



AUSTRALIAN RAIL TRACK CORPORATION

INFRASTRUCTURE, STRATEGY AND PERFORMANCE

Engineering Standards and Documents

The following recommendation, together with attached supporting documentation, has been considered the Manager Standards 11th April 2008.

Documents:

Ref No:	TAR 05-0607-048 - Equipment Type Approval
Subject:	Supporting Information for Type Approval of a Replacement for the Store No 70 Track Circuit Unit
Dated:	17 th September 2007.

Prepared By: Warren Mills, Consultant Signal Engineer Bathurst

Endorsed by: Trevor Moore, Signalling Standards Engineer

Items Considered for Approval:

Manufacturer:	Exetronics Pty. Ltd..
Product:	'Exmode' - DC Track Circuit battery charger.
Item Identification:	Part no. 3V10A (Store 170)

The items in the form presented at the review date were approved for System & Equipment Approval to be used on all ARTC jurisdictions in accordance with the manufacturers published performance criteria and subject to the following.

Relevant ARTC Specifications:

Ref. No.	Title	Status	Date
SPS 02	Environmental Conditions	Issue 1 Revision 2	May '05
SPS 05	Electrical & Electronic Components (Ratings & Construction Requirements)	Issue 1 Revision 3	May '05
SPS 22	Power Supply Units for Signalling Equipment – General Requirements	Issue 1 Revision 3	May '05
SPS 29	Power Supply Units for Signalling Equipment – DC Track Feeds	Issue 1 Revision 3	May '05

Specific Conditions of Approval:

- i. For use with 135 or 140 AH Nickel Cadmium cells.
- ii. Feed fuse rating shall not exceed 1.6A(T) with $I^2t \leq 4A^2\text{Sec.}$
- iii. For use in accordance with ARTC specification SDS 25 and standard typical circuits only modified as required to ensure surge protection (see ii above).

Certificate Issued to:

Exelectronics Pty. Ltd.
P.O. Box 92
Strawberry Hills
New South Wales 2012

Any subsequent change to the design, materials or manufacturing process is not covered by this approval.

Approved for use in the ARTC.



John Furness
Manager Standards

A general condition of approval is that the supplier maintains a quality management system for these products of a standard acceptable to ARTC including a continuing register of all reported faults, fault investigations and rectifications for individual units. ARTC reserves the right to conduct its own audit of the manufacture and supply of these components to maintain their own AS 19011:2003 certification.

APPROVAL No: 08-08-10-040

Approval Date: 11th April 2008