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Specification

For

British Railways

Standby Power Supply for Electronic Token Control Centre

British Railways Board



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AMENDMENTS

Amd. No.	Date	Text Affected

British Railways Board

STANDBY POWER SUPPLY FOR ELECTRONIC TOKEN CONTROL CENTRE**1. INTRODUCTION**

The mains power supply to the Electronic Token Control Centre can be expected to have occasional failures lasting for a period defined by the local electricity supply authority. To enable the Electronic Token System to continue operating it is necessary to provide a standby power supply. The Electronic Token System equipment can withstand temporary power interruptions, such that an uninterrupted supply is not necessary. This permits a simple standby system to be used. The system will consist of a charger, battery, inverter, and changeover system (see fig. 1).

2. SCOPE

This specification gives details of the requirements for general arrangements, mode of operation and construction. The specification indicates what information the Purchaser must supply to enable a system to be constructed for a particular location.

3. RELATED DOCUMENTS

British Standards	440	- Stationary Batteries (Lead-Acid Plante positive type) for general electrical purposes.
	714	- Cartridge fuselinks for use in railway signalling
	6004	- PVC insulated cables (non-armoured) for electric power and lighting
	6231	- PVC insulated cables for switchgear and control gear wiring
BR Specifications	872	- Flame retardant compound insulated cables for railway signalling
	967	- Railway Signalling Apparatus, Environmental Conditions
DEF Standard	61-12	- Wires, cords and cables, electrical - (Part 1) metric units.

4. THE CHARGER

- 4.1 The charger shall operate from a supply between 95 V and 120 V a.c. at a frequency of 50 Hz, ± 2 Hz. If required, input tapplings at 5 V intervals may be used.
- 4.2 The charger shall be rated at not less than 50 W nominal, and shall be capable of recharging the battery at 10% of its nominal discharge rate.
- 4.3 The charger shall be adjusted so as to keep the battery charged at a voltage of 2.30 Volts per cell of Lead-Acid battery.
- 4.4 The inrush current to the charger shall not blow a 3A fuse to BS 714.
- 4.5 After initial commissioning, the charger shall ~~not~~ require routine adjustment to enable it to maintain correct operation.