

ZOOM

# GRADE EG8220

## CARBON BRUSHES FOR TRACTION MOTORS



### EG8220, MERSEN'S RELIABLE SOLUTION

Mersen is a world leader in the manufacturing of carbon brushes for all types of motors and generators.

After extensive years of experience, grade EG8220 has been developed specifically for railway and transit traction motors. Today **EG8220 is used worldwide and provides a good technical and economical performance.**

### TAILORED BRUSH FEATURES

Mersen can supply you with carbon brushes of various designs, including shapes, components and sizes, with a high quality of manufacturing, in particular cable connection by tamping.

When required, **we could adjust the design** (grade, cable, top pad, wafer size...) **to adapt the carbon brush specifically to your DC motor for its application.**

MERSEN PROPERTY

### EG8220 advantages:

- ▶ **Impregnated grade for higher mechanical strength**
  - Good operation in severe conditions
  - Low wear rate
  - Consistent brush life
- ▶ **Good commutation** over a wide range of speeds and environmental conditions
  - Consistent commutating performance
  - No flashovers or other damaging events

With good commutation ability, no abrasiveness, and special impregnation, the grade **does not attack the commutator:**

- Longer maintenance periods between rectifications
- Longer commutator life

## GRADE SPECIFICATION

PHYSICAL CHARACTERISTICS according to IEC 60413:1972		
Classification	ELECTROGRAPHITE	
Metal content	0%	
Resistivity	5,300 / 0.002	$\mu\Omega.cm / \Omega.in$
Flexural strength	37 / 5,400	MPa / PSI
Shore hardness	85	-
Bulk density	1.82	-

RECOMMENDED RUNNING CONDITIONS		
Current density	8 – 12 / 52 - 77	A/cm <sup>2</sup> / A/in <sup>2</sup>
Peripheral speed	<50 / <10,000	m/s / ft/min
Pressure	Depending on application	

Contact us to request our complete technical data sheets as well as our safety data sheets.

### A WORLD-RENOWNED GRADE

Operational properties can be optimized by enhancing the **mechanical stability** (shape, components, friction coefficient) and **electrical performances** (voltage drop at contact, commutation ability, load capacity), **reducing the sensitivity to environmental condition** (protecting / polishing / lubricating action on the commutator skin), etc. The function of a good brush is further explained in our technical data sheet reference TDS-01.



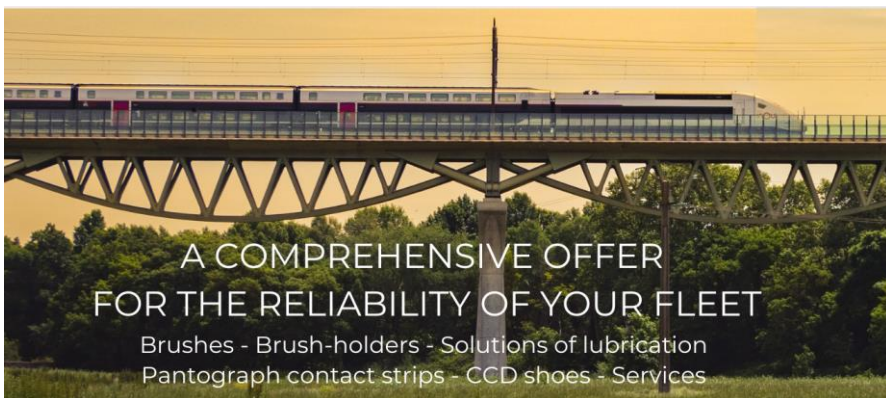
### MERSEN SERVICES

Mersen, as a reference supplier of electric motor manufacturers, also offers **dedicated services of refurbishment, replacement of brushes and brush-holders, re-engineering and trainings.**

#### IN SITU MAINTENANCE SERVICES



**TOOLS AND DIAGNOSTIC DEVICES**  
**TRAINING & TECHNICAL SEMINARS**



### A COMPREHENSIVE OFFER FOR THE RELIABILITY OF YOUR FLEET

Brushes - Brush-holders - Solutions of lubrication  
Pantograph contact strips - CCD shoes - Services

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Mersen products have been designed, manufactured and tested by Mersen for a range of specific industrial application to be operated depending on particular specification and climatic conditions.

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