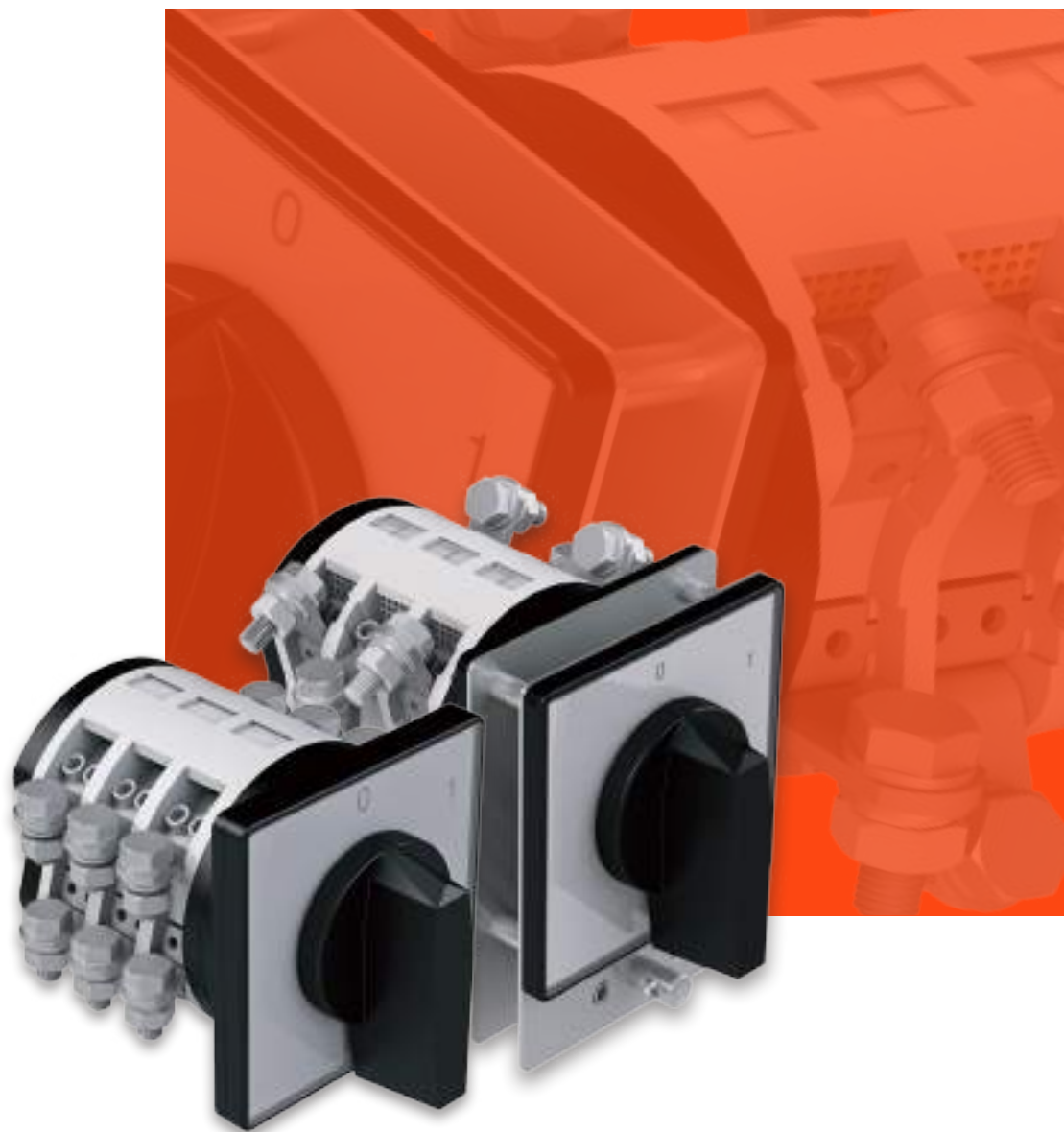
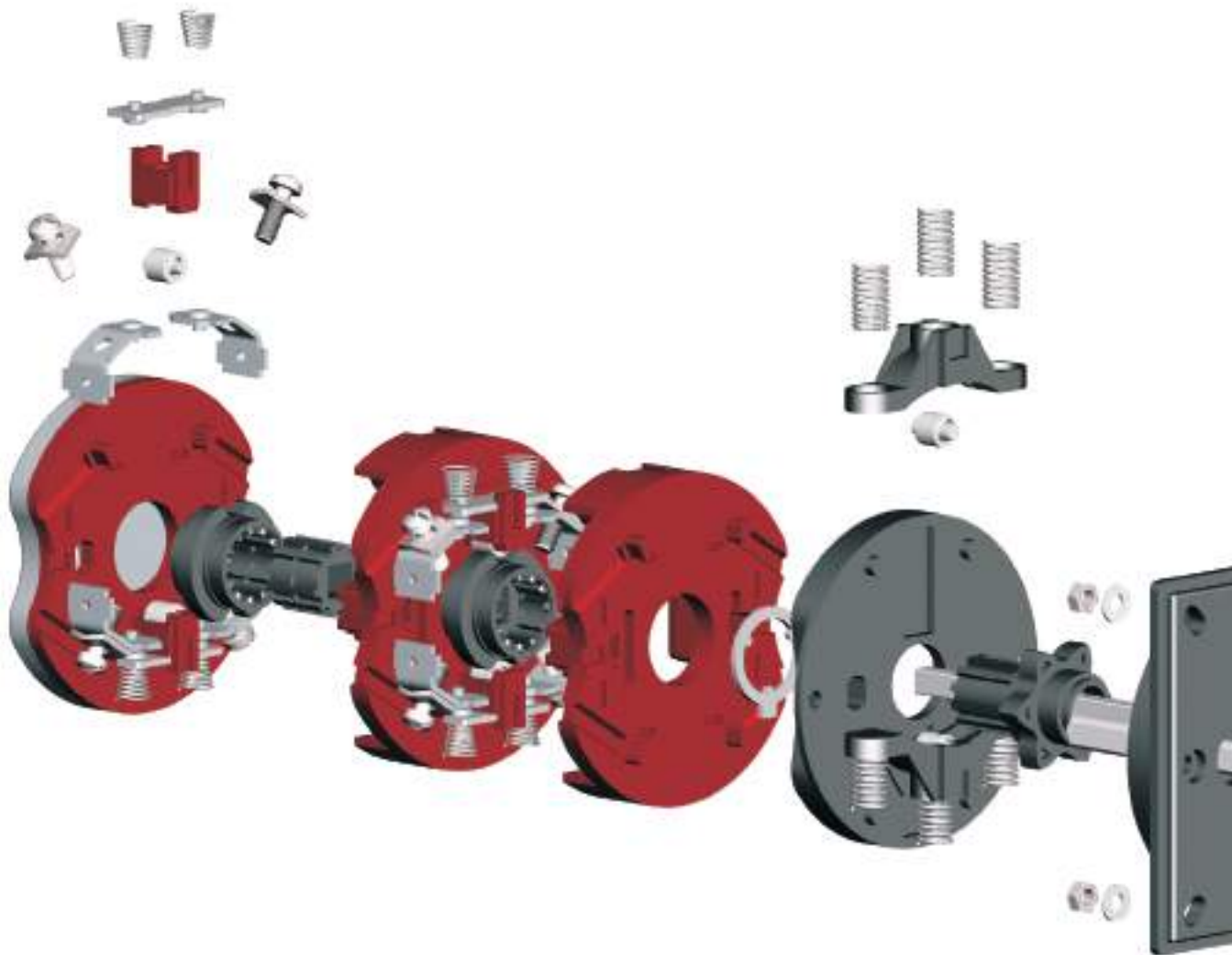


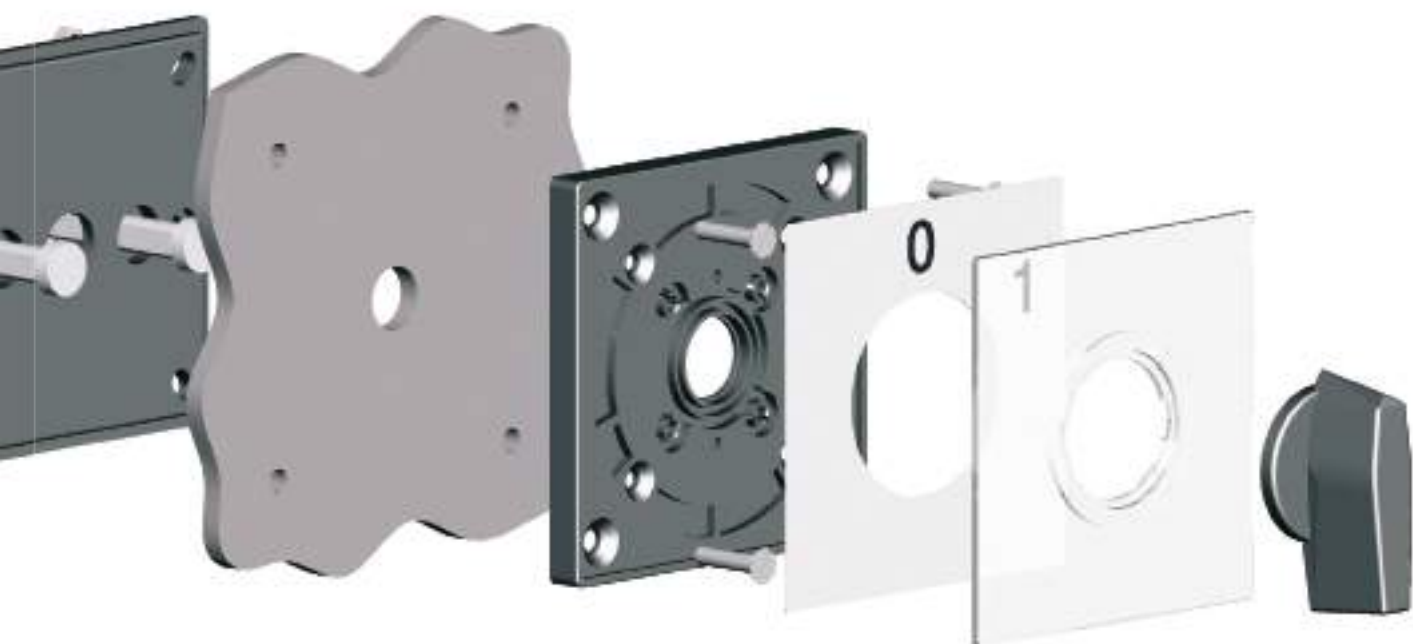
# ROTARY CAM SWITCHES 4G SERIES





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## GREBENASTE SKLOPKE serije 4G

Grebenaste sklopke serije 4G razvijene su prema suvremenim principima i dostignućima na području sklopnih aparata uz upotrebu najkvalitetnijih izolacijskih materijala i kontakata od srebrnih legura. Odlikuju se visokim sklopnim moćima, električnom i mehaničkom trajnošću, izdržljivošću na kratkotrajno preopterećenje, a u kombinaciji s osiguračima i velikom otpornošću na dinamičke struje kratkog spoja.

Grebenaste sklopke imaju višestruku primjenu za sklapanje u glavnim i pomoćnim strujnim krugovima:

- kao **motorske sklopke** mogu sigurno sklapati, upravljati i pokretati trofazne i jednofazne motore, a mogu se izvesti kao: preklopka zvijezda - trokut, preklopka za reverziranje, preklopka za motore s 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
- Grebenaste sklopke serije 4G udovoljavaju propisima

IEC 60947, IEC 204, VDE 0660, VDE 0630, kao i mnogim nacionalnim propisima.

Tijelo sklopnog elementa izrađeno je od umjetne mase na bazi melamina koja je osobito otporna prema kliznim strujama i djelovanju električnog luka. Primjenom dvostrukog prekidanja i kontaktnih elemenata platiniranih specijalnom srebrnom legurom, otpornom na nagaranje uslijed električnog luka, postiže se velika sklopna moć i električna trajnost.

Sklopke se standardno sastavljaju do najviše 12 sklopnih elemenata. Na poseban zahtjev isporučujemo i sklopke sa više od 12 sklopnih elemenata. Sklopke 4G400 do 4G1200 izrađuju se paralelnim spajanjem kontakata sklopke 4G200. Sklopka se može izvesti prema želji sa sljedećim kutom zakreta:

Veličina	A0	A1	A2	A3	Max. broj položaja
Kut zakreta 30°	•	•	•	•	12
45°	•	•	•	•	8
60°	•	•	•	•	6
90°	•	•	•	•	4



## ROTARY CAM SWITCHES series 4G

Rotary cam switches 4G series have been developed to the new achievements in the field of switching devices through the application of high quality insulation materials and contacts made with silver alloys. Their advantages are: high making and breaking capacities, electrical and mechanical endurance. They can withstand short time overload and in combination with fuses are highly resistant to short circuit peak currents.

