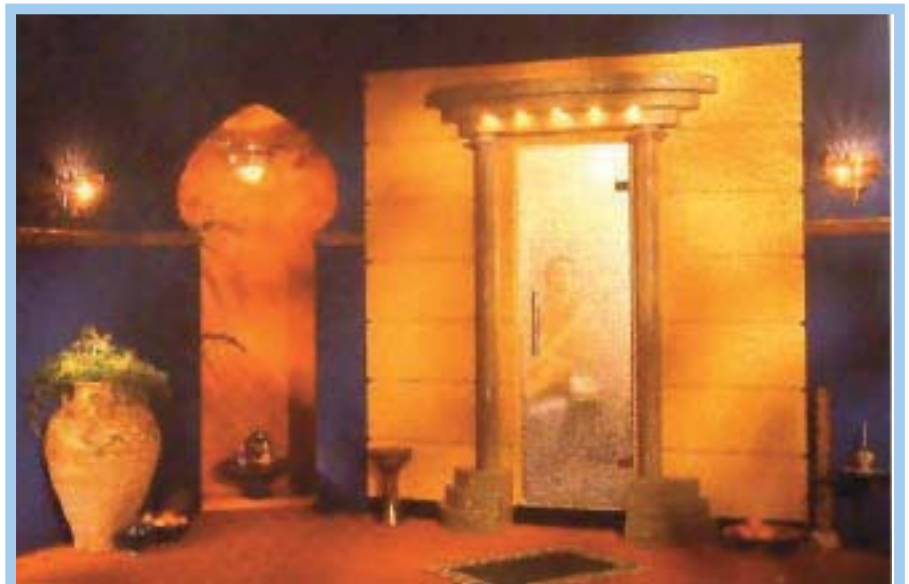
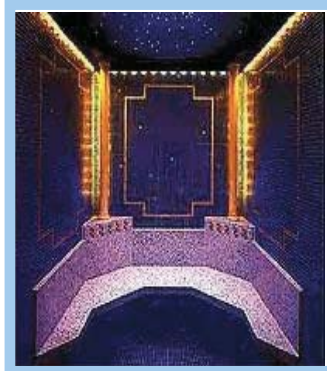


ELECTROVAP[®]

MC



Steam bath
Bain vapeur



Steam bath EG/HG

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ElectroVap MC Steam bath



Safety information

Important

This section should be read carefully to ensure the safe and correct installation of your steam bath.

GENERAL

This manual contains all details necessary for the planning and installation of the ElectroVap EG/HG steam bath. In addition commissioning and maintenance details are included.

The manual is intended for use by engineers and properly trained technical personnel. Maintenance, servicing or repair work must only be carried out by suitable skilled and qualified personnel, the customer must be responsible for ensuring their suitability.

Any risks or hazards, especially when working from ladders or towers should be identified by a skilled and Health and Safety representative and effective control measure put in place.

No liability will attach to the Distributor if any damage, injury or accident is attributable to inattentive, inappropriate, negligent or incorrect operation of the machinery whether or not caused deliberately.

Always isolate all electrical and water supplied before commencing any maintenance.

Every effort has been made to ensure details contained in this manual are correct, however, in view of the wide range of conditions experienced in air handling systems, the information provided should only be used as a guide. Please contact your Agent if any doubt.

CORRECT USE

ElectroVap MC steam bathes are **ONLY** intended for use with air handling systems or direct air humidification. **ANY OTHER APPLICATION IS NOT CONSIDERED USE FOR THE INTENDED PURPOSE. THE MANUFACTURER CANNOT BE MADE LIABLE FOR ANY DAMAGE RESULTING FROM INCORRECT USE.**

WATER

ElectroVap MC steam bathes are designed to be used with mains, demineralized R/O or softened water. On no account attempt to introduce any other fluid or chemical into the system. Water supply should not exceed 6.0 bar and installation should comply with local regulations.

ELECTRICITY

All work concerned with electrical installation **MUST** only be performed by skilled and qualified technical personnel (eg electrician or technicians with appropriate training). The customer **MUST** be responsible for ensuring their suitability.

It is the duty of the installer to ensure that suitable sized cables and MCB protection is provided. Please observe the local regulations concerning the provision of electrical installations.

WARRANTY

Failure to specify and fit original parts and accessories will invalidate your warranty.

NOTE

Our policy is one of continuous research and development. We therefore reserve the right to amend without notice the specifications given in this document.

The photographs are for illustrating purposes only.



ElectroVap MC

Product accreditation

CE DIRECTIVE APPLIED

Electromagnetic Compatibility Directive:

89/336/EEC, 2004/108/EC

Low Voltage Directive:

73/23/EEC, 2006/95/EC

Machinery Directive:

98/37/EC Amending Directive 89/392/EEC

Standard(s) to which Conformity is declared:

EN 61000-6-3: Electromagnetic compatibility generic requirements (residential, commercial, and light industry

- EN 55022 class B conducted and radiated emission limits

EN 61000-6-2: Electromagnetic compatibility (EMC)- Generic standards- Immunity for industrial environments;

- EN 61000-4-3: Radiated, radio frequency, electromagnetic field immunity test.
- EN 61000-4-6: Immunity to conducted disturbances induced by radio frequency fields.
- EN 61000-4-4: Electrical fast transient/burst immunity test.
- EN 61000-4-5: Surge immunity test.
- EN 61000-4-2: Electrostatic discharge immunity test.

EN 60204-1: Safety of machinery – Electrical Equipment of machines – Part 1: General requirements.

EN 292 Parts 1 & 2: Safety of machinery basic principle mechanical design.

Manufacturer's Name and Address

DEVATEC SAS
Rue Saint Eloi
76550 Ambrumesnil - FRANCE

Authorised Representative

Type of equipment:

Steam Humidifier

Model Name (s) & Series:

ELECTROVAP MC / ELMC

Year of Manufacture:

2001

We the undersigned, hereby declare that the equipment specified above conforms to the above Directive(s) and Standard(s).

Signature:

Name : FRAMBOT Jean-François
Position : General Manager
Date : 05.06.2008



ElectroVap MC

RoHS declaration

DEVATEC SAS

***Rue Saint Eloi
76550 Ambrumesnil
France***

Confirms that the ElectroVap ELMC steam humidifier is manufactured in compliance with the European regulations 2002/95/EU (RoHS).

This guideline regulates after July 1st 2006 the use of mercury, cadmium, lead (soldering processes), chrome VI as well as PBB and PBDE. ELMC steam humidifiers manufactured previously to this date may contain above materials.

Signature :



Name : MINFRAY Jean-Marie
Position : R & D Engineer
Date : 05.06.2008

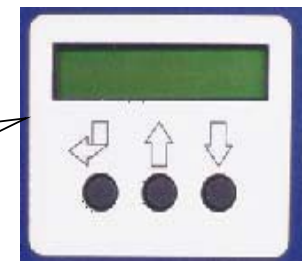


CLEANABLE CYLINDER COMPONENTS

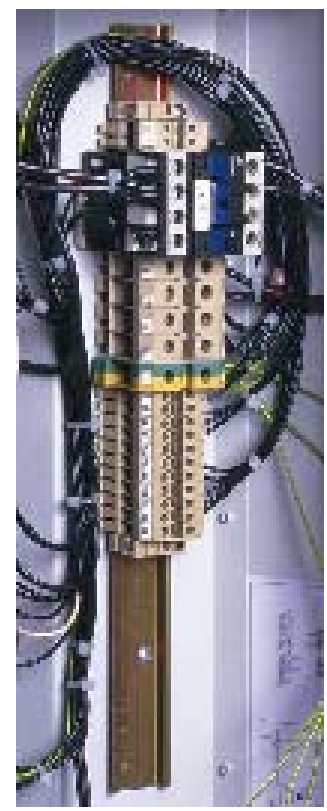
POWER LAMP



ALPHANUMERICAL LCD PANEL



ELECTRICAL DIN RAIL



OUTLET VALVE

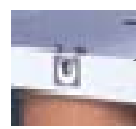


INLET VALVE

IDENTIFICATION TAG



QUARTER TURN DOOR FASTENER



Determination of the steam generator

Volume mini/maxi of the steam bath (m3)				Steam production in KG/HR	Model of the steam generator	Nominal Power in KW	Max Power in KW
Wall in glass, plastic etc.	With ventilation	Without ventilation	Wall in tiling, ciment, stones etc.				
			with ventilation	Without ventilation			
	Max 2 5	Max 2 5	Max 2 5	Max 1 5	ELMC 5 EG/HG	3,76	4,00
Max 4	Max 5 5	Max 5 5	Max 2 5	Max 3 5	ELMC 8 EG/HG	6,02	6,63
3 - 8	4 - 15	4 - 15	2 - 5	2 5 - 8	ELMC 10 EG/HG	7,52	8,21
3 - 8	4 - 15	4 - 15	2 - 5	2 5 - 8	ELMC 10 EG/HG	7,52	8,21
6 - 16	13 - 24	13 - 24	4 - 10	7 - 16	ELMC 15 EG/HG	11,29	12,18
14 - 22	22 - 30	22 - 30	8 - 15	14 - 20	ELMC 20 EG/HG	15,05	16,07
20 - 30	28 - 40	28 - 40	13 - 20	18 - 30	ELMC 30 EG/HG	22,57	24,01
28-40	38 - 50	38 - 50	18 - 30	28 - 40	ELMC 40 EG/HG	30,10	31,94
38 - 45	48 - 60	48 - 60	28 - 40	38 - 52	ELMC 40 EG/HG	30,10	31,94
43 - 60	58 - 70	58 - 70	38 - 50	48 - 60	ELMC 50 EG/HG	37,62	39,88
58 - 65	68 - 90	68 - 90	48 - 60	58 - 72	ELMC 60 EG/HG	45,14	47,74
71 - 102	78 - 125	78 - 125	58 - 60	68 - 102	ELMC 90 EG/HG	67,65	71,55

ELMC EG: Unit + remote control cabinet+ T°C sensor.

ELMC HG: Unit with integrate generator + T°C sensor.

ElectroVap MC Steam bath

Unit wall installation

Unit mounting



Unpack the ELMC steam bath generator and check for any damage.



Damage to packing and/or unit must be reported by registered letter to carrier within 3 working days.



Provide free space all around the unit : 1 m. to 1.20 m. (3 to 3 ft.) from the floor to the bottom of the steam generator, 1.25 m. (4 ft.) ahead and 0.60 m. (2 ft.) on the right hand side for allowing easy access for maintenance.



Mark the mounting holes.



Drill the holes.



Insert screws or bolts appropriate for support.



Screw the screws allowing about 10 mm (3/8 in.) for hanging the cabinet.

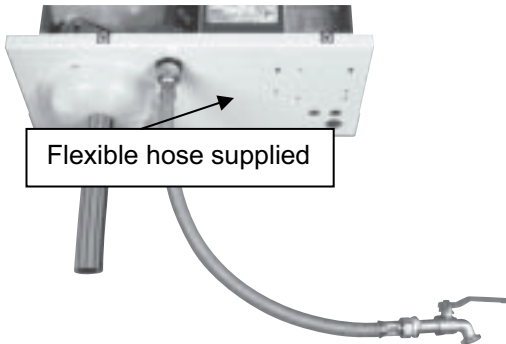


Hang the cabinet. Level the cabinet with a spirit level and tighten up all the screws.

Please refer to the following pages for the water and electrical connections.

STEAM BATH EG/HG

Water connection



A fresh mains cold water service should be used to supply the unit. The water supply must also satisfy the following requirements :

- Water quality: 30 to 1000 μ /cm (30 to 1000 ppm)
- Water Pressure: 1-6 bar (15 to 90 psi)
- Water Temp: less than 40°C (100 Deg. F.)



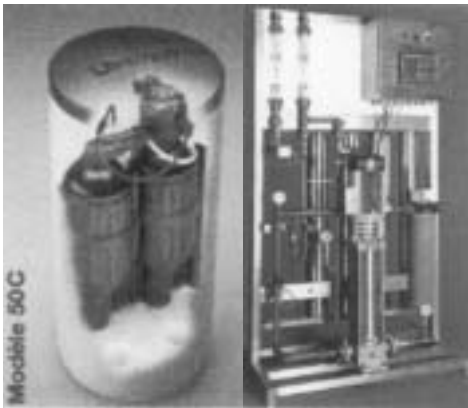
The water supply connection is on bottom of the unit. All the ELMC are delivered with a water inlet hose (500mm long) with a female 3/4" connection to the cold water supply

A check valve should be located on the mains and cold water service connection to the unit.

The inlet valve base has a basket filter (s.a. page n°44 part 3). Check periodically for debris.



The ELMC steam generator uses water to produce steam so leakage may happen causing potential damage. If an installation in false ceiling or above prime rooms such as museum, exhibition or laboratory rooms is considered, ensure that the floor below the humidifier is constructed from waterproof materials (with draining facilities) to withstand any water spilling during servicing or if a problem occurs.



Softener

D.I. water

The ELMC steam generator can run with 3 different water qualities :

TAP WATER

The water TH should be **between 0 and 40° French grade** for a conductivity **between 1000 and 350 μ /s.**

For the maintenance frequency of the cylinder see the maintenance curve. The ELMC incorporates a time counter (hours, steam KG... and shows maintenance messages when appropriate.

SOFTENED WATER

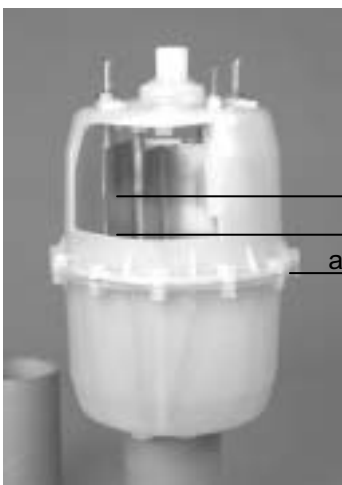
The ElectroVap MC humidifier may be used with softened water : **0° < TH < 2°.**

IMPORTANT: Softeners must be programmed correctly. Failure to programme the softener correctly may lead to excessive salt concentration in the steam cylinder. For assistance contact the Softener Manufacturer. The use of duplex softeners is recommended.

