	1SCA022679R9700



# Switch-disconnectors

## 4.2 Accessories – Shafts

### Shafts

Shaft length [mm]	H [mm]	Type	Order number
Shaft diameter 6 mm			
For selector type handles, suitable for OT16...125F			
85		OX56X85	1SCA101647R1001
130		OX56X130	1SCA101655R1001
180		OX56X180	1SCA101659R1001
250		OX56X250	1SCA101660R1001
330		OX56X330	1SCA101661R1001
For round padlockable type handles, suitable for OT16...125F			
85		OX6X85	1SCA111274R1001
130		OX6X130	1SCA111460R1001
200		OX6X200	1SCA111932R1001
300		OX6X300	1SCA111933R1001
For pistol type handles, suitable for OT16...125F			
150		OX6X150	1SCA022295R5600
265		OX6X265	1SCA108225R1001
400		OX6X400	1SCA108226R1001
For pistol type handles, suitable for OT160EV...250			
130	109...174	OX6X130	1SCA022057R0570
150	129...194	OX6X150	1SCA022295R5600
210	189...254	OX6X210	1SCA022295R6080
290	269...334	OX6X290	1SCA022042R6370
Shaft diameter 12 mm			
For pistol type handles, suitable for OT315...400			
185	165...245	OX12X185	1SCA022325R6710
250	230...310	OX12X250	1SCA022325R6980
280	260...340	OX12X280	1SCA022137R5140
325	305...385	OX12X325	1SCA022042R5810
395	375...455	OX12X395	1SCA022042R5990
465	445...525	OX12X465	1SCA022042R6020
535	515...595	OX12X535	1SCA022042R6110
For pistol type handles, suitable for OT630...800			
250	230...345	OX12X250	1SCA022325R6980
280	260...375	OX12X280	1SCA022137R5140
325	305...420	OX12X325	1SCA022042R5810
395	375...490	OX12X395	1SCA022042R5990
465	445...560	OX12X465	1SCA022042R6020
535	515...630	OX12X535	1SCA022042R6110
For pistol type handles, suitable for OT1000...25001)			
250	221...350	OX12X250	1SCA022325R6980
280	251...380	OX12X280	1SCA022137R5140
325	296...425	OX12X325	1SCA022042R5810
395	366...495	OX12X395	1SCA022042R5990
465	436...565	OX12X465	1SCA022042R6020
535	506...635	OX12X535	1SCA022042R6110
For pistol type handles, suitable for OT3200...4000			
280	251...380	OX12X280	1SCA022137R5140
325	296...425	OX12X325	1SCA022042R5810
395	366...495	OX12X395	1SCA022042R5990
465	436...565	OX12X465	1SCA022042R6020
535	506...635	OX12X535	1SCA022042R6110



OXS6X\_



OX6X\_



OXP6X\_



OXP12\_

## Switch-disconnectors

### 4.2 Accessories – Auxiliary contacts

#### Auxiliary contact blocks, IP20, for OT16...125F/FT\_ and OT16...125M\_

Contact numbering according to EN 50013. Snap-on mounting to the side of the switch.  $I_{th}$  = 16A, cable cross section max. 2 x 2.5 mm<sup>2</sup>. Early-break type OA1G10.



OA1G\_



OA2G11



OA1G10, OA3G01

Suitable for switches	Function	Type	Order number
Mountable on left side, max. 2 pcs			
OT16...125F_, FT_	1NC	OA1G01	1SCA022353R4890
Mountable on the right side, max. 2 pcs			
OT16...125F_, FT_	1NO	OA1G10	1SCA022353R4970
Mountable on both sides, simultaneous function with the main contacts			
OT16...40F_: max. 2NO+2NC, OT63...125F: max. 4NO+4NC <sup>3)</sup>			
OT16...125F_	1NO+1NC	OA2G11 <sup>2)</sup>	1SCA022379R8100

1) Not mountable on the same side as the fourth pole.

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

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

#### Auxiliary contact blocks, IP20, for OT160EV...4000

Contact numbering according to EN 50013.

Function	Type	Order number
Suitable for switches OT160EV...4000		
1NO	OA1G10	1SCA022353R4970
1NC	OA3G01	1SCA022456R7410
Mounting under the mechanism cover		

The "test" contacts operate in ON- and OFF-positions as well as when the handle is turned to TEST-position = 45 degrees over the OFF-position. The "test indication" contacts operate only when the handle is turned to TEST-position. See the function table below. The OA1G10 (N.O.) or OA3G01 (N.C.) auxiliary contact blocks can be used as standard auxiliary contacts, "test" or "test indication" contacts. The desired functions are achieved when an auxiliary contact block is installed in a specific place shown in the mounting instruction. In order to activate the "test" and "test indication" features a handle with test function is required.

OT160EV...250: Max. 4 test contacts or 2 test contacts + 2 test indication contacts

OT315...800: Max. 4 test contacts + 4 test indication contacts

Switches with \_K handle: 2+4 auxiliary contacts with \_P handle: 4+4 auxiliary contacts

OT1000...4000: Max 4 test indication contacts + 6 test contacts + 2 early operation test contacts

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

Handle position	Main contacts	Aux./Test contacts N.O.	Test indication contact N.O.
Function table of auxiliary contacts			
Test	open	closed	closed
0	open	open	open
I	closed	closed	open

Mounting on the left side of the switch

Max. 8 auxiliary contact blocks with the OEA28 module.

#### Module for auxiliary contacts with OT160EV...4000

Screw mounting to the left side of the switch.



OEA28

Suitable for switches	Type	Order number
OT160EV...4000	OEA28	1SCA022714R8810

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

# Switch-disconnectors

## 4.2 Accessories – Fourth poles



OTZ400E



OTZ800E



OTZ1250E



OTZ1600E



OTZ1500E

**Fourth poles, simultaneous function with the main contacts**

Mountable on the side of the switch.

Suitable for switches	Type	Order number
For OT switch-disconnectors		
OT16...40F3	OTPS40FPN1*	1SCA105001R1001
OT16...40F3	OTPS40FPN2*	1SCA105000R1001
OT63...80F3	OTPS80FP	1SCA105461R1001
OT100F3, OT125F3	OTPS125FP	1SCA105099R1001
OT16...40FT3	OTPS40FDN1*	1SCA104999R1001
OT16...40FT3	OTPS40FDN2*	1SCA104998R1001
OT63...80FT3	OTPS80FD	1SCA105458R1001
OT100...125FT3	OTPS125FD	1SCA105096R1001
OT160EV...250	OTZ250E	1SCA022735R9420
OT315...400	OTZ400E	1SCA022749R1960
OT630...800	OTZ800E	1SCA022807R5100
OT1000...1250	OTZ1250E	1SCA103765R1001
OT1600	OTZ1600E	1SCA100431R1001
OT2000...2500	OTZ2500E	1SCA107931R1001

**Fourth poles, late-break and early-make**

Mountable on the side of the switch.

Suitable for switches	Type	Order number
For OT switch-disconnectors		
OT16...40F3	OTPL40FP	1SCA105717R1001
OT63...80F3	OTPL80FP	1SCA105452R1001
OT100...125F3	OTPL125FP	1SCA105090R1001
OT16...40FT3	OTPL40FD	1SCA105716R1001
OT63...80FT3	OTPL80FD	1SCA105451R1001
OT100...125FT3	OTPL125FD	1SCA105088R1001

\*) N1=On the left side of the switch  
 \*) N2=On the right side of the switch

## Switch-disconnectors

### 4.2 Accessories – Terminal shrouds



OTS40T3



OTS125T3



OTS125T1P

#### Terminal shrouds for OT switches, snap-on mounting, transparent

Suitable for switches	Type	Order number
For 3-pole OT switches		
OT16...40F3, -FT3	OTS40T3	1SCA105317R1001
OT63...80F3, -FT3	OTS63T3	1SCA022353R6750
OT100...125F3, FT3	OTS125T3	1SCA022379R9680
For 3-pole OT switches with terminal clamps OZXL1 or OZXT1		
OT100...125F3	OTS125T3P	1SCA022491R9890
For 1 to 4-pole OT switches, shroud for single pole and for fourth pole		
OTP_40F_	OTS40T1	1SCA105314R1001
OTP_80F_	OTS63T1	1SCA022353R6910
OTP_125F_	OTS125T1	1SCA022379R9760



OTS1600G1L



OTS2500G1L

#### Terminal shrouds for OT switches, snap-on mounting, grey

Suitable for switches	Description	Type	Order number
For 3-pole OT			
OT160EV...250	Long type	OTS250G1L/3	1SCA022731R8150
OT315...400	Long type	OTS400G1L/3	1SCA022736R8840
OT630...800	Long type	OTS800G1L/3	1SCA022776R7890
OT1000...1600	Long type	OTS1600G1L/3	1SCA022871R9510
OT2000...2500	Long type	OTS2500G1L/3	1SCA107261R1001
OT3200...4000	Long type	OTS4000G1L/3	1SCA129042R1001

## Switch-disconnectors

### 4.2 Accessories – Conversion kits for front operated switch combinations



OWP6D40



OWP6D80



OWP6D125



OTZW8



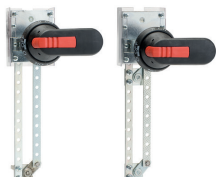
OWC6D40



OWC6D125



OTZW26



OTZW25

OTZW17



OTZW24

#### 6 and 8-pole switch mechanism

Suitable for switches	Shaft distance [mm]	Type	Order number
Parallel attachment for connecting two 3- or 4-pole switches			
The switches work simultaneously. Mounting directly on the top of two switch-disconnectors, snap-on mounting. The switch size is printed on stickers for the different switch sizes. The fourth pole or auxiliary contacts can be mounted on the outer side of the combination.			
OT16...40		OWP6D40	1SCA022865R4800
OT63...80		OWP6D80	1SCA022865R5010
OT100...125		OWP6D125	1SCA022865R5100
Attachment levers for connecting two 3- or 4-pole switches			
Attachment levers provided with holes, enabling different shaft distances. The combination switches can be mounted either horizontally or vertically. Two 3 or 4-pole switches needed.			
OT16...40	45+(0...12)x15	OTZW8	1SCA022421R7600
OT63...80	60+(0...11)x15	OTZW8	1SCA022421R7600
OT100...125	75+(0...10)x15	OTZW8	1SCA022421R7600

#### Change-over switch mechanism

Two switches connected with a mechanism operating into I-O-II -positions. Two 3 or 4-pole switches needed.

