



## **INSTALLATION / OPERATION MANUAL**

**P-2R - PROVER ROOM**

## MANUFACTURED BY

### Moffat Limited

Christchurch  
New Zealand

## INTERNATIONAL CONTACTS

### AUSTRALIA

#### Moffat Pty Limited

**E.Mail:** vsales@moffat.com.au  
**Main Office:** (tel) (03) 9518 3888  
(fax) (03) 9518 3833  
**Service:** (tel): 1800 622 216  
**Spares:** (tel): 1800 337 963  
**Customer Service:** (tel): 1800 335 315  
(fax): 1800 350 281

### CANADA

#### Serve Canada

**Web:** www.servecanada.com  
**E.Mail:** info@servecanada.com  
**Sales:** (tel): 800 551 8795 (Toll Free)  
**Service:** (tel): 800 263 1455 (Toll Free)

### NEW ZEALAND

#### Moffat Limited

**Web:** www.moffat.co.nz  
**E.Mail:** sales@moffat.co.nz  
**Main Office:** (tel): 0800 663328

### UNITED KINGDOM

#### Blue Seal

**Web:** www.blue-seal.co.uk  
**E.Mail:** sales@blue-seal.co.uk  
**Sales:** (tel): 0121 327 5575  
(fax): 0121 327 9711  
**Spares:** (tel): 0121 322 6640  
(fax): 0121 327 9201  
**Service:** (tel): 0121 322 6644  
(fax): 0121 327 6257

### UNITED STATES

#### Moffat

**Web:** www.moffat.com  
**Sales:** (tel): 800 551 8795 (Toll Free)  
(tel): 336 661 1556  
(fax): 336 661 9546  
**Service:** (tel): 800 858 4477 (Toll Free)  
(tel): 366 661 1556  
(fax): 336 661 1660

### REST OF WORLD

#### Moffat Limited

**Web:** www.moffat.co.nz  
**E.Mail:** export@moffat.co.nz

The reproduction or copying of any part of this manual by any means whatsoever is strictly forbidden unless authorized previously in writing by the manufacturer.

In line with policy to continually develop and improve its products, Moffat Ltd. reserves the right to change the specifications and design without prior notice.

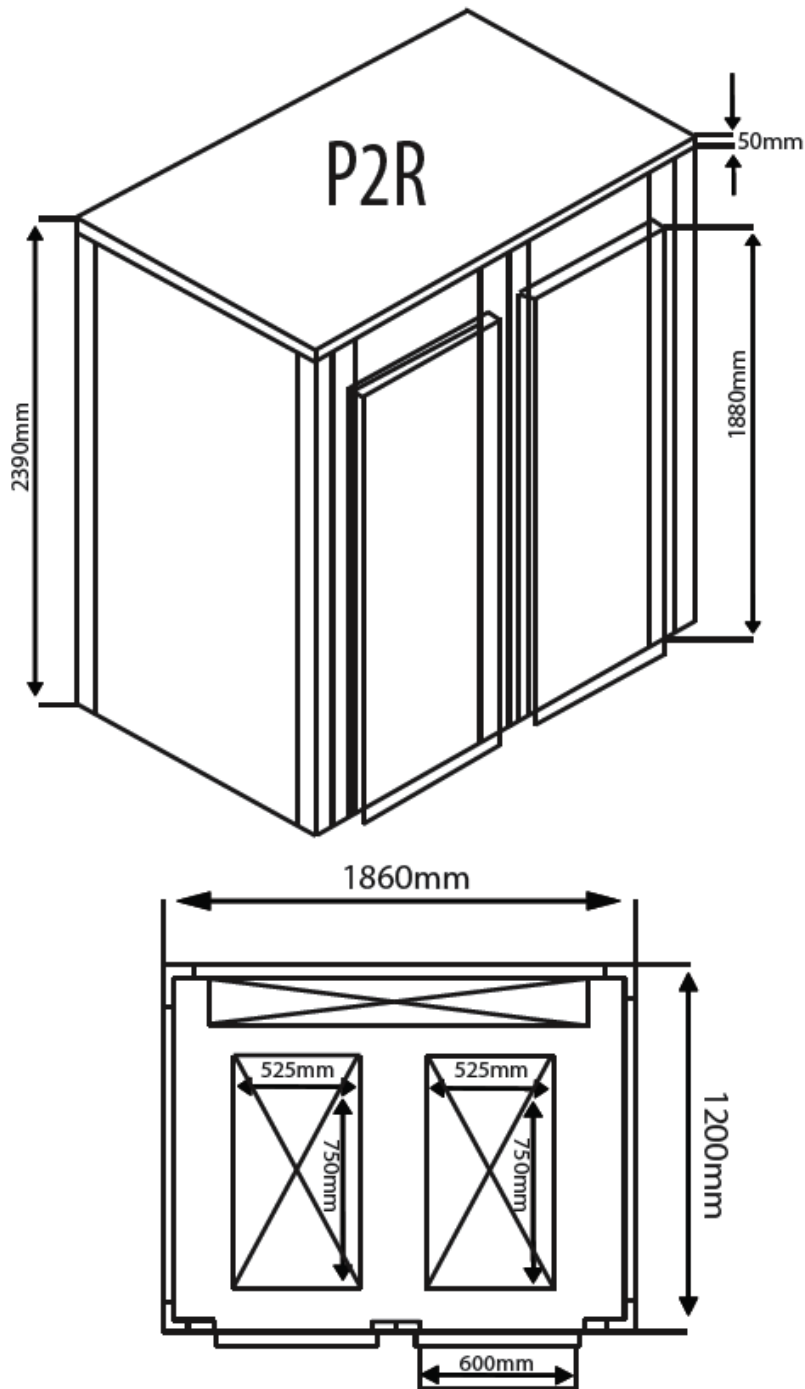
© Copyright Moffat Ltd. December 2013.

