Panel Mounting
The mounting panel must be rigid, and may be up to 6.0mm (0.24in) thick. Cut-out dimensions are as shown below:
UDC120T: Dim A = 64mm
Dim B = 44mm
UDC170T: Dim A = 69mm
Dim B = 50mm
For n multiple instruments mounted side-by-side, cut-out dimension A is 46mm.

Tolerance ±0.5, 0.3mm
Slide mounting clamp over the instrument housing towards rear face of mounting panel until the tongues engage ratchet teeth and instrument is clamped in position.

Hold instrument firmly in position (apply pressure to bezel only)

CAUTION: Do not remove the panel gasket; it is a seal against dust and moisture.

Rear Terminal Wiring
Use COPPER conductors (except for T/C input)
Single strand wire gauge: Max 1.0mm (18AWG)

Specifications

**Options as for alarm 1

CAUTION: Installation should only be performed by technically competent personnel. Local Regulations regarding electrical installation & safety must be observed.

1. INSTALLATION

Models UDC120T and UDC170T have different case sizes (refer to section 6.1) Installation differences between the two models have been clearly shown. Note: The functions described in sections 2 thru 6 are common to all models.

Installing Option Modules
UDC120T Module Positions

CPU PCB
Mounting Struts
Option Module 1
Option Module 2
Option Module 3
PSU PCB

UDC170T Module Positions

CPU PCB
Mounting Struts
Option Module A
Option Module B
Option Module C
PSU PCB

To access modules 1, A or B, first detach the PSU and CPU boards from the front by lifting the upper, and then lower mounting struts. Gently separate the back of the board from the case. a. Plug the required option modules into the correct connectors, as shown below.
b. Hold the main boards together while reconnecting back on the mounting struts.
c. Replace the instrument by aligning the CPU and PSU boards with their guides in the housing. Then slowly push the instrument back into position.

Note: Option modules are automatically detected at power up.

Option Module Connectors
UDC120T Module Connectors

Option Slot 1 Connectors PL7 & PL8
Option Slot 2 Connectors PL8A & PL9A
Option Slot A Connectors PL5, PL6 & PL7A
Option Slot B Connectors PL3A, PL4A & PL5A
Option Slot 1 Connectors PL7 & PL8
Option Slot 2 Connectors PL8A & PL9A
Option Slot A Connectors PL5, PL6 & PL7A
Option Slot B Connectors PL3A, PL4A & PL5A

UDC170T Module Connectors

Option Slot 1 Connectors PL7 & PL8
Option Slot 2 Connectors PL8A & PL9A
Option Slot A Connectors PL5, PL6 & PL7A
Option Slot B Connectors PL3A, PL4A & PL5A

Three diagrams show all possible option combinations. The actual connections required depends on the exact model and options fitted.

Note: This controller uses Three-Point Stepping Control. This requires two identical outputs (2 Relays, 2 Trance, 2 SSR Drives or 1 Dual Relay) for the valve Open & Close functions. See Output Usage 1-5 in Configuration Mode.

CAUTION: Check information label on housing for correct operating voltage before connecting supply to Power Input. Fused: 100 – 240 V ac – 1amp anti-surge 244Vdc – 315Vac anti-surge

Note: At first power-up the message GSRs CONF is displayed, as described in section 7 of this booklet. Access to other menus is denied until configuration mode is completed.

2. SELECT MODE

Mode is used to access the configuration and operation menu functions. It can be accessed at any time by holding down & and pressing . In select mode press to enter. An unlock code is required to prevent unauthorized entry to Configuration & Setup modes. Press .

CAUTION: Unlock code is required to proceed.

3. CONFIGURATION MODE

For 1st access Configuration mode from Select mode (refer to section 2). Press to select the required mode. Press to change the characters, otherwise parameter will revert to previous value. To exit Configuration mode, hold down & and press . In Select mode press .

Note: Parameters displayed depends on how instrument has been configured. Refer to user guide (available from your supplier) for further details. Parameters marked ** are repeated in Setup Mode.

Continued on next page…

Note: Decimal point shown in table indicates temperature resolution of 0.1°C
4. SETUP MODE

Note: Configuration must be completed before adjusting Setup parameters. Start setup from the Select mode (refer to section 2). The main LED will light while in Setup mode. Press + to scroll through the parameters, then press (-) or (+) to set the required value.

To exit from Automatic mode, hold down (+) and press (-), or return to Select mode.

Pre-tune is a single-shot routine and is thus self-disengaging when complete.

If in Setup mode, press + to attempt it again from every power up.

Refer to the full user guide (available from your supplier) for details on how and why parameters can be configured.

5. AUTOMATIC TUNING MODE

First select Automatic tuning mode from Select mode (refer to section 2). Press + to scroll through the modes, then press (-) to set the required value.

To exit from Automatic mode, hold down (+) and press (-), or return to Select mode.

Pre-tune is a single-shot routine and is thus self-disengaging when complete.

If in Setup mode, press + to attempt it again from every power up.

Refer to the full user guide (available from your supplier) for details on how and why parameters can be configured.

6. PRODUCT INFORMATION MODE

First select Product Information mode from Select mode (refer to section 2). Press + to view each parameter. To exit from Product Information mode, hold down (+) and press (-) to return to Select mode.

Note: These parameters are all read only.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Lower Display</th>
<th>Upper Display</th>
<th>Adjustment range &amp; Description</th>
<th>Default Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remote Auxiliary Input Range</td>
<td>0°C to +60°C</td>
<td>°C</td>
<td>±0.1% of full range</td>
<td></td>
</tr>
</tbody>
</table>