

Cam switches

Cam switches series S 6 – 160 J	D 3
Rotary switches S 32, 250, 400 J	D 50
Compact power switches K 16 J a K 32 J	D 54
Controls	D 58
Switches in embedded box	D 59
Crane switches	D 61

Notes

General

Cam switches series S 6, 10, 16, 25, 32, 40, 63, 100, 160 J are a new generation of switches in current line from 6 to 160 A. They are divided to five sizes:

- size I** switches S 6, 10 J - size of the switching element 34x33x(10,5) mm
 - size II** switches S 16, 25 J - size of the switching element 43x43x(13,5) mm
 - size III** switches S 32, 40 J - size of the switching element 56x53x(16) mm
 - size IV** switches S 63 J - size of the switching element 66x66x(18,5) mm
 - size V** switches S 100, 160 J - size of the switching element 77x84x(21) mm
- (The number in parenthesis is a height of one switching chamber)

Cam switches in IV. and V. size have identical detent room Ø 66 mm and fixation on the panel.

CAM SWITCHES SERIES S..J :

- they are in accordance with EN 947-3, (EN 60 947-3, IEC 60 947-3), EN 60 204-1, VDE 0660
- all terminals and interconnection are protected against contact (IP20)
- all execution are produced to reach the protection mode of IP 65 with delivery of the sealing elements designed with G to seal the shaft and fastening screws
- the cam switches in size I. - IV. have entrance to terminals with screwdriver in angle 45° and corrected readability of terminals designations on skewed area too
- switching angle: 30°, 45°, 60° and 90° (preferential angle 60° - maximum 6 switching position; angle 30° - maximum 12 switching position)
- small and unification switch sizes
- flexibility of mechanical execution
- extended selection of electrical execution by catalog
- maximum number of the switching chambers is 12 (24 contacts)
- they are in accordance with T32 requirements and they meet surrounding temperatures from -30° to +55°C.

Application

Power switches for switching of motors with load in AC3, AC23

Switches in the auxiliary and measuring circuits

Connection of the resistance loads and electric furnaces

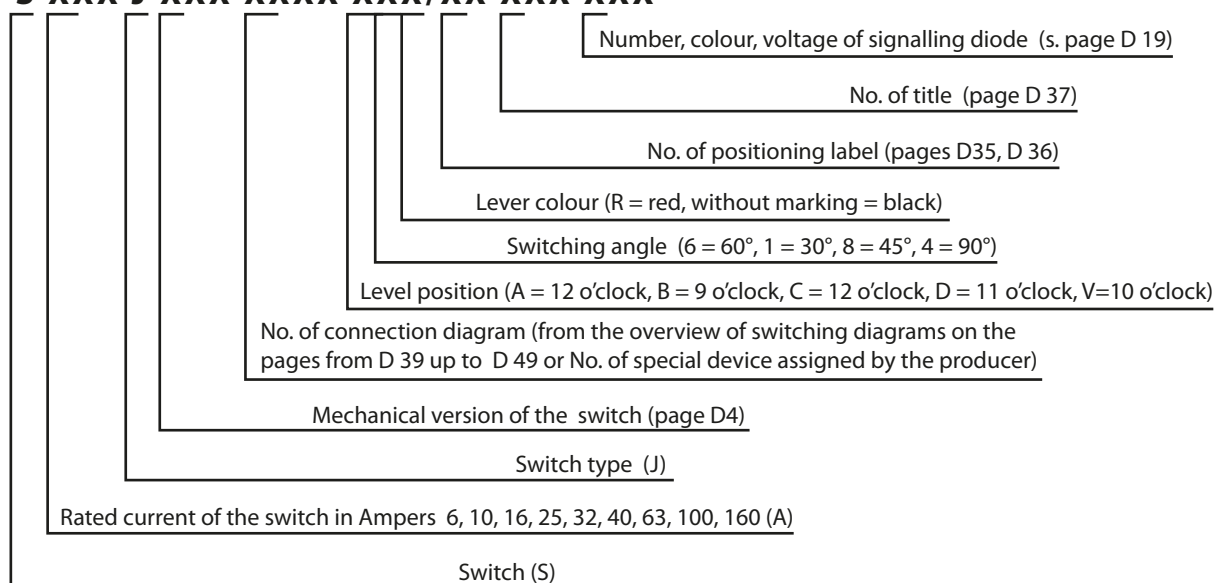
Stage change-over switches of the transformers, welding machines...

Switches with reversible position for testing purposes and single-phase motors

Change-over switches, switches of Y D , poles switching (speed) of multirevolution motors

Type designation

S XXX J XXX XXXX XXX/XX XXX XXX



Order example:

S16JVDG 2203X A6 R/ 01 N01 1R4

As an example, the following cam switch is specified:

- cam switch with rated current 16 A
- with reversible position (V), with frontal plate (D), with rubber insulation for IP65 (G)
- three - pole switch (2203) without interconnector (X)
- basic position of the lever A (12 hod), switching angle 60° (6)
- red lever (R)
- label position 01 with inscription MASTER SWITCH
- switch with 1 indication diode (red) for voltage 230 V~

When specifying the switch, is necessary use the base catalog with mechanical and electrical charts.

For substandard version of switch is necessary supply the specification sheet and send it to producer.

When no required position, switching angle, label position or inscription is stated, the A lever position (12 Hours), switching angle of 60° or other

regarding to required switching programme and relevant position label will be determined by the producer.

Label, inscription and LED diode No. are to be stated if they are resulted from mechanical execution and they are required specifically. (Type designation up to vertical dividing line).

Mechanical Execution

Switch with fixing to the panel (front mounting)

Type designation	Execution description
S ... J	With lever (without frontal plate)
S ... JE	With handle and terminal pins
S ... JG	With lever and rubber insulation for IP 65
S ... JD	With lever and frontal plate
S ... JZ	With the zero position (or other required positions -cite) to be locked with propelling lock
S ... JU	Switch with possibility to be locked by 3 padlocks
S ... JF	Switch with light alarm (1-3 LED diodes)
S ... JV	Switch with one or two reversible positions (only switch S 6 - 25 J)
S ... JR	Central fixing of the switch to the hole of 22 diameter with control by lever (only S 6 - 25 J)
S ... JK	Central fixing of the switch to the hole of 22 diameter with control by key (only S 6 - 25 J)
S ... JT	Switch with inhibiting push-button in zero position (only S 6 - 25 J) - other position cite
S ... JC	Switch with undervoltage coil 230 V~ (only for S 63 J)

Switches with rear fixing (reversed mounting)

Type designation	Execution description
S ... JO	Rear fixing of switches (reversed mounting)
S ... JLD	Switch with frontal plate fastened to the strip TH 35-7,5
S ... JLS	Switch fastened to the strip TH 35-7,5, with label 52,5x45 mm (only S 6, 10, 16, 25 J)
S ... JB	Rear fixing of switch - with lever in the door
S ... JBD	- with lever and frontal plate in the door
S ... JBU	- with lockable lever in the door
S ... JBZ	- with propelling lock in the door
S ... JP	Switch in the box with lever (IP65)
S ... JPD	Switch in the box with frontal plate (IP65)
S ... JPU	Switch in the box with lockable lever (IP65)
S ... JPZ	Switch in the box with propelling lock (IP65)
S ... JA	In Al cover (S 16 - 63 J)
S ... JAZ	In Al cover with propelling lock (S 16 - 63 J)
S ... JI	In Al cover with 3 fuses (S 16 - 63 J)
S ... JIZ	In Al cover s 3 fuses and propelling lock (S 16 - 63 J)
S ... NJ	In cover from plastic material with 3 fuses (S 16 - 25 J)
S ... NJU	In cover from plastic material with 3 fuses and lockable level 1 - 3 padlocks (S 16 - 25J)
S ... NJZ	In cover from plastic material and 3 fuses and propelling lock(S 16 - 25J)
S ... JM	With small lever
S ... JH	With locking lever S 6 - 25 J

Notes: All mechanical executions of switches are each other compatible, e.g. S16JVDG is switch of 16A rated current, with reversible position (V), frontal plate (D) and rubber insulation (G) for IP65. Executions JV, JR, JK, JLS are only available for switches of size I, II.

Technical data

Type of switch		S6J	S10J	S16J	S25J	S32J	S40J	S63J	S100J	S160J
Rated insulation voltage U_i , V *		500	500	690 **	690 **	690	690	690	690	690
Impulse withstand voltage U_{imp} , kV		4	4	4	4	6	6	6	6	6
Rated thermal current I_{th} , A		6	10	20	25	32	40	63	100	150
Rated operational current I_e , A, AC-21A; AC-1		6	10	16	25	32	40	60	100	150
Rated operational power, kW / rated operational current I_e , A										
AC-3 short armature motor ; starting, stopping	1 phase 220-240V	0,9/5,1	1,5/8,5	1,7/9,6	2,6/14,7	4/22,7	4,4/25	5 / 28,4	10 / 56,8	13 / 73,8
	3 phase 220-240V	1,5	2,5	3	4,5	7	7,7	8,5	17	23
	380-440 V	2,5/4,5	3,5 / 6,3	4 / 7,2	7,5 / 13,5	12 / 17,3	13/18,8	15 / 27	30 / 54	40 / 72
	500 V	2,5	3,5	4	7,5	12	13	15	30	40
AC-23A switching of motor and high inductive loads	1 phase 220-240 V	1/5,5	1,7 / 9,6	2,3 / 13	3 / 17	6,8/32	7,3/40	10 / 56,8	13 / 73,8	18 / 102
	3 phase 220-240 V	1,8	3	4	5,5	10	12,5	17	23	30
	380-440 V	3,3/6	5,5/10	7,5 / 13,5	11 / 19,8	17,5/32	22/40	30 / 54	40 / 72	55 / 99
	500 V	3,3	5,5	7,5	11	22	27	30	40	55
Rated DC operational current I_e , A										
- DC	24 V	6/4	10/8	16/8	25/8	32/12	34/12	63/25	100/32	150/63
(one switching contact)	48 V	3,7/2	6/4	6/4	6/4	25/10	25/10	25/16	32/20	32/20
DC-21A/DC-22A	110 V	0,7/0,2	1/0,3	1/0,3	1/0,3	4/3	4/3	4/3	5/4	5/4
(resistive load/DC motors)	220 V	0,2/0,1	0,3/0,2	0,3/0,2	0,3/0,2	1/0,4	1/0,4	1/0,4	1,2/0,5	1,2/0,5
Rated conditional short circuit current I_{cn} , kA		3	4	5	5	10	10	8	10	10
with fuse gG, A		6	10	16	25	32	40	63	100	160
Rated short time withstand current - 1 sec I_{cw} , A		160	200	220	500	800	1000	1200	1500	2000
Rated short circuit making capacity I_{cm} , A		320	400	400	500	800	1000	1200	1500	1600
Mechanical endurance (operations)		106	106	106	106	3x105	3x105	3x105	3x105	105
Terminals, mm ²		0,5-2,5	0,5-2,5	1-4	1,5-4	2,5-10	2,5-10	6-16	16-50***	16-50 ***
Terminal screw		M3	M3	M4	M4	M5	M5	M5	M6x0,75	M6x0,75
Control winch		● 5	● 5	● 5	● 5	● 5	● 5	● 6	● 6	● 6

Note.:

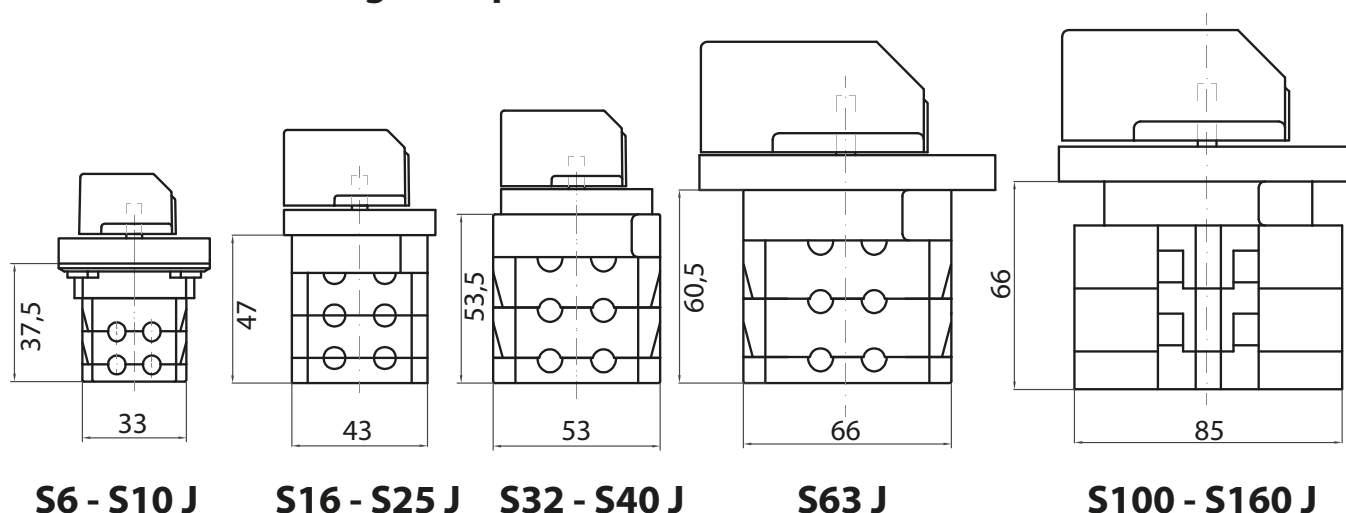
*STN EN 330420 - for circuits with grounded neutral point, category of overvoltage III and degree of pollution 2 ;

$U_i=500V$, if degree of pollution 3

**Main switch (execution S...JU) reduction of U_i to 400 V

***for 1 rigid Cu wire - max size 70 mm

Dimensional drawing - comparison of sizes S6 - S160 J



PANEL MOUNTING SWITCHES

S ... J, JE, JD, JG, JZ, JU, JR, JK, JV, JT, JF, JC

Dimensions (in mm)

Type	A	B	C	D	E	F	G	H	I	J	K	M	N	O	P	R	S	H1	U	V	X	Y	Z
S 6, 10 J	48	36	66	8	13	17,5	1,5	10,5	9	31	30	M3	23	3	19	30	34	5	5,5	33	15	3,2	46
S 16, 25 J	48	36	66	8	14	24	1,5	13,5	9	31	35	M4	23	3	24	30	43	5	5,5	43	19	4,2	46
S 32, 40 J	48	36	66	8	20,5	31	1,5	16	9	31	35	M4	23	3	24	30	56	5	7,5	53	19	4,2	46
S 63 J	94	75	106	11	22	46	2	18,5	10	42	50	M5	30	4	35	50	66	6	7,5	66	34,5	5,4	74
S 100, 160 J	94	75	106	11	22	46	2	21	10	42	50	M5	30	4	35	50	77	6	7,5	85	34,5	5,4	74

Type	L if no of chambers											
	1	2	3	4	5	6	7	8	9	10	11	12
S 6, 10 J	27,5	38	48,5	59	69,5	80	90,5	101	111,5	122	132,5	143
S 16, 25 J	33,5	47	60,5	74	87,5	101	114,5	128	141,5	155	168,5	182
S 32, 40 J	37,5	53,5	69,5	85,5	101,5	117,5	133,5	149,5	165,5	181,5	197,5	213,5
S 63 J	42	60,5	79	97,5	116	134,5	153	171,5	190	208,5	227	245,5
S 100, 160 J	45	66	87	108	129	150	171	192	213	234	255	276

SWITCHES IN ENCLOSURES

S ...J, JO, JLS, JLD, JB, JBD, JBU, JBJ, JP, JPU, JPD, JA, JI, JAZ, JIZ, NJ, NJU

Dimensions (in mm)

Type	A	B	C	D	E	F	G	H	I	J	K	M	N	O	P	R	S	H1	U	V	X	Y	Z
S 6, 10 J	48	36	66	8	13	17,5	1,5	10,5	9	31	30	M3	23	3	19	30	34	5	5,5	33	15	3,2	46
S 16, 25 J	48	36	66	8	14	24	1,5	13,5	9	31	35	M4	23	3	24	30	43	5	5,5	43	19	4,2	46
S 32, 40 J	48	36	66	8	20,5	31	1,5	16	9	31	35	M4	23	3	24	30	56	5	7,5	53	19	4,2	46
S 63 J	94	75	106	11	22	46	2	18,5	10	42	50	M5	30	4	35	50	66	6	7,5	66	34,5	5,4	74
S 100, 160 J	94	75	106	11	22	46	2	21	10	42	50	M5	30	4	35	50	77	6	7,5	85	34,5	5,4	74

Type	Z1	V1	S1	B1	B2	U1	U2	L1	L2	L3	D1	D2	D3	A1	F1	A2	C1
S 6, 10 J	22	110	87	66	73	5,5	10,5	86	100	159	64	14	8	72	35	48	66
S 16, 25 J	22	110	87	66	73	5,5	10,5	86	100	159	64	14	8	72	35	48	66
S 32, 40 J	30	160	140	110	110	6,5	12	108	140		84	16	10	119	58	66	106
S 63 J	30	160	140	110	110	6,5	12	108	140		84	16	10	119	58	66	106
S 100, 160 J	30	160	140	110	110	6,5	12	140			84	16	10	119	58	66	106

Type	T if no of chambers											
	1	2	3	4	5	6	7	8	9	10	11	12
S 6, 10 J	84	94,5	105	115,5	126	136,5	147	157,5	168	178,5	189	199,5
S 16, 25 J	90	103,5	117	130,5	144	157,5	171	184,5	198	211,5	225	238,5
S 32, 40 J	98	114	130	146	162	178	194	210	226	242	258	274
S 63 J	102,5	121	139,5	158	176,5	195	213,5	232	250,5	269	287,5	306
S 100, 160 J	105	126	147	168	189	210	231	252	273	294	315	336

Type	L4 if no of chambers											
	1	2	3	4	5	6	7	8	9	10	11	12
S 6, 10 J	70	70	70	70	112	112	112	112	154	154	154	154
S 16, 25 J	62	62	76	130	130	130	130	197,5	197,5	197,5	197,5	197,5
S 32, 40 J	112	112	112	112	169	169	169	253	253	253	295	295
S 63 J	115	115	115	115	172	172	172	256	256	256	298	298
S 100, 160 J	115	115	115	172	172	172	256	256	256	256	298	298

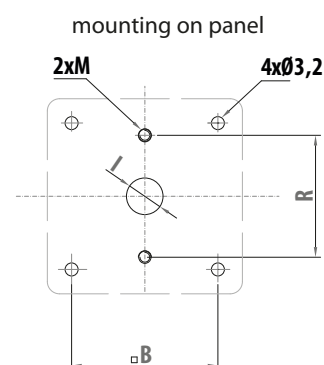
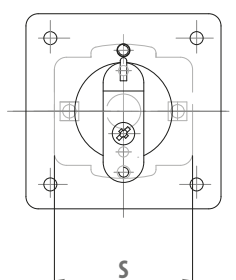
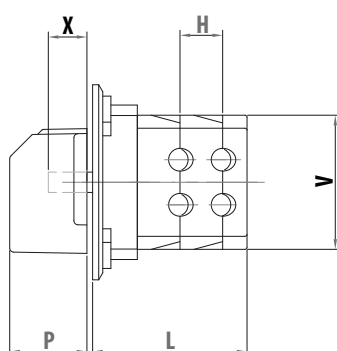
Type	Max. if no of chambers		
	L1	L2	L3
S 6, 10 J	3	4	9
S 16, 25 J	2	3	7
S 32, 40 J	2	4	-
S 63 J	2	4	-
S 100, 160 J	3	-	-

CAM SWITCHES S ... J

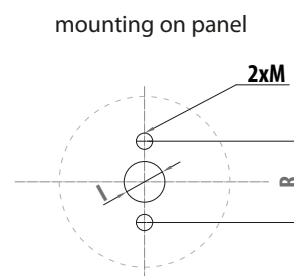
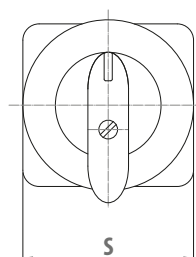
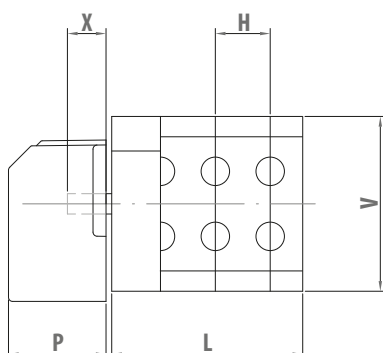
switch with handle without frontal plate



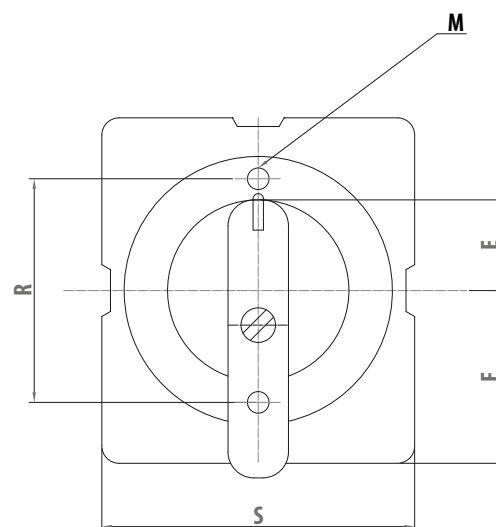
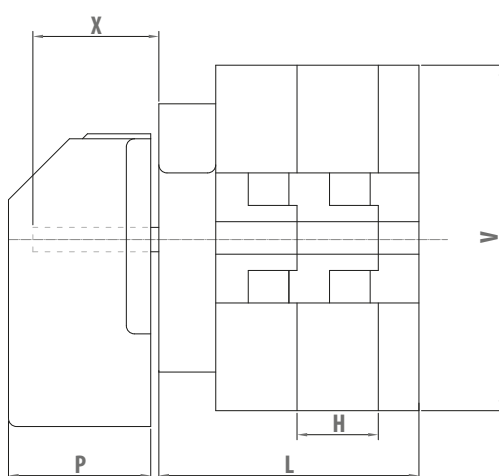
S 6,10 J

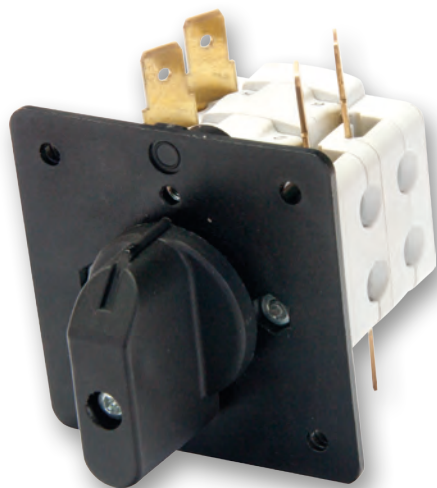


S 16, 25, 32,40, 63 J



S 100, 160 J

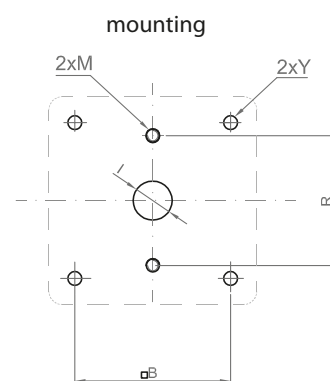
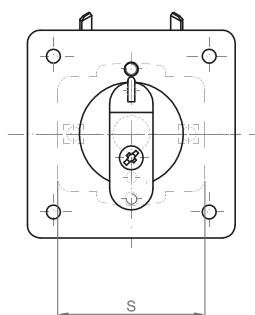
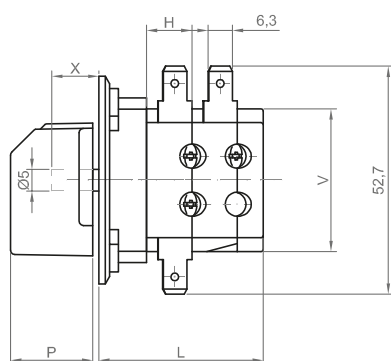




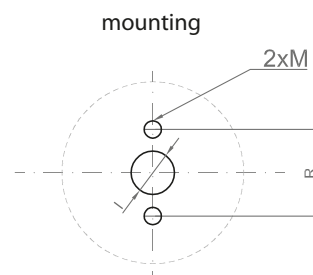
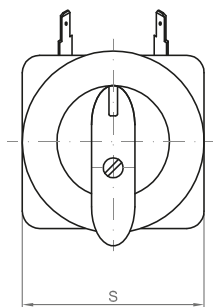
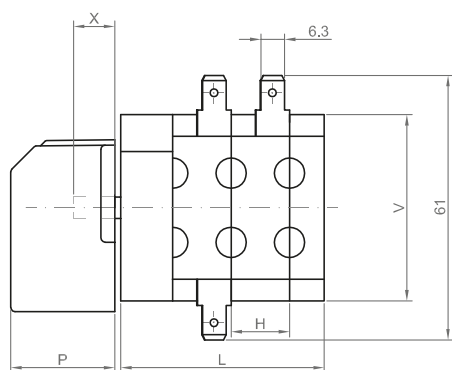
CAM SWITCHES S ... JE

- switch with handle and terminal pins

S6, 10 JE



S 16, 25 JE

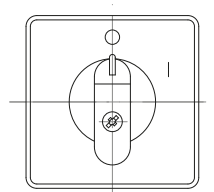
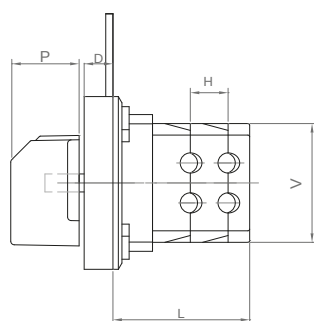


CAM SWITCHES S ... JD

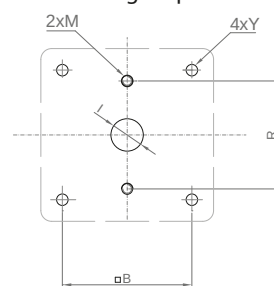
- switch with handle without frontal plate



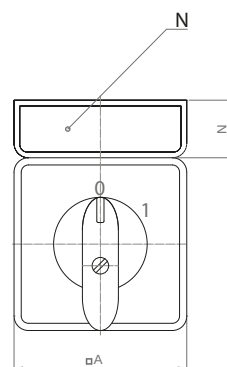
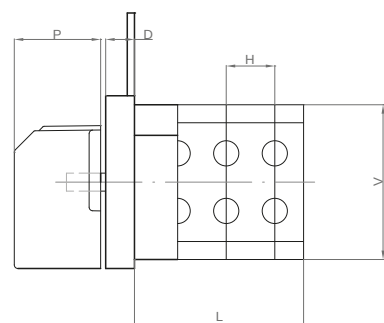
S 6,10 JD



