

Combi kettle Metos Proveno 4G 200S

Proveno 200: gross vol. 219 l, net vol. 200 l, boiling space 19 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 l 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 IoLiving
- automatic cooling C2, C3i or C5i; please see further details below
- drainage with pressurised air for C3iPA or C5iPA cooling
- draw off taps and valves D1 and D2
- double water connection; please see further details below
- 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 IoT Living HACCP
- multi mixing tool with IoT Living 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 sav

Product number	4224330
Product name	Combi kettle Metos Proveno 4G 200S
Size (mm) (w * d * h)	1360 * 920 * 900 / 1535
Weight	345,000 KG
Capacity	200 litres
Technical information	Steam 60 kg/h R1 1/4 (Ø32) 400/230 V, 20 A, 5,0 kW, 3NPE, 50/60 Hz HW: R½" (Ø15), CW: R½" (Ø15)

Nupylimo ciaupas D1-std 40mm Prov/Cul/ Vik



Product number	4211972
Product name	Nupylimo ciaupas D1-std 40mm Prov/Cul/Vik
Size (mm) (w * d * h)	100 * 100 * 100
Weight	NaN
Capacity	
Technical information	

Katilo išl. anga dugne 80-400 ltr.63mm D2-B/AUS



Product number	4222135
Product name	Katilo išl. anga dugne 80-400 ltr.63mm D2-B/AUS
Size (mm) (w * d * h)	100 * 100 * 100
Weight	NaN
Capacity	
Technical information	

metos

NAUDOJIMO IR PRIEŽIŪROS INSTRUKCIJA

VIRIMO KATILAS SU MAIŠYKLE

PROVENO EM, SM

Tipai (litrai): 40 l, 60 l, 80 l, 100 l,
150 l, 200 l, 300 l, 400 l



Bendroji informacija

UAB „METOS“ Kalvarijų g. 163A, Vilnius, Lietuva. Tel. (8 5) 249 61 50
Techninės priežiūros tarnyba, tel. 8 612 49 900

Atidžiai perskaitykite šiame vadove esančias instrukcijas, nes jose yra svarbios informacijos apie tinkmą, efektyvų ir saugų prietaiso instaliavimą, naudojimą ir priežiūrą.

Laikykite šį vadovą saugioje vietoje, kad ja galėtų naudotis kiti prietaiso operatoriai

Šio prietaiso pajungimas turi būti atliekamas pagal gamintojo instrukcijas, atsižvelgiant į vietines nuostatas. Prietaiso jungimą prie elektros tinklo ir vandentiekio turi atlikti tik kvalifikuoti specialistai.

Asmenys, dirbantys su šiuo prietaisu, turi būti paruošti darbui su juo.

Gedimo ar nesklandumų atveju išjunkite prietaisą.

Periodinis funkcinis patikrinimas pagal šio vadovo reikalavimus turi būti atliekamas pagal pateikiamas instrukcijas.

Reikalavimai įrenginio vartotojams:

- Įrengti vandentiekį – kanalizaciją, užtikrinant normalų vandens spaudimą ne mažiau 250 kPa.
- Įrengti gamybinėse patalpose trapus su vandens subėgimo loveliu bei grotelėmis. Lovelio plotis – 300mm, ilgis – pagal technologinį brėžinį.
- Užtikrinti vandens kietumą 0-4 dH (pagal vokiškus °) arba 0-2 f (pagal prancūziškus °)
- Gamybinėse patalpose įrengti mechaninę paduodamą – ištraukiamą oro ventiliaciją remiantis Statybos techniniu reglamentu STR 2.09.02:2005, Šildymas, vėdinimas ir oro kondensionavimas
- Užtikrinti pastovų ir nekintamą el. energijos tiekimą. Galimas įtampos svyravimas 230V±10%,400V±10%.
- Užtikrinti patalpų techninius parametrus, reikalingus įrangos normaliam darbui ir sandėliavimui:
 - Užtikrinti aplinkos temperatūrą +10 - +22 oC
 - Užtikrinti patalpų santykinę oro drėgmę ne daugiau kaip 60%

Jeigu įrenginys ėmė blogai veikti arba sugedo, jį reikia išjungti.

Nuolatinė patikra, kurios reikalaujama instrukcijoje, turi būti atliekama laikantis nurodymų.

Remontuoti įrenginį gali tik asmuo, turintis techninę kvalifikaciją ir įgaliotas gamintojo.

Atsarginės dalys turi būti originalios.

Jeigu nesilaikoma aukščiau pateiktų nurodymų, įrenginys gali kelti pavojų.

UAB METOS Techninės priežiūros tarnybos tel. 8 612 499 00

Reikalavimai garo tiekimo sistemai METOS tiesioginio garo katiluose

- Garo tiekimas / darbinis slėgis katile 1bar = 0,1 MPa
- Tiekimo linijos turi būti vienpusės, su uždarymu, su slėgio mažinimo vožtuvais ir filtrais.
- Garo slėgio sumažinimo vožtuvas neturi būti arčiau nei 15 metrų iki katilo (taip apsaugoma nuo perkaitimo ir garas nepasiekia +130°C temperatūros, kuri sunaikina solenoidinio vožtuvo membranas)
- **SVARBU**
Kondensacijos linijos visada turi būti su nuolydžiu. Jei nėra galimybės taip įrengti, tuomet būtina atskira pumpavimo sistema, pvz.:



- Kondensacijos linijos visada turi būti be slėgio.
- Garo sudėtis:
- Turi būti daugiau garo nei vandens.
- Jokių smulkių birių dalelių garo tiekimo linijoje - jos gali sugadinti garo kontroliavimo komponentus ir garo trapus.
- Garo tiekimo jungties dydis priklauso nuo katilo. Pasitikrinkite montavimo brėžiniuose.
- Kondensacijos dydis priklauso nuo katilo. Pasitikrinkite montavimo brėžiniuose.
- Rekomenduojama įrengti papildomą garo trapą (užsakomas papildomai) prieš kiekvieną katilą, kad būtų išvengta kondensato vandens sutekėjimo į katilo gaubtą.

GARANTIJA IR PROFILAKTIKOS DARBAI

Garantija suteikiama pagal įrenginio pirkimo-pardavimo sutartį.

Garantija netaikoma:

- greitai susidėvintiems elementams: filtrams, indikacijos apšvietimo lempoms, elektromagnetinėms ritėms, tarpinėms, guminėms detalėms;
- stiklinėms detalėms;
- apšvietimo lemputėms;
- gedimams, kurių priežastis – kalkių nuosėdų susikaupimas ant įrenginių konstrukcinių dalių (kaitinimo elementų, daviklių, vožtuvų, vamzdelių, vandens kaitintuvų, tarpinių);
- jeigu trūkumai atsirado dėl įrangos naudojimo, nesilaikant instrukcijoje nurodytų sąlygų, Pirkėjas pažeidė įrangos eksploatavimo taisykles, naudojo įrangą ne pagal paskirtį, už numatytą eksploatavimo ribų ar dėl kitų Pirkėjo kaltų veiksmų;
- jeigu įrangą remontavo ne Pardavėjo nurodyti asmenys, Pirkėjas savarankiškai arba kitų įmonių pagalba remontavo įrangą;
- Pirkėjas mechaniškai, termiškai ar kitais būdais pažeidė įrangą;
- įrangos gedimai atsirado dėl priežasčių, nepriklausančių nei nuo Pirkėjo, nei nuo Pardavėjo, tai yra: potvynis, audra, žaibas, trumpas jungimas, įtampos svyravimas, elektros padavimo nutrūkimas ir panašiai.

Jei garantinio laikotarpio metu defektai atsirado dėl Pirkėjo kaltės ar iškvietimas buvo klaidingas, Pirkėjas privalo apmokėti visas Pardavėjo dėl to patirtas išlaidas pagal nurodytas sąlygas įrenginio pirkimo-pardavimo sutartyje.

Garantinis aptarnavimas neapima veiksmų, kuriuos privalo atlikti Pirkėjas, tai yra:

higieninis valymas, profilaktinė techninė priežiūra, taip pat garantinis aptarnavimas neapima darbų, jei pirkėjas atliko mechaninių, šaldymo, valdymo, elektros sistemų rekonstrukciją ir modernizavimą.

Profilaktikos darbų sąrašas, kuriuos turi atlikti pats įrangos naudotojas:

Mechaninės dalies patikrinimas
Elektrinės dalies/įžeminimo-įnulinimo patikrinimas
Termostatų, termodaviklių patikrinimas
Apsauginio, vakuminio vožtuvų ir garų trapo patikrinimas
Vandentiekio sistemos patikrinimas
Pavertimo mechanizmo patikrinimas

Pardavėjas atskiru susitarimu gali atlikti profilaktinės techninės priežiūros bei pogarantinio remonto darbus.

- Jeigu gedimai buvo sąlygoti Pirkėjo nurodymų, projekto arba darbų aprašymo, arba kilo dėl Pirkėjui dirbančio kito vykdytojo arba rangovo atliktų darbų kokybės, **Pardavėjas neprivalo garantuoti už šių darbų trūkumus.**
- **Garantinis aptarnavimas nesuteikiamas**, jeigu Pirkėjas nesilaiko nerūdijančio plieno priežiūros taisyklių.
- **Garantinis aptarnavimas nesuteikiamas**, jeigu Pirkėjas neatlieka profilaktikos darbų ir periodinio įrangos patikrinimo.

Instrukcijoje naudojami simboliai



Šis simbolis žymi situaciją, kurioje gali kilti pavojus saugumui. Pateikti nurodymai yra privalomi siekiant išvengti sužeidimų.



Šis simbolis žymi taisyklingą būdą atlikti veiksmą siekiant išvengti netinkamų rezultatų, įrenginio pažeidimų ar pavojingų situacijų.



Šis simbolis žymi rekomendacijas ir patarimus, padėsiančius užtikrinti optimalų įrenginio veikimą.

Ant įrenginio esantys simboliai



Šis ant dalies esantis simbolis pateikia informaciją apie elektros jungtis. Šią dalį išmontuoti gali tik kvalifikuoti asmenys.

Įrenginio ir instrukcijos ryšio tikrinimas

Ant įrenginio vardinės plokštelės nurodytas serijos numeris. Jei instrukcijos nėra, iš gamintojo ar vietinio atstovo galima užsisakyti naują jos egzempliorių. Užsakant naują instrukciją būtina nurodyti plokštėje įrašytą įrenginio serijos numerį.

Jei tarp versijų skirtingomis kalbomis yra prieštaravimų, originali (anglų k.) versija laikoma pirminiu informacijos šaltiniu.

Sauga

Bendroji dalis

Įrenginys turi CE ženklą, t. y. atitinka visus gaminių saugai taikomus ES mašinų direktyvos reikalavimus.

Gaminio sauga reiškia, kad įrenginio dizainas neleidžia asmenims susižeisti ar sukelti žalos turtui.

„Proveno“ kombinuotasis katilas sukurtas ir pagamintas laikantis Mašinų saugos direktyvos, Žemos įtampos direktyvos, Elektromagnetinės atitikties direktyvos ir direktyvos dėl Slėginės įrangos.

„Proveno“ kombinuotasis katilas yra slėginis indas, kurio didžiausias darbinis slėgis yra 1 baras (0,5 baro tam tikrose rinkose). Pernelyg didelio slėgio išvengiama naudojant mechaninį (tai apsauginis vožtuvas, slėgio jungiklis) ir elektroninį valdymą.

„Proveno“ kombinuotasis katilas turi vandens lygio kontrolę, neleidžiančią katilui kaisti tais atvejais, kai garų generatoriuje nėra pakankamai vandens.



Atliekant įrangos pakeitimus be gamintojo leidimo panaikinama gamintojo suteikta garantija.



Saugai pagerinti montavimo, naudojimo ir priežiūros metu operatorius ir už montavimą bei priežiūrą atsakingas asmuo privalo atidžiai perskaityti instrukciją.



Gedimo ar trikdžių atveju nedelsdami išjunkite įrenginį. Įrenginio priežiūrą atlikti gali tik išmokyti inžinieriai. Reguliaris šioje instrukcijoje aprašytas patikras reikia atlikti pagal pateiktas rekomendacijas. Įrenginio priežiūrą gali atlikti tik gamintojo tam įgaliotas asmuo. Naudokite originalias atsargines dalis. Nesilaikant pirmiau pateiktų nurodymų gali kilti pavojingų situacijų.



Prieš naudodami įrenginį užtikrinkite, kad darbuotojai būtų tinkamai išmokyti jį naudoti ir prižiūrėti.



Šią instrukciją laikykite saugioje vietoje, kad ja galėtų pasinaudoti kiti įrenginio operatoriai. Šioje instrukcijoje nurodoma, kaip saugiai naudotis įrenginiu.



Atidžiai perskaitykite šias instrukcijas, nes jose pateikiama svarbi informacija apie tinkamą, veiksmingą ir saugų įrenginio montavimą, naudojimą ir techninę priežiūrą.



Įrenginio negali naudoti asmenys, turintys fizinę ar protinę negalią, nepatyrę asmenys (įskaitant vaikus).



Reikia nuolat stebėti, kad vaikai nežaistų su įrenginiu.

Nuostatų ir sureguliuavimo keitimas



Techniškai įrenginį sureguliuoti gali tik kvalifikuoti ir gerai išmokyti asmenys.

Saugumo nurodymai gedimo atveju



Rimtos nelaimės atveju visas įrenginio funkcijas reikia išjungti pasukant maitinimo jungiklį į padėtį OFF (išjungta). Jei išjungimo jungiklis panaudojamas rimto gedimo atveju, kai kyla pavojus saugai, nedelsdami susisiekite su įgaliotu priežiūros paslaugų tiekėju.

Įrenginio šalinimas

Įrenginiui baigus tarnavimo laiką jį reikia šalinti laikantis vietinių taisyklių ir reikalavimų. Įrenginyje gali būti medžiagų ar mišinių, galinčių turėti neigiamą poveikį aplinkai, bei perdirbamų medžiagų. Geriausias būdas tvarkyti tokias atliekas yra atiduoti jas atliekų perdirbimo įmonėms.

Kiti draudimai (pavojingi būdai ir procedūros)



Draudžiama tyčia ignoruoti saugumo įrenginius, nes tai mažina darbo saugumą virtuvėje.

Gamintojas neprisiima atsakomybės už žalą, sukeltą tyčia naudojant sugadintą įrenginį, nesilaikant saugumo nurodymų, keičiant projekcinį įrenginio dizainą, neatsižvelgiant į techninę būklę, neatliekant techninės priežiūros.

Funkcinis aprašymas

Įrenginio paskirtis

„Proveno“ kombinuotasis katilas skirtas profesionaliai ruošti maistą. Draudžiama naudoti „Proveno“ kitais tikslais. Į katilą draudžiama dėti šildinančias ar tarpusavyje reaguojančias medžiagas. Prašome atsižvelgti į tai, kad kai kurios maistui ruošti naudojamos medžiagos turi ilgalaikį šildinantį poveikį. Tokios medžiagos yra, pavyzdžiui, druska, acto rūgštis, citrinų rūgštis ir pieno rūgštis.

Naudojimas kitais tikslais

Gamintojas neprisiima atsakomybės už funkcinis sutrikimus ar žalą, sukeltą dėl netinkamo naudojimo arba naudojimo kitais tikslais, nei nurodyta pirmiau.

Konstrukcija

Katilas pagamintas iš nerūdijančiojo plieno. Vidinis dugnas ir sluoksnis yra iš rūgščiai atsparaus plieno. Katilas turi tris sluoksnius ir šilumos izoliaciją.

Veikimo principas

„Proveno“ katilas šildomas garais, kuriuos generuoja kaitinimo elementas. Garų generatorius ir šildymo elementai yra apatinėje katilo dalyje.

Katilas pakreipiamas naudojant pakreipimo variklį (40–150 litrų katilai). Dideli katilai (200–400 litrų) turi hidraulinį pakreipimo mechanizmą. Maišymo funkciją atlieka variklis su pavaromis. Vėsinimas (papildoma įranga) atliekamas katilo garų sluoksnyje cirkuliuojant vandeniui. Įrenginio valdymo skydelis yra ant dešiniojo statramsčio (valdymo statramsčio).

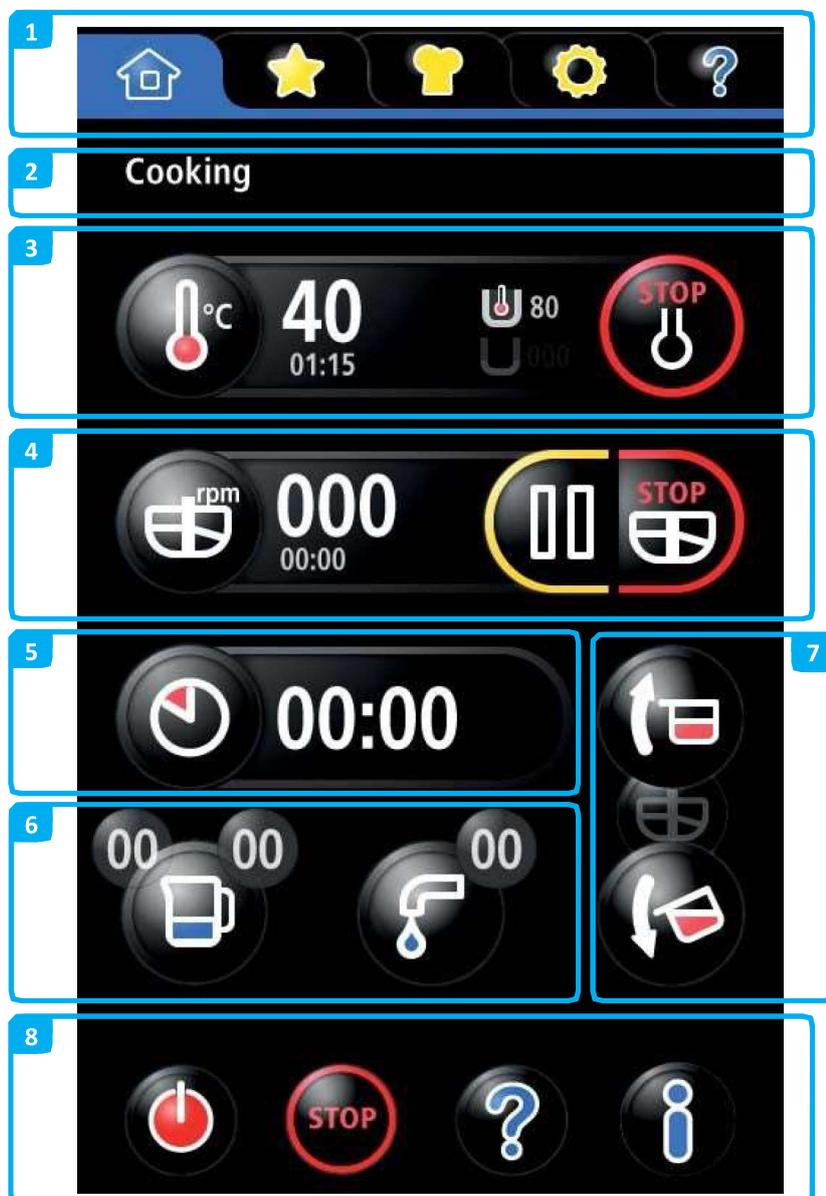
Ekranas

Ekrano vaizdas, kai įrenginys veikia budėjimo režimu



Ekranas užsklanda. Ekranas užsklanda įsijungia, kai ekranas tam tikrą laiką nenaudojamas. Ekranas išsijungia arba pradeda rodyti laiką ar galimas aktyvias funkcijas. Palietus ekraną jis grįš į įprastą režimą.

Ekrano elementai (pagrindinės funkcijos)



Skirtukai



Pradinis langas Mėgstami Programos Nuostatos Pagalba

Informacija



Temperatūros funkcijos



Maišymo funkcijos



Taisyklingas būdas sustabdyti maišyklę yra paspausti PAUZĖ () arba STOP (), o ne atidaryti dangtį.

Laikmačio funkcija („kiaušinių laikmatis“)



Laiko nustatymo funkcijos Likęs laikas

Vandens pripildymo funkcija

Nustatyti kiekį (litrais)*
Pripildytas kiekis (litrais)*



Automatinis vandens pripildymas.



Automatinio vandens pripildymo atšaukimas*

Pripildytas kiekis (litrais)*



Rankinis vandens pripildymas.



Rankinio vandens pripildymo atšaukimas*

* Rodoma tik vandens pripildymo metu

Katilo pavertimo funkcija



Grąžinti katilą į vertikalią padėtį
padėtyje) Maišymas pakreipus.



(= katilas virimo

katilo pakreipimas



(= katilas visiškai pakreiptas)

Navigacija



IJUNGTI / IŠJUNGTI

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a

Informacija

Kiti ekrano simboliai:



Pereina į kitą programos etapą (naudojant išsaugotą

programą)



Grįžti į ankstesnį langą



Pradžiai. Paspauskite šį mygtuką bet kuriame
lange, kad grįžtumėte į pagrindinį langą.



Sluoksnio ištuštinimas



Sulaikymo (vėsavimo) funkcija



įjungta Veikia A programa

Klaviatūros funkcijos

Kartu su įvairiomis nuostatomis ekrane pasirodys klaviatūra:

- Paspauskite didžiųjų raidžių  mygtuką, kad perjungtumėte mažąsias , didžiąsias  ir nuolatines didžiąsias raides.  (didžiųjų raidžių fiksavimo funkcija).
- Trynimo atgal mygtuku  simbolius ištrinkite.
- Paspauskite specialių simbolių mygtuką  norėdami įvesti skaičius ir specialius simbolius.



Naudojimo instrukcijos



Visiems įrenginį naudojantiems darbuotojams už saugumą atsakingi asmenys turi gerai išaiškinti, kaip prietaisas veikia.

Prieš naudojant

Kasdienis patikrinimas prieš naudojant

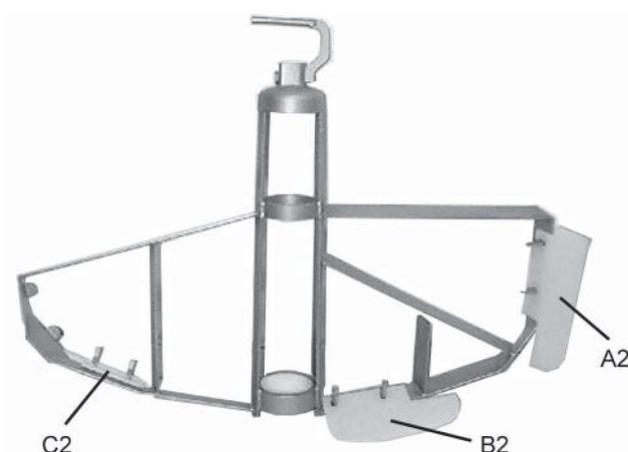
- Vandens (karšto ir šalto) tiekimas atidarytas.
- Katilė nėra nereikalingų daiktų.
- Grandikliai prie maišymo įrankio prijungti tinkamai. Žr. „Maišymo įrankio ir grandiklio padėčių nustatymas“.
- Maišymo įrankis užfiksuotas reikiamoje vietoje: fiksuojamoji dalis (vienas rankenos galas) yra maišytuvo ašies griovelyje, rankena pasukta į horizontalią padėtį. Patikrinkite, ar užfiksuota tinkamai: pabandykite iškelti įrankį iš katilo suėmę už viršutinio ašmens.

Maišymo įrankio ir grandiklių padėčių nustatymas

Prijunkite grandiklius prie maišymo įrankio įstatydami kaiščius į angas ant grandiklių. Paskui pasukite grandiklius pakeldami apatinę jų dalį. Galiausiai patraukite grandiklį į priekį. Apatinė grandiklio briauna (1) nukreipta į viršų, o grandiklio šonas nukreiptas nuo maišytuvo ašies.



Maišymo įrankis, priklausomai nuo jo dydžio, gali turėti 1–5 grandiklius.



Grandiklis	40	60	80	100	150	200	300	400
Grandiklis A2	-	1	1	2	1	2	1	2
Grandiklis B2	-	-	1	1	1	1	1	1
Grandiklis C2	1	1	-	-	1	1	2	2

Grandiklius naudokite visuose virimo režimuose, kad būtų padidintas šilumos perdavimas ir palengvėtų katilo valymas.



Maišymo įrankį lengviau pritvirtinti prie maišytuvo ašies, kai katilas yra pakreiptas. Ant maišymo įrankio esantį žiedą įstumkite į maišymo ašį ir uždėkite maišymo įrankį. Kėlimo rankena turi būti tiesi, kad fiksuojamasis įrenginys ant rankenos įsistatytų į griovelį ant maišymo ašies viršaus.



Tuomet pasukite rankeną į šoną.



Patikrinkite, ar maišymo įrankis užfiksuotas vietoje: pabandykite pakelti ar ištraukti jį suėmę už, pvz., maišymo mentės.

Katilo naudojimas

Ijungimas

- Jei ekranas tamsus, suaktyvinkite jį paliesdami.
 - Patikrinkite, ar įjungtas ekrano maitinimas. Patikrinkite, ar pagrindinis katilo jungiklis yra nustatytas ties būseną „1“.

- Įjunkite katilą paspausdami . Ekrane bus rodomos pagrindinės funkcijos.

Išjungimas

- Perjunkite katilą į budėjimo režimą nuspausdami ir laikydami .



PASTABA. Prieš išjungdami maitinimą katilą VISUOMET perjunkite į budėjimo režimą!

Šildymas



-  Šildymas įjungiamas tik tuomet, kai katilas yra vertikaloje (virimo) padėtyje. Jei šildymo funkcija parenkama tuomet, kai katilas nėra vertikaloje padėtyje, ekrane rodomas pranešimas „Katilas ne virimo padėtyje“.

-  Paspauskite šildymo mygtuką.

Temperatūrą nustatykite klaviatūra () ir paleiskite šildymą paspausdami 

Galios valdikliu nustatykite galią.



Maža galia: skirtumas tarp garų sluoksnio temperatūros ir maisto temperatūros yra mažesnis, virimas yra švelnesnis. Tinka, pavyzdžiui, pienui šildyti.

Didelė galia: greičiausias galimas šildymas.

Šildyti pradėta, ekrane rodoma nustatyta temperatūra  pasirinkta galia , maisto temperatūra  ir garų sluoksnio temperatūra.

