

OPERATING INSTRUCTIONS

DRYING / WARMING CABINETS
DC RANGE

INSULATED WARMING CABINETS
IWC RANGE

DRYING / WARMING CABINET

1. UNPACKING

- 1.1 Remove packaging from shelves and glass doors. Take care not to discard shelf supports and mains cable, which are packed inside the cabinet within the wrapping. Fit shelf runners and shelves to required positions.
- 1.2 For 125 & 250 litre units only: - Fit the glass doors. Insert the rear door first by pushing the glass door fully up to the top of the rear track and allow to slide down into the lower rear track. Check the door slides freely and is retained by the tracking. Insert the front door in the same manner and check that it slides freely.

2. MAINS SUPPLY

- 2.1 **240 volt units.** Each unit comes supplied with a mains connection lead already fitted with a correctly rated fuse. The fuse rating and other details for each unit are shown on the voltage plate riveted to the back of the unit. It is important that, if the fuse needs to be replaced, it must **ONLY** be replaced with one of the correct rating.
- 2.2 **110 volt units** are supplied with a cable but without a plug or fuse. These units should be wired in by a suitably qualified electrician to the following:-

BROWN	'L' Live pin	For fuse ratings for your unit please refer to the voltage plate attached to the rear of the unit.
BLUE	'N' Neutral pin	
GREEN/YELLOW	'E' Earth pin	

3. OPERATION

- 3.1 DC125 & DC250 only: insert shelf runners to desired positions.
- 3.2 Load shelves.

THERMOSTATIC CONTROL:-

3.3 DC125, DC250, IWC100 & IWC200 – NATURAL CONVECTION

- 3.4 Switch on via the illuminated mains switch on the control panel.
- 3.5 Select temperature setting required. Temperature settings are shown on dial.
- 3.6 The amber lamp should cycle on and off as the unit reaches set point temperature.
- 3.7 If overheat thermostat fitted, set temperature 5 to 10 degrees above the desired control temperature.

3.8 DC500, DC1000, IWC425 & IWC885 - FORCED AIR CIRCULATION

- 3.9 Switch on using the rotary switch (0/1).
- 3.10 Set to the temperature setting required. The unit is also fitted with an over-temperature thermostat which should be set to 5 - 10 degrees above the desired control temperature.

3.11 UNITS FITTED WITH DIGITAL CONTROL. (R38 – SINGLE DISPLAY)

- 3.12 Set the main temperature controller to the desired temperature by pressing '▼' button once to show 'sp1' then use the up or down buttons to alter the set point. Press the "p" button to accept the change. The operational parameters of the controller have been factory set to cover a wide range of temperature and load conditions. The display will revert back to the chamber temperature if no button is pressed for approximately 10 seconds.

Note: If manual reset fitted then press the red reset button to energise the overheat circuit. The red lamp will extinguish. If the red lamp stays on then either the temperature inside is too hot or there is a fault. If there is a fault please contact your supplier.

3.13 UNITS FITTED WITH DIGITAL CONTROL. (K39 – DUAL DISPLAY)

- 3.14 Set the main temperature controller to the desired temperature by pressing 'P' button once to show 'sp1' then use the up or down buttons to alter the set point. Press the 'P' button once again to accept the change. The display will revert back to the normal display if no button is pressed for approximately 10 seconds. The operational parameters of the controller have been factory set to cover a wide range of temperature and load conditions.

Note: Top display shows actual temperature and bottom display shows set temperature

- 3.15 If the chamber temperature rises above the overheat set temperature, the red lamp will be illuminated and the heat control circuit will be disabled. Control will switch back the main temperature controller once the chamber temperature falls below the overheat set temperature. If the red lamp will not go out or keeps coming on there may be a problem with the unit. *In this case please consult your supplier*

4 WARNING: The following precautions MUST be observed:-

- 4.1 Do not place items with excess water into the cabinet, e.g. drain glassware before use.
- 4.2 Do not place the cabinet flush to a wall. A small gap must be left to allow free circulation of air.
- 4.3 Clean off any spillage from the cabinet floor.
- 4.4 THIS UNIT IS NOT SUITABLE FOR USE WITH FLAMMABLE SOLVENTS.

5. PREVENTATIVE MAINTENANCE

Every 6 months:-

- Carry out an electrical safety check using a Portable Appliance Tester, operated by a suitably trained person.

6. GENERAL

Take the normal precautions not to allow water to come into contact with electrical components.

The outer surfaces can be cleaned with a warm, damp soapy cloth or any proprietary cleaner suitable for a painted surface (do not use solvents or harsh abrasives).

The chamber may also be cleaned as above.

