



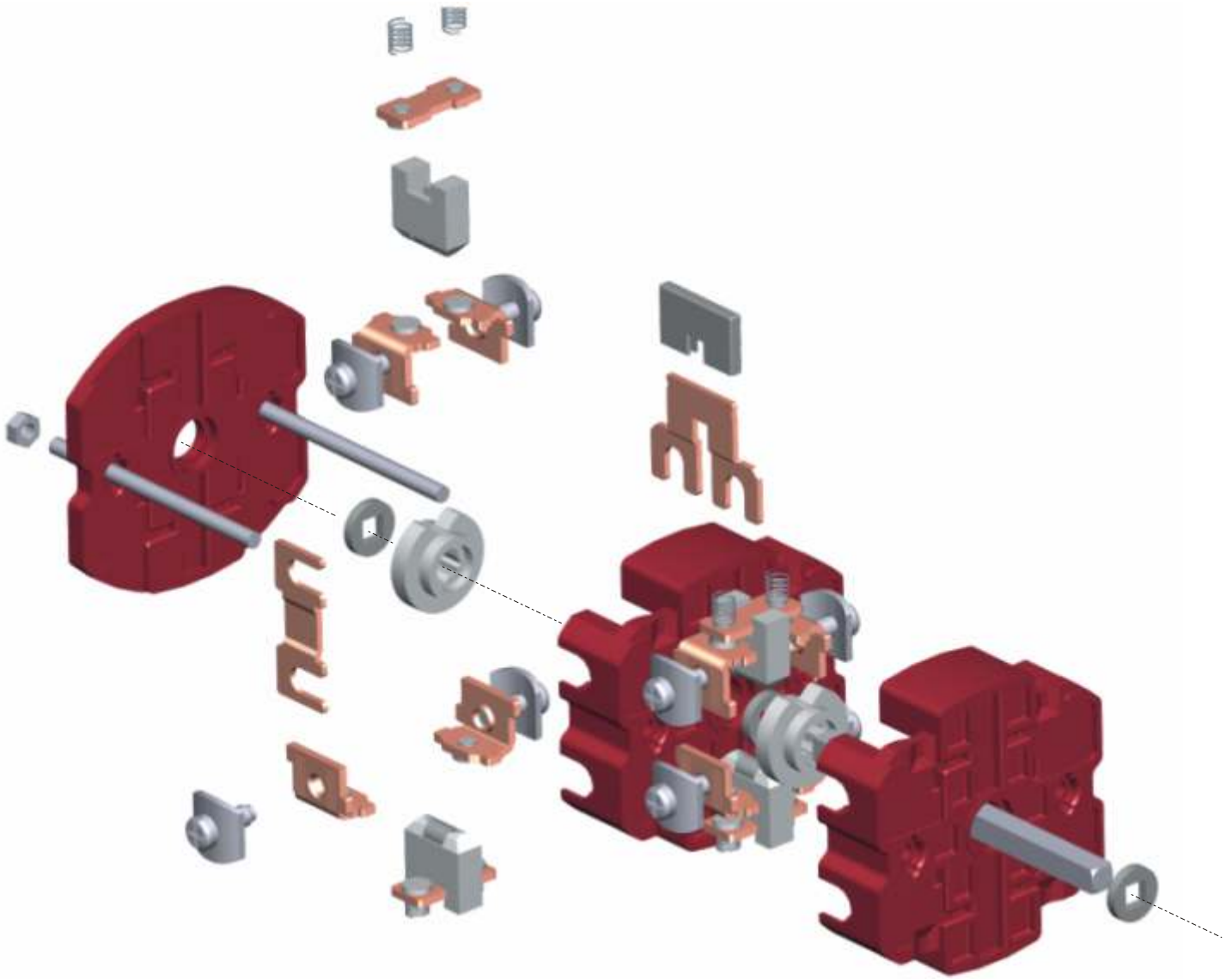
ROTARY CAM SWITCHES

GREBENASTE SKLOPKE

Type / Tip BS
Type / Tip PS



RADE KONČAR
KONTAKTORI I RELEI D.O.O.



QUALITY SYSTEM / SISTEM KVALETETA

ISO 9001 "Quality system.

Models for quality assurance in design / development, production and distribution of low - voltage switching devices".

The **RADE KONČAR - KONTAKTORI I RELEI D.O.O.** Quality Managements System has been certified by TÜV CERT- Certification Body of TÜV Rheinland Euroqua Kft.

The Certificate No. TRBA 100 0891 issued until September 2018 confirms that the quality system is in conformance with requirements of the standard ISO 9001: 2008 and refers to following product categories: Contactors, Thermal overload relays, Rotary cam switches, Pilot devices, Moulded case circuit breakers, Electronic time relays.

ISO 9001 "Sistem kvaliteta.

Model za garanciju kvaliteta u razvoju, proizvodnji i distribuciju niskonaponskih sklopnih aparata".

Sistem kvaliteta u RADE KONČAR - KONTAKTORI I RELEI D.O.O.

sertificiran je od TÜV CERT- Sertifikaciono tijelo na TÜV Rheinland Euroqua Kft.

Sertifikat Br. TRBA 100 0891 koji ima validitet do Septembar 2018 potvrđuje da sistem kvaliteta je u suglasnosti sa zahtjevima norme SO 9001: 2008, a odnosi se na slijedeće proizvodne kategorije: kontaktore, bimetale, grebenaste sklopke, upravljačke sklopke, niskonaponske prekidače, vrtlive sklopke, elektronske vremenske releje.



ROTARY CAM SWITCHES “BS / PS”

Rotary cam switches series “BS/PS” are intended for multiple switching operations in main as well as in auxiliary circuits:

As motor switches they are designed for direkt-online starting and stopping of single- phase and three-phase motors. They also come out as star-delta switches, reversing switches, pole-change over motor switches.

In auxiliary circuits they are assembled in compliance with the switching programme according to preference: switches for control, signalling and measuring circuits.

Switches, selector switches and step switches e.g. for transformers and welding apparatuses.

Group switches e.g. for switching operations of resistors and heaters.

Control switch with automatic return

The advantages of rotary cam switches are: high making and breaking capacities, electrical and mechanical endurance and small dimensions.

Rotary cam switches comply with international and national standards such as: IEC/EN 60947-3, VDE 0660, TS EN 60947-3, BS 5419 etc.

The rotary cam switches “BS / PS 10 to BS / PS 63” can have 24 contacts (12 switching elements) maximum and can be made with turning angle of 30, 45, 60 and 90 degrees.

The rotary cam switches “BS / PS 80 and BS / PS 100K” can have 24 contacts (12 switching elements) maximum and can be made with turning angle of 45, 60 and 90 degrees.

The rotary cam switches “BS / PS 125 to BS / PS 630” can have 18 contacts (9 switching elements) maximum and can be made with turning angle of 60 and 90 degrees.

GREBENASTE SKLOPKE “BS / PS”

Grebenaste sklopke služe za uklapanje i isklapanje motora i drugih potrošača.

Sklopke “BS / PS” imaju višestruku primjenu za sklapanje u glavnim i pomoćnim strujnim krugovima:

Kao motorske sklopke mogu pogonski sigurno sklapati, upravljati i pokretati trofazne i jednofazne motore, a mogu se izvesti kao: preklopka zvijezda - trokut, preklopka za reverziranje, preklopka za motore sa više brzina itd.

U pomoćnim strujnim krugovima sastavljaju se prema željenom programu sklapanja: sklopke za komandne, signalizacijske i mjerne krugove

Sklopke, preklopke i stepenaste sklopke npr. za transformatore i aparate za zavarivanje

Grupne sklopke npr. za sklapanje otpornika i grijača

Zakretna tipkala s automatskim povratom.

