

Low Voltage Products

CamLine rotary cam switches

Enclosed cam switches

OM, ON and OL, 10, 25 and 40 Amps

Brochure ON_1 GB 05_01
1SCC302003C0201



ABB



OL_Large



ON_Normal



ON_Modular



OM_Minature



OM_Minature
Key operated



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CamLine rotary cam switches

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The technical data and dimensions are valid at the time of printing.
We reserve the right to subsequent alternations.

CamLine - Cam switches

Cam Switches OM, ON and OL 10A, 25A, 40A

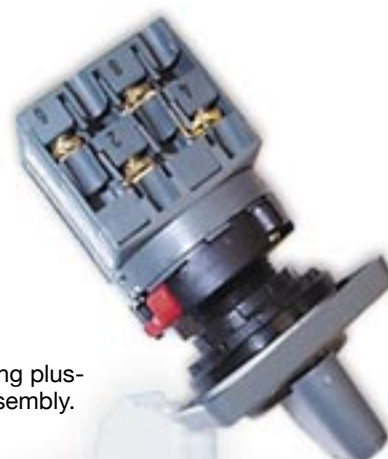
Complete range of standard and special cam switches
for door and base mounting



Complete delivery includes handle
and frontplate. Snap-on mounting of
contact block with interlocking



Protected terminals and
interconnections. Selflifting plus-
minus screws for fast assembly.



Handle, colour black
or grey. Padlockable
handle, colour black
or red-yellow.



Keylock and
cylinder lock
solutions



Enclosed cam switches.
Water and dustproof IP 65.
NEMA4 X for outdoor use.



Door mounting cam switches

- IP 65
- NEMA 4X outdoor (ON, OL40)
- Key operated switch, IP54
- OM, Miniature
- ON, Normal
- OL, Large

Door drilling

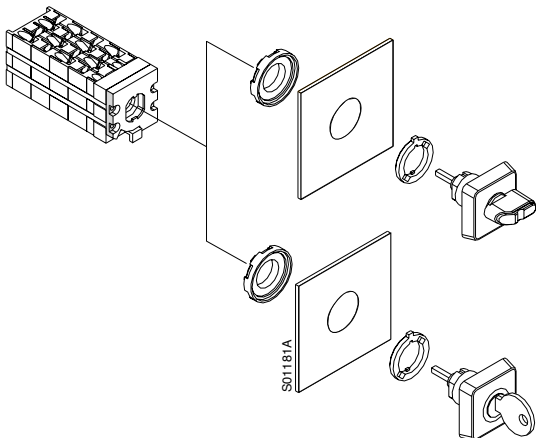
OM: Ø 16,5mm / Ø 22,5mm

ON: Ø 22,5mm / Ø 30,5mm

OL40: Ø 22,5mm / Ø 30,5mm

Maximum panel thickness 5,5 mm.

The black handle with square escutcheon plate marked for switch type is supplied with the switch body. Optional adaptor ring available for 30,5 mm hole.



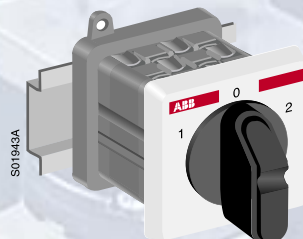
Escutcheon plates

OM: 30x30

ON, OL: 48x48

DIN-rail mounting

- IP 44
- ON, Modular



Number of contacts

OM: 16 contacts

ON: 20 contacts

ON_M: 6 contacts

OL40: 20 contacts

Special switches up to 60 contacts
Please consult with us.

Features:

- Complete delivery for easy purchasing and assembly
- Standard delivery with black handle, alt. grey or red yellow handle
- Small panel size: front space in side to side mounting 30 mm or 50 mm up to 25 A
- Finger protected terminals and interconnections (IP20, VBG4)
- Self lifting screws, terminal screws for fast cabling
- Double break silver contacts with 0,35 µm gold grid ensure a high breaking capacity and reliable connection.
Also available with solid gold contacts for extremely difficult circumstances.
Have to be ordered separately, please add AU to the type, e.g; OMA 1 PBAU.
- Fast special engraving service available
- Metallic shaft as special version
- Fast-on terminals available as special version



User guiding CamWeb Configurator for special cam switches

The user guiding CamWeb Configurator generates automatically the new cam switch type and sends order code for non-standard cam switches and front plates.

The global order code enables fast and failure free EDI-orders as standard switch from the first time.

The path to the configurator through ABB home pages:
www.abb.com or inside.abb_

Product&Services
Low Voltage Products
Switches&Fusegear
Switches
Cam Switches – CamLine
Special Cam Switches

You may also use the direct internet URL:
<http://194.241.162.3/FICON/FICON075.nsf>



CamLine

Rotary cam switches Technical data

Technical data according to IEC / EN 60947-3-4-5

IEC ratings				OM_	ON_	OL_
Resistive and inductive load						
AC ratings						
Impulse withstand voltage	U _{imp}	kV	-	-	6	
Rated operating voltage U _e	IEC	V	500	690	690	
Isolation conditions acc. to VDE		V	250	400	690	
Rated thermal current I _{th}	IEC	A	10	25	45	
Rated short circuit current (prospective)		kA	1	10	10	
Max back up fuse link		A	10	25	40	
Short time current carrying capacity		3s	A	-	100	360
		10s	A	-	60	200
		30s	A	-	32	120
		60s	A	-	30	80
Rated operational current I _e		A	10	25	45	
Non- or slightly inductive load	AC1	380 V	A	10	25	45
Switching of resistive loads	AC21	400 V	A	10	25	45
Switching of magnetic drives	AC11	220-240 V	A	2.5	5.5	14
relays, valves, traction magnets		380-440 V	A	-	3.5	6
		500 V	A	-	4.5	7
Mixed resistive and inductive load, pf. 0,7	AC22	220-500 V	A	10	20	40
		660-690 V	A	-	20	40
DC ratings						
Switching capacity DC rated voltage	DC1	24 V	A	10	10	45
with resistive circuits (T ≤1ms)		40 V	A	6	10	20
		60 V	A	2.5	3	5
		110 V	A	0.7	0.8	1
		220 V	A	0.3	0.32	0.3
		440 V	A	-	0.22	0.25
Switching capacity DC rated voltage	DC1	24 V	A	6	10	45
with inductive circuits (T < 50 ms)		30 V	A	3	4.5	11
		40 V	A	1	1.7	4
		60 V	A	0.7	0.7	1.5
		110 V	A	0.3	0.3	0.4
Motor ratings						
AC ratings						
Rated operational power	AC2	220-240 V	kW	2.5	3.5	11
3-phase		380-440 V	kW	-	6	18.5
Starting of slip-ring motors, switching off		500 V	kW	-	6	18.5
		660-690 V	kW	-	6	18.5
Rated operational power	AC3	220-240 V	kW	1.8	2.2	7.5
3-phase, 3-pole		380-440 V	kW	2.2	5.5	11
Direct starting of squirrel cage motors,		500 V	kW	-	4	11
switching off running motors		660-690 V	kW	-	4	11
1-phase		110 V	kW	0.3	0.4	2.5
		220-240 V	kW	0.55	0.75	4
		400 V	kW	0.75	1.3	5.5
Rated operational power	AC23	220-240 V	kW	1.8	2.6	7.5
3-phase, 3-pole		380-440 V	kW	3.0	7.5	15
Occasional switching of motors or other		500 V	kW	-	4.8	15
highly-inductive devices load		660-690 V	kW	-	4.8	17
1-phase		110 V	kW	0.37	0.5	2.5
		220-240 V	kW	0.75	0.9	4
		380-440 V	kW	1.1	1.5	7.5

CamLine

Rotary cam switches

Technical data

UL and CSA ratings

UL 508 Manual Motor Controller file number E 63822

			OM_	ON_	OL_
Maximum operating voltage			300	600	600
Ampere rating	Pilot duty	CSA/UL category	A300	A600	A600
	General use	CSA/UL	10	25	40
Rated power (HP)			1	1	5
3-phase	120V	HP	1	1	10
	240V	HP	-	2	20
	480V	HP	-	5	20
	600V	HP	-	-	-
1-phase			0.33	0.5	2
	120V	HP	0.75	1	3
	240V	HP	-	2	10
	480V	HP	-	3	10
	600V	HP	-	-	-
Short circuit ratings					
Maximum prospective fault current			1	10	10
Maximum fuse size			16	35(rk5)	50(rk3)
Switching frequency			150	150	150
Connecting screws			2.5	3.5	5
Max. cable cross section			1.5	4	6
			14	14-12	14-8(Cu75)

Approvals:

UL-Approval, file number EG 63822
 CSA-Approval
 Lloyds Register of Shipping
 Det Norske Veritas (DNV)
 Germanischer Lloyd (GL)
 Ghost R

Standards:

IEC 60947-3
 EN 60947-3
 UL 508
 CSA C22.2 No14



ON_ Normal



ON_M, Modular



OM_ Miniature



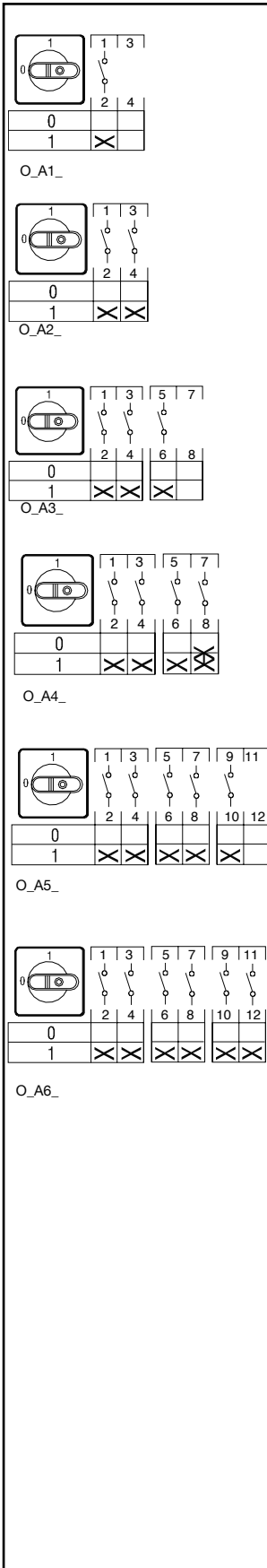
OL_ Large



OM_ Key operated

CamLine

Rotary cam switches Ordering details



ON-OFF switches

Black handle and frontplate with standard text are included. The type and the ordering number are for one piece, package quantity is 10 pcs. Special engraved frontplates to be ordered as separate items.

Function	Number of poles	Rated thermal current [A]	Type	Order number	Weight [kg]
Rotating angle 90°, O-position: 9 o'clock					
Miniature, door mounted					
0 - 1	1	10	OMA1PB	1SCA022531R3950	0.04
	2	10	OMA2PB	1SCA022531R4090	0.04
	3	10	OMA3PB	1SCA022531R4170	0.05
0 - 1	4	10	OMA4PB	1SCA022531R4330	0.05
	5	10	OMA5PB	1SCA022531R4410	0.06
	6	10	OMA6PB	1SCA022531R4500	0.06
Normal, door mounted					
0 - 1	1	25	ONA1PB	1SCA022531R4920	0.08
	2	25	ONA2PB	1SCA022531R5060	0.09
	3	25	ONA3PB	1SCA022531R5140	0.10
0 - 1	4	25	ONA4PB	1SCA022531R5220	0.11
	5	25	ONA5PB	1SCA022531R5310	0.12
	6	25	ONA6PB	1SCA022531R5490	0.12
Large, door mounted					
0 - 1	1	45	OL40A1PB	1SCA022755R7140	0.13
	2	45	OL40A2PB	1SCA022755R7220	0.17
	3	45	OL40A3PB	1SCA022755R7310	0.21
0 - 1	4	45	OL40A4PB	1SCA022755R7490	0.25
	6	45	OL40A6PB	1SCA022755R7650	0.33
Modular, DIN-rail mounted					
0 - 1	1	25	ONA1M	1SCA022531R6030	0.09
	2	25	ONA2M	1SCA022531R6110	0.10
	3	25	ONA3M	1SCA022531R6200	0.11
	6	25	ONA6M	1SCA022545R3020	0.12
Key operated, withdrawable in both positions, rotating angle 90°, O-position: 9 o'clock ¹⁾					
Miniature, door mounted					
0 - 1	1	10	OMA1KB	1SCA022531R4760	0.06
	3	10	OMA3KB	1SCA022531R4840	0.07
Normal, door mounted 90°					
0 - 1	1	25	ONA1KB	1SCA022531R5570	0.11
	3	25	ONA3KB	1SCA022531R5650	0.13

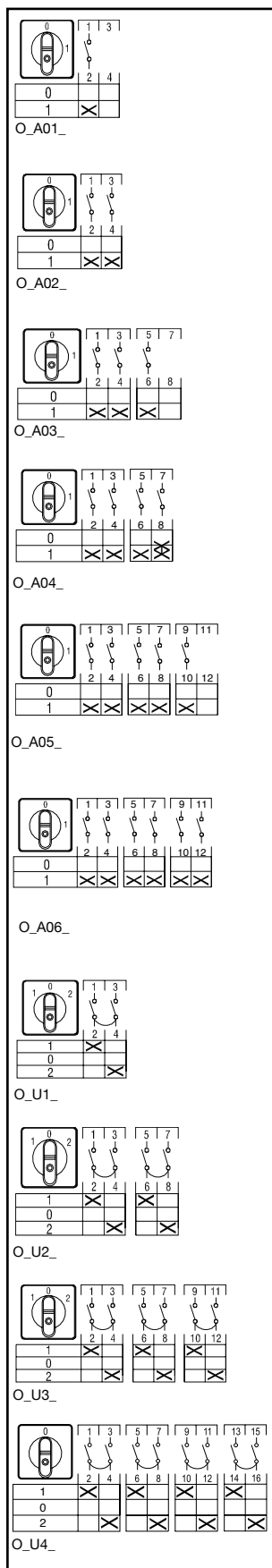
Packing sizes: OM 130 x 100 x 120 [mm]
ON, OL 250 x 100 x 110 [mm]

¹⁾ Different withdrawability of key is also possible to be ordered as special switch.

Standard delivery with black handle. Available also as an optional extra with grey handle, please change in type designation B to G, eg. OMA1PB would be OMA1PG with grey handle.

CamLine

Rotary cam switches Ordering details



ON - OFF switches

Black handle and frontplate with standard text are included. The type and the ordering number are for one piece, package quantity is 10 pcs. Special engraved frontplates to be ordered as separate items.

Function	Number of poles	Rated thermal current [A]	Type	Order number	Weight [kg]
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Rotating angle 90°, O-position: 12 o'clock

Miniature, door mounted

0 - 1	1	10	OMA01PB	1SCA022570R6680	0.04
	2	10	OMA02PB	1SCA022570R6760	0.04
	3	10	OMA03PB	1SCA022570R6840	0.05
0 - 1	4	10	OMA04PB	1SCA022570R6920	0.05
	5	10	OMA05PB	1SCA022570R7060	0.06
	6	10	OMA06PB	1SCA022570R7140	0.06

Normal, door mounted

0 - 1	1	25	ONA01PB	1SCA022570R7220	0.08
	2	25	ONA02PB	1SCA022570R7310	0.09
	3	25	ONA03PB	1SCA022570R7490	
0 - 1	4	25	ONA04PB	1SCA022570R7570	0.11
	5	25	ONA05PB	1SCA022570R7650	0.12
	6	25	ONA06PB	1SCA022570R7730	0.12

Modular, DIN-rail mounted

0 - 1	1	25	ONA01M	1SCA022572R5630	0.09
	2	25	ONA02M	1SCA022572R5710	0.10
	3	25	ONA03M	1SCA022572R5800	0.11
	6	25	ONA06M	1SCA022572R5980	0.12

Key operated, withdrawable in both positions, rotating angle 90°, O-position: 12 o'clock

Miniature, door mounted

0 - 1	1	10	OMA01KB	1SCA022570R7810	0.06
	3	10	OMA03KB	1SCA022570R7900	0.07

Normal, door mounted

0 - 1	1	25	ONA01KB	1SCA022570R8030	0.11
	3	25	ONA03KB	1SCA022570R8110	0.13

Change-over switches (1)

Black handle and frontplate with standard text are included. The type and the ordering number are for one piece, package quantity is 10 pcs. Special engraved frontplates to be ordered as separate items.

Rotating angle 60° - 0 - 60°

Miniature, door mounted

1 - 0 - 2	1	10	OMU1PB	1SCA022532R5960	0.05
	2	10	OMU2PB	1SCA022532R6000	0.06
	3	10	OMU3PB	1SCA022532R6180	0.06
	4	10	OMU4PB	1SCA022532R6260	0.07

Normal, door mounted

1 - 0 - 2	1	25	ONU1PB	1SCA022532R7310	0.09
	2	25	ONU2PB	1SCA022532R7400	0.11
	3	25	ONU3PB	1SCA022532R7580	0.13
	4	25	ONU4PB	1SCA022532R7660	0.14

Large, door mounted

1 - 0 - 2	1	45	OL40U1PB	1SCA022761R0990	0.17
	2	45	OL40U2PB	1SCA022761R1020	0.25
	3	45	OL40U3PB	1SCA022761R1110	0.33
	4	45	OL40U4PB	1SCA022761R1290	0.41

Modular, DIN-rail mounted

1 - 0 - 2	1	25	ONU1M	1SCA022532R8210	0.09
	2	25	ONU2M	1SCA022532R8390	0.11
	3	25	ONU3M	1SCA022532R8470	0.13
	4	25	ONU4M	1SCA022534R2710	0.14

Packing sizes: OM 130 x 100 x 120 [mm]
ON, OL 250 x 100 x 110 [mm]

Standard delivery with black handle. Available also as an optional extra with grey handle, please change in type designation B to G, eg. OMA1PB would be OMA1PG with grey handle.

