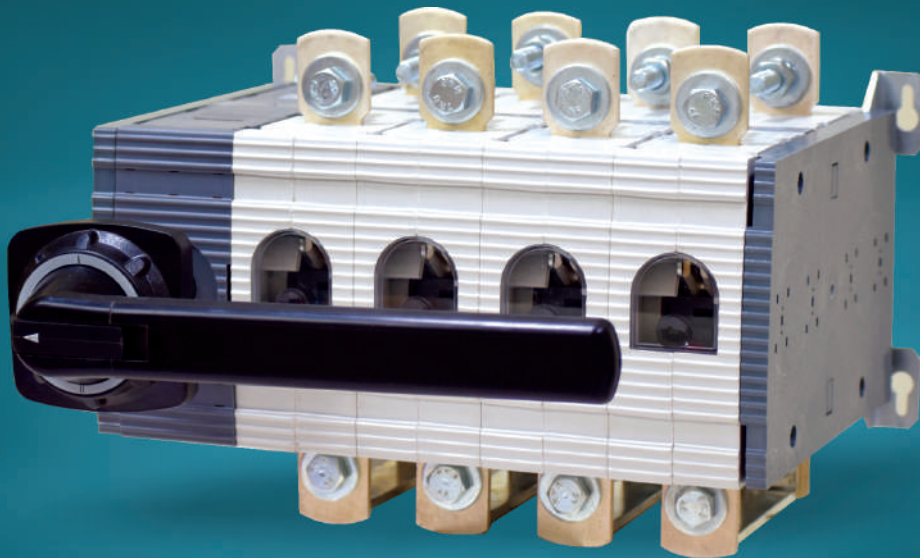
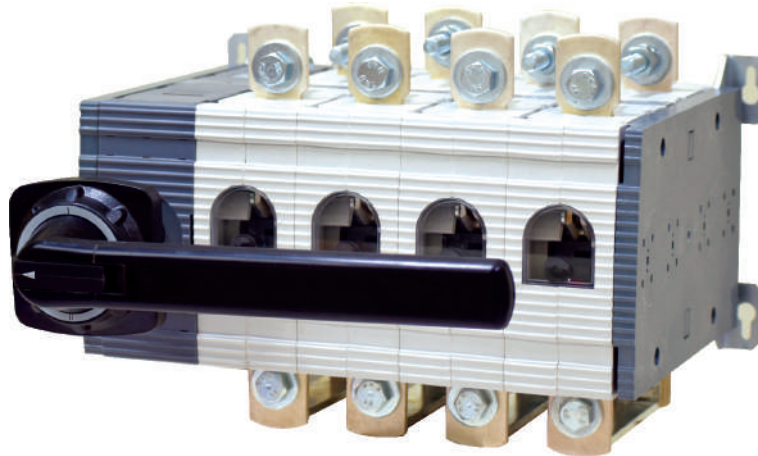


A = N

Change Over Switches



ABN offers wide range of Change Over Switches for manual operation. The range of Change Over Switches confirms to latest IEC 60947-3, 60947-6-1 standards. The products are in line with best design and quality standards

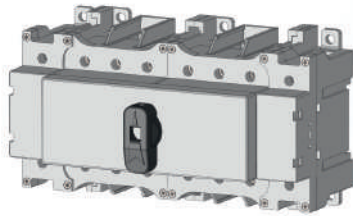


Features and benefits

- CB certifications for IEC 60947-3 from UL lab to conform IEC 60947-3/EN 60947-3/UL 60947-3/IS: 13947-3 for isolated Switch
- Compact and modular construction
- AC-23A and AC-33 rating for voltage level up to 690/1000V
- Double quick make/break operation feature that enhance performance
- Provision for add on auxiliary contact for identification of switch position
- Front operated mechanism
- Suitable for vertical, horizontal, upwards, downwards orientation
- Modular switch, can be configured from single pole to 8 pole

ABN Change Over Switches were developed according to IEC 60947-3 / IEC 60946-6-7 and enable the manual drive of motors, machines and other equipment. Besides carrying and interrupting electric currents under normal or over load conditions, the design of the switches provides complete physical insulation between the circuit on the power supply when in the Off position. In this position, it is possible to use 3 pad locks in order to prevent inadvertent actuations, increasing the safety of operators and maintenance personnel.

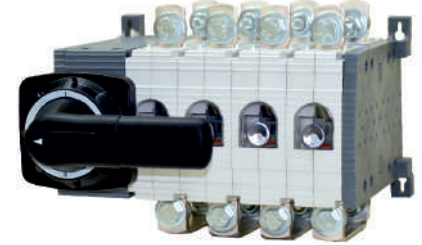
ABN Change Over Switches provide reliable protection for personnel and ensure high system availability in buildings, infrastructure and industrial plants.



20...125A



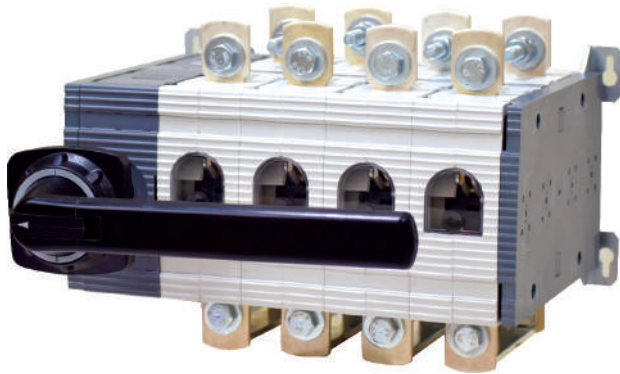
125...250A



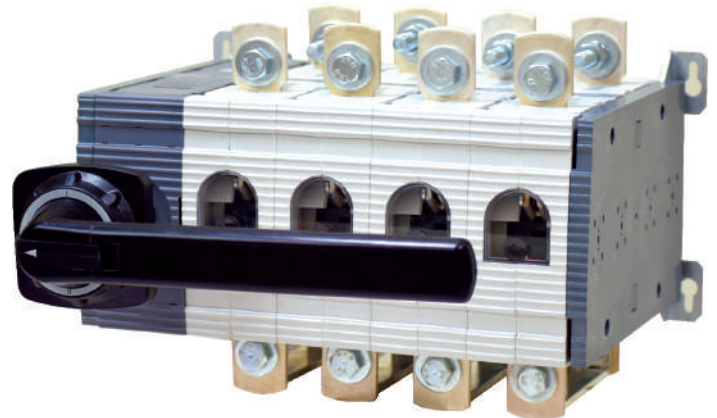
315...630A

IEC

I_{th} in A	20, 25, 32, 40, 50, 63, 80, 100, 125	125, 160, 200, 250	315, 400, 500, 630
I_e AC 22A / AC23A / AC 33 A in A	20, 25, 32, 40, 50, 63, 80, 100, 125	125, 160, 200, 250	315, 400, 500, 630



500...800A



1000...1600A

IEC

I_{th} in A	500, 630, 800	1000, 1250, 1600
I_e AC 22A / AC23A / AC 33 A in A	500, 630, 800	1000, 1250, 1600

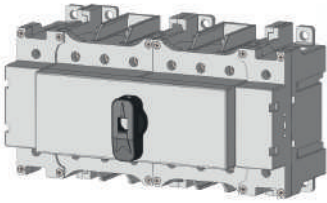
Technical data according to IEC 60947-3		Rating	A
		Switch type	
Rated insulation Voltage and rated Operational Voltage AC20/DC20			V
Dielectric Strength	Pollution degree 3	50 Hz 1min.	KV
Rated impulse Withstand Voltage			KV
Rated thermal current and rated operational current AC20/DC20	Ambient 40°C Ambient 40°C Ambient 60°C	In open air In enclosure In enclosure Cu	A A A mm ²
With minimum conductor cross section			
Rated operational current, AC-21A		Up to 415 V 440...690 V	A A
Rated operational current, AC-22A		Up to 415 V 440...500 V 690 V	A A A
Rated operational current, AC-23A		Up to 415 V 440 V 500 V 690 V	A A A A
Rated operational current / poles in series,DC-21A		24...48 V 110 V 220 V 440 V 500 V	A A A A A
Rated operational current / poles in series,DC-22A		24...48 V 110 V 220 V 440 V	A A A A
Rated operational current / poles in series,DC-23A		24...48 V 110 V 220 V 440 V	A A A A
Rated operational power, AC-23A (These values are given for guidance and may vary acc. to the motor manufacturer)		220...240 V 400...415 V 440 V 500 V 690V	kw kw kw kw kw
Rated breaking capacity, AC-23A		Up to 415 V 440 V 500 V 690 V	A A A A
Rated breaking capacity / poles in series, DC-23A		24...48 V 220 V 110 V 440 V	A A A A
Rated conditional short-circuit current I_p (r.m.s.) and corresponding max. allowed cut-off current \hat{I}_c .	I_p (r.m.s.) max. fuse size gG/aM	50 kA ≤ 415 V	kA A
The cut-off current \hat{I}_c refers to values listed by fuse manufacturers (single phase test acc. to IEC60269)	I_p (r.m.s.) max. fuse size gG/aM	100 kA ≤ 500 V	kA A
	I_p (r.m.s.) max. fuse size gG/aM	10 kA ≤ 690 V	kA A
	I_p (r.m.s.) max. fuse size gG/aM	50 kA ≤ 690 V	kA A
	Rated short -time withstand current	r.m.s. -value I_{cw} r.m.s. -value I_{cw}	690 V, 0.25 s 690 V, 1 s
Rated short circuit making capacity	Peak value I_{cm}	690 V/500 V	kA
Rated capacity power (the capacitor rating are limited by the fuse link.)		400...415 V	kVAr
Power loss / pole	At rated operational current		W
Mechanical endurance	Divide by two operation cycles		oper.
Weight without accessories	3-pole		Kg
	4-pole		Kg
Cable size	Cu-wire size suitable for terminal clamps		mm ² AWG
	Terminal tightening torque	Counter torque required	Nm
Operating torque	3-pole switch-disconnector		Nm