Glavne odlike “BS / PS” sklopke su: velika uklopna moć, velika električna trajnost, sigurnost od napona dodira.

Njihove karakteristike u potpunosti odgovaraju međunarodnom standardu IEC/EN 60947-3, kao i nacionalnim standardima VDE 0660, BS 5419, TS EN 60947-3 i drugi.

Sklopke “BS / PS 10 do BS / PS 63” mogu imati najviše 24 kontakta (12 sklopnih elemenata) i mogu se izvesti s ugaom zakreta: 30, 45, 60 i 90 stepena.

Sklopke “BS / PS 80 i BS / PS 100K” mogu imati najviše 24 kontakta

(12 sklopnih elemenata) i mogu se izvesti s ugaom zakreta: 45, 60 i 90 stepena.

Sklopke “BS / PS 125 do BS / PS 630” mogu imati najviše 18 kontakta (9 sklopnih elemenata) i mogu se izvesti s ugaom zakreta: 60 i 90 stepena.

UTILIZATION CATEGORY		KATEGORIJA PRIMENE
Category Kategorije	Utilization Primena	
AC-20	Connecting and disconnecting under no-load conditions Spajanje i rastavljanje neopterećenih kola	
AC-21	ON-OFF switching of resistive loads, including moderate overloads Uključivanje i prekidanje aktivnih potrošača, uključujući i umerena preopterećenja	
AC-22	Switching of mixed resistive and inductive loads, including moderate overloads Uključivanje i prekidanje kombiniranih, aktivnih i induktivnih potrošača, uključujući i umerena preopterećenja	
AC-2	Starting slip-ring motors and plugging Pokretanje klizno-kolutnih motora	
AC-23	Switching of motor loads or other highly inductive loads Uključivanje i isključivanje motora ili drugih jako induktivnih potrošača	
AC-3	Starting squirrel-cage motor and switching off motors when running Pokretanje i isključivanje kafezних motora pri punoj brzini	
AC-4	Starting squirrel-cage motors, plugging, inching, reversing Pokretanje kafezних motora, intermitiran pogon, reverziranje	
AC-15	Control switch for switching magnetic devices, contactors, valves Upravljanje elektromagnetnih pogona (sklopnika, ventila i sl.).	

TECHNICAL DATA / *TEHNIČKI PODACI*

TYPE / <i>TIP</i>		BS 10 / PS 10	BS 20 / PS 16	BS 25 / PS 25	BS 32 / PS 32	BS 40 / PS 40	BS 50	BS 63 / PS 63		
Rated insulation voltage <i>Nazivni izolacijski napon</i> U_i	V	400			690					
Rated impulse withstand voltage <i>Nazivni udarni podnosivi napon</i> U_{imp}	kV	4			6					
Rated thermal current <i>Nazivna termička struja</i> I_{th}	A	20	25	32	40	50	63	70 / 63		
Main switch (1) Max. value of rated operational voltage <i>Glav. sklopka Najveća vrijednost naziv. pogon. napona</i>	V				480					
Rated impulse withstand voltage <i>Nazivni udarni podnosivi napon</i>	kV				4					
Max. fuse size for short circuit protection <i>Max. veličina osigurača za Zaštitu od kratkog spoja</i> gL 10 kA	A	20	25	32	40	50	63	70 / 63		
Rated Short-time Withstand current I_{cw}	A	200	250	400	600	800	800	800		
<i>Nazivna kratkotrajno podnosiva struja</i>	1 sek	120	150	250	400	530	640	700		
	3 sek	70	80	140	240	290	320	350		
	10 sek	40	50	90	150	200	230	250		
	30 sek	30	40	70	120	150	150	150		
	60 sek									
Rated operational current I_o AC1 / AC21 <i>Nazivna pogonska struja I_o AC1/AC21</i>	A	10	20	25	32	40	50	63		
Rated operational current I_o AC15 <i>Nazivna pogonska struja I_o Ac15</i>	A									
	110V	8	10	20	25	40	45	50		
	220/230V	6	8	20	25	30	35	40		
	380/400V	4	6	16	20	25	32	40		
	660/690V			8	8,5	8.5	9	10		
Motor switch in utilization category <i>Motorska sklopka za kategoriju upotrebe</i>										
AC3										
3-phase <i>3-faze</i>	220/230 V	kW	2.5	3	5.5	7.5	9	10	11	
	380/400 V	kW	4	5	7.5	11	15	16	18.5	
	500/690 V	kW	-	-	11	15	19	20	22	
1-phase <i>1-faza</i>	2 poles <i>2 pola</i>	110V	kW	0.8	0.8	1.5	2.5	2.5	3	3
		220/230 V	kW	1.5	2.2	3	4.8	5.5	5.5	6
		380/400 V	kW	2.2	3	5.5	6.5	7.5	9	11
AC23										
3-phase <i>3-faze</i>	220/230 V	kW	3	5	6.5	8	9	10	15	
	380/400 V	kW	6	7.5	11	15	18.5	20	22	
	500/690 V	kW	-	-	11	18.5	22	25	30	
1-phase <i>1-faza</i>	2 poles <i>2 pola</i>	110V	kW	0.8	0.8	1.5	2.5	3	3	3.5
		220/230 V	kW	1.7	2.5	3.7	5	6	7	9
		380/400 V	kW	3	3.7	5.5	7.5	9	11	15
AC4										
3-phase <i>3-faze</i>	220/230V	kW	1.5	1.5	2.5	3	5	5.5	6	
	380/400V	kW	2	3	4	5.5	8	9	11	
	500/690V	kW	-	-	4	7.5	8	9	11	
Mechanical endurance switching cycles <i>Mehanička trajnost Broj uklopa</i>	10^6	3	3	3	3	3	2	2		
Terminal screw <i>Priključni vijak</i>		M3.5	M3.5	M3.5	M4	M5	M5	M5		
Screw head <i>Oblik glave vijaka</i>		PZ2	PZ2	PZ2	PZ2	PZ2	PZ2	PZ2		
Tightening torque <i>Moment stezanja</i>		0.8	0.8	0.8	1.2	1.8	2	2		
Cable cross-section <i>Presjek vodiča</i>	Rigid/ <i>kruti</i>	mm ²	2x(1-2.5) 2-4*	2x(1-2.5) 2-4*	2x(1-4) 1-6*	2x(2.5-6) 1-10*	2x(2.5-10)	2x(4-16)	2x(4-16)	
	Flexible / <i>finožičani</i>	mm ²	2x(1-2.5) 2-4*	2x(1-2.5) 2-4*	2x(1-4)	2x(2.5-6) 1-10*	2x(2.5-10)	2x(4-16)	2x(4-16)	

(1) Valid for neutral earthed systems, overvoltage category III, pollution degree 3 /

Vrijedi za mreže sa uzemljenim zvjezdištem, prenaponska kategorija III, stupanj zagađenja 3

(*) Only for diagrams without inside links / *Samo za šeme spoja bez unutrašnjih kratkospojnika.*

