

# **Operating Manual**

## Coffee Machine Model THERMO 24 ECO / 48 ECO

Item-No.: 317-2088 / 317-2089 (from production date 5/2025 onward)







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Dear Customer,

Congratulations on your new SARO coffee machine SAROMICA THERMO 24.

The product you have purchased was designed for commercial use in restaurants, hotels, cafés, canteens, and supermarkets. It is intended to brew large quantities of coffee and keep it warm in the insulated pump jug. The required amount of coffee can be dispensed directly on site.

Please read the operating manual carefully before putting the machine into operation.

We hope you enjoy your new SARO product.

#### **SCOPE OF DELIVERY**

- 1 Coffee machine
- 1 Insulated pump jug (THERMO 24 ECO) or 2 1 Insulated pump jug (THERMO 48 ECO)
- A few basket filters for a quick start
- Operating manual

#### **STANDARDS AND DIRECTIVES**

This device complies with the current EU standards and directives:

Low Voltage Directive – LVD 2014/35/EU Electromagnetic Compatibility Directive – EMC 2014/30/EU RoHS Directives 2011/65/EU and 2015/863/EU

We will be happy to provide you with the corresponding declaration of conformity upon request.



## **TECHNICAL OVERVIEW**

Coffee Machine		
Model	THERMO 24 ECO	THERMO 48 ECO
Order-Nr.	317-2088	317-2089
Material	(Housing and filter basket holder) stainless steel, (thermal pump jug) inner/outer stainless steel	
On/Off Switch	Yes	
Power Connection	Ready to plug in with Schuko plug	
Brewing Time	Approx. 9-10 minutes	
Cups	Approx. 16	Approx. 2x 16
Brewing Temperature	Approx. 93 – 96°C	
Boil-Dry Protection	Yes	
Capacity of pump jug	2,5 Liter	2x 2,5 Liter
Power Supply	230 V / 50 Hz / 1,9 kW	230 V / 50 Hz / 3,1 kW
External Dimensions	W 203 x D 383 x H 560 mm	W 405 x D 410 x H 560 mm
Net/Gross Weight	7,5 / 8,8 kg	13,5 / 15 kg
GTIN [EAN-Code]	4017337070084	4017337071715

## **SYMBOL EXPLANATIONS**



#### WARNUNG!

Dieses Symbol kennzeichnet Gefahren, die zu Verletzungen führen können. Halten Sie die angegebenen Hinweise zur Arbeitssicherheit unbedingt genau ein und verhalten Sie sich in diesen Fällen besonders vorsichtig.

#### WARNING!

This symbol indicates hazards that may cause injuries. Always follow the specified safety instructions precisely and exercise extra caution in these situations.



#### WARNUNG: GEFAHR DURCH ELEKTRISCHEN STROM!

Dieses Symbol macht auf gefährliche Situationen durch elektrischen Strom aufmerksam. Bei Nichtbeachten der Sicherheitshinweise besteht Verletzungs- oder Lebensgefahr!

# WARNING: DANGER OF ELECTRIC SHOCK!

This symbol warns of hazardous situations caused by electric current. Failure to follow the safety instructions may result in injury or death!





## WARNUNG: HEISSE OBERFLÄCHE -VERBRENNUNGSGEFAHR

Dieses Symbol weist auf die heiße Oberfläche des Gerätes, während des Betriebes und danach hin. Verbrennungsgefahr bei Nichtbeachten!

# WARNING: HOT SURFACE - RISK OF BURNS

This symbol indicates the hot surface of the device during and after operation. Risk of burns if not observed!



## WARNUNG: FEUERGEFÄHRLICHE STOFFE - VERBRENNUNGSGEFAHR

Dieses Symbol weist darauf hin, dass Gefahren aufgrund von feuergefährlichen Stoffen für Leben und Gesundheit von Personen bestehen. Verbrennungsgefahr bei Nichtbeachten!

# WARNING: FLAMMABLE SUBSTANCES - RISK OF BURNS

This symbol indicates that flammable substances pose a danger to life and health. Risk of burns if not observed!