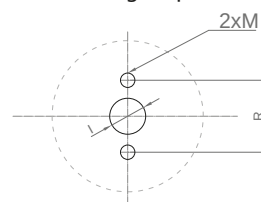
mounting on panel



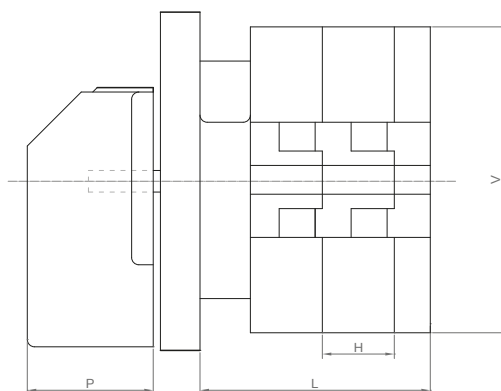
S 16, 25, 32, 40, 63 JD

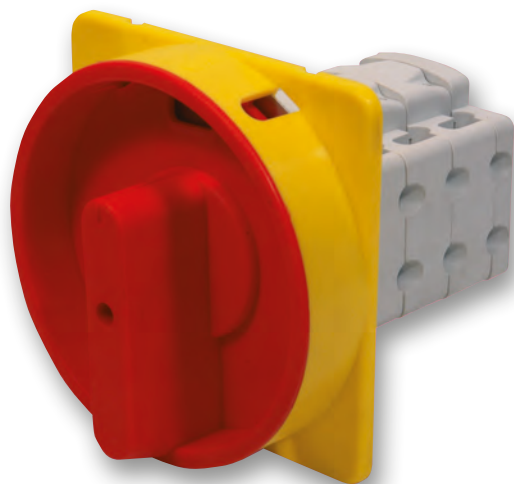


mounting on panel



S 100, 160 JD

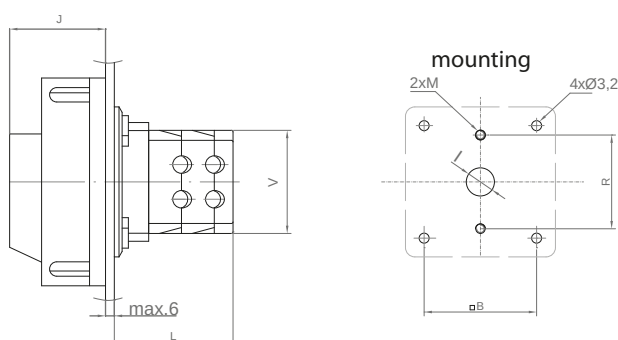




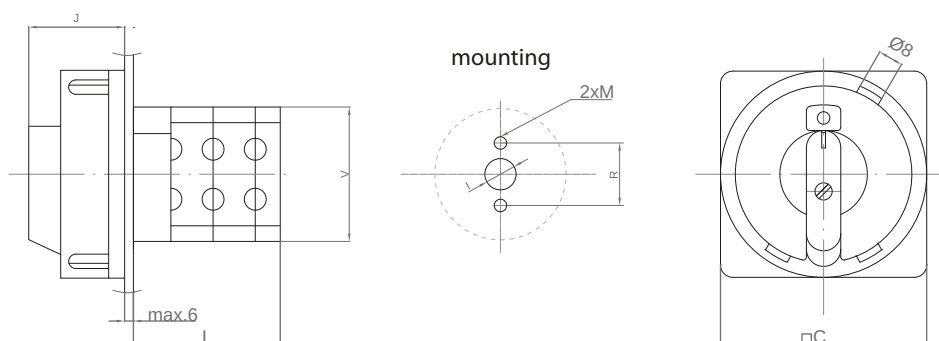
CAM SWITCHES S ... JU

- switch with possibility to be locked by 3 padlocks (Ø 5-8 mm)
- switch as master or emergency switch

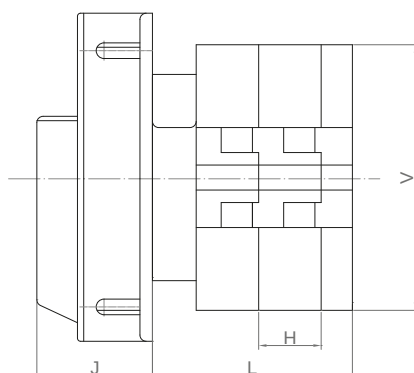
S 6,10 JU



S 16, 25, 32, 40, 63 JU



S 100,160 JU

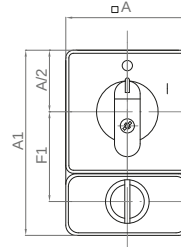
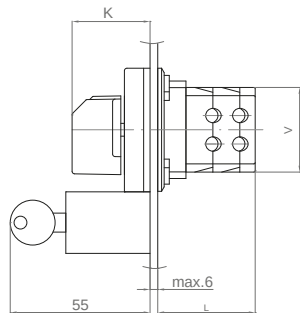


CAM SWITCHES S ... JZ

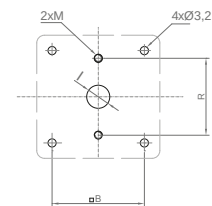
- Switch with the zero position (or other required positions) to be locked with propelling lock



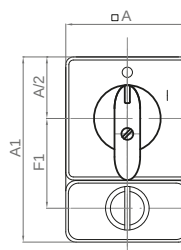
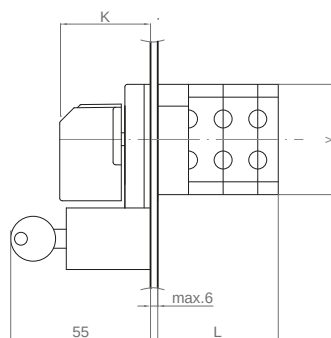
S 6,10 JZ



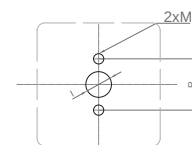
mounting on panel



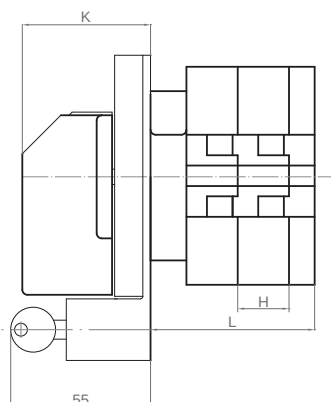
S 16, 25, 32, 40, 63 JZ



mounting on panel



S 100, 160 JZ



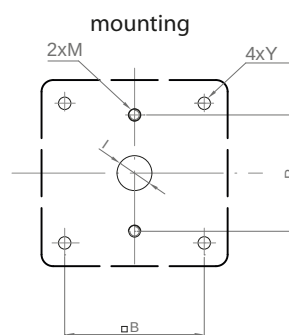
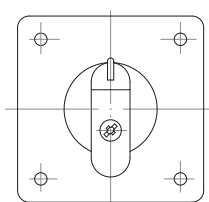
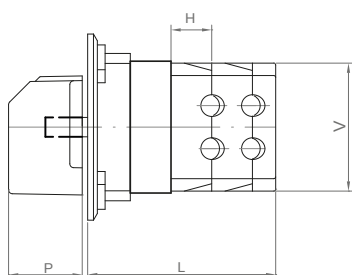


CAM SWITCHES S ... JV

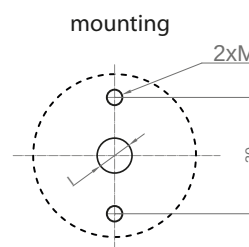
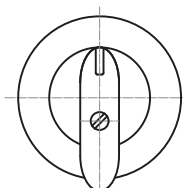
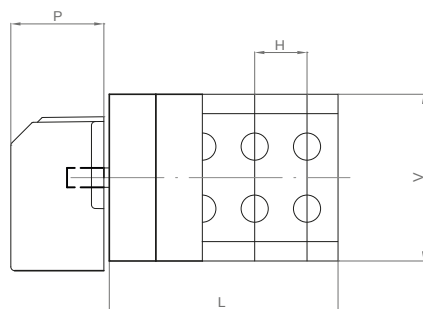
- Switch with one or two reversible positions also through more positions
- Maximum possible angle of reversible control 120°
- When specifying the switch, is necessary state (switches with two and more positions) the reversible and locking position, for example the switch with switching position 0-1-2 by move from position 2 to 1 is signify as V2-A1

Type	L (mm) if no of chambers											
No of chambers	1	2	3	4	5	6	7	8	9	10	11	12
S 6, 10 JV	38	48,5	59	69,5	80	90,5	101	111,5	122	132,5	143	154,5
S 16, 25 JV	47	60,5	74	87,5	101	114,5	128	141,5	155	168,5	182	195,5

S 6,10 JV

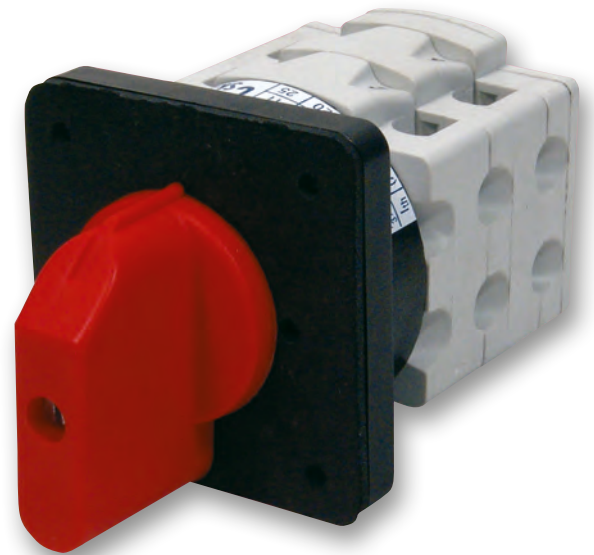


S 16, 25 JV



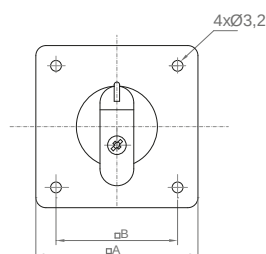
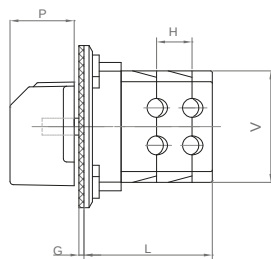
CAM SWITCHES S ... JG

- Switch with rubber insulation for IP 65

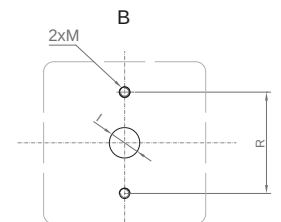
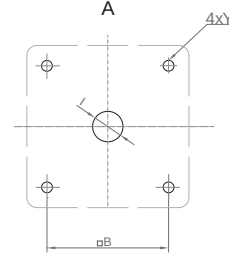


	S 6 - 10 J	S 16 - 40 J	S 63 - 160 J
A - Fixation by two self tapping screws	D3,5	D4	D4
B - Fixation by two bolts and nuts	M3	M4	M5

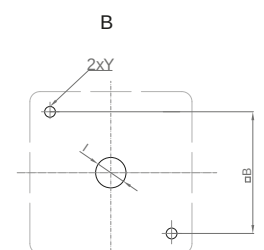
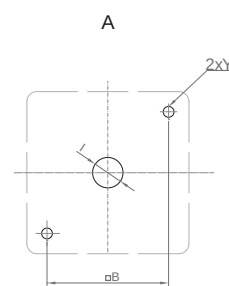
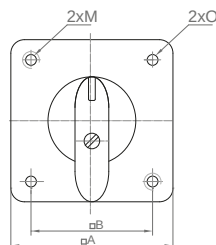
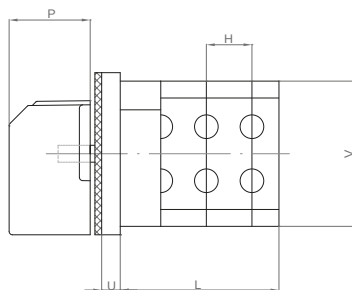
S 6,10 JG



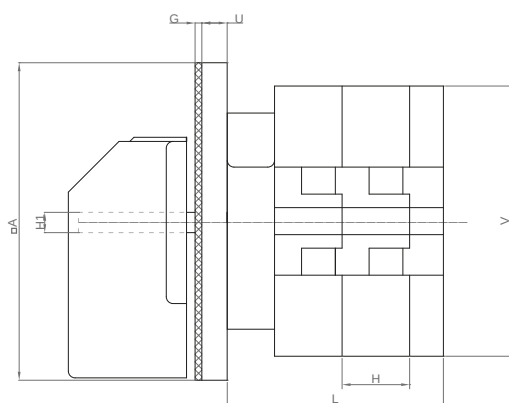
mounting on panel



S 16, 25, 32, 40,63 JG



S 100, 160 JG



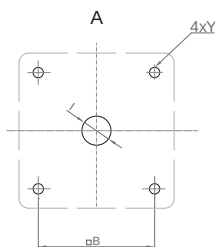
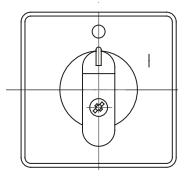
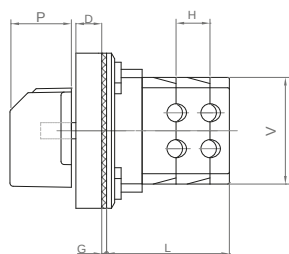


CAM SWITCHES S ... JDG

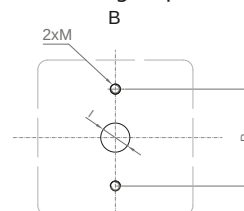
- Switch with frontal plate and rubber insulation for IP 65

	S 6 - 10 J	S 16 - 40 J	S 63 - 160 J
A - Fixation by two self tapping screws	D3,5	D4	D4
B - Fixation by two bolts and nuts	M3	M4	M5

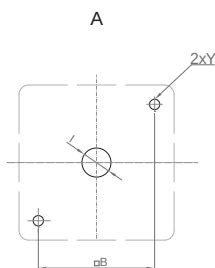
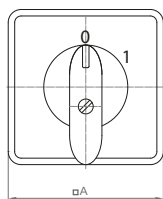
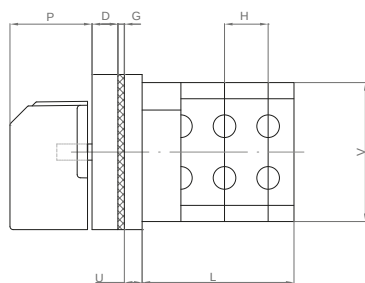
S 6,10 JDG



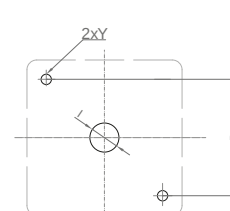
mounting on panel



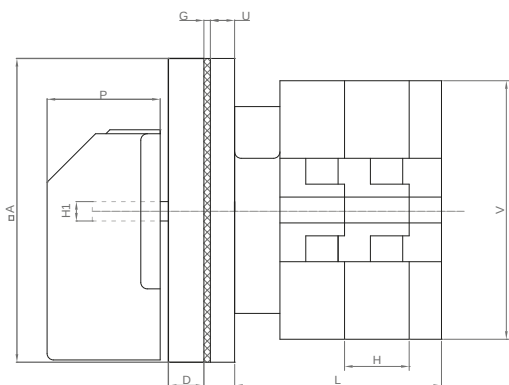
S 16, 25, 32, 40, 63 JDG



mounting on panel



S 100, 160 JDG



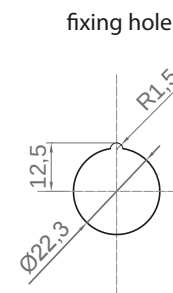
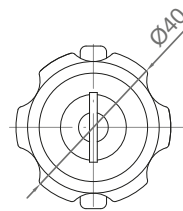
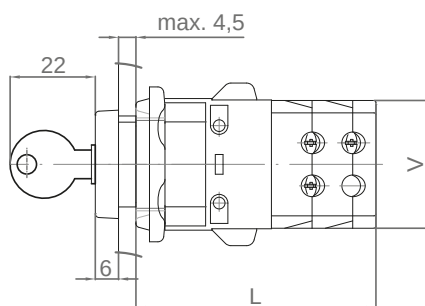
CAM SWITCHES S ... JK

- central fastening cam switch to the $\varnothing 22$ mm diameter hole using bayonet mechanism
- control by key

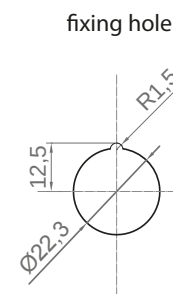
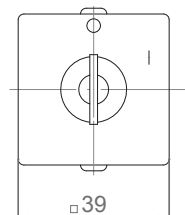
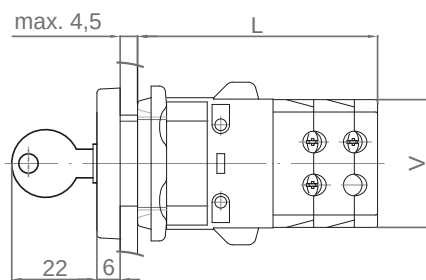


Type	L (mm) if no of chambers											
No of chambers	1	2	3	4	5	6	7	8	9	10	11	12
S 6, 10 JK	51,5	62	73,5	84	94,5	106	107,5	108	118,5	129	139,5	150
S 16, 25 JK	54,5	68	81,5	95	108,5	112	135,5	149	162,5	176	189,5	203

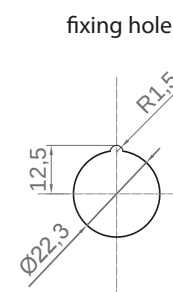
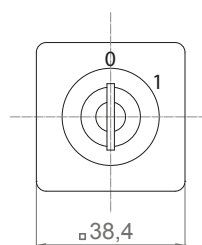
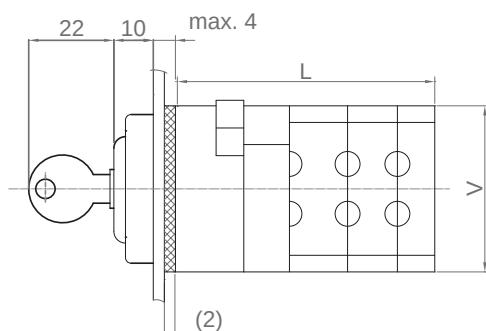
S 6,10 JK



S 6,10 JKD



S 16, 25 JK



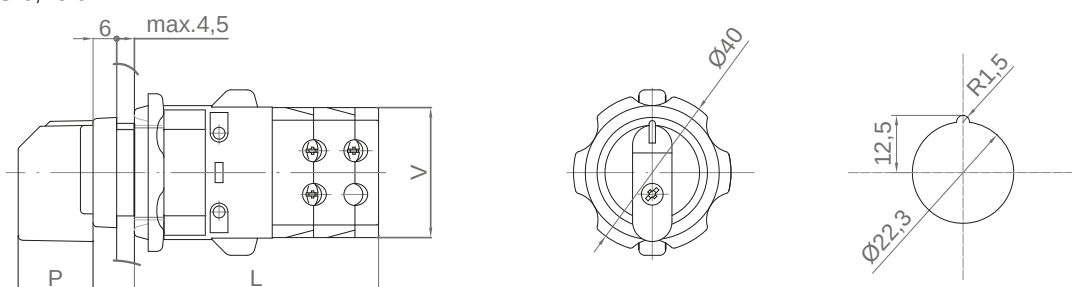


CAM SWITCHES S ... JR

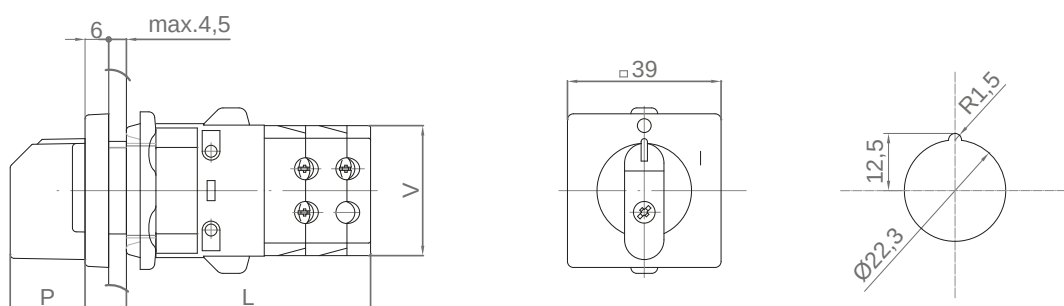
- Central fixing of the switch to the hole of $\varnothing 22$ mm diameter, JRG : JR
- + rubber seal G
- Control by lever

Type	L (mm) if no of chambers											
No of chambers	1	2	3	4	5	6	7	8	9	10	11	12
S 6, 10 JR	51,5	62	73,5	84	94,5	106	107,5	108	118,5	129	139,5	150
S 16, 25 JR	54,5	68	81,5	95	108,5	112	135,5	149	162,5	176	189,5	203

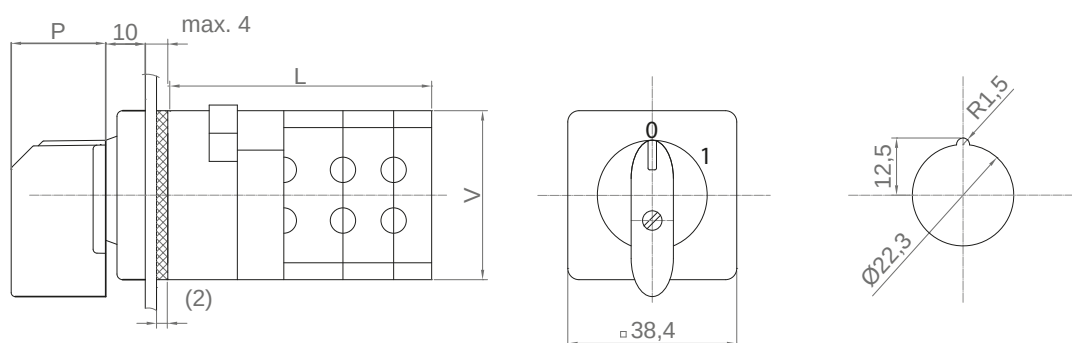
S 6,10 JR



S 6,10 JRD

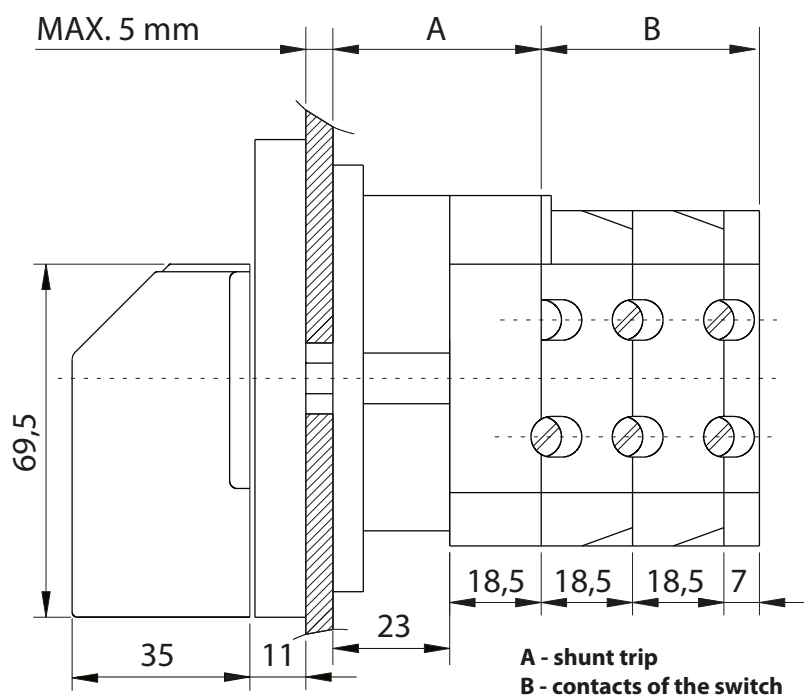
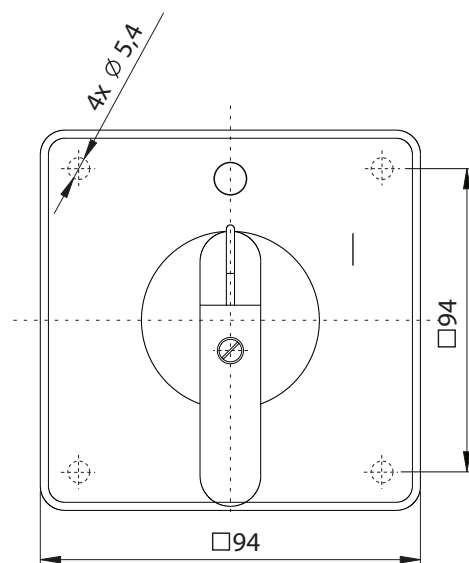


S 16, 25 JR



CAM SWITCHES S ... JC

- switch with undervoltage coil (the switch switched off selfactually when the voltage in the inlet terminal is OFF)
- possibility of switching on from 85% U_n and more
- possibility of switching off from 85% U_n and less, necessity to switch off from 35% U_n
- undervoltage coil terminals are marked as A1 - A2, coil voltage 230 V ~
- designed for second dimensional size 63 A
- mounting on panels, into enclosures
- advantage: no voltage on coil terminals of electromagnet in OFF position
- application: as 3 pole OFF switches - 1103 A6 as reverse changeover switches - 9151 C6

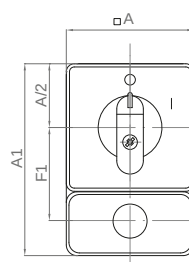
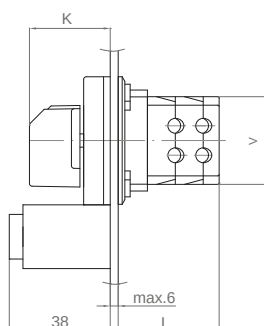


CAM SWITCHES S ... JT

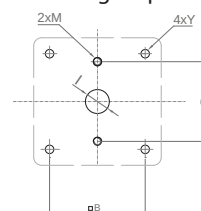
- switch with lever and frontal plate
- switch with push button which blocks lever in zero position



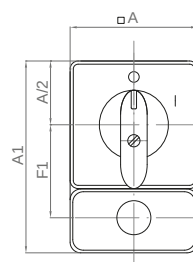
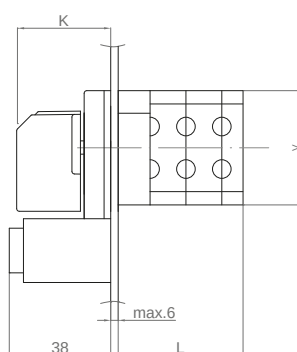
S 6,10 JT



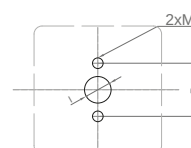
mounting on panel



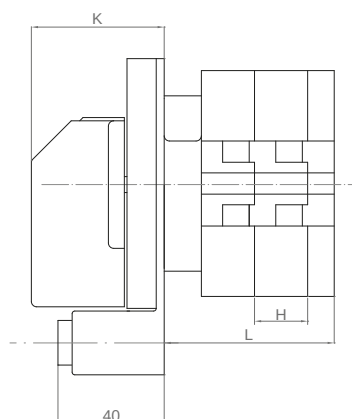
S 16, 25, 32, 40, 63 JT



mounting on panel



S 100, 160 JT



button: G - green
R - red
Y - yellow
without marking - black

CAM SWITCHES S ... JF

- Switch with light alarm in selected position

Specification of LED diode

3 or 4-character code, at the end of the technical specification of switch (see „Order sheet example“ page D 2)

Example.:

2 RG 0
 Feeding voltage of LED diode ("24 V ~" - see chart 2)
 LED diode color two-tone („red/green" - see chart. 1)
 Number of LED diodes 2 (1, 2 or 3)

2 R.G 0
 Feeding voltage of LED diode („24 V ~" - see chart. 2)
 LED diode color ("red / green" - see chart 1)
 Number of LED diodes 2 (1, 2 or 3 pcs)

Colour	Symbol
Red	R
Green	G
Orange	E
Yellow	Y

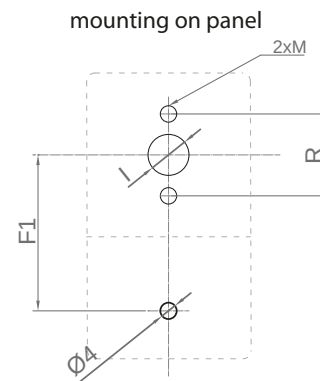
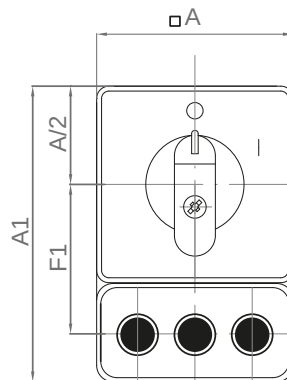
Other possible combinations (2-color LED diode): RG, YG, EG, EY

Voltage	24 V	48 V	60 V	110 V	230 V
Alternative	0	1	2	3	4
Direct	5	6	7	8	9

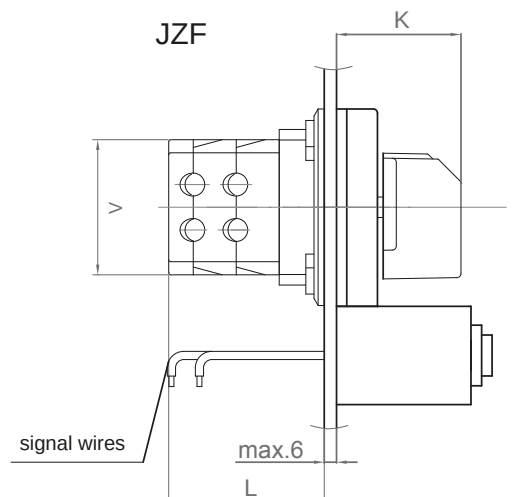
Note.: LED diode constructors are connected to individual terminals at the end of the switch, other requirements, please consult with manufacturer.



