

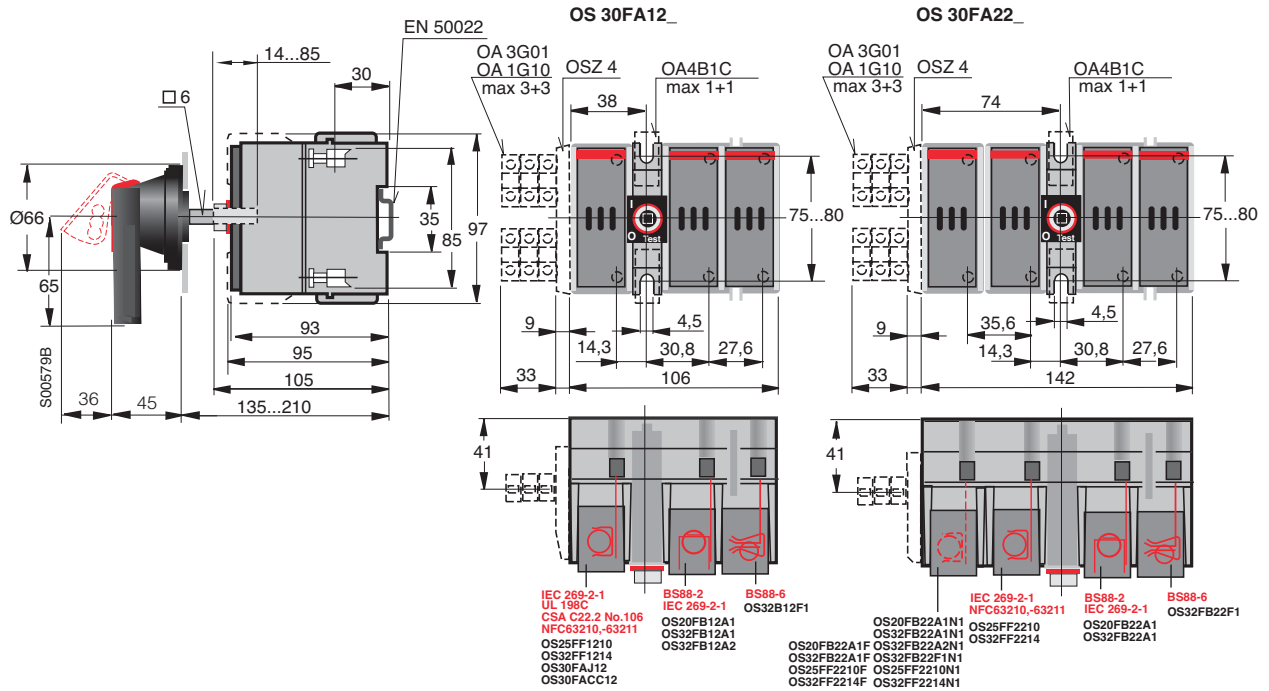
Approximate dimensions

Fusible disconnect switches

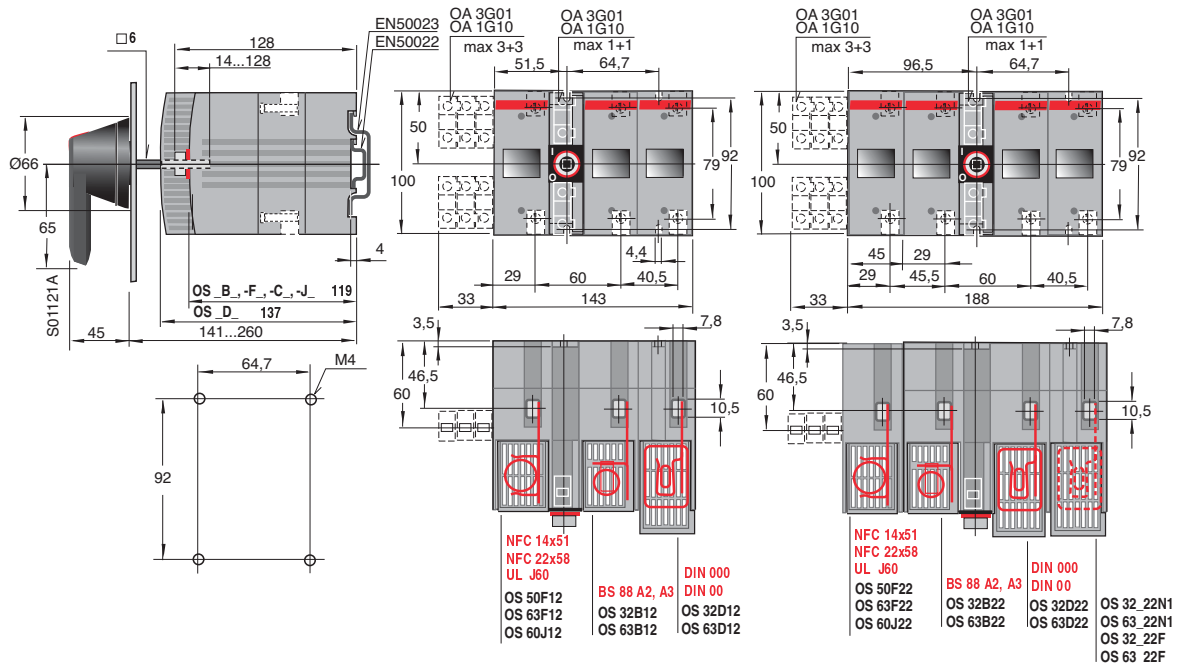
OS30_ – OS60_



OS30FA



OS60

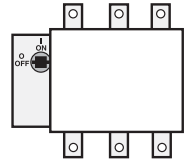




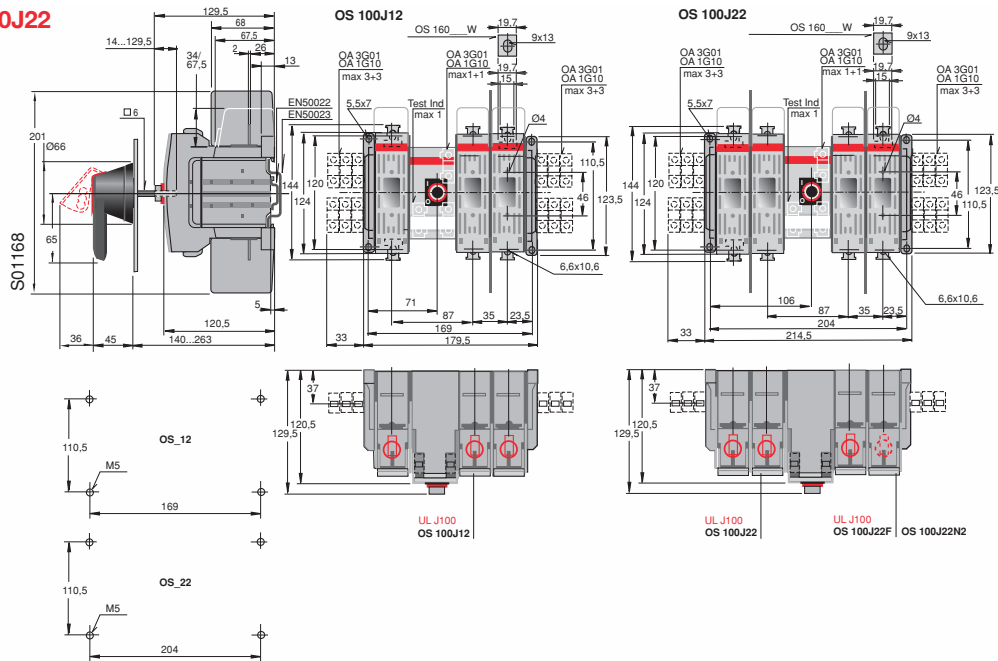
Approximate dimensions

Fusible disconnect switches

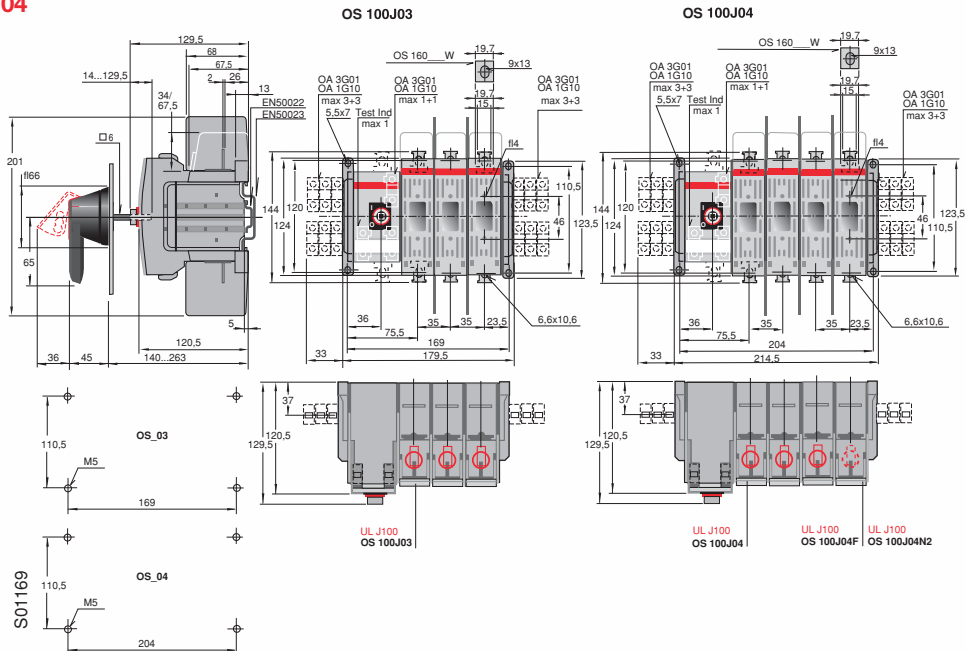
OS100J12, J03

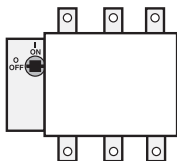


OS100J12, OS100J22



OS100J03, OS100J04





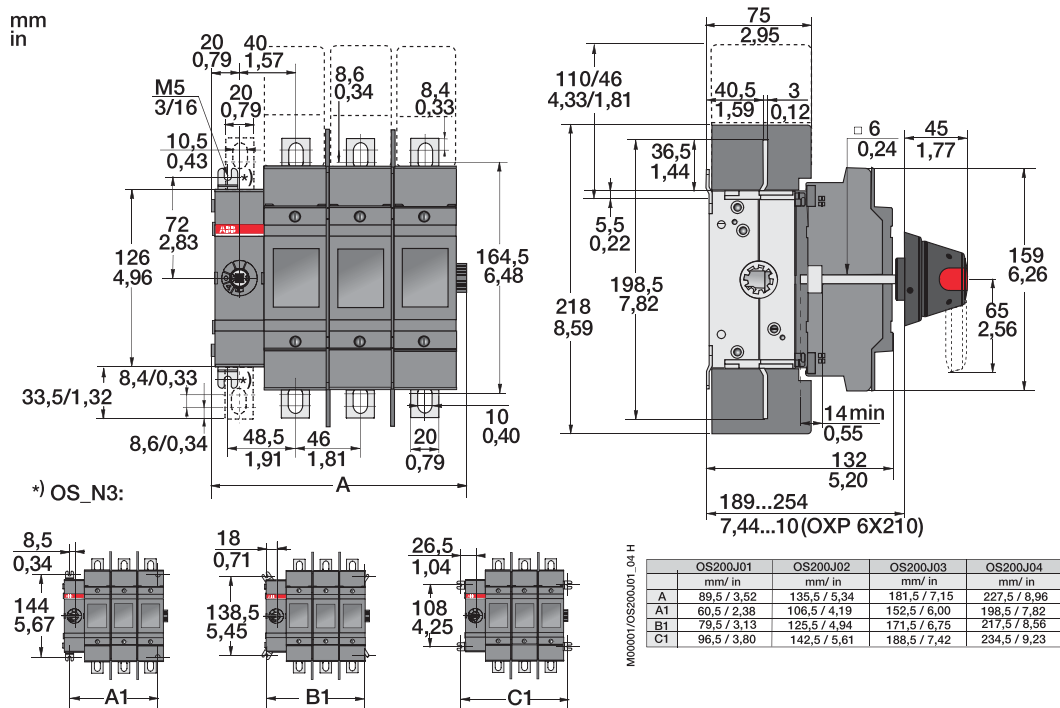
Approximate dimensions

Fusible disconnect switches

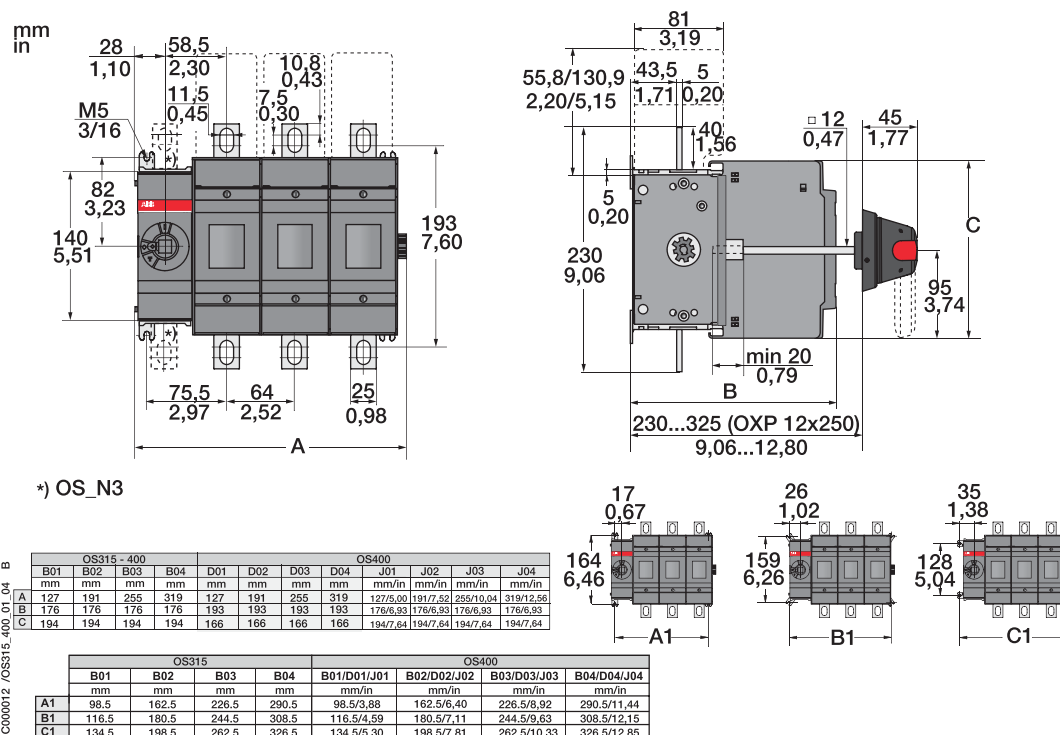
OS200 – OS400

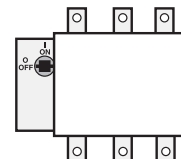


OS200J

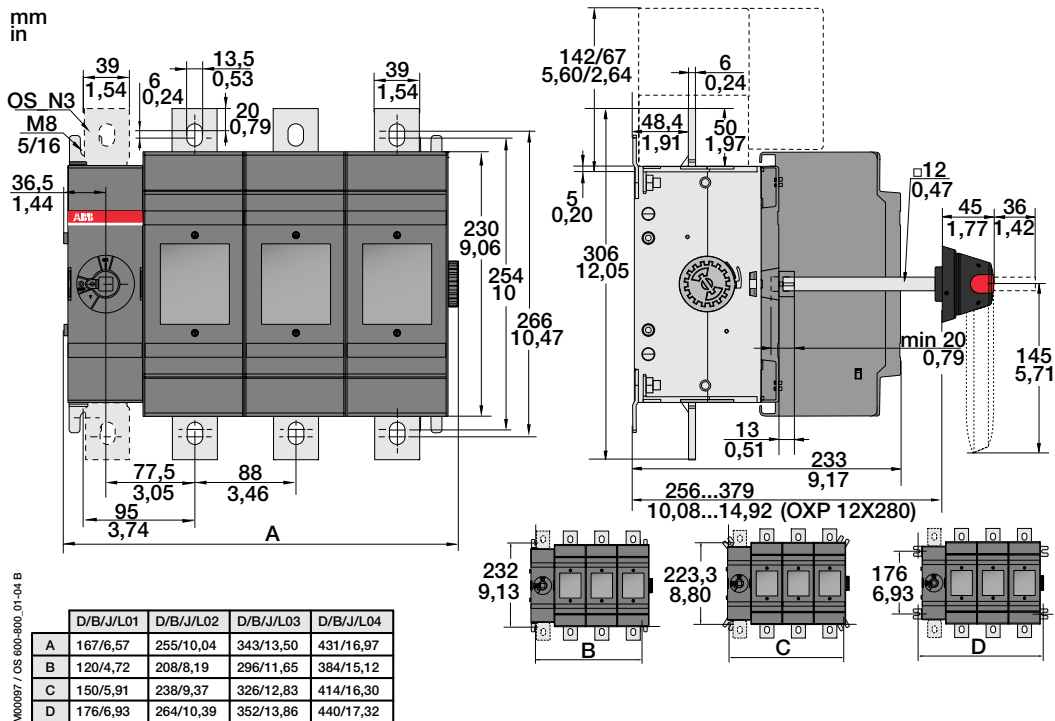


OS400J

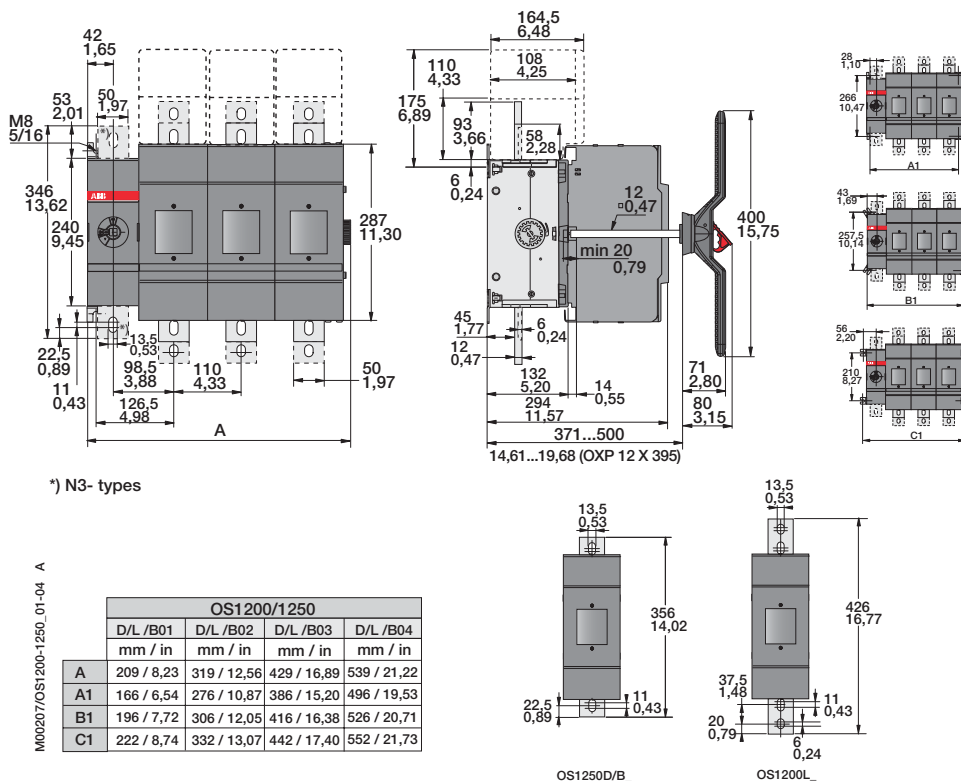




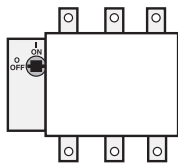
OS600J03-OS800L03



OS1200L03



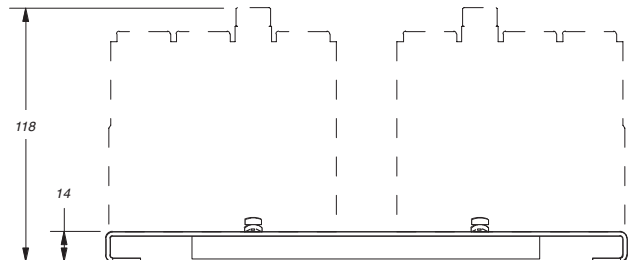
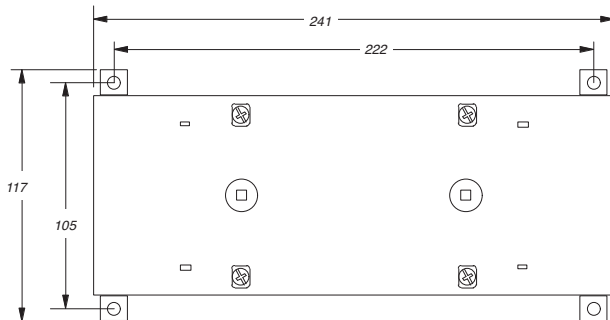
*) N3- types



Approximate dimensions 30A Conversion mechanisms



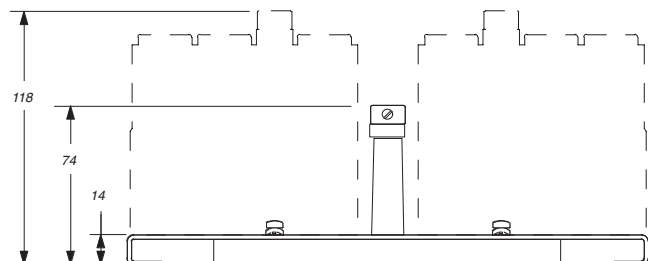
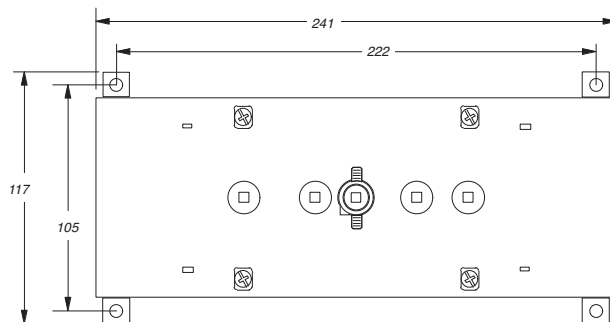
6 pole — OWP6DS1



For installation of 6 or 8 pole mechanisms, the following minimum and maximum mounting dimensions are given below.

OWP6DS1 in combination with:	Minimum mm	Maximum mm
OS30__	140	N/A

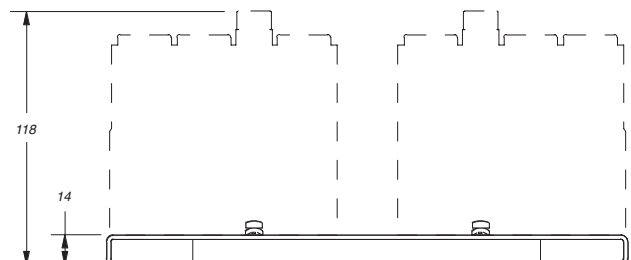
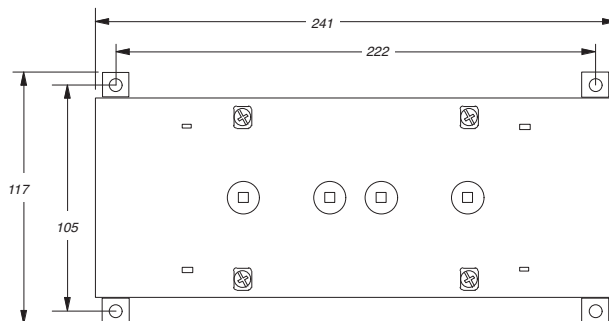
Transfer switch — OWC6DSH1



For installation of 6 or 8 pole mechanisms, the following minimum and maximum mounting dimensions are given below.

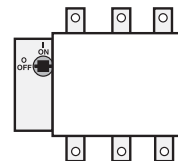
OWC6DSH1 in combination with:	Minimum mm	Maximum /mm
OS30__	140	N/A

Mechanical interlock — OWM6DS1



For installation of 6 or 8 pole mechanisms, the following minimum and maximum mounting dimensions are given below.

OWM6DS1 in combination with:	Minimum mm	Maximum mm
OS30__	140	N/A

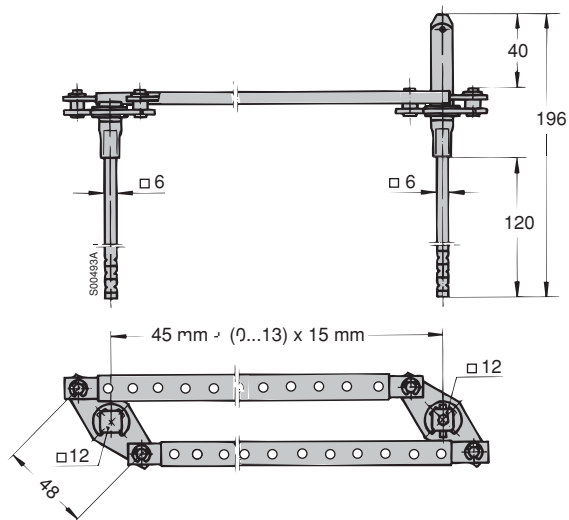


6 or 8 pole — OESA-ZW2

For installation of 6 or 8 pole and transfer mechanisms, the following minimum and maximum mounting dimensions are given below.

OESA-ZW2 in combination with:	Minimum mm	Maximum mm
OS60	175	275
OS100	175	275

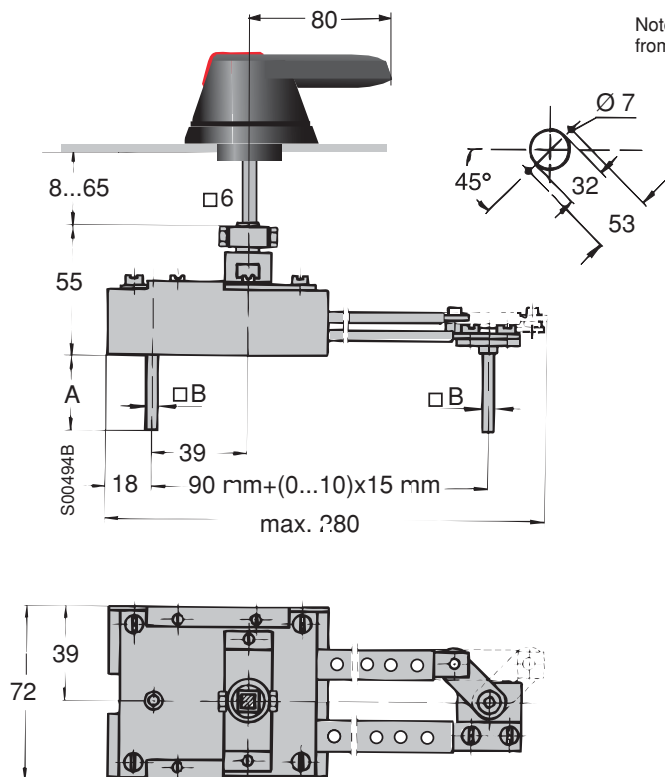
Note: Deeper enclosures will require a longer shaft, please select a 12mm shaft from page 2.25, and an OETL-ZX95 shaft extension coupler from page 2.21.

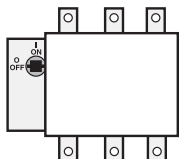


Transfer switch — OESA-ZW1

OESA-ZW1 in combination with:	Minimum mm	Maximum mm
OS60	200	336
OS100	210	336

Note: Deeper enclosures will require a longer shaft, please select a 6mm shaft from page 2.19.

