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Explosion-proof aluminum and plastic packet-type switches, ExGN, 2ExedIICT6, 1ExdIICT6, RV Exdl, RPExdel

Application

ExGN series explosion-proof packet-type cam switches and load switches designed for remote control of electric drives of machines and devices in stationary plants and on mobile means of land and sea transport, as well as for signaling related to these electric drives or other electric devices. They are used in underground workings of coal shafts and mines, including ones that have gas and/or dust explosion hazard.

Special features

- almost any switching circuit is possible
- switches keep operating at temperatures of up to -60°C

Technical Specifications

Explosion protection marking	1ExdIICT6, 2ExedIICT6, RV Exdl, RP Exdel, 1ExdIICT6X
Material of switch enclosures	aluminum alloy or plastic
Ingress Protection	IP66
Nominal voltage	up to 690 V
Rated current	up to 63 A

Explosion-protection type	Ambient temperature (depends on version)
RV Exdl	from -20°C to + 40°C
1ExdIICT6, 2ExedIICT6, 1ExdIICT6X, RP Exdel	from -35°C to + 50°C
	from -50°C to + 50°C
	from -60°C to + 50°C
	from -30°C to + 45°C

Rated current, A	Types of switches					
	ExGN12, GN12	ExGN20, GN20	ExGN25, GN25	GN32	GN40	GN63
	12	20	25	32	40	63

Design

An ExGN switch with 2ExedIICT6 or RP Exdel marking is rated as extra explosion-resistant electrical equipment and consists of a cover and a case with the ExGN switch (Ex-component with ExdeIU/ExdeIICU explosion-proof marking has a fixed cover and consists of general industrial switch with not more than 4 contact elements placed into a capsule filled with compound).
A switch with 1ExdIICT6 or RV Exdl marking is an ExGN series switch (Ex-component) integrated into an explosion-proof enclosure and consists of a cover and a case with the ExGN switch (Ex-component) installed on the cover. Load switches control is realized through thru shaft with cylindrical explosion-proof connecting plug cover.
1ExGN, RV ExGN and 2ExGN, RP ExGN switches have two cable glands - VK25 placed along B and D sides.
Switches can be completed with other types of glands with explosion-proof marking suitable for the switches according to customer's demand. Cam switches with 1ExdIICT6X marking is ExGN series designed for electric circuits laid in pipes without pipe cable entries, with straight connection of pipes to switch case having holes with thread G1. "X" sign in explosion-proof marking indicates their special using conditions, as follows: the use of these items is possible in pipes filled with compound keeping all the requirements referred to operation manual, as switch of general industrial is placed into explosion-proof case. If other thread sizes are required, use adapters with ExdIIC/ExeII explosion protection marking.

Scope of Delivery

Scope of delivery includes

switch	-1 pcs.
operation manual	-1 copy
passport	-1 copy

Catalog Number Logic

X1ExGNX2T-X3
X1 - explosion protection marking:
"RVEx.." or "1Ex.." - explosion-proof switch;
"RPEx.." or "2Ex.." - extra explosion-resistant switch.
GN - switch series
X2 – rated current, A
T - pipe gland version. If pipe gland is unnecessary, index is not specified.
X3 - code of circuit. It is selected according to commutation programme.
Order formulation example:
2ExGN25-100 Which stands for:
switch for rated current 25 A, circuit 100, turn angle 60°, explosion protection marking 2ExedIICT6.

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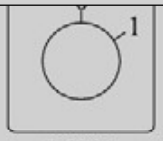
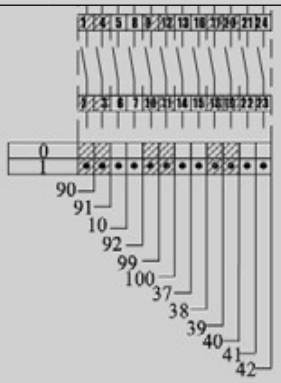
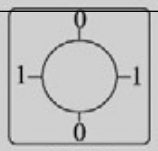
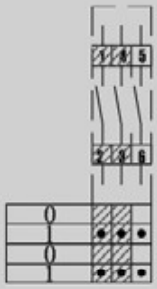
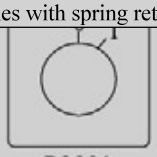
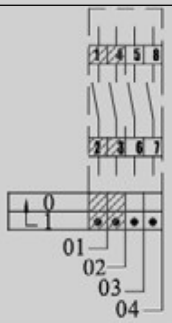
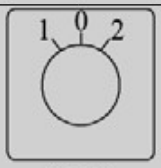
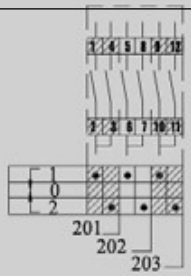
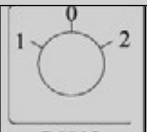
Commutation programme circuits of cam switches and load switches

