Detector Heater User Guide

Warnings
• To avoid the risk of burns, ensure that the fan and heater are **ALWAYS** powered at the same time
• To avoid the risk of burns, **DO NOT** touch the hot surfaces (e.g. fan heater)
• To avoid damaging the detector heater, **DO NOT** apply excessive pressure to the fan rotor
• To avoid damaging the detector heater, **DO NOT** use in wet or corrosive environments

Application
Condensation forming on the lenses of an optical beam smoke detector can result in false fire activations. The detector heater will reduce the likelihood of condensation by maintaining the detector lens at a higher temperature than the surrounding air. To conserve power, it is advisable to switch the heater off at times when condensation is not expected.

Mounting
The beam detector **MUST** be realigned after heater bracket installation (refer to system user guide for alignment process).

Wiring
• The detector heater will draw an in-rush current on a cold-start (refer to specifications), which the power supply **MUST** be able to cope with.
• The heater should be protected by a time delay T2A fuse to avoid false tripping.

Maintenance
The detector heater **MUST** be cleaned when operating after an extended period of non-use (e.g. during the summer months). This is to ensure that the fan is not obstructed or blocked. It is also recommended that the fan heater be cleaned periodically to prevent dust/dirt build-up inside, which may reduce fan performance and heat output. Care must be taken to ensure that the fan is not damaged whilst cleaning.

Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating voltage</td>
<td>24 V AC/DC</td>
</tr>
<tr>
<td>Power consumption at 24V</td>
<td>20 W</td>
</tr>
<tr>
<td>Maximum in-rush current</td>
<td>3 A</td>
</tr>
<tr>
<td>Typical steady-state current at 24V</td>
<td>0.8 A</td>
</tr>
<tr>
<td>Operating temperature*</td>
<td>-10°C to +45°C</td>
</tr>
<tr>
<td>Recommended fuse rating</td>
<td>T2A</td>
</tr>
</tbody>
</table>

Heater Performance
Average temperature increase of lens above ambient \(10°C\)

*The max operating temperature ensures that the detector remains within its own operating temperature range