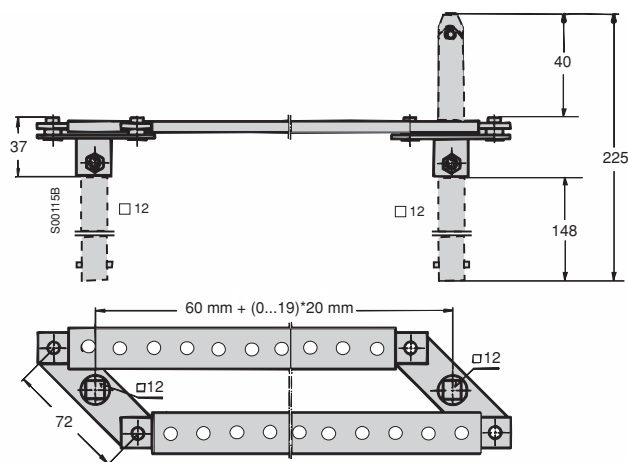




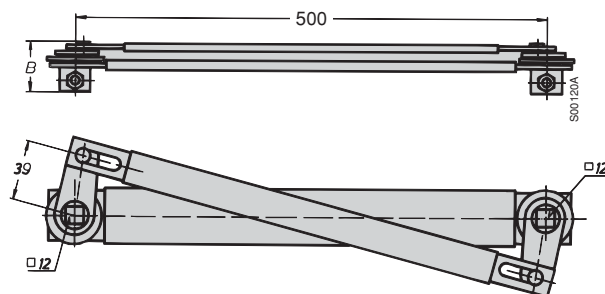
Approximate dimensions 200A – 800A Conversion mechanisms



6 or 8 pole — OETL-ZW9

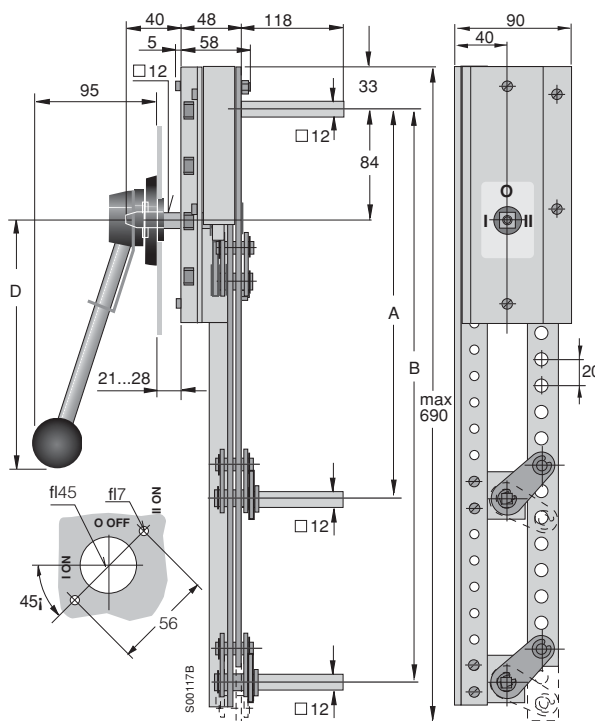


Mechanical Interlock — OETL-ZW15

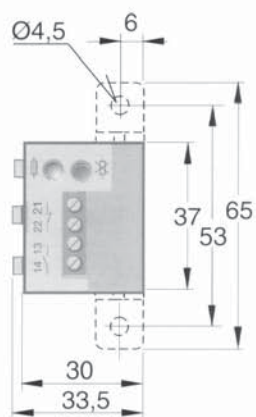
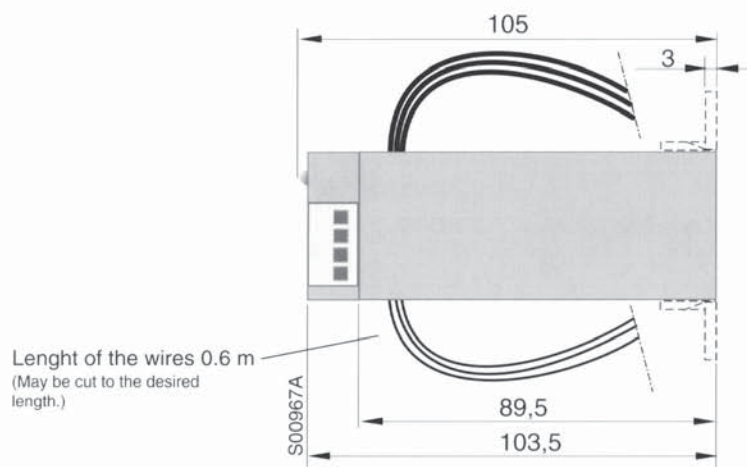
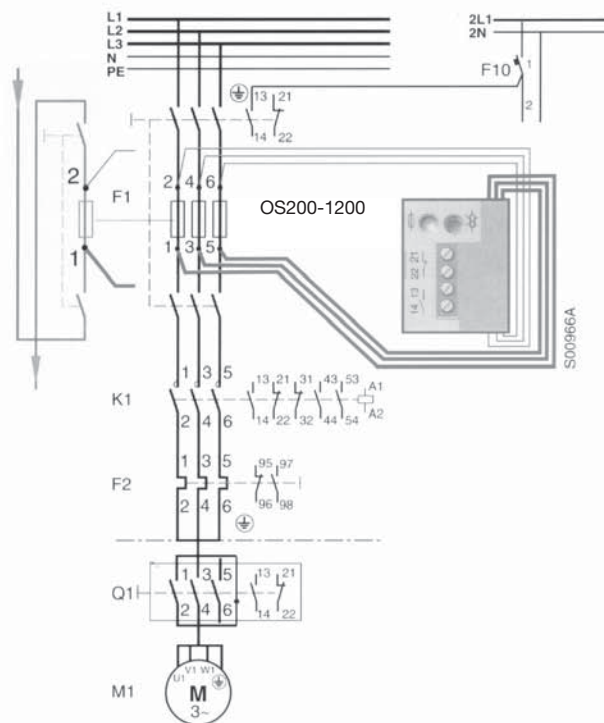
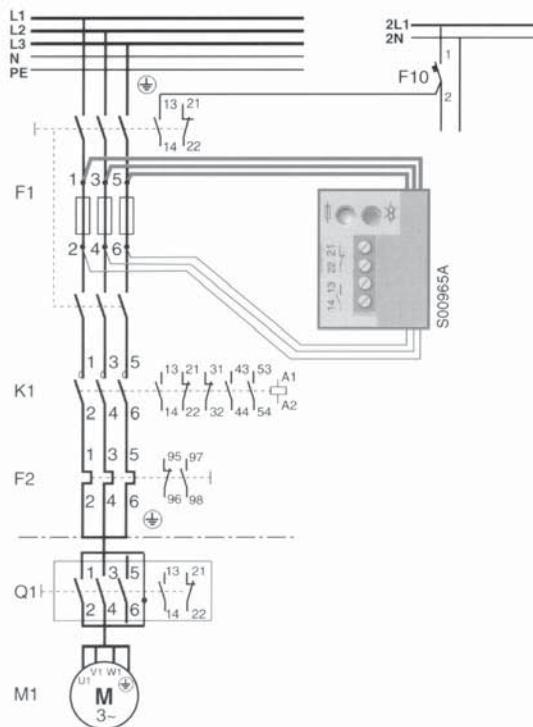
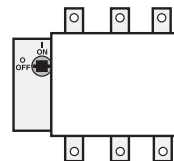


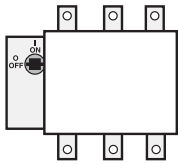
Transfer switch — OETL-ZW12

Bypass switch — OETL-ZW13



	A	B	D
OETLZW 12	210+(0...18)x20 mm	250+(0...18)x20 mm	220 mm
OETLZW 13	210+(0...18)x20 mm	250+(0...18)x20 mm	320 mm

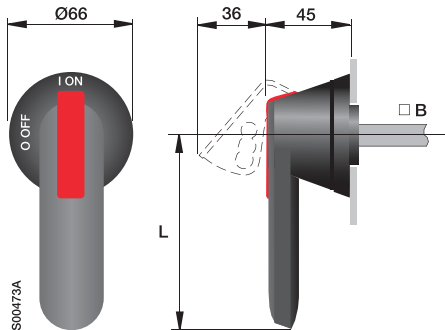




Approximate dimensions Handles

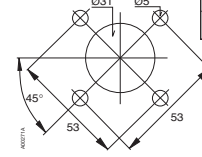
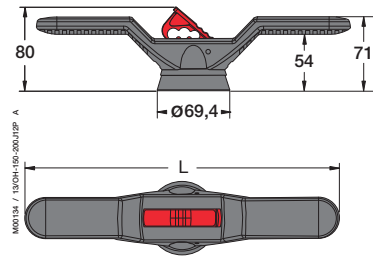
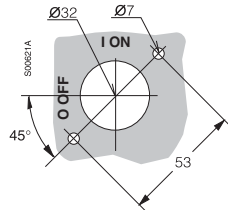


Plastic Handles:



Type	L lenght mm	B Shaft diameter
OH_45J6	46	6
OH_65J6	65	6
OH_80J6	80	6
OH_125J12	125	12
OH_145J12	145	12
OH_175J12	175	12
OH_275J12	275	12

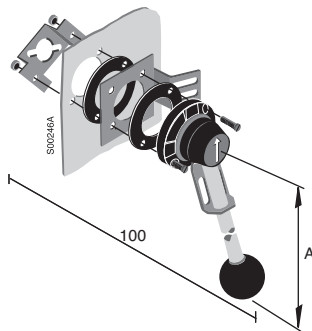
Door drilling for
OH_ handles:



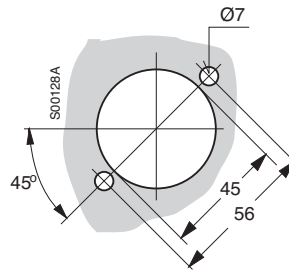
Type	L
OHB150J12P	300
OHB200J12P	400

Metallic Handles:

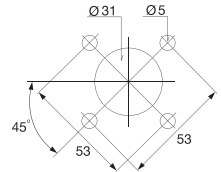
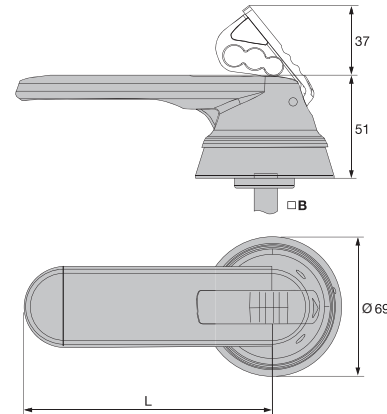
YASDA 7,8 (A=220)



Door drilling for YASDA

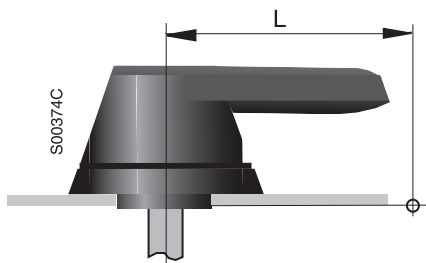


Stainless steel:



Handle type	OHM65L6	OHM125L12	OHM175L12	OHM275L12
L	65	125	175	275
□B	6	12	12	12

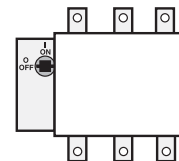
Minimum distance L between the hinge and the rotating shaft



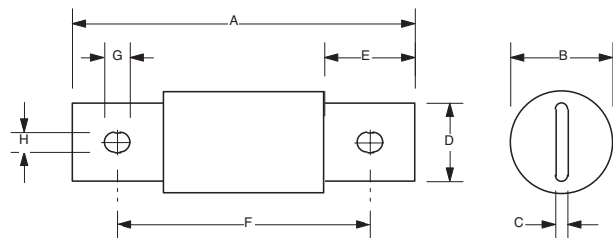
OS Sizes (A)	L (mm)	Suitable handles
30...60	60	OH_45J_, OH_65J_
60...100	80	OH_80J_
200...400	150	OH_125J12, OH_145J12
200...800	175	OH_175J12
200...800	275	OH_275J12
200...800	220	YASDA 7,8
1200	150	OHB150J12P



Approximate dimensions For Fuses

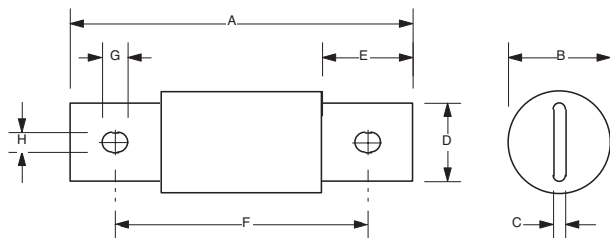


Class J (600V)



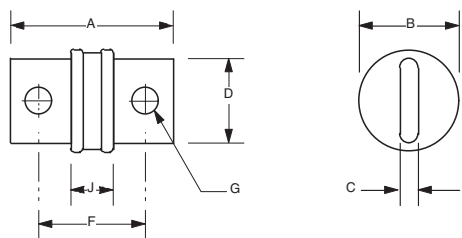
Ampere rating	A	B	C	D	E	F	G	H
1 - 30	2.25	.81	—	—	—	—	—	—
31 - 60	2.38	1.06	—	—	—	—	—	—
61 - 100	4.62	1.12	.12	.75	1	3.62	.38	.28
101 - 200	5.75	1.62	.19	1.12	1.38	4.38	.38	.28
201 - 400	7.12	2.12	.25	1.62	1.88	5.25	.53	.41
401 - 600	8.00	2.5	.38	2.00	2.12	6.00	.69	.53

Class L (600V)



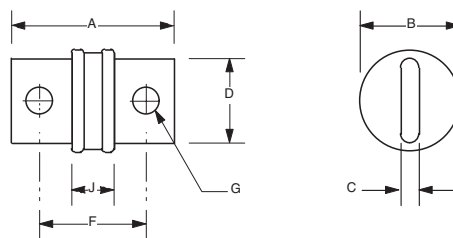
Ampere rating	A	B	C	D	E	F	G	H
200 - 600	8.62	2.00	.31	1.62	2.41	6.25	1.12	.62
601 - 800	8.62	2.50	.38	2.00	2.41	6.25	1.12	.62

Class T (300V)



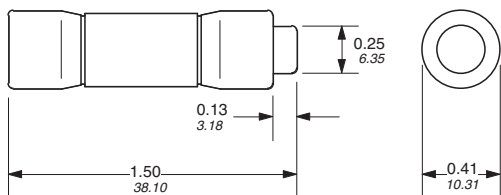
Ampere rating	A	B	C	D	F	G	J
1 - 30	.88	.41	—	—	—	—	—
31 - 60	.88	.56	—	—	—	—	—
61 - 100	2.16	.81	.12	.75	1	3.62	.38
101 - 200	2.45	1.06	.19	1.12	1.38	4.38	.38
201 - 400	2.75	1.33	.25	1.62	1.88	5.25	.53
401 - 600	3.06	1.62	.31	2.00	2.12	6.00	.69
601 - 800	3.38	2.08	.38	1.75	2.22	.55	.88

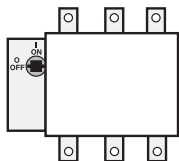
Class T (600V)



Ampere rating	A	B	C	D	F	G	J
1 - 30	1.50	.56	—	—	—	—	—
35 - 60	1.56	.81	—	—	—	—	—
70 - 100	2.95	—	.12	.75	2.36	.28	1.64
110 - 200	3.25	—	.19	.88	2.50	.34	1.66
225 - 400	3.62	—	.25	1.00	2.69	.41	1.64
450 - 600	3.98	—	.31	1.25	2.95	.48	1.78
601 - 800	4.37	—	.38	1.75	3.17	.55	1.88

Class CC (600V) — Rejection type

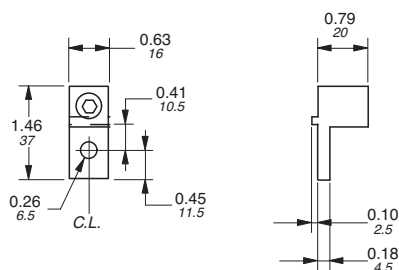




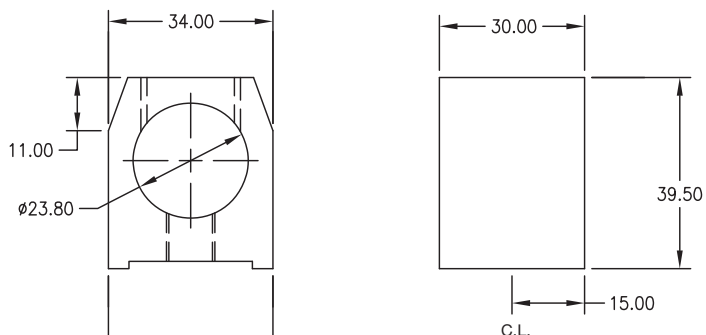
Approximate dimensions For Terminal lugs



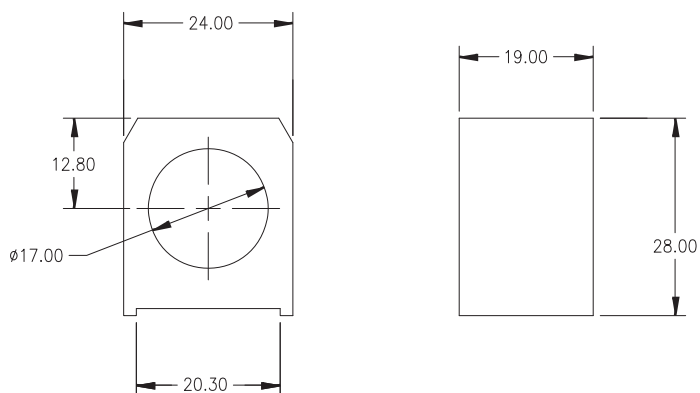
OZXA-24 — for use with 100A switches



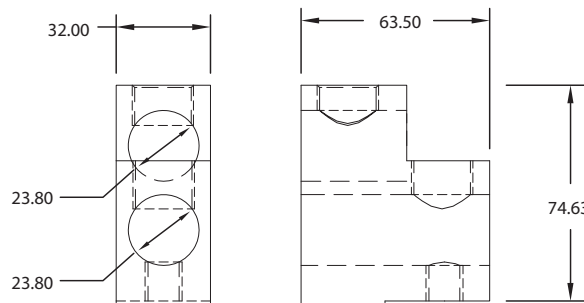
OZXA-400 — for use with 400A switches



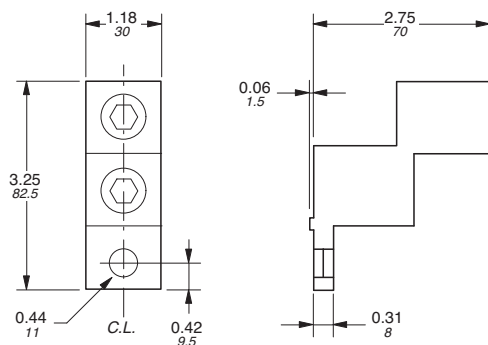
OZXA-200 — for use with 200A switches



OZXA-800 — for use with 800A switches



OZXA-33 — for use with 400A switches







SafeLine

Compact, heavy duty

Enclosed disconnect switches

16A – 1200A Non-fusible

30A – 1200A Fusible

SafeLine enclosed disconnect switches are designed to meet customer requirements in terms of safety, ease of installation, space savings and operational convenience. They are available in a wide range of ampere ratings, are CSA approved and EEMAC rated to satisfy rugged industrial environments.

Index

General information	3.1 – 3.3
Non-fusible	3.4 – 3.7
Fusible	3.8 – 3.10
Technical information & dimensions	3.11 – 3.14

NF 16 1 - 3P 11

Disconnect switch type

NF = Non-fusible
FJ = Fused Class J, (30A – 600A)
FL = Fused Class L, (800A)

Disconnect switch frame size

16	32	45	63
30	60	100	200
400	600	800	1200

Environmental rating

1 = Type 1
2 = Type 12
4 = Type 4
3 = Type 3R
X = Type 4X stainless steel

Accessories

10 = 1 N.O. auxiliary contact
01 = 1 N.C. auxiliary contact
11 = 1 N.O. & 1 N.C. auxiliary contacts
22 = 2 N.O. & 2 N.C. auxiliary contacts
N = Neutral terminal

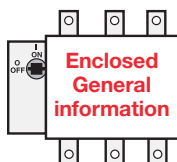
Poles or conversion mechanisms

2P = 2 poles pistol handle
3P = 3 poles pistol handle
4P = 4 poles pistol handle
6P = 6 poles pistol handle
3S = 3 pole selector handle
3T = 3 pole transfer



Padlockable

Handles can be padlocked in the "OFF" position with up to three padlocks: Additionally, the switch mechanism can be directly padlocked in the "OFF" position when the door is open. NOTE: Some handles can be ordered with the ability to padlock in both the "ON" & "OFF" positions, please consult your ABB sales office.



EEMAC environmental ratings for enclosed disconnect switches

Introduction

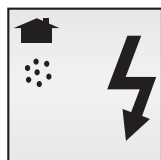
An enclosure is a surrounding case constructed to provide a degree of protection to personnel against accidental contact with the enclosed equipment and to provide a degree of protection to the enclosed equipment against specified environmental conditions.

A brief description of the more common types of enclosures used by the electrical industry relating to their environmental capabilities follows.

Refer to EEMAC Standards Publication for more information regarding applications, features and design tests.

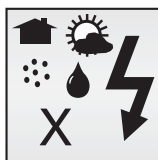
Individual EEMAC product Standards Publications or third party certification standards may contain additional requirements for product testing and performance.

Definitions pertaining to nonhazardous locations



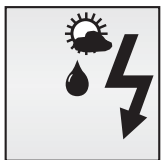
Type 1

Enclosures are intended for indoor use primarily to provide a degree of protection against limited amounts of falling dirt.



Type 4X

Enclosures are intended for indoor or outdoor use primarily to provide a degree of protection against corrosion, windblown dust and rain, splashing water, hose-directed water and damage from external ice formation.



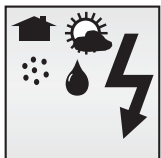
Type 3R

Enclosures are intended for outdoor use primarily to provide a degree of protection against rain, sleet and damage from external ice formation.



Type 12

Enclosures are intended for indoor use primarily to provide a degree of protection against circulating dust, falling dirt, and dripping non-corrosive liquids.



Type 4

Enclosures are intended for indoor or outdoor use primarily to provide a degree of protection against windblown dust and rain, splashing water, hose-directed water and damage from external ice formation.



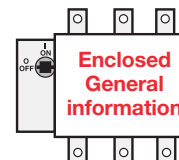
Type 13

Enclosures are intended for indoor use primarily to provide a degree of protection against dust, spraying of water, oil and noncorrosive coolant.

Legend

- Indoors
- Outdoors
- Water
- Dirt/dust
- Corrosion

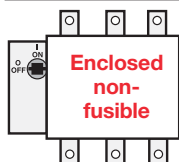
IP environmental ratings for enclosed disconnect switches



IP ratings

indicate the degree of protection against dust, liquids and impacts. The IP degrees of protection are defined by the French standard NFC 20-010. To rate a device's degrees of protection, the letters IP are followed by up to three numbers. These numbers are defined as follows:

first number protection against solid objects	second number protection against liquids	third number protection against mechanical impacts
IP 0 no protection	IP 0 no protection	IP 0 no protection
1 protected against solid objects over 50mm (e.g. accidental touch by hands.)	1 protected against vertically falling rain or condensation	1 impact 0.225 joule 150g falling from 15 cm
2 protected against solid objects over 12 mm (e.g. fingers)	2 protected against direct sprays of water up to 15° from vertical	2 impact 0.375 joule 250g falling from 15 cm
3 protected against solid objects over 2.5 mm (tools & wires)	3 protected against sprays to 60° from vertical	3 impact 0.50 joule 250g falling from 20cm
4 protected against solid objects over 1mm (small tools & small wires)	4 protected against water sprayed from all directions	5 impact 2.00 joule 500g falling from 40 cm
5 protected against dust (no harmful deposit)	5 protected against low pressure jets of water from all directions	7 impact 6.00 joule 1.5kg falling from 40 cm
6 totally protected against dust	6 protected from strong jets of water (e.g. for use on ship decks)	9 impact 20.00 joule 5 kg falling from 40 cm
	7 protected against the effects of immersion between 15cm and 1m	



Enclosed manual motor controllers 16A – 80A



NF321-3P



EOT16U3P3-S



EOT16U4P3-P

3 Pole, 600V, 16A – 80A — CSA C22.2 No. 14 enclosed manual motor controllers

Metal Enclosure type

CSA C22.2 No. 14 amp rating		Metal Enclosure type									
				1		12		4		4X Stainless	
		HP 480V	600V	Catalog number	List price	Catalog number	List price	Catalog number	List price	Catalog number	List price
	20	10	10	NF161-3S		NF162-3S		—		—	
	20	10	10	NF161-3P		NF162-3P		NF164-3P		NF16X-3P	
	40	20	25	NF321-3S		NF322-3S		—		—	
	40	20	25	NF321-3P		NF322-3P		NF324-3P		NF32X-3P	
	60	30	30	NF451-3S		NF452-3S		—		—	
	60	30	30	NF451-3P		NF452-3P		NF454-3P		NF45X-3P	
	80	40	40	NF631-3S		NF632-3S		—		—	
	80	40	40	NF631-3P		NF632-3P		NF634-3P		NF63X-3P	

Plastic Enclosure type

CSA C22.2 No. 14 amp rating		3R, 12					4, 4X, 12			
		HP 480V 600V	Catalog number	Aux. contact	Handle Type	List price	Catalog number	Aux. contact	Handle Type	List price
	20	10 10	EOT16U3P3-1S	1NO	Selector		EOT16U3P4-1P	1NO	Pistol	
	20	10 10	EOT16U3P3-S	—	Selector		EOT16U3P4-P	—	Pistol	
	40	20 25	EOT32U3P3-1S	1NO	Selector		EOT32U3P4-1P	1NO	Pistol	
	40	20 25	EOT32U3P3-S	—	Selector		EOT32U3P4-P	—	Pistol	
	60	30 30	EOT45U3P3-1S	1NO	Selector		EOT45U3P4-1P	1NO	Pistol	
	60	30 30	EOT45U3P3-S	—	Selector		EOT45U3P4-P	—	Pistol	
	80	40 40	—	—	—		EOT63U3P4-1P	1NO	Pistol	
	80	40 40	—	—	—		EOT63U3P4-P	—	Pistol	

Accessories for eOT16 to eOT63

Auxiliary contacts *Maximum number of auxiliary contacts 2NO + 1NC

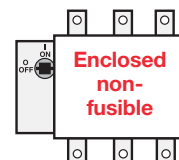
AC rated voltage	Description	AC amp rating	Catalog number	List price
600	NO, mounts on right side of the switch only	10	OA1G10	
600	NC, mounts on left side of the switch only	10	OA1G01	
4th poles for eOT16 and eOT32 * Only one additional pole per switch	4th pole	40	OTPS40FPN*	
600	4th pole, late-break / early-make function	40	OTPL40FP	
4th poles for eOT45 * and eOT63* Only one additional pole per switch	4th pole	80	OTPS80FP	
600	4th pole, late-break / early-make function	80	OTPL80FP	

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

NOTE: All enclosed switches are provided with a black handle; however, most handles can be substituted with a red and yellow handle by adding the "Y" suffix to the end of the catalog number. There is no additional price adder for changing to a red/yellow handle of equal ratings and style.

EXAMPLE: A red/yellow selector handle for an NF161-3S can be substituted for the black selector handle by using the "Y" suffix at the end, new catalog NF161-3SY.

Enclosed non-fusible disconnect switches 16A – 1200A



NF301-3P



NF1001-3P



NF2001-3P

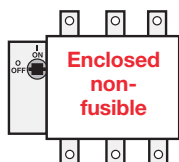
3 Pole, 600V, 30A – 2000A — CSA C22.2 No. 4 enclosed switches

		Metal Enclosure type								
CSA C22.2 No. 4 amp rating			1		12		4		4X Stainless	
	HP 480V	600V	Catalog number	List price	Catalog number	List price	Catalog number	List price	Catalog number	List price
	30	20 30	NF301-3P		NF302-3P		NF304-3P		NF30X-3P	
	60	40 40	NF601-3P		NF602-3P		NF604-3P		NF60X-3P	
	100	50 50	NF1001-3P		NF1002-3P		NF1004-3P		NF100X-3P	
	200	150 200	NF2001-3P		NF2002-3P		NF2004-3P		NF200X-3P	
	400	250 350	NF4001-3P		NF4002-3P		NF4004-3P		NF400X-3P	
	600	400 500	NF6001-3P		NF6002-3P		NF6004-3P		NF600X-3P	
	800	500 500	NF8001-3P		NF8002-3P		NF8004-3P		NF800X-3P	
1200	— —	NF12001-3P		NF12002-3P		NF12004-3P		NF1200X-3P		

C22.2 NO14 Amp rating	HP		Metal enclosure Nema 1			Metal enclosure Nema 3R, 12			Stainless steel Nema 4, 4X		
	480V	600V	Catalog number	Handle type	List price	Catalog number	Handle type	List price	Catalog number	Handle type	List price
20	10	10	EOT16U3M1-P	Pistol		EOT16U3M3-P	Pistol		EOT16U3S4-P	Plastic Pistol	
20	10	10	EOT16U3M1-S	Selector		EOT16U3M3-S	Selector		EOT16U3S4-M	SS Pistol	
40	20	25	EOT32U3M1-P	Pistol		EOT32U3M3-P	Pistol		EOT32U3S4-P	Plastic Pistol	
40	20	25	EOT32U3M1-S	Selector		EOT32U3M3-S	Selector		EOT32U3S4-M	SS Pistol	
60	30	30	EOT45U3M1-P	Pistol		EOT45U3M3-P	Pistol		EOT45U3S4-P	Plastic Pistol	
60	30	30	EOT45U3M1-S	Selector		EOT45U3M3-S	Selector		EOT45U3S4-M	SS Pistol	
80	40	40	EOT63U3M1-P	Pistol		EOT63U3M3-P	Pistol		EOT63U3S4-P	Plastic Pistol	
80	40	40	EOT63U3M1-S	Selector		EOT63U3M3-S	Selector		EOT63U3S4-M	SS Pistol	

C22.2 NO4 Amp rating	HP		Metal enclosure Nema 1			Metal enclosure Nema 3R, 12			Stainless steel Nema 4, 4X		
	480V	600V	Catalog number	Handle type	List price	Catalog number	Handle type	List price	Catalog number	Handle type	List price
30	20	30	EOT30U3M1-P	Pistol		EOT30U3M3-P	Pistol		EOT30U3S4-P	Plastic Pistol	
60	40	40	EOT60U3M1-P	Pistol		EOT60U3M3-P	Pistol		EOT60U3S4-P	Plastic Pistol	
100	50	50	EOT100U3M1-P	Pistol		EOT100U3M3-P	Pistol		EOT100U3S4-P	Plastic Pistol	
30	20	30	EOT30U3M1-S	Selector					EOT30U3S4-M	SS Pistol	
60	40	40	EOT60U3M1-S	Selector					EOT60U3S4-M	SS Pistol	
100	50	50	EOT100U3M1-S	Selector					EOT100U3S4-M	SS Pistol	

NOTE: All enclosed switches are provided with a black handle; however, most handles can be substituted with a red and yellow handle by adding the "Y" suffix to the end of the catalog number. There is no additional price adder for changing to a red/yellow handle of equal ratings and style.



Enclosed non-fusible disconnect switches

30 - 1200A

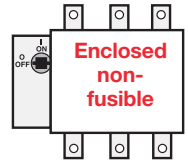
Other configurations

CSA General purpose amp rating	Option (Descriptions found on page 3.17)	Enclosure type							
		1		12		4		4XStainless	
		Catalog number	List price	Catalog number	List price	Catalog number	List price	Catalog number	List price
30	4 pole switch	NF301-4P		NF302-4P		NF304-4P		NF30X-4P	
	6 pole switch	NF301-6P		NF302-6P		NF304-6P		NF30X-6P	
	Transfer switch	NF301-3T		NF302-3T		NF304-3T		NF30X-3T	
60	4 pole switch	NF601-4P		NF602-4P		NF604-4P		NF60X-4P	
	6 pole switch	NF601-6P		NF602-6P		NF604-6P		NF60X-6P	
	Transfer switch	NF601-3T		NF602-3T		NF604-3T		NF60X-3T	
100	4 pole switch	NF1001-4P		NF1002-4P		NF1004-4P		NF100X-4P	
	6 pole switch	NF1001-6P		NF1002-6P		NF1004-6P		NF100X-6P	
	Transfer switch	NF1001-3T		NF1002-3T		NF1004-3T		NF100X-3T	
200	2 pole switch	NF2001-2P		NF2002-2P		NF2004-2P		NF200X-2P	
	4 pole switch	NF2001-4P		NF2002-4P		NF2004-4P		NF200X-4P	
	6 pole switch	NF2001-6P		NF2002-6P		NF2004-6P		NF200X-6P	
	Transfer switch	NF2001-3T		NF2002-3T		NF2004-3T		NF200X-3T	
400	2 pole switch	NF4001-2P		NF4002-2P		NF4004-2P		NF400X-2P	
	4 pole switch	NF4001-4P		NF4002-4P		NF4004-4P		NF400X-4P	
	6 pole switch	NF4001-6P		NF4002-6P		NF4004-6P		NF400X-6P	
	Transfer switch	NF4001-3T		NF4002-3T		NF4004-3T		NF400X-3T	
600	2 pole switch	NF6001-2P		NF6002-2P		NF6004-2P		NF600X-2P	
	4 pole switch	NF6001-4P		NF6002-4P		NF6004-4P		NF600X-4P	
	6 pole switch	NF6001-6P		NF6002-6P		NF6004-6P		NF600X-6P	
	Transfer switch	NF6001-3T		NF6002-3T		NF6004-3T		NF600X-3T	
800	2 pole switch	NF8001-2P		NF8002-2P		NF8004-2P		NF800X-2P	
	4 pole switch	NF8001-4P		NF8002-4P		NF8004-4P		NF800X-4P	
	6 pole switch	NF8001-6P		NF8002-6P		NF8004-6P		NF800X-6P	
	Transfer switch	NF8001-3T		NF8002-3T		NF8004-3T		NF800X-3T	
1200	2 pole switch	NF12001-2P		NF12002-2P		NF12004-2P		NF1200X-2P	
	4 pole switch	NF12001-4P		NF12002-4P		NF12004-4P		NF1200X-4P	
	6 pole switch	NF12001-6P		NF12002-6P		NF12004-6P		NF1200X-6P	
	Transfer switch	NF12001-3T		NF12002-3T		NF12004-3T		NF1200X-3T	

① Please consult ABB sales office for additional information.

② ⏏ = Three poles

Accessories for enclosed non-fusible disconnect switches



Auxiliary contacts

For use on:	Contact configuration	Installation suffix	Installed list price adder
16A – 100A	1 N.O. 1 N.C. 1 N.O. & 1 N.C.	add "10" suffix add "01" suffix add "11" suffix	
200A – 1200A	1 N.O. & 1 N.C. 2 N.O. & 2 N.C.	add "11" suffix add "22" suffix	

Accessories ^{①②}

For use on:	Description	Installation suffix	Installed list price adder
30A – 100A	Neutral block	N	
200 A	Neutral block	N	
400 A	Neutral block	N	
600 A	Neutral block	N	
800 A	Neutral block	N	
1200A	Neutral block	N	

Ground lugs

All enclosed switches are provided with a standard integral ground lug.