Reverse Osmosis and Demineralised Water

The ElectroVap MC steam generator may be used with Reverse Osmosis or Demineralised water. The minimum water quality is 30 μ /s. On start-up with new steam cylinder a tea spoon of bicarbonate of soda must be added.

The water supply must be made without any additional chemicals (chlorine, disinfectant, ozone). Also some water qualities may generate foam causing disturbances with the correct control of the humidifier. Please refer to Devatec technical services for further assistance.



The water level must be between (a) and (b) for the maximum cylinder capacity.

AUTOMATIC DRAINING

For sanitation purposes, the steam cylinder is automatically drained out in case the humidifier is not operated after a period of 72 hours. This factory pre-set value can be modified (s.a. page 40).

ElectroVap MC

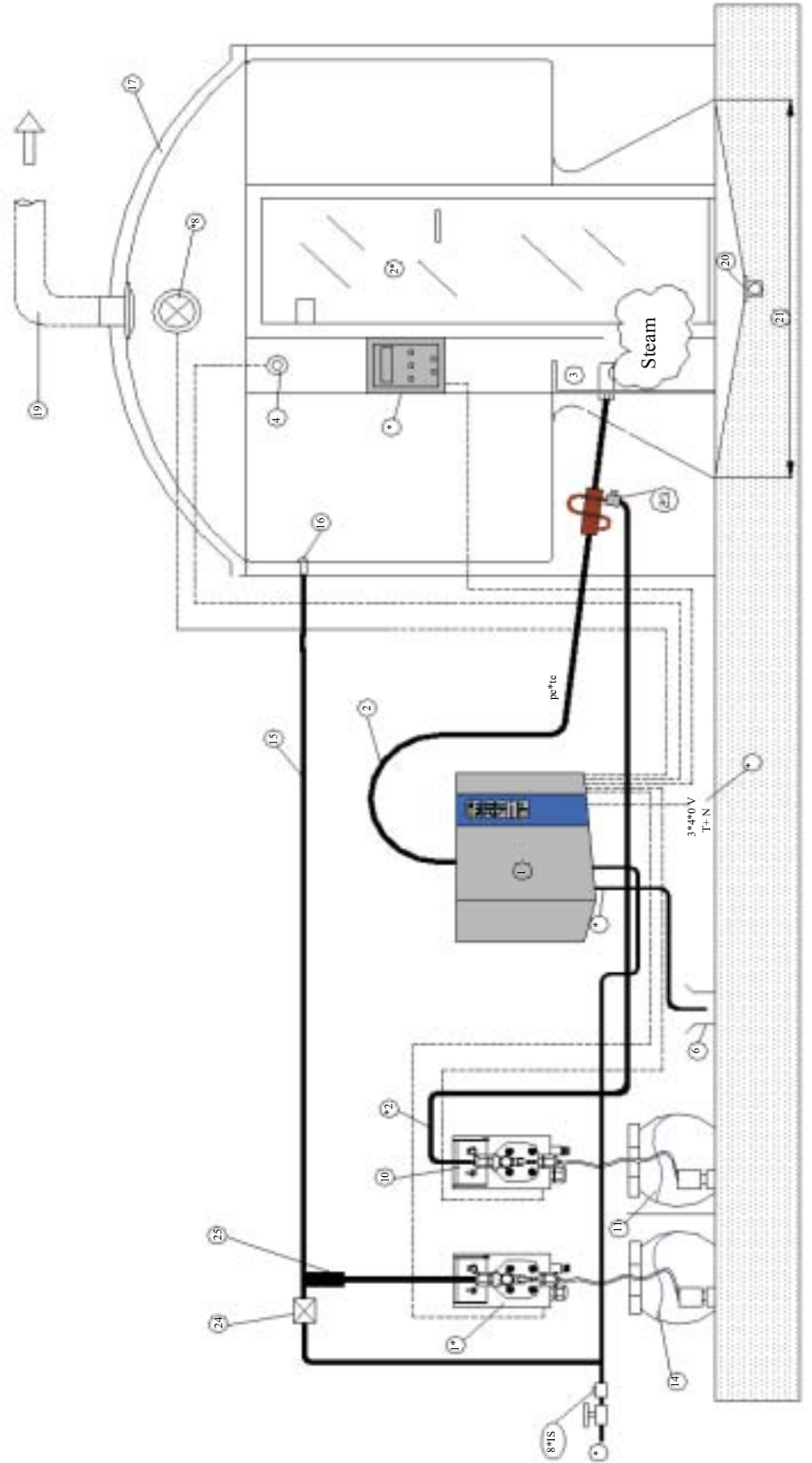
Steam bath EG/HG

Example of a Hammam installation

- 1 Steam bath ELMC EG/HG
- 2 Steam hose diam 25 or 40 according to model
- 3 Steam nozzle
- 4 temperature sensor
- 5 25 mm drain hose
- 6 Sewerage doat 40 mini (high temperature)
- 7 Power supply 3x 400 v +T+N
- 8 Water supply

- 8BIS Disconnector
- 9 Control cabinet (low voltate)
- 10 Perfuseme injection pump
- 11 7 liters perfume tank
- 12 Perfume pipe
- 13 Desinfecting unit
- 14 7 liters desinfectant tank
- 15 Desinfection pipe
- 16 Desinfectant nozzle

- 17 Steam bath generator
- 18 Protection glass for 12V bulb
- 19 Extraction of hygienic air
- 20 Floor siphon
- 21 Anti-slipping on a slop to siphon
- 22 Steam bath door
- 23 Perfuse valve
- 24 220V electrovalve
- 25 Antireturn valve



ElectroVap MC

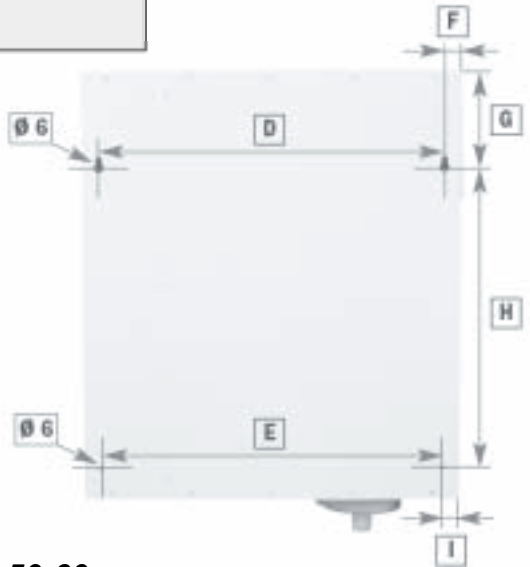
Steam bath EG/HG



ELMC 5-8-10

Dimensions mm	Steam output	Steam outlet	Weight empty kg	Weight full kg
A	470	1 115	a 115	15 23
B	540			
C	215			
D	425			
E	425			
F	20			
G	110			
H	380			
I	20			

Dimensions



ELMC 10 (230 V single phase)-15-20-30

Dimensions mm	Steam output	Steam outlet	Weight empty kg	Weight full kg
A	545	1 135	a 135	22 37
B	675			
C	270			
D	465			
E	505			
F	40			
G	110			
H	525			
I	20			



ELMC 40-50-60

Dimensions mm	Steam output	Steam outlet	Weight empty kg	Weight full kg
A	840	1 140	a 140	30 60
B	675	2 300	b 300	
C	270			
D	760			
E	795			
F	40			
G	110			
H	525			
I	20			

ELMC 90

Dimensions mm	Steam output	Steam outlet	Weight empty kg	Weight full kg
A	1070	1 140	a 140	45 90
B	675	2 275	b 275	
C	270	3 275	c 275	
D	990			
E	1030			
F	40			
G	110			
H	525			
I	20			



ElectroVap MC

Steam bath EG/HG

Condensate draining

The following drawings show the water draining connections that should be made.

Connection to the unit by a hose draining diam25

ELMC 5-30: 1 m hose with 3 hose clamps

ELMC 40-60: 1m+1.20m hose with 6 hose clamps.

ELMC 90: 1m+1.20m+1.80m hose with 9 hose clamps

Please follow the recommendations hereafter. Drain hose internal, diam mini

- ELMC 5/8/10/15/20/30 ø 25mm
- ELMC 40/50/60 ø 25 mm
- ELMC 90 ø 25 mm

The drain operates under gravity only. Ensure drain pipework has a pitch of at least 15°C to allow the unit to drain efficiently.

The Devatec recommended steam hoses should be used for connecting the humidifier to the drain network. Regular replacement is recommended.

If rigid piping is used, it must be heat (100°C) and pressure resistant PVC material (copper, galvanized or stainless steel piping **prohibited**)

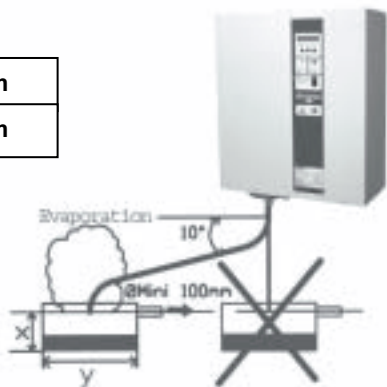
The temperature of the water discharged from the humidifier is between 60°C and 100°C. Ensure the pipe work used is capable of withstanding such temperatures.

The discharge hose must be free from any obstacle.

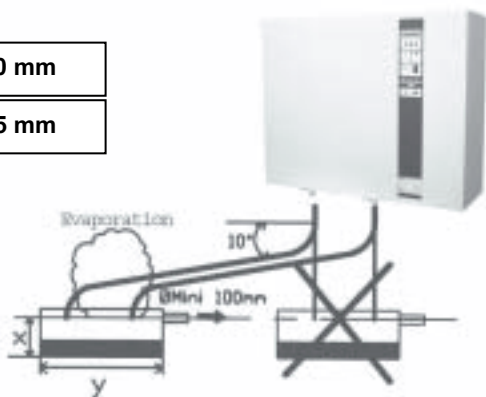
It is recommended that each steam cylinder has its own drain pipe and tundish arrangements. This will permit fast and easy identification of a fault within a cylinder.

The discharged water should be offset from the underside of the unit as shown. This will prevent any steam and/or condensation from getting into the cabinet.

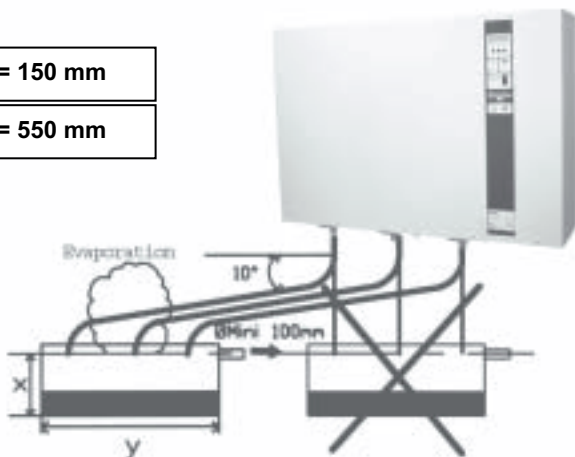
X = 100 mm
Y = 130 mm



X = 100 mm
Y = 375 mm

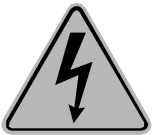
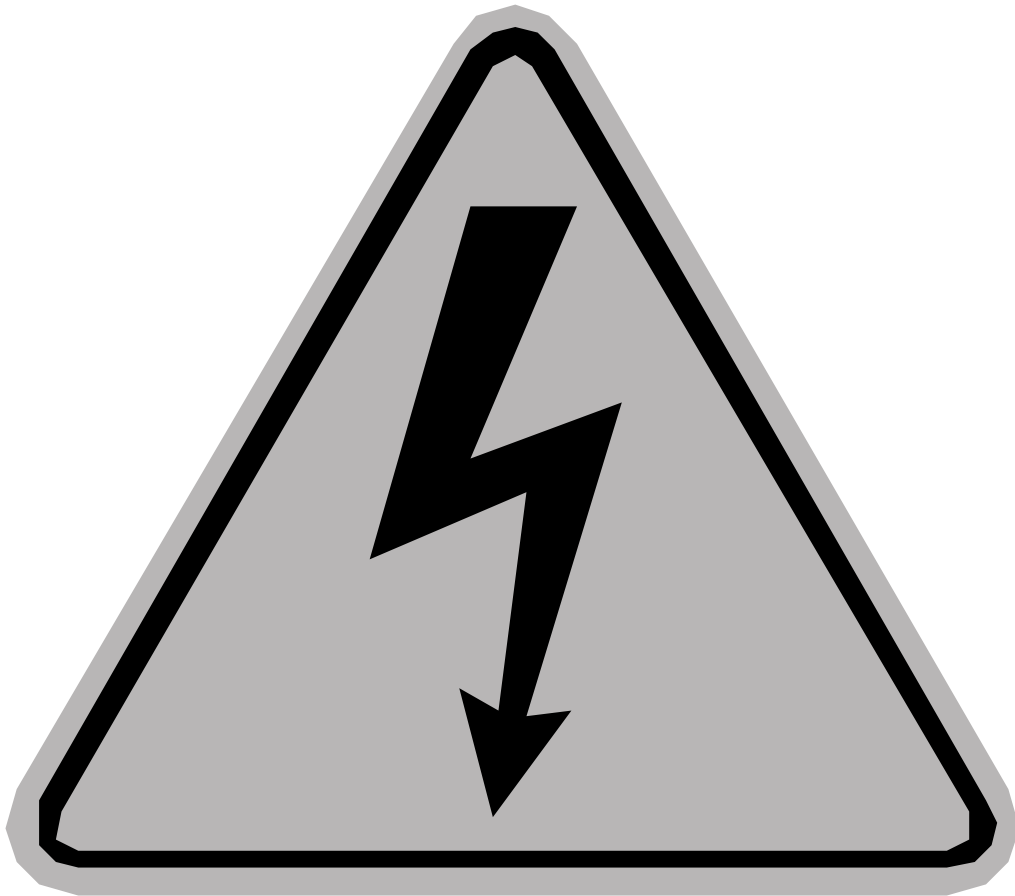


X = 150 mm
Y = 550 mm



Steam bath EG/HG

Electrical installation



- All works concerned with the electrical installation must be carried out by skilled and qualified personnel (eg electrician with appropriate training). The customer is responsible for ensuring their suitability. Please observe local regulations concerning the provision of electrical installations.



