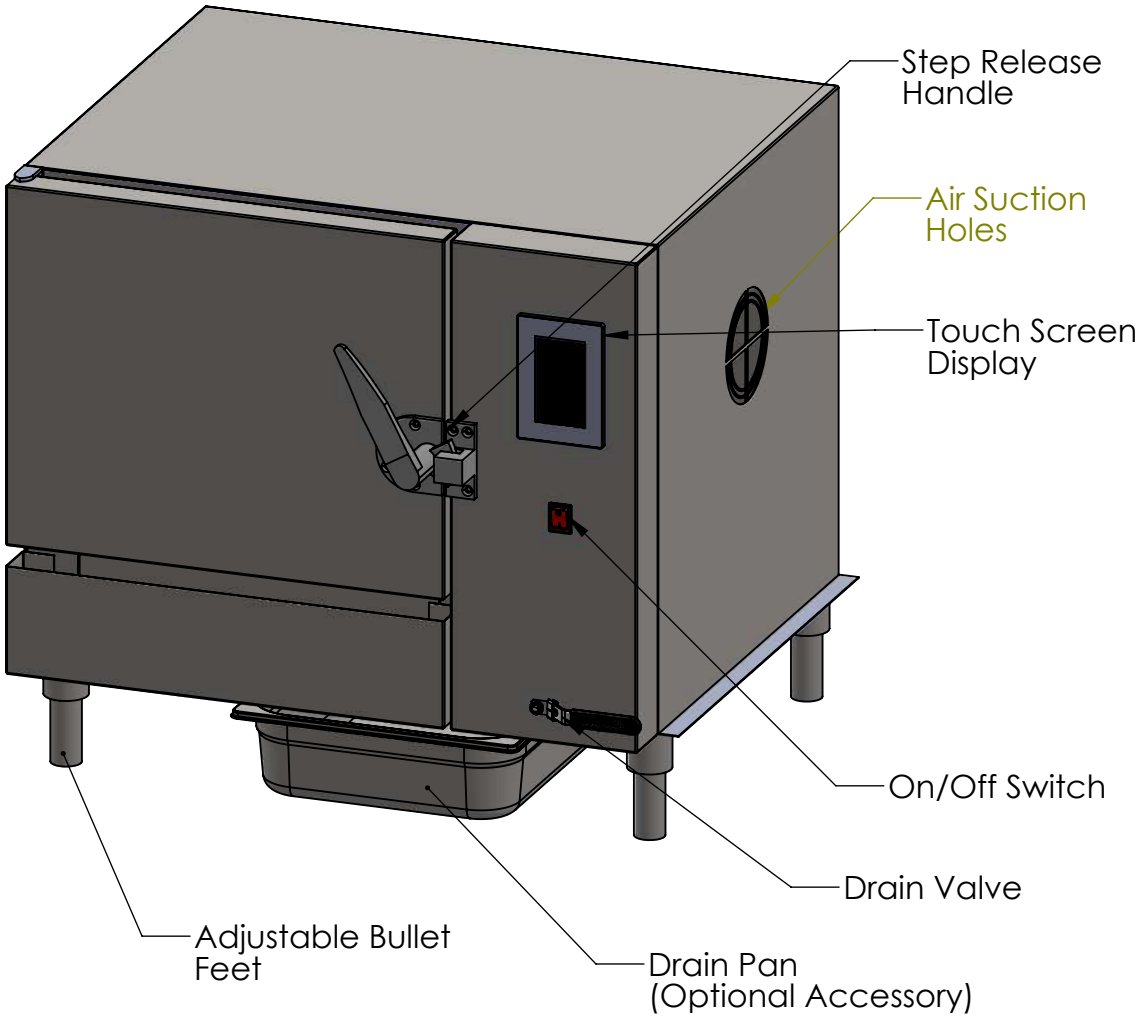
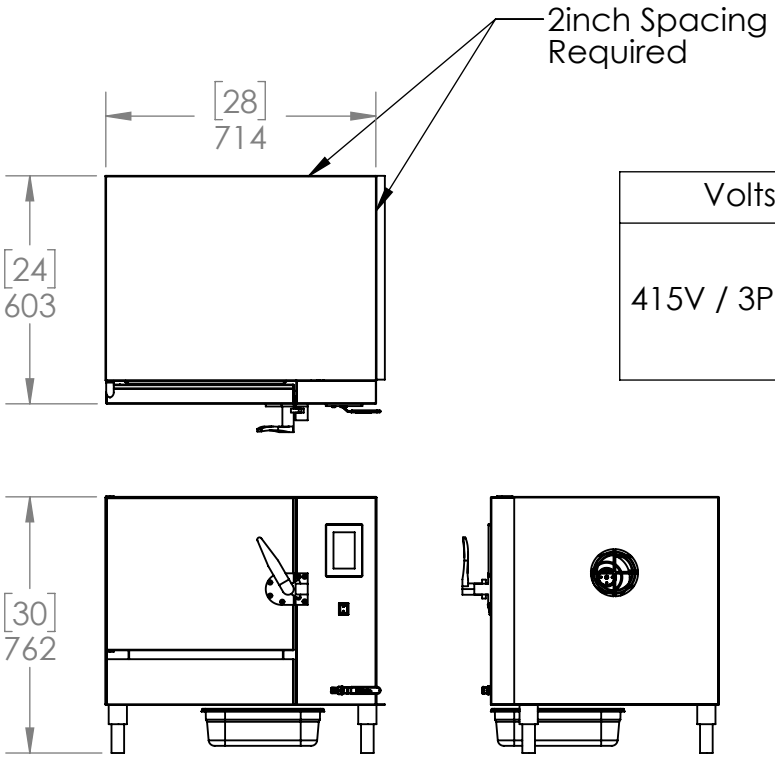




