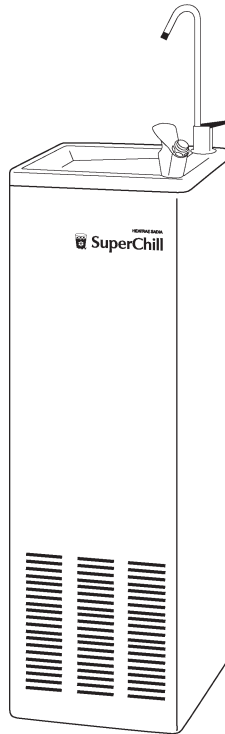


HEATRAE SADIA

The quality name in water heating

Installation and User Instructions for the Heatrae Sadia SuperChill Floor standing water chiller



Please read and understand these instructions before starting work.

Please leave this leaflet with the user following installation

Please read and understand these instructions prior to installing your SuperChill Floor Mounted water chiller. Particular attention should be paid to the section headed **IMPORTANT INSTALLATION POINTS**. Following installation and commissioning the operation of the water chiller should be explained to the customer and these instructions left with them for future reference.

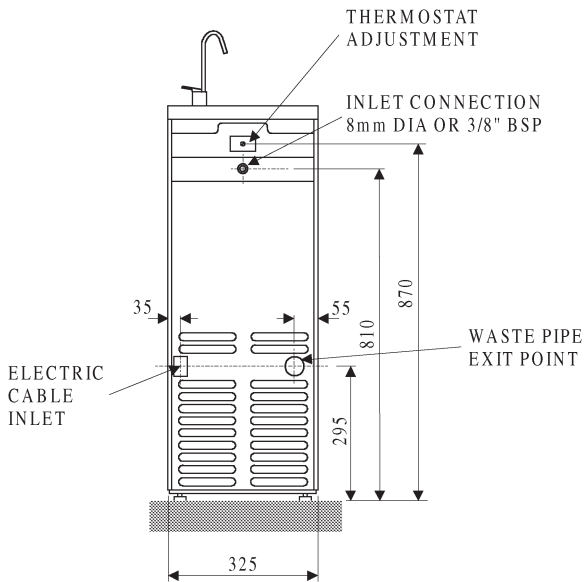
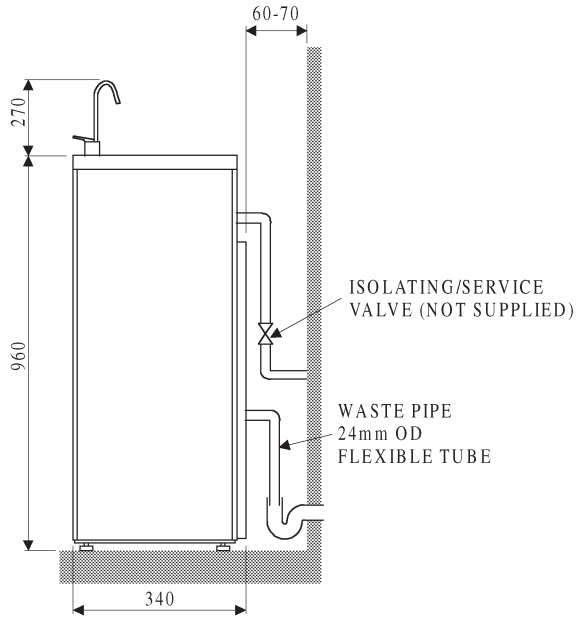
TECHNICAL SPECIFICATIONS

Electrical rating	180W 230/240V ~
Compressor power	1/10 HP
Chilled water output	30 l/hour (7.9 gal/hour)
Nominal water outlet temperature	10°C
Ice Bank instant chiller technology	
Weight (full)	26 kg
Rated pressure	3.5 bar
Minimum recommended supply pressure	1 bar
Refrigerant gas/gas charge weight	R134A/75g
Operating temperature range	min. 5°C/max 35°C

1.0 IMPORTANT INSTALLATION POINTS

- 1.1 If the water chiller has been laid down or turned upside down during transit or installation it should be allowed to stand for 8 hours in an upright position before commissioning.**
- 1.2** If the inlet water supply pressure exceeds 3.5 bar a pressure reducing valve set at between 2 and 3.5 bar should be fitted to the mains water supply to the chiller.
- 1.3** Adequate ventilation must be allowed through the chiller cabinet. **DO NOT** obstruct the ventilation louvres or place the chiller back flush to the wall. The condenser assembly should be periodically cleaned to prevent a build up of dust or dirt on the cooling fins.
- 1.4** The chiller must be installed vertically on a level surface. The chiller is provided with an adjustable foot, ensure the unit sits on all four feet to avoid excessive vibration.
- 1.5** The chiller is supplied fitted with an in line water filter. The filter cartridge must be periodically replaced to ensure its continued efficient operation. Replacement filter cartridges should be of the same manufacture and type as that originally fitted.