- Check all electrical terminal screws at commissioning, after 50 hours operation and at every service thereafter.



- Take care : the ELMC electronic components are very sensitive to electrostatic shocks. Appropriate steps must be taken before any operation.

ElectroVap MC

Electrical installation

The tables below show the electrical features of the ElectroVap ELMC steam bath generators.

In all cases, the electrical supply of the command circuit is in 230 V. single phase.

ELMC STEAM BATH IN 2 X 230 VAC 50/60Hz

ELMC	Production (KG/Steam)	In (A)	Imaxi (A)	Pmaxi (PW)	Cylinder size (Ø)	Ø Steam outlet
5-2	5	16,3	17,6	4,05	Small	25
10	10	33	35	8	Large Diam 25	25

ELMC STEAM BATH IN 3 X 400 VAC 50/60Hz

ELMC	Production (KG/Steam)	In (A)	Imaxi (A)	Pmaxi (PW)	Cylinder size (Ø)	Ø Steam outlet
5	5	5,6	6,2	4,24	Small	25
8	8	8,9	9,7	6,63	Small	25
10	10	11	12	8,21	Small	25
15	15	16,51	17,8	12,18	Large Diam 25	25
20	20	22	23,5	16,07	Large Diam 40	40
30	30	33	35	24,01	Large Diam 40	40
40	40	44	46,7	31,94	Large Diam 40	40
50	50	55	58,3	39,88	Large Diam 40	40
60	60	66	69,8	47,74	Large Diam 40	40
90	90	99	104,6	71,55	Large Diam 40	40

ELMC STEAM BATH IN 3 X 230 VAC 50/60Hz

ELMC	Production (KG/Steam)	In (A)	Imaxi (A)	Pmaxi (PW)	Cylinder size (Ø)	Ø Steam outlet
5-23	5	9,6	10,5	4,13	Small	25
8-23	8	15,3	16,5	6,49	Small	25
10-23	10	19,1	20,5	8,07	Small	25
15-23	15	28,7	30,6	12,04	Large Diam 25	25
20-23	20	38,2	40,6	15,98	Large Diam 40	40
25-23	30	47,8	50,7	19,95	Large Diam 40	40
32-23	32	62,9	66,6	26,21	Large Diam 40	40
40-23	40	76,5	81	31,84	Large Diam 40	40
50-23	50	95,6	101,1	39,75	Large Diam 40	40
60-23	60	114,7	121,2	47,66	Large Diam 40	40
90-23	70	133,8	141,3	55,57	Large Diam 40	40

NB : if a circuit breaker must be installed, select the appropriate I max. value and increase it by a multiplying factor for safety purposes.

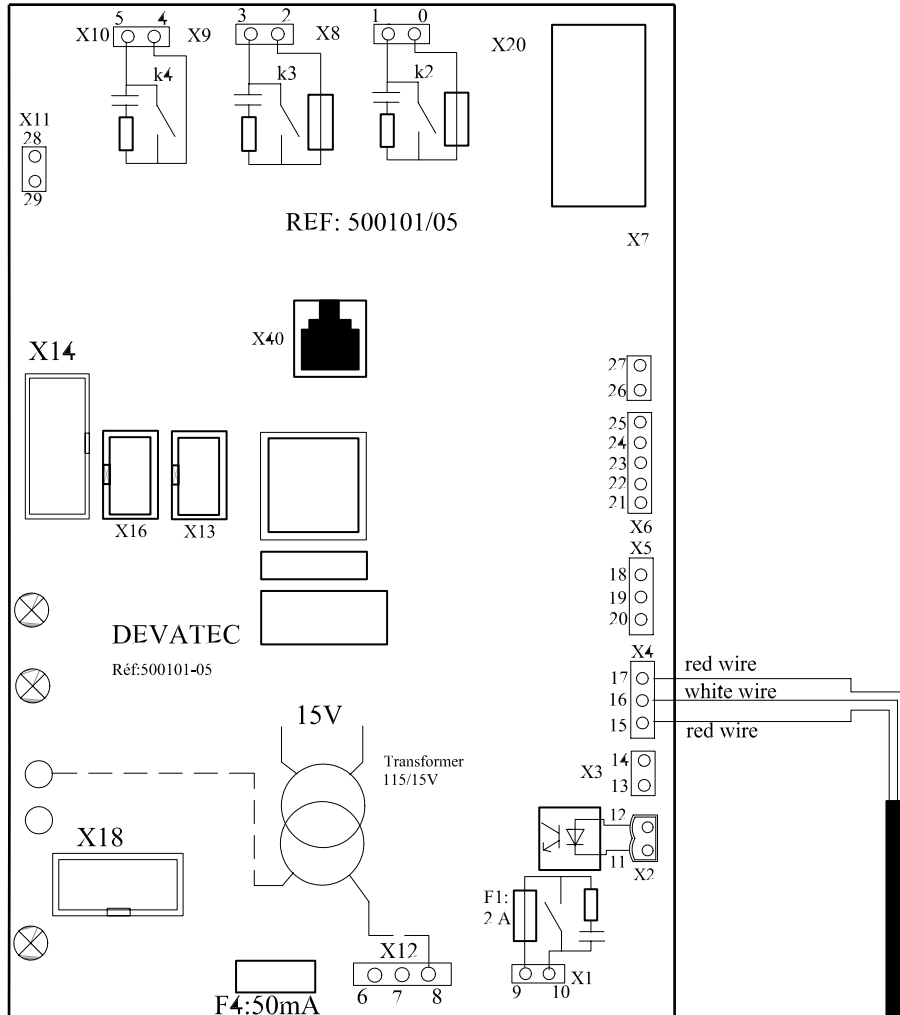
E.G. : ELMC 10 = 12A (I max) + 25% (coefficient) = 15 Amperes

**THE ELMC STEAM BATH GENERATOR IS ALSO AVAILABLE IN 460 & 600/3/60 V.
PLEASE CONSULT FACTORY FOR FURTHER INFORMATION.**

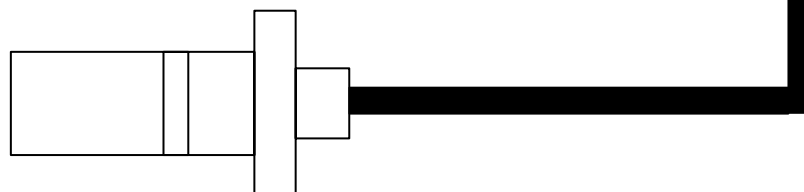
Electrovap MC

EG/HG

Wiring the temperature sensor



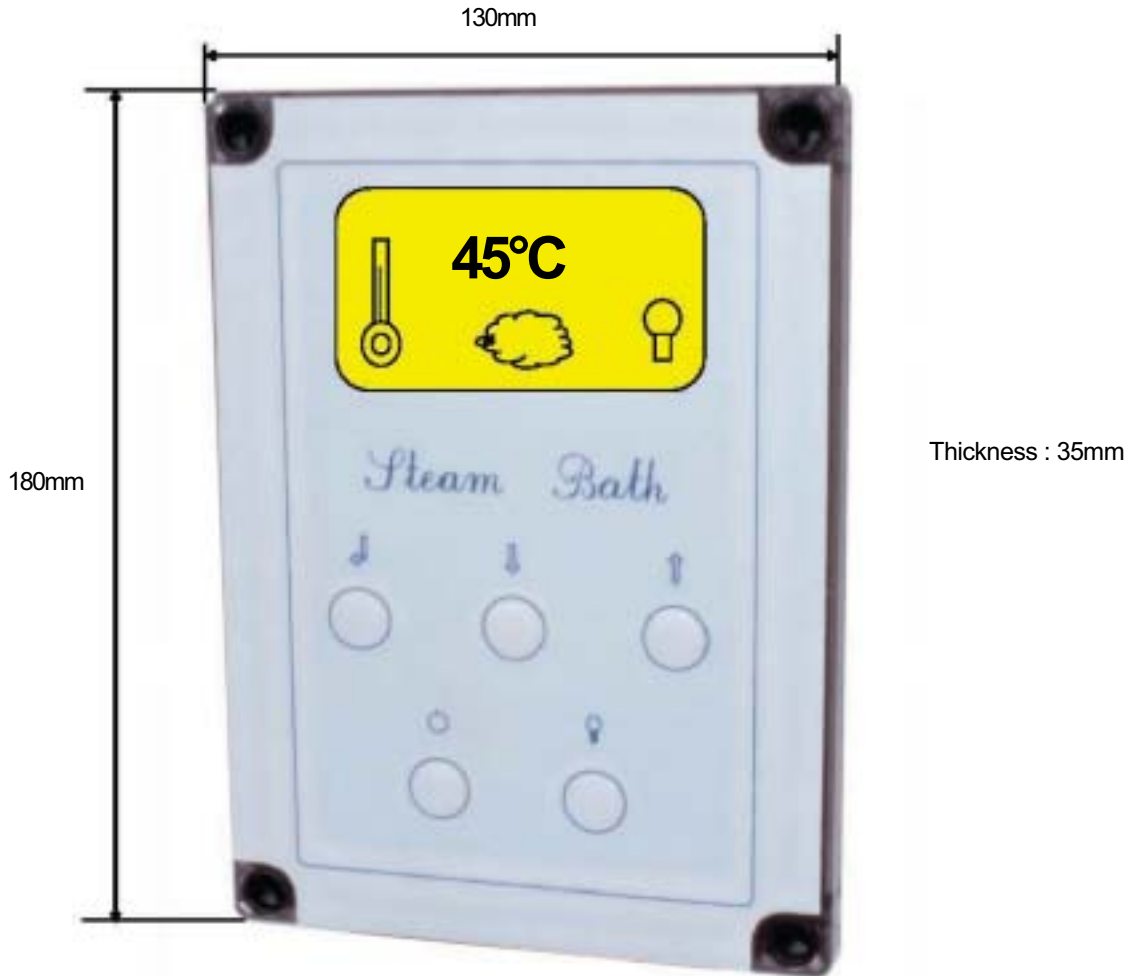
3 wire temperature sensor



A III works concerned with electrical installation must be carried out by a skilled and qualified personnel.


Electrovap MC

STEAM BATH CONTROL PANEL



LCD display control box for the close or remote control.



To stop steam production within the hammam, press the  bottom of the steam bath control box but do not turn off the ON/OFF switch of the generator.

This cabinet must be connected directly to the ELMC EG steam bath.

This model provides :

- the ON/OFF control of the steam humidifier ELMC EG ;
- the ON/OFF switch of the steam bath light ;
- the setting of the steam bath temperature ;
- the display of the temperature within the steam bath;
- the setting of the perfume dispensor.

The STEAM BATH remote control cabinet can be installed as far as 60 meters from the steam generator.

The cabinet is watertight and the push bottoms are membrane made.

For safety purposes, the cabinet has a 12V low voltage supply.

Never use solvent for cleaning the steam bath control cabinet



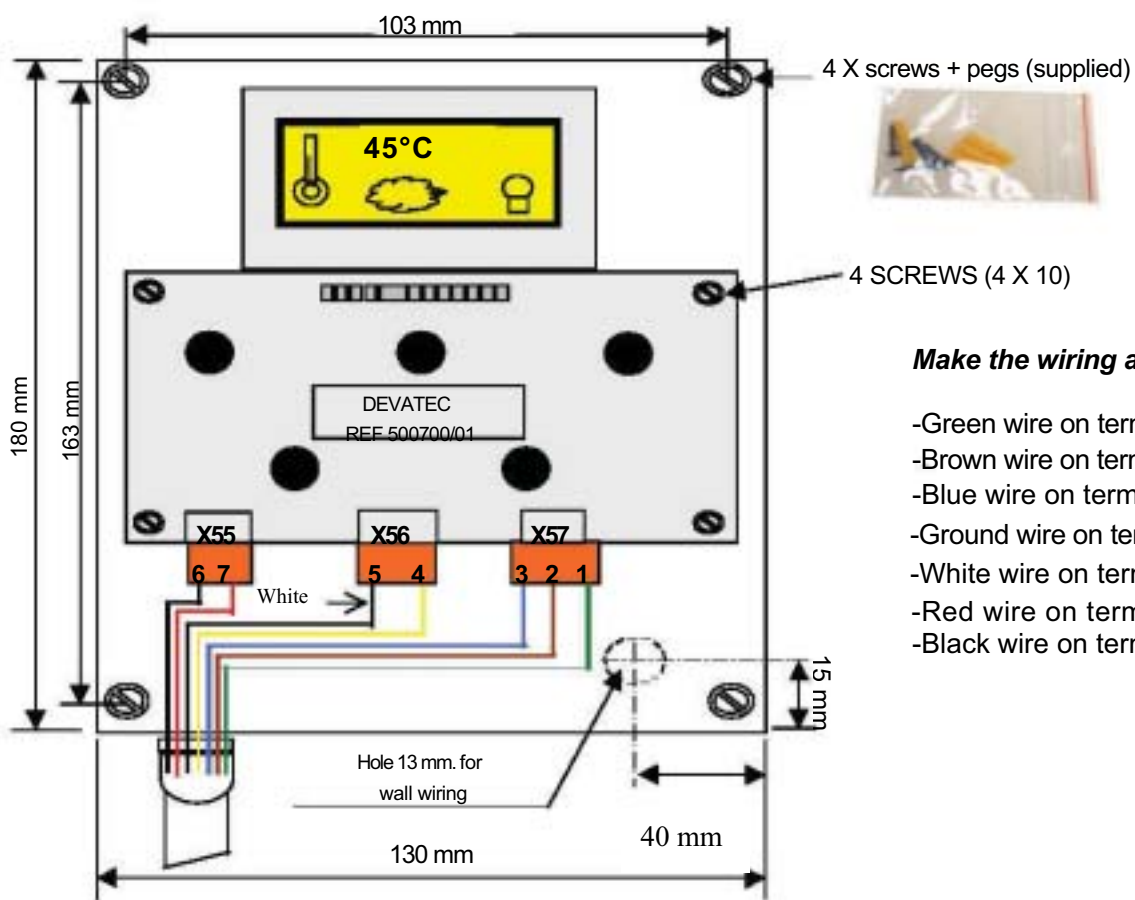
Electrovap MC

EG

REMOTE WIRING AND INSTALLATION OF THE CONTROL CABINET

Wiring your steam Bath cabinet :

