E-17 Electrical Fryer

User's Manual



CONTENT

- 1. Brief Introduction
- 1.1 Brief Introduction
- 1.2 Technical Parameters
- 1.3 Function Profile
- 1.4 Safe Operation Notice
- 1.5 Warranty
- 2. Installation
- 3. Actions before 1st operation
- 4. Pre-operation Cleaning
- 5. Putting in Oil
- 6. Circuit Diagram Display
- 7. Operation Procedure
- 7.1 Temperature setting
- 7.2 Time Setting
- 7.3 A-F Button Setting
- 7.4 Conversion between Fahrenheit and Celsius
- 7.5 Temperature setting checking
- 8. Frying Process
- 9. Filteration
- 10. Preventive Maintenance
- 11. Turing Off
- 12. Common Malfunction and Solution
- 13. Circuit Diagram

1.Brief Introduction

1.1 Brief Introduction

Electirc computer fryer E17 of **Master** series are specially designed for fast food restaurants, convenience stores and other similar shops to fry food such as chicken, chicken loaf, slice of fish and French fries (potato chips, potato doughnuts). E17 is a frying oven specially designed for sequencing management and equipped with the computer program controller and frying program of intelligent management. It has high-power heating elements and the temperature can be raised quickly. Its efficiency is high and capacity large. Oil discharge pipe with big caliber is designed in the cooling area. The frying area is 14"(35.56mm)*17"(43.18mm)

1.2 Technical Parameters

- 1. Dimension: 400(W)×800(D)×(850+250)H mm
- 2. Fuel tank capacity: 32 liters, Actual loading: 28 liters.
- 3. Power: 18KW
- 4. Power supply: Three-phase Five-wire 380V/50Hz

1.3 Function Profile

- 1. Intelligent setting and multi-function integrated, each cylinder could frying six categories food at the same time, each product button have a variety of timing settings.
- 2. Automatic temperature delay system ensures frying quality when putting variety of food .
- 3. Real-timecountdown display, click the L / R can view oil temperature , then click L / R check setting temperature.
- 4 Double temperature limit controls. Automatically power cutting off when exceeds the safety level.
- 5 Cancelling function by holding on product button for three seconds to exit, and then restart. Or click the up / down key within 10 seconds.

1.4 Safe Operation Notice

- 1. Operation must strictly obey rules regarding safe use of power.
- 2. Guarantee fryer operated only by personnel:
- -- Staffs been specially trained and according to operational procedures to operate.
- 3. Fryer operated only when safety can be ensured. Since all malfunctions may cause danger, it must be repaired immediately in case of any malfunction.
- 4. Before operation, all safety devices and removable parts must be installed and tested. Fryer be operated only when it is checked and no problem is found. The power supply of fryer must be cut off before removing any components. The unit must not be used in the course of maintenance. All components must be installed in accordance with the regulation.
- 5. The removal of any removable parts can be carried out only after the unit is shut down and cooled. Checking and repairing circuit and fryer, as well as installation of the fryer, must be done by electricians. The power supply and wiring

must be checked regularly for any error and fryer must be immediately repaired after the electric wire is blown.

Periodic inspection of power supply, key components. Damage of fuse wire must be repaired immediately.

Notice: Be careful to avoid scald when arranging the food. Do not touch the unit when it is running or generating heat.

1.5 Warranty

Fryer can only be used for frying food. The company will not be responsible for any malfunction caused by using the unit for other abnormal purposes.

The following situations are not covered in the warranty:

- 1. This unit is not properly used or is not used based on the design intent.
- 2. Improperly installation or maintaining.
- 3. The unit continues to operate when damaged.
- 4. Operational procedures are ignored; in particular, caused by process of storage, installation, testing, repairing or maintenance.
- 5. Parts are replaced without the written permission of the distributor.
- 6. Lack of daily maintenance for parts that are easy to be worn or damaged.
- 7. Force majeure.

