

VULCAN C SERIES ELECTRIC STEAM POT



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GENERAL DATA:

MANUFACTURER: Reg No. 1954/002040/07
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MODEL: SGT-150A
SERIAL NUMBER: 69020/00959 onwards
DESCRIPTION: Steam jacketed pan heated by 3 x 6kW elements and controlled by thermostat with overriding thermostat 150°C.

ELECTRICAL LOADING: 150 Lt
L1 = 6Kw
L2 = 6kW
L3 = 6kW
TOTAL LOAD = 18 kW

ELECTRICAL SUPPLY: 400V 3N ~ (400 Volts; 3 Phase; 4 Wire, 50 Hertz)

PAN CAPACITY: 150 LITRES

STEAM OPERATING PRESURE: 0,1 BAR (10 KPA)

WATER PRESSURE: 200-300 KPA

NET MASS: STBP 150 Lt - 328 kg crated

AUTHORISED VULCAN CATERING EQUIPMENT BRANCHES AND DEALERS:

Vulcan Toll Free Number	0860	Vulcan / 885226
Johannesburg Branch Office	(011)	249 - 8500
Johannesburg Service Department	(011)	249 - 8578 / 8582
Johannesburg Spares Department	(011)	249 - 8600
Johannesburg Standby Tel. Number	(082)	446 - 7095 <u>After Hours</u>

Cape Town Branch Office

Cape Town Office Tel. Number	(021)	510 - 5010
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Durban Branch Office

Durban Branch Office Tel. Number	(031)	569 - 7800
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Port Elizabeth Office

Port Elizabeth Office Tel. Number	(041)	453 - 5177
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East London Branch Office

East London Office Tel. Number	(043)	722 - 2883
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Bloemfontein Branch Office

Bloemfontein Office Tel. Number	(051)	430 - 6167
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Nelspruit Branch Office

Nelspruit Office Tel. Number	(013)	752 - 6830
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INSTALLATION:

- 1) Before leaving the factory, unit has been fully assembled and undergone final test.
- 2) Remove the plastic material protecting the stainless steel panels.
- 3) Position and level unit.
- 4) An all pole isolator switch having a contact separation of at least 3 mm in all poles must be incorporated in the electrical supply fitted adjacent to the unit.
- 5) For access to the main terminals, remove the control panel held by 2 screws at bottom of panel (right hand pedestal).

- 6) Connect the three phase wires to the terminal block marked L1, L2 and L3, the neutral wire to the neutral terminal marked N and the earth wire to the earth connection. Ensure that the unit is effectively earthed.
- 7) A stud with equipotential symbol at rear of unit to connect to earth. Equipotential bonding involves joining together metalwork that is or may be earthed so that it is at the same potential to prevent shock from between those pieces of metal as the earth system handles a fault.
- 8) The power supply cords shall be oil resistant sheathed flexible cable not lighter than ordinary polychloroprene or other equivalent synthetic elastomer - sheathed cord. (Code designation 245 - I.E.C. 57)
- 9) The unit may only be connected to the power supply by a qualified electrician in compliance with the local rules and regulations.
- 10) Connect water inlet pipe to a 15mm BSP water entry pipe situated at the rear bottom of the left hand pedestal.

OPERATION:

Important: before operating always make sure there is water in the boiler, see below.

- 1) Turn the Main On/Off Switch to the on position. Open the main water inlet valve. Depress the “filling water” Push Button on the control panel (right hand pedestal). This will open a solenoid valve and the boiler (steam generator) will start filling with water. When water runs out of the “full level” overflow pipe situated under the boiling pan, release the push button.
- 2) The “low water level”(red) lamp will illuminate and a buzzer will sound if there is insufficient amount of water in the boiler. Re-fill to operational level if required. Never fill boiler with when electric elements are on.
- 3) Turn Control Switch Knob to required setting (1-10). The “work” (green) indicator lamp will illuminate.
- 4) The boiling pan is tilted by turning the wheel handle on the left hand pedestal anti-clockwise to tilt (clockwise to lift). When the boiling pan is tilted more than 5° the electrical current to the electric elements will cut out (safety feature). When the pan is returned to the vertical position power will be restored automatically. It is recommended that unit is switched off at both Control and the Main Switch before tilting boiling pan. Tilt the pan slowly to avoid splashing.

- 5) When working or just finishing working with the unit do not open the air release valve or the overflow valve as temperatures can reach 110°C. Do not open these valves until the temperature has dropped to a safe level or the pressure has dropped to zero.
- 6) Consumption: it takes 0,2 kg of steam to heat up 1,0 litre of water from 0°C to 100°C.
- 7) To heat 100 litres of water from 20°C to 96°C (boiling) takes the unit 40 minutes at an altitude of 1750m(JHB) above sea level. External temperatures when the unit is boiling and the pan is closed with its lid, can reach temperatures of 70°C top and 47°C sides.
- 8) A 15mm water filling faucet with swivel arm is fitted on top of the left hand pedestal.
- 9) After use turn power off at the Control Switch then the Main On/Off Switch.