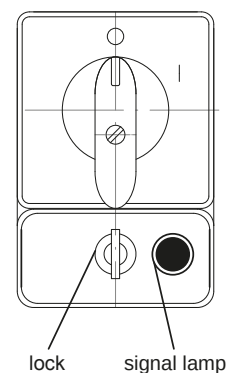
JF



JZF



mounting on panel

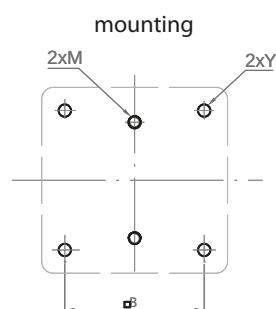
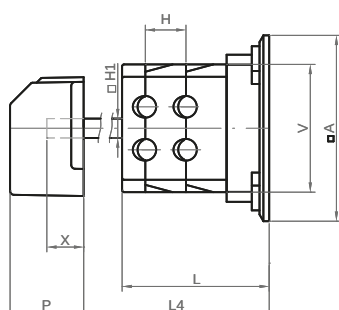




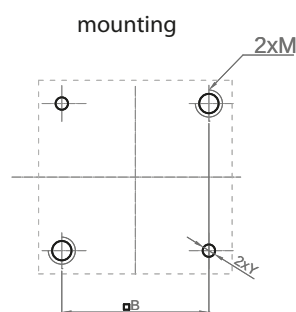
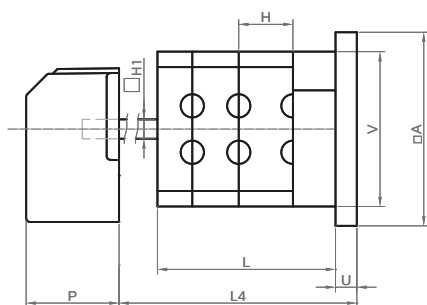
CAM SWITCHES S ... JO

- switch with rear fixing

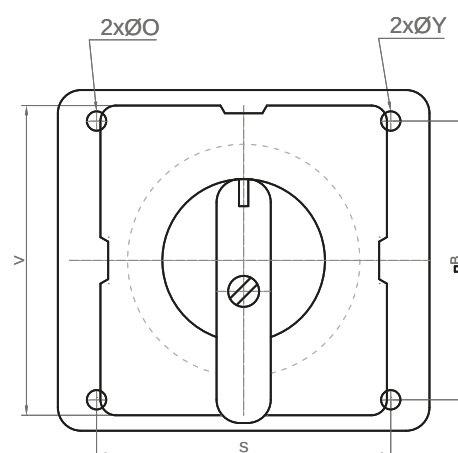
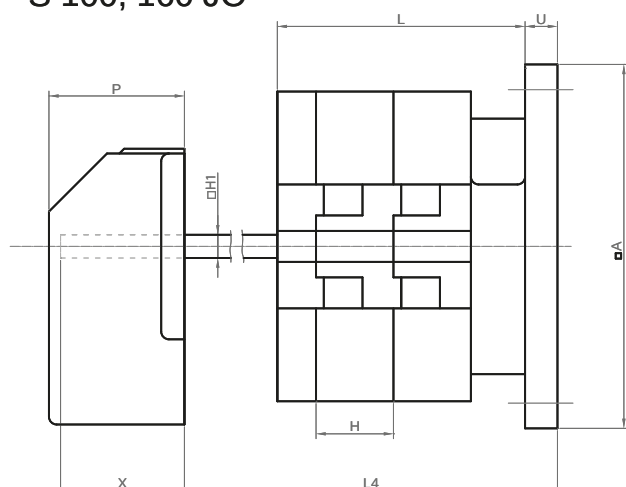
S 6,10 JO



S 16, 25, 32, 40, 63 JO

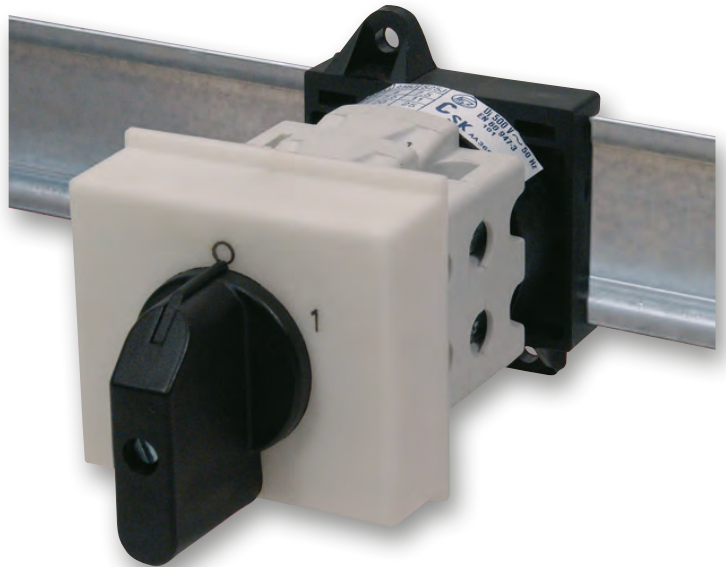


S 100, 160 JO



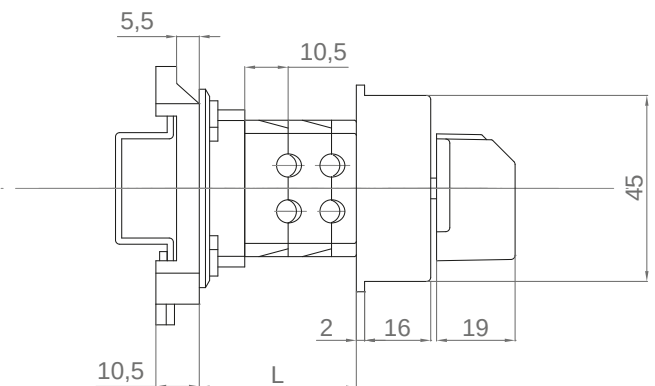
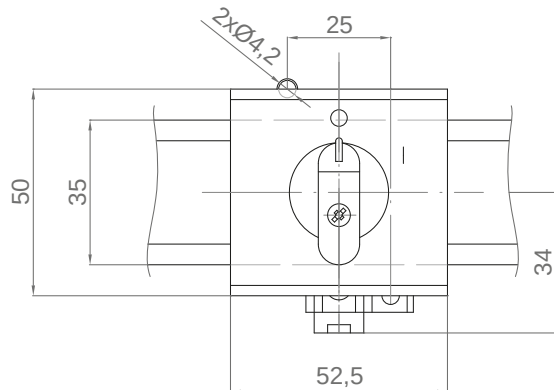
CAM SWITCHES S ... JLS

- Switch mounted on rail TH 35 - 7,5 with label
- Execution JL with lever, without label

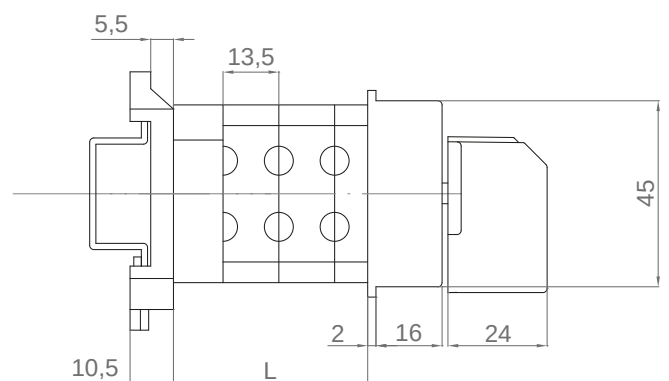
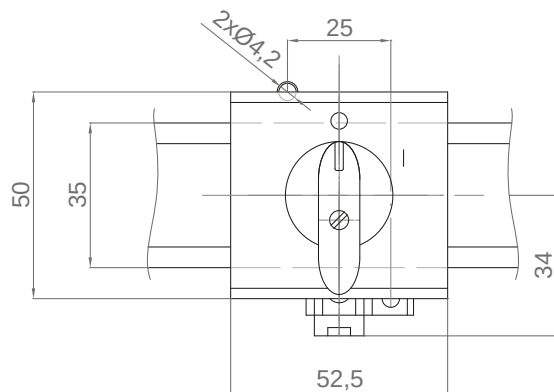


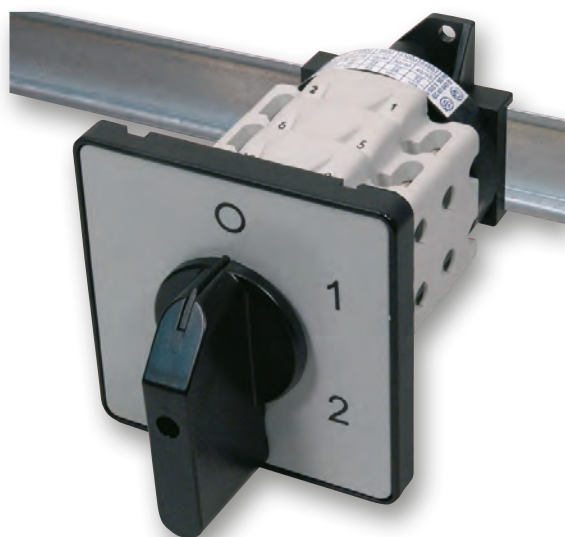
Type	L (mm) if no of chambers											
No of chambers	1	2	3	4	5	6	7	8	9	10	11	12
S 6, 10 JLS	39	52,5	66	79,5	93	106,5	120	133,5	147	160,5	174	187,5
S 16, 25 JLS	27,5	38	48,5	59	69,5	80	90,5	101	111,5	122	132,5	143

S6,10 JLS



S16,25 JLS

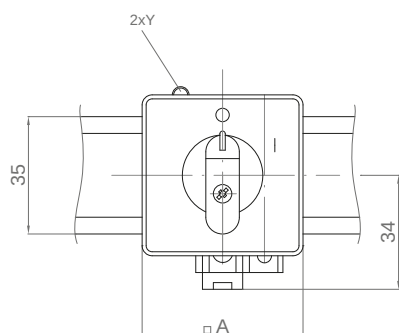




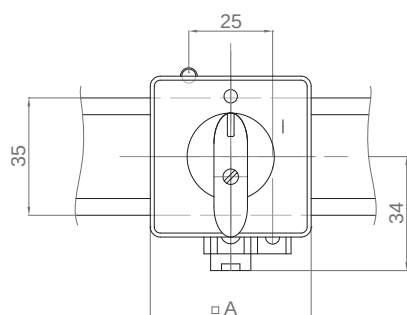
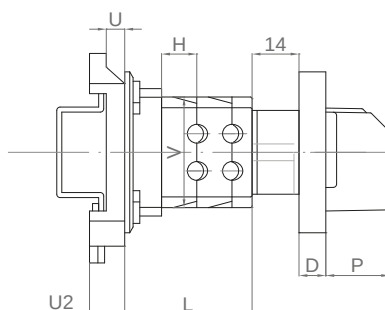
S6,10 JLD

CAM SWITCHES S ... JLD

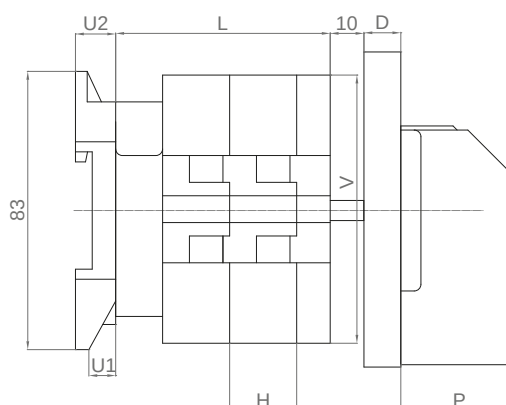
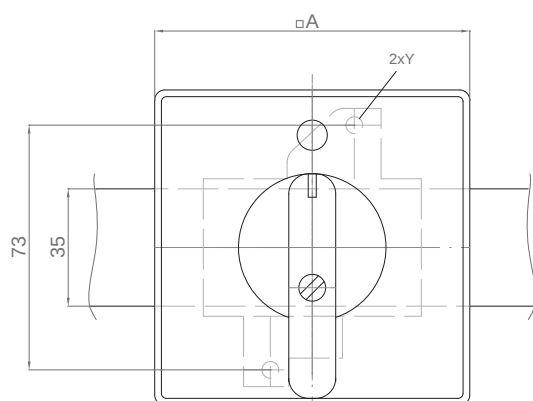
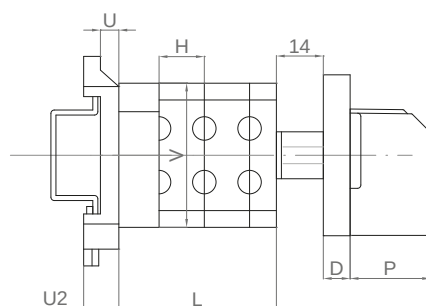
- Switch mounted on rail TH 35 - 7,5 with frontal plate
- Execution JL with lever, without frontal plate



S16,25,32,40 JLD



S63,100,160 JLD

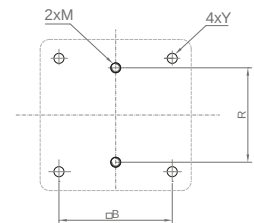
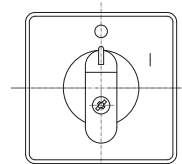
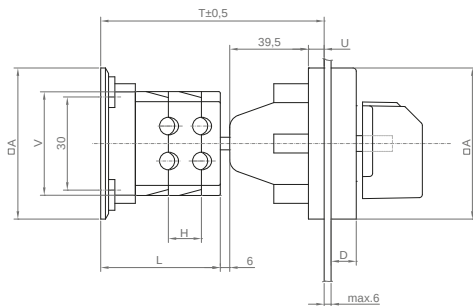


CAM SWITCHES S ... JBD

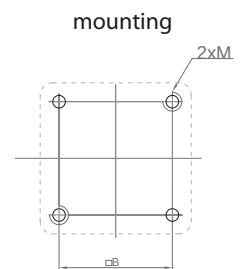
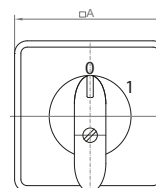
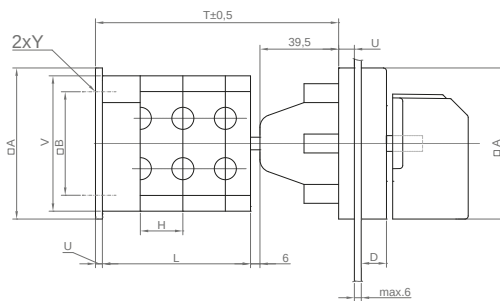
- Switch with rear fixing of the control element with frontal plate in the door
- Execution JB only with lever, without frontal plate
- possibility to deliver also shaft of different length - dimension T according to customer's requirements



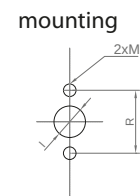
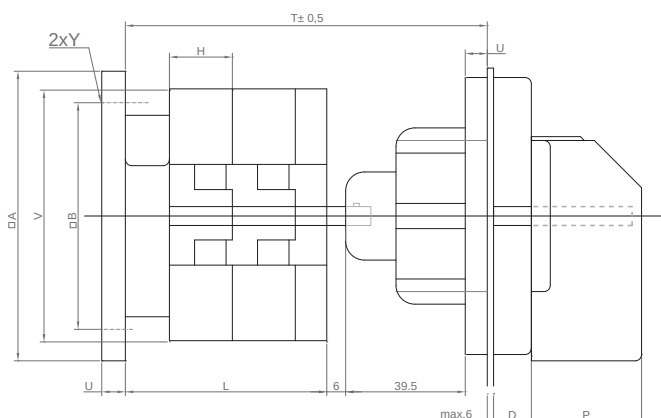
S 6,10 JBD

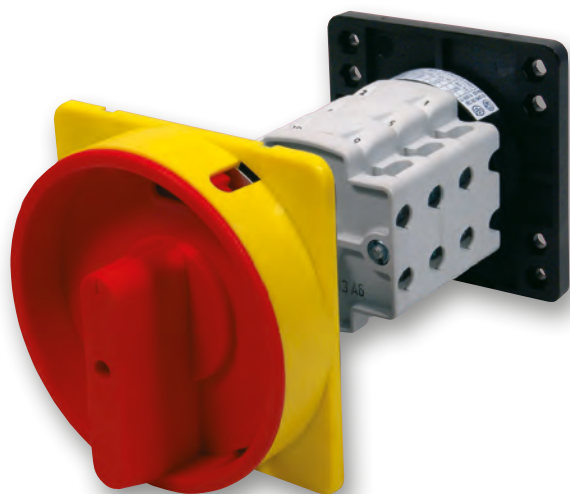


S 16, 25, 32, 40, 63 JBD



S 100, 160 JBD

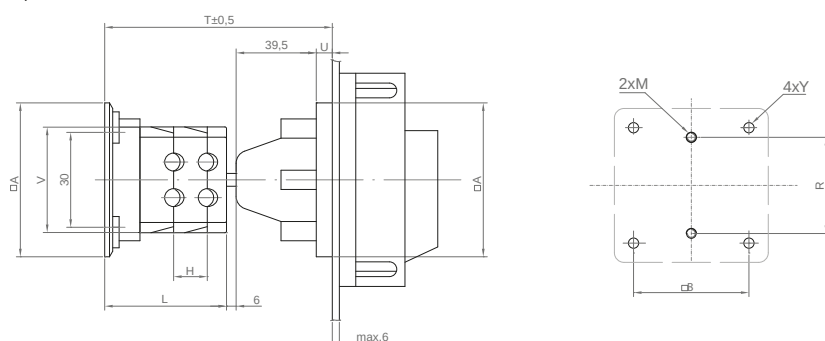




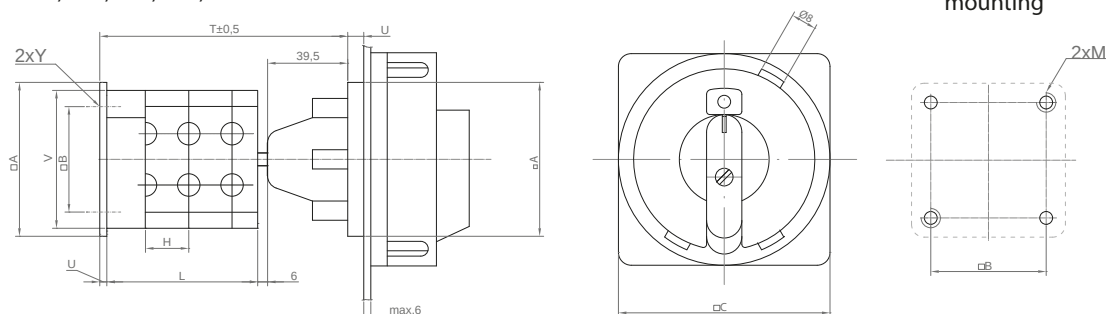
CAM SWITCHES S ... JBU

- Switch with rear fixing of the control element with lockable lever in the door
- Execution JBU only with lever, without a lock
- possibility to deliver also shaft of different length - dimension T according to customer's requirements

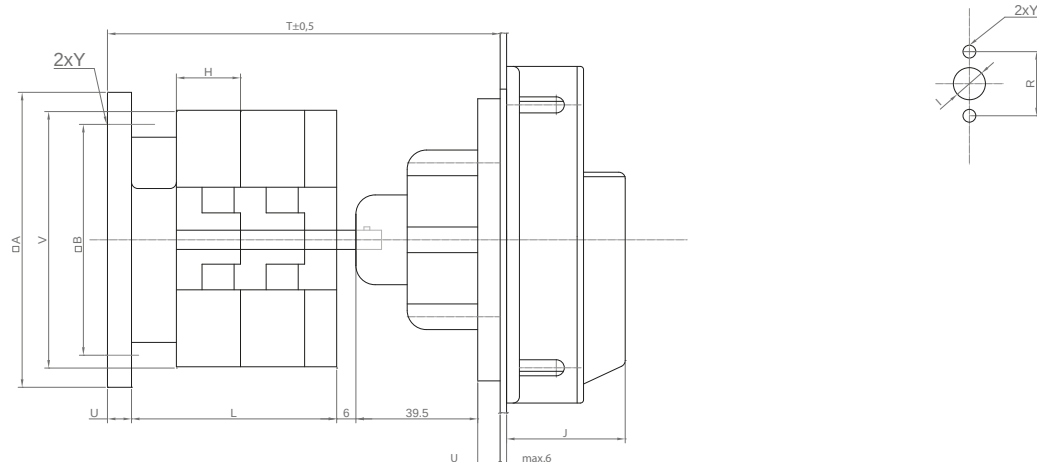
S 6,10 JBU



S 16, 25, 32, 40, 63 JBU

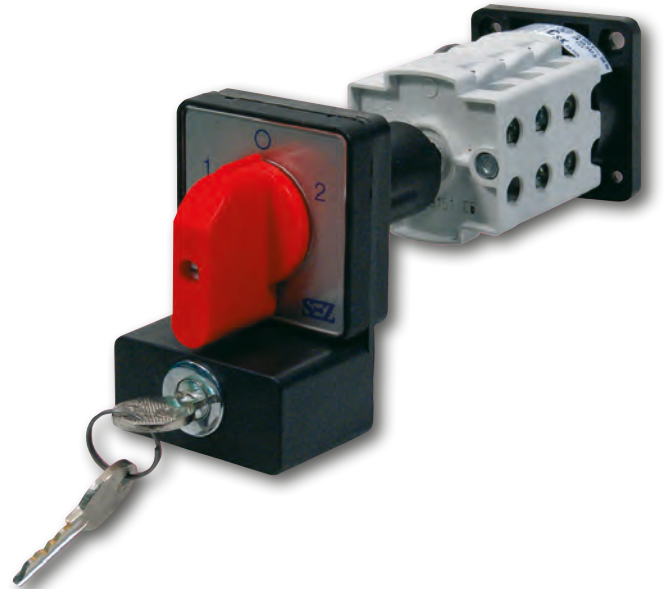


S 100, 160 JBU

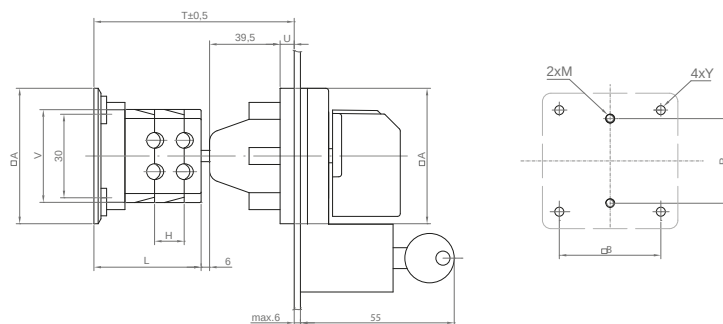


CAM SWITCHES S ... JBZ

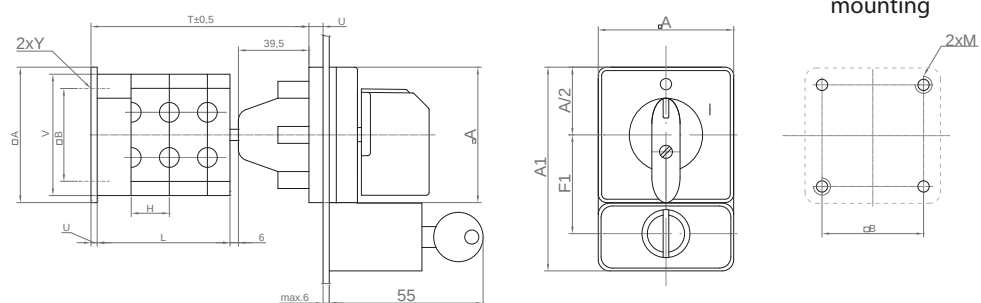
- Switch with rear fixing of the control element with propelling lock in the door with lock in „O“ position (other position cite)
- Execution JB only with lever, without a lock
- possibility to deliver also shaft of different length - dimension T according to customer's requirements



