

EF-28L  
EF-28L-2

# **Electric Fryer**

(Floor-Type)

Electric Fryer Series

# **User's Manual**

## **Dear User & Client,**

Firstly, thanks for purchasing and using our product. All the information and guidelines of this user's manual comply with certain applicable regulations, which come out from our long-term accumulated knowledge and experience as well as current project development situations.

Limited to some special structures, additional specified items or new technology changes, the actual usage situation might be some different from what stated in this user's manual. Should you have any question, please do not hesitate to contact the manufacturer via the method shown in back cover page of this manual.

For safety purpose and efficient operation, please make this document available to users for reference. Do have them to read this manual carefully before carry out any action on this device, especially when starting.

**This manual is not applicable for those who have physical or mental disabilities, insufficient experience, and/or insufficient knowledge, including children.**

**The manufacturer declines any responsibility in the event users do not follow the instructions or guidelines stated here.**

The user's manual should be placed close to the device, in convenience of users' reading before operation. We have the full authority to reserve the further technical changes of the device, in the scope of further performance improvement characteristic development.



## **Warning**

- ◆ Any self-modification, wrong installation, adjustment or maintenance can lead to property loss or casualty. Please contact the manufacturer for any adjustment or maintenance, and have the work done by a trained & qualified person.
- ◆ For your safety sake, please keep the machine away from any liquid, gas or other object, which is flammable or explosive.
- ◆ This appliance should not be operated by those who have physiological, perceptual or mental disabilities or those who have insufficient experience or knowledge (including children). Only in conditions of being given sufficient supervise & guarantee of personal safety, as well as proper instructions & guidance, those who were mentioned above can make some particular operation of this device.
- ◆ Keep children away from the device.
- ◆ Preserve this manual safely. When passing on/selling the device to a third party, the manuals must be handed over along with the device. All users must operate the device complying with the user's manual and related safety guidelines.
- ◆ Do not store or use gas, liquid or object that is flammable or explosive in the vicinity of the mounting position of the appliance.
- ◆ If this appliance is placed near walls, partitions or kitchen furniture and the like, it is advisable to make these facilities with non-combustible material, otherwise cover them with non-combustible heat-resistant material, and pay attention to fire prevention regulations.

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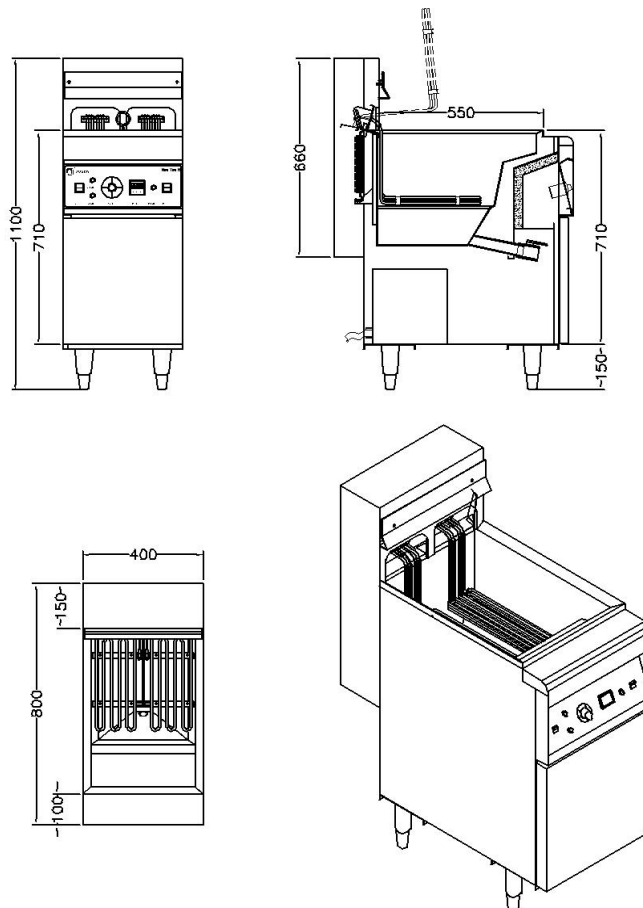
## 1. Functional Introduction