#### Change-over kits

The modular change-over switches can be built by adding a compact snap-on kit on the top of two switch-disconnectors. The kits do not require any additional foot print area, only the height is increased 12 mm.

OT16...40	OX56_, OXP6_	OWC6D40	1SCA022865R4550
OT63...80	OX56_, OXP6_	OWC6D80	1SCA022865R4630
OT100...125	OX56_, OXP6_	OWC6D125	1SCA104494R1001
Attachment levers			
OT160EV...250	210+(0...18)x20	OTZW25	1SCA022778R6920

See the table of the handles and shafts included in the conversion kits on next page.

#### By-pass switch mechanism

A combination of two switches in parallel with a third switch for change-over operation to by-pass, for example, a breaker for maintenance. The by-pass attachment can be used together with another combination attachment. Three 3 or 4-pole switches needed.

Suitable for switches	Shaft distance [mm]	Type	Order number
OT16...125	Between 1 and 2: 90+(0...6) x15	OTZW17	1SCA022387R1620
	Between 1 and 3: 90+(0...10) x15		
OT160EV...250	Between 1 and 2: 210+(0...9) x20	OTZW26	1SCA022778R7060
	Between 1 and 3: 250+(0...9) x20		

#### Mechanical interlock mechanism

Prevents one switch from moving to ON-position, if the other is not in OFF-position. When mounted upside down, prevents one switch from moving to OFF-position, if the other is not in ON-position. (UPS-usage, make-before-break).

OT16...125	100	OTZW24	1SCA022639R5610
OT160...250	190	OTZW10	1SCA022431R5280

See the table of the handles and shafts included in the conversion kits on next page.

## Change-over, bypass and transfer switches

### 4.3 Manual change-over switches OT16...125\_C, and OT315...800\_CP

#### Manual change-over switches, I-O-II -operation

Including terminal clamps, IP20. Handle and shaft have to be ordered separately.



OT63...80F3C

No. of poles	Rated current and power			Type	Order number
	AC-21A/AC-22A		AC-23A		
	≤ 415V I[A]	400V S[kVA]	400...415V I[A]/P[kW]		
3	16	11	16/7.5	OT16F3C	1SCA104816R1001
3	25	17	20/9	OT25F3C	1SCA104863R1001
3	40	27	23/11	OT40F3C	1SCA104913R1001
3	63	43	45/22	OT63F3C	1SCA105338R1001
3	80	55	75/37	OT80F3C	1SCA105402R1001
3	100	70	80/37	OT100F3C	1SCA105008R1001
3	125	86	90/45	OT125F3C	1SCA105037R1001

#### Manual change-over switches, I-O-II -operation

Including a black plastic IP65 I-O-II pistol type handle, shaft and bolt set for the cable connection. Handle padlockable in the 0-position, door interlock in the I- and II-positions and when padlocked..



OT160...250E03CP



OT160...250E04CP

No. of poles	Rated current and power			Type	Order number
	AC-21A/AC-22A		AC-23A		
	≤ 415V I[A]	400V S[kVA]	400...415V I[A]/P[kW]		
3	160	110	160/90	OT160E03CP	1SCA022772R6510
4	160	110	160/90	OT160E04CP	1SCA022775R9440
3	200	135	200/110	OT200E03CP	1SCA022771R7520
4	200	135	200/110	OT200E04CP	1SCA022771R7280
3	250	170	250/140	OT250E03CP	1SCA022771R3450
4	250	170	250/140	OT250E04CP	1SCA022775R4640

#### Shafts, handle and bolt kits included as standard

Suitable for switches	Shaft	Handle	Bolt kit
OT160...250_C	OXF6x161	OHB65J6E011	M8x25



OT315...400E03CP



OT630...800E03CP

No. of poles	Rated current and power			Type	Order number
	AC-21A/AC-22A		AC-23A		
	≤ 415V I[A]	400V S[kVA]	400...415V I[A]/P[kW]		
3	315	215	315/160	OT315E03CP	1SCA022772R6780
4	315	215	315/160	OT315E04CP	1SCA022775R7150
3	400	275	400/220	OT400E03CP	1SCA022771R8500
4	400	275	400/220	OT400E04CP	1SCA022771R8680
3	630	435	630/355	OT630E03CP	1SCA022785R6050
4	630	435	630/355	OT630E04CP	1SCA022785R6130
3	800	550	800/450	OT800E03CP	1SCA022785R6300
4	800	550	800/450	OT800E04CP	1SCA022785R6210

#### Shafts, handle and bolt kits included as standard

Suitable for switches	Shaft	Handle	Bolt kit
OT315...400_C	OXF12x166	OHB95J12E011	M10x30
OT630...800_C	OXF12x185	OHB125J12E011	M12x40

## Change-over, bypass and transfer switches

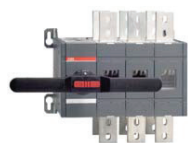
### 4.3 Manual change-over switches OT16...125\_C, and OT315...800\_CP

#### Manual change-over switches, I-O-II -operation

Including a black plastic IP65 I-O-II pistol type handle, shaft and bolt set for the cable connection. Handle padlockable in the 0-position, door interlock in the I- and II-positions and when padlocked..



OT1250E03CP



OT1600E03CP



OT3200E03CP

No. of poles	Rated current <sup>1)</sup> and power			Type	Order number
	AC-21A/AC-22A		AC-23A		
	≤ 415V I[A]	400V S[kVA]	400...415V I[A]/P[kW]		
3	1000	680	1000/560	OT1000E03CP	1SCA022872R1680
4	1000	680	1000/560	OT1000E04CP	1SCA022872R1500
3	1250	850	1250/710	OT1250E03CP	1SCA022872R0790
4	1250	850	1250/710	OT1250E04CP	1SCA022872R1250
3	1600	1000	1250/710	OT1600E03CP	1SCA022872R1840
4	1600	1000	1250/710	OT1600E04CP	1SCA022872R2310
3	2000	1350		OT2000E03CP	1SCA103908R1001
4	2000	1350		OT2000E04CP	1SCA103912R1001
3	2500	1700		OT2500E03CP	1SCA105615R1001
4	2500	1700		OT2500E04CP	1SCA103906R1001
3	3200	2170		OT3200E03CP	1SCA129156R1001
4	3200	2170		OT3200E04CP	1SCA129158R1001

1) OT2000...3200: Category AC-21B

#### Shafts, handle and bolt kits included as standard

Suitable for switches	Shaft	Handle	Bolt kit
OT1000...2500_C	OXPI2x185	OHB200J12PE011	M12x60
OT3200_C	OXPI2x185	OHB200J12PE011	M12x100

## Change-over, bypass and transfer switches

### 4.4 Bypass switches OT160...800E\_YP

#### Manual bypass switches, I-O-II -operation

Including a black plastic IP65 I-O-II pistol type handle and a handle extension for enabling smooth manual operation, shaft and bolt set for the cable connection. The handle extension is snap-on mounted on the standard handle for manual operation. The handle extension shall be removed when padlocking the standard handle. Handle padlockable in the 0-position, door interlock in the I- and II-positions and when padlocked.



OT160...250E03\_YP



OT315...400E03\_YP



OT630...800E03\_YP

No. of poles	Rated current and power			Type	Order number
	AC-21A/AC-22A		AC-23A		
	≤ 415V I[A]	400V S[kVA]	400...415V I[A]/P[kW]		
3	160	110	160/90	OT160E03YP	1SCA123551R1001
4	160	110	160/90	OT160E04YP	1SCA123556R1001
3	200	135	200/110	OT200E03YP	1SCA123552R1001
4	200	135	200/110	OT200E04YP	1SCA123557R1001
3	250	170	250/140	OT250E03YP	1SCA123553R1001
4	250	170	250/140	OT250E04YP	1SCA123558R1001
3	315	215	315/160	OT315E03YP	1SCA123581R1001
4	315	215	315/160	OT315E04YP	1SCA123583R1001
3	400	275	400/220	OT400E03YP	1SCA123582R1001
4	400	275	400/220	OT400E04YP	1SCA124026R1001
3	630	435	630/355	OT630E03YP	1SCA123590R1001
4	630	435	630/355	OT630E04YP	1SCA123592R1001
3	800	550	800/450	OT800E03YP	1SCA123591R1001
4	800	550	800/450	OT800E04YP	1SCA123593R1001

#### Shafts, handle and bolt kits included as standard

Suitable for switches	Shaft	Handle	Handle extension	Bolt kit
OT160...250_Y	OXp6/12x161C	OHB65J12E011	OHBZX200	M8x25
OT315...400_Y	OXp12x166	OHB95J12E011	OHBZX200	M10x30
OT630...800_Y	OXp12x185	OHB125J12E011	OHBZX275	M12x40



# Change-over, bypass and transfer switches

## 4.5 Motorized change over switches

### Change-over switches, motor operation, I-O-II -operation

Including a handle for manual operation, a storage clip for the handle and male connectors for control circuits..