Volts	Watts	Amps
415V / 3Phase	4.25kW	10amps per phase

DO NOT SCALE DRAWING | REVISION

SUNRISE KITCHENS

TITLE:

Cook & Hold Steamer

DWG NO. v2N - 3 Pan

A4

SCALE:1:20 | SHEET 1 OF 1

Purpose

- This screen appears immediately after power-on and confirms that the steamer is performing automatic self-diagnostics before entering normal operation.

Prerequisites

- Fill the steamer with filtered water up to the internal MAX level mark before applying power.
- Verify electrical supply: 3-phase 415 V AC;

Phase Supply	Wire & Cable	Colour codes
3 Phase	Line 1	
	Line 2	
	Line 3	
	Neutral	
Ground / Earth		

Power-on steps

1. Ensure door is closed and water has filled up-to the MAX mark;
2. Turn on the mains power; the startup screen displays “Performing Self Diagnostics” with a progress bar.
3. Wait for completion; if all checks pass, the controller proceeds automatically to the preheating page without user input.

What the self-diagnostics checks

- Controller and display integrity, internal temperature/pressure sensors, water level/probe signals, fill valve/boiler relay outputs and fan motor

If a fault is detected

- The system redirects to the error page with a clear message and an error code; heating and steam generation remain inhibited until the fault is cleared for safety.

Warnings and cautions

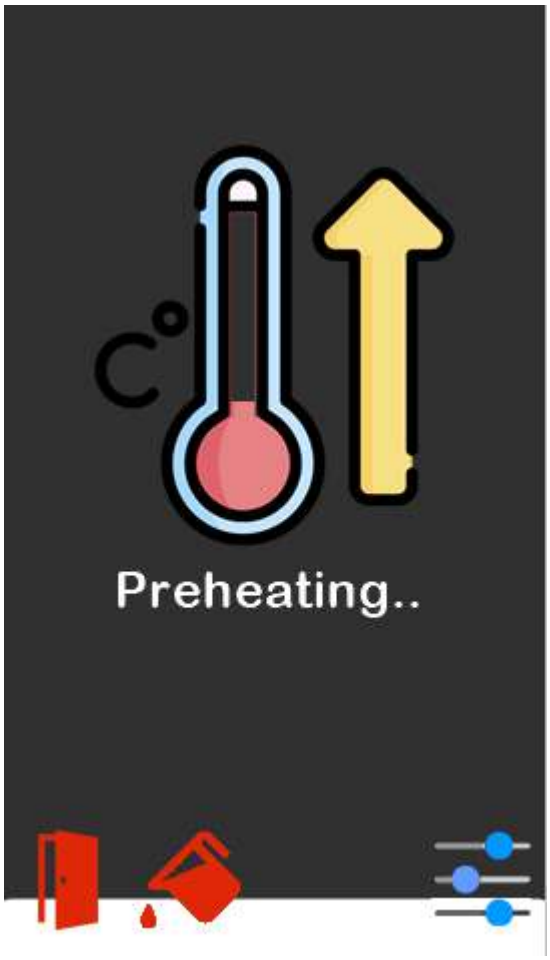
- Danger: Incorrect 3-phase wiring can cause electric shock, equipment damage, or reversed rotation on pumps; connections must be completed by a qualified electrician and verified with a polarity/earth test before first start.
- Caution: Operating without water above float level mark can trigger dry-heat protection and void warranty; always fill before powering on.