20	25	32	40	50	63	80	100	125
RVSD20	RVSD25	RVSD32	RVSD40	RVSD50	RVSD63	RVSD80	RVSD100	RVSD125
750 6 8	750 6 8	750 6 8	750 6 8	750 6 8	750 6 8	750 6 8	750 6 8	750 6 8
32 32 20 4	32 32 25 6	40 40 32 10	40 40 32 10	50 50 40 10	63 63 50 16	80 80 80 80	115 115 80 35	125 125 100 50
20 20	25 25	32 32	40 40	50 50	63 63	80 80	100 100	125 125
20 20 20	25 25 25	32 32 32	40 40 40	50 50 50	63 63 63	80 80 80	100 100 100	125 125 125
20 20 20	25 25 25	32 32 32	40 40 40	50 50 50	63 63 63	80 80 80	100 100 100	125 125 125
20 20 20 12	25 25 25 13	32 32 32 16	40 40 40 20	50 50 50 25	63 63 63 32	80 80 80 40	100 100 100 50	125 125 125 50
20/1 20/2 20/3 16/4 16/4	25/1 25/2 25/3 16/4 16/4	32/1 32/2 32/3 16/4 16/4	40/1 40/2 40/3 16/4 16/4	50/1 50/2 50/3 16/4 16/4	63/1 63/2 63/4 16/4 16/4	80/1 80/2 80/4 16/4 16/4	100/1 100/2 100/4 16/4 16/4	125/1 125/2 125/4 16/4 16/4
20/1 20/2 20/3 20/4	25/1 25/2 25/3 25/4	32/1 32/2 32/4 32/4	40/1 40/2 40/4 40/4	50/1 50/2 50/4 50/4	63/1 63/2 63/4 63/4	80/1 80/2 80/4 80/4	100/1 100/2 100/4 100/4	125/1 125/2 125/4 125/4
20/1 20/2 20/4 10/4	25/1 25/2 25/4 10/4	32/1 32/2 32/4 10/4	40/1 40/2 40/4 10/4	50/1 50/2 50/4 10/4	63/1 63/2 50/4 10/4	80/1 80/2 63/4 10/4	100/1 100/2 80/4 10/4	125/1 125/2 80/4 10/4
4 9 9 9 9	4 9 9 9 9	5 10 10 10 10	5.5 11 11 11 11	7.5 15 15 15 15	11 22 22 22 22	22 37 37 37 37	22 37 37 37 37	22 45 45 45 45
160 160 160 140	200 200 200 175	256 256 256 224	320 320 320 280	400 400 400 350	504 504 504 441	640 640 640 560	800 800 800 700	1000 1000 1000 875
80/1 80/2 80/4 32/4	100/1 100/2 100/4 40/4	110/1 110/2 110/4 40/4	128/1 128/2 128/4 40/4	128/1 128/2 128/4 50/4	180/1 180/2 180/4 40/4	252/1 252/2 180/4 40/4	400/1 400/2 252/4 60/4	500/1 500/2 252/4 60/4
6.5 40/32	6.5 40/32	6.5 40/32	6.5 40/32	6.5 100/80	13 100/80	13 100/80	16.5 125/125	16.5 125/125
					17 100/80	17 100/80		
							8.2 125/100	8.2 125/100
7 25/16	7 25/16	7 25/16	7 25/16	12 100/80	12 80/63	15 80/63	15 80/63	18 80/63
0.5	0.5	0.5	0.5	0.5	1	1.5	2.5	2.5
0.705	0.705	0.705	0.705	0.705	1.4	2.1	3.6	3.6
10	10	15	15	15	25	30	40	50
0.6 20 000	0.6 20 000	1.6 20 000	1.6 20 000	1.6 20 000	2.8 20 000	4.5 20 000	4.0 20 000	6.3 20 000
0.4 0.54	0.4 0.54	0.4 0.54	0.4 0.54	0.4 0.54	0.4 0.54	0.4 0.54	0.4 0.54	0.4 0.54
0.75...10 18-8	0.75...10 18-8	0.75...10 18-8	0.75...10 18-8	0.75...10 18-8	1.5...35 14-4	1.5...35 14-4	10...70 8-00	10...70 8-00
1.2 2	1.2 2	2.2 2	2.2 2	4 2	4 2	4 2	4 2	4 2

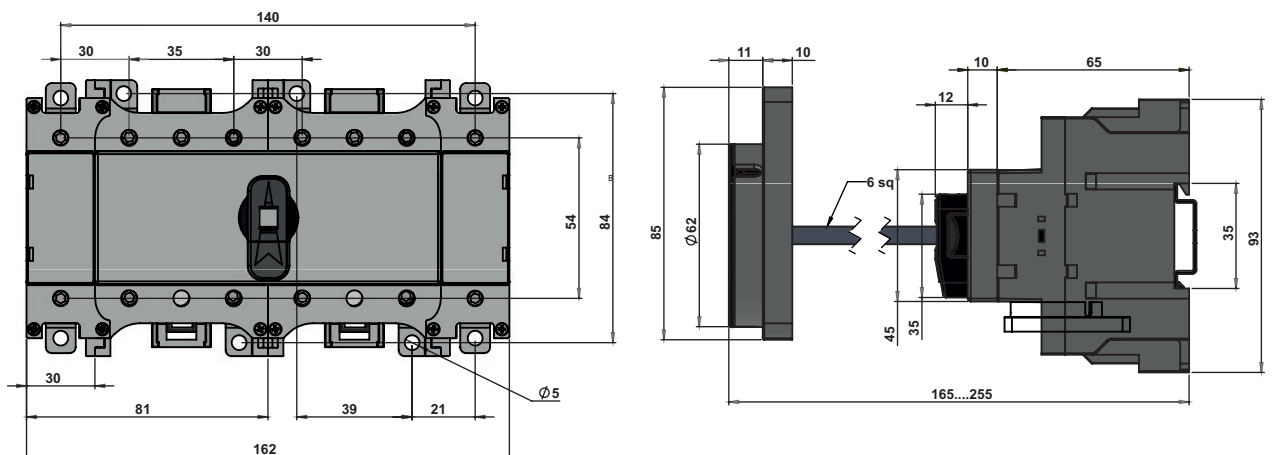
Change Over Switches I-0-II operation, open transition RVCO 20...125 A

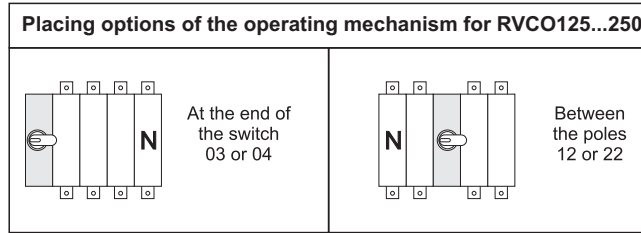
Change Over Switches I-0-II operation, open transition with pistol handle, base mounting, including a black ON-OFF-ON plastic handle and shaft as standard, The handle is IP65 protected, padlockable in the OFF position and with door interlock in the ON position. The shaft can be adjusted to different installation depths.



