

# Technical Sheet

## Sliprings Type PRP

### Main Performances

<b>Housing</b>	In thermoplastic insulating material
<b>Inside passage</b>	42 mm diameter through steel pipe for the passage of hoist cables, fluid cables and piston stems
<b>Positioning</b>	In vertical axis with threaded pipe as illustrated here below
<b>Cable entry</b>	Through 1/2" Gas cable entry on the lower and upper flange. Inside terminal to connect the rings
<b>Brushes</b>	20 A copper-graphite brushes, 30 A blade or copper-graphite and 50 A blade or copper-graphite
<b>Executions</b>	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
<b>Armonized rules</b>	CEI-EN 60947-1 CEI-EN 60529 2014/35/UE – 2014/30/UE – 2006/42/CE Directives
<b>Marking</b>	CE

### Electrical Features

Nominal voltage	660 V ac - dc
Nominal current	Ith 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		H=mm*
Type	N° Rings	Type	N° Rings	Type	N° Rings	
<b>G PRP B6</b>	6	<b>G PRP C4L</b>	4	–		260
<b>G PRP B9</b>	9	<b>G PRP C6L</b>	6	<b>G PRP D4L</b>	4	290
<b>G PRP B12</b>	12	<b>G PRP C8L</b>	8	–		320
<b>G PRP B15</b>	15	<b>G PRP C10L</b>	10	–		350
<b>G PRP B18</b>	18	<b>G PRP C12L</b>	12	<b>G PRP D8L</b>	8	380
<b>G PRP B21</b>	21	<b>G PRP C14L</b>	14	–		410
<b>G PRP B24</b>	24	<b>G PRP C16L</b>	16	<b>G PRP D12L</b>	12	440
<b>G PRP B27</b>	27	<b>G PRP C18L</b>	18	–		470
<b>G PRP B30</b>	30	<b>G PRP C20L</b>	20	–		500
<b>G PRP B33</b>	33	<b>G PRP C22L</b>	22	–		530
<b>G PRP B36</b>	36	<b>G PRP C24L</b>	24	–		560

Add an "L" at the end of the code for blade brushes, only for 30 A and 50 A executions.



## Installation and Wiring

The PRP slipping 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. 2), attach the central pipe (Ref. 10) to a minimum 3 mm thick plate with a central hole of  $\varnothing 48.5 \div 52.5$  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  $\varnothing 48$  mm, 1.5 mm pitch using the locknuts as jam nuts (Ref. 2).
- 2) Rotation is achieved thanks to 4  $\varnothing 13$  mm pivots situated on the cover (Ref. 7) 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. The movement can also be obtained by rotating the central tube (Ref. 10) by means of a suitable coaxial joint and by keeping the cover (Ref. 7) fixed by the 4 pivots.
- 3) The cables are connected to the brushes through the pipe union (Ref. 3) on the lower flange (Ref. 15). The rings are connected to the upper terminal board (Ref. 6) through the pipe union (Ref. 3). Please ensure that the wires do not interfere with any moving parts. 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 slipping 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 promptly replaced, even outside the maintenance schedule, as they could impact on the device safety. 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 lubricant.
- 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 modified and tampered. RAVIOLI declines any responsibility for damage deriving from incorrect installation or use of the product.

## Dimensions

