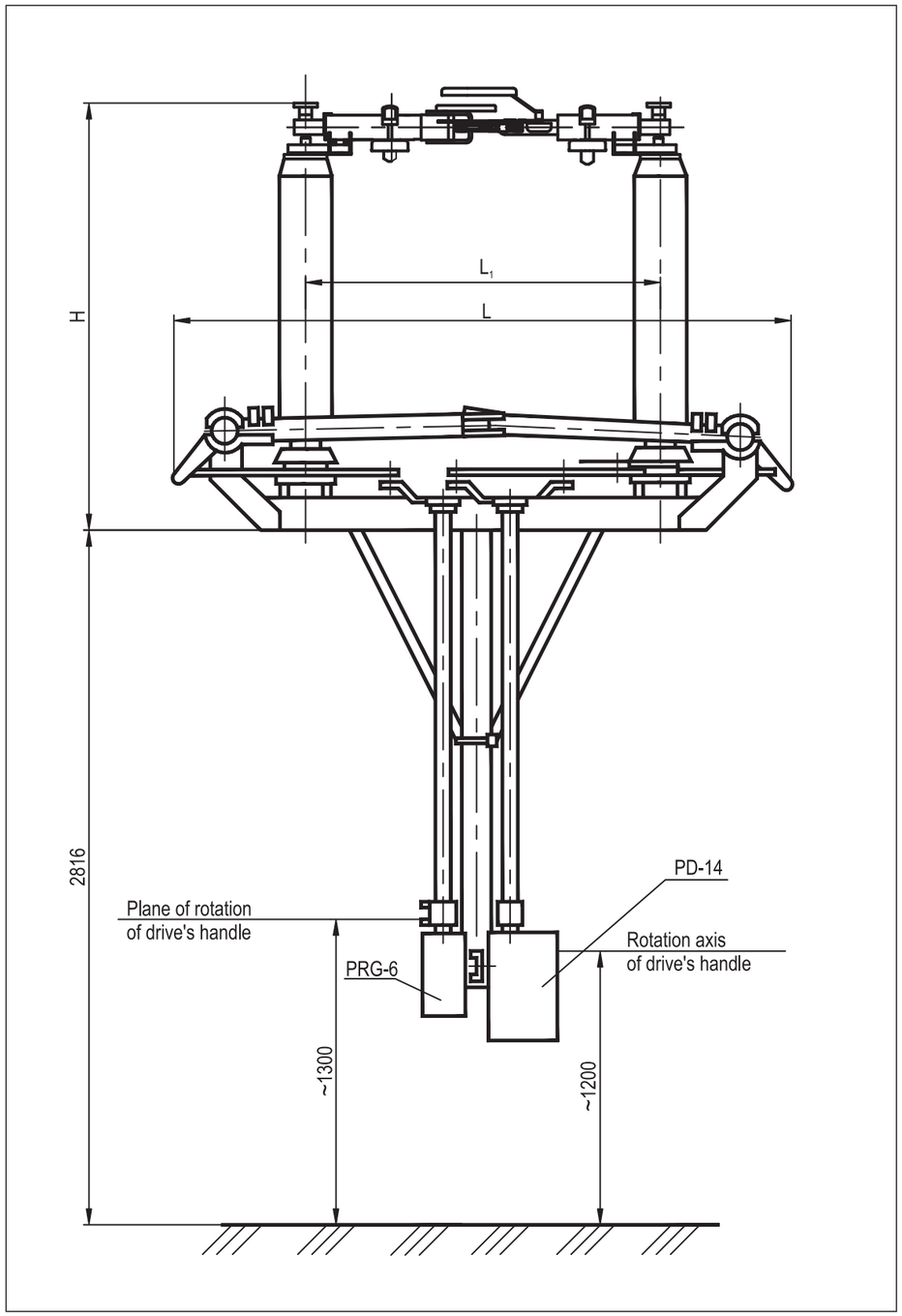
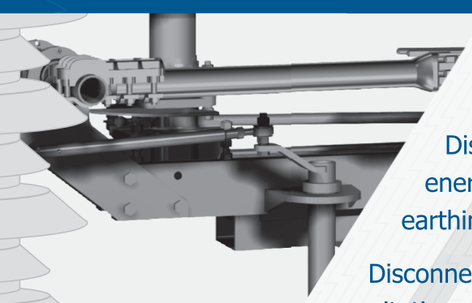
Overall dimensions



Disconnectors of RG series for 110 and 220kV voltage



Intended use

Disconnectors are intended for closing and opening de-energized sections of electric circuits alive and for earthing opened sections with earthing switches.