No. of poles	I_{th} (open) [A]	Cable cross section [mm ²]	Rated operat. currents AC22A/ AC23A 400 v [A/A]	Type	Order No	Delivery batch [pcs]	Weight/ unit [Kg]
3	20	0.75...10	20/20	RVCO2003	RVECO0020M03H3	10	1.0
4	20	0.75...10	20/20	RVCO2004	RVECO0020M03H3	10	1.28
3	25	0.75...10	25/25	RVCO2503	RVECO0025M03H3	10	1.0
4	25	0.75...10	25/25	RVCO2504	RVECO0025M03H3	10	1.28
3	32	0.75...10	32/32	RVCO3203	RVECO0032M03H3	10	1.0
4	32	0.75...10	32/32	RVCO3204	RVECO0032M03H3	10	1.28
3	40	0.75...10	40/40	RVCO4003	RVECO0040M03H3	10	1.0
4	40	0.75...10	40/40	RVCO4004	RVECO0040M03H3	10	1.28
3	50	1.5...35	50/50	RVCO5003	RVECO0050M03H3	10	1.0
4	50	1.5...35	50/50	RVCO5004	RVECO0050M03H3	10	1.28
3	63	1.5...35	63/63	RVCO6303	RVECO0063M03H3	10	1.0
4	63	1.5...35	63/63	RVCO6304	RVECO0063M03H3	10	1.28
3	80	1.5...35	80/80	RVCO8003	RVECO0080M03H3	10	1.0
4	80	10...70	80/80	RVCO8004	RVECO0080M03H3	10	1.28
3	100	10...70	100/100	RVCO10003	RVECO0100M03H3	10	1.0
4	100	10...70	100/100	RVCO10004	RVECO0100M03H3	10	1.28
3	125	10...70	125/125	RVCO12503	RVECOS125M03H3	10	1.0
4	125	10...70	125/125	RVCO12504	RVECOS125M03H3	10	1.28

Shafts and handles included as standard





		RATING		A	125	160	200	250	315
		Switch type			RVCO125	RVCO160	RVCO200	RVCO250	RVCO315
Rated insulation voltage and rated operational voltage AC-20, DC-20	Pollution degree 3	50 Hz	1 min.	V	1000	1000	1000	1000	1000
Dielectric strength				kv	10	10	10	10	10
Rated impulse voltage				kv	12	12	12	12	12
Rated thermal current and rated operational current AC-20, DC-20 in ambient 40°C ⁴⁾ with minimum cable cross section	Ambient 40°C	In open air		A	200	200	200	250	315
	Ambient 60°C	In enclosure		A ₂	125	160	200	250	315
		Cu	mm		50	70	95	120	185
Rated operational current AC-21A		≤ 500V		A	125	200	200	250	315
		690V		A	125	160	200	250	315
		1000V		A	125	160	200	250	315
Rated operational current AC-22A		≤ 500V		A	125	200	200	250	315
		690V		A	125	160	200	250	315
		1000V		A	125	160	200	250	315
Rated operational current AC-23A		≤ 500V		A	125	160	200	250	315
		690V		A	125	160	200	250	315
		1000V		A	125	135	135	135	200
Rated operational current/ poles in series, DC-21A ...23A ¹⁾		24...110 V		A	125/2	160/2	200/2	250/2	315/1 ²⁾
		220 V		A	125/2	160/2	200/2	250/2	315/2 ²⁾
		440 V		A	125/3	160/3	200/3	250/3	315/3
		660 V		A	125/4	160/4	200/4	230/4 ²⁾	315/4
Rated operational current/ poles in series, DC-21B		800 V		A	125/5	160/5	200/5	250/5	315/5
		1000 V		A	125/6	160/6	200/6	250/6	315/6
Rated operational power, AC-23 ³⁾		230 V	KW		37	48	60	75	100
		400 V	KW		64	80	110	140	160
		415 V	KW		68	88	110	145	180
		500 V	KW		87	112	132	170	220
		690 V	KW		112	144	200	250	315
Rated breaking capacity in category AC-23		≤ 500 V		A	1000	1280	1600	2000	2520
		690 V		A	1000	1280	1600	2000	2520
Rated conditional short-circuit I _p (r.m.s.) and corresponding max. allowed cut-off current \hat{I}_c .	I _p (r.m.s.)	100 KA, 500 V	KA		40.5	40.5	40.5	40.5	61.5
	Max. fuse size	gG/aM	A		315/315	315/315	315/315	315/315	500/450
The cut-off current \hat{I} refers to values listed by fuse manufacturers (Single phase test acc.to IEC60269).	I _p (r.m.s.)	80 KA, 690 V	KA		40.5	40.5	40.5	40.5	59
	Max. fuse size	gG/aM	A		355/315	355/315	355/315	355/315	500/500
Rated short-time making withstand current	r.m.s I _{cw}	≤1000 V 0.15s	KA		15	15	15	15	15
		≤1000 V 0.25s	KA		15	15	15	15	15
		≤1000 V 1s	KA		8	8	8	8	8
Rated short-time circuit making capacity	Peak Value I _{cm}	≤1000 V 1s	KA		30	30	30	30	30
Rated capacitor power when no initial charge on the capacitor	The capacitor rating are limited by the fuse link	415 V	KVAr		62	80	100	115	145
		500 V	KVAr		75	96	120	135	175
		690 V	KVAr		100	128	160	190	250
Power loss / pole	With rated current		W		3.2	3.2	4	6.5	10
Mechanical endurance	Operating cycle ⁵⁾ No. of operations		Oper.		10 000	10 000	10 000	10 000	10 000
					20 000	20 000	20 000	20 000	20 000
Weight without accessories	3-pole switch 4-pole switch		Kg		2.5	2.5	2.5	2.5	2.5
			Kg		3.0	3.0	3.0	3.0	3.0
Terminal bolt size	Metric thread diameter x length Counter torque required 3-pole switch disconnecter		mm		M8x25	M8x25	M8x25	M8x25	M8x25
Terminal tightening torque		Nm		15-22	15-22	15-22	15-22	15-22	
Operating torque		Nm		7	7	7	7	7	

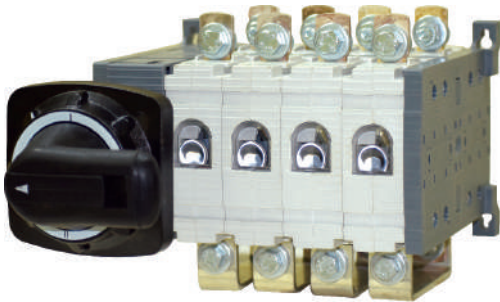
Data according to IEC 60947-6-1

				PC	PC	PC	PC
Class of equipment							
Rated short - time withstand current	I _{cw} (r.m.s.)	690 V 0.1s	kA	15	15	15	15
Rated operational current, AC-31B		up to 415V	A	125	160	200	250
Rated operational current, AC-33B		up to 415V	A	125	160	200	250

- 1) Further rating on request
- 2) Category B
- 3) These values are given for guidance and may vary acc. to the motor manufacturer
- 4) Acc. to IEC 60947-1, § 6.1.1
- 5) Operating cycle O-I-O-II-O

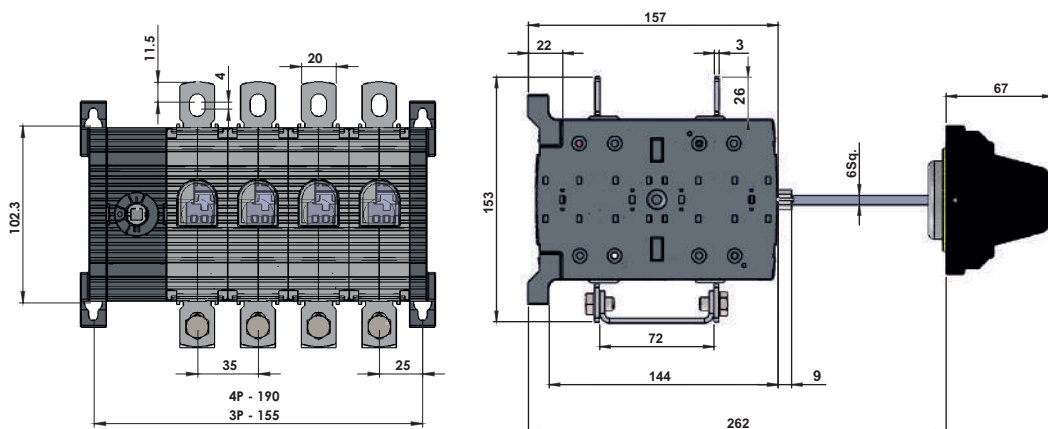
Front operated Change Over Switches RVCO125...RVCO250A

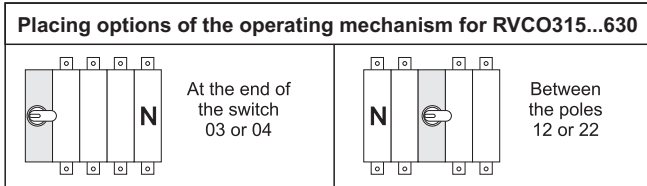
Change Over Switches I-0-II operation, open transition with pistol handle, base mounting, including a black ON-OFF-ON plastic handle and shaft as standard, The handle is IP65 protected, padlockable in the OFF position and with door interlock in the ON position. The shaft can be adjusted to different installation depths.