OTM40...125F3C\_



OTM40...125F4C\_

No. of poles	Rated current and power			Type	Order number
	AC-21A/AC-22A		AC-31B/ AC-33B		
	≤ 415V I[A]	400V S[kVA]	415V I[A]		
3	40	27	40/40	OTM40F3CMA230V	1SCA120096R1001
3	63	43	63/63	OTM63F3CMA230V	1SCA120095R1001
3	80	55	80/80	OTM80F3CMA230V	1SCA120093R1001
3	100	70	100/80	OTM100F3CMA230V	1SCA120071R1001
3	125	86	125/80	OTM125F3CMA230V	1SCA120070R1001
<b>Motor voltage U<sub>e</sub> 24 V DC</b>					
3	40	27	40/40	OTM40F3CMA24D	1SCA124061R1001
3	63	43	63/63	OTM63F3CMA24D	1SCA124060R1001
3	80	55	80/80	OTM80F3CMA24D	1SCA124059R1001
3	100	70	100/80	OTM100F3CMA24D	1SCA124058R1001
3	125	86	125/80	OTM125F3CMA24D	1SCA124057R1001

### Handles included as standard, cable cross section

Suitable for switches	Cable cross section [mm <sup>2</sup> ]	Handle
OTM40F_CM	2.5...25 or 2 x 2.5...16	OHB65D6CM
OTM63...125F_CM	10 ... 70	OHB65D6CM

### Change-over switches, motor operation, I-O-II -operation

Including a handle for manual operation, bolt kit with nut and washers for all terminals and male connectors for control circuits. Types OTM160...400E\_ include a storage clip for the handle and spare fuses.



OTM160...250E3C\_



OTM315...400E3C\_

No. of poles	Rated current and power			Type	Order number
	AC-21A/AC-22A		AC-31B/ AC-33B		
	≤ 415V I[A]	400V S[kVA]	415V I[A]		
Motor voltage U <sub>e</sub> 220...240 V AC					
3	160	110	160/160	OTM160E3CM230C	1SCA022845R8610
4	160	110	160/160	OTM160E4CM230C	1SCA022848R1510
3	200	135	200/200	OTM200E3CM230C	1SCA022845R8960
4	200	135	200/200	OTM200E4CM230C	1SCA022846R1590
3	250	170	250/250	OTM250E3CM230C	1SCA022845R9260
4	250	170	250/250	OTM250E4CM230C	1SCA022846R1910
3	315	215	315/315	OTM315E3CM230C	1SCA022847R1210
4	315	215	315/315	OTM315E4CM230C	1SCA022847R2870
3	400	275	400/400	OTM400E3CM230C	1SCA022847R1630
4	400	275	400/400	OTM400E4CM230C	1SCA022847R3250

### Handles and bolt kits included as standard

Suitable for switches	Handle	Bolt kit
OTM160...250	OTV250ECMK	M8x25
OTM315...400	OTV400ECMK	M10x30



OTM315...400E4C\_

## Change-over, bypass and transfer switches

### 4.5 Motorized change-over switches

#### Change-over switches, motor operation, I-O-II -operation

Including a handle for manual operation, bolt kit with nut and washers for all terminals and male connectors for control circuits. Types OTM630...2500E\_ include a storage clip for the handle and spare fuses.

4



OTM630...800E3C\_



OTM1000...1250E3C\_



OTM2000...2500E3C\_

No. of poles	Rated current <sup>1)</sup> and power			Type	Order number
	AC-21A/AC-22A		AC-31B/ AC-33B		
	≤ 415V I[A]	400V S[kVA]	415V I[A]		
Motor voltage U <sub>g</sub> 220...240 V AC <sup>2)</sup>					
3	630	435	650/650	OTM630E3CM230C	1SCA103567R1001
4	630	435	650/650	OTM630E4CM230C	1SCA022873R1990
3	800	550	720/650	OTM800E3CM230C	1SCA103570R1001
4	800	550	720/650	OTM800E4CM230C	1SCA022872R8340
3	1000	680	1000/1000	OTM1000E3CM230C	1SCA112677R1001
4	1000	680	1000/1000	OTM1000E4CM230C	1SCA112703R1001
3	1250	850	1250/1000	OTM1250E3CM230C	1SCA112676R1001
4	1250	850	1250/1000	OTM1250E4CM230C	1SCA112702R1001
3	1600	1000	1600/1000	OTM1600E3CM230C	1SCA112678R1001
4	1600	1000	1600/1000	OTM1600E4CM230C	1SCA112704R1001
3	2000	1350		OTM2000E3CM230C	1SCA112709R1001
4	2000	1350		OTM2000E4CM230C	1SCA112712R1001
3	2500	1700		OTM2500E3CM230C	1SCA112710R1001
4	2500	1700		OTM2500E4CM230C	1SCA112713R1001

1) OTM2000...2500: Category AC-21B

#### Handles and bolt kits included as standard

Suitable for switches	Handle	Bolt kit
OTM630...800	OTV800ECMK	M12x40
OTM1000...2500	OTV400ECMK	M12x60

## Change-over, bypass and transfer switches

### 4.5 Motorized change-over switches

#### Change-over switches, motor operation, I-O-II -operation

Including a handle for manual operation, bolt kit with nut and washers for all terminals and male connectors for control circuits. Types OTM160...2500E\_ include a storage clip for the handle and spare fuses. Types OTM160...250E\_W are equipped with extended phase distance.



OTM160...250E3C\_



OTM630...800E3C\_



OTM2000...2500E3C\_

No. of poles	Rated current <sup>1)</sup> and power			Type	Order number
	AC-21A/AC-22A		AC-31B/ AC-33B		
	≤ 415V I[A]	400V S[kVA]	415V I[A]		
Motor voltage U <sub>e</sub> 24 V DC					
3	160	110	160/160	OTM160E3CM24D	1SCA022845R8110
4	160	110	160/160	OTM160E4CM24D	1SCA022846R0860
3	200	135	200/200	OTM200E3CM24D	1SCA022845R8290
4	200	135	200/200	OTM200E4CM24D	1SCA022846R1240
3	250	170	250/250	OTM250E3CM24D	1SCA022845R8370
4	250	170	250/250	OTM250E4CM24D	1SCA022846R1670
3	315	215	315/315	OTM315E3CM24D	1SCA022847R0910
4	315	215	315/315	OTM315E4CM24D	1SCA022847R2520
3	400	275	400/400	OTM400E3CM24D	1SCA022847R1390
4	400	275	400/400	OTM400E4CM24D	1SCA022847R2950
3	630	435	650/650	OTM630E3CM24D	1SCA022873R1210
4	630	435	650/650	OTM630E4CM24D	1SCA022873R2020
3	800	550	720/650	OTM800E3CM24D	1SCA022872R5910
4	800	550	720/650	OTM800E4CM24D	1SCA022872R8420
3	1000	680	1000/1000	OTM1000E3CM24D	1SCA113672R1001
4	1000	680	1000/1000	OTM1000E4CM24D	1SCA113675R1001
3	1250	850	1250/1000	OTM1250E3CM24D	1SCA113671R1001
4	1250	850	1250/1000	OTM1250E4CM24D	1SCA113674R1001
3	1600	1000	1600/1000	OTM1600E3CM24D	1SCA113673R1001
4	1600	1000	1600/1000	OTM1600E4CM24D	1SCA113676R1001
3	2000	1350		OTM2000E3CM24D	1SCA113695R1001
4	2000	1350		OTM2000E4CM24D	1SCA113697R1001
3	2500	1700		OTM2500E3CM24D	1SCA113696R1001
4	2500	1700		OTM2500E4CM24D	1SCA113698R1001

1) OTM2000...2500: Category AC-21B

#### Handles and bolt kits included as standard

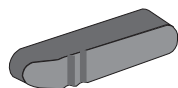
Suitable for switches	Handle	Bolt kit
OTM160...250	OTV250ECMK	M8x25
OTM315...400	OTV400ECMK	M10x30
OTM630...800	OTV800ECMK	M12x40
OTM1000...2500	OTV1000ECMK	M12x60

## Change-over, bypass and transfer switches

### 4.6 Accessories - Handle knobs and External handles

#### Handle knobs

No shaft needed, direct mounting on the top of the switch.



OHBS9\_



OHBS11

Suitable for switches	Colour	Type	Order number
Padlockable in 0-position			
OT16...80F_C	Black	OHBS2	1SCA109089R1001
OT16...80F_C	Red	OHR52	1SCA108598R1001
OT100...125F_C	Black	OHBS11	1SCA109092R1001
Non-padlockable			
OT16...80F_C	Black	OHBS3	1SCA108320R1001
OT16...80F_C	Red	OHR53	1SCA108667R1001
OT100...125F_C	Black	OHBS9	1SCA108665R1001
OT100...125F_C	Red	OHR59	1SCA108666R1001

#### Selector handle, indication I-O-II

IP65, padlockable in O -position with maximum three padlocks with bail diameter 5...8 mm (two lower holes) and 5...6.3 mm (the upper hole). Door interlock in I- and II-position and when padlocked in O-position.