Disconnectors can be used also to interrupt transformers' excitation currents and charging currents of overhead and cable lines.

Operating conditions

- Disconnectors can be operated outdoors at ambient temperature from -60º up to +40ºC.
- Ice thickness at icing is 20mm.
- Wind speed is no more 40 m/s without icing, no more 15m/s at icing.
- Seismic resistance of 9 points on the MSK-64 scale.
- Installation height above sea level not exceeding 1000m.

facebook.com/zao.zeto
vk.com/zao.zeto

We are making the world brighter

CJSC Plant of Electrotechnical Equipment
79, Oktyabrsky Avenue, Velikie Luki Town, Pskov region, Russia, 182113

Tel.: +7 (81153) 6-37-72
info@zeto.ru | zeto.ru

CJSC Plant of Electrotechnical Equipment
79, Oktyabrsky Avenue, Velikie Luki Town, Pskov region, Russia, 182113

Main technical characteristics

Disconnectors' designation	RG-110/1000-40 UKHL1	RG-110.II/1000-40 UKHL1	RG-K-110/1000-40 UKHL1	RG-K-110.II/1000-40 UKHL1	RGP-110/1000-40 UKHL1	RGP-K-110/1000-40 UKHL1	RG-110/2000-50 UKHL1	RG-110.II/2000-50 UKHL1	RG-110/2000-63 UKHL1	RG-110.II/2000-63 UKHL1	RG-110/3150-63 UKHL1	RG-110.III/3150-63 UKHL1	RGP-110/2000-50 UKHL1	RGN-110/1000-40 UKHL1	RGN-110.II/1000-40 UKHL1	RGN-K-110/1000-40 UKHL1	RGN-K-110.II/1000-40 UKHL1	RGN-SK-110/1000-40 UKHL1	RGN-SK-110.II/1000-40 UKHL1	RGN-V-110/1000-40 UKHL2	RGN-V-110.II/1000-40 UKHL2	RGNP-110/1000-40 UKHL1	RGNP-K-110/1000-40 UKHL1	RGNP-SK-110/1000-40 UKHL1	RGN-110/2000-50 UKHL1	RGN-110.II/2000-50 UKHL1	RGN-SK-110/2000-50 UKHL1	RGN-SK-110.II/2000-50 UKHL1	RGN-110/3150-50 UKHL1	RGN-110.II/3150-50 UKHL1	RGNP-110/2000-50 UKHL1	RGNP-SK-110/2000-50 UKHL1	RGNP-110/3150-40 UKHL1	RG-220/1000-40 UKHL1	RG-220.II/1000-40 UKHL1	RG-220/2000-50 UKHL1	RG-220.II/2000-50 UKHL1	RG-220/2000-55 UKHL1	RG-220.II/2000-55 UKHL1	RG-220/2000-63 UKHL1	RG-220.II/2000-63 UKHL1	RG-220/3150-63 UKHL1	RG-220.II/3150-63 UKHL1	RGN-220/1000-40 UKHL1	RGN-220.II/1000-40 UKHL1	RGN-220/2000-50 UKHL1	RGN-220.II/2000-50 UKHL1	RGN-220/2000-55 UKHL1	RGN-220.II/2000-55 UKHL1	RGN-220/2000-63 UKHL1	RGN-220.II/2000-63 UKHL1	RGN-220/3150-63 UKHL1	RGN-220.II/3150-63 UKHL1	RGP-220/1000-40 UKHL1	RGNP-220/1000-40 UKHL1
Rated current, kA	1000						2000				3150		2000	1000											2000				3150	2000	3150	1000		2000					3150	1000		2000				3150	1000	
Peak withstand current, kA	1000						125		160		160		125	100											125				100	100	125	138	160					100		125	138			160	100	
Short-time withstand current, kA	40						50		63		63		50	40											50				40	40	50	55	63					40		50	55			63	40	
Test short-time (one-minute) power frequency voltage, kV																																																
- relative to ground and between poles							230																		230							460							440						460	440
- between open contacts							265																		230							530							460						530	460
Lightning impulse test voltage 1.2/50μs, kV:																																															
- relative to ground and between poles							550																		450							1050							900						1050	900
- between open contacts							630																		570							1200							1100						1200	1100
Overall dimensions																																															
- L							2250							2140		2320										2140							4120							2940						4120	2940
- L							1400																		1240							2620							2250						2620	2250
- H	1680						1715				1785		1715	1510											1550				1620	1550	1620	2870		2890					2670		2690				2723	2870	2723