- Please wire your steam bath cabinet as per the following instructions
- Space has been provided at the rear of the cabinet for a wall installation



Make the wiring as follows

- Green wire on terminal n° 1
- Brown wire on terminal n° 2
- Blue wire on terminal n° 3
- Ground wire on terminal n° 4
- White wire on terminal n° 5
- Red wire on terminal n° 6
- Black wire on terminal n° 7

Wall mounting :

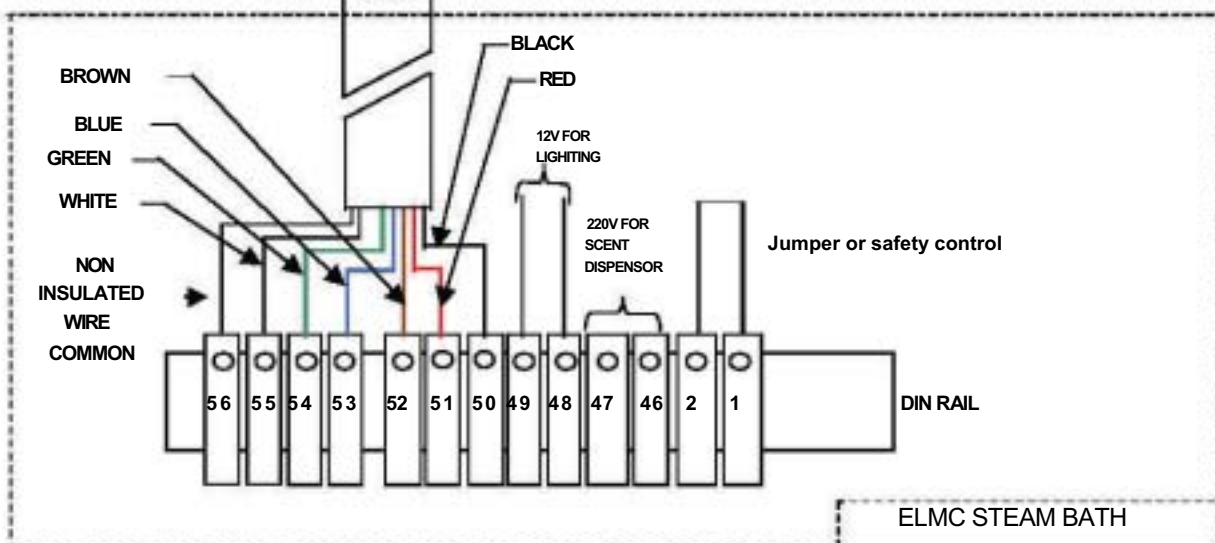
- Unscrew the 4 screws from the front cabinet of the Steam Bath
- Remove the front cover.
- Put the rear part of the box on the selected place.
- Mark off the 4 mounting holes (the latter are located at the same place at the front screws).
- Remove the back of the cabinet, drill with 5mm, put the pegs in place, position again the back of the control cabinet and screw up the 4 screws supplied (3x25mm) with a screw driver.
- The Steam Bath remote control panel is provided with a connecting cord sold by the meter (appropriate length to be indicated at order time).

Electrovap MC EG

Connection of the front control panel & the temperature sensor



SCHAFT SEAL



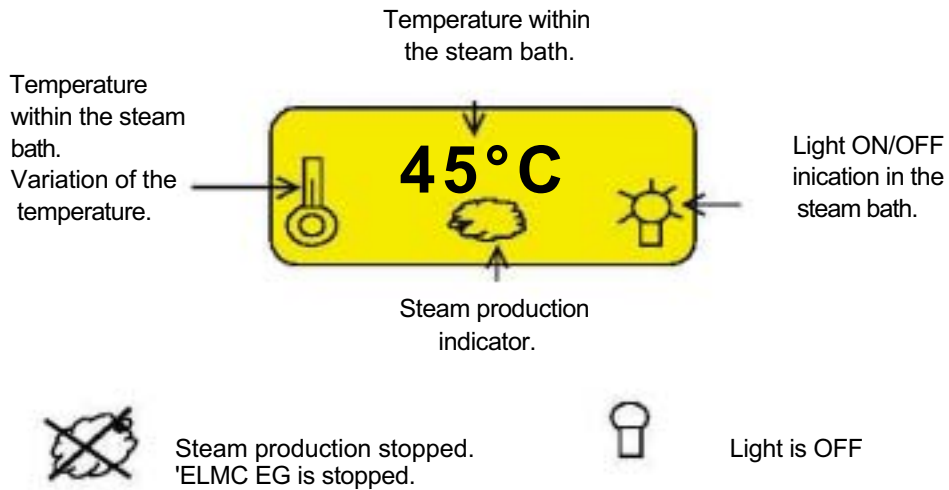
IMPORTANT:

All works concerned with electrical installation must be carried out by a skilled & qualified personnel.

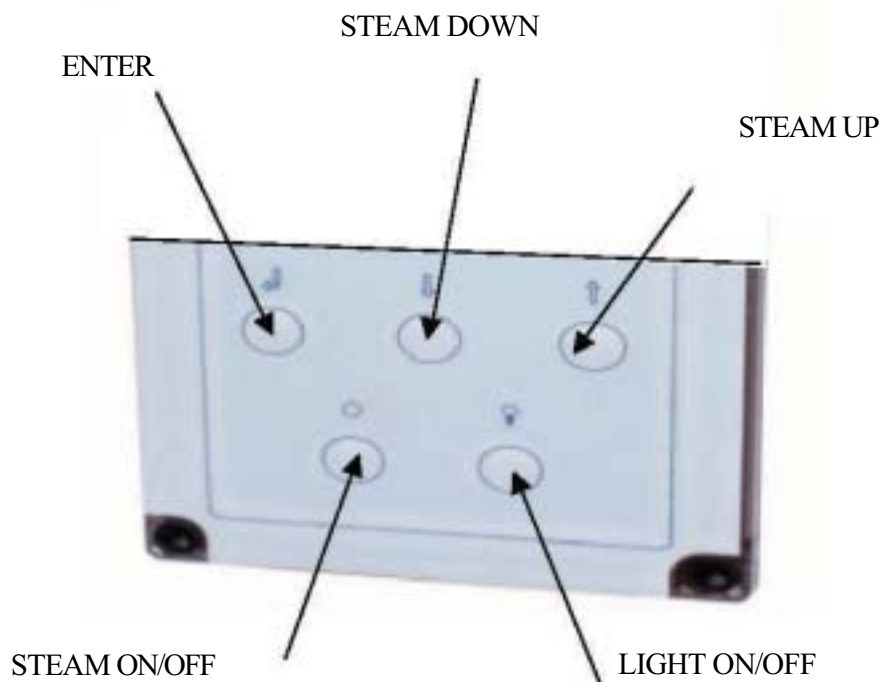
Electrovap MC EG

Front panel identification

Indications on the display panel :




Using of the panel buttons :



Electrovap MC EG

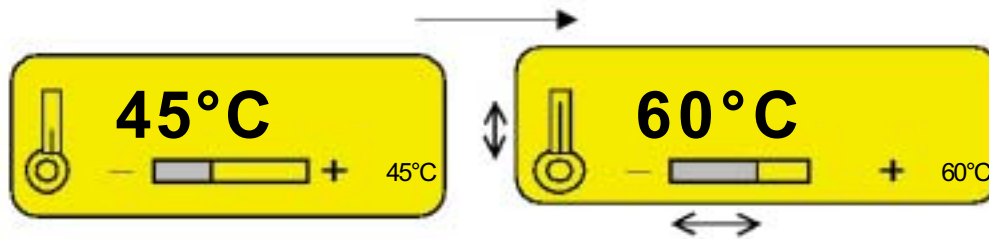
Modifications of the setting points

Modification of the temperature setting point :

Push on the enter button  the display indicates the temperature of the set point inside the steam bath.

You can change it with the help of the buttons (+) or (-).

DO NOT FORGET TO PRESS THE ENTER KEY TO CONFIRM THE SETTING

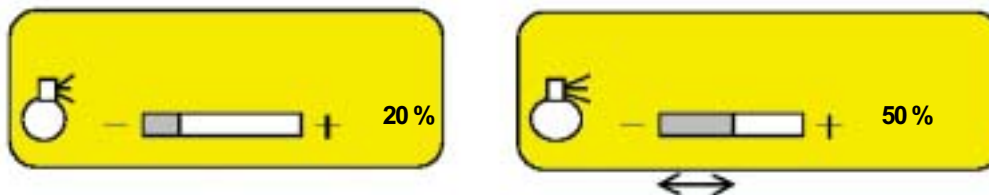


if any of the buttons is pressed within 10 seconds, the display will show the previous message again.

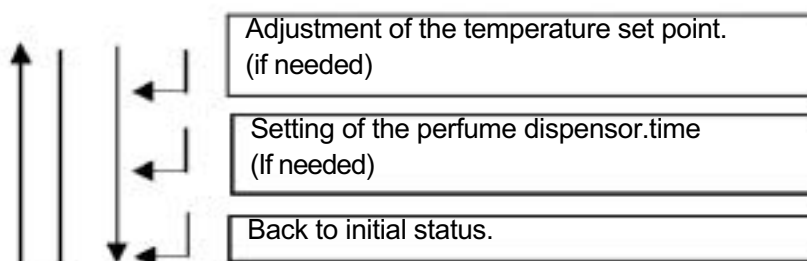
Modification of the perfume set point :

After the temperature it is possible to set the perfume spreading time with button (+) and (-) button.

DO NOT FORGET TO CONFIRM THE SETTING.

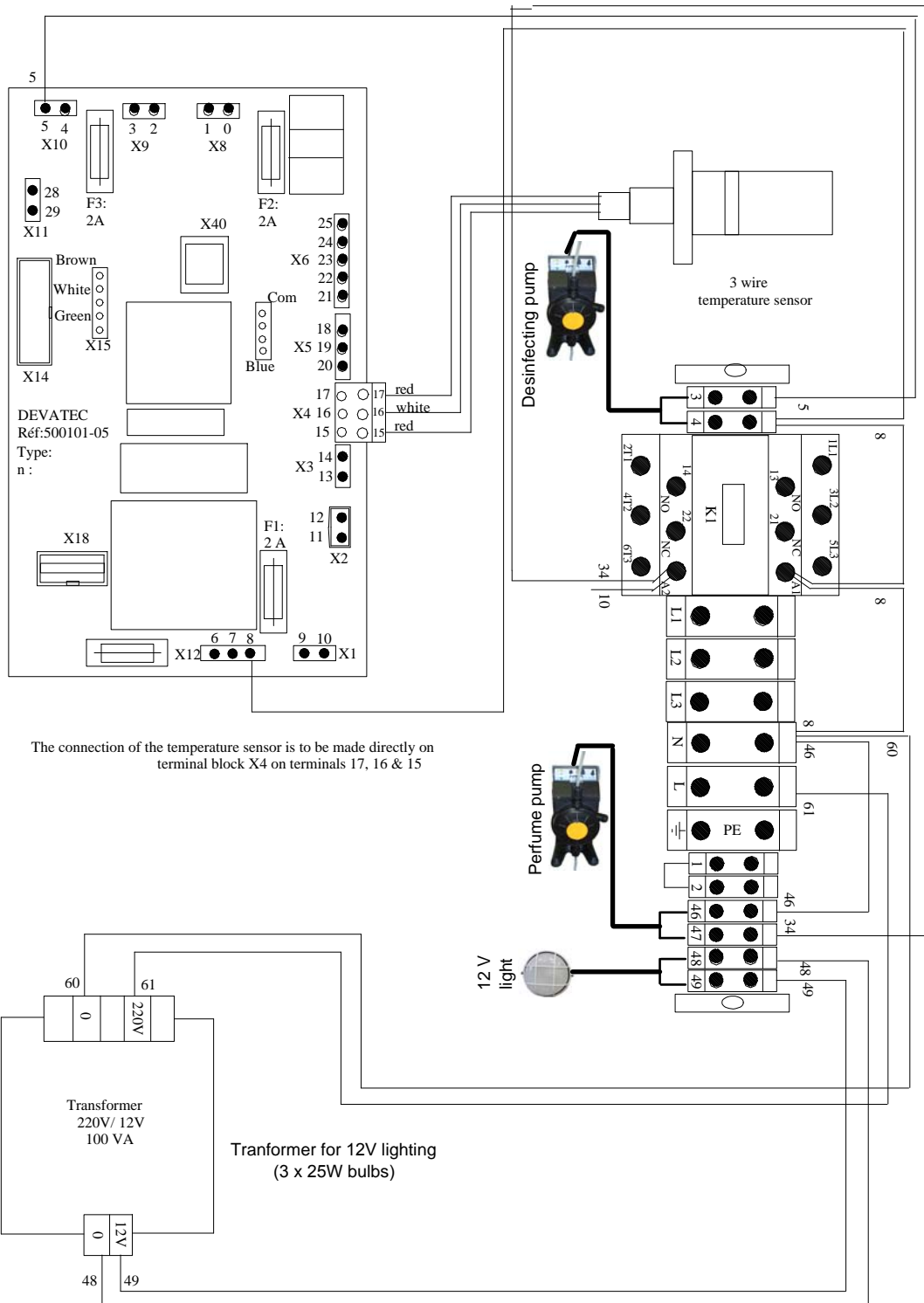


Example of the scrolling menu :



Electrovap MC HG

Connecting the optional equipment



Wiring of the KTY81 temperature sensor onto main board ref: 500101/05: □

- 1 Red wire on terminal n°15 □
- 1 White wire on terminal n°16 □
- 1 Red wire on terminal n°17



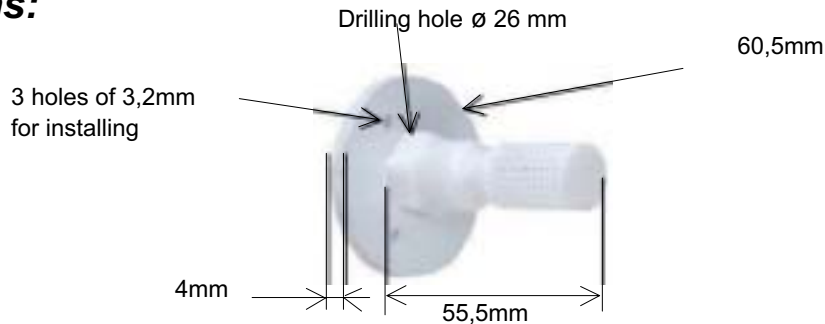
All works concerned with electrical installation must be carried out by a skilled and qualified personnel.

