



Zenith HydroChill

Instant Chilled and Sparkling water.

Models:

HCF90NZ, HCF120NZ, HCF200NZ,
HCS90NZ, HCS120NZ, HCS200NZ



AFFIX PRODUCT LABEL HERE

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WARNINGS AND PRECAUTIONS



1. All installation and service work must be completed by trained and suitably qualified tradespeople. Faulty operation due to unqualified persons working on an Zenith product may void warranty coverage.
2. All plumbing and electrical connections must be made in accordance with local regulations and relevant standards including Plumbing Standard AS/NZS 3500 & Electrical Wiring Rules AS/NZS 3000.
3. Check that the voltage shown on the chiller data plate corresponds to the voltage supplied at the installation site.
4. The electrical circuit must be correctly earthed and connected by means of suitable differential safety breaker. A 240V, 10 amp electrical power outlet is required.
5. If the electrical supply cord is damaged, it must be replaced by a qualified technician. To avoid hazards, all installation procedures must be carried out by a suitably qualified tradesperson. When replacing components, use only genuine parts certified by Zenith.
6. 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 they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. For products sold in Europe, this appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children should be supervised to ensure that they do not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.
7. The appliance contains R134a refrigerant. Refer to the compressor label inside the machine, and the nameplate. Maintenance of the refrigeration unit must be carried out by an accredited service provider or qualified refrigeration technician.
8. Take care when lifting. If you feel this is beyond your personal capabilities, please seek assistance with the lift. Do not lift the appliance by the front cover or any of its connections. Refer to the Technical specification for the weight of the product.
9. Do not locate near, or clean with water jets. Ensure that this product is not sited close to sources of heat.
10. The product is designed to function in environments with temperature between 5°C - 32°C (Climate Class N). The system will operate satisfactorily only if the recommended air gaps of 100 mm above, at the back and on each side are provided. If a vent kit is supplied it must be fitted.
11. If the product is exposed to temperatures below 0°C, the water inside it may freeze and cause damage to the product itself.
12. This appliance is designed for indoor use and must not be installed outdoors or exposed to the elements of nature.

WARNINGS AND PRECAUTIONS

Intended use

The Zenith HydroChill is a high-capacity drinking water dispenser, comprising an under-counter chiller with a bench-mounted font to dispense chilled and ambient-temperature still water.

Zenith HydroChill HCS models feature the addition of sparkling water, with a carbon dioxide gas cylinder to carbonate the chilled water.

Safety

- This equipment requires regular maintenance to guarantee the drinking quality standards of the chilled water with added carbon dioxide.
- Do not allow anyone to operate the machine unless suitably trained.
- Keep the machine in good working order and do not allow any modifications to be made to it unless these have been authorised by the manufacturer.
- Before using the machine, read this section of the manual carefully; it instructs operators in the correct use of the machine, and warns of improper use which may be hazardous.

Improper use

- This machine is designed for the use and conditions envisaged in this manual, in compliance with Machine Directive 2006/42/EC.
- The use of the dispenser for any purposes other than those for which it was designed is not allowed, under any circumstances. Likewise, its use in any way other than that indicated in this manual is forbidden.
- This machine is not intended to be used by people (including children) with reduced physical or sensory capacities, or with a lack of experience and knowledge, unless under supervision and with the instructions of someone responsible for their safety. Make sure that children do not play with the dispenser.
- For the purposes of your safety, and in accordance with the current legislation, any repair operations on the machine must be carried out by Zenith Water.
- Do not alter or tamper with the internal dispenser components; if they do not work well, contact the Service Centre.
- Do not use liquids other than those indicated.
- Do not place any objects on the dispenser. Do not place the dispenser on top of any other object.
- If you believe the dispenser to be damaged, contact Zenith Water.

Due to the process of continuous improvement, Zenith reserves the right to change details mentioned in this manual, without notice. Visit Zenithwater.com to ensure you have the latest copy of this document.

CO₂ (carbon dioxide) cylinder warnings

- Pressurised container, contains gas under pressure and may explode if heated.
- Do not expose to temperatures exceeding 50°C. Protect from sunlight.
- Do not expose to naked flame or any incandescent material.
- Avoid shock. Do not pierce or burn, even after use.
- Keep out of reach of children.
- Store in a location with a volume of no less than 50 cubic metres for each 2.64kg bottle of CO₂.
- Use only in ventilated areas. High concentration of gas may cause asphyxiation.
- Use only in an upright position.
- An approved pressure regulator must be used.
- Use according to the Material Safety Data Sheet (MSDS).



