Specifications of temperature probes for use with the MC810B Digital controller

Introduction

The MC810B Digital Heating Controller provides a convenient means of temperature control, utilising a digital display and microprocessors to provide easy operation and accurate readings. Temperature sensing is performed by a plug-in platinum resistance probe. The MC810B is supplied with a PTFE-covered platinum resistance probe (AZ6705) for measurements up to 250°C and alternative probes are available for measurements up to 800°C. The sections below give the specifications of each of the available temperature probes.

Summary table

<table>
<thead>
<tr>
<th>Part code</th>
<th>Maximum temperature</th>
<th>Sensor type</th>
<th>Material</th>
<th>Dimensions (ø x length)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AZ6705</td>
<td>250°C</td>
<td>PT100, 4-wire, Class A</td>
<td>Stainless steel with PTFE sleeving</td>
<td>5.0 x 260mm</td>
</tr>
<tr>
<td>AZ9046</td>
<td>250°C</td>
<td>PT100, 2-wire, Class A</td>
<td>Uncoated stainless steel</td>
<td>6.0 x 380mm</td>
</tr>
<tr>
<td>AZ6706</td>
<td>400°C</td>
<td>PT100, 2-wire, Class A</td>
<td>Uncoated stainless steel</td>
<td>5.0 x 280mm</td>
</tr>
<tr>
<td>AZ6741</td>
<td>800°C</td>
<td>PT100, 2-wire, Class B</td>
<td>Stainless steel with porcelain sheath</td>
<td>7.0 x 140mm</td>
</tr>
</tbody>
</table>

Class A sensors = +/- 0.15°C

Class B sensors = +/- 0.3°C

Please note these figures are for the accuracy of the sensors only. When used as part of a system (i.e. When connected to the MC810B) the accuracy of the ‘system’ will most likely be slightly less.
Specifications of temperature probes

- **AZ6705**

PTFE coated stainless steel temperature probe for measurements up to 250°C.
Specifications of temperature probes

- **AZ9046**
  Uncoated extra length stainless steel temperature probe for measurements up to 250°C.
Specifications of temperature probes

- **AZ6706**
  Uncoated stainless steel temperature probe for measurements up to 400°C.
Specifications of temperature probes

- **AZ6741**
  Stainless steel temperature probe with porcelain sheath for measurements up to 800°C.