Fig. 1 General dimensions and features

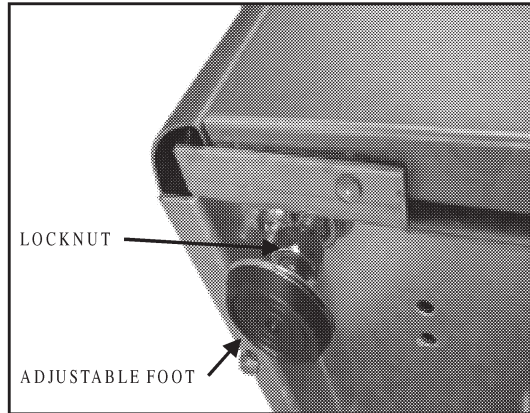


VIEW ON REAR OF UNIT

2.0 INSTALLATION - GENERAL REQUIREMENTS:

- 2.1 National Wiring rules may contain restrictions concerning the installation of these units in bathrooms.
- 2.2 The unit should be vertically floor mounted. An adjustable levelling foot is provided, this should be adjusted such that the unit stands level and stable and then locked in position by tightening the locknut provided (see Fig. 2 below).

Fig. 2 Mounting foot adjustment



- 2.3 Enough space should be left around the unit for adequate ventilation. The back and sides of the unit should be a minimum of 60 to 70mm from any wall or partition.
- 2.4 The water chiller must be installed inside a building, DO NOT install outside or in a position where it could be influenced by inclement weather conditions.
- 2.5 DO NOT install where the unit may be exposed to extremes of temperature (minimum operating temperature 5°C, maximum 35°C) or in direct sunlight.

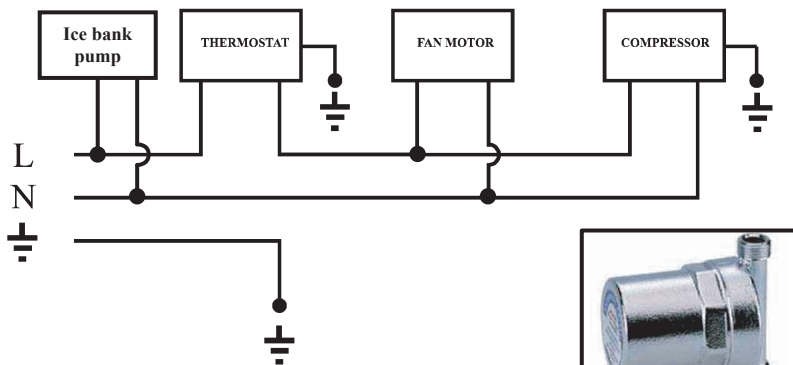
3.0 INSTALLATION - ELECTRICAL REQUIREMENTS

WARNING: This appliance must be earthed. It is suitable for a.c. supply only. Disconnect the electrical supply before accessing the cabinet. Installation must be in accordance with the current I.E.E. Wiring Regulations.

- 3.1 The unit is supplied fitted with a 2.0m 3 core 1.5mm² flexible cable with moulded 3 pin plug. The electricity supply should be fused 3 Amp. Connection to the electricity supply must be via a double pole isolating switch with a contact separation of at least 3mm in both poles. Refer to the schematic wiring diagram overleaf.
- 3.2 The wires are colour coded as follows:

Green and Yellow	EARTH	(\ominus)
Brown	LIVE	(L)
Blue	NEUTRAL	(N)

Schematic Wiring Diagram



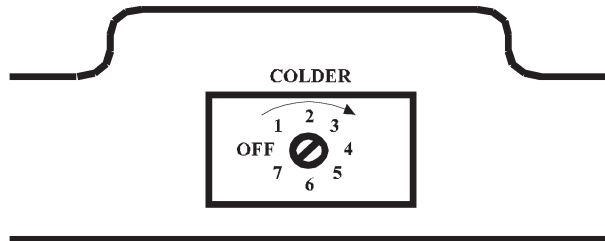
4.0 INSTALLATION - PLUMBING REQUIREMENTS