#### **GENERAL INSTRUCTIONS**

- Keep this operating manual within easy reach near the appliance.
- The manufacturer/dealer cannot be held responsible for any damage resulting from failure to follow this manual.
- If this manual is not observed, the safety of the device is no longer guaranteed.
- If you pass the appliance on to a third party, this operating manual must be included.
- This appliance must not be operated by children or by persons with physical, sensory, or mental impairments, as they
  may not recognize the dangers associated with the use of electrical appliances, potentially leading to accidents, fires,
  explosions, or property damage.
- After unpacking the appliance, ensure that everything is in perfect condition. If you notice any damage, do not connect the appliance: instead, contact your dealer.
- Check whether all components listed in the scope of delivery are present. If anything is missing, contact your dealer.
- Keep the original packaging. The appliance can only be safely transported (e.g., for repair or when moving) in the original packaging. Be aware that all packaging components (plastic bags, cardboard, styrofoam parts, etc.) can be dangerous to children and should not be stored near them.
- If storing the packaging is not possible, separate the packaging materials and take them to the nearest recycling center for proper disposal.
- Do not use the appliance outdoors in rainy conditions or in damp rooms.
- Do not operate the appliance unattended.
- Observe the accident prevention regulations and general safety standards applicable to the place of use.
- Place the appliance in a dry, well-ventilated area on a level and stable surface.
- Before connecting to the power supply and starting the appliance, clean it thoroughly as described in the "Cleaning" section.
- Before plugging in the appliance, ensure there is a grounded Schuko socket and a 230-volt connection available, and
  that this matches the information on the rating plate. Using power sources other than those specified on the rating plate
  may result in overheating or damage to the appliance.
- Do not drill or puncture any part of the appliance, either inside or outside. The circuit could be damaged.
- The manufacturer/dealer cannot be held liable for any damages resulting from failure to follow the instructions in this manual. The safety of the appliance is no longer guaranteed in such cases.
- In case of a malfunction or defect, disconnect the appliance from the power supply and contact your dealer. Repairs should only be carried out using original spare parts.



#### **SAFETY INSTRUCTIONS**



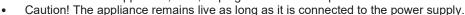
- Improper operation or handling may lead to malfunctions or injury to the user.
- There is a risk of scalding from hot steam and liquids during operation use caution when handling lids, taps, and containers.
- Observe all applicable accident prevention regulations and general safety standards for the area of use.
- Ensure the appliance is placed on a stable, dry, non-slip surface that can support its weight and in a well-ventilated location.
- Do not expose the appliance to direct sunlight or place it near other heat sources (heater, stove, oven, open flame) or on hot surfaces.
- Do not store flammable or explosive substances near the appliance.



- Do not perform work involving flammable substances near the appliance (e.g. no paint or lacquer sprays). This may lead to fire or explosion.
- Do not place heavy objects, loads, or liquids on top of the appliance.
- Before connecting the appliance to the power supply, ensure that the power type and voltage match the information on the rating plate. Operation is only permitted with the correct power specifications to prevent accidents or damage.
- Do not use adapters, power strips, or extension cords. These can lead to overheating of cables, especially if multiple
  devices are connected, increasing the risk of fire.



- Do not move the appliance while it is in use.
- Before moving the appliance, turn it off (if it has a power switch) and unplug it from the socket.
- · Always unplug by pulling the plug housing, not the cord.
- Ensure that the appliance does not tip over when being moved. This could cause injury.
- In the event of a power failure or if the plug has been briefly removed, turn the appliance off, wait 5 minutes, plug it back in, and restart it.
- Do not let the power cord hang over sharp edges, do not pinch it, and keep it away from hot surfaces and open flames.
- Make sure the cord cannot be pulled accidentally or cause someone to trip.
- Regularly check the power cord. If it is damaged (e.g. crushed), it must be replaced by a qualified professional.
- Do not touch the appliance, cord, or plug with wet or damp hands.