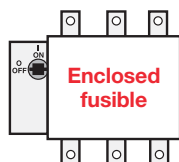
Switch size	Ground lug Wire size
16A – 100A	(2) #14
200A – 400A	#6 – 250 mcm
600A – 1200A	#2 – 600 mcm

Switch ratings, 20 – 1200 Amps, 600V

CSA General purpose amp rating	Maximum horsepower rating						Wire size for terminal lugs	For wire type	Approval
	Single phase		Three phase						
	120V	240V	200V – 208V	240V	480V	600V			
20	1	2	3	5	10	10	#18 – #8	Cu	CSA ①
40	2	5	10	10	20	25	#18 – #8	Cu	CSA ①
60	2	5	15	15	30	30	#14 – #1	Cu	CSA ①
80	2	5	20	20	40	40	#14 – #1	Cu	CSA ①
30	2	5	10	10	20	30	#14 – #4	Cu	CSA ②
60	3	7.5	20	20	40	40	#14 – #4	Cu	CSA ②
100	5	15	25	30	50	50	#8 – 1/0	Cu	CSA ②
200	—	—	60	75	150	200	#6 – 300 kcmil	Cu/Al	CSA ②
400	—	—	100	125	250	350	#2 – 600 kcmil	Cu/Al	CSA ②
600	—	—	150	200	400	500	(2) #2 – 600 kcmil	Cu/Al	CSA ②
800	—	—	200	250	500	500	(2) #2 – 600 kcmil	Cu/Al	CSA ②
1200	—	—	—	—	—	—	(4) #2 – 600 kcmil	Cu/Al	CSA ②

① CSA C22.2 No. 14

② CSA C22.2 No. 4



Enclosed fusible disconnect switches 30A – 1200A



3 Pole^①, 600V, 30A - 1200A

CSA general purpose amp rating		Fuse type	Enclosure type							
			1		12		4		4X Stainless	
			Catalog number	List price	Catalog number	List price	Catalog number	List price	Catalog number	List price
	30	J	FJ301-3P		FJ302-3P		FJ304-3P		FJ30X-3P	
	60	J	FJ601-3P		FJ602-3P		FJ604-3P		FJ60X-3P	
	100	J	FJ1001-3P		FJ1002-3P		FJ1004-3P		FJ100X-3P	
	200	J	FJ2001-3P		FJ2002-3P		FJ2004-3P		FJ200X-3P	
	400	J	FJ4001-3P		FJ4002-3P		FJ4004-3P		FJ400X-3P	
	600	J	FJ6001-3P		FJ6002-3P		FJ6004-3P		FJ600X-3P	
	800	L	FL8001-3P		FL8002-3P		FL8004-3P		FL800X-3P	
	1200	L	FL12001-3P		FL12002-3P		FL12004-3P		FL1200X-3P	

NOTE: All enclosed switches are provided with a black handle; however, most handles can be substituted with a red and yellow handle if desired. Please add the "Y" handle suffix code at the end of catalog number. There is no additional price adder for changing to a red/yellow handle of equal ratings and style.

EXAMPLE: A red/yellow pistol handle for an FJ301-3P can be substituted for the black pistol handle by adding the "Y" suffix at the end, new catalog number: FJ301-3PY.

Switch ratings

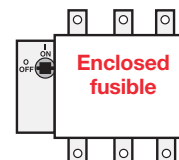
CSA general purpose amp rating	Maximum horsepower rating								Wire size for terminal lugs	For wire type	Approval ^①
	Single phase			Three phase							
	120V	200V	240V	200V	208V	240V	480V	600V			
30	2	3	5	5	7.5	7.5	15	20	#18 – #8	Cu	CSA
60	3	7.5	10	15	15	15	30	50	#14 – #4	Cu	CSA
100	5	10	15	25	25	30	60	75	#14 – 2/0	Cu/Al	CSA
200	—	—	—	50	50	60	125	150	#6 – 300 kcmil	Cu/Al	CSA
400	—	—	—	100	125	125	250	350	#2 – 600 kcmil	Cu/Al	CSA
600	—	—	—	150	150	200	400	500	(2) #2 – 600 kcmil	Cu/Al	CSA
800	—	—	—	200	200	250	500	500	(2) #2 – 600 kcmil	Cu/Al	CSA
1200	—	—	—	—	—	—	—	—	(4) #2 – 600 kcmil	Cu/Al	CSA

^① Fusible switches are CSA approved to the CSA C22.2 No. 4 standard.

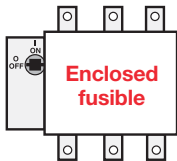
Enclosed fusible disconnect switches

30A – 1200A

Other configurations



CSA general purpose amp rating	Option	Enclosure type							
		1		12		4		4X Stainless	
		Catalog number	List price	Catalog number	List price	Catalog number	List price	Catalog number	List price
30	4 pole switch	FJ301-4P		FJ302-4P		FJ304-4P		FJ30X-4P	
	6 pole switch	FJ301-6P		FJ302-6P		FJ304-6P		FJ30X-6P	
60	4 pole switch	FJ601-4P		FJ602-4P		FJ604-4P		FJ60X-4P	
	6 pole switch	FJ601-6P		FJ602-6P		FJ604-6P		FJ60X-6P	
100	2 pole switch	FJ1001-2P		FJ1002-2P		FJ1004-2P		FJ100X-2P	
	4 pole switch	FJ1001-4P		FJ1002-4P		FJ1004-4P		FJ100X-4P	
	6 pole switch	FJ1001-6P		FJ1002-6P		FJ1004-6P		FJ100X-6P	
200	2 pole switch	FJ2001-2P		FJ2002-2P		FJ2004-2P		FJ200X-2P	
	4 pole switch	FJ2001-4P		FJ2002-4P		FJ2004-4P		FJ200X-4P	
	6 pole switch	FJ2001-6P		FJ2002-6P		FJ2004-6P		FJ200X-6P	
400	2 pole switch	FJ4001-2P		FJ4002-2P		FJ4004-2P		FJ400X-2P	
	4 pole switch	FJ4001-4P		FJ4002-4P		FJ4004-4P		FJ400X-4P	
	6 pole switch	FJ4001-6P		FJ4002-6P		FJ4004-6P		FJ400X-6P	
600	2 pole switch	FJ6001-2P		FJ6002-2P		FJ6004-2P		FJ600X-2P	
	4 pole switch	FJ6001-4P		FJ6002-4P		FJ6004-4P		FJ600X-4P	
	6 pole switch	FJ6001-6P		FJ6002-6P		FJ6004-6P		FJ600X-6P	
800	2 pole switch	FL8001-2P		FL8002-2P		FL8004-2P		FJ800X-2P	
	4 pole switch	FL8001-4P		FL8002-4P		FL8004-4P		FJ800X-4P	
	6 pole switch	FL8001-6P		FL8002-6P		FL8004-6P		FJ800X-6P	
1200	2 pole switch	FL12001-2P		FL12002-2P		FL12004-2P		FL1200X-2P	
	4 pole switch	FL12001-4P		FL12002-4P		FL12004-4P		FL1200X-4P	



Accessories

Enclosed fusible disconnect switches

Auxiliary contacts

For use on:	Contact configuration	Installation suffix	Installed list price adder
30A	1 N.O. + 1 N.C.	add "11" suffix	
	2 N.O. + 2 N.C.	add "22" suffix	
60A – 100A	1 N.O. + 1 N.C.	add "11" suffix	
	2 N.O. + 2 N.C.	add "22" suffix	
200A – 1200A	1 N.O. & 1 N.C.	add "11" suffix	
	2 N.O. & 2 N.C.	add "22" suffix	

Accessories

For use on:	Description	Installation suffix	Installed list price adder
30A – 100A	Neutral block	N	
200A	Neutral block	N	
400A	Neutral block	N	
600A	Neutral block	N	
800A	Neutral block	N	
1200A	Neutral block	N	

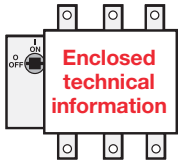
Ground lugs

All enclosed switches are provided with a standard integral ground lug.

Switch size	Ground lug wire size
30 – 100	(2) # 14 – 4
200	#14 – 2/0
400 – 800	#6 – 300 mcm
1200	#2 – 600 mcm

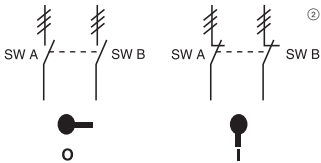
Other configuration descriptions

Enclosed disconnect switches



Conversion mechanisms

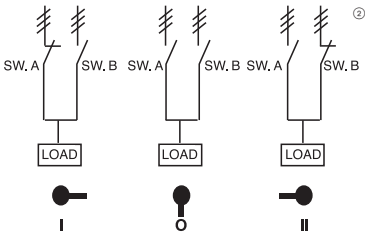
6 pole
6 pole mechanism allows two switches controlled by one handle to open or close simultaneously.



	POS. O	POS. I
SW. A	O	X
SW. B	O	X

X = Closed
O = Open

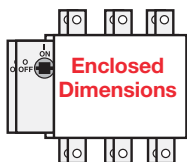
Transfer^①
Transfer mechanism manually transfers between two power sources using two switches and a center "OFF" position.



	POS. I	POS. O	POS. II
SW. A	X	O	O
SW. B	O	O	X

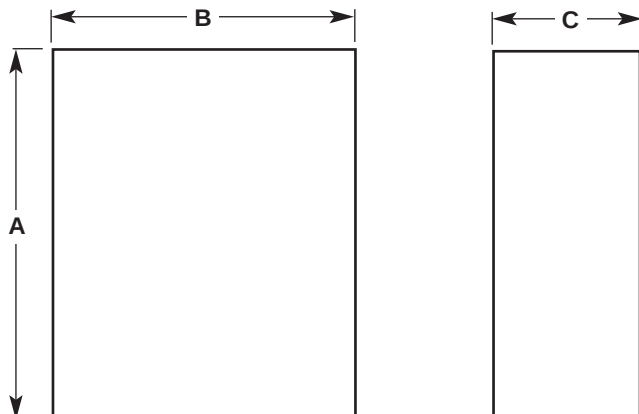
X = Closed
O = Open

^① Transfer and bypass enclosed switches include the load side bussed or cabled together, and all switches come standard with ground lugs.
^② = Three poles



Safe Line Dimensions^{①②} 600V 16-1200A Amps

Dimensions for metal and stainless steel enclosures Type 1, 12, 4 and 4X



Non-fusible switches NF*-3P

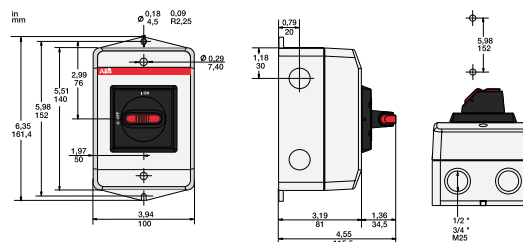
	A Height	B Width	C Depth
NF16, NF32,	6	5	4
NF30, NF45, NF60, NF63	10	5	4
NF100	16	6	4
NF200	24	14	8
NF400	36	24	10
NF600	36	24	10
NF800	48	24	12
NF1200	48	24	12

Fusible switches FJ*-3P

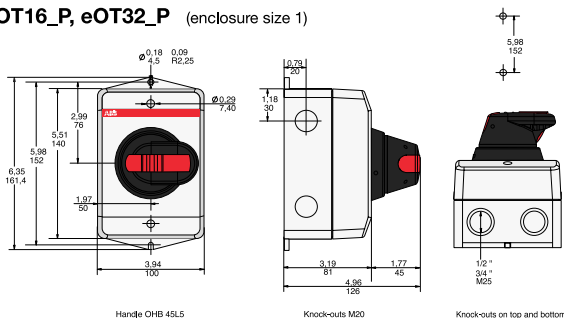
	A Height	B Width	C Depth
F30	10	8	6
F60	10	8	6
F100	16	10	6
F200	24	14	8
F400	36	24	10
F600	36	24	10
F800	48	24	12

Dimensions for eOT

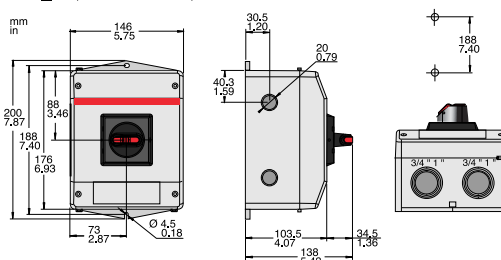
eOT16_S, eOT32_S (enclosure size 1)



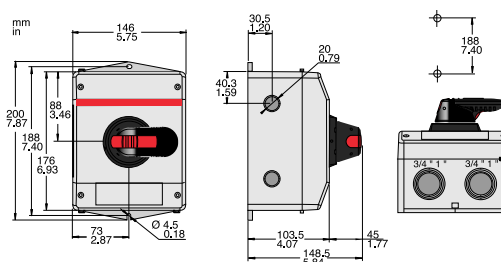
eOT16_P, eOT32_P (enclosure size 1)



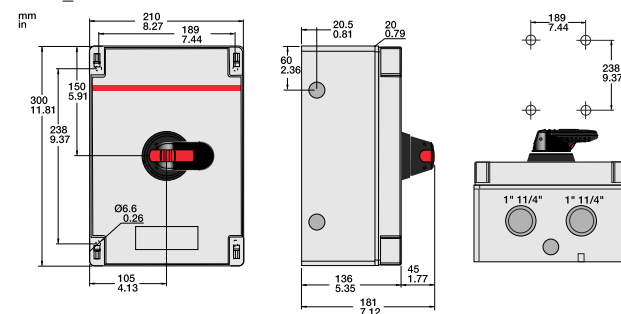
eOT45U_S (enclosure size 2)



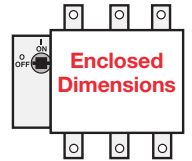
eOT45U_P (enclosure size 2)



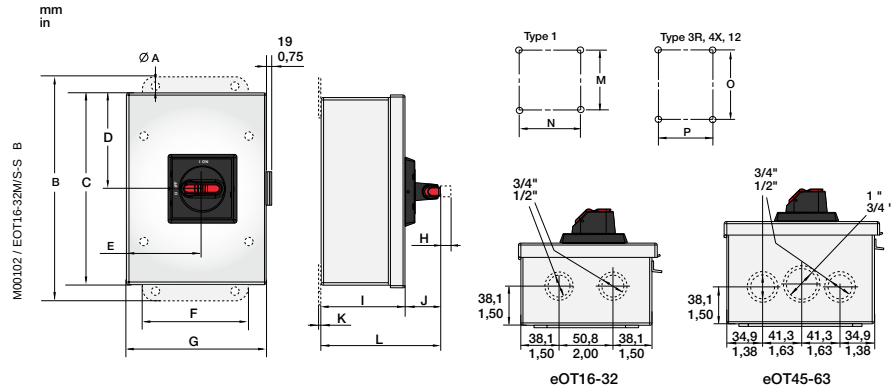
eOT63U_P



Dimension drawings Sheet steel and stainless steel enclosed manual motor controllers



eOT16/32_-S, eOT45-63_-S



Knock-outs in top and bottom of type 1 enclosures

eOT16-32

Dimension [mm/in]

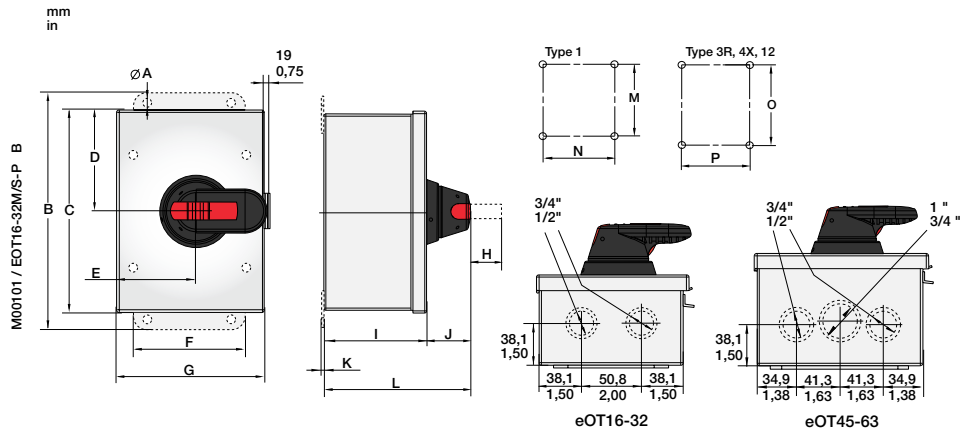
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
7,9/0,31	215,9/8,50	183,4/7,22	91,7/3,61	73,7/2,90	101,6/4,00	134,1/5,28	19,0/0,75	83,3/3,28	35,5/1,36	2,8/0,11	117,9/4,64	101,6/4,0	101,6/4,0	196,9/7,75	76,2/3,00

eOT45-63

Dimension [mm/in]

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
7,9/0,31	241,3/9,50	208,8/8,22	104,4/4,11	86,1/3,39	127,0/5,00	159,5/6,28	19,0/0,75	108,7/4,28	34,5/1,36	2,8/0,11	143,3/5,64	127,0/5,0	127,0/5,0	222,3/8,75	101,6/4,00

eOT16/32_-P/M, eOT45/63_-P/M



Knock-outs in top and bottom of type 1 enclosures

eOT16-32

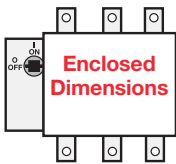
Dimension [mm/in]

Handle code	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
-P	7,9/0,31	215,9/8,50	183,4/7,22	91,7/3,61	73,7/2,90	101,6/4,00	134,1/5,28	36,6/1,42	83,3/3,28	45,0/1,77	2,8/0,11	128,3/5,05	101,6/4,0	101,6/4,0	196,9/7,75	76,2/3,00
-M	7,9/0,31	215,9/8,50	183,4/7,22	91,7/3,61	73,7/2,90	101,6/4,00	134,1/5,28	36,6/1,42	83,3/3,28	52,0/2,05	2,8/0,11	135,5/5,33	101,6/4,0	101,6/4,0	196,9/7,75	76,2/3,00

eOT45-63

Dimension [mm/in]

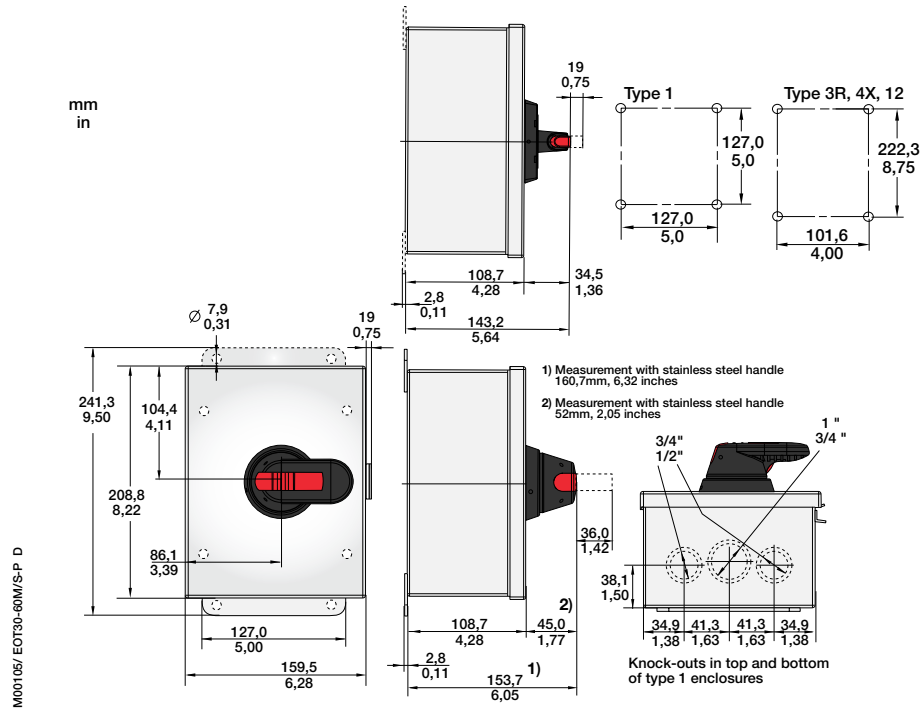
Handle code	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
-P	7,9/0,31	241,3/9,50	208,8/8,22	104,4/4,11	86,1/3,39	127,0/5,00	159,5/6,28	36,0/1,42	108,7/4,28	45,0/1,77	2,8/0,11	153,7/6,05	127,0/5,0	127,0/5,0	222,3/8,75	101,6/4,00
-M	7,9/0,31	241,3/9,50	208,8/8,22	104,4/4,11	86,1/3,39	127,0/5,00	159,5/6,28	36,0/1,42	108,7/4,28	52,0/2,05	2,8/0,11	160,7/6,32	127,0/5,0	127,0/5,0	222,3/8,75	101,6/4,00



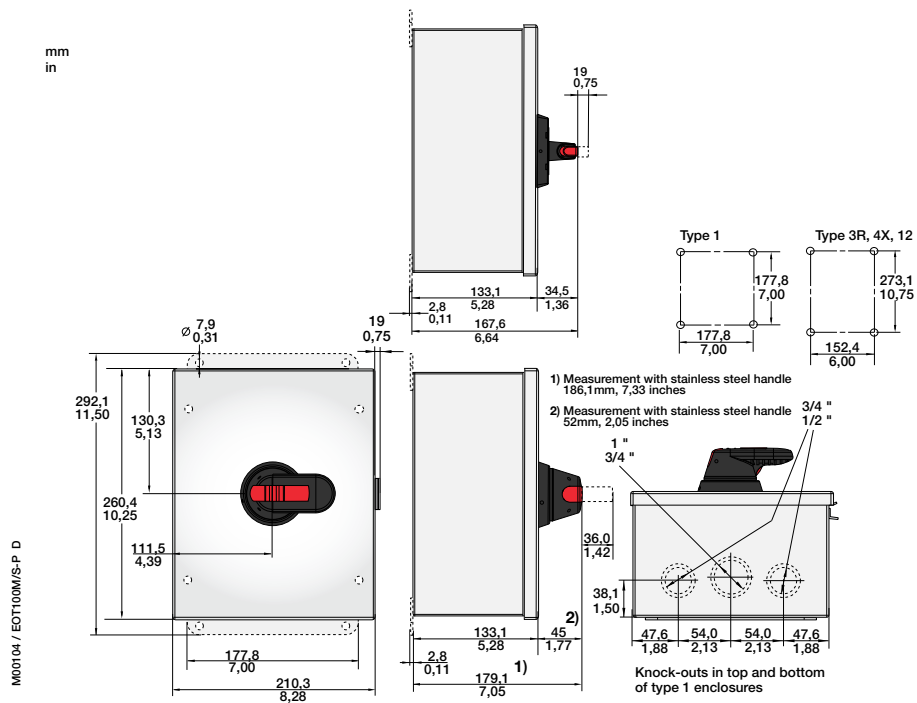
Dimension drawings

Sheet steel and stainless steel enclosed manual motor controllers

eOT30U3_, eOT60U3_



eOT100_





CamLine Rotary cam switches OM, ON and OL

Contents:

Rotary cam switches

Standard cam switches range	4.6 - 4.7
Accessories for standard cam switches	4.8 - 4.9
Special cam switches	4.10 - 4.11
Solutions	4.12 - 4.15
Technical data.....	4.16 - 4.17
Ordering details	
ON-OFF switches.....	4.18 - 4.19
Change-over switches.....	4.20 - 4.22
Bypass switches	4.23
Multistep switches.....	4.24 - 4.27
Motor control switches.....	4.28 - 4.29
Ventilation switches	4.28
Reversing switches	4.28
Star-delta switches	4.28
2 speed switches	4.28
Pumpstart switches	4.29
Stop switches.....	4.29
Start switches.....	4.29
Voltmeter switches	4.30
Ammeter switches	4.31
Volt-ammeter switches.....	4.31
Binary code switches	4.32
Accessories	4.33 - 4.35
Dimension drawings.....	4.36 - 4.53
OM, ON, door mounted	4.36
ON_M, ON, base mounted	4.37
OL40	4.37 - 4.39
Door mounted	4.37 - 4.38
Base mounted.....	4.39
OL80, OL125, OL160.....	4.40 - 4.41
Door mounted	4.40
Base mounted	4.41
OL200	4.42
Door mounted	4.42
Base mounted	4.42
Front plates	4.43
Handles	4.44
For OM.....	4.44
For ON and OL40	4.45 - 4.46
Padlockable handles.....	4.45 - 4.48
Key interlocked handles	4.49
Push button interlocked handle	4.50
Pistol and double lever handles	4.50
Door clutch.....	4.51
Double gang drive.....	4.52
Triple gang drive	4.53

Enclosed rotary cam and main switches

Ordering details.....	4.56 - 4.57
Dimension drawings.....	4.58

ROTARY CAM SWITCHES

Range OM, ON, OL

Sizes 10, 25, 40, 80, 125, 160 and 200 Amps

ABB's new OM, ON and OL rotary cam switches offer a complete range of cam switches for control, instrumentation and motor starting applications, maximizing the benefits and optimizing your use of assets. The standard cam switches provide you with a variety of functionalities for the most common mounting types and applications with minimum footprint area.

A focused standard range covering most applications

ON-OFF switches
Change-over switches
Multi-step switches

Volt-ammeter switches
Ammeter switches
Voltmeter switches

Bypass switches
Closed transition switches
UPS switches

Reversing switches
Pump-start switches
Stop-start switches
Ventilation switches

Binarycode switches

Standards

IEC/EN 60 947-1, -3
VDE 0660 Teil 107
UL508
CSA C22.2 No.14

► Captive plus-minus screws save installation time and the integrated screwdriver guides make the use of motorized screwdrivers easy and stable.



Quick and easy to install

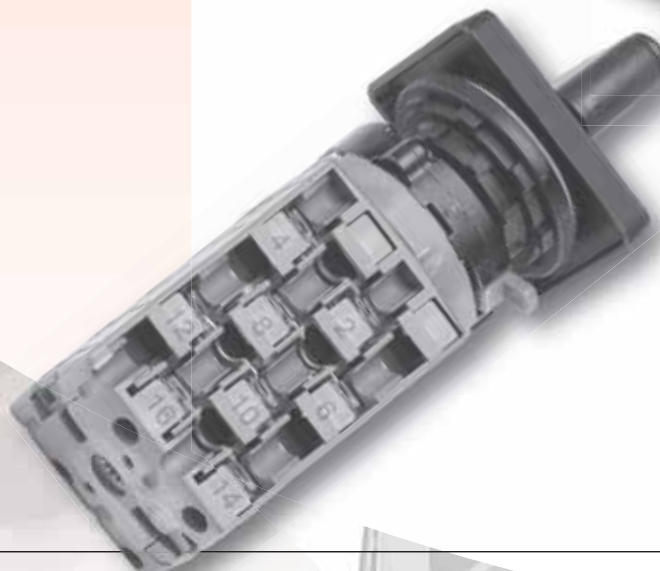
Captive plus-minus screws save installation time and the integrated screwdriver guides (available in sizes up to 160 Amps) make the use of motorized screwdrivers easy and stable. Lug terminals for connecting cable clamps and crimp lugs are available for the sizes from 125 Amps.

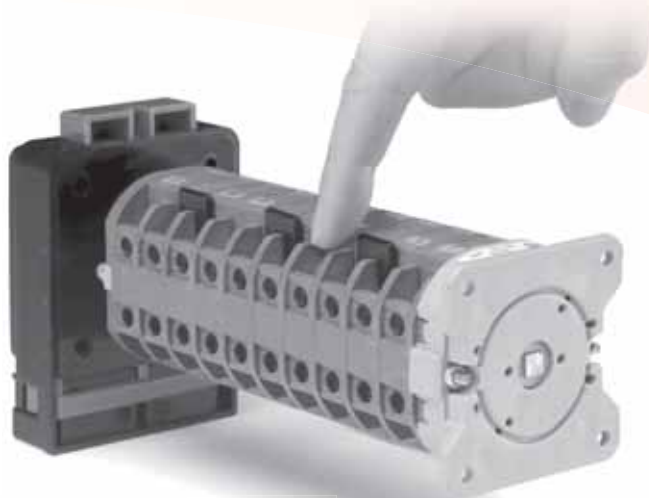
The double cam system shortens the multistep switch and enables the use of shallow enclosures. The sizes up to 40 Amps, including a black handle on a silver front plate, are suitable for snap on door mounting while the sizes from 80 to 200 Amps contain screw-mounted handles for door mounting.

► Self lifting terminal screws for fast cabling



◀ Complete delivery includes handle and front plate. Snap-on mounting of contact block with interlocking in sizes OM, ON and OL 40. Protected interconnections.





▲ Finger-proof tunnel terminals eliminate the risk of touching live parts without adding any protective covers.

◀ Versatile selection of padlocking and interlocking solutions

Safe to use with reliable contacts

Finger-proof tunnel terminals and interconnections eliminate the risk of touching live parts without adding any protective covers. This ensures safe operation, protecting people and equipment. The switches provide reliable isolation and stable contact positions with or without overlapping contacts.

The switches are designed for resistive and slightly inductive motor loads having a high switching reliability in distinctive environments, providing you with added value. Breaking capacity tests performed, cover CSA C22.2 No.14 Manual Motor Controller.

The well-enclosed contact chamber construction and special design of the OM's contact tip with high contact pressure ensure increased contact reliability and a long life span. Due to the contact design, the switches are also suitable for very low voltages (5 V) and currents (5mA). Gold-plated contacts are available on request.

Special cam switches for distinctive requirements

Special cam switches can be configured on the Internet by the Camweb configurator. The specification and ordering of special cam switches is as easy as selecting standard products!

What can be specified by Camweb?

Distinctive needs, such as front plate engraving, padlocking in various positions, key operation, key interlocking, auxiliary contacts for low ratings and special timings can be specified with the configuration tool. It is also possible to build switches with different chamber sizes in the same switch. Double and triple gang switches, as well as long cam switches with metallic shaft, can be specified with up to 60 contacts and 12 positions.

Easy to specify and to order

The user-friendly Camweb configuration tool is very simple to use: it provides a new approach to ordering with easy specifications and a minimized total delivery time. The tool guides the user in order to avoid incompatible/impossible solutions, eliminating mistakes and automatically generating the type and the ordering code. The optional paste and order tool generates the price for immediate ordering. The order handling of the special cam switch is as smooth as for the standard products - the same information goes transparent and unchanged throughout the process.

