High Performance Tension Controller
HPTC
Mechanical Installation Manual

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Mounting and dismounting the base module

Mechanical Dimensions

<table>
<thead>
<tr>
<th>Dimensions (mm)</th>
<th></th>
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<tbody>
<tr>
<td>Front Panel Width</td>
<td>246</td>
</tr>
<tr>
<td>Front Panel Height</td>
<td>146</td>
</tr>
<tr>
<td>Minimum Depth</td>
<td>54</td>
</tr>
<tr>
<td>Corner Radius</td>
<td>5</td>
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</tbody>
</table>
Panel Cut Out Dimensions

To mount the HPTC for panel mounting, you should proceed as follows:

Create a cut out in the front panel of the box, as shown in the dimensioned sketch. Do this very carefully, so as not to oversize the hole. A precise finish is necessary for obtaining an IP65 sealing.

- Drill the 6 mounting holes for the fastening bolts. The holes should be 4.5mm in diameter.
- Place the HPC into the front panel of the box and fix it by means of the 6 nuts. Tighten them gently to ensure that the neoprene rubber is firmly pressed between the box and the HPC front panel. This way a proper sealing is guaranteed.

To unmount the HPTC proceed as follows:
- Remove all electrical connections by sliding the terminal blocks away from the controller
- Remove the 6 nuts securing the HPC in the box front panel
- Remove the HPC from the box front panel.

The illustration shows the requirement for a minimum of 50mm of free air space above the Controller.
Upper Terminals

The image shows the designation and positions of the upper terminal blocks

![Upper Terminals Image]

Lower Terminals

The image shows the designation and positions of the lower terminal blocks

![Lower Terminals Image]
General Safety

HPTC's are the heart of an automation process therefore particular attention should be paid to the installation and the guidelines contained herein should be followed as closely as possible.

Only authorised and suitably qualified personnel should install, setup and commission the controller. The personnel must also be aware of the general safety regulations applying to the application.

If it is found necessary to open the casing of the HPTC there is a risk of contact with high voltages therefore the entire installation should be isolated before proceeding.

Both users and installers should take precautions to ensure that after a power shutdown there is no danger of restarting the system or continuing the interrupted program.

Special attention should be given to Emergency Stop circuits, they should be designed with proper care and arranged so the HPTC cannot override the situation.

If the installation or environment could be damaged or where there is a danger of personal injury from a malfunctioning HPTC an external parallel safety circuit should be provided.

Fuses must only be replaced with the types mentioned in this manual, or if in doubt replace with an identical unit.

The earth terminal on the HPTC (C9) should always be properly bonded with the Central Earth Point (CEP) of the installation with wiring of adequate capacity and colour coding.

This manual should not be considered as definitive, where queries or contradictions occur it is important to contact the relevant bodies (supplier, Health & Safety Executive etc.), to clarify any uncertain areas.
EMC Regulations

The HPTC is designed and built in accordance with the EMC guidelines for *industrial measuring and operating equipment* as applicable in the European Union as from the 1st of January 1996, both for industrial and household applications.

To achieve conformity with the EMC regulations the equipment has been tested to the following standards. The compliance with these standards should ensure satisfactory operation in all normal environment.

As the Controller will only be one part of an installation the associated equipment and wiring should also confirm to the regulations.

- **EN61000-6-3** Interfering radiations (Emission)
- **EN50082-2** Interference radiation resistance (Immunity)
- **EN61000-4-2** (ESD) Immunity for static discharges.
- **EN50140 and ENV50204** Immunity to Electromagnetic fields
- **EN61000-4-4** Test for fast electrical transit burst
- **EN61000-4-8** Immunity to Strong magnetic fields.
- **ENV50141** Resistance against line related interferences generated by HF fields.

Hazardous Area Operations

In its existing form the HPTC is not suitable for operation within, or connected to equipment within a hazardous area.

If this is required, please contact our help desk and we can advise accordingly.

Contact Details

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