

# **Combi kettle Metos Proveno 4G 400E**



## Produktdata

4224314
Combi kettle Metos Proveno 4G 400E
1560 × 1100 × 1050/1535 mm
475,000 kg
400 liter
400/230 V, 100 A, 62,4 kW, 3NPE, 50/60 Hz
KV: R½" (Ø15) VV: R½" (Ø15)

## Beskrivelse

Proveno 400:gross vol. 433 l, net vol. 400 l, boiling space 33 l Metos Proveno is a Finnish-made smart mixing combi-kettle. Reliable automation ensures routine food production without constant care or monitoring. Programming and management of recipes is easier than ever with the help of time-saving audio-visual communications features. Metos Proveno can be customised according to the user needs with the help of the respective features and accessories. Optimal ergonomics, ease of use and effortless cleaning make the hygienic and energy-saving Metos Proveno a user-friendly and economical option. Both fixed and free-standing (optional) installation is possible.

The control panel of the Metos Proveno is fully raised with a highly visible and easy-to-read digital interface which is protected from knocks as well as steam rising from the kettle. All parts that become dirty in everyday use such as, for example, mixers and scrapers, are easily removable without any special tools and are dishwasher-safe. The



sturdy stainless-steel lid has a Safety Grid Lid to facilitate adding of raw ingredients. Room for chef's tools is available on the control pillar top.

An automatically filled steam jacket means that the steam kettle is filled with water independently. It is possible to group Metos Proveno 4G combi-kettles by connecting them to other Metos 4G kettles and fixed Proveno 2G and 3G kettles without an intermediate support pillar between the kettles. The tilting height from the pouring spout to the floor is 600 mm. An elevated installation frame is available and can be customised to the desired tilting height. DELIVERY INCLUDES:

- a powerful stainless-steel mixing tool for all mixing, fitted with detachable and easy to clean scrapers Heavy Duty mixing tool a standard feature in 300 and 400 I combi-kettles
- a quick release stainless steel lid with a safety grid. Dishwasher safe. The rotating mechanism in the lid enables washing the lid even in the upright position while fixed to the kettle.
- stainless steel measuring stick, which is also dishwasher safe
- support pillar
- accessory hook OPTIONS (ordered together with the Proveno 4G combi-kettle)
- electronic or direct steam operated model
- hand shower with three options: S1 standard, Heavy Duty S2 or Reel -in Hand shower S3
- kettle sensor for wireless HACCP Metos loLiving
  automatic cooling C2, C3i or C5i
- drainage with pressurised air for C3iPA or C5iPA cooling
- draw off taps and valves D1 and D2
- "- double water connection
- foot switch, enabling mixing while tilting
- socket outlet (230V 10A) behind the control panel
- powerful high-performance heating element for 150 to 300 l kettles (requires a higher amperage inlet fuse)
- alternative voltages
- welded and seamless bowl cover is available for increased hygiene. Due to the fully welded outer surface, the whole device is urethane insulated ensuring excellent energy efficiency. INSTALLATION OPTIONS
- fixed installation: with a sub-surface installation frame
- fixed installation: with a surface installation frame
- elevated installation frames are available for fixed installation
- free standing installation: frame and feet
- free standing, midfloor kit 1
- free standing, midfloor kit 2
- group installation accessories are available for all options above
- it is possible to fix a free-standing combi-kettle to the floor with installation flanges which do not penetrate into the floor surface. Installation flanges do not prevent moving of the kettle as necessary. ACCESSORIES
- wireless IoLiving HACCP



- multi mixing tool with loLiving sensor
- strainer plate
- strainer plate extension for 300 to 400 l kettles
- pouring adapter (spout reducer)
- whipping grid
- cleaning tool
- · Heavy Duty Mixing tool for 150 to 200 l kettles
- blender lid kit Proveno 4G (40 to 100 l kettles)
- wide range of accessories for various cooking purposes MATERIALS

The kettle is made entirely of stainless steel with inner surface of acid resistant stainless steel. Protection class: IPX5 CONTROL PANEL