The rotary cam switches are intended for multiple switching operations in main as well as in auxiliary circuits.

- as **motor switches** they are designed for direct-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
- twisted switch** with automatic return

Rotary cam switches 4G series are built in accordance with the

following standards IEC 60947, IEC 204, VDE 0660, VDE 0630, as well as many other national standards.

The switching element's body is made of melamine-based material exceptionally resistant to leakage currents and effect of electric arc. By the application of double pole breaking and contact elements plated with a special silver alloy resistant to the electric arc, the switches of high breaking capacities and electric durabilities are obtained.

Standard switch can have maximum twelve switching elements. At special request the switches consisting of more than 12 elements may be supplied. The switches ranged from 4G400 up to 4G1200 are made by parallel connected contacts of the switch 4G200. The switch can be executed, as it is desired, with the following turning angle:

Switch size	A0	A1	A2	A3	max. possible number of positions
Turning angle 30°	•	•	•	•	12
45°	•	•	•	•	8
60°	•	•	•	•	6
90°	•	•	•	•	4

## STANDARDNI OBLICI UGRADNJE / STANDARD MOUNTING FORMS

OBLIK UGRADNJE MOUNTING FORM	OZNAKA MARKING	ZAŠTITA / PROTECTION		TIP TYPE	VELIČINA SIZE	IZGLED OUTLOOK
		PREDNJA FRONT	STRAŽNJA REAR			
Ugradna sklopka <i>Front mounting</i>	U	IP 40	IP 00	4G10	A0	
				4G16	A1	
				4G25	A1	
				4G40	A2	
				4G63	A2	
				4G80	A2	
Sklopka za odvojenu ugradnju <i>Rear mounting</i>	O	IP 40	IP 00	4G100	A3	
				4G200	A3	
				4G400	A3	
				4G630	A3	
				4G800	A3	
				4G1200	A3	
Sklopka u plastičnom kućištu <i>Switch in plastic casing</i>	P	IP 54	IP 54	4G10	A0	
				4G16	A1	
				4G25	A1	
				4G40	A2	
				4G63	A2	
				4G80	A2	
Sklopka u limenom kućištu <i>Switch in steel casing</i>	L	IP 54	IP 54	4G100	A3	
				4G200	A3	
				4G400	A3	
				4G630	A3	

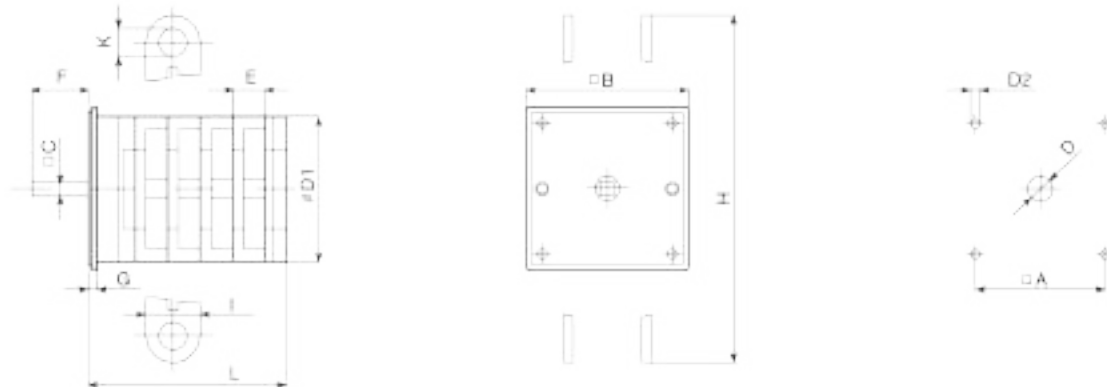
## UGRADBENE VELIČINE / MOUNTING SIZES

A0	A1		A2			A3		
4G10	4G16	4G25	4G40	4G63	4G80	4G100	4G400	4G800
						4G200	4G630	4G1200

# MJERNA SKICA / DIMENSIONAL DRAWING (mm)

## U - Ugradna sklopka / *Front mounting*

Plan bušenja / *Drilling plan*



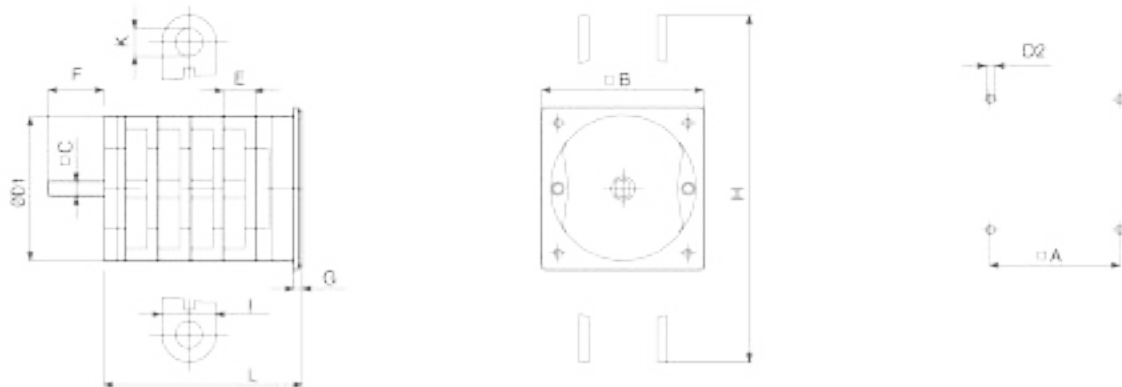
TIP / TYPE	OZNAKA / MARKING											BROJ ELEMENATA / L												NUMBER OF ELEMENTS											
	A	B	C	D0	D0x	D0Z	E	F	G	H	I	OK	1	2	3	4	5	6	7	8	9	10	11	12											
4G18	36	48	4	12	18	4,3	9,6	22	2,5	-	-	-	32,5	42,5	51,3	61,3	70,9	80,3	90,1	98,7	109,1	118,4	128,5	138,1											
4G18	48	65	7	14	20,5	4,3	13,5	26	3,5	-	-	-	41	51,5	60	70,5	80,5	90,9	102,5	110	122,5	136	149,5	163,5											
4G22	48	65	7	14	20,5	4,3	13,5	26	3,5	-	-	-	41	51,5	60	70,5	80,5	90,9	102,5	110	122,5	136	149,5	163,5											
4G28	68-72	90	8	14	20	5,3	18	31	5	-	-	-	58,5	74,5	92,5	110,5	128,5	146,5	164,5	182,5	200,5	218,5	236,5	254,5											
4G62	68-72	90	8	14	20	5,3	18	31	5	-	-	-	58,5	74,5	92,5	110,5	128,5	146,5	164,5	182,5	200,5	218,5	236,5	254,5											
4G98	68-72	90	8	14	20	5,3	18	31	5	-	-	-	58,5	74,5	92,5	110,5	128,5	146,5	164,5	182,5	200,5	218,5	236,5	254,5											
4G100	104	132	10	18	230	5,3	25	37,5	6	180	28	13,5	77	107	136	166	196	226	254	284	314	343	373	402											
4G100	104	132	10	18	230	5,3	25	37,5	6	180	28	13,5	77	107	136	166	196	226	254	284	314	343	373	402											
4G100	104	132	10	18	230	5,3	25	37,5	6	180	28	13,5	77	107	136	166	196	226	254	284	314	343	373	402											
4G600	104	132	10	18	230	5,3	25	37,5	6	190	34	17,5	-	-	136	-	226	-	314	-	343	-	-	432											
4G200	104	132	10	18	230	5,3	25	37,5	6	200	36	17,5	-	-	136	-	226	-	314	-	373	-	-	432											
4G1200	104	132	10	18	230	5,3	25	37,5	6	260	60	17,5	-	-	136	-	226	-	314	-	373	-	-	432											

\* - Za grupu A3 (4G100 do 4G1200), kada je broj elemenata veći od 6 pogledaj mjernu skicu sa dva razdjelna uređaja. (str. 14)

For the switches size A3 (4G100 to 4G1200) with 7 and more elements see the dimensional drawing with two distribution devices. (page 14)

## O - Sklopka za odvojenu ugradnju / *Rear mounting*

Plan bušenja / *Drilling plan*



\*\* Plan bušenja prednje ploče kao kod ugradne sklopke (U)

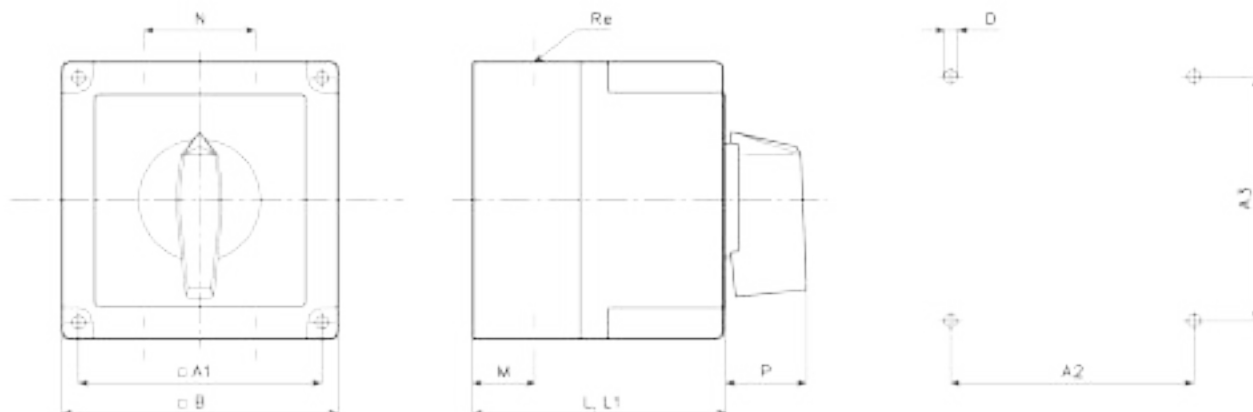
Drilling plan of front panel as at front mounting switches (U)

TIP / TYPE	OZNAKA / MARKING											BROJ ELEMENATA / L												NUMBER OF ELEMENTS											
	A	B	C	D0	D0x	D0Z	E	F	G	H	I	OK	1	2	3	4	5	6	7	8	9	10	11	12											
4G18	36	48	4	12	18	4,3	9,6	22	2,5	-	-	-	37,5	47,5	56,3	66,3	75,9	85,3	95,1	104,7	114	123,9	133,5	143,1											
4G18	48	65	7	14	20,5	4,3	13,5	26	3,5	-	-	-	46	56,5	65	75,5	85,5	95,9	107,5	114	127,5	141	154,5	168,5											
4G22	48	65	7	14	20,5	4,3	13,5	26	3,5	-	-	-	46	56,5	65	75,5	85,5	95,9	107,5	114	127,5	141	154,5	168,5											
4G28	68-72	90	8	14	20	5,3	18	40	5	-	-	-	56,5	72,5	90,5	108	126,5	144,5	162,5	180,5	198,5	216,5	234,5	252,5											
4G62	68-72	90	8	14	20	5,3	18	40	5	-	-	-	56,5	72,5	90,5	108	126,5	144,5	162,5	180,5	198,5	216,5	234,5	252,5											
4G98	68-72	90	8	14	20	5,3	18	40	5	-	-	-	56,5	72,5	90,5	108	126,5	144,5	162,5	180,5	198,5	216,5	234,5	252,5											
4G100	104	132	10	18	230	5,3	25	50	6	180	28	13,5	77	107	136	166	196	226	254	284	314	343	373	402											
4G100	104	132	10	18	230	5,3	25	50	6	180	28	13,5	77	107	136	166	196	226	254	284	314	343	373	402											
4G100	104	132	10	18	230	5,3	25	50	6	180	28	13,5	77	107	136	166	196	226	254	284	314	343	373	402											
4G600	104	132	10	18	230	5,3	25	50	6	190	34	17,5	-	-	136	-	226	-	314	-	343	-	-	432											
4G200	104	132	10	18	230	5,3	25	50	6	200	36	17,5	-	-	136	-	226	-	314	-	373	-	-	432											
4G1200	104	132	10	18	230	5,3	25	50	6	260	60	17,5	-	-	136	-	226	-	314	-	373	-	-	432											

