

USER MANUAL

## STORAGE WATER HEATER

**EWH-basis/N, EWH-classic/N**

**EWH-comfort/N, EWH-mini/N**

## INSTALLATION

This electric unvented storage water heater includes the basic installation elements which are found in the packaging, i.e.:

- Insulating bushing for pipes.
- Safety valve.

Installation and first operation of the storage heater and the fittings have to be done by an expert which can take the responsibility for properly done work and explains the handling procedures.

For the connection the specific technical conditions of the energy supplier as well as the valid standards and safety regulations have to be considered.

## WALL MOUNTING PROCEDURE

Use 4 adequately resistant and sturdy screws and raw-plugs capable of holding the weight of the filled heater.

## LOCATION

The installation procedure is greatly facilitated by the possibility to locate the unit horizontally (EWH-comfort/N and EWH-classic/N) or vertically in a frost-free (!) place anywhere the house.

It would be a good idea to place the unit as close as possible to the outlet - short piping means little loss of temperature.

A minimum space of 50 cm below the outlet pipe is necessary for servicing.

As shown in the drawing the input and output pipes must be on the left side when the heater is installed horizontally.

Should the unit be close to a wall leave the recommended minimum-space for maintenance and service.

Do not install the heater with its wall mounts against the floor nor on a horizontal plane.

## HYDRAULIC INSTALLATION

The heater must be connected to the water supply mains.

a) The safety valve - supplied with the heater- **MUST** be installed on the cold water input (see right side)

- Before connecting the safety valve with the heater, the connecting pipe must be rinsed carefully.
- The draining pipe and the safety valve must be left open to the air and be installed in a continuous downward slope.

Water expands when heated. The units of the series classic, basis and comfort are supplied with a safety valve that lets the expanding water flow back into the cold-water feed.

The units of the series classic/N and comfort/N have a safety valve that prevents the expanding water (N=non return) from flowing back into the cold-water feed. Here a suitable siphon for the absorption of the expanding water is to install.

The drain of the safety valve must not be blocked.

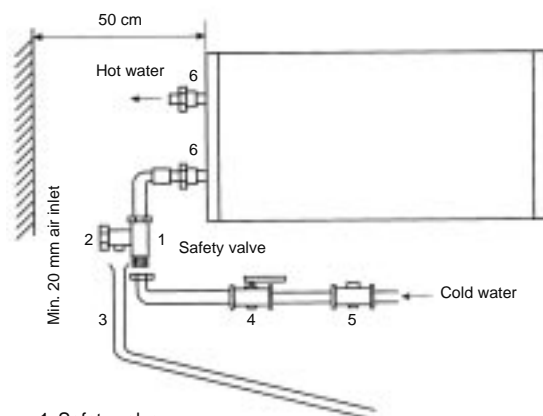
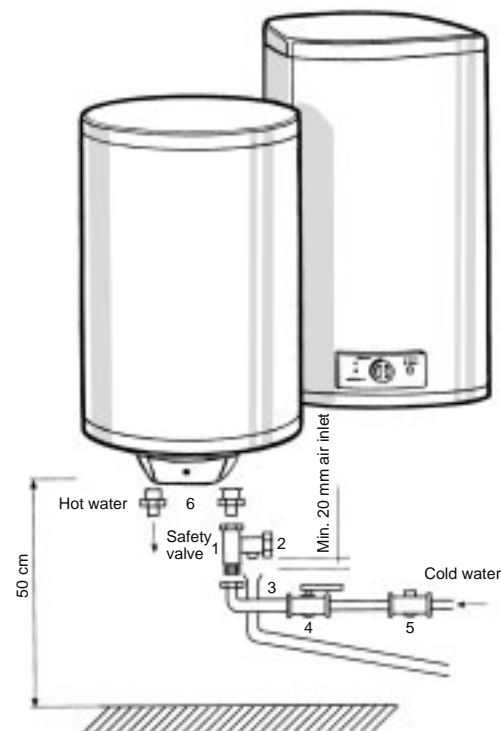
To open the safety valve (not safety valve basis) to let the water flow from the heater - via the outlet - turn the knob clockwise or counterclockwise as you please.

The proper operating of the safety valve should be tested periodically that way:

- turn the knob clockwise or counterclockwise up to the top position
- the water should flow out of the passage
- turn the knob to its down position

The pressure rating is indicated on the knob.

b) If the water-supply pressure exceeds 5 bar, a type-approved reducing valve must be installed.