No. of poles	I_{th} (open) [A]	Rated operat. currents AC22A/ AC23A 400 V [A/A]	Type	Order number	Units/ type [pcs]	Weight/ unit [Kg]
3	200	200/125	RVCO12503	RVECO0125M03H3	1	3.42
4	200	200/125	RVCO12504	RVECO0125M04H3	1	4.10
3	200	200/125	RVCO12512	RVECO0125M12H3	1	3.42
4	200	200/125	RVCO12522	RVECO0125M22H3	1	4.10
3	200	200/160	RVCO16003	RVECO0160M03H3	1	3.42
4	200	200/160	RVCO16004	RVECO0160M04H3	1	4.10
3	200	200/160	RVCO16012	RVECO0160M12H3	1	3.42
4	200	200/160	RVCO16022	RVECO0160M22H3	1	4.10
3	200	200/200	RVCO20003	RVECO0200M03H3	1	3.42
4	200	200/200	RVCO20004	RVECO0200M04H3	1	4.10
3	200	200/200	RVCO20012	RVECO0200M12H3	1	3.42
4	200	200/200	RVCO20022	RVECO0200M22H3	1	4.10
3	250	250/250	RVCO25003	RVECO0250M03H3	1	3.52
4	250	250/250	RVCO25004	RVECO0250M04H3	1	4.20
3	250	250/250	RVCO25012	RVECO0250M12H3	1	3.52
4	250	250/250	RVCO25022	RVECO0250M22H3	1	4.20
3	315	315/315	RVCO31503	RVECOS315M03H3	1	3.52
4	315	315/315	RVCO31504	RVECOS315M04H3	1	4.20
3	315	315/315	RVCO31512	RVECOS315M12H3	1	3.52
4	315	315/315	RVCO31522	RVECOS315M22H3	1	4.20

Shaft, shorting links, handle included as standard
Any other combinations are available on request





		RATING		A	315	400	500	630	
Technical data according to IEC 60947-3		Switch type			RVCO315	RVCO400	RVCO500	RVCO630	
Rated insulation voltage and rated operational voltage AC-20, DC-20	Pollution degree 3	50 Hz	1min.	V	1000	1000	1000	1000	
Dielectric strength				kv	10	10	10	10	
Rated impulse voltage				kv	12	12	12	12	
Rated thermal current and rated operational current AC-20, DC-20 in ambient 40°C ⁴⁾	Ambient 40°C	In open air		A	315	400	500	630	
	Ambient 60°C	In enclosure		A	315	400	500	630	
with minimum cable cross section				Cu	mm ²	185	240	2x150	2x185
Rated operational current AC-21A		≤ 500V		A	315	400	500	630	
		690V		A	315	400	500	630	
		1000V		A	315	400	500	630	
Rated operational current AC-22A		≤ 500V		A	315	400	500	630	
		690V		A	315	400	500	630	
		1000V		A	315	400	500	630	
Rated operational current AC-23A		≤ 500V		A	315	400	500	630	
		690V		A	315	400	500	630	
		1000V		A	200	200	200	400	
Rated operational current/ poles in series, DC-21A ...23A ¹⁾		24...110 V		A	315/1 ²⁾	400/1 ²⁾	500/1 ²⁾	630/1	
		220 V		A	315/2 ²⁾	400/2 ²⁾	500/2 ²⁾	630/1	
		440 V		A	315/3	360/3	360/3	360/2	
		660 V		A	315/4	360/4	360/4	630/4 ²⁾	
Rated operational current / poles in series, DC-21B		800 V		A	315/5	400/5	500/5	400/5	
		1000 V		A	315/6	400/6	500/6	400/6	
Rated operational power, AC-23 ³⁾		230 V	KW		100	132	165	200	
		400 V	KW		160	220	275	355	
		415 V	KW		180	230	287	355	
		500 V	KW		220	280	287	400	
		690 V	KW		315	400	500	630	
Rated breaking capacity in category AC-23		≤ 500 V		A	2520	3200	3200	5040	
		690 V		A	2520	3200	3200	5040	
Rated conditional short-circuit I _p (r.m.s.) and corresponding max. allowed cut-off current I _c	I _p (r.m.s.)	100 KA,500 V		KA	61.5	61.5	61.5	90	
	Max. fuse size	gG/aM		A	500/450	500/450	500/450	800/1000	
The cut-off current I _c refers to values listed by fuse manufacturers (Single phase test acc.to IEC60269).	I _p (r.m.s.)	80 KA,690 V		KA	59	59	59	83.5	
	Max. fuse size	gG/aM		A	500/500	500/500	500/500	800/1000	
Rated short-time making withstand current	r.m.s I _{cw}	≤1000 V 0.15s		KA	31	31	31	38	
		≤1000 V 0.25s		KA	24	24	24	36	
		≤1000 V 1s		KA	15	15	15	20	
Rated short-time circuit making capacity	Peak Value I _{cm}	≤1000 V 1s		KA	65	65	65	80	
Rated capacitor power when no initial charge on the capacitor	The capacitor rating are limited by the fuse link	415 V	KVAr		145	180	225	250	
		500 V	KVAr		175	215	268	300	
		690 V	KVAr		250	325	406	450	
Power loss / pole	With rated current			W	6.5	10	15	25	
Mechanical endurance	Operating cycle ⁵⁾			Oper.	8 000	8 000	8 000	8 000	
	No. of operations				16 000	16 000	16 000	16 000	
Weight without accessories	3-pole switch			Kg	4.8	4.8	4.8	4.8	
	4-pole switch			Kg	5.8	5.8	5.8	5.8	
Terminal bolt size	Metric thread diameter x length			mm	M10x30	M10x30	M10x30	M12x40	
Terminal tightening torque	Counter torque required			Nm	30-44	30-44	30-44	50-75	
Operating torque	3-pole switch disconnecter			Nm	16	16	16	27	

Data according to IEC 60947-6-1

Class of equipment				PC	PC	PC	PC
Rated short - time withstand current	I _{cw} (r.m.s.)	690 V 0.1s	kA	25	25	25	25
Rated operational current, AC-31B		up to 415V	A	315	400	500	630
Rated operational current, AC-33B		up to 415V	A	315	400	500	630

1) Further rating on request

2) Category B

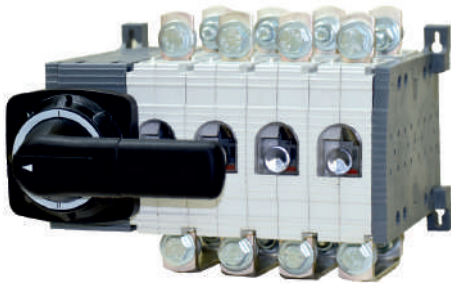
3) These values are given for guidance and may vary acc. to the motor manufacturer

4) Acc. to IEC 60947-1, § 6.1.1

5) Operating cycle O-I-O-II-O

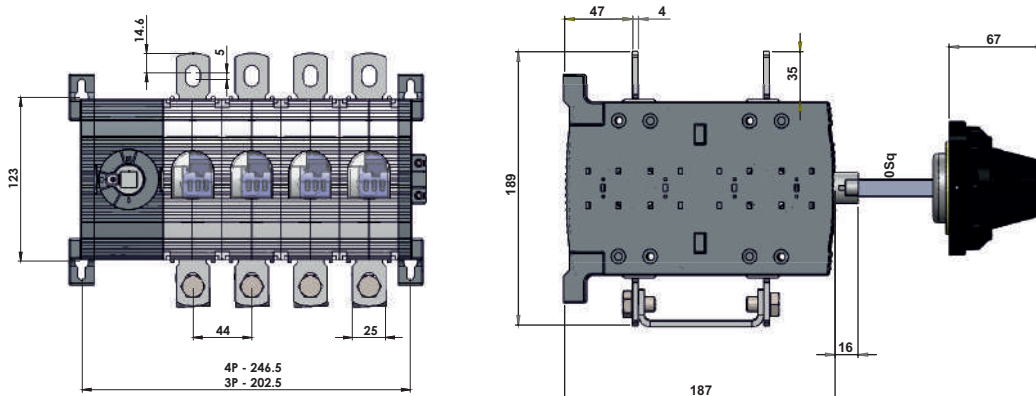
Front operated Change Over Switches RVCO 315...RVCO 630A

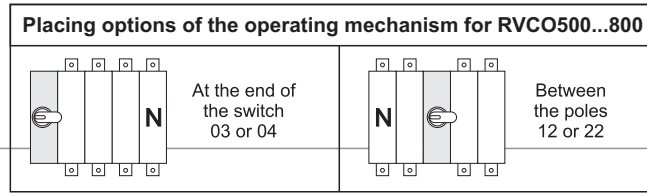
Change Over Switches I-0-II operation, open transition with pistol handle, base mounting, including a black ON-OFF-ON plastic handle and shaft as standard, The handle is IP65 protected, padlockable in the OFF position and with door interlock in the ON position. The shaft can be adjusted to different installation depths.



No. of poles	I_{th} (open) [A]	Rated operat. currents AC22A/ AC23A 400 V [A/A]	Type	Order number	Units/ type [pcs]	Weight/ unit [Kg]
3	315	315/315	RVCO31503	RVECO0315M03H3	1	6.82
4	315	315/315	RVCO31504	RVECO0315M04H3	1	8.10
3	315	315/315	RVCO31512	RVECO0315M12H3	1	6.82
4	315	315/315	RVCO31522	RVECO0315M22H3	1	8.10
3	400	400/400	RVCO40003	RVECO0400M03H3	1	7.20
4	400	400/400	RVCO40004	RVECO0400M04H3	1	8.40
3	400	400/400	RVCO40012	RVECO0400M12H3	1	7.20
4	400	400/400	RVCO40022	RVECO0400M22H3	1	8.40
3	500	500/500	RVCS50003	RVECOS500M03H3	1	7.20
4	500	500/500	RVCS50004	RVECOS500M04H3	1	8.40
3	500	500/500	RVCS50012	RVECOS500M12H3	1	7.40
4	500	500/500	RVCS50022	RVECOS500M22H3	1	8.40
3	630	630/630	RVCS63003	RVECOS500M03H3	1	7.80
4	630	630/630	RVCS63004	RVECOS500M04H3	1	8.80
3	630	630/630	RVCS63012	RVECOS500M12H3	1	7.80
4	630	630/630	RVCS63022	RVECOS500M22H3	1	8.80