CamLine

Rotary cam switches Ordering details

Change-over switches (2)

Black handle and frontplate with standard text are included. The type and the ordering number are for one piece, package quantity is 10 pcs. Special engraved frontplates to be ordered as separate items.

Function	Number of poles	Rated thermal current [A]	Type	Order number	Weight [kg]
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Key operated, with 0-position, withdrawable in all positions

Miniature, door mounted

1 - 0 - 2	1	10	OMU1KB	1SCA022532R6340	0.07
	3	10	OMU3KB	1SCA022532R6420	0.08

Normal, door mounted

1 - 0 - 2	1	25	ONU1KB	1SCA022532R7740	0.12
	3	25	ONU3KB	1SCA022532R7820	0.13

1_R - 0 - 2_R, with two sided spring return

Miniature, door mounted

1 _R - 0 - 2 _R	1	10	OMURR1PB	1SCA022532R6510	0.05
	3	10	OMURR3PB	1SCA022532R6690	0.06

Normal, door mounted

1 _R - 0 - 2 _R	1	25	ONURR1PB	1SCA022532R7910	0.09
	2	25	ONURR2PB	1SCA022558R4040	0.11
	3	25	ONURR3PB	1SCA022532R8040	0.12

Large, door mounted

1 _R - 0 - 2 _R	1	45	OL40URR1PB	1SCA022761R1370	0.17
	2	45	OL40URR2PB	1SCA022761R1450	0.25
	3	45	OL40URR3PB	1SCA022761R1530	0.33

Modular, DIN-rail mounted

1 _R - 0 - 2 _R	1	25	ONURR1M	1SCA022568R3530	0.09
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Without 0-position

Miniature, door mounted

1 - 2	1	10	OMWS1PB	1SCA022532R6770	0.09
	2	10	OMWS2PB	1SCA022532R6850	0.11
	3	10	OMWS3PB	1SCA022533R0610	0.13
	4	10	OMWS4PB	1SCA022533R0700	0.14

Normal, door mounted

1 - 2	1	25	ONWS1PB	1SCA022532R8120	0.09
	2	25	ONWS2PB	1SCA022532R9360	0.11
	3	25	ONWS3PB	1SCA022532R9440	0.13
	4	25	ONWS4PB	1SCA022532R9520	0.14

Large, door mounted

1 - 2	1	45	OL40WS1PB	1SCA022761R1610	0.17
	2	45	OL40WS2PB	1SCA022761R1700	0.25
	3	45	OL40WS3PB	1SCA022761R1880	0.33
	4	45	OL40WS4PB	1SCA022761R1960	0.41

Modular, DIN-rail mounted

1 - 2	1	25	ONWS1M	1SCA022532R8710	0.09
	2	25	ONWS2M	1SCA022532R8800	0.11
	3	25	ONWS3M	1SCA022532R8980	0.13
	4	25	ONWS4M	1SCA022532R9010	0.14

Packing sizes: OM 130 x 100 x 120 [mm]
ON, OL 250 x 100 x 110 [mm]

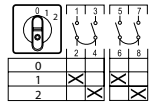
Standard delivery with black handle. Available also as an optional extra with grey handle, please change in type designation B to G, eg. OMA1PB would be OMA1PG with grey handle.

CamLine

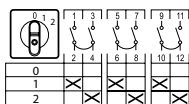
Rotary cam switches Ordering details



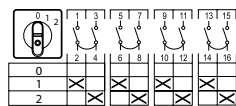
O_SO21_



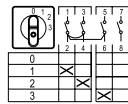
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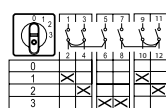
O_SO23_



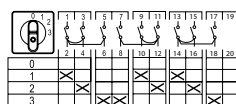
O_SO24_



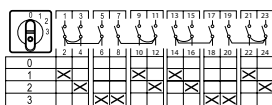
O_SO31_



O_SO32_



O_SO33_



O_SO34_

Multistep switches (1)

Black handle and frontplate with standard text are included. The type and the ordering number are for one piece, package quantity is 10 pcs. Special engraved frontplates to be ordered as separate items.

Function	Number of poles	Rated thermal current [A]	Type	Order number	Weight [kg]
2- step, with O-position					
Miniature, door mounted					
0 - 1 - 2	1	10	OMSO21PB	1SCA022533R0880	0.04
	2	10	OMSO22PB	1SCA022533R0960	0.05
	3	10	OMSO23PB	1SCA022533R1000	0.06
	4	10	OMSO24PB	1SCA022533R1180	0.07
Normal, door mounted					
0 - 1 - 2	1	25	ONSO21PB	1SCA022532R9610	0.10
	2	25	ONSO22PB	1SCA022532R9790	0.12
	3	25	ONSO23PB	1SCA022532R9870	0.13
	4	25	ONSO24PB	1SCA022532R9950	0.14
Modular, DIN-Rail mounted					
0 - 1 - 2	1	25	ONSO21M	1SCA022532R9100	0.10
3- step, with O-position					
Miniature, door mounted					
0 - 1 - 2 - 3	1	10	OMSO31PB	1SCA022545R3110	0.05
	2	10	OMSO32PB	1SCA022533R1420	0.06
	3	10	OMSO33PB	1SCA022533R1510	0.07
	4	10	OMSO34PB	1SCA022533R1690	0.08
Normal, door mounted					
0 - 1 - 2 - 3	1	25	ONSO31PB	1SCA022533R0020	0.10
	2	25	ONSO32PB	1SCA022533R0110	0.12
	3	25	ONSO33PB	1SCA022533R0290	0.13
	4	25	ONSO34PB	1SCA022533R0370	0.14
Large, door mounted					
0 - 1 - 2 - 3	1	45	OL40SO31PB	1SCA022758R7810	0.41
Modular, DIN-rail mounted					
0 - 1 - 2 - 3	1	25	ONSO31M	1SCA022532R9280	0.11

Packing sizes: OM 130 x 100 x 120 [mm]
ON, OL 250 x 100 x 110 [mm]

Standard delivery with black handle. Available also as an optional extra with grey handle, please change in type designation B to G, eg. OMA1PB would be OMA1PG with grey handle.

CamLine

Rotary cam switches Ordering details

Multistep switches (2)

Black handle and frontplate with standard text are included. The type and the ordering number are for one piece, package quantity is 10 pcs. Special engraved frontplates to be ordered as separate items.

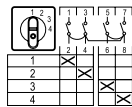
Function	Number of poles	Rated thermal current [A]	Type	Order number	Weight [kg]
4- step, with O-position					
Miniature, door mounted					
0 - 1 - 2 - 3 - 4	1	10	OMSO41PB	1SCA022533R1770	0.05
	2	10	OMSO42PB	1SCA022533R1850	0.06
	3	10	OMSO43PB	1SCA022533R3710	0.07
Normal, door mounted					
0 - 1 - 2 - 3 - 4	1	25	ONSO41PB	1SCA022533R0450	0.11
	2	25	ONSO42PB	1SCA022533R0530	0.12
	3	25	ONSO43PB	1SCA022533R2230	0.13
5- step, with O-position					
Miniature, door mounted					
0 - 1 - 2 - 3 - 4 - 5	1	10	OMSO51PB	1SCA022533R3800	0.06
	2	10	OMSO52PB	1SCA022533R3980	0.08
Normal, door mounted					
0 - 1 - 2 - 3 - 4 - 5	1	25	ONSO51PB	1SCA022533R2310	0.12
	2	25	ONSO52PB	1SCA022533R2400	0.14
3- step, without O-position					
Miniature, door mounted					
1 - 2 - 3	1	10	OMST31PB	1SCA022533R2580	0.05
	2	10	OMST32PB	1SCA022533R4010	0.06
	3	10	OMST33PB	1SCA022533R4100	0.07
	4	10	OMST34PB	1SCA022533R4280	0.08
Normal, door mounted					
1 - 2 - 3	1	25	ONST31PB	1SCA022533R2740	0.10
	2	25	ONST32PB	1SCA022533R2820	0.12
	3	25	ONST33PB	1SCA022533R2910	0.13
	4	25	ONST34PB	1SCA022533R3040	0.14
Modular, DIN-rail mounted					
1 - 2 - 3	1	25	ONST31M	1SCA022533R2070	0.10

Packing sizes: OM 130 x 100 x 120 [mm]
ON, OL 250 x 100 x 110 [mm]

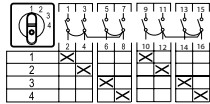
Standard delivery with black handle. Available also as an optional extra with grey handle, please change in type designation B to G, eg. OMA1PB would be OMA1PG with grey handle.