# P-2R - PROVER ROOM

<b>SPECIFICATIONS</b>	<b>2</b>
<b>INSTALLATION</b>	<b>3</b>
Features	3
Water Supply	3
Power Supply	3
Floor Requirements	4
Installation	4
Electrical Connection	6
<b>OPERATION</b>	<b>7</b>
Description of Controls	7
Operation	9
Parameter Settings	10
<b>CLEANING AND MAINTENANCE</b>	<b>11</b>
Cleaning Guidelines	11
<b>FAULT FINDING</b>	<b>12</b>
<b>PARTS LIST</b>	<b>13</b>

Date Purchased..... Serial No.....  
Dealer.....  
Service Agent.....

# SPECIFICATIONS



## Technical Specifications:

<b>Power Supply</b>	240V, 50Hz, 1P+N+E.
<b>Overall Dimensions (mm)</b>	1860 (W) x 1200 (D) x 2390 (H).
<b>Will Accommodate Rack Size</b>	525 x 750 x 1850mm.
<b>Twin Door</b>	
<b>Control Panel</b>	Digital
<b>Outer Panels</b>	Stainless Steel.

**NOTE;** All dimensions exclude protrusions - door handles, drains etc.

# INSTALLATION

It is the responsibility of the owner to supply and arrange for the connection of all services.

It is most important that the unit is installed correctly and that the operation is correct before use. Installation must comply with national electrical installation codes and local Health and Safety regulations.

**IMPORTANT - FIXED WIRING INSTALLATIONS MUST INCORPORATE AN ALL-POLE DISCONNECTION SWITCH.**

## FEATURES

- This proofer uses an electrical heater to generate heat for temperature and to evaporate water for humidity.
- The cabinet is made of stainless steel cabinet panels which are assembled together to make up the Roll-In Proofer Cabinet. The Proofer has been pre-assembled and tested at factory before shipping.
- A number of holes remain in the cabinet panels, these holes are for the correct installation and location of components such as the compressor unit, climatizer etc.
- Assembly Kits are supplied in the packing crate, these should be retained for later use.
- Please refer to the supplied assembly drawings when assembling the Proofer cabinet.



- |                                    |                               |
|------------------------------------|-------------------------------|
| 1. Plug.                           | 5. Bumper securing screw.     |
| 2. Control Box securing screw.     | 6. Climatizer securing screw. |
| 3. Compressor Unit securing screw. | 7. Adhesive.                  |
| 4. Mounting Plate securing screw.  |                               |

## WATER SUPPLY

Water must be supplied via a sediment filter to the water inlet connection. A stop cock must be fitted to allow the mains pressure water supply to be turned off in the event of a servicing requirement, tank drainage or cleaning procedure. The stop cock must be located in an easily accessible position.