Function	Position of knob	Circuit code	Number of contact elements	Circuit
Switches with 60° turn angle				
1 pole 2 pole 3 pole 4 pole 5 pole 6 pole 7 pole 8 pole 9 pole 10 pole 11 pole 12 pole	 P6001	90 91 10 92 99 100 37 38 39 40 41 42	1 1 2 2 3 3 4 4 5 5 6 6	
3-pole (with 360° turn angle)	 P9009	09	2	
Переключатели				атом с углом поворота 30°
Switches with spring return and 30° turn angle				
1 pole 2 pole 3 pole 4 pole	with spring return in “0”	 P3001	01 02 03 04	1 1 2 2	
1 pole 2 pole 3 pole	with spring return in “0”	 P3021	201 202 203	1 2 3	

Переключатели с положением «0» и углом поворота 60°

Switches with “0” position and 60° turn angle

1 pole		51	1
2 pole		52	2
3 pole		53	3
4 pole		75	4
5 pole		76	5
6 pole		77	6
7 pole		78	7
8 pole		79	8



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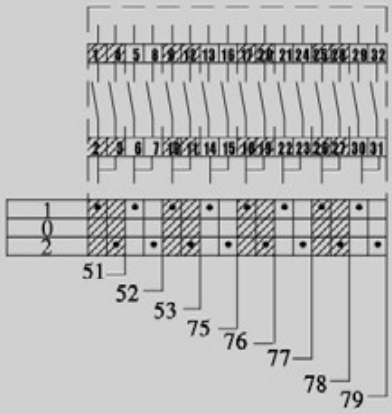
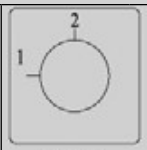


Перек ...жения «0» – с углом поворота 90°

Switches without “0” position with 90° turn angle

1 pole		54	1
2 pole		55	2
3 pole		56	3
4 pole		69	4
5 pole		70	5
6 pole		71	6
7 pole		72	7
8 pole		73	8



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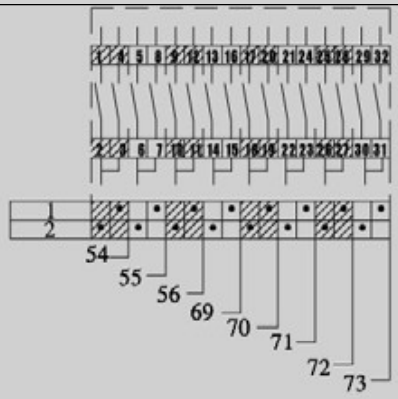
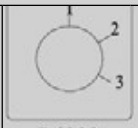


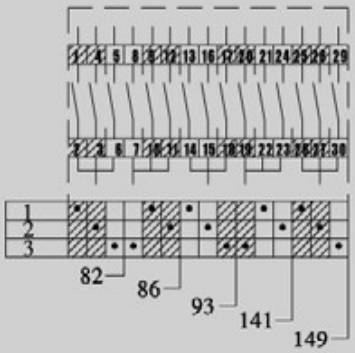
Мно ...натель без положения «0»