- 4.1 The mains water pressure supplying the chiller must be between 1 and 3.5 bar and the flow must be more than 3.5 l/min. Where the water pressure exceeds 3.5 bar a pressure reducing valve with a setting of between 2 and 3.5 bar must be incorporated in the supply to the water chiller. Heatrae Sadia accessory code no. 95 970 352 is recommended.
- 4.2 A WRAS listed isolating valve must be incorporated in the water supply to the water chiller
- 4.3 Connection of the water supply to the SuperChill is by means of a 8mm diameter “push fit” fitting. It is recommended that the supply pipe be of an 8mm outside diameter flexible WRAS listed plastic tube. Sufficient tube should be used to enable the chiller to be moved for access to the removable rear panel. The tube must be pushed fully home into the inlet fitting to ensure a water-tight joint. Alternatively, an 8mm to 3/8” BSP male adaptor fitting is supplied to enable connection to copper pipe work.
- 4.4 Waste water is collected by the pressed sink and drained from the unit by means of a flexible 24mm outside diameter hose. The drain hose should have a continuous fall and be connected to a drain pipe incorporating a wet trap. The flexible drain hose can be cut to avoid kinking or air-locking. DO NOT connect the drain hose or drain pipe to a soil pipe.
- 4.5 Should either the push button fountain or glass filling spout not be required they should be removed, the respective water tube blanked off with the plug provided and the mounting hole on the sink closed using the chromed blanking disc supplied.
- 4.6 If instead of being connected directly to the aqueduct the machine is connected to an autoclave pump, then it is necessary to install above the water supply a “Water Hammer Arrestor” device to prevent “water hammers”.

5.0 COMMISSIONING

- 5.1 DO NOT switch on the electrical supply until the unit has been filled with water and checked for leaks.
- 5.2 Check that all installation, electrical and plumbing requirements have been met.
- 5.3 Check that all water and electrical connections are tight.
- 5.4 Turn on the water supply and operate the outlet tap (either push button fountain or lever operated glass filling spout) until water flows smoothly from the outlet(s). Flow will initially be erratic as air is purged from the cooling tank. It is recommended that the water is allowed to flow for a few minutes to flush through the filter, internal pipes, tank and fittings of any air, dust or debris that may have accumulated during transit or installation.
- 5.5 Check that the glass filler spout is positioned at an angle that does not cause water to over-spill the sink.
- 5.6 The height of the water jet from the fountain can be adjusted if necessary. To do this unscrew the hexagonal nut locating the push button and remove. Remove the push button to reveal a slotted adjustment screw. Rotate the adjustment screw to either make the jet higher or lower. When the required jet height is achieved, replace the push button and secure using the hexagonal nut.
- 5.5 Adjust the thermostat by turning the adjustment screw clockwise with a small screwdriver (thermostat located on back panel) to position 3 or 4 (see Fig. 3 below).

Fig. 3 Thermostat adjustment



- 5.6 Switch on the electrical supply, check the compressor and cooling fan come into operation. Allow the unit to run for several minutes to cool the stored water (time will depend on thermostat setting and temperature of mains water and the surrounding air).
- 5.7 Check the temperature of the dispensed chilled water. If necessary adjust the thermostat; clockwise for a cooler temperature, anti-clockwise for a warmer temperature. The optimum outlet temperature should be approximately 10°C.

6.0 MAINTENANCE

Little maintenance is required, however the following actions should be periodically carried out to ensure efficient operation. Switch off and disconnect the electrical supply before removing the rear access panel for any internal maintenance.

6.1 Exterior cleaning

- 6.1.1 The exterior casing should be wiped over with a soft, damp cloth. If necessary proprietary cleaning agents can be used but these must not be solvent based or abrasive.
- 6.1.2 The top sink should be wiped over with a soft, damp cloth. If necessary a proprietary non-abrasive stainless steel cleaning agent can be used.
- 6.1.3 Clear the drain grating of any trapped lint or particles.
- 6.1.4 Clean the outlet(s) with a soft, damp cloth. In extreme circumstances evaporation salts may have accumulated around the outlet points. This should be cleaned with a proprietary scale remover approved for sanitary ware. Ensure all traces of the cleaner are removed before drinking from the outlet(s) again.
- 6.1.5 Remove the drain hose from the drain pipe connection and check for obstructions. Clean as necessary.

