

STEAMIST

Specification, Installation and operational Manual

SMS-RANGE

For further assistance please contact technical@steamist.co.uk or alternatively call 02380583999

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Specification and Summary

Features

- Limited 5 year warranty
- Stainless Steel Tank Construction
- Intelligent Control Communication
- Auto Drain
- Safety Overheat Protection
- Can Link Two Generators Together

Box components

Generator, SMS Control, Steamhead, lever valve, light cable.

NOTE: Cable not included for joining two generators. (Grey cable on generator)



Product Number	Kw Rating	Max. Adj. Cu. M. Range*	Volts/Phase/Max. Amps	Dimensions L x W x H
SMS-4.5	4.5kW	3.5m ³	220-240v / 1/ 20.5A	372 x 162 x 333mm
SMS-6	6Kw	5.8m ³	220-240v / 1/ 27.3A	372 x 200 x 333mm
SMS-9	9kW	10.3m ³	220-240v / 1/ 41A	372 x 200 x 333mm

*Refer to sizing guidelines to accurately determine the proper size generator for the installation.

Required Electrical Service

Dedicated circuit required. See specification chart for proper electrical requirements

Product Information

Water Supply – ½” BSP male thread

Steam Outlet – 4.5kw ½” BSP male thread

6kW and above ¾” BSP male thread

Drain Outlet – ½” BSP male thread

Clean Outlet – ½” BSP male thread

Generator Weight

4.5kW – 11.4kg 9kW – 12.9kg

6kW 12.2kg

Installation Notes

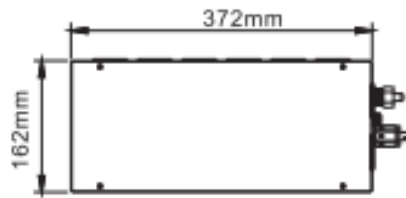
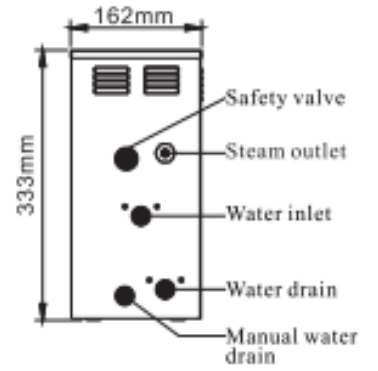
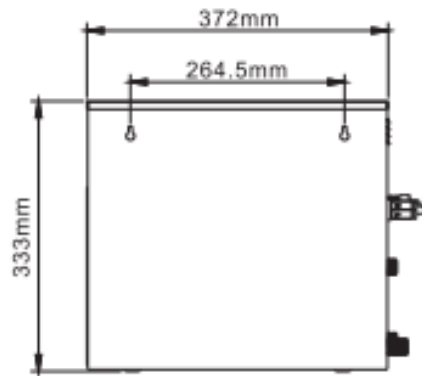
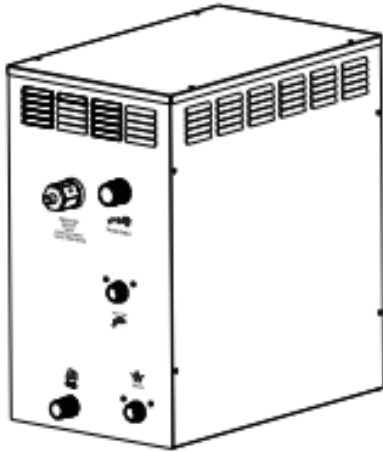
For optimum performance, the steam generator should be mounted as close as possible to the steam room. Generator to control distance is 6m (Extension Cable available upon request)

Do NOT install inside the steam room or near flammable materials such as paints, thinners, gasoline, etc.

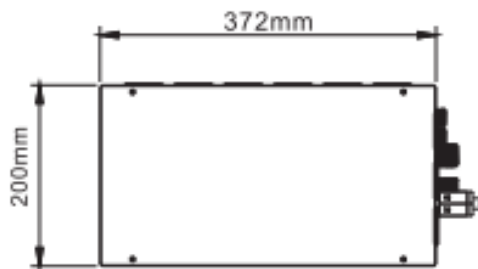
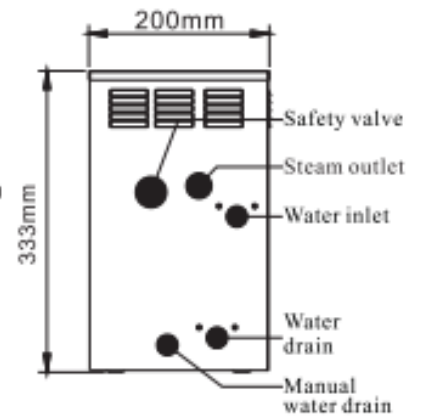
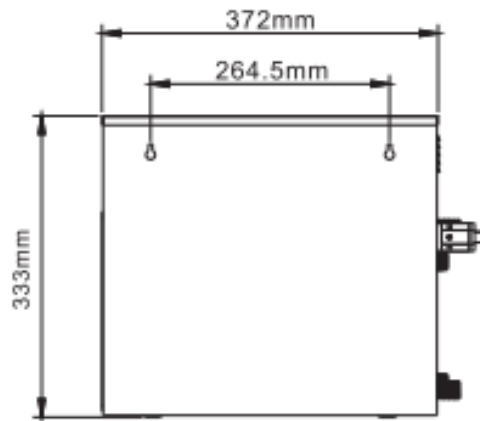
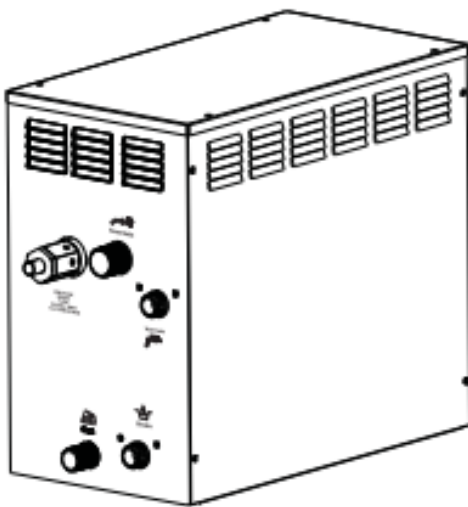
Steam Generators must NOT be installed outdoors, in moist humid areas, in areas prone to freezing, or extreme heat such as an unventilated attic. To do so will void the warranty.

