Combi kettle Metos Proveno 100E



Product information

SKU	4224606
Product name	Combi kettle Metos Proveno 100E
Dimensions	1154 × 720 × 900/1535 mm
Weight	265,000 kg
Capacity	100 litres
Technical information	400/230 V, 40 A, 22 kW, 3NPE, 50/60 Hz CW: R½" (Ø15) HW: R½" (Ø15)

Description

Proveno 100E MG4224606
The Proveno mixing combi kettle, proudly made in Finland, offers intelligent features and reliable automation, making routine food production effortless without constant monitoring. Its user-friendly design includes easy programming and recipe management with limitless customization options and robust construction.
Optimized ergonomics ensure ease of use, cleaning, and hygiene, while energy efficiency adds to its safety and economic viability. The Proveno can be floor-mounted or ordered as a free-standing model, the latter significantly reducing installation time by eliminating floor drilling or heavy lifting. It complies with all international and EU safety standards.
A wide range of optional features is available, including strainer plates, whipping grids, various hand shower styles, automated cooling, decanting, pumping valves, DiagoMix lid, GN-pouring support, light and a

high-speed blender top (40-100 liters) for pureeing soups and sauces.
Volume
Gross Volume 111 Liters Net volume 100 Liters
Electric Kettle

- Electric Tilting
- 9" high visibility digital touch screen control panel
- Variable speed mixing in two directions 10-160 rpm
- 9 pre-programmed mixing programs
- Control pillar complete with a GN 1/1 sized smooth, seamless and easy to workspace for chef's tools.
- Can be combined with other Proveno and Metos-kettles without an intermediate support pillar (saving space)

Standard features

- Proveno kettle with integrated mixer
- step-less mixing speed 10-160 rpm/min, auto reverse
- An elevated control pillar with a high-definition 9" color touchscreen, designed for use with gloved hands and easily visible from various angles and distances in the kitchen.
- audio-visual signals for user
- multi-functional timer
- programming on screen, unlimited number of programs, program phases and recipe bank.
- pre-set programs for basic production recipes and washing programs
- mixing patterns and saving of your own patterns
- ProTemp - real time temperature control, food and jacket temperature separately controlled.
- intelligent heating settings from gentle warming to full power. Allows for low temperature cooking, sous vide, proving and tempering.
- Delta -T cooking temperature of jacket rises accordingly when food temperature rises, temperature difference is determined.
- fully insulated kettle bowl
- user privilege levels
- 1/3 safety-grid lid
- automatic measured water filling
- electric tilting / hydraulic tilting dependent on size
- tilting while mixing function
- auto tilt-back
- graphical display of HACCP data on Screen, searchable by date
- daily consumption and trackable usage of electrics and water
- on screen calculator
- USB Port on control panel for program updates, program transfers and HACCP data saving
- teacher status for programming demonstrations and training to new users
- machine error diagnostics for maintenance and service teams
- on screen energy and water consumption measuring
- steam jacket automatic water filling
- measuring stick

The Metos Proveno's control panel is fully elevated with a clear, highly

visible digital interface, shielded from bumps and steam. All parts that tend to get dirty during daily use can be easily removed without special tools and are dishwasher safe. The removable mixing tool is designed for easy cleaning and features detachable scrapers. Its quick-release stainless steel lid includes a 1/3-size safety grid, making it easy to add liquids and ingredients.
At the top of the control pillar, there's a smooth 1/1 GN workspace for chef tools. The automatic steam jacket filling requires no user intervention. Proveno kettles can be combined with other Proveno or Metos kettles without the need for an intermediate support pillar, saving space. The tilting height from the pouring spout to the floor is 600 mm.
MATERIAL
The kettle is constructed from stainless steel, with the inner surface made of acid-resistant 316 stainless steel. The standard outer panels are fully insulated, remaining only warm to the touch, protecting the user from the steam jacket. It has a protection rating of IPX5.
Optionally, the Metos kettle bowl panels can be insulated with polyurethane foam, ensuring a more rigid and durable structure while enhancing energy efficiency.
CONTROL PANEL

- large control panel, fully raised from the control pillar of the kettle
- emergency stop button
- protected from bumps and from spray when washing
- informative and guiding touch screen
- only available functions active
- audio-visual signals to inform user
- info and error popup
- ongoing status can be seen from far on status display
- user manual for current situation can be read on the screen
- IP68 protected USB connector at back of the control panel
- software updates, program uploads and downloads and HACCP data saving with USB
- the kettle can be fitted with an integrated electrical socket outlet 230V 10A as an option.
- user privilege levels, for example program modifying requires login
- fitted with electric noise reduction system as standard so it does not interfere with other systems in the kitchen
- hot water food filling as an option
- LAN connection ethernet RJ45 - option*

TIMER FUNCTIONS

- possibility to set several timers
- selected functions can be timed
- cook & hold heat holding function
- egg timer function
- heating can be timed
- mixing can be timed
- mixing patterns can be timed
- timed first water drainage