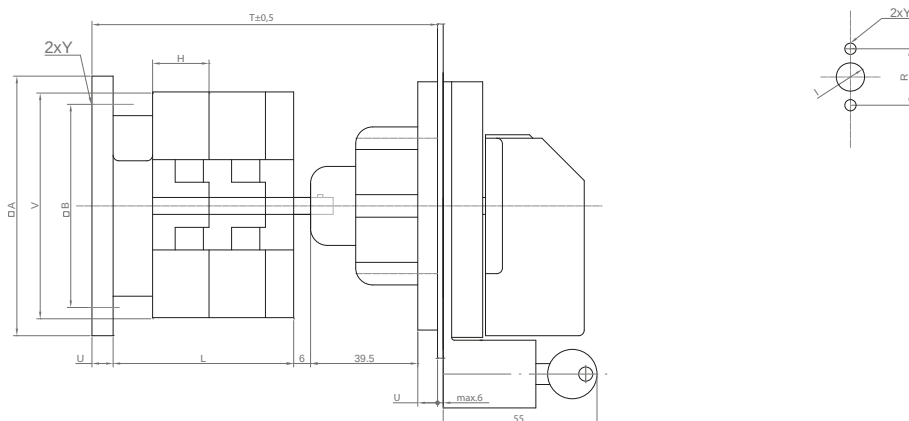
S 6,10 JBZ



S 16, 25, 32, 40, 63 JBZ



S 100, 160 JBZ

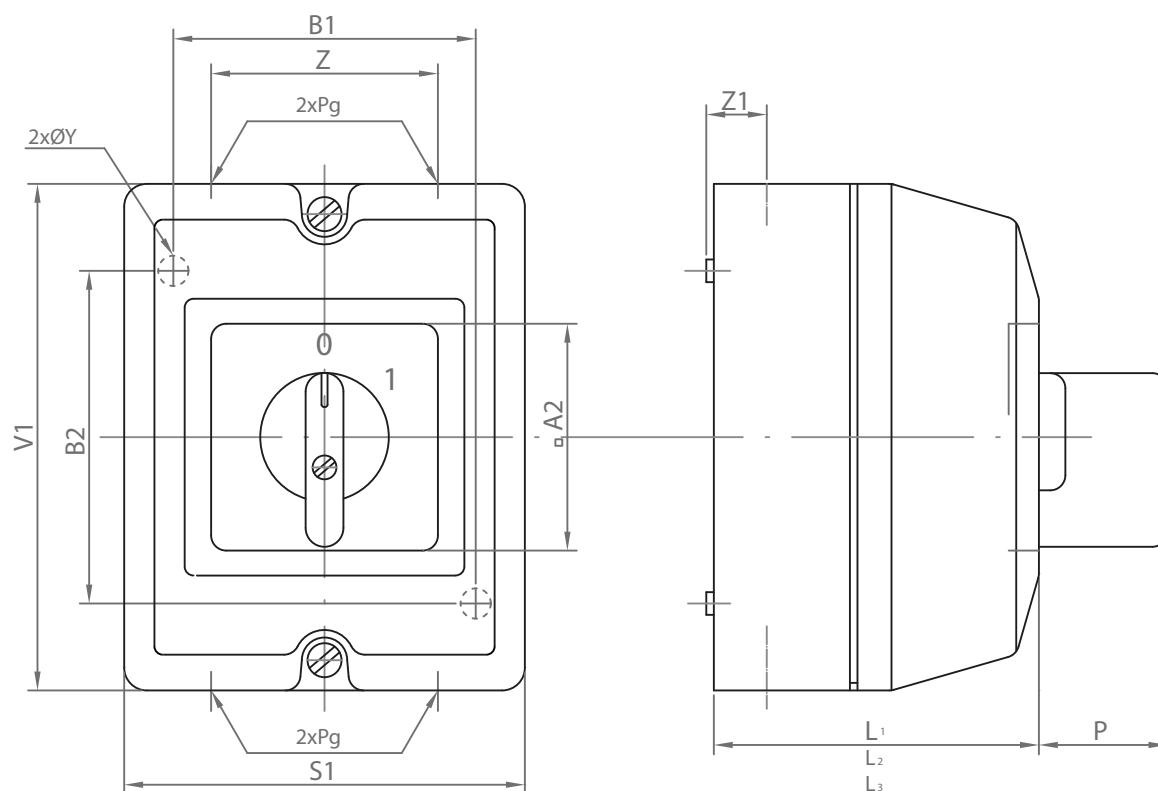




CAM SWITCHES S ... JP

- switch in plastic enclosure - IP65
- fixing with two screws M4 with washers (S6, 10, 16,25) or M5 for S32, 40,63 and 100
- Supplied including 2 cable glands:
Pg 16 - for S6J - S16J
Pg 21 - for S25J - S40J
Pg 29 - for S63J and S100J

S 6, 10, 16, 25, 32, 40, 63, 100 JP

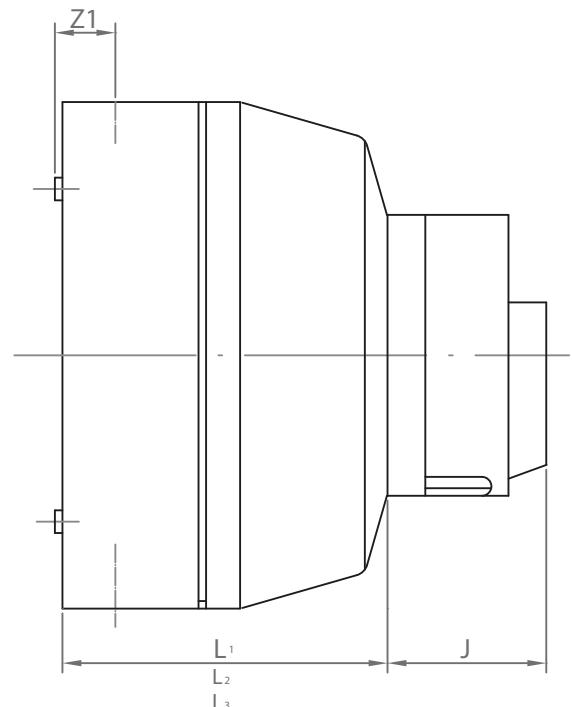
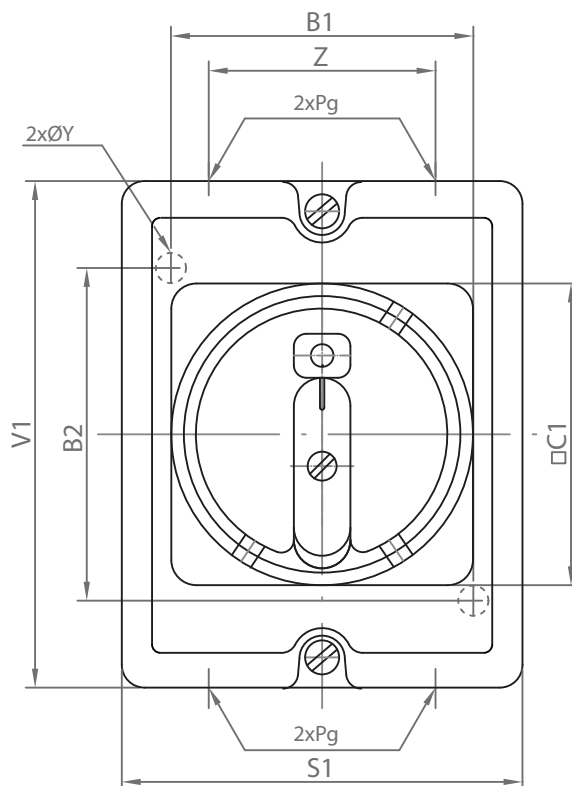


CAM SWITCHES S ... JPU

- Switch in the plastic enclosure with lockable handle with 3 padlock - IP65
- Switch with propelling lock - designation S ... JPZ - switch with frontal plate with propelling lock - designation S ... JZ
- fixing with two screws M4 with washers (S6, 10, 16,25) or M5 for S32, 40,63 and 100
- Supplied including 2 cable glands:
Pg 16 - for S6J - S16J
Pg 21 - for S25J - S40J
Pg 29 - for S63J and S100J



S 6, 10, 16, 25, 32, 40, 63, 100 JPU

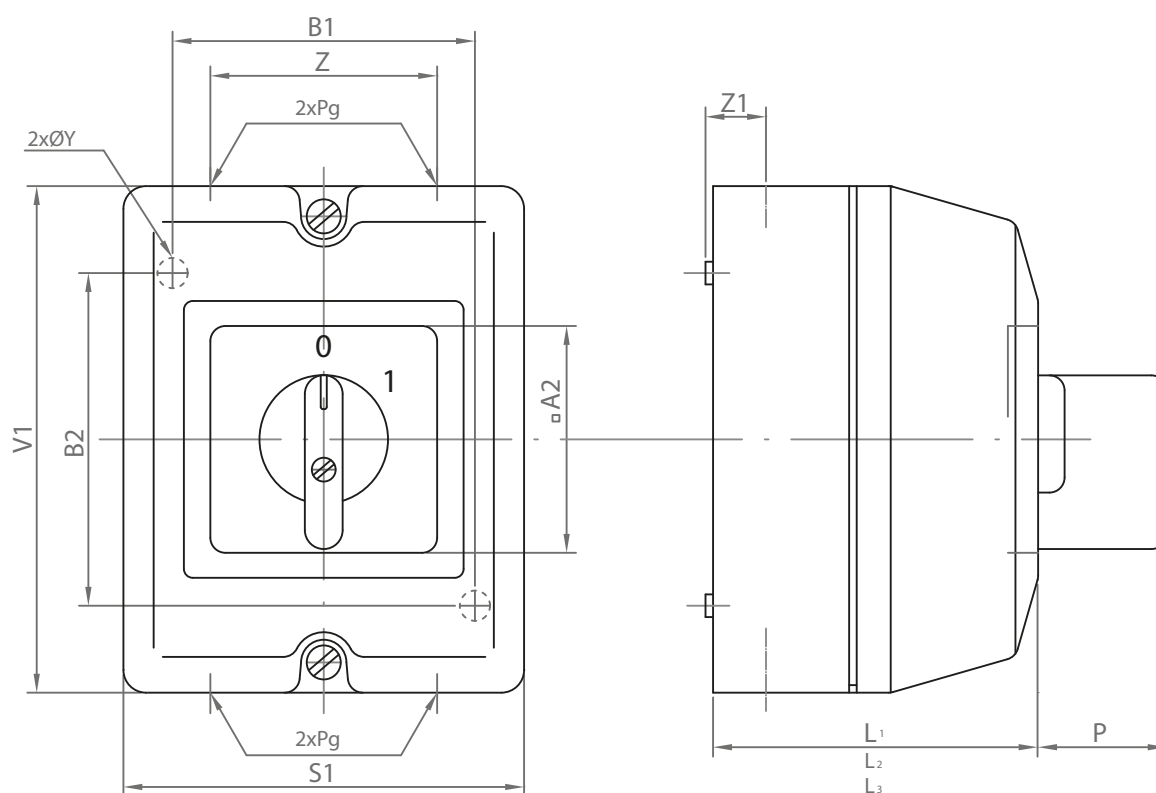




CAM SWITCHES S ... JPD

- Switch in the plastic enclosure with frontal plate - IP65
- fixing with two screws M4 with washers (S6, 10, 16,25) or M5 for S32, 40,63 and 100
- Supplied including 2 cable glands:
Pg 16 - for S6J - S16J
Pg 21 - for S25J - S40J
Pg 29 - for S63J and S100J

S 6, 10, 16, 25, 32, 40, 63, 100 JPD



S 6 - 25 JPU



S 32 - 63 JPU



S 32 - 63 - 100 JPU



S 6 - 25 JPZ



S 32 - 63 JPZ



S 32 - 63 - 100 JPZ



S 6 - 25 JPD, JP



S 32 - 63 JPD, JP



S 32 - 63 - 100 JPD, JP



S 160 JPD



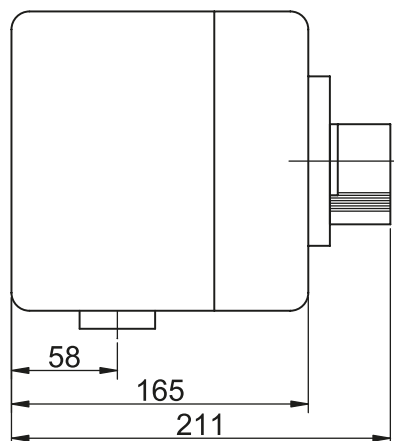
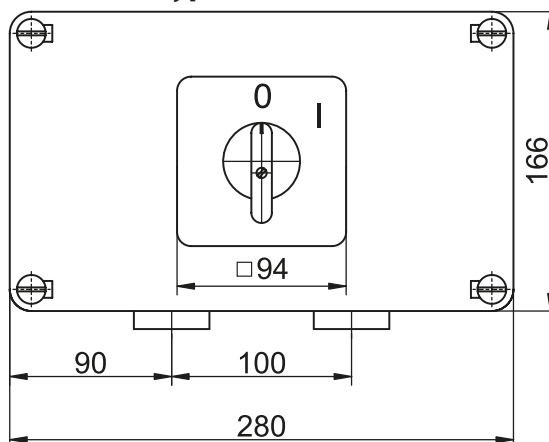
S 160 JPU



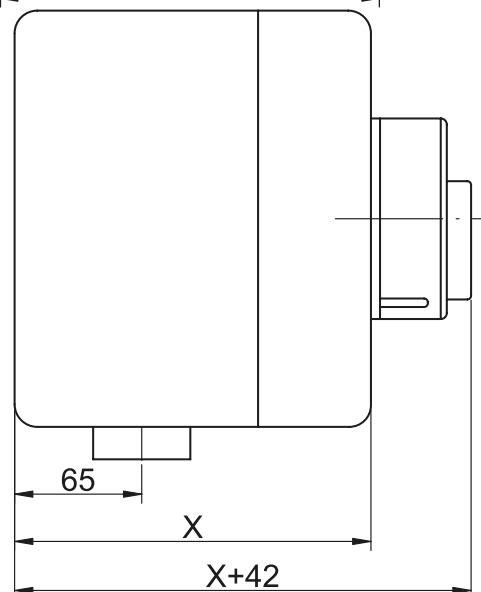
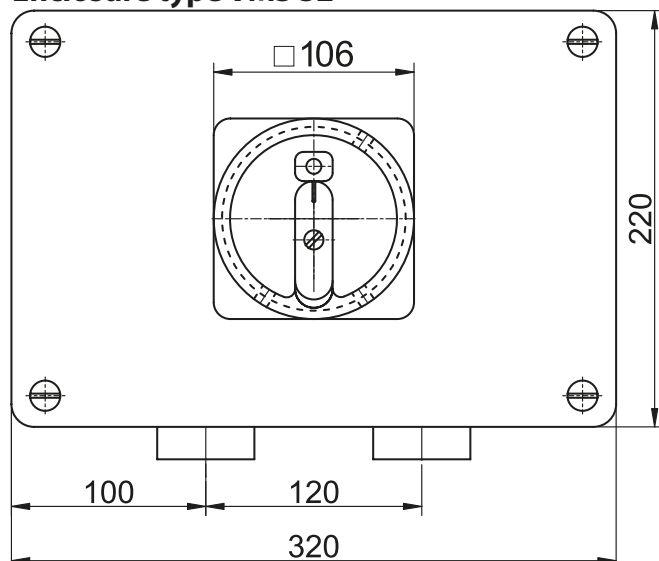
CAM SWITCHES S 160 JPD,JPU,JPZ

- switch in enclosure from plastic material with the frontal plate (JPD) and lever lockable with 3 padlocks (JPU), with lamella propelling lock (JPZ) - IP 54
- switches up to 3 chambers are in the case JP (dimensions 280 x 160 x 165 mm)
- switches with four and more chambers are in the case VMS 32 (dimensions 320 x 220 x 180 mm, the case height may be enlarged at need adding the modules with the height 75 mm)
- 2 cable glands Pg 36 are included

Enclosure type JP



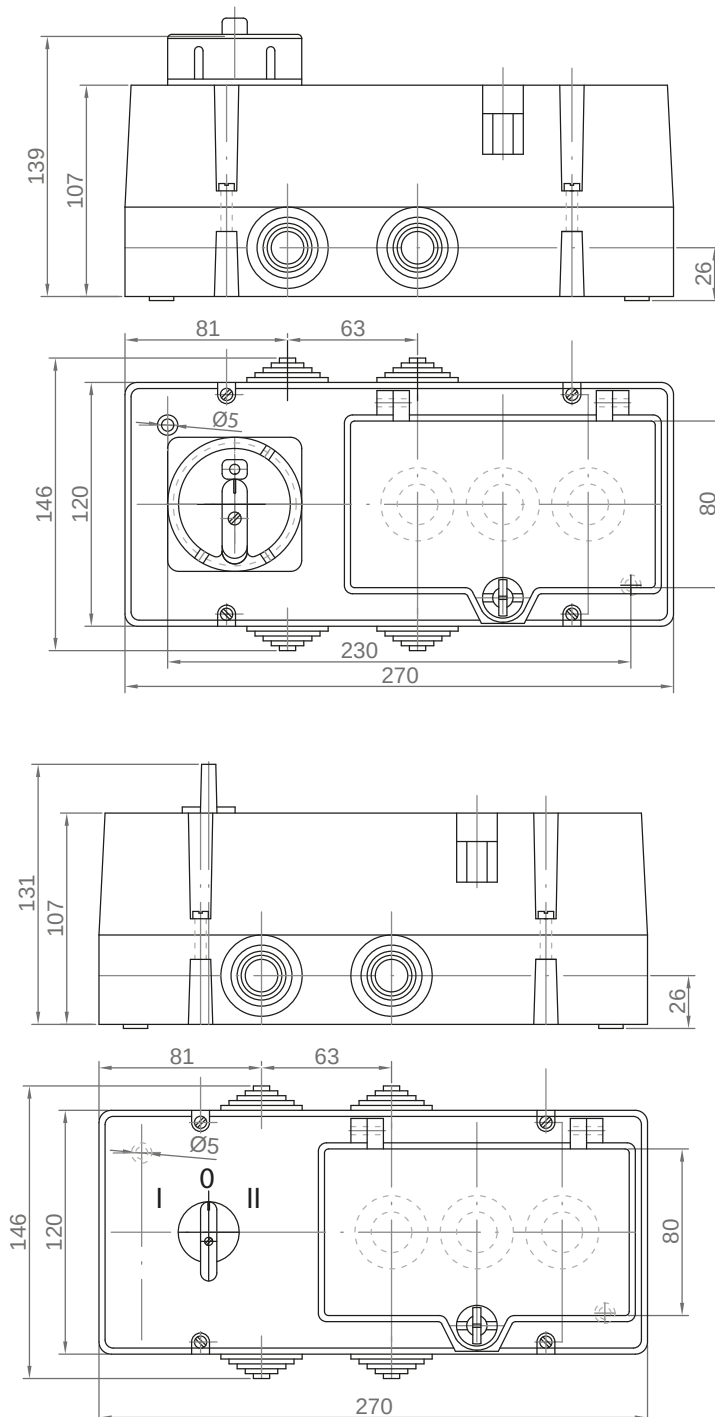
Enclosure type VMS 32



X = 180; 255; 330; ...

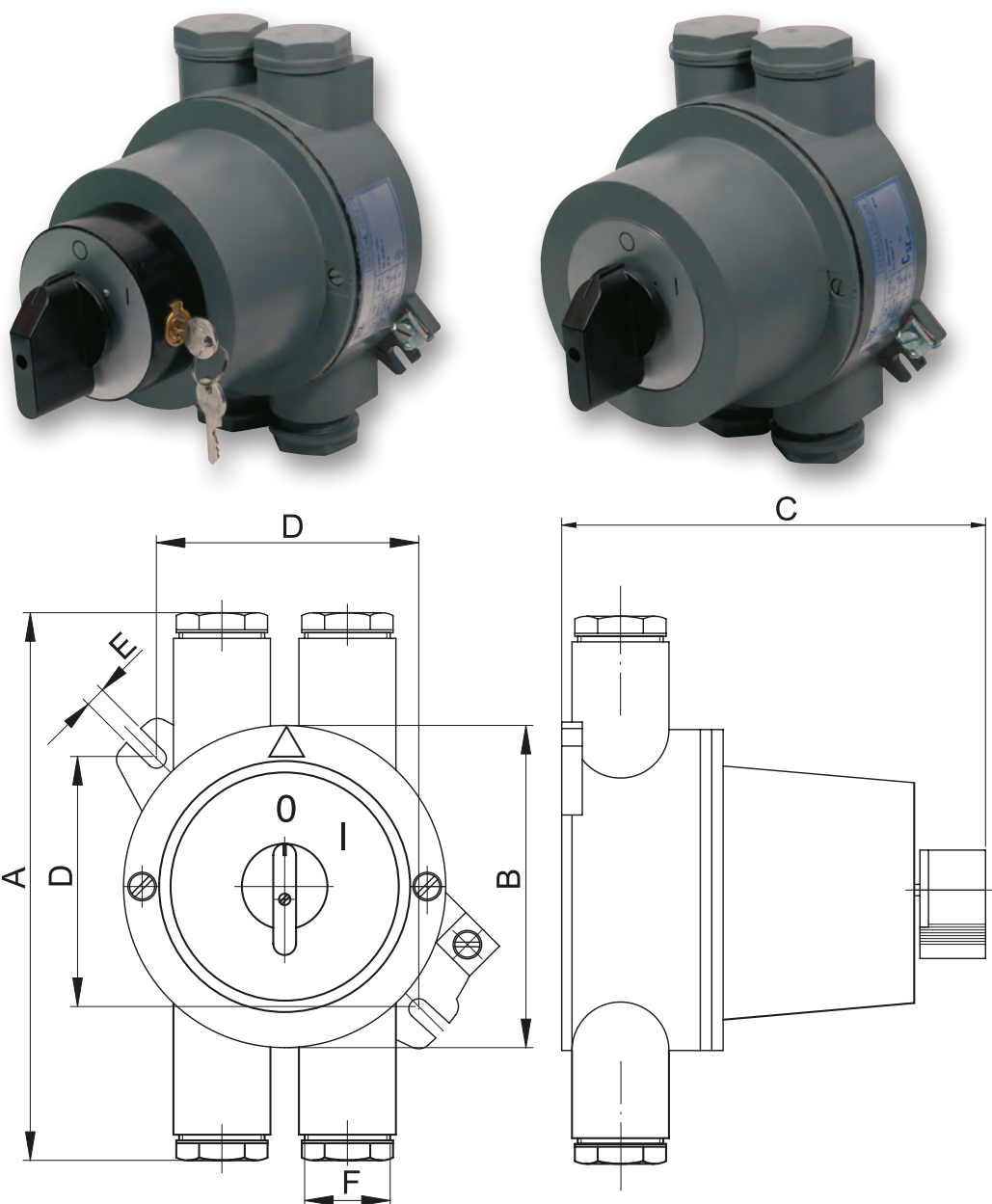
CAM SWITCHES S 16, 25 NJ, NJU, NJZ, NJD

- switch in enclosure from plastic material in combination with 3 fuses (E 27) and terminals to connect the zero and protection conductor - IP 54
- S ... NJ – with lever
- S ... NJU – with lever and locking by 3 padlocks
- S ... NJZ – with lever and locking by lamella propelling lock
- S ... NJD – with lever and front panel
- scaled sealing rubber terminals



CAM SWITCHES S ... JA, JAZ

- switches in Al enclosure, IP 54
- S ... JA – with lever
- S ... JAZ – with lever and locking lamella propelling lock



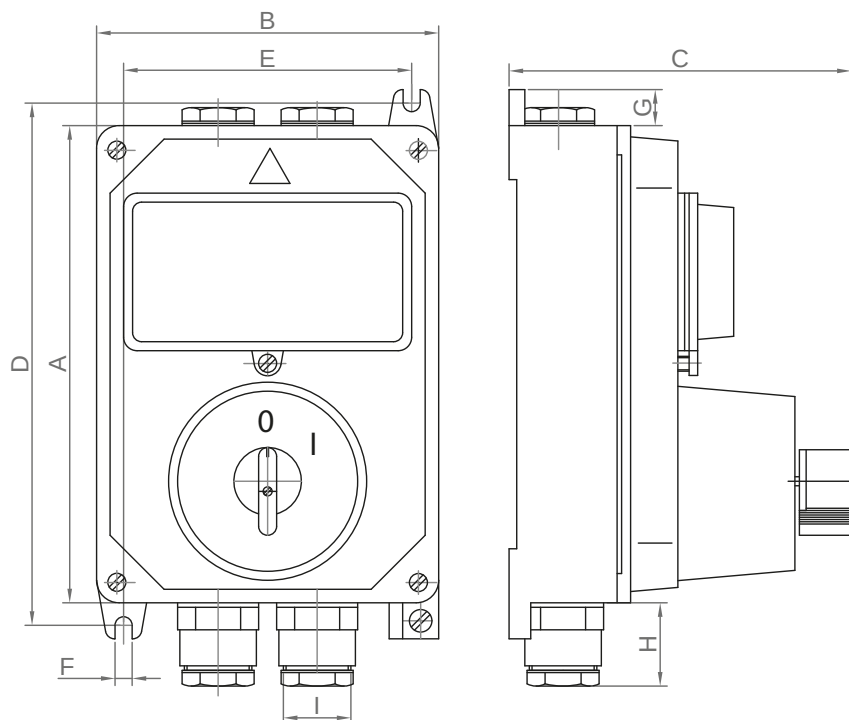
Type	Version	A	B	C	D	E	F
S 16, 25 JA	1103, 9151, 9551, 9552, 2203	190	Ø 113	134	90	7	P21
	9153			167			
S 16, 25 JAZ	1103, 9151, 9551, 9552, 2203			168			
	9153			201			
S 32, 63 JA	1103, 9151, 2203	235	Ø 113	166	122	9	P29
	9551, 9153, 9552			198			
S 32, 63 JAZ	1103, 9151, 2203			200			
	9551, 9153, 9552			232			

CAM SWITCHES S ... JI, JIZ

- switches in Al case in combination with 3 fuses (E 27,E 33), IP 54
- S ... JI – with lever
- S ... JIZ – with lever and locking with lamella propelling lock