CamLine

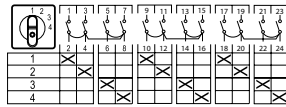
Rotary cam switches Ordering details



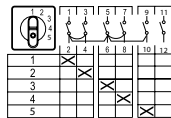
O_ST41_



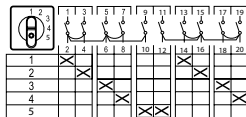
O_ST42_



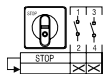
O_ST43_



O_ST51_



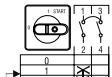
O_ST52_



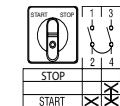
O_SA2_



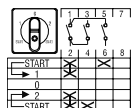
O_SE2_



O_SEA10_



ONSEA1PB



O_UR139_

Multistep switches (3)

Black handle and frontplate with standard text are included. The type and the ordering number are for one piece, package quantity is 10 pcs. Special engraved frontplates to be ordered as separate items.

Function	Number of poles	Rated thermal current [A]	Type	Order number	Weight [kg]
4- step, without O-position					
Miniature, door mounted					
1 - 2 - 3 - 4	1	10	OMST41PB	1SCA022533R4440	0.05
	2	10	OMST42PB	1SCA022533R4610	0.06
	3	10	OMST43PB	1SCA022533R4790	0.07
Normal, door mounted					
1 - 2 - 3 - 4	1	25	ONST41PB	1SCA022533R3210	0.11
	2	25	ONST42PB	1SCA022533R3390	0.12
	3	25	ONST43PB	1SCA022533R3470	0.13
5- step, without O-position					
Miniature, door mounted					
1 - 2 - 3 - 4 - 5	1	10	OMST51PB	1SCA022533R4870	0.06
	2	10	OMST52PB	1SCA022533R5090	0.08
Normal, door mounted					
1 - 2 - 3 - 4 - 5	1	25	ONST51PB	1SCA022533R3550	0.12
	2	25	ONST52PB	1SCA022533R3630	0.14

Stop switches

Black handle and frontplate with standard text are included. The type and the ordering number are for one piece, package quantity is 10 pcs. Special engraved frontplates to be ordered as separate items.

Miniature, door mounted, with spring return, contacts N.C.

O _R -Stop	2	10	OMSA2PB	1SCA022531R6380	0.04
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Normal, door mounted, with spring return, contacts N.C.

O _R -Stop	2	25	ONSA2PB	1SCA022531R6710	0.09
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Start switches

Black handle and frontplate with standard text are included. The type and the ordering number are for one piece, package quantity is 10 pcs. Special engraved frontplates to be ordered as separate items. With spring return.

Miniature, door mounted, with spring return.

O _R -Start	1	10	OMSE2PB	1SCA022531R6460	0.04
O-1 _R -Start	1	10	OMSEA10PB	1SCA022531R6540	0.05

Normal, door mounted, with spring return.

Stop-Start	1	25	ONSEA1PB	1SCA022605R8610	0.04
O _R -Start	1	25	ONSE2PB	1SCA022563R6290	0.04
O-1 _R -Start	1	25	ONSEA10PB	1SCA022531R6890	0.09
Start-1 _R -O-2 _R -Start	1	25	ONUR139PB	1SCA022531R6970	0.09

Modular, DIN-rail mounted, with spring return

O-1 _R -Start	1	25	ONSEA10M	1SCA022565R5750	0.09
Start-1 _R -O-2 _R -Start	1	25	ONUR139M	1SCA022568R3370	0.09

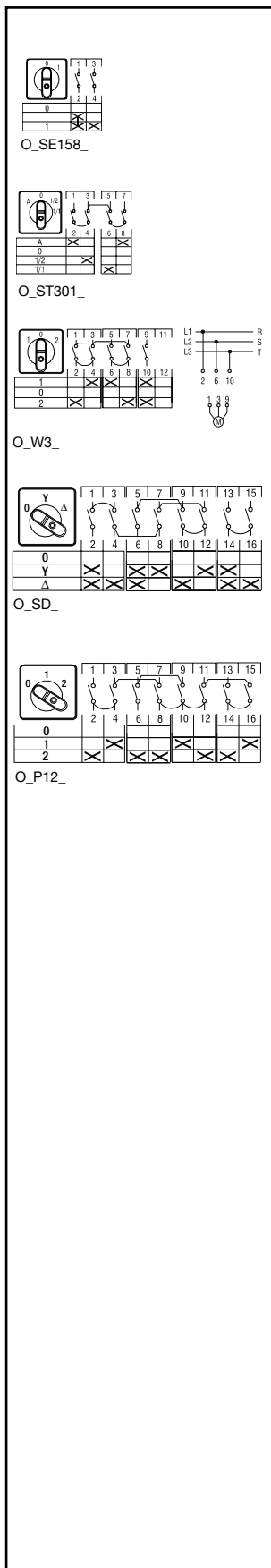
Packing sizes: OM 130 x 100 x 120 [mm]
ON, OL 250 x 100 x 110 [mm]

Standard delivery with black handle. Available also as an optional extra with grey handle, please change in type designation B to G, eg. OMA1PB would be OMA1PG with grey handle.

CamLine

Rotary cam switches

Ordering details



Motor control switches

Pumpstart switches

Miniature, door mounted

0 - 1	1	10	OMSE158PB	1SCA022545R4930	0.04
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Normal, door mounted

0 - 1	1	25	ONSE158PB	1SCA022534R2540	0.09
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Modular, DIN-rail mounted

0 - 1	1	25	ONSE158M	1SCA022565R5830	0.09
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Ventilation switches

Black handle and frontplate with standard text are included. The type and the ordering number are for one piece, package quantity is 10 pcs. Special engraved frontplates to be ordered as separate items.

Function	Number of poles	Rated thermal current [A]	Motor rating [kW/400V]	Type	Order number [kg]	Weight
Miniature, door mounted						
A - 0 - 1/2 - 1/1	2	10	7.5	OMST301PB	1SCA022533R4360	0.06
Normal, door mounted						
A - 0 - 1/2 - 1/1	2	25	7.5	ONST301PB	1SCA022533R3120	0.11
Modular, DIN-rail mounted						
A - 0 - 1/2 - 1/1	2	25	7.5	ONST301M	1SCA022533R2150	0.11
Large, door mounted						
A - 0 - 1/2 - 1/1	2	40	15	OL40ST301PB	1SCA022761R6680	0.21

Reversing switches

Black handle and frontplate with standard text are included. The type and the ordering number are for one piece, package quantity is 10 pcs.. Special engraved frontplates to be ordered as separate items.

Normal, door mounted

1 - 0 - 2	3	25	7.5	ONW3PB	1SCA022553R8790	0.10
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Large, door mounted

1 - 0 - 2	3	40	15	OL40W3PB	1SCA022757R5630	0.21
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Star-delta switches

Normal, door mounted

0 - Y - ΔΔ	3	25	7.5	ONSDEPB	1SCA022662R4140	0.12
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Large, door mounted

0 - Y - Δ	3	40	15	OL40SDEPB	1SCA022755R3230	0.21
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Pole-change switches (Dahlander)

Winding for 2 speeds, one direction, 0 - A - AYY

Normal, door mounted

0 - 1 - 2	3	25	7.5	ONP12PB	1SCA022576R6740	0.12
-----------	---	----	-----	---------	-----------------	------

Large, door mounted

0 - 1 - 2	3	40	15	OL40P12PB	1SCA022756R3380	0.25
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Packing sizes: OM 130 x 100 x 120 [mm]
ON, OL 250 x 100 x 110 [mm]

Standard delivery with black handle. Available also as an optional extra with grey handle, please change in type designation B to G, eg. OMA1PB would be OMA1PG with grey handle.