- Protect the appliance from moisture.
- Do not clean the appliance with a direct water spray.
- Do not immerse the appliance in water or other liquids, nor allow liquids to splash onto it.
   If the appliance does get wet, unplug it immediately and have it inspected by a professional before using it again. There is a risk of electric shock.
- Do not use the appliance if it is damaged!
  - In this case, disconnect it from the power supply and contact your dealer.
- Never attempt to open or repair the appliance yourself. Risk of fatal electric shock!
- Do not drill or puncture the appliance from the outside or inside.
  - Do not install other devices or attach foreign objects.
- Repairs must be carried out by qualified professionals using original spare parts.
- · Always disconnect the appliance from the power supply before cleaning or if not used for an extended period.
- For hygiene reasons, the appliance should be cleaned at least once a day or more frequently if necessary.



## **DEVICE INSTALLATION**

Place the appliance in a dry and well-ventilated room. Ensure it stands securely on a dry, non-slip surface.

Position the appliance at least 10 cm away from the wall at the back to allow sufficient air circulation at all times. There should be at least 30 cm of space above the appliance and 10 cm on each side.

Performance and energy consumption may be affected by the ambient temperature or direct sunlight. Therefore, do not expose the appliance to direct sunlight and avoid placing it near stoves, radiators, or other heat sources.

Ensure the power plug is always easily accessible and can be disconnected from the power supply without difficulty.

#### .

## **ELECTRICAL CONNECTION**

Before connecting the appliance, make sure that the voltage and frequency of your power supply match the specifications on the rating plate! Using incorrect voltage can cause the appliance to overheat!!!

Only connect the appliance to a grounded Schuko socket with a 230-volt power supply.

After a power outage or if the appliance has been disconnected from the power supply, wait at least 5 minutes before reconnecting and restarting the appliance!



## STRUCTURE AND COMPONENTS



## **INITIAL START-UP**

#### Before first use:

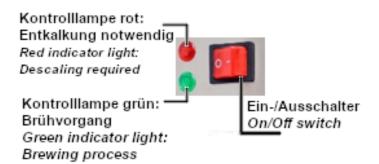
Unpack the appliance, check for completeness, and set it up (see Device Installation). Clean the appliance (see Cleaning).

Connect the cleaned coffee machine (see Electrical Connection) to a 230 V socket.

Do not dispense coffee until the brewing process is fully completed.



#### **OPERATION - SETTINGS**



#### **Installation**

- 1. Place the machine on a firm, level surface.
- 2. Insert the filter basket into position.
- Pour cold water (no more than 1.8 liters) into the water tank.Wait 1 minute to allow the water to push out any air from the machine.
- 4. Position the thermal jug correctly under the filter basket.
- 5. Switch the machine on the "In Use" indicator will light up.
- 6. Hot water will now begin to flow into the thermal jug.
- 7. After approximately 9 minutes, the "In Use" indicator will switch off. The brewing process is complete.
- 8. Before brewing coffee, repeat the steps above 2–3 times to thoroughly rinse the internal components.
- 9. During the process, it is normal to hear a hissing sound or see water vapor escaping.

#### Operation:

- 1. Assemble the filter basket and add the desired amount of coffee (according to taste) to the paper filter. The recommended amount is 75 g 90 g of coffee for 1.6 1.8 liters of water.
- 2. Slide the filter basket into position.
- 3. Pour 1600 to 1800 ml of water into the water reservoir.
- 4. Place the empty thermal jug correctly under the filter basket.
- 5. Switch on the machine the "In Use" indicator will light up. The brewing process begins.
- 6. Coffee will begin to flow into the thermal jug.
- 7. Once the "In Use" indicator turns off, the brewing cycle is complete.
- 8. Switch off the power and close the lid of the thermal jug. The coffee is now ready to be served.

The coffee machine is equipped with an overflow tube, in case the amount of water in the reservoir exceeds 2.3 liters. However, we strongly recommend not exceeding the maximum fill of 1.8 liters to prevent overflow from the thermal jug.

If the machine has not been used for an extended period, please repeat steps 1–8 under the **Installation** section before use.



#### Important:

Only insert one paper filter into the filter holder and use it only once, then dispose of it. Otherwise, this could also lead to overflowing and potential scalding.



## **CLEANING**

Make sure the appliance is disconnected from the power supply and has cooled down.

Wipe the exterior and interior surfaces with a damp, soft cloth.

A mild dishwashing detergent may be used.

Wipe again with clean water (no detergent), then dry thoroughly.

