

LIMITED WARRANTY

All equipment which is sold under ANVIL trademark and used for commercial purposes is warranted against defects in materials and workmanship. The warranty runs for two years from the date of original installation and is for the benefit of the original purchaser only. 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 ANVIL commercial products.

The Sellers obligation under this Warranty is limited to the repair of defects without charge. Defective units must be taken or shipped,transportation charges prepaid,to ANVIL.

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 using non Anvil spares voids this Warranty.



NB:

REGISTER ON-LINE TODAY

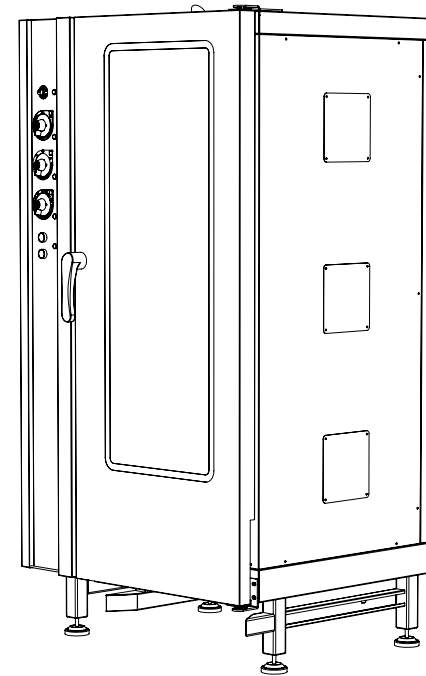
Register your warranty on-line now at www.anvilworld.com

NO WEB ACCESS

If you do not have access to the web. Kindly register by completing the warranty registration form and fax it to the anvil office in the country of purchase.

Failure to do so will invalidate your warranty.

HEAVY DUTY ELECTRIC COMBI OVEN



**INSTALLATION, OPERATION AND CARE OF
HEAVY DUTY ELECTRIC COMBI OVEN
MODEL: COA2020**

1 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.

GENERAL INSTALLATION AND OPERATION INSTRUCTIONS

- 1. Protective Film** - Carefully remove the protective film from the stainless steel before using oven for the first time. If any glue residue should remain, remove it with a suitable solvent recommended for stainless steel. It is important to remove this film before installation and use; otherwise it will stick onto the stainless steel and become very difficult to remove thereafter.
- 2. Positioning** - Install the oven in the most convenient location for ease of cleaning, maintenance and general operation. The unit should be placed a minimum distance of 100mm from any adjacent wall. If this appliance is to be positioned in close proximity to walls, partitions, kitchen furniture, decorative finishes, etc. they must be made of non-combustible materials. If not, they shall be clad with a suitable non-combustible heat insulating material and the closest attention should be paid to the fire prevention regulations. It is important to observe the recommended space at the top of the oven due to the exhaust air vent duct/chimney being positioned at the top of the unit. Hot exhaust gas can create a fire hazard.
- 3.** The oven requires a three-phase connection. Please consult a qualified electrician.
- 4. Earthing** - ANVIL Combi Oven require a suitable earth connection.