This product is manufactured by our company, which is combined with advantages from home and abroad. It is novel in design, reasonable in structure, easy in operation, durable in using, convenient in maintenance. The powerful Power design makes the cold oil reach the working condition and back to temperature quickly. It is efficient and high-yield. The deeper oil cooling zone makes the swirl no carton deposition which can extend the service life and ensure the fried food in a colorful color and luster. This product is equipped with a temperature controller whose control temperature is 190°C and a limit thermostat whose control temperature is 230°C. The temperature controller is used for adjusting the fried temperature and the limit thermostat shutting the Power off automatically and protecting the appliance when over-temperature. Moreover, an adjusting timing alarm is equipped too. From 1 minute to 99 minutes, you can set the time according to the fried needed. When the pre-set time is reached, the alarm will alert.

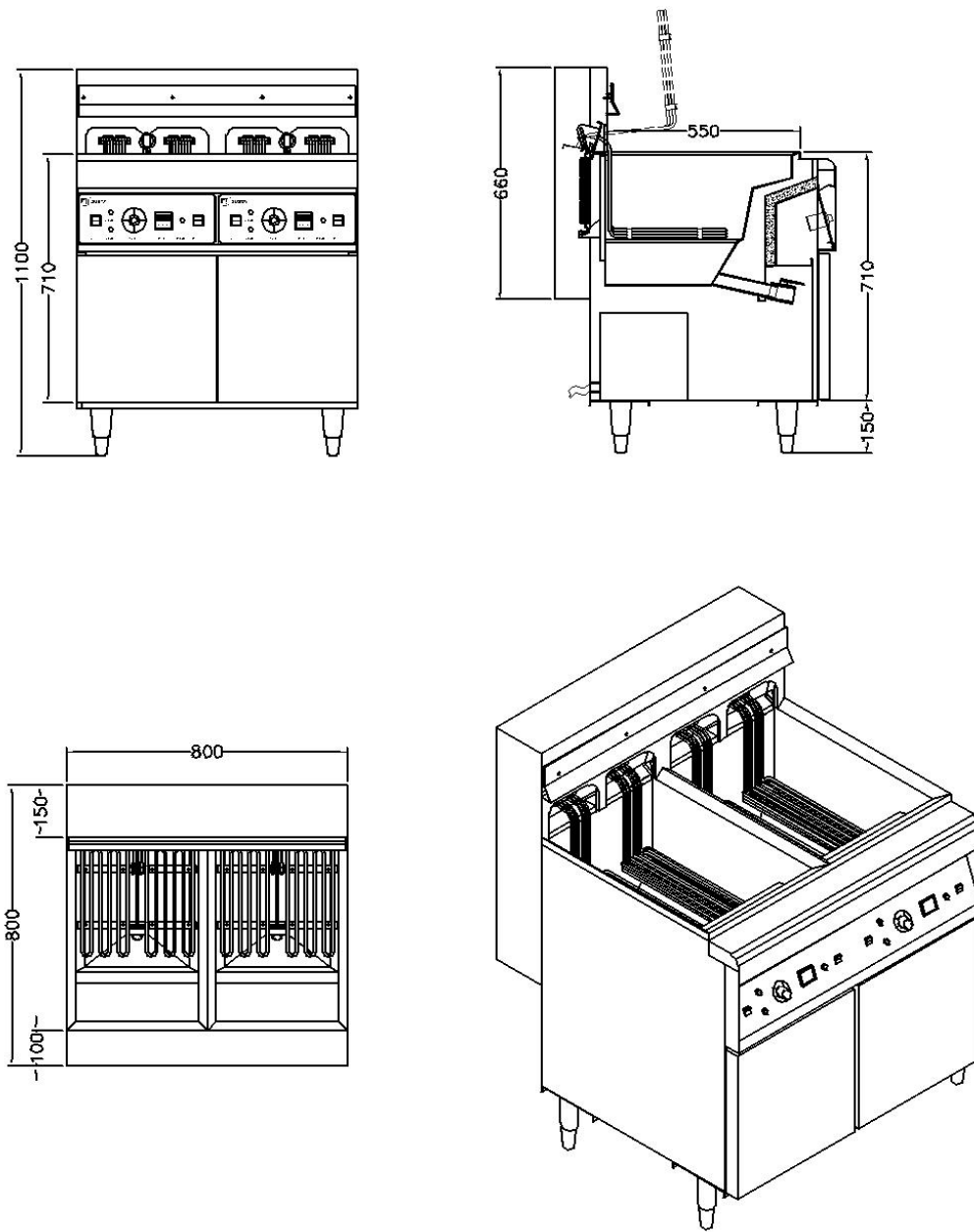
## 2. Structure Schematic Diagram & Working Principle