The Camweb configuration tool can be found on the ABB Internet site or directly from the address:

a.salesconfigurator.com



Standard

CAM SWITCHES RANGE

Black handle and silver frontplate with standard text are included.

camLine

Cam switch size	
I _{th} / IEC 60947 [A]	
CSA C22.2 No.14 [A]	
Positions	
ON-OFF switches	
Rotating angle 90, 0-position: 9 o'clock	
Black handle	1 - 0
Key operated	1 - 0
Rotating angle 90, 0-position: 12 o'clock	
Black handle	1 - 0
Key operated	1 - 0
Change-over switches	
Rotating angle 60 - 0 - 60, with 0-position	
Black handle	1 - 0 - 2
Key operated	1 - 0 - 2
Key operated, with two sided spring return	1 _R - 0 - 2 _R
Rotating angle 60 - 60, without 0-position	1 - 2
With common center position and with overlapping contacts	1 - 1+ 2 - 2
Bypass switches	
Without overlapping, for 3 and 4-pole net	1 - 0 - Bypass
With overlapping, for 3 and 4-pole net	1 - Bypass
Multistep switches	
With 0-position	
2 - step switches	0-1-2
3- step switches	0-1-2-3
4- step switches	0-1-2-3-4
5- step switches	0-1-2-3-4-5
6- step switches	0-1-2-3-4-5-6
7, 8, 9, 10 and 11- step switches	0-1-2-3-4-5-6-7-8...-11
Without 0-position	
3- step switches	1-2-3
4- step switches	1-2-3-4
5- step switches	1-2-3-4-5
6- step switches	1-2-3-4-5-6
7, 8, 9, 10, 11 and 12- step switches	1-2-3-4-5-6-7-8...-12
Motor control switches	
Ventilation switches	A - 0 - 1/2 - 1/1
Reversing switches	1 - 0 - 2
Star-delta switches	0 - Y - Δ
Pole-change switches (Dahlander)	0 - A - AYY
Pumpstart switches	0 - 1
Stop switches	0 _R - Stop
Start switches	Stop - Start
	0 _R - Start
	0 - 1 _R - Start
	Start - 1 _R - 0 - 2 _R - Start
Volt-ammeter switches	
3 phases and 3 current transformers with common pole	0 - 1 - 2 - 3
Voltmeter switches	
4 positions, 3 phase - 3 wire, with 0-position	0, L1-L2, L2-L3, L3-L1
3 positions, 3 phase - 3 wire, without 0-position	L1-L2, L2-L3, L3-L1
7 positions, 3 phase to phase, 3 phase to neutral, without 0-position	L1-L3, L2-L3, L1-L2, L1-N, L2-N, L3-N
7 positions, 3 phase to phase, 3 phase to neutral, with 0-position	L1-L3, L2-L3, L1-L2, 0, L1-N, L2-N, L3-N
7 positions, 3 phase to phase voltages for 2 circuits, with 0-position	L1-L3, L2-L3, L1-L2, 0, L1-L3, L2-L3, L1-L2
Ammeter switches	
For 3 current transformer circuits, with 0-position	0 - 1 - 2 - 3
Binarycode switches	
	0-1-2-3-4-5-6-7...-9...-11

**Door mounted****DIN rail mounted**

OM	ON	OL40	OL80	OL125	OL160	OL200	ON M
10	25	45	115	150	175	280	25
10	25	40	80	125	160	200	25
1, 2, 3, 4, 5 and 6- pole 1 and 3- pole			1, 2, 3 and 4- pole -			1, 2, 3 and 6- pole -	
1, 2, 3, 4, 5 and 6- pole 1 and 3- pole			1, 2, 3 and 4- pole -			1, 2, 3 and 6- pole -	
1, 2, 3 and 4- pole 1 and 3- pole			1, 2, 3 and 4- pole -			1, 2, 3 and 4- pole -	
1, 2 and 3- pole			-			1- pole	
1, 2, 3 and 4- pole			-			1, 2, 3 and 4- pole	
-			3 and 4- pole			-	
-			-			-	
-			3 / 6- pole, 4 / 8- pole			-	
-			4 / 6- pole, 4 / 8- pole			-	
1, 2, 3 and 4- pole			-			1- pole	
1, 2, 3 and 4- pole			-			1- pole	
1, 2 and 3- pole			-			-	
1 and 2- pole			-			-	
-			-			-	
1, 2 and 3- pole			-			-	
1- pole			-			-	
1, 2, 3 and 4- pole			1- pole			1- pole	
1, 2 and 3- pole			-			-	
1 and 2- pole			-			-	
-			-			-	
1, 2 and 3- pole			-			-	
1- pole			-			-	
2- pole			-			1- pole	
-			-			-	
-			3- pole			-	
-			3- pole			-	
-			3- pole			-	
1- pole			-			1- pole	
2- pole			-			-	
-			-			-	
1- pole			-			-	
1- pole			-			-	
-			-			1- pole	
1- pole			-			1- pole	
-			-			-	
3- pole			-			-	
3- pole			-			3- pole	
3- pole			-			3- pole	
3- pole			-			3- pole	
4- pole			-			-	
1- pole			-			1- pole	
-			-			-	
1 and 2- pole			-			-	
1 and 2- pole			-			-	

ACCESSORIES

for standard cam switches

CamLine



► Handles

Handles

Snap on handle with front plate without engraving

Size 30x30, black, grey, red, red-yellow

Size 48x48, black, grey, red, red-yellow

Size 64x64, black, grey, red, red-yellow

Screw mounting handle with front plate without engraving

Size 90x90, black, grey, red, red-yellow

Size 130x130, black, grey, red, red-yellow

Snap-on handles with round escutcheon plate

Black

Black, nose-type

Screw mounting pistol type handle

Black or red

Screw mounting double lever handle

Black or red

Padlockable handle knob, without front plate

Black, red-yellow

Round padlockable handles for screw mounting on door

Size 64x64, black, red-yellow

Size 90x90, black, red-yellow

Front plates

Front plate, without engraving

Size 30x30, silver, yellow

Size 48x48, silver, yellow

Size 64x64, silver, yellow

Size 90x90, silver, yellow

Size 130x130, silver, yellow

Size H=45mm, W=54mm, grey

Additional lettering plate

Without engraving

Size 30x30, black or grey frame

Size 48x48, black or grey frame

Size 64x64, black or grey frame

Other accessories

Front ring

Shaft sealing

Spare key

Protective rear cover

Nut spanner

Adaptor ring

Base mounting kit



► Front plates



► Additional lettering plate



Door mounted

DIN-rail mounted

OM	ON	OL40	OL80...OL160	OL200	ON_M
x					
	x	x			
	x	x			
			x		
				x	
x	x	x			
x					
			x	x	
				x	
	x	x			x
	x	x			
			x		
x					
	x	x			
			x		
				x	
					x
x					
	x	x			
	x	x			
x	x	x			
	x		x		
x	x	x			
	x		x		
x	x				
	x				



► Front ring



► Spare key



► Protective rear cover



► Nut spanner



► Adaptor ring
22.5/30.5 mm

Special CAM SWITCHES

To be specified by the Camweb
configuration tool

a.salesconfigurator.com

camline

Mounting

Door mounted

Snap-on mounted handle

Padlockable

Round, padlockable

Square, padlockable

Screw mounted handle

Round, padlockable

Square, padlockable

Round front ring

Key operated handle

Cylinder lock

Push button lock

Pistol type handle

Double lever handle

Base mounted

Snap-on mounted handle

Padlockable

Screw mounted handle

Door clutch

Type of contacts

Normal Number of contacts

Double gang (Tandem) Number of contacts

Triple gang Number of contacts

Long shaft Number of contacts

Connections

Standard box (tunnel) terminals

Fast on clips

Double fast on clips

Lug terminals

Other features

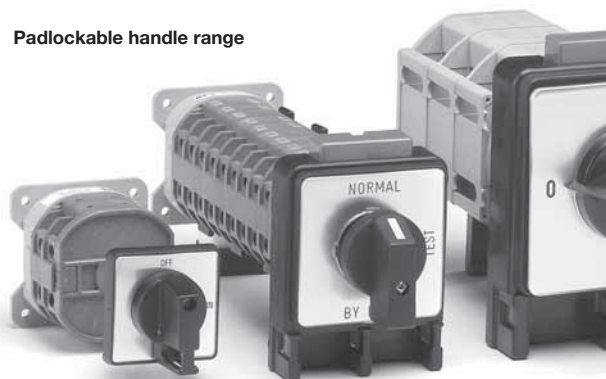
Spring return function

Metallic camshaft

Gold contacts

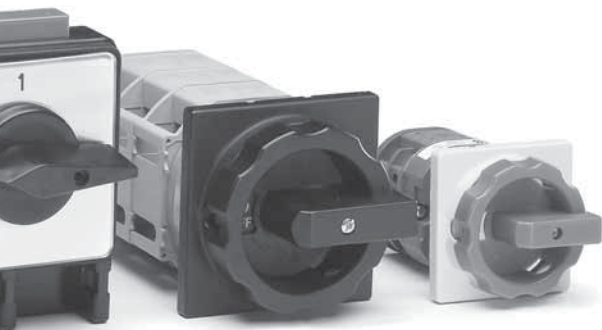
Enclosed cam switches

Padlockable handle range





Door mounted					DIN-rail mounted
OM	ON	OL40	OL80...OL160	OL200	ON_M
x	x	x			
	x	x			
	x	x			
	x	x			
x	x	x	x	x	
			x	x	
			x	x	
	x	x			
x	x				
	x	x	x	x	
	x	x	x	x	
			x	x	
				x	
					x
	x	x			
	x	x			
			x	x	
	x	x	x		
max. 16	max. 20 max. 40 max. 60 max. 60	max. 20 max. 40 max. 60 max. 60			max. 6
x	x	x	x		x
x	x	x			
x	x	x			
			x	x	
x	x	x	x	x	x
	x	x			
x	x	x	x	x	x
	x				



SOLUTIONS

CamLine

Standard handles

Cam switches up to the size OL40 are delivered with snap-on handles for 22.5 mm door drilling, while the larger handle sizes are screw mounted (4-hole mounting). Screw mounted handles are available for all sizes and they can be specified by the Camweb configurator. Protection degree IP65, NEMA 4X.



Special handles for large switches

Pistol type handles and double lever handles are available for the sizes OL80...OL200. Protection degree is the same as for the front plate.



Padlockable handles

Padlockable handle knob

Optional handle for replacing the standard knob handle. Two padlocks with bail diameter of 6 mm or three padlocks with 4 mm bail diameter. Padlocking is possible every 90 degrees at 9, 12, 3 and 6 o'clock positions. Available for the sizes ON...OL40 (6 mm shaft diameter). Suitable for both snap-on and screw mounted handles. Protection degree IP65, NEMA 4X.



Round padlockable handle

Optional handle with two locking positions and 90 degrees movement only. Locking positions: 9 o'clock (O-OFF) and 12 o'clock (1- ON) or when the switch is rotated 90 degrees: 12 o'clock (O-OFF) and 3 o'clock (1-ON). For maximum three padlocks with max. 8 mm bail diameter. Available for sizes ON...OL160 as a snap-on or screw mounted version. Protection degree IP65, NEMA 4X.



Square padlockable handle

The programmable square handle, with one to four possible padlocking positions at certain angles, can be specified by the Camweb configurator. For maximum three padlocks with max. 8 mm bail diameter for sizes ON...OL40 or 8 mm for sizes OL80...200, screw mounted. Protection degree IP65, NEMA 4X.



Interlocking solutions

Key operated cam switches

Key switches are operated by the key, which functions as the operating handle. Special key codes are available on request. The standard key removal is possible at 12 o'clock, or in other positions, as described in the ordering details. The delivery contains two keys. In non-standard switches the key removal positions can be specified by the Camweb configurator. The key switch is available for the sizes OM...OL40, also enclosed switches. Protection degree IP54, NEMA 1.



Key interlocked cam switches with cylinder interlock

The operation of the cam switch is interlocked with the cylinder lock below the switch. The interlocking is possible in one to four selected positions by the key. The possible interlocking positions are specified by the Camweb configurator. The delivery contains two keys. Available for the sizes ON...OL160. Protection degree IP65, NEMA 4X.



Push button interlock

The push button releases the cam switch in one or several positions specified by the Camweb configurator. Auxiliary contacts are possible to operate with the push button. Protection degree IP65, NEMA 4X.



Base mounted switches

Modular cam switches

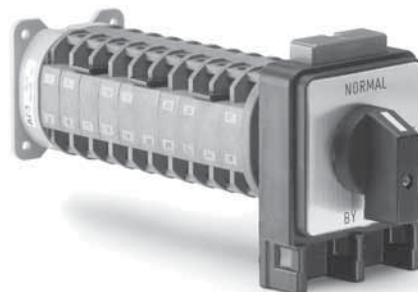
Modular cam switches are available for up to 6 contacts according to the DIN-rail component standard. Clip-on mounting on DIN-rail. Protection degree IP20.



Base mounted cam switches

Base mounted cam switches are recommended to be specified for the desired shaft length or panel depth by the Camweb configurator. The shaft can be specified with the door clutch, which locks the door in the ON-position. Mounting kit type ONZ74 for door-mounted ON cam switches can be ordered as optional extra with shaft length 200 mm and DIN rail

Base mounted cam switches with direct mounted handles are available as special cam switches. The standard or padlockable handle is fixed on the cam switch.



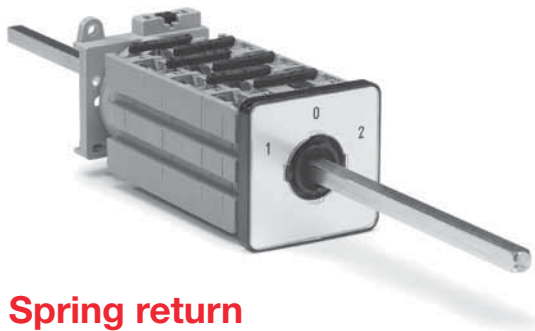
Cam switches with high number of contacts

Double and triple gang switches

Double and triple gang switches (2 x 20 or 3 x 20 contacts) are specified by the Camweb configurator for door and base mounting with the handle size from 64 mm. Padlocking with square padlockable handles. Screw mounting.

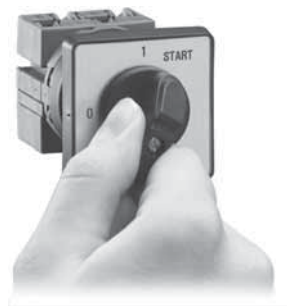
Metallic shaft

ON cam switches are available with metallic shafts allowing max. 60 auxiliary contacts to be assembled in one long cam switch. Specification by the Camweb configurator.



Spring return

The spring return movement is always 30 degrees. The next step of the static position of spring return needs to be 90 degrees if not symmetrical design.



Round front ring

The round front ring replaces the square escutcheon plate. The assembly do not include position indications. The round front ring is available as special switch configured by the Camweb.



Terminations

Quick connects

Cam switches are available with quick connects 6.3 x 0.8 or double FASTON-quick connects 2 x 3.15. Specification by the Camweb configurator.



Lug terminals

The OL80...160 cam switches are normally provided with protected box type termination. Lug terminals for cable lugs are specified by the Camweb configurator.



Gold contacts

The OM and ON switches can be supplied with gold contacts. Specification recommended by the Camweb configurator.



CamLine

Rotary cam switches

Technical data

Technical data

Ratings according to UL and CSA

			Size	OM	ON	OL40	OL80	OL125	OL160	OL200
Maximum operating voltage	CSA/UL	V		300	600	600	600	600	600	600
Ampere rating	General use	CSA/UL	A	10	25	40	80	125	170	200
Rated power	3-phase	240V	HP	1	2	10	30	40	40	60
		480V	HP	-	5	20	30	40	50	120
		600V	HP	-	5	20	30	40	50	120
	1-phase	120V	HP	0.33	1	2	7.5	10	10	-
		240V	HP	1	1	3	15	20	20	-
Short circuit ratings										
Maximum prospective fault current		kA		1	10	10	10	10	10	10
Maximum fuse size		A		16	35(RK5)	50(RK5)	100(RK5)	150(RK5)	200(RK5)	400(RK5)
Switching frequency		cycles/hour		150	150	150	150	150	150	150
Connecting screws		M		2.5	3.5	5	5	5	5	10
Max cable cross section		mm ²		1.5	4	6	70	70	70	150
		AWG		14	14-12	14-8	12-2/0	12-2/0	12-2/0	kcmil 300
Min switching current AC/DC		mA		5	5	5	5	5	5	5
Minimum voltage AC/DC		V		5	5	5	5	5	5	5



CamLine

Rotary cam switches

Technical data

Technical data

Ratings according to IEC60947

		Size	OM	ON	OL40	OL80	OL125	OL160	OL200
Impulse withstand voltage	U _{imp}	kV	-	-	6	6	6	6	6
Rated operational voltage	U _e	V	500	690	690	690	690	690	690
Rated insulation voltage		V	250	400	690	690	690	690	690
Rated thermal current I _{th}		A	10	25	45	115	150	175	315
Rated conditional short circuit current	I _p (r.m.s.)	kA	1	10	10	10	10	10	10
Max back-up fuse link		A	10	25	40	125	200	200	250
Rated short time withstand current (r.m.s)	3s	A		100	360	800	1280	1280	1600
	10s	A		60	200	420	700	700	1000
	30s	A		32	120	260	400	400	600
	60s	A		30	80	160	280	280	400
Rated operational current	I _e	A	10	25	45	115	150	160	250
	AC1 400V	A	10	25	45	115	150	170	250
	AC21 400V	A	10	25	45	115	150	170	250
	AC11 220-240V	A	2.5	5.5	14	30	45	45	80
	380-440V	A	-	3.5	6.0	30	45	45	80
	500V	A	-	4.5	7.0	28	40	40	70
	AC22 220-500V	A	10	20	40	100	150	170	250
	660-690V	A	-	20	40	80	100	100	125
Rated operational current	1/2/3 (contact in series)								
Time constant 0...1ms	DC21 24/48/72	A	10	20	40	115	130	150	250
	40/80/120	A	6	16	32	100	115	130	200
	60/120/180	A	2.5	4.2	7.5	11	15	17	23
	110/220/330	A	0.7	1	1.7	-	-	-	-
	220/440/660	A	0.3	0.37	0.48	-	-	-	-
	440/660	A	-	0.22	0.25	-	-	-	-
Rated operational current	1/2/3 (contact in series)								
Time constant 1...50 ms	DC22 24/48/72	A	6	10	32	100	115	130	200
	30/60/90	A	3	4.5	11	33	36	40	50
	40/80/120	A	1	1.7	4	6	7	7.8	8.5
	60/120/180	A	0.7	0.8	1.5	1.8	2	2.2	-
	110/220/330	A	0.3	0.4	0.6	-	-	-	-
Rated operational power									
AC23 3 ph.	220-240V	kW	1.8	2.6	7.5	30	37	37	56
	380-440V	kW	3	7.5	15	45	75	75	75
	500V	kW	-	4.8	15	55	75	90	85
	660-690V	kW	-	4.8	15	45	50	55	90
AC23 1 ph.	110V	kW	0.37	0.5	2.5	5.5	9	11	14
	220-240V	kW	0.75	0.9	4	15	20	22	30
	400V	kW	1.1	1.5	7.5	22	35	37	45
Rated operational power									
AC2 3 ph.	220-240V	kW	2.5	3.5	11	30	35	37	70
	380-440V	kW	-	6	18.5	45	50	55	95
	500V	kW	-	6	18.5	55	65	75	103
	660-690V	kW	-	6	18.5	55	65	55	110



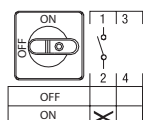
CamLine

Rotary cam switches

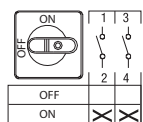
Ordering details

ON - OFF switches

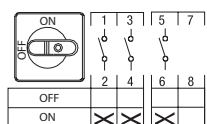
Black handle and front plate with position indication are included.



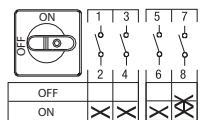
O_A1_



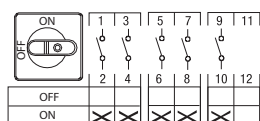
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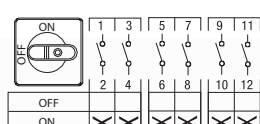
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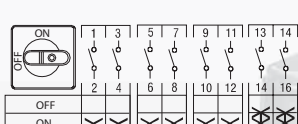
O_A4_



O_A5_



O_A6_



O_A8_

Function	Number of poles	Rated thermal current [A]	Catalogue number	List price
Step angle 90°, O-position: 9 o'clock				
Door mounted				
OFF - ON	1	10	OMA1PBA	
	2	10	OMA2PBA	
	3	10	OMA3PBA	
	4	10	OMA4PBA	
	5	10	OMA5PBA	
	6	10	OMA6PBA	
OFF - ON	1	25	ONA1PBA	
	2	25	ONA2PBA	
	3	25	ONA3PBA	
	4	25	ONA4PBA	
	5	25	ONA5PBA	
	6	25	ONA6PBA	
	8	25	ONA8PBA	
OFF - ON	1	40	OL40A1PBA	
	2	40	OL40A2PBA	
	3	40	OL40A3PBA	
	4 ¹⁾	40	OL40A4PBA	
	6	40	OL40A6PBA	
	8 ²⁾	40	OL40A8PBA	
O - I	1	80	OL80A1RB	
	2	80	OL80A2RB	
	3	80	OL80A3RB	
	4	80	OL80A4RB	
	6	80	OL80A6RB	
	8	80	OL80A8RB	
O - I	1	125	OL125A1RB	
	2	125	OL125A2RB	
	3	125	OL125A3RB	
	4	125	OL125A4RB	
	6	125	OL125A6RB	
	8	125	OL125A8RB	
O - I	1	160	OL160A1RB	
	2	160	OL160A2RB	
	3	160	OL160A3RB	
	4	160	OL160A4RB	
	6	160	OL160A6RB	
	8	160	OL160A8RB	
O - I	1	200	OL200A1RB	
	2	200	OL200A2RB	
	3	200	OL200A3RB	
	4	200	OL200A4RB	
	6	200	OL200A6RB	
	8	200	OL200A8RB	
DIN-rail mounted				
OFF - ON	1	25	ONA1MA	
	2	25	ONA2MA	
	3	25	ONA3MA	
	6	25	ONA6MA	
Key operated, withdrawable in both positions, step angle 90°, O-position: 9 o'clock				
Door mounted				
OFF - ON	1	10	OMA1KBA	
	3	10	OMA3KBA	
OFF - ON	1	25	ONA1KBA	
	2	25	ONA2KBA	
	3	25	ONA3KBA	
OFF - ON	1	40	OL40A1KBA	
	2	40	OL40A2KBA	
	3	40	OL40A3KBA	
	4	40	OL40A4KBA	

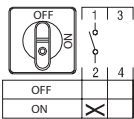
¹⁾ 4th pole early make, late break in A4_ and A8_ types
²⁾ 7th and 8th pole early make, late break



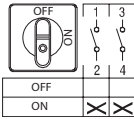
CamLine

Rotary cam switches

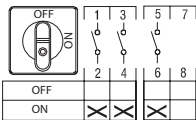
Ordering details



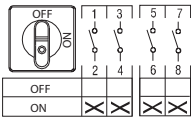
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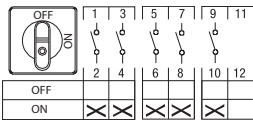
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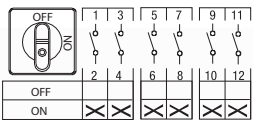
O_A03_



O_A04_



O_A05_



O_A06_

ON - OFF switches

Black handle and front plate with position indication are included.
The type and the ordering number are for one piece.

Function	Number of poles	Rated current [A]	Catalogue number	List price
Step angle 90°, O-position: 12 o'clock				
Door mounted				
OFF - ON	1	10	OMA01PBA	
	2	10	OMA02PBA	
	3	10	OMA03PBA	
	4	10	OMA04PBA	
	5	10	OMA05PBA	
	6	10	OMA06PBA	
OFF - ON	1	25	ONA01PBA	
	2	25	ONA02PBA	
	3	25	ONA03PBA	
	4 ¹⁾	25	ONA04PBA	
	5	25	ONA05PBA	
	6	25	ONA06PBA	
DIN-rail mounted				
OFF - ON	1	25	ONA01MA	
	2	25	ONA02MA	
	3	25	ONA03MA	
	6	25	ONA06MA	
Key operated, withdrawable in both positions, step angle 90°, O-position: 12 o'clock				
Door mounted				
OFF - ON	1	10	OMA01KBA	
	3	10	OMA03KBA	
OFF - ON	1	25	ONA01KBA	
	3	25	ONA03KBA	

¹⁾ 4th pole with simultaneous contacts



CamLine

Rotary cam switches

Ordering details

Change-over switches

Black handle and front plate with position indication are included. PB: snap-on handle, RB: screw mount, KB: key operated, withdrawable in all positions.

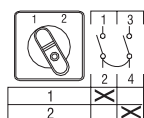
Function	Number of poles	Rated current [A]	Catalogue number	List price
Step angle 60°, with 0-position				
Door mounted				
1 - 0 - 2	1	10	OMU1PB	
	2	10	OMU2PB	
	3	10	OMU3PB	
	4	10	OMU4PB	
1 - 0 - 2	1	25	ONU1PB	
	2	25	ONU2PB	
	3	25	ONU3PB	
	4	25	ONU4PB	
	5	25	ONU5PB	
	6	25	ONU6PB	
1 - 0 - 2	1	40	OL40U1PB	
	2	40	OL40U2PB	
	3	40	OL40U3PB	
	4	40	OL40U4PB	
	5	40	OL40U5PB	
	6	40	OL40U6PB	
1 - 0 - 2	1	80	OL80U1RB	
	2	80	OL80U2RB	
	3	80	OL80U3RB	
	4	80	OL80U4RB	
1 - 0 - 2	1	125	OL125U1RB	
	2	125	OL125U2RB	
	3	125	OL125U3RB	
	4	125	OL125U4RB	
1 - 0 - 2	1	160	OL160U1RB	
	2	160	OL160U2RB	
	3	160	OL160U3RB	
	4	160	OL160U4RB	
1 - 0 - 2	1	200	OL200U1RB	
	2	200	OL200U2RB	
	3	200	OL200U3RB	
	4	200	OL200U4RB	
DIN-rail mounted				
1 - 0 - 2	1	25	ONU1M	
	2	25	ONU2M	
	3	25	ONU3M	
	4	25	ONU4M	
Door mounted				
1 - 0 - 2	1	10	OMU1KB	
	3	10	OMU3KB	
1 - 0 - 2	1	25	ONU1KB	
	3	25	ONU3KB	
	4	25	ONU4KB	
1 - 0 - 2	1	40	OL40U1KB	
	2	40	OL40U2KB	
	3	40	OL40U3KB	
	4	40	OL40U4KB	
1_R - 0 - 2_R, with two sided spring return, step angle 60°				
Door mounted				
1R - 0 - 2R	1	10	OMURR1PB	
	3	10	OMURR3PB	
1R - 0 - 2R	1	25	ONURR1PB	
	2	25	ONURR2PB	
	3	25	ONURR3PB	
	5	25	ONURR5PB	
1R - 0 - 2R	1	40	OL40URR1PB	
	2	40	OL40URR2PB	
	3	40	OL40URR3PB	
	5	40	OL40URR5PB	
DIN-rail mounted				
1R - 0 - 2R	1	25	ONURR1M	



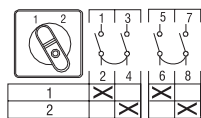
CamLine

Rotary cam switches

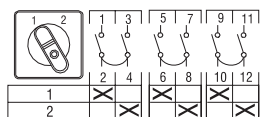
Ordering details



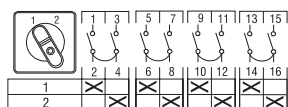
O_WS1_



O_WS2_



O_WS3_



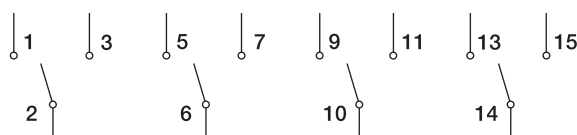
O_WS4_

Change-over switches

Black handle and front plate with position indication are included. PB: snap-on handle, RB: screw mount.

Function	Number of poles	Rated current [A]	Catalogue number	Price List
Without 0-position, step angle 60°				
Door mounted				
1 - 2	1	10	OMWS1PB	
	2	10	OMWS2PB	
	3	10	OMWS3PB	
	4	10	OMWS4PB	
1 - 2	1	25	ONWS1PB	
	2	25	ONWS2PB	
	3	25	ONWS3PB	
	4	25	ONWS4PB	
	5	25	ONWS5PB	
	6	25	ONWS6PB	
	7	25	ONWS7PB	
	8	25	ONWS8PB	
	9	25	ONWS9PB	
	10	25	ONWS10PB	
1 - 2	1	40	OL40WS1PB	
	2	40	OL40WS2PB	
	3	40	OL40WS3PB	
	4	40	OL40WS4PB	
	5	40	OL40WS5PB	
	6	40	OL40WS6PB	
	7	40	OL40WS7PB	
	8	40	OL40WS8PB	
	9	40	OL40WS9PB	
	10	40	OL40WS10PB	
1 - 2	1	40	OL40WS1RB	
	2	40	OL40WS2RB	
	3	40	OL40WS3RB	
	4	40	OL40WS4RB	
1 - 2	1	80	OL80WS1RB	
	2	80	OL80WS2RB	
	3	80	OL80WS3RB	
	4	80	OL80WS4RB	
1 - 2	1	125	OL125WS1RB	
	2	125	OL125WS2RB	
	3	125	OL125WS3RB	
	4	125	OL125WS4RB	
1 - 2	1	160	OL160WS1RB	
	2	160	OL160WS2RB	
	3	160	OL160WS3RB	
	4	160	OL160WS4RB	
1 - 2	1	200	OL200WS1RB	
	2	200	OL200WS2RB	
	3	200	OL200WS3RB	
	4	200	OL200WS4RB	
DIN-rail mounted				
1 - 2	1	25	ONWS1M	
	2	25	ONWS2M	
	3	25	ONWS3M	
	4	25	ONWS4M	

Wiring diagram (O_WS_)





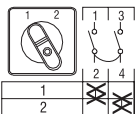
CamLine

Rotary cam switches

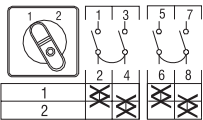
Ordering details

Change-over switches

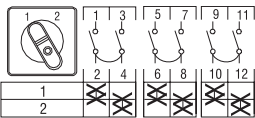
Black handle and front plate with position indication are included. PB: snap-on handle, RB: screw mount.



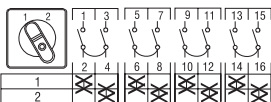
O_WC1_



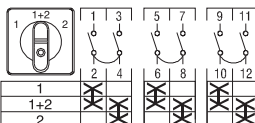
O_WC2_



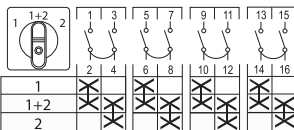
O_WC3_



O_WC4_



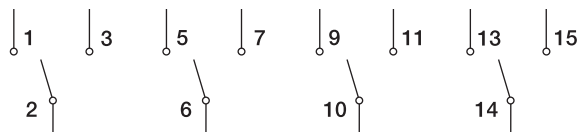
O_UC3_



O_UC4_

Function	Number of poles	Rated current [A]	Catalogue number	List price
Door mounted				
With overlapping contacts				
1-2	1	10	OMWC1PB	
	2	10	OMWC2PB	
	3	10	OMWC3PB	
	4	10	OMWC4PB	
1-2	1	25	ONWC1PB	
	2	25	ONWC2PB	
	3	25	ONWC3PB	
	4	25	ONWC4PB	
1-2	1	40	OL40WC1PB	
	2	40	OL40WC2PB	
	3	40	OL40WC3PB	
	4	40	OL40WC4PB	
1-2	1	80	OL80WC1RB	
	2	80	OL80WC2RB	
	3	80	OL80WC3RB	
	4	80	OL80WC4RB	
1-2	1	125	OL125WC1RB	
	2	125	OL125WC2RB	
	3	125	OL125WC3RB	
	4	125	OL125WC4RB	
1-2	1	160	OL160WC1RB	
	2	160	OL160WC2RB	
	3	160	OL160WC3RB	
	4	160	OL160WC4RB	
1-2	1	200	OL200WC1RB	
	2	200	OL200WC2RB	
	3	200	OL200WC3RB	
	4	200	OL200WC4RB	
With common center position and with overlapping contacts				
1 - (1 + 2) - 2	3	25	ONUC3PB	
	4	25	ONUC4PB	
1 - (1 + 2) - 2	3	40	OL40UC3PB	
	4	40	OL40UC4PB	
Door mounted, screw mounted handle				
1 - (1 + 2) - 2	3	80	OL80UC3RB	
	4	80	OL80UC4RB	
1 - (1 + 2) - 2	3	125	OL125UC3RB	
	4	125	OL125UC4RB	
1 - (1 + 2) - 2	3	160	OL160UC3RB	
	4	160	OL160UC4RB	
1 - (1 + 2) - 2	3	200	OL200UC3RB	
	4	200	OL200UC4RB	

Wiring diagram (O_WC_, O_UC_)

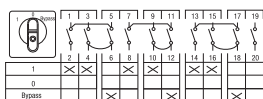




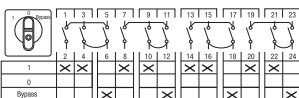
CamLine

Rotary cam switches

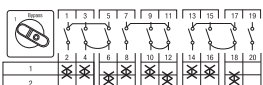
Ordering details



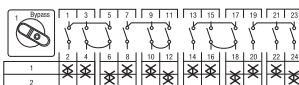
O_WS36_



O_WS48_



O_PW36_



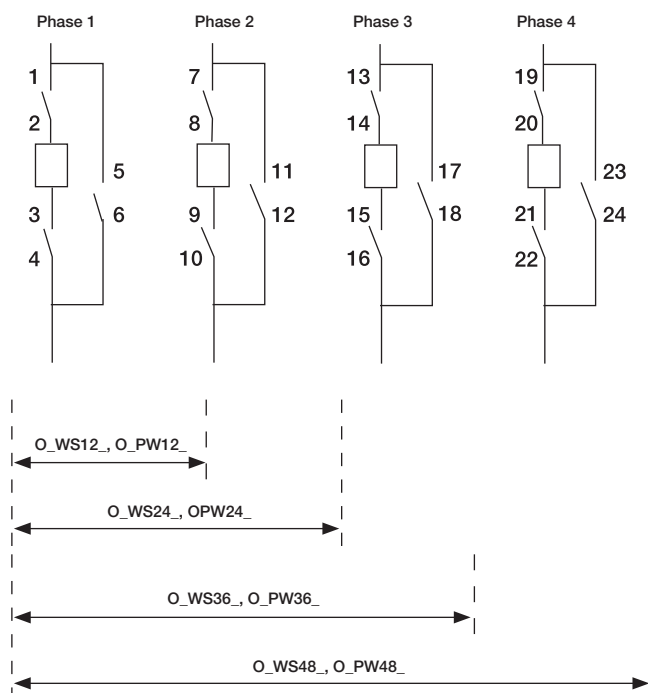
O_PW48_

Bypass switches

Black handle and front plate with position indication are included. PB: snap-on handle, RB:screw mount.