GENERAL OPERATING GUIDELINES

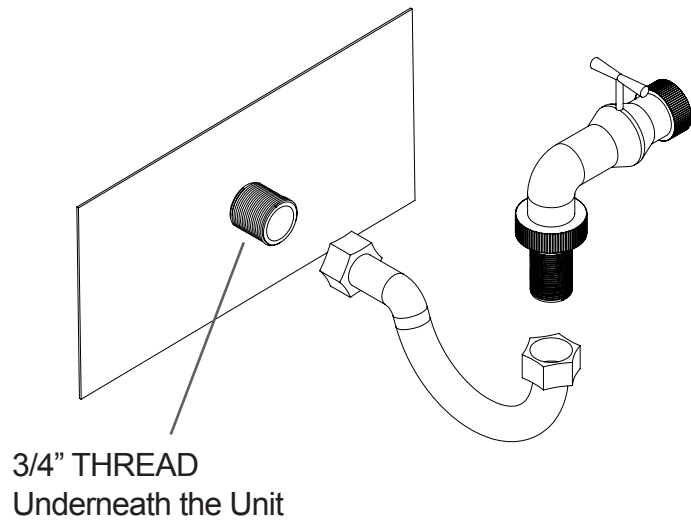
- Always preheat the oven before cooking. The indicator light will go out when the desired temperature has been reached.
- Always use a lower temperature setting than recommended for a standard oven. The general rule of thumb is to subtract 10°C–30°C from the standard oven recipe.
- You should begin checking the progress of your food product in about half the time recommended for the same recipe cooked in a standard oven. Check for suggested time and temperature. Keep in mind that times vary very much depending on the amount of product being cooked. The best results are always when a systematic record of times and temp is kept for reference.
- The COA2020 oven will hold up to 20 Gastronorm 1/1 65mm deep pans. The height of the product will also determine how many pans can be loaded.
- To minimize the shrinkage of roasted meats, place the meat directly on the racks and place a steel pan, one half full of water, in the bottom rack position. The water will keep the oven chamber more humid and the meat juices will evaporate less.
- The volume of food in a pan will determine its cooking time and less food in each pan will cook more quickly. You should therefore try to ensure that the same amount of food is in each pan so that all will cook evenly in the same amount of time.
- When baking light products, such as light cake batter or custard, you may wish to experiment with turning the oven off for 7-10 minutes after preheating and loading to allow the product time to set and then turning it on again once the product has set. This will stop the surface from rippling or being pushed by the fan.
- When starting off with frozen product, pre-heat the oven up to 40 degrees above the temperature you are going to cook at. Load the product and reset the temperature for normal time.
- Always thaw meats in a refrigerator and temper the meat 30-45 minutes at room temp before cooking.

3 WATER CONNECTION

This oven has a steam function and is supplied with a water spray hose and hand-held nozzle. A water connection can therefore be connected directly to the unit using the 3/4" fittings supplied.

The water pressure should be between 0.5-2 bar. Any supply pressure above this requires the fitment of an inline pressure reducing valve.

MAX 2 BAR

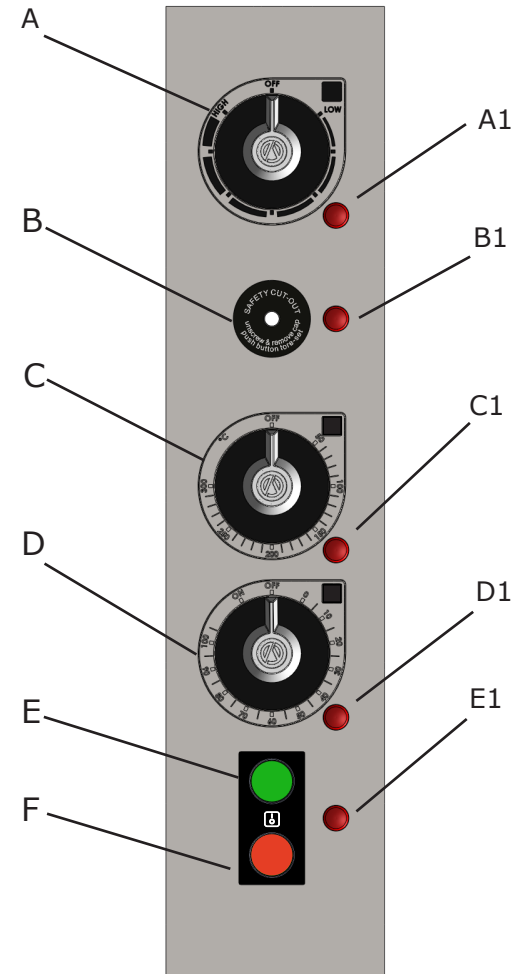


IT IS ESSENTIAL TO MAKE SURE THAT THE INCOMING VOLTAGE IS THE SAME AS THE RATED VOLTAGE OF THE UNIT AS FOUND ON THE SERIAL PLATE. THE SERIAL PLATE IS LOCATED AT THE REAR OF THE UNIT ADJACENT TO THE INCOMING CABLE ENTRY.