Multistage switch without “0” position

1 pole		82	2
2 pole		86	3
3 pole		93	5
4 pole		141	6
5 pole		149	8



P6023



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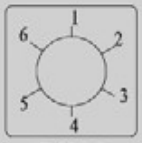
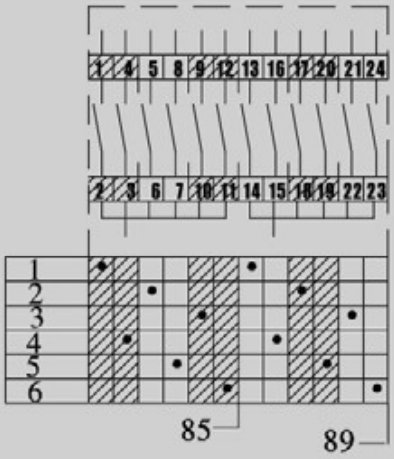
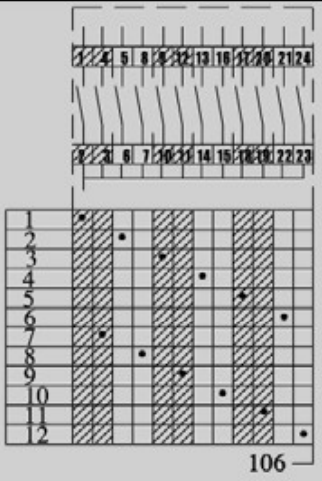
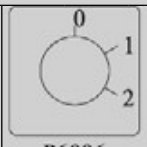
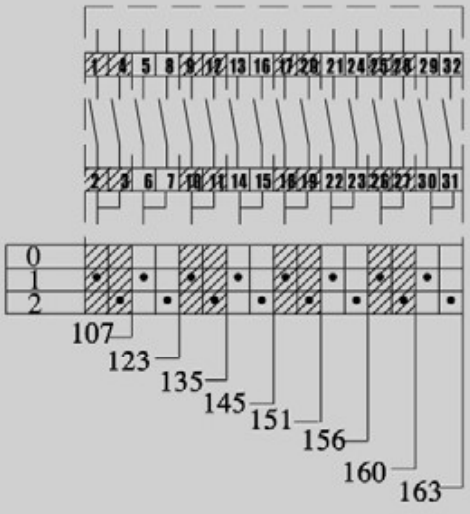
Multistage switch without “0” position				
1 pole 2 pole	 P6026	85 89	3 6	
Multistage switch without “0” position				
1-pole	 P3083	106	6	
Multistage switch with “0” position				
6 pole 7 pole 8 pole	 P6006	107 123 135 145 151 156 160 163	1 2 3 4 5 6 7 8	

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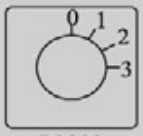
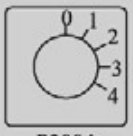
1 pole 2 pole 3 pole 4 pole 5 pole	 P3003	108 124 136 146 152	2 3 5 6 8
1 pole 2 pole 3 pole 4 pole	 P3004	109 125 137 147	2 4 6 8

