

ZOOM

CG677

CARBON BRUSHES FOR WIND TURBINES



IMPROVED WIND GENERATOR PERFORMANCE THANKS TO LOWER RUNNING TEMPERATURES

- Increased brush and slip ring life
- Designed for high loads, up to 20 A/cm² (and higher)
- Drop-in replacement for turbines with power output upgrade packages

A UNIVERSAL / VERSATILE GRADE

- Designed specifically for wind power applications in any climatic condition on stainless steel or bronze slip rings
- Brushes field-tested successfully to last longer on all platforms even under heavy loads
- 67 % metal content for high electrical conductivity
- Silver-tamped connections, meaning improved performance during production peaks and added resistance suited to any climatic condition including extreme ones

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CG677 advantages:

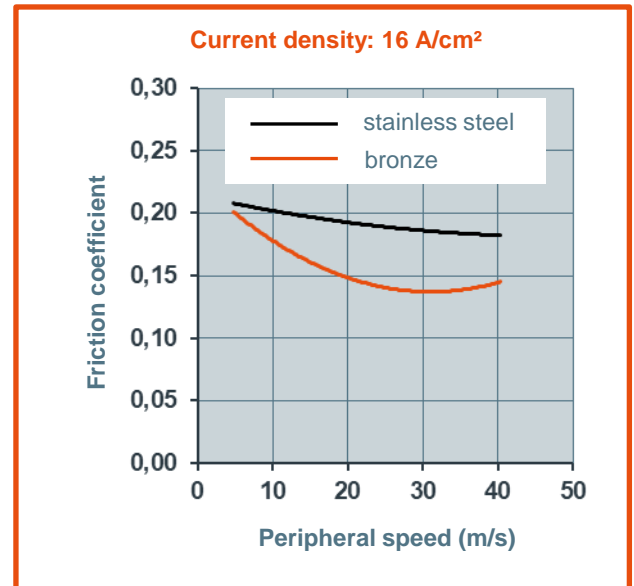
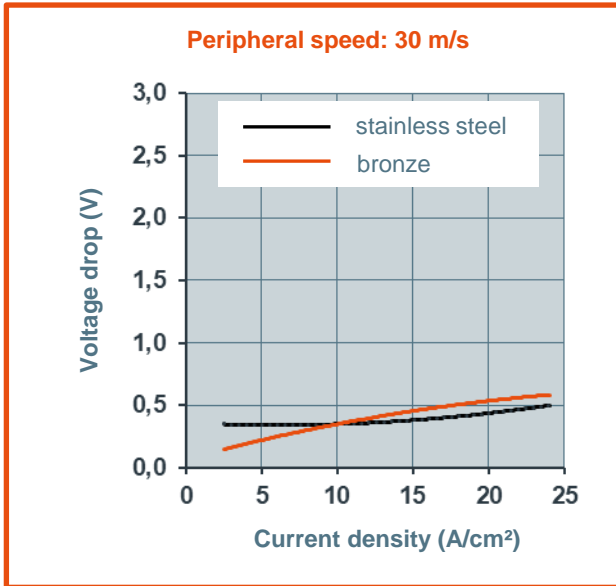
- ▶ **Low voltage drop**
 - Cool operating temperature
- ▶ **Good thermal conductivity**
 - Improved heat dissipation, which leads to lower slip ring temperatures
- ▶ **Good patina and good sliding contact**
 - Optimum performance on both stainless steel and bronze rings
- ▶ **High thermal stability**
 - No material expansion
- ▶ **Low and even brush wear**
 - Balanced current distribution in all brushes, eliminating uneven brush wear and delaying brush wear trigger

Technical characteristics:

- Relative density: 4
- Resistivity: 20 $\mu\Omega\cdot\text{cm}$ / 7.9 $\mu\Omega\cdot\text{in}$
- Flexural strength: 65 MPa / 9,427 PSI
- Metal content: 67 %

Recommended operating conditions*:

- Current density: 12-20 A/cm² / 75-125 A/inch²
- Linear speed: < 30 m/sec / 5,900 fpm
- Pressure on carbon brush: 18-25 kPa / 2.6-3.6 PSI



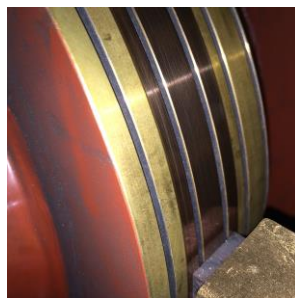
* CG677 grade has proven itself under heavy operating loads and complete spectrum of climatic conditions.

Recommended checks for optimized operation:

- adapted cooling – functional ventilation systems
- optimized groove – slip ring groove depth
- surface conditions – slip ring roughness and run-out within specification

Further technical information @www.mersen.com. Expertise upon request.

Good patina



Brushes wearing evenly and lasting longer



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