**EXPLODED DIAGRAM LEGEND
HEAVY DUTY ELECTRIC COMBI OVEN
MODEL CODE: COA2020**

ITEM NO.	DESCRIPTION	QTY.
64	CONVECTION OVEN SAFETY THERMOSTAT	1
65	ENERGY REGULATOR 230VOLT	1
66	50-250 DEG THERMOSTAT SS BULB	1
67	TIMER COA2006/2010 220V	1
68	120 MIN TIMER	1
69	RAISED STOP BUTTON RED	1
70	FLUSH PUSH BUTTON - GREEN WIT H N/O CONTACT BLOCK 22MM DIA	1
71	THERMOSTAT 50 - 250	1
72	APEX LEAVER CONTROL KNOB	3
72	CONTROL KNOB INSERT	3
73	NEON LIGHT RED 230V CO58900 LH -580REN02T	5
74	STEAM SCALE	1
75	F/F SAFETY THERMO FACIA PLATE	1
76	SERVICE DOOR SUB-ASSY	1
77	MAIN DOOR SEAL	1
78	BODY SUB-ASSY	1
79	SHELF SPACER	40
80	OVEN SHELF CHROMED	20
81	INNER FRONT GLASS	1
82	GLASS BUMPER	3
83	INNER DOOR CATCH	2
84	COA2020 DOOR HINGE	3
85	FRONT GLASS CLAMP	2
86	OUTSIDE FRONT GLASS	1
87	HINGE MOUNT SUB-ASSY	2
88-92	DOOR HANDLE COA2020	1

**CONTROL PANEL LAYOUT
HEAVY DUTY ELECTRIC COMBI
OVEN COA2020**



- A - Setting knob
- A1 - Water jet indicator lamp
- B - Safety reset button
- B1 - reset indicator lamp
- C - Temperature control
- C1 - Temp. indicator lamp
- D - Timer control
- D1 - Timer indicator lamp
- E - Start push button
- F - Stop push button
- E1 - power indicator lamp

OPERATING INSTRUCTIONS

Cooking cycle can be initiated as follows:

1. Set the cooking temperature by turning the temperature control knob to the desired temperature. When the indicator light turns off this indicates the desired temp has been reached.
2. Set the cooking timer to the desired time by turning the timer control knob. A warning buzzer will sound when timer has expired. **Note:** If the timer is set at '0' the oven will not energize the elements and the warning buzzer will sound.
3. Push green start button 'E'
4. Steam function is operated automatically by setting knob 'A'. Control is via an energy regulator. On maximum setting continuous steam is generated. Settings will vary according to the results required. For best results always keep a systematic record of times and temperatures for reference.
5. When the door is opened the fans and elements will turn off automatically to restart push the green start button 'E'.