Electrovap MC

EG/HG

Temperature sensor

Dimensions:



Wiring :

The connection of the temperature sensor is to be made directly onto the main board with a three pin connector (s.a. page 15 for further reference).

Position of the temperature sensor :

Recommended position



Vertical position



.If you install the temperature sensor on the ceiling : it may happen that the end of the sensor has some water due to steam condensation.

.If this occurs or in prevention, take this end off.



Never use solvents for cleaning the sensor.



Part to screw off

Supplied equipment :

Temperature sensor supplied with 10 m. long cable + 1 sent of 3 screws 3X25mm & pegs.

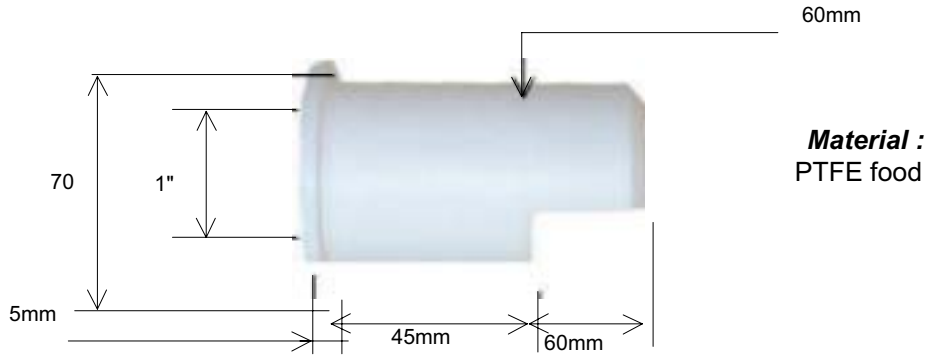


Electrovap MC

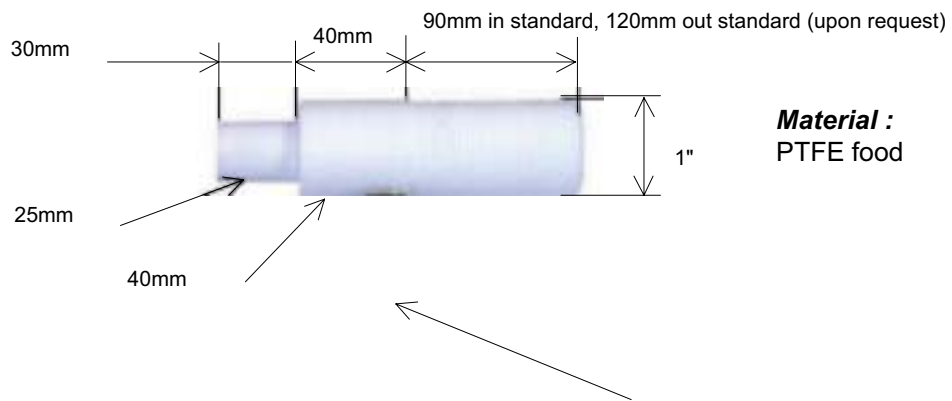
EG/HG

Steam nozzle

Dimensions of the nozzle:



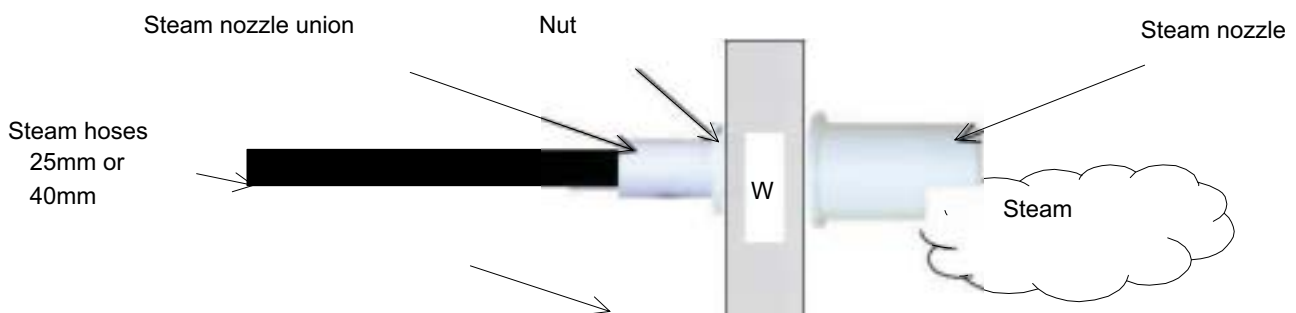
Dimensions of the steam nozzle union :



Dimensions of the nut:



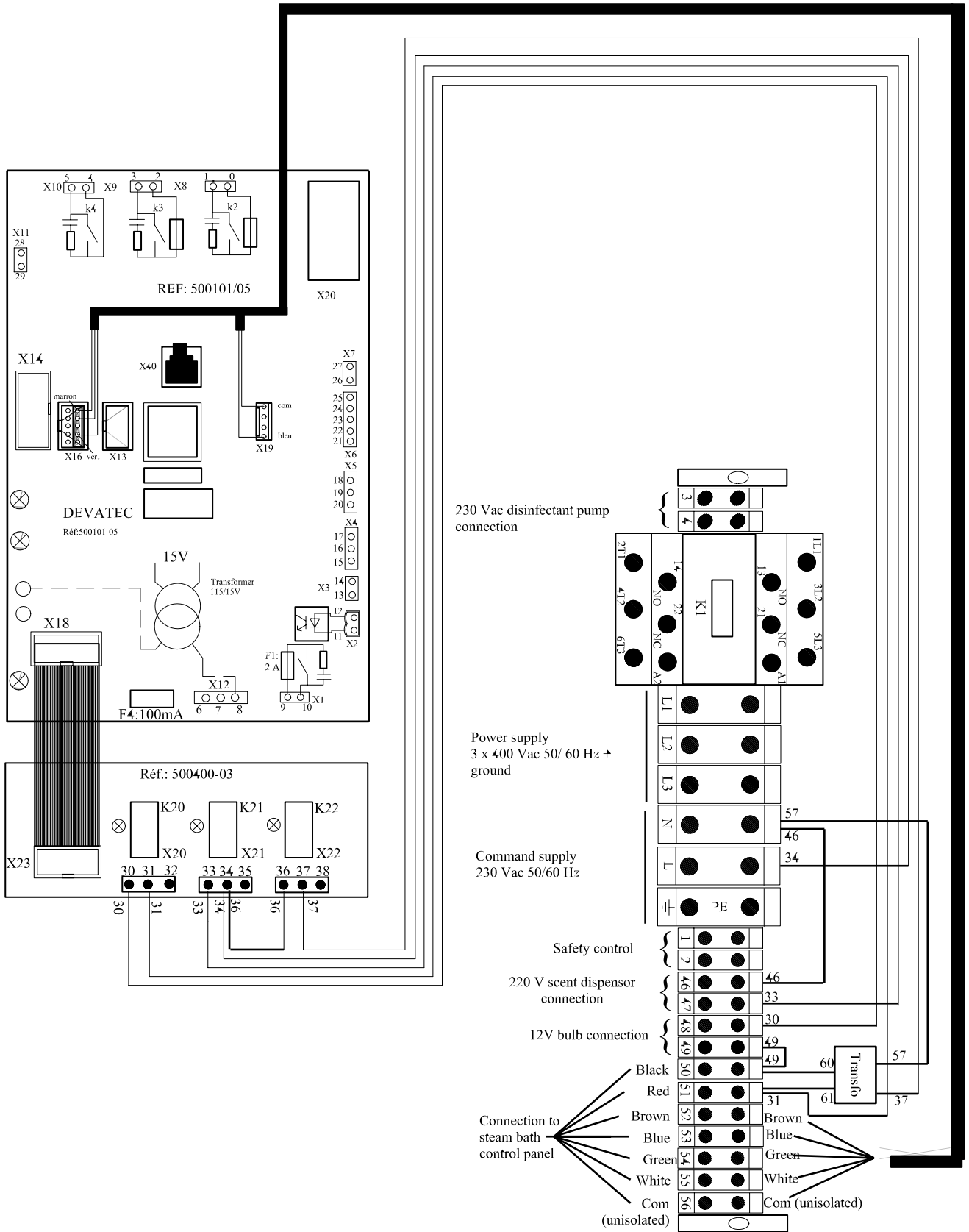
Build up and example of the installation of the whole steam nozzle:



Electrovap MC

EG

Wiring the main board and the optional equipment



ALL WORKS CONCERNED WITH ELECTRICAL INSTALLATION MUST BE CARRIED OUT BY A SKILLED AND QUALIFIED PERSONNEL.

Electrovap MC

EG/HG

Perfume dispenser

Dimensions :

Perfume pump



7 liters tank



Material :

Polyethylen high density, food quality.



Coil & perfume dispenser valve

Inlet of rislan pipe 4/6mm.

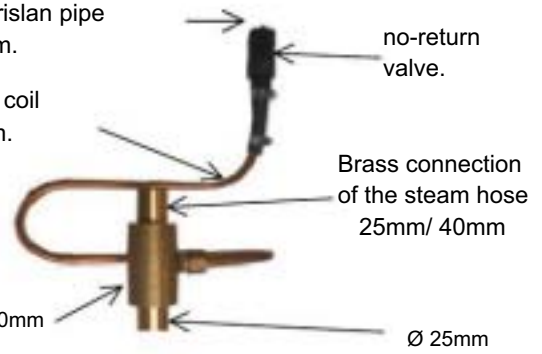
Copper coil 10mm.

no-return valve.

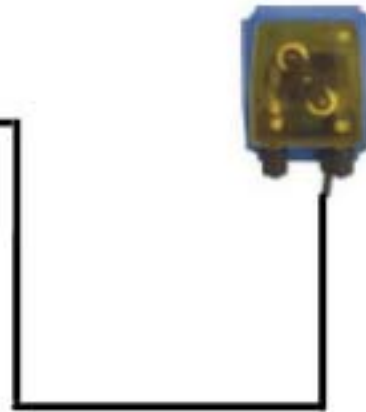
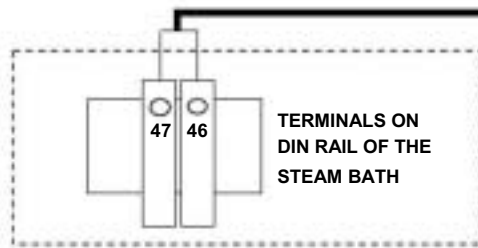
Brass connection of the steam hose 25mm/ 40mm

Ø 40mm

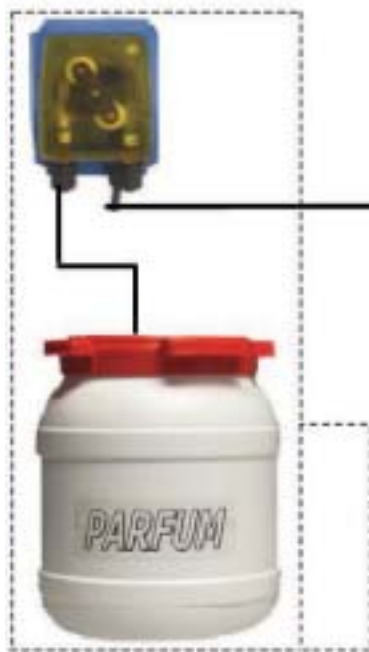
Ø 25mm



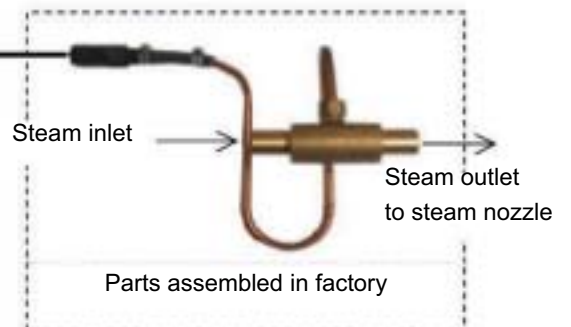
Wiring diagram :



Equipment supplied :



Parts assembled in factory



Parts assembled in factory



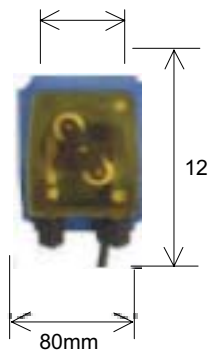
Never use solvent to clean the tank and the pump.