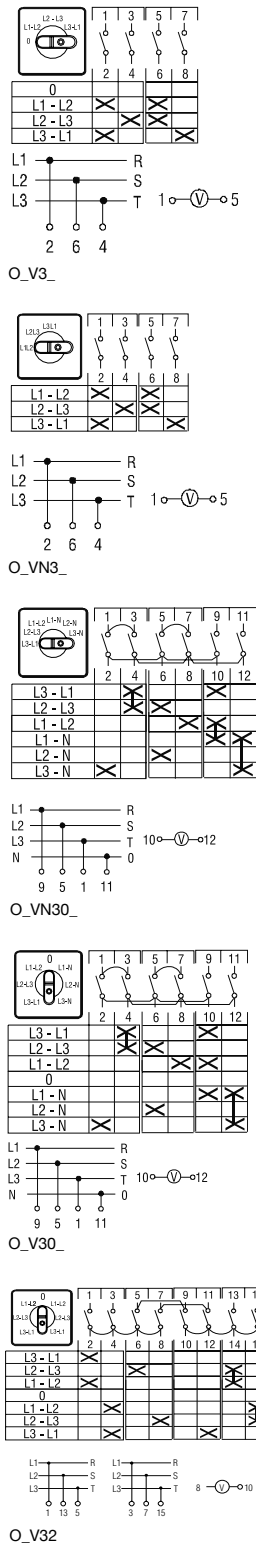
CamLine

Rotary cam switches Ordering details

Voltmeter switches

Black handle and frontplate with standard text are included. The type and the ordering number are for one piece, package quantity is 10 pcs. Special engraved frontplates to be ordered as separate items.

Function	Num- ber of stages	Rated thermal current [A]	Type	Order number	Weight kg
4 Positions, 3 phase -3 wire, with 0-position					
Miniature, door mounted					
0, L1-L2,L2-L3,L3-L1	2	10	OMV3PB	1SCA022533R5250	0.06
Normal, door mounted					
0, L1-L2,L2-L3,L3-L1	2	25	ONV3PB	1SCA022533R5680	0.11
Modular, DIN-rail mounted					
0, L1-L2,L2-L3,L3-L1	2	25	ONV3M	1SCA022549R9280	0.11
3 Positions, 3 phase -3 wire, without 0-position					
Miniature, door mounted					
L1-L2,L2-L3,L3-L1	2	10	OMVN3PB	1SCA022558R4470	0.06
Normal, door mounted					
L1-L2,L2-L3,L3-L1	2	25	ONVN3PB	1SCA022558R4630	0.11
Modular, DIN-rail mounted					
L1-L2,L2-L3,L3-L1	2	25	ONVN3M	1SCA022558R4800	0.11
7 Positions, 3 phase to phase 3 phase to neutral, without 0-position					
Miniature, door mounted					
L1-L3,L2-L3,L1-L2	3	10	OMVN30PB	1SCA022533R5330	0.08
L1-N,L2-N,L3-N					
Normal, door mounted					
L1-L3,L2-L3,L1-L2	3	25	ONVN30PB	1SCA022533R5760	0.12
L1-N,L2-N,L3-N					
Modular, DIN-rail mounted					
L1-L3,L2-L3,L1-L2	M	25	ONVN30M	1SCA022549R9010	0.12
L1-N,L2-N,L3-N					
7 Positions, 3 phase to phase 3 phase to neutral, with 0-position					
Miniature, door mounted					
L1-L3,L2-L3,L1-L2,0	3	10	OMV30PB	1SCA022533R5170	0.12
L1-N,L2-N,L3-N					
Normal, door mounted					
L1-L3,L2-L3,L1-L2,0	3	25	ONV30PB	1SCA022533R5500	0.12
L1-N,L2-N,L3-N					
Modular, DIN-rail mounted					
L1-L3,L2-L3,L1-L2,0	3	25	ONV30M	1SCA022549R9100	0.12
L1-N,L2-N,L3-N					
7 Positions, 3 phase to phase voltages for 2 circuits, with 0 position					
Miniature, door mounted					
L1-L3,L2-L3,L1-L2,0	4	10	OMV32PB	1SCA022549R7740	0.14
L1-L3,L2-L3,L1-L2					
Normal, door mounted					
L1-L3,L2-L3,L1-L2,0	4	25	ONV32PB	1SCA022549R7820	0.14
L1-L3,L2-L3,L1-L2					



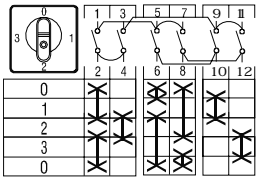
Packing sizes: OM 130 x 100 x 120 [mm]
ON 250 x 100 x 110 [mm]

Standard delivery with black handle. Available also as an optional extra with grey handle, please change in type designation B to G, eg. OMA1PB would be OMA1PG with grey handle.

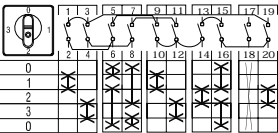
CamLine

Rotary cam switches

Ordering details



O_AU31



O_AU32

Ammeter switches

Black handle and frontplate with standard text are included. The type and the ordering number are for one piece, package quantity is 10 pcs. Special engraved frontplates to be ordered as separate items.

Function	Num-ber of stages	Rated thermal current [A]	Type	Order number	Weight kg
For 3 current transformer circuits, with 0-position					
Miniature, door mounted					
Single pole	3	10	OMAU31PB	1SCA022533R5410	0.12
Normal, door mounted					
Single pole	3	25	ONAU31PB	1SCA022533R5840	0.12
2 pole or direct measurement in 3 phases	5	25	ONAU32PB	1SCA022558R4210	0.15
Modular, DIN-rail mounted					
Single pole	4	25	ONAU31M	1SCA022549R9360	0.12

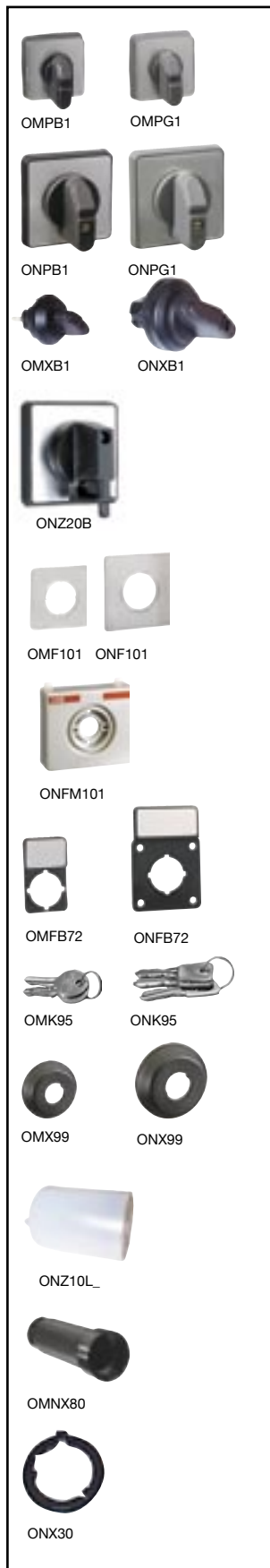
Packing sizes: OM 130 x 100 x 120 [mm]
ON 250 x 100 x 110 [mm]

Standard delivery with black handle. Available also as an optional extra with grey handle, please change in type designation B to G, eg. OMA1PB would be OMA1PG with grey handle.

CamLine

Accessories

Ordering details



Accessories

The type and the ordering number are for one piece.

Colour	For cam switches type	Type	Order number	Packing quantities	Weight kg
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Handle with blanco front plate without engraving

Black	OM_, Mini	OMPB1	1SCA022553R7470	5	0.05
Grey	OM_, Mini	OMPG1	1SCA022553R8010	5	0.05
Black	ON_Normal, OL40	ONPB1	1SCA022553R7550	5	0.08
Grey	ON_Normal, OL40	ONPG1	1SCA022553R7630	5	0.08

Handle with round escutcheon plate

Black	OM_, Mini	OMXB1	1SCA022629R7270	5	0.02
Black, nose-type	OM_, Mini	OMXNB1	1SCA022577R9810	5	0.02
Black	ON_Normal, OL40	ONXB1	1SCA022629R7350	5	

Padlockable handle

- for max 2 padlocks with 6 mm bail diameter or for max 3 padlocks with 4 mm bail diameter, 90 degrees.

