



TEDDINGTON APPLIANCE CONTROLS

**37000 Series
Fitting Advice.**

2007

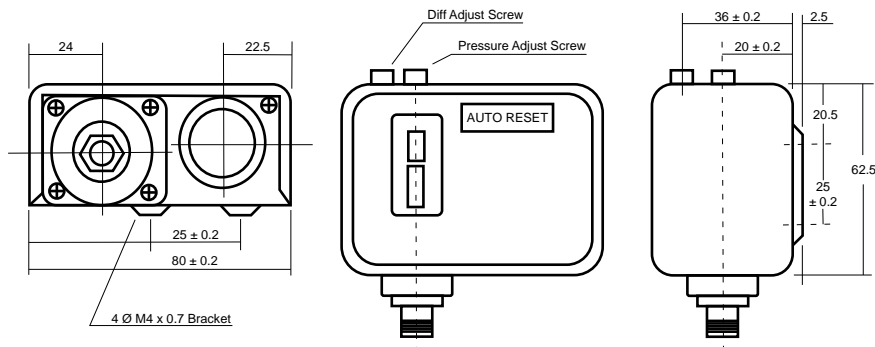
www.tedcon.com

TEDDINGTON APPLIANCE CONTROLS LTD.

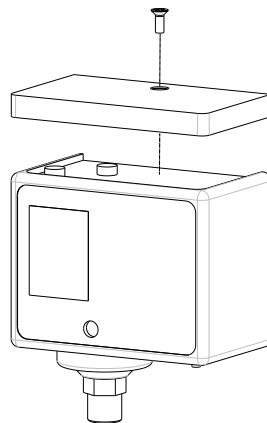
The Teddington Appliance Controls 37000 Series Fitting Advice.

The Teddington 37000 pressure switches are used for a wide range of applications where accurate control of pressure limits is necessary, including pressurised central heating, compressed gases, beverage dispensers, etc.

Most 37000 instruments incorporate an internal pressure surge restrictor orifice. If this feature is not required, please ensure that the switch you are ordering is the correct model as the restrictor orifice is not removable.

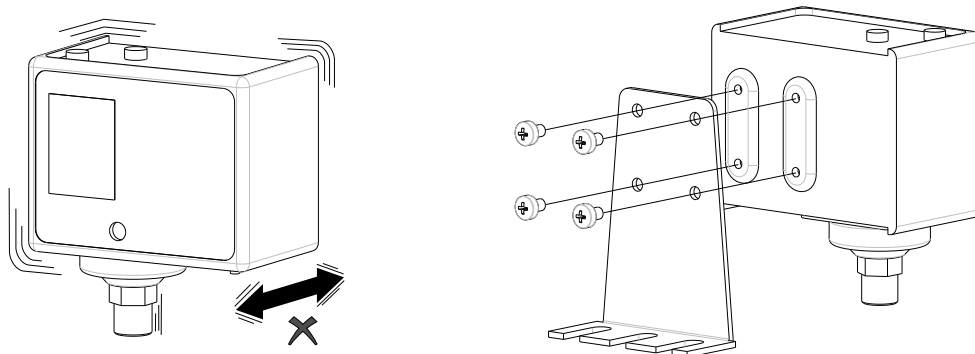


(All dimensions in mm unless shown otherwise)



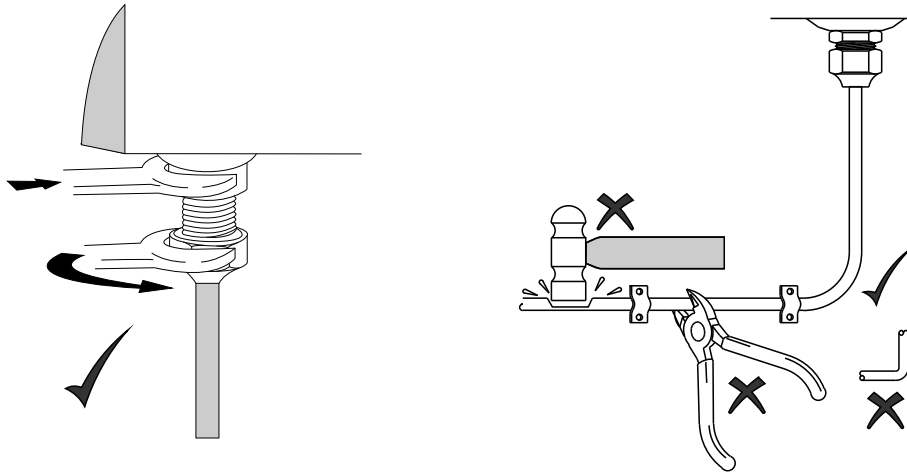
Installation.

The control may be mounted on a machine frame or panel and a position should be selected which is reasonably free from vibration. Alternatively brackets are available to mount the 37000 to accessible surfaces and these can be screwed to the back of the 37000 case using two M4 fixing holes on 25mm (1") vertical centres.



When attaching pressure connections to the 37000, always support the connector on the instrument with one spanner while tightening the connector with the other.