Shaft, shorting links, handle included as standard
Any other combinations are available on request





		RATING		A	500	630	800
Technical data according to IEC 60947-3		Switch type			RVCO0500	RVCO0630	RVCO0800
Rated insulation voltage and rated operational voltage AC-20, DC-20	Pollution degree 3	50 Hz	1min.	V	1000	1000	1000
Dielectric strength				kv	10	10	10
Rated impulse voltage				kv	12	12	12
Rated thermal current and rated operational current AC-20, DC-20 in ambient 40°C ⁴⁾	Ambient 40°C	In open air		A	500	630	800
	Ambient 60 C	In enclosure		A ₂	500	630	800
with minimum cable cross section			Cu	mm ²	2x150	2x185	2x240
Rated operational current AC-21A		≤ 500V		A	500	630	800
		690V		A	500	630	800
		1000V		A	500	630	800
Rated operational current AC-22A		≤ 500V		A	500	630	800
		690V		A	500	630	800
		1000V		A	500	630	800
Rated operational current AC-23A		≤ 500V		A	500	630	800
		690V		A	500	630	800
		1000V		A	200	400	400
Rated operational current/ poles in series, DC-21A ...23A ¹⁾		24...110 V		A	500/1 ²⁾	630/1	800/1
		220 V		A	500/2 ²⁾	630/1	800/1
		440 V		A	360/3	360/2	800/2
		660 V		A	360/4	630/4 ²⁾	650/4 ²⁾
Rated operational current / poles in series, DC-21B		800 V		A	500/5	400/5	600/5
		1000 V		A	500/6	400/6	600/6
Rated operational power, AC-23 ³⁾		230 V		KW	165	200	250
		400 V		KW	275	355	450
		415 V		KW	287	355	450
		500 V		KW	287	400	560
		690 V		KW	500	630	800
Rated breaking capacity in category AC-23		≤ 500 V		A	3200	5040	6400
		690 V		A	3200	5040	6400
Rated conditional short-circuit I _p (r.m.s.) and corresponding max, allowed cut-off current I _c .	I _p (r.m.s.)	100 KA, 500 V		KA	61.5	90	90
	Max. fuse size	gG/aM		A	500/450	800/1000	800/1000
The cut-off current I _c refers to values listed by fuse manufacturers (Single phase test acc.to IEC60269).	I _p (r.m.s.)	80 KA, 690 V		KA	59	83.5	83.5
	Max. fuse size	gG/aM		A	500/500	800/1000	800/1000
Rated short-time making withstand current	r.m.s I _{cw}	≤1000 V 0.15s		KA	38	38	38
		≤1000 V 0.25s		KA	36	36	36
		≤1000 V 1s		KA	20	20	20
Rated short-time circuit making capacity	Peak Value I _{cm}	≤1000 V 1s		KA	65	80	80
Rated capacitor power when no initial charge on the capacitor	The capacitor rating are limited by the fuse link	415 V		KVAr	225	250	310
		500 V		KVAr	268	300	375
		690 V		KVAr	406	450	550
Power loss / pole	With rated current			W	15	25	40
Mechanical endurance	Operating cycle ⁵⁾			Oper.	5 000	5 000	5 000
	No. of operations				10 000	10 000	10 000
Weight without accessories	3-pole switch			Kg	12.8	12.8	12.8
	4-pole switch			Kg	15.6	15.6	15.6
Terminal bolt size	Metric thread diameter x length			mm	M12x40	M12x40	M12x40
Terminal tightening torque	Counter torque required			Nm	50-75	50-75	50-75
Operating torque	3-pole switch disconnecter			Nm	27	27	27

Data according to IEC 60947-6-1

Class of equipment					PC	PC	PC
Rated short - time withstand current	I _{cw} (r.m.s.)	690 V 0.1s		kA	38	38	38
Rated operational current, AC-31B		up to 415V		A	500	630	800
Rated operational current, AC-33B		up to 415V		A	500	630	800

1) Further rating on request

2) Category B

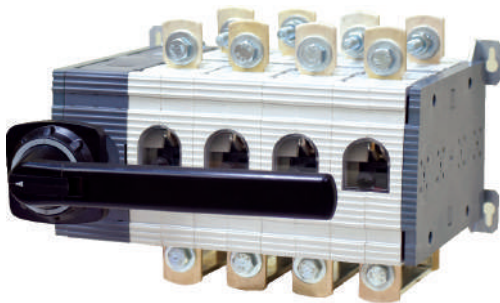
3) These values are given for guidance and may vary acc, to the motor manufacturer

4) Acc. to IEC 60947-1, § 6.1.1

5) Operating cycle O-I-O-II-O

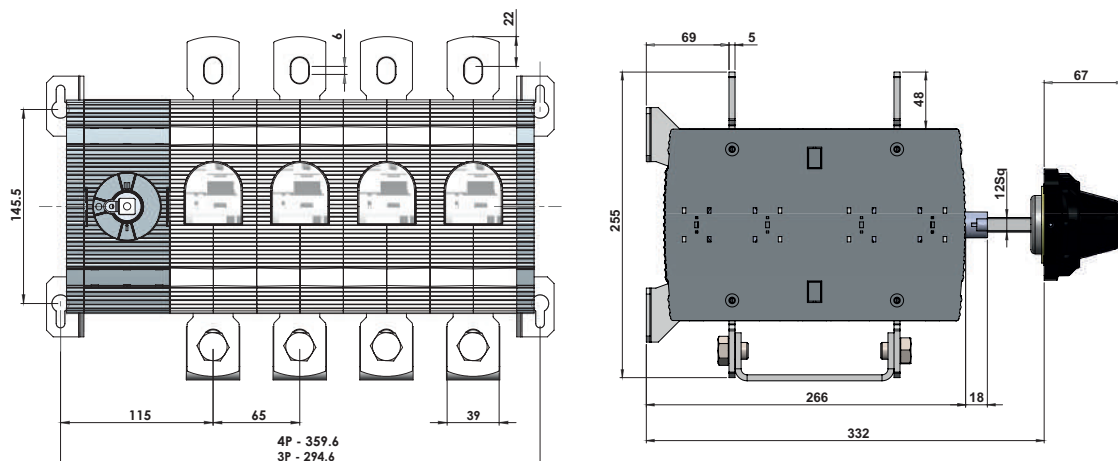
Front operated Change Over Switches RVCO 500...RVCO 800 A

Change Over Switches I-0-II operation, open transition with pistol handle, base mounting, including a black ON-OFF-ON plastic handle and shaft as standard, The handle is IP65 protected, padlockable in the OFF position and with door interlock in the ON position. The shaft can be adjusted to different installation depths.

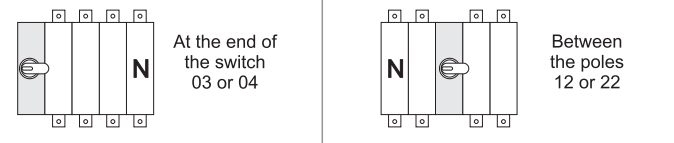


No. of poles	I_{th} (open) [A]	Rated operat. currents AC22A/ AC23A 400 v [A/A]	Type	Order number	Units/ type [pcs]	Weight/ unit [Kg]
3	500	500/500	RVCO50003	RVECO0500M03H3	1	17.10
4	500	500/500	RVCO50004	RVECO0500M04H3	1	20.90
3	500	500/500	RVCO50012	RVECO0500M12H3	1	17.10
4	500	500/500	RVCO50022	RVECO0500M22H3	1	20.90
3	630	630/630	RVCO63003	RVECO0630M03H3	1	17.10
4	630	630/630	RVCO63003	RVECO0630M04H3	1	20.90
3	630	630/630	RVCO63012	RVECO0630M12H3	1	17.10
4	630	630/630	RVCO63022	RVECO0630M22H3	1	20.90
3	800	800/800	RVCO80003	RVECO0800M03H3	1	17.10
4	800	800/800	RVCO80004	RVECO0800M04H3	1	20.90
3	800	800/800	RVCO80012	RVECO0800M12H3	1	17.10
4	800	800/800	RVCO80022	RVECO0800M22H3	1	20.90

Shaft, shorting links, handle included as standard
Any other combinations are available on request