1. Safety valve
2. Turning knob for cleaning and draining
3. Draining pipe for the safety valve
4. Stop valve
5. Reducing valve - necessary when pressure is more than 5 bar - to be installed after the "meter"
6. Earthed plastic sleeves (supplied with the heater)

## ELECTRIC INSTALLATION

All storage water heaters of the EWH-series are of 220/230 V single phase design. Before connecting make sure that the mains supply and unit input features coincide.

The heaters installation procedure is totally straightforward and only requires that Low Voltage Electronic Regulations are met. Although well known by the installers we would like to point out some of the basics:

"The following volumes and provisions shall be taken into account for installations in bathrooms or toilets".

**PROHIBITED VOLUME.**- It is the volume limited by the tangential and vertical planes with respect to the outer edges of bathtub, toilet pan or shower enclosure and by a plane situated 2,25 m above the same or the floor, should the units be embedded in the same.



Safety valve



Safety valve basis



Safety valve

**PROTECTION VOLUME.** - It is the volume situated within the horizontal planes previously stated for the prohibited volume plus another two vertical ones 1,00 meters away from those of the said volume.

No switches, power sockets or lighting equipment must be installed within the PROHIBITED volume.

Do not install switches within the PROTECTION volume; this does not apply, however, to safety power sockets.

If possible the heater must be installed outside the PROHIBITED VOLUME so as to prevent water splashing against the unit.

Power must be supplied via a multi-polar switch, circuit breaker

or contactor. Adequate power rating fuses shall be made available for unit protection purposes.

All electrical installations shall incorporate an earthing connection. The plug used by the heater already has this connection and only has to be inserted in a mains socket of the same features.

Make sure the household or place of installation does have an earth line. If not available, a differential switch is recommendable.

The electric connection must be made with a power cable Type H05VVF 3x1,5 (Serie basis/N).

## OPERATION

**Filling up.** Open the shutoff cock as soon as the heater has been installed. Open the hot water taps. Water appears as soon as the unit fills up completely. Close the taps and check the system for leaks. Do not connect the heater to the power mains if uncertain as to whether it is full or not.

**Electric connection.** Plug into the mains and press the main power input switch. A light flashes when the heating element is activated (on some models). The thermostat re-connects the heating element after a certain amount of water has been used.

**Setting water temperatures.** In the case of top-range models, the external control knob allows water temperature adjustments between 30°C (min. setting) and 70°C (max. setting).

**E Position.** (Energy saving) the water reaches a temperature of approx. 55°C thus allowing the heater to operate economically. Heat losses are minimal and calcareous deposits are practically fully eliminated.

**Heating element power setting switch.** The deluxe and super deluxe models incorporate double power rating features and a switch for power setting changes:

Pos. II; ■; MAX.: Total power

Pos. I; ▮; MIN.: Minimum power

It is advisable to have the heater plugged into the mains permanently as the thermostat will only activate the unit when it becomes necessary to maintain the selected temperature settings.

**How to empty the unit.** The heater should be fully drained if left unused for extended periods of time or if subject to freezing hazards where installed. This can be done by means of the safety valve (not safety valve basis). Always remember:

- Cut-off the power supply
- Shut-off the inlet cock
- Open the hot water tap.

## MAINTENANCE

The heater does not require a special maintenance procedure. Clean by wiping with a soft cloth or damp sponge. Never use abrasives nor detergents.

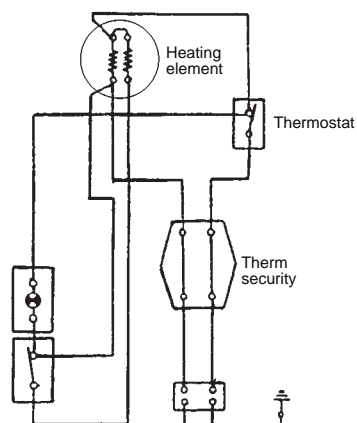
The customer is advised to contact the AFTER SALES SERVICE to check the magnesium bar once the guarantee has expired. Although this particular operation is not covered by the guarantee, as it does not imply «unit servicing», it does allow the wear rate of the bar to be monitored and to establish how soon it should be changed. Moreover, indefinite heater duration can be guaranteed.