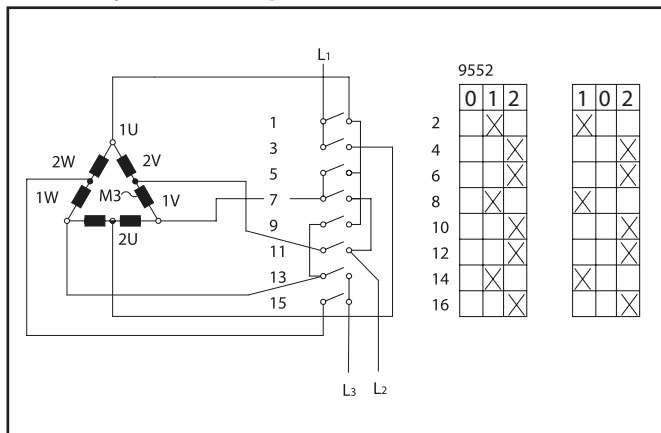
S 16, 25, 32, 40, 63 JI, JIZ



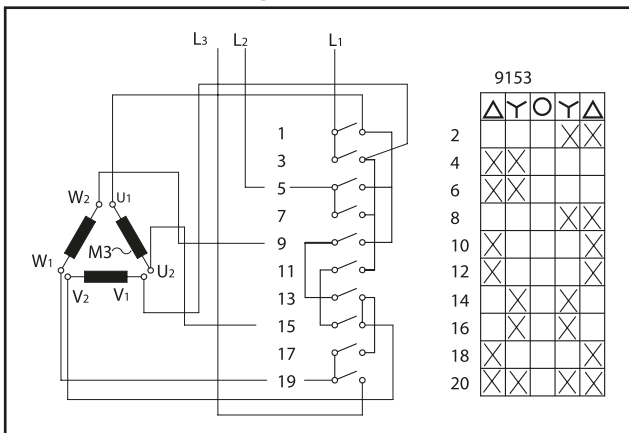
Type	Version	A	B	C	D	E	F	G	H	I
S 16, 25 JI	1103, 9151, 9551, 9552, 2203	212	152	136	226	125	7	16	34	P21
	9153			168						
S 16, 25 JIZ	1103, 9151, 9551, 9552, 2203			170						
	9153			202						
S 32, 63 JI	1103, 9151, 2203	269	212	166	300	180	9	25	39	P29
	9551, 9153, 9552			198						
S 32, 63 JIZ	1103, 9151, 2203			201						
	9551, 9153, 9552			253						

OTHER DIAGRAMS - SEE PAGES D37 - D47

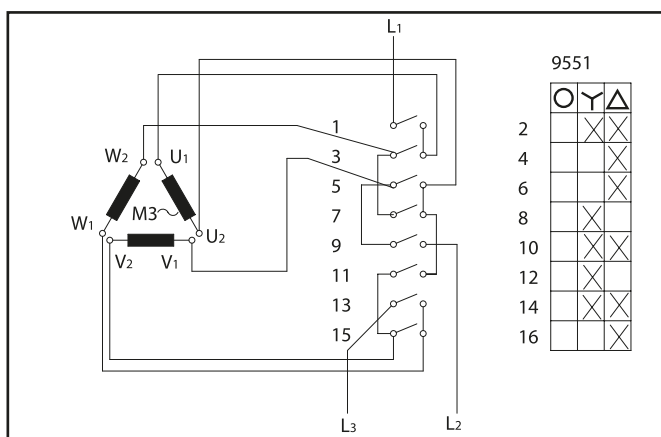
Polarity reversing switch (Dahlander)



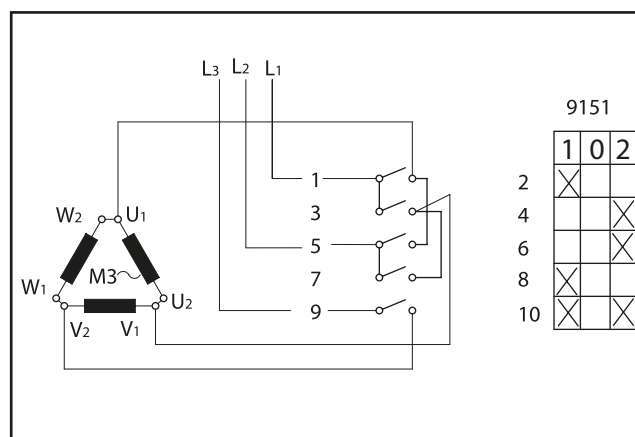
Reversible changeover switch Y-D



Switch Y-D



Reversible switch



Network switch

ABVM		C		Diagram Nr.
0	1	2		
1				2201
3				
5				2202
7				
9				2203
11				
13				2204
15				
17				2205
19				
21				2206
23				
25				2207
27				
29				2208
31				
33				2209
35				
37				2210
39				
41				2211
43				
45				2212
47				

1	2	Diagram Nr.
		2251
		2252
		2253
		2254
		2255
		2256
		2257
		2258
		2259
		2260
		2261
		2262

Pole breaker

	0	1	Diagram Nr.
1			1101
3			
5			1102
7			
9			1103
11			
13			1104
15			
17			1105
19			
21			1106
23			
25			1107
27			
29			1108
31			
33			1109
35			
37			1110
39			
41			1111
43			
45			1112
47			
			1113
			1114
			1115
			1116
			1117
			1118
			1119
			1120
			1121
			1122
			1123
			1124

60°	01	02	03	04	05	06	07	08	09
	10	11	12	13	14	15	16	17	19
	20	21	22	23	24	25	26	27	29
	30	31	32	33	34	35	36	37	39
	40	41	42	43	44	45	46	47	49
	50	51	52	53	54	55	56	57	58
90°									
	60	61	62	63	64	65	66	67	68
	69	70	71	72	73	74	75	76	78
	79	80	81	82	83				

	90	91	92	93	94	95	96	97	98
30°									
99	100	101	102	103	104	105	106	107	108
109	110	111	112	113	114	115	116	117	118
119	120	121	122	123	124	125	126	127	128
129	130	131	132	133	134	135	136	137	138
139	140	141	142	143	144	145			
151	152	153	154	155	156	157	158	159	
45°									
160	161	162	163	164	165	166	167	168	169
170	171	172	173	174	175	176	177	178	179
180	181	182	183	184	185	186	187	188	

Label designations

1

HLAVNÝ VYPÍNAČ
otvárať v polohe 0

2

HAUPTSCHLATER	MAINSWITSCH
ÖFFEN IN 0 - STELLUNG	OPEN 0 - POSITION

3

WATTMETER

4

VOLTMETER

5

AMPERMETER

6

**VOLTMETER
AMPERMETER**

7

OHREV

8

ČERPADLO

9

MOTOR

10

POSUV

11

ОСНОВНОЙ ВЫКЛЮЧАТЕЛЬ
ОТКРЫВАТЬ В СОСТОЯНИИ 0

12



- Another text on labels please state in your order

SEZ Kropmarchy a.s.

Hornádska ul. 1
053 42 Kropmarchy

CAM SWITCHES

S 6, 10, 16, 25, 32, 40, 63, 100, 160 J

CURRENT	A
VOLTAGE	V
POWER OUTPUT	W

Application category (IEC 60 947-3)

Switch chamber	Contact designation	Switch and reversible designation											
		1	2	3	4	5	6	7	8	9	10	11	12
1.	1 2	3 4	5 6	7 8	9 10	11 12							
2.	1 2	3 4	5 6	7 8	9 10	11 12							
3.	1 2	3 4	5 6	7 8	9 10	11 12							
4.	1 2	3 4	5 6	7 8	9 10	11 12							
5.	1 2	3 4	5 6	7 8	9 10	11 12							
6.	1 2	3 4	5 6	7 8	9 10	11 12							
7.	1 2	3 4	5 6	7 8	9 10	11 12							
8.	1 2	3 4	5 6	7 8	9 10	11 12							
9.	1 2	3 4	5 6	7 8	9 10	11 12							
10.	1 2	3 4	5 6	7 8	9 10	11 12							
11.	1 2	3 4	5 6	7 8	9 10	11 12							
12.	1 2	3 4	5 6	7 8	9 10	11 12							
Recommended		1	2	3	4	5	6	7	8	9	10	11	12
Abusive		1	2	3	4	5	6	7	8	9	10	11	12
REVERSIBLE POSITION		1	2	3	4	5	6	7	8	9	10	11	12
DESIGNATION		1	2	3	4	5	6	7	8	9	10	11	12
CONTACT CLOSED		1	2	3	4	5	6	7	8	9	10	11	12
IMPULSE CONTACT		1	2	3	4	5	6	7	8	9	10	11	12
OVER MORE POSITION		1	2	3	4	5	6	7	8	9	10	11	12
OVERLAPPING		1	2	3	4	5	6	7	8	9	10	11	12
OVERLAPPING		1	2	3	4	5	6	7	8	9	10	11	12
INTERPOSITION BREAK		1	2	3	4	5	6	7	8	9	10	11	12

CUSTOMER:

CUSTOMER:

DATE:

Order No.:

Other Requirements:

N

LABEL No.

POSITION LABEL No.

60°

90°

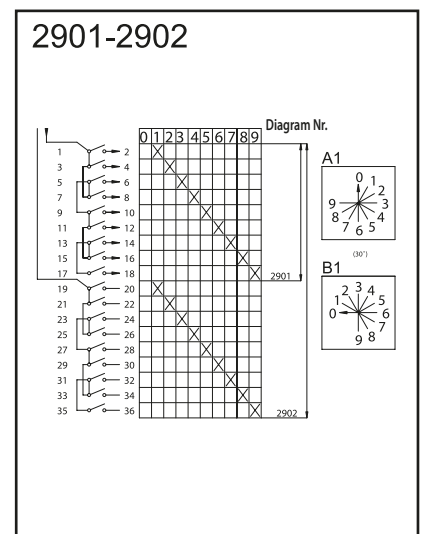
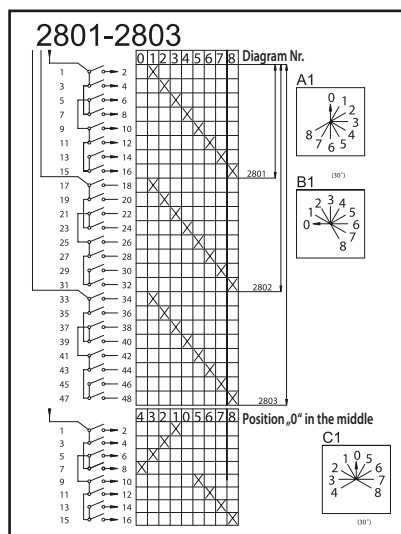
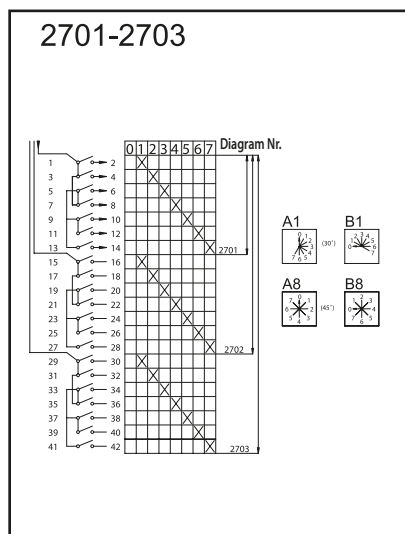
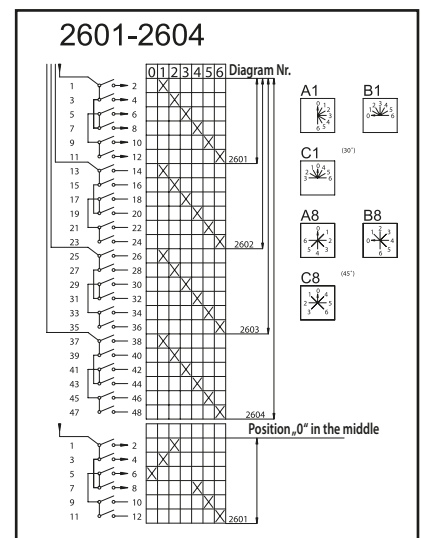
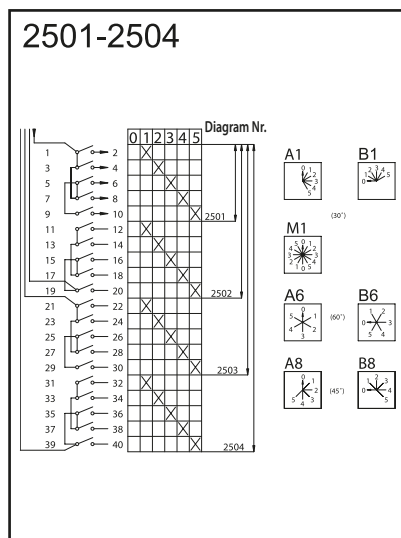
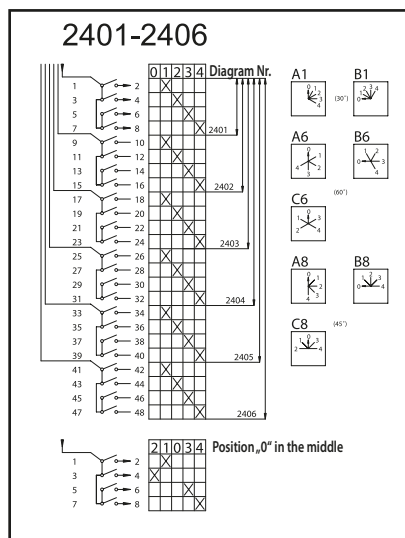
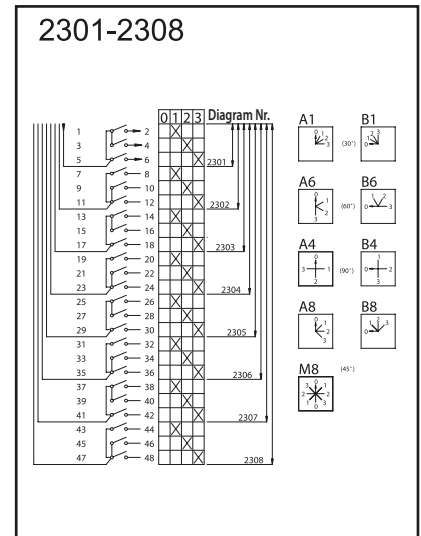
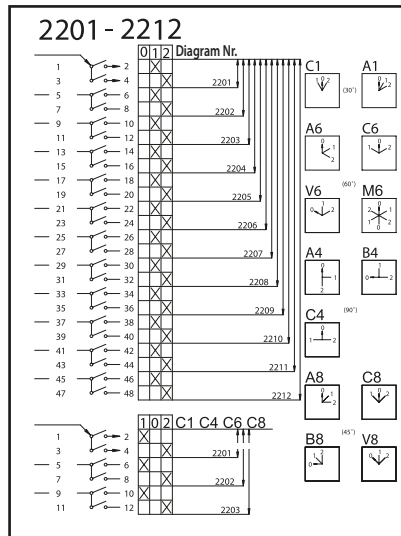
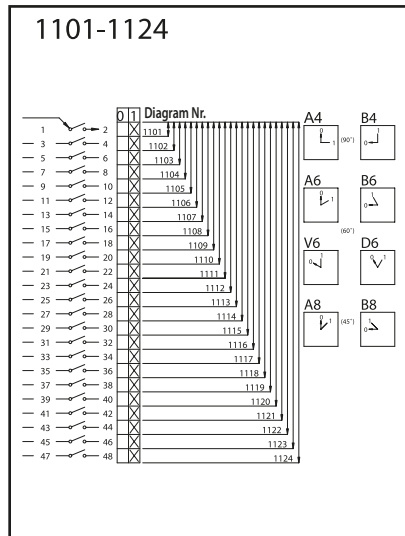
30°

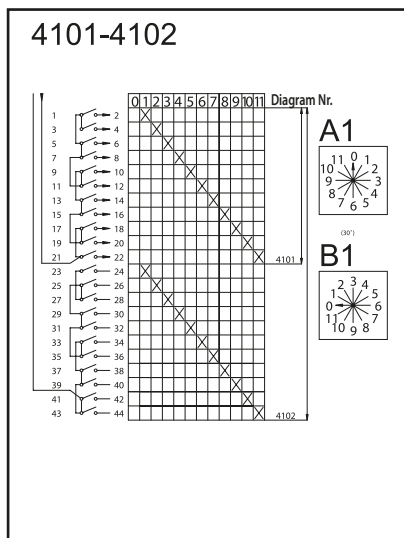
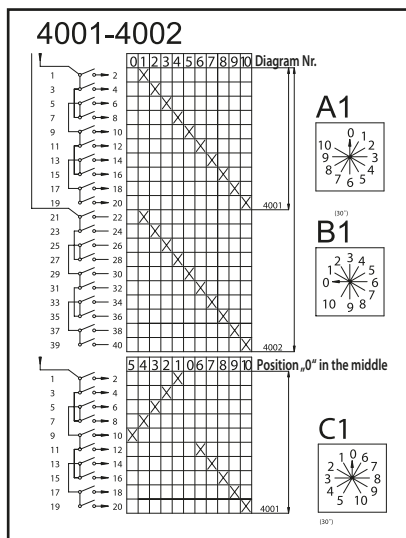
45°

TYPE	S	J						N
DESIGNATION								
REVERSIBLE DRIVE	V							
FOR DIN-RAIL WITH LABEL	LS							
FOR DIN-RAIL WITH PANEL	LD							
REAR FIXING	O							
CENTRAL FIXING Ø 22	R							
CENTRAL WITH FAB KEY	K							
CONTROL THROUGH DOOR	B							
PLASTIC BOX	P							
WITH UNDERVOLTAGE COIL	C							
PANEL + LABEL	D							
THREE PADLOCKS	U							
FAB PADLOCK	Z							
SEALING IP 65	G							
IN AI COVER	A							
IN AI COVER WITH FUSE	I							
WITH FUSES IN PH COVER	N							
LED SIGNALLING	F							
WITH BUTTON	T							
(Electric diagram without jumpers, marka as Diagram No. - X) IF DOES NOT EXIST. - PRODUCER WILL ASSIGNE THE NUMBER CATALOGUE NUMBER OF ELETRICAL SCHEME								
Lever colour	R - Red							
Position label	No.							
Label No.								
LED signaling								
Lever position - switch angle								
A	↓							
B	↙							
C	↘							
D	↗							
M	↑							Turn over 360°
V	↖							
W	↗							
		6						Switch angle 60°
		4						90°
		1						30°
		8						45°

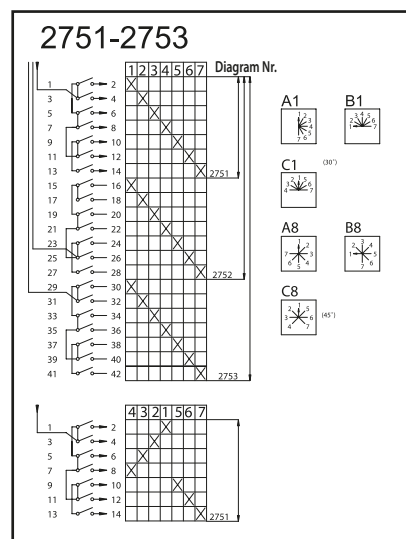
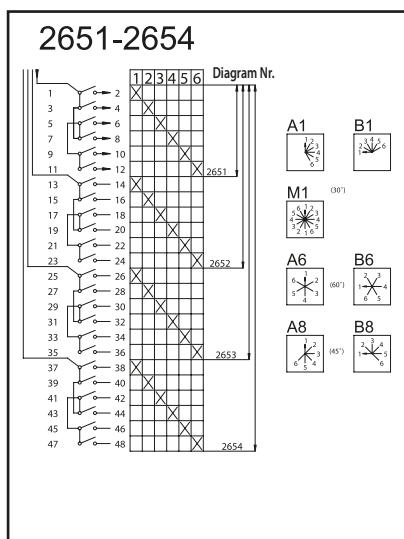
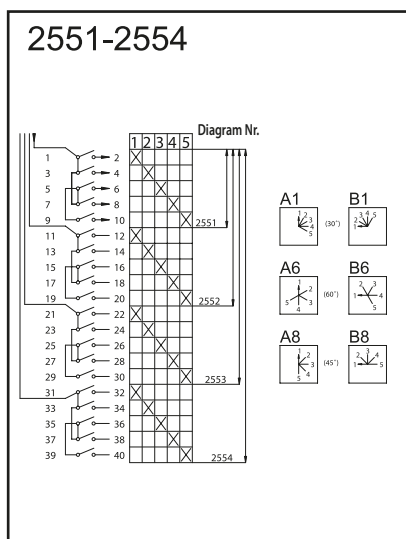
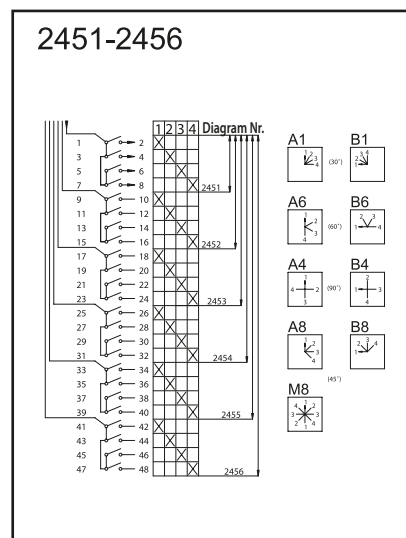
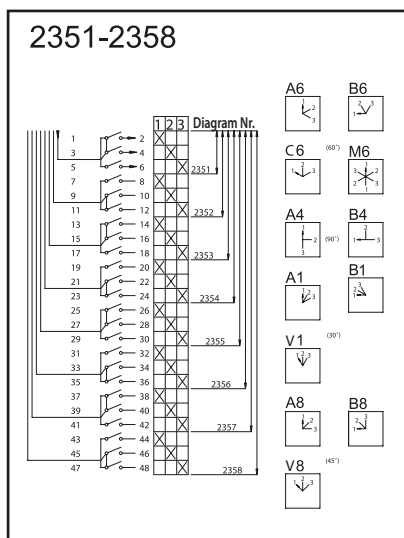
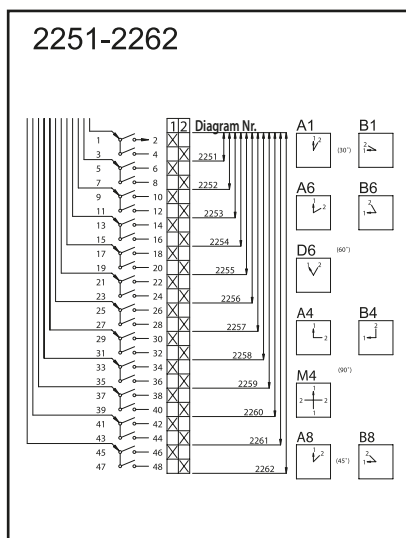
Customer will mark required electrical parameters, switching program a execution.
Type of switchbold marked part will be set by manufacturer.