Notes and tips

- Typical self-test duration is brief; longer durations indicate the connection between display and PCB

Next section

- After the diagnostics is complete, the water heating starts the display shows a preheating sign as shown below



What happens during preheat

- The controller ramps heaters to reach the set temperature.
- Typical preheat time is about 20 minutes, but actual duration varies with load, ambient conditions, and setpoints; the display remains on this screen until readiness is achieved.

Door interlock behaviour

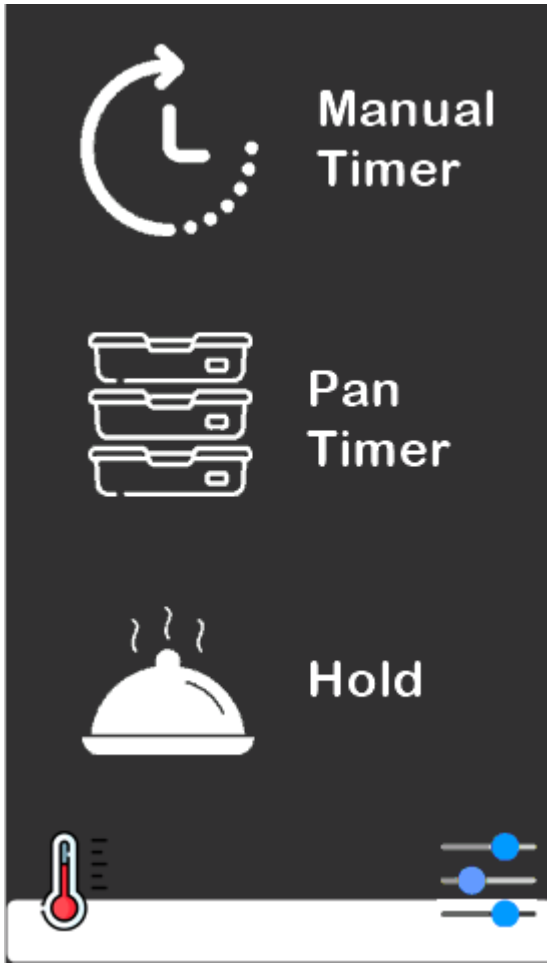
- If the door is opened during preheat, heating pauses immediately to prevent steam escape and energy waste; the status remains in preheat until the door is closed and conditions are safe.
- If the door stays open longer than the configured timeout, an audible and visual alarm is triggered and continues until the door is closed or the condition is acknowledged per site policy.

Water level monitoring

- The controller continuously checks the level probes; if water is below the minimum threshold, a Low Water indicator appears.
- Please do not wait for low water indicator to come on, periodically check water level and add when necessary

Settings linkage

- Preheat targets, door-open timeout, alarm volume, and inhibit behaviour are adjustable under Settings by authorized roles; changes apply to subsequent cycles and should match kitchen SOPs.



Purpose

- This screen appears after preheat completes and provides access to Manual Cook, Pan Timer, and Hold functions for day-to-day operation.

Navigation

- Tap the desired tile to open its workflow; use the triple-line menu to access Settings for units, limits, roles, and alarms configuration as authorized.
- Door and interlock behaviours remain active as described earlier: opening the door pauses heating and may alarm if left open beyond the configured timeout.

Manual Cook

- Use this mode for on-demand cooking with either pressurized steam or temperature-target control as set in Settings or per on-screen fields.
- Refer next slide for further details

Pan Timer

- Provides up to six independent timers to manage multiple pans or products in parallel, each with its own cook and hold sequence per end-user requirement.
- Refer pan timers slide for further details

Hold function

- Maintains cooked items at safe serving conditions using controlled steam humidity and temperature for quality and food safety after separate cooking steps.
- Refer Hold slide for further details

Status indicators

- A thermometer icon indicates current temperature, if the current temperature has reached the set temperature the icon turns green.
- If the current temperature is below the set temperature the icon turns red.

Tips

- Favor frequently used setups by saving defaults in Settings so Manual Cook and Hold open with preferred targets, reducing steps during rush periods.
- Train operators to acknowledge individual Pan Timer alerts promptly to prevent over-holding or extended door-open alarms during loading and unloading.

Purpose

- This screen lets operators choose between Pressure Cook and Low Temperature Cook, then set a cook time and start the cycle after preheat is complete.

