

NEW EQUIPMENT AND SYSTEM APPROVAL CERTIFICATE

Certificate No. S 02-1212-138

Approval date 12 August 2013
Approved by OSERG
Report no. TAR -02-1212-138
Report date 2 August 2013

This certificate is issued to

Supplier Frauscher Sensor Technology Australia Pty Ltd
 Suite 2, Level 4, 84 William Street,
 Melbourne, Victoria, 3000

In respect of

Manufacturer Frauscher Sensor Technology
Product description Frauscher FAdC axle counter system
Item identification Refer to Approved Item List.
Application ARTC Network Wide
Relevant Standards SPS 01 Standard Requirements for signalling Electronic Systems
 SPS 02 Environmental Conditions
 SCP 17 Computer Based Interlocking Requirements
 EN50126 Railway Applications – The Specification and Demonstration of Reliability, Availability, Maintainability and Safety
 EN50129 Railway Applications Communications, Signalling and Processing Systems – Safety Related Electronic Systems for Signalling
 EN50159 Railway Applications – Communication, signalling and processing systems – Safety-related communication in transmission systems
 ESI-06-02 Resetting Axle Counters
 OPE-PR-005 Axle Counter Reset Procedure Spencer Jn. to Tarcoola

Relevant Equipment Manuals FAdC D20002-3 Installation / Operation Frauscher Advanced Counter
 FAdC 2.1.x.x-1 & FAdC 2.1.x.x-3 version 2012-03-13
 FAdC D20003-3 Maintenance Frauscher Advanced Counter FAdC 2.1.x.x-1 & FAdC 2.1.x.x-3 version 2012-03-09
 FAdC D20001-4 Design & Planning Manual Frauscher Advanced Counter
 FAdC 2.1.x.x-1 & FAdC 2.1.x.x-3 version 2012-03-08

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Conditions of Approval

1. For use in accordance with ARTC signals construction standards and signal design standards and guidelines.
2. For use in accordance with approved axle counter reset procedures only.
3. All FAdC system data shall be treated as signal design data and shall not be subject to field changes.
4. FAdC vital signal control function shall only be used with closed data communications networks to category 1 of EN50159-2010.
5. A Design Guideline ESI-06-03 'Frauscher Axle Counter Design' Work Instruction shall be documented. This shall include all interfaces into and out of the FAdC system.
6. Designers of the signalling system using the FAdC shall have completed the FAdC design training course and have the competency skill rating for the FAdC system.
7. Manufacturer's guidance on installation and maintenance to be observed.
8. Only components from the Approved Item List (table below) shall be used.
9. Any change to the components or performance of the components to be submitted to ARTC for approval.

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.

Any subsequent change to the design, materials or manufacturing process is not covered by this approval. The manufacturer should notify ARTC of any modification or changes in order to obtain a valid updated certificate.

Note/Comments NIL.

Issue date 5 October 2016

Expiry date N/A

Issued by


John Furness
ARTC Manager Standards

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Approved Item List

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Manufacturer Frauscher

Product description FAdC axle counter system

The following lists the individual items of equipment that are approved and Conditions of Use. Only these items and versions are approved and any or all other items must be submitted for approval.

Model No.	Version	Description	Conditions of Use
10021	N/A	Rail Claw SK140	
10023	N/A	Clamping Bolt BBK11	
10025	N/A	Clamping Bolt BBK22	
10034	N/A	GAK Cable Box SKV20	
11749	GS03	Wheel Sensor RSR180/S—250—5m tail cable	
14620	GS03	Wheel Sensor RSR180/S—250—10m tail cable	
18607	GS03	Wheel Sensor RSR180/S—250—15m tail cable	
16254	GS03	Wheel Sensor RSR180/S—250—25m tail cable	
12205	N/A	Protection Tube 4.8 m	
14475	N/A	Protection Tube 9.8 m	
17443	N/A	Protection Tube 14.8 m	
16906	N/A	Protection Tube 24.8 m	
13753	GS01	Voltage protection BSI004	
17390	N/A	Board Rack BGT07 84TE	
16878	GS01	Evaluation Board AEB001-1	
17028	GS01	Backplane BP-EXB001-1 10TE	
17061	GS01	Backplane BP-EXB001-2 16TE	
17516	GS01	Backplane BP-EXB001-0 8TE	
17520	GS01	Backplane BP-EXB001-4 24TE	
17524	GS01	Backplane BP-EXB001-8 40TE	
17535	GS01	Backplane BP-EXB001-19 84TE	
17437	GS01	Supply Board PSC001	
17438	GS01	Communication Board COM-AdC 001	
20247	GS03	Communication Board COM-AdC 001	
17439	GS01	In/Output Board IO-EXB001	
18159	N/A	Backplane connector BP-EXB – Solder Version	
20042	N/A	Diag. System FDS001 for FAdC	
18012	GS01	Service Display Cable ASD001	
20064	GS02	Service Display Cable ASD001	
18058	N/A	Patch cable S/FTP cat.6: 0.5m	
17825	GS03	Testing / Simulation Plate – PB200	

N/A = not applicable