Do not use any harsh, bleaching, corrosive, or abrasive cleaning agents or tools, as these can damage or scratch the surfaces.

Since a small amount of water always remains in the hoses and boiler of the machine, make sure to remove any remaining water before storing the coffee machine.



#### Important:

When removing the coffee grounds, please ensure that the spring of the coffee machine is not accidentally thrown away!

The spring must be in place during the brewing process to prevent hot water/coffee from overflowing, which could pose a risk of scalding.



#### **MAINTENANCE**

The coffee machine requires very little maintenance. Please refer to the sections *Installation* and *Cleaning* for proper care.

### TAKING THE COFFEE MACHINE OUT OF OPERATION / STORAGE / TRANSPORT

Switch off the appliance and unplug it from the power supply.

Clean the appliance thoroughly inside and out. Once it is dry and not in use for an extended period, store it in a dry, dust-free, and cool location. Ideally, cover the appliance or use the original packaging to protect it from damage.

Make sure the machine is secured so that pets cannot crawl inside and get trapped.

When storing only the packaging materials, remember that items such as plastic bags, cardboard, and styrofoam parts can be hazardous to children if they are left unsupervised (e.g., risk of suffocation).

For transporting the appliance, it is best to use the original packaging to ensure optimal protection against shocks, sharp edges, weather conditions, etc.

Do not expose the appliance to moisture or rain and avoid strong vibrations.



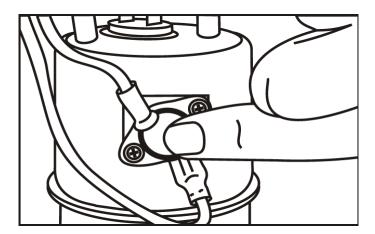
## **TROUBLESHOOTING**

If the brewing cycle does not start, switch off the appliance and unplug it from the power supply. Completely drain any remaining water from the machine, if present.

Remove the rear cover and check whether you can press the button on the side of the boiler.

If the button clicks when pressed, the coffee machine performs a reset.

Descale the appliance before using it again.



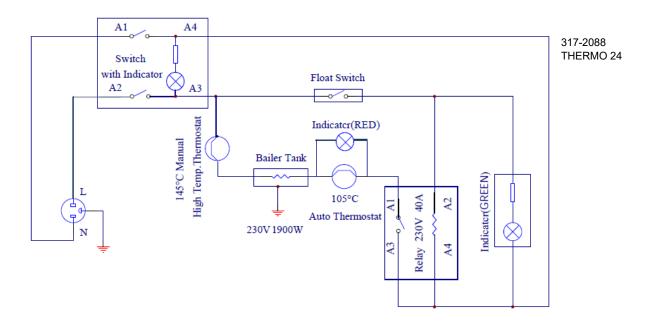
If the pump jug no longer pumps properly, please check whether the twist cap at the bottom is properly closed.

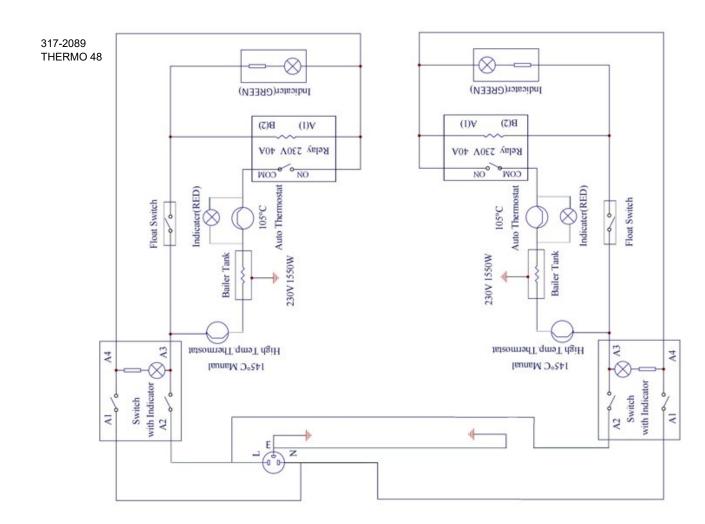
If air is being drawn in at this point, the pressure inside the insulated pump jug cannot build up correctly, which negatively affects the pump function.