Cold water connection is 1/2" tube connection on the roof of the appliance. The Proofer requires a 1/2" BSP Inlet Connection. The water connection and drain outlet should be plumbed in, in accordance with National / Local Codes covering installation.

**Maximum water supply pressure 550kPa (80psi).**

## POWER SUPPLY

The rating plate attached to the side of the Proofer Unit should be checked prior to the electrical installation being carried out. However, as a guide, the following power supply is required.

**P-1R      240V, 1P+N+E, 4kW.**

# INSTALLATION

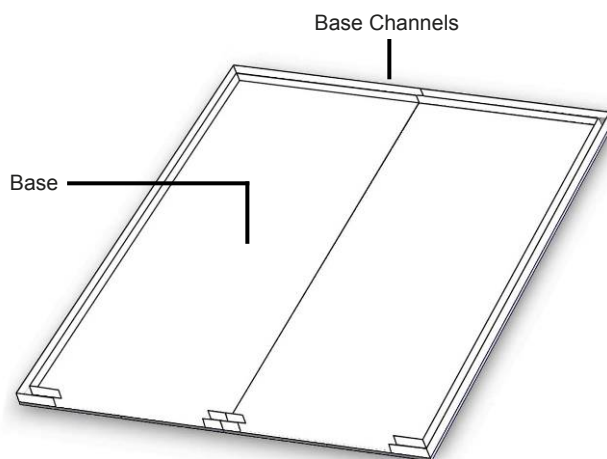
## FLOOR REQUIREMENTS

A concrete or tile surface is preferred. The floor area is to be flat to within 3mm over the whole prover room floor area.

## INSTALLATION

### CABINET

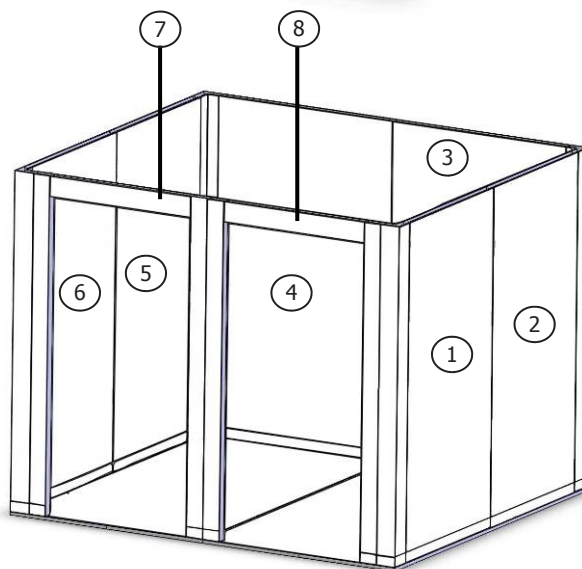
Clean the floor and adjacent wall to remove any obstruction, place the base on the floor. Base channels are used to support cabinet panels. Before erecting the panels, spread supplied adhesive along the base channels to prevent the joint from leaking.



The protective coating of each panel is marked with numbers, erect panels in accordance with the sequence of the numbers.

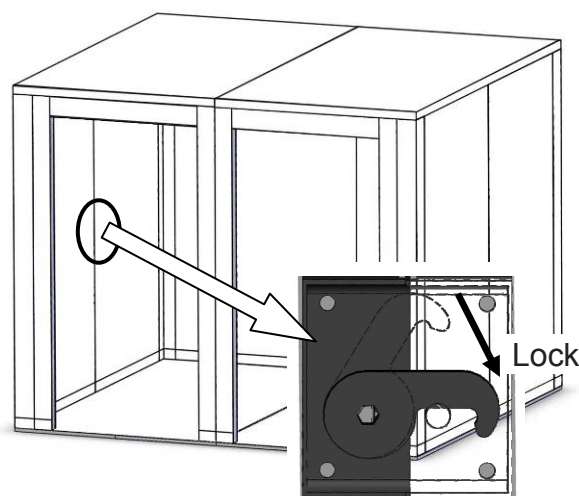
Insert the bottom of panels into base channels, take extra care to align the top edges and inner faces of the panels as you put them together.