Steamhead to be mounted 300mm to 450mm from floor

Dimensional Drawing



4.5kW



6 / 9kW

Controller Specification

Controller Information – SMS-CONTROL

Preset time and programmable temperature

Digital display of ambient, set temperature and time remaining

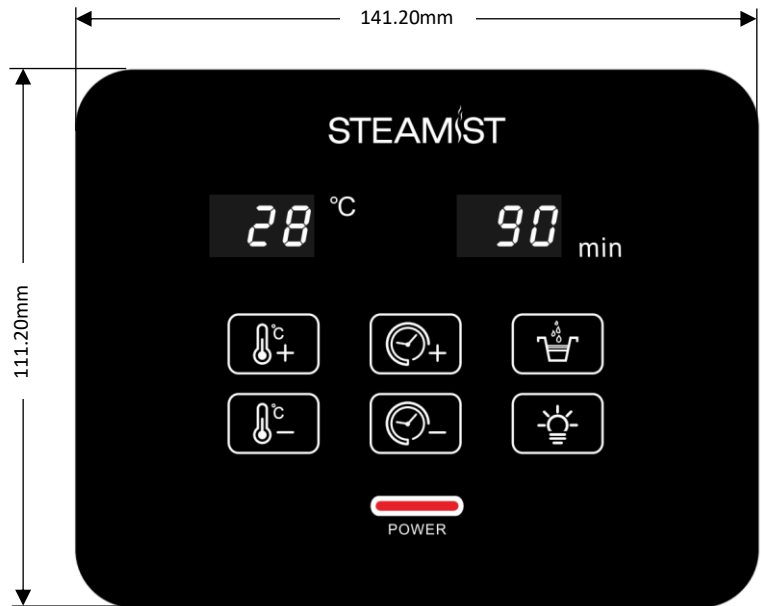
Icons for temp adjustment, time adjustment, manual drain, light and power on

Dimensions

L 141.20mm x H111.20

Package includes

Controller, control cable, Sticky pad, back box, surface mount trim and temperature sensor



Notes

First Fix –

- Control should be installed 1.2m from floor
- If controller is inside the steam room no need to use temperature sensor
- If controller is outside the steam room or close to steam outlet, run the temperature sensor cable through conduit pipe to the controller (Sensor connects into back of the control)
- Run black control cable through conduit pipe from generator to steam room

Note: If you are using two generators together you will need to link the grey cable from one generator to the black control cable on the secondary generator. (Refer to Internal diagram)

Plumbing & Generator Location

The Steamist SMS Generator comes factory assembled carefully wired and tested.

Warning: All electrical power should be turned OFF when working with the steam generator

Important: The plumbing installation must conform to local and national code of practice

1. Pre-Installation

a) Be sure that the proper size Steam Generator has been selected by using the sizing page in the “The Generator Sizing Guide”

CAUTION: An improperly sized Steam Generator may not produce the amount of steam necessary to reach selected temperature

b) For optimum performance, the Steam Generator should be located as close as possible to the Steamroom, Shower or tub enclosure using a ¾” copper pipe (1/2” acceptable on 4.5kW) If the steam pipe exceeds 3 meters, it should be insulated using appropriate pipe insulation rated for minimum of 100 °C Maximum steam pipe distance should not exceed a total of 15 liner meters.

CAUTION: Do NOT install near flammable material such as paints, thinners, gasoline, etc.

CAUTION: Steam Generators must NOT be installed outdoors, in moist humid areas, in areas prone to freezing, or extreme heat such as an unventilated attic. To do so will void the warranty.

2. Plumbing First-Fix

Plumbing rough-in is required for the water supply and steam line; this should be completed before the walls are closed. For operation, the “SMS” Steam Generator requires a 15mm. copper tubing to the fitting on the generator for water inlet and a 22mm copper pipe for steam outlet.

- a) Water Inlet – First fix a water line, (3 bar max) to the hot or cold supply. An isolating valve with a 15mm connection to the steam generator is to be provided at the generator location
- b) Steam Outlet – First fix in the steam line using a 22mm Copper tube with sweated or compression brass fittings only. Do NOT use plastic pipe or fittings. Do not use any push-fit, snap-fit or anything else that is not specifically rated for 100 °c steam. Do NOT use Black Iron or Galvanized pipe to avoid rust and discoloration to steam room. The steam head location should be 300mm – 450mm above the steam room floor or 150mm above a rim of a bathtub and as far from the seating area and user control as possible
- c) Drain Pipe – Rough in the drain pipe to an open drain using 15mm copper pipe.

do NOT connect the drain pipe to the steam line **(If unable to connect to a drain, cap the outlet with a ½” brass cap, cannot be left un-plumbed or capped.)**