If the problem persists, please contact the dealer from whom you purchased the product.



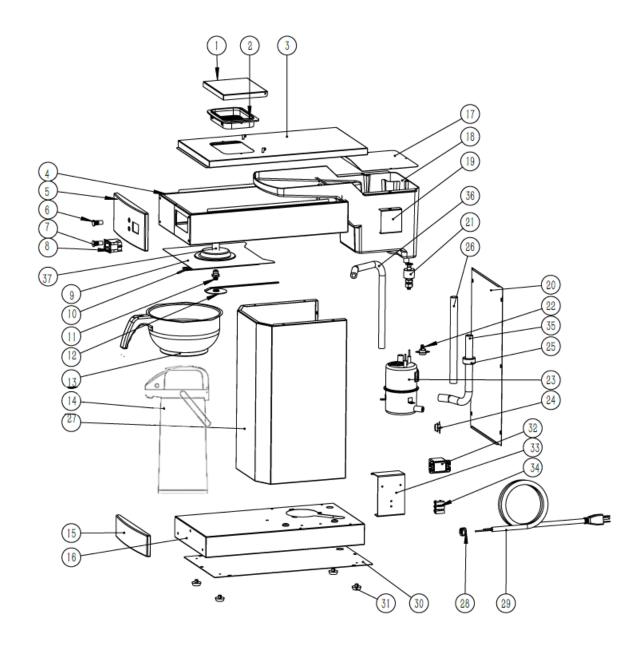
## **WIRING DIAGRAM**







## **EXPLODED VIEW DRAWING: 317-2088 THERMO 24 ECO**



## **EXPLODED VIEW DRAWING – LEGEND: 317-2088 THERMO 24 ECO**

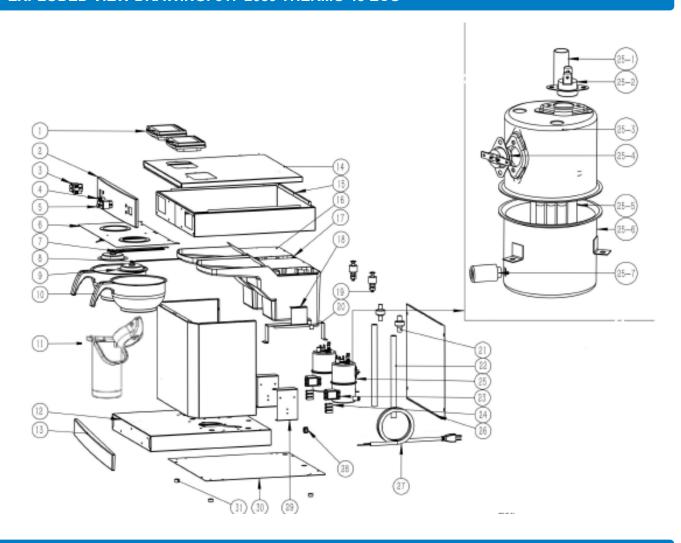
1-2	Plastic Water Entrance and cover assembly	Kunststoff-Wassereinlass und Abdeckbaugruppe
3	Reservoir Cover	Deckel des Wassertanks
4	Upper Frame	Oberrahmen
5	Alu Front Pannel(upper)	Alu-Frontblende (oben)
6	Indicator Lamp(Red) with wire	Kontrollleuchte (Rot) mit Kabel
7	Indicator Lamp(Green) with wire	Kontrollleuchte (Grün) mit Kabel
8	Dual Switch	Doppelschalter
9	Removable Sprinkler Cover	Abnehmbare Sprühabdeckung
10	Guide (Left), Guide (Right)	Führung (links), Führung (rechts)
11	Sprinkler Joint with screw	Sprühverbindung mit Schraube
12	Sprinkler Set	Sprühset
13	Stainless Filter Pan	Edelstahl-Filterpfanne
14	Thermo pot	Thermokanne