Pasiekus nustatytą temperatūrą ekrane rodomas pranešimas „Baigtas pradinis šildymas“.

- Nutildykite galimą garsinį signalą paspausdami  arba patvirtinkite paspausdami . Jei ekrano neliesite, po kurio laiko pranešimas išnyks.



Paspaudus mygtuką „Virti“  automatiškai įjungiamas virimo funkcija (100 °C) neatsižvelgiant į nustatytą temperatūrą.



Virimo intensyvumą galima reguliuoti galios valdikliu, paspaudžiant norimą lauką.

Šildymas ir virimas išjungiami paspaudžiant .



PASTABA! Paspaudus  išjungiamos visos katilo funkcijos.

ADV funkcijos:

„Delta-T“

„Delta-T“ funkcija palaiko nuolatinę garų sluoksnio temperatūrą (pagal „Delta T“ nustatymo vertę), kuri aukštesnė nei maisto temperatūra.

„Delta-T“ vertę nustatykite taip:

-  Paspauskite temperatūros mygtuką.
-  Paspauskite ADV mygtuką.

- Įjunkite „Delta-T“ funkciją paspausdami



- Paspauskite maisto temperatūros vertę -> ekrane rodoma klaviatūra, nustatykite norimą temperatūrą.
- Paspauskite „Delta-T“ temperatūros vertę -> ekrane rodoma klaviatūra, nustatykite norimą temperatūrų skirtumą.
- Įjunkite šildymą paspausdami .



„Delta-T“ funkcija tinka patiekalams, kuriuos reikia ilgai troškinti, pvz.,

ruošiant plėšomą kiaulieną. Išjunkite funkciją paspausdami .



PASTABA! Paspaudus  išjungiamos visos katilo funkcijos.

Garų sluoksnio temperatūra

Garų sluoksnio temperatūrą nustatykite taip:

-  Paspauskite temperatūros mygtuką.
-  Paspauskite ADV mygtuką.

-  Paspauskite.

- Paspauskite garų sluoksnio temperatūros vertę -> ekrane rodoma klaviatūra, nustatykite norimą temperatūrą.

- Įjunkite šildymą paspausdami .



Ši funkcija tinkama, pavyzdžiui, mielinei tešlai rauginti arba šokoladui lydyti.

Išjunkite funkciją paspausdami .



PASTABA! Paspaudus išjungiamos visos katilo funkcijos.



Maisto ir garų sluoksnio temperatūra

Maisto ir garų sluoksnio temperatūrą nustatykite taip:

-  Paspauskite temperatūros mygtuką.

-  Paspauskite ADV mygtuką.

- Paspauskite  .
ite

- Paspauskite maisto temperatūros vertę -> ekrane rodoma klaviatūra, nustatykite norimą maisto temperatūrą.
- Paspauskite garų sluoksnio temperatūros vertę -> ekrane rodoma klaviatūra, nustatykite norimą garų sluoksnio temperatūrą.

- Įjunkite šildymą paspausdami  .



Šią funkciją galima naudoti, pvz., „Sous Vide“ arba

košėms virti. Išjunkite funkciją paspausdami



 **PASTABA!** Paspaudus  išjungiamos visos katilo funkcijos.

Vėsinimas



 Vėsinimas įjungiamas tik katilui esant vertikaloje (virimo) padėtyje. Jei šildymo funkcija parenkama tuomet, kai katilas nėra vertikaloje padėtyje, ekrane rodomas pranešimas „Katilas ne virimo padėtyje“.

-  Paspauskite temperatūros mygtuką.
- Paspauskite .
- Pasirinkite funkciją „Palaikyti“  arba „Užbaigti“ .

Palaikymo funkcija

„Palaikymo“ funkcija išlaiko maistą nustatytoje vėsinimo temperatūroje, kol naudotojas šią funkciją išjungia.

 Baigus vėsinti katilo sluoksnis ištuštinamas, likęs ištuštinimo laikas  rodomas ekrane. Ištuštinimo laikas priklauso nuo katilo dydžio.

- Paspauskite mygtuką „Palaikyti“ .
- Vėsinimo temperatūrą nustatykite klaviatūra.
- Įjunkite vėsinimą paspausdami .
- Patvirtinkite vėsinimą paspausdami .
- Naudojant maišytuvą vėsinimo veiksmingumas didėja. Įjunkite maišytuvą paspausdami . Jei reikia, sureguliuokite maišytuvo greitį.
- Išjunkite maišytuvo langą paspausdami . Pasiekus nustatytą temperatūrą ekrane rodomas pranešimas „Pasiekta nustatyta vėsinimo temperatūra“.
- Nutildykite galimą garsinį signalą paspausdami  arba patvirtinkite paspausdami . Jei ekrano neliesite, po kurio laiko pranešimas išnyks.

Palaikymo funkcija bus įjungta, kol naudotojas ją išjungs.

- Išjunkite funkciją paspausdami .
 - Katilo sluoksnis ištuštinamas

 **Nenustatykite pernelyg žemos vėsinimo temperatūros! Atsižvelkite į vėsinimo medžiagos, pvz., vandentiekio vandens, temperatūrą. Rekomenduojama vėsinimo temperatūrą nustatyti 2 laipsniais aukštesnę nei vandentiekio temperatūra. Norint pasiekti žemesnę temperatūrą nei ši labai sunku, bandant tai atlikti gali ženkliai padidėti vandens sąnaudos.**

 Baigus vėsinti katilo sluoksnis ištuštinamas, likęs ištuštinimo laikas  rodomas ekrane. Ištuštinimo laikas priklauso nuo katilo dydžio.

 Funkciją galima išjungti paspausdami .
PASTABA! Paspaudus STOP mygtuką išjungiamos visos katilo funkcijos.

Užbaigimo funkcija

Funkcija „Užbaigti“ nutraukia vėsinimą pasiekus nustatytą vėsinimo temperatūrą.

- Paspauskite mygtuką „Užbaigti“ .
- Vėsinimo temperatūrą nustatykite klaviatūra.
- Įjunkite vėsinimą paspausdami .
- Patvirtinkite vėsinimą paspausdami .
- Naudojant maišytuvą vėsinimo veiksmingumas didėja. Įjunkite maišytuvą paspausdami . Jei reikia, sureguliuokite maišytuvo greitį.
- Išjunkite maišytuvo langą paspausdami .
Pasiekus nustatytą temperatūrą ekrane rodomas pranešimas „Pasiekta nustatyta vėsinimo temperatūra“.
- Nutildykite galimą garsinį signalą paspausdami  arba patvirtinkite paspausdami . Jei ekrano neliesite, po kurio laiko pranešimas išnyks.



Nenustatykite pernelyg žemos vėsinimo temperatūros! Atsižvelkite į vėsinimo medžiagos, pvz., vandentiekio vandens, temperatūrą.

Rekomenduojama vėsinimo temperatūrą nustatyti 2 laipsniais aukštesnę nei vandentiekio temperatūra. Norint pasiekti žemesnę temperatūrą nei ši labai sunku, bandant tai atlikti gali ženkliai padidėti vandens sąnaudos.



Baigus vėsinti katilo sluoksnis ištuštinamas, likęs ištuštinimo laikas  rodomas ekrane. Ištuštinimo laikas priklauso nuo katilo dydžio.



Funkciją galima išjungti paspaudus .



PASTABA! Paspaudus STOP mygtuką išjungiamos visos katilo funkcijos.

Maišymo funkcijos



Maišytuvo įjungimas (rankinis naudojimas)

 Maišytuvą galima įjungti tik tuomet, kai katilas yra vertikaliaje (virimo) padėtyje. Jei maišytuvo funkcija parenkama, kai katilas nėra vertikaliaje padėtyje, ekrane rodomas pranešimas „Katilas ne virimo padėtyje“.

-  Paspauskite maišytuvo mygtuką.
- Įjunkite maišytuvą paspausdami  arba paliesdami maitinimo valdymo juostą.

Greičio keitimas

- Greitį reguliuokite mygtukais „+“ arba „-“ arba slinkdami pirštu išilgai sūkių slinkiklio. Greičio valdiklis turi apsauginį delslaiškį. (Greitis didėja lėtai, pirštą reikia laikyti pridėjus tol, kol pasiekiamas norimas greitis).

Automatinio apgręžimo funkcija

- Maišytuvui veikiant paspauskite, kol mygtukas  , mygtukas pasidarys mėlynos spalvos  maišytuvus automatiškai apsigręš

Papildoma maišymo galia maišymo metu

- Maišytuvui veikiant paspauskite  .

Papildomas maišymas yra stiprus maišymas su automatinio apgręžimu, kuris tęsiamas, kol mygtukas laikomas nuspauštas. Papildomą maišymą galima naudoti visuomet, kai maišytuvus veikia, taip pat iš anksto nustatytuose maišymo cikluose.

 Prieš naudodami papildomą maišymą patikrinkite, ar tykštantis maistas nekels pavojaus darbo saugai.

Iš anksto nustatyti maišymo ciklai

- Pasirinkite vieną iš rodomų maišymo ciklų.
- Įjunkite maišytuvą paspausdami .
- Sustabdykite maišymo ciklą paspausdami .
- Išjunkite maišymo ciklą paspausdami .



Informacija apie maišymo ciklus, greičius ir sukimosi kryptis paspaudžiant .

 **PASTABA!** Paspaudus  išjungiamos visos katilo funkcijos.

 Tinkamas būdas sustabdyti maišytuvą yra paspausti pauzė (arba STOP), o ne atidaryti dangtį.

Taip pat žr. „Programavimas / Maišymo ciklai“.

Katilo pabertimas



Katilo pakreipti negalima, jei uždarytas jo dangtis. Jei bandysite pakreipti katilą su uždarytu dangčiu, bus rodomas pranešimas, jog veiksmo atlikti nepavyko.



„Proveno“ katilas paverčiamas paspaudus pakreipimo mygtuką.

Katilas verčiamas tol, kol mygtukas laikomas nuspaustas. Jei įjungta „atitraukimo“ funkcija (žr. „Reguliavimo nurodymai, kliento parametrų nustatymas“) atleidus mygtuką atliekamas trumpas grįžtamasis judėjimas; taip sumažėja lašėjimas nuo katilo snapelio.

Norint visiškai ištuštinti katilą grįžtamasis judesys neatliekamas, kai katilas paverčiamas į pačią tolimiausią padėtį.



Į virimo padėtį katilas grąžinamas paspaudus vertikaliuos padėties mygtuką.

Saugumo sumetimais (saugos taisyklės) grąžinimo judesys atliekamas tol, kol laikomas nuspaustas mygtukas. Vertikaliuos padėties mygtukas turi būti laikomas nuspaustas tol, kol grąžinimo judesys bus atliktas ir katilas atsidurs virimo padėtyje. Jei katilas negrąžinamas į virimo padėtį, bandant įjungti šildymą ar maišymą ekrane bus rodomas pranešimas „Katilas ne virimo padėtyje“.

Maišymas paverčiant



Ši funkcija leidžia įjungti maišymą mažiausiu greičiu, kai katilas yra pakreiptas. Naudojant šią funkciją į mažesnius indelius galima tiekti homogeniškesnę masę.



Ši funkcija įjungiama tik tuo atveju, jei katilas pakreipiamas nedaug.

- Pakreipkite katilą paspausdami .
- Paspauskite maišymo mygtuką tarp pakreipimo



mygtukų. Ekrane rodoma „Pradėti maišymą ir pakreipimą?“

- Paspauskite , tuomet paspauskite maišytuvo mygtuką tarp pakreipimo mygtukų, **laikykite jį nuspaustą**. Maišytuvas veiks tol, kol mygtuką atleisite. Jei norite sureguliuoti katilo pakreipimą, perbraukite pirštu mygtuką  arba  (nepakeldami piršto).

Pėda nuspaudžiamas jungiklis (papildoma įranga)

Sekite pirmiau pateiktas instrukcijas iki punkto, kuriame nurodoma nuspausti ir laikyti maišytuvo mygtuką tarp pakreipimo mygtukų.



- Nuspaudus pėda nuspaudžiamą jungiklį galima pakelti pirštą nuo ekrano neišjungiant maišytuvo. Pėda nuspaudžiamas jungiklis turi būti nuspaudžiamas ir laikomas vidurinėje padėtyje; jei jis nuspaudžiamas iki galo, funkcija išsijungia.
- Pakreipimą maišymo metu galima reguliuoti paspaudžiant  arba  (neatkliant pėdos nuo pėda nuspaudžiamo jungiklio). Jei padėsite pirštą ant maišytuvo mygtuko tarp pakreipimo mygtukų, pėdos jungiklį galite atleisti, maišytuvas neišsijungs.

Vandens pripildymas



Automatinis vandens pripildymas

- Paspauskite .
- Klaviatūra įveskite norimą vandens kiekį (litrais).
- Įjunkite vandens pripildymo funkciją paspausdami .
- Ekrane rodomas nustatytas kiekis (litrais)  ir pripildytas kiekis (litrais) .
- Pasiekus nustatytą kiekį, pildymas automatiškai išjungiamas.
- Vandens matuoklio lange rodomas paskutinis pripildytas kiekis  ir bendras kiekis  (galima atkurti pradinę reikšmę).

Automatinio vandens pripildymo pertraukimas

- Pertraukite funkciją paspausdami , mygtukas aktyvus tik automatinio vandens pripildymo metu. Pildymą galima tęsti, kol ekrane rodomas pripildytas kiekis ().
- Paskui kiekis grįžta į pradinę būseną ir turi būti nustatomas iš naujo.

Rankinis vandens pripildymas.

- Įjunkite vandens pripildymą paspausdami . Ekrane rodomas pripildytas kiekis (litrais) .
- Pasiekus norimą vandens kiekį, paspauskite . Mygtukas aktyvus tik rankinio vandens pripildymo metu.



Numatytoji vandens pripildymo tikslumo parinktis yra visas litras. Parametrų keitimo lange galima nustatyti decilitrus, jei pripildomas kiekis yra mažiau nei 10 litrų. Nustatyti gali tik įgaliotas prižiūrintis darbuotojas.

Laikmatis („kiaušinių laikmatis“)



- Paspauskite .
- Pridėkite naują laikmatį paspausdami .
- Laiką nustatykite klaviatūra.
- Įjunkite laikmatį paspausdami .

Praėjus nustatytam laikui ekrane rodomas pranešimas „Laikas baigėsi!“

Nutildykite galimą garsinį signalą paspausdami  arba patvirtinkite paspausdami . Jei ekrano neliesite, po kurio laiko pranešimas išnyks.

Laikmačio ekrane rodoma aktyvi funkcija, pvz., šildymas.

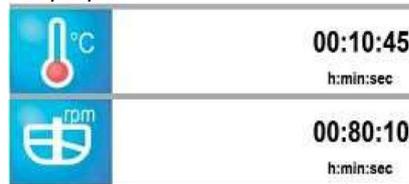


Funkciją galima pridėti prie laikmačio paspaudžiant ir laikant simbolį tol, kol jis padidės ir jo fonas pasidarys mėlynas. Tuomet ją galima nutempti ant laikmačio. Tokiu būdu funkcija bus išjungta pasibaigus nustatytam laikui.



Taip pat galima įjungti keletą laikmačių vienu metu. Pridėkite naują laikmatį, kaip tai aprašyta pirmiau. Įvairias laikmačio funkcijas galima valdyti kaip nurodyta pirmiau, paspaudžiant ir laikant funkcijos simbolį, kol jis padidėja, fonas pasidaro mėlynas, tuomet nutempiant simbolį ant laikmačio.

Pavyzdys:



Į tą patį laikmatį galima sudėti kelias funkcijas, kad jos visos baigtųsi tuomet, kai baigsis nustatytas laikas.

Pavyzdys:

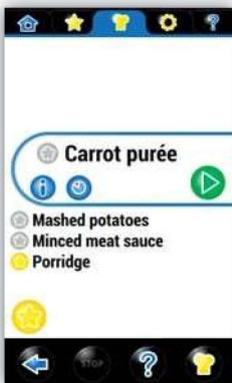
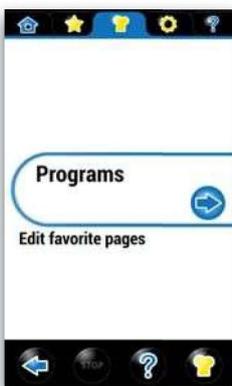


Veikiantį laikmatį galima ištrinti paspaudžiant laikmačio lauką (kairėje laiko pusėje) ir laikant nuspaustą, kol laikmatis sumažės ir pasidarys judrus. Laikmatį dabar galima ištrinti

nutempiant į lango apačioje rodomą šiukšlių dėžę . Tokiu pat būdu iš laikmačio galima ištrinti funkciją. Paspauskite ir palaikykite funkcijos simbolį, kol jis sumažės ir pasidarys judrus, tuomet nutempkite jį į šiukšlių dėžės simbolį.

 Katilas taip pat turi laikmatį, kurį galite užprogramuoti įsijungti tam tikru metu. Žr. „Išsaugotos programos / Programų įjungimas nustatytu laiku“.

Išsaugotos programos



Išsaugotos programos naudojimas

- Paspauskite .
- Pasirinkite „Programos“, tuomet paspauskite .
- Pasirinkite programą slinkdami pirštais.
- Įjunkite norimą programą paspausdami .
- Ekrane rodomas simbolis  ir (pavyzdys) 1/2 programos etapas, t. y. veikia pirmasis iš dviejų programos etapų.
- Kai programa baigiama, ekrane rodoma „Programa baigta“ ir „Laukta“ (praėjęs laikas), taip informuojant, kiek laiko praėjo nuo programos pabaigos.

- Patvirtinkite paspausdami .
-  Programai keičiantis iš vieno etapo į kitą, katilas gali (priklausomai nuo programos) pareikalauti naudotojo atlikti tam tikrus veiksmus ir tik tuomet pradėti kitą programos etapą.

-  Paspaudus  katilas pereina į kitą programos etapą.



Vykdomą programos etapą galima pratęsti taip:

- Paspauskite .
 - Paspauskite ir laikykite nuspauštą , rodomą programos etapo laiko juostoje, kol jis padidės.
 - Didinkite arba mažinkite etapo trukmę (laiką) pastumdami  aukštyn arba žemyn.
- Kiti programos pakeitimai aprašyti dalyje „Programavimas“.



Programos etapo pratęsimas jam pasibaigus:

Jei perėjimui iš vieno etapo į kitą reikia patvirtinimo, galima pratęsti jau pasibaigusį etapą:

Pasibaigus programos etapui ekrane rodomas pranešimas su informaciniu tekstu, laiku, praėjusiu nuo etapo pabaigos, bei dviem  mygtukais („+1:00“ ir „+5:00“) ir .

- Paspaudus  („+1:00“ ir „+5:00“) ankstesnis etapas pratęsiamas vieną arba penkias minutes.
- Paspaudus  programa pereina į kitą etapą.

Programos pradžia numatytu laiku



Galima užprogramuoti, kad programa prasidėtų vėliau:

- Paspauskite .
- Pasirinkite „Programa“.
- Pasirinkite norimą programą ir paspauskite .
- Ekranu klaviatūra nustatykite norimą programos datą ir laiką.
- Patvirtinkite parinktį paspausdami .

Ekranu rodomas iki programos pradžios likęs laikas bei pasirinkta programa.

- Paspaudus  nustatytą laiką galima pakeisti.
- Paspaudus  ekrane rodomas apibendrinimas.
- Paspaudus  ištrinama pradžia nustatytu laiku.

 Pradžią nustatytu laiku galima užprogramuoti vėsinimo metu

1. Įjunkite vėsinimą „PALAIKYMO“ režimu (žr. „Vėsinimas“)
2. Vėsinimui veikiant nustatykite programos įsijungimą, kaip aprašyta pirmiau
 - Katilas išlaikys maistą vėsų, kol prasidės numatyta virimo programa

Mėgstami langai



Kaip naudotis mėgstamais langais:

- Paspauskite , ekrane atsidarys pirmasis mėgstamas langas su programomis. Mėgstamame lange rodomos su juo susietos programos ir šios kiekvienos programos funkcijos:
 - , rodoma programos apžvalga
 - , atidaromas laikmatis, leidžiantis nustatyti programos įjungimo laiką, žr. „Programos pradžia numatytu laiku“. Jei simbolis pilkas, programa jau įjungta.
 - , įjungia programą.

Jei yra daugiau nei vienas mėgstamas langas, pereikite į kitą ar ankstesnį langą naudodamiesi ekrano viršuje esančiomis rodyklėmis.

Programavimas

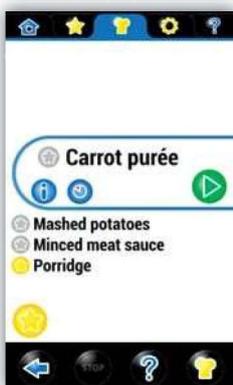


Reikalingas prisijungimas (numatytasis „Vyriausiojo virėjo“ prisijungimo kodas „1234“. Kodą galima pakeisti parametrais, žr. „Koregavimo instrukcijos“).

- Paspauskite
- Pasirinkite „Programos“, paspauskite

Ekrane atsidarys langas su programomis.

Lange rodomos toliau pateiktos funkcijos (prisijungus):



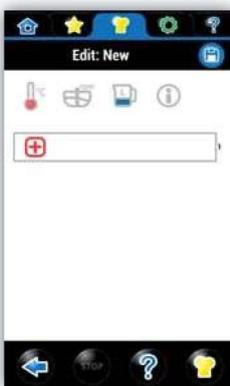
- Rodoma pasirinktos programos apžvalga.
- Atidaromas laikmačio langas, kuriame galima nustatyti pasirinktos programos įjungimo laiką.
- Įjungia pasirinktą programą.
- Ištrina pasirinktą programą.
- Prideda pasirinktą programą prie mėgstamo lango, žr. „Mėgstami langai“.
- Padaro pasirinktos programos kopiją.
- Atidaro pasirinktą programą redaguoti.
- Sukuria naują programą.

Programos



Naujos programos kūrimas:

- Paspauskite .
- Pasirinkite „Programos“, paspauskite .
- Paspauskite .
- Ekrane rodoma klaviatūra, įveskite programos pavadinimą.
- Išsaugokite pavadinimą paspausdami .



Programos etapo temperatūra ir laikas:

- Paspauskite .
- Pasirinkite vieną iš šių funkcijų:
 - šildymas .
 - neutrali (nešildoma)  (jei tame etape reikalingas vien maišymas).
 - vėsinimas .

Pasirinkus **šildymas** ekrane bus rodomas langas, kuriame galima nustatyti etapo temperatūrą.

- Temperatūrą nustatykite skaičių klaviatūra.
- Patvirtinkite parinktį paspausdami .

Paskui ekrane bus rodomas langas, kuriame galima nustatyti etapo trukmę.

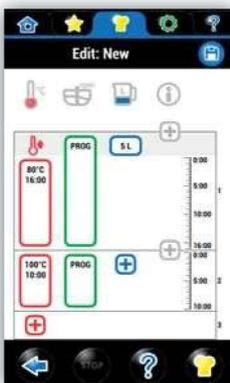
- Naudodamiesi skaičių klaviatūra nustatykite etapo trukmę **val., min. ir s.**
- Pasirinkite, ar norite, kad laikmatis įsijungtų
 - **nedelsiant** (Laikmatis įsijungia iškart) numatytoji parinktis temperatūroms virš 100 °C (pvz. 2)
 - **pasiekus virimo temperatūrą**. (Laikmatis įsijungia pasiekus virimo temperatūrą) numatytoji parinktis mažesnei nei 100 °C temperatūrai (pavyzdžiui. 1)
- Patvirtinkite parinktį paspausdami .

Pasirinkus **neutralus** ekrane bus rodomas langas, kuriame galima nustatyti etapo trukmę.

- Naudodamiesi skaičių klaviatūra nustatykite etapo trukmę **val., min. ir s.**
- Patvirtinkite parinktį paspausdami .

Pasirinkus **vėsinimas** ekrane bus rodomas langas, kuriame galima nustatyti norimą galutinę temperatūrą.

- Norimą temperatūrą nustatykite skaičių klaviatūra.



Etapo maišymo funkcija:

- Paspauskite .
- Ekrane bus rodomas langas, kuriame galima nustatyti etapo maišymo funkciją pasirenkant vieną iš rodomų ciklų arba nustatant greitį galios valdymo juosta.
- Apie sukimosi kryptį skaitykite „Programavimas / Maišymo ciklai“.
- Patvirtinkite parinktį paspausdami .

Etapo vandens pripildymo funkcija:

- Paspauskite .
- Ekrane bus rodomas langas, kuriame naudojantis skaičių klaviatūra galima nustatyti norimą vandens kiekį (litrais).
- Patvirtinkite parinktį paspausdami .

Papildomos programos etapo nuostatos:



Be pirmiau nurodytų funkcijų galima pateikti papildomą etapo informaciją:

- Paspauskite .
- Teksto laukas:**
 - Paspauskite , ekrane atsidarys klaviatūra. Parašykite laisvos formos programos etapo paaiškinimą ar instrukcijas.

Garso signalas:

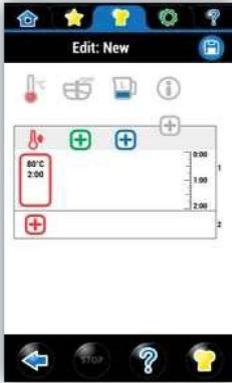
- Jei norite, pasirinkite garsinį signalą, kuris skambės pasibaigus etapui. Paspauskite .
- Pasirinkite norimą garso signalą iš pateikiamo sąrašo. Išklauskite garsą paspausdami .

Norimą garsą pasirinktie paspausdami . Pašalinkite pasirinktą garsą paspausdami „Nėra garso“ .

Prieš pereinant į kitą etapą

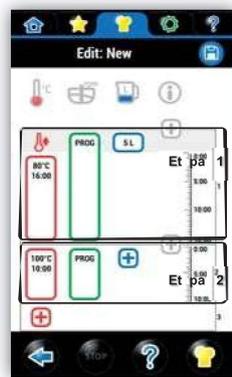
- Jei pereiti į kitą etapą reikia veiksmo arba naudotojo patvirtinimo, pasirinkite „Sustabdymo sąlygos ir Laukti, kol naudotojas paspaus mygtuką Gerai“.
- Pasirinkus „Katilas automatiškai pereina į kitą etapą be laukimo“ programa į kitą etapą pereina automatiškai, be patvirtinimo.
- Patvirtinkite nuostatas paspausdami .