- d) Clean Outlet – Install supplied ball valve and plumb into an open drain using 15mm copper pipe. **(If unable to connect to a drain, cap the outlet with a ½” brass cap, cannot be left un-plumbed or capped)**

CAUTION: Do Not install a shutoff valve in the steam line. Do NOT create traps or valleys in this line which would trap condensation and block the flow of steam. The steam pipe should be pitched toward the Steam Generator allowing condensation to run back toward the Steam Generator (preferred), or toward the steamhead. If the steam generator is equipped with a drain valve, do NOT connect the drain pipe to the steam line

Plumbing & Generator Diagram

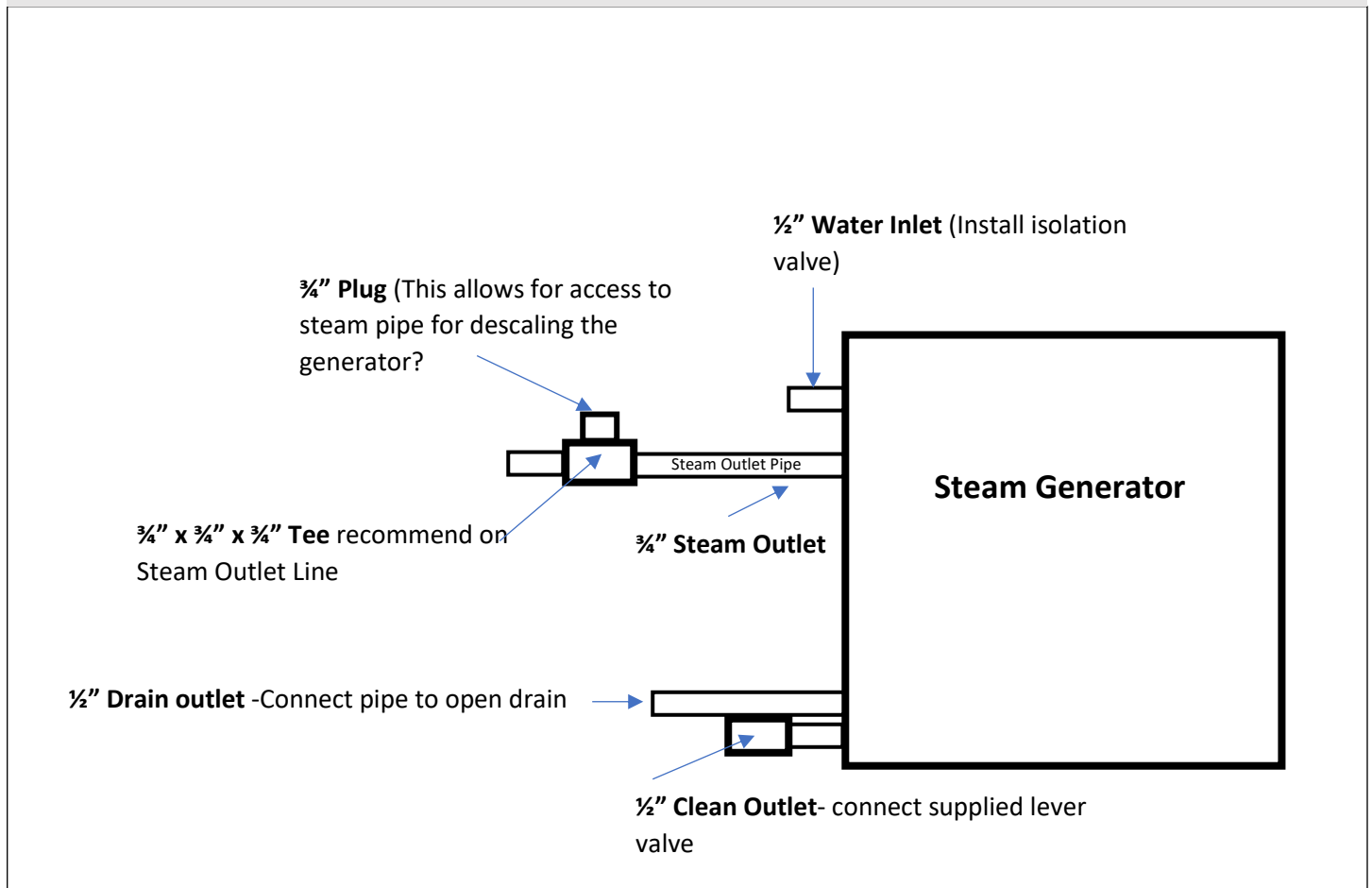
3. Steam Generator Installation

The Steam Generator should be mounted in a location convenient for hook-up and service by the plumber and electrician