Construction features and advantages

- High-strength porcelain and polymer insulators recommended by OJSC "Federal Grid Company" are used in disconnectors, their degree of pollution can vary from I up to IV as per GOST 9920.
- Insulation of RG disconnectors in comparison with RGN and RDZ disconnectors withstands higher lightning impulse test voltages relative to ground and between poles so they can be operated in the regions of high mountains.
- Reliable contact systems and connections provide working capacity at working loads and high stability to short-circuit currents.
- All contact surfaces of current-carrying circuit are galvanic tin-plated or silver-plated, plate-like silver with mechanical life up to 10000 cycles is used in detachable contacts.
- All necessary means for contact parts' protection to provide reliable operation in severe icing conditions (30mm) are available.
- Contact terminal is made symmetrically relative to insulator's axis and allows connection both flexible and rigid busbars without transition elements.
- Earthing switches are reliably fixed in their closed position from kicking forces at short-circuit currents.
- Mechanical interlock is available.
- Minimal efforts while operation due to the usage of out-of-service bearing units with closed ball bearings and hinge joints not requiring lubrication in all friction units.
- Reliable anticorrosive protection of ferrous metals with hot or thermodiffusion zinc, nonferrous metals – with galvanic tin.
- Screen fittings, anti-icing casings are made from aluminum alloys.
- Disconnectors are equipped with PD-14 electric motor drives meeting all up-to-date requirements and having several advantages:
  - drives' cubicles are manufactured from stainless steel,
  - access inside the cubicle is from three sides (serviceability),
  - high-quality components are used,
  - cubicle's construction excludes water entry inside it,
  - it is completely adapted to automated control system of technological process,
  - a possibility of manual operation (a handle is fixed inside the cubicle).
- PRG-6 manual drives have nonremovable folding handles.
- Drives are completed with switching devices of KSAM 12 type and electromagnet interlock, they are arranged in usable and serviceable zone of a bracket included into supply set.
- Disconnectors' supplies are made as enlarged units, completed with connecting elements allowing mounting without welding; frames and supports for disconnector's installation are supplied as per order.
- Connecting dimensions of RG disconnectors coincide with replaceable RDZ series.
- All RG disconnectors possess high performance characteristics excluding maintenance during the whole service life and fully meet up-to-date requirements.

Symbolic designation

RG(N) (P)X_1X_2-X_3-X_4X_5/X_6-X_7 UKHL1 (2)

R	- Disconnector;
G	- Horizontal-rotary type;
N	- Normal insulation level as per GOST 1516.3; with higher level – a letter is absent;
P	- With polymer insulation corresponding to II degree of atmosphere pollution as per GOST 9920 (for disconnectors with porcelain insulation a letter is absent);
X_1	- Number of earthing switches (1 or 2);
X_2	- Arrangement of earthing switches (a – from the side of main blade with lamellas, b – from the side of contact blade with "cam");
X_3	- For in-series, step-in-series or vertical installation (K, SK or V);
X_4	- Rated voltage (110 or 220), kV;
X_5	- II is index designating degree of insulation pollution as per GOST 9920 (for slight degree of pollution figure I is not indicated);
X_6	- Rated current (1000, 2000 or 3150), A;
X_7	- Short-time withstand current (40; 50; 55 or 63), kA;
UKHL1(2)	- Climatic version and arrangement category as per GOST 15150.