### 2.1 Structure Schematic Diagram:

EF-28L



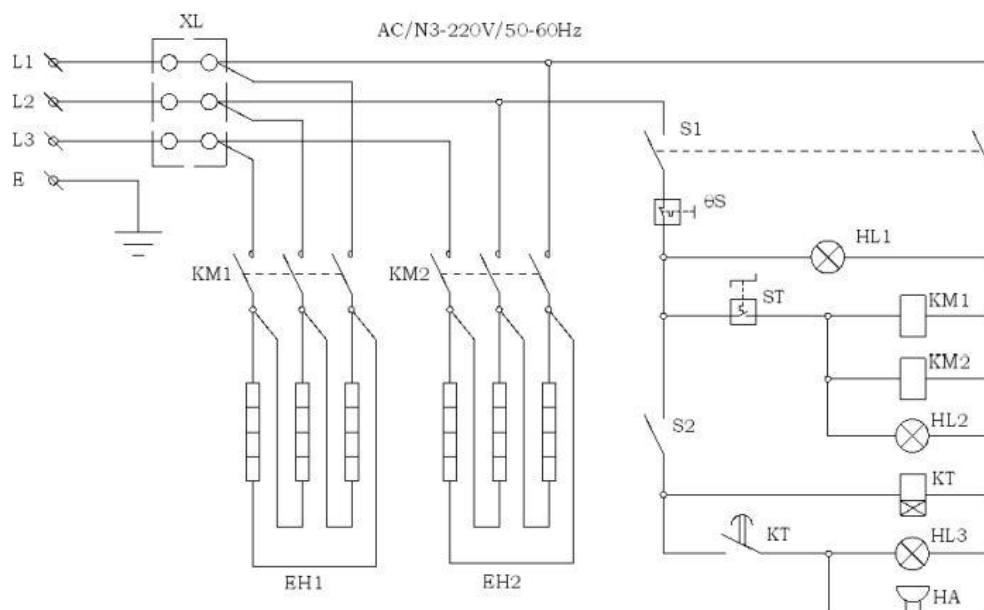
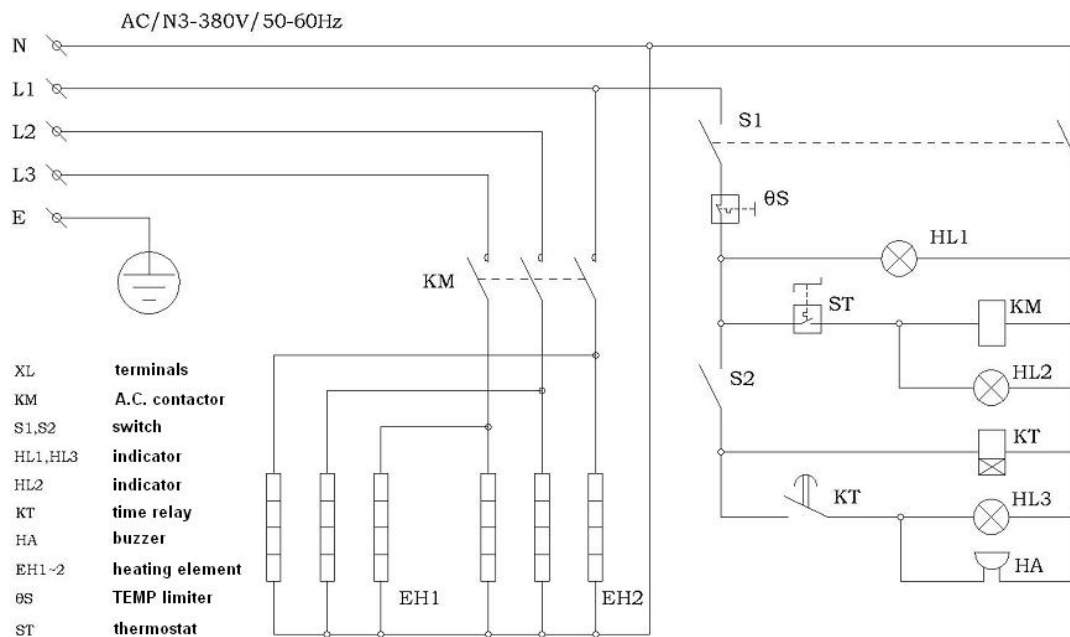
## EF-28L-2



