



## INSTALLATION, OPERATION AND CARE MANUAL

REMEMBER TO COMPLETE THE ONLINE  
WARRANTY REGISTRATION TO  
RECEIVE YOUR FULL TWO YEAR WARRANTY.

### **WARRANTY**

All Scientific equipment comes with a standard ONE year warranty, The 1 Year Extended Warranty is only valid for customers who have registered their warranty online at [www.scientific.co.za](http://www.scientific.co.za) within the first year after making their purchase.

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ALL SCIENTIFIC EQUIPMENT COMES WITH A TWO  
YEAR WARRANTY ON COMPONENTS AND  
DEFECTIVE WORKMANSHIP - Ts & Cs APPLY.

### REGISTER ONLINE TODAY

- Register your warranty on-line at [www.scientific.co.za](http://www.scientific.co.za) today and learn how to get the best out of your Scientific product.

### NO WEB ACCESS?

- If you do not have access to the Web, register by completing this form and Email it to the Scientific head office in South Africa. Email: [sales@scientific.co.za](mailto:sales@scientific.co.za)

### ONLY COMPLETE IF YOU DO NOT HAVE WEB ACCESS

Company \_\_\_\_\_

Name \_\_\_\_\_

Surname \_\_\_\_\_

Telephone \_\_\_\_\_

Cellphone \_\_\_\_\_

Email Address \_\_\_\_\_

Country \_\_\_\_\_

Postal address \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Scientific products purchased \_\_\_\_\_

Product Code (see box label) \_\_\_\_\_

Serial number (see back of machine) \_\_\_\_\_

### INTENDED USE

- |                                       |  |   |
|---------------------------------------|--|---|
| <input type="checkbox"/> Agriculture  | <input type="checkbox"/> Genetics        | <input type="checkbox"/> Pharmaceutical Physics |
| <input type="checkbox"/> Automotive   | <input type="checkbox"/> Industrial      | <input type="checkbox"/> Power Generation       |
| <input type="checkbox"/> Biochemistry | <input type="checkbox"/> Medical         | <input type="checkbox"/> Special Metals         |
| <input type="checkbox"/> Botony       | <input type="checkbox"/> Microbiology    | <input type="checkbox"/> Sugar                  |
| <input type="checkbox"/> Chemistry    | <input type="checkbox"/> Mining          | <input type="checkbox"/> Water                  |
| <input type="checkbox"/> Cosmetics    | <input type="checkbox"/> Nuclear         | <input type="checkbox"/> Zoology                |
| <input type="checkbox"/> Electronics  | <input type="checkbox"/> Paper/Packaging | <input type="checkbox"/> Other (Specify): _____ |
| <input type="checkbox"/> Food         | <input type="checkbox"/> Petrochemical   | _____   |



ALL SCIENTIFIC EQUIPMENT COMES WITH A TWO  
YEAR WARRANTY ON COMPONENTS AND  
DEFECTIVE WORKMANSHIP - Ts & Cs APPLY.

## LIMITED WARRANTY

The manufacturer guarantees that this unit is free from defect in materials and workmanship when it leaves the factory and undertakes to replace or repair the unit if it proves defective in normal use or during servicing for a period of 1(one) year from the date of original installation and is for the benefit of the original purchaser only. The liability under this warranty is limited to repairing the defective unit or any part of the unit provided it is sent carriage paid to an authorized dealer. All other Warranties ,expressed or implied , statutory or otherwise, including without limitations any implied Warranty of Merchantability or fitness for purpose are excluded .The Seller shall in no event be liable for direct,indirect or consequential damages in connection with the products.

This unit is at all times to be used according to the instruction manual and for its normal purpose.

This Warranty is not effective if damage occurs because of accident, carelessness,improper installation,lack of proper set-up,supervision when required or if the equipment is installed or operated in any manner contrary to the installation and operating instructions. In these cases,repairs will be made at a reasonable cost. Work performed by unauthorized personnel or unauthorized service agencies voids this Warranty.

4-INS-362 R05

## INDUSTRIAL OVENS/ INCUBATORS



**INSTALLATION OPERATION AND CARE OF  
INDUSTRIAL OVENS / INCUBATORS  
MODELS:  
385/386/387/388/389/362/363/620**

## UNPACKING

Unpack the product and check for any damage incurred during transit. This should be reported to the responsible carrier, railway or postal authority, and a request for a damage report should be made.



THESE INSTRUCTIONS MUST BE FOLLOWED FOR US TO GUARANTEE OUR FULL SUPPORT OF YOUR CLAIM FOR PROTECTING AGAINST LOSS FROM CONCEALED DAMAGE. THE FORM FOR FILING SUCH A CLAIM WILL BE PROVIDED BY THE CARRIER.

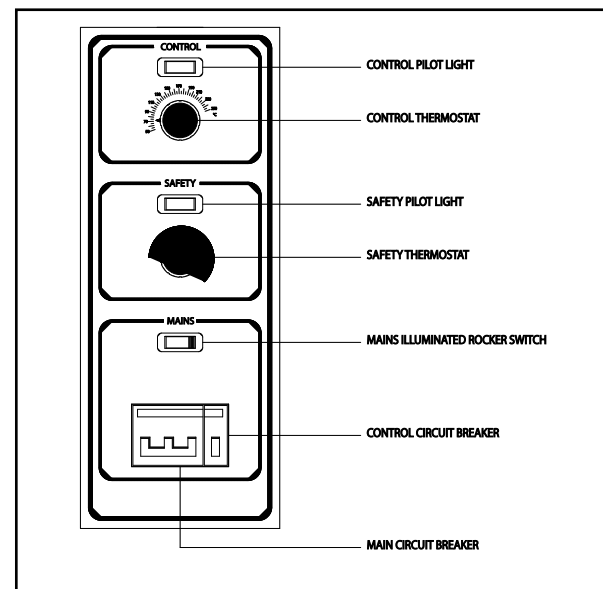
## PRODUCT DESCRIPTION

The units are free standing, general purpose ovens with a working temperature range from ambient +7°C to 250°C. They are intended for a variety of drying and curing operations. The 700 litre units operates on a forced air circulating principle whilst the 1400 litre units incorporate a 3 walled air circulation system to ensure uniform temperatures throughout the chamber.

The unit consists of a mild steel body coated with a textured powder coated finish, while the interior chamber is made of 304 stainless steel. The exterior shell is separated from the interior shell by mineral wool insulation.

## GENERAL INSTALLATION AND OPERATION INFORMATION

1. Position the unit ensuring that the unit is at least 100mm – 200mm from the wall to ensure adequate fan ventilation, and 600mm around control panel to allow access
2. Check that the mains voltage complies with the rated 380V 50 Hz 3 phase, neutral and earth supply voltage.
3. Caution: Use supply wires suitable for 75°C  
Caution: Use supply wires suitable for 90°C  
Caution: Use supply wires suitable for 110°C

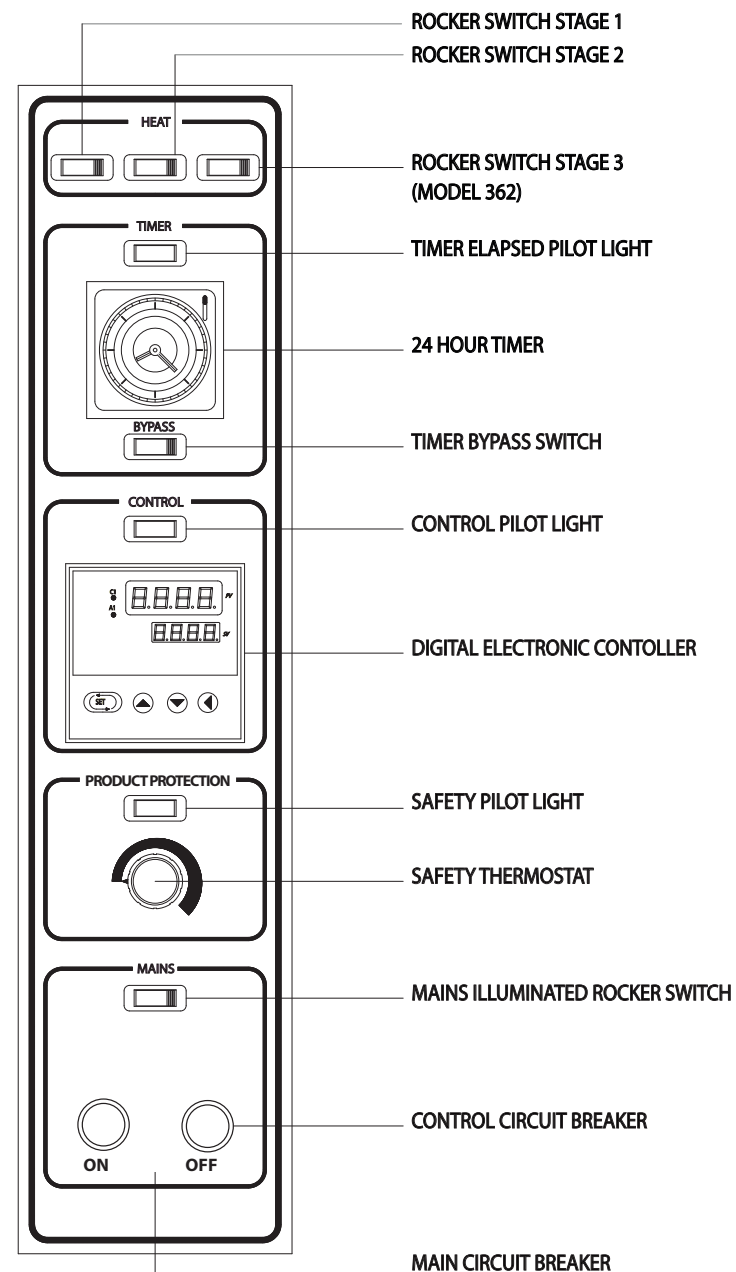
**ECONOMY OVENS: MODELS: 386/388/363**

1. After electrical connection lift all circuit breakers to the upper position. The fan will now run.
2. Open safety thermostat fully. The red pilot light will now be on.
3. Adjust the control thermostat to the desired setting. Turn the safety thermostat fully clockwise until the unit has reached the desired temperature, then turn anti-clockwise until the pilot light comes on. The safety thermostat is then set a few degrees above the set control point.
4. All units are factory calibrated with an empty interior. However, due to voltage fluctuations or heavy internal load the set temperature may not correspond exactly. In this case turn the thermostat dial slightly lower or higher to suit