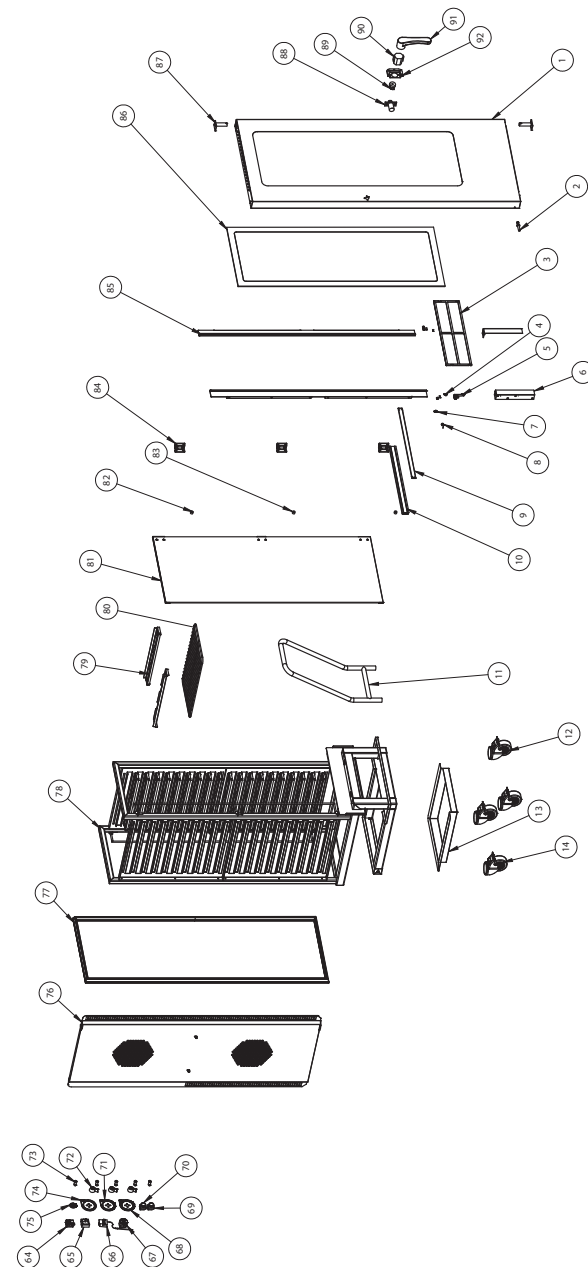


TIP : COOKING AT A HIGHER TEMPERATURE WILL NOT REDUCE YOUR COOKING TIME ! IT WILL PRODUCE UNSATISFACTORY BAKING AND ROASTING RESULTS.

STEAMING TIPS

- If the food is likely to release juices, the juices can be used to make a sauce
- Unless browned first, food that is steamed will be flavourful and succulent, but pale in colour. Simply serve with sauce garnish to add colour.
- Cooking time can be shortened if the food is cut into small pieces. For even cooking make sure the pieces are about the same size.
- When steaming meat, the steam will cause fat to melt and thereby reducing the fat content.
- Steamed whole fish retains its shape better than fish cooked in liquid.
- Do not sprinkle salt over vegetables, as it draws moisture out during cooking and may discolour them.

EXPLODED DIAGRAM - MAIN ASSEMBLY HEAVY DUTY ELECTRIC COMBI OVEN MODEL CODE: COA2020



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EXPLODED DIAGRAM LEGEND
HEAVY DUTY ELECTRIC COMBI OVEN
MODEL CODE: COA2020