# MJERNA SKICA / DIMENSIONAL DRAWING (mm)

## P - Sklopka u plastičnom kućištu / Switch in plastic casing

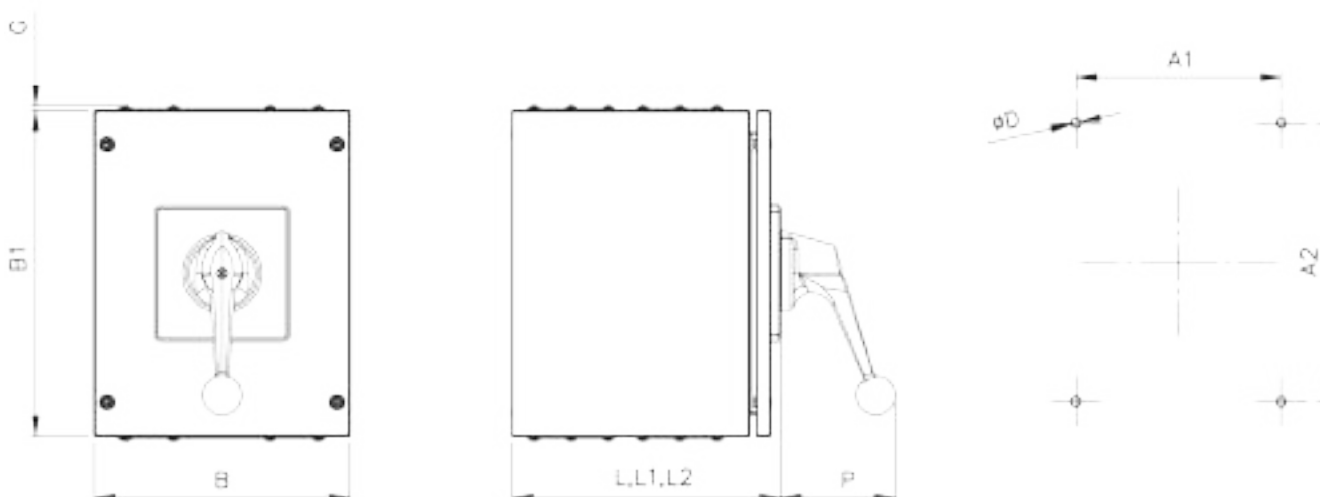
Plan bušenja / Drilling plan



TIP / TYPE	TIP KUĆIŠTA HOUSING SIZE	BROJ ELEMENATA NUMBER OF ELEMENTS		L	L1	A1	A2	A3	B	D	M	N	P	ZAŠTITA PROTECTION	Re	UVODNICE CONDUIT ENTRIES
		L	L1													
4G10	64 x 64	1-2	3-4	55,5	75	55	54	38	64	4,3	13	25	19	IP54		4 x Pg 11
	75 x 75	1-2	3-4	57,5	79,8	55	64	50	75	4,5	14	28	19	IP65		4 x Pg 13,5
4G16	85 x 85	1-2	3-4	77	104	75	75	75	85	4,3	19	34	25	IP54		4 x Pg 16
4G25		1-2	3-4													
4G40	120 x 120	1-2	3-4	95	132	109	107	91	120	5,3	29	45	32	IP54		4 x Pg 21
4G63		1-2	3-4													
4G80		1-2	3-4													


## L - Sklopka u limenom kućištu / Switch in steel casing

Plan bušenja / Drilling plan



TIP / TYPE	TIP KUĆIŠTA HOUSING SIZE	BROJ ELEMENATA NUMBER OF ELEMENTS			L	L1	L2	A1	A2	B	B1	D	G	P
		L	L1	L2										
4G100	250 x 316	1-3	-	4-6	162	-	252	200	270	250	316	9	4,5	98
4G200														
4G400	316 x 500	2	4	6	162	192	252	240	420	316	300	9	4,5	98
4G630														

**POSEBNE IZVEDBE / OPTIONAL EXTRAS**









OPIS / DESCRIPTION	KOD / CODE				IZGLED / OUTLOOK
	1	2	III/OR	4	
<b>POVEĆANI STUPANJ ZAŠTITE</b> <b>INCREASED PROTECTION DEGREE</b>					
Zaštita sprejeda IP54 <i>Front protection IP54</i>	4G40 4G63 4G80 4G100 4G200 4G400 4G630 4G800 4G1200	-	U O	01	
Zaštita sprejeda IP65 <i>Front protection IP65</i>	4G10 4G16 4G25	-	U O	51	
<b>PRODUŽENA OSOVINA</b> <b>EXTENDED SHAFT</b>					
Narudžbom je potrebno definirati dubinu ormara <i>It is necessary to define the board depth</i>	4G10 4G16 4G25 4G40 4G63 4G80 4G100 4G200	-	O	02	
<b>UTIČNI PRIKLJUČCI</b> <b>FAST-ON TERMINALS</b>					
Utični priključci AMP 4,8 4G10 AMP 6,3 4G16; 4G25 <i>Fast-on terminals</i>	4G10 4G16 4G25	-	U O P	03	
<b>POMOĆNI KONTAKTI</b> <b>AUXILIARY CONTACTS</b>					
Narudžbom je potrebno definirati tip i program sklapanja pomoćnih kontakata <i>It is necessary to define switch type and switching diagram of the auxiliary contacts</i>	4G100 4G200 4G400 4G630 4G800 4G1200	-	U	04	
<b>SKLOPKE SA ZAKLJUČAVANJEM</b> <b>SWITCHES WITH LOCKING</b>					
Standardno zaključavanje u "0"- moguće i u drugim položajima (potrebno definirati). Ključ se vadi samo u zaključanom položaju. <i>In a standard manner locking is in "0"- possible in other positions, too (please define). The key can be pulled out only in locked position.</i>	4G16 4G25 4G40 4G63 4G80 4G100 4G200 4G400 4G630 4G800 4G1200	-	U	05	



## POSEBNE IZVEDBE / OPTIONAL EXTRAS

OPIS / DESCRIPTION	KOD / CODE				IZGLED / OUTLOOK
	1	2	III/OR	4	
<p>Zaključavanje samo u "0". Koristi se kod sklopki 0 - 1 (60<sup>0</sup>, 90<sup>0</sup>). Moguća upotreba (60<sup>0</sup>) sa većim brojem položaja (max. 6). Standardna izvedba - crna ručica, čelona ploča i prednja ploča. Specijalni zahtjev - siva boja ili crveno/žuta kombinacija boja</p> <p style="text-align: center;">○ ○ ○</p> <p><i>Locking only in "0". Used at switches 0 - 1 (60<sup>0</sup>, 90<sup>0</sup>). Possible use (60<sup>0</sup>) with several positions (max. 6). Standard version - black handle, cover plate and front panel. Special request - grey colour or red/yellow combination of colours.</i></p>	4G10 4G16 4G25 4G40 4G63 4G80	- - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	U O P U O P U O P U O P U O P U O P	06 06 06 06 06 06	<p style="text-align: center; font-size: 2em;">06</p>
<p>Zaključavanje samo u "0". Koristi se kod sklopki 0 - 1 (60<sup>0</sup>, 90<sup>0</sup>). Moguća upotreba (60<sup>0</sup>) sa većim brojem položaja (max. 6). Standardna izvedba - crna ručica, čelona ploča i prednja ploča. Specijalni zahtjev - siva boja ili crveno/žuta kombinacija boja</p> <p><i>Locking only in "0". Used at switches 0 - 1 (60<sup>0</sup>, 90<sup>0</sup>). Possible use (60<sup>0</sup>) with several positions (max. 6). Standard version - black handle, cover plate and front panel. Special request - grey colour or red/yellow combination of colours.</i></p>	4G100 4G200 4G400 4G630 4G800 4G1200	- - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	U O L U O L U O L U O L U O L U O L	06 06 06 06 06 06	
<p>Zaključavanje (1-3 lokota) samo u "0".</p> <p><i>Locking (1-3 padlocks) only in "0".</i></p>	4G10	- - - - -	U O P	56	<p style="text-align: center; font-size: 2em;">56</p>
<p><b>SPOJKA ZA VRATA</b> <b>DOOR COUPLING</b></p> <p>Otvaranje vrata u bilo kojem položaju (07) ili samo u "0" (08). Minimalna udaljenost od šarke je 150 mm.</p> <p><i>Door-opening in any position (07) or only in "0" (08). Minimal distance to the door-hinge is 150 mm.</i></p>	4G16 4G25 4G40 4G63 4G80 4G100 4G200 4G400 4G630 4G800 4G1200	- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	O O O O O O O O O O O	07/08 07/08 07/08 07/08 07/08 07/08 07/08 07/08 07/08 07/08 07/08	<p style="text-align: center; font-size: 2em;">07 08</p>
<p>Otvaranje vrata u bilo kojem položaju (57) ili samo u "0" (58). Minimalna udaljenost od šarke je 150 mm.</p> <p><i>Door-opening in any position (57) or only in "0" (58). Minimal distance to the door-hinge is 150 mm.</i></p>	4G10 4G16 4G25	- - - - - - - - - - - - - - -	O O O	57/58 57/58 57/58	
<p>Otvaranje vrata samo u "0" položaju. Minimalna udaljenost od šarke je 150 mm. Zaštita od slučajnog dodira priključnih stezaljki pod naponom za sklopke do dva elementa.</p> <p><i>Door-opening only in "0" position. Minimal distance to the door-hinge is 150 mm. Protection against an accidental contact with the supplying terminals under voltage for the switches with only two elements.</i></p>	4G10 4G16 4G25	- - - - - - - - - - - - - - -	O O O	68 68 68	<p style="text-align: center; font-size: 2em;">68</p>

**POSEBNE IZVEDBE / OPTIONAL EXTRAS**

OPIS / DESCRIPTION	KOD / CODE					IZGLED / OUTLOOK
	1	2	ILI/OR	4		
<b>CENTRALNA MONTAŽA</b> <b>CENTRAL MOUNTING</b>						
Ugradnja u Ø30 mm (09) ili Ø22 mm (11). <i>Mounting into Ø30 mm (09) or Ø22 mm (11).</i>	4G10	-	.....	- U	09/11	09 11 
Ugradnja u Ø22 mm odnosno Ø30 mm. Montaža s dva vijka. <i>Mounting into Ø22 mm or Ø30 mm with two screws.</i>	4G10	-	.....	- U	20	20 
Brza ugradnja u Ø22 mm (36) ili Ø30 mm (37). <i>Quick mounting into Ø22 mm (36) or Ø30 mm (37).</i>	4G10	-	.....	- U	36/37	36 37 
<b>CENTRALNA MONTAŽA-ZAKLJUČAVANJE</b> <b>CENTRAL MOUNTING-LOCKING</b>						
Ugradnja u Ø30 mm (10) ili Ø22 mm (12). Zaključavanje odnosno vadenje ključa pod 90°. Moguća 1-4 zaključana položaja unutar 360° (potrebno definirati). 	4G10	-	.....	- U	10/12	10 12 
Brza ugradnja u Ø22 mm (29) ili Ø30 mm (30). Zaključavanje odnosno vadenje ključa pod 90°. Moguća 1-4 zaključana položaja unutar 360° (potrebno definirati). 	4G10	-	.....	- U	29/30	29 30 
Brza ugradnja u Ø22 mm (41) ili Ø30 mm (42). Zaključavanje(1-3 lokona) u "0". <i>Quick mounting into Ø22 mm (41) or Ø30 mm (42).                      Padlocking (1-3) in "0".</i>	4G10	-	.....	- U	41/42	41 42 