Multistage switch with “0” position

1 pole	 P3011	116	6

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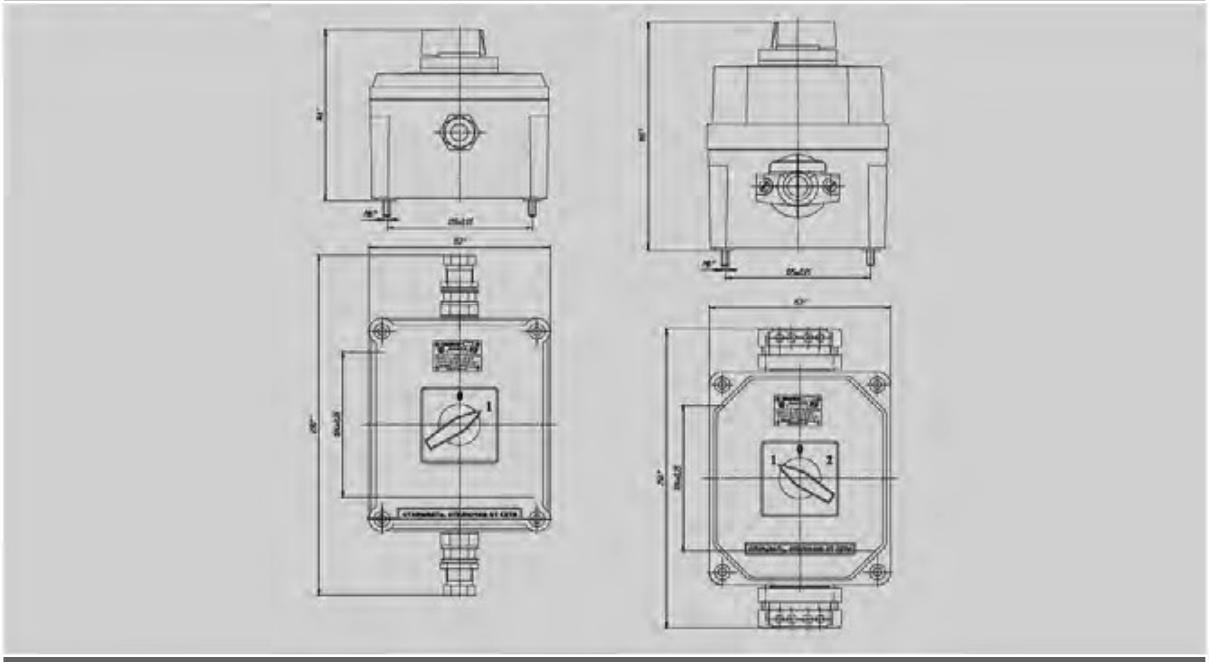
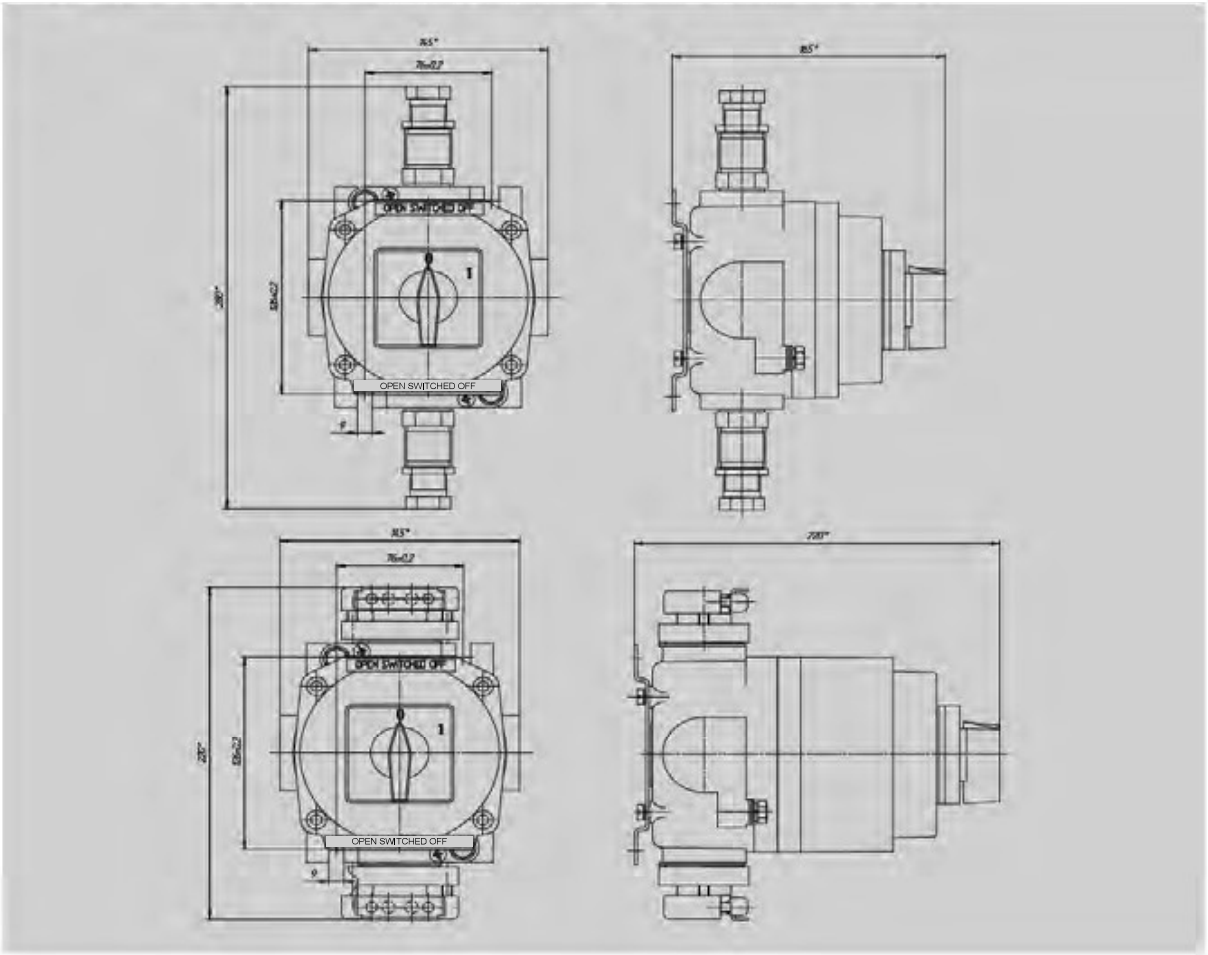
2EXGN25 overall and installation dimensions



