

# IEEE Standard for Performance of DC Overhead Current Collectors for Rail Transit Vehicles

**IEEE Vehicular Technology Society**

Sponsored by the  
Overhead Contact Systems Subcommittee  
of the  
Rail Transportation Standards Committee

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**Abstract:** The general characteristics of pantographs that enable current collection from an overhead contact system on light rail and heavy rail transit systems are described. Definitions pertinent to pantographs, including general definitions, specific pantograph terminology, pantograph components, pantograph dimensions, and operating characteristics are contained in the standard.

The operating requirements that need to be defined by the purchaser of pantographs are stated. In addition, standard dimensions for the collector head and contact strip, various pantograph mechanical and operational requirements, environmental conditions, and maintainability and documentation requirements are specified. Various testing methodologies and requirements are also included.

**Keywords:** collector head, contact strip, gradient, heavy rail, IEEE 1629™, light rail, overhead contact system, pantograph, rail vehicle, railway, streetcar, tracking, traction, tramcar, transit

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