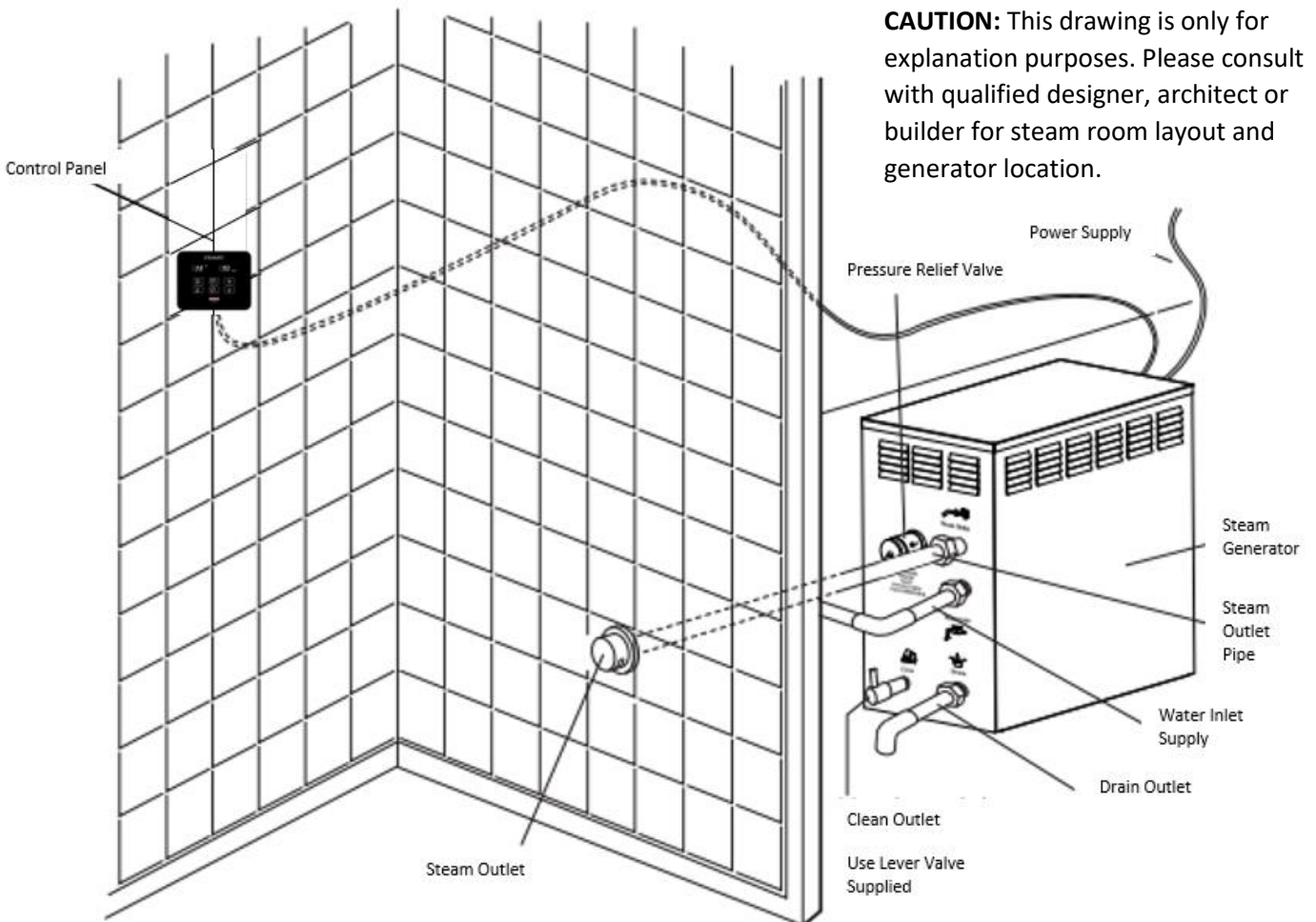
CAUTION: The Steam Generator is designed to be used ONLY in an upright and level position; to do otherwise would damage the unit and void the warranty

- a) The Steam Generator can be mounted to a wall or set on the floor. However, the unit must be secured. To secure the unit to a vertical wall, remove the the four screws removing the top cover. Then Located inside the cabinet near the top left and right corners are mounting holes to secure generator. Then place top cover back and secure.
- b) Connect the $\frac{1}{2}$ " water inlet to a shut off valve as described in diagram below figure 2. The valve must be kept in an open position during normal operation. In an area where water hammer is a problem install a water hammer arrestor in the line
- c) Connect the steam line from rough-in location described in Figure 1 to the $\frac{3}{4}$ " nipple on the Steam Generator using a union
- d) We recommend installing a $\frac{3}{4}$ " BSP equal tee along with a $\frac{3}{4}$ " plug on the steam outlet connection to allow for descaling
- e) Connect the $\frac{1}{2}$ " drain outlet to an open drain. (If unable to connect to a drain, cap the outlet with a $\frac{1}{2}$ " female brass cap, this cannot be left un-plumbed or capped.)
- f) Connect the $\frac{1}{2}$ " clean outlet to the supplied lever valve and plumb to an open drain (If unable to connect to a drain, use a $\frac{1}{2}$ " male brass plug into the lever valve, this cannot be left un-plumbed or capped.)

Figure 1 – Plumbing Diagram



Plumbing Typical Installation Diagram - Figure



IMPORTANT

Run the Control Cable through a 3/4" Conduit



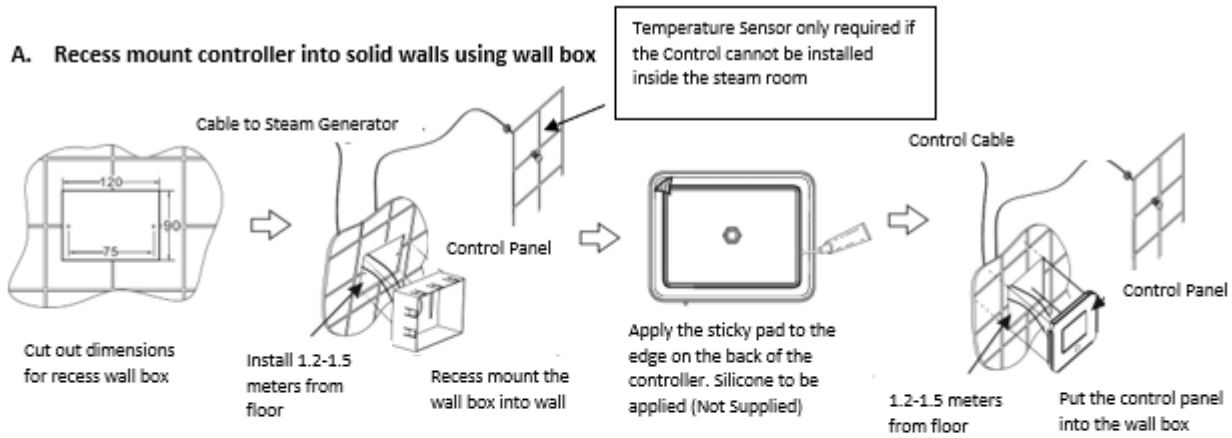
Steam Outlet Pipe – Use 22mm copper pipe

