

ZOOM

CG677

GRADE CG677
CARBON BRUSHES
FOR WIND TURBINES



CG677 advantages:

- **67 % metal content**
 - ➔ High electrical conductivity
- **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
- **Silver-tamped connections**
 - ➔ Improved performance during production peaks and added resistance suited to any climatic condition including extremes

IMPROVED WIND GENERATOR PERFORMANCE THANKS TO LOWER RUNNING TEMPERATURES

- Increased brush and slip ring life
- Designed for Higher Loads
- Drop-in replacement for turbines with power output upgrade packages

A UNIVERSAL / VERSATILE GRADE

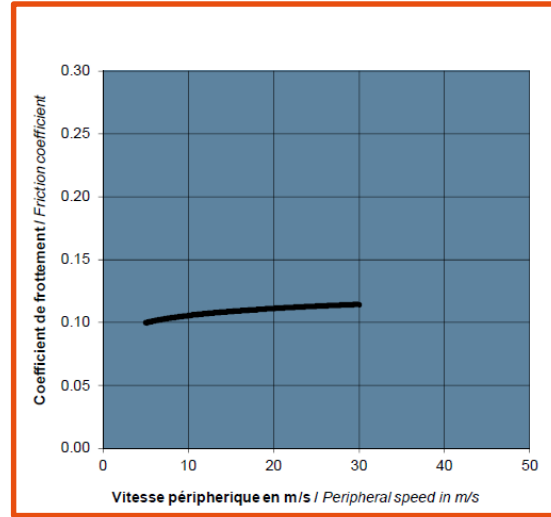
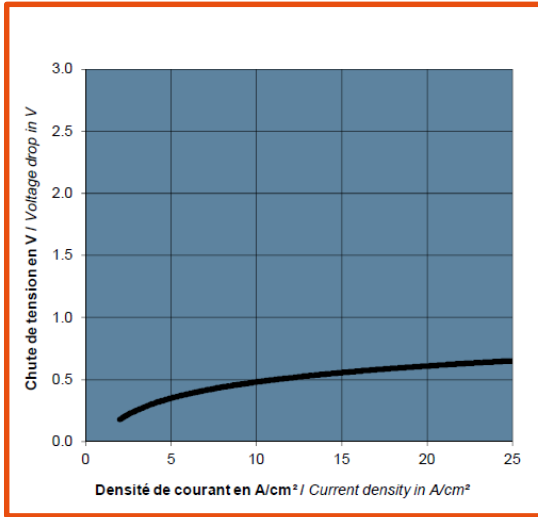
- Designed specifically for wind power applications in any climatic condition on stainless steel or bronze slip rings
- Brushes field tested successfully to last longer on all platforms even under heavy loads

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 %



Mersen CG677 (p/n HCH-30X) drop-in replacement brush for Mersen CG626 (p/n HCH-3) and CG626X (p/n HCH-3X)



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: 20 kPa / 2.9 PSI

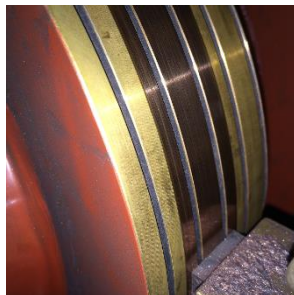
* CG677 grade has proven itself under heavy operating loads and complete spectrum of climatic conditions.

Recommended checks for optimized operation:

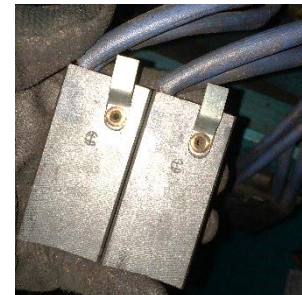
- adapted cooling – functional ventilation systems
- optimized groove – slip ring groove depth
- surface conditions – slip ring roughness and run-out within specification

Further technical information and expertise available @ www.mersen.com.

Good patina



Brushes wearing evenly and lasting longer



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Please contact Mersen in case your operation conditions are beyond above specified limits.

Contact: info.ptt@mersen.com