Function	Number of poles	Rated current [A]	Catalogue number	List price
Door mounted				
Without overlapping, 3 and 4- pole network				
1 - 0 - Bypass	3 / 6	25	ONWS36PB	
	4 / 8	25	ONWS48PB	
1 - 0 - Bypass	3 / 6	40	OL40WS36PB	
	4 / 8	40	OL40WS48PB	
1 - 0 - Bypass	3 / 6	80	OL80WS36RB	
	4 / 8	80	OL80WS48RB	
1 - 0 - Bypass	3 / 6	125	OL125WS36RB	
	4 / 8	125	OL125WS48RB	
1 - 0 - Bypass	3 / 6	160	OL160WS36RB	
	4 / 8	160	OL160WS48RB	
1 - 0 - Bypass	3 / 6	200	OL200WS36RB	
	4 / 8	200	OL200WS48RB	
With overlapping, 3 and 4- pole network				
1 - Bypass	3 / 6	25	ONPW36PB	
	4 / 8	25	ONPW48PB	
1 - Bypass	3 / 6	40	OL40PW36PB	
	4 / 8	40	OL40PW48PB	
1 - Bypass	3 / 6	80	OL80PW36RB	
	4 / 8	80	OL80PW48RB	
1 - Bypass	3 / 6	125	OL125PW36RB	
	4 / 8	125	OL125PW48RB	
1 - Bypass	3 / 6	160	OL160PW36RB	
	4 / 8	160	OL160PW48RB	
1 - Bypass	3 / 6	200	OL200PW36RB	
	4 / 8	200	OL200PW48RB	

Wiring diagram, bypass switches





CamLine

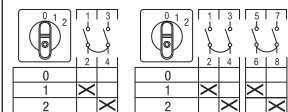
Rotary cam switches

Ordering details

Multistep switches

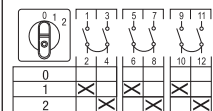
Black handle and front plate with position indication are included. PB: snap-on handle, RB: screw mount.

Step angle 30°

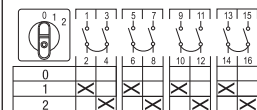


O_SO21_

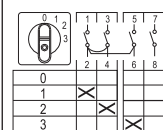
O_SO22_



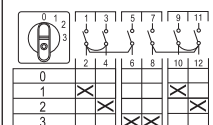
O_SO23_



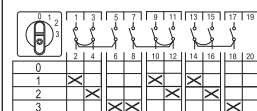
O_SO24_



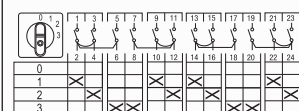
O_SO31_



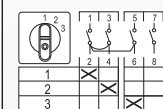
O_SO32_



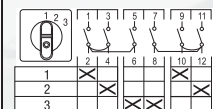
O_SO33_



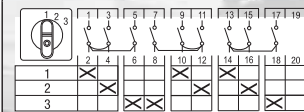
O_SO34_



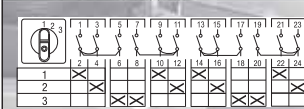
O_ST31_



O_ST32_



O_ST33_



O_ST34_

Function	Number of poles	Rated current [A]	Catalogue number	List price
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2- step, with O-position

Door mounted

0 - 1 - 2	1	10	OMSO21PB	
	2	10	OMSO22PB	
	3	10	OMSO23PB	
	4	10	OMSO24PB	
0 - 1 - 2	1	25	ONSO21PB	
	2	25	ONSO22PB	
	3	25	ONSO23PB	
	4	25	ONSO24PB	
	6	25	ONSO26PB	
0 - 1 - 2	1	40	OL40SO21PB	
	2	40	OL40SO22PB	
	3	40	OL40SO23PB	
	4	40	OL40SO24PB	
	6	40	OL40SO26PB	
0 - 1 - 2	1	80	OL80SO21RB	
	1	125	OL125SO21RB	
	1	160	OL160SO21RB	
	1	200	OL200SO21RB	

DIN-Rail mounted

0 - 1 - 2	1	25	ONSO21M	
	2	25	ONSO22M	

3- step, with O-position

Door mounted

0 - 1 - 2 - 3	1	10	OMSO31PB	
	2	10	OMSO32PB	
	3	10	OMSO33PB	
	4	10	OMSO34PB	
0 - 1 - 2 - 3	1	25	ONSO31PB	
	2	25	ONSO32PB	
	3	25	ONSO33PB	
	4	25	ONSO34PB	
	5	25	ONSO35PB	
0 - 1 - 2 - 3	1	40	OL40SO31PB	
	2	40	OL40SO32PB	
	3	40	OL40SO33PB	
	4	40	OL40SO34PB	
	5	40	OL40SO35PB	
0 - 1 - 2 - 3	1	80	OL80SO31RB	
	1	125	OL125SO31RB	
	1	160	OL160SO31RB	
	1	200	OL200SO31RB	

DIN-rail mounted

0 - 1 - 2 - 3	1	25	ONSO31M	
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3- step, without O-position

Door mounted

1 - 2 - 3	1	10	OMST31PB	
	2	10	OMST32PB	
	3	10	OMST33PB	
	4	10	OMST34PB	
1 - 2 - 3	1	25	ONST31PB	
	2	25	ONST32PB	
	3	25	ONST33PB	
	4	25	ONST34PB	

DIN-rail mounted

1 - 2 - 3	1	25	ONST31M	
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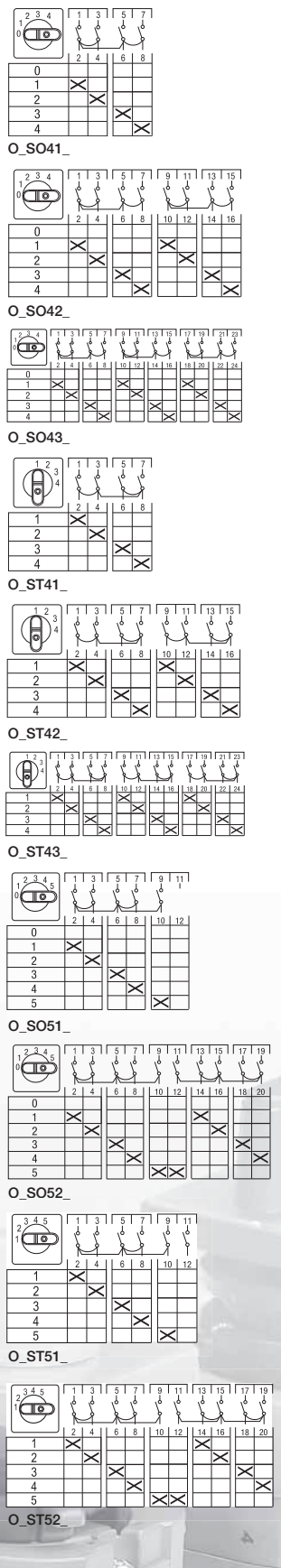
CamLine

Rotary cam switches

Ordering details

Multistep switches

Black handle and front plate with position indication are included. PB: snap-on handle, RB: screw mount.
Step angle 30°



Function	Number of poles	Rated current [A]	Catalogue number	List price
3- step, without O-position				
Door mounted				
1 - 2 - 3	1	40	OL40ST31PB	
	2	40	OL40ST32PB	
	3	40	OL40ST33PB	
	4	40	OL40ST34PB	
	6	40	OL40ST36PB	
	8	40	OL40ST38PB	
4- step, with O-position				
Door mounted				
0 - 1 - 2 - 3 - 4	1	10	OMSO41PB	
	2	10	OMSO42PB	
	3	10	OMSO43PB	
0 - 1 - 2 - 3 - 4	1	25	ONSO41PB	
	2	25	ONSO42PB	
	3	25	ONSO43PB	
0 - 1 - 2 - 3 - 4	1	40	OL40SO41PB	
	2	40	OL40SO42PB	
	3	40	OL40SO43PB	
4- step, without O-position				
Door mounted				
1 - 2 - 3 - 4	1	10	OMST41PB	
	2	10	OMST42PB	
	3	10	OMST43PB	
1 - 2 - 3 - 4	1	25	ONST41PB	
	2	25	ONST42PB	
	3	25	ONST43PB	
1 - 2 - 3 - 4	1	40	OL40ST41PB	
	2	40	OL40ST42PB	
	3	40	OL40ST43PB	
5- step, with O-position				
Door mounted				
0 - 1 - 2 - 3 - 4 - 5	1	10	OMSO51PB	
	2	10	OMSO52PB	
0 - 1 - 2 - 3 - 4 - 5	1	25	ONSO51PB	
	2	25	ONSO52PB	
0 - 1 - 2 - 3 - 4 - 5	1	40	OL40SO51PB	
	2	40	OL40SO52PB	
Din-rail mounted				
0 - 1 - 2 - 3 - 4 - 5	1	25	ONSO51M	
5- step, without O-position				
Door mounted				
1 - 2 - 3 - 4 - 5	1	10	OMST51PB	
	2	10	OMST52PB	
1 - 2 - 3 - 4 - 5	1	25	ONST51PB	
	2	25	ONST52PB	
1 - 2 - 3 - 4 - 5	1	40	OL40ST51PB	
	2	40	OL40ST52PB	



CamLine

Rotary cam switches

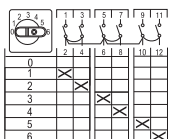
Ordering details

Multistep switches

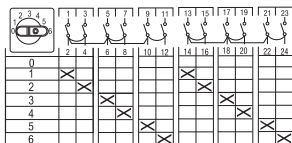
Black handle and front plate with position indication are included. PB: snap-on handle, RB: screw mount.

Step angle 30°

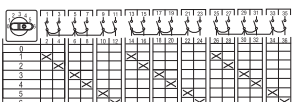
Function	Number of poles	Rated current [A]	Catalogue number	List price
Door mounted				
6-step, with 0-position				
0 - 1 - 2 - 3 - 4 - 5 - 6	1	25	ONSO61PB	
	2	25	ONSO62PB	
	3	25	ONSO63PB	
0 - 1 - 2 - 3 - 4 - 5 - 6	1	40	OL40SO61PB	
	2	40	OL40SO62PB	
	3	40	OL40SO63PB	
6-step, without 0-position				
1 - 2 - 3 - 4 - 5 - 6	1	25	ONST61PB	
	2	25	ONST62PB	
	3	25	ONST63PB	
1 - 2 - 3 - 4 - 5 - 6	1	40	OL40ST61PB	
	2	40	OL40ST62PB	
	3	40	OL40ST63PB	
1 - 2 - 3 - 4 - 5 - 6	1	80	OL80ST61PB	
	1	125	OL125ST61PB	
	1	160	OL160ST61PB	
	1	200	OL200ST61PB	
7-step, with 0-position				
0-1-2-3-4-5-6-7	1	25	ONSO71PB	
	1	40	OL40SO71PB	
7-step, without 0-position				
1-2-3-4-5-6-7	1	25	ONST71PB	
	1	40	OL40ST71PB	
8-step, with 0-position				
0-1-2-3-4-5-6-7-8	1	25	ONSO81PB	
	1	40	OL40SO81PB	
8-step, without 0-position				
1-2-3-4-5-6-7-8	1	25	ONST81PB	
	1	40	OL40ST81PB	



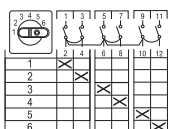
O_SO61_



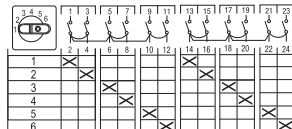
O_SO62_



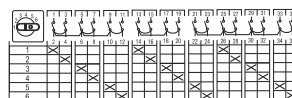
O_SO63_



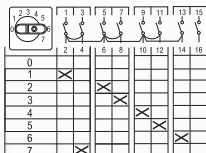
O_ST61_



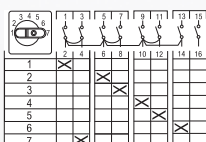
O_ST62_



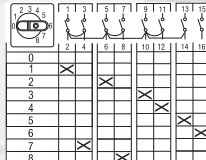
O_ST63_



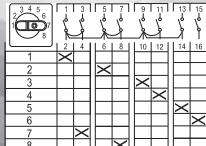
O_SO71_



O_ST71_



O_SO81_



O_ST81_



CamLine

Rotary cam switches

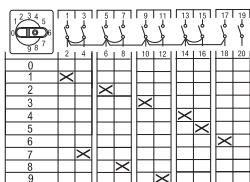
Ordering details

Multistep switches

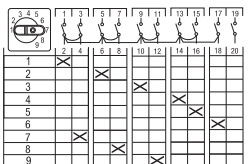
Black handle and front plate with position indication are included. PB: snap-on handle, RB: screw mount.

Step angle 30°

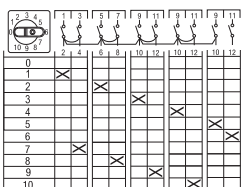
Function	Number of poles	Rated current [A]	Catalogue number	List price
Door mounted				
9-step, with 0-position				
0-1-2-3-4-5-6-7-8-9	1	25	ONSO91PB	
	1	40	OL40SO91PB	
9-step, without 0-position				
1-2-3-4-5-6-7-8-9	1	25	ONST91PB	
	1	40	OL40ST91PB	
10-step, with 0-position				
0-1-2-3-4-5-6-7-8-9-10	1	25	ONSO101PB	
	1	40	OL40SO101PB	
10-step, without 0-position				
1-2-3-4-5-6-7-8-9-10	1	25	ONST101PB	
	1	40	OL40ST101PB	
11-step, with 0-position				
0-1-2-3-4-5-6-7-8-9-10-11	1	25	ONSO111PB	
	1	40	OL40SO111PB	
11-step, without 0-position				
1-2-3-4-5-6-7-8-9-10-11	1	25	ONST111PB	
	1	40	OL40ST111PB	
12-step, without 0-position				
1-2-3-4-5-6-7-8-9-10-11-12	1	25	ONST121PB	
	1	40	OL40ST121PB	



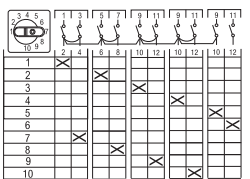
O_SO91_



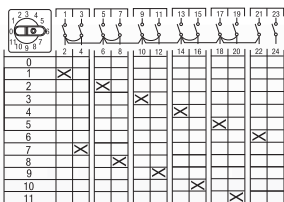
O_ST91_



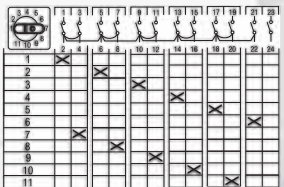
O_SO101_



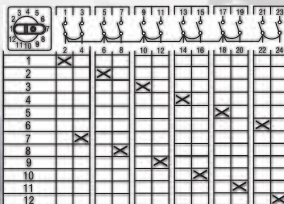
O_ST101_



O_SO111_



O_ST111_



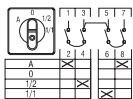
O_ST121_



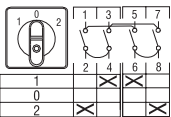
CamLine

Rotary cam switches

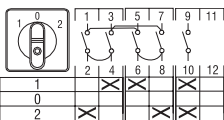
Ordering details



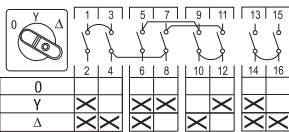
O_ST301_



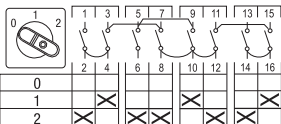
O_W2_



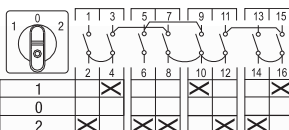
O_W3_



O_SD_, O_SDE_



O_P12_



O_P012_

Motor control switches

Black handle and front plate with position indication are included. PB: snap-on handle, RB: screw mount.

Step angle 60°

Function	Number of poles	Rated current [A]	Motor rating	Catalogue number	List price
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Ventilation switches

Door mounted

A - 0 - 1/2 - 1/1

2

25

600V [HP]

5

ONST301PB

OL40ST301PB

2

40

20

DIN-rail mounted

A - 0 - 1/2 - 1/1

2

25

5

ONST301M

Reversing switches

Door mounted, 3 phase

1 - 0 - 2

2

25

600V [HP]

5

ONW2PB

OL40W2PB

OL80W2RB

2

40

20

2

80

30

1 - 0 - 2

3

25

5

ONW3PB

OL40W3PB

3

40

20

Door mounted, 1 phase

1 - 0 - 2

3

25

240V [HP]

1

ON6PBS5487

OL406PBS12326

3

40

3

Star-delta switches

Door mounted

0 - Y - Δ

3

25

600V [HP]

5

ONSDPB

OL40SDPB

OL80SDRB

OL125SDRB

OL160SDRB

OL200SDRB

3

40

20

3

80

30

3

125

40

3

160

50

3

200

120

Pole-change switches (Dahlander)

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

Door mounted

0 - 1 - 2

3

25

600V [HP]

5

ONP12PB

OL40P12PB

OL80P012RB

OL125P012RB

OL160P012RB

OL200P012RB

3

40

20

1 - 0 - 2

3

80

30

3

125

40

3

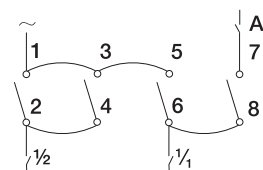
160

50

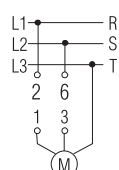
3

200

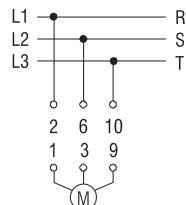
120



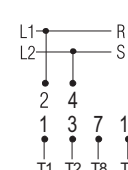
O_ST301



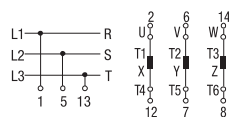
O_W2_



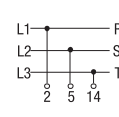
O_W3_



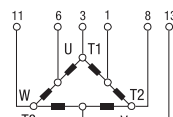
ON6PBS5487



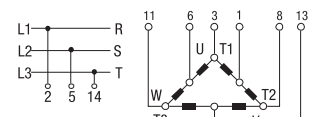
O_SD_, O_SDE_



O_P12_



O_P012_



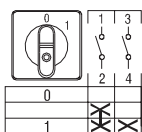
O_P012_



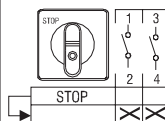
CamLine

Rotary cam switches

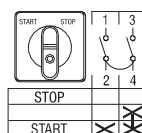
Ordering details



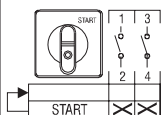
O_SE158_



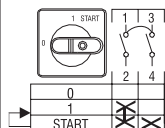
O_SA2_



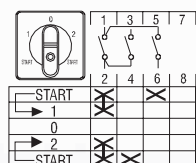
O_SEA1_



O_SE2_



O_SEA10_



O_UR139_

Motor control switches

Black handle and front plate with position indication are included. PB: snap-on handle, RB: screw mount.

Function	Number of poles	Rated current [A]	Catalogue number	List price
----------	-----------------	-------------------	------------------	------------

Pumpstart switches

Step angle 60°

Door mounted

0 - 1	1	10	OMSE158PB
	1	25	ONSE158PB

DIN-rail mounted

0 - 1	1	25	ONSE158M
-------	---	----	----------

Stop switches

Step angle 30°, with spring return, contacts N.C.

Door mounted

0 _R -Stop	2	10	OMSA2PB
	2	25	ONSA2PB

Start switches

Step angle 30°, with spring return.

Door mounted

Stop-Start	1	25	ONSEA1PB
0 _R -Start	1	10	OMSE2PB
	1	25	ONSE2PB

Step angle 90° - 30°

0-1 _R -Start	1	10	OMSEA10PB
	1	25	ONSEA10PB

Start-1 _R -0-2 _R -Start	1	25	ONUR139PB
---	---	----	-----------

Start-1 _R -0-2 _R -Start	1	40	OL40UR139PB
---	---	----	-------------

Step angle 90° - 30°, with spring return

DIN-rail mounted

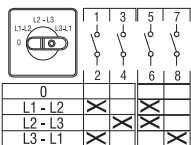
0-1 _R -Start	1	25	ONSEA10M
Start-1 _R -0-2 _R -Start	1	25	ONUR139M



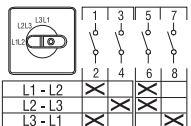
CamLine

Rotary cam switches

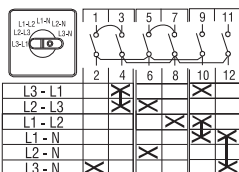
Ordering details



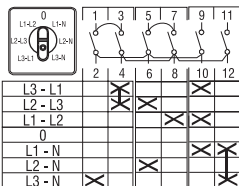
O_V3_



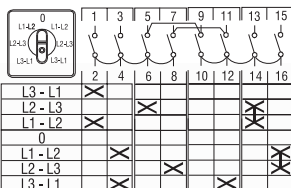
O_VN3_



O_VN30_



O_V30_

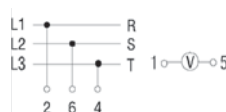


O_V32_

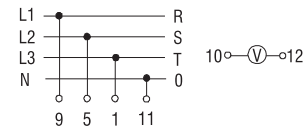
Voltmeter switches

Black handle and front plate with position indication are included.

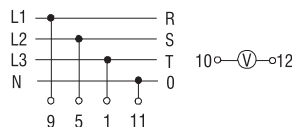
Function	Number of poles	Rated current [A]	Catalogue number	List price
3 Positions, 3 phase -3 wire, without 0-position, step angle 45°				
Door mounted				
L1-L2, L2-L3, L3-L1	2	10	OMVN3PB	
	2	25	ONVN3PB	
	2	25	OL40VN3PB	
DIN-rail mounted				
L1-L2, L2-L3, L3-L1	2	25	ONVN3M	
4 Positions, 3 phase -3 wire, with 0-position, step angle 45°				
Door mounted				
0, L1-L2, L2-L3, L3-L1	2	10	OMV3PB	
	2	25	ONV3PB	
	2	40	OL40V3PB	
DIN-rail mounted				
0, L1-L2, L2-L3, L3-L1	2	25	ONV3M	
7 Positions, 3 phase to phase 3 phase to neutral, without 0-position, step angle 30°				
Door mounted				
L1-L3, L2-L3, L1-L2, L1-N, L2-N, L3-N	3	10	OMVN30PB	
	3	25	ONVN30PB	
	3	40	OL40VN30PB	
DIN-rail mounted				
L1-L3, L2-L3, L1-L2, L1-N, L2-N, L3-N	3	25	ONVN30M	
7 Positions, 3 phase to phase 3 phase to neutral, with 0-position, step angle 45°				
Door mounted				
L1-L3, L2-L3, L1-L2, 0, L1-N, L2-N, L3-N	3	10	OMV30PB	
	3	25	ONV30PB	
	3	40	OL40V30PB	
DIN-rail mounted				
L1-L3, L2-L3, L1-L2, 0, L1-N, L2-N, L3-N	3	25	ONV30M	
7 Positions, 3 phase to phase voltages for 2 circuits, with 0 position, step angle 45°				
Door mounted				
L1-L3, L2-L3, L1-L2, 0, L1-L3, L2-L3, L1-L2	4	10	OMV32PB	
	4	25	ONV32PB	
	4	40	OL40V32PB	



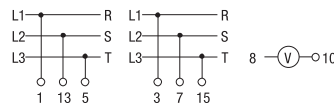
O_VN3_



O_VN30_



O_V30_



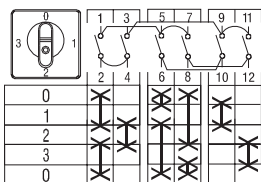
O_V32_



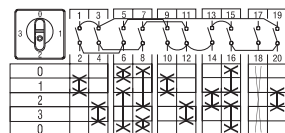
CamLine

Rotary cam switches

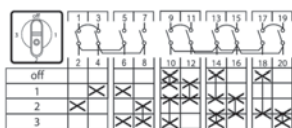
Ordering details



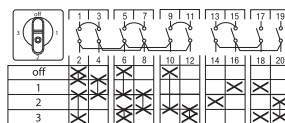
O_AU31_



O_AU32_



O_VA21_



O_AV12_

Ammeter switches

Black handle and front plate with position indication are included.

Function	Rated current [A]	Catalogue number	List price
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For 3 current transformer circuits, with 0-position, step angle 90°

Door mounted

Single pole

0 - 1 - 2 - 3

10

25

40

OMAU31PB

ONAU31PB

OL40AU31PB

2 pole or direct measurement in 3 phases

0 - 1 - 2 - 3

25

40

ONAU32PB

OL40AU32PB

DIN-rail mounted

Single pole

0 - 1 - 2 - 3

25

ONAU31M

Volt-ammeter switches

Black handle and frontplate with position indication are included.

Function	Rated current [A]	Catalogue number	List price
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Measuring between phases and 3 current transformers with common pole, step angle 90°

Door mounted

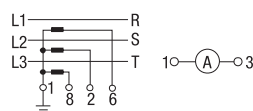
OFF - 1 - 2 - 3

25

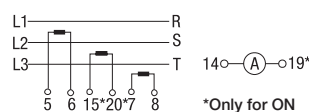
25

ONVA21PB

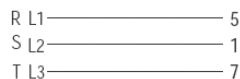
ONAV12PB



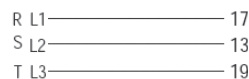
O_AU31_



O_AU32_



O_AV21



O_VA12



CamLine

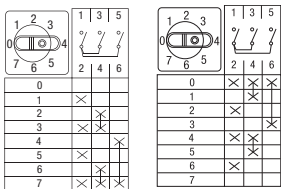
Rotary cam switches

Ordering details

Binary code switches

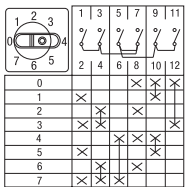
Black handle and front plate with position indication are included.

Function	Number of poles	Rated current [A]	Catalogue number	List price
With 0-position, step angle 30°				
Door mounted				
0 - 1 - 2 - 3	1	25	ONBC030PB	
0 - 1 - 2 - 3 - 4 - 5 - 6 - 7	1	25	ONBC070PB	
	1	25	ONBC071PB	
	2	25	ONBC072PB	
0 - 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9	1	25	ONBC090PB	
	1	25	ONBC091PB	
	2	25	ONBC092PB	
0 - 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10 - 11	1	25	ONBC0110PB	
	2	25	ONBC0112PB	

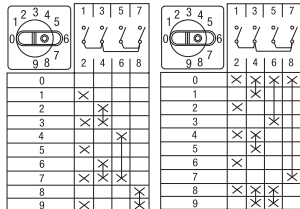


O_BC070_

O_BC071_

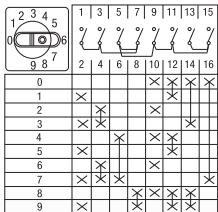


O_BC072_

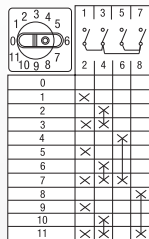


O_BC090_

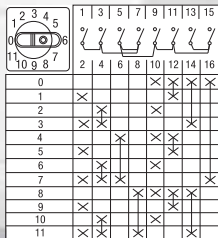
O_BC091_



O_BC092_



O_BC110_



O_BC112_



CamLine

Accessories

Ordering details



Handles

Colour	For cam switches	Catalogue number	List price
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Snap on handle with front plate without engraving

(The black handle is standard delivery in types OM, ON, and OL40)

Size 30x30, 6mm shaft

Black	OM	OMPBB1
Gray	OM	OMPG1
Red	OM	OMPR1
Red-yellow	OM	OMPRY1

Size 48x48, 6mm shaft

Black	ON_PB, OL40	ONPB1
Gray	ON_PB, OL40	ONPG1
Red	ON_PB, OL40	ONPR1
Red-yellow	ON_PB, OL40	ONPRY1

Snap on handle with large front plate without engraving

Size 64x64, 6mm shaft

Black	ON_PB, OL40	ONPLB1
Gray	ON_PB, OL40	ONPLG1
Red	ON_PB, OL40	ONPLR1
Red-yellow	ON_PB, OL40	ONPLRY1

Screw mounting handle with front plate without engraving

(The black handle is standard delivery in types OL 80...200)

Size 90x90, 8mm shaft

Black	OL80, OL125, OL160	OLR2B
Gray	OL80, OL125, OL160	OLR2G
Red	OL80, OL125, OL160	OLR2R

Size 130x130, 10mm shaft

Black	OL200	OLR3B
Gray	OL200	OLR3G
Red	OL200	OLR3R

Snap on handle with round escutcheon plate

Black	OM	OMXB1
Black, nose-type	OM	OMXNB1
Black	ON_PB, OL40	ONXB1

Screw mounting pistol type handle

Black	OL80, OL125, OL160	OLZ2RB
Red	OL80, OL125, OL160	OLZ2RR
Black	OL200	OLZ3RB
Red	OL200	OLZ3RR

Screw mounting double lever handle, suitable for 10mm shaft, replaces the standard handle

Black	OL200	OLZ3DB
Red	OL200	OLZ3DR

Padlockable handle knob, without front plate ¹⁾

The standard handle knob is replaced by the padlockable handle knob. For max 2 padlocks of 6 mm hasp diameter. Standard padlocking in the OFF-position at 9 o'clock. Padlocking in the ON-position (12 o'clock) by turning the control piece 180 degrees. Padlocking in both OFF-and ON-positions by removing a precut in the yellow control piece.