**Use adhesive on all joints to avoid leak.**



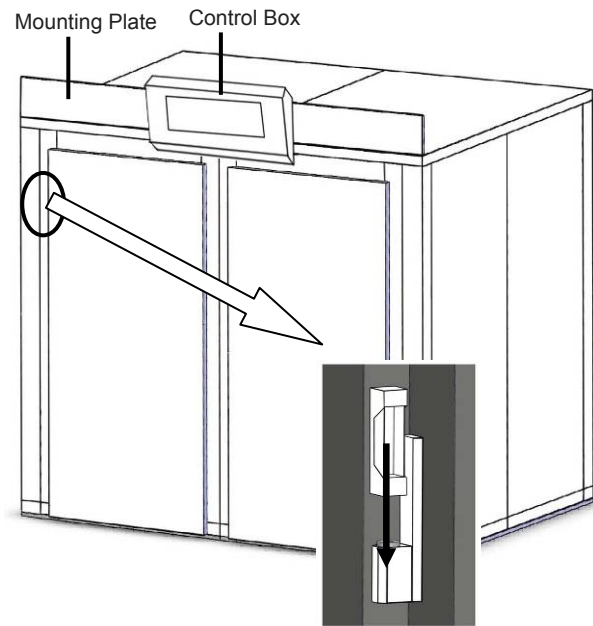
Use allen key to rotate the locks to the fully engaged position to lock each two adjacent panels together. Place the ceiling panels on the top of upright panels with stainless steel side down, then lock the ceiling to adjacent upright panels.

**Use adhesive on all joints to prevent cabinet from leaking.**



# INSTALLATION

Place the doors on the hinge pins and lower into place, fix the mounting plate and control box over the doors with screws attached.  
Finally, place the compressor unit on top of the ceiling with the pipe joint of the compressor unit pointing at the hole in left rear corner of the ceiling panel.



## For installation of Steam Generator

Install the steam generator shown in picture below, to the inside of the prover room and secure in position.



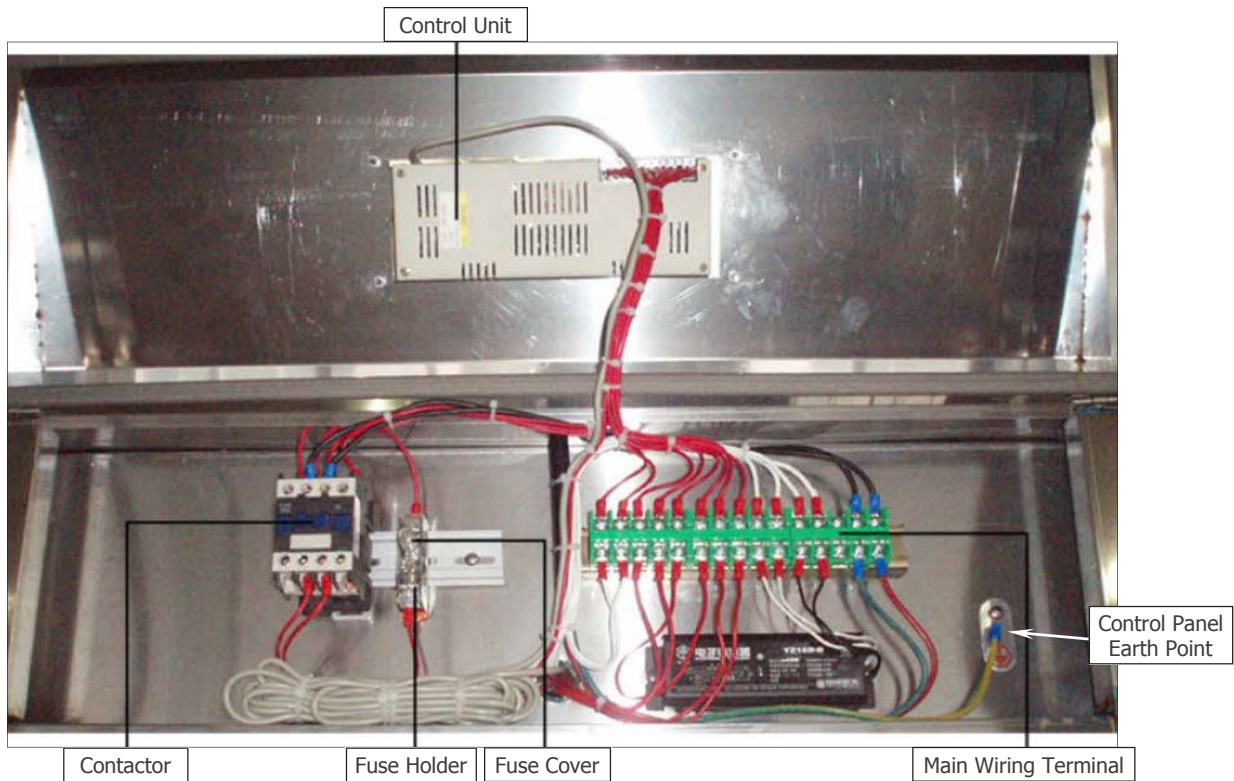
2. The location of the prover room must have adequate ventilation.
3. Connect up the water supply to the roof of the prover room using a 1/2" BSP Inlet Connection.
4. Connect up the prover drain outlet in accordance with National / Local Codes.