### 2.2 Structural & Functional Features

1. All stainless steel made, with attractive appearance.
2. Heavy duty heating element(s), safe (oil) drain valve.
3. Over-temperature protection device.
4. The heating element(s), could be turned upward, convenient for element and tank cleaning.

## 2.3 Electrical Diagram:



KM1, KM2	A.C. contactor 32A	S1	power switch
θS	TEMP. limiter	ST	thermostat
HL1	power indicator	HL2	heating indicator
S2	timer switch	KT	time relay
HL3	alarm indicator	HA	buzzer
EH1, EH2	heating element 2x9kW	XL	terminals

### Note:

Electrical working principle of the EF-Series (1/2-tank) is identical. The only distinction is the 2-tank model has two same electrical boxes.

### 3. Basic Features & Parameters

Model	Dimension (mm)	Capacity (L)	Power (kW)	Voltage	N/W (kg)
EF-28L	400×800×1100	28	16~18	3N~380V~400V	60
EF-28L-2	800×800×1100	28×2	(16~18)×2	3N~380V~400V	101
EF-28L	400×800×1100	28	16~18	3N~220V~230V	60
EF-28L-2	800×800×1100	28×2	(16~18)×2	3N~220V~230V	101

### 4. Precautions & Recommendations

#### 4.1 Transportation and Storage

During transportation, the machine should be carefully handled and do not put it upside down to prevent from damaging to the shell and inside. The packaged machine should be stored in a ventilated warehouse without corrosive gas. If it needs to be stored in open air temporarily, measurement against raining is needed.

#### 4.2 Notice for Installment

##### Accessories:

No.	Name	QTY		Unit
		EF-28L	EF-28L-2	
1	basket	2	4	pc
2	(oil) drain tube	1	1	pc
3	cover	1	2	pc
4	bracket	1	2	pc

##### Electrical Installation:

1. Power supply shall be 380V/50HZ, which should be protected by reliable earth wire.
2. Air switch that connecting to the power cord should be no less than 30A.
3. The live line and neutral line should be connected in accordance with the power cord standard.



**Note:**

1. The supply voltage should comply with the working voltage of the appliance.
2. The appliance is equipped with an earth bolt at its back, which should be connected with copper wire no less than 1.5mm<sup>2</sup> and earth wire that conforming to safety regulations reliably.
3. After installation, check that whether the connection is loose, whether the voltage is normal and whether the safety grounding is reliable.
4. The appliance should be positioned at a stable area with a minimum clearance of 10cm away from non-combustible substances (e.g. walls, windows etc.) on both sides, and 20cm at back side.
5. The fixed arrangement of wire should be equipped with an all-pole disconnecting switch with a contact opening of 3mm on its poles. It is advisable to install a grounding leakage protection switch. Do not pile up sundries in front of the switch, for convenient operation sake.
6. Vicinity of the mounting position should not store flammable or explosive objects. The ambient temperature should be lower than 45°C and the relative humidity should be below 85%.
7. Installation of the appliance should be done by professional technicians.