Electrovap MC EG/HG

Disinfecting system

Dimensions :

Disinfecting pump



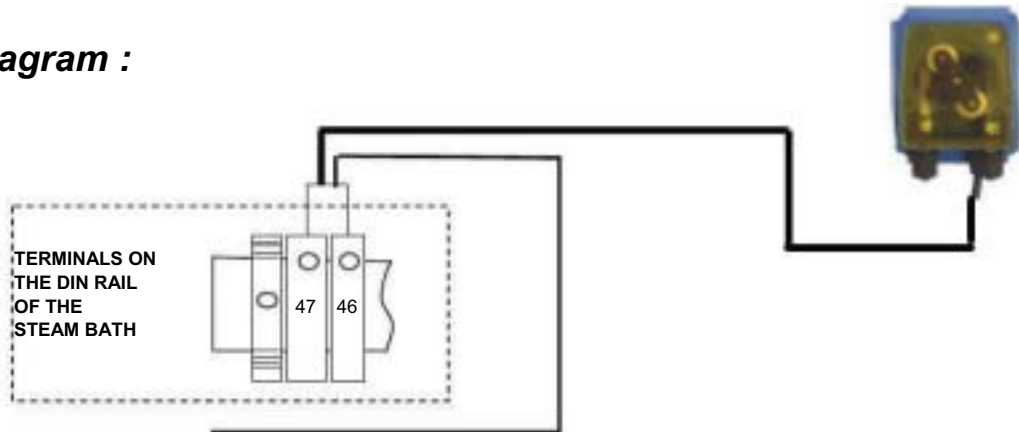
7 liters tank



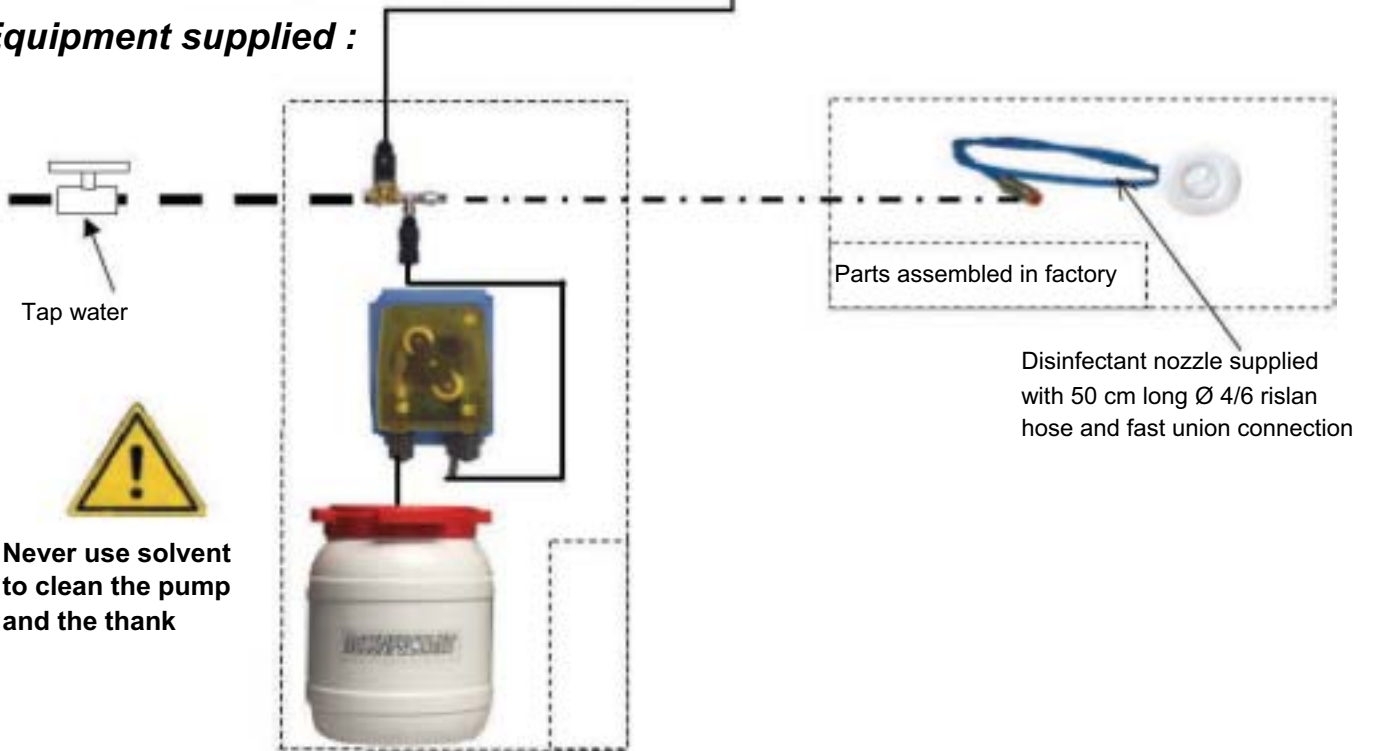
Disinfecting nozzle



Wiring diagram :



Equipment supplied :



Never use solvent to clean the pump and the tank

Parts assembled in factory

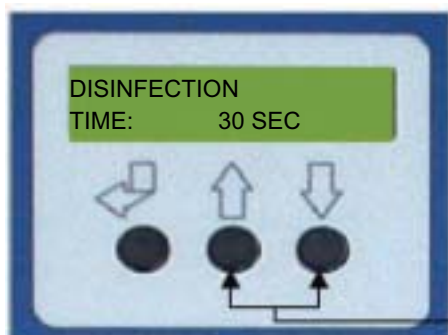
Pictures for illustrating purposes only

Electrovap MC


EG / HG

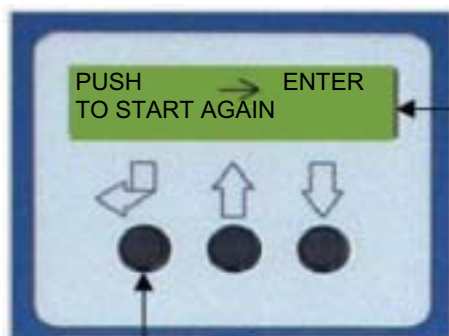
Disinfection system

How to start the disinfection system :



To adjust the disinfection time :
Please check with menu "Changing parameters" on page 32.

To initiate the disinfection system :
Press simultaneously on  :
the disinfection time begins to scroll
(s.a. the display window).



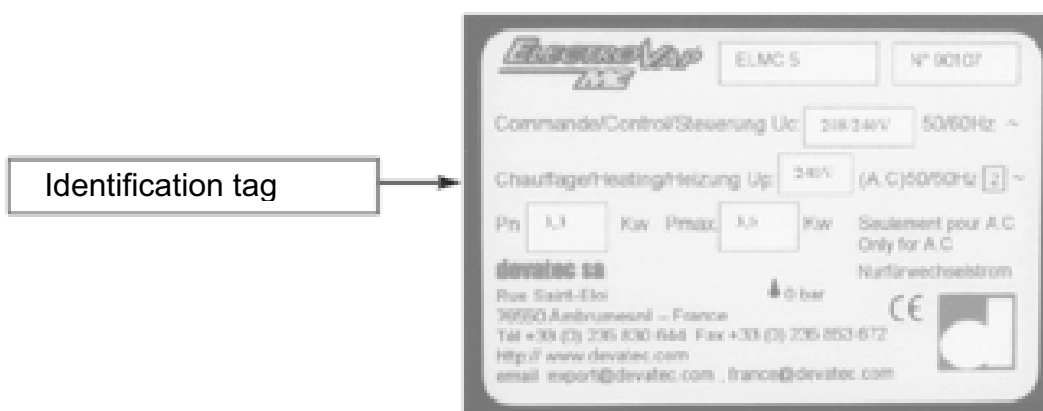
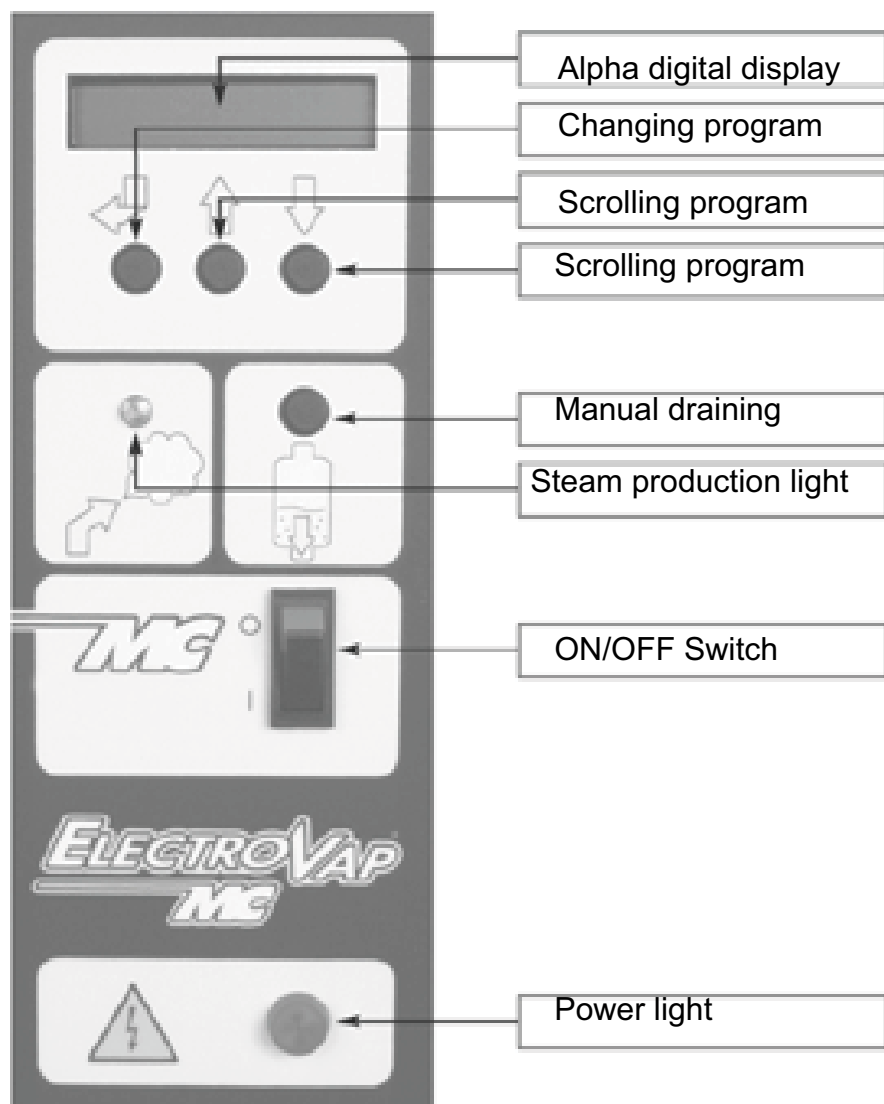
When the time is over, the display reads :

At this moment, press the button  to go back to the information menu

ElectroVap MC

Front panel identification

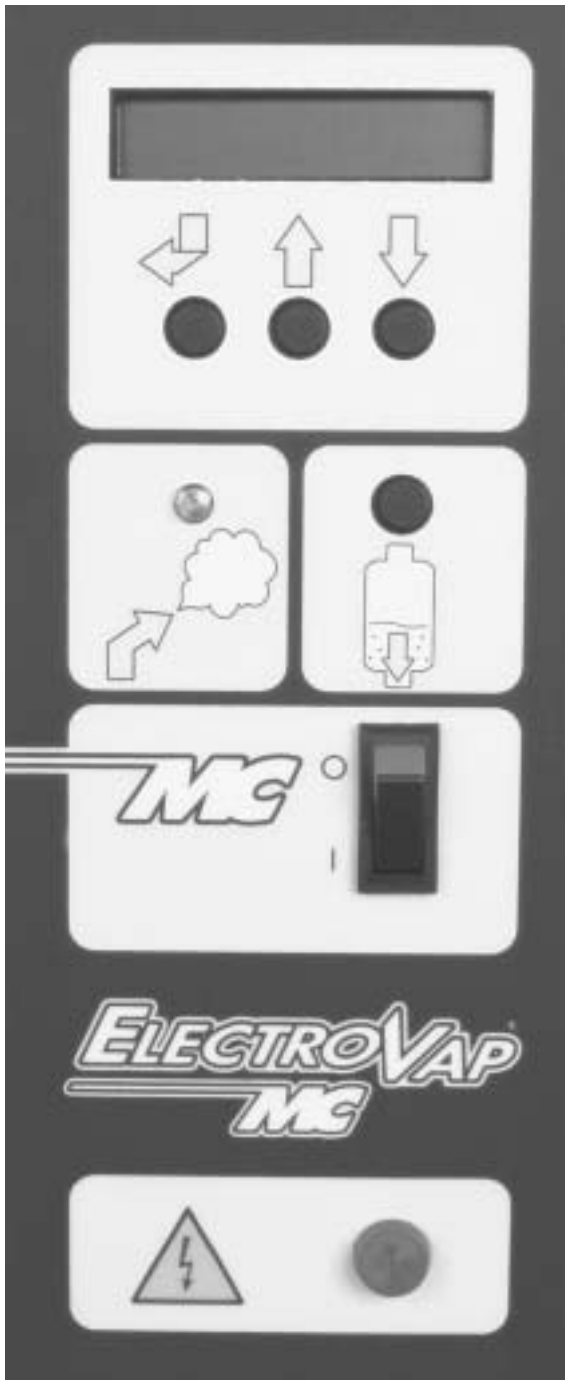
Software assistant



ElectroVap MC

EG/HG commissioning

Software assistant



Checking and Switching on.