Chiller

This manual refers to the following Te-Mix Aqua/L undercounter chiller models

- Te-Mix Aqua 15 (HCS90NZ / HCF90NZ)
- Te-Mix Aqua 25 (HCS120NZ / HCF120NZ)
- Te-Mix Aqua 50 (HCS200NZ / HCF200NZ)

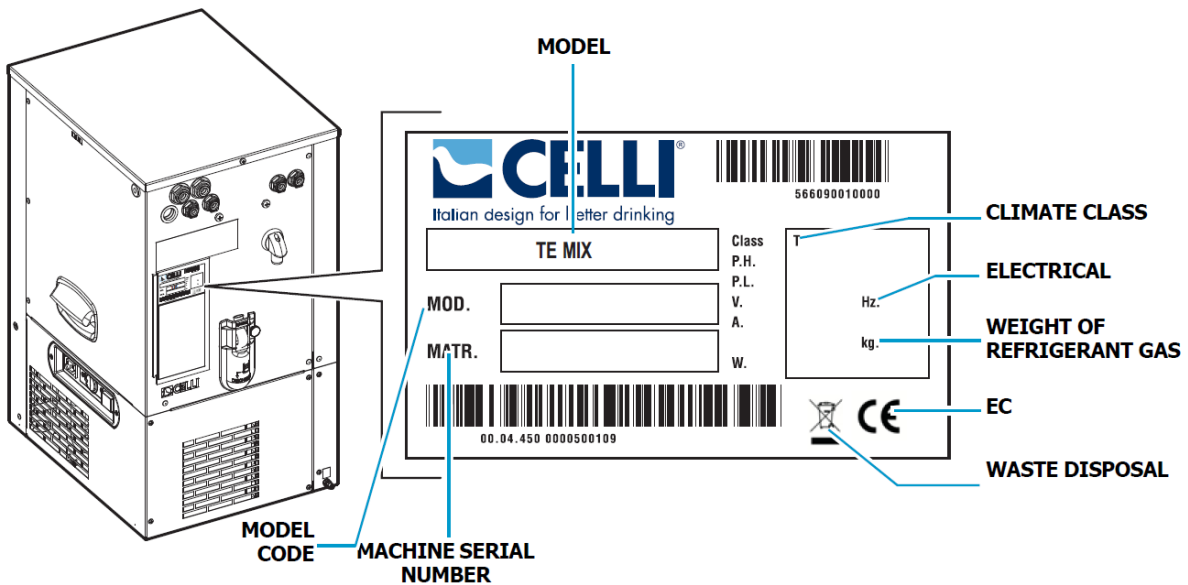
The Te-Mix Aqua/L chillers are directly connected to the water supply (with a filter), to dispense:

- Still water at room temperature
- Still chilled water
- Sparkling chilled water

The water is carried through thermally insulated tubes from the chiller to the font.

The insulating tube (known as the “python”) and the font are included.

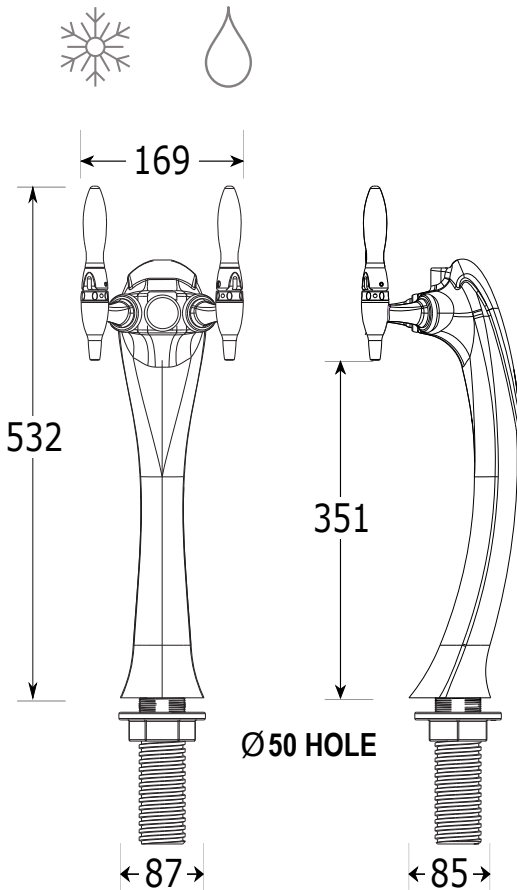
Check that the machine delivered to you carries the nameplate (EC nameplate) shown below. This indicates the model, the serial number and all the machine technical data necessary for ordering spare parts or reporting technical problems to the technical support service.



