

Technical Sheet

Sliprings

Type PMR PREMIUM

Main Performances

Housing	In aluminium
Positioning	On vertical axis, with cover assembled on top
Connections	Rings cabled with 2m cable
Cable entry	Inside the fastener pipe for the rings and through the side cable inlets for brush holders
Brushes	100A blade, 10A touch system, gold-silver touch system for signals
Executions	version in unique 10A composition, or mixed 100A / 10A version
Optional	absolute encoder
Marking	UE
Armonized rules	EN 60947-1 EN 60529 EN 60204-1
Directives	2014/35/UE - 2014/30/UE - 2006/42/CE

Electrical Features

Nominal voltage	50 V ac - dc
Nominal current	lth 10 A - 100 A
Test voltage	500 V ac - dc
Insulation resistant	>200 MOhm at 500 V ac - dc
Max rotating speed	20 revs / min
Protection degree	IP 65
Operating temperature	- 20 °C ÷ + 60 °C

Standard Models

Electrical passages

Code	Rings type	H = mm
GPMRV2T14	2 x 100A + 14 x 10A	177
GPMRV2T20	2 x 100A + 20 x 10A	198
GPMRV2T32	2 x 100A + 32 x 10A	240

Optional absolute encoder



Installation and Wiring

The **PMR Premium** slipring must be installed only by qualified personnel in compliance with current safety standards.

Power feeding must be turned off before installing cabling connections.

Connections must follow the wiring scheme of the controlled equipment.

After installation has been completed, the installer should check all controls for proper operation.

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. 1) to a minimum 3 mm thick plate with a central hole of $\varnothing 40,5$ mm. Alternatively the central pipe (Ref. 1) can be connected to a plate with a threaded hole of $\varnothing 40$ mm, 1.5 mm pitch using the locknuts as jam nuts (Ref. 2);
- 2) Rotation is achieved using the two pivots of the base (Ref.3). 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 base (Ref. 3) using the pivot (Ref. 1) situated on the plate, enabling the central pipe to rotate (Ref. 1) thanks to a suitable coaxial joint.
- 3) The cables are connected to the brushes through the cable inlets (Ref. 4) and the connector (Ref.5). Ensure that the wires do not interfere with any moving parts. The cables connected to the rings protrude from the central pipe by approx. 2 m (Ref. 1). Longer cables are available upon request.
- 4) Using the cables provided check the equipotential of any surfaces not generally recommended to be used under voltage and the ground connection.

Maintenance

Periodic maintenance is required to ensure that the PMR Premium slipring is kept in perfect working conditions. All maintenance is to be done by qualified personnel using only original spare parts. The first maintenance must be done within 300 operations hours (20 revs/min) or in any case within 12 months from the installation. Subsequent maintenance should be carried out every 18 months. Any defective or worn parts must be replaced promptly, even out of the maintenance schedule, as they could affect the safety of the device. In particular:

- 1) Disconnect from power source and wait until the internal parts have cooled down;
- 2) Remove the cover (Ref. 6);
- 3) Check the consumption of 10A pads and signals, replace if completely worn;
- 4) Remove dust with de-humidified compressed air or a clean brush;
- 5) Check blade and power rings conditions;
- 6) Remove dust with de-humidified compressed air or a clean brush, lubricate again using an appropriate conductive lubricant;
- 7) Check the tightness of cables;
- 8) Check that the cover seal is in good condition;
- 9) Replace the cover (Ref. 6).

Please note that the guarantee does not cover any equipment which parts have been modified or tampered.

RAVIOLI declines all responsibility for damage caused by incorrect installation or improper use of the product.

Dimensions