Programos etapo pridėjimas:



- Paspauskite  ir sekite instrukcijas nuo „Programos etapo temperatūra ir laikas“.

Programos etapų tvarkos keitimas ir etapo pašalinimas



- Programos etapų tvarką galima keisti paspaudžiant ir palaikant programos etapą. Kai etapas pasidaro judrus, jį galima perkelti aukštyn arba žemyn. Programos etapą dabar galima ir ištrinti nutempiant į šiukšlių dėžės simbolį , rodomą ekrano viršuje.

Programos išsaugojimas:

- Nepamirškite programos ar pakeitimų išsaugoti paspausdami .



Rekomenduojama išsaugoti ir programuojant

Maišymo ciklai



Naujo maišymo ciklo sukūrimas

- Paspauskite  .
- Pasirinkite „Maišymo ciklai“ ir paspauskite  .
- Pridėkite naują maišymo ciklą paspausdami  .
- Paspauskite ekrano viršuje esantį lauką „Naujas maišymo ciklas“
- Naudodamiesi ekrane rodoma klaviatūra įveskite maišymo ciklo pavadinimą.

- Išsaugokite pavadinimą paspausdami  .

Sukimosi kryptis

- Pasirinkite sukimosi kryptį spausdami  . Kryptis pasikeičia kaskart paspaudus tokia tvarka:

- Pagal laikrodžio rodyklę  
- Prieš laikrodžio rodyklę  
- Automatinio apgręžimo funkcija 

Maišytuvo greitis

- Nustatykite maišytuvo greitį paspausdami lauką „rpm“ (). Naudodamiesi ekrane rodoma klaviatūra nustatykite greitį.

- PASTABA. Pasirinkus  taip pat galima nustatyti sukimosi kryptį trukmę.

- Paliesdami  viršutinį simbolį ir atsiradusioje klaviatūroje įvedę laiką nustatysite, kiek ilgai maišytuvas suksis pagal laikrodžio rodyklę. Paskui paliesdami apatinį simbolį ir atsiradusioje klaviatūroje įvedę laiką nustatysite, kiek ilgai maišytuvas suksis prieš laikrodžio rodyklę.

- Išsaugokite paspausdami  .
- Grįžimas neišsaugant pakeitimų  .

Maišymo ciklo trukmė

- Trukmę nustatykite paspausdami lauką „h:min:s“
 - Naudodamiesi ekrane rodoma klaviatūra nustatykite laiką.

- Išsaugokite paspausdami  .
- Grįžimas neišsaugant pakeitimų  .

Etapo trukmė neturi reikšmės, jei cikle yra tik vienas etapas.

Maišymo ciklą gali sudaryti keli etapai. Naują etapą sukurkite paspausdami ir nustatydami sukimosi kryptį ir greitį, kaip tai nurodyta pirmiau. 



Ciklo etapų tvarkos keitimas ir etapo pašalinimas

Ciklo etapų tvarką galima keisti paspaudžiant ir palaikant ciklo etapą. Kai etapo simbolis pasidaro judrus, jį galima perkelti aukštyn arba žemyn. Ciklo etapą dabar galima ir ištrinti

nutempiant į šiukšlių dėžės simbolį , rodomą ekrano viršuje.

- Programą ar pakeitimus išsaugokite paspausdami .

Mėgstami langai



Programas galima susieti su mėgstamais langais, pavyzdžiui, pagal kategoriją.

Naujo mėgstamo lango sukūrimas

- Paspauskite .
- Pasirinkite „Mėgstami langai“ ir paspauskite .
- Pridėkite naują mėgstamą langą paspausdami .
- Naudodami ekrane rodomą klaviatūrą įveskite lango pavadinimą.
- Išsaugokite langą paspausdami .
- Grįžkite neišsaugoję paspausdami .

Mėgstamo lango pavadinimo keitimas:

- Paspauskite .
- Pasirinkite „Mėgstami langai“ ir paspauskite .
- Paspauskite mėgstamo lango .
- Naudodamiesi ekrane rodoma klaviatūra pakeiskite lango pavadinimą.
- Išsaugokite langą paspausdami .
- Grįžkite neišsaugoję pakeitimų paspausdami .

Mėgstamo lango pašalinimas:

Mėgstamą langą ištrinkite taip:

- Paspauskite .
- Pasirinkite „Mėgstami langai“ ir paspauskite .
- Paspauskite ir palaikykite langą, kurį norite pašalinti, pavadinimą.
- Lango apačioje atsiranda šiukšlių dėžės  simbolis.
- Nutempkite ant jo langą, kurį norite pašalinti.

Programos įtraukimas į mėgstamą langą.

- Paspauskite .
- Pasirinkite „Programos“, tuomet paspauskite .
- Pasirinkite programą.

Jei programa nesusieta su mėgstamu langu, prieš programą esantis mėgstamo lango simbolis yra pilkas. Jei programa susieta su mėgstamu langu, prieš programą esantis mėgstamo lango simbolis yra geltonas.

- Paspauskite lango apačioje esantį .
- Paspausdami mėgstamo lango  pasirinkite, su kuriuo mėgstamu langu norite susieti programą. Programą galima susieti su daugiau nei vienu mėgstamu langu.
- Į programų sąrašą grįžkite paspaudę .
- Programos mėgstamo lango simbolis dabar yra geltonas , rodo, kad programa susieta su vienu ar daugiau mėgstamų langų.
- Grįžkite neišsaugoję pakeitimų paspausdami .

Panaudojus

Valymas



Draudžiama valyti aukštu slėgiu. Slėginiai purkštuvai sukuria daug vandens dulksnos, galinčios užteršti maistą ir maisto tvarkymo paviršius dideliame virtuvės plote.



Prieš pradėdami valyti katilą išjunkite įrenginį (I/O) jungikliu arba atjunkite jį nuo maitinimo šaltinio.



Įrankiai, kuriuos draudžiama naudoti valymui:

- Slėginis purkštuvus
- Visi metaliniai įrankiai
- Šiurkščios kempinės
- Plieninės kempinės
- Braižantys valikliai



Valymui rekomenduojami įrankiai:

- specialūs nerūdijančiajam plienui skirti valikliai
- nailoniniai šepečiai
- minkštos kempinės
- kitos nerūdijančiajam plienui skirtos medžiagos, nebraižančios paviršiaus



Visi priedai, pvz., filtrų plokštės ir jų dalys, maišymo įrankiai ir grandikliai, dangčio dalys gali būti plaunami indaplovėje, pritaikytoje tokioms dalims plauti.

Kuo mažiau braižomas katilo paviršius, tuo lengviau jį valyti. Greičiausias ir lengviausias būdas yra valyti katilą kiekvieną kartą po naudojimo. Nepurškite vandens ant valdymo skydelio. Statramsčius valykite šluoste.



Įrenginio išorę tekančiu vandeniu plaukite tik jei tai būtina. Dažniausiai pakanka ją nuvalyti drėgna šluoste. Valydami katilą atsižvelkite į maisto higienai taikomus reikalavimus. Atmirkymui naudojant daug vandens padidės vandens suvartojimas. Tačiau jei norite katilą atmirkyti, pasinaudokite maišytuvu ir papildomu valymo įrankiu, kad mirkymas būtų veiksmingesnis. Mirkymo metu lėtai maišykite.

Valymo procedūros:

- Neprikibusius nešvarumus nugrandykite plastikiniu grandikliu.
- Į katilą įpurškite valiklio, tuomet šveiskite ir įpurškite vandens, kol katilas taps švarus.
- Išdžiovinkite katilą.

Atsižvelkite į valymo priemonių dozavimą, veikimo laiką ir veiksmingumą, pvz., per ilgai leidus veikti putojantiems valikliams, jie gali reaguoti su druskos likučiais ir sukelti stiprią taškinę koroziją net ir nerūdijančiojo plieno induose.



Gamintojas neprisiima jokios atsakomybės už galimą žalą, kylančią dėl instrukcijų nesilaikymo.

Dangčio dalių nuėmimas

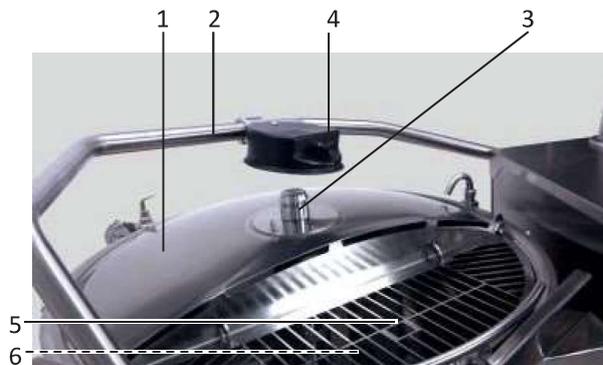
- Patikrinkite, ar katilas yra vertikaliaje padėtyje.
- Ant katilo uždėkite dangtį.
- Nuimkite apsauginių grotelių gaubtą ir groteles.
- Nuo kėlimo svirties patraukdami nuimkite dangtį ir fiksavimo svirtį.



Dangčio dalių uždėjimas

Ant katilo uždėkite dangtį taisyklingoje padėtyje.

Patraukite kėlimo svirtį ant dangčio. Pasukite dangtį taip, kad kreipiantysis kaištis susilygiuotų su anga kėlimo svirties viduryje.



1. Dangtis
2. Kėlimo svirtis
3. Kreipiantysis kaištis
4. Dangčio fiksavimo svirtis
5. Apsauginės dangčio angos grotelės
6. Užpildymo angos dangtis

Prispauskite dangčio svirtį, kad tvirtinimo kūgis būtų nukreiptas į fiksavimo dalį, o fiksavimo svirtis būtų užfiksavimo padėtyje. Patikrinkite, ar dangtis užfiksavimas svirtimi.



Įstatykite apsaugines groteles ir jų dangtį.

Periodinė priežiūra

Kaip ir automobilis, maisto ruošimo įranga turi būti geros būklės, tad reikia atlikti jos prevencinę techninę priežiūrą. Taip užtikrinsite saugų įrenginio veikimą ir išvengsite gedimų. Priklausomai nuo to, kiek naudojamas katilas ir kokia jo būklė naudojimo metu, technines „Proveno“ kombinuotojo katilo sąlygas reikia reguliariai tikrinti laikantis plano. Pavyzdžiui, garų sistemoje susikaupusių kalkių kiekis priklauso nuo tiekiamo vandens kietumo. Norėdami gauti prevencinės techninės priežiūros rekomendacijų, kreipkitės į įgaliotą priežiūros paslaugų teikėją.

Apsauginio vožtuvo tikrinimas

Katilas informuoja atėjus laikui atlikti apsauginio vožtuvo patikrą.



Elektra šildomas katilas

- Atidarykite apsauginio vožtuvo tikrinimo langą paspausdami  .
- Tęsti neatliekant tikrinimo  (nerekomenduojama).
- Nutildyti galimą garso signalą paspausdami  .
- Pradėkite bandymą paspausdami  . Katilas kaista.
- Katilui įkaitus rodoma  . Palaikykite nuspaustą mygtuką, kol atsidarys apsauginis vožtuvas.



Draudžiama stovėti už katilo apsauginio bloko tikrinimo metu, nes pasibaigus tikrinimui apsauginis vožtuvas galinėje katilo dalyje atsidaro ir išpučia karštus garus. Katilas turi būti tuščias ir švarus. Tikrinimo metu girdisi trumpas stiprus šnypštimas. Naudokite klausos apsaugą



Jei apsauginis vožtuvas neatsidaro nustatytoje ribose, katilas rodo pavojaus signalą ir nutraukia tikrinimą. Tokiu atveju griežtai draudžiama toliau naudoti katilą, reikia nedelsiant kreiptis į kvalifikuotą „Metos“ priežiūros centrą ir pašalinti gedimą.

Garais šildomas katilas

- Atidarykite apsauginio vožtuvo tikrinimo langą paspausdami  .
 - Tęsti neatliekant tikrinimo  (nerekomenduojama).
 - Nutildyti galimą garso signalą paspaudžiant  .
- Atidarykite apsauginį vožtuvą lėtai pasukdami rankenėlę rodyklės kryptimi.
- Garams išeinant (sumažėja garsas ir slėgio matuoklio rodmėnys) rankenėlę galite grąžinti į pradinę padėtį.



- Patvirtinkite, kad apsauginio vožtuvo patikra baigta paspausdami  .

Draudžiama stovėti už katilo apsauginio bloko tikrinimo metu, nes pasibaigus tikrinimui apsauginis vožtuvas galinėje katilo dalyje atsidaroma ir išpučia karštus garus. Katilas turi būti tuščias ir švarus. Tikrinimo metu girdisi trumpas stiprus šnypštimas. Naudokite klausos apsaugą

Gedimų šalinimas

Ekranas nešviečia

- Katilas yra budėjimo režime. Palieskite ekraną.
- Nuspaustas avarinio išjungimo mygtukas. Atstatykite avarinio išjungimo mygtuką pasukdami jį pagal laikrodžio rodyklę.
- Maitinimo jungiklis yra padėtyje „0“. Pasukite jį į padėtį „1“.

Katilas informuoja, kad yra vandens tiekimo problema

- Patikrinkite vandens tiekimą ir atidarykite galimai užsidariusią atjungimo sklendę.

Katilas nekaista

- Katilas nėra vertikaliaje (virimo) padėtyje. Grąžinkite katilą į vertikalią padėtį.
- Vyksta tarpinio sluoksnio vandens išpylimas. Palaukite, kol baigsis išpylimas, ir vėl bandykite.
- Tarpinis sluoksnis po katilo atvėsinimo su pneumatiniu išleidimu nėra tuščias. Patikrinkite suslėgto oro tiekimą ir galimą atjungimo sklendę.
- Garų tiekimo problemos garais kaitinamame katile. Patikrinkite garų tiekimą ir slėgį.

Maišytuvas neįsijungia

- Katilas nėra vertikaliaje (virimo) padėtyje. Grąžinkite katilą į vertikalią padėtį.
- Atidarytas dangtis. Uždarykite dangtį.
- Apsauginės grotelės netinkamoje padėtyje. Patikrinkite apsauginį dangtį.

Vėsinimas neveikia

- Katilas nėra vertikaliaje (virimo) padėtyje. Grąžinkite katilą į vertikalią padėtį.
- Tarpinio sluoksnio užpildymo problemos. Patikrinkite vandens tiekimą (vėsinimas vandentiekio vandeniu) arba ledinio vandens talpyklos jungtis (vėsinimas ledu)

Įrenginio nustatymas į pradinę būseną

- Pasukite pagrindinį maitinimo jungiklį į padėtį „0“ ir palaukite apie 1 minutę. Pasukite pagrindinį maitinimo jungiklį į padėtį „1“.

Techninės priežiūros informacija

Fiksuokite visas naudojant „Proveno“ kombinuotąjį katilą atliktas priežiūros ir remonto procedūras. Priežiūros istorija gali paspartinti būsimas priežiūros procedūras, padėti kontroliuoti kaštus ir planuoti investicijas. Reguliariai tikrinkite apsauginį vožtuvą, kaip tai nurodyta naudojimo instrukcijoje. Patikros duomenis įrašykite techninės priežiūros lentelėje.

Techninės priežiūros informacija

Kombinuotasis katilas

Serijos Nr.

Priimta naudoti (data) _

Apsauginio vožtuvo tikrinimas keturis kartus per metus:

Data	Patikrino	Pastabos	Data	Patikrino	Pastabos

Kasmetinė techninė priežiūra:

Data	Patikrino	Pastabos	Data	Patikrino	Pastabos

Kalkių šalinimas:

Data	Patikrino	Pastabos	Data	Patikrino	Pastabos

Koregavimo instrukcijos

Nuostatų keitimas neprisijungiant



Paspauskite

Šias nuostatas galima keisti neprisijungus:

- Švaraus vandens funkcija
- Atminties funkcijos (HACCP)
- Kalba
- Laikas ir data
- Garsai (neprisijungus galima reguliuoti tik garsumą)
- Apsauginio vožtuvo tikrinimas
- Versijos informacija
- Elektros ir vandens naudojimas

Pasirinktas parinktis peržiūrėkite braukdami langą

pirštu. Patvirtinkite pasirinktą parinktį paspausdami



Parinktį atšaukite paspausdami



Švaraus vandens funkcija

Švaraus vandens funkcija praskalauja vandens vamzdžius, jei katilas kurį laiką buvo nenaudojamas. Išvalomas užsistovėjęs vanduo ir nuosėdos vamzdžiuose. Švaraus vandens funkcijos lange rodoma, kada ši funkcija naudota paskutinį kartą.

Nustatykite švaraus vandens funkcijos trukmę (30... 600 s)

- Paspauskite dabartinę
- Skaičių klaviatūra įveskite naują vertę
- Išsaugokite pakeitimą
- Grįžkite neišsaugoję pakeitimų



Nustatykite funkcijos intervalą (0... 24)

- Paspauskite dabartinę
- Skaičių klaviatūra įveskite naują vertę
- Išsaugokite pakeitimą
- Grįžkite neišsaugoję pakeitimų paspausdami



Rankinis funkcijos įjungimas

- Įjunkite ar išjunkite funkciją rankiniu būdu paspausdami ir
- Grįžkite neįjungdami funkcijos paspausdami



Atminties funkcijos

Ši funkcija leidžia išsaugoti HACCP žurnalo failą USB atmintinėje.

- Prijunkite USB atmintinę prie USB lizdo ir paspauskite .
- Grįžkite neįjungdami funkcijos paspausdami .

Kalba

Kalbos lange rodomos galimos kalbos.

- Pasirinkite norimą kalbą paspausdami kalbos juostą
- Grįžkite neįjungdami funkcijos paspausdami .

Laikas ir data

Nustatykite laiką ir datą:

- Nustatykite laiką ir datą paspausdami laukus ir nustatydami atitinkamas vertes klaviatūra.
- Išsaugokite pakeitimus paspausdami .
- Grįžkite neišsaugoję pakeitimų paspausdami .

Garsai

Ši funkcija leidžia reguliuoti garsumą. Norint keisti kitas garsų nuostatas reikia prisijungti.

- Garsumą reguliuokite braukdami pirštu per garsumo juostą .
- Grįžkite neįjungdami funkcijos paspausdami .

Apsauginio vožtuvo tikrinimas

Naudojant šią funkciją galima tikrinti apsauginį vožtuvą.

- Atlikite apsauginio vožtuvo tikrinimą paspausdami .
- Grįžkite neįjungdami funkcijos paspausdami .

Versijos informacija

Ši funkcija parodo informaciją, kurios gali reikėti priežiūrą atliekančiam darbuotojui, kai skambinsite techniniais klausimais.

Elektros ir vandens sąnaudos

Ši funkcija leidžia patikrinti elektros (elektra šildomo katilo atveju) ir vandens sąnaudas. Funkcija nematuoja vandens, kurį sunaudoja rankinis purkštukas.

„Pagrindinio virėjo“ nuostatų pakeitimas

Paspauskite .

Toliau nurodytas nuostatas galima pakeisti prisijungus kaip „Pagrindiniam virėjui“. Numatytasis „Pagrindinio virėjo“ prisijungimo kodas yra „1234“, jį galima pakeisti parametruose.

- Švaraus vandens funkcija (žr. „Nuostatų keitimas neprisijungus“).
- Atminties funkcijos
- Kalba (žr. „Nuostatų keitimas neprisijungus“).
- Laikas ir data (žr. „Nuostatų keitimas neprisijungus“).
- Garsai
- Parametrai
- Apsauginio vožtuvo tikrinimas (žr. „Nuostatų keitimas neprisijungus“).
- Versijos informacija (žr. „Nuostatų keitimas neprisijungus“).
- Elektros ir vandens sąnaudos (žr. „Nuostatų keitimas

neprisijungus“). Pasirinkimus peržiūrėkite braukdami langą pirštu.

Patvirtinkite pasirinktą parinktį paspausdami .

Parinktį atšaukite paspausdami .

Atminties funkcijos

Ši funkcija leidžia atlikti šiuos veiksmus su atmintimi:

Išsaugoti receptų knygą USB

- Prijunkite USB atmintinę prie USB lizdo ir paspauskite .
- Grįžkite neįjungdami funkcijos paspausdami .

Įkelti receptų knygą iš USB

- Prijunkite USB atmintinę prie USB lizdo ir paspauskite .
- Pasirinkite, kurias programas norite įkelti iš USB atmintinės ( = pasirinkta,  = nepasirinkta.

- Paspauskite . Jei programa tokiu pavadinimu katilo atmintyje jau yra, prie programos pavadinimo pridedamas skaičius, pvz., „Mėsos kukuliai (2)“.

- Grįžkite neįjungę funkcijos paspausdami .

Išsaugoti HACC USB

- Prijunkite USB atmintinę prie USB lizdo ir paspauskite .
- Grįžkite neįjungę funkcijos paspausdami .

Garsai

Ši funkcija leidžia pasirinkti garsinius signalus įvairioms funkcijoms bei nustatyti garsumą.

- Garsumą reguliuokite braukdami pirštu per garsumo juostą .
- Garsinį signalą pasirinkite paspausdami garso mygtuką norimai funkcijai, jei nepasirinktas joks garsas, mygtukas turės pavadinimą „Nėra garso“.
- Išklauskite garsą paspausdami .
- Garsą pasirinkite paspausdami .
- Grįžkite neįjungę funkcijos paspausdami .

Parametrai

Kai kurias funkcijas galima pakeisti parametrais. Jei norite pakeisti parametrus, turite prisijungti kaip „Pagrindinis virėjas“.

Kiekvienas parametras turi šias funkcijas:

104: Master chef login time out 15 s - 36000 s (600 s)	600 s
--------------------------------------------------------------------	--------------

104: Parametro numeris

Pagrindinio virėjo prisijungimo laiko pabaiga: Parametro aprašymas.

15 s - 36 000 s (600 s): Mažiausia reikšmė - didžiausia reikšmė (gamyklos nuostata).

600 s: Dabartinė parametro reikšmė

Jei norite pakeisti skaitinę parametro reikšmę, paspauskite ją.

-> nustatykite parametro reikšmę naudodamiesi ekrane rodoma klaviatūra:

Paspaudus ne skaitinį parametras klaviatūra nerodoma, tačiau perjungiamą kita parametro reikšmė, pvz.:

103: Master chef login time out enabled (Yes)	Yes
103: Master chef login time out enabled (Yes)	No

metos

COMBI-KETTLE

PROVENO 4G EM SM

Type (liters): 40, 60, 80, 100, 150, 200, 300, 400

Installation and Operation Manual

Original instructions



Rev 1.0

(29.1.2020)

From 1.12.2019

4224300, 4224302, 4224304, 4224306, 4224308, 4224310, 4224312, 4224314, 4224320, 4224322, 4224324, 4224326, 4224328, 4224330, 4224332, 4224334

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1. General

Carefully read the instructions in this manual as they contain important information regarding proper, efficient and safe installation, use and maintenance of the appliance.

Keep this manual in a safe place for eventual use by other operators of the appliance.

The installation of this appliance must be carried out in accordance with the manufacturer's instructions and following local regulations. The connection of the appliance to the electric, steam and water supply must be carried out by qualified persons only.

Persons using this appliance should be specifically trained in its operation.

Switch off the appliance in the case of failure or malfunction. The periodical function checks requested in the manual must be carried out according to the instructions. Have the appliance serviced by a technically qualified person authorized by the manufacturer and using original spare parts.

Not complying with the above may put the safety of the appliance in danger.

1.1. Symbols used in the manual



This symbol informs about a situation where a safety risk might be at hand. Given instructions are mandatory in order to prevent injury.



This symbol informs about the right way to perform in order to prevent bad results, appliance damage or hazardous situations.



This symbol informs about recommendations and hints that help to get the best performance out of the appliance.

1.2. Symbols used on the appliance



This symbol on a part informs about electrical terminals behind the part. The removal of the part must be carried out by qualified persons only.

1.3. Checking the relationship of the appliance and the manual

The rating plate of the appliance indicates the serial number of the appliance. If the manuals are missing, it is possible to order new ones from the manufacturer or the local representative. When ordering new manuals it is essential to quote the serial number shown on the rating plate.

If language versions have information contradictions, the original language English is the primary language regarding the information content.

2. Safety

2.1. General

The appliance is CE marked, which means that it complies with the requirements of the EU machinery directive with regard to product safety.

Product safety means that the design of the appliance will prevent personal injury or damage to property.

The Proveno combi-kettle has been designed and manufactured in compliance with the Directive regarding safety of Machinery, the Low Voltage Directive, the Directive regarding Electromagnetic Compatibility and the Directive regarding Pressure Equipment currently in force.

The Proveno combi-kettle is a pressurized vessel with a maximum operating pressure of 1 bar (or 0,5 bar for certain markets). Overpressure is prevented by means of both mechanical (safety valve, pressure switch) and electronic control.

The Proveno combi-kettle is provided with water level control, which prevents heating if there is not enough water in the steam generator.



Modifying the equipment without the approval of the manufacturer invalidates the manufacturer's product liability.



To further improve safety during installation, operation and servicing, the operator and the personnel responsible for installing and servicing the appliance should read the safety instructions carefully.



Switch off the appliance immediately in the event of a fault or malfunction. The appliance must only be serviced by trained engineers. The regular checks described in the manual must be carried out in accordance with the instructions. The appliance must be serviced by a person authorized to do so by the manufacturer. Use original spare parts. Dangerous situations may arise if the instructions above are not followed.



Before using the appliance, ensure that personnel are given the necessary training in operating and maintaining the appliance.



Keep this manual in a safe place so that it can be used by other operators of the appliance.

This manual guides the user to use the device safely.



Carefully read the instructions in this manual as they contain important information regarding proper, efficient and safe installation, use and maintenance of the appliance.



The appliance should not be used by anyone suffering from a physical or mental illness or by inexperienced people (including children).



Children should be watched to ensure that they do not play with the appliance.

2.2. Construction of the combi-kettle

The main parts of the combi-kettle are illustrated in the following pictures:



1. Support pillar
2. Safety block
3. Mixer and mixing tool
4. Emptying valve for steam generator
5. Safety lid
6. Safety grid for fill opening
7. One-grip tap for hand shower
8. Control panel
9. Emergency/stop button
10. Hand shower
11. Water fill to kettle
12. Free standing frame (option)

**Lid**

1. Safety lid
2. Lifting arm
3. Locking lever of the lid
4. Safety grid for fill opening
5. Safety switch
6. Cover for fill opening (not shown in picture)

**Mains switch**

1. Mains switch

2.3. Changing the settings and adjustments

Technical adjustments to the appliance must be performed by a qualified and well trained person.