# INSTALLATION

## ELECTRICAL CONNECTION

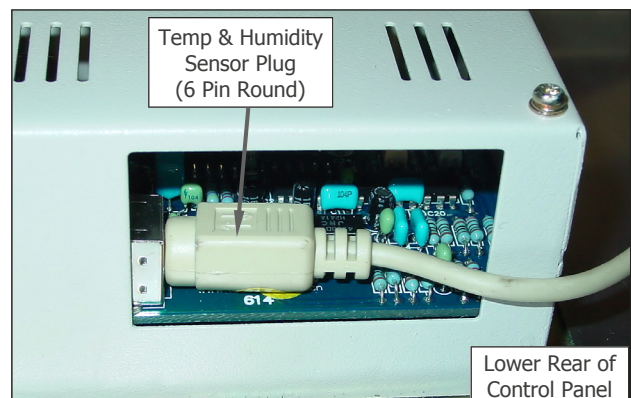
1. Fit the Control Panel to the outside of the Prover Room.
2. Fit cable glands to all the drilled holes and seal all joints.



3. Pass cables through glands and tighten glands to secure cable and prevent ingress of dirt and moisture.
4. Pass cables along roof of Prover Room and down to where control panel has been located. Secure all cabling in accordance with normal wiring regulations.
5. Connect the Dry Heat element cables to similar numbered cables already fitted to the terminal block.
6. Connect the Water Heat element cables to the similar numbered cables already fitted to the terminal block.

**NOTE:** When connecting these cables and their respective neutral cables, ensure that the neutral cables are connected to the common neutral connection nearest to the cables. (See figure below).

7. Connect the remaining cables to their respective terminals and ensure that all the terminal connections are tight.
8. Connect the 6 pin round plug from the temperature and humidity sensors into the rear of the base of the control panel screen.
9. Connect the mains cable to the mains power supply. The Prover is now ready for use.