Black	ON_PB, ON_M, OL40	ONZ20B
Red-yellow	ON_PB, ON_M, OL40	ONZ20RY

Round padlockable handle for screw mounting on door

Knob pistol type handles with front plate without engraving, size 64x64, for max 3 padlocks of 6 mm hasp diameter, length 32 mm

Snap-on mounting handles (one-hole mounting)

Black	ON_PL_, OL40_PL_	OLZ20PB
Red-yellow	ON_PL_, OL40_PL_	OLZ20PRY

Screw mounting handles (four-hole mounting)

Black	ON_RL_, OL40...80	OLZ20RB
Red-yellow	ON_RL_, OL40...80	OLZ20RRY

1) More cam switches with padlockable handles can be configured on Internet by the Canweb configurator tool.



CamLine

Accessories

Ordering details

Optional handles

The type and ordering number are for one piece.

Colour	For cam switches	Catalogue number	List price
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Round padlockable handle for screw mounting on door

For max 3 padlocks with max 8 mm hasp diameter. Locking positions of type ONZ33_ 9 o'clock (O,OFF) - 12 o'clock (1, ON) or switch rotated 12 o'clock (O, OFF) - 3 o'clock (1, ON). Other square handle padlock positions can be specified by camweb tool.

Size 64x64, shaft size 6 mm

Black	ON_PB, OL40	ONZ331PB
Red-yellow	ON_PB, OL40	ONZ331PRY

Size 90x90, shaft size 8 mm

Black	OL80, OL125, OL160	OLZ332RB
Red-yellow	OL80, OL125, OL160	OLZ332RRY

Low extended handle knob

Replaces the standard knob in handles ONP_ and ONPL_.

Black	ON_, OL40_	ONSB1
Grey	ON_, OL40_	ONSG1

Knob-pistol type handle, screw mounting

Suitable for 6 mm shaft, replaces the standard handle, length 32 mm.

Black	ON_, OL40_, OL80	OLZ20RB
Red	ON_, OL40_, OL80	OLZ20RRY

Pistol type handle, screw mounting

Suitable for 8 mm shaft, replaces the standard handle, length 70 mm.

Black	OL125, OL160	OLZ8RB
Red	OL125, OL160	OLZ8RR

Suitable for 10 mm shaft, replaces the standard handle, length 130 mm.

Black	OL200	OLZ9RB
Red	OL200	OLZ9RB



ONZ331PB



OLZ332RRY



ONSB1



OLZ20R_



OLZ8RB



OLZ9RB

More cam switches with padlockable handles can be configured on Internet by the Camweb configurator tool.



CamLine

Accessories

Ordering details



OMF101

ONF101



OLF64

OLF90



ONFM101



OMFB72

ONFB72



OLFB64



OMX99

ONX99

Front plates

Colour	For cam switches/handle size	Catalogue number	List price
Front plates, without engraving			
Size 30x30			
Silver	OM/OMP_1	OMF101	
Yellow	OM/OMPR41	OMFY101	
Size 48x48			
Silver	ON_PB, OL 40/ONP_1	ONF101	
Clear	ON_PB, OL 40/ONP_1	ONFC101	
Yellow	ON_PB, OL 40/ONPRY1	ONFY101	
Size 64x64			
Silver	ONPL_1	OLF64	
Clear	ONPL_1	OLFC64	
Yellow	ONPLRY1	OLFY64	
Black	ONPL_1	OLFB64	
Size 90x90			
Silver	OL80, OL125, OL160/OLR2_	OLF90	
Clear	OL80, OL125, OL160/OLR2_	OLFC90	
Yellow	OL80, OL125, OL160/OLR2_	OLFY90	
Size 130x130			
Silver	OL200/OLR3_	OLF130	
Clear	OL200/OLR3_	OLFC130	
Yellow	OL200/OLR3_	OLFY130	
Size H=45mm, W=54mm			
Grey	ON_M	ONFM101	

Additional lettering plates

Without engraving, black engraving from front side available.

Size 30x30			
Black frame	OM	OMFB72	
Grey frame	OM	OMFG72	
Size 48x48			
Black frame	ON_PB, OL 40	ONFB72	
Grey frame	ON_PB, OL 40	ONFG72	
Size 64x64			
Black frame	ON_PB, OL 40	OLFB64	
Grey frame	ON_PB, OL 40	OLFG64	

Front ring

Black	OM	OMX99	
Black	ON_PB, OL40	ONX99	

Shaft sealing

To prevent dust and moisture from penetrating along the switch shaft. Protection to NEMA 4X from the front. Door drilling 16...17 mm.

Description	For cam switches/handle size	Catalogue number	List price
Shaft Seal	ON, OL40 OL 80...160	ONZ11 OLZ12	

Door clutch

This is for coupling base-mounted unit in an enclosure with it's control handle mounted on a pivoting door.

Description	For cam switches	Catalogue number	List price
Door clutch	ON, OL40 OL 80...160 OL200	ONZ45P OLZ652 OLZ653	



CamLine

Accessories

Ordering details



OMK95 ONK95



ONZ10L_



OMNX80



ONX30



ONZ74_

Other accessories

Spare key

Number of keys included	For cam switches	Catalogue number	List price
2 pcs	OM	OMK95	
3 pcs	ON, OL40	ONK95	

Protective rear cover

Transparent, IP 42 protection

Number of chambers	Number of contacts	For cam switches	Catalogue number	List price
1-2	1-4	ON	ONZ10L2	
3-4	5-8	ON	ONZ10L4	
5-6	9-12	ON	ONZ10L6	
2	1-4	OL40	OLZ401L2	
4	5-8	OL40	OLZ401L4	
6	9-12	OL40	OLZ401L6	
2	1-4	OL80...160	OLZ1601L2	
4	5-8	OL80...160	OLZ1601L4	
6	9-12	OL80...160	OLZ1601L6	

Nut spanner tool

for mounting the handle to the door

Colour	For cam switches	Catalogue number	List price
Black	OM, ON	OMNX80	

Adaptor ring

for fixing the snap-on handles in the 30 mm door drilling.

Black	ON	ONX30	
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Base mounting kit

Includes base for DIN-rail mounting, shaft adaptor and 200 mm shaft for cutting up to 250 mm panel depth.

Depth [mm]	For cam switches	Catalogue number	List price
250	ON	ONZ74	

DIN-Rail mounting plate

Depth [mm]	For cam switches	Catalogue number	List price
Includes base for DIN-rail mounting	ON	ONZ37	

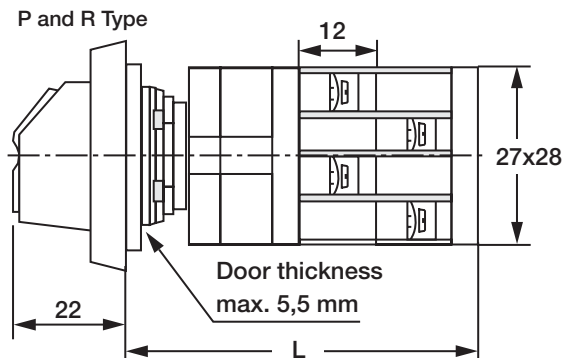
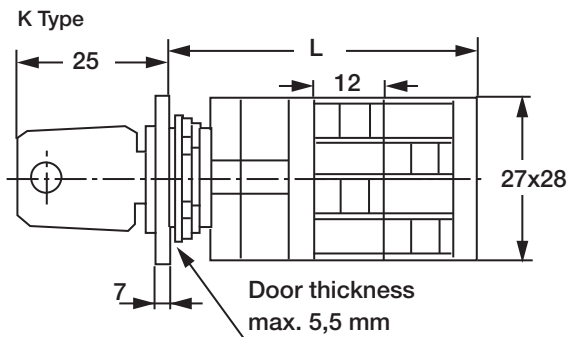
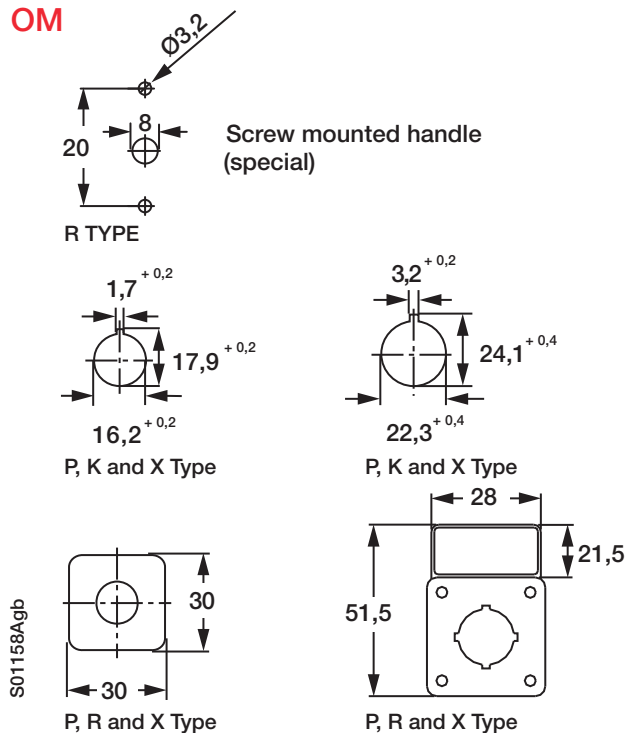


CamLine

Rotary cam switches

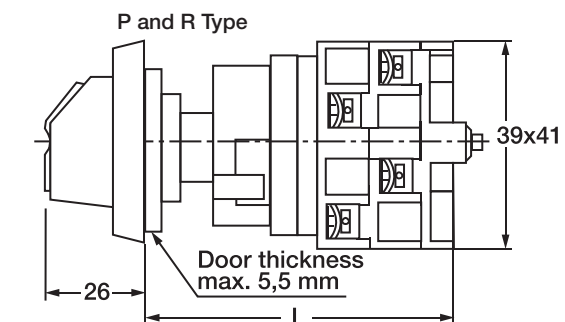
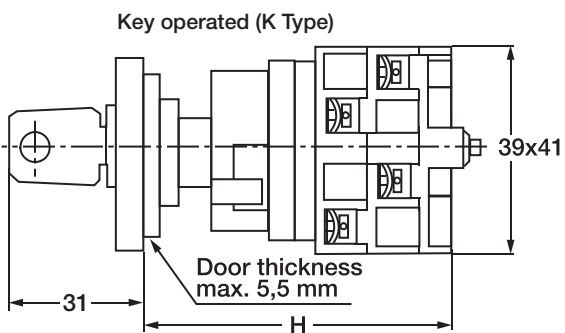
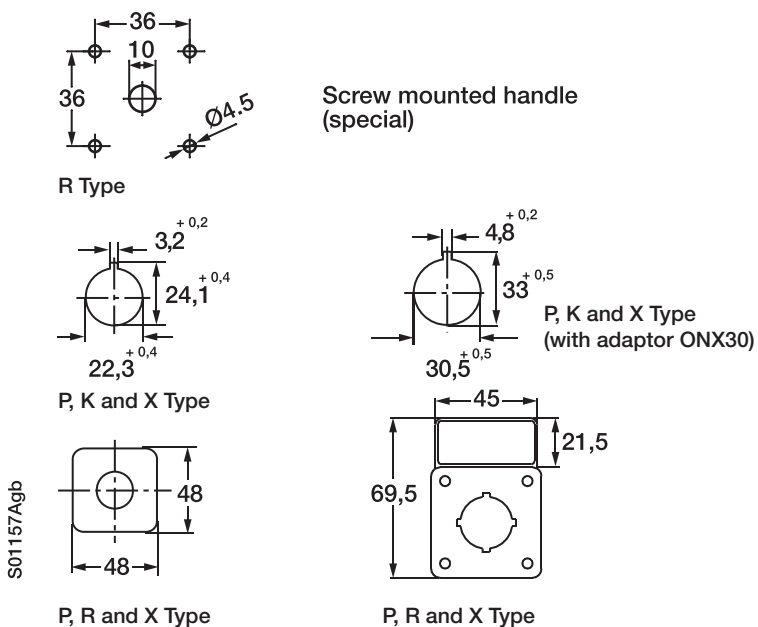
Dimension drawings, OM and ON

OM



		Number of contact chambers							
		1	2	3	4	5	6	7	8
Snap-on mounting (P type)	L	45	57	69	81	93	105	117	129
Screw mounting (R type)	L	33	45	57	69	81	93	105	117

ON



		Number of contact chambers									
		1	2	3	4	5	6	7	8	9	10
Snap-on mounting (P type)	L	54	66	78	90	102	114	126	138	150	162
Screw mounting (R type)	L	34	46	58	70	82	94	106	118	130	142
Key operated (K type)	H	62	74	86	98	110	122	134	146	159	171

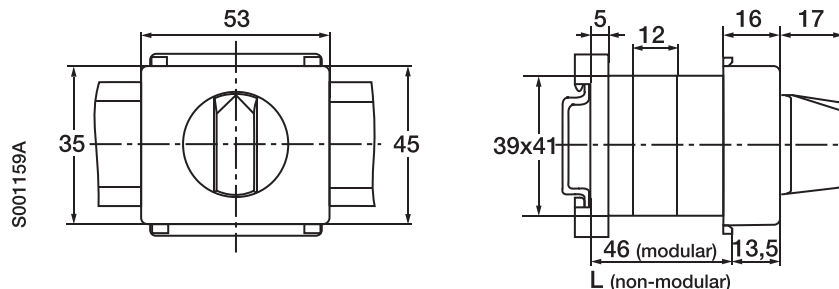


CamLine

Rotary cam switches

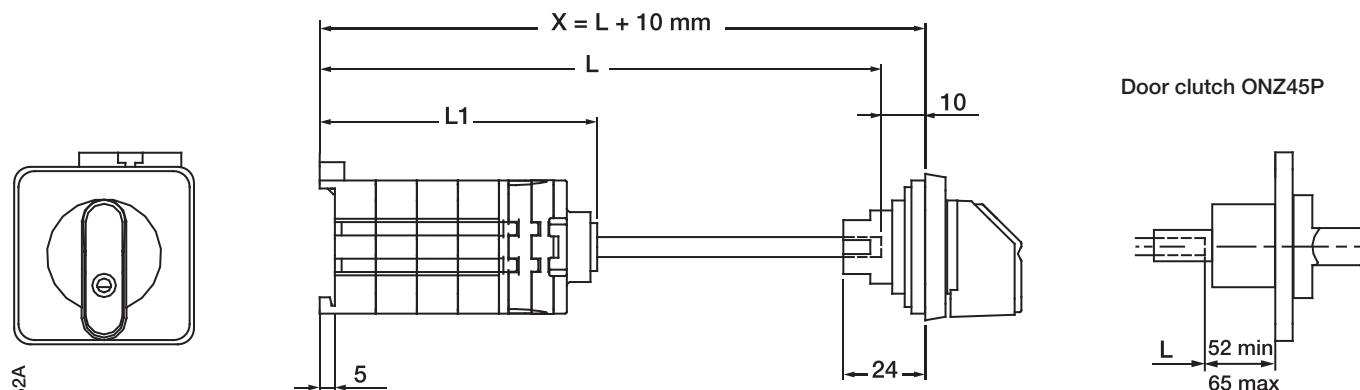
Dimension drawings, ON, OL and ONZ 74

ON_M



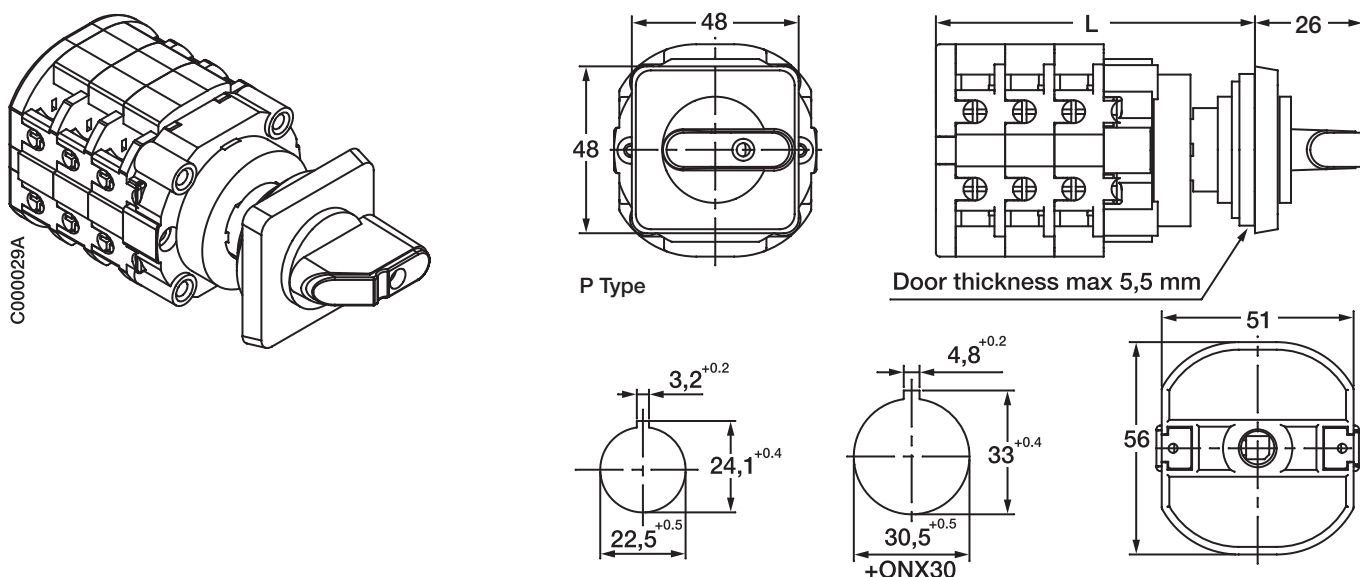
Non-modular: number of contact chambers							
	2	3	4	5	6	7	8
L	58	70	82	94	106	118	130

ON with base mounting kit ONZ 74 - to be specified by Camweb configurator



Number of contact chambers/example: Shaft length 200 mm										
	1	2	3	4	5	6	7	8	9	10
L ₁	55	67	79	91	103	115	127	139	151	163
L	345	357	369	381	393	405	417	429	441	453

OL40, door mounted with snap-on mounting handle type P, PL and round front ring type X



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

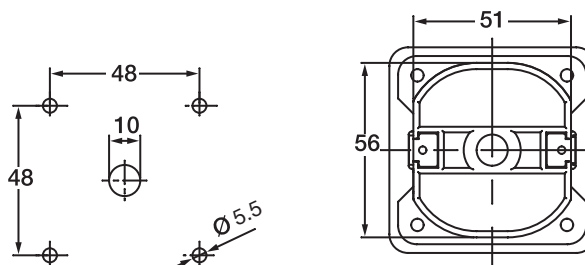
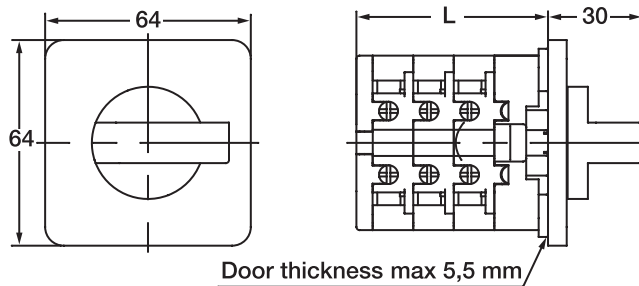
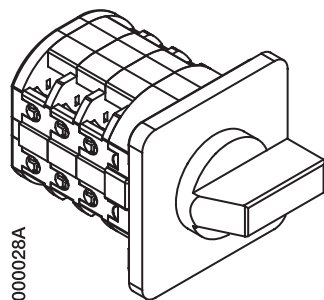


CamLine

Rotary cam switches

Dimension drawings, OL40

OL40, door mounted with screw mounting handle, front plate size 64x64 RL Type



	Number of contact chambers									
	1	2	3	4	5	6	7	8	9	10
L	39	52	65	78	91	104	117	130	143	156

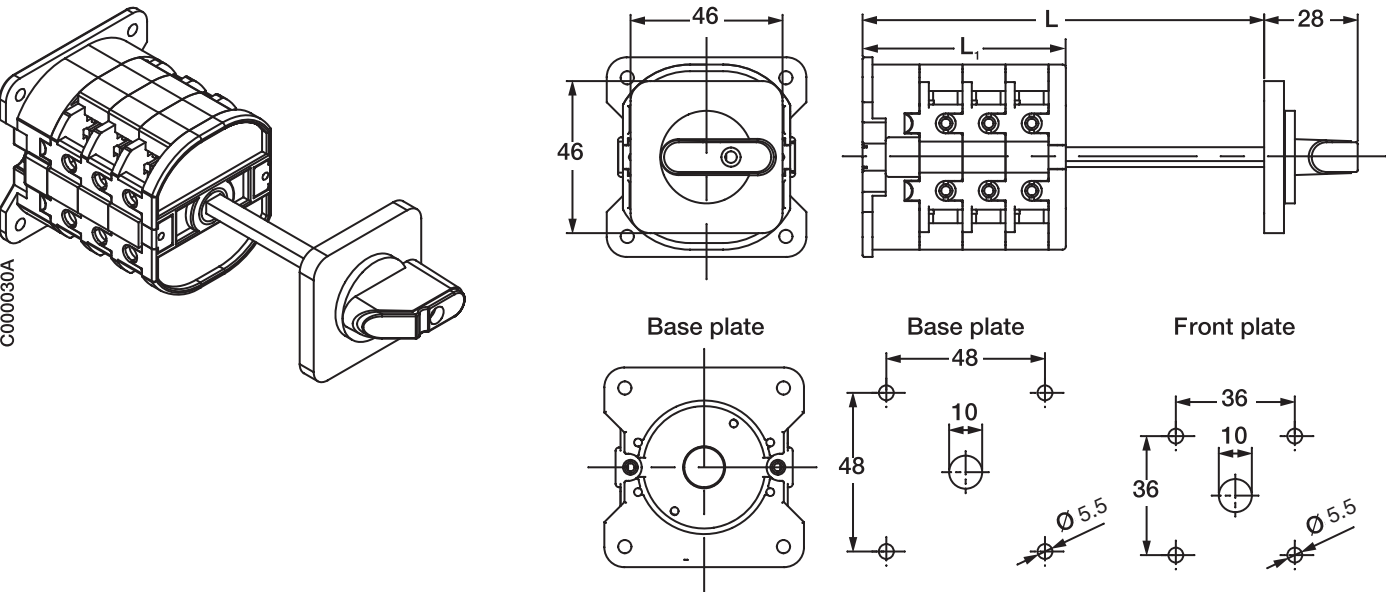


CamLine

Rotary cam switches

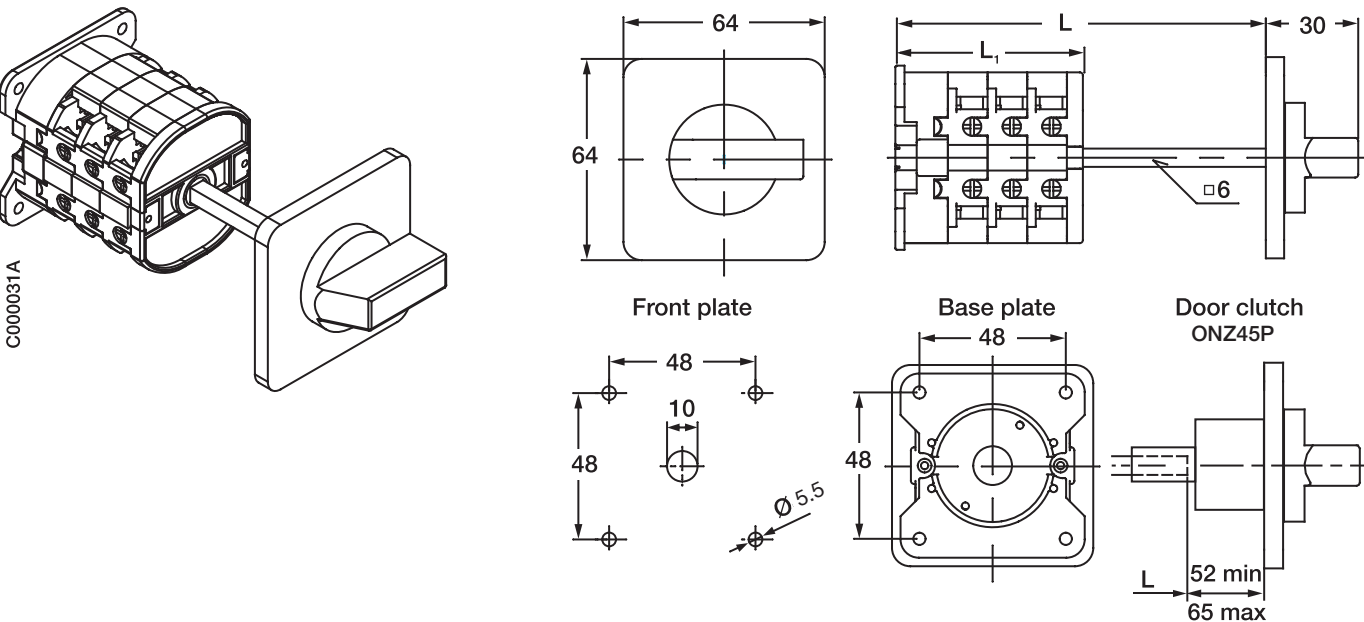
Dimension drawings, OL40

OL40, base mounted, front plate size 48x48 - to be specified by Camweb configurator



	Number of contact chambers/example: shaft length 200 mm									
	1	2	3	4	5	6	7	8	9	10
L ₁	37	49	62	75	88	101	114	127	140	153
L	237	249	262	275	288	301	314	327	340	353

OL40, base mounted, front plate size 64x64 - to be specified by Camweb configurator



	Number of contact chambers/example: shaft length 200 mm									
	1	2	3	4	5	6	7	8	9	10
L ₁	37	49	62	75	88	101	114	127	140	153
L	237	249	262	275	288	301	314	327	340	353

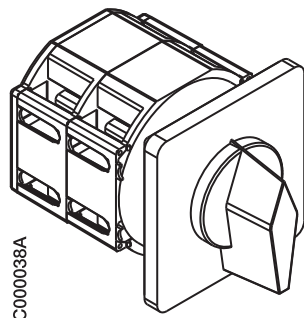


CamLine

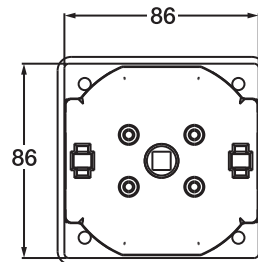
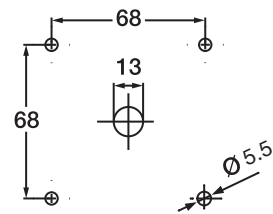
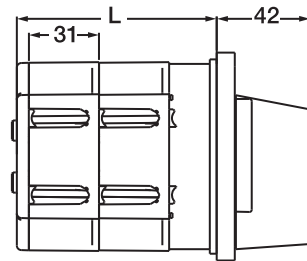
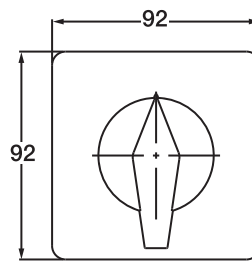
Rotary cam switches

Dimension drawings, OL80, OL125 and OL160

OL80, OL125, OL160 door mounted

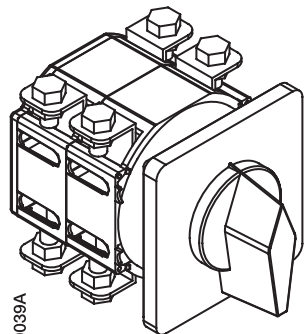


C000038A

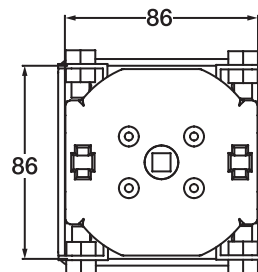
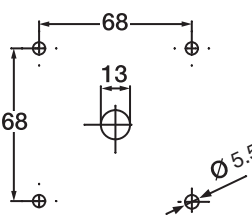
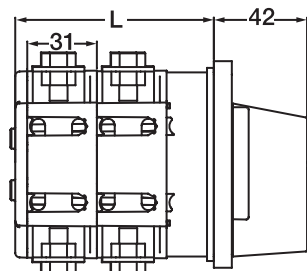
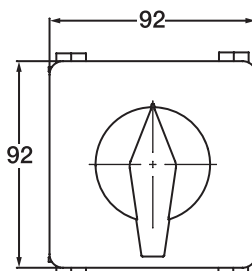


	Number of contact chambers									
	1	2	3	4	5	6	7	8	9	10
L	66	97	128	159	190	221	252	283	314	345

OL80, OL125, OL160 door mounted, lug terminals - to be specified by Camweb configurator



C000039A



	Number of contact chambers									
	1	2	3	4	5	6	7	8	9	10
L	66	97	128	159	190	221	252	283	314	345

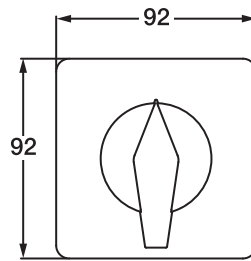
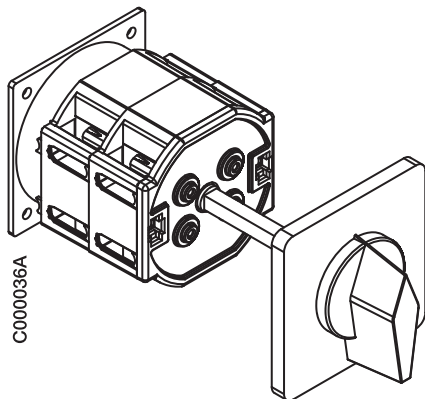


CamLine

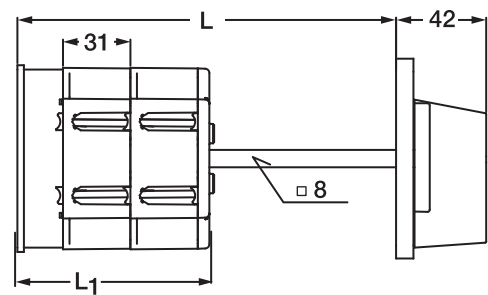
Rotary cam switches

Dimension drawings, OL80, OL125 and OL160

OL80, OL125, OL160 base mounted - to be specified by Camweb configurator

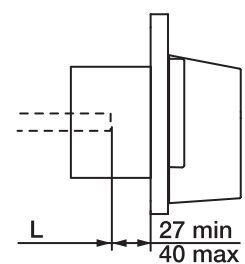
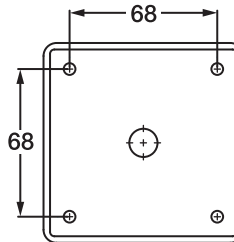
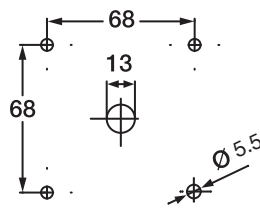


Front plate



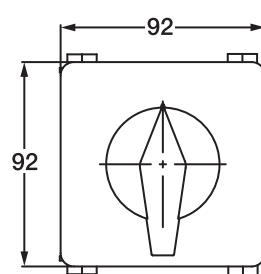
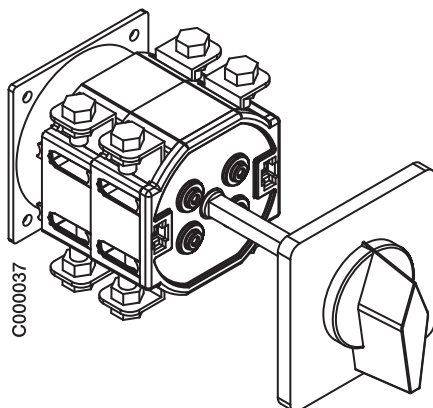
Base plate