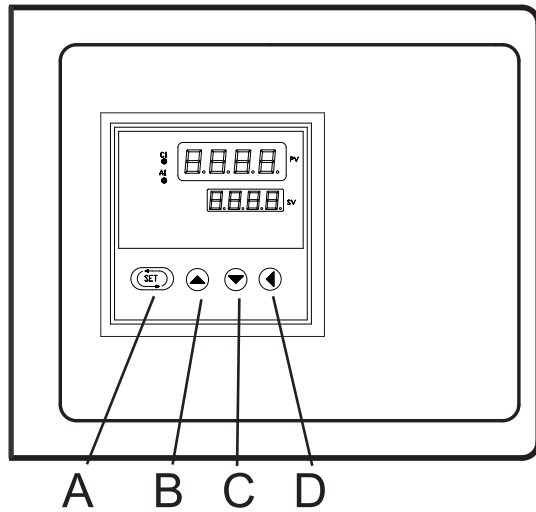
**DIGITAL OVENS: MODELS 385/387/389/362/620**

1. After electrical connection lift all circuit breakers to the upper position. The fan will now run.
2. Push the "green" start button.
3. Open safety thermostat fully. The red pilot light will now be on.
4. Adjust the control thermostat to the desired setting. Turn the safety thermostat fully clockwise until the unit has reached the desired temperature, then turn anti-clockwise until the pilot light comes on. The safety thermostat is then set a few degrees above the set control point.
5. Set the timer to the correct time of day. The bypass switch enables one to either switch the oven on or off via the timer, or if desired, to allow the oven to run continuously. When the red pilot light above the timer is on, the timer is in the off position. The timer is of the synchronous type. It has a 24-hour range but has not time reserve. In other words, when the power is cut to the timer motor, the timer fails to keep time. The unit can resolve in 15 minute intervals.
6. With the stage switches, the unit can be used at two different wattages (3000W and 6000W). Stage 1 is for low temperature use. Stage 1 plus Stage 2 is for higher temperature use. Note that for the 700L the stage 3 switch serves no function.
7. The Model 362 and 620 is fitted with 3 stage heating 4000W, 8000W, 12000W

PART NO.	DESCRIPTION
1	INTERIOR ASSEMBLY
2	CONTROL BOX ASSEMBLY
3	VENT TUBE
4	LH SIDE PANEL
5	DOOR HINGE
6	DOOR HINGE SUPPORT
7	LH DOOR ASSEMBLY
8	RH DOOR ASSEMBLY
9	LOCKING PLATE
10	BOTTOM HINGE BRACKET
11	TROLLEY STOP ASSEMBLY
12	2kw ELEMENT
13	TOP HINGE BRACKET
14	ELEMENT PLATE
15	ELEMENT BOX
16	ELEMENT BOX COVER
17	TROLLEY GUIDE
18	RH SIDE PANEL
19	MOTOR SUPPORT ASSEMBLY
20	MOTOR-1.5kw,2P,380V
21	EXHAUST DAMPER
22	EXHAUST DAMPER FLAP
23	M12 EYE BOLT
24	TOP PANEL
25	BACK PANEL

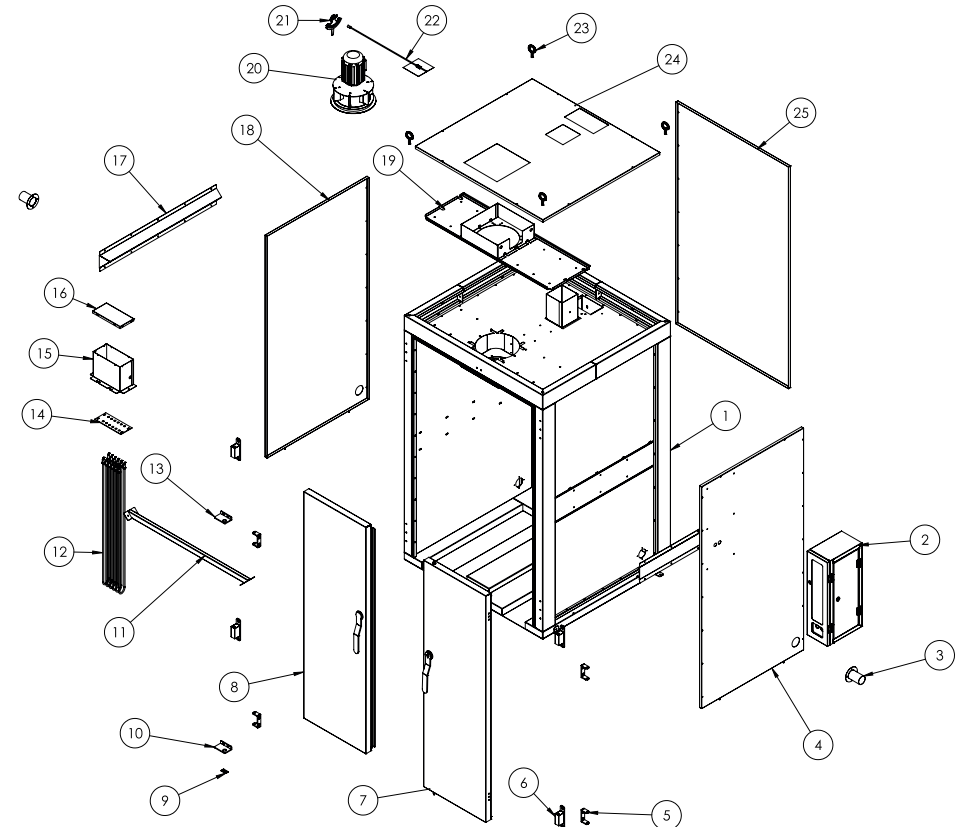


## DIGITAL TEMPERATURE CONTROLLER OPERATION



1. To set the operating temperature, use button "D" on the controller to toggle between characters on the bottom display. The buttons "B" and "C" set the values higher or lower. Press 'SET' button "A" when the temperature value is correct. The upper display indicates the actual internal temperature.

## EXPLODED DIAGRAM 2000L ECONOMY OVEN MODEL: 620





**MODEL: 1400 LITRE ECONOMY OVEN**  
**MODEL CODE: 362**

Part No.	Description
1	INNER ENCLOSURE
2	1400L OVEN SHELF
3	LEFT HINGE
4	DOOR SEAL (4M)
5	INNER DOOR LINER
6	OVEN DOOR HANDLE TONGUE
7	DOOR HANDLE PIN
8	OVEN DOOR HANDLE BUSH NUT
9	OVEN DOOR HANDLE BUSH
10	OVEN DOOR HANDLE
11	LEFT OUTER DOOR
12	RIGHT OUTER DOOR
13	DOOR STRIKER PIN
14	PLASTIC FEET
15	FAN MOTOR
16	FAN MOTOR EXTENSION SHAFT
17	FAN IMPELLER ASSEMBLY
18	PILOT LIGHT
19	SWITCH
20	TIMER
21	TEMPERATURE CONTROLLER
22	KNOB CAP
23	KNOB
24	TRIPLE POLE CIRCUIT BREAKER
25	SINGLE POLE CIRCUIT BREAKER
26	TERMINAL END STOP
27	EARTH TERMINAL
28	TERMINAL
29	UK5 BRIDGE
30	TERMINAL SEPARATION PLATE
31	20MM RUBBER GROMMET
32	CONTROL PANEL DOOR HINGE
33	CONTROL PANEL LOCK
34	CONTROL PANEL SQUARE KEY
35	CONROL PANEL DOOR
36	OVERLOAD PROTECTION
37	32AMP CONTACTOR
38	TERMINAL DIM RAIL
39	SOLID STATE RELAY BRACKET
40	SOLID STATE RELAY
41	SWITCH GEAR PANEL
42	THERMOSTAT
43	FACIA
44	ELEMENT 2000W 230V
45	ELEMENT SUPPORT BRACKET
46	ELEMENT COVER
47	1400L BODY ASSEMBLY
48	EXHAUST DAMPER
49	RIGHT HINGE

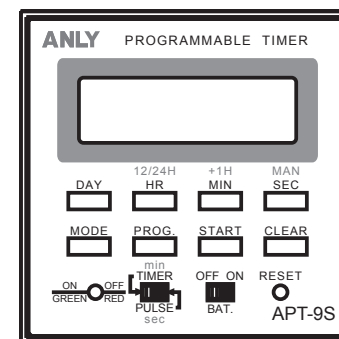
**MODEL: 1400 LITRE ECONOMY OVEN**  
**MODEL CODE: 363**

Part No.	Description
1	EXHAUST DAMPER
2	LEFT HINGE
3	SHELF RUNNER
4	RIGHT HINGE
5	1400L SHELF
6	DOOR SEAL (4M)
7	OVEN DOOR HANDLE
8	OVEN DOOR HANDLE BUSH
9	OVEN DOOR HANDLE BUSH NUT
10	OVEN DOOR HANDLE TONGUE
11	DOOR PANEL
12	INNER LINER SPACER ASSEMBLY
13	PLASTIC FEET
14	DOOR STRIKER PIN
15	FAN MOTOR
16	FAN MOTOR EXTENSION SHAFT
17	FAN IMPELLER ASSEMBLY
18	THERMOSTAT
19	FACIA
20	PILOT LIGHT
21	KNOB
22	KNOB CAP
23	SWITCH
24	CIRCUIT BREAKER
25	TERMINAL END STOP
26	EARTH TERMINAL
27	TERMINAL
28	UK5 BRIDGE
29	TERMINAL SEPERATION PLATE
30	CONTROL PANEL DOOR
31	CONTROL PANEL DOOR HINGE
32	CONTROL PANEL SQUARE KEY
33	CONTROL PANEL LOCK
34	OVERLOAD PROTECTION
35	40AMP CONTACTOR
36	20MM RUBBER GROMMET
37	SWITCH GEAR PANEL
38	ELEMENT 2000W 230V
39	ELEMENT SUPPORT BRACKET
40	ELEMENT COVER
41	CONTROL BOX ASSEMBLY
42	FACIA PANEL
43	1400L BODY ASSEMBLY

**MODEL 389/385/387/362/620**  
**DIGITAL OVENS/INCUBATORS**

- The controls of these growth chambers have been designed to simulate both day and night conditions and temperatures.