2.4. Safety instructions in the event of malfunction

In case of a serious emergency, all functions of the appliance must be stopped by turning the mains switch to the OFF position. In case the reason for using the stop switch is a serious malfunction jeopardizing safety at work, contact an authorized service provider immediately

2.5. Disposal of the appliance

Once the appliance has reached the end of its useful life, it must be disposed of in compliance with local rules and regulations. The appliance may contain substances/ materials which potentially have an adverse impact on the environment as well as recyclable materials. The best way of dealing with such substances is to dispose of them through a proper waste company

2.6. Other prohibitions (dangerous methods and procedures)

Deliberate disregard of safety devices is prohibited, as it jeopardizes safe work in the kitchen. The manufacturer does not take responsibility for damage caused by deliberate use of a defective appliance, disregard of the safety precautions by modifying the designed operation of the appliance, or neglect of the technical condition, maintenance or service of the appliance.

3. Functional description

3.1. Intended use of the appliance

The Proveno combi-kettle is designed for professional food preparation. Using Proveno for other purposes is prohibited. It is forbidden to put corrosive ingredients or substances reacting with each other in the kettle. Please observe that long-term effect of some substances used in food preparation is corrosive. Such substances are, for example, salt, acetic acid, citric acid and lactic acid.

The corrosion resistance of stainless steel is due to a so called passive layer, which is a very thin chromium oxide film. This film is naturally and fairly quickly formed on the stainless steel surface when the surface is in contact with oxygen (air). The chromium oxide film is hard, but in some situations it is possible to damage it with hard materials. When using steel tools, there is a potential risk of scratching the inner jacket and hence increased risk of corrosion. Therefore, we recommend using wooden or plastic tools in the kettle, especially when mixing and scraping.

3.1.1. Use for other purposes



The manufacturer does not take responsibility for functional troubles or damages caused by misuse or use for other purposes than stated above.

3.2. Construction

The construction of the kettle is of stainless steel throughout. The inner bottom and jacket are of acid-proof steel. The kettle is triple-jacketed and thermally insulated throughout.

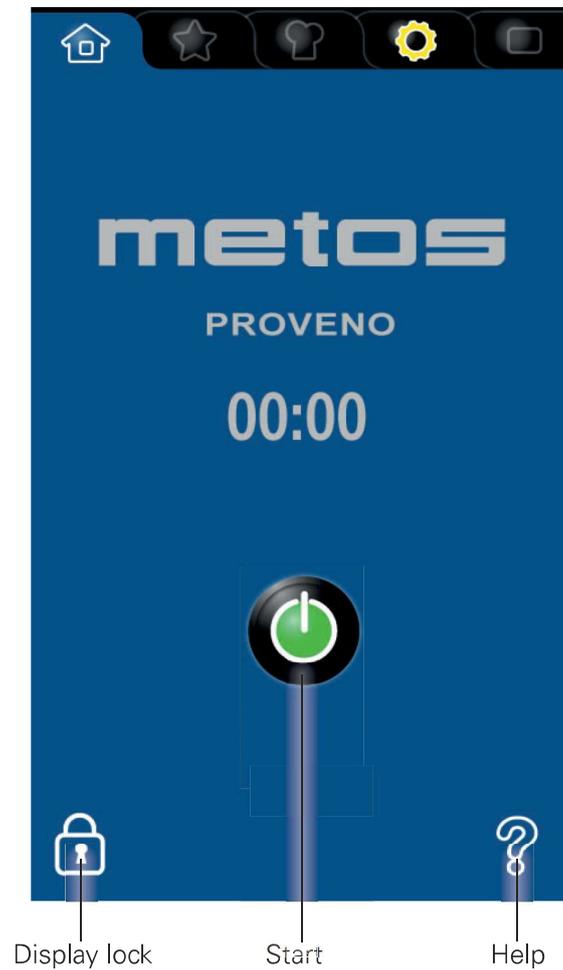
3.3. Operating principle

The Proveno kettle is heated by steam generated with heating elements. The steam generator and heating elements are located in the lower section of the kettle.

The kettle tilts by means of a tilting motor (40 - 150 -liter kettles). Larger kettles (200 - 400 liters) are equipped with a hydraulic tilting mechanism. The mixing functions are performed by means of a gear motor. Cooling (accessory) is based on cold water circulating inside the kettle's steam jacket. The raised control panel of the appliance is situated on the kettle's right-hand pillar (control pillar).

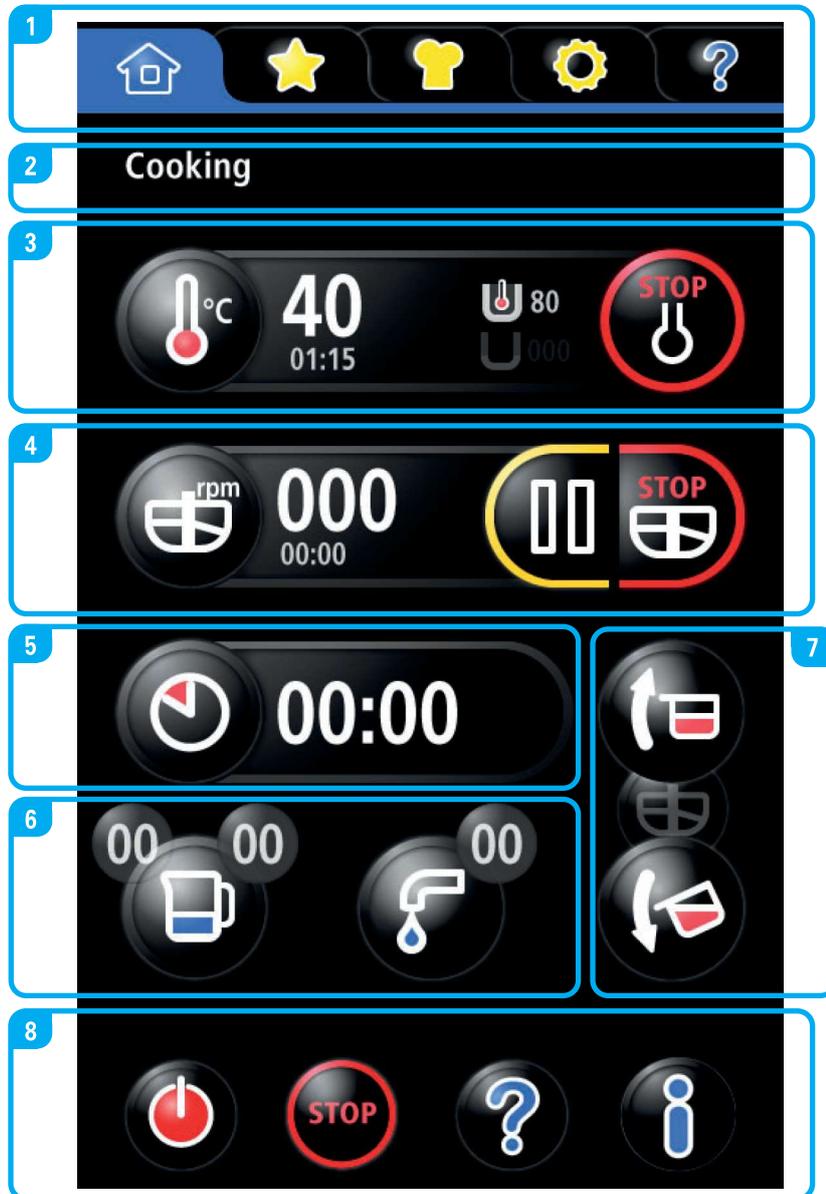
3.4. Display

3.4.1. Display when the appliance is in stand-by mode

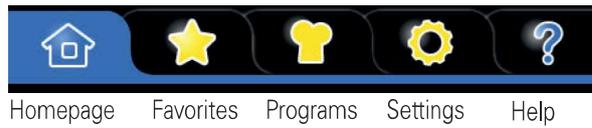


Screen saver. The screen saver is activated when the display has been idle for a set amount of time. The display goes black or starts to show the time or the possible active functions. The display will return to normal operation when touching it.

3.4.2. The display elements (basic functions)



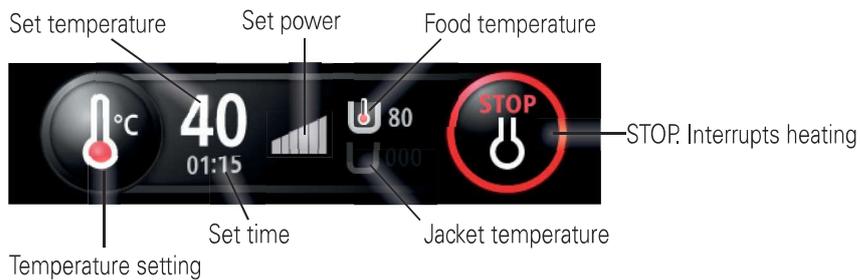
1. Tabs



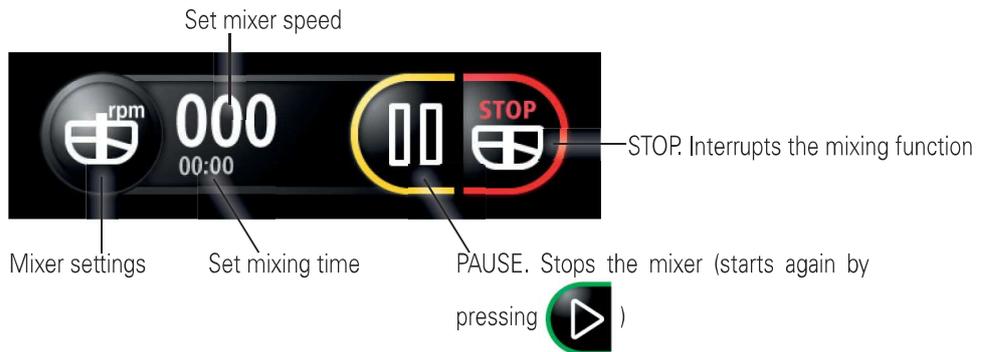
2. Info



3. Temperature functions



4. Mixer functions

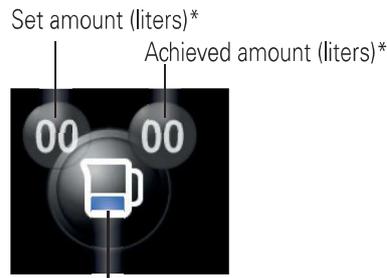


 The correct way to stop the mixer is to press PAUSE ( or STOP (), **not by opening the lid.**

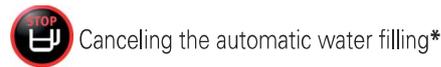
5. Timer functions ("egg timer")



6. Water filling function



Automatic water filling.



Canceling the automatic water filling*



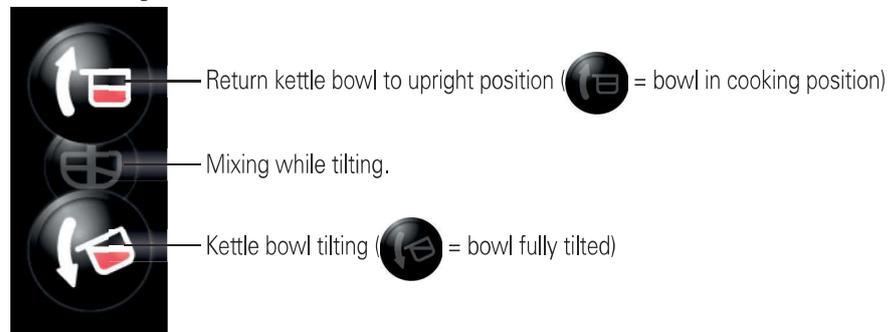
Manual water filling.



Canceling the manual water filling*

* Only displayed during water filling

7. Bowl tilting functions



8. Navigation



Other symbols on the display:

- Moves to the next program phase (while running a saved program)
- Return to previous display
- Home. On any page, push the button to go to the main view.
- Emptying the jacket
- The Hold function (cooling) is active
- A program is running

Keypad functions

In connection with various settings, a keypad will appear on the display:

- Push the uppercase button  to toggle between lowercase , uppercase  and uppercase hold letters.  (caps lock).
- Push the backspace button  to erase characters.
- Push the special characters button  for numbers and special characters.



4. Operating instructions



All personnel using the appliance must be given training in how the appliance works by the person responsible for staff safety.

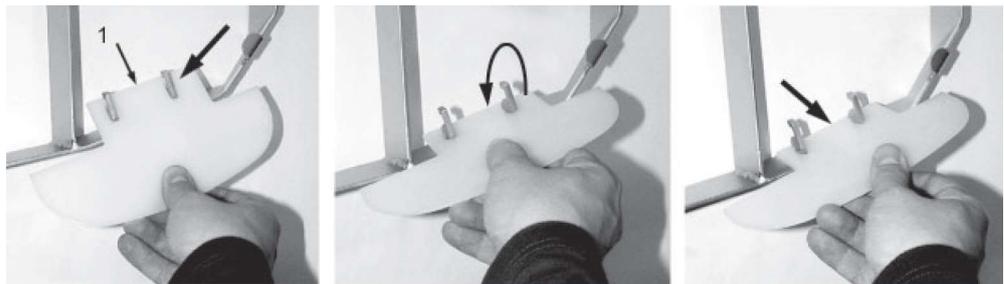
4.1. Before use

Daily checks before use

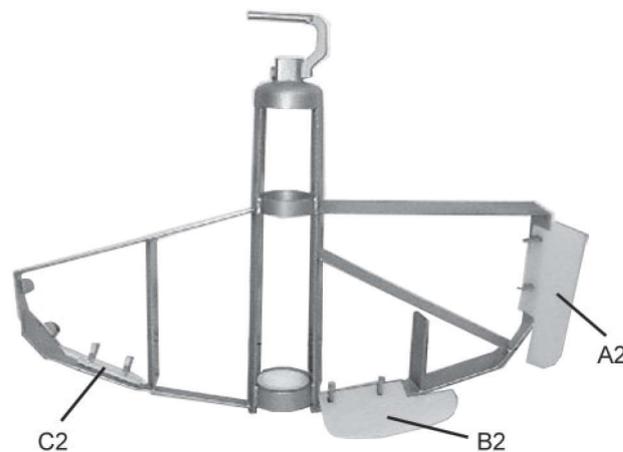
- Water supply (hot/cold) is open.
- No inappropriate objects in the kettle.
- Scrapers are correctly attached to the mixing tool. See "Positioning the mixing tool and scraper".
- The mixing tool has been locked in its place: locking part (one end of the handle) in the groove of the mixer axle, with the handle turned in a horizontal position. Secure fixing by trying to lift the tool out of the kettle by the upper blade.

4.1.1. Positioning the mixing tool and scrapers

Attach the scrapers by placing the pins on the mixing tool into the holes on the scrapers. After that turn the scraper into place by lifting the scraper's lower part. Finally pull the scraper forward. The bevel (1) will on the lower scraper point upwards and on the side scraper away from the mixer axle.



The mixing tool is equipped with 1-5 scrapers, depending on the size of the tool.



Scraper	40	60	80	100	150	200	300	400
Scraper A2	-	1	1	2	1	2	1	2
Scraper B2	-	-	1	1	1	1	1	1
Scraper C2	1	1	-	-	1	1	2	2

Use scrapers in all cooking modes to increase the efficiency of heat transfer and to help the cleaning of the kettle.



It is easiest to attach the mixing tool to the mixer axle when the kettle is in a tilted position. Push the ring on the mixing tool into the kettle's mixer axle and fit the mixing tool in place, while the lifting handle is straight so that the locking device of the lifting handle sets in the groove at the upper end of the mixer axle.



Then turn the handle aside.



Make sure that the mixing tool is locked in its place by trying to lift/pull it out of its place by pulling at the mixer blade, for example.

4.2. Using the kettle

Switching on

- Activate the display if it is dark by touching it.
 - Check the power supply of the display is not activated. Ensure that the main switch on the kettle back is set in state "1".
- Start the kettle by pressing . The display will show the basic functions.

Switching off

- Put the kettle in stand-by mode by keeping  pressed.



NOTE: ALWAYS put the kettle in stand-by mode before switching off the power!

4.1.2. Heating



Heating is only switched on when the kettle is in upright position (cooking position). If the heating function is selected when the kettle is not in upright position, the message "Kettle not in cooking position" appears on the display.

-  Press the heating button.
- Set the temperature using the keypad ( ... ) and start the heating by pressing 



Set the power with the power control.



Low power: The difference between the steam jacket temperature and the food temperature is smaller and the cooking is gentler. Suitable for example for heating milk.

High power: Fastest possible heating

The heating starts, the display shows the set temperature  , the selected power level  , food temperature  and steam jacket temperature .

When the set temperature is reached, the message "Initial heating completed" appears on the display.

- Mute the possible audio signal by pressing  or confirm by pressing . The message disappears after a while if the display is not touched.



By pressing the "Boil" button  the boil function (100°C) starts automatically regardless of the set temperature.



The cook intensity can be adjusted with the power control by pressing the desired field .

The heating / cooking is stopped by pressing .



NOTE! Pressing  stops all kettle functions.

ADV functions:

Delta-T

The Delta-T function keeps the steam jacket temperature a constant (according to the Delta T value setting) higher than the temperature of the food.

Set the Delta-T value as follows:

-  Press the temperature button.
-  Press the ADV button.

- Activate the Delta-T function by pressing



- Press the food temperature value -> a keypad appears on the display, set the desired temperature.
- Press the Delta-T temperature value -> a keypad appears on the display, set the desired temperature difference.
- Start the heating by pressing .



The Delta-T function is suitable for dishes that require long braising, such as pulled pork.

Stop the function by pressing .

 **NOTE!** Pressing  stops all kettle functions.

Steam jacket temperature

Set the steam jacket temperature as follows:

-  Press the temperature button.
-  Press the ADV button.

- Press 

- Press the steam jacket temperature value -> a keypad appears on the display, set the desired temperature

- Start the heating by pressing .



This function is suitable for example for fermentation of yeast dough or to melt chocolate.

Stop the function by pressing .

 **NOTE!** Pressing  stops all kettle functions.

Food / steam jacket temperature

Set the food / steam jacket temperature as follows:

-  Press the temperature button.
-  Press the ADV button.
- Press 

80	Food temperature
90	Jacket temperature

.
- Press the food temperature value -> a keypad appears on the display, set the desired food temperature.
- Press the steam jacket temperature value -> a keypad appears on the display, set the desired steam jacket temperature.
- Start the heating by pressing .



This function can be used eg for Sous Vide or to simmer porridge.

Stop the function by pressing .

 **NOTE! Pressing  stops all kettle functions.**

4.2.1. Cooling



i Cooling is only switched on when the kettle is in upright position (cooking position). If the heating function is selected when the kettle is not in upright position, the message "Kettle not in cooking position" appears on the display.

- Press the temperature button .
- Press .
- Select "Hold"  or "Finish"  function

Hold -function

The "Hold" function keeps the food at the set cooling temperature after the cooling until the user stops the function.

- Press the "Hold" button .
- Set the cooling temperature with the keypad.
- Start the cooling by pressing .
- Confirm the cooling by pressing .
- Using the mixer improves the efficiency of the cooling. Start the mixer by pressing . Adjust the mixer speed if needed.
- Exit the mixer view by pressing .

When the set temperature is reached, the message "Target cooling temperature reached" appears on the display.

- Mute the possible audio signal by pressing  or confirm by pressing . The message disappears after a while if the display is not touched.

After this, the Hold function will continue until the user stops the function.

- Stop the function by pressing .
 - The kettle jacket is emptied

i **Do not set a too low cooling temperature! Take into account the cooling medium, for example tap water temperature. It is advisable to set the cooling temperature 2 degrees warmer than the tap water temperature. To achieve a lower temperature than that is in practice very difficult and may increase the water consumption considerably.**

i When the cooling is completed the kettle jacket is emptied and the remaining emptying time and  is shown on the display. **The kettle must be in cooking position in order for the water in the jacket to drain. It is therefore necessary to return the kettle to upright position after any tilting.** The emptying time depends on the kettle size.

i The function can be stopped by pressing .

i **NOTE! Pressing  stops all kettle functions.**

Finish -function

The "Finish" -function interrupts the cooling when the set cooling temperature is reached.

- Press the "Finish" button .
- Set the cooling temperature with the keypad.
- Start the cooling by pressing .
- Confirm the cooling by pressing .
- Using the mixer improves the efficiency of the cooling. Start the mixer by pressing . Adjust the mixer speed if needed.
- Exit the mixer view by pressing .

When the set temperature is reached, the message "Target cooling temperature reached" appears on the display.

- Mute the possible audio signal by pressing  or confirm by pressing . The message disappears after a while if the display is not touched.

 **Do not set a too low cooling temperature! Take into account the cooling medium, for example tap water temperature. It is advisable to set the cooling temperature 2 degrees warmer than the tap water temperature. To achieve a lower temperature than that is in practice very difficult and may increase the water consumption considerably.**

 When the cooling is completed the kettle jacket is emptied and the remaining emptying time and  is shown on the display.
The kettle must be in cooking position in order for the water in the jacket to drain. It is therefore necessary to return the kettle to upright position after any tilting.
The emptying time depends on the kettle size.

 The function can be stopped by pressing .

 **NOTE! Pressing  stops all kettle functions.**

4.2.2. Mixer functions



Starting the mixer (manual use)

 The mixer can only be switched on when the kettle is in upright position (cooking position). If the mixer function is selected when the kettle is not in upright position, the message "Kettle not in cooking position" appears on the display.

-  Press the mixer button.
- Start the mixer by pressing  or by touching the power control bar.

Changing the speed

- Adjust speed using the "+" or "-" buttons or by sliding your finger along the rpm slider. The speed control is equipped with a safety delay. (speed increases slowly, the finger must be kept in place until the desired speed is reached).

Auto-reverse function

- When the mixer is running, press  , the button will turn blue  and the mixer is auto-reversing until the button is pressed again.

Power mixing during mixing

- When the mixer is running, press .

Power mixing is heavy auto-reverse mixing, which continues as long as the button is pressed. Power mixing can be used whenever the mixer is running, also during the pre-set mixing cycles.

 Make sure before using power mixing that possible splashes of food do not cause any danger to safety at work.

Preset mixing cycles

- Select one of the mixing cycles shown.
- Start the mixer by pressing .
- Pause the mixing cycle by pressing .
- Stop the mixing cycle by pressing .

 Information about mixing cycles, speeds and directions of rotation by pressing .

 **NOTE!** Pressing  stops all kettle functions.

 The correct way to stop the mixer is to press pause  or STOP , **not by opening the lid of the kettle.**

 See also "Programming / Mixing cycles".

4.2.4. Tilting the kettle



It is not possible to tilt the kettle when the lid is closed. In case you try to tilt the kettle with the lid closed, a message appears that the operation could not be performed.

 Tilting the Proveno kettle is carried out by pressing the tilting button.

The kettle tilts as long as the button is held down. In case the "pull-back" function is on, (see "Adjustment instructions, Setting customer specific parameters"), a slight reversing movement occurs after the button is released, which decreases dripping of food from the the spout.

To make it possible to empty the kettle completely the reversing movement does not occur when the kettle is tilted to the extreme position.

 Returning the kettle to the cooking position is carried out by pressing the upright position button.

For safety reasons (safety regulations), the reversing movement lasts only as long as the button is pressed. The upright position button must be pressed until the reversing movement stops and the kettle is in the cooking position. In case the kettle is not reversed up to the cooking position, a message "Kettle not in cooking position" appears on the display when you try to switch the heating or mixing on.

4.2.3. Mixing while tilting



This option enables forced mixing at the lowest mixing speed while the kettle is tilted. With the help of this function it is possible to portion more homogeneous batches of food into smaller bowls.

 This function is activated only if the pot is slightly tilted.

- Tilt the kettle by pressing .
- Press the mixer button between the tilting buttons .

The display shows "Start mixing and tilting?"

- Press  and then press the mixer button between the tilting buttons and **keep it pressed**, the mixer will work as long as the button is pressed. If you need to adjust the tilting of the kettle, slide your finger to the  or  button (without lifting your finger).

Foot switch (option)



Follow the instructions above to the point that tells to keep the mixer button between the tilting buttons pressed.

- By keeping the foot switch pressed it is possible to lift the finger from the display without the mixer stopping. The foot switch has to be kept in the middle position, if it is pressed all the way down the function stops.
- The tilting can be adjusted during mixing by pressing  or  (without lifting your foot from the foot switch). If you place your finger on the mixer button between the tilting buttons the foot switch can be released without the mixer stopping.

4.2.5. Water filling



Automatic water filling

- Press .
- Set the desired amount (liters) with the keypad.
- Start the water filling by pressing .
- The display shows the set amount (liters)  and the achieved amount (liters) .
- When the set amount is reached the filling stops automatically.
- On the water filling page the last filled amount is displayed  as well as the total amount  (can be reset)

Interrupting the automatic water filling.

- Interrupt the function by pressing , the button is visible only during automatic water filling.
- The filling can be continued as long as the filled amount () is shown on the display. After this the amount resets and must be set again.

Manual water filling.

- Start the water filling by pressing . The display shows the achieved amount (liters) .
- Press  when the desired water amount is achieved. The button is visible only during manual water filling.



The default setting for the water filling accuracy is full liters. It can however, by setting the parameters, be set to deciliters for amounts smaller than 10 liters. The setting is done by authorized service personnel.

4.2.6. Timer ("egg timer")



- Press .
- Add new timer by pressing .
- Set the time with the keypad.
- Start the timer by pressing .

When the set time has elapsed, a message "Timer expired!" appears on the screen,

Mute the possible audio signal by pressing  or confirm by pressing . The message disappears after a while if the display is not touched.

The active function, e.g. heating is shown on the timer display.

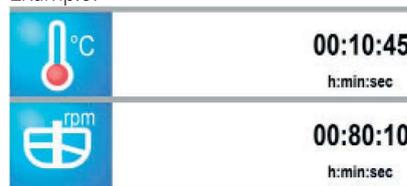


The function can be added to the timer by keeping the symbol pressed until it gets bigger and gets a blue background. It can then be dragged onto the timer. In this way the function stops when the set time has elapsed.