Mode selection

- Tap Pressure Cook for high-moisture, rapid steaming suitable for items such as idlis, momos, rice, and biryani were pressurized steam transfers heat efficiently and evenly.
- Tap Low Temp Cook for delicate foods like seafood and cakes where gentler temperature-based control preserves texture and prevents overcooking;

Setting parameters

- Use the time selectors to enter Hours and Minutes, then press Start; in Low Temp mode, set the target temperature shown at the top before starting.
- Parameter ranges follow the configured process limits for your site; if a value is out of bounds, adjust within the allowed range in Settings or contact a supervisor with permission.

Door-open compensation

- Opening the door during cooking pauses heating and automatically adds time to the remaining cook time to compensate for steam and heat loss, ensuring consistent doneness across batches.
- The added time value is adjustable in Settings by authorized roles, allowing chefs to tune recovery based on product and load size.

Interlocks and safety

- Heating is inhibited if the door is open; close the door to resume the cycle safely.

Tips

- Save commonly used targets as defaults in Settings so Pressure Cook and Low Temp Cook open with kitchen-preferred presets, reducing setup time during service.
- For mixed batches, consider using Pan Timers from the main menu so each product can signal done independently while the chamber continues running.

Purpose

- This screen provides up to six independent pan timers, each tracking a product's Cook Time and Hold Time so multiple trays can be managed concurrently in one chamber.

How it works

- Each row represents one pan with an on/off toggle, a countdown Cook Time field in minutes, and a Hold Time counter in hours:minutes that starts automatically when that pan's cook completes.
- All door, water-level, and alarm interlocks from the cook and hold modes apply here; if the door is opened, affected pans pause along with chamber heating until conditions are restored.

Operating steps

1. This slide comes with an exclusive settings page, that allows user to define planogram with tray wise product name with its cook and hold times.
2. For each pan to be used, toggle the row on when the product is inserted, and off when its finished or discarded.
3. Each toggle proceeds with pressure cook as per the settings, followed by hold mode.
4. Acknowledge a pan alert, unload or rotate product, or let it continue in Hold according to kitchen SOPs; use the home button to return to the main menu when finished.

Tips and notes

- Stagger start times to sequence finishes during peak service and reduce door openings, which shortens recovery and saves energy.
- Configure default Cook Times, discard limits, and alert volumes in Settings so common products are one-touch ready for staff and timing errors are minimized.
- Door-open and water-level interlocks remain in force during Pan Timer operation; frequent door openings increase recovery time, so plan loading to minimize energy loss.

Purpose

- This screen tracks how long a cooked product has been in the Hold state and regulates chamber conditions to maintain food quality and safety until service.

Displayed fields

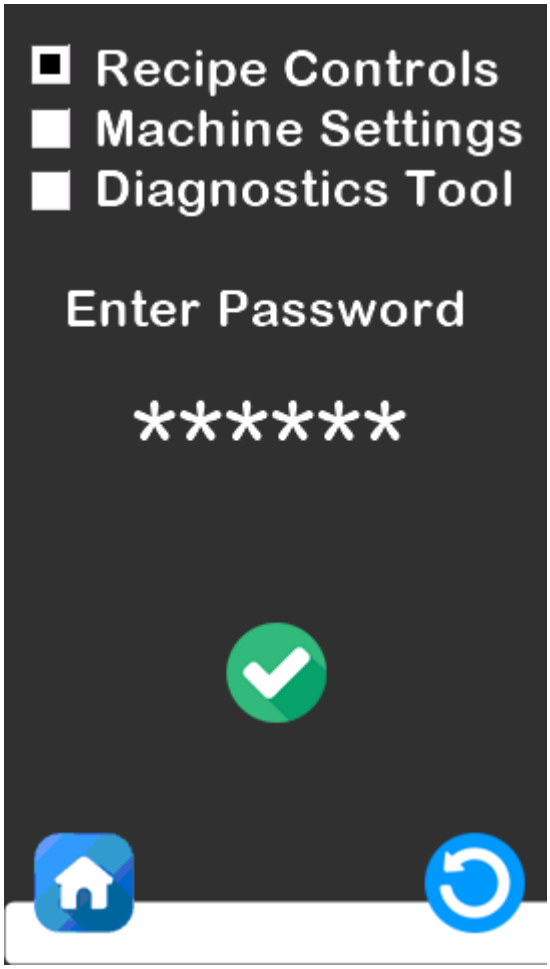
- Elapsed Hold Time shows a running counter from the moment Hold is started so staff can coordinate service and rotation of pans or trays.
- Discard Time is the maximum allowable hold duration; when reached, the controller alerts the operator that the product should be discarded or reworked per kitchen SOPs.

Settings linkage

- Discard Time, default hold temperature behaviour, and alarm volume are adjustable in Settings by authorized roles so each kitchen can align with its HACCP or SOP standards.
- If policy changes, update the Discard Time and defaults once; subsequent Hold sessions inherit the new values automatically to reduce operator input errors.