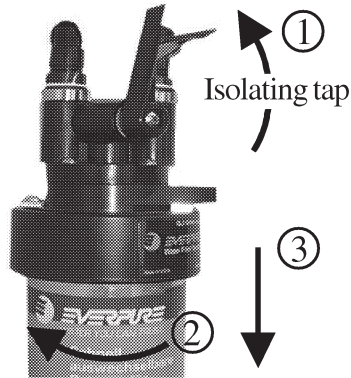
6.2 Interior cleaning

- 6.2.1 Carefully move the unit away from the wall to gain access to the rear panel. Ensure the water supply tube is not strained or kinked.
- 6.2.2 Unscrew the rear panel and remove.
- 6.2.3 Remove any dust or dirt from inside the chiller cabinet using a vacuum cleaner. Particular attention should be paid to the inside of the louvre grills and the condensor fins. DO NOT use a metal brush to clean the condensor fins as they may be damaged.

6.3 Filter cartridge replacement

6.3.1 Turn off the isolating tap on the filter housing by placing it in a vertical position (see Fig. 4 Step 1 below).

Fig. 4 Filter cartridge removal



6.3.2 Unscrew the filter cartridge by twisting approximately a quarter of a turn clockwise and pulling downwards (see Fig. 4 Steps 2 and 3 above).

6.3.3 Replace with a new filter cartridge ensuring it is screwed tightly into its housing. The Super Chill water chiller is fitted with an Everpure 4C cartridge, DO NOT use a different type of cartridge for replacement. For further information and details of stockists please contact Everpure (UK) Ltd., tel. 01280 822662, fax 01280 822366.

6.3.4 Re-open the isolating tap by returning the lever to a horizontal position. Operate the water chiller outlet tap and allow water to flow for about two minutes to allow air within the cartridge to vent, NOTE the flow may be erratic whilst this is done.

6.4 Disinfecting

It is recommended that the chiller is disinfected on a regular basis to prevent the build up of contaminants.

WARNING Many disinfecting products are acid or alkali corrosive substances. Always follow the manufacturers instructions for use and DO NOT exceed the recommended dosing concentrations or times. Always wear suitable protective clothing, disposable gloves and safety glasses as a minimum requirement for most solutions.

6.4.1 Prepare the disinfecting solution in accordance with the manufacturers instructions. At least 7 litres of mixed solution will be required.

6.4.2 If fitted with a chlorine filter, the filter cartridge must be bypassed.

6.4.3 Connect the container containing the disinfecting solution to the inlet of the water chiller via a small pump.

- 6.4.4** Start the pump and operate the outlet (glass filler, fountain or both) to allow the disinfecting solution to enter the chiller. Allow approximately 6 litres of solution to enter the chiller to ensure the chilling tank and all internal pipework is filled with disinfecting solution. Close the outlets and stop the pump.
- 6.4.5** Allow the solution to stand within the chiller for the recommended dosing time (refer to manufacturers instructions).
- 6.4.5** Disconnect the disinfecting solution filling arrangement. Reconnect the chlorine filter or fit a new filter cartridge (see 6.3 above). Reconnect the mains water supply and turn it on.
- 6.4.6** At least 15 litres of water should be flushed through the chiller and outlets to ensure all traces of the disinfecting solution are removed from the system before further use for drinking water.
- 6.4.7** Other disinfecting processes may be suitable (eg. ozone treatment), consult the manufacturers for further advice.

7.0 SPARE PARTS

The following comprehensive list of spare parts is available for your SuperChill water chiller. Please refer to the Rating Label on the side of your water chiller before ordering to ensure the correct spare part is obtained.

DO NOT REPLACE WITH PARTS NOT RECOMMENDED BY HEATRAE SADIA - THIS WILL INVALIDATE YOUR GUARANTEE AND MAY RENDER THE INSTALLATION DANGEROUS.

DESCRIPTION	CODE NO.
Glass/Carafe filling tap and spout assembly	95 604 670
Push button fountain assembly	95 604 672
Compressor	7034616
Drain funnel	95 607 542
Drain tube	95 607 543
Condensor assembly	7034617
Motorised fan	7034618
8mm x 3/8" BSP outlet adaptor	95 607 549
Filter connecting head assembly	95 607 551
Everpure 4C filter cartridge	95 607 552
Thermostat	95 612 677
Electrical cable with moulded plug	95 612 678
Compressor thermal overload cut-out & Relay....	7034619

8.0 FAULT FINDING

Disconnect the electrical supply before removing the access panel. It is recommended that any service operations on the water chiller are carried out by a competent person.