OHBS2\_



OHY\_

Suitable for switches	Colour	Shaft diameter [MM]	Type	Order number
Padlockable in 0-position				
OT16...125F_C	Black	6	OHBS2AJE011	1SCA105220R1001
OT16...125F_C	Red-yellow	6	OHYS2AJE011	1SCA105301R1001



OHB\_



OHB274\_



OHB200\_P\_

#### Pistol type handle, plastic, indication I-O-II

Suitable for switches	Colour	Shaft diameter [MM]	Type	Order number
Padlockable in 0-position				
IP65, door interlock in I- and II-position and when padlocked. Padlocking possibility with three padlocks, bail dia Ø 5...10 mm.				
OT16...125F_C	Black	6	OHB45J6E011	1SCA022594R7110
OT160...250_C	Black	6	OHB65J6E011	1SCA022383R2480
OT315...400_C	Black	12	OHB95J12E011	1SCA022621R0760
OT630...800_C	Black	12	OHB125J12E011	1SCA022589R3340
OT1000...3200_C	Black	12	OHB274J12E011	1SCA122306R1001
OT1000...3200_C	Black	12	OHB200J12PE011	1SCA022873R4230
OT160...250E_Y	Black	12	OHB65J12E011	1SCA123656R1001
OT315...400E_Y	Black	12	OHB95J12E011	1SCA022621R0760
OT630...800E_Y	Black	12	OHB125J12E011	1SCA022589R3340

## Change-over, bypass and transfer switches

### 4.6 Accessories – Handles and shafts

#### Plastic handle, direct mounting, indication I-O-II

Includes a shaft and a mechanism cover.



OTV\_



OTV1000ECK



OHB65D6CM



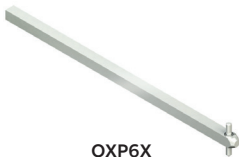
OTVS0



OTVS1



OXS6X\_



OXP6X\_

Suitable for switches	Colour	Type	Order number
Padlockable with three padlocks in 0-position			
OT160...250_C	Black	OTV250ECK	1SCA022783R0090
OT315...400_C	Black	OTV400ECK	1SCA022783R0170
OT630...800_C	Black	OTV800ECK	1SCA022797R2470
OT1000...2500_C	Black	OTV1000ECK	1SCA107481R1001
Includes a shaft (no mechanism cover)			
OTM40...125F_C	Black	OHB65D6CM	1SCA022807R9430
Padlockable with three padlocks in 0-position. Types -ECMK include also microswitches.			
OTM160...250_C	Black	OTV250ECMK	1SCA022804R0570
OTM315...400_C	Black	OTV400ECMK	1SCA022843R2900
OTM630...800_C	Black	OTV800ECMK	1SCA022804R3410
OTM1000...2500_C	Black	OTV1000ECMK	1SCA111301R1001

#### Shafts for selector type handles

Suitable for switches	Length [mm]	Type	Order number
Shaft diameter 6 mm			
OT16...125F_C	85	OXS6X85	1SCA101647R1001
OT16...125F_C	130	OXS6X130	1SCA101655R1001

#### Shafts for pistol type handles

Suitable for switches	Length [mm]	Type	Order number
Shaft diameter 6 mm			
OT16...125F_C	150	OXP6X150	1SCA022295R5600
OT16...125F_C	265	OXP6X265	1SCA108225R1001
OT16...125F_C	400	OXP6X400	1SCA108226R1001
Shaft diameter 6 mm			
OT160...250_C	130	OXP6X130	1SCA022057R0570
OT160...250_C	210	OXP6X210	1SCA022295R6080
OT160...250_C	290	OXP6X290	1SCA022042R6370
OT160...250_C	360	OXP6X360	1SCA022042R6530
Shaft diameter 12 mm			
OT315...400_C	185	OXPI2X185	1SCA022325R6710
OT315...400_C	250	OXPI2X250	1SCA022325R6980
OT315...400_C	280	OXPI2X280	1SCA022137R5140
OT315...400_C	395	OXPI2X395	1SCA022042R5990
OT315...400_C	465	OXPI2X465	1SCA022042R6020
OT630...800_Y	185	OXPI2X185	1SCA022325R6710
OT630...800_Y	250	OXPI2X250	1SCA022325R6980
OT630...800_Y	395	OXPI2X395	1SCA022042R5990
OT630...800_Y	465	OXPI2X465	1SCA022042R6020
OT1000...2500_C	250	OXPI2X250	1SCA022325R6980
OT1000...2500_C	325	OXPI2X325	1SCA022042R5810
OT1000...2500_C	395	OXPI2X395	1SCA022042R5990
OT1000...2500_C	465	OXPI2X465	1SCA022042R6020

## Change-over, bypass and transfer switches

### 4.6 Accessories – Auxiliary contacts and fourth poles

#### Auxiliary contact blocks for OT16...125F and OTM40...125F

Snap-on mounting to the switch, IP 20, max. 2 blocks/ side. Ith = 16 A, suitable for cable cross sections max. 2 x 2.5 mm<sup>2</sup>. Simultaneous action with the main contacts.



OA1G01



OA1G10



OA2G11

Suitable for switches	Contact functions	Installation side	Type	Order number
Padlockable with three padlocks in 0-position				
OT_16...125F_C	1NO	Right	OA1G10	1SCA022353R4970
OT_16...125F_C	1NC	Right	OA8G01	1SCA022744R2240
OT_16...125F_C	1NO	Left	OA7G10	1SCA022673R1140
OT_16...125F_C	1NC	Left	OA1G01	1SCA022353R4890
OT63...125F3C	1NO+1NC	Either	OA2G11 <sup>1)</sup>	1SCA022379R8100
OTM40...125F3C	1NO+1NC	Either	OA2G11 <sup>1)</sup>	1SCA022379R8100

1) Not mountable on 4-pole change-over switches

#### Auxiliary contact blocks for OT160... 3200 , OT160...800\_Y and OTM160...2500

Mounting on the right side of the switch: Max. 4 auxiliary contact blocks/switch (totally 8 blocks). Simultaneous action with the main contacts, IP20.



OTPS40F\_

Suitable for switches	Contact functions	Installation side	Type	Order number
Padlockable with three padlocks in 0-position				
OT_160...3200_	1NO	Right	OA1G10	1SCA022353R4970
OT_160...3200_	1NC	Right	OA3G01	1SCA022456R7410



OTPS80F\_

#### Fourth poles for OT16...125F

Snap-on mounting to the left or right side of the switches, IP20. Simultaneous operation with power poles.



OTPS125F\_

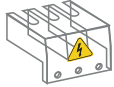
Suitable for switches	Rated current, up to 415V AC-21A/AC-22A/AC-23A I[A]	Type	Order number
Padlockable with three padlocks in 0-position			
OT16...OT/OTM40F_C	40/40/23	OTPS40FPN1 <sup>1)</sup>	1SCA105001R1001
OT16...OT/OTM40F_C	40/40/23	OTPS40FPN2 <sup>2)</sup>	1SCA105000R1001
OT/OTM63...80F_C	80/80/75	OTPS80FP	1SCA105461R1001
OT/OTM100...125F_C	125/125/90	OTPS125FP	1SCA105099R1001

1) Installation to the left side

2) Installation to the right side

## Change-over, bypass and transfer switches

### 4.6 Accessories – Terminal shrouds and parallel connection kits



OTS\_T3



OTS\_T1



OTS\_L\_



OTS\_S



OZXA32



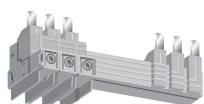
OZXA33



OZXA40



OZXA41



OMZC\_

#### Terminal shrouds, transparent plastic

Snap-on mounting to the switches, IP20. The full shrouding of a 3-pole change-over switch is achieved with four 3-pole shrouds.

Suitable for switches	Type	Order number
For three pole switches		
OT16...40F_C	OTS40T3	1SCA105317R1001
OT63...80F_C	OTS63T3	1SCA022353R6750
OT100...125F_C, OTM40...125F_	OTS125T3	1SCA022379R9680
For fourth pole		
OTPS40FPN1	OTS40T1	1SCA105314R1001
OTPS40FPN2	OTS40T1	1SCA105314R1001
OTPS80FP	OTS63T1	1SCA022353R6910
OTPS60FP, OTPS125FP	OTS125T1	1SCA022379R9760

#### Terminal shrouds, grey plastic

Snap-on mounting to the switches, IP 20. A kit includes three or four shrouds which can be used on either side of the switch. Suitable for the upperswitch.

Suitable for switches	No. of poles	Description	Type	Order number
OT_160...250_C, _Y	3	Long type	OTS250G1L/3	1SCA022731R8150
OT_315...400_C, _Y	3	Long type	OTS400G1L/3	1SCA022736R8840
OT_600...800_C, _Y	3	Long type	OTS800G1L/3	1SCA022776R7890
OT_1000...1600_C	3	Long type	OTS1600G1L/3	1SCA022871R9510
OT_2000...2500_C	3	Long type	OTS2500G1L/3	1SCA107261R1001
OT3200_C	3	Long type	OTS4000G1L/3	1SCA129042R1001

#### Parallel connection kits

Finger protected connection bars for parallel connection of the upper or lower terminals. The bars accept additional cables, the maximum size is stated below.

Suitable for switches	Cable cross section [mm <sup>2</sup> ]	Type	Order number
OT16...40F3C	6 (fine stranded), 10 (stranded)	OZXA33	1SCA022685R0310
OT16...40F4C	6 (fine stranded), 10 (stranded)	OZXA32	1SCA022683R4110
OT63...80F3C	25	OZXA38	1SCA022785R2140
OT63...80F4C	25	OZXA39	1SCA022790R3820
OT100...125F3C	50	OZXA40	1SCA022790R3910
OT100...125F4C	50	OZXA41	1SCA022790R4040
OTM40...125F3C_	10...70	OMZC03	1SCA117037R1001
OTM40...125F4C_	10...70	OMZC04	1SCA117038R1001

## Change-over, bypass and transfer switches

### 4.6 Accessories – Bridging bars and automatic control units



OTZC13...34

OTZC43...44  
OTZC53...54

#### Bridging bars

The bridging bars provide a connection link either on the incoming or outgoing side of the switch.