2. Installation

- i. A well ventilated environment must be guaranteed for the installation of the opened frying oven and its working area must be far away from inflammables.
- 1) adjust casters and installation height
- 2) Install security network, vent pipes and other accessories putted in cylinder
- ii. The installation of power supply: Adopt 3x6+2x4mm cable to connect the power supply of three-phase Fivewire system (380V/50Hz). There must be reliable ground wire.

3. Actions before 1st operation

- 1. Level Fryer.
- 2. Close oil drain valve, add water to between Min- Max Line
- 3. Adjust temperature to 88 ° C for boiling
- 4. Drain out water, clean Fryer.

4. Pre-operation Cleaning

Before adding oil, take following cleaning procedures first (at least once per month).

- 1. Close oil valve, adding cold water, cleaning agents.
- 2. Turn on the General Power Switch on Jack Box. Then start computer board operation, ajust temperature to 88 °C for boiling cylinder, around approximately 45 to 60 minutes. Need be watched during the process to prevent overflow events.
- 3. Shut down power, adding water, cleaning cylinder and liquid discharges.
- 4. Clean twice again, don't leave water trails.

5. Putting in Oil

Shut down drain valve and turn off power switch, remove basket support frame, filling oil between Min-Max line, then put on support frameagain, and insure putting

-down heating tubes immerse in oil.

If using oil shortning, it should be pressed tightly inside cylinder and space around heating tube should be fullfilled, (to prevent damage) .

Note: Take care of oli splashing if Fryer be moved during operation. And it's better to drain out oil then move.

6. Circuit Diagram Display

PROG: Program

L/R: Switch, Temperature

A-F: Product 1 and 1 DOWN ARROW: Time channel selection



7. Operation Procedure

Switch: Turn on the General Power Switch on the Jack Box. Hop on the power switch on control board, screen displays flashing boldface and when the boldface stay the lower right corner of the screen, press L / R button for three seconds. Relays on function and left screen shows ----, with right-screen display temperature degrees.

To shut off, after countdown, holding down the L / R button to 3 seconds then shut down. At this point, bottom right corner of the screen displays only a boldface, and then the closure of general power supply.

7.1 Temperature setting

- 1) Hold the key PROG to six seconds and left screen display PASS, right display a boldface, this time, entering a password A BCD (to be completed within 10 seconds).
- 2) Press the L key, middle screen display Lc / f (c / f said Celsius / Fahrenheit), right screen shows - degrees, said current temperature of the cylinder;
- 3) Then click L button, middle screen display L0, right screen shows degrees,

said the current setting temperature. By E / F button to adjust temperature settings (Recommended170 degrees Celsius), E up and F down

- 4) Then click the L button, middle screen show the L1, right window shows degrees, said safty temerature, ibid by E / F adjusted to between 190-200;
- 5) Then click L button, middle screen show the L2, the right window shows that said the temperature-controlled zone, by E / F adjusted to between 10-15.
- 6) At this point, the temperature settings to complete.
- 7) After setting, press PROG to exit.

7.2 Time Setting

- 1) Press PROG for six seconds, entering code ABCD, press 1 button, to the frying ands stiring-up setting.
- 2) Middle screen display product No.01, indicates channel No.01's time setting, left screen shows PROG, right screen displays frying setting time. Press E / F button to adjust. Then clcik D and right screen shows the R-: time, that indicate stir-up timing, also by press E / F button to adjust
- 3) Then press button, No.1 Time be saved and,enter No.2 time channel, middle screen display chain linel No. 02, right screen shows channel setup time -:--, to repeat the previous steps for setting up.
- 4) Respectively set to 01-09 channel. Finished time set-up.
- 5) Click PROG set to exit.

7.3 A-F Button Setting

1) Press A when temperature achieve setting temperature on dispaly. A indicator lighting, middle screen shows the current A key products by default channel No. 01, left window shows channel setup time and started the countdown. Time could be adjusted by for button to select from No.1 to No.9 Channel. For example: Press A button after middle window display of 01, left window shows

For example: Press A button after middle window display of 01, left window shows 2:30 and start the countdown, but time required is of channel 03's 6:30. Thus double click middle screen will display 03, left screen display 6:30 (after 10 seconds 03 figure went out) channel 3 time automatically saved to the A button, which need to be completed within 10 seconds. A setting be completed.

