

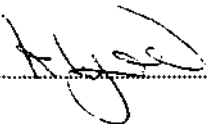
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Business Process Document

Guidance note of low voltage electrical Installations on railway premises (including plugs, sockets, trailing leads and appliances)

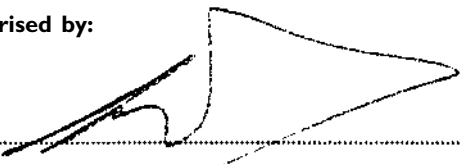
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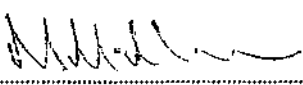
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Issue record

Issue	Date	Comments
I	December 2005	New standard (<i>part of the former RT/E/C/27037 now withdrawn</i>)

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I Purpose

The Regulations for Electrical Installations published by the Institution of Electrical Engineers need to be supplemented for the many special requirements found in the railway environment. These requirements are detailed in NR/SP/ELP/27242 upon which guidance is provided here. Additionally, measures necessary to ensure compliance with the Electricity at Work Regulations and Health and Safety at Work Act are also encompassed.

2 Scope

This document provides guidance on the requirements to be adopted for electrical installations on railway premises (including plugs, sockets, trailing leads and associated appliances). It should be used in conjunction with the current edition of the BS 7671 (I. E. E. Regulations for Electrical Installations) and any other relevant Regulations and Legislation.

3 Reference documentation

Health and Safety Executive

The Electricity Safety, Quality & Continuity Regulations

The Electricity at Work Regulations

H.S.E. Guidance Notes:

HSG141	Electrical Safety On Construction Sites
GS 27HSG85	Electricity At Work – Safe Working Practices
GS 38	Electrical Test Equipment for Use by Electricians
PM 29	Electrical Hazards from Steam/Water Pressure Cleaners etc.
PM 38	Selection and Use of Electric Handlamps

British Standards

BS 88	Cartridge fuses for voltages up to and including 1000 V a.c. and 1500 V d.c.
BS 196	Specification for protected-type non-reversible plugs, socket-outlets cable-couplers and appliance-couplers with earthing contacts for single phase a.c. circuits up to 250 volts
BS 1361	Specification for cartridge fuses for a.c. circuits in domestic and similar premises
BS 1363	Specification for 13 A fused plugs and switched and unswitched socket outlets
BS EN 61140	Protection Against Electric Shock – Common Aspects For Installation And Equipment

BS 2769 & BS EN 50144	Hand-held electric motor-operated tools & Safety Of Hand-Held Electric Motor Operated Tools
BS EN 60742 & BS EN 61558	Isolating transformers and safety isolating transformers requirements
BS 3871 & BS EN 60898	Miniature air-break circuit-breakers for a. c. circuits & R.C.B.O.s to BS EN 61009
BS EN 60309	Specification for industrial plugs, socket-outlets and couplers for a. c. and d. c. supplies
BS EN 60598	Luminaires
BS EN 60529	Specification for classification of degrees of protection provided by enclosures
BS EN ISO 10012	Measurement Management Systems, Requirements For Measurement Processes & Measuring Equipment
BS 6007	Specification for rubber-insulated cables for electric power and lighting
BS 6500	Specification for insulated flexible cords and cables
BS 7671	Requirements for Electrical Installations

Railway Group Standards

GI/RT7007	Low Voltage Electrical Installations
GI/GN7607	Low Voltage Electrical Installations
GK/RT0031	Lineside Signals & Indicators
GI/RT7010	Lighting Of Railway Premises
GI/RT7017	Signalling & Safety Related Telecommunications Power Supplies & Circuits
GI/GN7517	Guidance On Signalling & Safety Related Telecommunications Power Supplies & Circuits

Network Rail Company Standards

RT/E/C/45002	Code of Practice: Electric switch heating installations
RT/E/C/27036	Code of Practice: Electric cable installations associated with P & M in B. R underground and other specified locations
S-PM-448	Standard Specification: Shore based power supplies for traction and rolling stock: 850 volts a.c. single phase
RT/E/PS/00022	400V 3 Phase AC Shore Supply For Use In Non Electrified Areas
RT/E/S/21085	Design Of Earthing & Bonding Systems For 25KV AC Electric Lines
RT/E/S/21028	Ancillary Wiring of Electrical Distribution Equipment On AC & DC Electrified Lines
RT/E/G/00015	Signalling Power Supply Design

4 Definitions

Not used