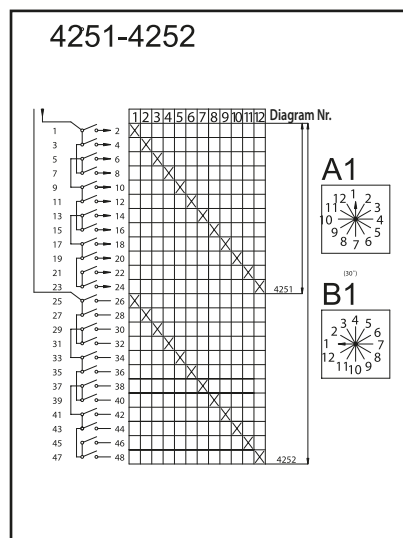
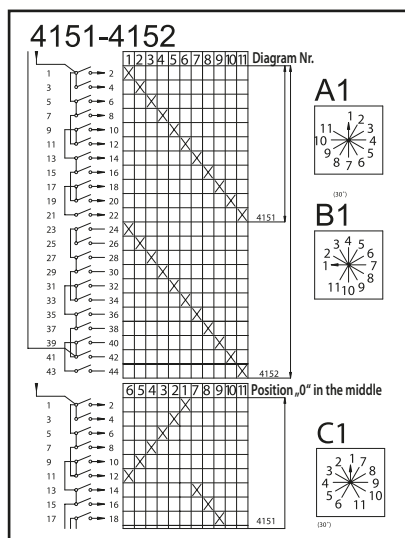
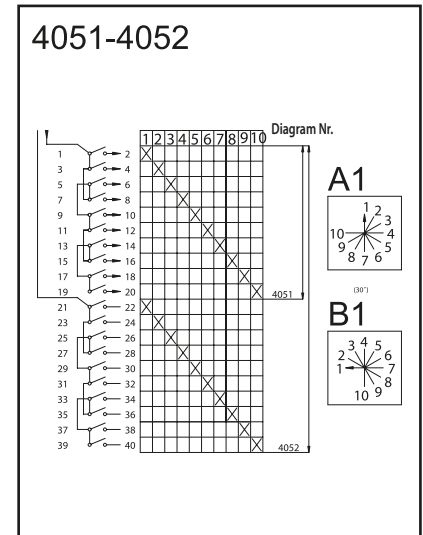
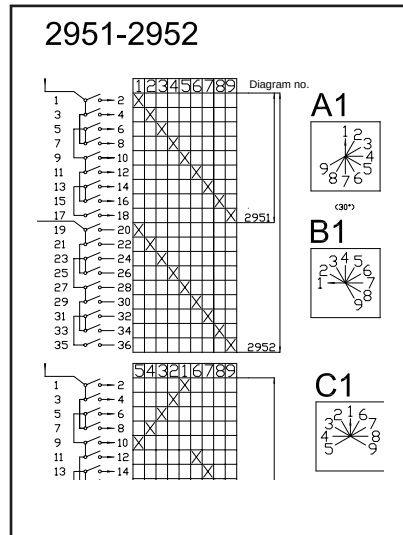
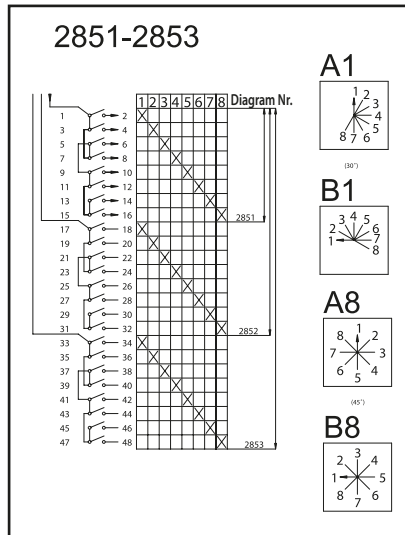
STAGE OVER SWITCHES WITH ZERO POSITION



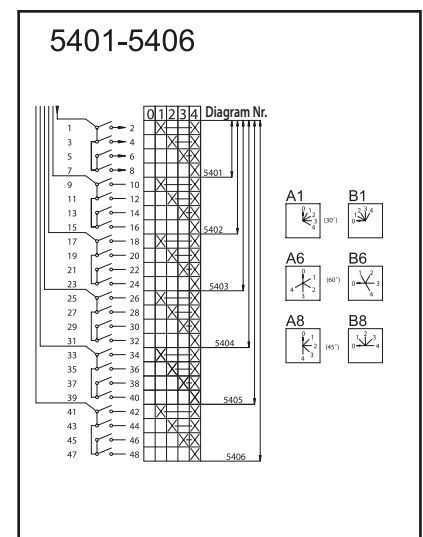
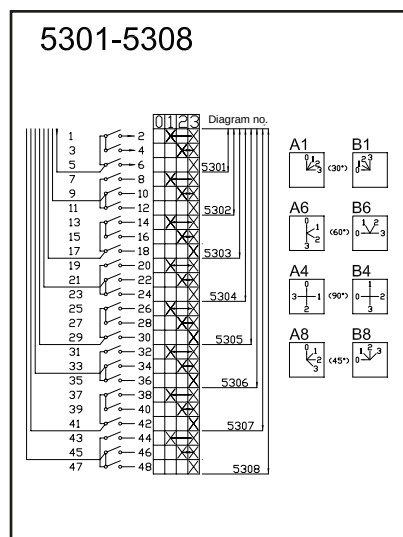
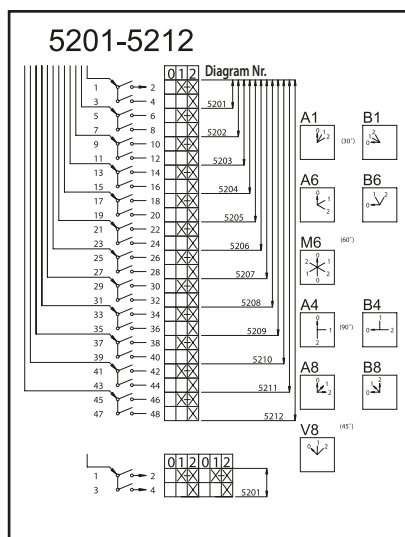


STAGE OVER SWITCHES WITHOUT ZERO POSITION



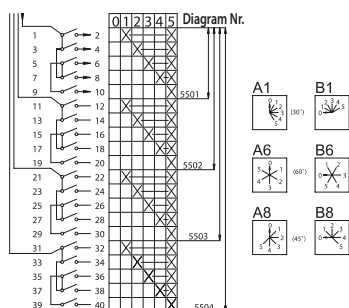


STAGE OVER SWITCHES WITH ZERO POSITION WITHOUT BRAKE FROM POWER ON

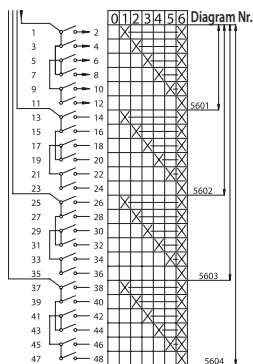


STAGE OVER SWITCHES WITH ZERO POSITION WITHOUT BRAKE FROM POWER ON

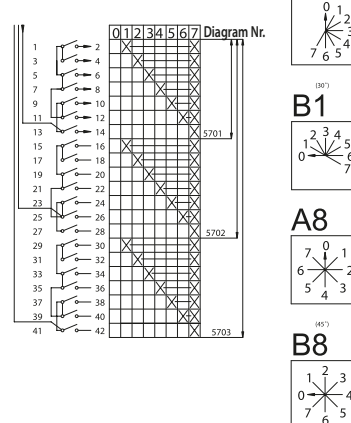
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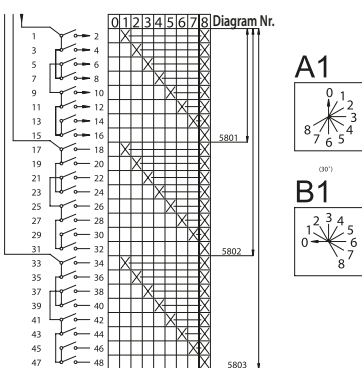
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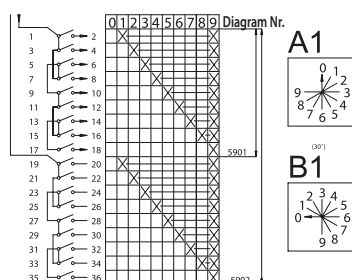
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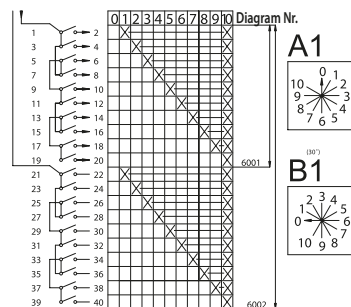
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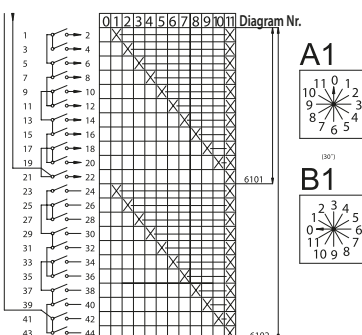
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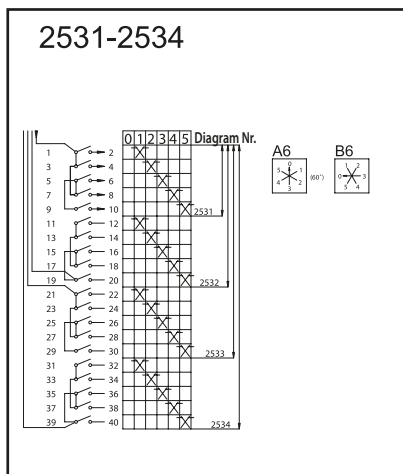
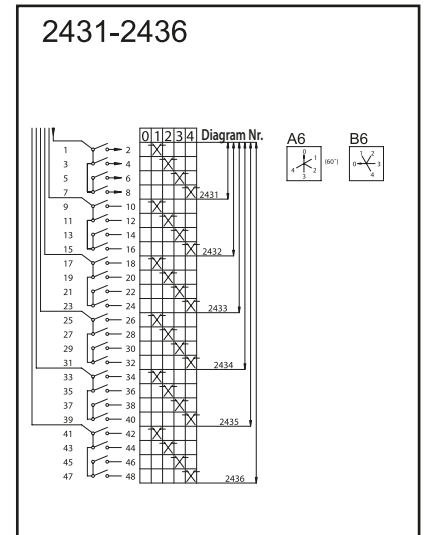
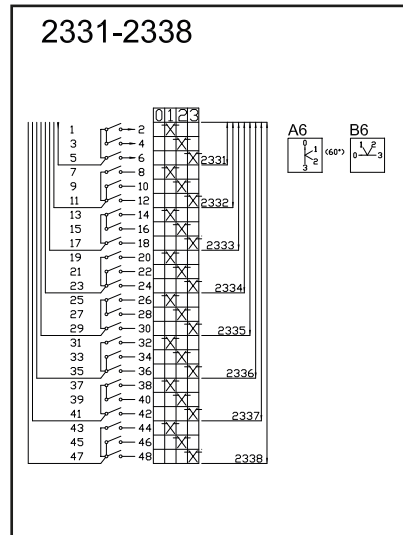
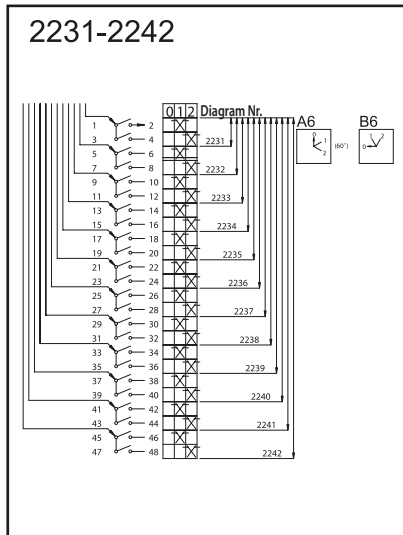
6001-6002



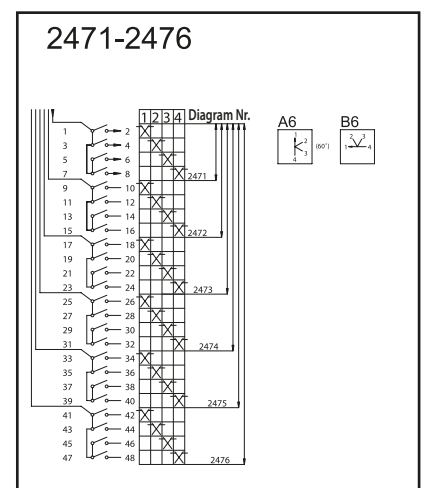
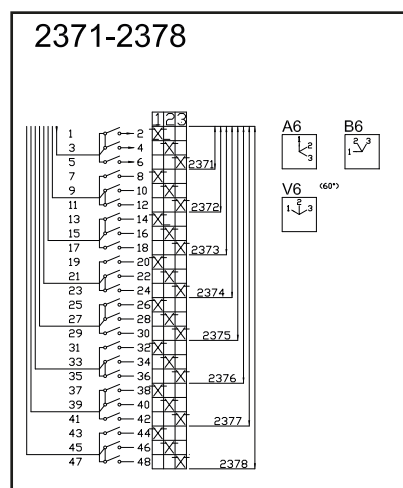
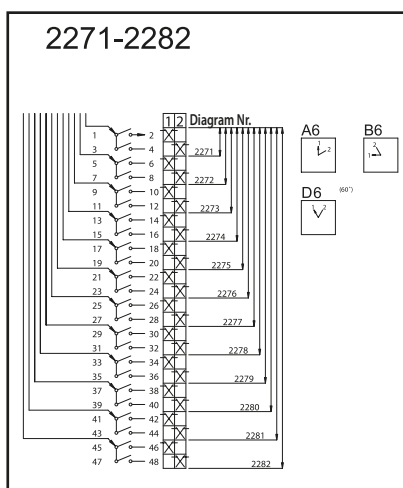
6101-6102



STAGE OVER SWITCHES WITH ZERO POSITION WITH OVERLAP CONNECTIONS

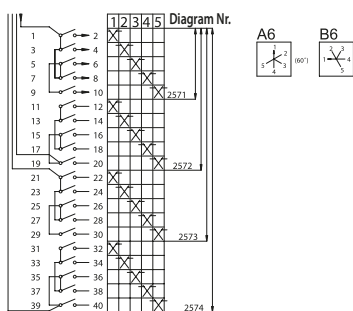


STAGE OVER SWITCHES WITH ZERO POSITION WITHOUT OVERLAP CONNECTIONS

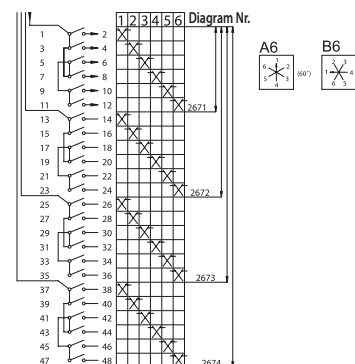


STAGE OVER SWITCHES WITH ZERO POSITION WITH OVERLAP CONNECTIONS

2571-2574

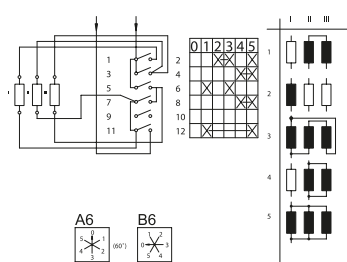


2671-2674

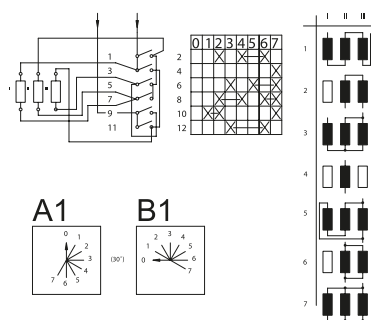


SWITCHES FOR ORDERING RESISTANCE

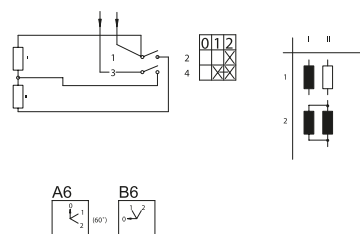
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7194

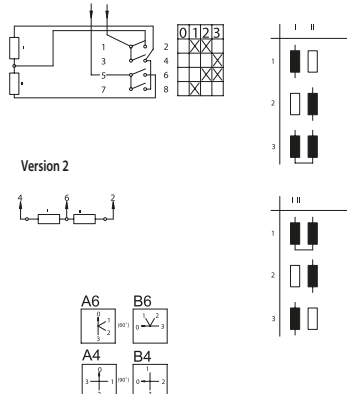


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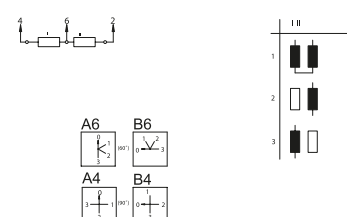


7202

Version 1

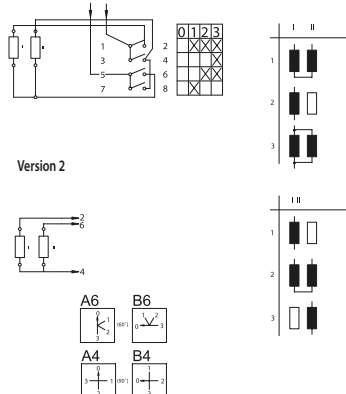


Version 2

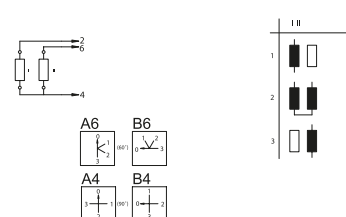


7204

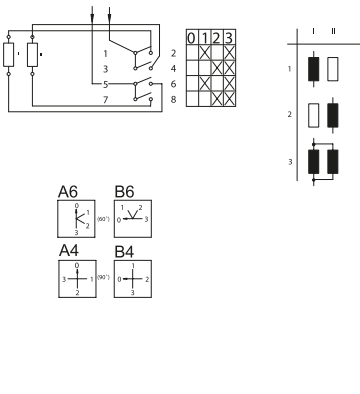
Version 1



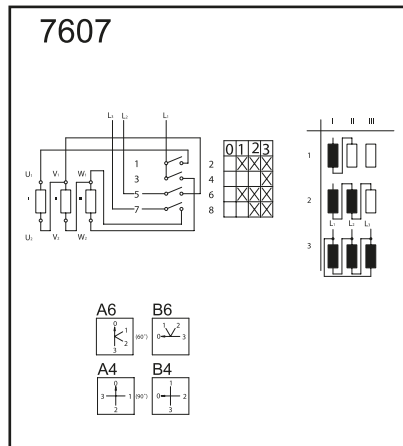
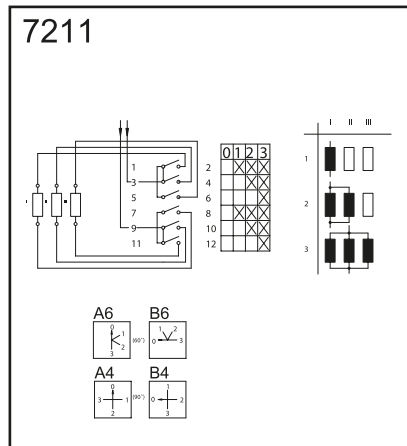
Version 2



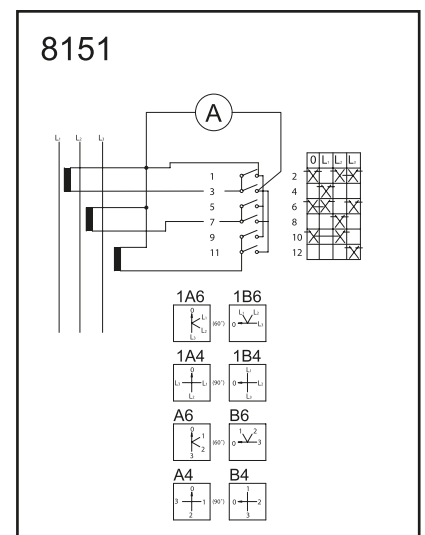
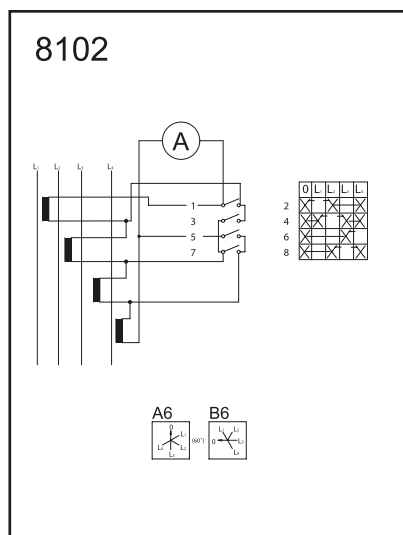
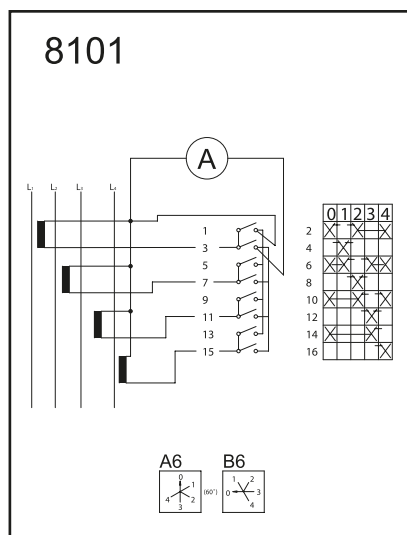
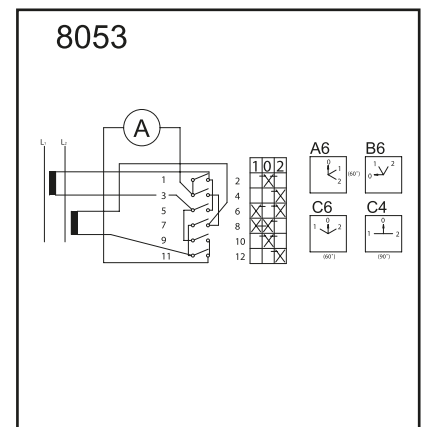
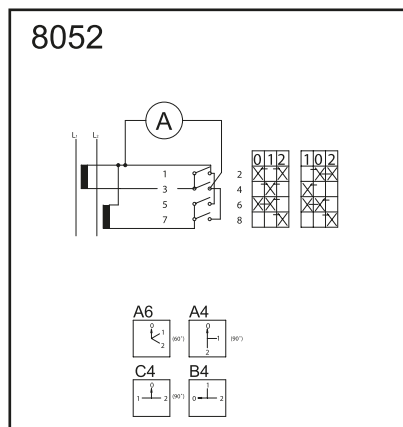
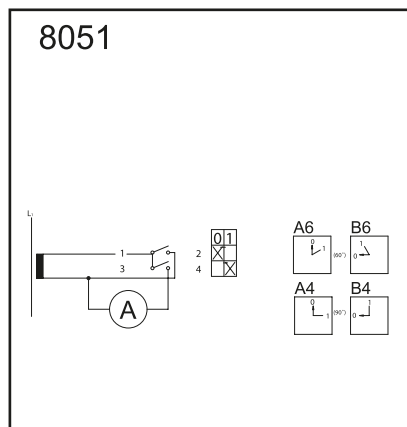
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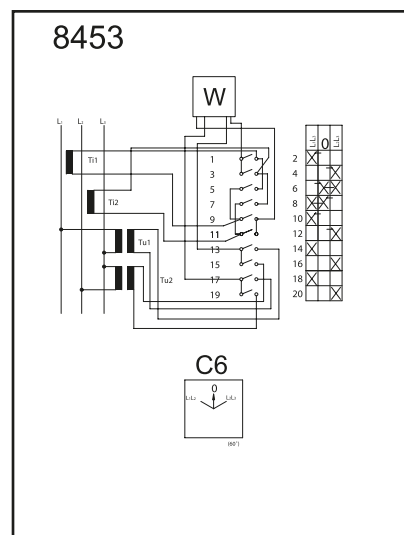
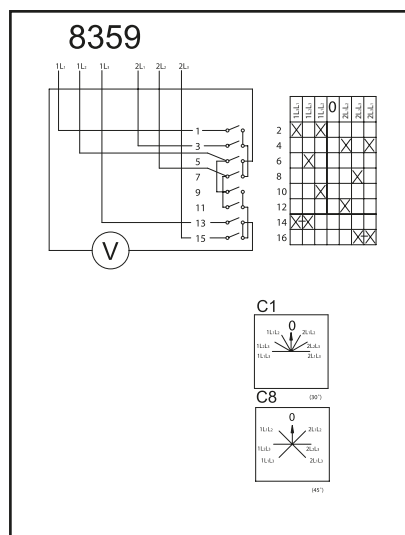
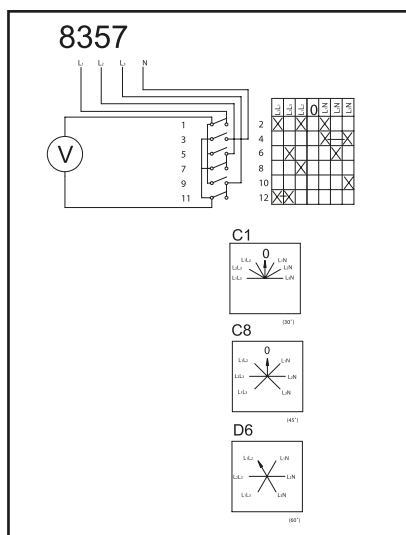
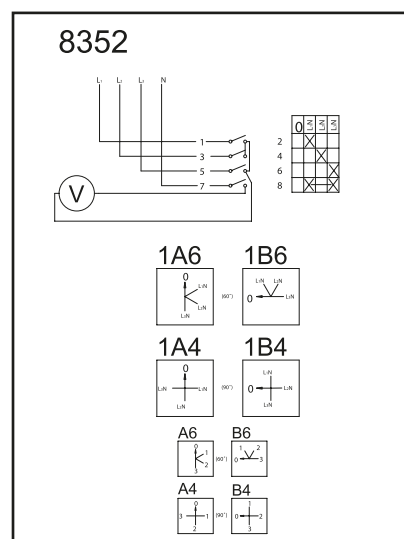
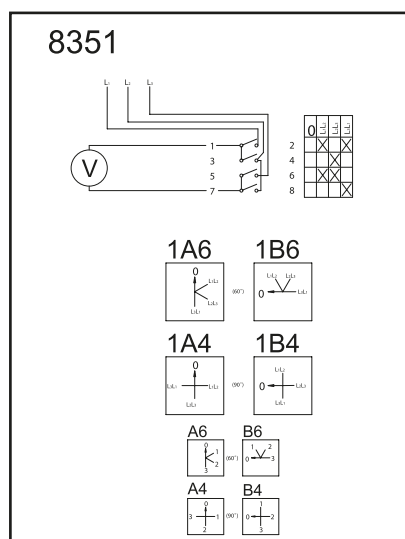
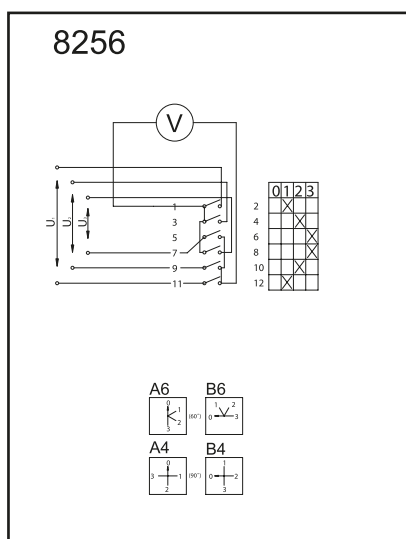
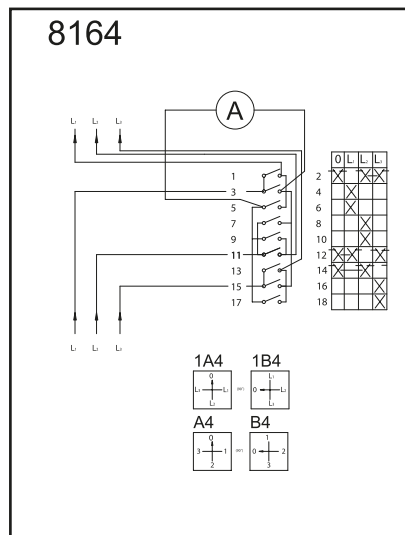
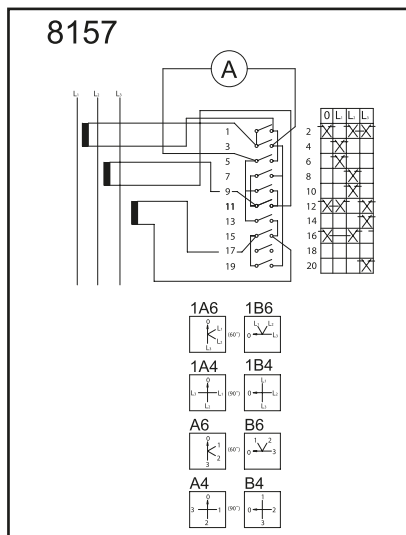
SWITCHES FOR ORDERING RESISTANCE



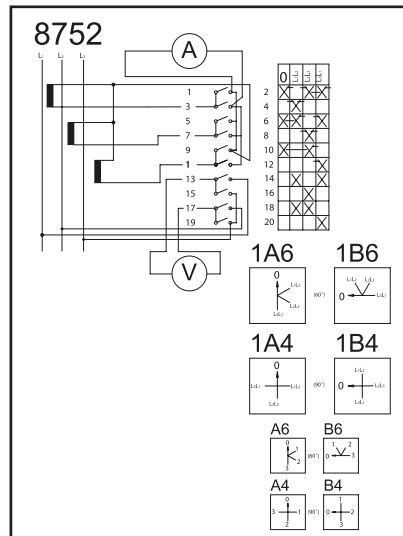
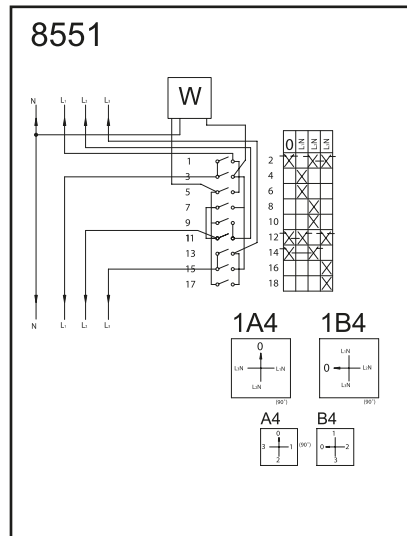
SWITCHES FOR MEASURING INSTRUMENTS