15	Alu Front Pannel(lower)	Alu-Frontblende (unten)
16	Base Frame	Basisrahmen
17	Rear Cover	Rückabdeckung
18	Plastic eservoir	Kunststoff-Wassertank
19	Reservoir Fixer	Tankhalter
20	Back Cover	Hintere Abdeckung
21	Float Switch	Schwimmerschalter
22	Auto Thermostat	Automatischer Thermostat
23	Boiler Tank	Boilertank
24	Manual High Temp. Thermostat	Manueller Hochtemperatur-Thermostat
25	OneWay Valve	Rückschlagventil
26	Drain pipe	Ablaufrohr
27	Body Frame	Gehäuserahmen
28	Cord Clip	Kabelhalter
29	Plug+Power Cord	Stecker + Netzkabel
30	Bottom Cover	Bodenabdeckung
31	Bottom Heel	Hinterer Standfuß
32	Relay	Relais
33	Relay Fixer	Relaishalter
34	Terminal Block	Anschlussklemme
35	Inflow Pipe	Zulaufrohr
36	Outflow Pipe	Ablaufrohr
37	Pipe of Hot Water	Heißwasserleitung



## **EXPLODED VIEW DRAWING: 317-2089 THERMO 48 ECO**



## **EXPLODED VIEW DRAWING – LEGEND: 317-2089 THERMO 48 ECO**

1	Plastic Water Entrance and cover	Kunststoff-Wasserzulauf und Abdeckung
2	Alu Front Pannel(upper)	Alu-Frontblende (oben)
3	Switch	Schalter
4	Indicator Lamp(Red) with wire	Kontrollleuchte (Rot) mit Kabel
5	Indicator Lamp(Green) with wire	Kontrollleuchte (Grün) mit Kabel
6	Removable Sprinkler Cover	Abnehmbare Sprinklerabdeckung
7	Guide rail	Führungsschiene
8	Sprinkler Joint with screw	Sprinkleranschluss mit Schraube
9	Sprinkler Set	Sprinklerset
10	Stainless Filter Pan	Edelstahl-Filterhalter
11	Thermos Airpot 2.5L	Thermoskanne 2,5 L
12	Base Frame	Grundrahmen
13	Alu Front Pannel(lower)	Alu-Frontblende (unten)
14	Upper Cover	Obere Abdeckung
15	Upper Frame	Oberer Rahmen
16	Baffle of water receivor	Prallblech des Wasserauffangbehälters
17	Water receivor	Wasserauffangbehälter
18	Receivor bracket	Halterung für Auffangbehälter
19	Float Switch	Schwimmerschalter



20	Receivor bracket-1	Halterung für Auffangbehälter – 1
21	OneWay Valve	Rückschlagventil
22	Draining pipe	Ablaufrohr
23	Relay	Relais
24	Terminal Block	Klemmenblock
25	SS Heating Boiler including thermostats assembly	Edelstahl-Heizkessel inkl. Thermostat-Baugruppe
25-1	SS Heating outlet pipe	Edelstahl-Auslassrohr (Heizung)
25-3	SS Boiler body(upper)	Edelstahl-Kesselgehäuse (oben)
25-5	SS Heating Tube	Edelstahl-Heizrohr
25-6	SS Boiler body(lower)	Edelstahl-Kesselgehäuse (unten)
25-7	SS Heating inlet pipe	Edelstahl-Zulaufrohr (Heizung)
25-2	Auto Thermostat	Automatischer Thermostat
25-4	Manual High Temp. Thermostat	Manueller Hochtemperatur-Thermostat
26	Back Cover of middle frame	Rückwand des Mittelrahmens
27	Plug+Power Cord	Stecker + Stromkabel
28	Wire clip	Kabelhalter
29	Relay Fixer	Relaishalter
30	Bottom Cover	Bodenabdeckung
31	Bottem Heel	Hinterer Standfuß / Bodenfuß



## **PACKAGING DISPOSAL**



Please separate the packaging materials accordingly and take them to the appropriate collection points for recycling and environmental protection.

#### **DEVICE DISPOSAL**



If the appliance is no longer in use, please dispose of it properly at a designated collection point for electrical devices.

Electrical appliances do not belong in household waste.

Your local authorities can provide information about the locations and opening hours of nearby disposal sites.

Proper disposal ensures that old appliances are recycled and handled correctly. Thank you!



#### Made in P.R.C for:

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Note: Technical, design, and model changes as well as errors are subject to change without notice.