A compact system controller with a large clear graphical display, an intuitive user interface and serial communications, providing full remote control and data logging functions via Windows™ based PC program.

The TIC can automatically control and power 1 turbomolecular pump from the nEXT range. nEXT turbomolecular pumps have full serial communication with TIC and may be both configured and report status via TIC.

Both mains and 24V backing pumps may be controlled by TIC. For larger vacuum systems the TIC may control mains backing pumps from the nXDS and nXRi ranges.

The optional external relay box enables a wider range of backing pumps (such as our RV range) to be controlled and also provides interfaces for a turbo flange heater band, a backing line isolation valve and a logic bypass.

• TIC systems can be simply and quickly configured using the range of standard cables on offer, there is therefore no need for the customer to prepare loom assemblies or relay boxes and special interfaces.

• TIC is packaged in a compact case and can be panel/rack (¼ 19 inch rack 3U) or bench mounted with the included bezel to increase usability.

• The large 128 x 64 pixel backlit graphics LCD, coupled with a simple menu system simplifies programming and with a choice of summary screens excellent visibility of displayed parameters is assured.

• Edwards range of active gauges are compatible with these controllers; APG100, APGX-H, WRG, AIM, AIGX, and ASG2.

Features and benefits

• TIC automatically recognises and controls one turbomolecular pump from the nEXT range. nEXT turbomolecular pumps have full serial communication with TIC and may be both configured and report status via TIC.

• Both mains and 24V backing pumps may be controlled by TIC. For larger vacuum systems the TIC may control mains backing pumps from the nXDS and nXRi ranges.

• The optional external relay box enables a wider range of backing pumps (such as our RV range) to be controlled and also provides interfaces for a turbo flange heater band, a backing line isolation valve and a logic bypass.
## Product Description

### Units

<table>
<thead>
<tr>
<th>Description</th>
<th>Order Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>TIC turbo &amp; instrument controller, 100 W RS232</td>
<td>D39721000</td>
</tr>
<tr>
<td>TIC turbo &amp; instrument controller, 200 W RS232</td>
<td>D39722000</td>
</tr>
<tr>
<td>TIC relay box, RV pump/heater band/isolation valve</td>
<td>D39711805</td>
</tr>
<tr>
<td>TIC Profibus Communications Module</td>
<td>D39754000</td>
</tr>
<tr>
<td>XDD/DX/EXDC extension cable 1 m</td>
<td>D39700835</td>
</tr>
<tr>
<td>XDD/DX/EXDC extension cable 2 m</td>
<td>D39700836</td>
</tr>
<tr>
<td>XDD/DX/EXDC extension cable 5 m</td>
<td>D39700837</td>
</tr>
<tr>
<td>Linecord 2 m UK plug</td>
<td>A50505000</td>
</tr>
<tr>
<td>Linecord 2 m north Euro plug</td>
<td>A50506000</td>
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<tr>
<td>Linecord 2 m with US plug</td>
<td>A50507000</td>
</tr>
<tr>
<td>0.5 m active gauge cable</td>
<td>D40001005</td>
</tr>
<tr>
<td>1 m active gauge cable</td>
<td>D40001010</td>
</tr>
<tr>
<td>3 m active gauge cable</td>
<td>D40001030</td>
</tr>
<tr>
<td>5 m active gauge cable</td>
<td>D40001050</td>
</tr>
<tr>
<td>10 m active gauge cable</td>
<td>D40001100</td>
</tr>
</tbody>
</table>

## Technical Data

### Pump/TIC Power

<table>
<thead>
<tr>
<th>Units</th>
<th>TIC Turbo and Instrument Controller</th>
</tr>
</thead>
<tbody>
<tr>
<td>W</td>
<td>100/200</td>
</tr>
</tbody>
</table>

### nEXT 80 W

- Slow/Slow

### nEXT 160 W

- Slow/Fast

### Mains Input

- 90 to 264 V a.c. 47 to 63 Hz

### Power Consumption (max)

- 215 VA

### Peak Inrush Current

- 10.3 A @ 110 V a.c. / 23.0 A @ 230 V a.c.

### Earth Stud

- M4

### Dimensions

- Electronics Housing: 110 high x 105 wide x 245 deep
- Front Panel: 106 wide x 128 high
- Weight: 3.5 kg

### Operating Temperature

- -40 to +40 °C

### Storage Temperature

- -30 to +70 °C

### Max Ambient Operating Humidity

- 90% RH non-condensing at 40 °C

### Max Operating Altitude

- 3000 m

### Electronic Design

- EN 61010-1

### Electromagnetic Compatibility

- EN 61326 industrial location, class B emissions

### Enclosure Rating

- IP20

## Communications Module

### Product Description

| TIC Profibus Communications Module | D39754000 |

## Active Gauge Cable

### Product Description

| 0.5 m active gauge cable | D40001005 |
| 1 m active gauge cable | D40001010 |
| 3 m active gauge cable | D40001030 |
| 5 m active gauge cable | D40001050 |
| 10 m active gauge cable | D40001100 |

## Global Contacts

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