Compact with integrated Fuse USA

CURRENT COLLECTOR DEVICES (CCD)

CCD FOR STANDARD BOGIE

Current collector devices are used by Metros to collect the energy from the third rail to energize the Electrical Multiple Unit installed in the trailers.

For 40 years, Mersen offers the largest range of Current Collector Devices to the market with almost 200 applications running every day all over the world.

The comprehensive range of CCDs for Metros is designed for all kinds of configurations:
- Regular steel wheel Metro
- Pneumatic wheel Metro,
- Monorail and
- Driverless metro applications

They can operate at 750VDC and 1.500VDC.

All technologies shown in this brochure can be customized to your technical environment and available space on your bogie.

The CCD can be fixed on a beam with integrated DC fuse protection and more functions.

All those technologies are proven and have shown their reliability every day for more than 40 years.

Some references for this CCD:
Atlanta (USA)....

FEATURES & BENEFITS
- Proven technology for 40 years with more than 200 applications running every day
- CCD’s dimensions and characteristics can be customized to your application
- Minimum weight, especially low dynamic mass
- Low noise level
- Extremely compact
- Cost effective, proven technologies and simple mounting
- Low cost maintenance

APPLICATIONS
- Third rail applications for Metros

STANDARDS
- IEC 61373
Compact with integrated Fuse USA

TECHNICAL DATA OVERVIEW

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage DC</td>
<td>750 VDC</td>
</tr>
<tr>
<td>Amper (A)</td>
<td>800 A</td>
</tr>
<tr>
<td>Speed/Characteristic</td>
<td>90 km/h</td>
</tr>
<tr>
<td>Working Temperature</td>
<td>-40°C / +25°C</td>
</tr>
<tr>
<td>Pressure of the Shoe</td>
<td>120N ±20%</td>
</tr>
<tr>
<td>Humidity</td>
<td>90%</td>
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</tbody>
</table>

DIMENSIONS

Compact with fuse - contact from the Bottom of the shoe
Dwg 128020
FUNCTIONS

Integrated fuse
The fuse protection needs to be as close as possible to the source of energy, this is why Mersen has integrated a fuse protection within the CCD.

Shoe material
Mersen can propose different Shoe materials - Copper; Graphite; Cast iron; Steel; Cupro Alu adapted to your third rail.
Once they are worn, they are very easy to change them for new ones supplied by Mersen.

Weak link
To protect your CCD in case of shock, your CCD can be equipped with a weak link on the collecting shoe arm.
When the CCD hits an obstacle, the arm will break at the weak link section preventing damage of the CCD device.

Adjusting rack
The CCD is equipped with an adjusting rack in order to adjust the shoe vertically once overhauling and wheel reprofiling is performed.
This adjusting rack allows for 40mm adjustment (pitch = 4mm)
FUNCTIONS

Spare part kits
Mersen supplies all the Spare parts kits needed to increase the life time and guarantee and to ensure the reliable service of your current collector devices.
- cables,
- fuses,
- replacement shoes and arms,
- hardware,
- and all necessary components

Training and technical support
The Mersen team can help you in training your maintenance personnel for your new installations all around the world.

Tooling
Besides the spare parts, Mersen can supply the necessary tooling to accurately set your CCD to the technical requirements of your grid and optimize their use.

High, Low and nominal position can be set, also, the tool includes a pressure measurement system to check the pressure of the CCD on the 3rd rail.

This tool is recommended to ensure the proper overhaul, to guarantee a reliable service and longer life time of your CCD fleet.

LCC; RAMS; Type tests
All around the world, Mersen's technical team can help with technical support and can offer you customized training sessions for your Maintenance personnel.
ACCESSORIES

**Brushes**

<table>
<thead>
<tr>
<th>Catalog number</th>
<th>Package</th>
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<tbody>
<tr>
<td>Graphite Shoe</td>
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<tr>
<td>Cupro Alu shoe</td>
<td>1 piece</td>
</tr>
<tr>
<td>Cast Iron Shoe</td>
<td>1 piece</td>
</tr>
<tr>
<td>Copper shoe</td>
<td>1 piece</td>
</tr>
<tr>
<td>Steel shoe</td>
<td>1 piece</td>
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</table>

**Cables**

<table>
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<tr>
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<tbody>
<tr>
<td>Braided cables</td>
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<tr>
<td>Connexion cables</td>
<td></td>
</tr>
</tbody>
</table>

**Connexion cables**

**Traction fuses**

<table>
<thead>
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<tr>
<td>A150Z</td>
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