It is also possible to start several timers at the same time. Add a new timer as described above. Various timer functions can be controlled as above by holding a function symbol pressed until it gets bigger and gets a blue background wherein it can be dragged onto the timer.

Example:



Several functions can be placed in the same timer wherein all these functions ends when the set time has expired.

Example:



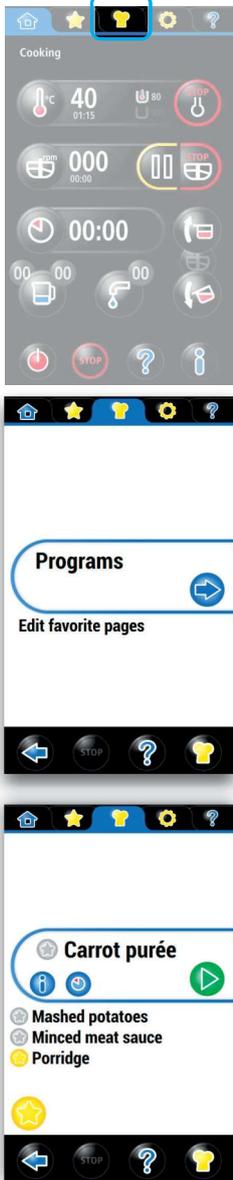
A running timer can be deleted by pressing the timer field (left of the time) and keeping pressed until

the timer gets smaller and floating. The timer can now be deleted by dragging it to the waste bin  that appears at the bottom of the page. A function can be deleted from a timer the same way. Keep the function icon pressed until it gets smaller and floating and drag it to the waste bin.



The kettle is also equipped with a timer with which you can program a program to start at a certain time. See "Saved Programs /Timer-set start of the program.

4.2.7. Saved Programs



Using a saved program

- Press
- Select "Programs" and press
- Select program by scrolling with your finger.
- Start the desired program by pressing
- A symbol appears on the display together with (example) 1/2 meaning that first phase of a program with two phases is running.
- When the program is ready "Program completed" is shown on the display together with "Waited" (passed time), that tells how much time has passed since the program ended.
- Confirm by pressing

When the program changes from one phase to the following the kettle can, depending on the programming, ask the user to perform actions before the next program phase starts

By pressing the kettle moves to the next program phase.

An ongoing program phase can be extended as follows:

- Press
- Press and keep pressed shown on the program phase timing bar until it gets bigger
- Increase or decrease the phase length (time) by moving up or down

Other changes to the program, see "Programming".

Extending the program phase after the phase has ended:

If the check point between the phases require confirmation before moving on to the next phase it is possible to continue the ended phase if needed:

When the program phase ends a message appears on the display showing the possible info text, the time that has passed since the phase ended as well as two buttons (" +1:00" and " +5:00") and .

- By pressing (" +1:00" or " +5:00") the previous phase continues for one or five minutes.
- By pressing the program moves on to the next phase.

Timed start of a program



A program can be programmed to start at a later point:

- Press .
- Select "Program".
- Select the desired program and press .
- Set the desired date and time for the program using the keypad on the display.
- Confirm the setting by pressing .

The display shows the time remaining until the program starts as well as the selected program.

- By pressing  the set start time can be changed.
- By pressing  an overview is shown on the display.
- By pressing  the timed start is deleted.

 The timed start can be programmed during cooling

1. Switch on the cooling in HOLD mode (see "Cooling")
2. While the cooling is running, set a timed start for the program as above
 - The kettle now keeps the food cold until the the scheduled cooking program starts

4.2.8. Favorite pages

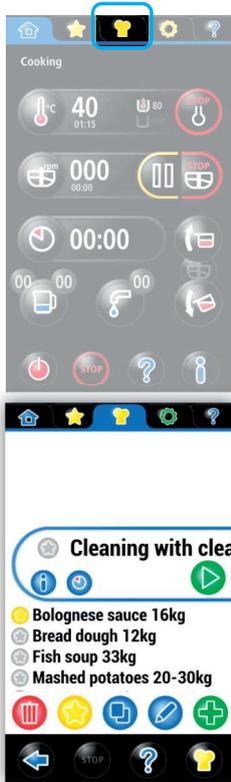


How to use the favorite pages:

- Press  the first favorite page with the programs is shown on the display. A favorite page shows the programs linked to it and the following functions for each program:
 - , shows an overview of the program
 - , opens a timer that allows a delayed start of the program to be set, see "Timed start of a program." If the icon is gray a program already active.
 - , starts the program.

If there are more than one favorite page, move to the next / previous page with the help of the arrows at the top of the display.

4.3. Programming



Requires logging (Default log in code for Master chef is "1234". The code can be changed with the parameters, see "Adjustment instructions")

- Press .
- Select "Programs", press .

A page with the programs is shown on the display.

The following functions are displayed on the page (as logged in):

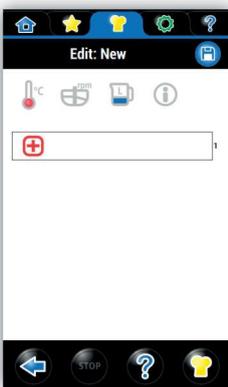
-  Shows an overview of the selected program.
-  Opens the timer page where a timed start of the selected program can be set.
-  Starts the selected program.
-  Deletes the selected program.
-  Adds the selected program to a favorite page, see "Favorite pages".
-  Makes a copy of the selected program.
-  Opens the selected program for editing.
-  Creates a new program.

4.3.1. Programs



Creating a new program:

- Press .
- Select "Programs", press .
- Press .
- A keypad appears on the display, name the program.
- Save the name by pressing .



The temperature and the time for the program phase:

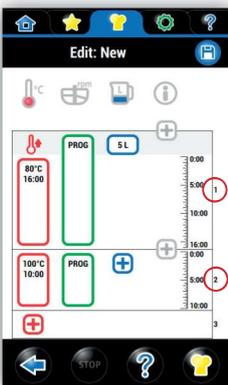
- Press .
- Select one of the following:
 - heating .
 - neutral (no heating)  (if only mixing is required in the phase).
 - cooling .

If **heating** is selected the display will show a window where the temperature for the phase can be set.

- Set the temperature with the numeric keypad.
- Confirm the setting by pressing .

After this the display will show a window where the duration of the phase can be set.

- Set the duration of the phase **h, min** and **s** with the numeric keypad.
- Select whether you want the timer to start
 - **immediately** (Start timer immediately) default setting for temperatures over 100°C (example )
 - **after reaching cooking temperature.** (Start timer after reaching cooking temperature) default setting for temperatures below 100°C (example )
- Confirm the settings by pressing .



If **neutral** is selected the display will show a window where the duration of the phase can be set

- Set the duration of the phase **h, min** and **s** with the numeric keypad.
- Confirm the setting by pressing .

If **cooling** is selected the display will show a window where the desired end temperature can be set.

- Set the desired end temperature with the numeric keypad.

The mixer function of the phase:

- Press .
- The display will show a window where the mixer function for the phase can be set either by selecting one of the mixing cycles shown or by setting the speed by touching the power control bar.
- The direction of rotation, see "Programming / Mixing cycles".
- Confirm the setting by pressing .

The water filling of the phase:

- Press .
- The display will show a window where the desired amount of water can be set (liters) with the numeric keypad.
- Confirm the setting by pressing .

Additional settings for the program phase:

In addition to the above mentioned functions it is possible to provide additional information for the phase:

- Press .

Text field:

- Press , a keypad appears on the screen. Write a free-form explanation / instructions for the program phase.

Audio signal:

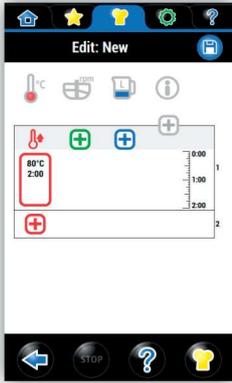
- Select, if desired, the audio signal that sounds when the phase has elapsed by pressing . Select the desired sound from the list. Listen to the sound by pressing . Select the desired sound by pressing . Remove a selected sound by pressing "No sound" .

Before moving to next phase

- Select "Hold conditions and wait until user clicks OK button" if moving to the next phase requires action or confirmation from the user.
- By selecting "Kettle moves to next phase automatically without waiting" the program proceeds automatically to the next phase without confirmation.
- Confirm the settings by pressing .

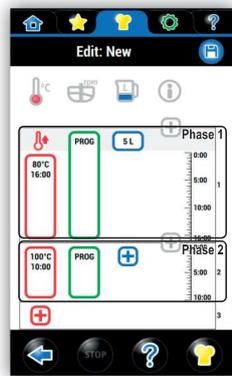


Adding a program phase:



- Press  and follow the instructions from "The temperature and the time for the program phase " onward.

Changing the order of the program phases and deleting a program phase



- It is possible to change the order of the program phases by pressing a phase and keeping it pressed. When the phase gets "floating" it can be dragged up and down. The program phase can also be deleted at this point by dragging it onto the waste bin  that appears on the top of the display.

Saving the program:

- Finally remember to save the program / changes by pressing .



The chef recommends to save also during programming

4.3.2. Mixing cycles



Creating a new mixing cycle

- Press
- Select "Mixing cycles" and press
- Add a new mixing cycle by pressing
- Press the "New mixing cycle" field at the top of the display
- Name the mixing cycle with the keypad that appears on the display.
- Save the name by pressing



The direction of rotation

- Select direction of rotation by pressing . The direction changes at each pressing as follows:
 - Clockwise
 - Counterclockwise
 - Auto-reverse function

Mixer speed

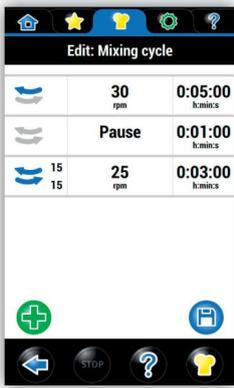
- Set the mixer speed by pressing the "rpm" -field (). Set the speed with the keypad that appears on the display.
- NOTE. If you select the duration of the rotation directions can also be set.
 - Set how long the mixer rotates clockwise by touching the upper figure and setting the time with the keypad that appears on the display. Next set how long the mixer rotates counterclockwise by touching the lower figure and setting the time with the keypad that appears on the display.
- Save by pressing
- Return without saving

The duration of mixing cycle

- Set the duration by pressing the "h:min:s" field.
 - Set the time with the keypad that appears on the display.
- Save by pressing
- Return without saving

The duration of the phase is not relevant if the cycle has only one step.

The mixing cycle can consist of several phases. Create a new phase by pressing and setting the direction of rotation and speed as above.



Changing the order of the cycle phases and deleting a cycle phase

It is possible to change the order of the cycle phases by pressing a phase and keeping it pressed. When the phase gets "floating" it can be dragged up and down. The cycle phase can also be deleted at this point by dragging it onto the waste bin  that appears on the top of the display.

- Finally save the program / changes by pressing .

4.3.3. Favorite pages

The programs can be linked to favorite pages for example by category.



Creating a new favorite page:

- Press .
- Select "Favorite pages" and press .
- Add new favorite page by pressing .
- Name the page with the keypad that appears on the display.
- Save the page by pressing .
- Return without saving by pressing .

Changing the name of a favorite page:

- Press .
- Select "Favorite pages" and press .
- Press  of the favorite page.
- Change the name with the keypad that appears on the display.
- Save the page by pressing .
- Return without saving by pressing .

Deleting a favorite page:

Delete a favorite page as follows

- Press .
- Select "Favorite pages" and press .
- Press and keep pressed the name of the page to be deleted.
- A waste bin  appears on the bottom of the page.
- Drag the page to be deleted onto the waste bin.

Adding a program to a favorite page:

- Press .
- Select "Programs" and press .
- Select program.

If the program is not linked to a favorite page the favorite symbol in front of the program name is gray .

If the program is linked to a favorite page the favorite symbol in front of the program name is yellow .

- Press the  at the bottom of the page.
- Select to which favorite page you want to link the program by pressing the  of the favorite page (pages). The program can be linked to more than one favorite page.
- Return to the program list by pressing .
- The favorite symbol of the program is now yellow  indicating that the program is linked to one or more favorite pages.
- Return without saving by pressing .

4.4. After use

4.4.1. Cleaning



Use of a pressure washer is forbidden. Pressure washers generate huge amounts of water fog that might contribute to contamination of food and food handling surfaces over large areas in the kitchen.



Switch off the appliance with the (I/O) switch or the mains switch before starting to wash the kettle.



Tools not allowed for cleaning:

- pressure washer
- all metallic tools
- rough rubbing sponges
- steel wool
- abrasive detergents



Tools recommended for cleaning:

- special detergents for stainless steel
- nylon brush
- soft rubbing sponges
- other materials intended for stainless steel that do not scratch the surface



All accessories, such as strainer plates and its parts, mixing tools and scrapers and parts of the safety lid can be washed in a dishwasher suitable for washing such items.

The less the kettle surface gets scratched, the easier it is to clean. The fastest and easiest method is to clean the kettle every time right after use. Clean the pillars of the appliance by wiping.



Do not spray water on the control panel.



Cleaning the touch screen (display) and the panel overlay with steam is prohibited!



Wash the exterior of the appliance with running water only if necessary. Wiping with a damp cloth will often suffice. Consider the requirements of food hygiene when cleaning the kettle. Abundant use of water for soaking increases water consumption. However, if you want to clean the kettle by soaking, make use of the mixer and the optional washing tool to make soaking more efficient, mixing slowly during soaking.

Cleaning procedures:

- Scrape loose dirt with a plastic scraper
- Spray detergent into the kettle, then brush and spray the kettle with water until clean.
- Dry the kettle.

The dosing and impact time instructions for cleaning detergents must be followed - e.g. exceeding the impact time for foam cleaning detergents in combination with salt residues has been observed to cause severe spot corrosion even on stainless steel.



The manufacturer does not take any responsibility for possible damage caused by not following the instructions.

Detaching the lid parts

- Make sure the kettle is in an upright position.
- Place the lid on the kettle.
- Remove the cover of the safety grid and detach the safety grid.
- Detach the solid lid from the lifting arm by holding the lifting arm with one hand and pulling the locking lever of the lid and then lifting the arm.



Refitting the lid parts

Place the solid lid on the kettle approximately in the correct position.

Pull the lifting arm down over the lid. Turn the solid lid so that the guiding pin lines up with the hole in the lifting arm center piece.



1. Solid lid
2. Lifting arm
3. Guiding pin
4. Locking lever of the lid
5. Safety grid for lid opening
6. Cover for fill opening (not shown in picture)

Press the lid arm against the lid so that the fixing cone is guided into the fixing part and the locking lever snaps in the locked position. Make sure that the lid is locked on the arm.



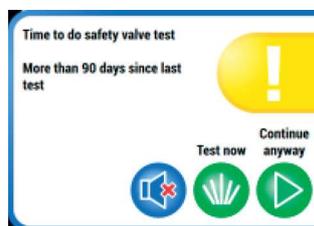
Put the safety grid and its cover in place.

4.4.2. Periodic service

Like a car, a food preparation appliance should be kept in good working order with the help of preventive maintenance. This guarantees trouble-free and safe operation of the appliance. Depending on how much the kettle is used and in what kind of conditions it is operated, the technical condition of the Proveno combi-kettle should be checked according to plan from time to time. For example, the amount of scale built up on the steam system depends on the use of the kettle and the hardness of local water. Contact your authorized service provider for recommendations on preventative maintenance to be performed.

4.4.3. Safety valve test

The kettle notifies when it is time to perform safety valve test.



Electrically heated kettle

- Open the safety valve test page by pressing .
- Continue without performing the test  (not recommended).
- Mute the possible audio signal by pressing .
- Start the test by pressing . The kettle heats up.
- When the kettle is warm  is shown. Hold the button pressed until the safety valve opens.



It is not allowed to stand behind the kettle during the safety block check, because, when the check is completed, the safety valve at the kettle's rear edge opens, blowing hot steam out of the kettle. The kettle must be clean and empty. The test causes a momentary strong hissing sound. Wear hearing protection



The kettle gives an alarm signal and interrupts the test if the safety valve does not open within acceptable limits. In this case, it is strictly prohibited to continue using at the kettle, and you should immediately contact a qualified Metos service to fix the error.

Steam heated kettle

- Open the safety valve test page by pressing  .
- Continue without performing the test  (not recommended).
- Mute the possible audio signal by pressing  .
- Open the safety valve by slowly by turning the knob in the direction of the arrow.
- When the steam is discharging (sound, pressure gauge reading reduces) allow the knob to return to the start position.



- Confirm the safety valve test is done by pressing  .

It is not allowed to stand behind the kettle during the safety block check, because, when the check is completed, the safety valve at the kettle's rear edge opens, blowing hot steam out of the kettle. The kettle must be clean and empty. The test causes a momentary strong hissing sound. Wear hearing protection

4.5. Troubleshooting

The display is not lit

- The kettle is in stand-by mode. Touch the display.
- The emergency/stop button is pushed. Release the emergency-stop switch by turning it clockwise.
- The mains switch is in the "0" position. Turn it to "1" position.

The kettle informs that there is a problem with the water supply

- Check the water supply and open and open possible cutoff valve.

The kettle does not heat up

- The kettle is not in upright (cooking) position. Return the kettle to upright position.
- The draining of the jacket water is in progress. Wait until draining the delay has elapsed and then try again.
- The jacket is not empty after a cooling on a kettle with pneumatic draining of the jacket. Check the compressed air supply and open possible cutoff valve.
- Steam supply problems on a steam heated kettle. Check the steam supply and pressure.

The mixer does not start

- The kettle is not in upright (cooking) position. Return the kettle to upright position.
- The lid is open. Close the lid.
- The safety grid is not in correct position. Check the safety lid.

The cooling does not work

- The kettle is not in upright (cooking) position. Return the kettle to upright position.
- Jacket filling problems. Check the water supply (tap water cooling) or the ice bank connections (ice water cooling)

Resetting the unit

- Turn the main power switch to position 0 and wait for about 1 minute. Turn the main power switch to 1 position.

4.5.1. Maintenance information

Keep a record of all service and repair measures carried out for the Proveno combi-kettle during its life cycle. Service history may speed up future service measures, help in controlling the costs and in planning new investments. The safety valve must be periodically checked as instructed in this manual. Enter the check data in the "Maintenance information" table.

Maintenance information

Combi-kettle _____ Serial No. _____ Taken into use (date) _____

Checking the safety valve four times per year:

Date	Checked by	Notes	Date	Checked by	Notes

Yearly maintenance:

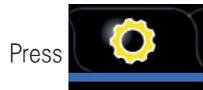
Date	Checked by	Notes	Date	Checked by	Notes

Descaling:

Date	Checked by	Notes	Date	Checked by	Notes

5. Adjustment instructions

5.1. Changing the settings without logging



The following settings can be altered without logging:

- Fresh water function
- Memory functions (HACCP)
- Language
- Time and date
- Sounds (only the volume can be set without logging)
- Safety valve test
- Version info
- Use of electricity and water

Scroll through the options by scrolling the page with your finger.

Confirm the selected option by pressing .

Cancel the selection by pressing .

5.1.1. Fresh water function

Fresh water function rinses the water pipes when the kettle has not been used for a certain time. The function rinses stagnant water and any deposits from the pipes. The Fresh Water Function page shows when the function was performed the last time.

Set the duration of the fresh water function (30 ... 600 s)

- Press the current setting
- Set a new value with the key pad
- Save the changes by pressing .
- Return without saving by pressing .

Set the function interval (0 ... 24)

- Press the current setting
- Set a new value with the key pad
- Save the changes by pressing .
- Return without saving by pressing .

Manual operation of the function

- Start / stop the function manually by pressing  and .
- Return without performing the function by pressing .

5.1.2. Memory functions

This function allows the HACCP log file to be stored on a USB memory stick.

- Connect the USB stick to the USB port and press .
- Return without performing the function by pressing .

5.1.3. Language

The language page shows the available language choices.

- Select the desired language by pressing the language bar
- Return without performing the function by pressing .

5.1.4. Time and date

Set the time and date:

- Set the time and date by pressing the fields and setting the corresponding values with the keypad.
- Save the changes by pressing .
- Return without saving by pressing .

5.1.5. Sounds

This feature allows you to adjust the volume. Other sound settings require a login.

- Adjust the volume by sliding your finger across the volume bar .
- Return without performing the function by pressing .

5.1.6. Safety valve test

With this function the safety valve test can be performed.

- Perform the safety valve test by pressing .
- Return without performing the function by pressing .

5.1.7. Version info

This function shows information that a service technician might ask for when a service call is made.

5.1.8. Use of electricity and water

This function allows you to check the electricity (electrically heated kettle) and water use. The function does not measure the water used with the hand-held shower.

5.2. Changing the settings "master chef"



The following settings can be modified when logged in as "Master chef". Default log in code for Master chef is "1234" and it can be changed with the parameters.

- Fresh water function (see " Changing the settings without logging")
- Memory functions
- Language (see " Changing the settings without logging")
- Time and date (see " Changing the settings without logging")
- Sounds
- Parameters
- Safety valve test (see " Changing the settings without logging")
- Version info (see " Changing the settings without logging")
- Use of electricity and water (see " Changing the settings without logging")

Scroll through the options by scrolling the page with your finger.

Confirm the selected option by pressing .

Cancel the selection by pressing .

5.2.1. Memory functions

With this function the following memory functions can be carried out:

Save cookbook to USB

- Connect the USB stick to the USB port and press .
- Return without performing the function by pressing .

Load the cookbook from USB

- Connect the USB stick to the USB port and press .
- Select which programs you want to download from the USB stick ( =selected,  = not selected).
- Press . If there already is a program with the same name in the kettles memory, a number is added after program name, for example "Meatballs (2)".
- Return without performing the function by pressing .

Save HACCP to USB

- Connect the USB stick to the USB port and press .
- Return without performing the function by pressing .

5.2.2. Sounds

With this function, you can select the audio signal for the different function as well as set the volume.

- Adjust the volume by sliding your finger across the volume bar .
- Select the audio signal by pressing the audio button for the desired function, if no sound is selected the button is labeled "no sound".
- Listen to the sound by pressing .
- Select the sound by pressing .
- Return without performing the function by pressing .

5.2.3. Parameters

Some of the features can be changed by parameters. You have to log in as "Master chef" to change the parameters.

Each parameter has the following features:

104: Master chef login time out 15 s - 36000 s (600 s)	600 s
---------------------------------------------------------------------------	--------------

104: Parameter number

Master chef login time out: Parameter description,.

15s - 36000s (600s): Minimum value - maximum value (factory setting).

600s: The parameters current value

To change a numeric parameter value, click on it.

-> set a value for the parameter with the keypad that appears on the display:

Clicking a non numeric parameter does not show a keyboard, but simply toggles the parameter to next value, like:

103: Master chef login time out enabled (Yes)	Yes
103: Master chef login time out enabled (Yes)	No

6. Installation

6.1. General



Please observe the instructions given in this chapter concerning the installation and adjustments that must be done before taking the Proveno combi-kettle into use. Strict observance of the instructions prevents malfunctions and damages potentially caused by defective installation.

Do not switch the power on if the installation place is damp or wet (building site conditions).

6.1.1. Operating conditions

The Proveno combi-kettle can be used in a normal, air-conditioned professional kitchen. The room temperature of the installation place must not exceed +40°C and the relative humidity must be less than 80% (condensation on surfaces not allowed to occur). If the temperature of the facility in winter conditions is below 0°C, the steam generator of the combi-kettle must be drained and the kettle must be emptied to avoid damage caused by freezing. The kettle's pipes and solenoid valve bodies must be emptied at the same time.

6.1.2. Possible interference from the surroundings (to the surroundings)

The Proveno combi-kettle fulfils the requirements of the EMC directive concerning the emissions and immunity to electromagnetic disturbances. In case there are electronically controlled appliances and, in particular, devices fitted with a frequency converter in the installation place, it is recommended to ensure their conformity with the relevant regulations and that their cabling has been done according to instructions.

6.1.3. Storage

The Proveno combi-kettle must be stored in a dry place, at a temperature between +10 and +40°C. The kettle should be kept in its transport package during storage.



If the appliance is stored in construction site conditions, special care must be taken not to damage it through other operations on the site.

- Protect the exterior of the combi-kettle from scratches and knocks.
- Protect the combi-kettle from construction site dust.
- **Protect the combi-kettle from sparks produced by welding, grinding and abrasive cutting wheels. These can later cause rust spots on the stainless steel surface of the appliance.**

6.1.4. Unpacking the appliance

The combi-kettle should be transported in its own package as close as possible to the installation place before final unpacking. Do not remove the protective film until after installation, just before the first use of the kettle.



After removing from the transport pallet, the combi-kettle is not stable until it has been bolted down to the installation frame. It is strictly forbidden to operate or tilt the kettle before it has been fixed to the floor or to the free standing frame according to the installation instructions. When the combi-kettle is removed from its transport pallet, it must be supported to prevent it from falling before it is fixed to the floor. If the kettle falls down, this may cause injury to people or damage to property.

6.1.5. Disposal of the package

After unpacking all packing material must be sorted and disposed of in accordance with local recycling regulations.

6.2. Installation

Check before installation from the installation drawing that there is enough space behind the kettle for tilting and servicing. Also check the location of the floor drain.



The Proveno combi-kettle is designed for installation in a place with a floor drain in front of the kettle. The arrangement with a pouring channel and floor drain behind the kettle is not suitable for use with the combi-kettle

The combi-kettle can be installed in three different ways:

- On a subsurface installation frame, the frame cast into the floor.
- On a surface installation frame, the frame fixed to the floor surface.
- Free standing



For kettles size 200 - 400 l a subsurface frame installation is recommended.



Fixing the kettle directly to the floor without frames is forbidden.

Either subsurface frames or surface frames must be in position before the installation of the combi-kettle is started.

