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

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TECHNICAL DATA OVERVIEW

Voltage DC	750 VDC
Amper (A)	800 A
Speed/Characteristic	90 km/h
Working Temperature	-40°C / +25°C
Pressure of the Shoe	120N ±20%
Humidity	90%

DIMENSIONS

Compact with fuse - contact from the Bottom of the shoe Dwg 1068046



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Compact with integrated Fuse USA

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.



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 verticaly 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

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

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

This tool is mandatory to succeed the maintenance when the great 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



Catalog number	

Brushes

Brushes	
Cast Iron Shoe	1 piece
Copper shoe	1 piece
Cupro Alu shoe	1 piece
Graphite Shoe	1 piece
Steel shoe	1 piece

Package

Cables



Braided cables Braided cables

Connexion cables

Traction fuses



Traction fuses			
Traction fuses			
A150Z	L1068038A		

Item numbe

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