TECHNICAL DATA/ *TEHNIČKI PODACI*








TYPE/ <i>TIP</i>			BS 80 / PS 80	BS 100K / PS 100	BS 125 / PS 125	BS 200 / PS 200	BS 400 / PS 400	BS 630 / PS 630
Rated insulation voltage <i>Nazivni izolacijski napon</i>	U_i	V	690		690			
Rated impulse withstand voltage <i>Nazivni udarni podnosivi napon</i>	U_{imp}	kV	6		8			
Rated thermal current <i>Nazivna termička struja</i>	I_{th}	A	80	100	125	200	400	630
Main switch (1) Max. value of rated operational voltage <i>Glav. sklopka Najveća vrijednost naziv. pogon. napona</i>		V	480		690			
Rated impulse withstand voltage <i>Nazivni udarni podnosivi napon</i>		kV	4		6			
Max. fuse size for short circuit protection gL 10 kA <i>Max. veličina osigurača za Zaštitu od kratkog spoja gL 10 kA</i>		A	80	100	120	200	400	630
Rated Short-time 1 sek		A	1000	1800	2100	3000		
Withstand current I_{cw} 3 sek		A	800	900	1300	1700		
	10 sek	A	400	450	700	850		
<i>Nazivna kratkotrajno podnosiva struja</i>	30 sek	A	250	300	400	500		
	60 sek	A	160	200	300	400		
Rated operational current I_e AC1 / AC21 <i>Nazivna pogonska struja I_e AC1/AC21</i>		A	70	75	120	200	400	630
Motor switch in utilization category <i>Motorska sklopka za kategoriju upotrebe</i>								
AC3	220/230 V	kW	12	19	26	37	37	37
3- Phase <i>3-faze</i>	380/400 V	kW	22	32	41	60	60	60
	500/690 V	kW	28	42	55	75	75	75
1-phase 2 poles <i>1-faza 2-pola</i>	110V	kW	-	-	-	-	-	-
	220/230V	kW	-	-	-	-	-	-
	380/400 V	kW	-	-	-	-	-	-
AC23	220/230 V	kW	18.5	22	26	37	37	37
3- Phase <i>3-faze</i>	380/400 V	kW	32	37	41	60	60	60
	500/690 V	kW	45	55	55	75	75	75
1-phase 2 poles <i>1-faza 2-pola</i>	110V	kW	-	-	-	-	-	-
	220/230V	kW	-	-	-	-	-	-
	380/400 V	kW	-	-	-	-	-	-
AC4	220/230V	kW	7	9.5	17	17		
3-phase <i>3-faze</i>	380/400V	kW	12	16	30	30		
	500/690V	kW	12	16	32	32		
Mechanical endurance switching cycles <i>Mehanička trajnost Broj uklopa</i>		10^5	10	10	3	1	0.5	0.5
Terminal screw <i>Priključni vijak</i>			2xM5	2xM5	M8	M10	M12	M16
Cable cross-section <i>Presjek vodiča</i>								
Flexible / <i>finožičani</i>		mm ²	6-25 2x(6-16)	6-25 2x(6-16)	16-35	70-95 ⁽²⁾	70-240	70-240
Flat connection / <i>šine</i>		mm					△	△

(1) Valid for neutral earthed systems, over voltage category III, pollution degree 3 /
Vrijedi za mreže sa uzemljenim zvjezdištem, prenaponska kategorija III, stupanj zagađenja 3

(2) Connection valid for luge with cables having a section; min. 70 mm², max.95 mm² /
Važi za priključne kablove sa kabelskim stopicama; min. 70 mm², max.95 mm² .





△ Connection valid to connect copper bars / *Važi za spojne bakarne trake.*

STANDARD MOUNTING FORMS/*STANDARDNI OBLICI UGRADNJE*

Mounting form <i>Oblik ugradnje</i>	Marking <i>Oznaka</i>	Switch type <i>Tip sklopke</i>	Protection/ <i>Zaštita</i>		Outlook <i>Izgled</i>
			Front <i>Prednja</i>	Rear <i>Stražnja</i>	
Front mounting <i>Ugradna sklopka</i>	U	BS 10 / PS 10 BS 20 / PS 16 BS 25 / PS 25 BS 32 / PS 32 BS 40 / PS 40 BS 50 BS 63 / PS 63	IP 40	IP 20	
		BS 80 / PS 80 BS 100K / PS 100 BS 125 / PS 125 BS 200 / PS 200 BS 400 / PS 400 BS 630 / PS 630	IP 40	IP 00	
Front mounting without indicating plate cover <i>Ugradna sklopka bez sklopa sa natpisnom pločom</i>	M	BS 10 BS 20 BS 25 BS 32 BS 40 BS 50 BS 63	IP 40	IP 20	
		BS 80 BS 100K	IP 40	IP 00	
Rear mounting <i>Ugradnja sa stražnje strane</i>	O	BS 10 / PS 10 BS 20 / PS 16 BS 25 / PS 25 BS 32 / PS 32 BS 40 / PS 40 BS 50 BS 63 / PS 63	IP 40	IP 20	
		BS 80 / PS 80 BS 100K / PS 100	IP 40	IP 00	
Switch with door interlock device. Door opening only in "0" <i>Sklopka sa spojkom za vrata s blokadom Otvaranje vrata samo u "0"</i>	S8	BS 125 BS 200 BS 400 BS 630	IP 40	IP 00	
Switch in insulated enclosures <i>Sklopka u plastičnom kućištu</i>	PN	PNBS 10 PNBS 20 PNBS 25 PNPS 10 PNPS 16 PNPS 25	IP 65		
Switch in insulated enclosures <i>Sklopka u plastičnom kućištu</i>	PNG	PNGBS 25 PNGBS 32 PNGBS 40 PNGPS 25 PNGPS 32 PNGPS 40	IP 65		
	PNG LK	PNGBS 25 .. LK PNGBS 32 .. LK PNGBS 40 .. LK PNGPS 25 .. LK PNGPS 32 .. LK PNGPS 40 .. LK	IP 65		

(*) BS 32-63 / PS 32-40; BS 10-25 UA - Version/*Verzija*

STANDARD MOUNTING FORMS/*STANDARDNI OBLICI UGRADNJE*

Mounting form <i>Oblik ugradnje</i>	Marking <i>Oznaka</i>	Switch type <i>Tip sklopke</i>	Protection/ <i>Zaštita</i>		Outlook <i>Izgled</i>
			Front <i>Prednja</i>	Rear <i>Stražnja</i>	
Switch in insulated enclosures <i>Sklopka u plastičnom kućištu</i>	PN1	PN1BS 10 PN1BS 20 PN1BS 25 PN1PS 10 PN1PS 16 PN1PS 25	IP 55		
Switch in insulated enclosures <i>Sklopka u plastičnom kućištu</i>	PN2	PN2BS 32 PN2BS 40 PN2BS 50 PN2BS 63 PN2PS 32 PN2PS 40 PN2PS 50 PN2PS 63	IP 55		
Switch in insulated enclosures <i>Sklopka u plastičnom kućištu</i>	PN3	PN3BS 80 PN3BS 100K PN3PS 80 PN3PS 100	IP 54		
Switch in insulated enclosures <i>Sklopka u plastičnom kućištu</i>	PN4	PN4BS 80 PN4BS 100K PN4BS 125 PN4BS 200 PN4PS 80 PN4PS 100 PN4PS 125 PN4PS 200	IP 54		

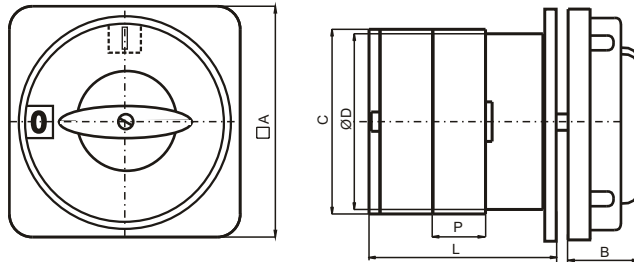
GENERAL EMERGENCY ON - OFF SWITCH VERSION "LK" WITH PADLOCKING ONLY IN "0"
SKLOPKA ZA NUŽNO ISKLAPANJE IZVEDBA "LK" SA ZAKLJUČAVANJE U "0"

- Emergency switch have to make electrical separation between el. supply and electrical equipment.
- Control handle according the Standards is Red, and the plate behind the handle yellow .
- Emergency switch is able to lock in the open position "0" up to three padlocks.
- "LK" - *Glavna sklopka za nužno isklapanje*
- *Crvena ručica, žuta prednja ploča i podloga saglasno standardima*
- *Glavna sklopka ima mogućnosti zaključavanje u "0" položbu*