SYMPTOM	POSSIBLE CAUSE	ACTION
The compressor will not start	1. No power to unit	1. Check the power supply is not faulty and is switched on
	2. Thermostat set to the OFF or minimum cooling position	2. Turn thermostat to ON and adjust to cooler temperature
	3. Thermostat fault	3. Replace thermostat
	4. Wiring fault	4. Check all wiring connections are secure and correctly made (refer to Wiring Diagram page 5)
	5. Compressor fault	5. Replace compressor
Water is cold, but unit operates excessively	1. Poor ventilation	1. Ensure the unit is 60-70mm from the wall and ventilation slots are clean and unobstructed
	2. The condensor fins are dirty or airflow over condensor is impaired	2. Clean the condensor (see Section 6.2)
	3. Thermostat set to maximum cooling position	3. Adjust thermostat to a less cool temperature
	4. Faulty thermostat	4. Replace thermostat
	5. Thermostat sensing probe not inserted into cold water tank correctly	5. Ensure thermostat sensing probe is pushed fully into pocket in tank
	6. High ambient temperature (>32 deg. C)	6. At high ambient air temperatures it is normal for the unit to work continuously
Compressor works continuously, but water is not cold	1. Gas leak from the cooling system	1. The remaining gas must be emptied and the leak must be sealed. The unit should then be recharged with the correct quantity of gas (refer to Technical Specifications or data plate on the appliance) NOTE: This action must only be done by qualified personnel with the correct apparatus
	2. Faulty compressor	2. Replace compressor
	3. Cooling fan does not work	3. Replace cooling fan
Unit works excessively, but water is not cold enough	Cold reservoir is frequently exhausted by heavy usage	The units cold water output is being exceeded (see Technical Specifications), consider a larger unit or installing another nearby
Water is cold, but unit is excessively noisy	1. Unit not level	1. Adjust the levelling foot on the underside of the unit (see Section 2.2)
	2. Pipe vibration	2. Check that water pipes are not vibrating against other parts of the unit, adjust their position if necessary
NOTE: This unit contains a compressor and fan so some noise will be normal when these are in operation.		
Poor water flow	1. Low water pressure	1. Ensure water pressure is a minimum of 1 bar
	2. Water filter clogged	2. Check and, if necessary, change water filter cartridge
	3. Thermostat sensor not inserted into the housing of the cold water tank causing water in tank to freeze	3. Switch off unit and allow to thaw. Insert thermostat sensor correctly into housing in tank

9.0 USER INSTRUCTIONS

- 9.1 The SuperChill water chiller cools and stores water at the temperature set on the adjustable thermostat. This can be set to give temperatures in the range of 6 to 12° C. To avoid any risk of freezing when the water chiller is not in use for long periods during the winter months, set the thermostat to a higher position.
- 9.2 The SuperChill water chiller is fitted with an integral filter that will remove tastes, odours and particles from the water supply. As with any filter the cartridge will require periodic replacement to remain effective. This period will depend on the water usage, however a period of six to twelve months is recommended. Replacement of the filter cartridge by competent personnel is recommended, instructions for replacement are given in Section 6.3 Filter Cartridge Replacement. Only replace the filter cartridge with one of the same design.
- 9.3 Chilled water is dispensed by pressing the black lever behind the outlet spout (glass filling spout) or by pressing the chromed button on the top of the fountain. Use of the fountain is recommended where drinking receptacles are not provided. Water from the spout should be dispensed into suitable cups, jugs or carafes.
- 9.4 A cup dispenser is available as an accessory, Code no. 95 970 127. This can dispense standard plastic or paper cups with a rim diameter of between 70 and 85mm.
- 9.5 To ensure the SuperChill water chiller continues to operate at its optimum performance it should be periodically maintained in accordance with the instructions given under the Sections headed 6.0 MAINTENANCE.

GUARANTEE

The SuperChill water chiller is guaranteed for a period of two years from the date of purchase provided:

1. The unit has been installed in accordance with these instructions and all necessary inlet controls have been fitted correctly.
2. Any valves or controls are of Heatrae Sadia recommended type.
3. The unit has not been tampered with and has been regularly maintained as detailed in these instructions.
4. The unit has been used only for chilling potable water.

The unit is not guaranteed against damage by frost or due to the build up of scale. The guarantee does not cover the filter.

This guarantee does not affect the statutory rights of the consumer.

ENVIRONMENTAL INFORMATION

This product and its packaging is manufactured from many recyclable materials. At the end of its useful life it should be disposed of at a Local Authority Recycling Centre to realise the full environmental benefits. The cooling gas used is CFC free, refer to the data label in the rear of the unit for full details of the gas used.

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