- 1 - After completion of the installation inspection, switch on the water supply to the unit..
- 2 - Switch on the main power supply.
- 3 - The power lamp must be illuminated.
- 4 - Switch on the main power supply I/O on I. The display will default to show the rate of steam produced.

The steam bath unit offers 3 main menus:

USER INFORMATION

The User Information menu (steam generator status) provides information on the operation status of the unit. No parameter can be changed from within this menu.

HUMIDIFIER CONDITION

(Steam Generator Configuration) menu provides information only regarding the unit set up. No parameters can be changed from within this menu.

CHANGING PARAMETER

The changing parameter System menu allows all operating parameters to be adjusted. An access code is required to gain entry (2 3 4).

Electrovap MC

EG/HG

Changing parameters menu

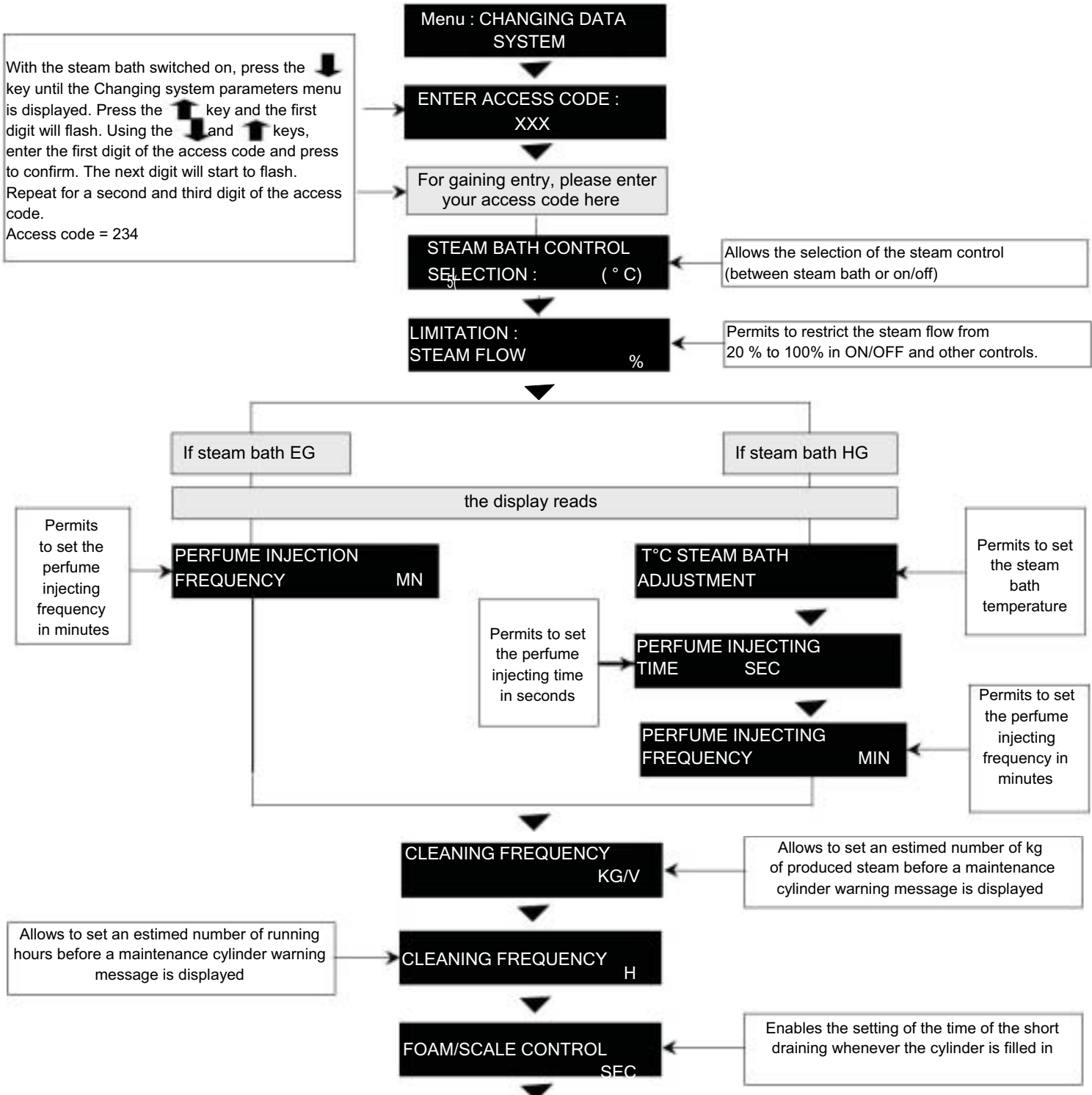
Roll up or down the menu in pushing on



keys, press the select button



to change menu



Electrovap MC

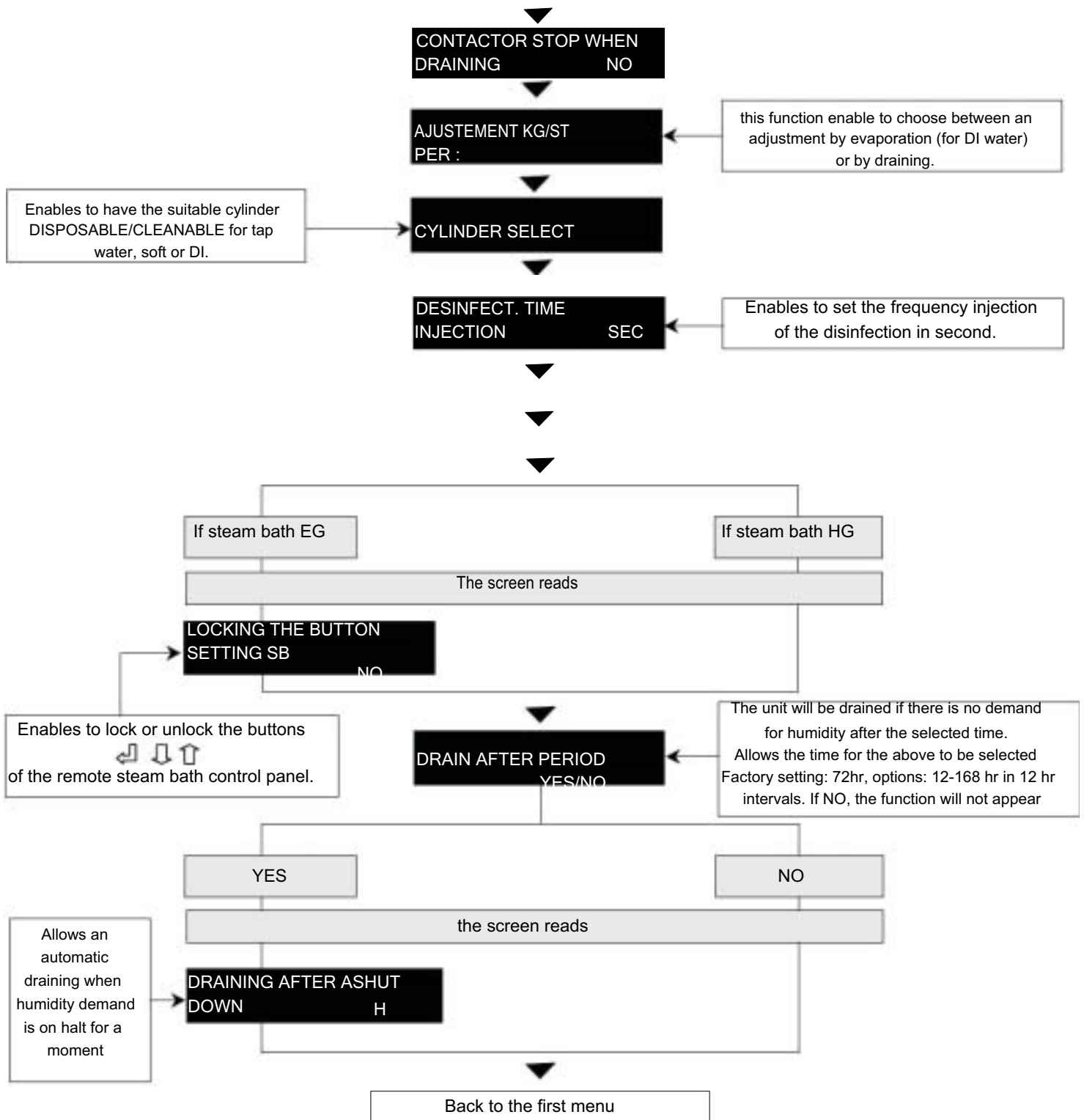
EG/HG

Changing parameter menu

Take care: Rolling the menu in pushing on in any time, allow to change the menu



, pressing the select button



Electrovap MC

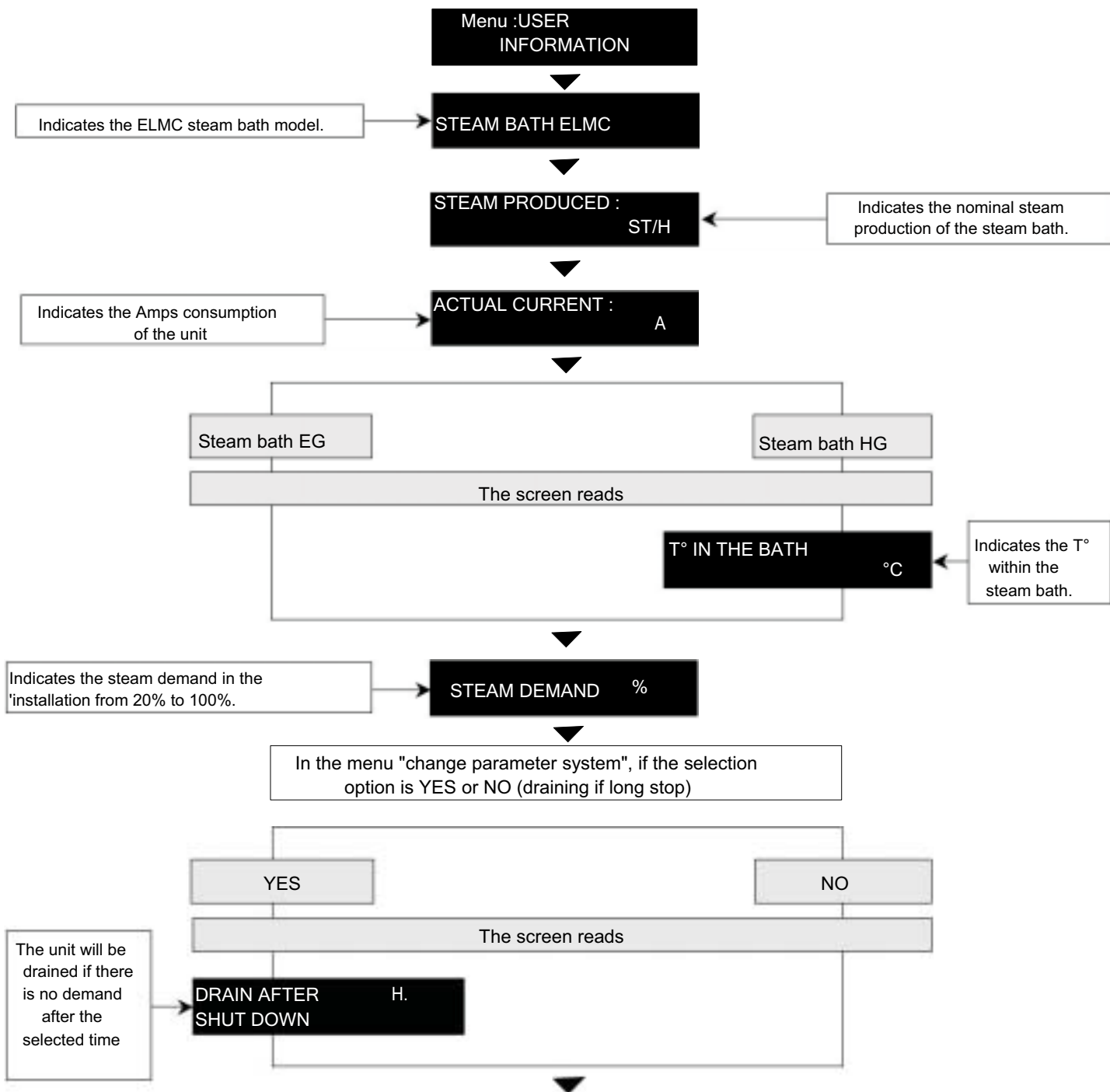
EG/HG

USER INFORMATION MENU

Take care : Rolling the menu in pushing on in any time, allow to change the menu.