Any overheating caused by thermostat failures is offset by the safety limiting device cutting both stages off and leaving the heater without power input.

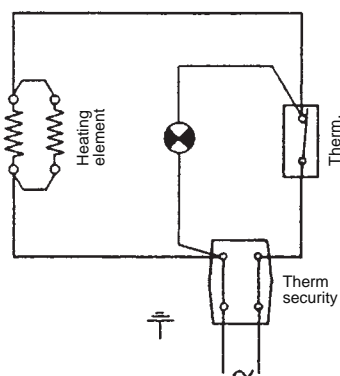
If this happens, contact our After Sales Service.

**WARNING.-** Never remove the lead cover without previously disconnecting the heater from the power supply.

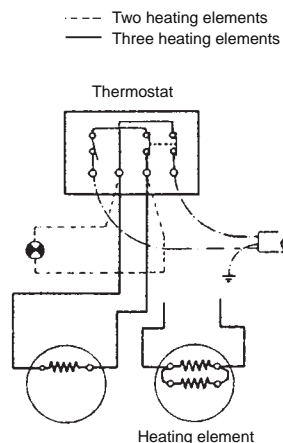
THE MANUFACTURER reserves the right to modify the characteristics and specifications of all products without prior notice.



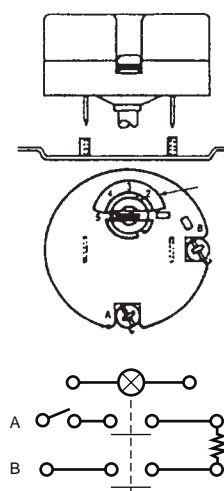
EWH-comfort/N



EWH-mini/N



EWH-classic/N



EWH-basis/N

## ELECTRIC HEATER FEATURES

MODELS	CAPACITY (l)	POWER RATING 230 V	HEATING TIME (h) 65°C (Δ50°C)	DIMENSIONS (mm)												WEIGHT (kg)
				A	B	C	D	E	F	G	H	I	J	K	L	
EWH-classic/N	30	1200	1,50	530	599	596	380	393	120	235	155	160	340	–	–	16
	50	1200	2,45	743	812	809	380	393	120	435	200	160	340	–	–	21
	80	2x800	3	727	789	785	500	522	175	322	250	230	440	–	–	32
	100	2x800	3,75	859	921	917	500	522	175	435	250	230	440	–	–	35
	120	2x800	4,40	992	1054	1050	500	522	175	570	250	230	440	–	–	39
	150	2x900	5	1197	1259	1255	500	522	175	790	250	230	440	–	–	45
	200	2x1200	5	1525	1587	1583	500	522	175	790	250	230	440	–	–	60
EWH-basis/N	30	1200	1,50	530	599	596	380	393	120	235	155	160	340	–	–	16
	50	1200	2,50	743	812	809	380	393	120	435	200	160	340	–	–	21
	80	1200	4	727	789	785	489	516	175	322	250	230	440	–	–	32
	100	1200	5	859	921	917	489	516	175	435	250	230	440	–	–	35
	120	1200	6	992	1054	1050	489	516	175	570	250	230	440	–	–	39
	150	1500	6	1197	1259	1255	489	516	175	790	250	230	440	–	–	45
	200	2400	5	1525	1587	1583	489	516	175	790	250	230	440	–	–	60
EWH-comfort/N	30	800/1600	1,10	599	–	–	375	388	120	235	155	160	340	–	–	17
	50	800/1600	1,90	812	–	–	375	388	120	435	200	160	340	–	–	22
	80	2x900	2,60	785	–	–	489	516	175	322	250	230	300	–	–	33
	100	2x900	3,25	912	–	–	489	516	175	435	250	230	300	–	–	37
	120	2x900	4	1050	–	–	489	516	175	570	250	230	300	–	–	41
	150	2x1200	3,75	1251	–	–	489	516	175	790	250	230	300	–	–	47
EWH-mini/N	10	1200	0,50	414	–	390	320	315	70	–	–	100	284	307	260	9
	10 U	1200	0,50	414	–	390	320	315	70	–	–	100	284	307	150	9
	15	1200	0,75	470	–	468	320	315	70	–	–	100	284	307	313	12
	15 U	1200	0,75	470	–	468	320	315	70	–	–	100	284	307	197	12

## DIMENSIONAL CHART