Caution: Do NOT install a shutoff valve on the steam outlet pipe. Do NOT create traps or valleys in the line which would prevent flow of steam. The steam outlet pipe should be pitched towards the steam generator (Preferred) allowing condensation to run back into the Steam Generator or towards the steamhead. If the steam pipe exceeds 3 meters. Use appropriate pipe installation rater for minimum of 100 degree Celsius.

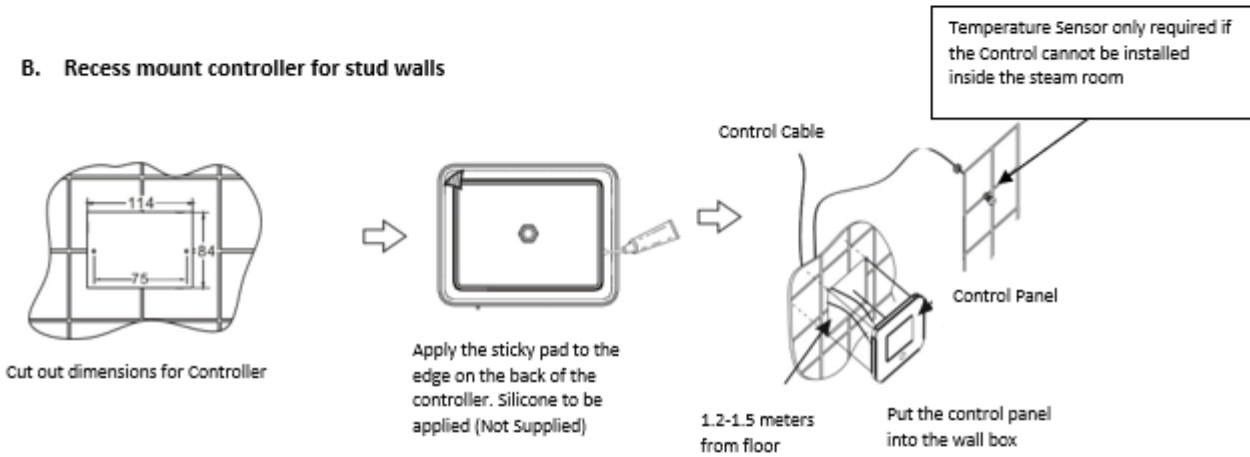
Important: Unions MUST be use on the steam line and Drain line.

Control Installation Diagram

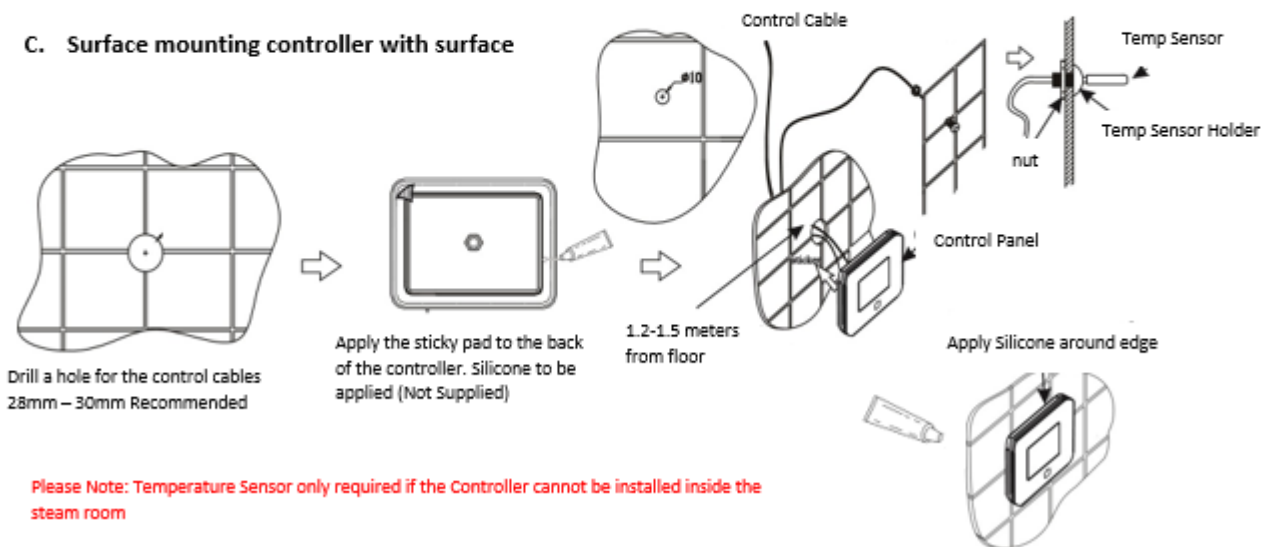
A. Recess mount controller into solid walls using wall box