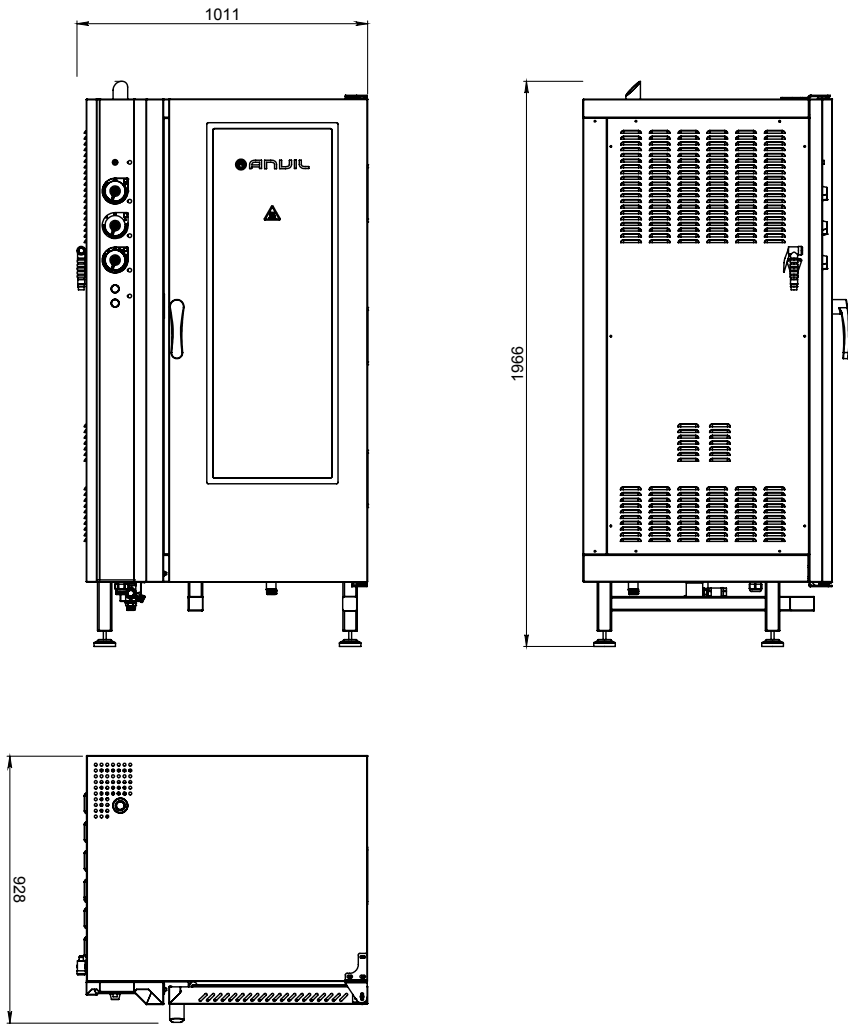
ITEM NO.	DESCRIPTION	QTY.
1	FRONT DOOR WELD SUB-ASSY	1
2	PROXIMITY SWITCH SM03 M8 250V	1
3	PRESSURE PLATE SUB ASSY	1
4	UPPER PARALLEL LINK	1
5	PARALLEL LINK LH	1
6	ADAPTABLE SEAL MOUNT BRKT SUB-ASSY	1
7	ADAPTABLE SEAL SWIVEL MOUNT BRKT SUB-ASSY	4
8	ADAPTABLE SEAL SPRING	4
9	BOTTOM SEAL MOUNT BRKT	1
10	BOTTOM DOOR SEAL	1
11	COT2020 TROLLEY HANDLE SUB-ASSY	1
12	TROLLEY SWIVEL WHEEL WITH BRAKE NO PLATE	2
13	BOTTOM TRAY	1
14	TROLLEY SWIVEL WHEEL WITHOUT BRAKE & PLATE	2
15	BOTTOM DOOR HINGE SPRING	1
16	FRONT DOOR HINGE PLUNGER	2
17	DOOR HINGE SHIM	7
18	HINGE BOTTOM	1
19	M10X48 BLACK ADJUSTABLE FOOT Z P120D	4
20	FRONT PANEL SUB-ASSY	1
21	POLYMER CABLE GLAND PG29 GREY	1
22	BASE FRAME SUB-ASSY	1
23	3/4" BSP BALL VALVE S/S	1
24	3/4" S/S HEX NIPPLE	2
25	WATER INLET TOP HAT	1
26	3/4" FEMALE TEE PIECE S/S	1
27	SOLENOID VALVE - COA1020	1
28	24KW ELEMENT	1
29	CIRCUIT MOUNT PANEL	1
30	TERMINAL DIN RAIL (1M LONG)	1
31	2 PHASE CONNECTOR BLOCK KADO 1/6 3VL	5
32	80A 3PHASE/3POLE NH2 ISOLATOR	1
33	NC1-2510 3P 220VAC COIL 50/60H 2 UL APPROVAL TO APPEAR ON RAT	4
34	RIGHT OUTSIDE PANEL	1
35	SHOWER	1
36	BLUE SLOTTED TRUNKING 40X40X2M	1
37	FAN PAPT 4650N	2
38	COOLING FAN MOUNT BRKT	1
39	NC1-1810 3P 220VAC COIL 50/60H 2 UL APPROVAL TO APPEAR ON RAT	2
40	CHINT 240V ALARM BUZZER	1
41	OVERLOAD RELAY 2.5-4 AMP	2
42	INSTRUMENT MOUNT PANEL	1
43	MOTOR TOP HAT	2
44	FAN MOTOR COA1006 MOTOR MODEL - 1079 A 6355	2
45	COA1006 FAN SEAL HOUSING	2
46	SHAFT SEAL COA2006 SM 17X28X7 METRIC OIL SEAL COA2006	4
47	12KW ELEMENT	1
48	FANWHEEL - COA1020	2
49	ATOMIZER	2
50	STEAM OUTLET SUB-ASSY	2
51	COA2020 AIR & WATER HOSE 8MM	3
52	REAR PANEL	1
53	HEAT EXCHANGER SUB-ASSY	1
54	TUB SUB-ASSY	1
55	TOP PANEL SUB-ASSY	1
56	FOAM FILTER	1
57	MAIN HINGE TOP MOUNT	1
58	TOP DOOR HINGE SPRING	1
59-62	LIGHTHOLDER WITH BULB 230V HOL OGEN G9 LAMP 77.945.0101.23	3
63	LEFT OUTSIDE PANEL SUB-ASSY	1