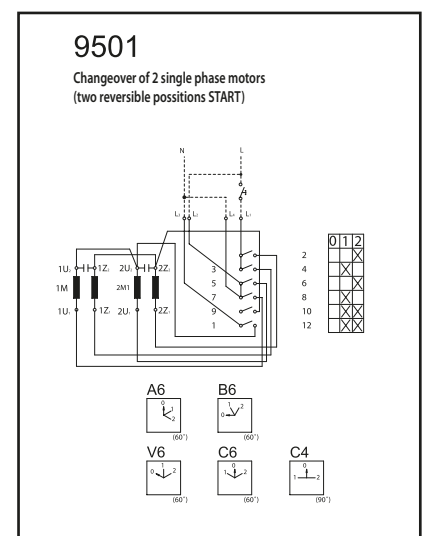
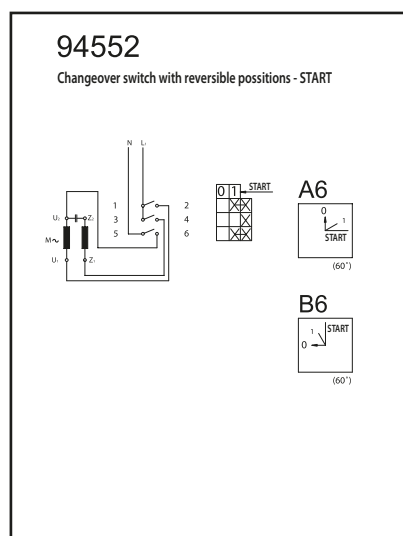
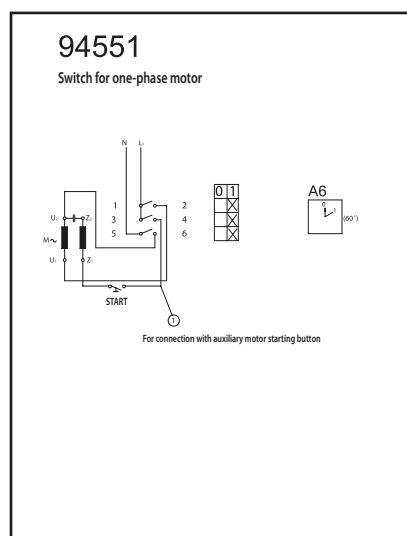
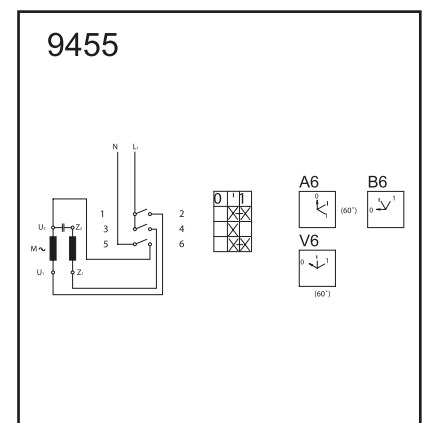
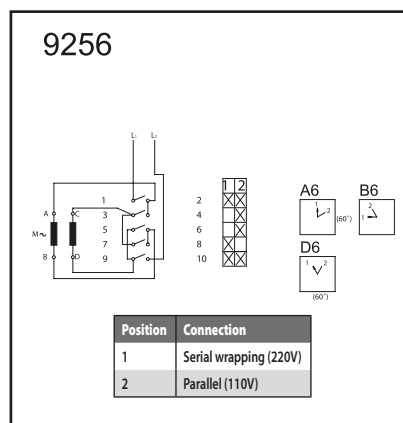
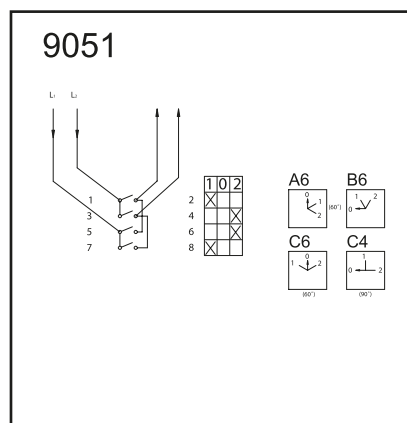
SWITCHES FOR MEASURING INSTRUMENTS



SWITCHES FOR MEASURING INSTRUMENTS



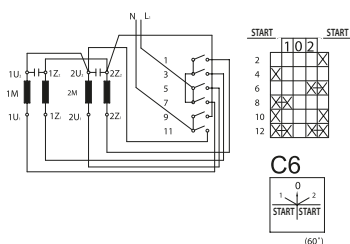
SWITCHES FOR ONE-PHASE MOTORS



SWITCHES FOR ONE-PHASE MOTORS

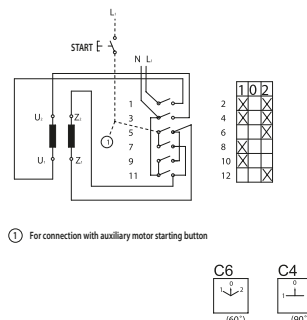
95012

Changeover of 2 single phase motors
(two reversible positions START)



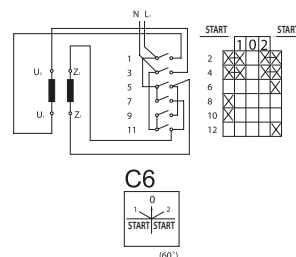
91011

One-phase reversible switch



91012

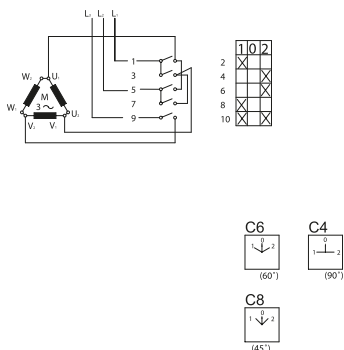
One-phase reversible switch



SYNCHRONOUS MOTORS

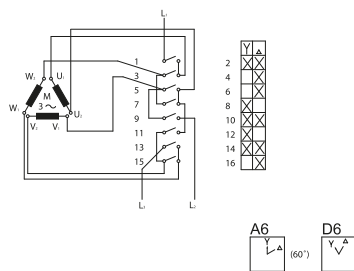
9151

Reversible switch 3~



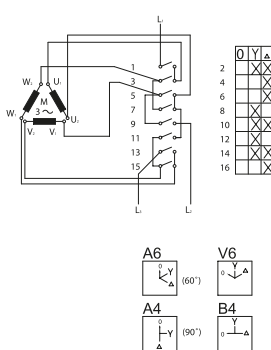
93521

Changeover switch Y - Δ



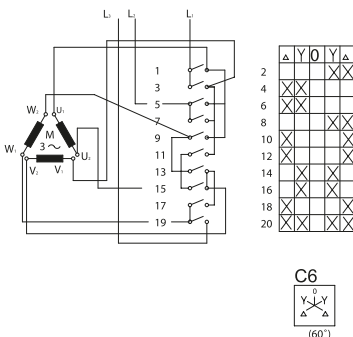
9551

Changeover switch Y - Δ



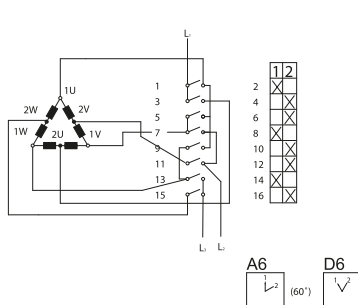
9153

Reversible switch Y - Δ



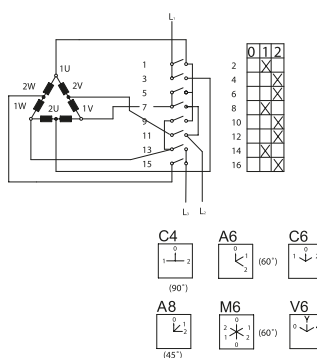
9354

Polarity reversing switch (Dahlander) Δ - Ψ



9552

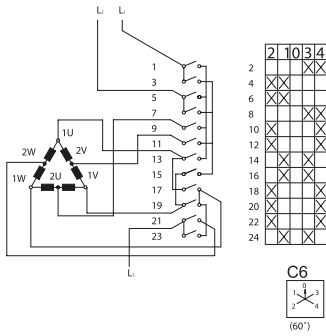
Polarity reversing switch (Dahlander) 0 - Δ - Ψ (Δ - 0 - Ψ)



SWITCHES FOR THREE ASYNCHRONOUS MOTORS

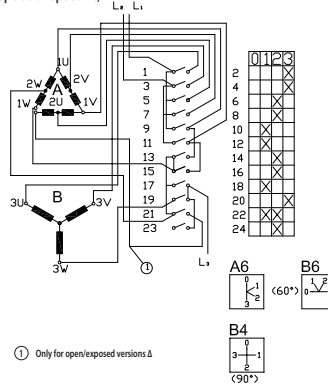
9154

Polarity reversing switch (Dahlander) Ψ - Δ - 0 - Δ - Ψ



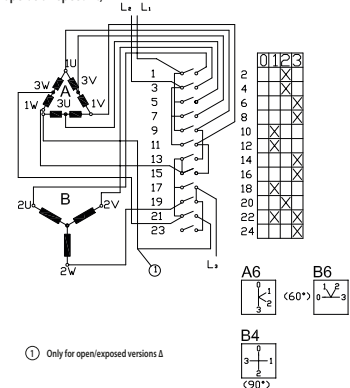
9554

Polarity reversing switch 0 - Δ - Ψ - Ψ - Δ
(three operating speeds, two separated coils/windings YB at operation speed III.)



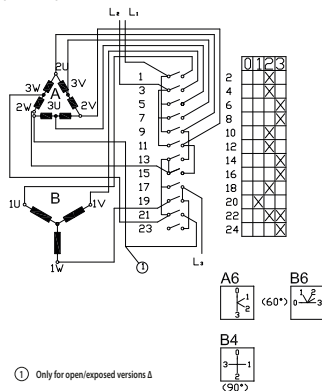
9555

Polarity reversing switch 0 - Δ - Ψ - Ψ - Δ
(three operating speeds, two separated coils/windings YB at operation speed II.)



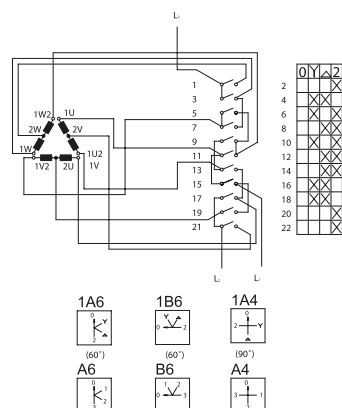
9556

Polarity reversing switch 0 - Ψ - Δ - Ψ - Δ
(three operating speeds, two separated coils/windings YB at operation speed I.)



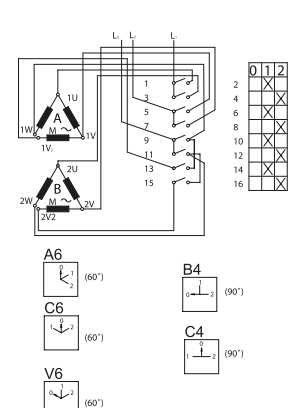
9567

Polarity reversing switch 0 - Ψ - Δ - Ψ
(Dahlander - two operating speeds)



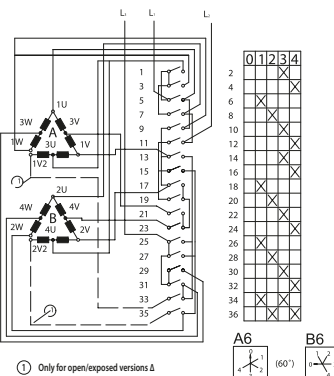
9553

Polarity reversing switch
(two separated coils/windings)



9557

Polarity reversing switch 0 - Δ - Δ - Ψ - Ψ
(2 x Dahlander - four operating speeds)



Description

Switches S 32, 250, 400 J are a new non-conventional designed rotary switch with switching angle 60° with maximum 6 switching positions.

The control gear of the switch is separated from the control switching part of the device and by turning the control lever it enables quick making and breaking contacts independently of the way of control.

The unit-construction switching part of the device has from one to six switching chambers in which there are disks with movable contacts rollers on the basis of Cu and terminal clamps. Maximum number of switching poles is 12.

Minimum use of metal parts in construction of the switch significantly increases the safety of operation.

Use

They are used for switching unidirectional and alternating electrical circuits till the rated current, and ohmic and inductive load.

Technical data

- they correspond to EN 60 947-3 (EN 60 947-3, IEC 60 947-3, EN 60 947-3)

		S 32 J		S 250 J	S 400 J
Rated isolation voltage U_i , V		500		660	660
Rated current I_n , A		32		250	400
Rated thermal current I_{th} , A		32		250	400
Rated frequency, Hz		50		50	50
Switching ON/OFF ability, A		v AC 3		v AC 22	v AC 22
	in 500 V	250		450	750
	in 380 V	250		750	900
Working current I_e , A	in 500 V	18		150	200
	in 380 V	25		250	250
Electric durability, cycles		10.000		1.000	1.000
Mechanical durability, cycles		100.000		10.000	10.000
Class of operational interruption		30		30	30
Working current I_e , A		DC 22	DC 21	DC 22	DC 22
in 110 V=	poles in series 1	6	16	100	100
	2	12	20	150	150
	3	16	32	-	-
in 220 V=	poles in series 1	4	10	40	40
	2	6	16	100	100
	3	10	20	-	-
Connection of conductors, mm ²		1,5 - 6		240*	240*

* Possibility to connect cable eye up to Ø 30 mm, for bigger section of the connecting wires is necessary to use additive clamps.

Mechanical type

Type designation	Execution
S ... J	contact maker/switch with lever
S ... JD	contact maker/switch with front board
S ... JVZ	contact maker/switch with padlocks

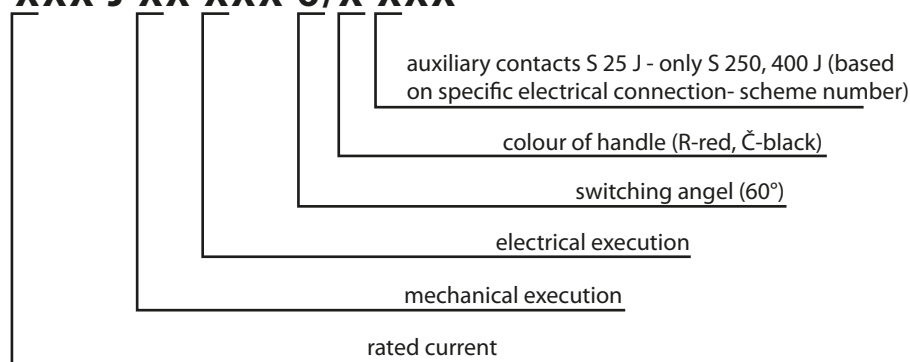
Electrical type

Type	Designation	Marking	No. of switching chambers
S 32 J	Three pole switch	001	2
	Reverse switch	002	3
	Switch YD	003	4
	Reverse switch YD	004	6
	Pole-changing switch	005	4
	Network switch	006	3
S 250, 400 J	One-pole switch	01	1
	Two-pole switch	02	1
	Three-pole switch	03	2
	Four-pole switch	04	2
	One-pole changeover switch	11	1
	Two-pole changeover switch	12	2
	Three-pole changeover switch	13	3
	Four-pole changeover switch	14	4

Other required electric type is necessary to be consult with the producer.

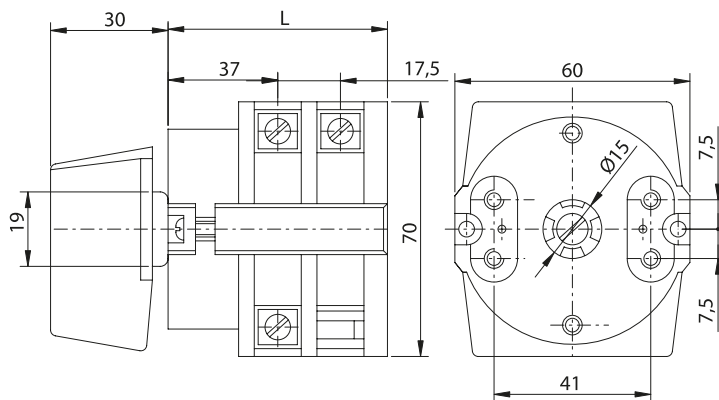
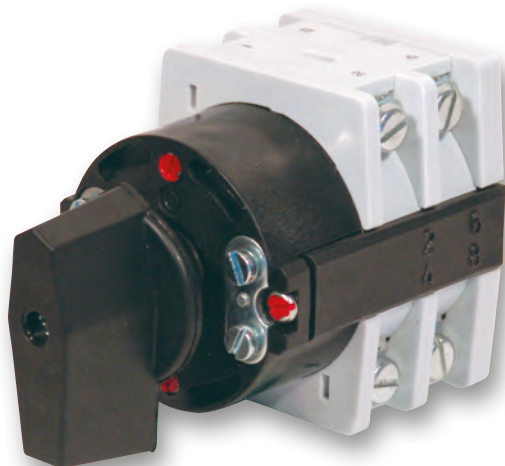
TYPE DESIGNATION

S XXX J XX XXX 6/X XXX

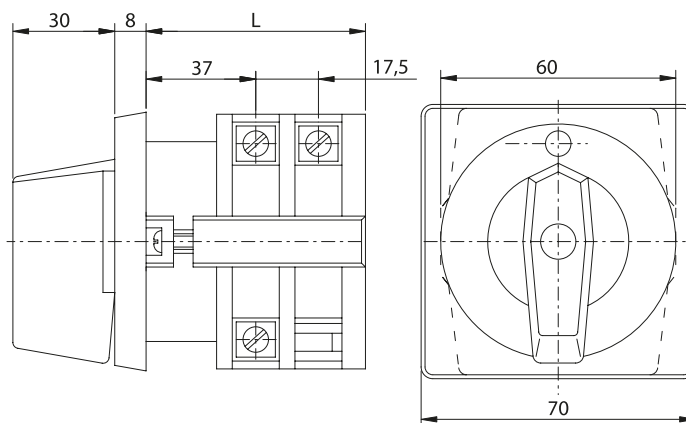


Notes: Auxiliary contacts (switch S 25 J) are mounted to the rear side of switches S 250, 400 J.

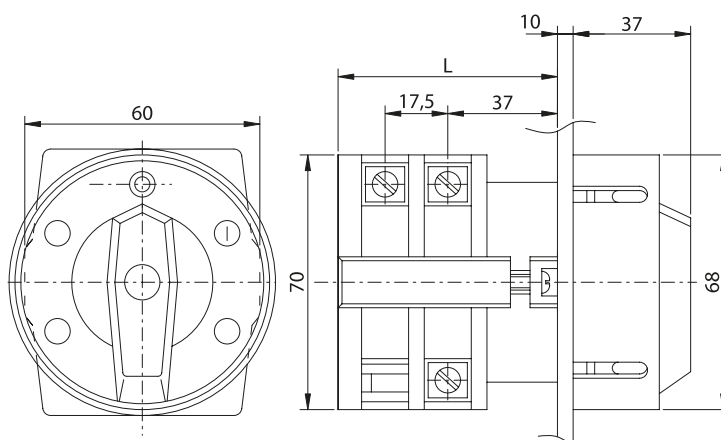
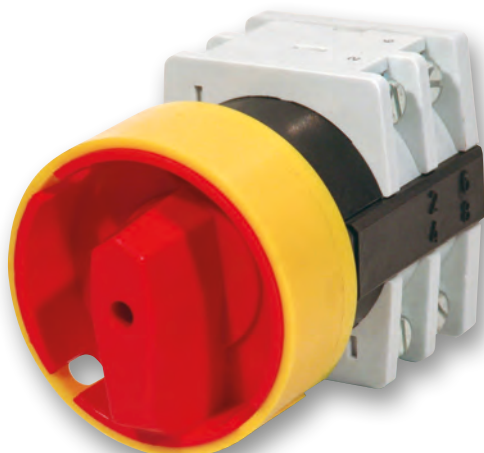
Rotary switch S 32 J



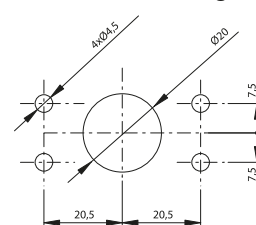
Rotary switch S 32 JD



Rotary switch S 32 JVZ

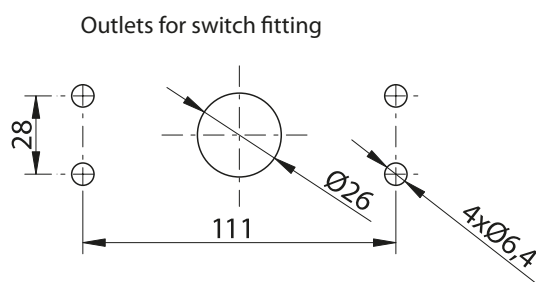
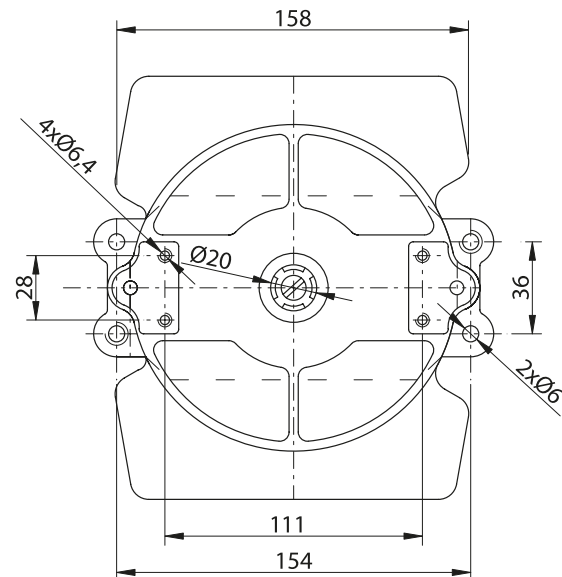
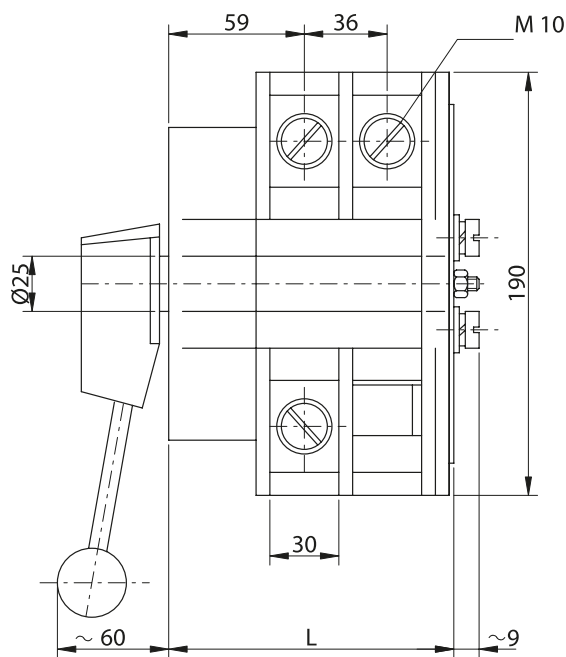


Outlets for switch fitting

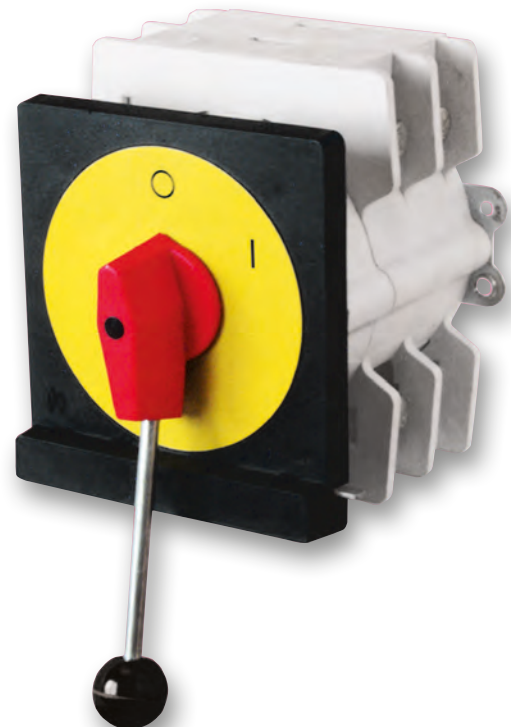


Number of chambers	1	2	3	4	5	6
L	51	68	86	103	121	138

Rotary switch S 250, 400 J



Number of chambers	1	2	3	4
L	88	124	160	196



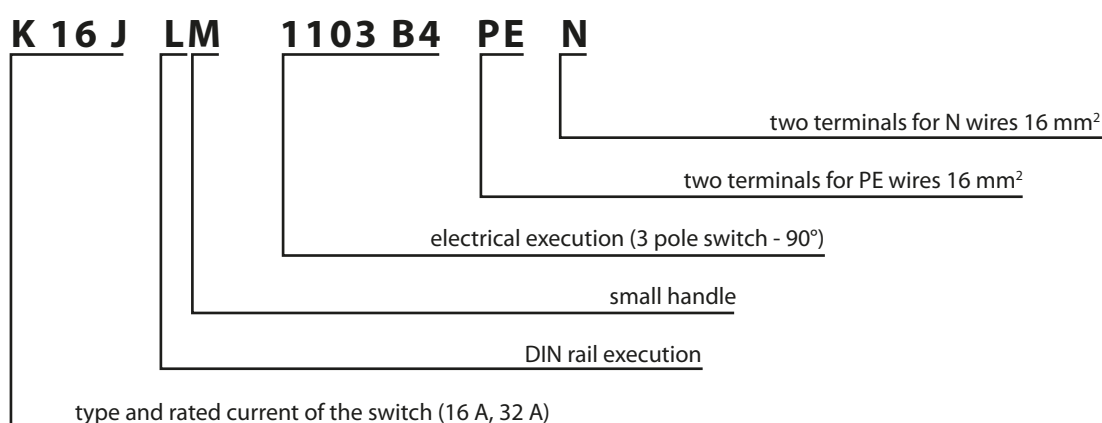
Fastening:

- to the panel - by four screws M6x10 mm (max) with the axis distance of holes of 28 x 111 mm
- rear - by two screws M6x10 mm (max) with the axis distance of holes of 36 x 154 mm
- frontal plate dimensions of 158 x 172 mm

Use

Compact power switches K16J and K32J are 2 modules, 3poles switches of rated current 16A and 32A with switching angle 90°. Switches can be mounted on DIN rail, or on base plate with M4 bolts. They can also be mounted on the front panel of distribution box with 2 self tapping screws Ø 3,9. Access to heads of the screws for connection of conductors is in this case from the back side of the switch and the switch is without back fixing rail. O basic execution of 3 poles switches K16J and K32J you can add 4-th and 5-th switching pole, or PE and N poles. These units can be attached to the switches without screws from the left or right side. Extensions front plates of operatings elements, mechanical executions and numeric designation of electrical schemes are identical with cam switches S16J and S25J.

