

## NEW EQUIPMENT AND SYSTEM APPROVAL CERTIFICATE

### Certificate No. S-01-1201-HI155

<b>Approval date</b>	5 <sup>th</sup> March 2019
<b>Approved by</b>	General Manager Technical Standards
<b>Report no.</b>	S-01-1201-HI155
<b>Report date</b>	24 <sup>th</sup> October 2018

### *This certificate is issued to*

**Supplier** HIMA Australia Pty Ltd

### *In respect of*

**Manufacturer** HIMA Australia Pty Ltd  
Level 3  
Hay Street  
Perth 6000 WA

**Product description** HIMA 'HIMatrix' system

**Item identification** See table

**Application** Signalling

**Relevant Standards** EN50126 Railway Applications. The Specification and Demonstration of Reliability, Availability, Maintainability and Safety (RAMS)

EN50128 Railway Applications - Communications, Signalling and Processing Systems - Software for Railway Control and Protection Systems

EN50129 Railway Applications – Communication, signalling and processing systems – Safety related electronic systems for signalling

SCP17 Computer Based Interlocking Requirements

SCP23 Design of Microlok II Interlockings

SPS02 Environmental Conditions

SPS05 Electrical & Electronic Components

### **Conditions of Approval**

1. For use in accordance with ARTC specifications SPS05, SDS 25 and standard typical circuits only.
2. Only components and software from the 'Equipment type approval list' may be utilised.
3. SILworX version 5.30.0 shall only be permitted to be used at the currently installed Portland site – no further installation of this version

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shall be permitted.

4. SILworX Version 10.48 shall be used on all new installations. Any new version changes shall require ARTC approval prior to use.
5. Circuit and data design must ensure a healthy communications link status is proved against all down proved contacts before outputs can be driven.
6. Genysis protocol conversion license to be made available to ARTC prior to commissioning of the first HIMatrix system on the ARTC network.
7. Type Approved 24Vdc power supplies (20.4-28.8 Vdc including ripple) must be used.
8. The connecting plugs must have mechanical coding inserted,
9. For safety critical outputs, Line Control must be implemented.
10. RCSA will document a Design Guide for the HIMatrix system data design (including typical data structures for ARTC network requirements) which is consistent with existing ARTC standards and practices. The document will be finalised and submitted to ARTC upon commissioning of the first implementation of the HIMA HIMatrix system.
11. RCSA will document a Design Guide for the HIMA HIMatrix circuit design (including typical circuits for ARTC network requirements) which is consistent with existing ARTC standards and practices. The document will be finalised and submitted to ARTC upon commissioning of the first implementation of HIMatrix system.
12. No other works incorporating HIMA HIMatrix shall commence prior to the completion of the design guidelines for data and circuits.
13. Mandatory to use SILworX First Steps Manual when creating/updating SILworX programming.
14. Any individual working with or designing a HIMA HIMatrix system must complete the respective training course and have this documented in their SOC.
15. RCSA shall provide a full license to ARTC to manage the installed HIMA HIMatrix equipment and any changes required to the system in the future. This to be provided to ARTC prior to the first planned commissioning of the equipment. This has been provided to Paul Hunt, Team Manager Control & Wayside Systems in Adelaide – it is in the form of a USB Key (License No. 506461) and has been provided to be used with HIMA SILworX V5.30.0. SILworX has been loaded onto the maintenance server ready to use with this key and access the Portland (or any) HIMA devices.

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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 certificate.

### Note/Comments

Issue date

19/03/2019

Expiry date

N/A

Issued by



John Furness

ARTC Manager Standards

### Equipment type approval list

Part #	Function	Description	Firmware Version	Hardware Revision	Notes
98 2200005	Processor with Digital I/O	HIMA F30 034 SILworX	CPU – 13.20 COM – 18.24	01	Layer 3 processor – extended Temp variant
98 2200498	Processor with Digital I/O	HIMA F31 03 SILworX	CPU – 10.16	01	Layer 3 processor – legacy only
98 2200006	Processor with Digital and Analogue I/O	HIMA F35 034 SILworX	CPU – 13.20 COM – 18.24	01	Layer 3 processor– extended Temp variant
98 2200484	Remote Digital I/O Module	HIMA F3 DIO 20/8 02 SILworX	CPU – 7.20	00	20 I/P & 8 O/P Line monitoring
98 2200486	Remote Digital I/O Module	HIMA F3 DIO 16/8 SILworX	CPU – 7.20	00	16 I/P & 8 O/P Line monitoring 2-pin O/Ps
98 2200096	Power Supply card	HIMA F60 PS 01			F60 Power supply card
98 2200139	Processor card	HIMA F60 CPU 03 SILworX	CPU – 13.20 COM – 18.24	01	Layer 3 processor – CPU card only
98 2200100	Digital I/O card	HIMA F60 DIO 24/16 01			24 I/P & 16 O/P
98 2200112	Digital O/P card	HIMA F60 DO 8 01			8 O/P
98 2200114	Digital I/P card	HIMA F60 DI 32 01			32 I/P
98 2200214	Analogue I/P card	HIMA F60 AI 8 01			8 I/P
98 2200215	Analogue O/P card	HIMA F60 AO 8 01			8 O/P
89 5210001	License	SILworX Full Licence Hardlock-E		5	USB Dongle – cannot be replaced if lost – current install only
89 5210001	License	SILworX Full Licence Hardlock-E		10.58	USB Dongle – cannot be replaced if lost – all future sites
89 4000015	License	X-OPC DA software license		N/A	Manages interface between HIMA and maintenance panel
89 4000012	License	COM user task License		N/A	Manages Genisys protocol converter component of HIMA