B. Recess mount controller for stud walls



C. Surface mounting controller with surface

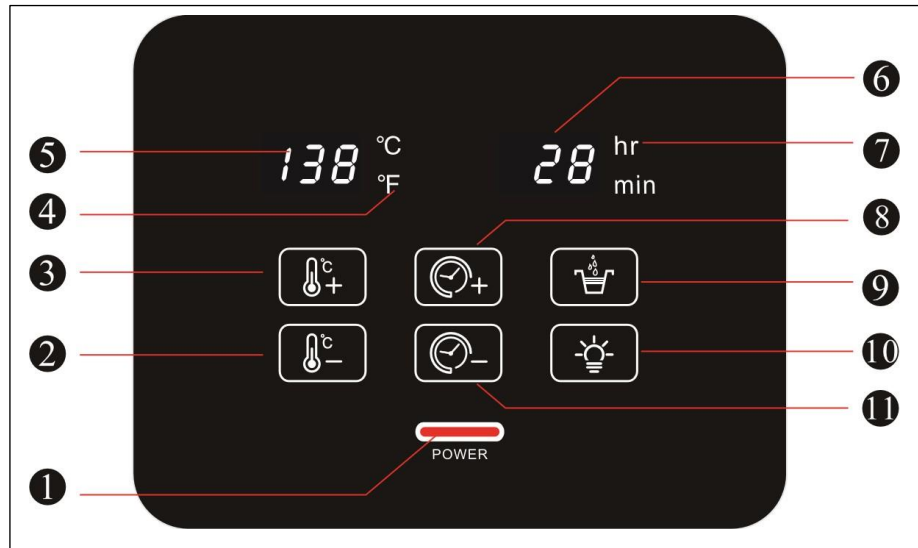


Please Note: Temperature Sensor only required if the Controller cannot be installed inside the steam room

Control Operation

CAUTION: When joining cables check male and female connection arrows are in-line to avoid damage to internal pins.

- 1. Power On/Off Touch Button** – Press and generator will begin producing steam in a few minutes.
- 2 & 3. Up/Down Touch Button** – Press to adjust the temperature setpoint
- 4. Celsius / Fahrenheit Indicator**
- 5. Temperature Display**
- 6. Time Display**
- 7. Time Unit**
- 8 & 11 Time Up/Down Touch Button** - Press to adjust the remaining steam time
- 9. Manual Drain**
- 10. light** – press to turn on/off steam light



Operation: Make sure the water and power are turned on. Simply press the Power touch button to begin the previously programmed cycle. Pressing the Power touch button, a second time will cancel the steam cycle. After a cycle is started it will take a few minutes for the Steam Generator to heat up and begin producing steam. During operation the display will show the ambient room temperature.

Programming: Adjustments can be made to the temperature control after pressing the power touch button to start the steam cycle. To adjust the temperature simply press the temperature + or temperature – touch button. All changes made to the temperature control are stored in memory until changed again. Temperature range is 35 °C – 68 °C

Additional Features

Memory: The Temperature setpoint is retained even if there is a power failure.

Fahrenheit / Celsius: The temperature display can be changed by pressing and holding icon 3 for 2 seconds when control is off (Steam cycle not started) The display indicator will then change current setting “C” to “F” and then alternate when the change is complete.

Note: When Steam cycle has finished auto drain (if plumbed) to drain will commence 10minutes after shut off and remain open for 7 minutes until completion.

Error Codes – See page 12

Electrical Installation

Steamist "SMS" Generator -Operates with one control located inside or outside the steamroom. The Generator is small enough in size to be tucked away using very little space in a vanity, closes, basement, or an insulated attic, but large enough to provide steam for more residential steam rooms.

Steamist "SMS" Generator Steam Bath Generator comes factory assembled, carefully wired and tested.

1. Pre-Installation

- a) Proper electrical supply (208 or 240 Volt): See rating label on Steam Generator and Chart on page 13. Determine proper size of wire, voltage, amperage, and phase for the Steam Generator. 90°C copper wire is required for generator connection.
- b) Dedicated overcurrent protection device, such as an in-line fuse/circuit breaker required: Fuse/circuit breaker to be installed must be sized in accordance with chart on back page. Do NOT install a GFI (Ground Fault Interrupter) to this equipment
- c) Route power supply cable to the location where the Steam Generator will be installed (before walls are closed).

2. Electrical First Fix

- a) Install appropriate power cable to the location the Steam Generator will be installed. If receptacle is desired, mount the box for the isolating switch close to the Steam Generator.
NOTE: The plug and receptacle require a rating of no less than 250V and proper amperage. Refer to chart on page 13 for amperage rating.