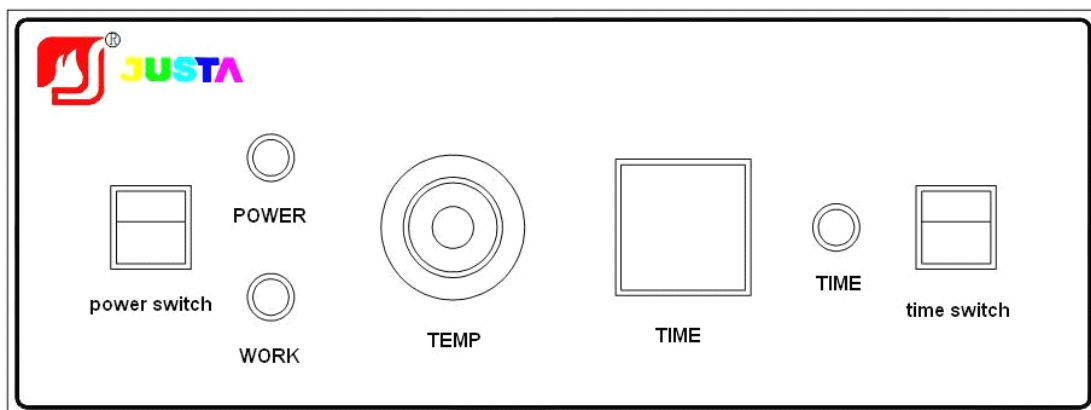
**4.3 Special Notice**

1. This product is a commercial machine that needs to be operated by trained cook, not applicable for household use.
2. All operators should observe the electric safety regulations strictly. Before using, making sure that the power voltage complies with that on the nameplate and the grounding is safe.
3. All operations should be done only in safe condition. If any failure occurs, have it repaired immediately.
4. Before using, install and debug the appliance correctly. Only when the appliance is inspected with no error can it be put into service.
5. Do not sway or tilt the appliance during operation.
6. Do not self-modify the machine. Self-modification may cause casualty.
7. Turn the appliance off and cool it down before dismantling any components.
8. Do not open the housing of the appliance. The product contains high-voltage circuit, housing dismantlement may cause electric shock.
9. Before cleaning, unplug and cut off the power supply.
10. During cleaning, do not aim at the appliance with water jet. Water can conduct electricity, that may cause electric shock due to leakage.
11. Do not pat the product or put any heavy objects onto it. Abnormal operation may cause damage and danger.
12. To prevent scald, do not touch the appliance with hands directly due to high temperature during or after operation.

13. To prevent damage, turn off the electric switch ASAP when near thunder zone.
14. Do not destroy the control panel with hard or sharp objects.
15. After working, turn off the switches.
16. Circuit maintenance and appliance installation should be done by professional personnel. It is dangerous for others to have the work done.
17. If the power cord is damaged, replace it with original or dedicated components that bought from manufacturer or its maintenance department. Substitution should be done by professional personnel.
18. Only liquid oil could be used for this appliance. Never melt the solid oil directly by heating in the appliance.