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SUGGESTED COOK TIMES AND TEMPERATURES

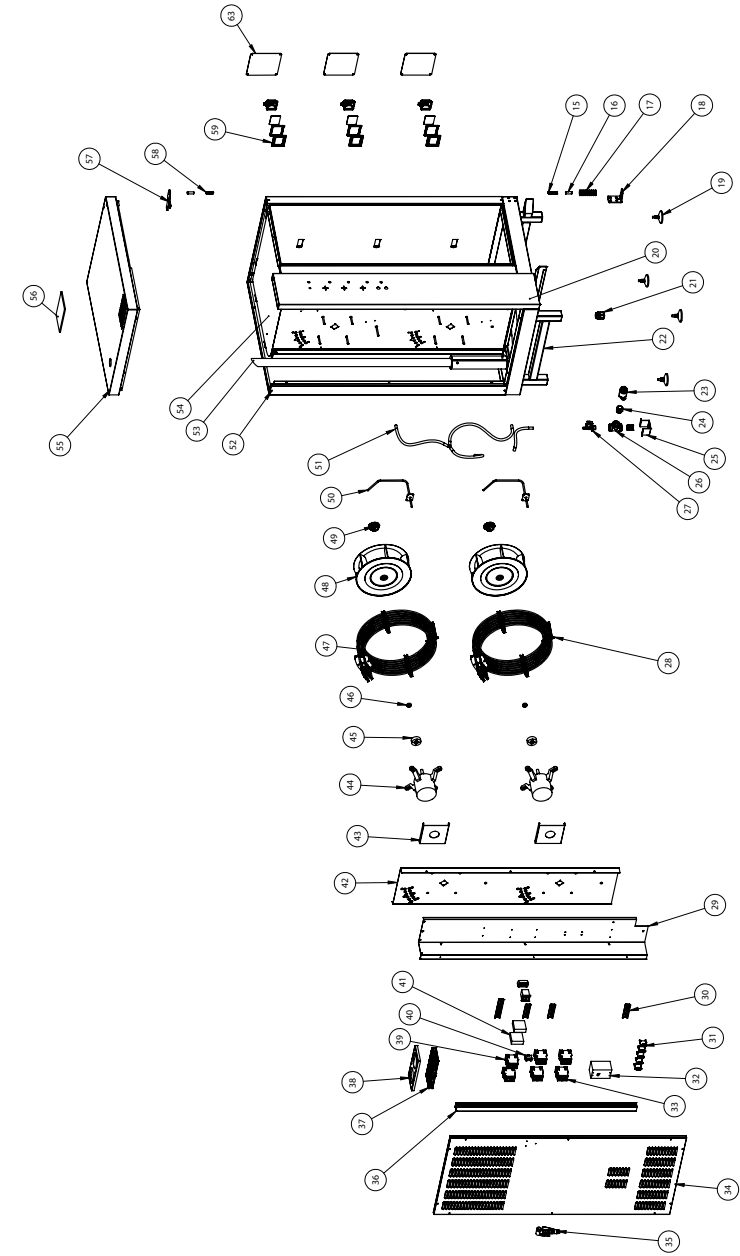
	PRODUCT	F°	C°	COOK TIME
BEEF	HAMBURGER PATTIES 125 grams (3.3 OZ)	400	205	8-10 MIN.
	MEAT LOAF	325	165	40-45 MIN.
	ROLLED BEEF ROAST 5 - 7 Kg's (12-15 LBS)	275	135	2-1/2 HRS.
	STANDING RIB ROAST 9 Kg (20 LBS. RARE)	235	115	2-3/4 HRS
	POT PIES	400	205	30-35 MIN
	STUFFED PEPPERS	350	175	15-20 MIN
	LASAGNA	260	125	90 MIN
	HOT DOGS	325	165	10-15 MIN
PORK	BAKED, STUFFED PORK CHOPS	375	190	25-30 MIN.
	BACON	400	205	5-7 MIN.
VEAL	BONED VEAL ROAST 7 Kg (15 LBS)	300	150	3 HRS 10 MIN.
LAMB	LAMB CHOPS	400	205	7-8 MIN.
POULTY	CHICKEN BREASTS & THIGHS	300	175	40 MIN.
	CHICKEN BACKS & WINGS	350	175	35 MIN.
	CHICKEN QUARTERED	350	175	30 MIN.
	TURKEY ROLL 8Kg (18 LB.)	310	155	3-3/4 HRS
	POT PIES	400	205	30-35 MIN.
FISH	FISH STICKS	335	170	16-18 MIN.
	COD, HALIBUT	350	175	20 MIN.
SEAFOOD	PRAWNS BAKED STUFFED	400	205	6-7 MIN.
	LOBSTER, BAKED STUFFED	400	205	10 MIN.
	LOBSTER TAILS (FROZEN)	425	220	9 MIN.
CHEESE	MACARONI & CHEESE CASSEROLE	350	175	30 MIN.