Placing options of the operating mechanism for RVCO1000...1600



		RATING		A	1000	1250	1600
Technical data according to IEC 60947-3		Switch type			RVCO1000	RVCO1250	RVCO1600
Rated insulation voltage and rated operational voltage AC20, Dc20	Pollution degree 3	50 Hz	1min.	V	1000	1000	1000
Dielectric strength				kv	10	10	10
Rated impulse voltage				kv	12	12	12
Rated thermal current and rated operational current AC20/DC20 with minimum conductor cross section	Ambient 40°C	In open air		A	1000	1250	1600
	Ambient 60 C	In enclosure		A	1000	1250	1600
		Cu		mm ²	2x300	2x400	2x500
Rated operational current AC-21A		Up to 690 V		A	1000	1250	1600
		1000 V		A	1000	1250	1600
Rated operational current AC-22A		Up to 415 V		A	1000	1250	1600
		500 - 690 V		A	1000	1250	1600
Rated operational current AC-23A		Up to 500 V		A	1000	1250	1250
		690 V		A	1000	1250	1250
Rated operational power, AC-23A (These values are given for guidance and may vary acc to the motor manufacturer)		400...415 V		KW	560	710	890
		440 V		KW	630	800	1000
		500 V		KW	710	900	1100
		690 V		KW	1000	1200	1600
Rated breaking capacity, AC-23A		Up to 500 V		A	8000	10000	12800
		690 V		A	8000	10000	12800
Rated conditional short-circuit current I _p (r.m.s.) and corresponding max. allowed cut-off current I _c	I _p (r.m.s.)	80 KA		KA	100	100	100
	Max. fuse size	≤ 415 V		A	1250/1250	1250/1250	1250/1250
The cut-off current I refers to values listed by fuse manufacturers (Single phase test acc.to IEC60269).	I _p (r.m.s.)	100 KA		KA	106	106	106
	Max. fuse size	≤ 500 V		A	1250/1250	1250/1250	1250/1250
Rated short-time withstand current	r.m.s I _{cw}	690 V, 0.25s		KA	50	50	50
		690 V, 1s		KA	50	50	50
Rated short-time circuit making capacity	Peak Value I _{cw}	690 V		KA	110 ⁽¹⁾	110 ⁽¹⁾	110 ⁽¹⁾
	Max. distance from switch frame to nearest busbar/cable support			mm	150	150	150
Rated capacitor power when no initial charge on the capacitor	The capacitor rating are limited by the fuse links	415 V		KVAr	460	575	730
		500 V		KVAr	550	690	880
		690 V		KVAr	750	950	1200
Power loss / pole	At rated operational current			W	19	29	48
Mechanical endurance	Operating cycle ⁽¹⁾ No. of operations			Oper.	3 000	3 000	3 000
					6 000	6 000	6 000
Weight without accessories	3-pole			Kg	29.00	29.00	33.60
	4-pole switch			Kg	35.70	35.70	42.20
Terminal bolt size	Metric thread diameter x length			mm	M12x50	M12x50	M12x60
Terminal tightening torque	Counter torque required			Nm	50...75	50...75	50...75
Operating torque	3-pole switch disconnecter			Nm	65	65	65

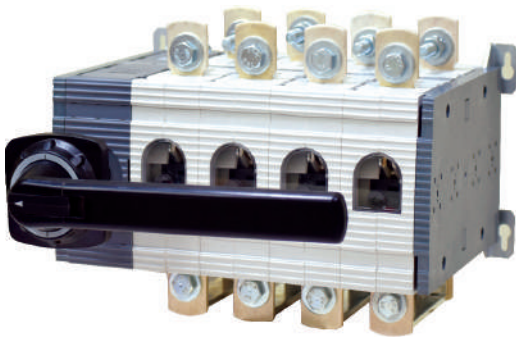
Data according to IEC 60947-6-1

Class of equipment					PC	PC	PC
Rated short - time withstand current	I _{cw} (r.m.s.)	690 V 0.1s		kA	50	50	50
Rated operational current, AC-31B		up to 415V		A	1000	1250	1600
Rated operational current, AC-33B		up to 415V		A	1000	1250	1600

1) Operating cycle O-I-O-II-O

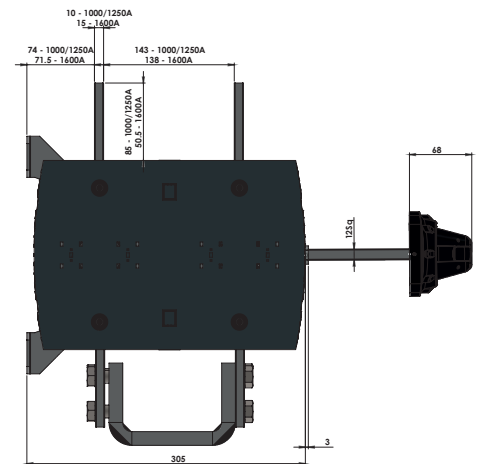
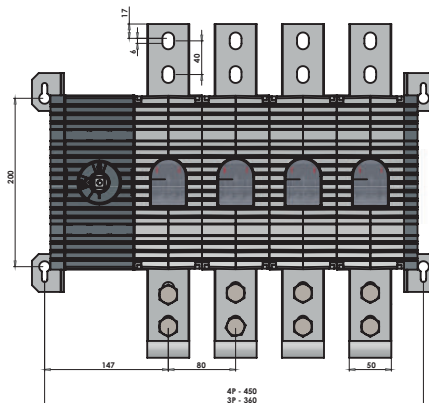
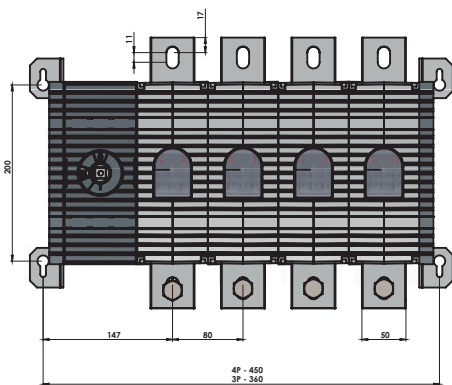
Front operated Change Over Switches RVCO 1000...RVCO 1600 A

Change Over Switches I-0-II operation, open transition with pistol handle, base mounting, including a black ON-OFF-ON plastic handle and shaft as standard, The handle is IP65 protected, padlockable in the OFF position and with door interlock in the ON position. The shaft can be adjusted to different installation depths.



No. of poles	I_{th} (open) [A]	Rated operat. currents AC22A/ AC23A 400 v [A/A]	Type	Order number	Units/ type [pcs]	Weight/ unit [Kg]
3	1000	1000/1000	RVCO100003	RVECO1000M03H3	1	37.20
4	1000	1000/1000	RVCO100004	RVECO1000M04H3	1	46.00
3	1000	1000/1000	RVCO100012	RVECO1000M12H3	1	37.20
4	1000	1000/1000	RVCO100022	RVECO1000M22H3	1	46.00
3	1250	1250/1250	RVCO125003	RVECO1250M03H3	1	37.20
4	1250	1250/1250	RVCO125004	RVECO1250M04H3	1	46.00
3	1250	1250/1250	RVCO125012	RVECO1250M12H3	1	37.20
4	1250	1250/1250	RVCO125022	RVECO1250M22H3	1	46.00
3	1600	1600/1600	RVCO160003	RVECO1600M03H3	1	48.20
4	1600	1600/1600	RVCO160004	RVECO1600M04H3	1	61.30
3	1600	1600/1600	RVCO160012	RVECO1600M12H3	1	48.20
4	1600	1600/1600	RVCO160022	RVECO1600M22H3	1	61.30

Shaft, shorting links, handle included as standard
Any other combinations are available on request



SHEET METAL ENCLOSED CHANGEOVER SWITCH I-0-II OPERATION OPEN TRANSITION



Front operated Change Over Switches RVCO 20...RVCO 125 A

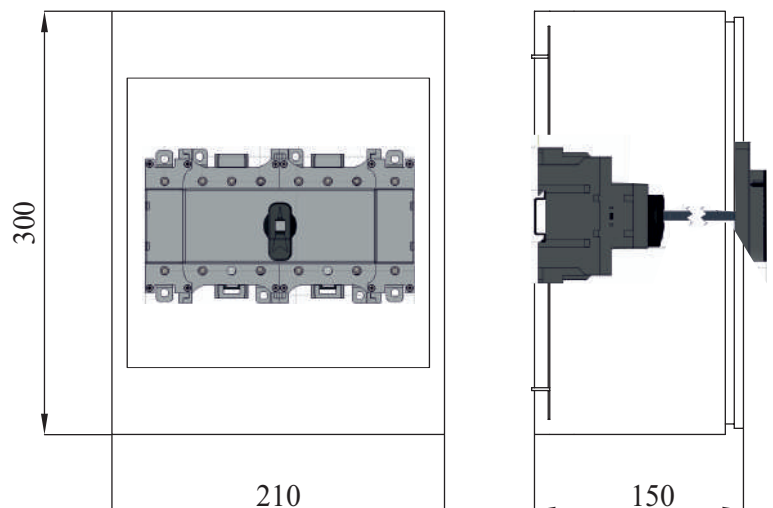
Change Over Switches I-0-II operation, open transition with pistol handle, base mounting, including a black ON-OFF-ON plastic handle and shaft as standard, The handle is IP65 protected, padlockable in the OFF position and with door interlock in the ON position. The shaft can be adjusted to different installation depths.