## POSEBNE IZVEDBE / OPTIONAL EXTRAS

OPIS / DESCRIPTION	KOD / CODE				IZGLED / OUTLOOK
	1	2	ILI/OR	4	
<b>UTIČNI KLJUČ</b> <b>SOCKET KEY</b> Utični ključ. Standardno vadenje ključa u "0". Na posebni zahtjev moguće i u drugim položajima pod 90°. <div style="text-align: center;"> </div> <i>Socket key. In a standard manner pull-out of the key in "0". Possible in other positions at the angle of 90° (please define).</i>	4G16 4G25 4G40 4G63 4G80	- - - - -	U U U U U	13 13 13 13 13	13 
<b>SIGNALNE SVJETILJKE</b> <b>SIGNAL LAMPS</b> Standardno ugrađena crvena svjetiljka (220V), desno dolje. Mogući naponi 110; 380V te i zelena boja svjetiljke (potrebno definirati). Na poseban zahtjev ugrađujemo i drugu svjetiljku lijevo dolje. <i>In a standard manner, the red lamp (220V) is built in the right bottom corner. Possible voltages are 110; 380V too and green lamp (please define). On special request second lamp can be built in left bottom corner.</i>	4G10 4G16 4G25 4G40 4G63 4G80 4G100 4G200 4G400 4G630 4G800 4G1200	- - - - - - - - - - -	U O P U O P U O P U O P U O P U O P U O L U O L U O L U O L U O	15 15 15 15 15 15 15 15 15 15 15	15 
<b>BLOKIRANJE POLOŽAJA</b> <b>BLOCKADE OF POSITIONS</b> Blokiranje položaja-dvoručno upravljanje, protiv nehotičnog uklapanja (16), + zaključavanje jednim lokotom (26). <i>Blockade of positions-two hands operating, against an accidental switching-on (16), + locking by one padlock (26).</i>	4G16 4G25 4G40 4G63 4G80 4G100 4G200 4G400 4G630 4G800 4G1200	- - - - - - - - - -	U U U U U U U U U U	16/26 16/26 16/26 16/26 16/26 16/26 16/26 16/26 16/26 16/26 16/26	16 26 
Blokiranje položaja-dvoručno upravljanje, protiv nehotičnog uklapanja + pomoćni kontakti (17), + zaključavanje jednim lokotom (27). Upravljanje kontaktima ostvaruje se prije funkcije sklopke. <i>Blockade of positions two hands operating, against an accidental switching-on + auxiliary contacts (17), + locking by one padlock (27). Operating of contacts is being realized before switch function.</i>	4G16 4G25 4G40 4G63 4G80 4G100 4G200 4G400 4G630 4G800 4G1200	- - - - - - - - - -	U U U U U U U U U U	17/27 17/27 17/27 17/27 17/27 17/27 17/27 17/27 17/27 17/27 17/27	17 27 
<b>MONTAŽA NA ŠINU</b> <b>MOUNTING ON THE RAIL</b> Montaža na šinu 35EN 50022 <i>Mounting on the rail 35EN 50022</i>	4G10 4G16 4G25	- - -	U O U O U O	18 18 18	18 
<b>ZAŠTITNA KAPA</b> <b>PROTECTION COVER</b> Zaštita od slučajnog dodira dovodnih priključnih stezaljki pod naponom, za sklopke sa samo dva elementa, u "0" položaja. <i>Protection against an accidental contact with the supplying terminals under voltage for the switches with only two elements, in "0" position.</i>	4G10 4G16 4G25 4G40 4G63 4G80	- - - - - -	U O U O U O U O U O U O	19 19 19 19 19 19	19 

**POSEBNE IZVEDBE / OPTIONAL EXTRAS**

OPIS / DESCRIPTION	KOD / CODE					IZGLED / OUTLOOK
	1	2	IL/OR	4		
<b>GLAVNA SKLOPKA</b> <b>MAIN SWITCH</b> Zaključavanje (u "0") i zaštita od slučajnog dodira dovodnih priključnih stezaljki (max. 4 pol.). 23 - crna ručica i prednja ploča; 25 (ujedno i sklopka za nužno isklapanje) - crvena ručica i žuta prednja ploča. 	4G16 4G25 4G40 4G63 4G80	- - - - -	U U U U U	21/22 21/22 21/22 21/22 21/22	21 22	
Locking (in "0") and protection against an accidental contact with the supplying terminals (max. 4 pole). 23 - black handle and front plate; 25 (with emergency) - red handle and yellow front plate.						
Zaključavanje (u "0") i zaštita od slučajnog dodira dovodnih priključnih stezaljki (max. 4 pol.). 23 - crna ručica i prednja ploča; 25 (ujedno i sklopka za nužno isklapanje) - crvena ručica i žuta prednja ploča. 	4G10 4G16 4G25 4G40 4G63 4G80	- - - - - -	U O P U O P U O P U O P U O P U O P	23/25 23/25 23/25 23/25 23/25 23/25	23 25	
Locking (in "0") and protection against an accidental contact with the supplying terminals (max. 4 pole). 23 - black handle and front plate; 25 (with emergency) - red handle and yellow front plate.						
<b>SKLOPKA ZA NUŽNO ISKLAPANJE</b> <b>EMERGENCY OFF SWITCH</b> Standardna sklopka sa žutom prednjom pločom, žutom podlogom i crvenom ručicom (1-pol.; shema 90; 2-pol. shema 91; 3-pol. shema 10; 4-pol. shema 92). Standard switch with yellow front plate, yellow escutcheon plate and red handle (1-pole: scheme 90; 2-pole: scheme 91; 3-pole: scheme 10; 4-pole: scheme 92).	4G10 4G16 4G25 4G40 4G63 4G80 4G100 4G200 4G400 4G630 4G800 4G1200	- - - - - - - - - - - -	U O P U O P U O P U O P U O P U O P U O U O U O U O U O U O	24 24 24 24 24 24 L L L L L L L L L L L L L L L L L L L L L L L L	24	
<b>BLOKIRANJE SMJERA OKRETANJA</b> <b>BLOCKADE OF THE ROTATION DIRECTION</b> Blokiranje lijevog smjera okretanja. The left direction is blocked.	4G10 4G16 4G25 4G40 4G63 4G80	- - - - - -	U O P U O P U O P U O P U O P U O P	28 28 28 28 28 28	28	
<b>INSTALACIONA KAPA</b> <b>SERVICE COVER</b> Montaža na širu 35EN 50022 s instalacionom kapom i ručicom za standardnu ugradnju u 45 mm. Podešavanje dužine L (izvedba 48). Fiksna dužina L (izvedba 48D). Snap on base mounting for track 35EN 50022. Both the service cover (45mm) and handle are adjustable in height (measure L - optional extra 48). Fixed measure L (optional extra 48D).	4G10	-	O	48/ 48D	48 48D	
Montaža na širu 35EN 50022 sa instalacionom kapom i ključem za standardnu ugradnju u 45 mm. Snap on base mounting for track 35EN 50022. Both the service cover (45mm) and key are adjustable in height.	4G10	-	O	49	49	

## TEHNIČKI PODACI / TECHNICAL DATA

TIP SKLOPKE / SWITCH TYPE				4G10	4G16	4G25	4G40	4G63	4G80	4G100	4G200	4G400	4G630	4G800	4G1200
Nazivni izolacijski napon <i>Rated insulation voltage</i>	IEC/VDE/BS	$U_i$	V	690	690	690	690	690	690	690	690	690	690	690	690
Nazivni udarni podnosivi napon <i>Rated impulse withstand voltage</i>	(1) IEC-947 (III/3)	$U_{imp}$	kV	6	6	6	6	6	6	8	8	8	8	8	8
Nazivna termička struja <i>Rated thermal current</i>	$I_{ts}$	IEC/VDE/BS	A	12	20	25	50	63	80	125	200	400	630	800	1200
Glavna sklopka (1) IEC-947 (III/3) Main switch	Najveća vrijednost nazivnog pogonskog napona <i>Max. value of rated operational voltage</i> Nazivni udarni podnosivi napon <i>Rated impulse withstand voltage</i>		V kV	480 4	480 4	480 4	690 6	690 6	690 6	690 6	690 6	690 6	690 6	690 6	690 6
Max. veličina osigurača za zaštitu od kratkog spoja <i>Max. fuse size for short circuit protection</i>	$I_n$ (gG/gL)	10 kA 25 kA 50 kA 63 kA	A	16 10 -	25 25 -	32 32 -	50 50 -	63 63 -	80 80 -	125 125 -	200 160 -	400 315 -	630 500 -	800 500 -	1200 2x400 2x500 2x400 630
Nazivna kratkotrajno podnosiva struja <i>Rated short-time withstand current</i>	$I_{cs}$	1 sec 3 sec 10 sec 30 sec 60 sec	A	200 120 70 40 30	400 250 140 90 70	600 400 240 150 120	800 530 290 200 150	1000 800 500 300 200	1200 900 550 350 250	2600 1500 850 500 350	3300 2000 1100 640 460	6500 3800 2000 1200 850	9500 5700 3000 1800 1250	12000 7500 4000 2400 1600	18000 11500 6100 3500 2450
Nazivna pogonska struja <i>Rated operational current</i>	$I_n$	AC1/AC21 IEC/VDE/BS 110/120 V AC15 220/230 V IEC/VDE 280/300 V 660/690 V	A	12 10 8 4 1,5	16 20 20 10 2	25 25 20 10 2	50 50 40 40 10	63 63 50 45 10	80 72 50 45 10	125 -	200 -	400 -	630 -	800 -	1200 -
Motorska sklopka za kategoriju upotrebe <i>Motor switch in utilization category</i>	AC3/AC23 IEC/VDE/BS 3 faze 500 V 660/690 V	220/230 V 380-415 V 500 V 660/690 V	kW	2,5/3 4,6 5,5/7,5	4,5 8 11	7,5 13 15	12,5 21 27	18,5 32 42	21 37 45	27,5 47 62	27,5 47 62	27,5 47 62	27,5 47 62	27,5 47 62	27,5 47 62
1 faza, 2 pola <i>1 phase, 2 pole</i>	110/120 V 220/230 V 380-415 V	kW	0,8/0,8 1,5/1,7 2,2/3	1,3 2,6 4,6	1,7 4 7,5	3,6 7,2 12	4,5 10,6 18,5	6 12,1 21,1	- -	- -	- -	- -	- -	- -	- -
Sklopna moć kod istosmjernje struje <i>DC Switching capacity</i>	DC21A IEC/VDE/BS T=1 ms/T=20 ms	24 V 48 V 60 V 110 V 220 V 440 V 600 V	A	12/12 12/12 41 0,7/0,4 0,35/0,15 0,16/0,1	20/20 20/20 5,5/3 0,8/0,4 0,5/0,25 -	25/25 25/25 5,5/3 0,8/0,4 0,5/0,25 -	50/50 50/50 15/3,5 1,2/0,4 0,6/0,25 0,45/0,2	63/63 63/63 15/3,5 1,2/0,4 0,6/0,25 0,45/0,2	80/80 80/80 15/3,5 1,2/0,4 0,6/0,25 0,45/0,2	100/100 100/100 35/7,5 2,5/0,75 0,9/0,3 0,5/0,25	200/200 200/200 35/7,5 2,5/0,75 0,9/0,3 0,5/0,25	- -	- -	- -	- -
Potrebni broj kontakata u seriji <i>Number of series contacts</i>	$I_p$ (DC1)= $I_k$ T=1 ms	24 V 60 V 110 V 220 V 440 V	Br. No	1 1 2 5 8	1 1 3 4 8	1 1 3 4 8	1 1 2 4 6	1 1 2 4 6	1 1 2 4 6	1 1 2 3 6	1 1 2 4 8	- -	- -	- -	- -
Mehanička trajnost <i>Mechanical durability</i>	Broj uklopa <i>Switching cycles</i>			3x10 <sup>6</sup>	3x10 <sup>6</sup>	3x10 <sup>6</sup>	1x10 <sup>6</sup>	1x10 <sup>6</sup>	1x10 <sup>6</sup>	2x10 <sup>6</sup>	2x10 <sup>6</sup>	2x10 <sup>6</sup>	2x10 <sup>6</sup>	2x10 <sup>6</sup>	2x10 <sup>6</sup>
Priljučni vijak <i>Terminal screw</i>			M	3	4	4	5	5	7	10	10	12	16	16	16
Max. presjek vodiča <i>Max. conductor size</i>	Kruti vodič <i>Stranded wire</i>	mm <sup>2</sup> AWG		2x1,5 2x16	2x6 2x10	2x6 2x10	2x16 2x6	2x16 2x6	1x25 1x4	- -	- -	- -	- -	- -	- -
	Fleksibilni vodič <i>Flexible wire</i>	mm <sup>2</sup> AWG		2x1,5 2x16	2x4 2x12	2x4 2x12	2x10 2x8	2x10 2x8	1x16 1x6	1x50 <sup>2</sup> 1x1 <sup>2</sup>	1x95 <sup>2</sup> 1x000 <sup>2</sup>	1x240 <sup>2</sup> 1x500 <sup>2</sup>	- -	- -	- -
	Spojna traka <i>Flat connection</i>	mm		-	-	-	-	-	-	-	-	2x 30x5	2x 40x5	2x 40x10	2x 60x10