Warnings and notes

- Caution: Opening the door frequently increases heat loss and may lengthen recovery time; minimize door-open duration to maintain consistent holding conditions and energy efficiency.
- Please do not wait for low water indicator to come on, periodically check water level and add when necessary



Purpose

- This screen gates access to configuration areas using role-based passwords so operators, supervisors, and technicians only see tools appropriate to their responsibilities.

Profiles and scope

- Recipe Controls: For chefs/operators to manage programs, presets, and day-to-day parameters that do not alter machine safety limits or wiring-dependent behaviors.
- Machine Settings: For technical staff to configure units, limits, interlocks, default targets, timers, alarms, and network options that influence how the steamer operates.
- Diagnostics Tool: For maintenance technicians to view sensors, run I/O tests, review logs, and perform non-cooking verifications without changing recipes unless explicitly permitted.

Passwords

- Default passwords are 1111 for Recipe Controls, 2222 for Machine Settings, and 3333 for Diagnostics Tool; use these at commissioning and change them during handover to site staff.
- A Master password grants access to all sections and can reset individual role passwords; the Master value is fixed and cannot be changed for audit traceability and recovery control.
- Use the checkmark button at the bottom to confirm new passwords after entry; failed attempts display “Incorrect Password!” and deny access to protect configuration integrity.

Best-practice guidance

- Assign role passwords to responsible personnel only and store them per your kitchen SOP; rotate non-master passwords when staff changes to maintain security.
- Avoid sharing the Master password operationally; reserve it for authorized service or ownership to prevent unsafe changes to process limits and diagnostics settings.

Purpose

- This screen lets supervisors define a tray-wise planogram so operators can run consistent cook and hold cycles for recurring products with minimal setup during service.

Configuration fields

- Number of Timers defines how many tray rows are active on the Pan Timer screen, up to six depending on site needs and chamber capacity.
- For each Pan row, set Cook Time in minutes and Discard Time in hours to establish product-specific timing and food safety limits that will auto-apply during operation.
- Use the Veg/Non-Veg toggle per row to label products for segregation; this helps kitchens maintain SOP compliance and avoid cross-contamination during busy service.

Workflow

1. Enter this page from Settings with appropriate role access, then define active rows, Veg/Non-Veg flags, and each product's Cook Time and Discard Time according to your menu and SOPs.
2. Press the confirm/check button to save; these values persist in controller memory and become the defaults used by the Pan Timer runtime screen for day-to-day operations.
3. Update the planogram when menus change or when audits require revised hold limits; saved changes apply to future sessions and reduce operator data entry errors.

Notes and cautions

- Ensure Discard Times reflect your HACCP guidelines so the Hold counter alerts before quality or safety thresholds are exceeded for each product type.

Purpose

- This screen configures key operating limits and behaviors that govern preheat, cooking, holding, alarms, and user feedback for the steamer controller.

Parameters

- Pre-heat Temp: Target temperature used on the Preheat screen before allowing cook or hold transitions; set this per menu and energy goals to shorten ramp time during service. The machine tries to maintains this temperature during its operations.
- Holding Temp: Default chamber target during Hold for safe hot holding; align with kitchen SOP/HACCP and product quality needs.
- Pressure Cutoff: Maximum pressure at which heaters cut out in Pressure Cook mode to protect the vessel and maintain repeatability; do not exceed rated limits.
- Pressure Range: Full-scale range of the installed pressure sensor so the controller scales readings correctly; match this to the hardware label.
- Temp. Offset: Calibration trim applied to the temperature reading; in this setup a value of 10 equals zero correction, while a setting of 5 applies a −5 °C offset to compensate a sensor reading high by 5 °C.
- Door Alarm: Time threshold for a continuously open door before sounding the buzzer; used to reduce energy loss and preserve chamber conditions.
- Hold Time: Default maximum hold duration; reaching these triggers discard guidance on the Hold screen to meet food-safety standards.
- Door Comp.: Added time applied to the active cook when the door is opened, default 3 minutes unless changed; this compensates for steam and heat loss so doneness remains consistent.
- Buzzer Tone: Selectable alert tone profile so kitchens can distinguish alarms in noisy environments and comply with site preferences.

Operating guidance

- Only personnel with Machine Settings access should modify these values; changes affect all subsequent cycles and can enable or inhibit programs depending on limits.
- After adjustment, confirm with the checkmark to save; verify behavior on the next preheat or cook to ensure sensors and interlocks respond as intended.