

NEW EQUIPMENT AND SYSTEM APPROVAL CERTIFICATE

Certificate No. S-01-1204-130B
Approval date 04 /01/2018
Approved by GM Technical Standards
Report no. TAS-01-1204-IR130B
Report date 05/11/2017

This certificate is issued to

Supplier Siemens
 Level 7, 380 Docklands Drive
 Docklands, Victoria 3008

In respect of

Manufacturer Siemens
Product description WESTRACE MkII
Item identification Computer Based Interlocking
Application ARTC Network Wide
Relevant Standards SCP17 Computer Based Interlocking Requirements
 SPS05 Electrical & electronic Components
 SCP23 Requirements

Conditions of Approval

General	1. For use in accordance with ARTC specifications SPS05, SDS 25 and standard typical circuits only.
	2. Only components and software from Attachment A may be used.
	3. Only the latest approved version of the executive software, together with the associated development system software, may be used in new works installations.
Supplier	4. All documentation from the supplier supporting this system shall be in English. All diagnostic systems and support systems associated with the Product shall display all information in English.
	5. The Supplier shall submit to ARTC any updates to the documents detailed in table 3.
	6. 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.
	7. Any subsequent change to the design, materials or manufacturing process is not covered by this approval. The Supplier shall notify ARTC of any modification or changes in order to obtain a valid updated certificate.
	8. Siemens will document a Design Guide for the WESTRACE MkII 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 prior to commencing Detailed Design of the first implementation of WESTRACE MkII on the ARTC network.
	9. Siemens will document a Design Guide for the WESTRACE MkII circuit design (including typical circuits for ARTC network requirements) which is consistent with existing ARTC standards and practices. The

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	document will be finalised and submitted to ARTC prior to commencing Detailed Design of the first implementation of WESTRACE MkII on the ARTC network.
	10.No other works incorporating WESTRACE MkII shall commence prior to the completion of the design guidelines for data and circuits.
	11.Siemens will make available training courses for signals staff for Maintenance of WESTRACE MkII (including fault finding) and for Set to Work and Testing of WESTRACE MkII. These may be separate courses. These courses will be delivered to enable the signals staff to be trained prior to the first planned commissioning. Siemens to provide details for these courses in accordance with ARTC standard EST-20-01 at least 3 months prior to the planned commissioning.
	12.Siemens will establish training courses for signals staff for Data and Circuit Design of WESTRACE MkII in accordance with EST-20-01 and submit to ARTC.
Signal Designers	13.Mandatory to follow the Application Manual for WESTRACE MkII (WRTOAPDR) and the First Line Maintenance Manual for WESTRACE MkII (WRTOFLDR)
	14.Circuit and data design must ensure a healthy communications link status is proved against all down proved functions/contacts before outputs can be driven.
	15.The FAdC axle counter Serial Data Interface connection and ACS2000 Interface to WESTRACE MkII is included in this type approval.
	16.Approved 24Vdc power supplies with an a.c. ripple less than 5% must be used.
	17.The type approval does not cover the Tranzeo SSR radio communication link with the WESTRACE MkII. Type approval only covers data communications link to EN 50159:2010 category 3. The system is not approved for use with category 4 or 5 communications networks including radio data links.
	18.Any individual working with or designing a WESTRACE MkII system must complete the respective training course and have this documented in their SOC

Issue date 04 /01/2018

Issued by



Expiry date

John Furness

ARTC Manager Standards

Type Approval Status

Issue 1 – S-01-1204-130 Siemens – WESTRACE MkII – superseded

Issue 2 – S-01-1204-130A Siemens – WESTRACE MkII – superseded

Issue 3 – S-01-1204-130B Siemens – WESTRACE MkII - Current

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Table 1 - Approved Item List - S 01-1204-130B