Suitable for switches	No. of poles	Type	Order number
OT_160...250_C,_Y	3	OTZC13	1SCA022767R6910
OT_160...250_C,_Y	4	OTZC14	1SCA022767R7040
OT_315...400_C,_Y	3	OTZC23	1SCA022767R7120
OT_315...400_C,_Y	4	OTZC24	1SCA022767R7210
OT_600_C...800E_C,_Y	3	OTZC33	1SCA022785R7020
OT_600_C...800E_C,_Y	4	OTZC34	1SCA022785R7110
OT_1000...1250E_C	3	OTZC43	1SCA022868R0710
OT_1000...1250E_C	4	OTZC44	1SCA022868R0800
OT800U_ OT_1600E_C	3	OTZC53	1SCA022868R0980
OT800U_ OT_1600E_C	4	OTZC54	1SCA022868R1010
OT_2000...2500E_C	3	OTZC63	1SCA022868R1100
OT_2000...2500E_C	4	OTZC64	1SCA022868R1360



# Automatic transfer switches

## 4.7 Compact ATS

### OTM\_C21D

For Network/Network and Network/Genset application.

Adjustable version with configurable transfer and back-switching delays. Adjustable over and under-voltage thresholds.



OTM\_C21D

Number of poles	Rated current [A]	Rated voltage [V]	Voltage sensing	Type	Ordering code
2	63	230:220-240	Top in	OTM63F2C21D230C	1SCA151422R1001
2	125	230:220-240	Top in	OTM125F2C21D230C	1SCA151418R1001
3	63	400:380-415	Top in	OTM63F3C21D400C	1SCA151424R1001
3	125	400:380-415	Top in	OTM125F3C21D400C	1SCA151420R1001
4	63	400:380-415	Top in	OTM63F4C21D400C	1SCA151255R1001
4	125	400:380-415	Top in	OTM125F4C21D400C	1SCA151251R1001

### Handles, direct mounting

Plastic I - O - II handle.



OTVS0

Suitable for switches	Colour	Installation side	Units /type [pcs]	Type	Order code
OTM40...125F_CM	Black	Shaft incl.	1	OHB65D6CM	1SCA022807R9430

### Auxiliary contacts

Snap-on mounting to the switch, IP 20, max. 2 blocks/side.  $I_{th} = 16$  A, suitable for cable cross sections max.  $2 \times 2.5\text{mm}^2$ . Simultaneous action with the main contacts. The type and ordering number is for one piece.



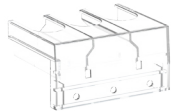
OA1G01  
OA7G10

OA1G10  
OA8G01

Suitable for switches	Contact function	Installation side	Units /type [pcs]	Type	Order code
OTM40...125F_CM	1NO	Right	1	OA1G10	1SCA022353R4970
OTM40...125F_CM	1NC	Right	1	OA8G01	1SCA022744R2240
OTM40...125F_CM	1NO	Left	1	OA7G10	1SCA022673R1140
OTM40...125F_CM	1NC	Left	1	OA1G01	1SCA022353R4890

### Terminal Shrouds

Transparent plastic, snap-on mounting to the switches, IP 20. The full shrouding of a 3-pole change-over switch is achieved with four 3-pole shrouds\*.



OTS\_T3



OTS\_T1

Suitable for switches	Units /type [pcs]	Type	Order code
<b>For 3-pole switches</b>			
OTM40...125F_CM	1	OTS125T3	1SCA022379R9680
<b>For 4-pole switches</b>			
OTPS60FP, OTPS125FP	1	OTS125T1	1SCA022379R9760

\* Terminal shrouds can also be mounted on parallel connection kits.

# Automatic transfer switches

## 4.7 Compact ATS

4



OZXT1



OZXT2...3



OMZC\_

### Terminal clamp sets

Suitable for switches	Contact function	Units /type [pcs]	Type	Order code
<b>Terminal clamp sets for Al- and Cu-cables insulated versions</b>				
OTM40...125F_CM	16...50Al / 2.5...50 Cu	3	OZXT1	1SCA022469R6310
OTM63...125F_CM	16...120 Al/Cu	3	OZXT2	1SCA022620R7200
OTM63...125F_CM	2x (16...50) Al/Cu	3	OZXT3	1SCA022639R0720
<b>Terminal clamp sets for Al- and Cucables</b>				
OTM40...125F_CM	10...70 Al/Cu	3	OZXL1	1SCA022639R0720

### Parallel connection kits

Finger protected connection bars for parallel connection of the upper or lower terminals. The bars accept additional cables, the maximum size is stated below.

Suitable for switches	Cable crossection [mm <sup>2</sup> ]	Units /type [pcs]	Type	Order code
OTM40...125F3CM_	10...70	1	OMZC03	1SCA117037R1001
OTM40...125F4CM_	10...70	1	OMZC04	1SCA117038R1001

## Automatic transfer switches

### 4.8 TruONE® ATS OXB200...1600

#### Delayed transition - Open style, Level 2 DIP controls

I - O - II - operation with stable OFF position between positions I and II. Delivery includes handle for manual operation, 2m RJ45 connection cable between detachable HMI and ATS frame.

Terminal connection kits (bolts, nuts and washers) available as accessory.

#### Top entry - Source 1 and Source 2 connections on top, load connections on bottom



OXB200...250E3X2QT



OXB315...400E3X2QT



OXB500...800E3S2QT



OXB1000...1600E3X2QT

No. of poles	Rated current [A]	Type	Order code
3	200	OXB200E3X2QT	1SCA153434R1001
3	250	OXB250E3X2QT	1SCA153460R1001
3	315	OXB315E3X2QT	1SCA153507R1001
3	400	OXB400E3X2QT	1SCA153520R1001
3	500	OXB500E3X2QT	1SCA151028R1001
3	630	OXB630E3X2QT	1SCA149957R1001
3	800	OXB800E3X2QT	1SCA150940R1001
3	1000	OXB1000E3X2QT	1SCA153582R1001
3	1250	OXB1250E3X2QT	1SCA153617R1001
3	1600	OXB1600E3X2QT	1SCA153626R1001
4	200	OXB200E3S2QT	1SCA153428R1001
4	250	OXB250E3S2QT	1SCA153457R1001
4	315	OXB315E3S2QT	1SCA153502R1001
4	400	OXB400E3S2QT	1SCA153516R1001
4	500	OXB500E3S2QT	1SCA151026R1001
4	630	OXB630E3S2QT	1SCA151055R1001
4	800	OXB800E3S2QT	1SCA150935R1001
4	1000	OXB1000E3S2QT	1SCA153578R1001
4	1250	OXB1250E3S2QT	1SCA153611R1001
4	1600	OXB1600E3S2QT	1SCA153623R1001

\*Contact ABB for pricing

## Switch-disconnectors OTDC and OTDCP

### 4.9 Front operated switch-disconnectors, IEC

#### Switch-disconnectors OTDC, base or DIN-rail mounting, IEC

Types OTDC16...32 include IP20 protected terminal clamps. Shafts and handles need to be ordered separately.

##### Single circuit use - up to 660 VDC

No. of poles	Rated operat. current [A] DC 21B / 660 V	Type	Order number
2	16	OTDC16F2	1SCA121454R1001
2	25	OTDC25F2	1SCA121455R1001
2	32	OTDC32F2	1SCA121456R1001



OTDC16...32F2

##### Up to 1000 VDC

No. of poles	Rated operat. current [A] DC 21B / 1000 V	Type	Order number
2	10	OTDC16F2	1SCA121454R1001
2	16	OTDC25F2	1SCA121455R1001
2	20	OTDC32F2	1SCA121456R1001
3	16	OTDC16F3	1SCA121457R1001
3	25	OTDC25F3	1SCA121458R1001
3	32	OTDC32F3	1SCA121459R1001



OTDC16...32F3

##### Double circuit use - up to 1000 VDC

No. of poles	Rated operat. current [A]		Type	Order number
	DC21B / 660 V	DC21B / 1000 V		
2x2	16	10	OTDC16F4	1SCA121461R1001
2x2	25	16	OTDC25F4	1SCA121462R1001
2x2	32	20	OTDC32F4	1SCA121463R1001



OTDC16...32F4

#### Switch-disconnectors OTDC\_, door mounting, IEC

Types OTDC16...32 include IP20 protected terminal clamps. Shafts and handles need to be ordered separately. Jumpers included in the package.

