

## FriFri FFS41, FFS31, FFM31, FFE31, 4251188725889

# FriFri Fryer Heater Instruction Manual

Models: FFS41, FFS31, FFM31, FFE31, 4251188725889

## 1. INTRODUCTION

This manual provides essential information for the safe and efficient installation, operation, and maintenance of your FriFri Fryer Heater. Please read this manual thoroughly before installation and keep it for future reference. This heater is designed for specific FriFri electric fryer models: FFS41, FFS31, FFM31, and FFE31.

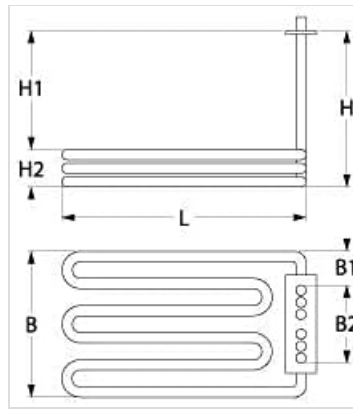
## 2. PRODUCT OVERVIEW

The FriFri Fryer Heater is a high-performance immersion heating element designed for commercial electric fryers. It ensures rapid and consistent oil heating for optimal frying results. Key features and specifications are detailed below:

- **Connection Length:** 33 mm
- **Application:** Electric Fryer
- **Fixing Type:** Rectangular Flange
- **Width:** 215 mm
- **Other Widths:** 66 mm, 60 mm
- **Usage Type:** Immersion Heater
- **Flange Width:** 52 mm
- **Heating Circuit:** 106 mm
- **Height:** 298 mm
- **Additional Height:** 260 mm, 32 mm
- **Cable Length:** 70 mm
- **Power:** 11.4 kW
- **Hole Spacing:** 95 mm
- **Hole Diameter:** 6 mm
- **Length:** 310 mm
- **Voltage:** 230/400 V



**Figure 2.1:** The FriFri Fryer Heater, an immersion heating element with multiple heating tubes and electrical connections at the top.



**Figure 2.2:** Dimensional drawing of the FriFri Fryer Heater, showing various measurements including length (L), width (B), heights (H, H1, H2), and flange dimensions (B1, B2).

### 3. SAFETY INSTRUCTIONS

Always adhere to the following safety precautions to prevent injury or damage to the equipment:

- Ensure the fryer is disconnected from the power supply before any installation, maintenance, or cleaning.
- Installation and replacement should only be performed by qualified personnel.
- Verify that the voltage and power ratings of the heater match the fryer's requirements.
- Do not operate the fryer without sufficient oil or liquid covering the heating element. Dry operation will cause severe damage.
- Handle the heating element carefully to avoid bending or damaging the tubes.
- Keep electrical connections dry and free from oil or water.
- Regularly inspect the heater for signs of wear, corrosion, or damage. Replace immediately if any damage is observed.

### 4. SETUP AND INSTALLATION

This section outlines the general steps for installing the FriFri Fryer Heater. Refer to your specific FriFri fryer model's service manual for detailed instructions.

1. **Disconnect Power:** Ensure the fryer is completely disconnected from the main power supply.
2. **Drain Oil:** If replacing an existing heater, drain all oil from the fryer tank.
3. **Access Heater:** Depending on the fryer model, you may need to remove panels or lift the control head to access the heating element.
4. **Remove Old Heater:** Carefully disconnect the electrical wiring from the old heater. Unfasten any mounting bolts or clamps securing the heater. Gently remove the old heating element from the tank.
5. **Inspect Gasket/Seal:** Check the condition of the gasket or seal around the heater flange. Replace if worn or damaged to ensure a watertight seal.
6. **Install New Heater:** Insert the new FriFri Fryer Heater into the tank, ensuring the flange aligns correctly with the mounting holes. Secure it with the appropriate bolts or clamps, tightening them evenly to create a proper seal.
7. **Connect Wiring:** Reconnect the electrical wiring to the new heater terminals according to the fryer's wiring diagram. Ensure all connections are secure and insulated.
8. **Test for Leaks:** Before restoring power, fill the fryer tank with water (or oil if preferred) to just above the heating element and check for any leaks around the flange. If leaks are present, re-tighten the bolts or replace the gasket.
9. **Restore Power:** Once installation is complete and no leaks are detected, restore power to the fryer.

## 5. OPERATING INSTRUCTIONS

The FriFri Fryer Heater operates as an integral part of your electric fryer. Its operation is controlled by the fryer's thermostat and control system. Ensure the fryer is filled with oil to the recommended level before activating the heating element.

- **Oil Level:** Always ensure the oil level is above the minimum fill line and completely covers the heating element before turning on the fryer. Operating the heater without sufficient oil will cause it to overheat and fail.
- **Temperature Control:** Set the desired frying temperature using the fryer's thermostat. The heater will automatically activate to reach and maintain this temperature.
- **Preheating:** Allow sufficient time for the oil to preheat to the set temperature before adding food. The 11.4 kW power rating ensures efficient heating.
- **Monitoring:** Periodically monitor the oil temperature and the heater's performance during operation.