The same method for left buttons' setting.

7.4 Conversion between Fahrenheit and Celsius

Press PROG button for 6 seconds and enter code ABCD, press L, middle screen shows the LC / LF, C / F, said Celsius and Fahrenheit temperature unit, press D to convert then press PROG to exit.

7.5 Temperature setting checking

Click L / R button, screen shows C - degrees, said current cylinder temperature. Then click L / R button, screen shows P - degrees, said current setting temperature. After ten seconds automatically return to the current status.

8. Frying Process

1) Temperature achieving frying point, start to put in food and select appropriate product button. Product indicator green lighting, begins to the countdown. When

time to setting stiring-up timing, indicator turns to blue flashing lights and accompanied by three consecutive sound alarm to remind that when the countdown reaches 0, then display shows the END. The indicator light turns red indicates the product has been completed frying.

- 2) Computer automatically delay system, offer quality protection for cooked food
- 3) The countdown real-time displaying, click the L / R button you can view the current furnace oil temperature, and then click L / R button you can view setting temperature,
- 4) Pressed wrong button, click product button for three seconds to exit, and then restart other product button. Or adjusting by thin 10 seconds, re-select the time/channel product button.
- 5) Three types foodcould be cooked in one cylinder.
- 6) When electric heating tubes pulling up, power supply will be automatically interrupted, down to resume.

9. Filteration

- 1. Take care when releasing oil to cylinder, boiling oil can cause serious burns.
- 2. If the valve has been jammed by food remains, please clean up
- 3. When re-oiling to pot, please remove food remains first.
- 4. Filteration at least one time a day.
- 5. Regurate filteration can keep quality of frying and prolong oil life.

10. Preventive Maintenance

- 1. Daily clean fryer inside and outside. Smear with a dry cloth to clean all parts, removing oil and dust.
- 2. Weekly clean cylinder and heating tube. Notice:Do not use when cylinder is hollow.

11. Turing Off

- 1. Oil filteration, covered with a lid, and then power off.
- 2. When using suspetion for long time, power off, drain outoil and make total clean.

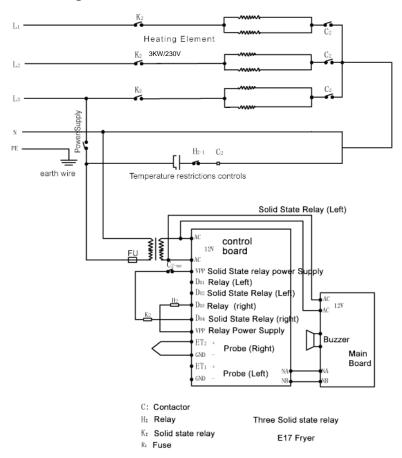
12. Common Malfunction and Solution

Problem	Cause	Solution
No Heating	Heating tube damaged	Check/change
or	Contactor damage	Check/change

low temperature	Probe damaged	Check/change
	Power supply not on	Check power supply
	Low temperature setting	Resetting
	Power safty cut off power supply	Refer follow solutions
Safty controls cut off power supply	Temperature setting high	Resetting and press safty controls reset
	Safty controls damaged	Check/change
Oil temperature too high	Probe damaged or loose	Check/change
	Solid state relay damaged	Check/change
	Control board damaged	Check/change
No alarm	Buzzer or circuit damaged	Check/Change
	Control board damaged	Check/Change
No display on control board	Transformer/Fuse damaged	Check/Change
	Control board damaged	Check/Change
	No power supply	Check/Change

Notice: Repairing and maintenance must taken by professionall

13. Circuit Diagram



All the contents of this operation Manual are aimed only at the product then designed. Our company reserves the right for changing the product design. Please excuse us for not updating the Manual in time in case of any design change!