(1) vrijedi za mreže sa uzemljenim zvjezdastim, prenaponska kategorija III, stupanj zagađenja 3  
*valid for neutral earthed systems, overvoltage category III, pollution degree 3*

(2) kabelska stopica  
*cable lug*

**STANDARDNI SKLOPNI PROGRAM / STANDARD SWITCHING PROGRAMME**

SKLOPNI PROGRAM / SWITCHING PROGRAMME	BROJ SHEME / DIAGRAM No.	BROJ ELEMENATA / No. OF ELEMENTS	KUT / ANGLE
<b>Sklopka / Switch</b>			
1-polna/pole	90	1	60°
2-polna/pole	91	1	60°
3-polna/pole	10	2	60°
4-polna/pole	92	2	60°
5-polna/pole	99	3	60°
6-polna/pole	100	3	60°
<b>Sklopka 90° / Switch 90°</b>			
Kontakti 30° prethode/ Early-make contact 30° 1-polna/pole	270	1	90°
Kontakti 30° prethode/ Early-make contact 30° 2-polna/pole	271	1	90°
Kontakti 30° prethode/ Early-make contact 30° 3-polna/pole	63	2	90°
3 Kontakti 30° prethode/ 3 Early-make contact 30°			
1 Kontakti 60° prethode/ 1 Early-make contact 60° 4-polna/pole	272	2	90°
3 Kontakti 30° prethode/ 3 Early-make contact 30°			
2 Kontakti 60° prethode/ 2 Early-make contact 60° 5-polna/pole	273	3	90°
Kontakti 30° prethode/ Early-make contact 30° 6-polna/pole	274	3	90°
<b>Sklopka s nul položajem / Switch with off-position</b>			
1-polna/pole	51	1	60°
2-polna/pole	52	2	60°
3-polna/pole	53	3	60°
4-polna/pole	75	4	60°
5-polna/pole	76	5	60°
6-polna/pole	77	6	60°
7-polna/pole	78	7	60°
8-polna/pole	79	8	60°
9-polna/pole	80	9	60°
10-polna/pole	81	10	60°
<b>Sklopka bez nul položaja / Switch without off-position</b>			
1-polna/pole	54	1	90°
2-polna/pole	55	2	90°
3-polna/pole	56	3	90°
4-polna/pole	69	4	90°
5-polna/pole	70	5	90°
6-polna/pole	71	6	90°
7-polna/pole	72	7	90°
8-polna/pole	73	8	90°
9-polna/pole	74	9	90°
10-polna/pole	62	10	90°
<b>Strujna preklopka, za preklapanje strujnih transformatoru / Current switch for switching of current transformers</b>			
3-polna/pole	57	3	90°
<b>Stepenasta sklopka s nul položajem / Step switch with off-position</b>			
1-polna/pole 2 Stepena/Two-step	107	1	60°
3 Stepena/Three-step	108	2	30°
4 Stepena/Four-step	109	2	30°
5 Stepena/Five-step	110	3	30°
6 Stepena/Six-step	111	4	30°
7 Stepena/Seven-step	112	4	30°
8 Stepena/Eight-step	113	5	30°
9 Stepena/Nine-step	114	5	30°
10 Stepena/Ten-step	115	6	30°
11 Stepena/Eleven-step	116	6	30°
2-polna/pole 2 Stepena/Two-step	123	2	60°
3 Stepena/Three-step	124	3	30°
4 Stepena/Four-step	125	4	30°
5 Stepena/Five-step	126	5	30°
6 Stepena/Six-step	127	7	30°
7 Stepena/Seven-step	128	8	30°
8 Stepena/Eight-step	129	9	30°
9 Stepena/Nine-step	130	10	30°
10 Stepena/Ten-step	131	11	30°
11 Stepena/Eleven-step	132	12	30°
3-polna/pole 2 Stepena/Two-step	135	3	60°
3 Stepena/Three-step	136	5	30°
4 Stepena/Four-step	137	6	30°

SKLOPNI PROGRAM / SWITCHING PROGRAMME	BROJ SHEME / DIAGRAM No.	BROJ ELEMENATA / No. OF ELEMENTS	KUT / ANGLE
5 Stepena/Five-step	138	8	30°
6 Stepena/Six-step	139	11	30°
7 Stepena/Seven-step	140	12	30°
4-polna/pole 2 Stepena/Two-step	145	4	60°
3 Stepena/Three-step	146	6	30°
4 Stepena/Four-step	147	8	30°
5 Stepena/Five-step	148	10	30°
5-polna/pole 2 Stepena/Two-step	151	5	60°
3 Stepena/Three-step	152	8	30°
4 Stepena/Four-step	153	10	30°
6-polna/pole 2 Stepena/Two-step	156	6	60°
3 Stepena/Three-step	157	9	30°
4 Stepena/Four-step	158	12	30°
7-polna/pole 2 Stepena/Two-step	160	7	60°
3 Stepena/Three-step	161	11	30°
8-polna/pole 2 Stepena/Two-step	163	8	60°
3 Stepena/Three-step	164	12	30°
<b>Stepenasta sklopka bez nul položaja / Step switch without off-position</b>			
1-polna/pole 3 Stepena/Three-step	82	2	60°
4 Stepena/Four-step	83	2	60°
5 Stepena/Five-step	84	3	60°
6 Stepena/Six-step	85	3	60°
7 Stepena/Seven-step	101	4	30°
8 Stepena/Eight-step	102	4	30°
9 Stepena/Nine-step	103	5	30°
10 Stepena/Ten-step	104	5	30°
11 Stepena/Eleven-step	105	6	30°
12 Stepena/Twelve-step	106	6	30°
2-polna/pole 3 Stepena/Three-step	86	3	60°
4 Stepena/Four-step	87	4	60°
5 Stepena/Five-step	88	5	60°
6 Stepena/Six-step	89	6	60°
7 Stepena/Seven-step	117	7	30°
8 Stepena/Eight-step	118	8	30°
9 Stepena/Nine-step	119	9	30°
10 Stepena/Ten-step	120	10	30°
11 Stepena/Eleven-step	121	11	30°
12 Stepena/Twelve-step	122	12	30°
3-polna/pole 3 Stepena/Three-step	93	5	60°
4 Stepena/Four-step	94	6	60°
5 Stepena/Five-step	95	8	60°
6 Stepena/Six-step	96	9	30°
7 Stepena/Seven-step	133	11	30°
8 Stepena/Eight-step	134	12	30°
4-polna/pole 3 Stepena/Three-step	141	6	60°
4 Stepena/Four-step	142	8	60°
5 Stepena/Five-step	143	10	60°
6 Stepena/Six-step	144	12	60°
5-polna/pole 3 Stepena/Three-step	149	8	60°
4 Stepena/Four-step	150	10	60°
6-polna/pole 3 Stepena/Three-step	154	9	60°
4 Stepena/Four-step	155	12	60°
7-polna/pole 4 Stepena/Four-step	159	11	60°
8-polna/pole 4 Stepena/Four-step	162	12	60°
<b>Grupna sklopka s nul položajem / Group switch with off-position</b>			
1-polna/pole 2 Grupe/Group	251	1	60°
3 Grupe/Group	254	2	30°
2-polna/pole 2 Grupe/Group	252	2	60°
3 Grupe/Group	255	3	30°
3-polna/pole 2 Grupe/Group	253	3	60°
3 Grupe/Group	256	5	30°
<b>Serijsko grupna sklopka / Series-connected group switch</b>			
1-polna/pole 2 Grupe/Group	257	1	30°
2-polna/pole 2 Grupe/Group	258	2	30°
3-polna/pole 2 Grupe/Group	259	3	30°
<b>Serijsko-paralelna sklopka / Series parallel connected switch</b>			
2-polna/pole 2 Grupe/Group	260	2	30°

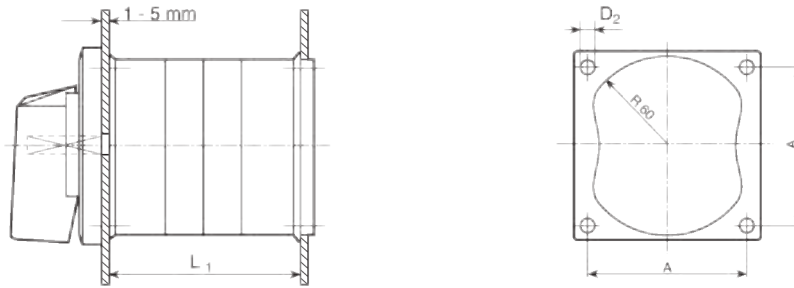
## STANDARDNI SKLOPNI PROGRAM / STANDARD SWITCHING PROGRAMME

SKLOPNI PROGRAM / SWITCHING PROGRAMME	BROJ SCHEME/ DIAGRAM No.	BROJ ELEMENATA/ No. OF ELEMENTS	KUT/ ANGLE
<b>Sklopke za mjerenje struje i napona/ Selector switches for measuring of current and voltage</b>			
<b>Ampermetarska preklapka/</b>			
2-polna/pole L1-L2-L3	58	5	90°
2-polna/pole 0-1-2-3	97	6	90°
1-polna/pole 0-1-2-3	98	4	90°
<b>Voltmetarska preklapka bez nul položaja/ Voltmeter selector switch without off position</b>			
3 linijska napona + 1 fazi napona/ 3 phase-to-phase voltages + 1 phase-to-neutral voltage	60	3	90°
<b>Voltmetarska preklapka s nul položajem/ Voltmeter selector switch with off position</b>			
3 fazi napona/ 3 phase-to-neutral voltage	68	2	30°
3 linijska napona/ 3 phase-to-phase voltages	67	2	30°
3 linijska napona + 3 fazi napona/ 3 phase-to-neutral voltages + 3 phase-to-phase voltages	66	3	30°
<b>ZAKRETNIA TIPKALA/ TWIST SWITCHES</b>			
<b>Preklapka s nul položaja/ Selector switch with off-position</b>			
Povrat u 0 iz oba položaja/ Return to 0 from both positions			
1-polna/pole	201	1	30°
2-polna/pole	202	2	30°
3-polna/pole	203	3	30°
<b>Preklapka bez nul položaja/ Selector switch without off-position</b>			
1 uklopna + 1 isklopna kontakt/ 1 make + 1 break contact	204	1	30°
2 uklopna + 2 isklopna kontakta/ 2 make + 2 break contacts	205	2	30°
3 uklopna + 3 isklopna kontakta/ 3 make + 3 break contacts	206	3	30°
Za upravljanje sklopnikom 1-polni/ For contactor control 1-pole	207	1	30°
1 uklopni + 1 isklopni kontakt kod zakreta lijevo i desno/ 1 make + 1 break contact turning to left and right	208	1	30°
2 uklopna + 2 isklopna kontakta kod zakreta lijevo i desno/ 2 make + 2 break contacts turning to left and right	209	4	30°
Kombinacija sklopke i tipkala/ Combination selector and twist switch	210	5	90° + 30°
<b>MOTORSKE SKLOPKE/ MOTOR SWITCHES</b>			
<b>Preklapka zvijezda trokut/ Star-delta selector switch</b>			
Osnovna izvedba/ Basic design	12	4	60°
<b>SKLOPNI PROGRAM / SWITCHING PROGRAMME</b>	<b>BROJ SCHEME/ DIAGRAM No.</b>	<b>BROJ ELEMENATA/ No. OF ELEMENTS</b>	<b>KUT/ ANGLE</b>
Povrat iz Y u 0 s protustrujnim kočenjem/ Return from Y to 0 with Counter-current breaking	28	4	30° + 60°
Povrat iz Y u 0/ Return from Y to 0	29	5	30° + 30° + 60°
Kao naponska preklapka/ A voltage selector switch	30	4	60°
Za upravljanje sklopnikom/ For contactor control	31	4	90°
2 smjera okretanja/ 2 turning directions	21	5	30°
<b>Preklapka za motore u Dahlanderovom spoju/ Selector switch for motors in Dahlander connection</b>			
2 brzine $\Delta$ -0-YY/2 speed $\Delta$ -0-YY	13	4	60°
2 brzine 0- $\Delta$ -YY/2 speed 0- $\Delta$ -YY	19	4	60°
2 brzine, 2 smjera okretanja YY- $\Delta$ -0- $\Delta$ -YY/ 2 speed, 2 turning directions YY- $\Delta$ -0- $\Delta$ -YY	20	6	30°
Za upravljanje sklopnikom/ For contactor control	32	5	60°
<b>Preklapka za motore s odjeljenim namotom/ Selector switch for motors with a separate winding</b>			
1-0-2	53	3	60°
0-1-2	22	3	60°
2 smjera okretanja/ 2 turning directions	23	5	60°
Za upravljanje sklopnikom/ For contactor control	33	4	60°
<b>Preklapka za motore s tri brzine/ Selector switch for three-speed motors</b>			
2 namota 0- $\Delta$ -Y-YY (1-3 brzine Dahlanderov spoj)/ 2 windings 0- $\Delta$ -Y-YY (1 and 3 speed Dahlander connection)	34	6	30°
2 namota 0- $\Delta$ -YY-Y (1-2 brzine Dahlanderov spoj)/ 2 windings 0- $\Delta$ -YY-Y (1 and 2 speed Dahlander connection)	35	6	30°
2 namota 0-Y- $\Delta$ -YY (2-3 brzine Dahlanderov spoj)/ 2 windings 0-Y- $\Delta$ -YY (2 and 3 speed Dahlander connection)	36	6	30°
<b>Reverziona preklapka/ Reversing switch</b>			
2-polna/2-pole	24	2	60°
2-polna, povrat u 0 položaj/ 2-pole, return to off position	25	2	30°
3-polna/3-pole	11	3	60°
3-polna, povrat u 0 položaj/ 3-pole, return to off position	26	3	30°
Za upravljanje sklopnikom/ For contactor control	27	5	90° + 30°
Sklopka za upuštanje jednofaznih motora/ Switch for starting of single-phase motors	15	2	30° + 90°

