This product forms part of a life safety system. Failure to correctly store, handle, install and maintain the product will directly put at risk the lives of the occupants and the fabric of the building.

Always read this document before installation, please retain for future reference.

Actionpac LNS5 & Safegard V5 Network Extender

Installation Datasheet

The Modbus Network Extender provides a complete Lonworks® device to manage network traffic, increase the total number of devices or increase the amount of cabling in a system.

The Modbus Network Extender is terminated for ease of installation.
**Mounting Diagram**

- Dimensions in mm.
- Four mounting holes Ø 6mm for mounting with suitable screws depending on whether mounting to a duct, block wall or stud wall.

**Dimensions and Mounting**

The compact and robust design of the enclosure allows the unit to be mounted to a duct, block wall or stud wall.

Ensure the enclosure is accessible for future maintenance purposes.

Please note:
- 150mm clearance required for lid removal and at cable entry points.
- Do not drill the enclosure as this will affect its IP rating.

**Maintenance**

Mains terminal fuse replacement: 250mAT 250 VAC
Suggested replacement: Bussman S504 series.

**Preparation**

- Only trained and qualified personnel should be allowed to install, replace or service this equipment. Installation should be in accordance with the relevant local safety standards.
- The connectors can accommodate cable diameters up to 2.5mm². It is recommended that all wires be crimped to ease installation and replacement of the product.
- The mains wiring should comply with IEC 60227 or IEC 60245.
- A switch or circuit breaker should be included as part of the installation.
- The switch or circuit breaker should meet the relevant requirements of IEC 60947-1 and IEC 60947-3.
- The switch or circuit breaker should be in close proximity to the equipment and be within easy reach of the operator.
- The switch or circuit breaker should be marked as the disconnecting device for the equipment and should disconnect both poles of the supply.
- The switch or circuit breaker should not interrupt the protected earth conductor.
- This equipment MUST be earthed.

**Installation**

1. Disconnect the local supply before commencing any work on the NE-M.
2. Wire the NE-M in accordance with the wiring diagram shown across.
3. If mains supply, cable should be fitted in such a manner that, should the cable be subject to strain, the earth wire would be the last wire to break loose.
4. If mains supply, cable should be secured using the cable gland provided and tie wrapped to prevent slippage.
5. It is recommended that the network cables are not run alongside any high voltage or high frequency sources. Also, network cables must not be mixed on an individual network as they have very different electrical characteristics and could render the system unreliable.
6. Once wiring is complete, apply power to the NE-M. The green power LED should illuminate to indicate the presence of power.
Wiring Diagram: 230V

Wiring Diagram: 24V
Specification

Modbus

<table>
<thead>
<tr>
<th>Bus</th>
<th>Modbus ASCII / RTU</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEDs</td>
<td>Data LEDs flash each side of device when data transmits</td>
</tr>
</tbody>
</table>

Supply

*(please specify at time of order)*

<table>
<thead>
<tr>
<th>Input voltages</th>
<th>(230 ± 23) V AC, 50 Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(120 ± 12) V AC, 60 Hz</td>
</tr>
<tr>
<td></td>
<td>(24 ± 2.4) V DC</td>
</tr>
</tbody>
</table>

| Maximum power consumption | 9 VA |

Environmental

<table>
<thead>
<tr>
<th>Operating temperature</th>
<th>-5 °C to 50 °C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage temperature</td>
<td>-20 °C to 50 °C</td>
</tr>
<tr>
<td>Humidity</td>
<td>80 % RH to 31 °C decreasing linearly to 50 % RH at 40 °C</td>
</tr>
<tr>
<td>Maximum altitude</td>
<td>2000 m</td>
</tr>
</tbody>
</table>

Conformance

<table>
<thead>
<tr>
<th>EMC</th>
<th>EN 55032:2015</th>
</tr>
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<tbody>
<tr>
<td>LVD</td>
<td>EN 61000-6-1: 2007</td>
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</table>

Enclosure

<table>
<thead>
<tr>
<th>Material</th>
<th>Polycarbonate</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP rating</td>
<td>IP 54</td>
</tr>
<tr>
<td>Flammability</td>
<td>UL 746C 5V</td>
</tr>
<tr>
<td>Dimensions (excl glands)</td>
<td>400 mm x 200 mm x 130 mm (L x W x D)</td>
</tr>
<tr>
<td>Dimensions (incl glands)</td>
<td>450 mm x 200 mm x 130 mm (L x W x D)</td>
</tr>
</tbody>
</table>

Complies with European standards

WARNING: The responsible body shall be made aware that, if the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

The information herein is subject to change without notice. We do not assume any liability arising out of the use of this product. Purchase of goods and services is subject to Safegard Systems standard terms and conditions. Product warranty 12 months from date of delivery.

Actionair and Safegard are brand names of Swegon Air Management and Safegard Systems respectively and both companies are part of the Swegon Group.

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