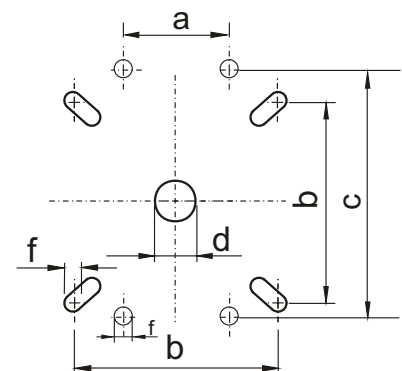


BS / PS 10 10 LK (Three-pole)	BS / PS 10 92 LK (Four-pole)	BS / PS 80 10 LK (Three-pole)	BS / PS 80 92 LK (Four-pole)
BS 20 / PS 16 10 LK (Three-pole)	BS 20 / PS 16 92 LK (Four-pole)	BS 100K / PS 100 10 LK (Three-pole)	BS 100K / PS 100 92 LK (Four-pole)
BS / PS 25 10 LK (Three-pole)	BS / PS 25 92 LK (Four-pole)	BS / PS 125 10 LK (Three-pole)	BS / PS 125 92 LK (Four-pole)
BS / PS 32 10 LK (Three-pole)	BS / PS 32 92 LK (Four-pole)	BS / PS 200 10 LK (Three-pole)	BS / PS 200 92 LK (Four-pole)
BS / PS 40 10 LK (Three-pole)	BS / PS 40 92 LK (Four-pole)	BS / PS 400 10 LK (Three-pole)	BS / PS 400 92 LK (Four-pole)
BS 50 10 LK (Three-pole)	BS 50 92 LK (Four-pole)	BS / PS 630 10 LK (Three-pole)	BS / PS 630 92 LK (Four-pole)
BS / PS 63 10 LK (Three-pole)	BS / PS 63 92 LK (Four-pole)		

DIMENSIONAL DRAWINGS VERSION "LK" (mm)
MJERNE SKICE IZVEDBA "LK"



DRILLING PLAN / PLAN BUŠENJA



TYPE / TIP	□A	C	ØD	P	B	$\frac{L}{2}$	b	d	f	a	c
BS / PS 10 LK	49	38.6	38.6	12.8	35	45.3	36	10	3.2		
BS 10 / PS 16 LK	49	38.6	38.6	12.8	35	45.3	36	10	3.2		
BS / PS 25 LK	49	45.2	38.6	12.8	35	45.3	36	10	3.2		
BS / PS 32 LK	72	53	38.6	12.8	32	49.8	58	10	4.2		
BS / PS 40 LK	72	61	56.4	17.5	32	68.1	58	10	4.2		
BS 50 LK	72	68.6	56.4	20.5	32	63	58	10	4.2		
BS / PS 63 LK											
BS / PS 80 LK	105	84	80	25	44	92.5	85	14	5.3		
BS 100K / PS 100 LK											
BS / PS 125 LK BS / PS 200 LK	130		110	39	62	100		18	5.3	30	90

MOUNTING ON THE RAIL /
MONTAŽA NA ŠINU



BS / PS 10 .. L*
 BS 20 / PS 16 .. L*
 BS / PS 25 .. L*
 BS / PS 32 .. L*

* Max. up to 4 elements/
 Max. do 4 elementi

"ES" - GENERAL EMERGENCY ON - OFF SWITCH
"ES" - SKLOPKA ZA NUŽNO ISKLAPANJE



Sizes: BS / PS 10; ; BS 100K / PS 100
 Veličine: BS / PS 10; ; BS 100K / PS 100

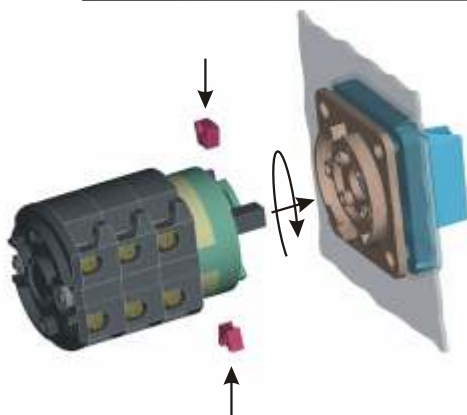
“BAYONET” ROTARY CAM SWITCHES TYPE BSB

“BAJONET” GREBENASTE SKLOPKE

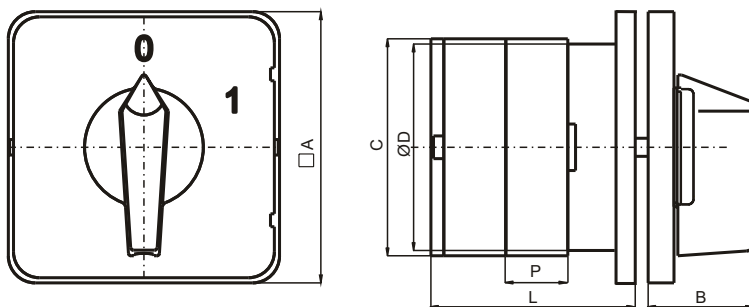
Selection and ordering data / *Izbor i naračka*



lth A	Description / <i>Opis</i>	Type / <i>Tip</i>
20		BSB 10 .. .
25		BSB 20 .. .
32		BSB 25 .. .
40		BSB 32 .. .
No. of diagram are as the standard version of the model “BS” <i>Br. šeme je isti kao kod standardne verzije “BS”</i> Mounting form - for front “U” <i>Oblik ugradnje - za ugradnju sa prednje strane “U”</i> Front part: C - (handle and front plate - black) - standard P - (handle and front plate - blue) - on request <i>Boja prednjeg sklopa:</i> C - (ručica i prednja ploča su crni) - standardna verzija P - (ručica i prednja ploča su plavi) - na posebno baranje		



DIMENSIONAL DRAWINGS (mm) / *MJERNE SKICE (mm)*



TYPE/TIP	MARKING / <i>OZNAKA</i>					NUMBER OF ELEMENTS / <i>BROJ ELEMENATA</i> (L/mm)											
	□A	B	C	ØD	P	1	2	3	4	5	6	7	8	9	10	11	12
BSB 10	51,2	27,2	38,6	38,6	12,8	39,5	52,3	65,1	77,9	90,7	103,5	116,3	129,1	141,9	154,7	167,5	180,3
BSB 20						39,5	52,3	65,1	77,9	90,7	103,5	116,3	129,1	141,9	154,7	167,5	180,3
BSB 25	51,2	27,2	45,2	38,6	12,8	39,5	52,3	65,1	77,9	90,7	103,5	116,3	129,1	141,9	154,7	167,5	180,3
BSB 32	51,2	27,2	53	38,6	12,8	44	56,8	69,6	82,4	95,2	108	120,8	133,6	146,4	159,2	172	184,8

NOTES / *ZABELEŠKA:*

1. Technical date and drilling plan are same as the standard version of the model “BS”
1. Tehničke podatke, plan bušenja su iste kao i kod standardne verzije “BS”
2. The selection of the color for the front parts for “BS” is same as previous case for “BSB”
2. Izbor boje prednjeg sklopa za “BS” je isti kao i za “BSB”.