- a large control panel is fully raised from the control pillar of the kettle and equipped with a touch screen
- the screen is protected from knocks as well as steam rising from the kettle
- informative and simple touch screen with various symbols and language options
- only available functions are active in the menu
- adjustable audio-visual signals
- info and error pop-up messages
- service diagnostics are available on the display
- clear and highly visible non-reflecting status display
- current status related user instructions are available on the touch screen
- IP68 protected USB connection in the back of the panel
- software updates via USB
- programs are saved and downloaded via USB
- HACCP data is saved via USB
- various user levels, for example, making changes in the programming requires logging in
- extensive kettle settings database which is managed by users
- · demo mode for new users
- · comprehensive demo application is available
- users may alter mixing patterns and create new programmes
- energy saving mode for touch screen
- emergency stop function TIMER
- possibility to set several timers
- timed starting function (day/month/week)
- timed STOP-function
- Cook&Hold for maintaining desired temperatures
- egg timer
- timed heating
- timed mixing
- timed mixing patterns
- timed first water drainage
- timed adding of water PROGRAMMING



- programming is as standard feature
- · tested ready-to-use standard recipes and kettle cleaning programs
- programming, modifying and saving functions are available on the touch screen
- unlimited number of programs and program phases
- favourite pages for most popular programs
- HACCP set points and alarms
- timed starting function (day/month/week)
- new and customised mixing patterns also for kettle washing CLEANING

Ready-to-use cleaning programs and possibility to save an unlimited number of customised cleaning programs. Washing tool is attached to the mixer. The chosen cleaning program doses an optimal amount of water, heats up the water and starts the mixer. Signal indicates the end of a program. Programs may be customised and copied for various washing needs.

#### SMART HEATING FUNCTION

ProTemp real-time temperature control allows setting food temperature, kettle jacket temperature, or their difference (Delta-T) on the basis of actual real-time temperatures to prevent the food from burning. Display for food and jacket real-time temperatures. Smart power setting enables sensitive cooking as well as cooking on full power. Delta-T cooking, low temperature cooking, sous vide, proving and tempering - with Proveno everything is possible. Temperature setting range of 0°C... 120°C with 1°C setting accuracy. Maximum operating pressure of 1.0 bar corresponds to +120°C on the inside surface of the kettle. Optimal use of energy in all functions.

#### WATER AUTOMATIC, FOOD WATER FILLING

Automatic food water filling is a standard feature. Water is added via touch screen icons by choosing to open or close the tap, or by setting the amount of water to be added. Memory for added cooking water. Adding of cooking water may be adjusted by parameters with 100 ml intervals. Ideally located water-spout on the edge of the kettle enables filling of the kettle with water even when the kettle is being tilted, or with low water pressure. The possibility to add water when the kettle is being tilted is extremely useful, for example, when cooking or rinsing pasta. MIXER

Two directional mixing tool with an automatic reversing function provides thorough mixing at low speeds without Braking the product. Variable mixing speed for all kettle sizes is 15 to 140 rpm. Power mixing option is activated by touching and holding the respective icon, for example, for adding raw ingredients or spices. Mixing in a tilted position is enabled by touching and holding the icon when the kettle is being tilted. Pedal for mixing during tilting (optional) enables passing of the manually hand activated mixing during tilting. The pedal has two automated emergency stops.

The kettle has nine ready-to-use fully automatic mixing programs designed and tested by food-service professionals for healthy and versatile diets. You can also create and save your own mixing programs, for example, for Cold cooking, Hot-Fill and Cook Chilli cooking.



Standard mixing programs for this kettle:

- crumbling
- whipping
- mashing
- gentle stirring, for soups
- sautéing meat or vegetables and powerful back and forth mixing
- mashed potatoes and efficient back and forth mixing
- desserts
- porridges
- doughs

The mixer stops when the lid is opened. Mixing significantly decreases the time spent on heating and cooling which in turn helps to save energy.

TILTING

Efficient and long-lasting electric tilting for 40 to 150 l kettles, and hydraulic tilting mechanism for 200 to 400 l kettles. According to occupational safety standards, tilting of the kettle is enabled only when touching and holding the respective icon on the screen. Auto Tilt-back function stops the product flow from the kettle (may be adjusted with the respective settings) and makes working easier when filling containers. Additionally, this function increases safety when pouring hot product from the kettle. Ergonomic tilting height of the pouring spout is 600 mm from the floor enabling easier cleaning and emptying to bigger transport containers. An elevated installation frame is available for this kettle and can be customised according to the desired tilting height (optional).

AUTOMATED MONITORING

Integrated automatic monitoring. Automated monitoring data is saved on USB flash drive, or alternatively the kettle may be connected to, for example, the wireless Metos IoLiving system.