SERVICE INSTRUCTIONS

FOR DC125 & DC250 AND IWC100 & IWC200

(thermostatic or digital control)

1. REPLACING THE CONTROL THERMOSTAT

- 1.1 Disconnect from the mains supply and remove glass doors.
- 1.2 Remove all shelves from the chamber and the clips holding the thermostat bulb to the stainless steel bottom cover.
- 1.3 Lock up the dial after setting to 25°C, prise out the centre cap and slacken the lock nut. Remove the dial lock and carefully pull off the knob.
- 1.4 Turn the unit over onto a piece of suitable protective material and remove the baseplate.
- 1.5 Detach the capillary heater wires from their respective terminations and withdraw the thermostat bulb from the chamber.
- 1.6 Take note of the connections to the head of the thermostat.
- 1.7 Carefully detach all the connections from the thermostat and remove the two screws on the panel front to release the thermostat. Retain the spacing washers from between the head to the front panel.
- 1.8 Fit the new thermostat, ensuring all spacing washers are in position.
- 1.9 Position the bulb within the chamber, fit the tube heater and replace the clips to retain the bulb.
- 1.10 Reconnect all wires to the thermostat head and those from the capillary.
- 1.11 Check all wiring before refitting the baseplate.
- 1.12 When refitting the knob, position the dial to 25°C and lock it up by tightening the centre nut. Refer to the recalibration instructions.

2. REPLACING THE DIGITAL CONTROLLER

- 2.1 Follow steps 1.1 and 1.4.
- 2.2 Remove the retaining clips from the side of the controller.
- 2.3 Disconnect the (6) wires from the controller, taking note of where they fit and extract the controller through the front panel. Fit the new controller in reverse order - ensuring the electrical connections are correct.
- 2.4 The control parameters have been pre-set at the factory to cover a wide range of uses. Refer to controller handbook for tuning procedures if required.

3. RECALIBRATION

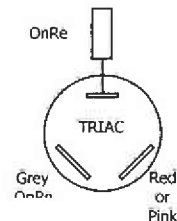
- 3.1 Set the dial to 60°C
Check the internal temperature via a suitable thermometer.
- 3.2 Adjust the dial to achieve the correct air temperature.
- 3.3 Tighten the dial lock then slacken the centre lock nut.
Release the dial lock (the knob should now turn freely on the thermostat spindle).
Set the dial to coincide with the air temperature.
Lock up the dial, tighten the centre nut and replace the centre cap.

4. REPLACING THE ELEMENTS

- 4.1 Follow steps 1.1 to 1.3 inclusive.
- 4.2 Remove self-tapping screws from stainless steel base and remove plate.
- 4.3 Remove self tapping screws from element fixing clips.
- 4.4 Turn unit on to its top. Remove base plate and remove wires from elements.
- 4.5 Carefully remove old elements from inside the work chamber and fit replacement elements.
- 4.6 Re-assemble in reverse order.

4. REPLACING THE 25 AMP TRIAC

- 6.1 Disconnect from the mains supply.
- 6.2 Remove the external baseplate.
- 6.3 Locate the triac, this may be on the side wall or the back wall. It is mounted by means of two screws on to an aluminium heat sink.
- 6.4 Carefully pull off the three wires taking note of the connections.
- 6.5 Replace the wires onto the new triac as follows:
 - The RED wire to the tag marked with RED.
 - The GREY wire to the GREY tag.
 - The ORANGE wire to the small ORANGE tag.



7. PREVENTATIVE MAINTENANCE

Ensure that the unit is maintained in a clean, dry condition and when not in use, stored in a normal warm atmosphere.

- 7.1 Carry out electrical safety check (Portable Appliances) using an appropriate tester operated by a competent person.
- 7.2 Check that the control temperature is maintained within limits.

The manufacture can offer the above service on request.

9. GENERAL

Take normal precautions not to allow water to come into contact with electrical components. The outer surfaces can be cleaned with a warm, damp, soapy cloth or any proprietary cleaner suitable for a painted surface (do not use solvents or harsh abrasives). The work chamber may also be cleaned as above.

REPLACEMENT PARTS LIST

WHEN ORDERING REPLACEMENT PARTS, PLEASE REFER TO SERIAL PLATE AND QUOTE MODEL AND SERIAL NUMBER OF UNIT.

<u>CODE</u>	<u>DESCRIPTION</u>
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S2515	Element (3 per unit)
A2453	Shelf
R10128	Green Illuminated Mains Switch
D1012	Amber Lamp
G2701	Glass door for DC125
G2702	Glass Door for DC250
M0702	4 way terminal block

With thermostat control:

W2309	Thermostat
D1009	Triac

With digital control:

T5602	Digital controller (please state 12V or 240V – this information can be found on the controller itself, not the cabinet)
T5604	Solid state relay
T5204	PT100 Sensor



Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.



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Please note - Product designs and specifications are subject to change without notice. The user is responsible for determining the suitability of this product.