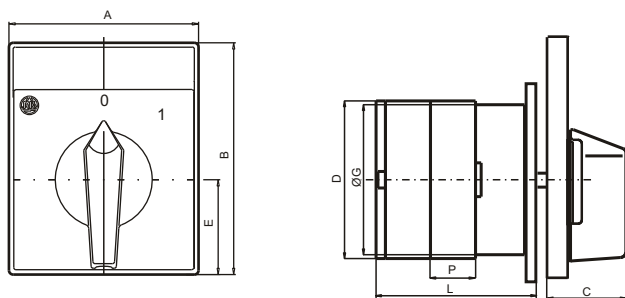
ROTARY CAM SWITCHES WITH TITLE TYPE BS ...N
GREBENASTE SKLOPKE SA NATPISOM TIP BS ...N

Selection and ordering data / Izbior i naračka

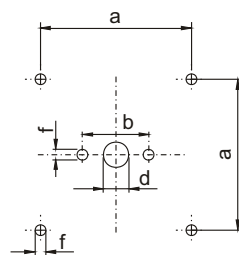
lth A	Description / Opis	Type / Tip
20		BS 10 .. . N
25		BS 20 .. . N
32		BS 25 .. . N
40		BS 32 .. . N
50		BS 40 .. . N
63		BS 50 .. . N
70		BS 63 .. . N
80		BS 80 .. . N
100		BS 100K .. . N
<p>No. Of diagram are as the standard version of the model "BS" <i>Br. šeme je isti kao kod standardne tipove "BS"</i></p> <p>Front mounting "U", Rear mounting "O" <i>Ugradna sklopka "U", Ugradnja sa stražnje strane "O"</i></p> <p>Extended front plate with title <i>Produženi prednji sklop sa natpisom</i> Standard colour - Black <i>Izrađuje se standardno u crnoj boji</i></p>		



DIMENSIONAL DRAWINGS (mm) /
MJERNE SKICE (mm)



DRILLING PLAN /
PLAN BUŠENJA



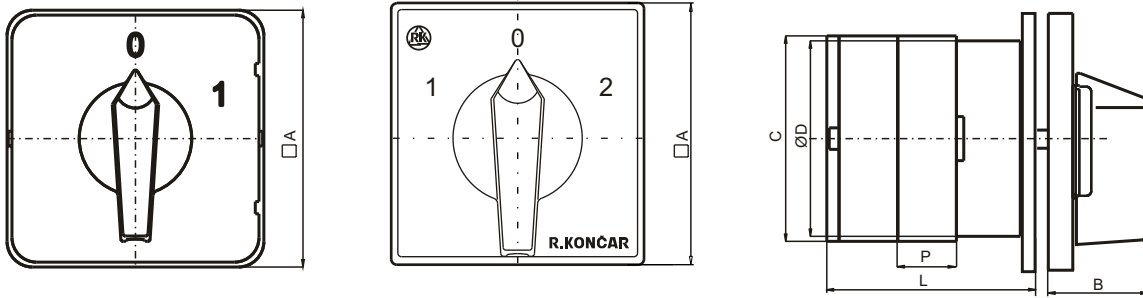
TYPE / TIP	MARKING / OZNAKA					
	A	B	E	C	D	ØG
BS 10 .. N	48	60	24	26	38.6	38.6
BS 20 .. N						
BS 25 .. N	48	60	24	26	45.2	38.6
BS 32 .. N	65	80	32,5	33	53	38.6
BS 40 .. N	65	80	32,5	33	61	56.4
BS 50 .. N	65	80	32,5	33	68.6	56.4
BS 63 .. N						
BS 80 .. N	90	110	45	41	84	80
BS 100K .. N	90	110	45	41	84	80
BSB 20 ..N	48	60	24	26	38.6	38.6
BSB 25 ..N	48	60	24	26	45.2	38.6

TYPE / TIP	a	b	d	f
BS 10 .. N	36	30	10	4.2
BS 20 .. N				
BS 25 .. N				
BS 32 .. N	48		10	4.2
BS 40 .. N				
BS 50 .. N	72		14	5.3
BS 63 .. N				
BS 80 .. N				
BS 100K .. N				
BSB 20 .. N	36		10	4.2
BSB 25 .. N				

NOTES / ZABELEŠKA:

1. Technical date and drilling plan are same as the standard version of the model "BS".
 1. Tehničke podatke i plan bušenja su iste kao i kod standardne izvedbe "BS".

DIMENSIONAL DRAWINGS (mm) / MJERNE SKICE (mm)

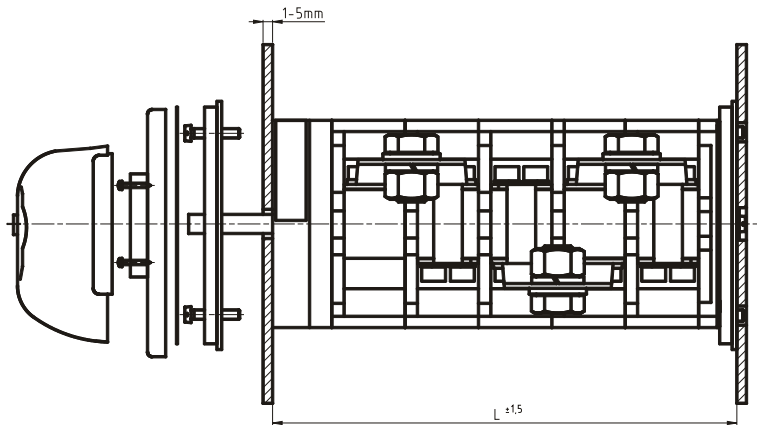


TYPE/TIP	MARKING/ OZNAKA				NUMBER OF ELEMENTS (L/mm) / BROJ ELEMENATA (L/mm)															
	□A	B	C	ØD	P	1	2	3	4	5	6	7	8	9	10	11	12			
BS / PS 10	51,2/48	27,2/26	38,6	38,6	12,8	32,5	45,3	58,1	70,9	83,7	96,5	109,3	122,1	134,9	147,7	160,5	173,3			
BS 20 / PS 16																				
BS / PS 25	51,2/48	27,2/26	45,2	38,6	12,8	32,5	45,3	58,1	70,9	83,7	96,5	109,3	122,1	134,9	147,7	160,5	173,3			
BS / PS 32	72 / 65	33	53	38,6	12,8	37	49,8	62,6	75,4	88,2	101	113,8	126,6	139,4	152,2	165	177,8			
BS / PS 40	72 / 65	33	61	56,4	17,5	50,6	68,1	85,6	103,1	120,6	138,1	155,6	173,1	190,6	208,1	225,6	243,1			
BS 50	72 / 90	33/41	68,6	56,4	20,5	42,5	63	83,5	104	124,5	145	165,5	186	206,5	227	247,5	268			
BS / PS 63																				
BS / PS 80	105 / 90	41	84	80	25	67,5	92,5	117,5	142,5	167,5	192,5	217,5	242,5	267,5	292,5	317,5	342,5			
BS 100K / PS 100																				
BS / PS 125	130	62	110	110	30	91	121	151	181											
BS / PS 200					39	100	139	178	217											
BS / PS 400					39	100	139	178	217	-	295									
BS / PS 630					39	-	139	178	-	256	295	-	-	412						

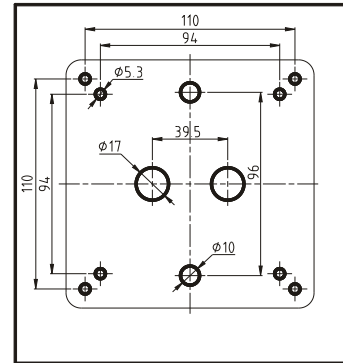
(*) For the switch with 5-9 elements see the dimensional drawing on page 13. / Za sklopku za 5-9 elemenata pogledaj mjernu skicu na str.13.

