Technical Sheet Sliprings Type PRP

Main Performances

Housing	In thermoplastic insulating material		
Inside passage	42 mm diameter through steel pipe for the passage of hoist cables, fluid cables and piston stems		
Positioning	Vertical axis		
Cable entry	Through 1/2" Gas cable entry on the inferior and superior flange. Inside terminal to connect the rings		
Brushes	20 A copper-graphite brushes, 30 A blade or copper-graphite and 50 A blade or copper-graphite		
Executions	From 6 to 36 rings 20 A from 4 to 12 rings 30 A and from 4 to 12 rings 50 A. Mixed executions with 4 rings 30 A and till 30 rings 20 A		
Armonized rules	CEI-EN 60947-1 CEI-EN 60529 2014/35/UE – 2014/30/UE – 2006/42/CE Directives		
Marking	CE		

Electrical Features

Nominal voltage	660 V ac - dc
Nominal current	lth 20 A - 30 A
Protection degree	IP 51
Max rotating speed	30 revs / min
Test voltage	2,5 kV
Operating temperature	- 20 °C ÷ + 60 °C

Availability on demand:

- Mixed versions with 20 A / 30 A / 50 A rings
- Signal versions with gold or silver rings

Standard Types

20 A	30 A	50 A
Type N° Rings	Type N° Rings	Type N° Rings H=mm*
G PRP B6 6	G PRP C4L 4	- 260
G PRP B9 9	G PRP C6L 6	G PRP D4L 4 290
G PRP B12 12	G PRP C8L 8	- 320
G PRP B15 15	G PRP C10L 10	- 350
G PRP B18 18	G PRP C12L 12	G PRP D8L 8 380
G PRP B21 21	G PRP C14L 14	- 410
G PRP B24 24	G PRP C16L 16	G PRP D12L 12 440
G PRP B27 27	G PRP C18L 18	- 470
G PRP B30 30	G PRP C20L 20	- 500
G PRP B33 33	G PRP C22L 22	- 530
G PRP B36 36	G PRP C24L 24	- 560

For 30 A and 50 A executions, please omit the final "L" of the code if you need copper-graphite brushes

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Installation and Wiring

The PRP slipring has to be installed only by qualified personnel in compliance with current safety standards. Power to the machine must be turned off before carrying out cabling. Connections are to be made in compliance with the wiring scheme of the controlled equipment. After installation has been completed, the installer is required to check that all commands are working properly. Avoid prolonged contact with oils and acids when using the equipment, as these may damage the products.

- 1) Using the locknuts (Ref. 10), attach the central pipe (Ref. 2) to a minimum 3 mm thick plate with a central hole of Ø 48.5÷52.5 mm (using the reducing cable clip on the nuts). As an alternative the central pipe (Ref. 10) can be attached to a plate with a threaded hole of Ø 48 mm, 1.5 mm pitch using the locknuts as jam nuts (Ref. 2).
- 2) Rotation is achieved thanks to 4 Ø 13 mm pivots (Ref. 7) situated on the cover (Ref. 1) at a distance of 100 mm from each other. We recommend the coupling to be made with slack to take up any possible runout during rotation. Rotation can also be achieved by attaching the cover (Ref. 7) using the 4 pivots (Ref. 8), thus enabling the central pipe to rotate by (Ref. 10) thanks to a suitable coaxial joint.
- 3) The cables are connected to the brushes through the pipe union (Ref. 3) on the superior flange (Ref. 15). Please ensure that the wires do not interfere with any moving parts. The rings are connected to the terminal board through the pipe union (Ref. 3). During the tightening of the cables to the brushes, brush holders must be locked.
- 4) Please check the equipotential of any surfaces not generally recommended to be used under tension, and the ground connection using the cables provided.

Maintenance

A programme of periodical maintenance is required to be carried out to ensure that the PRP slipring is kept in perfect working order. All maintenance is to be effected by qualified personnel using only original spare parts. The first maintenance is to be carried out within 300 hours rotation (50 revs/min) or 12 months after installation. Successively, maintenance should be carried out every 18 months. Any defective or altered parts must be replaced promptly, even outside the maintenance schedule, as they could impact on the safety of the device. In particular:

- 1) Disconnect from power source and wait until the internal parts have cooled down.
- 2) Remove the mobile semicovers (Ref. 22).
- 3) Copper-graphite brushes execution: check the brushes for wear and tear, and check that they fit properly to the rings. Blade brushes execution: check the brushes and rings for wear and tear. As for the brushes 20 Amps, they must be in contact with the rings, without lifting the holders.
- 4) Copper-graphite brushes execution: remove copper-graphite dust with de-humidified compressed air or a clean brush. Blade brushes execution: remove dust or grease and grease again with a suitable lubrificant.
- 5) Check tightness of cables.
- 6) Check that the cover seal is in good condition.
- 7) Replace the mobile semicovers (Ref. 22).

Please note that the guarantee does not cover any equipment whose parts have been modifi ed and tampered. RAVIOLI declines any responsibility for damage deriving from incorrect installation or use of the product.

Dimensions