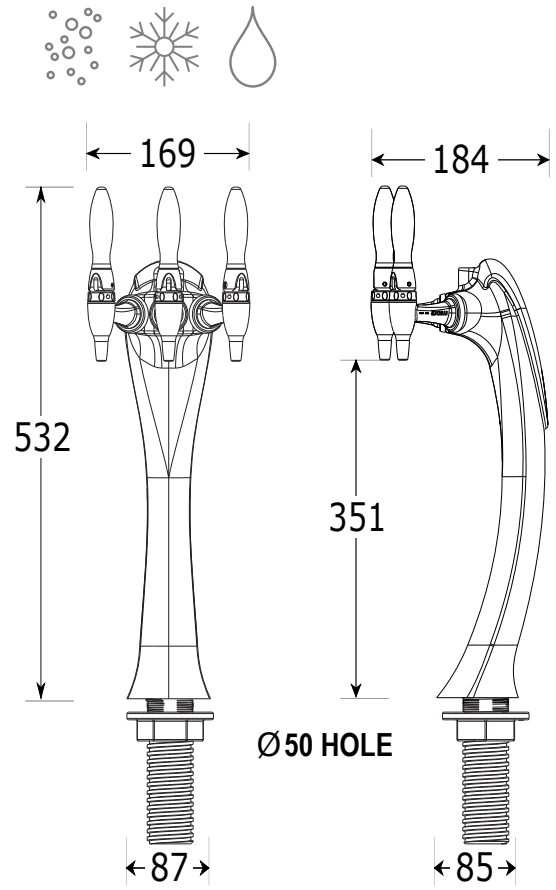
Font, Taps and Drip Tray

The font houses the hoses that connect to the outlet taps.

- HCF Chilled Filtered (2-tap) fonts include 4 hoses: 2 clear for drinking water and 2 black for recirculation.
- HCS Sparkling (3 tap) fonts include 5 hoses: 3 clear for drinking water, 2 black for recirculation.



Gemma font with 2 Mini Celtic Taps.
Part no. **94728NZ**



Gemma font with 3 Mini Celtic Taps.
Part no. **73424NZ**



FC4 taps (short USA spout)
Part no. **94730NZ**



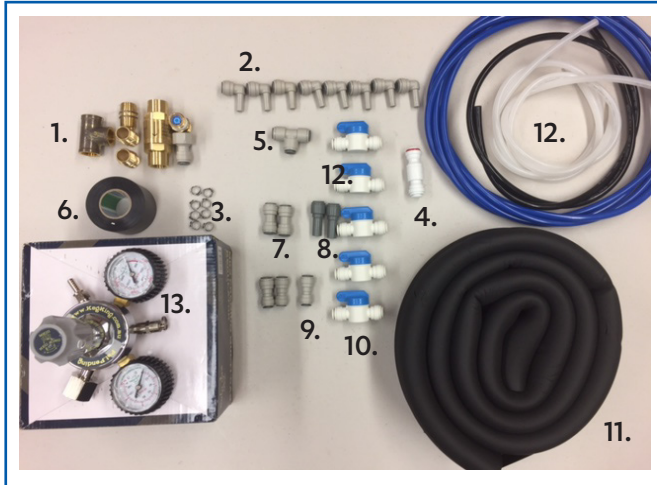
Drip tray (hose not supplied)
Part no. **94742NZ**

Components and accessories

Installation Pack

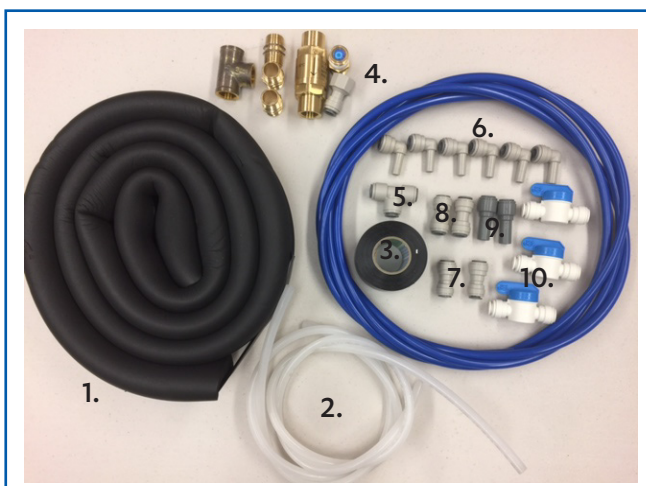
All installation packs include drip tray plumbed (hose not supplied)