- adding water can be timed
  PROGRAMMING
- programming is standard feature
- tested recipes for basic foods and programs for kettle cleaning
- programming, modifying and saving on kettle touch screen
- unlimited number of programs and program phases
- favorite pages for most used programs
  HACCP
- HACCP set points and alarms
- Graphical HACCP display on screen records usage of heating, mixing, cooling cycles and is searchable by date.
- pre-set starting of programs according to time and date
  ON SCREEN CALCULATOR
- On screen calculator allows users quick access to its function for recipe calculation.
  CLEANING PROGRAMMES
- pre-set cleaning program and possibility to save unlimited number of own wash programs
  HEATING FUNCTION
  The ProTemp real-time temperature control system allows you to set either the food temperature, kettle jacket temperature, or their temperature difference (Delta-T). It features real-time displays for both food and jacket temperatures. The smart power setting offers options for delicate cooking or full-power heating. Proveno supports various techniques such as Delta-T cooking, low-temperature cooking, sous vide, proofing, and tempering. The temperature range can be set up to 120°C, with a precision of 1°C. The kettle operates at a maximum pressure of 1.0 bar, which corresponds to +120°C in the jacket, ensuring optimal energy efficiency across all functions.
  AUTOMATIC WATER FILLING
  Automatic water filling is a standard feature, easily controlled via touchscreen buttons. One button allows setting a specific number of liters, while another opens/closes the water tap manually. The waterspout is ideally positioned to allow filling even in areas with low water pressure, and the system works even while tilting the kettle-perfect for tasks like rinsing pasta.
  MIXER FEATURES
  The two-directional, bottom-mounted mixing tool is designed for auto-reverse mixing, allowing gentle mixing without breaking the product, even at low speeds. The step-less speed adjustment ranges from 10-160 rpm. A separate power mixing button is available for adding raw ingredients or spices. You can also mix while tilting the kettle by pressing a hold button during decanting. The kettle offers nine pre-programmed mixing patterns, designed and tested by food-service professionals, and provides the flexibility to create and save custom patterns.
- stirring
- whipping
- mashing
- gentle stirring

- sautéing meat or vegetables, a powerful mix of back-and-forth pattern
- mashed potatoes, a powerful mix of back-and-forth pattern
- desserts
- porridges
- dough

The mixer stops in less than a second if the lid is opened. Mixing significantly decreases the time spent on heating and cooling which saves energy.

TILTING FUNCTIONS

The Proveno kettle features a powerful and durable electric or hydraulic tilting system, dependent on size, activated with the push of a button. Tilting is only possible when the button is pressed, and the Auto Tilt-back function prevents overfilling during pouring, ensuring safety (adjustable via kettle parameters). The ergonomic pouring spout height of 600 mm from the floor makes washing easier and allows for emptying into larger containers. Slow mixing while tilting is a standard feature, ensuring even product distribution while decanting. There is also an option for hands-free control with a foot pedal to operate tilting while mixing.

HOT FOOD WATER FILLING

The Proveno can be connected to a hot water supply for quicker water heating, making it ideal for tasks like cooking pasta or rice. (Optional feature)

ENERGY AND WATER CONSUMPTION MONITORING

Electric-heated kettles feature energy and water consumption tracking, viewable on the display. The data is saved in the kettle's diagnostics and can be downloaded via the USB port. Water consumption data is displayed on the screen, with separate readings for food water, bypass water, steam jacket filling, and total usage. Daily consumption and trackable usage of electricity and water are also available and searchable.

MAINTENANCE AND FAULT DIAGNOSTICS

The kettle logs usage information and operating hours, including during power outages, to assist with maintenance and troubleshooting.

OCCUPATIONAL SAFETY

The software prevents accidental button presses and sudden changes in mixer speed. The mixer stops within one second if the lid is opened. Automatic steam evaporation (optional) occurs before cooling begins. In the event of an electrical or water outage, the kettle notifies the user of production delays, how long the outage lasted, and the temperature of the food before and after. The kettle won't heat if the water supply is disrupted. If the lid is opened during mixing, an alarm is triggered, and a timer appears on the display.

The kettle tilts only when the button is pressed. Mixing with the lid open in the upright position is blocked to meet safety regulations. The kettle also reminds users to run a semi-automatic safety valve test.

LAN CONNECTION (OPTIONAL)

The Proveno can be equipped with an RJ45 Ethernet port for communication with third-party cloud services or Things5. This option provides the connection port only and other services related to this feature are in

development. Contact your Metos representative for more information.
TEACHER MODE
The Proveno includes a training mode where functions can be demonstrated without activation, and a teaching app simulates the entire control panel. This app is available for mobile devices.
COOLING (OPTIONAL)
When configured with cooling, the Proveno can circulate chilled water through its jacket (using a separate machine like a fluid chiller or ice bank) to reduce food temperatures from 95°C to 3°C in approximately 1 hour, depending on the product's viscosity and the size of the kettle.
Automatic ice water cooling C3i or C3iPA - closed circulation
Ice water circulates between the ice builder and the kettle's steam jacket
(closed circulation). C3iPA comes with pressurized air drainage saving water in ice water circulation. Open system cooling (C2) uses tap water to cool the food, but this water is not recovered. Cooling performance varies with the temperature of the tap water. The C5i system combines both methods, starting with C2 and automatically switching to C3i. *C3i PA & C5i PA not available for 40l and 60l kettle and C3i PA not available for direct steam kettles.