Installation dimensions and floor drain placement, see "Technical specifications"

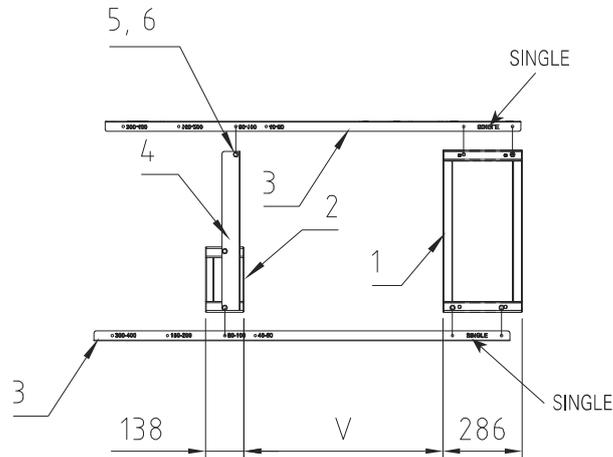
6.3. Residual current device recommendation

- Electrically and steam heated 40 - 300 liters kettles with mixer: Type A residual current device with high frequency filtering or a residual current device separately approved for use with frequency converters. If a 300 liters kettle is equipped with a three-phase frequency converter (option) a residual current device of type B has to be used
- Electrically and steam heated 400 liters kettles with mixer: Type B three-phase residual current device or a residual current device separately approved for use with frequency converters

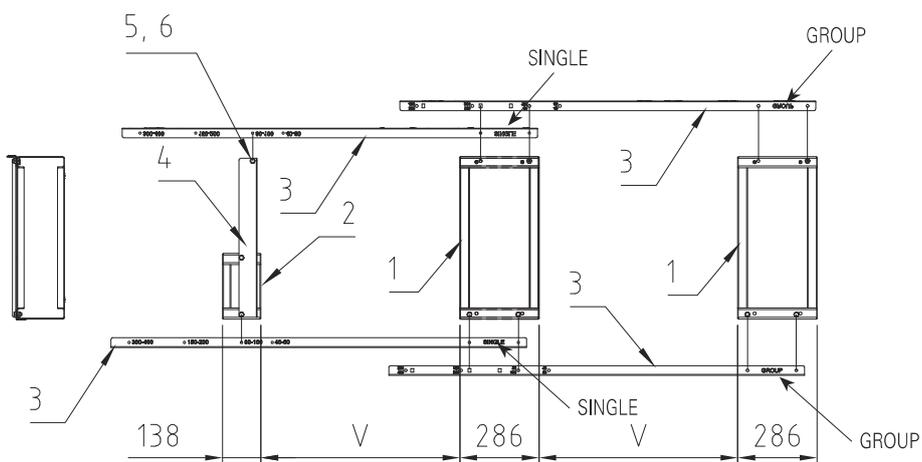
6.4. Installation frames

6.4.1. Positioning of installation frames

Single kettle



Kettle group



Installation frames

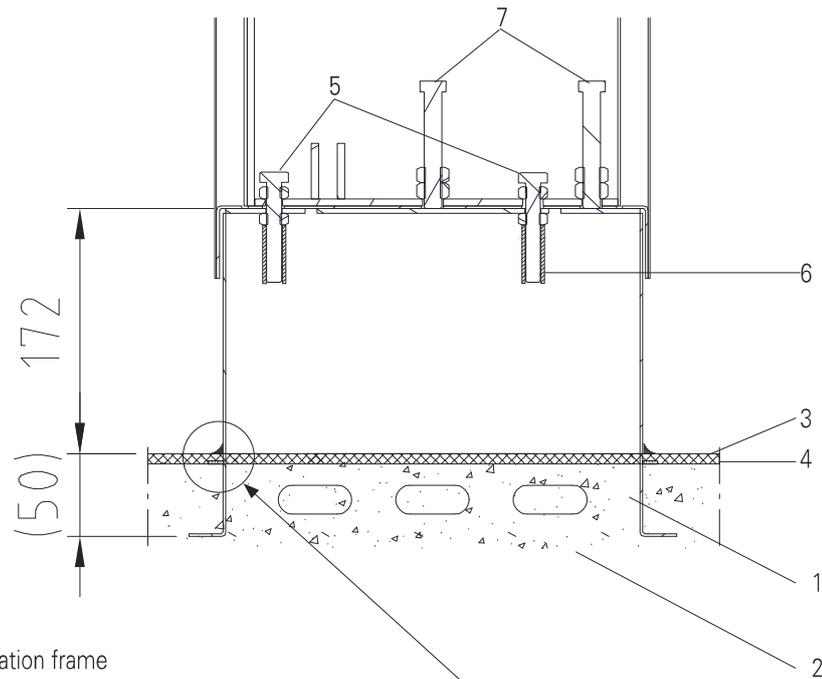
MG4224000	Surface installation
MG4224002	Sub-surface installation
MG4224004	Group installation, surface
MG4224006	Group installation, sub-surface

1. Control pillar frame
2. Support pillar frame
3. Installation guide : 3917669
4. Spacer guide: 3917668
5. Hex bolt M10x20
6. Hex nut M10

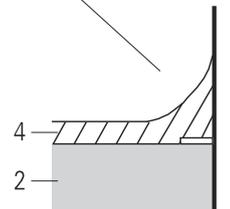
Model	V (mm)
40E, S	608
60E, S	608
80E, S	718
100E, S	718
150E, S	924
200E, S	924
300E, S	1124
400E, S	1124

6.4.2. Subsurface frame cast into the floor

Installation frames are mounted according to the installation drawing, with the help of installation guides supplied with the delivery. The frames must be installed in a horizontal position and fixed so that they do not move during casting. The installation frames must be positioned so that their upper surface is 172 mm above the finished floor surface. The junction of the installation frame and floor is filled with flooring material. To achieve the best result regarding tightness, the installation frame should be filled up to the top level with concrete mass which is covered with floor coating after the installation. Make sure that the protective sleeves of the fixing bolts are in place before filling the installation frame. The main points concerning the installation of the subsurface frame are shown in the picture below.



1. Installation frame
2. Concrete casting
3. Finished floor surface
4. Floor coating
5. Fixing bolt
6. Protecting sleeve for fixing bolt
7. Adjusting bolt



Place the kettle on the installation frame and adjust to a horizontal position with the adjusting bolts. When the kettle is in a horizontal position, it must be fixed to the installation frames with the help of the fixing bolts. The control pillar has 4 bolts and the support pillar has 2 bolts. Tighten the adjusting nuts carefully. Do not seal the space between the kettle pillars and installation frame as there must be enough change of air.

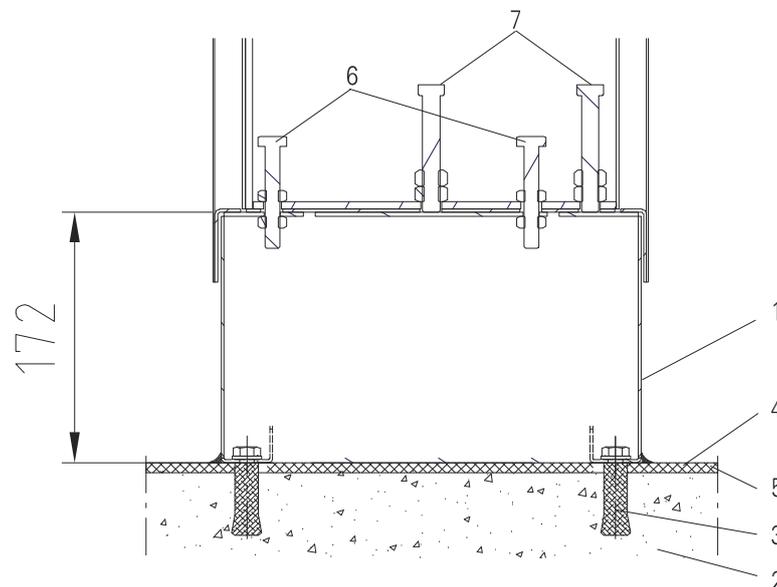
6.4.3. Surface installation frame fixed to the floor

Surface frames are mounted according to the installation drawing, with the help of installation guides supplied with the delivery. If the inclination of the floor is very steep, it may be necessary to level the surface frame closer to the horizontal by placing stainless steel spacers between the frame and the floor. This will ensure that the adjustment range of the pillars is adequate.



Pieces of stainless steel plate should be used as spacers that are large enough and have a suitable hole for the fixing bolt. Washers or other small spacers are not allowed.

The fixing bolts for the surface installation must be chosen according to the floor construction. A type recommended is a UKA M10x150 chemical bolt, which suits various floor materials. Alternatively expansion-shell bolts or equivalent can be used. The junction of the surface frame and the floor is filled with flooring material. The main points concerning the installation of the surface frame are shown in the picture below.



1. Surface frame
2. Concrete casting
3. Fixing bolt for surface frame
4. Finished floor surface
5. Floor coating
6. Fixing bolt
7. Adjusting bolt

Place the kettle on the surface installation frame and adjust to a horizontal position with 4 adjusting bolts. When the kettle is in a horizontal position it must be fixed to the surface frame with the help of the fixing bolts. The control pillar has 4 bolts and the support pillar has 2 bolts. Tighten the fixing bolts carefully. Do not seal the space between the kettle pillars and surface installation frames, as there must be enough change of air.

6.5. Installation on frames

Installing the first left hand kettle or a single kettle

The kettles are delivered attached to a pallet with transport brackets.

The front and rear cover plates of the kettle's control pillar and the side plates of the support pillar must be detached before installation. Each plate has been fixed at its lower edge with two screws. After that, it is also possible to detach the lead-through plate of supply cables and water pipes located at the lower rear edge of the control panel by loosening four screws.



Move the kettle to the installation frame as follows:

- Cut the longitudinal boards of the pallet and push the fork-lift trolley below the kettle.

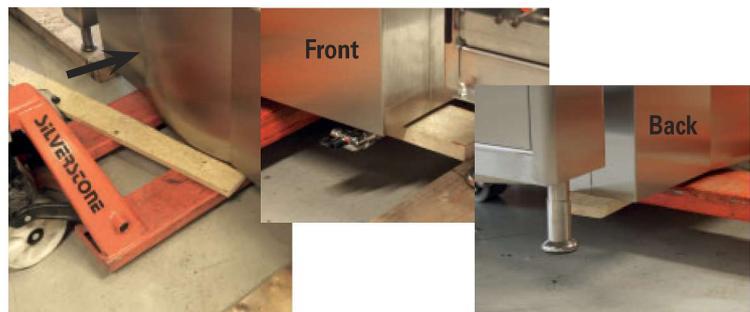


Care must be taken that the lifting arms of the fork-lift trolley do not hit the parts protruding from the kettle bottom, i.e. the mixing motor cover box (Proveno 40, 60, 80, 100, 150, 200) as well as the drain and discharge pipes. Lift from the edges, NOT from the bottom plate

Furthermore, it is recommended to place e.g. plywood strips between the fork-lift trolley and the kettle bottom. It should be observed that the kettle pillars also move. It is advisable to put a piece of foamed plastic or a rolled cellular board between the kettle and the pillars so that they do not hit each other.



Proveno 40, 60, 80, 100, 150 and 200



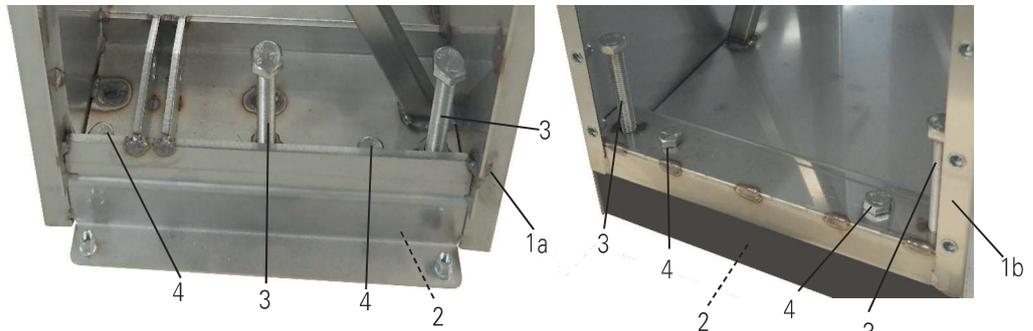
Proveno 300 and 400

- Lift the forklift trolley so that it supports the kettle preventing it from tipping over when the transport brackets are removed.
- Remove the kettle from the transport brackets by loosening the bolts.
- Lift the kettle off the pallet.
- Move the kettle with the forklift onto the installation frame
- Start installing the combi-kettle or kettle group by first positioning the left-hand support pillar in place. Lift the support pillar (1) on the installation frame (2) and adjust it by means of the adjusting bolts (3) to a horizontal position and to a height of 900 mm measured from the top of the support pillar front edge to the floor. When the support pillar (1) is in place, fix it with two fixing bolts (4) to the installation frame (2).

1. Support pillar (from above)
2. Installation frame
3. Adjusting bolt
4. Fixing bolt



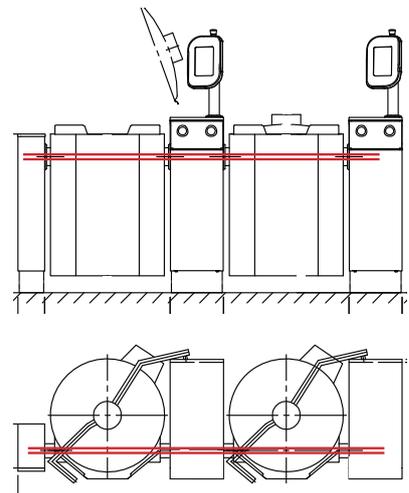
- Next, the control pillar (1) is adjusted by means of the adjusting bolts (3), to a horizontal position and on the same level with the support pillar. When the control pillar (1) is in position, it is fixed to the installation frame (2) with four fixing bolts (4). Check that the space between the kettle section and the support and control pillars is the same, both at the top and at the bottom.



- 1a. Control pillar (front side)
- 1b. Control pillar (back side)
- 2. Installation frame
- 3. Adjusting bolt
- 4. Fixing bolt

Installing the following kettle in a kettle group

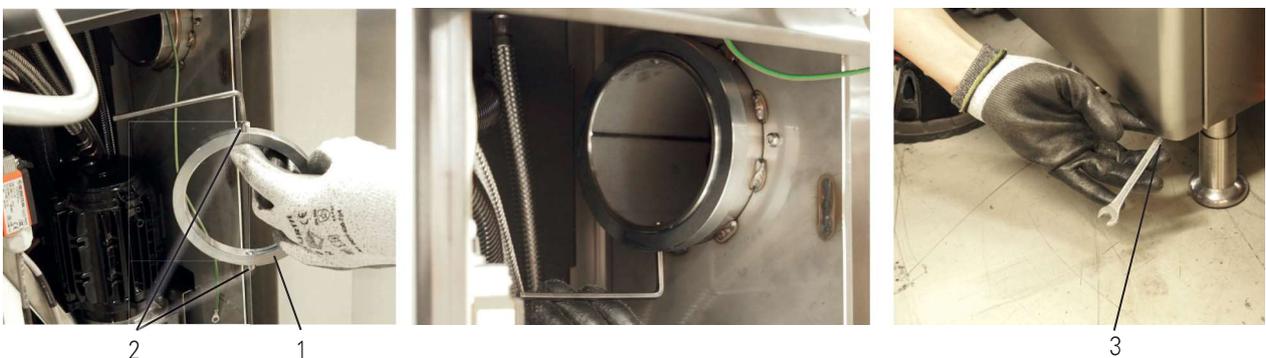
If a kettle group is installed proceed as follows:



- Align the two kettles at the same height and move them together.
- Push the axle into the bearing. Apply grease if needed.



Make sure that the axles of the kettles align, both horizontally and sideways. Adjust if needed with the adjusting bolts.



- Mount the locking ring (1) and secure it with the two locking screws (2) (4 mm Allen key). After that the cover plate of the kettles control pillar can be refitted (3) (10 mm spanner).

6.6. Free standing kettles

Installing the first left hand kettle or a single kettle

40 - 200 liter kettles

40 - 200 liter kettles are delivered attached to a pallet with transport brackets, the free standing frame is delivered on a separate pallet.

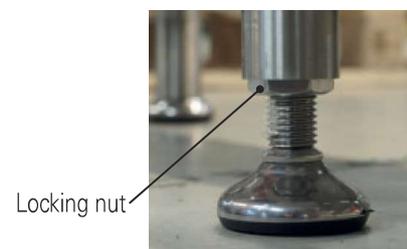
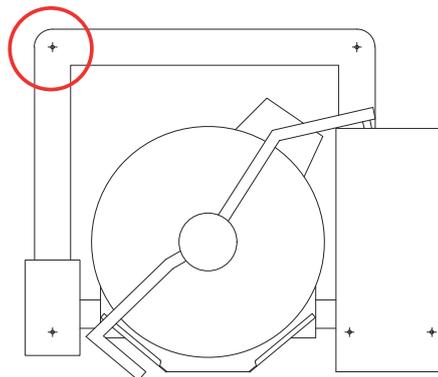
Move the kettle to the free standing frame as follows:

- Cut the longitudinal boards of the pallet and push the fork-lift trolley below the kettle.
- Care must be taken that the lifting arms of the fork-lift trolley do not hit the parts protruding from the kettle bottom, i.e. the mixing motor cover box (Proveno 40, 60, 80, 100, 150, 200) as well as the drain and discharge pipes. Lift from the edges, NOT from the bottom plate

It should be observed that the kettle pillars move. It is advisable to put a piece of foamed plastic or a rolled cellular board between the kettle and control pillar so that they do not hit each other.



- Lift the forklift trolley so that it supports the kettle preventing it from tipping over when the transport brackets are removed.
- Remove the kettle from the transport brackets by loosening the bolts.
- Lift the kettle off the pallet.
- Move the kettle with the forklift onto the free standing frame and lower it into place.
- Attach the kettle to the free standing frame with M10 bolts.
- Move the kettle to the installation site and check that it is horizontal. Adjust if needed using the adjustable feet on the free standing frame.



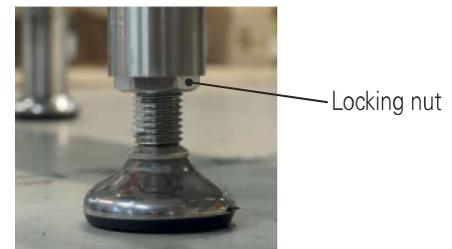
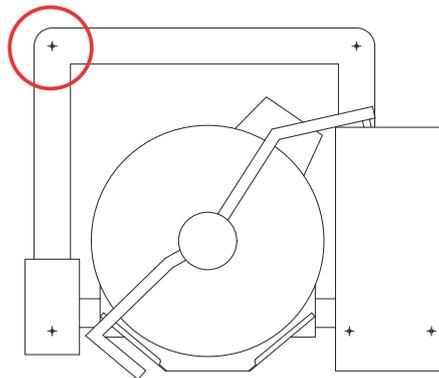
- Be sure to tighten the foot in the back corner of the support pillar side tight to the floor, otherwise it may lift when using the mixer with heavy loads or when tipping the kettle.
- Tighten the locking nuts of the adjustable feet after the adjustment.

300 and 400 liter kettles

The 300 and 400 liter kettles are delivered pre-mounted on the free standing frame.



- Lift the kettle one side at the time and place planks under the feet of the free standing frames feet in order to lift the kettle enough to make the fork-lift trolley to fit under the kettle.
- Move the Kettle to the installation site and check that it is horizontal. Place plywood strips or planks between the fork-lift trolley and the kettle bottom (see pics above) before lifting the kettle.
- Adjust if needed using the adjustable feet on the free standing frame.



- Be sure to tighten the foot in the back corner of the support pillar side tight to the floor, otherwise it may lift when using the mixer with heavy loads or when tipping the kettle.
- Tighten the locking nuts of the adjustable feet after the adjustment

Installing the following kettle in a kettle group

If a kettle group is installed proceed as follows:



- Remove the cover plate of the left hand kettle's control pillar (10 mm spanner).



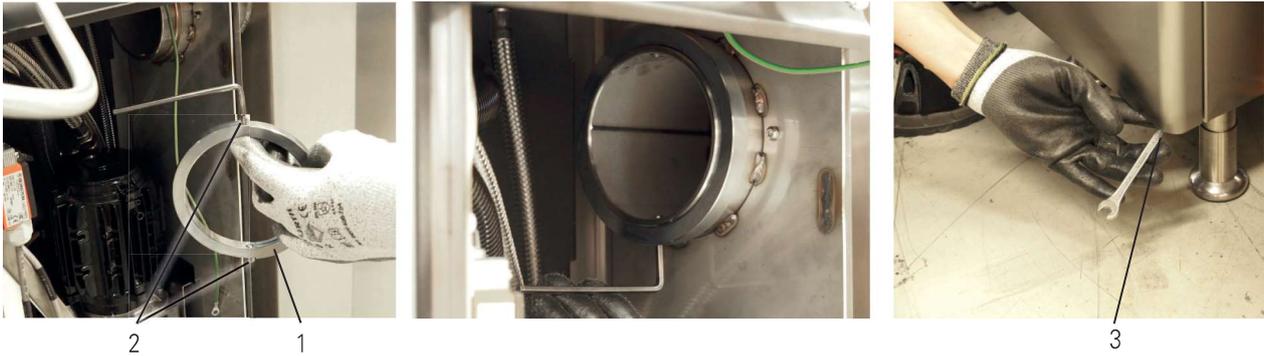
- Align the two kettles at the same height and move them together.
- Push the axle into the bearing. Apply grease if needed.



- Make sure the kettle is in position and the holes in the free standing frames of the kettles align.



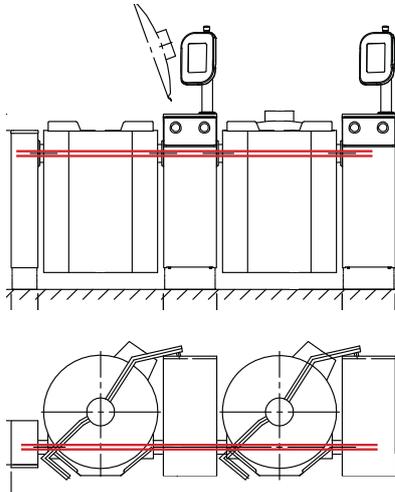
- Fix the kettles together with four 12 mm bolts using the 19 mm spanner.



- Mount the locking ring (1) and secure it with the two locking screws (2) (4 mm Allen key). After that the cover plate of the kettles control pillar can be refitted (3) (10 mm spanner).



Make sure that the axles of the kettles align, both horizontally and sideways. Adjust if needed with the adjustable feet.



Mounting flanges

Mounting flanges (4 pcs / kettle) are recommended for all kettles and especially for large kettles (150 liters and larger) or if the floor is uneven. The flanges are glued to the floor.

- Lift one side at a time with a forklift trolley and place the flange around the legs in the corner. Lower the kettle and glue the flange to the floor.



Mounting flange

6.7. Electrical connections

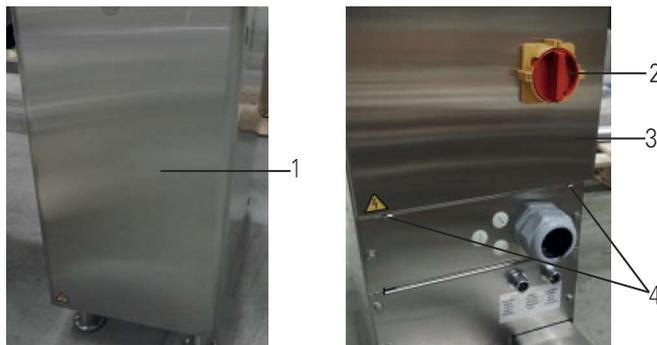


The electrical connections of the Proveno combi-kettle can only be carried out by a qualified electrician having the necessary competence for the installation and service of electrical appliances.



The control pillar cover plate is a fixed component, not intended for detaching. Do not force it upwards when removing the front and rear cover plates.

To make the electrical connections, the upper left-hand side plate, where the mains switch is located, must be removed.

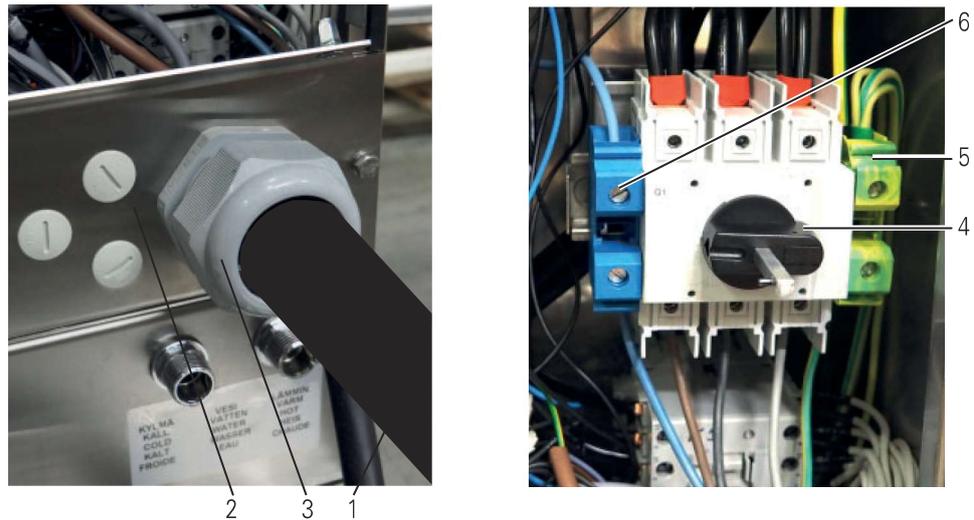


1. Front plate
2. Mains switch
3. Rear plate
4. Screw

Turn the mains switch (2) to the OFF position.

If the control pillar front plate (1) is in place, it must be first detached by opening two screws (4) at the lower section of the plate.

Detach the rear cover plate (3) by opening the screws (4).



1. Supply cable
2. Lead-through plate
3. Cable bushing
4. Mains switch
5. PE terminal
6. N terminal

Detach the lead-through plate (2) from the pillar. Slip the supply cable (1) through the cable bushing (3) of the lead-through plate. Connect the phase wires of the cable to the mains switch (4) and PE and N cables (5, 6) to the terminal blocks.

After that, check phase order to make sure that the mixer and tilting motors rotate in the correct direction.

Close the lid and safety grid of the combi-kettle, but do not put the cover of the safety grid on.

Turn the mains switch to position 1 and switch the combi-kettle on by pressing . The display will show the basic functions.

Press . Start the mixer by pressing .

The mixer should rotate clockwise.

Stop the mixer by pressing .

On hydraulically tilted Proveno 200, 300 and 400 combi-kettles, you also have to check the rotation direction of the hydraulic pump motor.

Open the kettle lid and tilt the kettle by pressing .