No. of poles	I_{th} (open) [A]	Cable cross section [mm ²]	Rated operat. currents AC22A/ AC23A 400 v [A/A]	Type	Order No	Delivery batch [pcs]	Weight/unit [Kg]
3	20	0.75...10	20/20	RVCE2003	RVECE0020M03H3	1	5.0
4	20	0.75...10	20/20	RVCE2004	RVECE0020M03H3	1	6.0
3	25	0.75...10	25/25	RVCE2503	RVECE0025M03H3	1	5.0
4	25	0.75...10	25/25	RVCE2504	RVECE0025M03H3	1	6.0
3	32	0.75...10	32/32	RVCE3203	RVECE0032M03H3	1	5.0
4	32	0.75...10	32/32	RVCE3204	RVECE0032M03H3	1	6.0
3	40	0.75...10	40/40	RVCE4003	RVECE0040M03H3	1	5.0
4	40	0.75...10	40/40	RVCE4004	RVECE0040M03H3	1	6.0
3	50	1.5...35	50/50	RVCE5003	RVECE0050M03H3	1	5.0
4	50	1.5...35	50/50	RVCE5004	RVECE0050M03H3	1	6.0
3	63	1.5...35	63/63	RVCE6303	RVECE0063M03H3	1	5.0
4	63	1.5...35	63/63	RVCE6304	RVECE0063M03H3	1	6.0
3	80	1.5...35	80/80	RVCE8003	RVECE0080M03H3	1	5.0
4	80	10...70	80/80	RVCE8004	RVECE0080M03H3	1	6.0
3	100	10...70	100/100	RVCE10003	RVECE0100M03H3	1	5.0
4	100	10...70	100/100	RVCE10004	RVECE0100M03H3	1	6.0
3	125	10...70	125/125	RVCE12503	RVECES125M03H3	1	5.0
4	125	10...70	125/125	RVCE12504	RVECES125M03H3	1	6.0

Shafts and handles included as standard

Stainless Steel enclosure are available on request.



Steel sheet enclosed front operated Change Over Switches RVCE 125...RVCE 315A

Change Over Switches I-0-II operation, open transition with pistol handle, base mounting, IEC

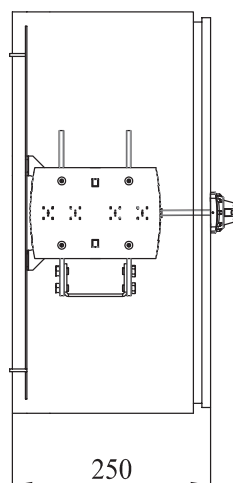
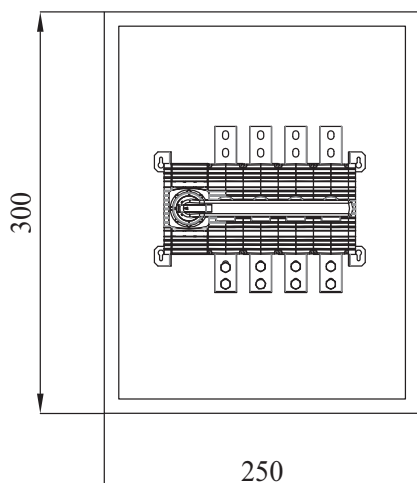
including a black ON-OFF plastic handle and shaft as standard. The handle is IP65 protected, padlockable in the OFF- position and with door interlock in the ON-position. The shaft can be adjusted to different installation depths.



No. of poles	I _{th} (open) [A]	Rated operat. currents AC22A/ AC23A 400 V [A/A]	Type	Order number	Units/ type [pcs]	Weight/ unit [Kg]
3	200	200/125	RVCE12503	RVECE0125M03H3	1	10.92
4	200	200/125	RVCE12504	RVECE0125M04H3	1	11.28
3	200	200/125	RVCE12512	RVECE0125M12H3	1	10.92
4	200	200/125	RVCE12522	RVECE0125M22H3	1	11.28
3	200	200/160	RVCE16003	RVECE0160M03H3	1	10.92
4	200	200/160	RVCE16004	RVECE0160M04H3	1	11.28
3	200	200/160	RVCE16012	RVECE0160M12H3	1	10.92
4	200	200/160	RVCE16022	RVECE0160M22H3	1	11.28
3	200	200/200	RVCE20003	RVECE0200M03H3	1	10.92
4	200	200/200	RVCE20004	RVECE0200M04H3	1	11.28
3	200	200/200	RVCE20012	RVECE0200M12H3	1	10.92
4	200	200/200	RVCE20022	RVECE0200M22H3	1	11.28
3	250	250/250	RVCE25003	RVECE0250M03H3	1	10.92
4	250	250/250	RVCE25004	RVECE0250M04H3	1	11.28
3	250	250/250	RVCE25012	RVECE0250M12H3	1	10.92
4	250	250/250	RVCE25022	RVECE0250M22H3	1	11.28
3	315	315/315	RVCE31503	RVECES315M03H3	1	10.92
4	315	315/315	RVCE31504	RVECES315M04H3	1	11.28
3	315	315/315	RVCE31512	RVECES315M12H3	1	10.92
4	315	315/315	RVCE31522	RVECES315M22H3	1	11.28

Protection-IP55/65

Stainless Steel enclosure are available on request.

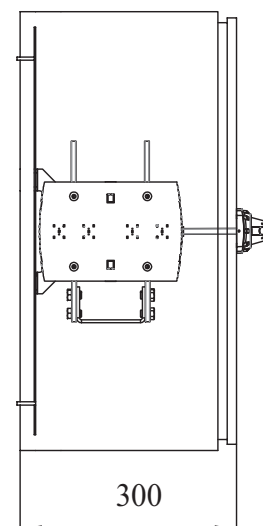
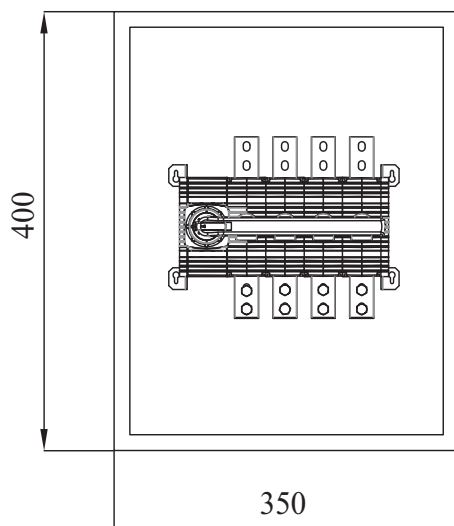


Steel sheet enclosed front operated Change Over Switches
RVCE 315...RVCE 630 A

No. of poles	I_{th} (open) [A]	Rated operat. currents AC22A/ AC23A 400 V [A/A]	Type	Order number	Units/ type [pcs]	Weight/ unit [Kg]
3	315	315/315	RVCE31503	RVECE0315M03H3	1	25.87
4	315	315/315	RVCE31504	RVECE0315M04H3	1	27.20
3	315	315/315	RVCE31512	RVECE0315M12H3	1	25.87
4	315	315/315	RVCE31522	RVECE0315M22H3	1	27.20
3	400	400/400	RVCE40003	RVECE0400M03H3	1	25.87
4	400	400/400	RVCE40004	RVECE0400M04H3	1	27.20
3	400	400/400	RVCE40012	RVECE0400M12H3	1	25.87
4	400	400/400	RVCE40022	RVECE0400M22H3	1	27.20
3	500	500/500	RVCE50003	RVECE0500M03H3	1	25.87
4	500	500/500	RVCE50004	RVECE0500M04H3	1	27.20
3	500	500/500	RVCE50012	RVECE0500M12H3	1	25.87
4	500	500/500	RVCE50022	RVECE0500M22H3	1	27.20
3	630	630/630	RVCE63003	RVECES630M03H3	1	25.87
4	630	630/630	RVCE63004	RVECES630M04H3	1	27.20
3	630	630/630	RVCE63012	RVECES630M12H3	1	25.87
4	630	630/630	RVCE63022	RVECES630M22H3	1	27.20

Protection-IP55/65

Stainless Steel enclosure are available on request.

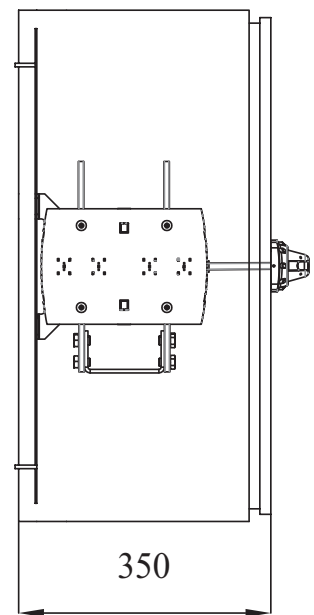
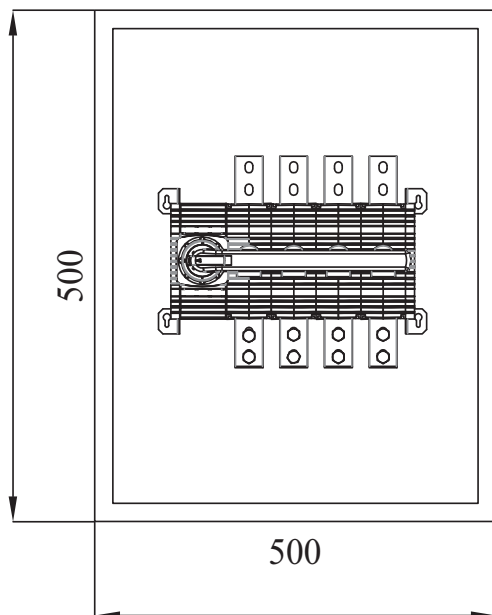




No. of poles	I _{th} (open) [A]	Rated operat. currents AC22A/ AC23A 400 v [A/A]	Type	Order number	Units/ type [pcs]	Weight/ unit [Kg]
3	500	500/500	RVCE50003	RVECE0500M03H3	1	58.00
4	500	500/500	RVCE50004	RVECE0500M04H3	1	61.80
3	500	500/500	RVCE50012	RVECE0500M12H3	1	58.00
4	500	500/500	RVCE50022	RVECE0500M22H3	1	61.80
3	630	630/630	RVCE63003	RVECE0630M03H3	1	58.00
4	630	630/630	RVCE63003	RVECE0630M04H3	1	61.80
3	630	630/630	RVCE63012	RVECE0630M12H3	1	58.00
4	630	630/630	RVCE63022	RVECE0630M22H3	1	61.80
3	800	800/800	RVCE80003	RVECE0800M03H3	1	58.00
4	800	800/800	RVCE80004	RVECE0800M04H3	1	61.80
3	800	800/800	RVCE80012	RVECE0800M12H3	1	58.00
4	800	800/800	RVCE80022	RVECE0800M22H3	1	61.80

Protection-IP55/65

Stainless Steel enclosure are available on request.