Door clutch ONZ45P

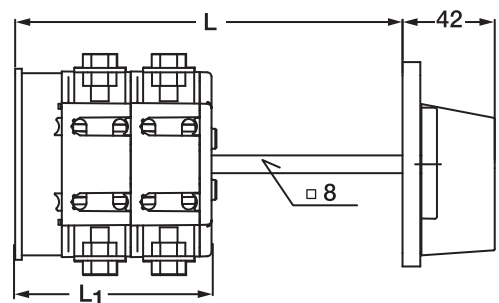


	Number of contact chambers/Shaft length 100 mm									
	1	2	3	4	5	6	7	8	9	10
L ₁	65	96	127	158	189	220	251	282	313	344
L	165	196	227	258	289	320	351	382	413	444

OL80, OL125, OL160 base mounted, lug terminals - to be specified by Camweb configurator

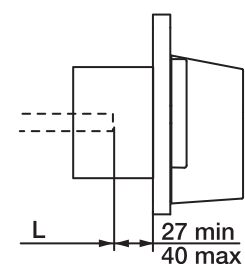
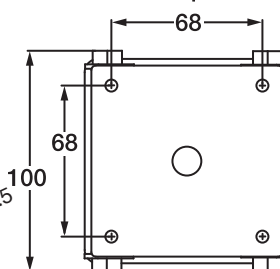
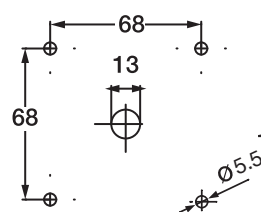


Front plate



Base plate

Door clutch ONZ45P

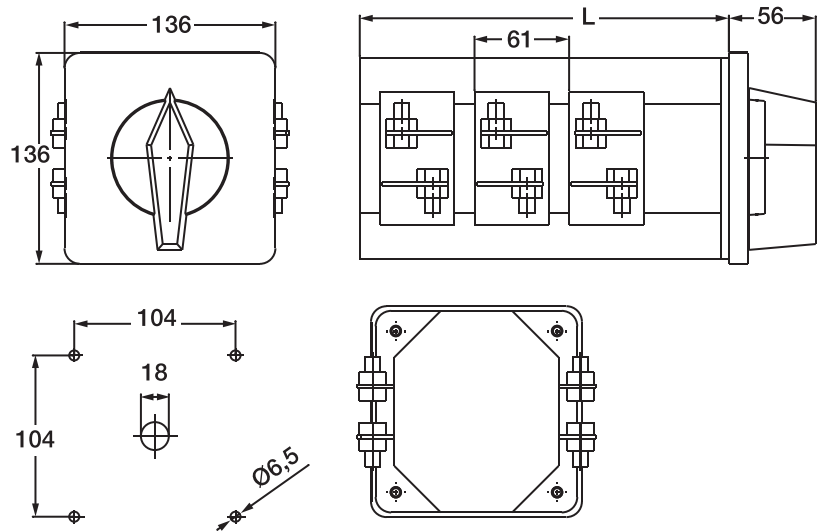
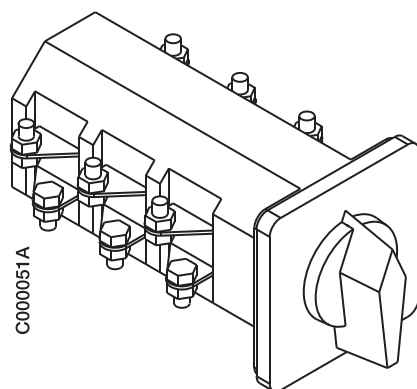


	Number of contact chambers/Shaft length 100 mm									
	1	2	3	4	5	6	7	8	9	10
L ₁	65	96	127	158	189	220	251	282	313	344
L	165	196	227	258	289	320	351	382	413	444



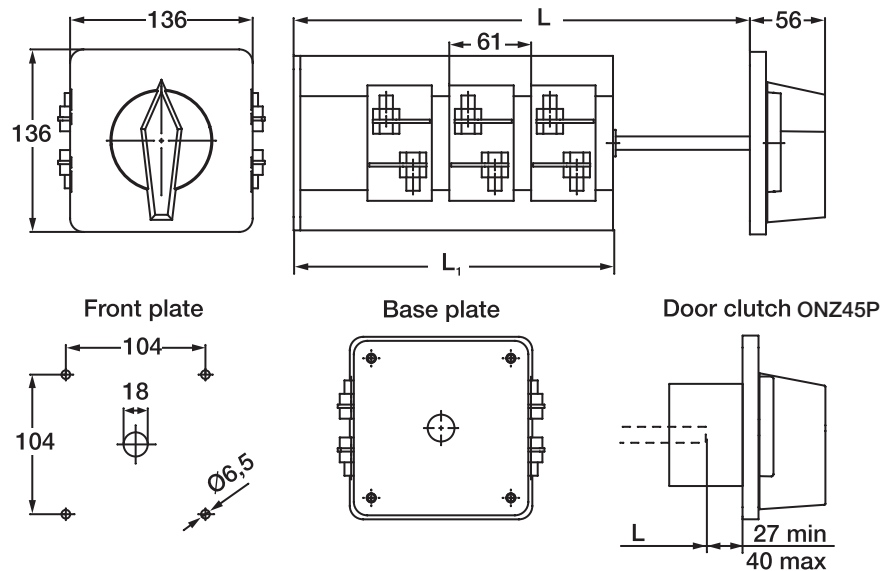
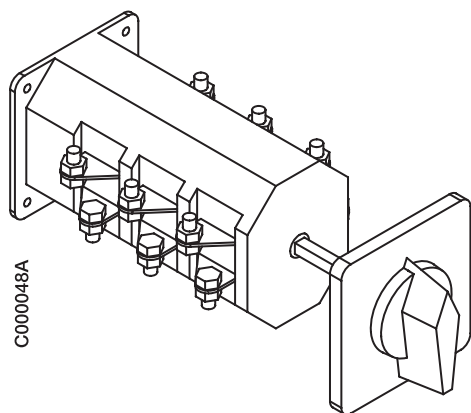
CamLine Rotary cam switches Dimension drawings, OL200

OL200 door mounted



	Number of contact chambers									
	1	2	3	4	5	6	7	8	9	10
L	120	181	242	303	364	425	486	547	608	669

OL200 base mounted - to be specified by Camweb configurator



	Number of contact chambers/example: Shaft length 100 mm									
	1	2	3	4	5	6	7	8	9	10
L ₁	120	181	242	303	364	425	486	547	608	669
L	220	281	342	403	464	525	586	647	708	769

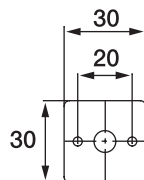


CamLine

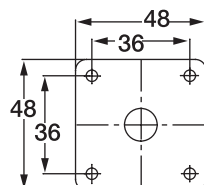
Rotary cam switches

Dimension drawings, front plates

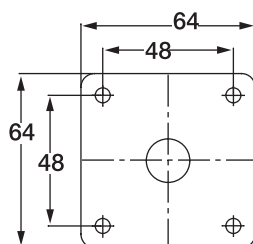
Front plates, sizes and door drillings



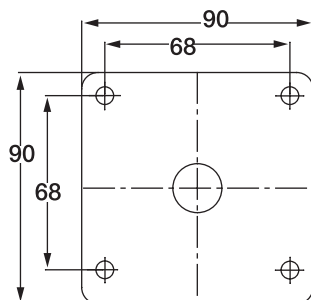
Size 30x30
OM



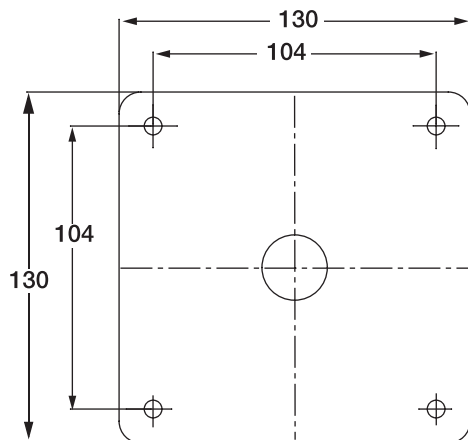
Size 48x48
ON



Size 64x64
ON
OL 40



Size 90x90
OL 80...160



Size 130x130
OL 200

C000033

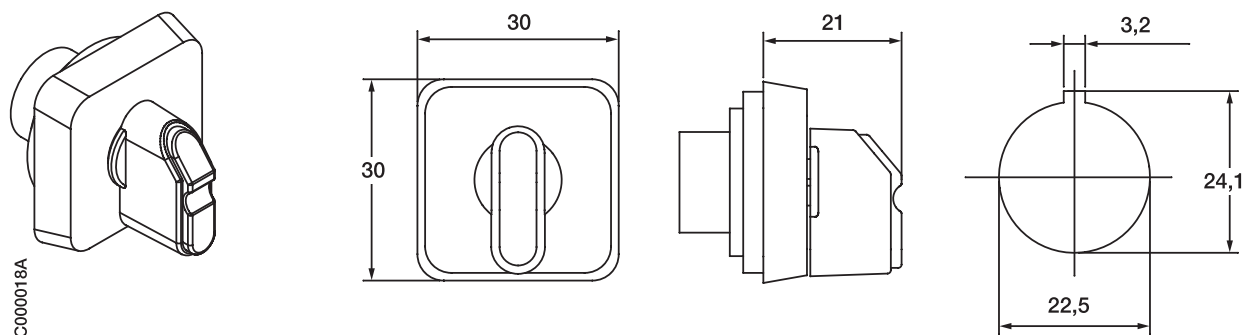


CamLine

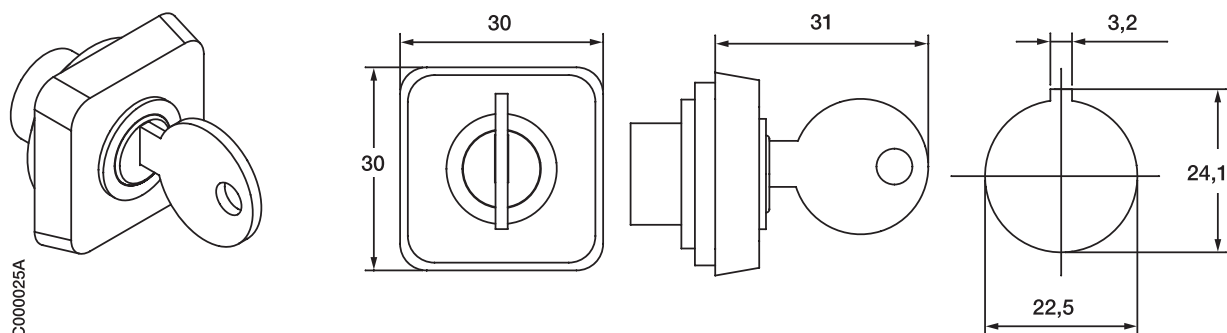
Rotary cam switches

Dimension drawings, handles

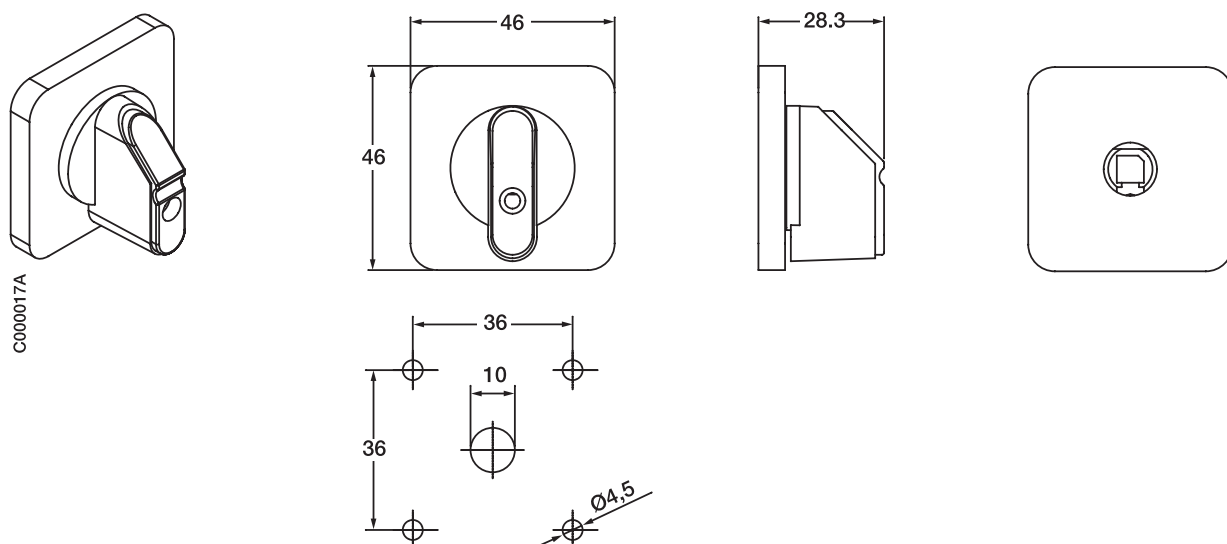
Snap-on handle for OM, type OMP_



Snap-on key operated handle for OM - to be specified by Camweb configurator



Screw mounted handle ON and OL40 - to be specified by Camweb configurator



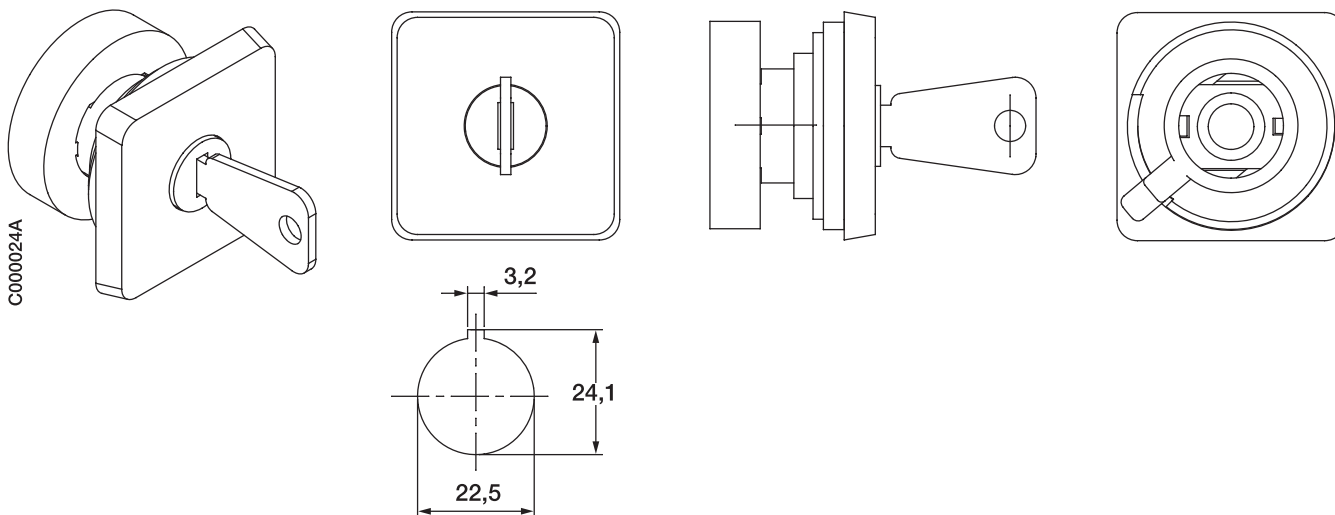


CamLine

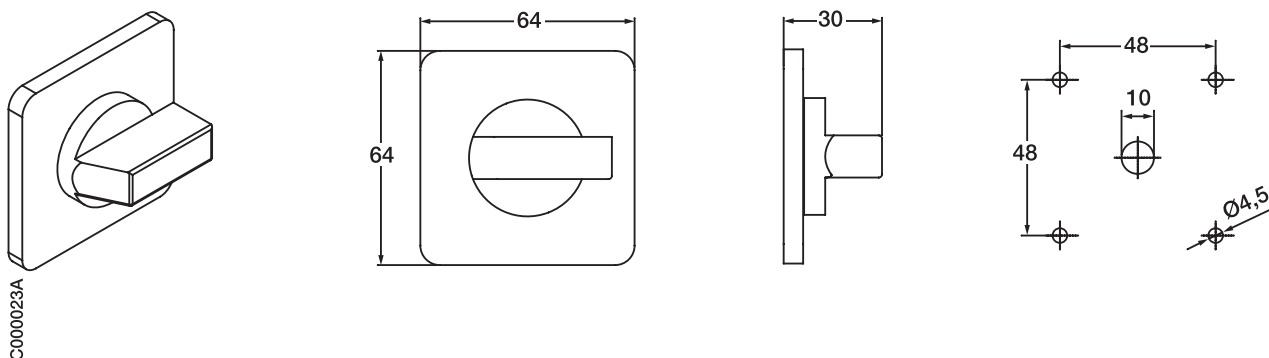
Rotary cam switches

Dimension drawings, handles

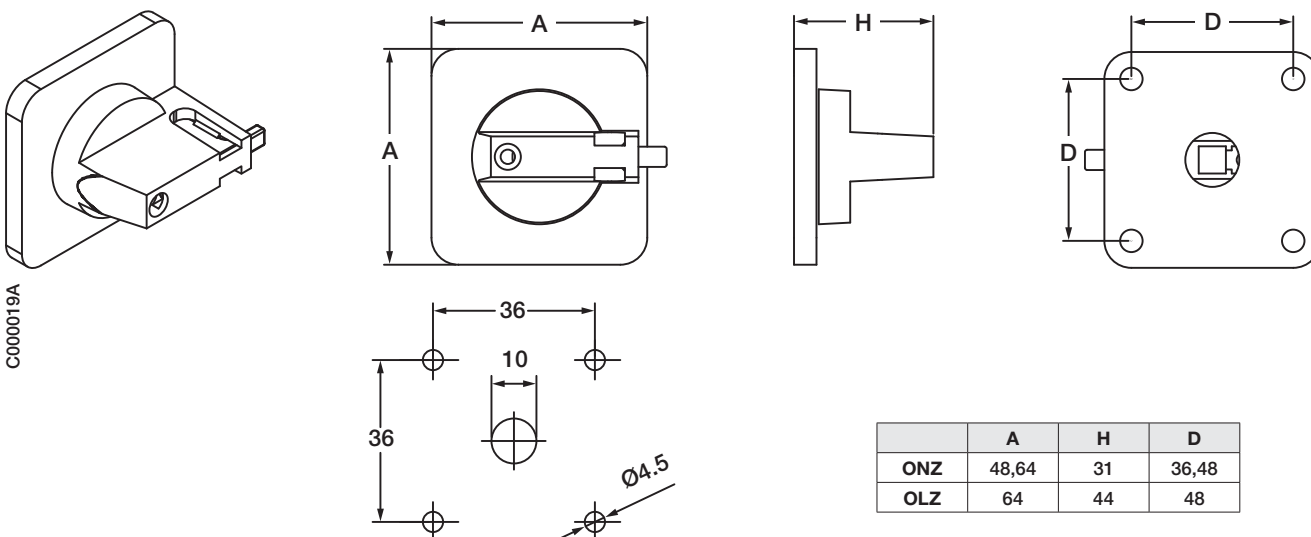
Snap-on key operated handle for ON - to be specified by Camweb configurator



Screw mounted large handle option for ON and OL40 - to be specified by Camweb configurator



Padlockable handle knob for ON and OL40, type ONZ20_ (also suitable for 64x64 handle)





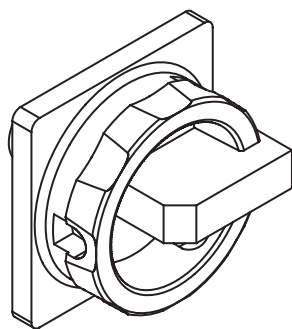
CamLine

Rotary cam switches

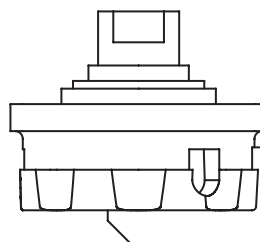
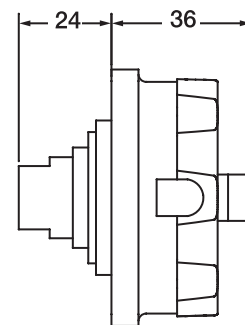
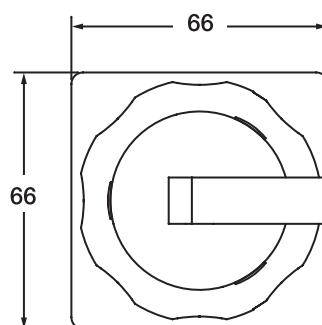
Dimension drawings, handles

Round padlockable snap-on mounted handle for ON and OL40

- to be specified by Camweb configurator (Type P3)

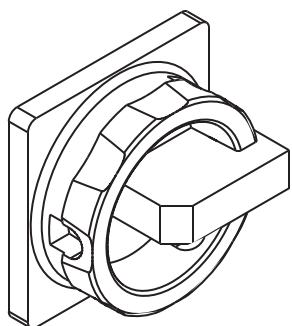


C000049A

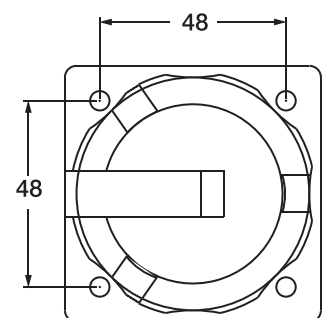
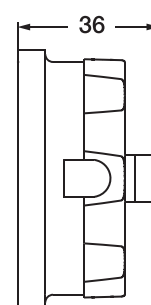
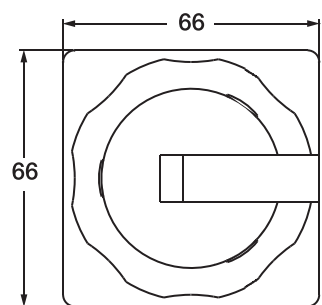


Shaft size 6mm

Round padlockable screw mounted handle for ON and OL40, type ONZ331P_ (Type R3)



C000022A



Shaft size 6 mm



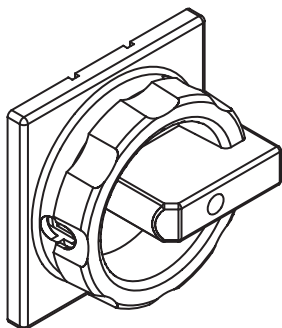
CamLine

Rotary cam switches

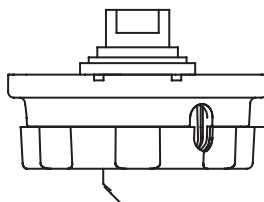
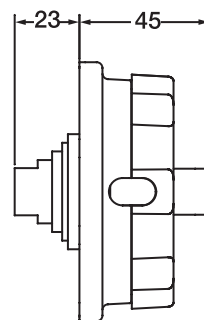
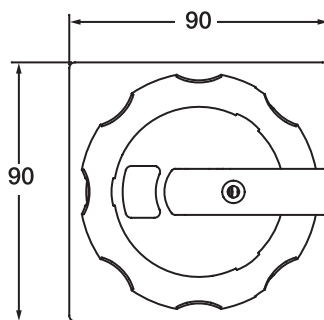
Dimension drawings, handles

Round padlockable snap-on mounted handle for OL80, OL125 and OL160

- to be specified by Camweb configurator (Type P3)

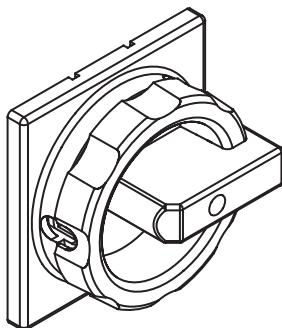


C000050A

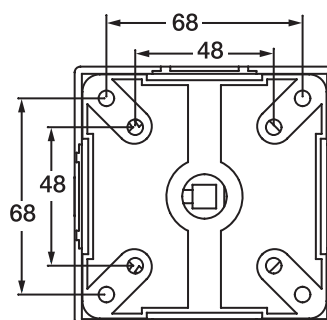
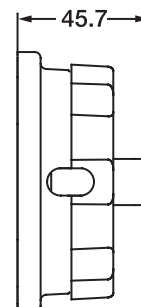
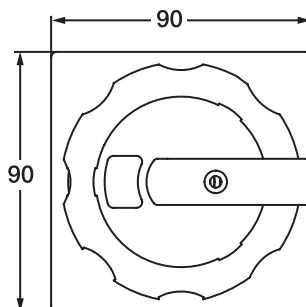


Round padlockable screw mounted handle for OL80, OL125 and OL160, type OLZ332R_

- Type R3 to be specified by the Camweb configurator



C000021A



Shaft size 8 mm

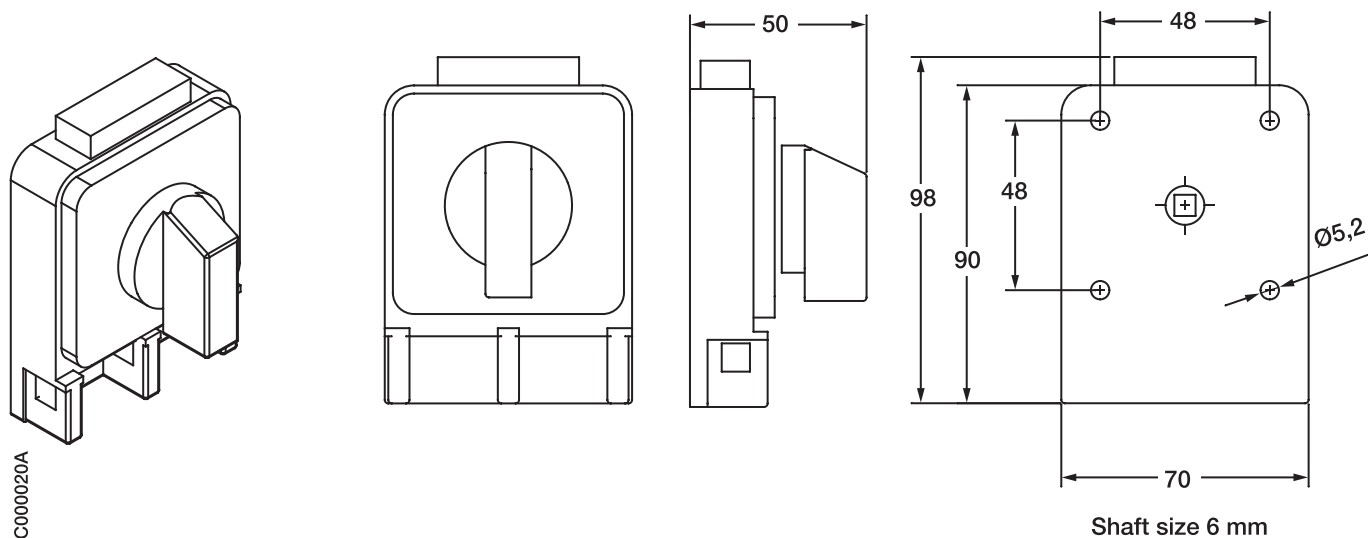


CamLine

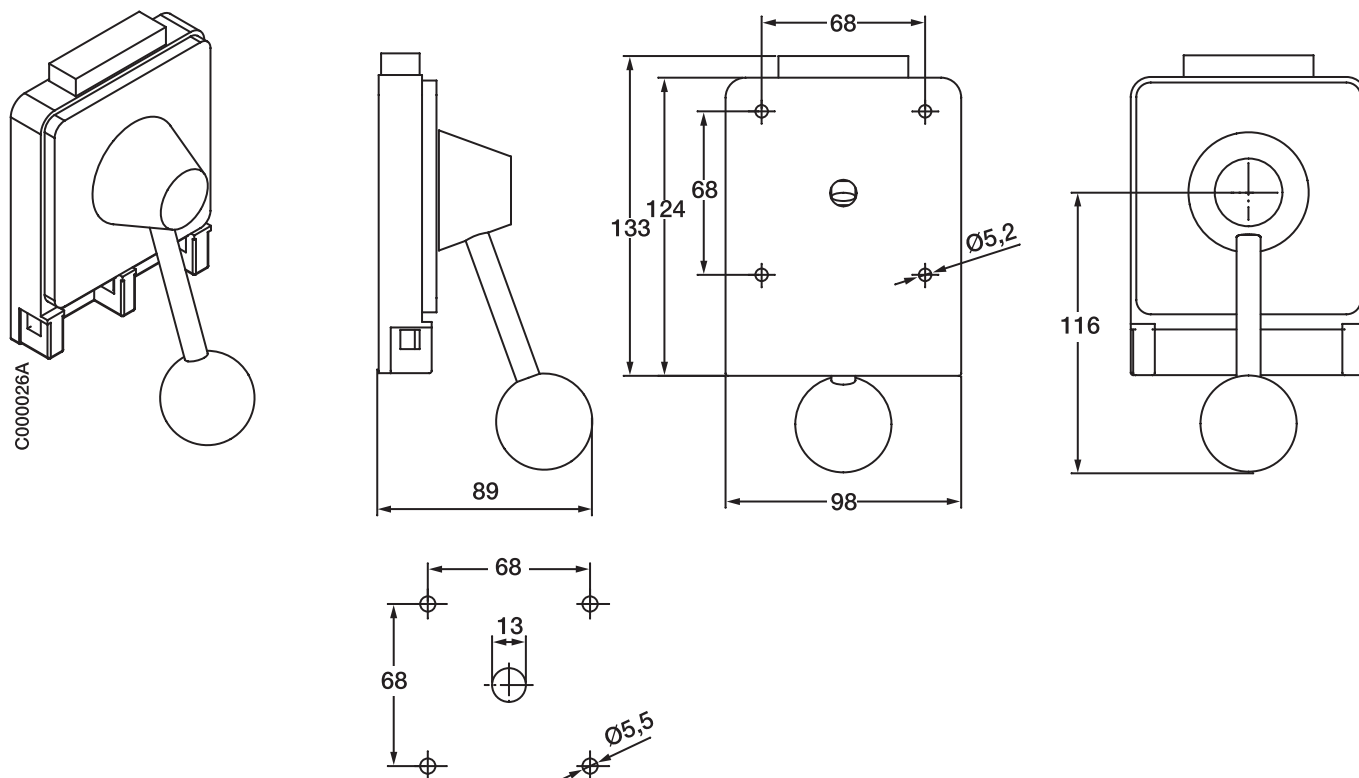
Rotary cam switches

Dimension drawings, handles

Square padlockable handle for ON and OL40 -
to be specified by Camweb configurator (type R5)



Square padlockable handle for OL80, OL125, OL160 and OL200
- to be specified by Camweb configurator (Type R5)





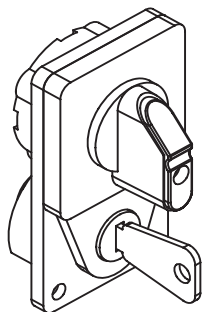
CamLine

Rotary cam switches

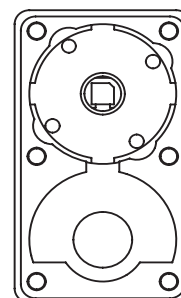
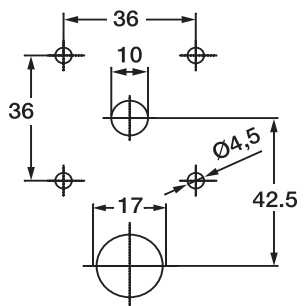
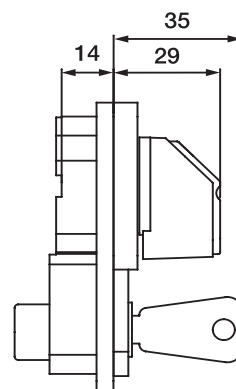
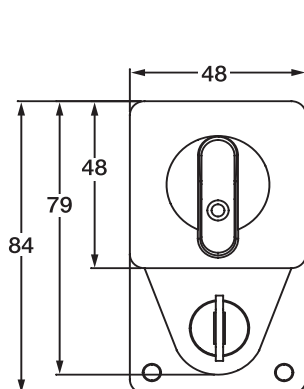
Dimension drawings, handles