## MJERNE SKICE / DIMENSIONAL DRAWINGS (mm)

### UGRADNJA SKLOPKE / MOUNTING OF THE SWITCH 4G100 - 4G1200

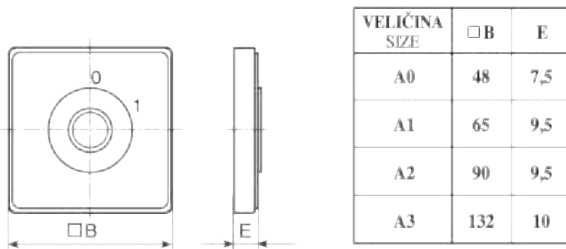
Za sklopku sa više od 6 elemenata / For the switch with more than 6 elements



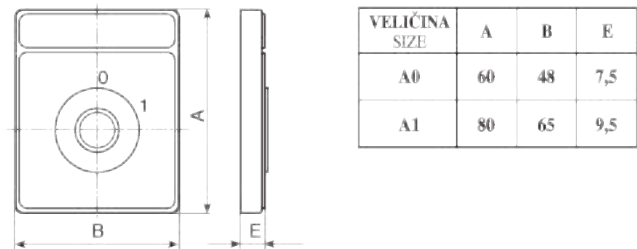
VELIČINA SIZE	A(mm)	D <sub>2</sub> (mm) ∅	BROJ ELEMENATA / NO. OF ELEMENTS - L(mm)					
			7	8	9	10	11	12
A3	104	5,3	271	301	330	360	389	419

### PREDNJI SKLOPOVI / FRONT PARTS

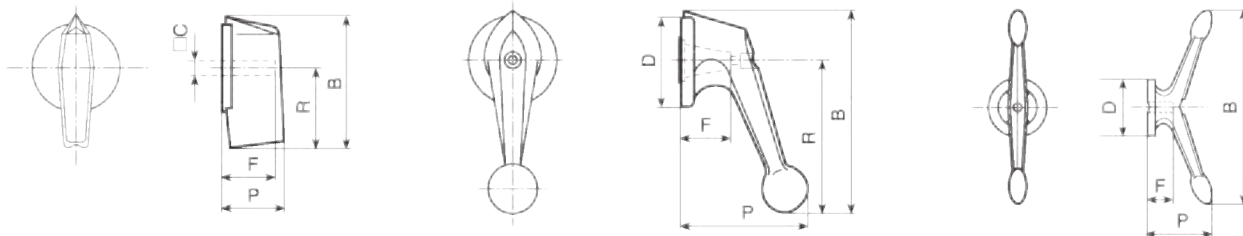
Prednja ploča / Front plate



Prednja ploča s natpisom N / Front plate with the title N



### Ručice / Handles



VELIČINA SIZE	C □	P	R	B	F
A0	6	19	23,5	39,5	16
A1	7	25	32	53	20
A2	8	32	43,5	70,5	26
A3	10	46,5	63,5	104	39

VELIČINA SIZE	D ∅	P	R	B	F
A1	35	51	61,5	81,5	15
A2	48	64	79,5	105,5	19
A3	75	88	115	155,5	28

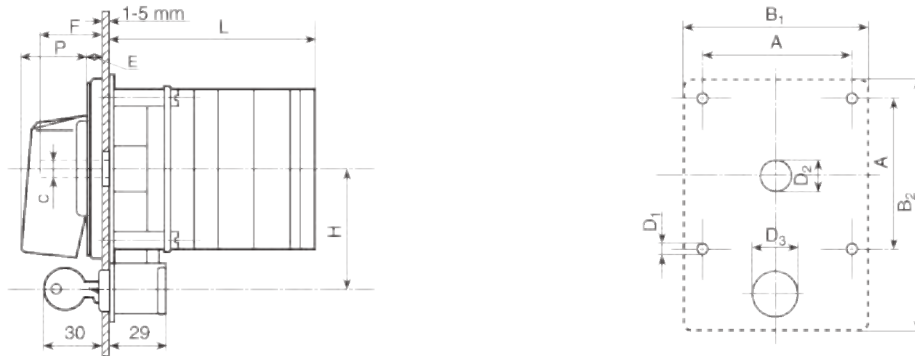
VELIČINA SIZE	D ∅	P	B	F
A3	75	87	262	28

	BOJA / COLOUR	NARUDŽBENI KOD / ORDERING CODE			
		VELIČINA / SIZE			
		A0	A1	A2	A3
	siva / gray crvena / red cma / black žuta / yellow	R011 R012 R014 R015	R111 - 7 R112 - 7 R114 - 7 R115 - 7	R211-8 R212-8 R214-8 R215-8	R311 R312 R314 R315
	siva / gray crvena / red cma / black žuta / yellow	- - - -	R121 - 7 R122 - 7 R124 - 7 R125 - 7	R221-8 R222-8 R224-8 R225-8	R321 R322 R324 R325
	siva / gray crvena / red cma / black žuta / yellow	- - - -	- - - -	- - - -	R331 R332 R334 R335



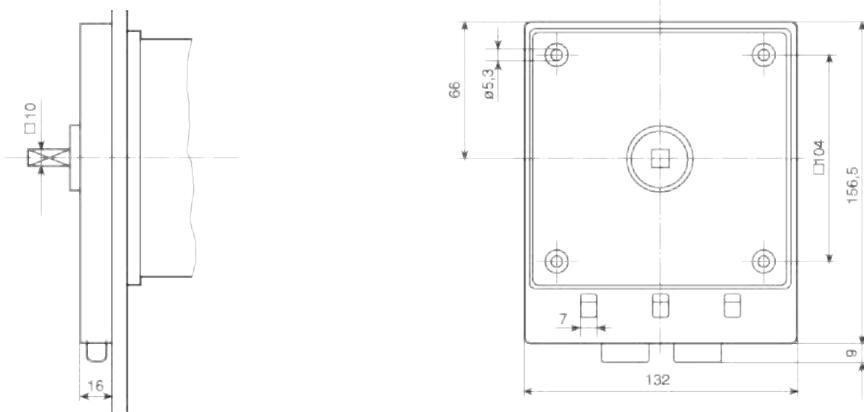
## MJERNE SKICE / DIMENSIONAL DRAWINGS (mm)

### 05 - Zaključavanje ključem / *Locking with the key*

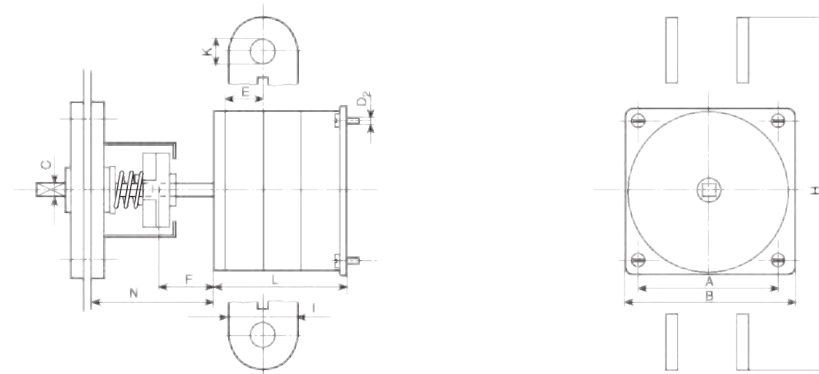


VELIČINA SIZE	D <sub>1</sub> ∅	D <sub>2</sub> ∅	D <sub>3</sub> ∅	A	B <sub>1</sub>	B <sub>2</sub>	C □	E	F	H	P	BROJ ELEMENATA / NO. OF ELEMENTS - L(mm)											
												1	2	3	4	5	6	7	8	9	10	11	12
A1	5	14	21,5	48	65	98	7	9,5	26	48	25	67,5	81	94,5	108	121,7	135,5	149	162,5	176	190	203,5	217
A2	6	16	21,5	68-72	90	122	8	9,5	31	60	32	82,5	100,5	118,5	136,5	154,5	172,5	190,5	208,5	226,5	244,5	262,5	280,5
A3	6	18	21,5	104	132	168	10	10	37,5	85	46,5	103	133	162	192	222	252	310	340	369	399	428	458

### 06 - Zaključavanje (lokoti) - za sklopke / *Padlocking - for the switches 4G100 - 4G1200*



### 08 - Spojka za vrata s blokadom / *Door coupling with the blockade*

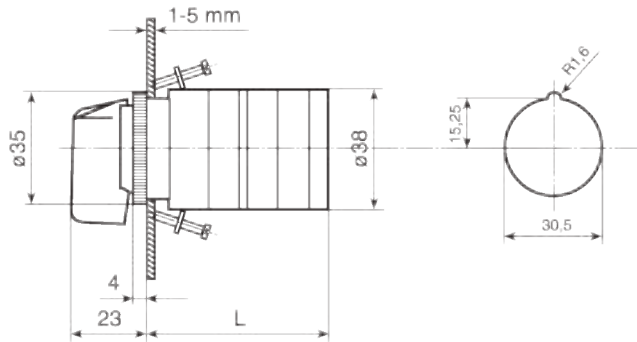


VELIČINA SIZE	D <sub>2</sub> ∅	A □	B □	C □	E	F	H	I	K	min N*	BROJ ELEMENATA / NO. OF ELEMENTS - L(mm)											
											1	2	3	4	5	6	7	8	9	10	11	12
A1	4	48	65	7	13,5	26	-	-	-	64	46	59,5	73	86,5	100,5	114	127,5	141	154,5	168,5	182	195,5
A2	5	68-72	90	8	18	17	-	-	-	60	56,5	74,5	92,5	110,5	128,5	146,5	164,5	182,5	200,5	218,5	236,5	254,5
A3	5	104	132	10	29	30	**	**	**	77	77	107	136	166	196	226	284	314	343	373	402	432

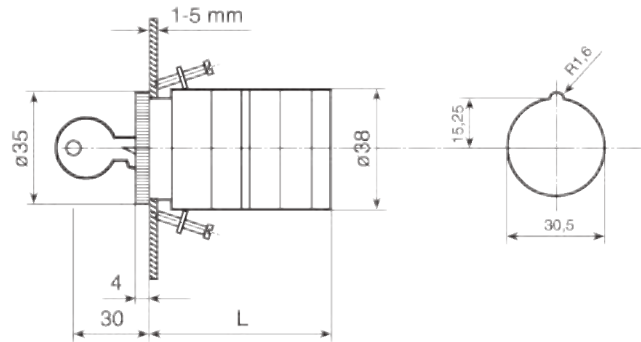
\* Veća mjera za kotu N je moguća na posebni zahtjev / *Longer measure for N is possible at special request*  
 \*\* Mjere za H, I i K - vidi tabele na stranici 4 / *Figures for H, I and K - see the Tables on page 4*