On the 37004 model, with $\frac{3}{32}$ " diameter connecting tubing, run the pipe connection to the system and attach with the $\frac{1}{4}$ " flare nut. Avoid sharp bends near the end connectors and support the tube to avoid vibration.



Wiring.

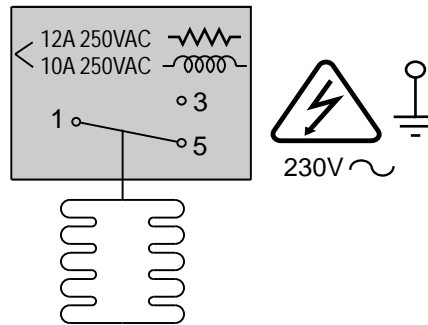
To conform to British Standards this control should be used with fixed cables. Access for wiring is by removal of the front cover after loosening, but not removing, the two cover-holding screws at the top of the case.

Terminals are marked as follows;

1 is Common.

5 is used to break on rise of pressure.

3 is used to make on rise of pressure (break on fall).



When used with some pressurised central heating installations, 37000's can be used to ensure that the boiler cannot be switched on if the system pressure is too low using terminals 1 common and 3 make on rise. The 37000 can also be used to monitor means of pressurising the system using terminals 1 common and 5 break on rise.

The earthing terminal is at the front lower right-hand corner of the case.

Wiring connections are accessible through the base of the instrument case on the right-hand side. The entry will accept 16mm conduit. When conduit is not used, to conform to British Standards, the rubber grommet provided must be used.

After wiring has been completed, replace the front cover by clipping it into the sides of the case and tightening the cover-holding screws.

Setting.

NOTE: Check that the pressure range of the control is suitable for the application required.

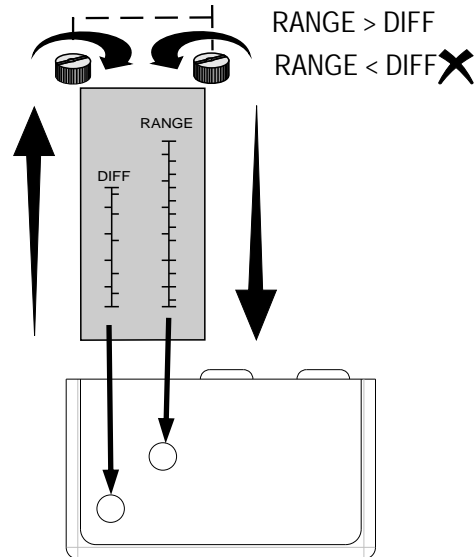
Range settings can be adjusted from the top of the instrument case using the right-hand screw, viewed from the front. Differential settings can also be adjusted using the left-hand screw, except with manual reset models, which have fixed differential. Settings are indicated on the appropriate scales seen through the instrument cover window.

The adjustable range indicator shows the nominal pressure at which the switch will operate on rising pressure.

The adjustable Differential indicator shows the nominal difference between the switch operating points on rising and falling pressures.

To adjust the setting of the range. Turn the knob clockwise to lower the range setting and anticlockwise to raise the range setting.

To adjust the setting of the differential. Turn the knob clockwise to increase and anticlockwise to decrease the differential.



The differential value subtracted from the range setting will give you the lower opening pressure. i.e the switch will change over from terminal 5 to terminal 3 when the system pressure reaches the range set point. The switch will not change back until the pressure has fallen to the range value less the differential value, e.g. If the range setting is 2.5bar and the differential setting is 0.5bar, the switch will change over when the pressure has risen to 2.5bar and will not change back until the pressure has fallen below 2.0bar.

When the settings have been made replace the top cover over the two spindles.

There is no differential adjustment or scale on the manual reset 37002 model. These instruments can be reset after tripping when the pressure in the system has risen or fallen to a safe level.

Over-riding the 37000.

For some plant servicing, for example during pump down on refrigeration plant, it is required that the instrument circuit should be closed even though pressure conditions have caused the switch to open.

UNDER NO CIRCUMSTANCES SHOULD THE 37000 MECHANISM BE LEVERED OR BLOCKED TO OVER-RIDE SWITCH ACTION.

A jumper wire across the appropriate terminals can be used to simulate switch operation.

37000 Models

Model	Range (bar)		Differential (bar)		Restrictor	¼" BSP	¼" Flare & Capillary	Max. Over Pressure
	Min.	Max.	Min.	Max.				
37001	-0.7	6	0.6	4	✓	✓		16.5
37002	-0.7	6	Manual Reset (3 bar fixed)		✓	✓		16.5
					✓	✓		
37003	8	24	2	5	✓	✓		16.5
37004	-0.7	3	0.2	1.5	✗		✓	16.5
37005	-0.7	3	0.2	1.5	✓	✓		16.5
37006	-0.7	6	0.6	4	✗	✓		16.5



Part of the **TEDDINGTON GROUP**
 Holmush · St. Austell · Cornwall · United Kingdom · PL23 3HG
 Tel: +44 (0) 1726 74400 · Fax: +44 (0) 1726 67953
 www.tedcon.com · info@tedcon.com