SAFETY:

- 1) The Main On/Off Switch on the (right hand pedestal) front panel can be padlocked when in the off position.
- 2) Situated at the top rear of boiling pan is a pressure safety release valve fitted to the steam jacket with pressure gauge indicating the pressure during operation. A vacuum air break to allow air into steam jacket to equalize with the outside atmospheric pressure when cooling down is fitted next to the safety valve. It is very important to keep any objects from obstructing and/or interfering with the safety valve and the vacuum air break as it might impair the safety function of the valves and damaging the unit .
- 3) A safety cut out thermostat with a manual re-set button will cut off the power to the elements if the elements are not covered with water (re-set button is fitted to the bottom rear of the boiling pan). Make sure the water covers the electric elements before manually re-setting the thermostat and turning the power on.
- 4) A Working Pressure Switch (pressure control) situated on the underside of the unit under the base cover (set to trip at 1.0 bar) cuts power to the electric elements until pressure drops.
- 5) A Safety Pressure Cut-Out Switch is also incorporated into the system (set to trip at 1,2 bars).If the switch is tripped it will cut the electric current to the elements. The red “over pressure” lamp will illuminate when unit is over the pressure safety level. If the both the above malfunction, the safety release valve will trip and release steam(set to trip at 1,3bars). Turn unit off immediately and call a technician.

- 6) Do not hose unit down.
- 7) This appliance is not intended for use by persons (including children) with reduced physical sensory or mental capabilities, or lack of experience and knowledge, unless overseen and supervised by trained personnel.
- 8) Children should be supervised to ensure that they do not play with the appliance.

Pressure		Temperature °C
bar	kPa	
0,1	10	102,7
0,2	20	105,1
0,3	30	107,3
0,4	40	109,6
0,5	50	111,6
0,6	60	113,6
0,7	70	115,4
0,8	80	117,1
0,9	90	118,8
1,0	100	120,4
1,1	110	122,0
1,2	120	123,5
1,3	130	124,9
1,4	140	126,3

MAINTENANCE:

- 1) Routinely check on general appearance, moving parts, screws and nuts working loose.
- 2) For access to elements remove boiling pan bottom panel.
- 3) When cleaning switch off at isolator.
- 4) Clean when unit is still warm with soapy damp cloth. Never use steel wool, soda or any other harsh abrasives for cleaning.
- 5) Regularly check safety protection functions as follows.
(It is recommended that this is only done by only a trained technician)

- A) Make sure the boiler is filled with water to an operational level.
 - B) Empty pan.
 - C) Remove bottom control panel on right hand pedestal by unscrewing two screws at bottom of panel to gain access to the test button.
 - D) Turn power Control Switch to maximum(10)
 - E) Turn unit on at the Main On/Off Switch. Wait for unit to heat up to maximum and then check the pressure gauge reading . When the pressure gauge reads 0,8 bars the Working Pressure switch should cut off power to the electric elements. When the pressure drops a little the power to the elements should come on again. Leave unit on to repeat this cycle at least 3 times consecutively . If unit repeats the cycle 3 times without any faults occurring, continue with the next test.
 - F) Press down the test button to keep the electric elements working, bypassing the Safety Pressure Switch. When the pressure gauge reaches between 1,1 – 1,3 bars the safety release valve should open and release steam and the pressure indicator lamp “overpressure” should illuminate. Release the test button. If the above test are done without the operation showing any fault, then the safety pressure control and protection system is in good working order. (switch off the Main Switch to unlock the Safety Pressure Switch before using the unit again) If the safety valve does not release steam when the pressure gauge reads 1,3 bars release the test button immediately and switch unit off. Do not use the unit again until a qualified technician has rectified the problem.
- 6) Only original parts must be used as replacements of faulty parts.
- 7) It is recommended purifier is added to the water in the boiler due to the hardness of water in certain areas. De-scaling should be done by a technician or trained person due to difficulty in gaining access to boiler.

PARTS ORDERING INFORMATION:

Parts / spares orders must be placed directly with your local branch / distributor.

To help speed up your order, we require the following information:

- 1) Model / Serial Number _____
- 2) Voltage 240/400V
- 3) Item Part Number _____
- 4) Quantity Required _____

(The serial number data plate is sited at control box conduit entry.)

Service information may be obtained by calling your local branch / distributor.

When calling, please have the following information available:

- 1) Model / Serial Number _____
- 2) Type of Gas (L.P or Natural Gas) _____
- 3) Nature of Service Problem _____

Subject to standard Vulcan warranty within South Africa borders. Subject to standard Vulcan Export warranty outside South Africa borders. Vulcan reserves the right to modify or alter appliances without prior notice. Local prices subject to confirmation at time of purchase / placing of order.

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