**WEEKLY PROGRAMMABLE TIMER**



**BUTTON and SWITCH FUNCTIONS**

- DAY** : Weekday setting
- HR** : Hour setting
- MIN** : Minute setting
- SEC** : Second setting
- MODE** : Mode status selecting
- PROG.** : Program number setting
- START** : Normal mode setting
- CLEAR** : Clear setting
- 12/24H** : 12H or 24H setting
- +1H** : Daylight-saving-time setting
- MAN** : Mandatory contact enable or disable
- RESET** : Program reset
- TIMER** : Timer mode
- PULSE** : Pluse mode
- min** : Unit of minute (in TWIN TIMER)
- sec** : Unit of second (in TWIN TIMER)
- ON** : Power on (Battery on)
- OFF** : Power off (Battery off)

## OPERATING FLOWCHART

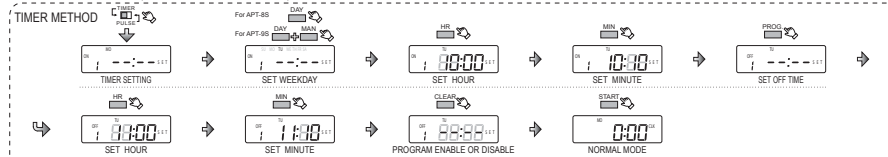
## CLOCK MODE



## NORMAL MODE



## PROGRAM MODE(Choose ONE method ONLY)

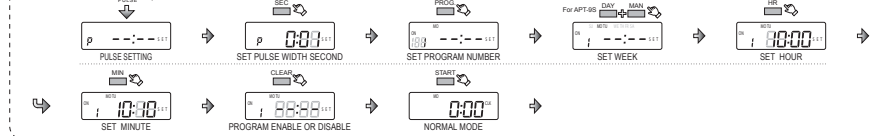


## Setting example :

There is a machine needed to be turned on at 8:00 AM and to be turned off at 5:00 PM, from Monday to Friday. In addition, the machine needed to be turned on at 9:00 AM to 11:00 AM every Saturday for inspection. The correct setting display should be as follows.



## PULSE METHOD



## Setting example :

The factory has a buzz to remind workers their business hours, break time and etc. The buzz should be activated at 8:00, 12:00, 13:00, and 17:00 from Monday to Saturday. The buzz should be activated 10 seconds every time. The correct setting display should be as follows.



## HOLIDAY SUSPENSION MODE

(You may skip this step and setup this function later.)

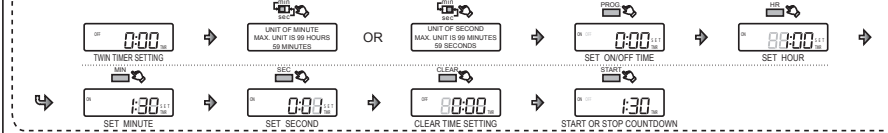


## Setting example :

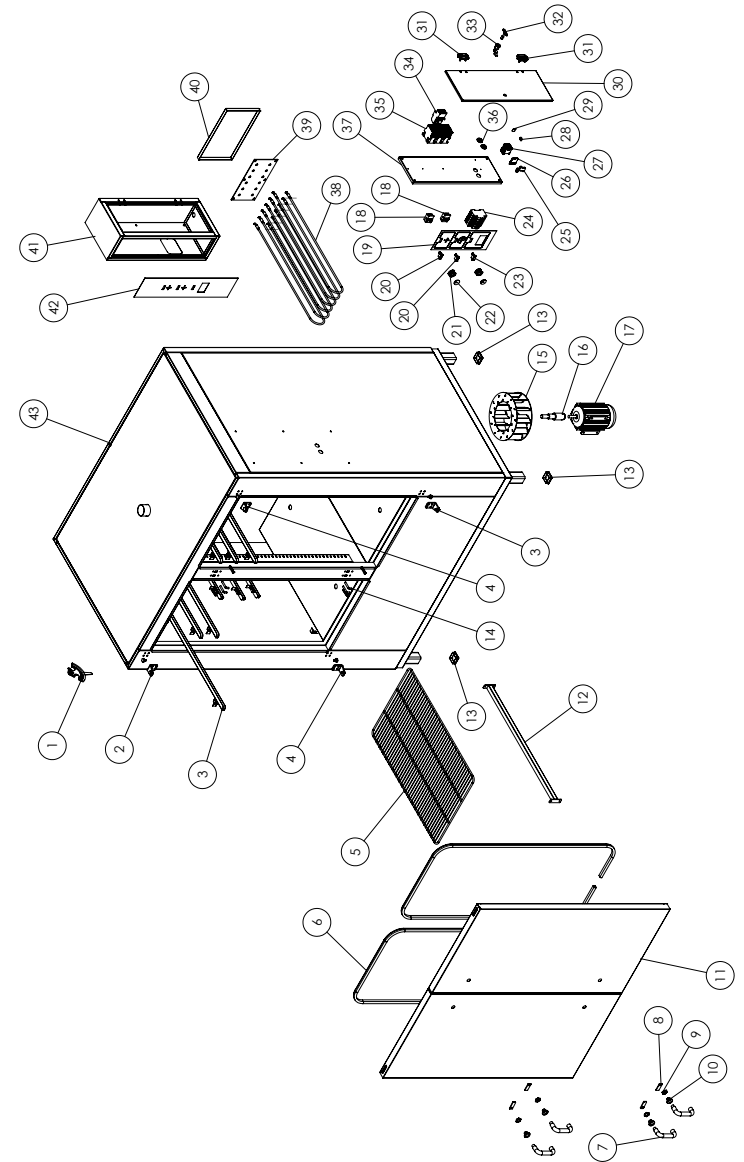


## TWIN TIMER MODE

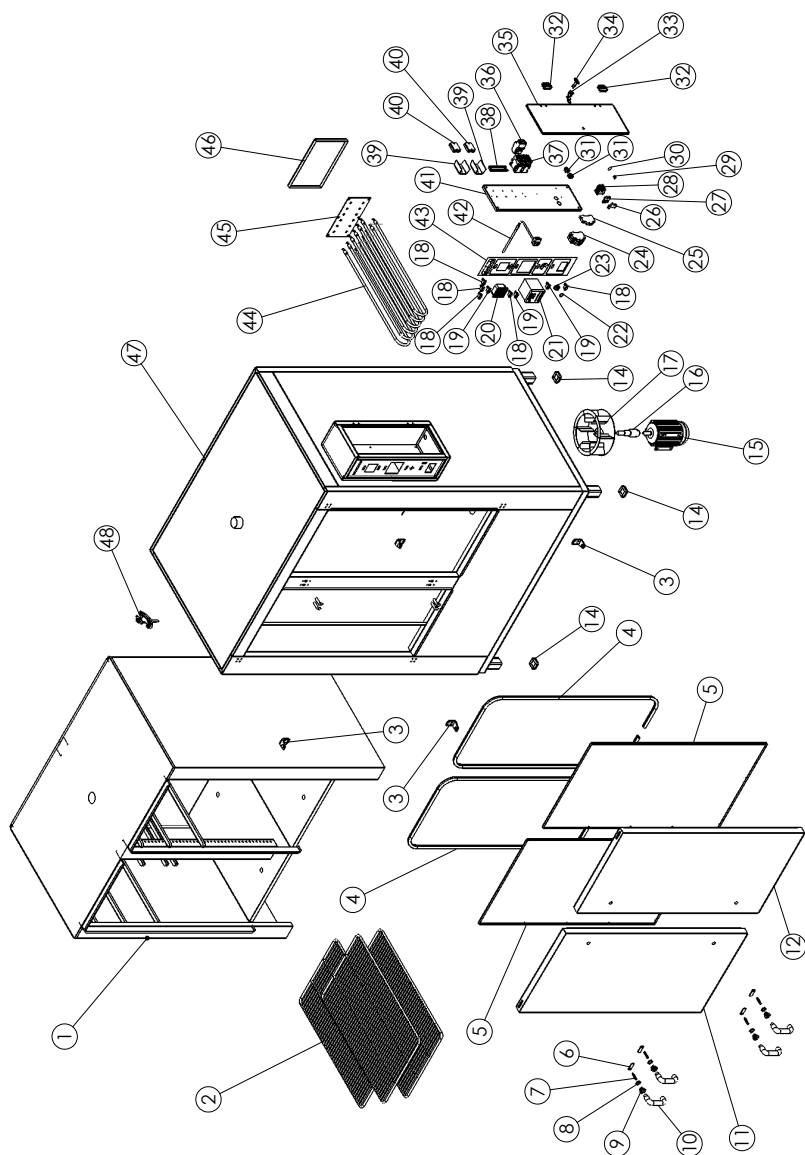
(You may skip this step, if you do not need this function. Please be noticed, when twin timer function is enabled, the program will be disabled.)



## BACK TO THE CLOCK MODE

EXPLODED DIAGRAM  
1400L ECONOMY OVEN  
MODEL: 363

**EXPLODED DIAGRAM  
1400L DIGITAL OVENS  
MODELS: 362**



## WARNING

### Burn Hazard.

Do not touch hot, liquid or heating surfaces while equipment is heating or operating

Hot surfaces and liquid can burn skin. Allow the hot surfaces to cool before handling

## CLEANING

BEFORE CLEANING THE UNIT, DISCONNECT THE UNIT FROM THE MAINS !

1. Clean the outside of the unit using a damp cloth with soapy water
2. The stainless steel inner chamber should be cleaned with a damp cloth immersed in soapy water.
3. Under no circumstances should steel wool be used.
4. Avoid aggressive acids since this will discolour the stainless steel.
5. It is normal for the stainless steel to adapt a slightly yellow discolouration when exposed to continuous high temperature use.
6. The units are designed for continuous operating under normal conditions. Periodic maintenance other than cleaning is not required.



CLEAN THE STAINLESS STEEL PARTS WITH WATER AND SOAP. AVOID THE USE OF DETERGENTS CONTAINING ABRASIVE SUBSTANCES. ALWAYS RINSE WELL AND DRY CAREFULLY AFTER CLEANING. DO NOT USE PRODUCTS CONTAINING AGGRESSIVE CHEMICALS, ACIDS OR PRODUCTS WITH CHLORINE TO CLEAN THE STAINLESS STEEL EVEN IF DILUTED



## WARNING

### Electric Shock Hazard.

Keep water and other liquids from entering the inside of the equipment. Liquid inside the equipment could cause an electrical shock

Do not spray water or cleaning products. Liquid could contact the electrical components and cause a short circuit or an electrical shock.  
Do not use equipment if power cord is damaged or has been modified