POTATOES	POTATOES, BAKED (120 COUNT)	400	205	50 MIN.
	POTATOES, SLICED OR DICED	325	165	10 MIN.
PIES	FRESH APPLE PIE 750 grams 20 off (20-36 OZ each.)	350	175	25-30 MIN.
	APPLE TURNOVERS	350	175	15 MIN.
BREADS	BREAD 2.2 Kg (1 LB. LOAVES)	325	165	30 MIN.
	HAMBURGER ROLLS	275	125	15 MIN.
	YEAST ROLLS	300	140	25 MIN.
	BISCUITS	400	205	6 MIN.
	ROLLS, BROWN & SERVE	350	175	15 MIN.
CAKES	CHOCOLATE CAKE	325	165	20 MIN.
	DANISH PASTRY	325	165	12 MIN.
	CINNAMON BUNS	325	165	20 MIN.
COOKIES	SUGAR COOKIES	275	125	15 MIN.
	CHOCOLATE CHIP COOKIES	325	165	10 MIN.

PLEASE NOTE THESE FIGURES ARE FOR GUIDELINE PURPOSES ONLY

POSITIONING DIAGRAM
MODEL: HEAVY DUTY ELECTRIC COMBI OVEN
MODEL CODE: COA2020



EXPLODED DIAGRAM - TROLLEY; DOOR & INTERNAL PANELS
HEAVY DUTY ELECTRIC COMBI OVEN
MODEL CODE: COA2020



Exterior

1. Coat soiled surfaces with Greasemaster / Encompass.
2. On heavily soiled areas or where grease has been baked on, agitate the soil with a stiff brush.
3. Rinse exterior with clean water. Wipe dry.
4. Clean only with cloths, avoid spraying the exterior of the unit as this could cause electrical damage or injury.