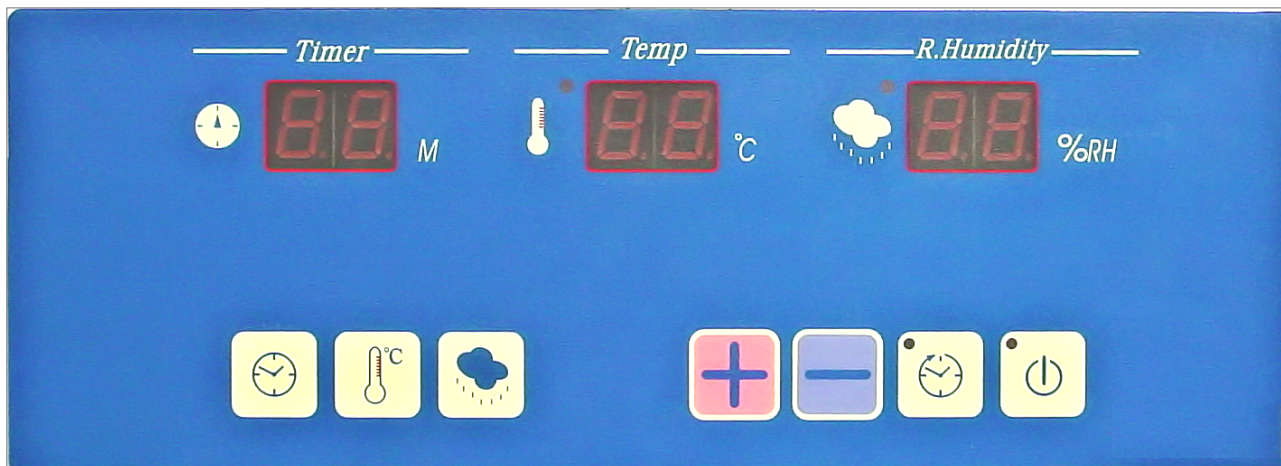




# OPERATION

## DESCRIPTION OF CONTROLS

### CONTROL PANEL



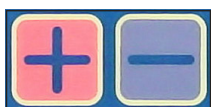
### OPERATION KEYS



**Power 'ON / OFF' switch;** Main power 'ON / OFF' switch for the Prover. Light in top left corner of key will illuminate when this key is pressed.



**Proof Cycle 'Start' Key;** Used to start the Proof cycle. Light in top left corner of key will illuminate when this key is pressed and timer is running.



**'Up / Down' Keys;** Used to change the 'Timer', 'Temp' and 'relative Humidity' settings.



**Humidity Key;** Used to set the relative humidity for the prover. Pressing this key when the prover is operating will show the set humidity of the prover.



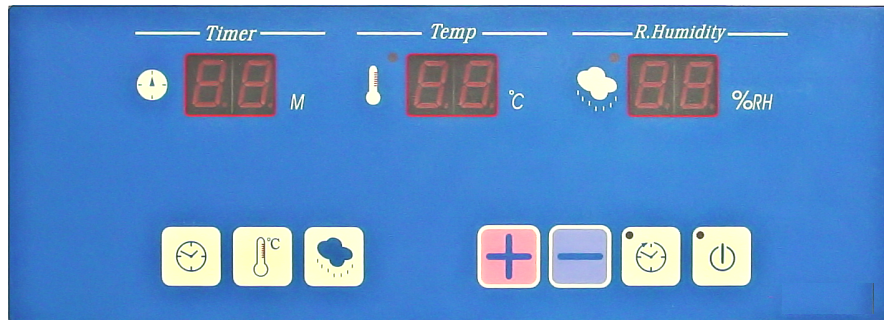
**Temperature Key;** Used to set the operating temperature of the prover. Pressing this key when the prover is operating will show the set temperature of the prover.



**Timer Key;** Used to set the prover operating time. Pressing this key when the prover is operating will show the set operating time of the prover. The timer can be set for a maximum of 99 minutes.

# OPERATION

## DISPLAY SCREENS



### The Timer Display will show the following functions:-

- Displays the elapsed 'Time' in minutes that the prover has to run.
- Pressing the 'Timer' key will display the set operating 'Time' in minutes for the prover.
- The light in the lower right corner of display will flash intermittently when the timer is running.

### Temperature Display will show the following functions:-

- Displays the current temperature of the prover.
- Pressing the 'Temperature' key will display the current set operating 'Temperature' in centigrade for the prover.

### Relative Humidity Display will show the following functions:-

- Displays the current humidity in the Prover room.
- Pressing the Humidity key will show the current humidity set for the prover.

**NOTE:** The 'Timer' and 'Temp' displays will show 'Stop' when the prover is powered up and also on completion of setting changes.

# OPERATION

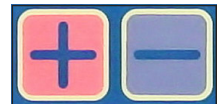
## OPERATION

Turn 'On' the mains power supply to the prover room, the 'Timer' and 'Temp' displays will show 'Stop'. Ensure the water supply connection is turned 'On'.



### To Set the Operating Time

- Press the 'Clock' key on the left of the display. The 'Timer' display will show the current set time and the LED in the bottom right corner of the 'Timer' display will glow.
- Press the '+ / -' Keys to change the set operating time. Press the 'Clock' key to accept the change. The display will show the new set time and after a short time the screen will revert to the 'Stop' display.