## 5. Working Instructions & Operation Flow

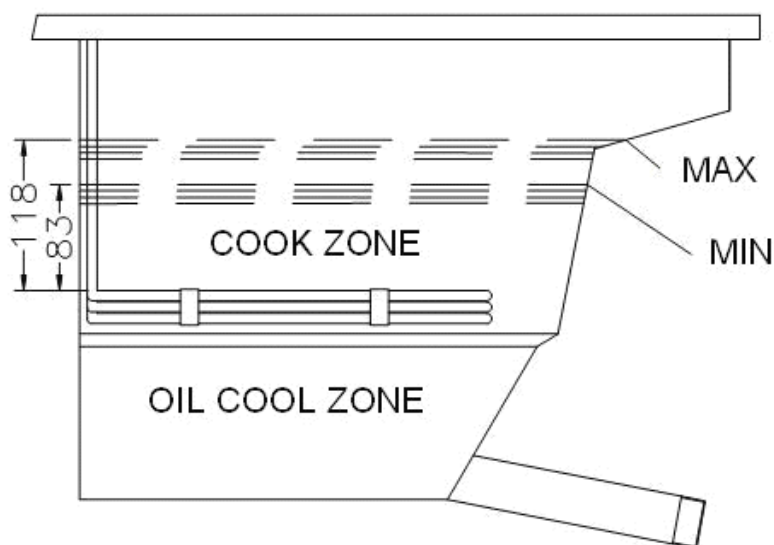
### 5.1 Control Panel:



### 5.2 Operation:

1. Before using, making sure that the tank and heating element(s) are clean and dry. Put away the bracket and check that whether the oil valve is well closed. Then pour some edible oil into the tank, whose capacity should not exceed the MAX level or lower than the MIN level. Oil level as chart below:
2. Turn on the power switch, the POWER indicator illuminates. Rotate the thermostat knob to desired temperature, with the WORK indicator on, and put the prepared food for cooking into the basket.
3. If the WORK indicator is off, which indicates that the oil reaches the set point, turn on the time switch with the TIME indicator on and set the cook time, then put the basket into the tank.

4. During cooking, shake the basket timely. When it alarms, the food is done. Turn off the time switch and lift up the basket, then hang it on the hanging board to filter the oil.
5. After filtering, take out the cooked food and put the prepared one into the basket for cooking. If not going to use the fryer for a short time, cover the tank.
6. After cooking, reset the thermostat and turn off the power switch. Oil shortening and fryer cleaning could be done when the oil cools down to room temperature.
7. When draining, tighten the oil drain pipe to the ball valve. Pay attention that the outlet should be downward, a container shall be put underneath the outlet to collect the oil. Then open the ball valve to drain.



## 6. Routine Inspection

It is necessary to check the machine daily.

Check the machine regularly can avoid serious accident happens.

Stop using if user feels that there are some problems in the circuit or machine.

Check the situation of the machine before or after using every day.

Before using: Whether the machine is tilted?

Whether the control panel is damaged?

Whether the power cord is aging, cracking or damaged?

During using: Whether there is strange odor or vibration noise?

Whether the temperature is out of control or any electric leakage?

## 7. Cleaning & Maintenance

1. Before cleaning, cut off the power supply first to prevent unexpected accidents.
2. After working everyday, drain out the edible oil and filter it. First, take out the basket netting and oil drain pipe, have them cleaned with non-corrosive detergent and rinsed with clear water. Then, have the tank and heating element(s) cleaned as aforementioned and wipe up with a dry towel. Finally, scrub the body surface and power outgoing line with wet towel. Do not aim at the appliance with water jet directly for cleaning. Water infiltration may damage the electric performance and cause safety hazard.
3. After cleaning, have all accessories put away, then cover the cover.
4. If not going to use the appliance at any time, turn off the thermostat and power switch.
5. If not going to use the appliance for a long period of time, clean it completely and store it in a well-ventilated warehouse without any corrosive gases.

## 8. Failure Analysis & Trouble Shooting

Symptoms	Causes	Solutions
Connect the power and turn on the switch, the panel has no reaction.	1. Circuit connection is loose or damaged.	1. Tighten the connection or check the circuit.
Power on and heat the appliance, but the operating temperature keeps rising without control.	1. The thermostat is malfunctioning. 2. The TEMP limiter is defective.	1. Replace the thermostat. 2. Replace the TEMP limiter.
The POWER indicator is not on and the appliance does not heat up.	1. Power supply is abnormal or disconnected. 2. The fuse is burnt out.	1. Check the power supply and its connection to make it supply normally. 2. Replace the fuse.

**Aforementioned troubles are just for reference. If any failure occurs, please stop using, and inform the professional technicians to check and repair.**