##### Single circuit use - up to 660 VDC

No. of poles	Rated operat. current [A] DC 21B / 660 V	Type	Order number
2	16	OTDC16FT2	1SCA123839R1001
2	25	OTDC25FT2	1SCA123842R1001
2	32	OTDC32FT2	1SCA123845R1001



OTDC16...32FT2

##### Up to 1000 VDC

No. of poles	Rated operat. current [A]		Type	Order number
	DC 21B / 660 V	DC 21B / 1000 V		
2	10		OTDC16FT2	1SCA123839R1001
2	16		OTDC25FT2	1SCA123842R1001
2	20		OTDC25FT2	1SCA123845R1001
3	16		OTDC16FT3	1SCA123840R1001
3	25		OTDC25FT3	1SCA123843R1001
3	32		OTDC32FT3	1SCA123846R1001



OTDC16...32FT3

##### Double circuit use - up to 1000 VDC

No. of poles	Rated operat. current [A]		Type	Order number
	DC 21B / 660 V	DC 21B / 1000 V		
2x2	16	10	OTDC16FT4	1SCA123841R1001
2x2	25	16	OTDC25FT4	1SCA123844R1001
2x2	32	20	OTDC32FT4	1SCA123847R1001



OTDC16...32FT4

## Switch-disconnectors OTDC and OTDCP

### 4.9 Front operated switch-disconnectors, IEC

#### Handle knobs for base and DIN rail mounted switches

Mounting directly to the switch, no shaft needed, for base and DIN-rail mounted switches

Colour	Handle length [mm]	Type	Order number
Suitable for switches OTDC16...32F, OTDC16...32U_			
Black	40	OHBS2*	1SCA109089R1001
Red	40	OHRS2	1SCA108598R1001
Black	39	OHBS3	1SCA108320R1001
Red	39	OHRS3	1SCA108667R1001



OHBS2PJ



OHYS2RJ

#### Selector handles, for door mounted switches

Indication I-O and ON-OFF. No separate shaft needed.

Colour	Type	Order number
Screw mounting, hole distance 36 mm, for OTDC16...32		
Padlockable with max. 3 padlocks, IP65, hole distance 36/48 mm, NEMA 1, 3R, 12		
Black	OHBS2RJ	1SCA105232R1001
Red-yellow	OHYS2RJ	1SCA105323R1001

#### Extended shafts for selector handles

Shaft length [mm]	H [mm]	Type	Order number
Suitable for switches OTDC16...32F, shaft diameter 6 mm			
85		OX56X85	1SCA101647R1001
180		OX56X180	1SCA101659R1001
250		OX56X250	1SCA101660R1001



OX56X\_

#### Plastic enclosed switch-disconnectors OTDCP, IEC

M20 threaded knock-outs..

Up to 660 VDC

No. of poles	Rated operat. current [A]		Type	Order number
	DC 21B / 1000 V			
Includes red-yellow selector handle (I-O and ON-OFF indication)				
2	16		OTDCP16SA11M	1SCA125126R1001
2	25		OTDCP25SA11M	1SCA125127R1001
2	32		OTDCP32SA11M	1SCA125128R1001

Up to 1000 VDC

No. of poles	Rated operat. current [A]		Type	Order number
	DC 21B / 1000 V			
Includes red-yellow selector handle (I-O and ON-OFF indication)				
3	16		OTDCP16SA12M	1SCA125150R1001
3	25		OTDCP25SA12M	1SCA125151R1001
3	32		OTDCP32SA12M	1SCA125152R1001



OTDCP\_SA\_



OTDCP\_S\_M20



OTDCP\_S\_M25

## Switch-disconnectors OTDC and OTDCP

### 4.9 Front operated switch-disconnectors, IEC



OTDC100...250E11

#### Single circuit, 1000 VDC, IEC - 100...250 A

No. of poles	Rated operat. current [A] DC 21 / 1000 V	Type	Order number
Front operated, mechanism between the poles. OTDC_EPP types include pre-mounted connection bars.			
2	100	OTDC100E11	1SCA125821R1001
2	160	OTDC160E11	1SCA123745R1001
2	200	OTDC200E11	1SCA125626R1001
2	250	OTDC250E11	1SCA125865R1001



OTDC315...800F11

#### Single circuit, 1000 VDC, IEC - 315...800 A

No. of poles	Rated operat. current [A] PV2 / 1000 V	Type	Order number
Front operated, mechanism between the poles. OTDC_EPP types include pre-mounted connection bars.			
2	315	OTDC315F11	1SCA158172R1001
2	400	OTDC400F11	1SCA158196R1001
2	500	OTDC500F11	1SCA158220R1001
2	630	OTDC630F11	1SCA158244R1001
2	800	OTDC800F11	1SCA158853R1001



OTDC315...800FV11

#### Single circuit, 1500 VDC, IEC - 315...800 A

No. of poles	Rated operat. current [A] PV2 / 1500 V	Type	Order number
Front operated, mechanism between the poles. OTDC_EPP types include pre-mounted connection bars.			
2	315	OTDC315FV11	1SCA158178R1001
2	400	OTDC400FV11	1SCA158202R1001
2	500	OTDC500FV11	1SCA158226R1001
2	630	OTDC630FV11	1SCA158250R1001
2	800	OTDC800FV11	1SCA158856R1001



OXP6X210



OHB95J12

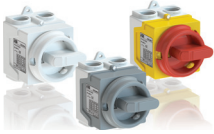
#### Recommended handles and shafts

Suitable for switches	Mounting	Type	Order number
OTDC100...250	Direct mount handle	OTDV250EK	1SCA127390R1001
OTDC315...800	Direct mount handle	OTDV400EK	1SCA130579R1001
OTDC100...250	Door mount handle	OHB65J6	1SCA022380R9660
OTDC100...250	Shaft	OXP6X210	1SCA022295R6080
OTDC315...800	Door mount handle	OHB95J12	1SCA022381R0830
OTDC315...800	Shaft	OXP12X185	1SCA022325R6710

## Enclosed switches

### 4.10 Plastic enclosed switch-disconnectors

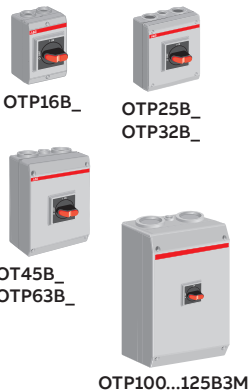
#### ONE front operated switch-disconnectors Plastic enclosed, IP67



Rated operational current [A]		No. of poles	Enclosure size [mm]			Type	Order number	
AC22A	AC23A							
230V	400V		H	W	D			
Cover color: white. Handle color: white.								
20	9.8	2	92	65	84	ONE20M2W	1SCA138456R1001	
20	20	9.8	3	92	65	84	ONE20M3W	1SCA138457R1001
20	20	9.8	4	92	65	84	ONE20M4W	1SCA138459R1001
Cover color: yellow. Handle color: red.								
20	9.8	2	92	65	84	ONE20M2Y	1SCA135533R1001	
20	20	9.8	3	92	65	84	ONE20M3Y	1SCA135536R1001
20	20	9.8	4	92	65	84	ONE20M4Y	1SCA135540R1001

## Enclosed switches

### 4.10 Plastic enclosed switch-disconnectors



#### 3-pole front operated switch-disconnectors Plastic enclosed, IP65

Rated operational current [A]		Cable outlets/ side	Enclosure size [mm]			Type	Order number
AC22A	AC23A						
≤690V	≤415V		H	W	D		
Includes selector-type black handle (I-0 and ON-OFF indication), N- and PE-terminals, two membrane cable glands and two pull stoppers.							
16	16	2xM20	120	85	60	OTP16B3M	1SCA022383R2130
Includes selector-type black handle (I-0 and ON-OFF indication), N- and PE-terminals. Threaded knock-outs, compression glands have to be ordered separately.							
25	20	2xM25+M16	150	130	60	OTP25B3M	1SCA022383R2640
40	23	2xM25+M16	150	130	60	OTP32B3M	1SCA022389R8400
63	45	2xM32+M16	200	145	90	OTP45B3M	1SCA022383R3020
80	75	2xM32+M16	200	145	90	OTP63B3M	1SCA022383R3450
100	80	2xM50+M16	400	200	140	OTP100B3M	1SCA126054R1001
125	90	2xM50+M16	400	200	140	OTP125B3M	1SCA022812R7180

## Enclosed switches

### 4.10 Plastic enclosed switch-disconnectors



OTP16B\_  
OTP25B\_  
OTP32B\_



OT45B\_  
OTP63B\_



OTP125B4M



OTP125B4B

#### 4-pole front operated switch-disconnectors Plastic enclosed, IP65

Rated operational current [A]		Cable outlets/ side	Enclosure size [mm]			Type	Order number
AC22A ≤690V	AC23A ≤415V		H	W	D		
Includes selector-type black handle (I-O and ON-OFF indication), N- and PE-terminals. Threaded knock-outs, compression glands have to be ordered separately.							
16	16	2xM25+M16	150	130	60	OTP16B4M	1SCA022401R4160
25	20	2xM25+M16	150	130	60	OTP25B4M	1SCA022401R4320
40	23	2xM25+M16	150	130	60	OTP32B4M	1SCA022401R4590
63	45	2xM32+M16	200	145	90	OTP45B4M	1SCA022401R4750
80	75	2xM32+M16	200	145	90	OTP63B4M	1SCA022401R4910
125	90	2xM50+M16	400	200	140	OTP125B4M	1SCA022812R7260



OTP16B\_



OTP25B\_  
OTP32B\_



OTP45B\_  
OTP63B\_



OTP100...  
125BA3M



OTP100...  
125BA3B

#### 3-pole front operated switch-disconnectors Plastic enclosed, IP65, red-yellow

Rated operational current [A]		Cable outlets/ side	Enclosure size [mm]			Type	Order number
AC22A ≤690V	AC23A ≤415V		H	W	D		
Includes selector-type red-yellow handle (I-O and ON-OFF indication), N- and PE-terminals, two membrane cable glands and two pull stoppers.							
16	16	2xM20	120	85	60	OTP16BA3M	1SCA022401R3350
Includes selector-type red-yellow handle (I-O and ON-OFF indication), N- and PE-terminals. Threaded knock-outs, compression glands have to be ordered separately.							
25	20	2xM25+M16	150	130	60	OTP25BA3M	1SCA022401R3430
40	23	2xM25+M16	150	130	60	OTP32BA3M	1SCA022401R3510
63	45	2xM32+M16	200	145	90	OTP45BA3M	1SCA022401R3600
80	75	2xM32+M16	200	145	90	OTP63BA3M	1SCA022401R3780
100	80	2xM50+M16	400	200	140	OTP100BA3M	1SCA126069R1001
125	90	2xM50+M16	400	200	140	OTP125BA3M	1SCA022812R7420