Example of type designation:



Technical data

TYPE		K16J	K32J
Standards		STN EN 60947-3	
Rated insulating voltage U_i	V	690	690
Rated impulse voltage U_{imp}	kV	4	4
Rated thermal current $I_{th} - I_{the}$	A	16	32
Output in AC3 at 500 V~ (motors)	kW	7,5	11
Rated operating current I_e v AC 23 A – 500 V~	A	16	32
Rated switching-on capacity	A	160	320
Rated switching-off capacity	A	128	256
Conditional short-circuit current with fuse 16, 35 A	kA	6	6
Mechanical endurance		100 000 cykles	100 000 cykles
Max. cross section of conductors	mm ²	16	16
Protection degree		IP 20	
		IP 40 from the front panel	
Switching angle		90°	
Ambient temperature	°C	-30 till +55	
Mounting		on panel, DIN rail 35 x 7,5	
Rated operating current I_e (A) at DC 22/21	48 V	16	32
	110 V	1	1
	220 V	0,5	0,5

Technical parameters for switching pole SP 16, SP 32 and range of connecting terminals for N32 and N16 are identical with data in chart – Technical data.

Execution:	Type:	Description:
* Switches with rear mounting	K...JLM	- with small handle for DIN rail or with screws
	K...JB	- with control on the door
	K...JP	- in plastic box with IP 65
Switches on panel	K...J	- with handle
	K...JM	- with small handle
	K...JG	- with handle and sealing for IP 65 (also for execution D,U...)
	K...JD	- with handle and front plate
	K...JU	- with lock and 3 padlock - cylindrical
	K...JH	- with locking padlocks on handle
Accessories	K...JF	- with LED signalling diode
	SP 16	- switching pole with terminals 7-8 or 9-10
	SP 32	
	PE 16	- nonswitched pole for two earthing conductors till 16 mm ²
	PE 32	
	N 16	- nonswitched pole for conductors till 16 mm ² terminals for central con-
	N 32	ductors

* For these types there is a possibility of adding front plate and lock with 3 padlocks U, small handle M and handle H.

Numeric designation of switches:

1102 B4 – 2 pole switch

1103 B4 – 3 pole switch

1104 B4 – 4 pole switch

1105 B4 – 5 pole switch

Application

- **2 to 5 poles switches in AC 21, AC 23 and AC 3 categories (switches for resistive and inductive loads, motors)**
- **switches in distributions with 3 and 5 conductors with PE a N terminals**

GUIDE FOR AUXILIARY SWITCH SP

Auxiliary switch SP can be mounted to all types of switches K..J, due to increased number of switching poles from three to four or five.

For correct mounting, following conditions have to be observed:

1. For switches K16J use auxiliary switch SP16, for switches K32J use auxiliary switch SP32
2. Auxiliary switches with terminals marked 7 – 8 are mounted to the right side of switches K..J, auxiliary switches with terminals marked 9-10 to the left side of switches K..J.
3. Auxiliary switches SP with screw head from the front of the device (front of the device is marked with SEZ logo) are intended for attaching on mounting plate or DIN rail, i.e. for switches K..JL. Auxiliary switches with screw head from the back side of the device are intended for switches K..J, i.e. for gripping the switch from the front side.

Guide for mounting of SP:

1. Put contacts of the switch K..J to the closed position, i.e. handle in position „I“.
2. Slide the auxiliary switch onto switch K..J in the way that projections are directed to apertures of K..J. Slightly push the side of SP and both devices will join together.
3. The function of the device can be checked by changing the position of the handle of the switch to „I“ and „0“ and checking the closing and opening of the contacts of SP.

GUIDE FOR NON-SWITCHING POLE „N“ AND „PE“

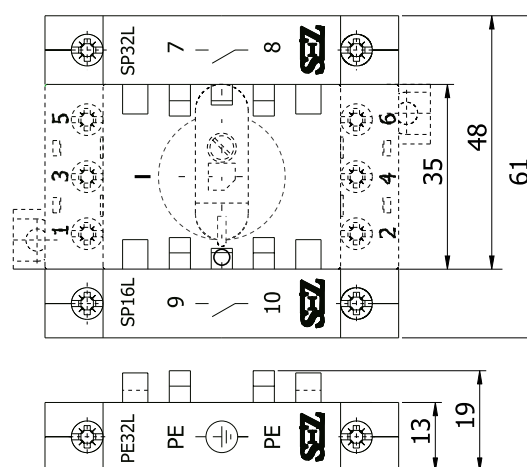
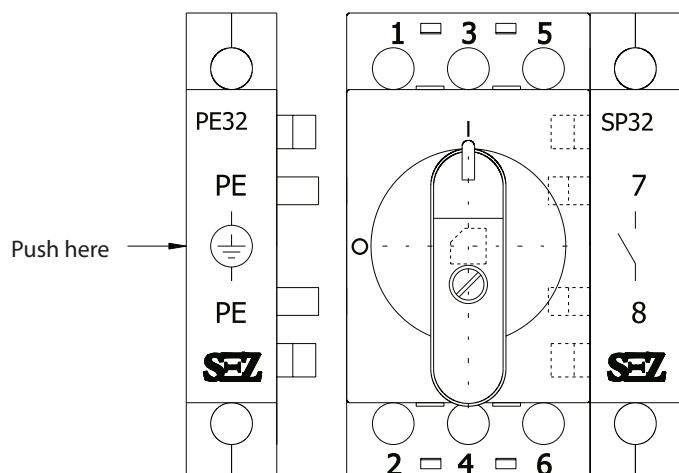
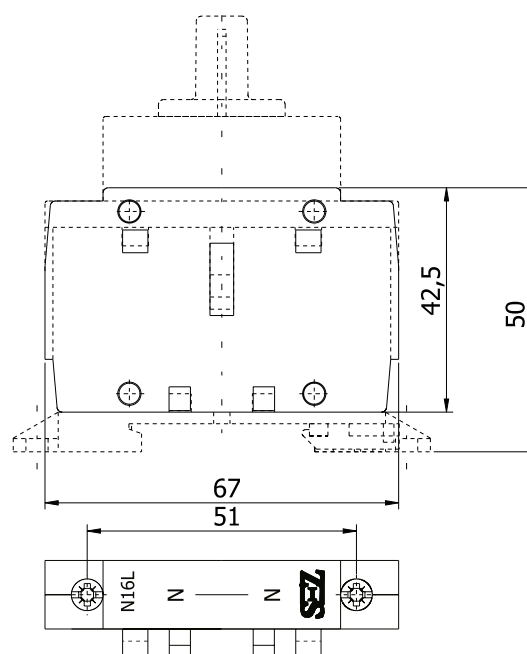
Non-switching pole „N“ and „PE“ can be mounted to all types of switches K..J, , due to increased number of terminals of the switch K..J for gripping the conductors N and PE.

For correct mounting, following conditions have to be observed:

1. For switches K16J use non-switching pole N16 or PE16 and for switches K32J use non-switching pole N32 or PE32.
2. Non-switching poles with terminals marked N-N are mounted to the right side of switches K..J, non-switching poles with terminals marked PE-PE to the left side of switches K..J.
3. Non switching poles N a PE with screw head from the front of the device (front of the device is marked with SEZ logo) are intended for attaching on mounting plate or DIN rail, i.e. with marking of the switch K..JL. Non-switching poles with screw head from the back side of the device are intended for switches K..J, i.e. for gripping the switch from the front side.

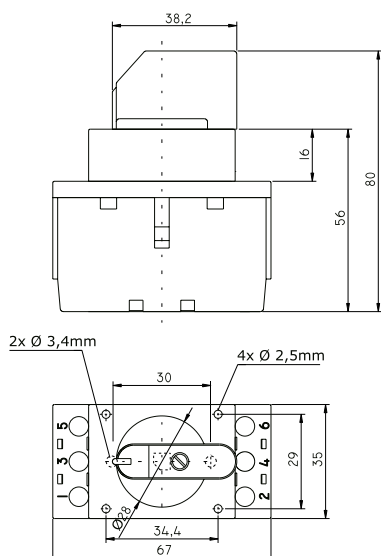
Guide for mounting of N a PE:

Slide the non-switching pole N, or PE onto the switch K..J in the way that projections are directed to apertures of K..J. Slightly push the side of N or PE and both devices will join together.

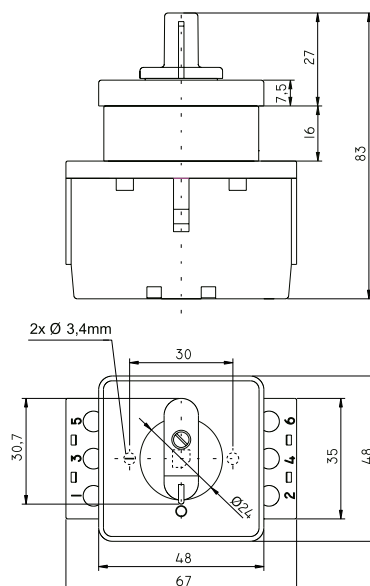


Dimensional drawing

K 32 J



K 32 JDM



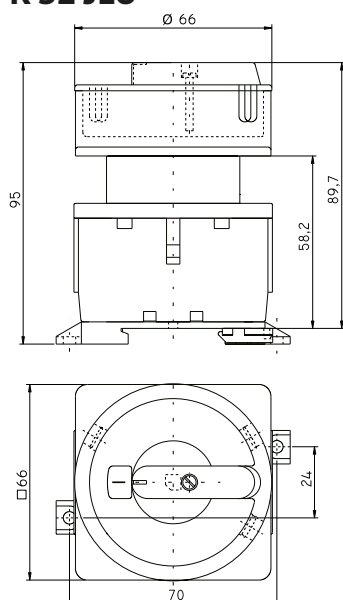
K 32 JM



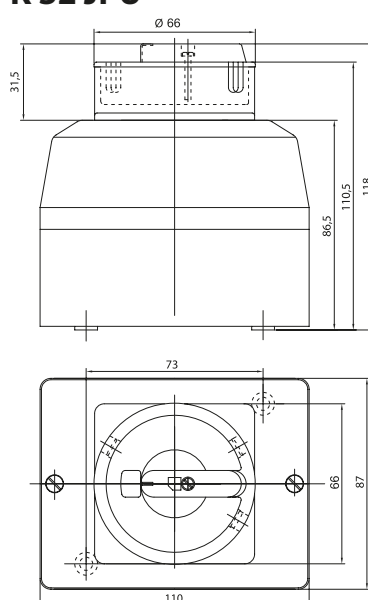
K 32 JD



K 32 JLU



K 32 JPU



K 32 JLU



K 32 JLM



K 32 JU

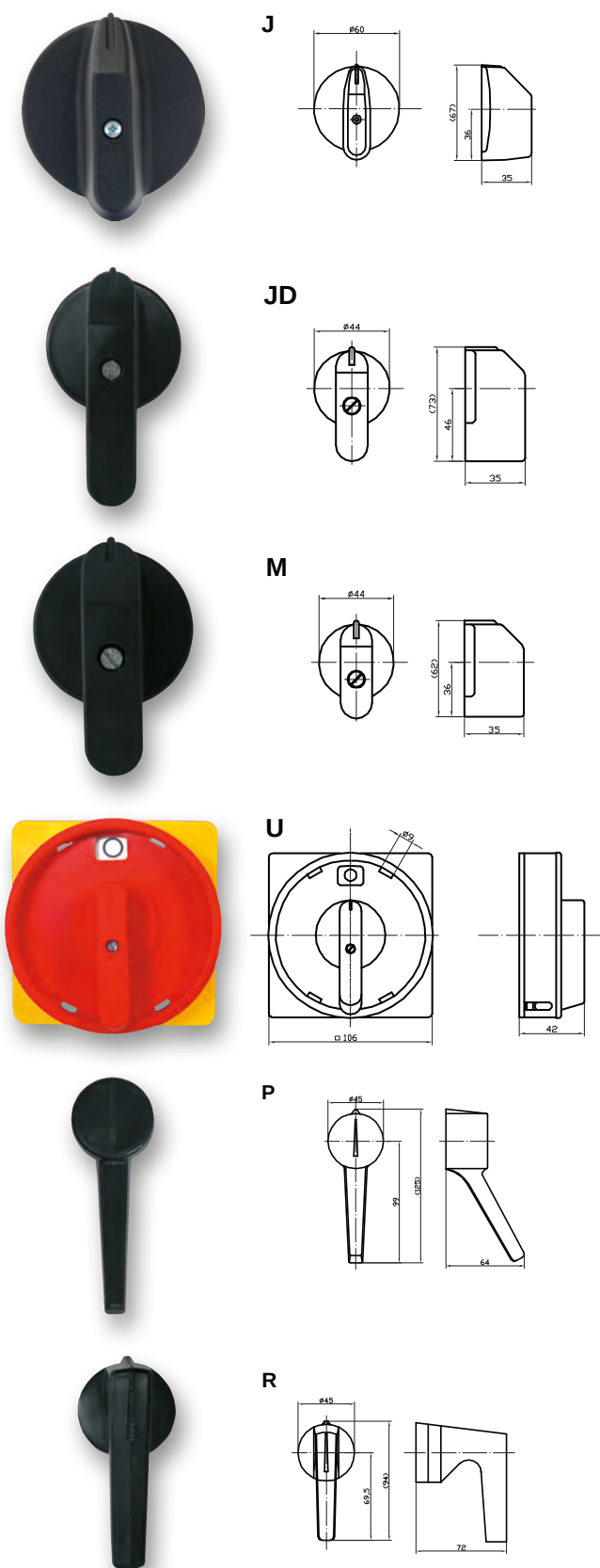


K 32 JPM



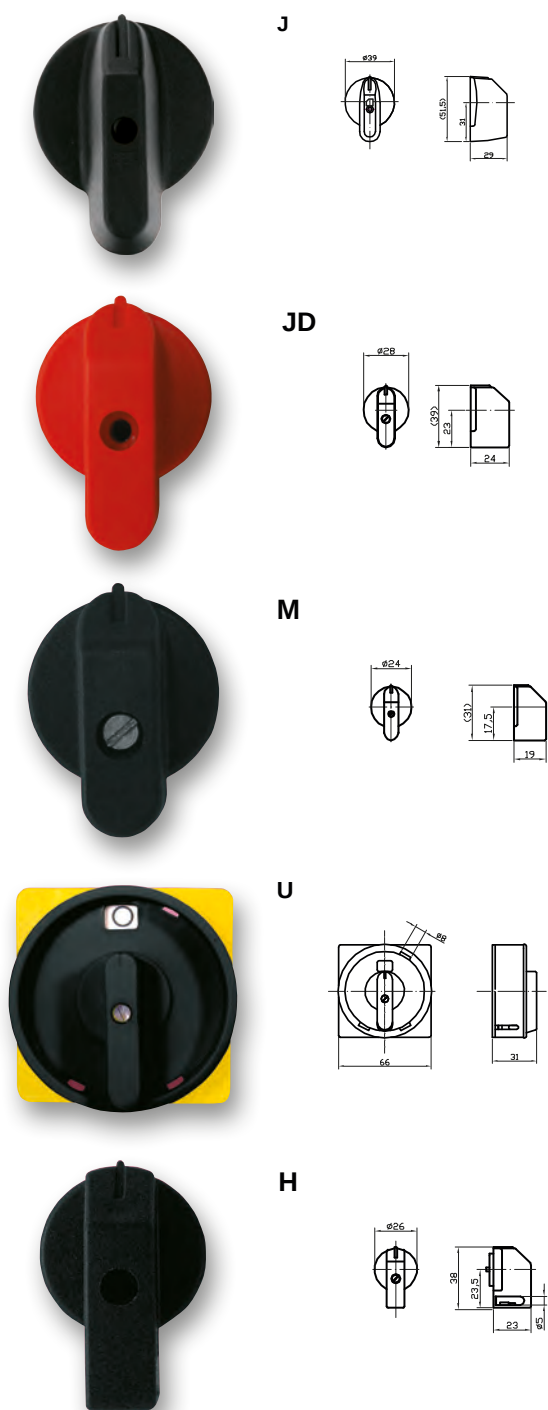
FOR CAM SWITCHES S 63 - 160 J

Winch 6x6



FOR CAM SWITCHES S 6 - 40 J, SWITCHES K 16 - 32 J

Winch 5x5



**TABLE OF THE ORDERING NUMBERS
FOR SPARES PARTS FOR SWITCHES**

handle name	symbol	Ordering number			
		Switches S 63 - 160 J		Switches S 6 - 40 J K 16 - 32 J	
		black	red	black	red
middle handle	J	1100846	1100847	1100870	1100871
middle handle	JD	1010500	1101550	1100524	1100525
small handle	M	1105982	1105983	1029002	1029003
handle for locking cilindric	U	1005901	1104774	1100436	1100437
handle for locking small	H	-	-	1029000	1029001
big handle	P	1033014	-	-	-
handle holder	R	1033016	-	-	-

Note: In type sign of cam switches is signed of the red handle - R

SWITCHES IN EMBEDDED BOX S25JEP, K32JEP

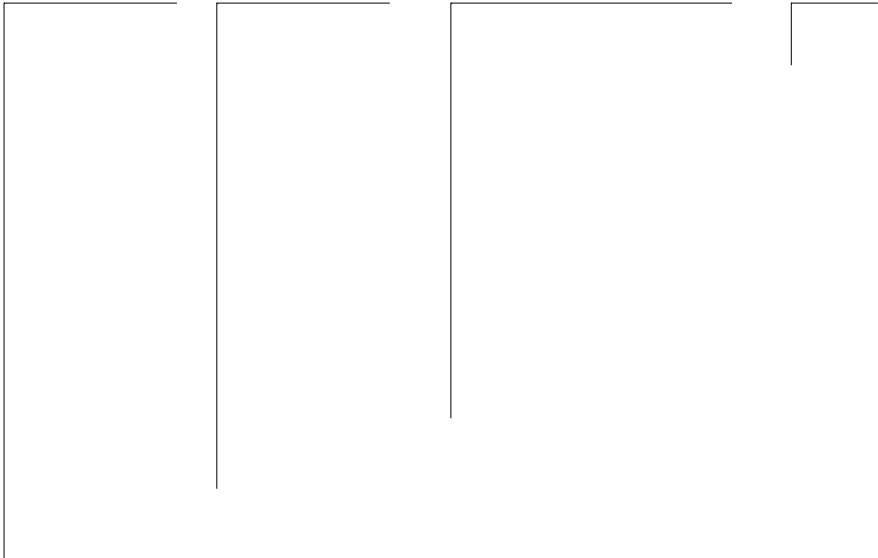
Description and technical data:

- switch in plastic box designed to be used for connection of electric heaters, boilers etc.
- can be used in household or in industry
- protection IP 65, clamps and contacts are protected from the event of direct connection with protection degree IP 20
- box installation into panel, wall, etc.
- there is possibility to add two pairs of two cable bushings Pg16 or Pg21, which are not a part of basic product package
- in accordance STN EN 60 947-3 (EN 60947-3, IEC60947-3, ČSN EN60947-3)
- variants:
 - S25JEPF with cam switch and signal lamp
 - S25JEP with cam switch
 - K32JEPF with cam switch and signal lamp
 - K32JEP with cam switch
- colour variant:
 - white
 - 1-dark brown
 - 2-tawny(beige)
 - 3-black

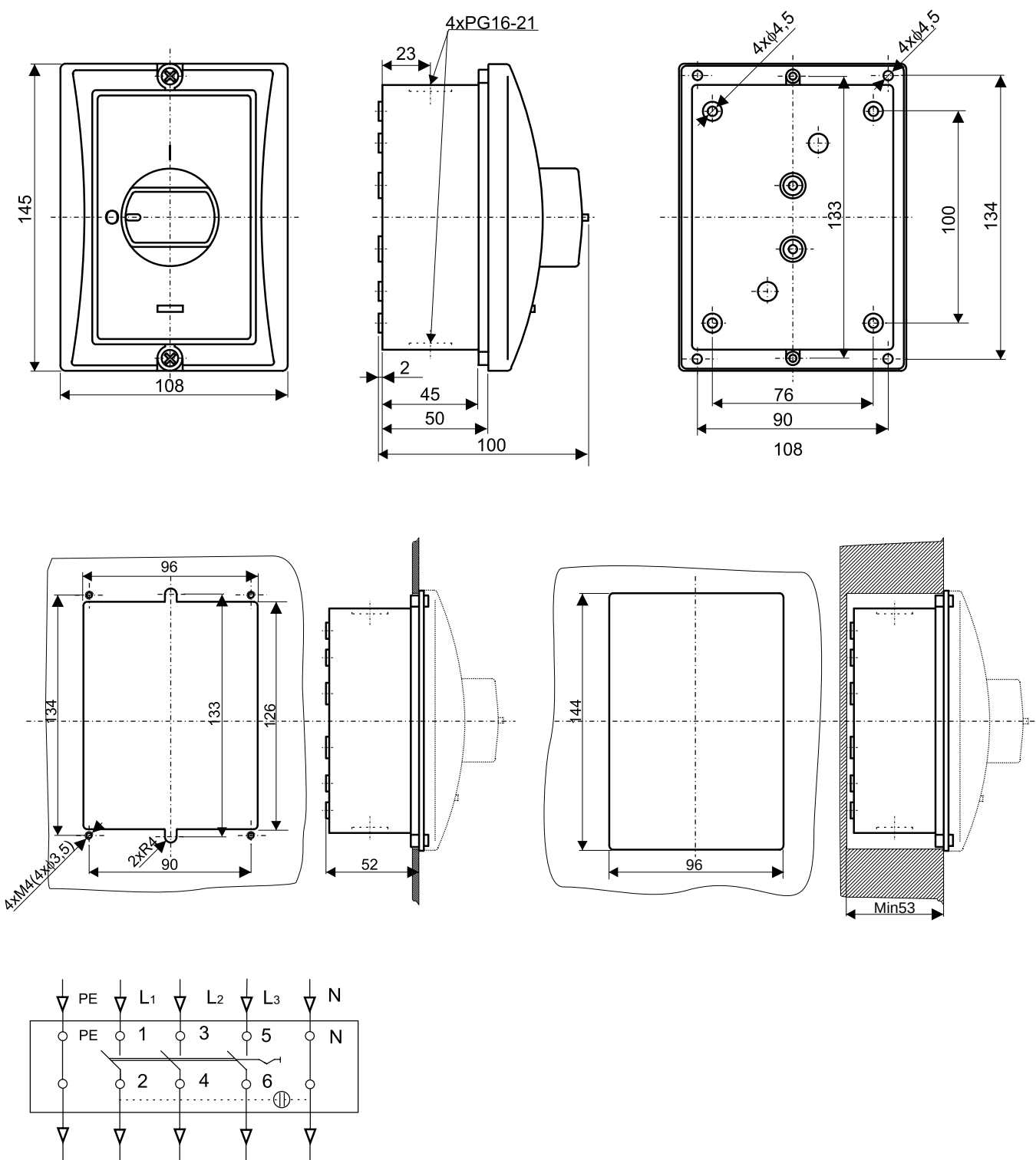
Other colour variants possible

Switch type		S 25 JEP	K 32 JEP
Rated insulation voltage U_i (V)		500	690
Rated impulse withstand voltage U_{imp} (kV)		4	4
Rated thermal current I_{th} (A)		25	32
Rated operating power kW AC3/AC23 400V, 500V		7,5/11	11
Rated operating current I_e (A) AC23	400V	19,8	32
	500V	16	32

S 25 JEPF 1103 B4 - 1



Switches in embedded box S25JEP, K32JEP



Description and technical data:

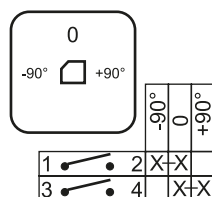
- switch in plastic box with special lever
- protection IP 65, clamps and connections are protected against contact with degree of protection IP 20
- fixation on the base with 2 screws M4
- two cable terminals are part of delivery: Pg 16 for S10 – 16 JPS, Pg 21 for S25 JPS
- they are in accordance with STN EN 60947-3(EN 60947-3, IEC 60947-3, ČSN 60947-3), STN EN 60204-1, VDE 0606
- they are in accordance with T 32 and temperatures of ambient -30°C - +55 °C
- possibility delivery of switches by the specification of customer

Type		S10J	S16J	S25J
Rated voltage U_i (V)*		690**	690**	690**
Rated impulse withstand voltage U_{imp} (kV)		4	4	4
Rated thermal current I_{th} (A)		10	16	25
Rated operational current I_e (A), AC-21A, AC-1				
AC - 3, short circuit armature motors	1 phase 220 - 240 V	1,5/8,5	1,7/9,6	2,6/14,7
	3 phase 220 - 240 V	2,5	3	4,5
	380 - 400 V	3,5/6,3	4/7,2	7,5/13,5
	500 V	3,5	4	7,5
AC - 23, switching the motors and high inductive loads	1 phase 220 - 240 V	1,7/9,6	2,3/13	3/17
	3 phase 220 - 240 V	3	4	5,5
	380 - 400 V	6/10,8	7,5/13,5	11/19,8
	500 V	6	7,5	11

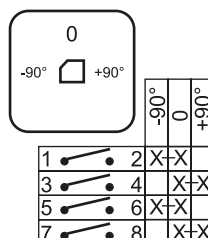
STN 330420- valid for mains with grounded neutral point, category of overstrain III. And degree of contamination 2, $U_i = 500V$ if degree of contamination is 3.

The most common electric scheme of switching.

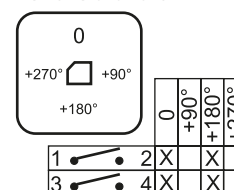
S...JPS 0103 044 C4



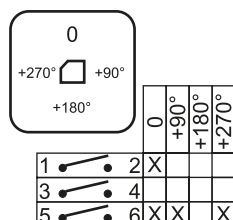
S...JPS 0203 275 C4



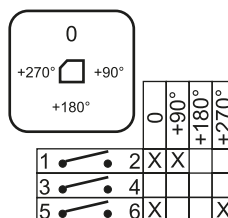
S...JPS 0104 048 A4



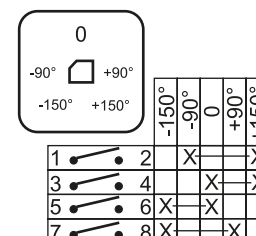
S...JPS 0204 277 A4



S...JPS 0204 278 A4



S...JPS 0205 271 C4



Possibility to adjust switches according to specification of customer