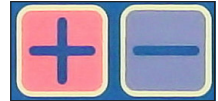
### To Set the Prover Operating Temperature

- Press the 'Temp' key on the left of the display. The 'Timer' display will show the current set temperature of the prover and the LED in the bottom right corner of the 'Temp' display will glow.
- Press the '+ / -' Keys to change the set operating temperature. Press the 'Temp' key to accept the change. The display will show the new set temperature and after a short time the screen will revert to the 'Stop' display.



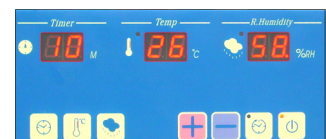
### To Set the Relative Humidity Level

- Press the 'Humidity' key on the display. The 'Humidity' display will show the current set temperature of the prover and the LED in the bottom right corner of the 'Humidity' display will glow.
- Press the '+ / -' Keys to change the set relative humidity. Press the 'Humidity' key to accept the change. The display will show the new set humidity and after a short time the screen will revert to the 'Stop' display.



### To Start the Prover

- Load the dough into the prover.
- Press the 'Power' key on the display to turn 'On' the prover. Hold the key depressed until all 3 displays illuminate.
- The LED in the top left corner of the 'Power' key will glow.
- The displays will show the current settings for the prover.
- Press the 'Start Timer' key. The red LED in the top left of the 'Start Timer' key will illuminate and the 'Timer' display will start to count down the time remaining.
- The LED in the bottom right hand corner of the 'Timer' display will flash intermittently.
- Once the proving time has completed, the display will flash '00' intermittently in the 'Timer' display and an audible alarm will sound.
- To silence the audible warning, press the 'Timer Start' key.
- Remove the dough from the prover.



### To Turn 'Off' the Prover

- To turn 'Off' the prover, hold the 'Power' key depressed until 'Stop' is displayed on the 'Timer' and 'Temp' display screens.



# OPERATION

## PARAMETER SETTINGS:

1. When unit display shows "STOP" push + - keys together for 3 seconds.
  2. Push + key until display reads "In 00 08".
  3. Push LHS time key.
  4. To cycle through parameters press LHS time key.
  5. To change value push + or – key.
- To save and exit push and hold LHS time key for 3 seconds.

CODE	SET TO	RANGE	DESCRIPTION
oR	- - 00	00 – 99	
rT	00	-25 - + 25	Temperature offset.
rR	- 00	-25 - + 25	Humidity offset.
rd	- - 00	00 – 99	
Rd	- - 00	00 – 99	

To access 2<sup>nd</sup> level parameter settings:

1. When unit display shows "STOP" push + - keys together for 3 seconds.
  2. Push + key until display reads "In 00 88".
  3. Push LHS time key.
  4. To cycle through parameters press LHS time key.
  5. To change value push + or – key.
- To save and exit push and hold LHS time key for 3 seconds.

CODE	SET TO	RANGE	DESCRIPTION
rP	- - 10	00 – 99	Temperature proportion.
rt	- - 6	00 – 30	Temperature PID calculation cycle.
rc	- - 30	01 – 99	Temperature output cycle.
Rc	- - 1	01 – 99	Steam output period.
Ro	- - 1	01 – 32	Steam output value.
oH			
dF			Heating dead zone.
FI			Filter index.
Lt			Light timer.

After installing proofer, set temperature to 40°C and Humidity to 80%.

Leave unit for 1 hour to stabilise.

Measure temperature and humidity and adjust offsets (rt & rR) as per Level 1 instructions.

# CLEANING AND MAINTENANCE

## CLEANING GUIDELINES

### **CAUTION:**

**All installation and service repair work must be carried out by qualified persons only.**

### **Cabinet**

The inside of the cabinet should be cleaned on a frequent basis to ensure the utmost hygiene standards are maintained. Clean the inside and outside of the cabinet with a clean, damp cloth and water and a mild detergent solution. Do not use cleaners containing grit, abrasive materials, bleach harsh chemicals or chlorinated cleaners. Do not use steel wool or harsh abrasive cleaners as these may damage the surface.

### **Door**

Wash with warm water and detergent solution using a soft sponge in straight lines up and down the door. Rinse with clean, warm water and dry off with a soft dry cloth.