#### 4-pole front operated switch-disconnectors Plastic enclosed, IP65, red-yellow

Rated operational current [A]		Cable outlets/ side	Enclosure size [mm]			Type	Order number
AC22A ≤690V	AC23A ≤415V		H	W	D		
Includes selector-type red-yellow handle (I-O and ON-OFF indication), N- and PE-terminals. Threaded knock-outs, compression glands have to be ordered separately.							
16	16	2xM25+M16	150	130	60	OTP16BA4M	1SCA022459R6510
25	20	2xM25+M16	150	130	60	OTP25BA4M	1SCA022459R6600
40	23	2xM25+M16	150	130	60	OTP32BA4M	1SCA022459R6780
63	45	2xM32+M16	200	145	90	OTP45BA4M	1SCA022459R6860
80	75	2xM32+M16	200	145	90	OTP63BA4M	1SCA022459R6940
125	90	2xM50+M16	400	200	140	OTP125BA4M	1SCA022812R7510



OTP16B\_  
OTP25B\_  
OTP32B\_



OTP45\_, OTP63\_



OTP125BA4M



## Switch fuses OS

### 4.11 Din-type



OS125...160GD03P

#### Front operated switch fuses

Including terminal bolt set in OS125G...160G, 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 range of installation depths.

Rated op. current AC-20...23A ≤ 690V [A]	Fuse size	No. of poles	Type	Order number
Mechanism at the end of the switch fuse				
Protected tunnel terminals, IP20				
32	000	3	OS32GD12P	1SCA114581R1001
63	000	3	OS63GD12P	1SCA115227R1001
Including terminal bolt set				
125	000, 00	3	OS125GD12P	1SCA115641R1001
160	000, 00	3	OS160GD12P	1SCA115643R1001

#### Shafts and handles included as standard

Suitable for switches	Included shaft	Included handle	Incl. terminal bolts
OS32G...63G_P	OXF6X161	OHB45J6	-
OS125G...160G_P	OXF6X161	OHB65J6	M8X25



OS200...250D03N3P

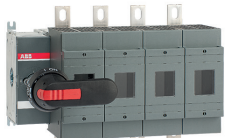
#### Front operated switch fuses

Including terminal bolt set, 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 range of installation depths.

Rated op. current AC-20...23A ≤ 690V [A]	Fuse size	No. of poles	Type	Order number
Mechanism at the end of the switch fuse				
200	0	3	OS200D03P	1SCA022709R9500
250	0-1	3	OS250D03P	1SCA022719R0090
400	0-2	3	OS400D03P	1SCA022719R0250

#### Shafts and handles included as standard

Suitable for switches	Included shaft	Included handle	Incl. terminal bolts
OS200_P	OXF6X210	OHB65J6	M8X25
OS250_P	OXF6X210	OHB65J6	M10X30
OS400_P	OXF12X250	OHB95J12	M10X30



OS400D04FP

#### Front operated switch fuses

Including terminal bolt set, 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 range of installation depths. OS1250DA\_: a fuse replacement tool is integrated in the fuse cover.

Rated op. current AC-20...23A ≤ 690V [A]	Fuse size	No. of poles	Type	Order number
Mechanism at the end of the switch fuse				
630	3	3	OS630D03P	1SCA022825R2830
800	3	3	OS800D03P	1SCA022825R4880
1250 <sup>1)</sup>	4	3	OS1250D03P	1SCA105475R1001
1250 <sup>1)</sup>	4a	3	OS1250DA03P	1SCA105238R1001

1) 1250A / AC-21...22A, 1000A / AC-23A



OS1250D03P



OS1250D04P

## Switch fuses OS

### 4.11 Din-type

#### Shafts and handles included as standard

Suitable for switches	Included shaft	Included handle	Incl. terminal bolts
OS630...800_P	OXPI2X280	OHB145J12	M12X40
OS1250_P	OXPI2X395	OHB274J12	M12x50

#### Front operated switch fuses with direct mount handle

Including terminal bolt set in OS125G...160G, a black Test-OFF-ON plastic handle and shaft as standard. The handle is padlockable in the OFF-position. Types OS1250DA\_: a fuse replacement tool is integrated in the fuse cover.



OS32...63GD03K



OS125...160GD03K

Rated op. current AC-20...23A ≤ 690V [A]	Fuse size	No. of poles	Type	Order number
Mechanism at the end of the switch fuse				
Protected tunnel terminals, IP20				
32	000	3	OS32GD03K	1SCA116733R1001
63	000	3	OS63GD03K	1SCA116738R1001
Including terminal bolt set				
125	000, 00	3	OS125GD03K	1SCA116878R1001
160	000, 00	3	OS160GD03K	1SCA116742R1001

#### Shafts and handles included as standard

Suitable for switches	Included shaft	Included handle	Incl. terminal bolts
OS32G...63G_K	-	OSV200BK	-
OS125G...160G_K	-	OSV200BK	M8X25

#### Front operated switch fuses with direct mount handle

Including terminal bolt set, a black Test-OFF-ON plastic handle and shaft as standard. The handle is padlockable in the OFF-position. Types OS1250DA\_: a fuse replacement tool is integrated in the fuse cover.



OS200...250D03K



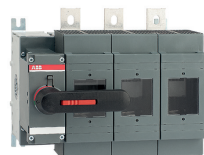
OS400D03K

Rated op. current AC-20...23A ≤ 690V [A]	Fuse size	No. of poles	Type	Order number
Mechanism at the end of the switch fuse				
Including terminal bolt set				
200	0	3	OS200D03K	1SCA022764R7130
250	0-1	3	OS250D03K	1SCA022763R6360
400	0-2	3	OS400D03K	1SCA022779R5410
630	3	3	OS630D03K	1SCA108704R1001
800	3	3	OS800D03K	1SCA108725R1001
1250 <sup>1)</sup>	4	3	OS1250D03K	1SCA108718R1001
1250 <sup>1)</sup>	4a	3	OS1250DA03K	1SCA108720R1001

1) 1250A / AC-20...22A, 1000A / AC-23A

#### Shafts and handles included as standard

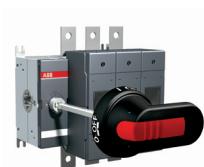
Suitable for switches	Included shaft	Included handle	Incl. terminal bolts
OS200_K	-	OSV250DK	M8X25
OS250_K	-	OSV250DK	M10X30
OS400_K	-	OSV400DK	M10X30
OS630...800_K	-	OSV800DK	M12X40
OS1250_K	-	OSV1250DK	M12x50



OS630...800D03K

## Switch fuses OS

### 4.12 BS-type



OS100...160GB03P

#### Front operated switch fuses

Including terminal bolt set in OS100G...160G, 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 range of installation depths.

Rated op. current AC-20...23A ≤ 690V [A]	Fuse size	No. of poles	Type	Order number
Protected tunnel terminals IP20, mechanism at the end of the switch				
32	A2, A3	3	OS32GB03P	1SCA115259R1001
63	A2, A3	3	OS63GB03P	1SCA115235R1001
Including terminal bolt set, mechanism at the end of the switch				
100	A2-A4 <sup>1)</sup>	3	OS100GB03P	1SCA114613R1001
125	A2-A4 <sup>1)</sup>	3	OS125GB03P	1SCA115634R1001
160	A2-A4 <sup>1)</sup>	3	OS160GB03P	1SCA115413R1001

1) Max. fuse diameter 32 mm

#### Shafts and handles included as standard

Suitable for switches	Included shaft	Included handle	Incl. terminal bolts
OS32G...63G_P	OXF6X161	OHB45J6	-
OS100G...160G_P	OXF6X161	OHB65J6	M8X25

#### Front operated switch fuses

Including terminal bolt set, 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 can be adjusted to different installation depths.



OS200...250B02P

Rated op. current AC-20...23A ≤ 690V [A]	Fuse size	No. of poles	Type	Order number
Mechanism at the end of the switch fuse				
200	B1-B2	3	OS200B03P	1SCA022709R9330
250	B1-B3	3	OS250B03P	1SCA022750R6660
315	B1-B4	3	OS315B03P	1SCA022719R0680
400	B1-B4	3	OS400B03P	1SCA022719R0840

#### Shafts and handles included as standard

Suitable for switches	Included shaft	Included handle	Incl. terminal bolts
OS200_GB_P	OXF6X161	OHB65J6	M8X25
OS200_P	OXF6X210	OHB65J6	M8X25
OS250_P	OXF6X210	OHB65J6	M10X30
OS315...400_P	OXF12X250	OHB95J12	M10X30



OS200...250B03N3P



OS315...400B03P

#### Front operated switch fuses

Including terminal bolt set, 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 range of installation depths.

Rated op. current AC-20...23A ≤ 690V [A]	Fuse size	No. of poles	Type	Order number
Mechanism at the end of the switch fuse				
630	C1-C2	3	OS630B03P	1SCA022825R5850
800	C1-C3	3	OS800B03P	1SCA022825R7550
1250 <sup>1)</sup>	D1	3	OS1250B03P	1SCA105250R1001

1) 1250A / AC-20...22A, 1000A / AC-23A

#### Shafts and handles included as standard

Suitable for switches	Included shaft	Included handle	Incl. terminal bolts
OS630...800_P	OXF12X280	OHB145J12	M12X40
OS1250_P	OXF12X395	OHB274J12	M12X50



OS1250D03P

## Switch fuses OS

### 4.13 Accessories - Handles



OHB65J6



OHY65J6



OHG65J6



OHB95J12



OHY95J12T



OHB125J12



OHB274/330J12



OHY274J12



OHM\_



YASDA\_

#### Pistol handles for front operated switch fuses

##### Plastic pistol handles, IP 65

Padlockable with 3 padlocks in the OFF-position, door interlock in the ON-position. Screw fixing from the back side of the handle ensures double insulation.