1ExGN25 overall and installation dimensions



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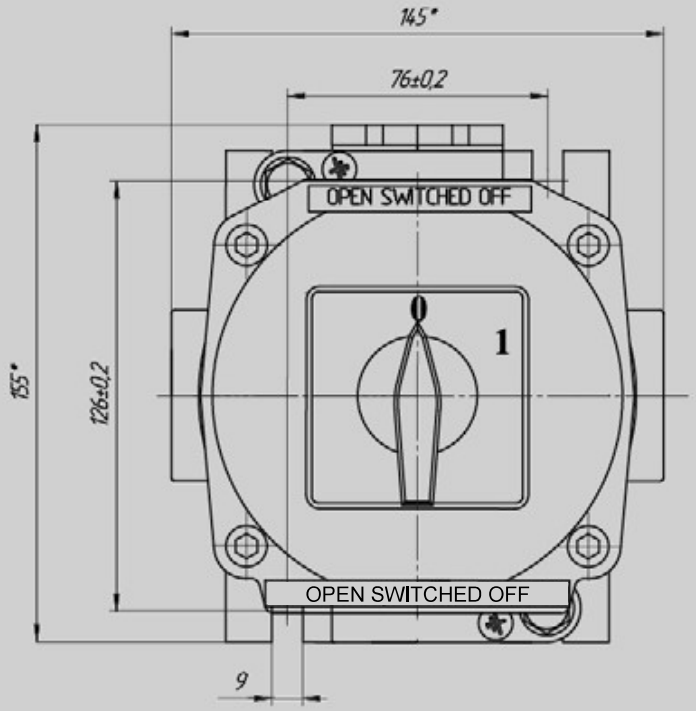
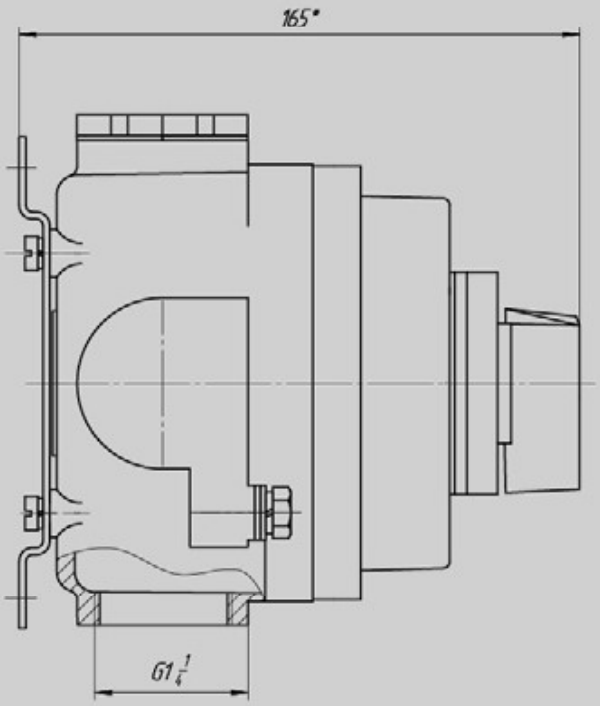
1ExGNXX T overall and installation dimensions





Weight of switches is not more than 2,7 kg.