FRONT MOUNTING "U" UGRADNJA SA PREDNJE STRANE "U"		TYPE/TIP						
		a	b	a1	b1	c	d	f
FRONT MOUNTING "M" UGRADNJA SA PREDNJE STRANE "M"		TYPE/TIP						
				h	d	g		
		BS 10	13.5	8	3.5			
		BS 20		10				
		BS 25						
		BS 32	16.2	10	4			
		BS 40						
		BS 50						
		BS 63	20	14	4.5			
		BS 80						
BS 100K								
REAR MOUNTING "O" UGRADNJA SA STRAŽNJE STRANE "O"		TYPE/TIP						
		a	b	f	k			
		BS / PS 10	36	36	4.2	15.5		
		BS 20 / PS 16						
		BS / PS 25	58	48	4.5	17		
		BS / PS 32						
		BS / PS 40						
		BS 50	58	48	4.5			
BS / PS 63								
BS / PS 80	85	68	5.3	20.5				
BS 100K/PS 100								

**DIMENSIONAL DRAWINGS FOR "U" FOR BS / PS 125 - 630 WITH 5-9 ELEMENTS (mm) /
MJERNE SKICE ZA "U" ZA BS / PS 125 - 630 (mm)**



DRILLING PLAN FROM REAR SITE /
PLAN BUŠENJA SA ZADNJE STRANE



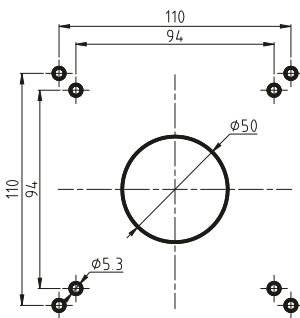
Size / Veličina	No. of el. / Broj elemenata - L (mm)				
	5	6	7	8	9
BS / PS 125	191	251	281	311	341
BS / PS 200	236	305	344	383	422
BS / PS 400	236	305	344	383	422
BS / PS 630	236	305	-	383	422

Note / *Zabjeleška:*

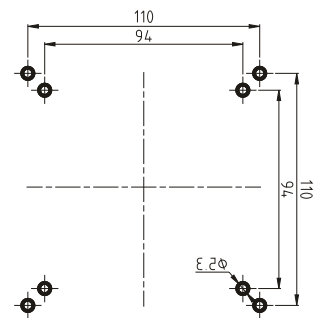
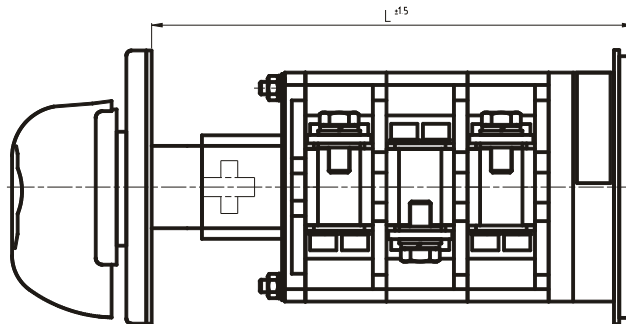
- For the switch with 5-9 elements the front plate is also mounted at the back side /
- *Za skopku sa 5-9 elemenata ugrađujemo prednju ploču i straga*

**DIMENSIONAL DRAWINGS FOR "S8" FOR BS 125 - 630
MJERNE SKICE ZA "S8" ZA BS 125 - 630 (mm)**

DRILLING PLAN / PLAN BUŠENJA



ON THE DOOR /
NA VRATU



LOOK FROM REAR SITE /
POGLED SA ZADNJE STRANE

Size / Veličina	No. of el. / Broj elemenata - L (mm)				
	1	2	3	4	5
BS 125	150	180	210	240	270
BS 200	159	198	237	276	315
BS 400	159	198	237	276	315
BS 630	-	198	237	-	315

**SWITCHES SERIES BS / PS 125 - BS / PS 630
SKLOPKE SERIJE BS / PS 125 - BS / PS 630**

CODE ŠEMA	Number of elements / Broj elemenata			
	BS / PS 125	BS / PS 200	BS / PS 400	BS / PS 630
10	2	2	3	5
92	2	2	4	6
52	2	2	4	6
53	3	3	6	9
11	3	3		

When ordering please define:

- 1.- Switch type
- 2.- Number of schematic diagram
- 3.- Mounting form (for front "U" or rear mounting "O")
- 4.- Front part:
 C - (handle and front plate - black) - standard.
 P - (handle and front plate - blue) - on request.
 N - Extended front plate with title. Standard colour : black
 LK - (red knob and yellow plate for main emergency on - off switch).
 ES - (handle-red and front plate-yellow)

EXAMPLE:

BS 25	10	U	C
-------	----	---	---

Type - **BS 25**, schematic diagram - **10**, mounting form - **U**, with **black** handle and front plate - **C**.

BS 40	10	U	N
-------	----	---	---

Type - **BS 40**, schematic diagram - **10**, mounting form - **U**, Extended front plate with title - **N**.

PS 63	10	LK
-------	----	----

Type - **PS 63**, schematic diagram - **10**, Main emergency on-off switch with 3 padlock facility in "0" position - **LK**

PODACI ZA NARUČIVANJE:

Prilikom naručivanja sklopke potrebno je definirati:

- 1.- Tip sklopke
- 2.- Broj šeme
- 3.- Oblici ugradnje (ugradnja sa prednje strane "U" ili ugradnja sa stražne strane "O")
- 4.- Boja prednjeg sklopa:
 C - (ručica i prednja ploča su crne boje) - standardna verzija
 P- (ručica i prednja ploča su plave boje) - na posebno baranje
 N - Produženi prednji sklop sa natpisom. Izrađuje se standardno u crnoj boji
 LK - (crvena ručica, žuta prednja ploča za nužno isklapanje).
 ES - (crvena ručica, žuta prednja ploča)

PRIMER:

BS 25	10	U	C
-------	----	---	---

*Tip - **BS 25**, broj šeme - **10**, ugradnja sa prednje strane - **U**, sa ručicom i prednjeg sklopa crni - **C**.*

BS 40	10	U	N
-------	----	---	---

*Tip - **BS 40**, broj šeme - **10**, ugradnja sa prednje strane - **U**, produženi prednji sklop sa natpisom - **N**.*

PS 63	10	LK
-------	----	----

*Tip - **PS 63**, broj šeme - **10**, Glavna sklopka za nužno isklapanje, Zaključavanje u "0"-om položaju - **LK***

ROTARY CAM SWITCHES IN INSULATED ENCLOSURES

GREBENASTE SKLOPKE U PLASTIČNOM KUĆIŠTU

Selection and ordering data / Izbor i naračka



PNBS 10, PNBS 20, PNBS 25
PNPS 10, PNPS 16, PNPS 25

	Degree of protection	Type / Tip
Number of elements 1-3	IP 65	PNBS 10 / PNPS 10 .. . PNBS 20 / PNPS 16 .. . PNBS 25 / PNPS 25* .. .
No. of diagram / <i>Br. šeme</i> - (90, 91, 10, 92, 51, 52, 53, 54, 55, 56, 11, 15)		
Front parts C - (handle and front plate of rotary cam switches - black) P - (handle and front plate of rotary cam switches - blue)		<i>Boja prednjeg sklopa:</i> C - (ručica i prednja ploča su crni) P - (ručica i prednja ploča su plavi)



PNGBS 25, PNGBS 32,
PNGBS 40
PNGPS 25, PNGPS 32,
PNGPS 40

Number of elements 1-3 for BS / PS 25, BS / PS 32, BS / PS 32 .. LK	IP 65	PNGBS 25 .. . PNGBS 32 .. . PNGBS 40 .. . PNGPS 25 .. . PNGPS 32 .. . PNGPS 40 .. .
Number of elements 1-2 for BS / PS 40, BS / PS 40 .. LK		PNGBS 25 .. LK PNGBS 32 .. LK PNGBS 40 .. LK PNGPS 25 .. LK PNGPS 32 .. LK PNGPS 40 .. LK
No. of diagram for / <i>Br. šeme za</i> PNGBS/PNGPS 25 - (90, 91, 10, 92, 51, 52, 53, 54, 55, 56, 11, 15)		
No. of diagram for / <i>Br. šeme za</i> PNGBS/PNGPS 32 - (90, 91, 10, 92, 51, 52, 53, 54, 55, 56, 11, 15)		
No. of diagram for / <i>Br. šeme za</i> PNGBS/PNGPS 40 - (90, 91, 10, 92, 51, 52, 54, 55)		
Front parts C - (handle and front plate of rotary cam switches - black) P - (handle and front plate of rotary cam switches - blue)		<i>Boja prednjeg sklopa:</i> P - (ručica i prednja ploča su plavi) C - (ručica i prednja ploča su crni)



