

Certified circuit protection for rolling stock and track power

Shock-hardened power protection

Eaton offers rail-specific modifications for our AC and DC low and medium voltage power protection and control components that meet smoke and fume, shock and vibration, and power surge requirements. Application assistance is available for development of differentiating accessories.





Component leader for rail applications

- Compact power protection and control with proven life
- Fast turnaround of AC and DC products to meet authority bid timelines
- Low arc-flash components and arc-resistant enclosures
- Extended warranty options







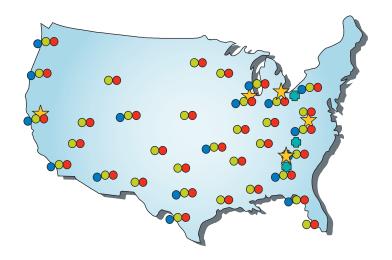


Compact, Globally Certified Circuit Protection Components for Rolling Stock and Track Power

for Rolling Stock and Track Power	
Job-specific products and accessories delivered with speed	Solutions for transit authority bid requirements, such as Series C® low smoke and fume compatible molded-case circuit breakers (MCCBs), compact size Series G® MCCBs, illuminated-handle hydraulic-magnetic circuit breakers (HMCBs) and low arc-flash protection subsystems.
Rugged and reliable for AC and DC ratings	A broad portfolio of low and medium voltage protection components with a wide variety of AC and DC ratings in UL and IEC certifications. Series C MCCBs and HMCBs have a proven track record in performing through decades of shock, vibration, transients and power surges.
Service and support	With a long local history in rail application engineering, we work closely with your engineering and purchasing teams through application design, testing, build and maintenance.
Local availability	On-demand inventory is always available for your job manufacturing requirements, with local service and support available in every metropolitan city in the nation. Additional late-point definition services are available, depending upon your particular needs.

Eaton design and aftermarket support centers

- R&D and engineering technology centers
- Product and site application engineering services
- Sales, representative and dealer network
- Bid and project coordination centers
- Manufacturing and aftermarket product extension services





Eaton rail track power engineering and support services

Eaton backs up its broad family of rail circuit protection products with the awardwinning Electrical Engineering and Support Services group, which offers power generation system consulting studies, installation, grounding and commissioning services, and maintenance and monitoring services. Its power systems engineers have an average of 15 years experience with multiple power generation and electrical industry brand names, and more than 50% hold electrical engineering master's degrees.

How a Power Outage Can Affect Your Revenue

Unplanned power outages lose revenue	It's not uncommon for a circuit breaker not meant for rail duty to begin nuisance tripping before the end of rolling stock life, due to the severe shock, vibration, power transients and surges that typically wear out breakers not rated for such duty. The total rolling stock downtime and maintenance can easily cost an average \$10K or more per hour to correct the problem.
Potential for revenue loss is hidden in every under-designed rail circuit protection application	Today's newer rolling stock and trackside power systems require high-performance circuit protection capable of performing robustly and reliably across the life cycle of the equipment. This requires using industry-specific wires and harnesses, meeting industry shock, vibration and temperature requirements, and providing custom product modifications and accessories to custom fit these demanding circuit protection applications.
Avoid unnecessary service stoppage due to under-performing circuit protection equipment	Eaton Electrical Engineering and Support Services are available for on-site grounding systems and power system ground-fault risks analysis, power distribution electrical system design, turnkey installation and commissioning of equipment, and annual maintenance and monitoring services to keep your rolling stock and trackside power systems ready 24 hours a day, 7 days a week.



Eaton Corporation Electrical Sector

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Management

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