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Chargers for rolling stock

轨道交通 机车车辆变流设备 充电机

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Table of Contents

1 Scope	1
2 Normative references	1
3 Terms and Definitions	1
4 Conditions of use	2
5 Technical Requirements	3
6 Test methods	7
7 Inspection Rules	10
12 Reference	14

Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part

1. Structure and drafting rules for standardization documents" Drafting. Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents. This document is proposed by the National Railway Administration. This document is under the jurisdiction of the National Rail Transit Electrical Equipment and System Standardization Technical Committee (SAC/TC278). This document was drafted by: CRRC Zhuzhou Electric Locomotive Research Institute Co., Ltd., CRRC Yongji Electric Motor Co., Ltd., CRRC Dalian Locomotive Research Institute Co., Ltd., CRRC Dalian Locomotive and Rolling Stock Co., Ltd., CRRC Zhuzhou Electric Locomotive Co., Ltd., CRRC Datong Electric Locomotive Co., Ltd., Locomotive and Rolling Stock Research Institute of China Academy of Railway Sciences Group Co., Ltd. and Qingdao Sifang Alstom Railway Transport Equipment Co., Ltd. The main drafters of this document are. Li Hua, Zhang Xiaoyong, Zhou Shuai, Chen Hong, Kan Jingbo, Wang Wei, Fu Ya'e, Li Zhen, Ma Yingtao, Lü Jiyu and Zhang Qing. Rail transit locomotive and vehicle inverter equipment charger

1 Scope

China's national standard for chargers on rolling stock. Every rail vehicle carries a battery, and the charger that maintains it is one of the least glamorous and most consequential items on board: it feeds the vehicle's low voltage system in service and the battery is what keeps the emergency lighting, the brakes' control, the doors and the radio alive when the traction supply fails. That is the case in which the vehicle is stopped in a tunnel and the battery's state of charge determines what the passengers experience. The charger's

environment is unhelpful - a supply that varies widely and is interrupted at every neutral section, vibration, wide temperature range - and it must be reliable for decades. The standard covers chargers installed on locomotives, EMUs, passenger coaches, suburban rail and urban transit vehicles, specifying conditions of use, technical requirements, test methods, inspection rules, marking, packaging, transport and storage.

This document specifies the conditions of use, technical requirements, inspection rules, marking, packaging, transportation and storage of rolling stock chargers. Appropriate test method. This document is applicable to chargers installed on railway locomotives, EMUs, passenger cars, urban (suburban) railway vehicles and urban rail transit vehicles.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document. For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to This document.

GB/T 1402-2010 Voltage of rail transit traction power supply system

GB/T 2423.1 Environmental testing for electric and electronic products Part

3 Terms and definitions

GB/T 2900.33, GB/T 1402-2010, GB/T 32350.1-2015 and GB/T 25122.1-2018 and the following The following terms and definitions apply to this document.