Clean the door seal with warm water and detergent solution using a soft sponge when required and dry off with a soft dry cloth.

### **Water Tank**

The water tank should be cleaned out monthly to prevent build up of scaling.

### **Periodic Maintenance**

**NOTE: All maintenance operations should only be carried out by a qualified service person.**

To achieve the best results cleaning must be regular and thorough and all controls and mechanical parts should be checked and adjusted periodically by a qualified service person. If any small faults occur, have them attended to promptly. Don't wait until they cause a complete breakdown. It is recommended that the appliance is serviced every 6 months.

If the appliance is not used for long periods, close the water shut-off valve upstream of the appliance and clean the appliance thoroughly.

The appliance should be inspected and by an qualified service person at least every 6 months.

# FAULT FINDING

This section provides an easy reference guide to more common problems that may occur during operation of your appliance. The fault finding guide in this section is intended to help you correct, or at least accurately diagnose problems with your equipment.

Although this section covers most common problems reported, you may encounter a problem not covered in this section. In such instances, please contact your local authorised service agent who will make every effort to help you identify and resolve the problem. Please note that the service agent will require the following information:-

- **Model Code and Serial Number of appliance. (Both can be found on the Rating Plate located on the appliance).**

<b>Fault</b>	<b>Possible Cause</b>	<b>Remedy</b>
Not enough humidity	Humidity element damaged.	Replace humidity element.
	Too much scale in water tank.	Descale and clean water tank.
Proving is not even.	Fan damaged.	Replace fan.
Proving temperature is too low.	Heating element damaged.	Replace heating element.
Prover noisy.	Fan damaged.	Replace fan.
Lighting not working.	Lighting tube faulty.	Replace lighting tube.
	Lighting starter faulty.	Replace fluorescent tube starter.

# PARTS LIST

## IMPORTANT:

Only genuine qualified replacement parts should be used for the servicing and repair of this appliance. The instructions supplied with the parts should be followed when replacing components.

For further information and servicing instructions, contact your nearest qualified service branch (contact details are as shown on the reverse of the front cover of this manual).

When ordering spare parts, please quote the part number and the description as listed below. If the part required is not listed below, request the part by description and quote model number and serial number which is shown on the equipment rating plate.

## Prover Room P-1R

Part No.	Parts Code	Description	Specification
ST100001	16FSLW6	Fan Net 6"	Applied with EF060UF15PC23HN
ST100002	16FSL6	Fan 6"	EF060UF15PC23HN
ST100003	16DRG1KW	U Heating Element	1000W
ST100004	16FS-01	Fan	80*80*38MM,220V
ST100005	16DCF-UD8	Magnetic Valve	UD-8 1/4"AC220V P=7kgf HGD0UD814A22007
ST100006	15JTLJALZ-10ZG1/4	Copper Connector	JALZ-10ZG1/4
ST100007	15JTLJA-10	Copper Connector	JA-10
ST100008	15JTLL1/2	Copper Connector	1/2
ST100009	15JTLST1-14	Copper Connector	ST1-14
ST100010	15GLQ1/4	Filter	Y, 1/4"
ST100011	12ST1-01-11	Water Level Plate	443CT/2B 1.2T*45*167
ST100012	16FQL-3001DE	Water Level Switch	RF-3001DE
ST100013	16DRG32F-PR76000-1	Humidifying Element	220V 1000W
ST100014	12ST1-05-00	Flume(upper)	ST1-05-00
ST100015	11ST2-05-01-02	Drainpipe	φ16/14*230MM
ST100016	12ST1-06-00	Flume(lower)	ST1-06-00
ST100017	16JCQCN16-2	Contacto	CU-16 3A1b 220V/50HZ
ST100018	16JXZ5P	Wiring Terminal	5P
ST100019	16BXSG111B	Fuse Seat	111B
ST100020	16BXSZD	Fuse Cover	111A
ST100021	16KGDZ47LE/2P-40A	Breaker	DZ47LE/2P 40A-50HZ
ST100022	16KZQST100	Control Unit	220V
ST100023	12ST1-08-00	Electrical Box	ST1-08-00
ST100024	11ST1-01-06	Drainpipe	1.2T*φ19*40L



# PARTS LIST

## P-2R Steam Generator