3. Steam Generator Electrical Installation

WARNING: All power to the steam generator must be turned off

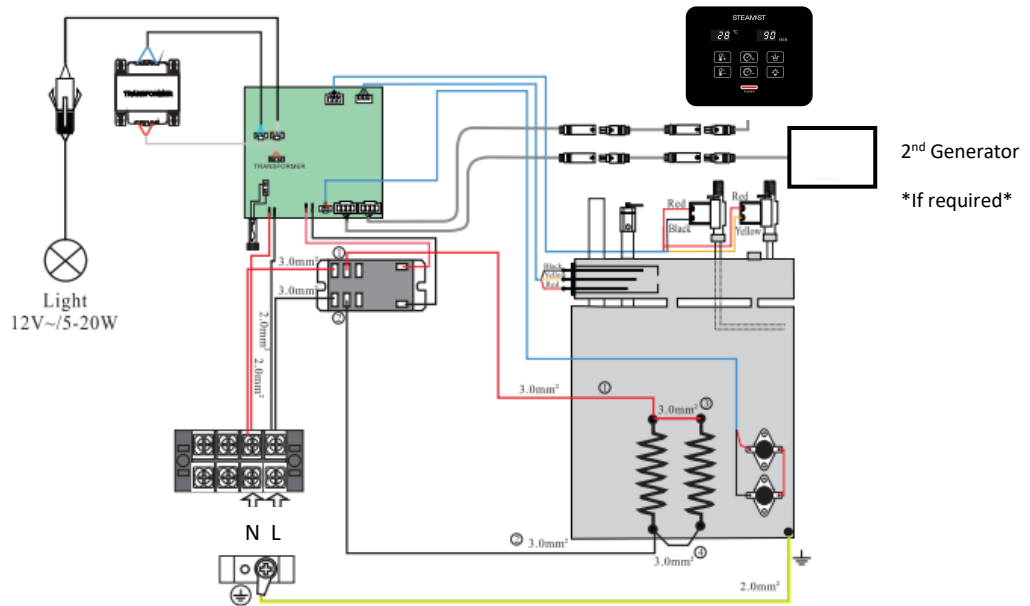
- d) Remove the four screws holding the top access panel and remove

- a) Strip back power cable's outer insulation jacket eight inches and insert into Steam Generator. Strip back insulation ½" from the three (3) incoming wires (one power/live, one neutral and one ground)
- b) Connect incoming ground wire to floating green pigtail labelled "GND."

CAUTION: Be sure the ground wire does not come in contact with a live electrical part

- c) Connect incoming live to terminal block labelled "L" and neutral to labelled connection "N"

Electrical Data & Internal Wiring Diagram



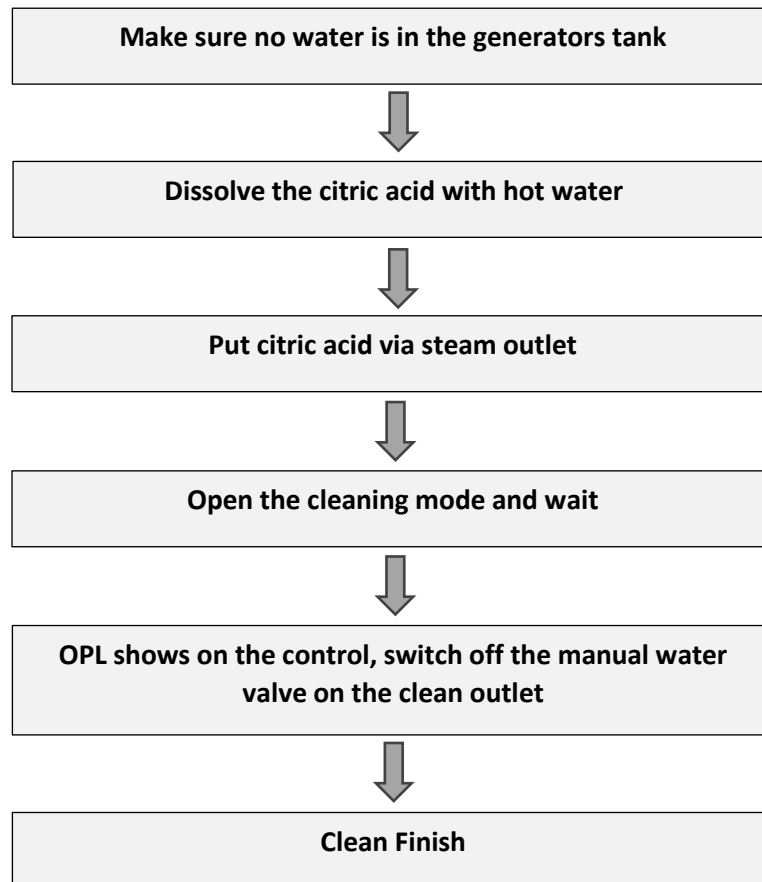
Internal wiring diagram of steam generator 4.5kW – 6kW
(220V/1Phase)

Product Number	Kw Rating	Max. Adj. Cu. M. Range*	Volts/Phase/Max. Amps	Dimensions L x W x H
SMS-4.5	4.5kW	3.5m ³	220-240v / 1/ 20.5A	372 x 162 x 333mm
SMS-6	6Kw	5.8m ³	220-240v / 1/ 27.3A	372 x 200 x 333mm
SMS-9	9kW	10.3m ³	220-240v / 1/ 41A	372 x 200 x 333mm

Checklist

- The proper size generator has been selected by using the generator sizing guide in the Steamist Brochure
- **CAUTION:** An improperly sized Steam Generator will NOT produce the amount of steam necessary to reach selected temperature.
- The Steam Generator is installed in an upright position
- Correct electrical wire and circuit breaker has been used
- The circuit breaker is NOT a GFI (Ground Fault Interrupter) type.
- The Steam Generator is properly grounded.
- The circuit breaker or isolator switch is on.
- Water supply to the generator is on

Cleaning Process & Trouble Shooting



Trouble Shooting & Error Codes

E0: The temperature sensor has open circuit

Water level sensor failure, check the control cable connection between the control panel to steam generator is loose or not.

E02: The temperature sensor is short circuit

E03: Signal transfer fault between pain panel and sub-panel.