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

**09 - Centralna ugradnja / Central mounting  $\varnothing$  30, 5**

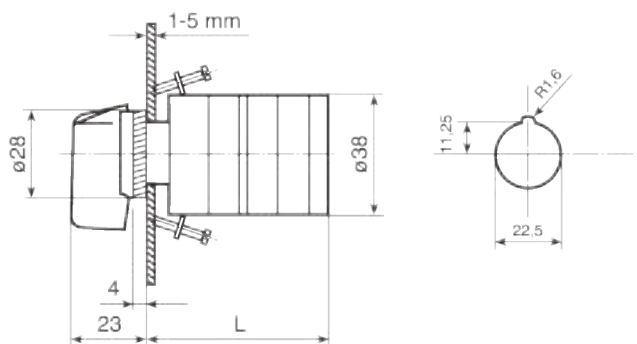


**10 - Centralna ugradnja / central mounting  $\varnothing$  30, 5 mm (zaključavanje/locking)**

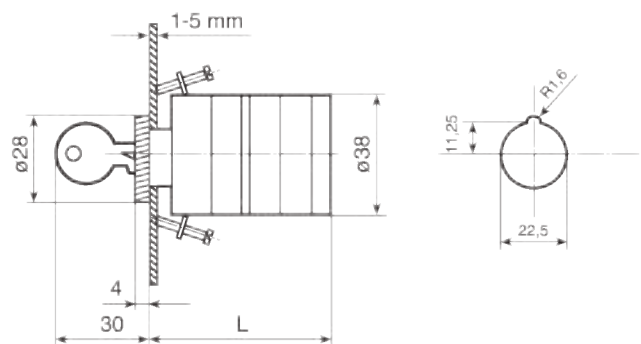


09, 10	BROJ ELEMENATA / NO. OF ELEMENTS - L(mm)											
	1	2	3	4	5	6	7	8	9	10	11	12
	47	56,5	66	75,5	85	95	104,5	114	123,5	133	143	152,5

**11 - Centralna ugradnja / Central mounting  $\varnothing$  22, 5 mm**

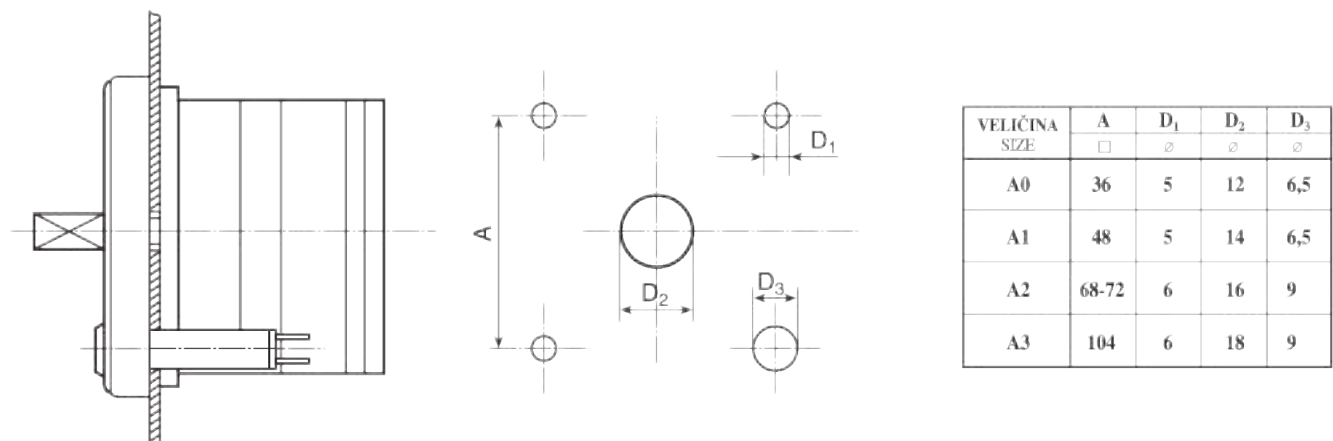


**12 - Centralna ugradnja / Central mounting  $\varnothing$  22, 5 mm (zaključavanje/locking)**



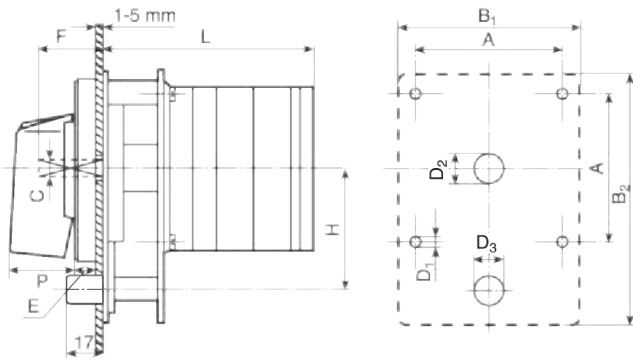
11, 12	BROJ ELEMENATA / NO. OF ELEMENTS - L(mm)											
	1	2	3	4	5	6	7	8	9	10	11	12
	47	56,5	66	75,5	85	95	104,5	114	123,5	133	143	152,5

**15 - Sklopka sa signalnom lampom / Switch with signal lamp**

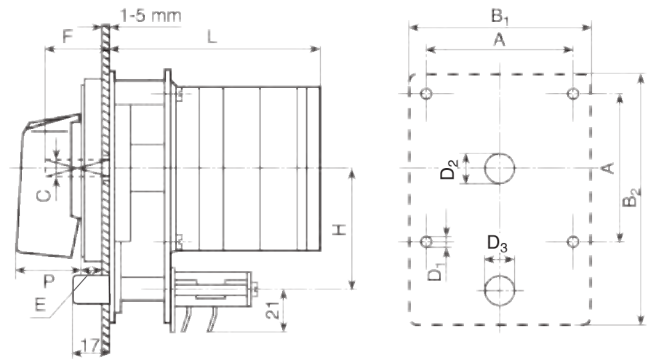


## MJERNE SKICE / DIMENSIONAL DRAWINGS (mm)

16 - Blokiranje položaja / *Blockade of positions*

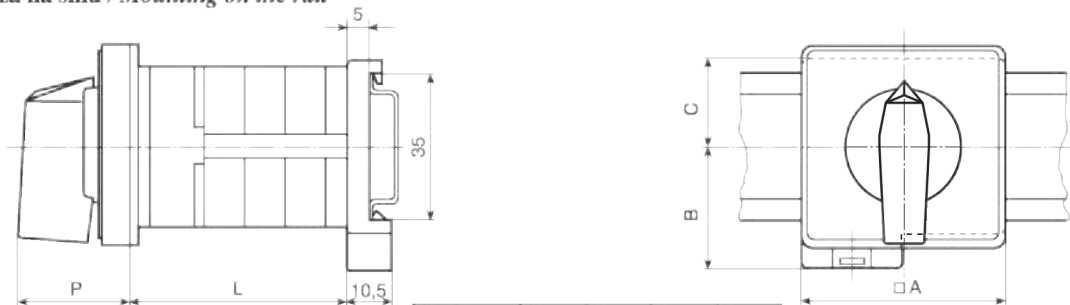


17 - Blokiranje položaja + tipkalo / *Blockade of positions + push button*



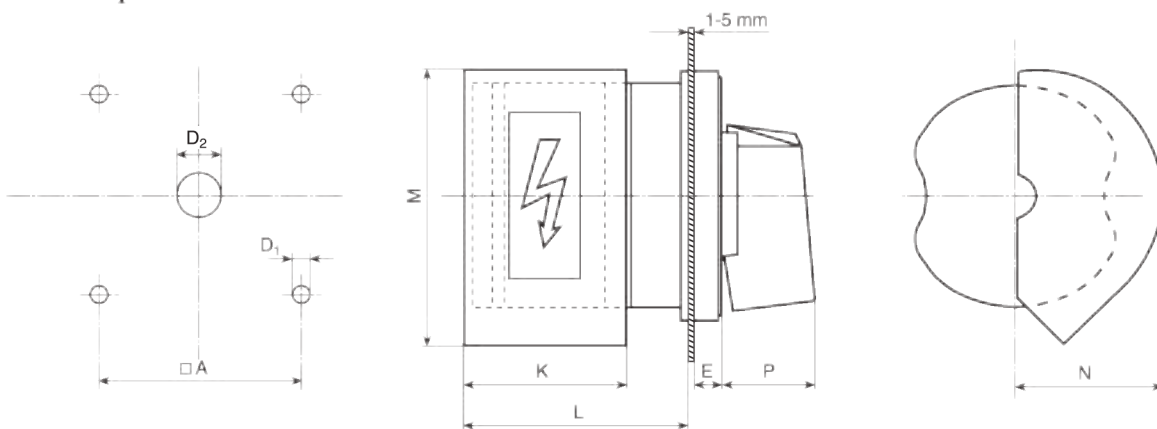
VELIČINA SIZE	D <sub>1</sub> ∅	D <sub>2</sub> ∅	D <sub>3</sub> ∅	A	B <sub>1</sub>	B <sub>2</sub>	C □	E	F	H	P	BROJ ELEMENATA / NO. OF ELEMENTS - L(mm)											
												1	2	3	4	5	6	7	8	9	10	11	12
A1	5	14	15	48	65	98	7	9,5	26	48	25	69,5	83	96,5	110	124	137,5	151	164,5	178	192	205,5	219
A2	6	16	15	68-72	90	122	8	9,5	31	60	32	84,5	102,5	120,5	138,5	156,5	174,5	192,5	210,5	228,5	246,5	264,5	282,5
A3	6	18	15	104	132	168	10	10	37,5	85	46,5	105	135	164	194	224	254	312	342	371	401	430	460

18 - Montaža na šinu / *Mounting on the rail*



VELIČINA SIZE	A	B	C	P
A0	48	30	21	26,5
A1	65	38	20	34,5

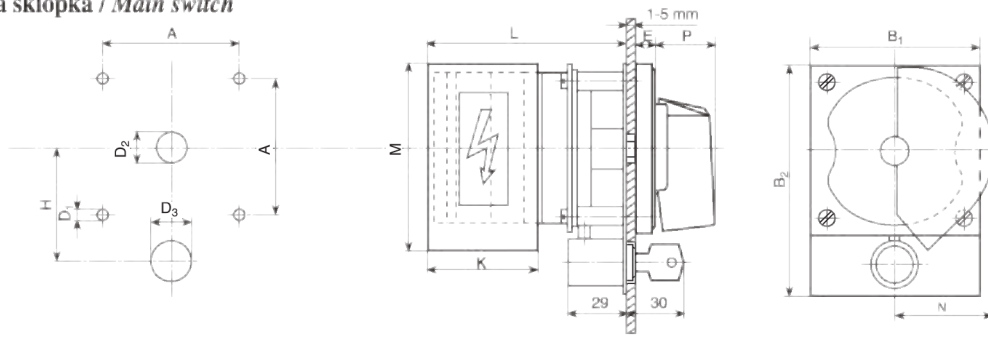
19 - Zaštitna kapa / *Protection cover*



VELIČINA SIZE	D <sub>1</sub> ∅	D <sub>2</sub> ∅	A □	E	P	K	M	N	L
A0	5	12	36	7,5	19	43	64	30	48,5
A1	5	14	48	9,5	25	51	78	42	69
A2	6	16	68-72	9,5	32	58	99	53	78

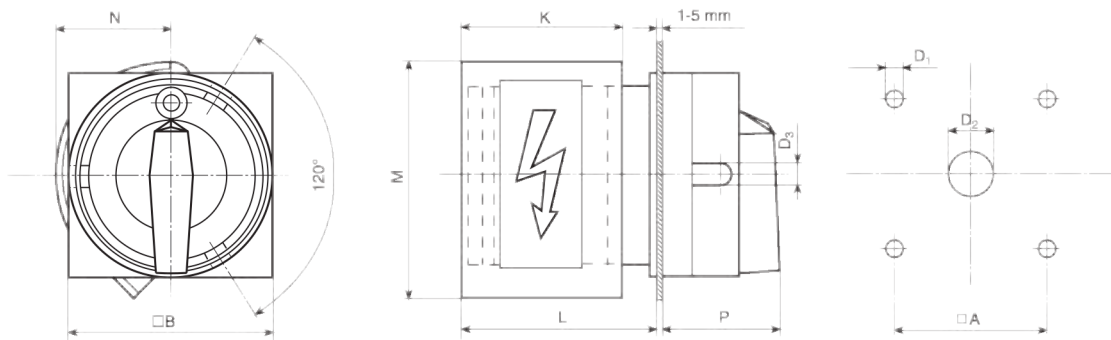
**MJERNE SKICE / DIMENSIONAL DRAWINGS (mm)**