PNGBS 25..LK, PNGBS 32..LK,
PNGBS 40..LK
PNGPS 25..LK, PNGPS 32..LK,
PNGPS 40..LK

Number of elements 4-6	IP 55	PN1BS 10 .. . PN1BS 20 .. . PN1BS 25 .. . PN1PS 10 .. . PN1PS 16 .. . PN1PS 25 .. .
No. of diagram - (12, 13, 75, 69, 19, 97, 98)		
Front parts P - (handle and front plate of rotary cam switches - blue) C - (handle and front plate of rotary cam switches - black)		



PN1BS 10, PNGBS 20,
PNGBS 25
PN1PS 10, PN1PS 16,
PN1PS 30

NOTES:

Color of enclosures ist grey (RAL 7035)

* Only with conection cable up to 2.5 mm²

ROTARY CAM SWITCHES IN INSULATED ENCLOSURES

GREBENASTE SKLOPKE U PLASTIČNOM KUĆIŠTU

Selection and ordering data /



**PN2BS 32, PN2BS 40,
PN2BS 50, PN2BS 63**

**PN2PS 32, PN2PS 40,
PN2PS 63**

	Degree of protection	Type
Number of elements 4-5 for BS / PS 32	IP 55	PN2BS 32 .. .
Number of elements 3-5 for BS / PS 40		PN2BS 40 .. .
Number of elements 1-4 for BS 50		PN2BS 50 .. .
Number of elements 1-4 for BS / PS 63		PN2BS 63 .. .
		PN2PS 32 .. .
		PN2PS 40 .. .
		PN2PS 63 .. .

No. of diagram for PN2BS / PN2PS 32 - (75, 69, 13, 12, 19, 97, 98)
 No. of diagram for PN2BS / PN2PS 40 - (53,75, 56, 69, 11,13, 12, 26,19, 97, 98)
 No. of diagram for PN2BS 50 / PN2BS 63 / PN2PS 63 - (90, 91, 10, 92, 5, 53, 75, 54, 55, 56, 69, 11, 13, 12, 26,19, 15, 207, 98)

Front parts

P - (handle and front plate of rotary cam switches - blue)
 C - (handle and front plate of rotary cam switches - black)



**PN3BS 80, PN3BS 100K
PN3PS 80, PN3PS 100**

Number of elements 1-3	IP 54	PN3BS 80 .. .
		PN3BS 100K .. .
		PN3PS 80 .. .
		PN3PS 100 .. .

No. of diagram - (90, 91, 10, 92, 51, 52, 53, 54, 55, 56, 11, 26, 15,)

Front parts

P - (handle and front plate of rotary cam switches - blue)
 C - (handle and front plate of rotary cam switches - black)



**PN4BS 80, PN4BS 100K
PN4BS 125, PN4BS 200**

**PN4PS 80, PN4PS 100
PN4PS 125, PN4PS 200**

Number of elements 4 for BS / PS 80	IP 54	PN4BS 80 .. .
Number of elements 4 for BS 100K / PS 100		PN4BS 100K .. .
Number of elements 1-3 for BS / PS 125		PN4BS 125 .. .
Number of elements 1-2 for BS / PS 200		PN4BS 200 .. .
		PN4PS 80 .. .
		PN4PS 100 .. .
		PN4PS 125 .. .
		PN4PS 200 .. .

No. of diagram for PN4BS 80, 100K / PN4PS 80, 100 - (12, 13, 19, 75, 98)
 No. of diagram for PN4BS / PN4PS 125 - (10, 11, 51, 52, 53, 54, 55, 56, 57, 92)
 No. of diagram for PN4BS / PN4PS 200 - (10, 51, 52, 54, 55, 92)

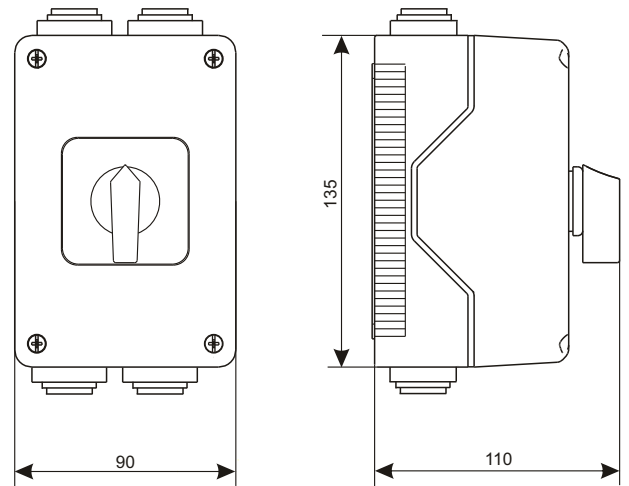
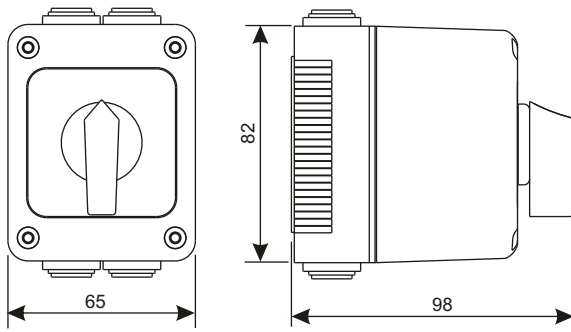
Front parts

P - (handle and front plate of rotary cam switches - blue)
 C - (handle and front plate of rotary cam switches - black)

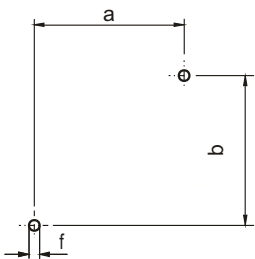
DIMENSION DRAWINGS (mm) / MJERNE SKICE (mm)

PNBS 10, 20, 25 / PNPS 10, 16, 25

PNGBS 25, 32, 40 / PNGPS 25, 32, 40



DRILLING PLAN / PLAN BUŠENJA

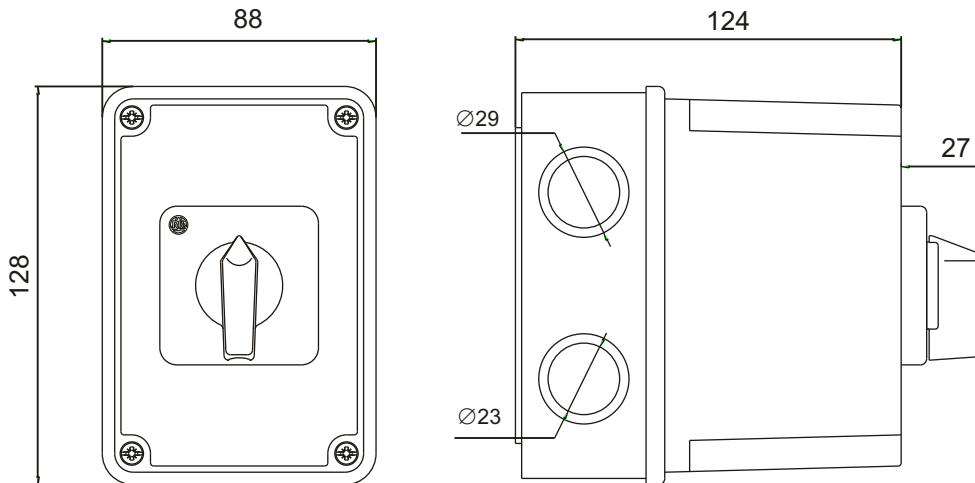


TYPE/ TIP	a	b	f
PNBS 10, 20 / PNPS 10, 16 PNBS 25 / PNPS 25	44	48	4,3
PNGBS 25 / PNGPS 25 PNGBS 32 / PNGPS 32 (LK) PNGBS 40 / PNGPS 40 (LK)	48	100	4,3