## 6. MAINTENANCE

Regular maintenance extends the life of your FriFri Fryer Heater and ensures optimal performance.

- **Cleaning:**
  - Always disconnect power before cleaning.
  - After draining oil, clean the heating element to remove any accumulated food particles or carbonized residue.
  - Use a non-abrasive brush or cloth and appropriate fryer cleaning solutions. Avoid harsh chemicals that could damage the element's surface.
  - Rinse thoroughly and ensure the element is dry before refilling the fryer.
- **Inspection:**
  - Periodically inspect the heating element for signs of pitting, corrosion, cracks, or swelling.
  - Check electrical terminals for looseness, discoloration, or signs of arcing.
  - Inspect the flange gasket for deterioration or leaks.
- **Replacement:** Replace the heater if significant damage or reduced performance is observed.

## 7. TROUBLESHOOTING

This section provides basic troubleshooting steps for common issues related to the heating element. For complex problems, consult a qualified technician.

Problem	Possible Cause	Solution
Heater not turning on	No power to fryer; tripped circuit breaker; faulty thermostat; loose wiring; failed heating element.	Check power supply and circuit breaker. Verify thermostat operation. Inspect and secure wiring. Test heater continuity; replace if open circuit.
Oil not heating sufficiently	Incorrect thermostat setting; low voltage; partial heater failure; excessive sediment on element.	Adjust thermostat. Verify correct voltage supply. Inspect element for damage. Clean element thoroughly.
Oil overheating	Faulty thermostat; stuck contactor.	Replace thermostat. Inspect and replace contactor if necessary.

Problem	Possible Cause	Solution
Oil smells burnt / smokes excessively	Excessive food debris on element; old oil; element operating dry.	Clean element. Change oil. Ensure element is fully immersed.

## 8. SPECIFICATIONS


Attribute	Value
Brand	FriFri
Model Numbers	FFS41, FFS31, FFM31, FFE31
Manufacturer Part Number	4251188725889
Power	11.4 kW
Voltage	230/400 V
Connection Length	33 mm
Fixing Type	Rectangular Flange
Width	215 mm
Hole Spacing	95 mm
Cable Length	70 mm


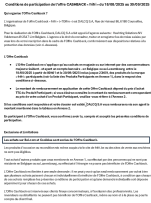

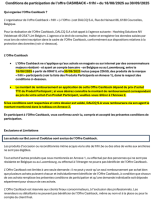
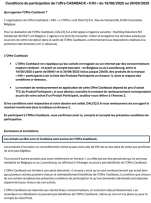
## 9. WARRANTY AND SUPPORT

For warranty information and technical support, please contact your original point of purchase or an authorized FriFri service center. Information regarding spare parts availability for this specific model is currently unavailable through general product listings. Always use genuine FriFri replacement parts to ensure compatibility and maintain product performance.

For further assistance, you may refer to the official FriFri website or contact their customer service department. (Note: Specific contact details are not provided in the product data.)

### Related Documents - FFS41, FFS31, FFM31, FFE31, 4251188725889

	<p><a href="#">FriFri Super Easy 411 Free Standing Fryer - Technical Specifications</a></p> <p>Detailed technical specifications for the FriFri Super Easy 411 free-standing fryer. Features include manual temperature control, oil capacity, output rates, basket configuration, dimensions, power requirements, and optional accessories for professional catering.</p>
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	<p><a href="#">Frifri MULTEX Waffle Maker Operating Instructions</a></p> <p>Comprehensive operating instructions for the Frifri MULTEX waffle maker, covering safety, usage, maintenance, and warranty information. Includes details on adjustable thermostat and available waffle irons.</p>
	<p><a href="#">frifri Cashback Offer: How to Participate and Get Your Reimbursement</a></p> <p>Detailed guide on the frifri cashback promotion from August 18, 2025, to September 30, 2025. Learn how to purchase eligible waffle makers and plates, register online, and claim your cashback from DALCQ S.A. Includes product lists and reimbursement amounts.</p>
	<p><a href="#">frifri Cashback Promotion: Up to 50€ Refund on Kitchen Appliances</a></p> <p>Details of the frifri cashback offer valid from December 2, 2025, to January 2, 2026. Learn how to claim up to 50€ back on eligible frifri kitchen appliances by following the participation terms and conditions.</p>
	<p><a href="#">Conditions Offre Cashback frifri : Guide Complet 2025</a></p> <p>Toutes les informations sur l'offre Cashback frifri (18/08/2025 - 30/09/2025). Découvrez comment participer, les produits éligibles (Annexes 1 &amp; 2), les exclusions et les conditions de remboursement.</p>
	<p><a href="#">Conditions de participation offre Cashback frifri 18/08/2025 - 30/09/2025</a></p> <p>Découvrez les conditions complètes pour participer à l'offre Cashback frifri du 18 août au 30 septembre 2025. Détails sur l'éligibilité, l'achat, l'inscription et le remboursement.</p>