CLEAN THE 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 CHLORINE AS THIS WILL INVALIDATE THE WARRANTY



ALWAYS ENSURE THAT THE UNIT IS DISCONNECTED FROM THE MAIN SUPPLY BEFORE CLEANING



BEFORE USING THE APPLIANCE FOR THE FIRST TIME CLEAN THE METAL PARTS WITH HOT WATER AND SOAP AND THOROUGHLY RINSE THEM. HEAT THE OVEN USING THE BAKE CONTROL TO APPROXIMATELY 300°C FOR 30 MINUTES TO ELIMINATE ANY THERMAL INSULATION ODOURS.

**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

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

**WARNING****Burn Hazard.**

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

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

CLEANING

- Prevent food from blocking the flow of drain water from the oven.
- Clean the oven daily after use.
- The interior and exterior of the oven are manufactured from stainless steel and can be cleaned easily with any cleaner recommended for stainless steel.
- The trolley and the fan cover panel are removable. Clean fan grease filter with degreasing agent.
- The unit is fitted with Low "E" glass which reflects heat inward making heat retention more efficient. Scouring with abrasive cleaners will damage coating and invalidate warranty.

CLEANING INSTRUCTIONInterior

1. Remove Trolley for cleaning. Clean Trolley and shelving separately.
2. Preheat oven to (66°C) – turn off heat.
3. While oven surface is still warm, spray the interior with Greasemaster / Encompass from Hychem and let it soak completely.
4. Let solution stand on soil for 2 to 3 minutes to permit chemical cleaning action to take place.
5. Turn the oven onto a Steam heat cycle for around 5 minutes at 70°C. Most of the soil should be removed.
6. Baked on grease or carbonized food may have to be loosened with a stiff brush. DO NOT USE ANY ABRASIVE PRODUCTS SUCH AS STEEL WOOL TO SCOUR THE UNIT.
7. Rinse with clean water and allow to air dry.

SAFETY

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

1. When these ovens are to be positioned in close proximity to a wall, partitions, kitchen furniture, decorative finishes, etc. it is recommended that they be made of non-combustible material. If not, they shall be clad with a suitable non-combustible heat insulating material, and the closest attention be paid to fire prevention regulations.
2. Ensure that the equipment and the power supply cord does not come into contact with hot surfaces.
3. Supervision is necessary when the appliance is used in close proximity to children.
4. Use only earthed outlets matching the serial plate voltage.
5. Have equipment installed by a qualified personnel in accordance with local codes and ordinances.
6. Use equipment in a flat level position.
7. Do not stand on left side of the door when opening as the steam and heat will escape and may cause burns.
8. The equipment may be hot, even though the pilot light is not on.
9. Do not operate if equipment has been damaged or is malfunctioning in any way.
10. This oven is designed to run only on alternating current (A.C.)
DO NOT CONNECT TO DIRECT CURRENT (D.C)

ELECTRICAL CONNECTION INFORMATION

MODEL	DESCRIPTION	VOLTS (V /Hz)	POWER (W)
COA2020	HEAVY DUTY ELECTRIC 20 PAN COMBI OVEN	380V/50Hz 3Phase with NEUTRAL & EARTH	37 000

WIRING DIAGRAM LEGEND
COA2020 - 20 PAN OVEN

LEGEND	DESCRIPTION
M1 & M2	FAN MOTOR
C1, C3, C5, C6	40A ELEMENT CONTACTOR
C2 & C4	32A MOTOR CONTACTOR
M.S	80 AMP MAIN SWITCH
B4	DOOR SWITCH
L1 - L3	OVEN LIGHT
M3 & M4	COOLING FANS
T	DIGITAL TIMER 230V
B1	CONTROL THERMOSTAT
B3	SAFETY THERMOSTAT
ER	ENERGY REGULATOR
BUZZER	BUZZER 230V
SOL	SOLENOID
P1, P5	PILOT LIGHTS
M1-MR2	MOTOR OVERLOADS
PB1	RED PUSH BUTTON-STOP
PB2	GREEN PUSH BUTTON-START
E	OVERLOAD
EH1	2KW ELEMENT
EH2	4KW ELEMENT