Black	ON_Normal, OL40	ONZ20B	1SCA022621R1810	5	0.06
Red yellow	ON_Normal, OL40	ONZ20RY	1SCA022621R1900	5	0.06

Front ring only

Black	OM_, Mini	OMX99	1SCA022553R8100	10	0.01
Black	ON_, Normal	ONX99	1SCA022553R7710	10	0.01

Front plate, blanco without engraving ¹⁾

Silver	OM_, Mini	OMF101	1SCA022540R4590	10	0.003
Silver	ON_, Normal	ONF 101	1SCA022540R6290	10	0.003
Yellow	ON_, Normal, OL40	ONFY 101	1SCA022716R4250	10	0.003
Grey	ON_, Modular	ONFM 101	1SCA022553R8520	10	0.003

Additional lettering plate, without engraving, black engraving from front side²⁾

Black frame	OM_, Mini	OMFB72	1SCA022555R4990	5	0.01
Black frame	ON_, Normal, OL40	ONFB72	1SCA022555R5020	5	0.01
Grey frame	OM_, Mini	OMFG72	1SCA022556R1850	5	0.01
Grey frame	ON_, Normal	ONFG72	1SCA022556R1930	5	0.01

Spare key

2 pcs	OM_, Mini	OMK95	1SCA022553R8360	2	0.01
3 pcs	ON_, Normal, OL40	ONK95	1SCA022553R7980	2	0.01

Protective rear cover

Transparent, IP 42 protection

Number of chambers	Contats	For cam switches type	Type	Order number	Packing quantities	Weight kg
1-2	2-4	ON_, Normal	ONZ10L2	1SCA022621R1570	1	0.02
3-4	6-8	ON_, Normal	ONZ10L4	1SCA022621R1650	1	0.04
5-6	10-12	ON_, Normal	ONZ10L6	1SCA022621R1730	1	0.06

Nut spanner for mounting the handle to the door

Black	OM_, Mini	OMNX80	1SCA022553R8440	1	0.02
	ON_, Normal				

Adaptor ring for 30 mm door drilling

Black	ON_, Normal	ONX30	1SCA022643R8510	10	0.01
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¹⁾ Special front plate for standard switches: order as separate position. Attach specification in electronic format or paper. Eg. ONF 101/TEXT

²⁾ Additional lettering plate with engraving: order as separate position. Attach specification in electronic format or paper. The text can also be typed as comment. Eg. ONFB 72/TEXT Pumping station

CamLine

Accessories

Ordering details



ONZ74_



O_Z31_



O_Z21_

Accessories available for special cam switches

The type and the ordering number are for one piece.
Special cam switches to be specified by CAMWEB configurator.

Base mounting switches

Base mounting kit includes base for DIN-rail mounting, shaft adaptor and 200 mm shaft for cutting up to 250 mm panel depth. Can be supplied also as optional extra.

Depth[mm]	For cam switches	Type	Order number
250	ON_Normal	ONZ74	1SCA022757R3510

Cylinder interlock

To lock all pre-determined positions with a safety key (2 pcs)
Available for special cam switches only. Special configuration with CAMWEB.

OL_Large	OLZ31	1SCA022757R6360
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Push button interlock

To release all pre-determined positions while pushed. Special configuration with CAMWEB.

OL_Large	OLZ21	1SCA022757R6100
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CamLine

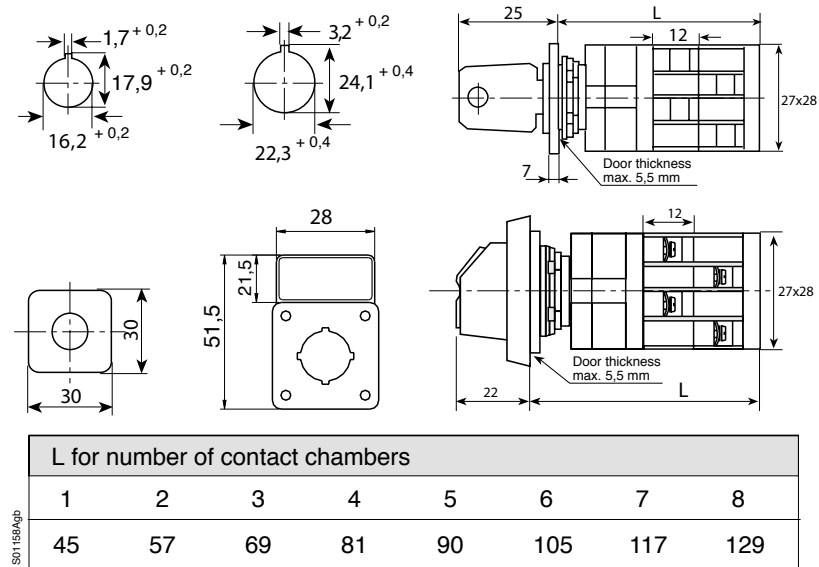
Cam switches Dimension drawings

Dimension drawings for OM, ON and OL switches

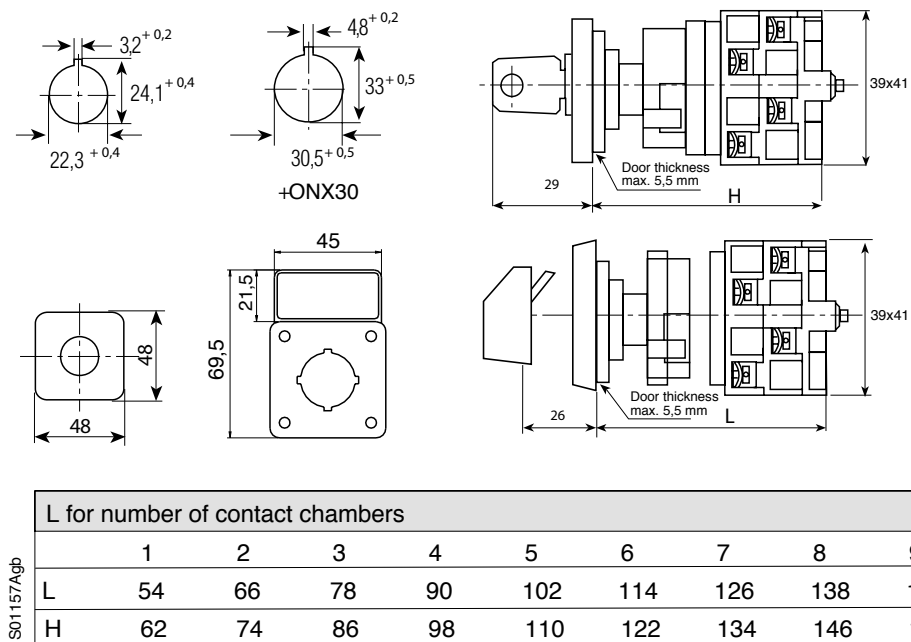
Dimensions in mm.

Remark: Terminal screws on top and bottom side.

OM, Miniature



ON, Normal



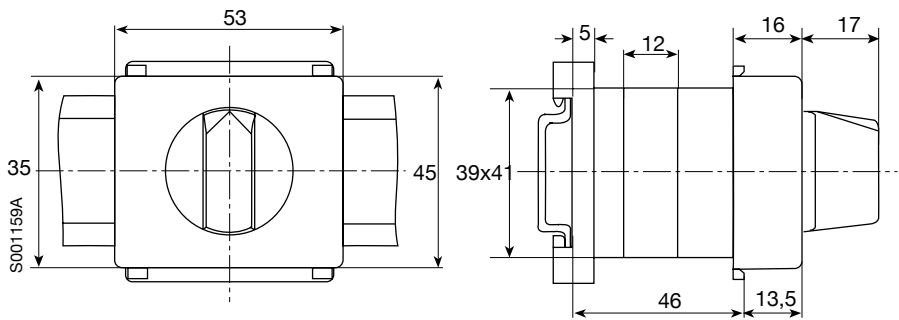
CamLine

Cam switches Dimension drawings

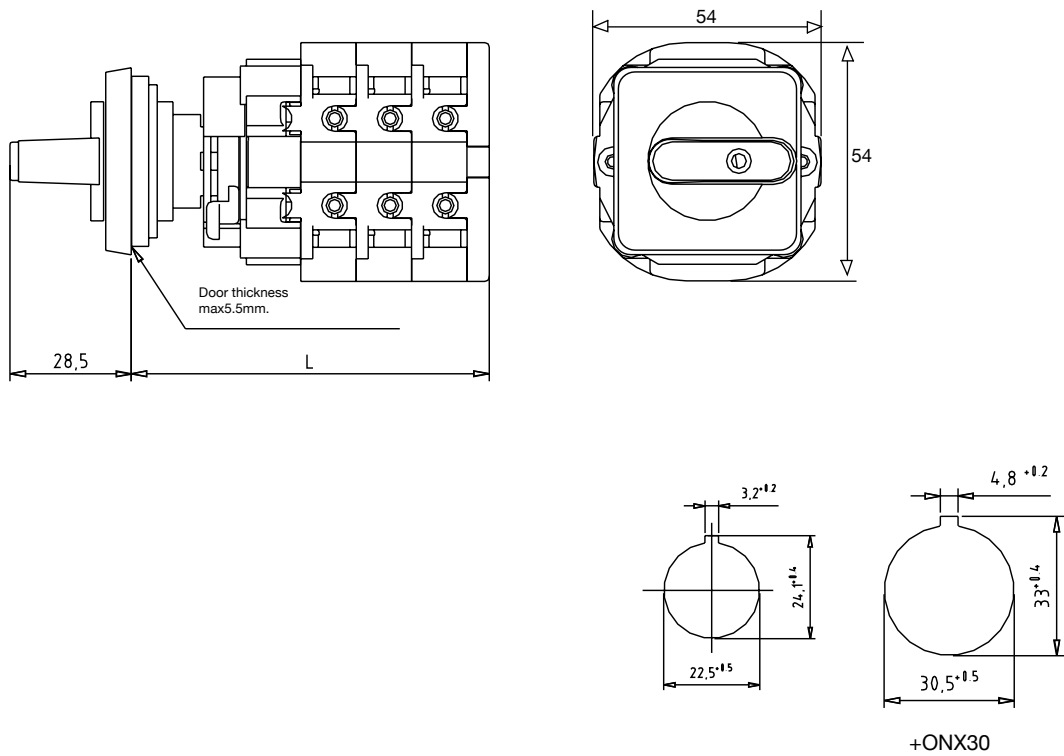
Dimension drawings for ON and OL cam switches.