## SAFETY

### READ ALL INSTRUCTIONS BEFORE USE. FAILURE TO FOLLOW THESE PRECAUTIONS COULD RESULT IN INJURY TO YOURSELF AND OTHERS

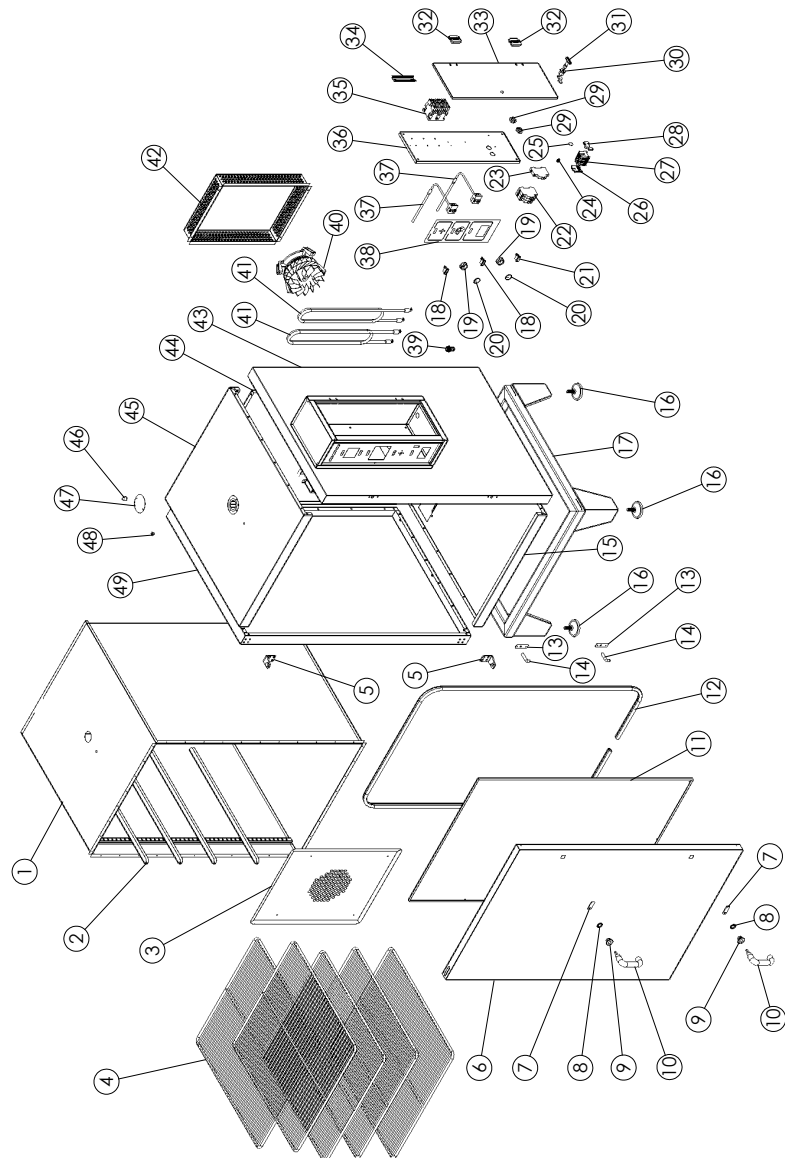
1. Ensure that the equipment and the power supply cord do not come into contact with hot surfaces.
2. Never leave oven door open because the desired set temperature cannot be reached which can result in over-heating of the elements.
3. Uniformly load shelves and do not overload since this may damage the inside construction of the ovens.
4. Because these ovens are not explosion-proof, it is dangerous to heat solvents and other flammable substances in this equipment.
5. When opening the door of the unit, stand a distance away to prevent exposure to potentially hazardous fumes.
6. This unit is only to be used by properly trained laboratory staff.
7. If the supply cord is damaged, it must be replaced with a new cord assembly available from the suppliers agent.
8. Use only earthed outlets matching the serial plate voltage.
9. In the case of 3 phase equipment, have equipment installed by a qualified personnel in accordance with local codes and ordinances.
10. Use equipment in a flat level position.
11. Do not operate if equipment has been damaged or is malfunctioning in any way.
12. These units are designed to run only on alternating current (A.C.) **DO NOT CONNECT TO DIRECT CURRENT (D.C)**

### MODEL: 700 LITRE ECONOMY OVEN

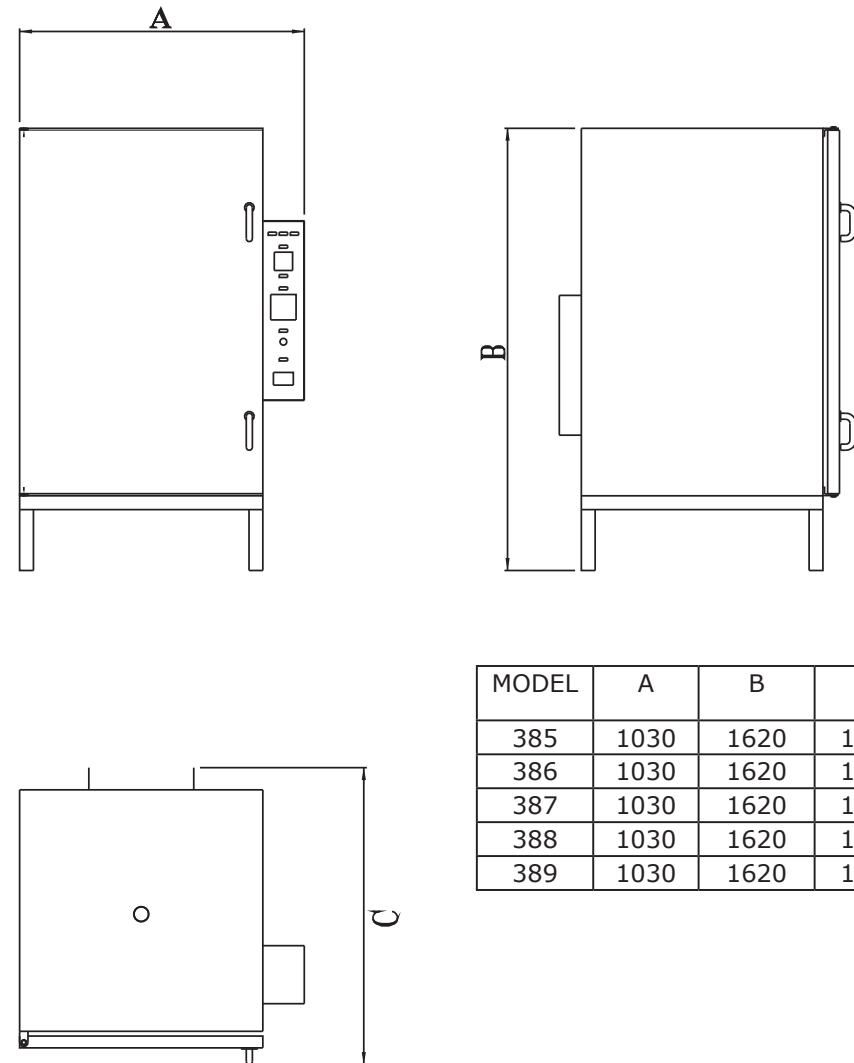
MODEL CODE: 386/388

Part No.	Description
1	INNER ENCLOSURE
2	OVEN RUNNER
3	INTERIOR FAN COVER PLATE
4	700L OVEN SHELF
5	HINGE
6	OUTER DOOR
7	OVEN DOOR HANDLE TONGUE
8	OVEN DOOR HANDLE BUSH NUT
9	OVEN DOOR HANDLE BUSH
10	OVEN DOOR HANDLE
11	INNER DOOR LINER
12	DOOR SEAL (4M)
13	DOOR HANDLE STRIKER PIN PLATE
14	DOOR STRIKER PIN
15	BOTTOM PANEL ASSEMBLY
16	ADJUSTABLE FOOT
17	BASE FRAME ASSEMBLY
18	PILOT LIGHT
19	KNOB CAP
20	KNOB
21	SWITCH
22	TRIPLE POLE CIRCUIT BREAKER
23	SINGLE POLE CIRCUIT BREAKER
24	UK5 BRIDGE
25	TERMINAL SEPARATION PLATE
26	EARTH TERMINAL
27	TERMINAL
28	TERMINAL END STOP
29	20MM RUBBER GROMMET
30	CONTROL PANEL LOCK
31	CONTROL PANEL SQUARE KEY
32	CONTROL PANEL DOOR HINGE
33	CONTROL PANEL DOOR
34	TERMINAL DIM RAIL
35	40AMP CONTACTOR
36	SWITCH GEAR PANEL
37	THERMOSTAT
38	FACIA
39	CABLE GRIP
40	FAN MOTOR
41	ELEMENT 3000W 230V
42	EXTERNAL FAN COVER
43	RIGHT HAND SIDE PANEL
44	BACK PANEL ASSEMBLY
45	TOP PANEL ASSEMBLY
46	EXHAUST DAMPER PLATE KNOB
47	EXHAUST DAMPER PLATE
48	6MM RUBBER GROMMET
49	RIGHT HAND SIDE PANEL