**21, 22 - Glavna sklopka / Main switch**



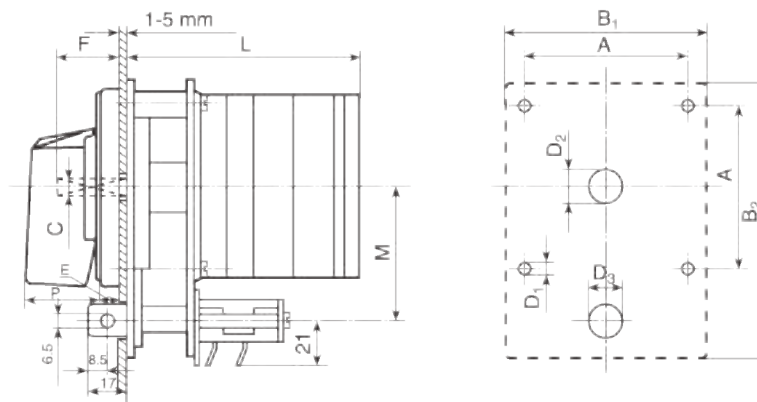
VELIČINA SIZE	D <sub>1</sub> ∅	D <sub>2</sub> ∅	D <sub>3</sub> ∅	A	B <sub>1</sub>	B <sub>2</sub>	P	K	M	N	L	E	H
A1	5	14	21,5	48	65	98	25	51	78	42	95	9,5	48
A2	6	16	21,5	68-72	90	122	32	58	99	53	104	9,5	60

**23, 25 - Glavna sklopka / Main switch**



VELIČINA SIZE	D <sub>1</sub> ∅	D <sub>2</sub> ∅	D <sub>3</sub> ∅	A □	B □	P	K	M	N	L
A0	5	12	5	36	48	34	43	64	30	48,5
A1	5	14	6	48	65	38	51	78	42	69
A2	6	16	7	68-72	90	48,5	58	99	53	78

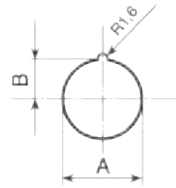
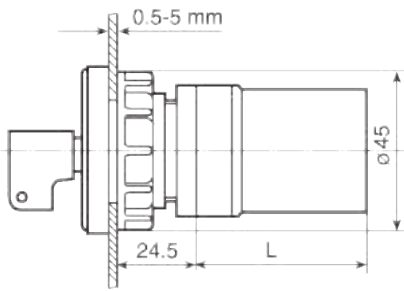
**27 - Blokiranje položaja + tipkalo + zaključavanje / Blockade of positions + push button + locking**



VELIČINA SIZE	D <sub>1</sub> ∅	D <sub>2</sub> ∅	D <sub>3</sub> ∅	A	B <sub>1</sub>	B <sub>2</sub>	C □	E	F	H	P	BROJ ELEMENATA / NO. OF ELEMENTS - L(mm)											
												1	2	3	4	5	6	7	8	9	10	11	12
A1	5	14	15	48	65	98	7	9,5	26	48	25	69,5	83	96,5	110	124	137,5	151	164,5	178	192	205,5	219
A2	6	16	15	68-72	90	122	8	9,5	31	60	32	84,5	102,5	120,5	138,5	156,5	174,5	192,5	210,5	228,5	246,5	264,5	282,5
A3	6	18	15	104	132	168	10	10	37,5	85	46,5	105	135	164	194	224	254	312	342	371	401	430	460

## MJERNE SKICE / DIMENSIONAL DRAWINGS (mm)

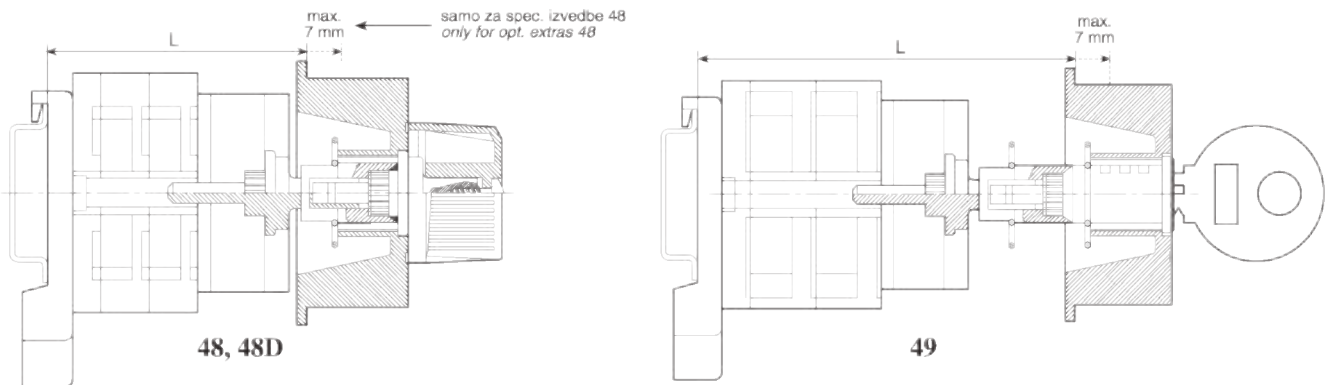
29, 30 - Centralna ugradnja + zaključavanje + standardna prednja ploča / *Central mounting + locking + standard front plate*



	A	B
29	22,5	11,25
30	30,5	15,25

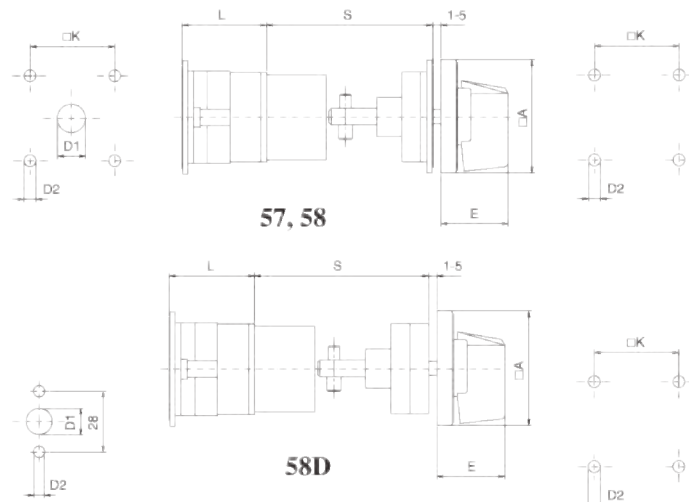
BROJ ELEMENATA / NO. OF ELEMENTS	1	2	3	4	5	6	7	8	9	10	11	12
L(mm)	29	38,5	48	57,5	67	77	86,5	96	105,5	115	125	134,5

48, 48D, 49 - Instalaciona kapa / *Service cover*



TIP / TYPE	BROJ ELEMENATA / NO. OF ELEMENTS								
	48			48D			49		
4G10	1	2	3	1	2	3	1	2	3
L(mm)	40-47	50-57	59-66	32,5	42	51,5	58-65	68-75	77-84

57, 58, 58D - Spojka za vrata / *Door coupling*



VELIČINA SIZE	A	D <sub>1</sub>	D <sub>2</sub>	E	K	S	BROJ ELEMENATA / NO. OF ELEMENTS - L(mm)											
							1	2	3	4	5	6	7	8	9	10	11	12
A0	48	12	5	26,5	36	45-55	40,5	50	59,5	69,5	79	88,5	98	107,5	117,5	127	136,5	146
A1	65	14	5	34,5	48	45-55	46	59,5	73	86,5	100,5	114	127,5	141	154,5	168,5	182	195,5

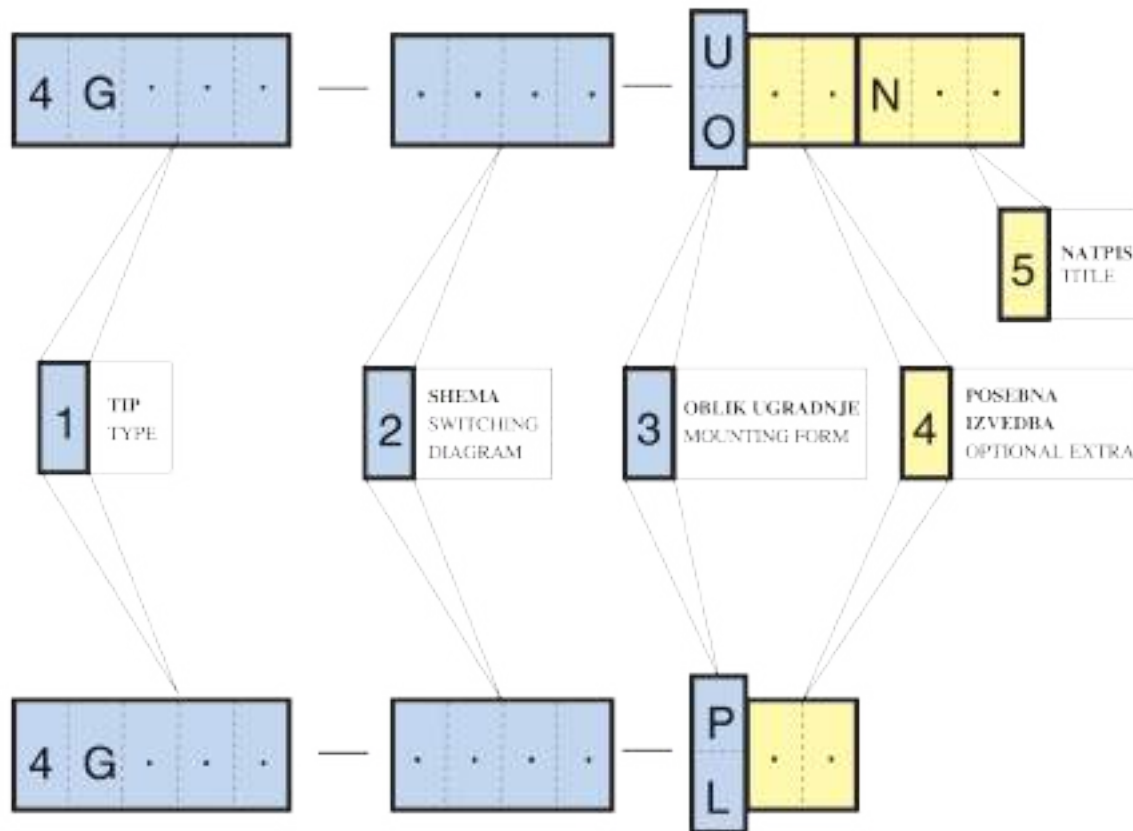
## NARUDŽBENI KOD / ORDERING CODE

Prilikom naručivanja sklopke potrebno je definirati:

- za **standardnu** izvedbu sklopke tri tipa podataka **1 2 3**
- za sklopku s **posebnom izvedbom** max. 5 tipova podataka **1 2 3 4 5**

When ordering please define:

- for **standard** switch three data types **1 2 3**
- for switch with an **optional extra** max. 5 data types **1 2 3 4 5**



OPIS	DESCRIPTION
<b>1</b> Tip sklopke. Odabire se prema teh. zahtjevima (vidi str. 11) i ugradnoj veličini (vidi str. 3)	Switch type. To be chosen in accordance with the technical requests (see page 11) and mounting size (see page 3)
<b>2</b> Shema. Odabire se prema programu sklapanja (vidi stranu 12 i 13)	Switching diagram. To be chosen in accordance with the switching programme. (see pages 12 - 13)
<b>3</b> Standardni oblici ugradnje U,O (vidi str. 3) U - Ugradna O - Odvojena P - Plastično kućište L - Limeno kućište	Standard mounting forms U,O (see page 3) U - Front O - Rear P - Plastic casing L - Steel casing
<b>4</b> Posebna izvedba (vidi str. 6 - 10)	To be marked when an optional extra is required (see pages 6 - 10)
<b>5</b> "N" se upisuje ako se traži prednja ploča s natpisom. Potrebno je upisati željeni tekst.	"N" is to be written when the front plate with a title is required. Please define required text.



# ■ ROTARY CAM SWITCHES 4G SERIES



ENERGY AND AUTOMATION

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## LOVATO ELECTRIC d.o.o.

Borongajska cesta 81 b  
10002 ZAGREB

HRVATSKA

Tel +385 (0)1 2369 243, 2369 203

[prodaja@LovatoElectric.hr](mailto:prodaja@LovatoElectric.hr)

[www.LovatoElectric.hr](http://www.LovatoElectric.hr)



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