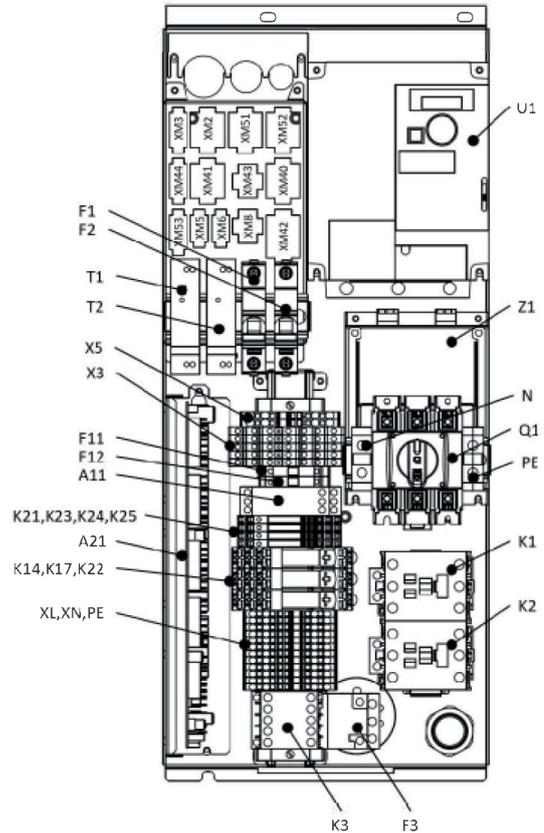
If the motor is running but the kettle does not tilt after pressing the button for moment the rotation direction is wrong.

If the rotation direction in two foregoing points is wrong, two phases of the supply cable coming to the mains switch have to be exchanged.

Tighten the screws of the cable connections and the cable bushing properly, refit the lead through plate and the rear cover plate.

6.7.1. Electrical Connection to Icebank Unit

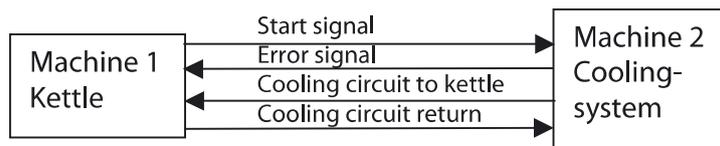
The Proveno combikettle and the icebank have two control line connections in order to co-operate during the cooling process of the kettle. Both connections are potential free. The first control connection is for starting of the icebank circulation pump for the kettle when cooling is requested. The second control line is for signaling of a possible malfunction of the icebank to the kettle user panel. The connection terminals are shown in the picture below.



X3:7-8	Potential free icebank pump control signal
X3:9-10	Potential free malfunction signal from icebank

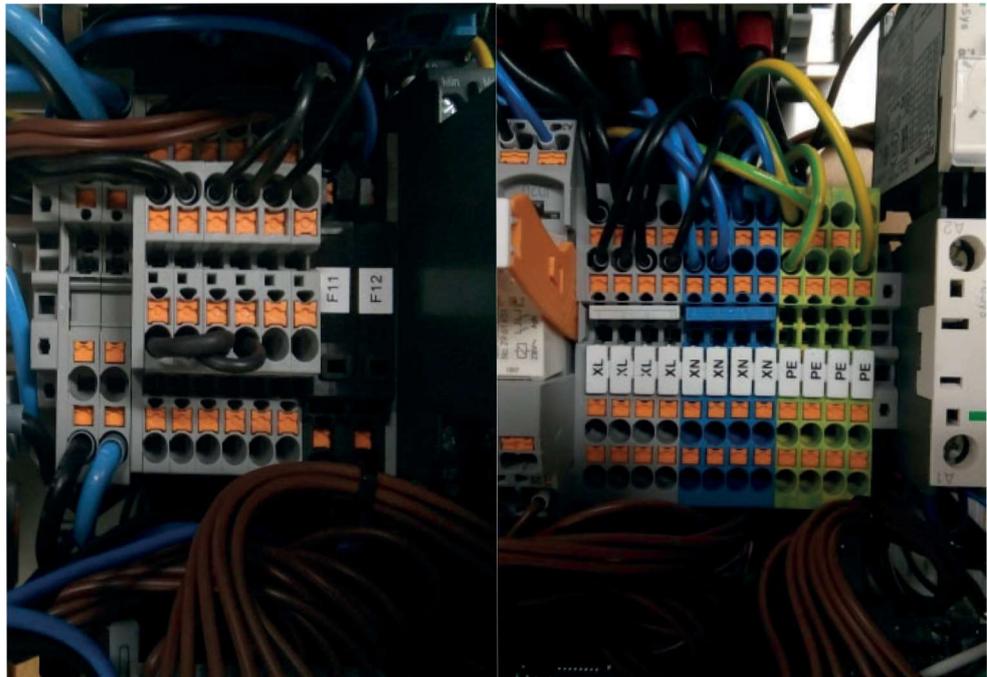
NOTE! When the combikettle and icebank unit control circuits are interconnected a combination of machines as specified by the EC Machinery Directive is created. This requires that at commissioning a signed declaration of conformity must be provided covering the combination of the two machines.

COMBINATION OF MACHINES



6.7.2. Electrical Connection to Peak Power Regulating Systems

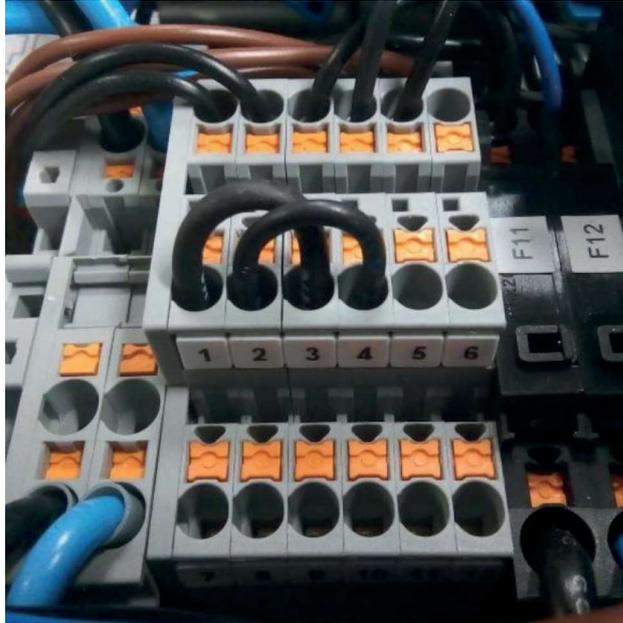
The Proveno combikettle is prepared for connection to peak power regulating systems like Sicotronic or Ecotronic. These systems continuously monitor all the connected appliances of the site and intelligently control electrical power usage in order to keep total peak energy under set limit and at the same time minimize the effect this has on the usage of the appliances. The connection terminals are shown in the picture below. Before making the connections the wire links between terminals X3:1-3 and X3:2-4 must be removed.



Remove wires from X3:1-4 to connect external system	
X3:1, 3	Heating contactor K2 control
X3:2, 4	Heating contactor K1 control
X3:5	Heating ON signal
XN	Neutral
PE	Protective earth

6.7.3. Forced Half Power

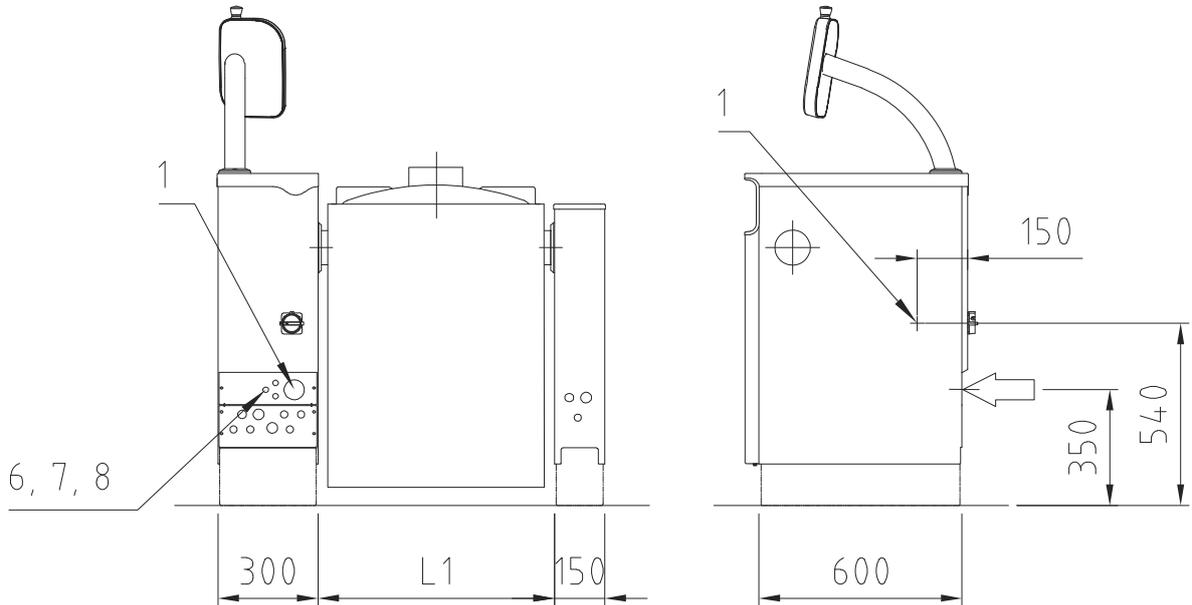
In cases where there is a limitation of electrical power supply there is a possibility to force the kettle to half heating power in order to enable some other appliance to momentarily be switched on. This will of course to some extent affect the cooking process of the kettle. The control input is to be connected to a potential free closing contact. The connection terminals are shown in the picture below.



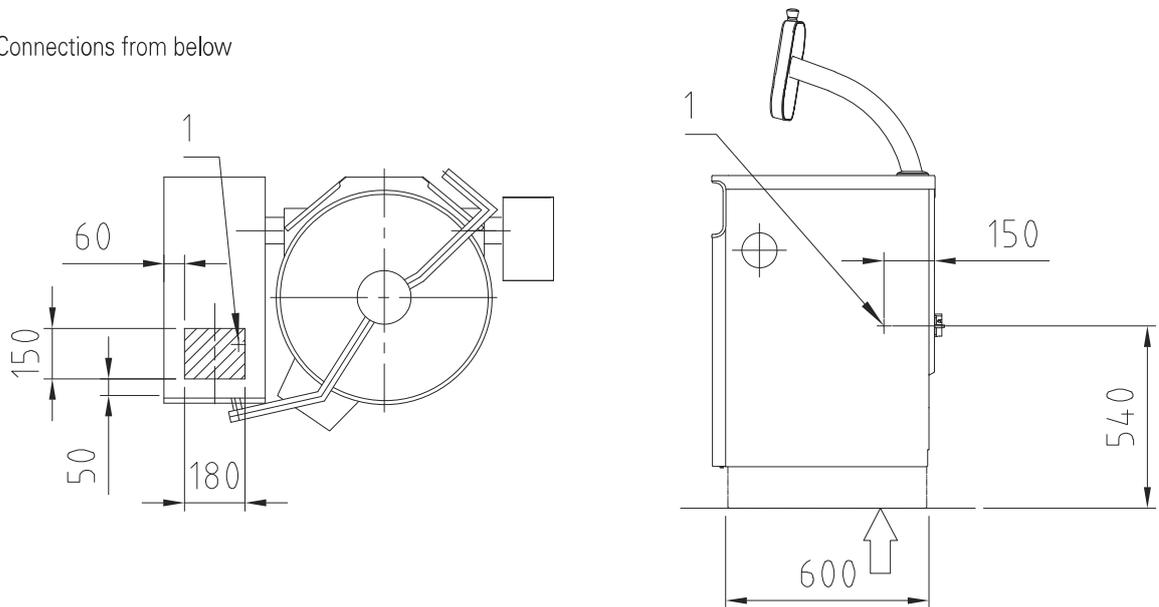
X3:11-12	Potential free forced half power input
----------	----------------------------------------

Electrical connections

A. Connections from the rear



B. Connections from below



- 1. Electrical power supply cable, PG21/PG36/PG42 gland
- 6. Ice bank cooling control cable (option).
- 7. HACCP cabling (option).
- 8. Power management system control cable (option).

Detailed electrical connection data available in kettle electrical diagram.

6.8. Water and steam connections



Water connections of the Proveno combi-kettle can only be carried out by a person with professional competence in the installation and service of heating, plumbing and air conditioning equipment.

The location of the water connection points appears from the installation drawing. Both cold and hot water connections must be fitted with a closing valve and a non-return valve (not included in delivery). The sizes of water connection points are as follows:

Cold water: connection with R1/2" outer thread, supply with min. 15 mm inlet pipe

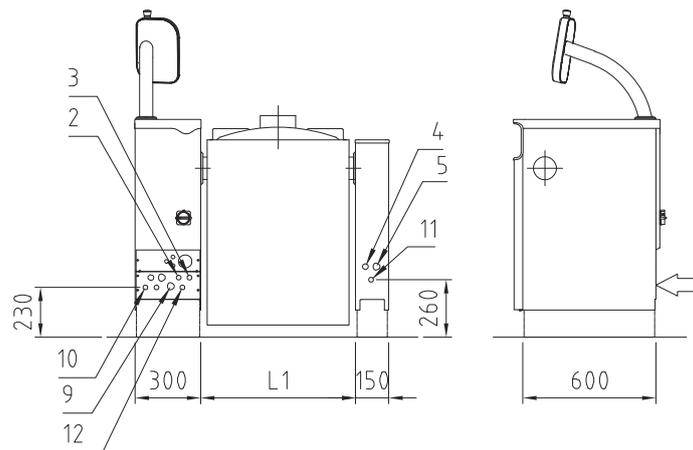
Hot water: connection with R1/2" outer thread, supply with 10 mm inlet pipe (max. +60°C)



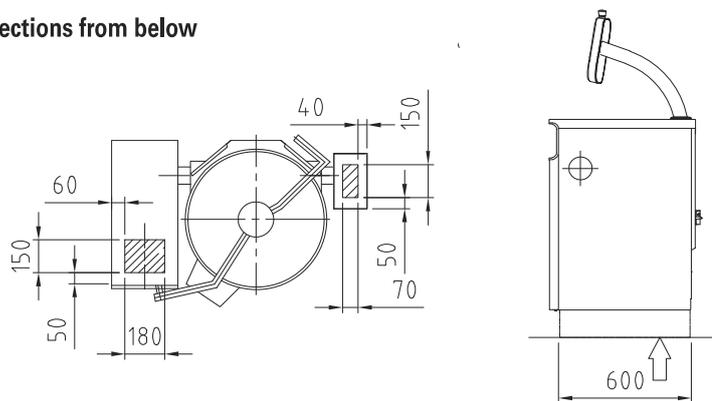
If the cold water inlet pipe is smaller than 15 mm, water flow will decrease and the filling times will be longer than indicated.

- Cold and hot water supply lines must be fitted with a one-way valve and a shut-off valve (not included in delivery).
- Before connection to the unit all water lines must be thoroughly rinsed from all loose particles.
- The water pressure range for optimum performance is 250 - 600 kPa.
- The minimum water pressure allowed for proper function of the unit is 250 kPa.

Connections from the rear



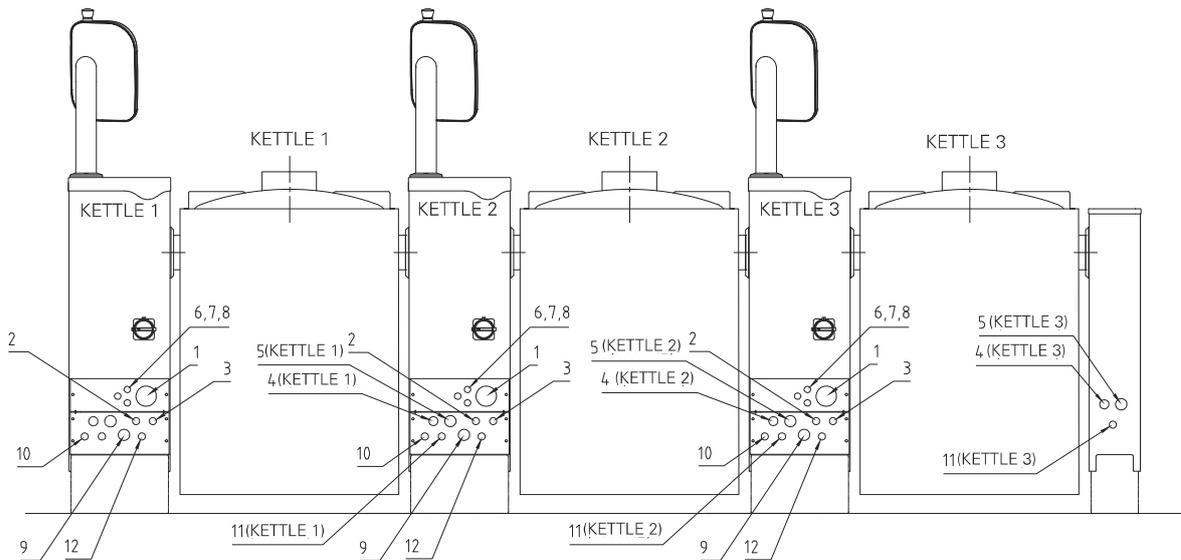
Connections from below



2. Cold water connection R1/2" (ø15). Must be fitted with a one way valve and shut off valve.
3. Hot water connection R1/2" (ø15). Must be fitted with a one way valve and shut off valve. (option)
4. Ice bank cooling inlet R3/4" Max. pressure 3 BAR, flow 90l/min. (option)
5. Ice bank cooling outlet R1" (option)
9. Steam inlet R3/4" / R1" / R1 1/4" (option)
10. Condensate outlet R1/2" / R3/4" (option)
11. Compressed air inlet R1/2" max pressure 1,3 bar, minimi flow 30 l/min (option)
12. Twin water inlet R1/2"(option)

	9		10
40S	R3/4"	12 KG/H	R1/2"
60S	R3/4"	18 KG/H	R1/2"
80S	R3/4"	24 KG/H	R1/2"
100S	R1"	30 KG/H	R3/4"
150S	R1"	45 KG/H	R3/4"
200S	R1 1/4"	60 KG/H	R3/4"
300S	R1 1/4"	90 KG/H	R3/4"
400S	R1 1/4"	115 KG/H	R3/4"

An example of connections in a kettle group



1. Electrical power supply cable, PG21/PG36/PG42 gland
2. Cold water connection R1/2" (ø15). Must be fitted with a one way valve and shut off valve.
3. Hot water connection R1/2" (ø15). Must be fitted with a one way valve and shut off valve. (option)
4. Ice bank cooling inlet R3/4". Max. pressure 3 BAR, flow 90l/min. (option)
5. Ice bank cooling outlet R1". (option)
6. Ice bank cooling control cable 4 x 0,75mm (option).
7. HACCP cabling (option).
8. Power management system control cable (option).
9. Steam inlet R3/4" / R1" / R1 1/4" (option)
10. Condensate outlet R1/2" / R3/4" (option)
11. Compressed air inlet R1/2" max pressure 1,3 bar, minimi flow 30 l/min (option)
12. Twin water inlet R1/2"(option)

6.8.1. Ice bank connections (C3-option) C3i / C5i (PA)

The location of the connection points of an external icebank appears from the installation drawing.

Icebank in: R ¾" outer thread. Max. pressure 3 BAR, flow 90l/min. The icebank must be fitted with a solenoid valve to stop the flow of cooling water after cooling has ended.

Icebank out: R 1" outer thread.

6.8.2. Water connection and quality requirements

- The unit must be connected to the cold and warm water supply and, if fitted with a twin water connection option (T), also to the soft water supply.
- All water supply lines must be fitted with a one-way valve and a shut-off valve (not included in delivery).
- Before connection to the unit all water lines must be thoroughly rinsed from all loose particles.
- The water pressure range for optimum performance is 250 - 600 kPa.
- The minimum water pressure allowed for proper function of the unit is 250 kPa. If the pressure is lower, a pressure rise pump must be fitted by the customer.
- The minimum water flow rate in the kettles is 5 l/min. To ensure optimal operation of the unit, it is recommended cold water flow rate must be at least 20 l/min.
- All water connections are of size Ø15mm (R 1/2").
- The size of particles in the water must not exceed 15 µm
- Water conductivity should be below 1000µS/cm. Already when the conductivity is over 500µS/cm, a water analysis is recommended.
- Maximum chloride concentration allowed is 60 mg/l.
- Maximum chlorine concentration allowed is 0,2 mg/l.
- The pH value of the water should be between 6,5 and 9,5.

- The water hardness should be less than 6 ° dH. Water hardness must not exceed 9 ° dH. If the hardness of the water is between 6-9 ° dH, it increases the need for cleaning the steam generator and shortens the lifespan of heating resistors.
- Unit damages caused by chloride, chlorine or pH values exceeding the stated limits are not covered by manufacturer warranty.

6.8.3. Extreme water conditions

When extreme water conditions not fulfilling the requirements above exist, filters and water treatment devices should be installed in order to ensure proper function of the unit and avoid corrosion. When extreme water conditions are at hand, a water quality analysis must be carried out. Depending on the results of the analysis, needed filters and water treatment devices are installed by the customer. The most common filters and treatment equipment are:

1. Particle filter

A 5-15µm particle filter is recommended when water contains sand, iron particles or other suspended matters.

2. Active carbon filter

An active carbon filter must be used if the chlorine level exceeds 0,2 mg/l.

3. Reverse osmosis system

A reverse osmosis system must be used if the chloride concentration exceeds 60 mg/l. This is very crucial in order to avoid corrosion.

4. Water softener

If a high level of scale build-up is experienced, a water softener is needed. H+ Ion Exchanger or Kleen-steam are recommended systems. Sodium ion exchangers must not be used because of problems caused by high salt content. A water softener is recommended when the water hardness exceeds 6 ° dH. Water hardness must not exceed 9 ° dH.

The optional twin water connection should be used if the water quality does not meet the above requirements and a water treatment appliance is used. The twin water connection reduces the consumption of treated water because raw water can be used for cleaning purposes and for preparing the food.

NOTE!

Several water treatment equipment will lower the flow of water. If the kettle is connected to a water treatment unit, care must be taken to ensure sufficient flow after the water treatment unit. Particular attention is needed when using a twin water connection. The branching of the water must always be done before the water treatment unit.

6.8.4. Steam and condensate connections



The steam and condensate connections of the Proveno combi-kettle must be carried out by a person with professional competence in the field. Improper connections and piping may severely impact the correct function of the kettle.

The location of the steam and condensate connection points appears from the installation drawing.

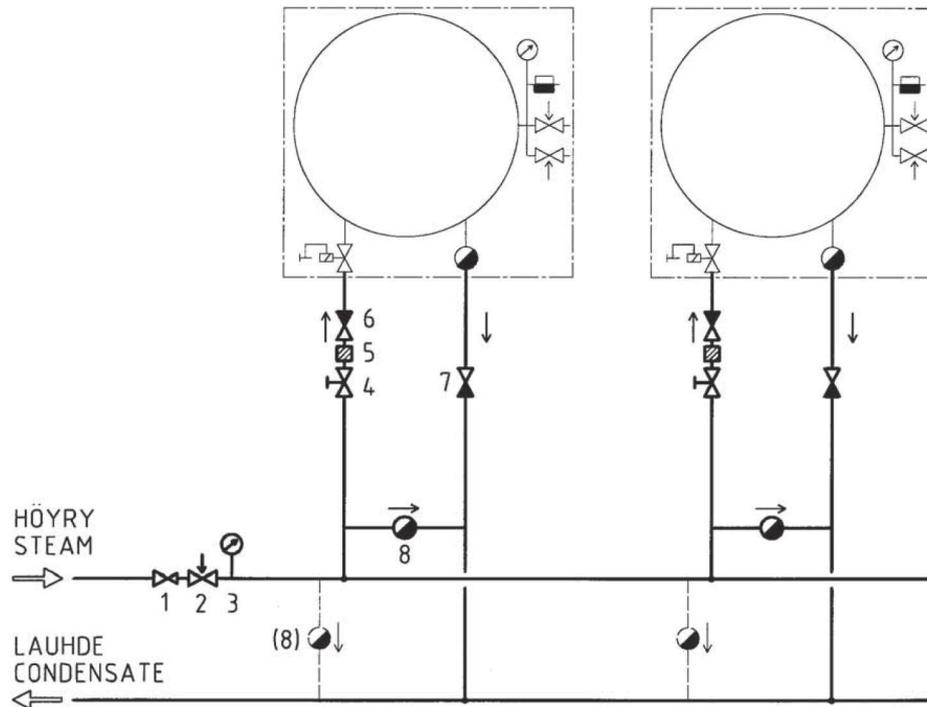
The maximum steam pressure in the kettle is 1 bar. The steam supply line must be fitted with a one-way valve, a shut-off valve, a filter, a pressure reduction valve and a safety valve set at 1,5 bar.

The condensate pipe must be on the same floor as the kettle or go to the floor below. Leading the condensate pipe to the floor above the kettle is not allowed, as it creates a water trap that prevents normal function of the kettle.

The condensate pipe must be free from pressure created by other appliances.

The temperature of the incoming steam must never exceed 130°C. If needed, the pressure has to be reduced far enough away from the kettle to ensure that the temperature does not exceed the permissible value.

Steam supply recommendations



1. Paineenalennusventtiili
2. Varoventtiili
3. Painemittari
4. Sulkuventtiili
5. Suodatin
6. Takaiskuventtiili (mikäli kyseessä on jäähdytyksellä varustettu laite)
7. Takaiskuventtiili (0 bar)
8. Lauhteenerotin

1. Pressure reduction valve
2. Safety valve
3. Manometer
4. Shut-off valve
5. Filter
6. Non-return valve (in case of a cooling equipped appliance)
7. Non-return valve (0 bar)
8. Condensate remover

6.9. Ventilation

The heat and steam load of the kettle must be taken into account in the kitchen's ventilation plan. A ventilation hood must be installed above the kettle, because plenty of steam is released when the kettle lid is opened. When dimensioning the ventilation hood, the space requirement for opening the lid must be taken into account (see installation drawing).

6.10. Other installations

In case the combi-kettle being installed is connected to a kitchen power management system the connection points are shown in the electric wiring diagram.

6.11. Procedures after installation

6.11.1. Adjusting the tilting

Before refitting the cover plates on the combi-kettle control panel, you have to check and, when needed, adjust the operation of tilting.