Dimensions in mm.

ON, Modular



OL, Large



L number of contact chambers									
1	2	3	4	5	6	7	8	9	10
59	72	85	98	111	124	137	150	163	176



Special cam switches, contact plan

Company _____

Phone/Fax nr. _____

Name _____

Type _____

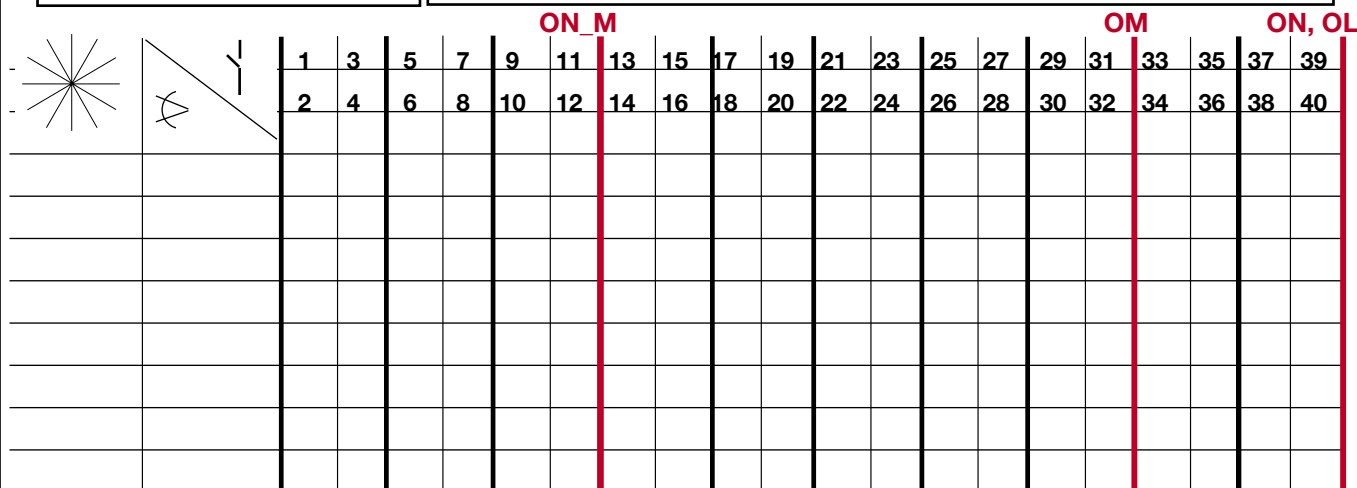
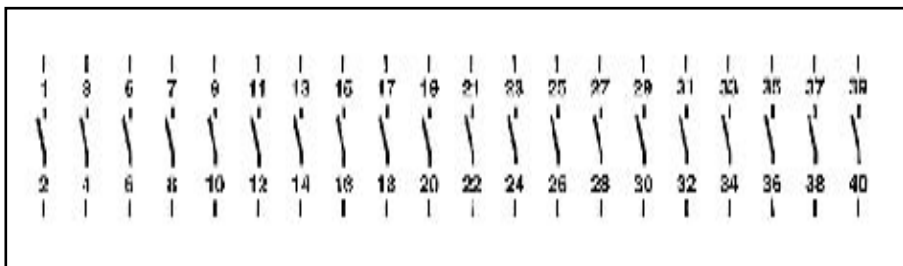
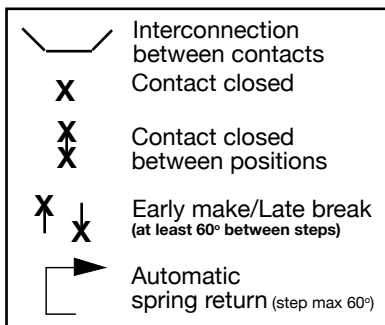
Project number _____

Customer's number _____

Quantity: _____ pcs

Handled by: _____

Date: _____



	Normal	Padlockable _X20	Key operated _K	Enclosed _E_6 IP65	Cylinder locking	Pusbutton locking
Black _B						
Grey _G						
Red-yellow -RY						

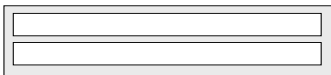
Door mounting

OM, Miniature ☐

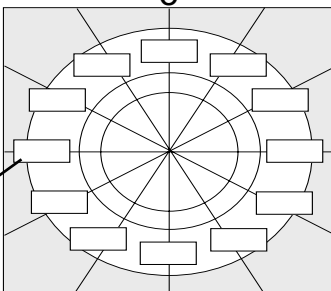
ON, Normal ☐

OL, Large ☐

Additional
lettering
plate



Front
plate



Max 6 (7) Letters

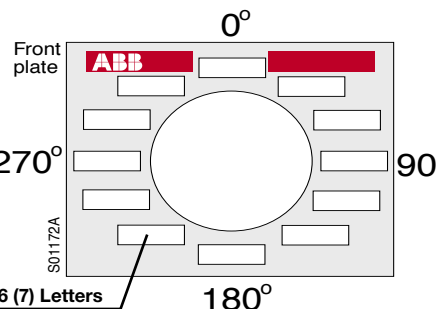
S01172B

ABB Oy

Max 20 contacts (ON), 16 contacts (OM)
[Max 6 (7) Letters]

DIN-rail mounting

ON_M, Modular ☐



Max 6 (7) Letters

Max 3 chambers = 6 contacts
[Max 6 (7) Letters]

Enclosed rotary cam switches

ON-OFF switches
Key switches
Change-over switches
Reversing switches
Star Delta switches
Ventilation switches
Special switches





CamLine

Enclosed rotary cam and main switches

Contents:

Enclosed rotary cam and main switches

Ordering information

Enclosed cam switches	24
Enclosed main switches	24
Empty enclosures	24
Switch-disconnectors for enclosures OTC_	25
Dimension drawings.....	26

The technical data and dimensions are valid at the time of printing.
We reserve the right to subsequent alternations.

CamLine

Enclosed cam switches and main switches Ordering details



ONA_EPB



ONA3EKP



ONA_EZB



OTU16B3M6



OTC2_M25



OTC3_M25



OTC4_M25



OTC36LM25

Enclosed cam switches

The type and the ordering number are for one piece, the package quantity is four pieces.

Neutral and earth terminal, 6mm² included

Number of poles	Function	Size of enclosure	Type	Order number	Weight [kg]
ON-OFF switches, IP65					
2	0 - 1	96x96x70	ONA2EPB	1SCA022662R3410	0.3
3	0 - 1	96x96x70	ONA3EPB	1SCA022662R3500	0.3
4	0 - 1	96x96x70	ONA4EPB	1SCA022662R3680	0.3
5	0 - 1	96x96x85	ONA5EPB	1SCA022755R1020	0.3
6	0 - 1	96x96x85	ONA6EPB	1SCA022755R1110	0.3
8	0 - 1	96x96x108	ONA8EPB	1SCA022755R1290	0.3
9	0 - 1	96x96x138	ONA9EPB	1SCA022761R4710	0.3

ON - OFF switches, padlockable handle, IP65

2	0 - 1	96x96x70	ONA2EZB	1SCA022755R1610	0.3
3	0 - 1	96x96x70	ONA3EZB	1SCA022755R1700	0.3
4	0 - 1	96x96x70	ONA4EZB	1SCA022755R1880	0.3
5	0 - 1	96x96x85	ONA5EZB	1SCA022755R1960	0.3
6	0 - 1	96x96x85	ONA6EZB	1SCA022755R2000	0.3
8	0 - 1	96x96x108	ONA8EZB	1SCA022755R2180	0.3
9	0 - 1	96x96x138	ONA9EPB	1SCA022761R4800	0.3

ON - OFF switches, key type, IP54

3	0 - 1	96x96x100	ONA3EKB	1SCA022755R2260	0.3
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Change-over switches

1	1 - 0 - 2	96x96x100	ONU1EPB	1SCA022755R2850	0.3
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Reversing switches

3	1 - 0 - 2	96x96x100	ONW3EPB	1SCA022755R2930	0.3
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Star delta switches

25	0 - Y - ΔΔ	305x215x185	ONSDEPB	1SCA022662R4140	0.3
40	0 - Y - ΔΔ	305x215x185	OL40SDEPB	1SCA022755R3230	0.4

Enclosed front operated main switches

AC 21...22A 400 V I _n [A]	AC 23A 400 V I _n [A] / P[kW]	Cable outlets /side	Type	Order number	Weight [kg]
16	16/17.5	2xM25	OTU16B3M6	1SCA022758R6750	0.35

Enclosures

Anonymous enclosures

The enclosures can accommodate cam switches for door mounting and OT-switches for door and base mounting, see following pages. Includes fastening rings.