, pressing the select button



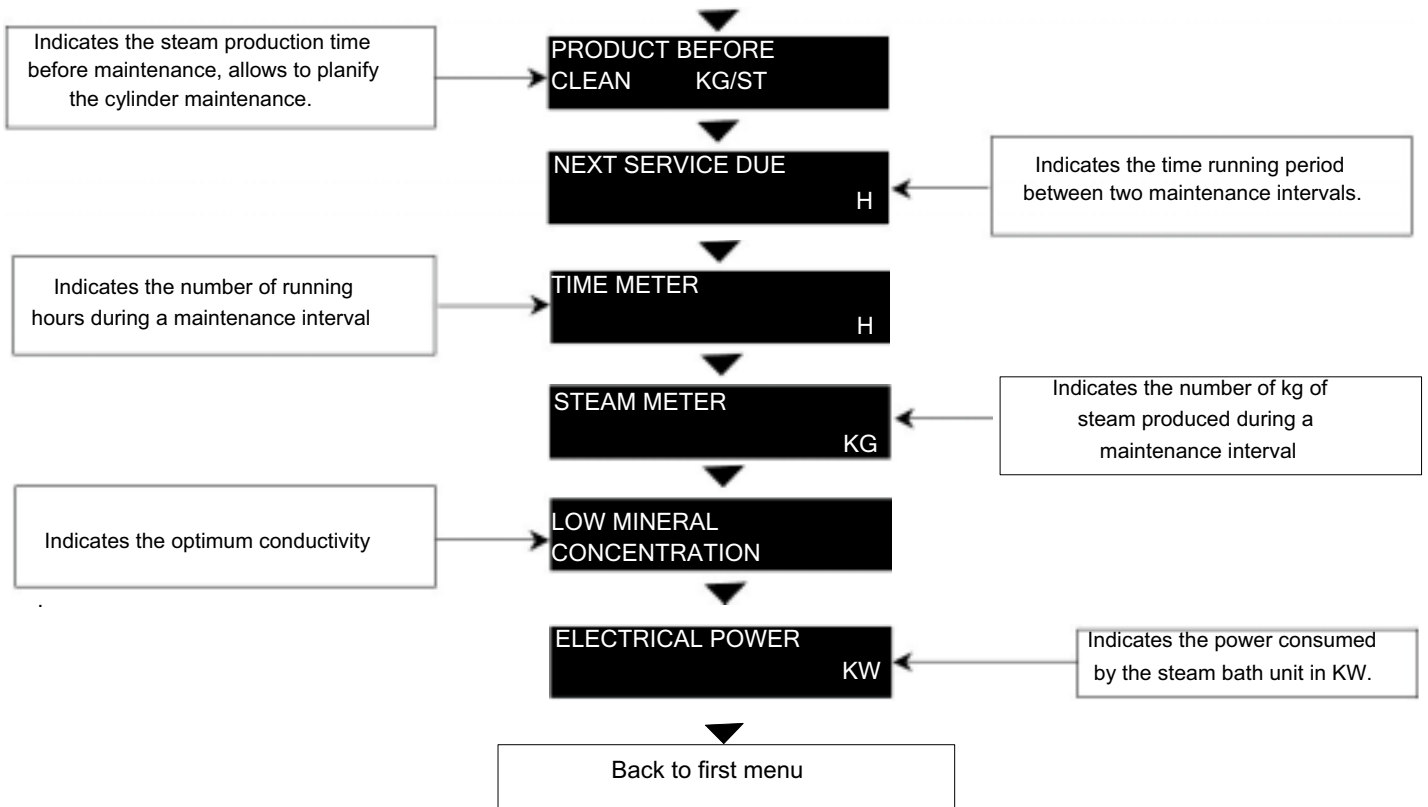
Electrovap MC

EG/HG

USER INFORMATION MENU

Take care : Rolling the menu in pushing on in any time, allow to change the menu.

↓ ↑, pressing the select button



1-2 Reverse timers (time before maintenance or production before cleaning). When at 0, the display reads "maintenance : VALVE DRAINING + CYLINDER". The timers are reset by pressing the manual draining button.

3-4 Timers (time & steam) can be reset by pressing the manual draining button and the enter key

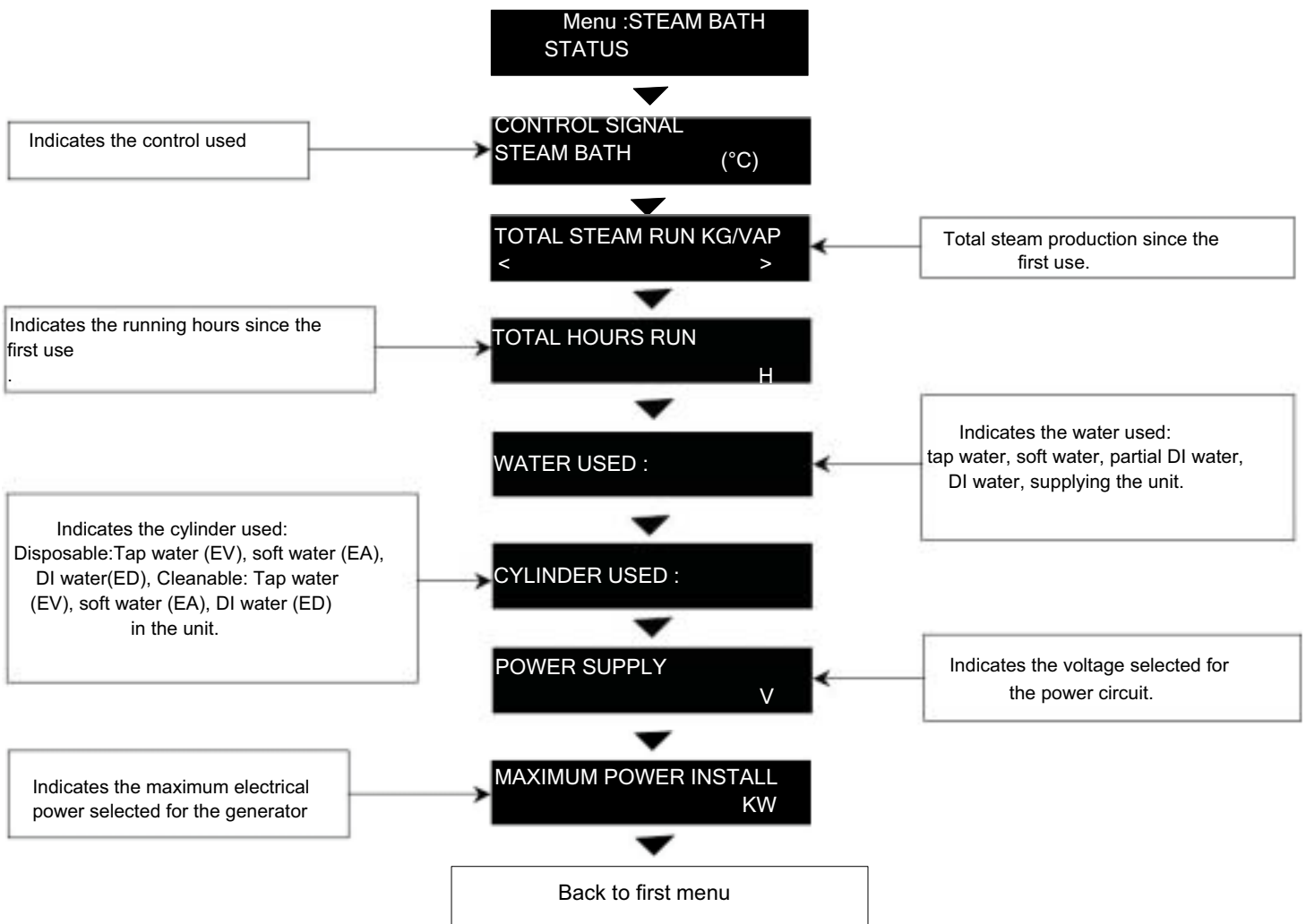
Electrovap MC

EG/HG

STEAM BATH STATUS MENU

Take care : Rolling the menu in pushing on in any time, allow to change the menu.

↓ ↑, pressing the select button



ElectroVap MC

ALERTS

Software assistant

P ALERTS	TROUBLE	CAUSES / ACTIONS	OPTION
P0 ALERT	A power phase is missing	Check power supply, fuses or power circuit breaker (general power switchboard)	Power phase detection device is required
P1 ALERT	Unit on steam demand and contactor still on	F1 fuse (2A) or contactor coil failure. CHANGE FUSE OR CONTACTOR	Standard
P2 ALERT	Idle demand and contactor still off	CHANGE CONTACTOR	Standard
P3 ALERT	Inlet valve constantly open	Check correct water inlet pressure (1 to 6 bar). CHANGE INLET VALVE	Standard
P4 ALERT	Cylinder is not filling correctly	Water supply failure or low water pressure. Drain valve failure. CHANGE INLET VALVE – CLEAN DRAIN VALVE	Standard
P5 ALERT	Cylinder not draining correctly	Blockage at the drain valve. Drain valve coil failure. CLEAN or CHANGE DRAIN VALVE – REPLACE COIL- CHANGE or CLEAN CYLINDER	Standard
P6 ALERT	Water leakage in cylinder part	Cylinder leaking at the gasket. CHANGE GASKET or CYLINDER	Water leakage detection device is required

ElectroVap MC

Inspection maintenance

Maintenance



The ElectroVap Steam Bath MC is delivered with disposable cylinder(s) in standard which can be replaced by cleanable ones, however, without any modification, according to the choice of the user. Drain the steam cylinder using the manual drain key. When the cylinder is fully drained switch off the unit and isolate the power. **The steam cylinder may be very hot. Allow it to cool down before removing.** Remove front panel from the humidifier to access the cylinder compartment. Disconnect the steam hose from the top of the steam cylinder. Remove power and high water level electrodes from top of the steam cylinder.

Lift the cylinder upwards until it is clear of the drain valve. Ensure the retaining ring remains in the drain valves. The disposable cylinder will be merely replaced by new ones.



Cleanable cylinder:

Mark the edge of the cylinder halves so the can be matched up when reassembled.

Note:

The constant heating and cooling of the cylinder may cause distortion. Consequently the cylinder halves must be assembled in the same relative position. Remove nuts and bolts around the centre of the cylinder. Open up cylinder. It is important that the strainer in the bottom half of the cylinder is also cleaned.

Clean the electrodes by scraping off the mineral deposits. Alternatively, this can be done using weak descaling solution. Rinse the electrodes and the body of the cylinder. **IT IS IMPORTANT TO AVOID DISTORTION THE CYLINDER IN ATTEMPTING TO REMOVE ANY MINERAL DEPOSITS FROM IT.** Relocate the strainer in the cylinder base. Replace the cylinder gasket on the rim of the bottom half of the cylinder and then locate the upper half of the cylinder on the gasket, **TAKING CARE THAT THE MARKS ARE ALIGNED.** Refit the nuts and bolts. Clean the O-ring on the drain valve and if necessary, change it. (every 2-3 cylinder cleanings). Locate the steam outlet of the cylinder in the retaining clip. Position the base of the cylinder over the drain valve and push downwards. Reconnect the power cables.

General:

The steam generator requires regular maintenance to ensure efficient operation and to prevent breakdown.

The exact maintenance frequency is variable and will depend on water quality, hours run and level of demand for humidification.

New installations should be inspected / serviced every 2 to 4 weeks. This may be too frequent, but it will enable a suitable maintenance routine to be established.



Routine inspection:

The following is a guide to work that should be undertaken in a routine inspection.

- 1 - Inspect water and steam installation for leaks and damage.
- 2 - Inspect electrical installation for any loose cables and or damages. Components.
- 3 - Inspect the steam cylinder for scale deposits. If the scale in the cylinder is half way up the stainer in the lower half of the cylinder it should be replaced / cleaned (see changing steam cylinder).
- 4 - Inspect the inlet valve. The drain valve may become blocked with scale from the steam cylinder is will cause water to continually run to drain.



ElectroVap MC

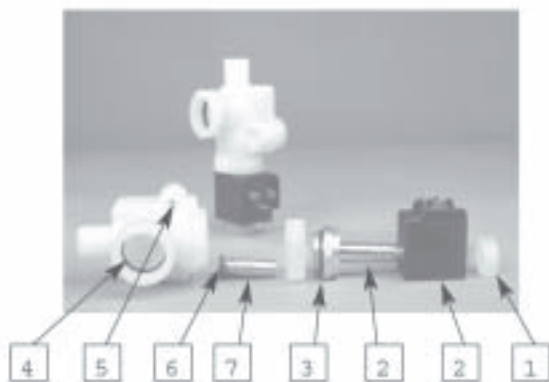
Valves maintenance

Maintenance



Drain valve maintenance

To be made at each cylinder maintenance



Drain the steam cylinder fully and remove it from the humidifier. Isolate power and water supply before attempting to carry out any maintenance.

- Remove the cap from, the end of the solenoid valve **1**
- Remove the coil from the valve stem **2**
- Unscrew and remove the valve stem from the valve body **3**
- Clean the valve stem with fresh water **3**
- Clean the valve seat and the piston (taking care not to lose the spring **7**)
- Remove the O ring and drain valve collar from the top of the valve body **4**

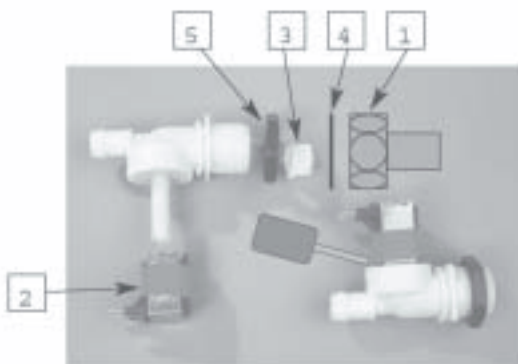
Note

Grease the O ring with high temperature silicone grease before replacing. Remove the filling cup hose from the valve body. Remove the two screws that secure the valve body to the drain cup **5**. Remove the drain valve body from the drain cup and rinse with clear water ensuring any scale deposits are removed. Pay particular attention to the piston seat **6**. Assemble in reverse order.

Inlet valve maintenance



To be made every six months



Drain the steam cylinder fully and remove it from the humidifier

Isolate power and water supply before attempting to carry out any maintenance.

- Remove the water inlet hose from the valve. **1** Remove the solenoid coil in pushing and turning **2**
- Remove the basket filter from the base of the valve with a pair of long nose pliers. **3**
- Wash the basket filter under clean water to remove any dirt and debris. **3** Change the O ring if necessary **4**
- Assemble in reverse order.

Note

Do not forget to fit the washer when attaching the water inlet hose.

Steam bath Bain vapeur

**Steam bath
control
cabinet**



Sensor



**Perfume dispenser
or disinfecting
pump**



Perfume coil



Steam nozzle

**Perfume dispenser or
disinfecting tank**



Disinfecting nozzle



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