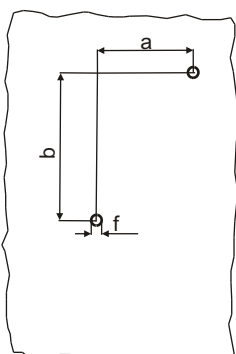
NOTES / ZABELEŠKA

Color of enclosures ist grey (RAL 7035)
 * Only with conection cable up to 2.5 mm²
Boja kućišta je siva (RAL 7035)
 * Samo za priključne kablove do 2.5 mm²

PN1BS 10, 20, 25 / PN1PS 10, 16, 25

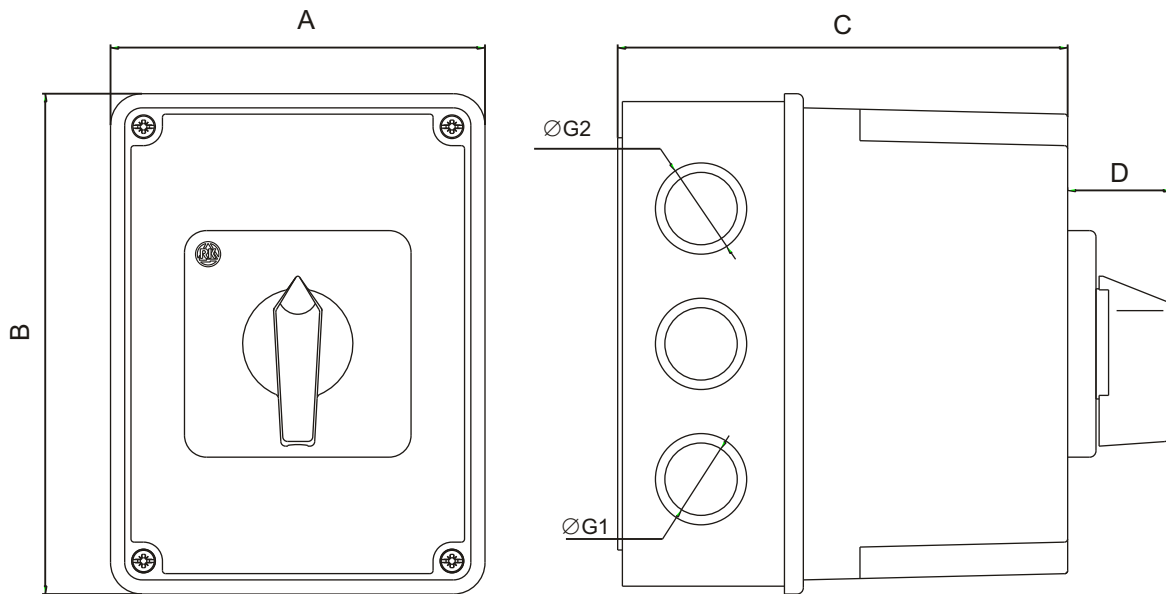


DRILLING PLAN / PLAN BUŠENJA



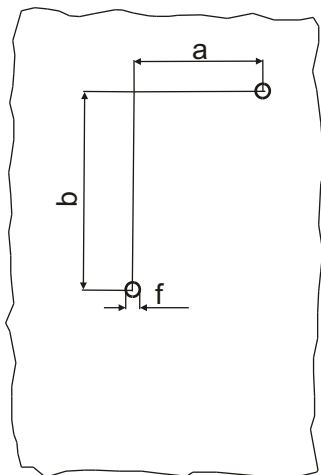
TYPE	a	b	f
PN1BS 10 / PN1PS 10 PN1BS 20 / PN1PS 16 PN1BS 25 / PN1PS 25	42	82	4,3

DIMENSION DRAWINGS (mm) / MJERNE SKICE (mm)



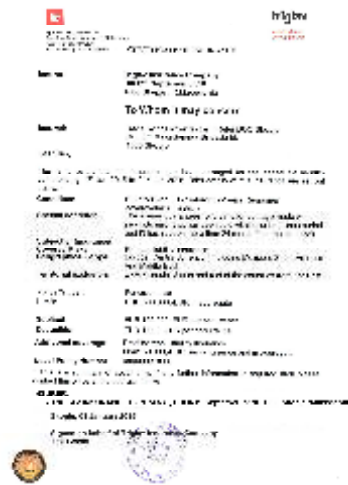
TYPE / TIP	MARKING / OZNAKA					
	A	B	C	D	ØG1	ØG2
PN2BS 32-40 / PN2PS 32-40 PN2BS 50-63 / PN2PS 63	119	159	143	33	23	29
PN3BS 80 / PN3PS 80, PN3BS 100K / PN3PS 100	155	201	148	41	29	37
PN4BS 80 / PN4PS 80, PN4BS 100K / PN4PS 100	210	260	168	41	29	37
PN4BS 125 / PN4PS 125, PN4BS 200 / PN4PS 200	210	260	168	57	29	37

DRILLING PLAN / PLAN BUŠENJA



TYPE	a	b	f
PN2BS 32 / PN2PS 32 PN2BS 40 / PN2PS 40 PN2BS 50 PN2BS 63 / PN2PS 63	72	112	4,5
PN3BS 80 / PN3PS 80 PN3BS 100K / PN3PS 100	98	144	4,5
PN4BS 80 / PN4PS 80 PN4BS 100K / PN4PS 100 PN4BS 125 / PN4PS 125 PN4BS 200 / PN4PS 200	140	194	4,3

PRODUCTION PROGRAM / PROIZVODNI PROGRAM



See Catalogue 2016
Vidi Katalog 2016





RADE KONČAR

KONTAKTORI I RELEI D.O.O.

Low-Voltage Switchgear






General catalogue 2016

PRODUCTION PROGRAM OF ROTARY CAM SWITCHES

PROIZVODNI PROGRAM GREBENASTE SKLOPKE

PS 10; PS 16; PS 25	BS 10; BS 20 ... N	BS 10; BS 20 ... L	BS 10; BS 20 .. U ES	BSB 20; BSB 25
				
PS 32	BS 25 .. N	BS 25 .. L	BS 25 .. ES	PNBS 20; PNBS 25
				
PS 40	BS 32 ... N	BS 32 ... LK	BS 32 ... ES	PNGBS
				
PS 63	BS 40 .. N	BS 40 .. LK	BS 40 .. ES	PNGBS LK
				
PS 80; PS 100	BS 50; BS 63 ... N	BS 50; BS 63 .. LK	BS 50; BS 63 .. ES	PNPS 10; PNPS 16; PNPS 25
				
PS 125	BS 80 .. N; BS 100 K ... N	BS 80 .. LK; BS 100 K .. LK	BS 80 .. ES; BS 100 K .. ES	PNGPS
				
BS 200	BS 400	BS 630	BS 200 S8	PNGPS LK
				



RADE KONČAR

KONTAKTORI I RELEI D.O.O.

1000 - Skopje, Macedonia

III Makedonska brigada br. 54

Tel./Fax++389 (0)2/2461 106; 2465 586; 2463 596

E-mail: export@radekoncar.com.mk

<http://www.radekoncar.com.mk>

www.radekoncar.eu

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