**EXPLODED DIAGRAM  
700L ECONOMY OVENS  
MODELS: 386/388**

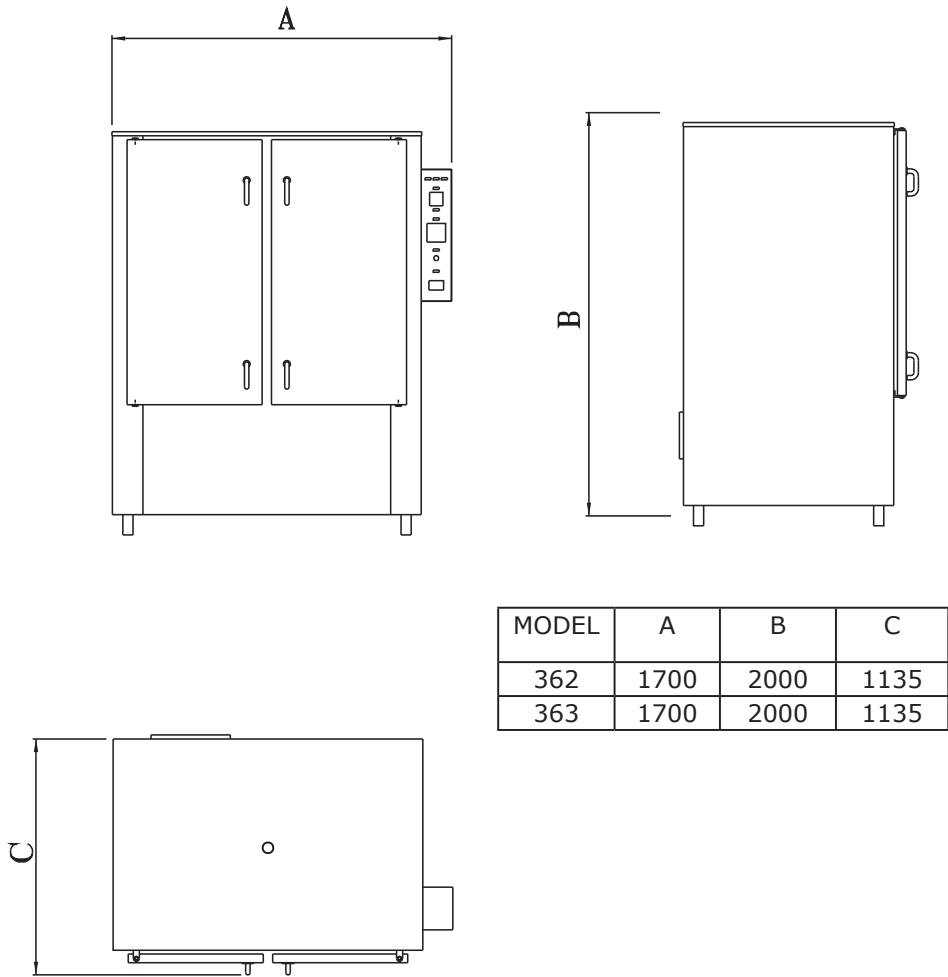


**POSITIONING DIAGRAM  
ECONOMY/DIGITAL OVENS  
MODELS: 385/386/387/388/389**



MODEL	A	B	C
385	1030	1620	1100
386	1030	1620	1100
387	1030	1620	1100
388	1030	1620	1100
389	1030	1620	1100

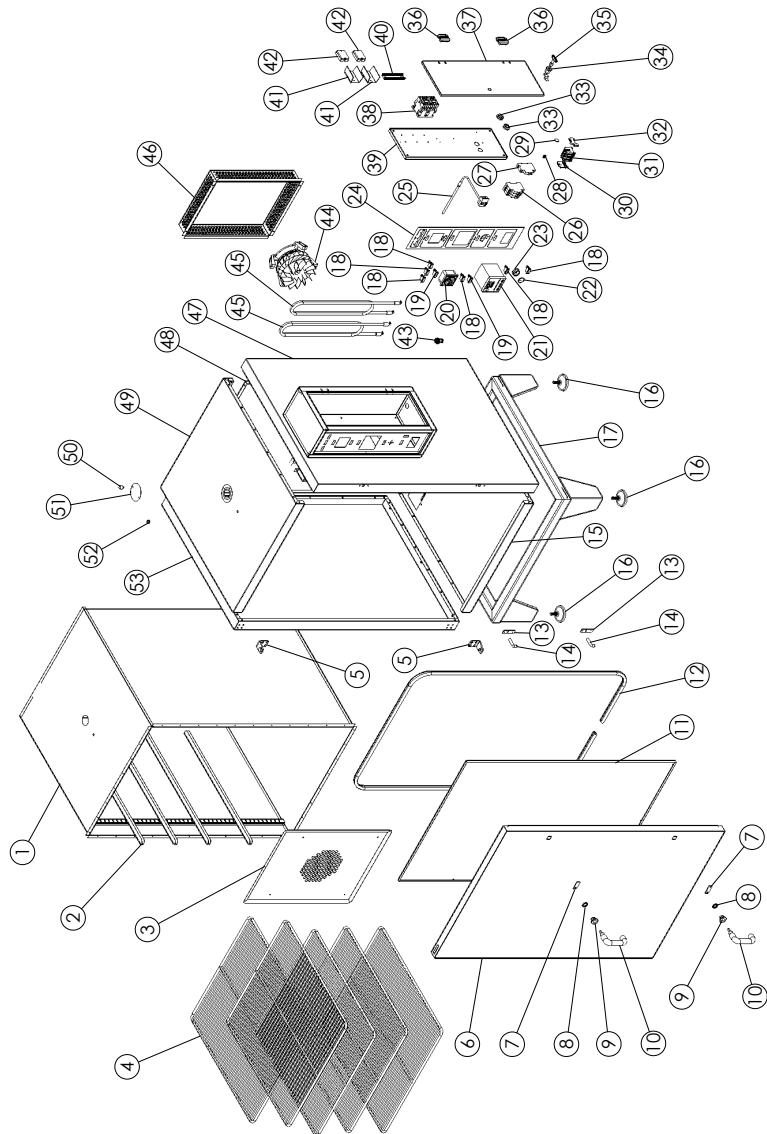
POSITIONING DIAGRAM  
ECONOMY/DIGITAL OVENS  
MODELS: 362/363



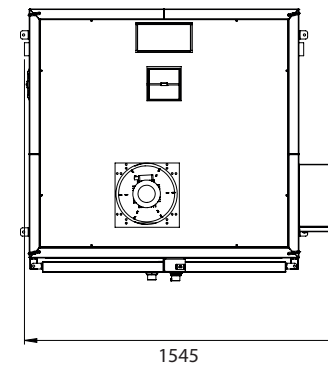
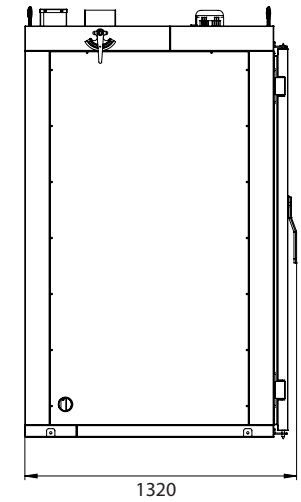
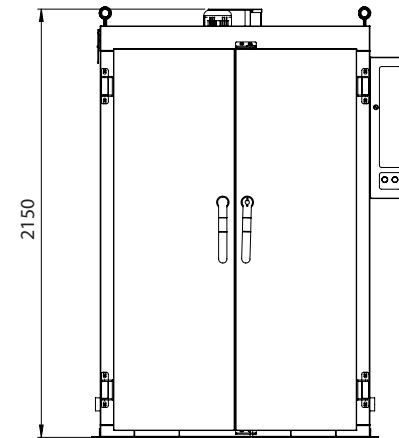
MODEL: 700 LITRE DIGITAL OVENS  
MODEL CODE: 385/387/389

Part No.	Description
1	INNER ENCLOSURE
2	OVEN RUNNER
3	INTERIOR FAN COVER PLATE
4	700L OVEN SHELF
5	HINGE
6	OUTER DOOR
7	OVEN DOOR HANDLE TONGUE
8	OVEN DOOR HANDLE BUSH NUT
9	OVEN DOOR HANDLE BUSH
10	OVEN DOOR HANDLE
11	INNER DOOR LINER
12	DOOR SEAL (4M)
13	DOOR HANDLE STRIKER PIN PLATE
14	DOOR STRIKER PIN
15	BOTTOM PANEL ASSEMBLY
16	ADJUSTABLE FOOT
17	BASE FRAME ASSEMBLY
18	SWITCH
19	PILOT LIGHT
20	TIMER
21	TEMPERATURE CONTROLLER
22	KNOB CAP
23	KNOB
24	FACIA
25	THERMOSTAT
26	TRIPLE POLE CIRCUIT BREAKER
27	SINGLE POLE CIRCUIT BREAKER
28	UK5 BRIDGE
29	TERMINAL SEPARATION PLATE
30	EARTH TERMINAL
31	TERMINAL
32	TERMINAL END STOP
33	20MM RUBBER GROMMET
34	CONTROL PANEL LOCK
35	CONTROL PANEL SQUARE KEY
36	CONTROL PANEL DOOR HINGE
37	CONTROL PANEL DOOR
38	40AMP CONTACTOR
39	SWITCH GEAR PANEL
40	TERMINAL DIM RAIL
41	SOLID STATE RELAY BRACKET
42	SOLID STATE RELAY
43	CABLE GRIP
44	FAN MOTOR
45	ELEMENT 3000W 230V
46	EXTERNAL FAN COVER
47	RIGHT HAND SIDE PANEL
48	BACK PANEL ASSEMBLY
49	TOP PANEL ASSEMBLY
50	EXHAUST DAMPER PLATE KNOB
51	EXHAUST DAMPER PLATE
52	6MM RUBBER GROMMET
53	RIGHT HAND SIDE PANEL

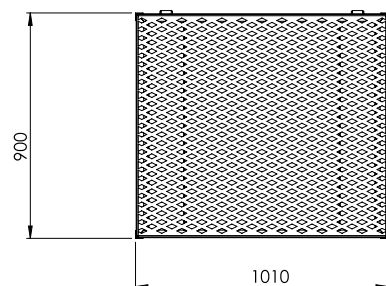
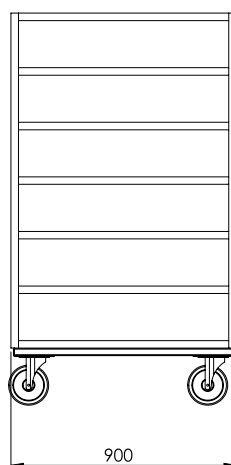
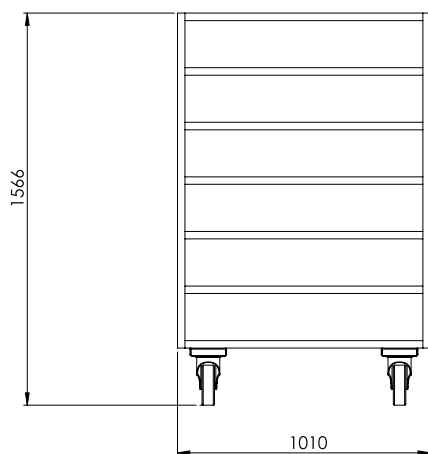
**EXPLODED DIAGRAM  
700L DIGITAL OVENS  
MODELS: 385/387/ 389**