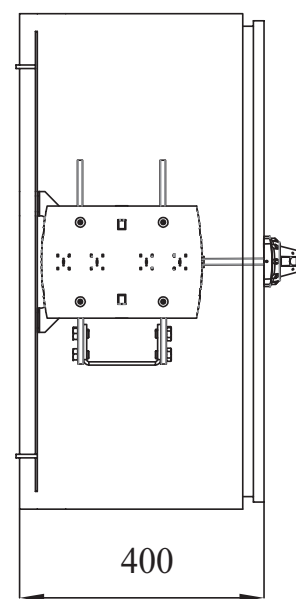
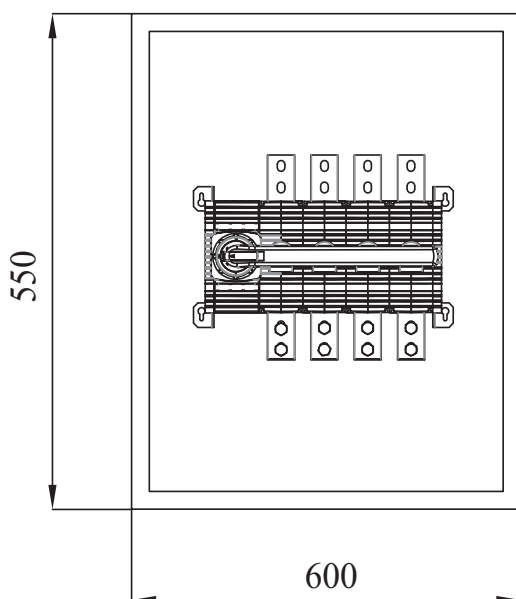


Steel sheet enclosed front operated Change Over Switches
RVCE1000...RVCE1600 A

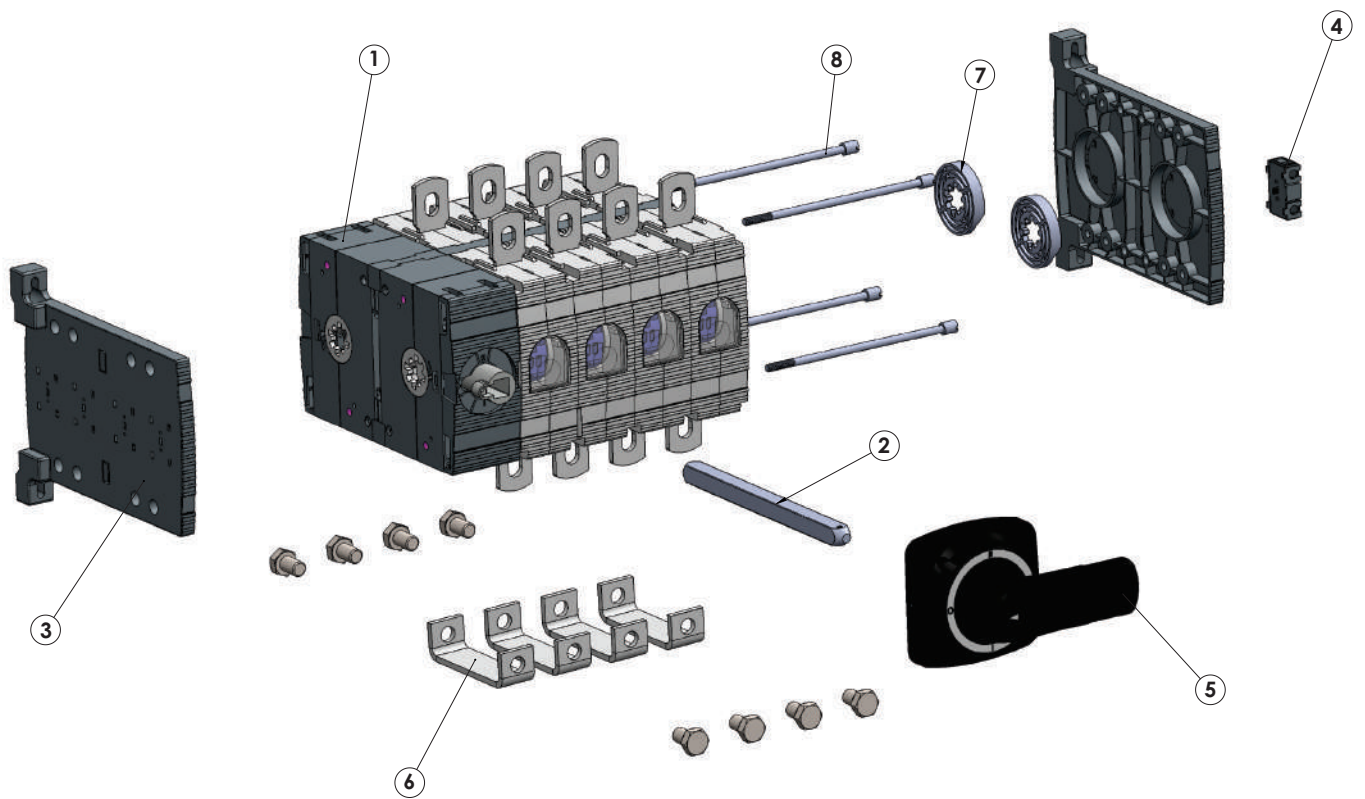
No. of poles	I_{th} (open) [A]	Rated operat. currents AC22A/ AC23A 400 v [A/A]	Type	Order number	Units/ type [pcs]	Weight/ unit [Kg]
3	1000	1000/1000	RVCE100003	RVECE1000M03H3	1	97.50
4	1000	1000/1000	RVCE100004	RVECE1000M04H3	1	99.50
3	1000	1000/1000	RVCE100012	RVECE1000M12H3	1	97.50
4	1000	1000/1000	RVCE100022	RVECE1000M22H3	1	99.50
3	1250	1250/1250	RVCE125003	RVECE1250M03H3	1	97.50
4	1250	1250/1250	RVCE125004	RVECE1250M04H3	1	99.50
3	1250	1250/1250	RVCE125012	RVECE1250M12H3	1	97.50
4	1250	1250/1250	RVCE125022	RVECE1250M22H3	1	99.50
3	1600	1600/1600	RVCE160003	RVECE1600M03H3	1	108.00
4	1600	1600/1600	RVCE160004	RVECE1600M04H3	1	121.00
3	1600	1600/1600	RVCE160012	RVECE1600M12H3	1	108.00
4	1600	1600/1600	RVCE160022	RVECE1600M22H3	1	121.00

Protection-IP55/65

Stainless Steel enclosure are available on request.



RVCO 125...RVCO1600A



1. Change Over Switch

5. Handle

2. Shaft

6. Shorting Link







3. Side Cover

7. Cam Slide

4. Auxiliary Block

8. Socket Screw

Accessories

Handle with Soft	Length	Suitable for	Type	Order Number
	150mm*	RVCO20...RVCO125	RVCOH125	RVECO0125H03H3
	260mm*	RVCO125...RVCO250	RVCOH250	RVECO0250H03H3
	235mm*	RVCO315...RVCO500	RVCOH400	RVECO0400H03H3
	325mm*	RVCO500...RVCO800	RVCOH800	RVECO0800H03H3
	325mm*	RVCO1000...RVCO3200	RVCOH1600	RVECO1600H03H3
Auxiliary Block				
	NO	Type Function Suitable for RVCO20..	RVSA10	RVECO0A10H03H3
	NC	RVCO3200A	RVSA01	RVECO0A01H03H3

* Different Shafts length are available

ABN



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Electricity is the most indispensable source of energy in this modern era. ABN Electric excel in the specialized manufacturing, servicing and exporting of low voltage Switchgear, controlgear, Power Busbars & Diesel Gensets. since its establishment, the company is a fully self contingent, where every component is formulated, developed, processed and manufactured to latest requirements.

"We Make Ideas Work"

ABN electric hold an excellent technical infrastructure and highly skilled team of professionals. The R&D wing constantly work on innovations and determine to transform conventional products to new generation products.

"Conviction"

Our products are accredited with Global Standards which stand as a testimony to our strict and vigilant quality control. We are committed to quality and innovation besides prompt after sales service.