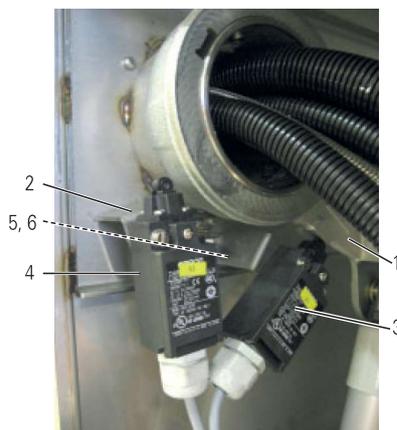
40 - 150 liter kettles

Next you have to ensure that the kettle is horizontal when it is in the cooking position. Before that make sure that the combi-kettle's control pillar has been installed horizontally. Checking is done as follows:

- First tilt the kettle at least half-way and after that press the tilting reverse button as long as the kettle stops in the cooking position.
- Check that the kettle is horizontal by the upper rim of the kettle.

If the kettle is not horizontal, the position of the mounting plate of the tilting limit switches must be adjusted as follows:

- Tilt the kettle at least half-way.
- Loosen the locking nut for adjustment (5) and the fixing nut for the limit switch plate (6) so that the limit switch plate (1) can be moved, but after moving stays in the new point.
- If the combi-kettle in its cooking position is tilted too much towards the spout, turn the limit switch plate (1) slightly downwards. In case the kettle in its cooking position is tilted too much backwards, turn the limit switch plate (1) slightly upwards.
- Tighten the locking nut (5) slightly after adjustment, press the tilting reverse button until the kettle tilting stops and check the kettle's horizontal again by the upper rim of the kettle.
- Tighten both the fixing nut (6) and the locking nut (5), if the combi-kettle is horizontal in its cooking position. Otherwise, repeat the adjustment measures.



1. Tilting lever
2. Mounting plate of limit switches
3. Limit switch for cooking position
4. Limit switch of tilting end position
5. Locking nut for adjustment

200 - 400 liter kettles

On hydraulically tilted Proveno 200, 300 and 400 combi-kettles the rotation direction of the hydraulic pump has to be checked according to chapter 6.7.

Next you have to ensure that the kettle is horizontal when it is in the cooking position. Before that make sure that the combi-kettle's control pillar has been installed horizontally. Checking is done as follows:

- First tilt the kettle at least half-way and after that press the tilting reverse button as long as the kettle stops in the cooking position.
- Check that the kettle is horizontal by the upper rim of the kettle.



If the kettle is not horizontal, the position of the mounting plate of the tilting limit switches must be adjusted as follows:

- Loosen the lock nut of the tilting cylinder (1)
- Loosen the limit switch of the cooking position (4).

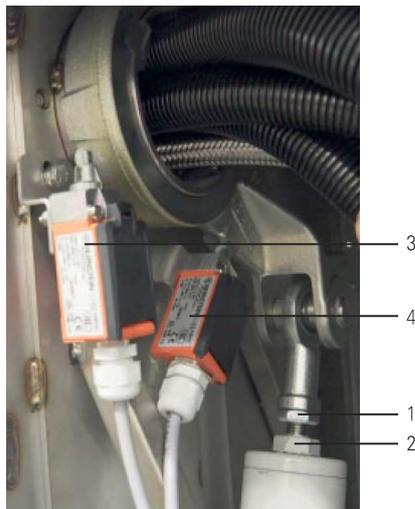


To lighten the adjustment, tilt the kettle slightly and place a block of wood under the rear edge of the outside of the kettle and return the kettle to the cooking position so that the block supports the back of the kettle.

- Adjust the tilting by turning the adjusting nut (2).
- Tilt the kettle, remove the wood block and return the kettle to the cooking position.
- Check that the kettle is in horizontal position.
- Repeat the adjustment if necessary.
- Finally tighten the lock nut (1), adjust the cooking position limit switch (4) and adjust the limit switch of tilting end position (3) if necessary.



Note. If the kettle is equipped with a retractable hand shower, make sure the tilt lever does not squeeze the hand shower hose housing when the kettle is tilted to the end position.



1. Adjustment lock nut
2. Tilting adjustment nut
3. Limit switch of tilting end position
4. Limit switch for cooking position

6.11.2. Fastening the mixer motor cover box

On the large kettle models (Proveno 150, 200, 300, 400), the cover box of the mixing motor comes unattached inside the kettle. The cover box is fastened after installation by using the screws supplied while the kettle is in a tilted position.

6.12. First run and testing

The following checks must be performed after the installation before taking the Proveno combi-kettle into regular use.

6.12.1. Filling the steam generator

The steam generator of the Proveno combi-kettle is empty of water on delivery. When the combi-kettle is started for the first time after installation, the steam generator is automatically filled. After first run, the combi-kettle automatically checks and maintains the correct water amount in the steam generator.

- First check that the closing valves coming to the kettle are in the ON position and the kettle's mains switch is in position 1.
- Switch the kettle on with the 0/1 button.
- Check that the kettle section is in the cooking position by pressing the tilting reverse button.
- Filling the steam generator of the combi-kettle can take several minutes, depending on the kettle size.

6.12.2. Safety valve test

Electrically heated kettle

Press  and select "Safety valve test"

- Start the test by pressing . The kettle starts heating up.
- When the kettle is warm  is shown. Hold the button pressed until the safety valve opens.



It is not allowed to stand behind the kettle during the safety block check, because, when the check is completed, the safety valve at the kettle's rear edge opens, blowing hot steam out of the kettle. The kettle must be clean and empty. The test causes a momentary strong hissing sound. Wear hearing protection



The kettle gives an alarm signal and interrupts the test if the safety valve does not open within acceptable limits. In this case, it is strictly prohibited to continue using at the kettle, and you should immediately contact a qualified Metos service to fix the error.

Steam heated kettle

Press  and select "Safety valve test"

- Open the safety valve by slowly by turning the knob in the direction of the arrow.
- When the steam is discharging (sound, pressure gauge reading reduces) allow the knob to return to the start position.



- Confirm the safety valve test is done by pressing .



It is not allowed to stand behind the kettle during the safety block check, because, when the check is completed, the safety valve at the kettle's rear edge opens, blowing hot steam out of the kettle. The kettle must be clean and empty. The test causes a momentary strong hissing sound. Wear hearing protection



If the test was not implemented as described it is strictly prohibited to continue using at the kettle, and you should immediately contact a qualified Metos service to fix the error.

6.12.3. Earth leakage circuit breaker test (option)

If the kettle is equipped with the optional socket in the back of the control panel the earth leakage circuit breaker have to be tested after the installation by pressing the test button.



Earth leakage circuit breaker test button

6.13. Adjustments, programming

The Proveno combi-kettle has been programmed in the factory with values suitable for the needs of professional kitchens. The combi-kettle is, however, provided with customer specific function parameters, which makes it possible to alter certain functions to better suit the specific needs of an individual customer or kitchen.

Should adjustments be needed, see "Adjustment instructions" for customer specific setting values.

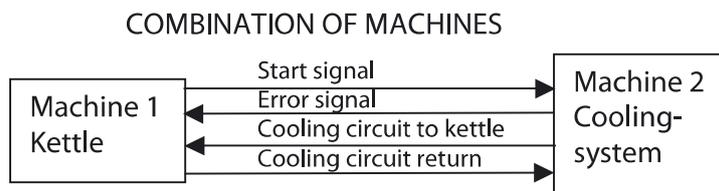
Parameter values for adjustment by authorized service personnel are given in a separate service manual.

6.14. Staff training

Before taking the Proveno combi-kettle into use, make sure that the operators have sufficient information about the correct and safe use of the kettle.

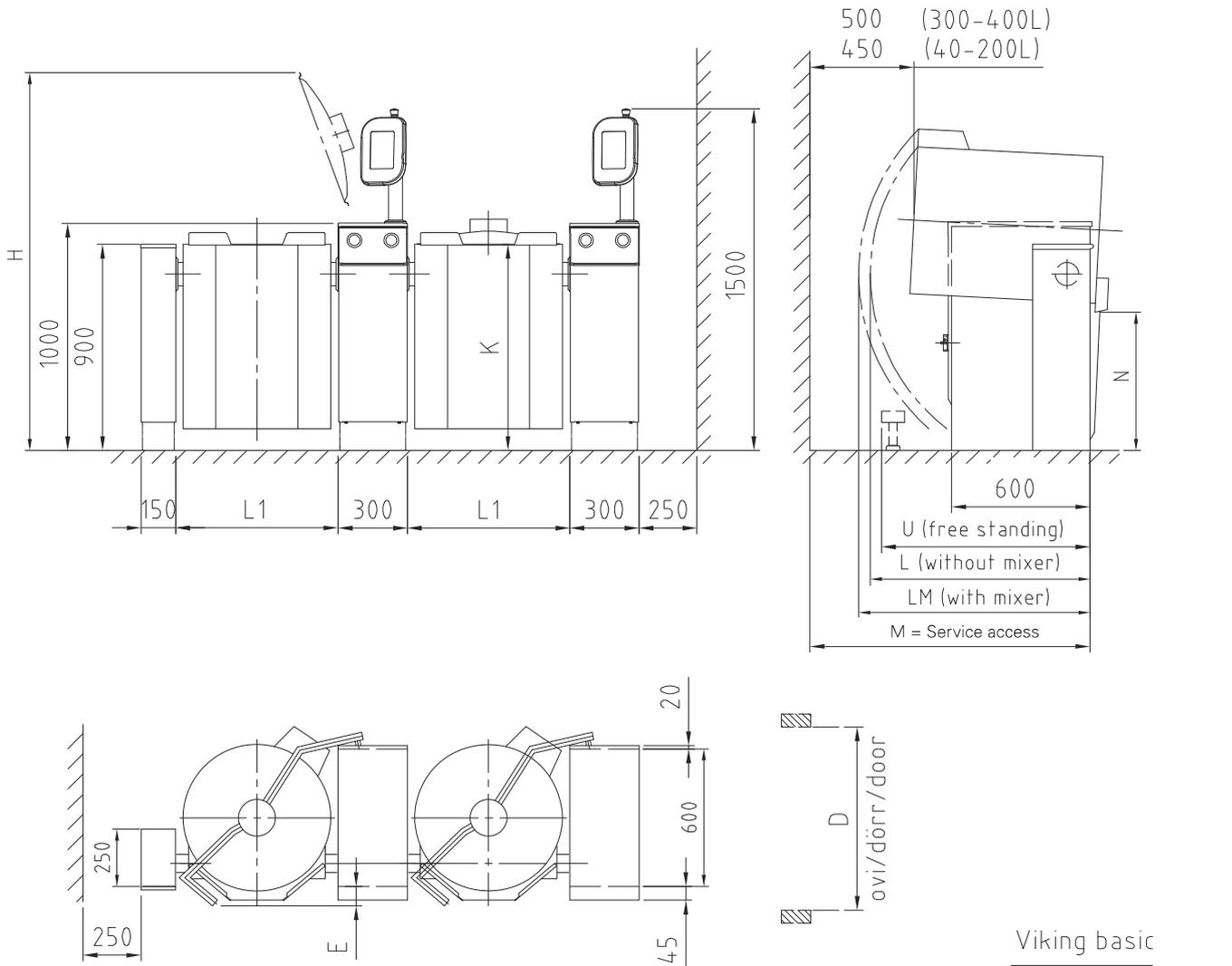
6.15. Combination of machines

When the kettle is connected to a closed loop cooling system, a combination of machines as specified in the machinery directive is created for which, at commissioning, a signed declaration of conformity must be provided covering the combination of machines.



7. Technical specifications

7.1. Dimensions



	L1	H	K	L	LM	M	M1	E	D	N	V	S	T	U	KG	KG	KG
40E	594	1740	900	660	870	1055	1049	100	800	600	608	800	400	860	155	195	200
60E	594	1740	900	755	955	1180	1174	100	800	600	608	800	400	860	165	205	210
80E	704	1745	900	860	1010	1235	1229	85	800	600	718	800	500	890	185	225	230
100E	704	1745	900	860	1010	1235	1229	85	800	600	718	800	500	890	210	260	265
150E	910	1945	900	960	1075	1170	1164	110	1000	600	924	800	600	1110	250	300	305
200E	910	1945	900	1035	1155	1285	1279	110	1000	600	924	800	600	1110	290	340	345
300E	1110	2110	900	1280	1280	1320	1314	150	1200	600	1124	1000	600	1010	350	410	415
400E	1110	2080	1050	1280	1280	1320	1314	150	1200	600	1124	1200	600	1010	410	470	475

The minimum free distance to any structure behind the kettle needed for tilting of the kettle is dimension L depending on model. However service access to the components under the kettle bowl requires the bigger dimension M.

National and local regulations must be observed when installing the combi kettle.

7.3. Steam connection

Model	Inlet		Condensate outlet
40S	R3/4"	12 kg/h	R1/2"
60S	R3/4"	18 kg/h	R1/2"
80S	R3/4"	24 kg/h	R1/2"
100S	R1"	30 kg/h	R3/4"
150S	R1"	45 kg/h	R3/4"
200S	R1 1/4"	60 kg/h	R3/4"
300S	R1 1/4"	90 kg/h	R3/4"
400S	R1 1/4"	115 kg/h	R3/4"

7.4. Water connection

Cold water connection R1/2" (ø15). Must be fitted with a one way valve and shut off valve.

Hot water connection R1/2" (ø15). Must be fitted with a one way valve and shut off valve. (option)

7.5. Icebank connections (option)

Ice bank cooling inlet R3/4". Max. pressure 3 BAR, flow 90l/min. (option)

Ice bank cooling outlet R1". (option)

7.6. Electrical connections

Electrically heated kettles

3/N/PE AC 400/230V 50 Hz					
Type Proveno	Power/kW	Current/A	Fuse/A	Supply cable diameter	
				min / mm	max / mm
40E	12.5	24	25	22	32
60E	18.0	32	32	22	32
80E	22.0	38	40	22	32
100E	22.0	38	40	22	32
150E	27.6	50	50	22	32
150EH	35.6	62	63	22	32
200E	35.6	62	63	22	32
200EH	46.5	72	80	34	44
300E	47.6	79	80	34	44
300EH	60.8	91	100	34	44
400E	62.0	97	100	34	44

Steam heated kettles

2/PE AC230V 50-60Hz, 1/N/PE AC 230V 50Hz					
Type Proveno	Power/kW	Current/A	Fuse/A	Supply cable diameter	
				min / mm	max / mm
40S	2,3	10	10	13	18
60S	2,3	10	10	13	18
80S	2,3	10	10	13	18
100S	2,3	10	10	13	18
150S	3,9	17	20	13	18

3NPE AC 400/230V 50Hz					
Type Proveno	Power/kW	Current/A	Fuse/A	Supply cable diameter	
				min / mm	max / mm
200S	5,0	18	20	13	18
300S	5,0	18	20	13	18
400S	6,2	23,2	25	13	18

The values of the special voltages differ from the standard voltage values.

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Country FI	Department	Document title Installation/commissioning checklist for Metos kettles	Approved by	Security level Confidential	

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Installation/commissioning checklist for Metos kettles

To validate warranty enclosed checklist is to be completed and returned within 14 days from installation/commissioning. This document is to be completed individually for each Metos kettle installation. Please send a copy or photos of this document (DOC000650, 4 pages) to email address: commissioning@metos.com

Customer information: *) Mandatory to fill in.

*Name:	
*Company:	
*Street:	
*ZIP code:	
*Country:	
Phone no.:	
*Email:	

*Kettle type:	
*Kettle serial no.:	
*Kettle options:	
*Commissioned by:	
*Commissioner's address: ...	
*Commissioner's email:	
Commissioner's phone no.: ..	
*Installation date:	DD – MM – YYYY

Installation meets the manufacturer's installation instructions: yes no

If the installation does not comply installation instruction values, customer and Metos have to be notified immediately about possible deviations.

We confirm the installation was done according to the attached installation checklist, the installation instructions and all national and local standards which ever may apply. The equipment was handed over free of defects. Operation and maintenance of the equipment was explained.

Sign/Date
Commissioner

Sign/Date
Customer

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metos		Document type Review	Document ID DOC000650	Revision A	Page(s) 2(4)
Owner organization Metos Manufacturing		Created by	Date 2019-08-19	Status Ready	
Country FI	Department	Document title Installation/commissioning checklist for Metos kettles	Approved by	Security level Confidential	

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1. Physical installation:

Installation type: surface installation frame
 subsurface installation frame
 free standing

Free standing installation flanges: yes no
 Floor fixing bolts (min. 150mm and stainless steel) in surface standard chemical
 installation:
 Single or group installation: single group
 Installation frames filled with acrylic filling: yes no

2. Important perimeter clearances of all kettles:

	measurement:	
Support pillar (left) height:	[mm]	(900mm)
Control pillar (right) height:	[mm]	(992mm)
From support/control pillar without front plate to back wall/obstacle:	[mm]	(Dim. M, see installation manual)
Width from pillar to pillar:	[mm]	(L1 single/L2 group, see installation manual)

Height for lid opening OK: yes no

3. Levelling & tilting bearings

Free standing installation is made according to installation manual: yes no N/A
 Pillars and kettle are aligned vertically/horizontally: yes no
 Tilting bearing locks are checked: yes no

4. Electric connections

Measured voltages [V]:	L1-L2	L1-L3	L2-L3	L1-N	L2-N	L3-N	N-PE
.....							

Breaker size/fuse rating [A]:

Measured amps per phase [A]: L1 L2 L3
 (Full heating, no mixing)

Kettle connected to equipotential bonding: yes no
 Indicated voltage on the rating plate corresponds with measured yes no
 voltage:

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metos		Document type Review	Document ID DOC000650	Revision A	Page(s) 3(4)
Owner organization Metos Manufacturing		Created by	Date 2019-08-19	Status Ready	
Country FI	Department	Document title Installation/commissioning checklist for Metos kettles	Approved by	Security level Confidential	

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5. Water connections

Cold/hot water supply equipped with non-return and shut-off valves: yes no

Cold-water dynamic pressure min. 250 kPa – max. 600 kPa;

measured value: [kPa]

Max. chloride (CL⁻) < 60mg/l (if higher → deionization treatment): yes no

Max. chlorine (CL₂) < 0,2mg/l (if higher → carbon filter treatment): yes no

Ph between 6,5 – 9,5: yes no

Conductivity < 1000µS/cm: yes no

Water treatment system used: yes no

If yes, manufacturer/type:

Water total hardness calculated from calcium (lime) and magnesium rate.

Too low total hardness rate can cause corrosion < 0,5 d° if chloride rate is high.

6. External cooling systems

Kettle connected with external cooling system (ice-bank etc.): yes no

If yes, installation company:

If yes, kettle manometer value when cooling: [bar] (max. 1,3bar)

Kettle equipped with pressurized air emptying: yes no

If yes, kettle manometer value when emptying: [bar] (max. 1,3bar)

Measured cooling water flow: [l/min]

7. Procedures after installation

Rotation direction of hydraulic tilting pump motor (counterclockwise): yes no N/A

Kettle up/down end limit switches working (kettle empties) and adjusted: .. yes no N/A

Mixer rotating direction checked (clockwise): yes no N/A

Lid and safety grid switches OK: yes no

Date and time (option) set and checked: yes no N/A

Safety valve test executed (electric heated → panel/direct steam → valve): yes no

8. Function test/commissioning:

All electrical connections and plugs are tight: yes no

All water connections tight and no leakages: yes no

All steam connections tight and no leakages (direct steam kettles): yes no

Cooling media circulation tight and no leakages (if closed circuit): yes no

All standard functions operational: yes no

All additional functions/features operational (HACCP, cooling etc.): yes no

Customer advised in daily cleaning routine: yes no

User/customer advised in preventative maintenance yes no

(safety valve test executed 4 times/year etc.):

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9. Direct steam kettles:

Steam pressure regulator valve; set pressure: (max. 1bar)

Steam pressure regulator valve; distance from kettle: (min. 15m) *)

*) If not pilot guided valve, min. 10m.

Steam trap (condensation remover) before kettle; (max. 2m) **)

distance:

Steam line installed according to installation manual: yes no

Steam line safety valve set pressure: (max. 1,3bar)

Steam line safety valve after regulator valve: yes no

Steam line particle filter: yes no

Non-return valve steam line installed if cooling: yes no **)

Steam line insulated: yes no

Free flow in condensation line: yes no **)

Condensation line going downwards, min. 3°: yes no **)

Non-return valve condensation line installed: yes no **)

**) If no, contact factory.

Comments:

Revision history

Revision	Page (P) Chapter (C)	Description	Date	Name/ Department
A	-	Original version	2019-08-19	

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Return to your dealer.

Registration form for units "Dead on Arrival" (DoA)		
Reported by subsidiary:		Reported by (Name):
Equipment type and serial no:	Installation date:	Date when fault occurred:
Customer's address:	Service company contacts / technician who reported the fault:	
Fault description:		
Measured supply voltages: L1: L2: L3:		
Fault remedy (if repaired) + service parts used/exchanged:		
<u>Please return following material/data in any case as soon as possible:</u>		
Service parts that are exchanged with parcel service:		Tracking number:
<ul style="list-style-type: none">- Service data- HACCP data- Log file- Pictures		
Address for parts: Metos Oy Ab Ahjonkaarre FI-04220 Kerava FINLAND		

Valmistajan nimi / Tillverkarens namn / Manufacturer's name

METOS OY AB

Osoite / Adress / Address

04220 KERAVA
FINLAND

Vakuuttaa, että seuraava tuote / Försäkrar att följande produkt / Declare that the following product

Nimi, tyyppi tai malli / Namn, typ eller modell / Name, type or model

Patasarjat / Grytsserierna / Kettle series **METOS PROVENO 4G / METOS VIKING 4G** sähkö- tai hörylämmiteinen / el- eller ånguppvärmd / electrically or steam heated.
Mallit / Modeller / Models : 40, 60, 80, 100, 150, 200, 300, 400 / E, S / H / M
Varustepaketit / Optionspaket / Option sets: T, C1, C2, C3i, C5i, PA, S1, S2, S3, D1, D2, HA, DO, W, FP, JF, PS, HG, TD

on seuraavien direktiivien asiaankuuluvien säännösten mukainen / överensstämmer med tillämpliga bestämmelser i följande direktiv / is in conformity with the relevant provisions of the following directives

MD 2006/42/EC, LVD 2014/35/EU, EMC 2014/30/EU, RoHS 2011/65/EC, WEEE 2012/19/EU, PED 2014/68/EU, moduulit / modelerna / modules B + D

- SEP: 40 – 60 höry/ånga/steam
- Cat I: 40 – 60 sähkö/el/electric, 80 – 400 höry/ånga/steam
- Cat II: 80 – 400 sähkö/el/electric

HUOM: PED 2014/68/EU:n mukaisesti vaatimustenmukaisuusvakuutus ja CE-merkintä ei koske SEP luokiteltuja laitteita.

OBS: Enligt PED 2014/68/EU försäkran om överensstämmelse och CE-märkningen ej produkter i SEP kategorin.

ATT: According to PED 2014/68/EU the declaration of conformity and the CE-marking does not apply to SEP category products.

ja lisäksi vakuuttaa, että seuraavia yhdenmukaistettuja standardeja (tai niiden osia/kohtia) on sovellettu / och försäkrar dessutom att följande harmoniserade standarder (eller delar/paragrafer) har använts / and furthermore declares that the following harmonised standards (or parts/clauses) have been used

EN ISO 12100:2010, EN ISO 13857:2008, EN 61000-6-1:2005, EN 61000-6-3:2007
EN 60204-1:2006, EN 13445:1...5:2014

ja lisäksi vakuuttaa, että seuraavia muita standardeja (tai niiden osia/kohtia) on sovellettu / och försäkrar dessutom att följande andra standarder (eller delar/paragrafer) har använts / and furthermore we declare that the following other standards (or parts/clauses) have been used

EN 13886:2005+A1:2010, EN 1717:2001

Tuotteen suunnitelmatarkastustodistus ja laatu järjestelmää valvova ilmoitettu laitos (vain painelaitteet)
Produktens konstruktionskontrollcertifikat och anmält organ, som övervakar kvalitetssystemet (endast tryckkärl)
Product design examination certificate and the notified body supervising the quality system (only pressure vessels)

Quality system
Inspecta Tarkastus Oy, Helsinki, Finland
0424

DA-617-17-102669 Ad.2 (4E, 4S, 6E, 6S),
DA-617-17-102744 Ad.2 (8E, 8S, 10E, 10S),
DA-617-17-102745 Ad.2 (15E, 15S, 20E, 20S),
DA-617-17-102746 Ad.2 (30E, 30S, 40E, 40S)
DEKRA Industrial Oy, Vantaa, Finland 0875

Alla mainittu henkilö on valtuutettu kokoamaan teknisen tiedoston / Nedan nämada person är bemyndigad att sammanställa den tekniska dokumentfilen / The person mentioned below is authorized to compile the technical file

Risto Koskelainen

Metos Oy Ab, Ahjonkaarre, 04220 Kerava, Finland

Tämä vaatimustenmukaisuusvakuutus on annettu valmistajan yksinomaisella vastuulla. Edellä kuvattu vakuutuksen kohde on unionin asiaankuuluvan yhdenmukaistamislainsäädännön vaatimusten mukainen.

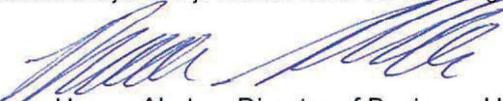
Denna EU-försäkran om överensstämmelse utfärdas på tillverkarens eget ansvar. Föremålet för försäkran ovan överensstämmer med den relevanta unionslagstiftningen om harmonisering.

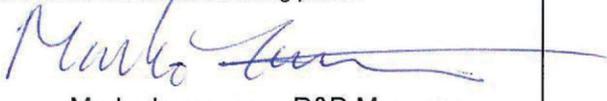
This declaration of conformity is issued under the sole responsibility of the manufacturer. The object of the declaration described above is in conformity with the relevant Union harmonisation legislation

Antopaikka ja päivä / Utfärdad på ort och datum / Place and date of issue

KERAVA 29.10.2019

Vakuutuksen antajan nimi ja asema / Namn och befattning av personen som försäkrar / Name and title of declaring person


Hannu Ahola – Director of Business Unit


Marko Immonen – R&D Manager



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