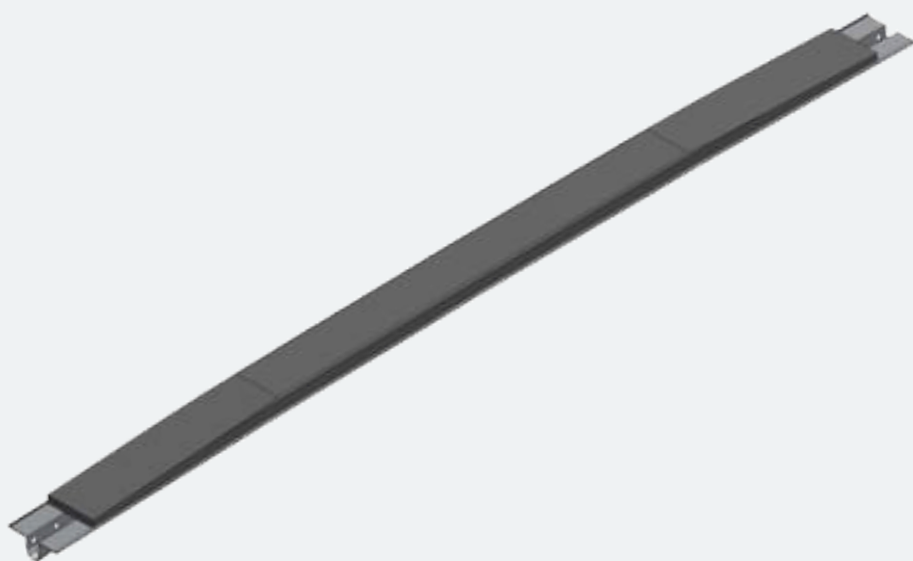


TRACTION AND TRANSIT

ZOOM

PANTOGRAPH STRIPS FOR CITADIS TRAMWAYS (ALSTOM)



© Matthieu Riegler, CC-BY

CITADIS TRAMWAY

- The world's most popular tramway system
- 750 V DC supply
- Max speed 100 km/h
- 1 pantograph and 2 carbon strips

MERSEN PRODUCTS: A RELIABLE AND ECONOMICAL OPTION

ADVANTAGES

- Average lifetime between 80,000 and 120,000 km
- Quality control in accordance with EN50405 (Cenelec)

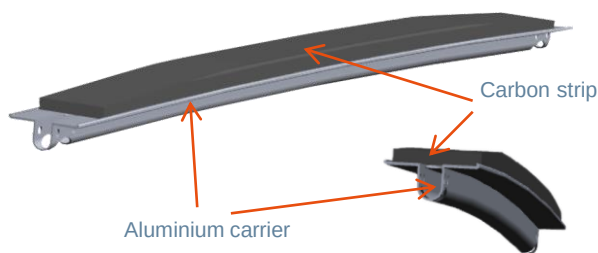
Mersen also supplies
solutions for Earth Return
Current Units (ERCU):

- Carbon brushes
- Brush-holders
- Technical assistance
- Training

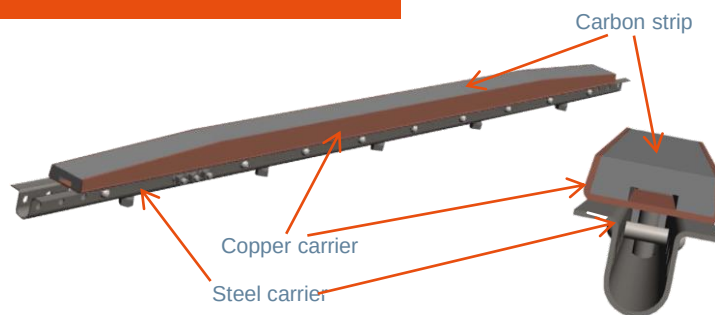


Carbon brushes for ERCUs

MERSEN'S SOLUTION: 2 TYPES OF PANTOGRAPH STRIPS IN GRADE P5696



Main pantograph strip
Reference 3-54201



Frost resistant strip
Reference 3-39579

04/03/2015

APPLICATION CAPTAGE CURRENT COLLECTION

P5696

FICHE TECHNIQUE

CARACTERISTIQUES PRINCIPALES MOYENNES / AVERAGE PHYSICAL CHARACTERISTICS

Densité relative / Relative density ¹	2,25
Résistivité / Resistivity ¹	6 $\mu\Omega\cdot m$
Rupture à la flexion / Flexural strength ¹	70 MPa
Imprégnation cuivre / Copper impregnation	22 %
Résilience Charpy / Charpy resilience ²	1,2 kJ/m ²

Captage à l'arrêt / Standstill current test

Conditions d'essai / Test conditions

Section caténaire / Catenary section	107 mm ²
Pression / Pressure	70N
Courant / Current	70A / 110A
Largeur de bande / Strip width	60mm

CONDITIONS D' APPLICATION RECOMMANDEES / RECOMMENDED RUNNING CONDITIONS

J_{max} : Courant linéaire maximum en opération / Maximum operating linear current density	12 A/mm
Vitesse maximale / Maximal speed running	350 km/h

DOMAINE D'APPLICATIONS / APPLICATION FIELD

Bandes de pantographe pour 3kV-1,5kV-750V DC / Pantograph carbon strips for 3kV-1,5kV-750V DC
 Patins de 3ème rail / 3rd rail shoes
 Frotteurs Industriels / Industrial sliding contacts

MERSEN France Amiens S.A.S.
 ANCIENNEMENT CARBONE LORRAINE APPLICATIONS ELECTRIQUES
 www.mersen.com

¹ Selon / According to IEC 60413 ² Selon / According to ISO 178-1

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Drawings and Technical data sheets are available upon request

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