

**Certificate No. S-02-1512-184**

**Approval date** 06/06/2018  
**Approved by** GM Technical Standards  
**Report no.** TAS-02-1512-SI-184  
**Report date** 25/05/2018

*This certificate is issued to*

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

*In respect of*

**Manufacturer** Siemens  
**Product description**  
 - Siemens Switchguard® HLM MkII Point Lock and Detector variants  
 - Siemens Switchguard® HM MkII Point Detector variants  
**Item identification** Refer to Approved Item List  
**Application** ARTC Network Wide

### Condition of Approval:

<b>General</b>	<ol style="list-style-type: none"> <li>Only items listed in Approved Item list shall be utilized.</li> <li>Only 110/120V AC and 12 VDC detectors are covered by this approval:               <ol style="list-style-type: none"> <li>120V AC machine: shall not be used in areas where running rails carry AC traction current.</li> <li>12V DC machine: shall not be used in areas where running rails carry DC traction current.</li> </ol> </li> <li>For use in accordance with ARTC standards.               <ol style="list-style-type: none"> <li>SPS02 –Environmental Conditions</li> <li>SPS03 – Signs, Notice Plates and Instruction Plates</li> <li>SPS05 – Electrical and Electronic Components-(Rating and Construction Requirements),</li> <li>SCP14 - Type Approval Requirement for Signalling System and Equipment</li> <li>ESC-07-01 – Installation of Trackside Equipment</li> </ol> </li> </ol>
<b>Supplier / Manufacturer</b>	<ol style="list-style-type: none"> <li>All documentation / manual from the supplier supporting this system shall be in English.</li> <li>The unit must be fitted with a readily visible label stating the Equipment Serial Number, Version Number, along with the manufacturer's identification and date of manufacture.</li> <li>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.</li> <li>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.</li> </ol>

## NEW EQUIPMENT AND SYSTEM APPROVAL CERTIFICATE

<b>Signal Designers</b>	<ul style="list-style-type: none"> <li>8. For use in accordance with ARTC Standards.</li> <li>9. For use in accordance with ARTC typical circuits only. Point machine detection circuits shall be wired over contacts in the voltage cut-out switch.</li> </ul>
<b>Signals Installers / Testers / Maintainers</b>	<ul style="list-style-type: none"> <li>10. Detection rods to be installed with a matched set of M20 HARD LOCK nuts. These should be proprietary Hard Lock self-locking nuts from HARD LOCK Industry Co, Ltd.</li> <li>11. Maintenance overhaul to be completed after 200,000 operations or 10 years (whichever comes first).</li> <li>12. To be operated and maintained in accordance with TMP and service schedules.</li> </ul>

**Note/Comments**

NIL.

**Issue date**

07/06/2018

**Expiry date**

N/A

**Issued by**



**John Furness**

**ARTC Manager Standards**

## Approved Item List:

Siemens Switchguard® HLM MkII Point Lock and Detector variants.

Catalogue No.	Style	Detection Bars	Profile	Coil Voltage	Hand Release
<b>HM MKII Point Lock with Detector</b>					
1570101408	HLM2	2	Wide	110V AC	No
1570101409	HLM1	1	Wide	110V AC	No
1570101410	HLM	0	Wide	110V AC	No
1570101303	HLMX	0	Narrow	110V AC	No
1570101411	HLM 2 Position Lock	0	Wide	110V AC	No
1570101310	HLMX	0	Narrow	12V DC	No
1570101416	HLM2	2	Wide	12V DC	No
1570101417	HLM1	1	Wide	12V DC	No
1570101418	HLM	0	Wide	12V DC	No

Siemens Switchguard® HM MkII Point Detector variants

Catalogue No.	Style	Detection Bars	Profile	Hand Release	Detection Bar (mm)	
					Lug Drop	Range
<b>HM Detector Only (No Lock)</b>					Customized to customer requirements to suite specific application	
1570100901	HMX1	1	Narrow	No	20	100 - 140
1570100902	HMX2	2	Narrow	No	20	100 – 140
1570100903	HMX2 Special Detection Bars	2	Narrow	No	59*	100 – 140
1570100904	HMX2	2	Narrow	No	20	80 - 110
1570100905	HMX2	2	Narrow	No	20	160 – 190
1570100906	HMX2	2	Narrow	No	20	130 – 170
1570100907	HMX2	2	Narrow	No	20	60 – 90
1570100908	HMX2	2	Narrow	No	3.5	100- 140
1570100909	HMX2	2	Narrow	No	-	100 – 140
1570100910	HMX	0	Narrow	No	No detection bars	



## NEW EQUIPMENT AND SYSTEM APPROVAL CERTIFICATE

Catalogue No.	Style	Detection Bars	Profile	Hand Release	Detection Bar (mm)	
					Lug Drop	Range
1570100301	HM1	1	Wide	No	20	100 – 140
1570100302	HM2	2	Wide	No	20	100 – 140
1570100303	HM3	3	Wide	No	20	100 – 140
1570100304	HM4	4	Wide	No	20	100 – 140
1570100305	HM4 Special Detection Bar	4	Wide	No	20	100 – 140
* Inverted – 59mm above mounting face						

**Note:** Siemens have equivalent counterparts with coil voltages at 24V DC, 50V DC and 110V DC. Only 110V AC and 12V DC range have been assessed as part of this type approval assessment.

### HLM MkII Retrofit Lock bar - Part list

Catalogue No.	Style
TWO POSITION LOCK	3570203403
SPECIAL DROP LUG - 28 mm Below Mounting face	3570203402
SPECIAL DROP LUG - 46 mm Below Mounting face	3570203401

### Approved Supplier Documentation List:

- TTTNHLM2 Issue 2.0 Field Installations and Maintenance Guide
- HLM MkII Point Lock with Detector and HM Point Detector – Product Datasheet 2D-6 Issue 1.0