Module	Part Number	Current Revision	Description
PM without RSMB	E26131/1	M	(Processor Module)-PM without Remote Serial Module Bus
PM with RSMB	E26131/3	G	PM with Remote Serial Module Bus.
Media Adapter Unit SM-MAU	E26211/1	A	SM-MAU(Single Mode Media Adaptor Unit)
Remote SMB Adapter RSA	E26373/1	B	RSA (Remote SMB Adaptor) Module
Parallel Input Module PIM50	E26134/1	F	PIM50 – 50 Volts Input Module
Relay Output Module ROM50	E26132/1	E	ROM50 – 50 Volts Relay Output Module
Lamp Output Module LOM110	E26135/1	F	LOM110 – 110 Volts Lamp Output Module.
Signal Operating Module SOM24	E26163/2	F	SOM24 – 24 Volts Signal Output Module
Parallel Input Module PIM12	E26414/1	B	PIM12 – 12 Volts Input Module
Relay Output Module ROM12	E26394/1	C	ROM12 – 12 Volts Relay Output Module
LOM110 Red retaining Interfaces			
Red Retaining type A (blue)	3650143901	2.0	Red Retaining Module for output 6
Red Retaining type B (red)	3650141701	3.0	Red Retaining Module for outputs 3 & 6
Red Retaining type C (black)	3650143801	2.0	Red Retaining Module for outputs 3
Translation Modules from WESTRACE MkI to WESTRACE MkII			
Translation Module ROM to VROM	3690109101	A	ROM to VROM Translation Module
Translation Module PIM to VPIM	3690109201	A	PIM to VPIM Translation Module
Basic housing, Backplanes and Connectors			
5 slot housing	E26154/1	NA	A half 19" width housing that holds 5 modules

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Module	Part Number	Current Revision	Description
10 slot housing	E26155/1	NA	A full 19" backplane that holds 10 modules
Half width Backplane (5 slot)	E26197/2	A	5-slot coated backplane with shield and screws
Full width Backplane (10 slot)	E26196/2	A	10-slot coated backplane with shield and screws
PM Backplane	E26195/1	C	PM backplane with shield and Screws.
Backplane shield 5 slot (Conformal coated)	B52218/1	2	
Backplane shield 10 slot (Conformal coated)	B2219/1	2	
SM-MAU Backplane kit	4690212001	2.0	SM-MAU Backplane Kit
SM-MAU Complete - Full width	3690109302	2.0	SM-MAU, backplane and full width subrack
SM-MAU Complete - Half width	3690109301	2.0	SM-MAU, backplane and half width subrack
Cable and terminators			
Cable-PM-to-PM data	1704703 (2 m)		Redundancy or Crossover Cable (PM-to-PM data)
Cable-PM-to-PM status	1704664 (2 m) 1704691 (8 m)		Handshake or Arbitration cable (PM-to-PM Status)
Cable-SMB copper wire	2138592 (2 m) 2138622 (8m)		Cable — SMB copper wire (standard straight-through serial cable)
SMB termination plug	1704371	-	Terminator SMB

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List of acceptable Software

Software	Version	Operating system required	Description
GCSS	10.0.0	Windows 7	Graphical Configuration Subsystem
ICS	10.0.0	Windows 7	Installation Check System
GSIM	10.0.0	Windows 7	Graphical Simulator
GTT	10.0.0	Windows 7	GCS Templates Tool
MoviolaW	4.0.1.2	Windows 7	Diagnostic tool for WESTRACE MKII.

Table 3 - List of reference manuals for WESTRACE MkII

Document Number	Title	Version
WRTOOVDR	System Overview Manual	6.0
WRTOAPDR – Siemens Ltd	Application Manual – Trackguard WESTRACE MkII	11.0
WRTOFLDR – Siemens Ltd	First Line Maintenance Manual – Trackguard WESTRACE MkII	8.0
WRTDGCSS – Siemens Ltd	WESTRACE Graphical Configuration Sub-System (GCSS) User Manual	8.2
WRTDICS	ICS User Manual	8.1
WRTDGTT	GCS Templates Tool User Manual	12.2
WRTOGSIM	WESTRACE Graphical Simulator (GSIM) user manual	13.2
WRTNMOLA – Siemens Ltd	Moviola W Installation, Configuration and User Manual	3.0