E04: Signal transfer fault between control panel and steam generator

E12, E22, E32, E42: water inlet takes over 2 minutes

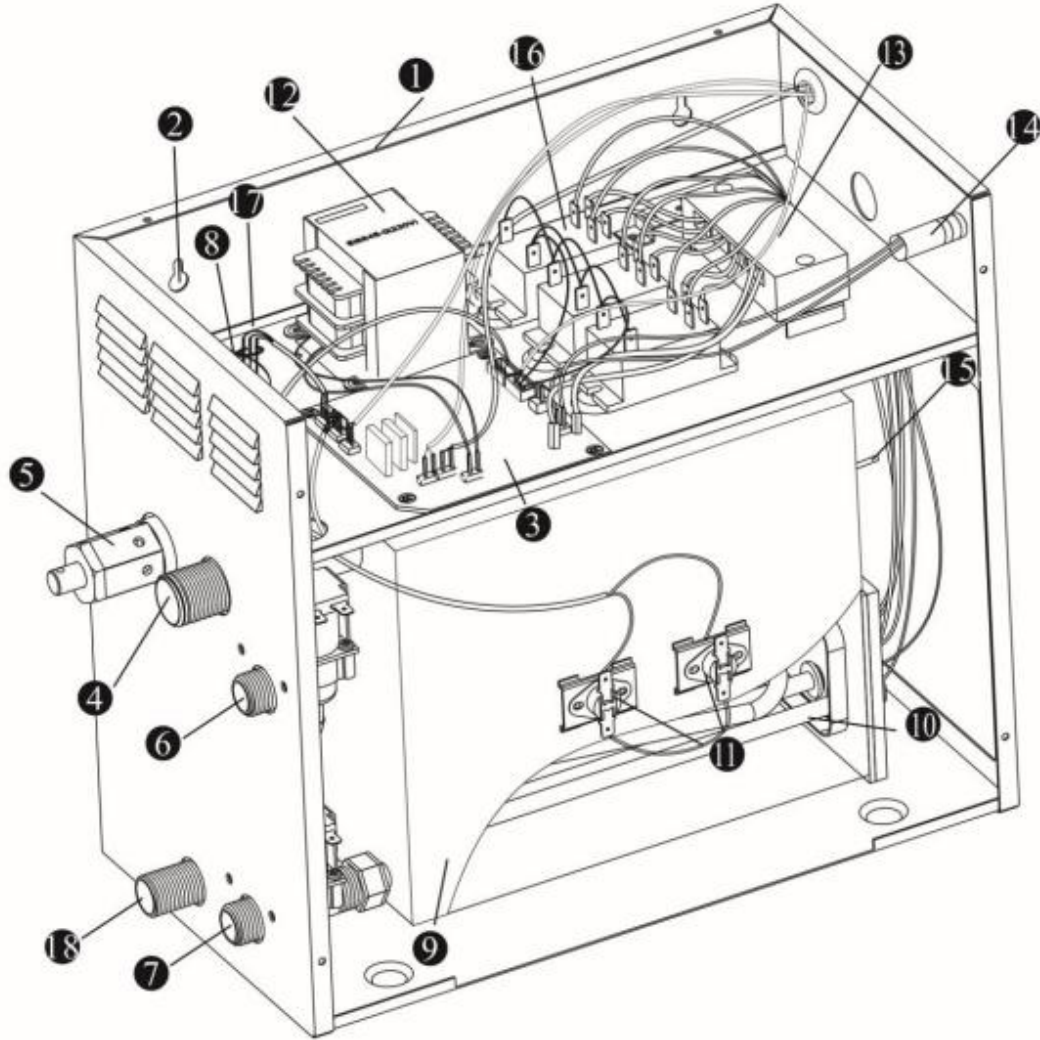
E13, E23, E33, E43: water inlet tank blockage

E15, E25, 35, E45: Auto. High limit trips.

Common Trouble Shooting Solutions

Faults	Cause of faults	Trouble-Shooting Methods
Generator not working with power switch on	Check green light is on, on circuit board - If not check power connections and fuse Green light on, check cable between Generator and control	Change main fuse on circuit board 0.8a/250v Tighten loose connection Change cable if pins inside are damaged
Trip or fuse tripping out	Check for water ingress on control and connections Test heating element for failure	If dampness found, dry with suitable method Element reading ohms – replace element
No steam only hot water through steamhead	Water level probe faulty	Replace probe
No display on control panel	The power connection cable between generator and control	Check the connections are fully home at both ends
Water Escape	Water pipe develops a leak Water solenoid valve Water drain valve	Repair or replace and faulty pipework Replace solenoid valve Replace drain valve
No steam with power and control on	No water Temperature set below room temperature	Check water supply is on Increase temperature above room temperature
No steam from outlet only noise of water boiling	Steam pipe has in-line trap	Trace steam pipe to ensure no change of direction has been installed
Light not functioning	Fuse Poor connection Faulty light Wire damage	Replace fuse Disconnect and re-connect (poor connection) Replace light Check and replace wire
Calling for steam but no steam	Heat sensor faulty	Replace sensor

Generators Parts Breakdown



- | | | |
|-------------------------|------------------------|------------------------|
| ① Generator Case | ⑦ Water Drain Valve | ⑬ L & N Terminal Block |
| ② Installation Mounts | ⑧ Water Inlet Tank | ⑭ Fuse |
| ③ PCB Circuit Board | ⑨ Main Water Tank | ⑮ Earth Terminal Block |
| ④ Steam Outlet Pipe | ⑩ Heating Element | ⑯ Relay |
| ⑤ Pressure Relief Valve | ⑪ 105°C Hi-Temp Sensor | ⑰ Water Level Sensor |
| ⑥ Solenoid Valve | ⑫ Transformer | ⑱ Manual Water Drain |