Colour	Handle length [mm]	Type	Order number
For shaft diameter 6 mm (for OSMini and OS32...250)			
Black and red-yellow: I-O/ON-OFF.			
Black	45	OHB45J6	1SCA022380R8770
Red-yellow	45	OHY45J6	1SCA022380R8930
Black	65	OHB65J6	1SCA022380R9660
Red-yellow	65	OHY65J6	1SCA022380R9820
Black	80	OHB80J6	1SCA022381R0240
For shaft diameter 12 mm (for OS315...400)			
Black and red-yellow: I-O/ON-OFF.			
Black	95	OHB95J12	1SCA022381R0830
Red-yellow	95	OHY95J12	1SCA022381R1050
For shaft diameter 12 mm (for OS630...800)			
Black and red-yellow: I-O/ON-OFF.			
Black	125	OHB125J12	1SCA022381R1560
Red-yellow	125	OHY125J12	1SCA022381R1720
Black	145	OHB145J12	1SCA022381R2110
Red-yellow	145	OHY145J12	1SCA022381R2370
Black	175	OHB175J12	1SCA022381R2450
Grey	175	OHG175J12	1SCA022381R2610

- Door interlocking in the ON-position means that the door cannot be opened, when the handle is in the ON-position. This can be defeated to allow authorized personnel access for inspection.

- Handles padlockable in all positions

#### Optional handles for front operated switch fuses

##### Plastic pistol handles, IP 65

Padlockable with 3 padlocks in the OFF-position, door interlock in the ON-position. Screw fixing from the back side of the handle ensures double insulation.

Colour	Handle length [mm]	Type	Order number
For shaft diameter 12 mm (for OS1200...1250)			
Black and red-yellow: I-O/ON-OFF.			
Black	274	OHB274J12	1SCA115920R1001
Red-yellow	274	OHY274J12	1SCA115919R1001
Black	330	OHB330J12	1SCA115922R1001
Black	2x200	OHB200J12P	1SCA022865R9510
Red-yellow	2x200	OHY200J12P	1SCA101587R1001

- Door interlocking in the ON-position means that the door cannot be opened, when the handle is in the ON-position. This can be defeated to allow authorized personnel access for inspection.

- Handles padlockable in all positions

## Switch fuses OS

### 4.13 Accessories - Shafts

#### Shafts



OXP6X\_



OXP\_X\_-45



OHP12X\_

Shaft length [mm]	Type	Order number
<b>For OS 32G...63G , shaft diameter 6 mm</b>		
130	OXP6X130	1SCA022057R0570
161	OXP6X161	1SCA022067R1760
210	OXP6X210	1SCA022295R6080
290	OXP6X290	1SCA022042R6370
360	OXP6X360	1SCA022042R6530
430	OXP6X430	1SCA022056R6030
<b>For OS100G...25, shaft diameter 6 mm</b>		
130	OXP6X130	1SCA022057R0570
210	OXP6X210	1SCA022295R6080
290	OXP6X290	1SCA022042R6370
360	OXP6X360	1SCA022042R6530
430	OXP6X430	1SCA022056R6030
<b>For OS 315...400, shaft diameter 12 mm</b>		
250	OXP12X250	1SCA022325R6980
280	OXP12X280	1SCA022137R5140
325	OXP12X325	1SCA022042R5810
395	OXP12X395	1SCA022042R5990
465	OXP12X465	1SCA022042R6020
535	OXP12X535	1SCA022042R6110

## Switch fuses OS

### 4.13 Accessories - Auxiliary contacts



OA3G01



OEA28

#### Auxiliary contacts for OS32G...1250

Suitable for switches	Description	Protection degree	Type	Order number
OS32G...1250	1NO	IP20	OA1G10	1SCA022353R4970
OS32G...1250	1NC	IP20	OA3G01	1SCA022456R7410

#### Mounting under the mechanism cover

The "test" contacts operate in ON- and OFF-positions as well as when the handle is turned to TEST-position = 45 degrees over the OFF-position. The "test indication" contacts operate only when the handle is turned to TEST-position. See the function table below. The OA1G10 (N.O.) or OA3G01 (N.C.) auxiliary contact blocks can be used as standard auxiliary contacts, "test" or "test indication" contacts. The desired functions are achieved when an auxiliary contact block is installed in a specific place shown in the mounting instruction. In order to activate the "test" and "test indication" features, a handle with test function is required.

#### Function table of OS32G...1250 auxiliary contacts

Handle position	Main contacts	Aux./Test contacts N.O.	Test indication contacts N.O
Test	open	closed	closed
0	open	open	open
I	closed	closed	open

Maximum number of contact blocks, "Aux./test" contacts and "test indication" contacts, see the table below. Standard versions include all except for N3-types, which are equipped with integrated neutral through the mechanism.

#### Maximum number of auxiliary contacts under the mechanism cover

Pole version	OS/OSM32G...250		OS/OSM315...800		OS/OSM1200...1250	
	Standard	N3	Standard	N3	Standard	N3
Maximum number of contact blocks	4	0	8	4	12	8
Aux./Test contacts	4	0	4	2	8 <sup>1)</sup>	6 <sup>2)</sup>
Test indication contacts	2	0	4	2	4	2

For contact timing, see pages 106 and 107.

1) 6 aux./test contacts and 2 early operation aux./test contacts

2) 4 aux./test contacts and 2 early operation aux./test contacts



OSP160GN

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

Maximum 8 auxiliary contact blocks (N.O. or N.C.) with the OEA28 module.

#### Module for auxiliary contacts for OS32...1250

Description	Type	Order number
Screw mounting to the left side of the switch	OEA28	1SCA022714R8810



OSP250N

#### Fourth poles

Snap-on mounting to the side of the switch.

Suitable for 3-pole switches	Mounting side	Type	Order number
Switched 4. poles			
OS100G...160G	Left/right	OSP160GN	1SCA114770R1001
OS200_	Left/right	OSP200N	1SCA022735R8700
OS250_	Left/right	OSP250N	1SCA022735R9260
OS400_	Left/right	OSP400N	1SCA022770R3490
OS630...800	Left/right	OSP800N	1SCA100432R1001
OS1200...1250	Left/right	OSP1250N	1SCA107943R1001



OSP800N

## Switch fuses OS

### 4.13 Accessories - Terminal shrouds and Fuse monitors



OSS200G1L



OSS250G1L



OSS800G1L



OFS260



OFD500EA

#### Terminal shrouds

Suitable for switches	Description	Type	Order number
Pack of single pole terminal shrouds			
Snap-on mounting, grey plastic, IP 3X from front.			
OS100G...160G	Long type	OSS160GG1L/3	1SCA114764R1001
OS200	Long type	OSS200G1L/3	1SCA022731R8910
OS250	Long type	OSS250G1L/3	1SCA022731R9390
OS315...400	Long type	OSS400G1L/3	1SCA022776R6650
OS630...800	Long type	OSS800G1L/3	1SCA022776R7200
OS1250	Long type	OSS1250G1L/3	1SCA107938R1001

#### Electronic fuse monitor

Includes the auxiliary contacts 1NO + 1NC.

#### OS32G...1250

Mounting onto the left side of OS32G-1250 switch fuse or on DIN-rail or on mounting plate.

Rated voltage [V]	Type	Order number
100...260/AC	OFS260	1SCA022716R0180
380...690/AC	OFS690	1SCA022715R9920
48...110/DC	OFD110EA	1SCA121775R1001
110...500/DC	OFD500EA	1SCA121776R1001

## Fuse Switch XLP

### 4.14 Fuse switch horizontal



Fuse Switch XLP - 1 Pole

Rated op. current AC-20...23A ≤ 690V [A]	Fuse size	No. of poles	Type	Order number
160	00	1	XLP00-1P-2M8	1SEP600113R0003
250	1	1	XLP1-1P-M10	1SEP600116R0003
400	2	1	XLP2-1P	1SEP600122R0001
630	3	1	XLP3-1P	1SEP600126R0001



Fuse Switch XLP - 2 Pole

Rated op. current AC-20...23A ≤ 690V [A]	Fuse size	No. of poles	Type	Order number
160	00	2	XLP00-2P-4M8	1SEP600114R0003
250	1	2	XLP1-2P-4M8	1SEP600117R0003
400	2	2	XLP2-2P	1SEP600123R0001
630	3	2	XLP3-2P	1SEP600127R0001



Fuse Switch XLP - 3 Pole

Rated op. current AC-20...23A ≤ 690V [A]	Fuse size	No. of poles	Type	Order number
160	00	3	XLP00-6M8	1SEP101890R0004
250	1	3	XLP1-6M10	1SEP101891R0004
400	2	3	XLP2	1SEP101892R0001
630	3	3	XLP3	1SEP101975R0001



Fuse Switch XLP - 4 Pole

Rated op. current AC-20...23A ≤ 690V [A]	Fuse size	No. of poles	Type	Order number
160	00	4	XLP00-4P-8M8	1SEP600115R0003
250	1	4	XLP1-4P-8M8	1SEP600119R0003
400	2	4	XLP2-4P	1SEP600124R0001
630	3	4	XLP3-4P	1SEP600128R0001