**POSITIONING DIAGRAM  
MODEL 620 DIGITAL OVEN**



### TROLLEY DIMENSIONS MODEL 620

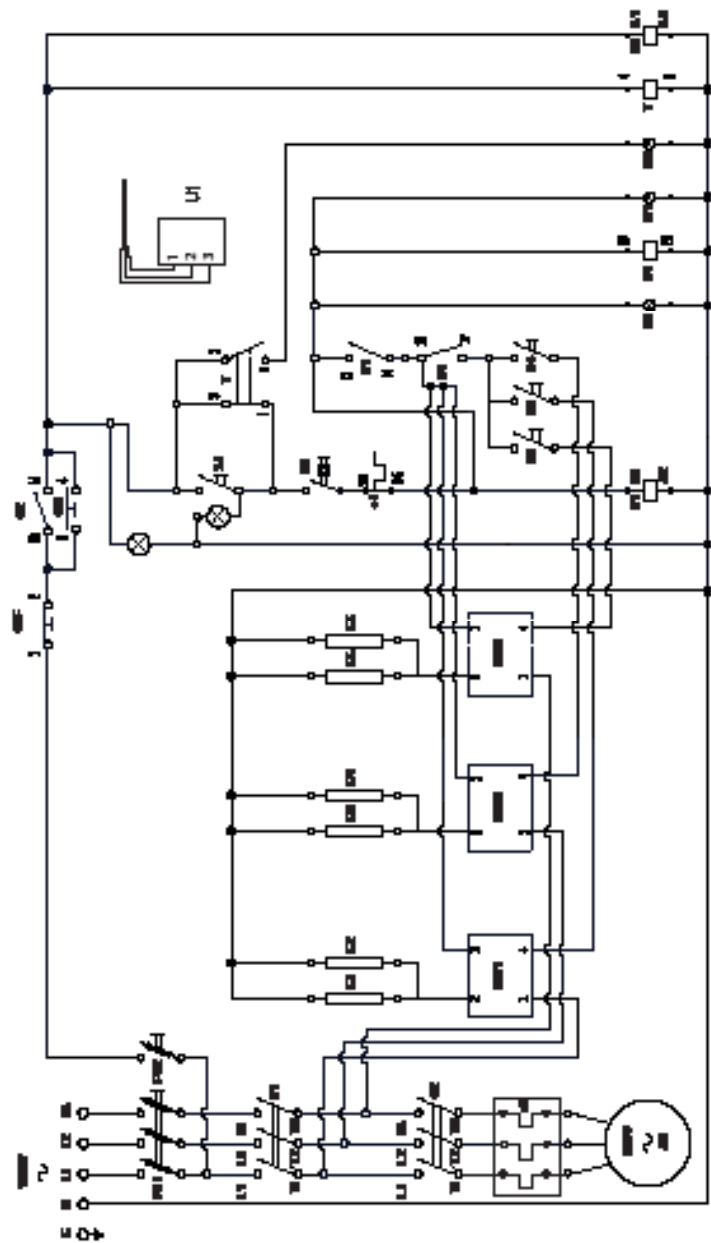


### WIRING DIAGRAM LEGEND MODEL: DIGITAL OVEN MODEL CODE: 620

PART	DESCRIPTION	STOCK CODE
FU1	CIRCUIT BREAKER 20AMP TRIPLE POLE	1-20A-TCPB
FU2	CIRCUIT BREAKER 5AMP TRIPLE POLE	1-5A-SPCB
H1	SAFETY PILOT LIGHT	1-18TRF
H2	CONTROL PILOT LIGHT	1-18TRF
H3	TIMER ELAPSED PILOT LIGHT	1-18TRF
E1/E2 E3/E4 E5/E6	RED HEAT ELEMENT 2000W/230V	5-2000W-RS
C1	ELEMENT CONTACTOR	1-220V-CONT-40A
C2	MOTER CONTACTOR	1-220V-CONT-32A
S1	TIMER BYPASS	1-17TAF
S2	STAGE SWITCH CIRCUIT 1	1-17TAF
S3	STAGE SWITCH CIRCUIT 2	1-17TAF
S4	STAGE SWITCH CIRCUIT 3	1-17TAF
B1	SAFETY THERMOSTAT	1-EGO-150
T	24 HOUR TIMER	1-24HR-TIMER
M	FAN MOTOR	1-FAN-MOT-1.5KW
U1	ELECTRONIC TEMPERATURE CONTROL- LER	1-TDC-250-PT100
SSR1 SSR2 SSR3	SOLID STATE RELAY	1-SSR-50A
e1	MOTOR OVERLOAD RELAY	1-ORL-362
ON	ON PUSH BUTTON	1-PBG-JES0002
OFF	OFF PUSH BUTTON	1-PBR-JES0002



**WIRING DIAGRAM**  
**MODEL: DIGITAL OVEN**  
**MODEL CODE: 620**



**ELECTRICAL CONNECTION INFORMATION**

MODEL	DESCRIPTION	VOLTS (V/Hz)	POWER (WATTS)
385	700L DIGITAL OVEN	380/50/2P	6000
386	700L ECONOMY OVEN	380/50/2P	6000
387	700L DIGITAL OVEN	230/50	3000
388	700L ECONOMY OVEN	230/50	3000
389	700L DIGITAL INCUBATOR	230/50	1500
362	1400L DIGITAL OVEN	380/50/3P	12000
363	1400L ECONOMY OVEN	380/50/3P	12000
620	2000L DIGITAL OVEN	380/50/3P	12000

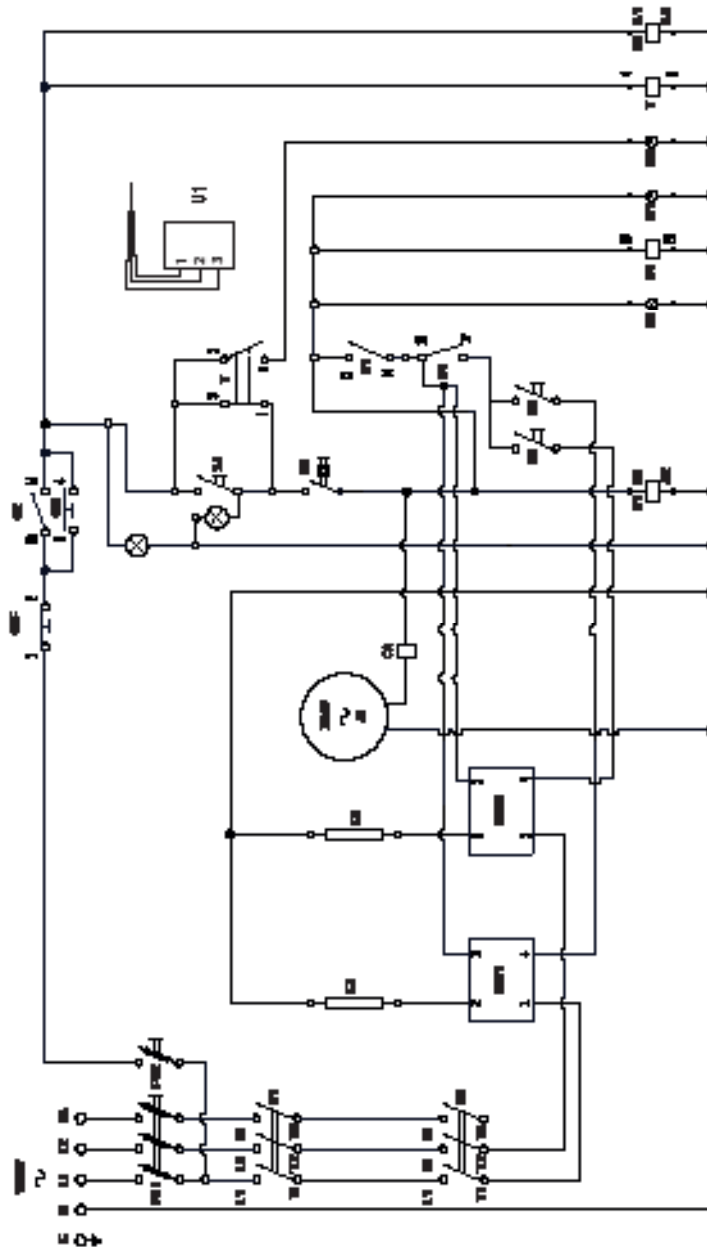


THE CONTROL COMPARTMENT OF THIS UNIT CONTAINS DANGEROUS VOLTAGES. MAINTENANCE AND SERVICING REQUIRING THE REMOVAL OF ANY PANELS OR COVERS SHOULD BE DONE BY QUALIFIED SERVICE PERSONNEL ONLY.



IT IS ESSENTIAL TO MAKE SURE THAT THE INCOMING VOLTAGE IS THE SAME AS THE RATED VOLTAGE OF THE UNIT AS FOUND ON THE SERIAL PLATE. THE SERIAL PLATE IS LOCATED AT THE REAR OF THE UNIT ADJACENT TO THE INCOMING POWER CABLE.

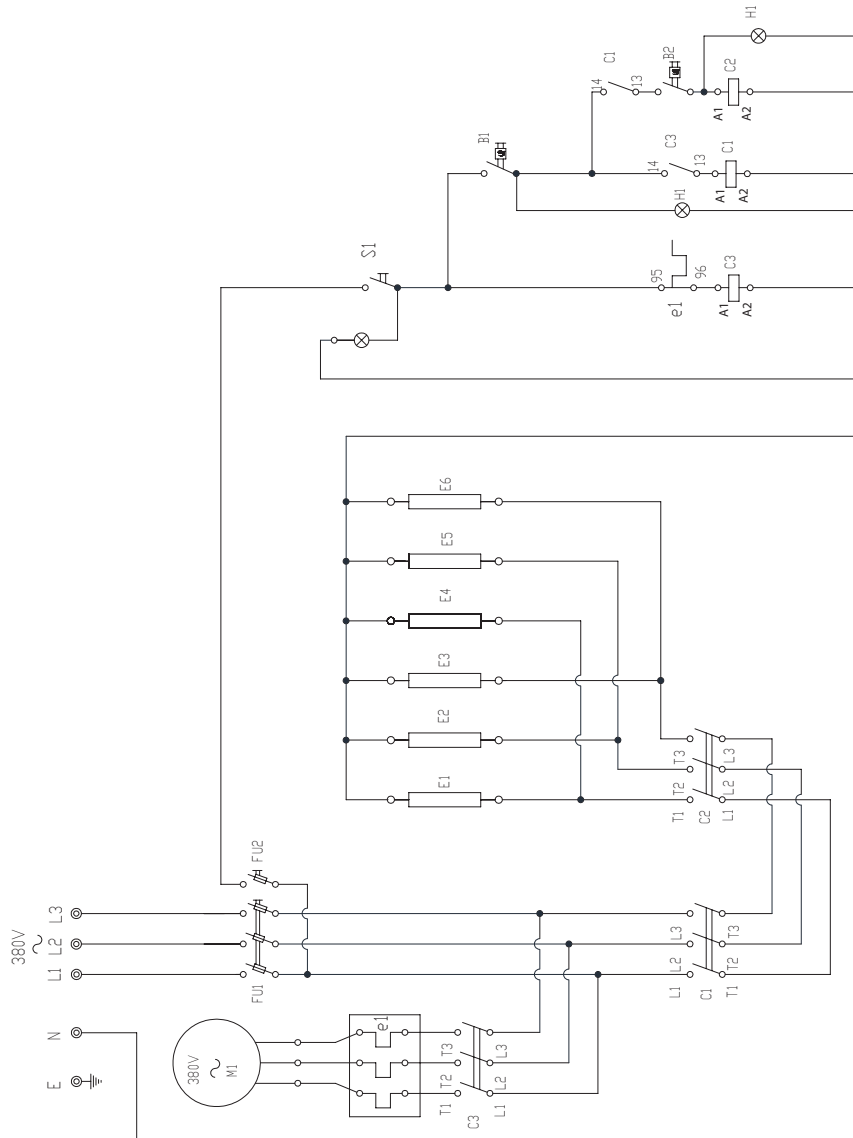
**WIRING DIAGRAM**  
**MODEL: DIGITAL OVEN**  
**MODEL CODE: 385**



**WIRING DIAGRAM LEGEND**  
**MODEL: ECONOMY OVEN**  
**MODEL CODE: 363**

LEGEND	DESCRIPTION	PART NUMBER
B1	SAFETY THERMOSTAT	1-EGO-150
B2	CONTROL THERMOSTAT	1-EGO-150
S1	MAINS ILLUMINATED ROCKER SWITCH	1-17TAF
E1/E6	RED HEAT ELEMENT 2000W/230V	5-2000W-RS
M1	FAN MOTOR	1-FAN-385
C1	ELEMENT SAFETY CONTACTOR	1-220V-CONT-32A
C2	ELEMENT CONTACTOR	1-220V-CONT-32A
C3	MOTOR CONTACTOR	1-220V-CONT-32A
e1	MOTOR OVERLOAD REALY	1-ORL-362
FU1	20 AMP TRIPLE POLE CIRCUIT BREAKER	1-20A-TPCB
FU2	5 AMP SINGLE POLE CIRCUIT BREAKER	1-18TRF
H1	PILOT LIGHT	1-18TRF

