HI320A

Heat detector
(rate of rise and maximum)

For the auto-addressable detector bus SynoLOOP

- Registers rapid temperature rises regardless of the starting temperature
- Auto-addressing eliminates the setting of dip switches, punch cards, etc. For a safe and easy start up
- Automatic localization of interruptions and short circuits
- Immune to mobile telephones, fluorescent tubes and most electromagnetic interference
- Built-in isolator: in each auto-addressable SynoLOOP element
- Siemens special: Each detector can be colored
- Uncompromising use of environmentally-compatible materials
- Exceeds national and international standards and passes the toughest internal tests
Features

The HI320A is an extremely reliable rate of rise and maximum temperature detector for demanding applications. It is characterized by a reliable response behavior, not only in the event of temperature rises which are slow, but also where the temperature rises are fast.

- **Product features**
  - The HI320A is a reliable heat detector for demanding requirements (up to 50 °C). It offers excellent response behavior, both for slow rises in temperature and for rises in temperature which are fast. The immunity from electromagnetic interferences is at least five times better than the present standards.

  - The HI320A detector is auto addressed the first time the control panel is switched on. It allows individual identification in case of alarm.

  - A loop system ensures optimum security - should a short circuit occur, a built-in isolator localizes the defective part on the detector bus and isolates it between two devices, therefore saving time investigating the entire system.

- **Application**
  - The HI320A is best suited for locations where different ambient temperatures occur (e.g. mechanical workshops, machine rooms etc.). Furthermore, its innovative design makes it particularly suitable where dirt, dust (e.g. sawmills) or high humidity environments could affect the operation of traditional detectors.

Design

- SO320 detector base – mounted whilst running cables – contains only the screw less click-in connector

  - Click concept:
    - Plug-in connector for wiring (line connection)
    - Plug-in mounting for detector

  - Up to two external type AI300/AI340 alarm indicators can be connected to each detector

Options

- CDM320 commissioning module: plug-in to check the pre-wired detector lines and base

  - SOA322 base attachment for surface mounting

  - Anti-theft device: TP320 detector cover locking device
Typical response curve of detector

Parameters $dT/dt$ [°C/min.]

Temperature rise $dT$ [°C]

Dimensions

HI320A with SO320

Accessories

TP320  DBZ1190-AB  CDM320  SO320  SOA322
Technical data

- **Operating voltage**: 16...28 VDC
- **Operating current (quiescent)**: max. 200 μA
- **Operating temperature**: -10...+50 °C
- **Storage temperature**: -20...+65 °C
- **Humidity**: ≤95 % rel.
- **Protection category**: IP44
- **Color**: white, ~RAL 9010
- **Standards**: EN54-17, EN54-5: A1R
- **Approvals**: – VdS G298005 – LPCB 531f/03
- **System compatibility**: Compatible with all SynoLOOP panels. A list of compatible equipment is available from your local sales organization.

**QS Standard**

### Details for ordering

<table>
<thead>
<tr>
<th>Type</th>
<th>Part no</th>
<th>Designation</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detector</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HI320A</td>
<td>BPZ:5081880001</td>
<td>Heat detector (rate of rise and maximum)</td>
<td>0.040 kg</td>
</tr>
<tr>
<td>SO320</td>
<td>BPZ:5085990001</td>
<td>Base for Synova 300 series detectors</td>
<td>0.020 kg</td>
</tr>
<tr>
<td>Accessories</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOA322</td>
<td>BPZ:5358340001</td>
<td>Base attachment for surface mounting</td>
<td>0.020 kg</td>
</tr>
<tr>
<td>DBZ1190-AB</td>
<td>BPZ:4942340001</td>
<td>Connecting terminal 1…2.5 mm²</td>
<td>0.001 kg</td>
</tr>
<tr>
<td>CDM320</td>
<td>BPZ:5162350001</td>
<td>Commissioning unit</td>
<td>0.010 kg</td>
</tr>
<tr>
<td>TP320</td>
<td>BPZ:5093100001</td>
<td>Detector cover locking device</td>
<td>0.005 kg</td>
</tr>
<tr>
<td>FDAI92</td>
<td>S54370-F3-A1</td>
<td>Alarm indicators for wall mounting</td>
<td>0.050 kg</td>
</tr>
<tr>
<td>FDAI91</td>
<td>S54370-F9-A1</td>
<td>Alarm indicators for door frames</td>
<td>0.020 kg</td>
</tr>
<tr>
<td>AI330</td>
<td>BPZ:3169430001</td>
<td>Additional frame</td>
<td>0.020 kg</td>
</tr>
</tbody>
</table>