



## AUSTRALIAN RAIL TRACK CORPORATION

### STANDARDS and SYSTEMS

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#### Engineering Standards and Documents

The following recommendation, together with attached supporting documentation, has been considered by the ARTC Manager Standards on 24<sup>th</sup> December 2007.

#### *Documents:*

Ref No:	<b>08-08-10-075</b> Equipment Type Approval
Subject:	'Crompton Greaves' QBCA1 12v Miniature Plug-in Relays
Dated:	12 <sup>th</sup> July 2007.

Prepared By: Arthur Haberlin, Signal Engineer - Equipment  
Endorsed by: Trevor Moore, Signal Standards Engineer

#### *Items Considered for Approval:*

Manufacturer:	Crompton Greaves, Signalling Division, Dhar, India
Product:	Miniature Plug-in Safety Relay.
Item Identification:	Specification No.: QBCA1 - 4842072, Pin Code (BRB): ABCKS, Description - :QBCA1 - 2HF/4F/4B Contact & (Coil) 12v DC Configuration:

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 10	Specification Relays, Plug-in Vital	Issue 1 Revision 3	May '05

### ***Specific Conditions of Approval:***

- i. Each relay shall successfully undergo an additional type specific acceptance testing by the Importer in Australia with a copy of the individual test certificate supplied to ARTC. The test certificate shall reference both the Factory and the Importer test results together with the individual testers' references.
- ii. Especial care shall be exercised when inserting relays into a base drilled for a non-'Network Rail' pin code (pins positions S, T, X, Y or Z drilled) to ensure that the correct relay type is utilised.
- iii. For use in accordance with ARTC specification SDS 25 – 'Circuit Design Standards' and standard typical circuits only.
- iv. This item should be considered as included in list **01-0611-034a** attached to type approval ref: **08-08-10-044** dated 2<sup>nd</sup> February 2007.

### ***Certificate Issued to:***

Selectrix International Pty. Ltd.  
2 Merchant Avenue  
Thomastown  
Melbourne  
Victoria 3074

A general condition of approval is that the supplier remains accredited to ISO 9001 specifically for these products and ARTC is advised on a 12 monthly basis that accreditation is current. ARTC reserves the right to conduct its own audit of the manufacture and supply of these components to AS 19011:2003.

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

**APPROVAL No: 08-08-10-075**

Approval Date: **24th December 2007**

This certificate ~~Supersedes~~, ~~Supplements~~, ~~Suspends~~ prior approval number 08-08-10-044 which remains valid.