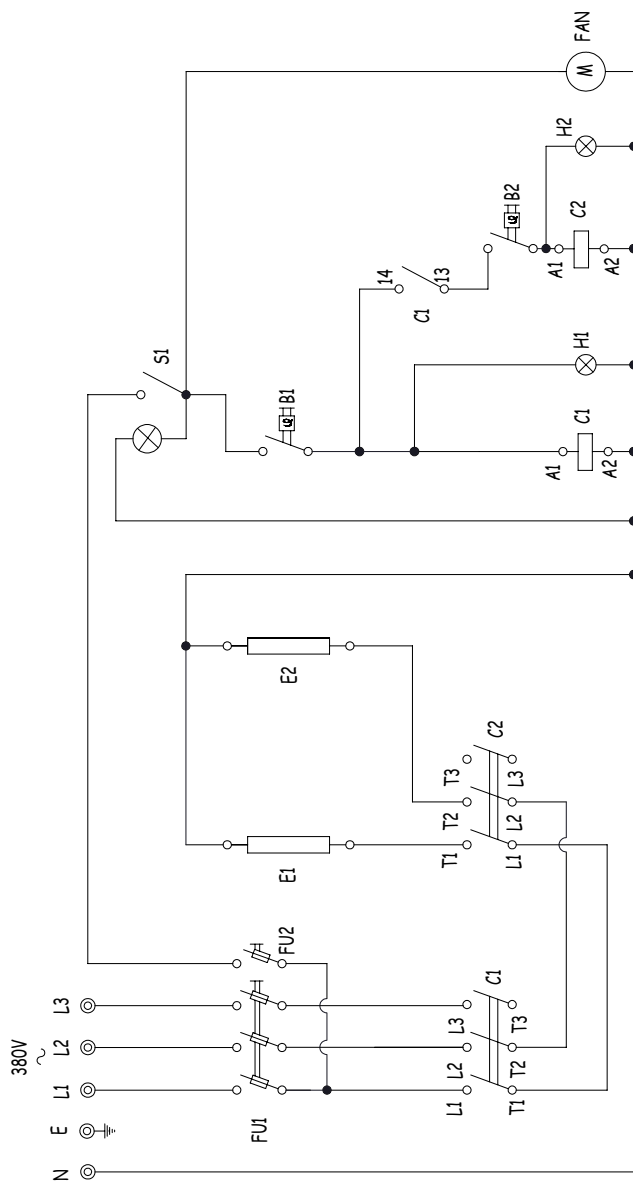
**WIRING DIAGRAM**  
**MODEL: ECONOMY OVEN**  
**MODEL CODE: 363**



**WIRING DIAGRAM LEGEND**  
**MODEL: DIGITAL OVEN**  
**MODEL CODE: 385**

PART	DESCRIPTION	STOCK CODE
FU1	CIRCUIT BREAKER 20AMP TRIPLE POLE	1-20A-TCPB
FU2	CIRCUIT BREAKER 5AMP TRIPLE POLE	1-5A-SPCB
H1	SAFETY PILOT LIGHT	1-18TRF
H2	CONTROL PILOT LIGHT	1-18TRF
H3	TIMER ELAPSED PILOT LIGHT	1-18TRF
E1/E2	RED HEAT ELEMENT 3000W/230V	5-3000W-RHP
C1	SAFETY CONTACTOR	1-220V-CONT-32A
C2	MOTOR CONTACTOR	1-220V-CONT-32A
S1	TIMER BYPASS	1-17TAF
S2	STAGE SWITCH CIRCUIT 1	1-17TAF
S3	STAGE SWITCH CIRCUIT 2	1-17TAF
B1	SAFETY PROTECTION	1-EGO-150
T	24 HOUR TIMER	1-24HR-TIMER
M	FAN MOTOR	1-FAN-385
U1	ELECTRONIC TEMPERATURE CONTROLLER	1-TDC-250-PT100
CA	3 $\mu$ F CAPACITOR	1-CAP-3MF

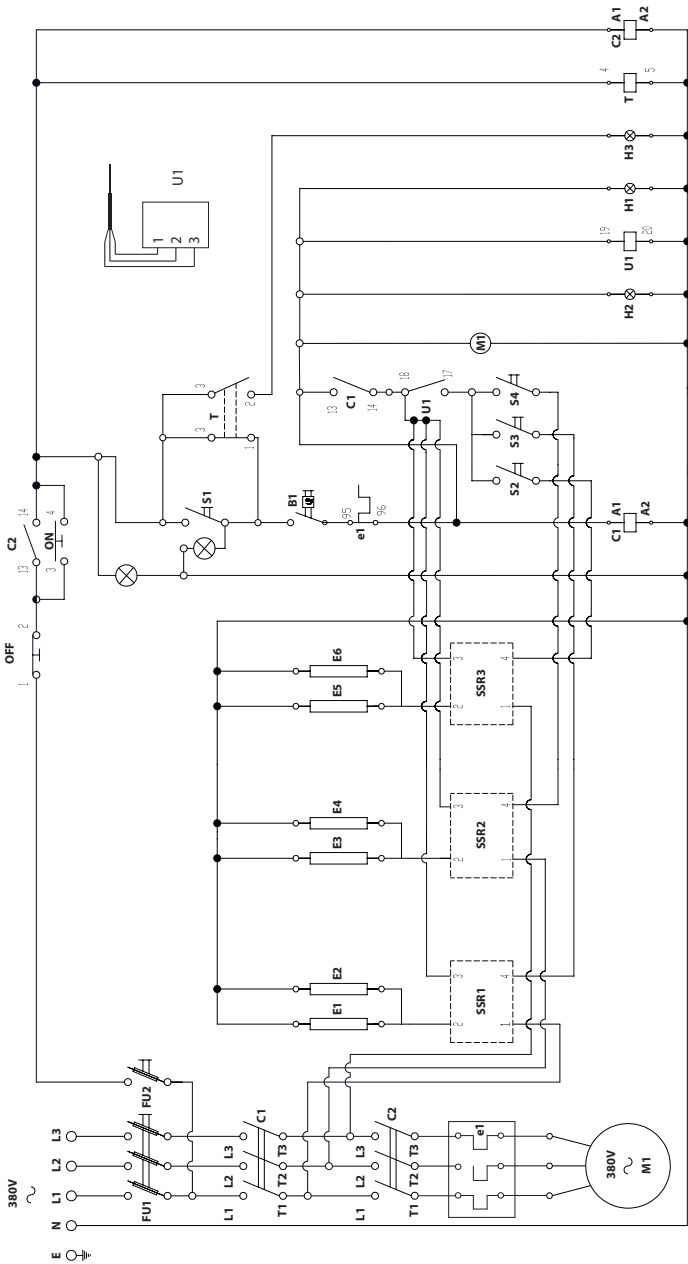
**WIRING DIAGRAM**  
**MODEL: ECONOMY OVEN**  
**MODEL CODE: 386**



**WIRING DIAGRAM LEGEND**  
**MODEL: DIGITAL OVEN**  
**MODEL CODE: 362**

PART	DESCRIPTION	STOCK CODE
FU1	CIRCUIT BREAKER 20AMP TRIPLE POLE	1-20A-TCPB
FU2	CIRCUIT BREAKER 5AMP TRIPLE POLE	1-5A-SPCB
H1	SAFETY PILOT LIGHT	1-18TRF
H2	CONTROL PILOT LIGHT	1-18TRF
H3	TIMER ELAPSED PILOT LIGHT	1-18TRF
E1/E2 E3/E4 E5/E6	RED HEAT ELEMENT 2000W/230V	5-2000W-RS
C1	ELEMENT CONTACTOR	1-220V-CONT-40A
C2	MOTER CONTACTOR	1-220V-CONT-32A
S1	TIMER BYPASS	1-17TAF
S2	STAGE SWITCH CIRCUIT 1	1-17TAF
S3	STAGE SWITCH CIRCUIT 2	1-17TAF
S4	STAGE SWITCH CIRCUIT 3	1-17TAF
B1	PRODUCT PROTECTION	1-EGO-150
T	24 HOUR TIMER	1-24HR-TIMER
M	FAN MOTOR	1-FAN-MOT-1/2HP
U1	ELECTRONIC TEMPERATURE CONTROL- LER	1-TDC-250-PT100
SSR1 SSR2 SSR3	SOLID STATE RELAY	1-SSR-50A
e1	MOTOR OVERLOAD RELAY	1-ORL-362
ON	ON PUSH BUTTON	1-PBG-JES0002
OFF	OFF PUSH BUTTON	1-PBR-JES0002