Neutral and earth terminal, 6mm² included

Number of contacts	Protection - Class	Size of enclosure	Type	Order number	Weight [kg]
ON-OM: 4 contacts, 2 stages, OL: 2 contacts, 1 stage					
IP 54		96x96x70	OTC25M25	1SCA022745R4500	0.2
IP 65		96x96x70	OTC26M25	1SCA022745R4680	0.2
ON-OM: 6 contacts, 3 stages, OL: 4 contacts, 2 stages					
IP54		96x96x84.5	OTC35M25	1SCA022757R6440	0.2
IP65		96x96x84.5	OTC36M25	1SCA022757R6520	0.2
ON-OM: 10 contacts, 5 stages, OL: 6 contacts, 3 stages					
IP 54		96x96x108	OTC45M25	1SCA022745R4760	0.2
IP 65		96x96x108	OTC46M25	1SCA022745R4840	0.2
ON-OM: 6 contacts, 3 stages, wide, OL: 4 contacts, 2 stages					
IP 65		161x100x80	OTC36LM25	1SCA022761R4980	0.2
NEMA 4x		161x100x80	OTC36NPT3/4	1SCA022766R9450	0.2

¹⁾ The height without handle.

Special enclosed cam switches configurated by CAMWEB tool.

CamLine

Switch-disconnectors for OTC_ enclosures Ordering details

Switch-disconnectors for enclosures OTC_

This is a selection of switches and accessories, more information in catalogue OT/OETL 1GB.

Base mounted switch disconnectors

Suitable for enclosures OTC25M20 and OTC26M20.

Number of poles	I _{th} (open) [A]	Cable cross section [mm²]	Operat. currents AC22/AC23 415V [A/A]	Type	Order number	Recomm. order qty [pcs]	Weight one pc [kg]
3	25	0.75...10	16 / 16	OT 16E3	1SCA022283R8470	10	0.11
4	25	0.75...10	16 / 16	OT 16E4	1SCA022352R7170	10	0.14

Selector type handles

Indication I-O and ON-OFF, shaft (diameter 5 mm) has to be ordered separately, door drilling 22,5 mm, NEMA 1. The door cannot be opened in I/ON-position.

Black, IP 54, no padlocking	OHB1AH1	1SCA022364R6340	150	0.07
Red-yellow, IP54, no padlocking	OHY1AH1	1SCA022364R6420	150	0.07
Black, IP54, one padlock	OHB3AH1	1SCA022428R9000	150	0.07
Red-yellow, IP54, one padlock	OHY3 AH1	1SCA022400R3710	150	0.07
Black, IP65, 3 padlocks	OHB2AJ1	1SCA022347R4030	120	0.07
Red-yellow, IP65, 3 padlocks, defeatable	OHY2AJ1	1SCA022353R2840	120	0.07

Shaft

Diameter 5 mm

For OH1 and 3 handles, length 45 mm

For OH2 handle, length 57 mm

OXS5X45	1SCA022563R7770	10	0.1
OXS5X57	1SCA022389R0090	10	0.2

Interlocking ring

For replacement of red knob on OT switch

OTZS1	1SCA022543R5210	10	0.1
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Door mounted switch-disconnectors

Suitable for enclosures OTC25M25 and OTC26M25.

Number of poles	I _{th} (open) [A]	Cable cross section [mm²]	Operat. currents AC22/AC23 415V [A/A]	Type	Order number	Recomm. order qty [pcs]	Weight one pc [kg]
3	25	0.75...10	16 / 16	OT 16ET3	1SCA022352R6610	10	0.13
4	25	0.75...10	16 / 16	OT 16ET4	1SCA022352R7250	10	0.16

Alternative handles

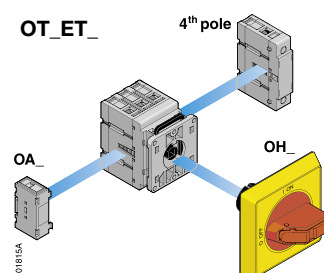
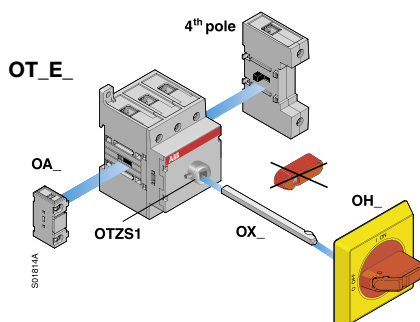
Black, IP54, no padlocking	OHY1PH	1SCA022353R1870	150	
Red-yellow, IP54, no padlocking	OHB1PH	1SCA022353R1610	150	
Black, IP54, one padlock	OHB3PH	1SCA022428R9260	150	
Red-yellow, IP54, one padlock	OHY3PH	1SCA022400R3120	150	
Black, IP54, 3 padlocks	OHB2PJ	1SCA022353R2680	120	
Red-yellow, IP54, 3 padlocks	OHY2PJ	1SCA022353R2920	120	

Other accessories for OT 16E 3/ 4 and OT 16ET3/ 4 switch-disconnectors

Auxiliary contact, 1NC (normally open)	OA1G01	1SCA022353R4890	10	0.03
Auxiliary contact, 1NO (normally closed)	OA1G10	1SCA022353R4970	10	0.03
Adress plate for OH1_ and 3_ , black	OPB1	1SCA022353R3730	1	
Adress plate for OH1_ and 3_ , yellow	OPY1	1SCA022353R3810	1	

Base mounted switch-disconnectors

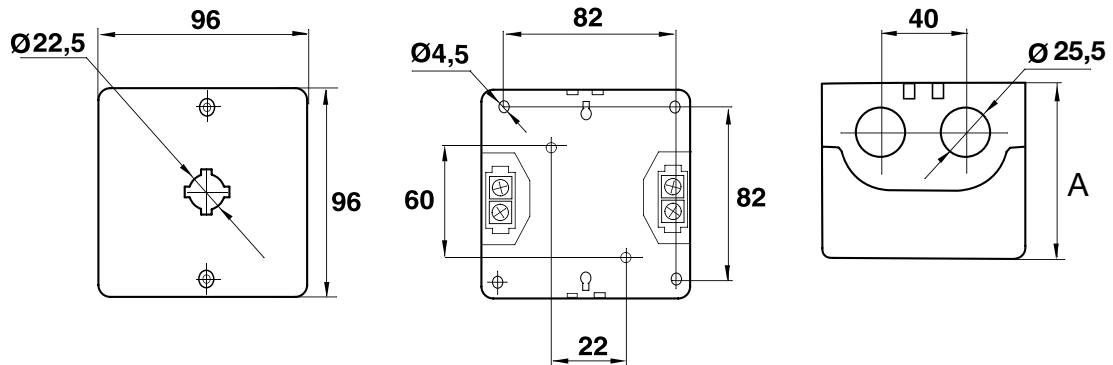
Door mounted switch-disconnectors



CamLine

Enclosed cam switches Dimension drawings

OTC_



Type	A/mm Outside	A/mm Inside
OTC2_M25	70	61
OTC3_M25	84.5	75.5
OTC4_M25	108	99

OTC36LM25

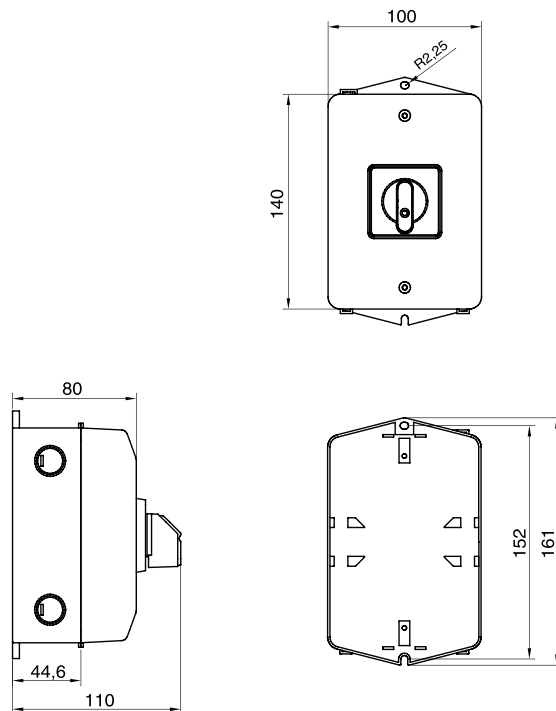




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