Key interlocked handle for ON and OL40, front plate size 48x48

- to be specified by Camweb configurator (Type Q)

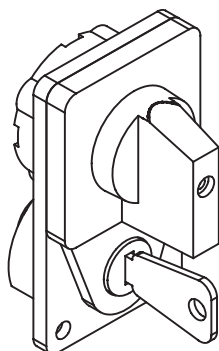


C000016A

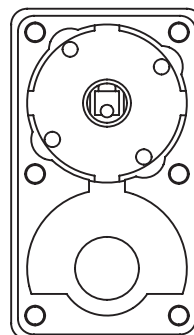
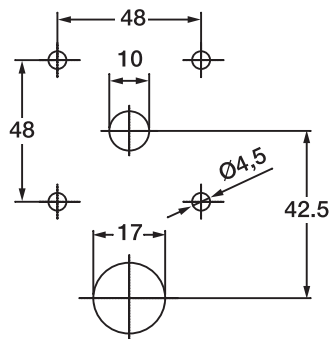
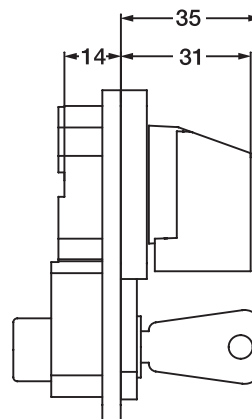
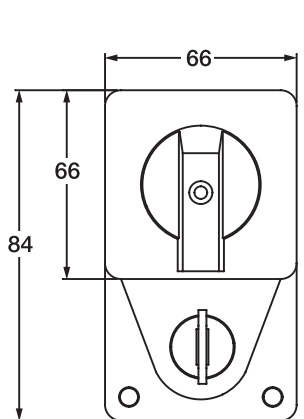


Key interlocked handle for ON and OL40, front plate size 64x64

- to be specified by Camweb configurator (Type Q)



C000040A



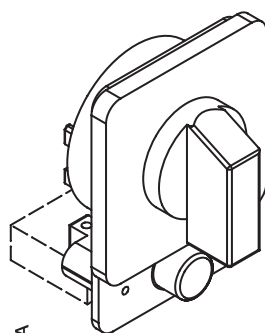


CamLine

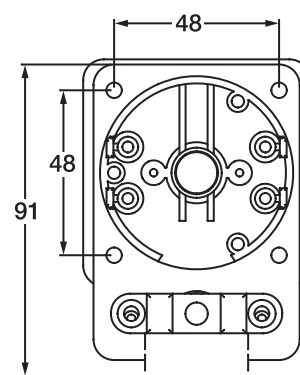
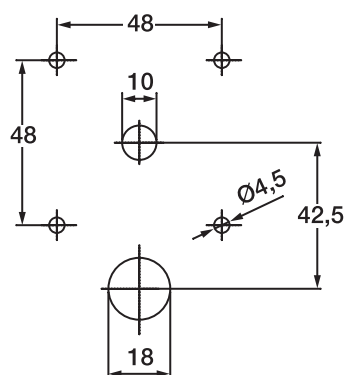
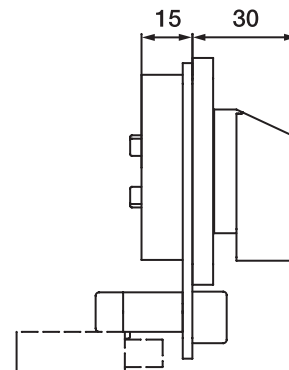
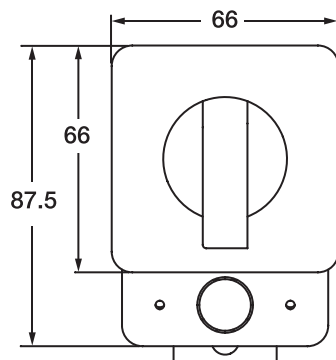
Rotary cam switches

Dimension drawings and handles

Push button interlock handle for ON and OL40 -
to be specified by Camweb configurator (Type U)

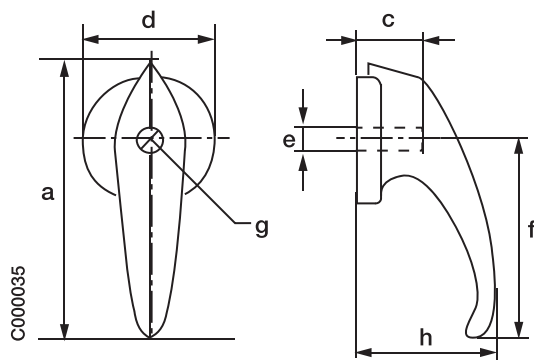


C000015A



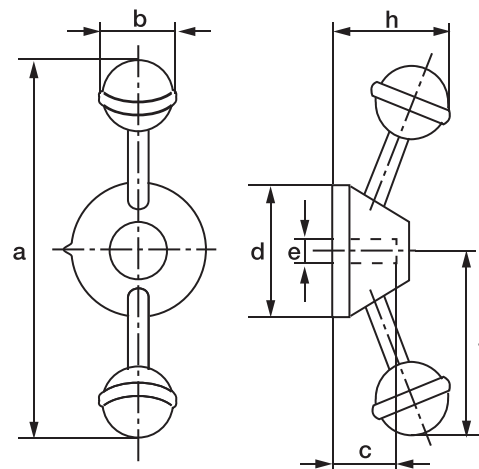
Pistol and double lever handles

OLZ2R_, OLZ2R



C000035

OLZ3D_



	a	b	c	d	e	f	g	h	y
OLZ2R_	112	40	21	50	8 [□]	80	114	50	9
OLZ3R_	141	54	26	77	10 [□]	145	145	66	14
OLZ3D_	252	40	28	77	10 [□]	126	-	56	10



CamLine

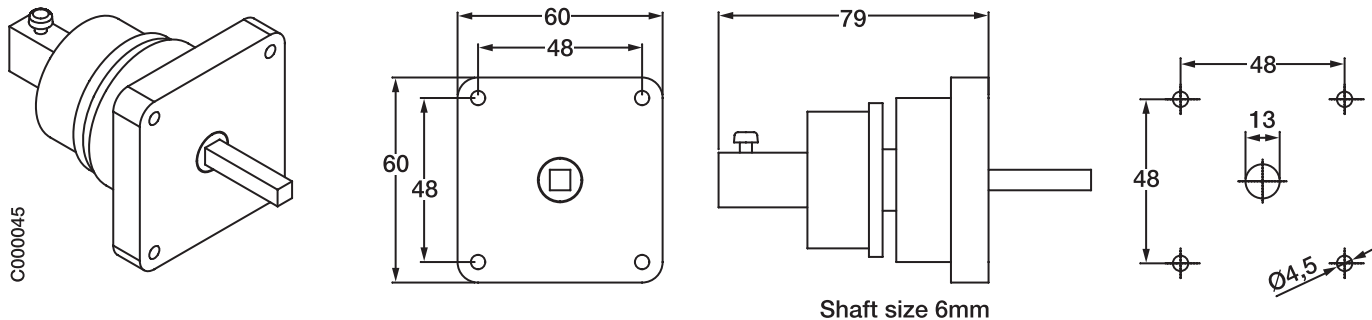
Rotary cam switches

Dimension drawings, door clutch

Door clutch, interlock for hinged door, for ON and OL40 (ONZ45P)

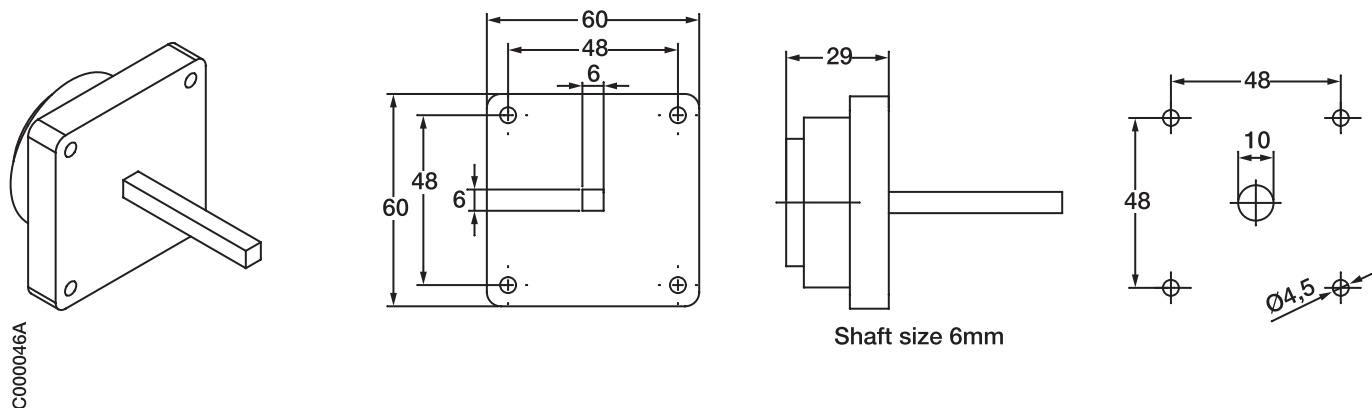
- to be specified by Camweb configurator

- to lock the panel when the switch is in the ON position



Door clutch, interlock for hinged door, for OL40 (ONZ45P) - to be specified by Camweb configurator

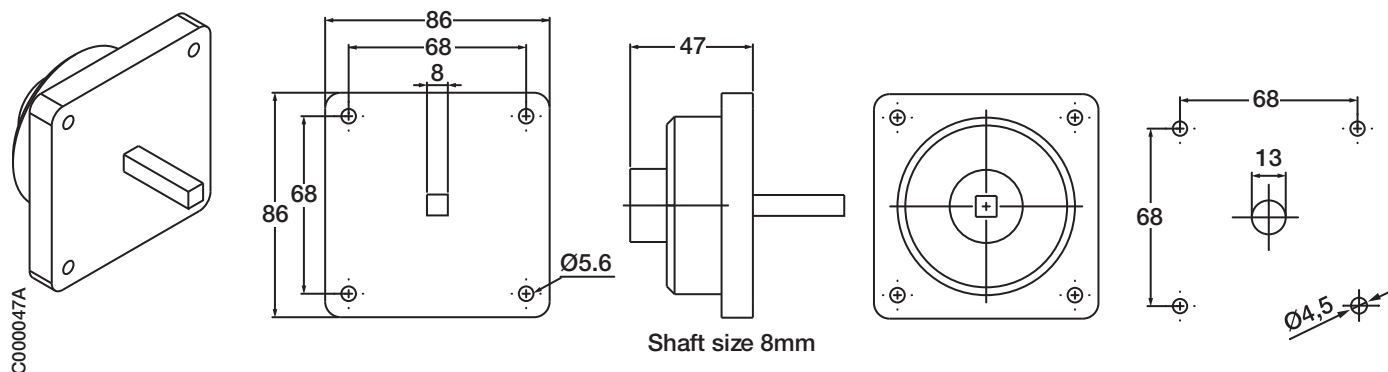
- to lock the panel when the switch is in the ON position



Door clutch, interlock for hinged door, for OL80, OL125, OL160 (OLZ652) and OL200 (OLZ653)

- to be specified by Camweb configurator

- to lock the panel when the switch is in the ON position





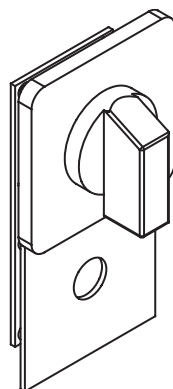
CamLine

Rotary cam switches

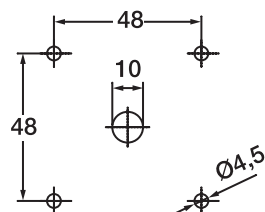
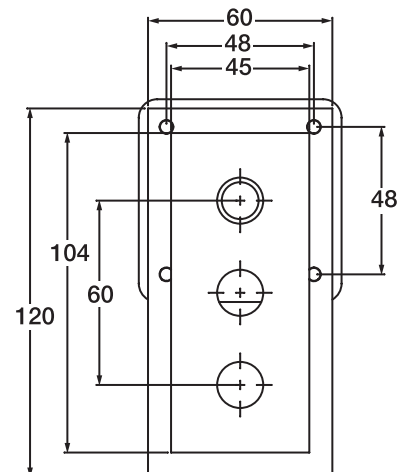
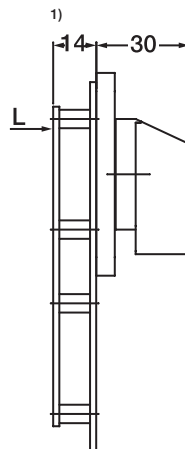
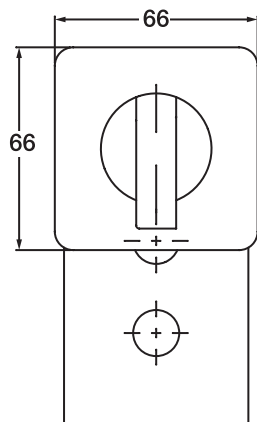
Dimension drawings, double gang

Double gang (Tandem) drive for ON, standard handle

- to be specified by Camweb configurator

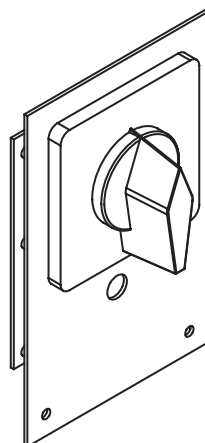


C000041A

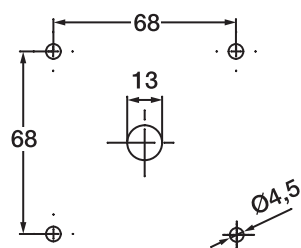
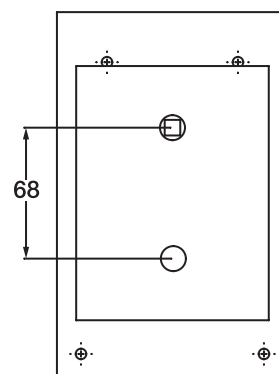
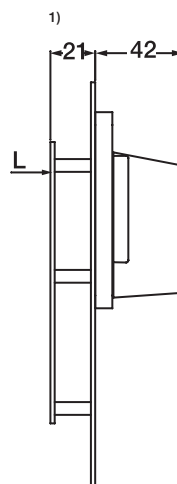
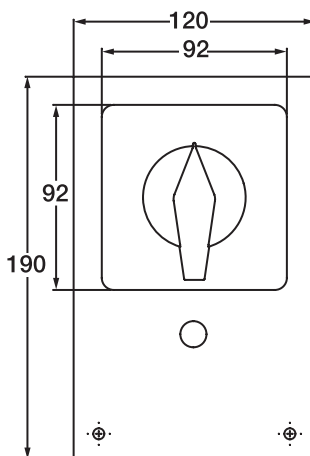


Double gang (Tandem) drive for OL40, standard handle

- to be specified by Camweb configurator



C000042A



¹⁾ Add the dimension L of the screw mounted cam switch for the total depth.

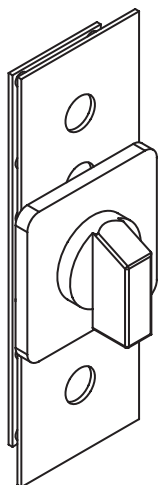


CamLine

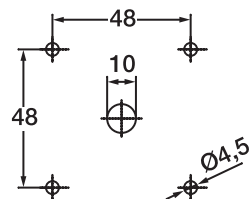
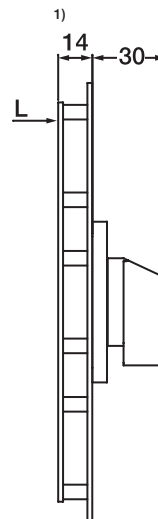
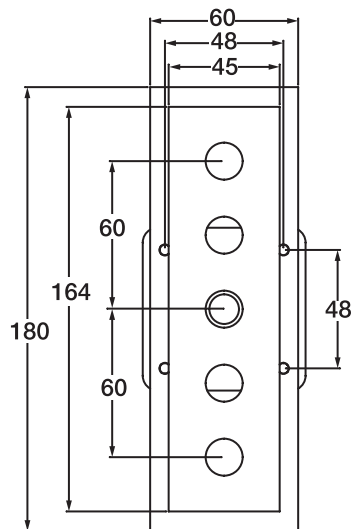
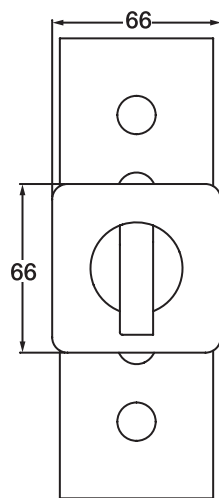
Rotary cam switches

Dimension drawings, triple gang

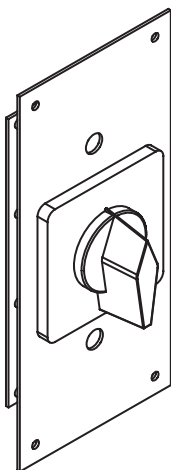
Triple gang drive for ON, standard handle - to be specified by Camweb configurator



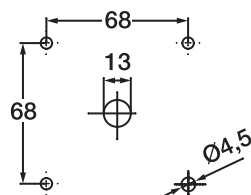
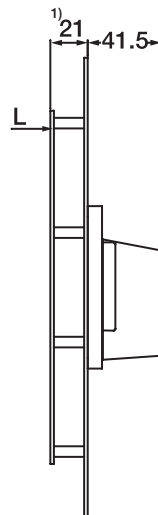
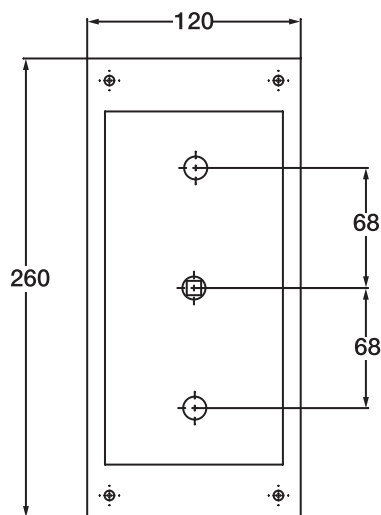
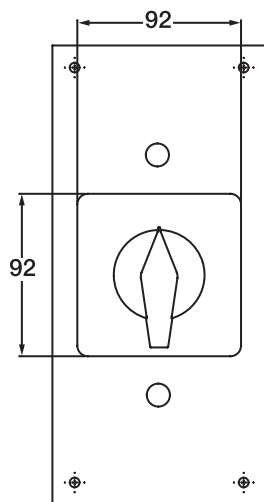
C000043A



Triple gang drive for OL40, standard handle - to be specified by cam web configurator



C000044A



¹⁾ Add the dimension L of the screw mounted cam switch for the total depth.



CamLine Enclosed rotary cam and main switches

Contents:

Enclosed rotary cam and main switches

Ordering information

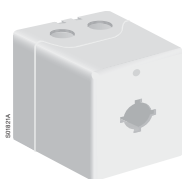
Enclosed cam switches.....	56
Enclosed main switches.....	56
Enclosures.....	56
Disconnect switches for enclosures OTC_.....	57
Base mounted disconnect switches.....	57
Door mounted disconnect switches	57
Accessories	57
Dimension drawings.....	58



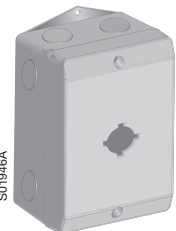
CamLine

Enclosed rotary cam switches and main switches

Ordering details



OTC4_M25



OTC36NPT3/4

Enclosed cam switches

The type and the ordering number are for one piece. Neutral and ground terminal, included.

Number of poles	Function	Size of ¹⁾ enclosure	Catalogue number	List price
ON-OFF switches, IP65, NEMA 4X				
1	0 - 1	160x100x80	ONA1EPB	
2	0 - 1	160x100x80	ONA2EPB	
3	0 - 1	160x100x80	ONA3EPB	
4	0 - 1	160x100x80	ONA4EPB	
ON - OFF switches, padlockable handle, IP65, NEMA 4X				
1	0 - 1	160x100x80	ONA1EZB	
2	0 - 1	160x100x80	ONA2EZB	
3	0 - 1	160x100x80	ONA3EZB	
4	0 - 1	160x100x80	ONA4EZB	
ON - OFF switches, key type, IP54, NEMA 1				
1	0 - 1	160x100x80	ONA1EKB	
3	0 - 1	160x100x80	ONA3EKB	
Change-over switches				
1	1 - 0 - 2	160x100x80	ONU1EPB	
2	1 - 0 - 2	160x100x80	ONU2EPB	
Reversing switches				
3	1 - 0 - 2	160x100x80	ONW3EPB	

Enclosures

The enclosures can accommodate cam switches for door mounting and OT-switches for door mounting and base mounting. Neutral and earth terminal, included.

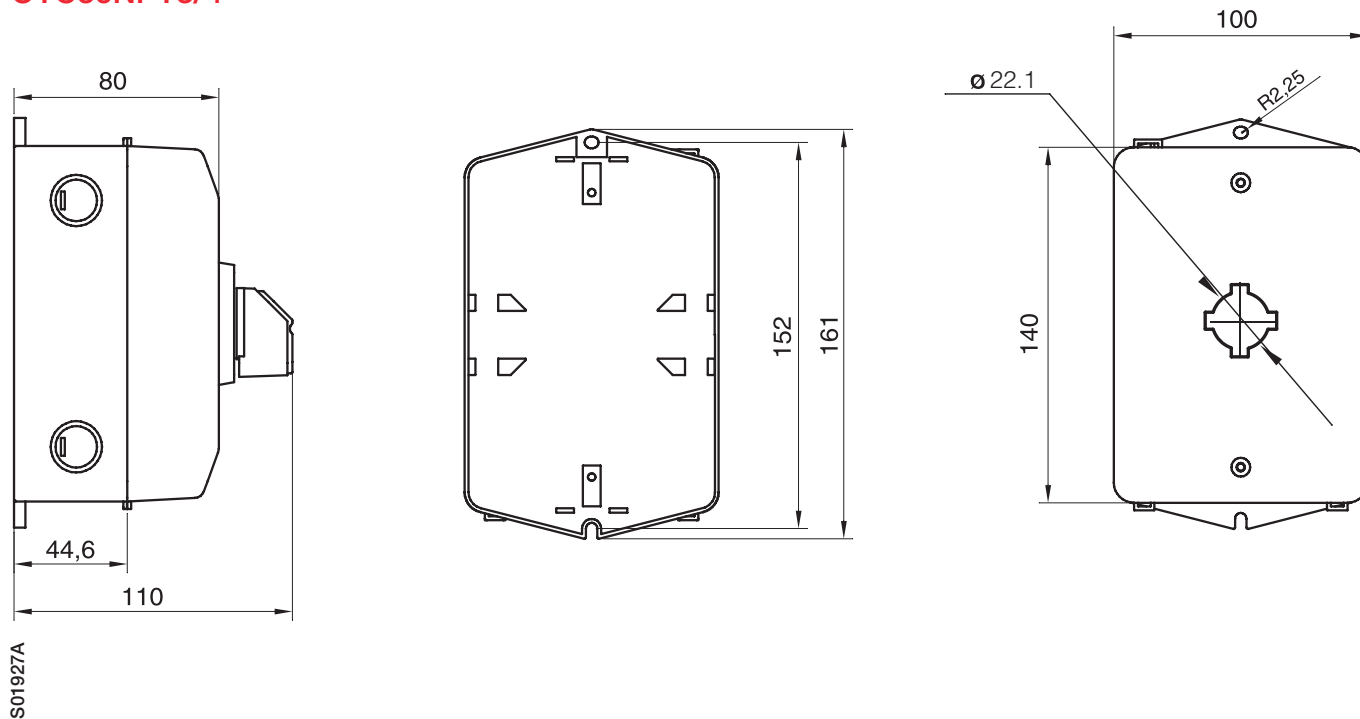
Suitable cam switches	Protection - Class	Size of enclosure	Catalogue number	List price
ON-OM: 10 contacts, 5 stages, OL40: 6 contacts, 3 stages				
Enclosure	IP 65	96x96x108	OTC46M25	
ON-OM: 6 contacts, 3 stages, wide, OL: 4 contacts, 2 stages				
Enclosure	NEMA 4X	160x100x80	OTC36NPT3/4	
Mounting plate require for assembly of base mounted OT16...32E			VP3G6	

¹⁾ The height without handle.
Special enclosed cam switches configured by the Camweb tool.

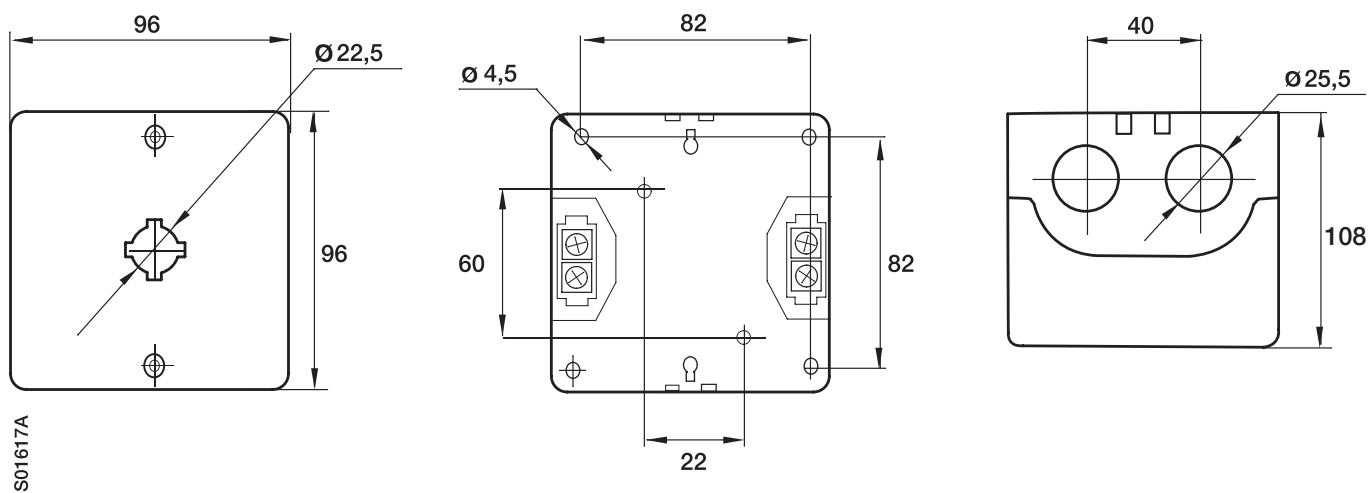


CamLine Enclosed rotary cam switches Dimension drawings

OTC36NPT3/4



OTC46M25





Type

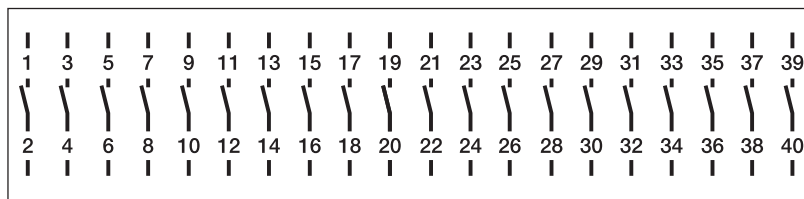
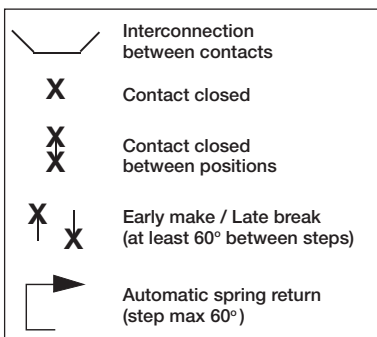
Project number

Customer's number

Quantity: pcs

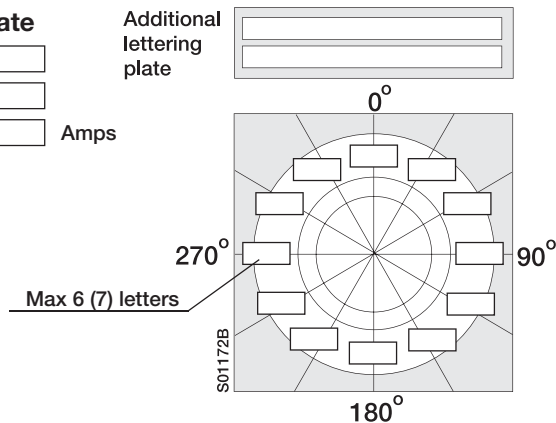
Handled by:

Date:

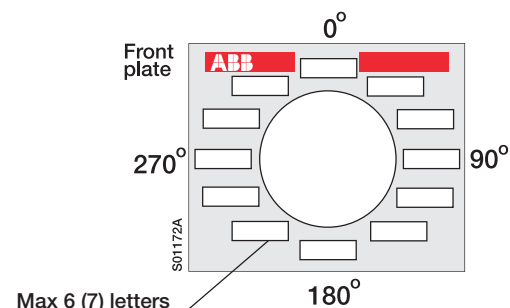
[illegible]

	Normal	Padlockable	Key operated _K	Enclosed _E	Cylinder locking	Pushbutton locking	Comments:
Black _B							
Grey _G							
Red-yellow _RY							

Additional
lettering
plate

OL Amps

Max 20 contacts (ON)
16 contacts (OM)

ON M, Modular ☐

Max 3 chambers = 6 contacts



Notes

[illegible]

Quick Information

Put a checkmark in the boxes below and fax it to your nearest ABB office to receive more information.

Please fill in the following information (or attach a business card).

Name

Company

Address

City

Prov.

Postal Code

Telephone

Fax

Control Products

- ☐ AC & DC Contactors
- ☐ Cam Switches
- ☐ Definite Purpose Contactors
- ☐ Drive Contactors
- ☐ Electronic Timers
- ☐ Lighting Contactors
- ☐ Limit Switches
- ☐ Magnetic Starters
- ☐ Manual Motor Starters
- ☐ PLC
- ☐ Pushbuttons, Stacklights and Beacons
- ☐ Relays
- ☐ Safety and Monitoring Relays
- ☐ Softstarters
- ☐ Wiring Ducts

Circuit Protective Devices

- ☐ Arc Guard Monitor
- ☐ Disconnect Switches, Fusible and Non-Fusible
- ☐ Low Voltage Power Circuit Breakers
- ☐ Molded Case Circuit Breakers
- ☐ Supplementary Protectors

Power Quality Products

- ☐ Active Filter
- ☐ Anti-Resonance Capacitor Banks
- ☐ Automatic Capacitor Banks
- ☐ Dynacomp
- ☐ Fixed Capacitor Banks
- ☐ Harmonic Filter (shunt)
- ☐ Individual Capacitors
- ☐ Surge Capacitor

Entrelec Products

- ☐ Analog Converters
- ☐ Digital Converters
- ☐ Industrial pluggable relays & Optos
- ☐ Logic Control relay
- ☐ Overvoltage protection
- ☐ PCB connectors
- ☐ PLB connectors
- ☐ PLC's Pre-wiring system
- ☐ Power Blocks
- ☐ Power Supplies
- ☐ Remote Input/Output
- ☐ Rotary switches
- ☐ Terminal Blocks
- ☐ Timers & Monitoring (Entrelec & SSAC)

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Fax: +1 403-278-8232

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