MEASURING OF ENERGY CONSUMPTION

Electric kettles are equipped with energy consumption measuring, and the results are available on the display. The data is also saved to diagnostics and may be downloaded to USB flash memory. HIGH PERFORMANCE HEATING ELEMENT

High performance heating elements are available for 150 to 300 l kettles. More powerful heating elements enable quicker heating. High performance heating elements require higher amperage fuses. MEASURING OF WATER CONSUMPTION

Water consumption data is available on the display. Cooking water, by-pass flow and jacket filling water are displayed separately. Additionally, the total water consumption is displayed on the screen. DOUBLE WATER CONNECTION

- food water from the tap
- a double water supply enables using another water supply for kettle's technical functions, for example, filtered water helps to reduce accumulation of impurities and lower maintenance costs. MAINTENANCE AND DIAGNOSTICS

Data on kettle temperature, hours of use and mixer usage data are being collected in case of possible failures. Maintenance diagnostics



interface enables quicker maintenance.

OCCUPATIONAL SAFETY

The software prevents erratic touching of icons and erroneous rapid changes of the mixing speed. The mixer stops when the lid is opened. Cooling of the steam jacket prior to opening the drain valve (optional) when cooling is commenced.

"Safety measures for water cut-offs and blackouts

duration of these delays are shown on the display. Length of the blackout as well as functions that were being used are displayed and food temperatures before and after the blackout are shown on the display. If water supply has been cut-off, the kettle does not heat the food. Opening the lid during mixing triggers an alarm, and the user is informed of the activated timer function on the display. According to occupational safety standards, the kettle will tilt only when the respective icon is touched and held. The mixing function cannot be used when the lid is open.

Automatic safety valve test. The kettle reminds the user to test the safety valve every third month. This operation is activated on the kettle's touch screen.

DEMO MODE

The kettle enables safe training in the demo mode without activating any of the kettle functions.

A comprehensive training application is available.

AUTOMATIC TAP WATER COOLING (C2)

Fully automatic cooling straight to the desired temperature is available via the respective touch screen icon, and the Cool & Hold function keeps the food at the set temperature. Adjustable Cool & Hold temperature. (the cooling performance is subject to the temperature of the tap water being supplied to the kettle). Automatic steam jacket draining after cooling, or Cool & Hold. Automatic transfer to Hold when the product cannot be cooled further (saves energy). Food temperature is shown continuously on the display. Cooling of the steam jacket prior to opening the drain valve when cooling is commenced. Interrupting or stopping the cooling or changing the target temperature are enabled during the cooling phase. Various signals are available for the cooling phase.

AUTOMATIC ICE WATER COOLING (C3i)

The kettle is equipped with connections for a separate ice water circulation system. The Ice Bank or Fluid Chiller (optional) chills the cooling water down to nearly zero degrees. Cooling of the food is started on the kettle's touch screen. By touching the fully automated cooling icon the food will be cooled down to the desired temperature, and the Cool & Hold function maintains the chosen temperature. It is possible to adjust the Cool and Hold setting. Cooling water is drained automatically after the cooling, or Cool & Hold. Automatic transfer to hold, if the product cannot be cooled further, which helps to save energy. The food temperature is displayed on the screen throughout the cooling phase, and cooling can be interrupted or stopped, and the target temperature may be adjusted during the cooling phase. Various signals are available for the cooling phase.



AUTOMATIC COMBINED COOLING (C5i) WITH TAP WATER AND ICE WATER The kettle is equipped with connections for a separate ice water circulation system. The Ice Bank or Fluid Chiller (optional) chills the cooling water down to nearly zero degrees. Cooling of the food is started on the kettle's touch screen. By touching the fully automated cooling icon the food will be cooled down to the desired temperature, and the Cool & Hold function maintains the chosen temperature. It is possible to adjust the Cool and Hold setting. Cooling with tap water commences when the maximum temperature difference has been reached and continues with ice water when the temperature difference is smaller enabling the ice water to circulate between the kettle and the Ice Bank. Cooling water is drained automatically after the cooling or Cool & Hold. Automatic transfer to hold, if the product cannot be cooled further, which helps to save energy. The food temperature is continuously displayed on the screen during the cooling phase. Automatic cooling of the steam jacket prior to opening the drain valve when cooling is started.

Interrupting or stopping the cooling or changing the target temperature are enabled during the cooling phase. Various signals are available for the cooling phase.

DRAINING WITH PRESS.AIR OF THE COOLING WATER (PA) C3iPA/C5iPA COOLING Pressurised draining of the cooling water shortens the jacket drainage time and helps to save cooled ice water.

Pressurised air removes the cool cooling water from the kettle jacket, and the water flows back to the Ice Bank.