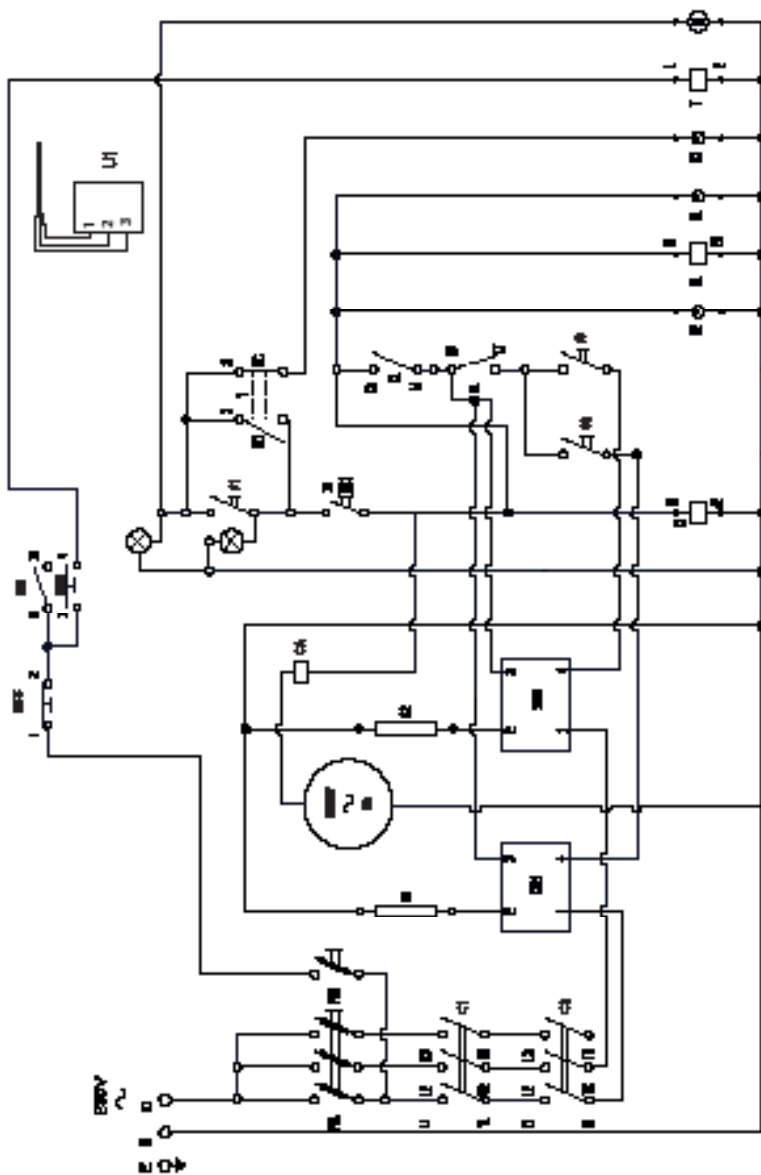
WIRING DIAGRAM  
MODEL: DIGITAL OVEN  
MODEL CODE: 362



WIRING DIAGRAM LEGEND  
MODEL: ECONOMY OVEN  
MODEL CODE: 386

LEGEND	DESCRIPTION	PART NUMBER
B1	SAFETY THERMOSTAT	1-EGO-150
B2	CONTROL THERMOSTAT	1-EGO-150
S1	MAINS ILLUMINATED ROCKER SWITCH	1-17TAF
E1/E2	ELEMENT 3000W/230V	5-3000W-RHP
M	FAN MOTOR	1-FAN-385
C1	ELEMENT SAFETY CONTACTOR	1-220V-CONT-32A
C2	ELEMENT CONTACTOR	1-220V-CONT-32A
FU1	20 AMP TRIPLE POLE CIRCUIT BREAKER	1-20A-TPCB
FU2	5 AMP SINGLE POLE CIRCUIT BREAKER	1-18TRF
H1/H2	PILOT LIGHT	1-18TRF
MR	FAN MOTER, 230V	1-FAN-354

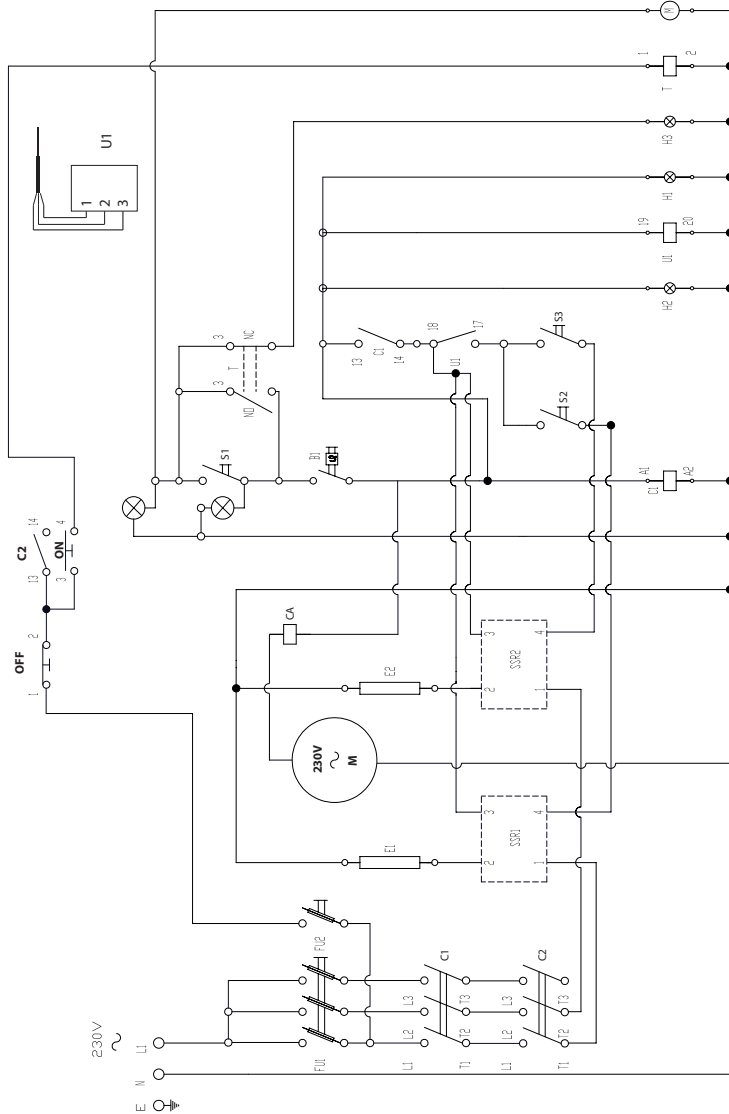
**WIRING DIAGRAM**  
**MODEL: DIGITAL OVEN**  
**MODEL CODE: 387**



**WIRING DIAGRAM LEGEND**  
**MODEL: DIGITAL INCUBATOR**  
**MODEL CODE: 389**

PART	DESCRIPTION	STOCK CODE
FU1	CIRCUIT BREAKER 20AMP TRIPLE POLE	1-20A-TCPB
FU2	CIRCUIT BREAKER 5AMP TRIPLE POLE	1-5A-SPCB
H1	SAFETY PILOT LIGHT	1-18TRF
H2	CONTROL PILOT LIGHT	1-18TRF
H3	TIMER ELAPSED PILOT LIGHT	1-18TRF
E1/E2	RED HEAT ELEMENT 750W/230V	5-3000W-RHP
C1	SAFETY CONTACTOR	1-220V-CONT-32A
C2	MOTER CONTACTOR	1-220V-CONT-32A
S1	TIMER BYPASS	1-17TAF
S2	STAGE SWITCH CIRCUIT 1	1-17TAF
S3	STAGE SWITCH CIRCUIT 2	1-17TAF
B1	PRODUCT PROTECTION	1-EGO-150
T	24 HOUR TIMER	1-24HR-TIMER
M	FAN MOTOR	1-FAN-385
U1	ELECTRONIC TEMPERATURE CON- TROLLER	1-TDC-250-PT100

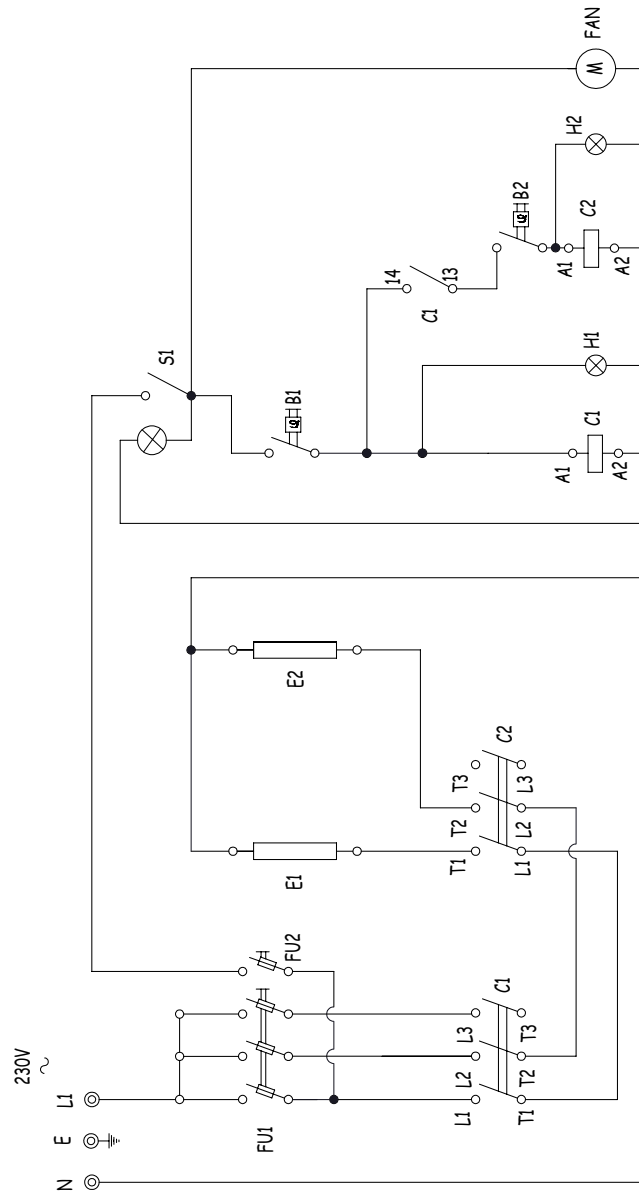
**WIRING DIAGRAM**  
**MODEL: DIGITAL INCUBATOR**  
**MODEL CODE: 389**



**WIRING DIAGRAM LEGEND**  
**MODEL: DIGITAL OVEN**  
**MODEL CODE: 387**

PART	DESCRIPTION	STOCK CODE
FU1	CIRCUIT BREAKER 20AMP TRIPLE POLE	1-20A-TCPB
FU2	CIRCUIT BREAKER 5AMP TRIPLE POLE	1-5A-SPCB
H1	SAFETY PILOT LIGHT	1-18TRF
H2	CONTROL PILOT LIGHT	1-18TRF
H3	TIMER ELAPSED PILOT LIGHT	1-18TRF
E1/E2	RED HEAT ELEMENT 3000W/230V	5-3000W-RHP
C1	SAFETY CONTACTOR	1-220V-CONT-32A
C2	MOTOR CONTACTOR	1-220V-CONT-32A
S1	TIMER BYPASS	1-17TAF
S2	STAGE SWITCH CIRCUIT 1	1-17TAF
S3	STAGE SWITCH CIRCUIT 2	1-17TAF
B1	SAFETY PROTECTION	1-EGO-150
T	24 HOUR TIMER	1-24HR-TIMER
M	FAN MOTOR	1-FAN-385
U1	ELECTRONIC TEMPERATURE CONTROLLER	1-TDC-250-PT100
CA	3 µF CAPACITOR	1-CAP-3MF

**WIRING DIAGRAM**  
**MODEL: ECONOMY OVEN**  
**MODEL CODE: 388**



**WIRING DIAGRAM LEGEND**  
**MODEL: ECONOMY OVEN**  
**MODEL CODE: 388**

LEGEND	DESCRIPTION	PART NUMBER
B1	SAFETY THERMOSTAT	1-EGO-150
B2	CONTROL THERMOSTAT	1-EGO-150
S1	MAINS ILLUMINATED ROCKER SWITCH	1-17TAF
E1/E2	ELEMENT 1500W/230V	
M	FAN MOTOR	1-FAN-385
C1	ELEMENT SAFETY CONTACTOR	1-220V-CONT-32A
C2	ELEMENT CONTACTOR	1-220V-CONT-32A
FU1	20 AMP TRIPLE POLE CIRCUIT BREAKER	1-20A-TPCB
FU2	5 AMP SINGLE POLE CIRCUIT BREAKER	1-18TRF
H1/H2	PILOT LIGHT	1-18TRF