Sparkling Chilled & Ambient Installation Pack excluding filter & filter head (kit no: 94731NZ)



Item	Part No.	Description	Qty
1	806026	PLV Kit	1
2	805317	3/8 Stem Elbows	8
3	805335	Seamless Clamps 8-10mm	10
4	805341	3/8 CO2 Non Return Valve	1
5	801652	3/8 Equal Tee	1
6	805586	Black Duct Tape	1
7	805307	3/8 Straight Connector	2
8	805309	1/2 to 3/8 Reducer	2
9	805312	3/8 to 5/16 Straight Connector	3
10	805308	3/8 Stop Valve	5
11	805587	Armaflex	2 m
12	805467	JG 3/8 Hose - Natural (White)	8 m
	805469	JG 3/8 Hose - Blue	5 m
	805470	JG 3/8 Hose - Black	5 m
13	805301	CO2 Regulator	1
14	805955	3/8 x 3/8 Straight Adaptor (not shown)	2

Chilled Ambient Installation Pack excluding filter & filter head (kit no: 94729NZ)



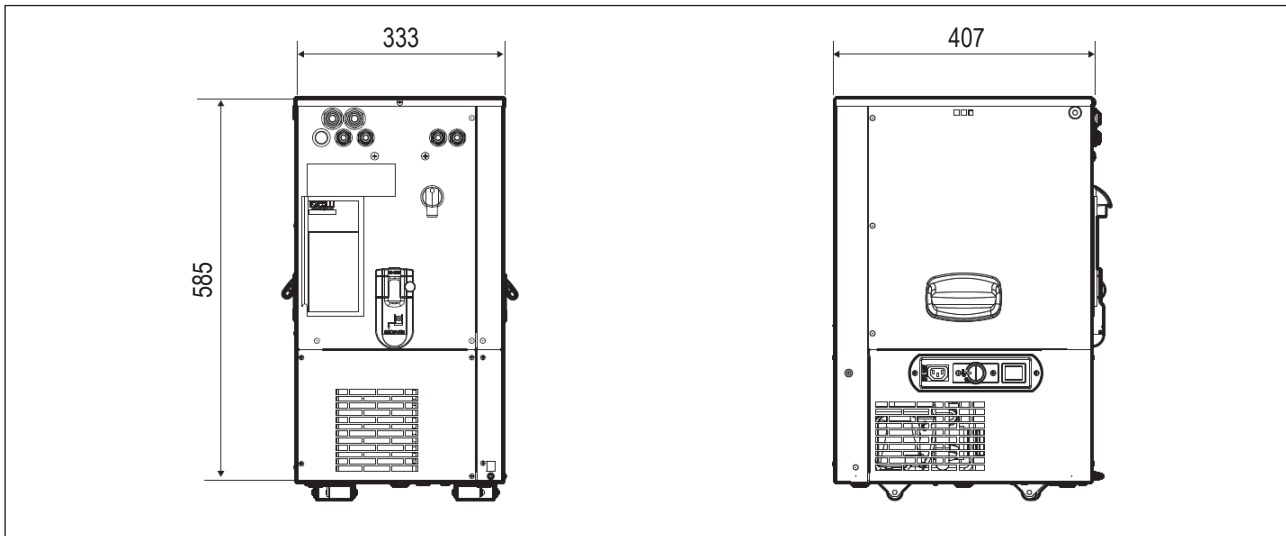
Item	Part No.	Description	QTY
1	805587	Armaflex	2 m
2	805467	JG 3/8 Hose - Natural (White)	5 m
	805469	JG 3/8 Hose - Blue	5 m
3	805586	Black Duct Tape	1
4	806026	PLV kit	1
5	801652	3/8 Equal Tee	1
6	805317	3/8 x 3/8 Stem Elbows	6
7	805312	3/8 x 5/16 Straight Connector	3
8	805307	3/8 x 3/8 Straight Connector	2
9	805309	1/2 x 3/8 Reducer	2
10	805308	3/8 Stop Valve	3
11	805955	3/8 x 3/8 Straight Adaptor (not shown)	2

Optional Accessory Kit:

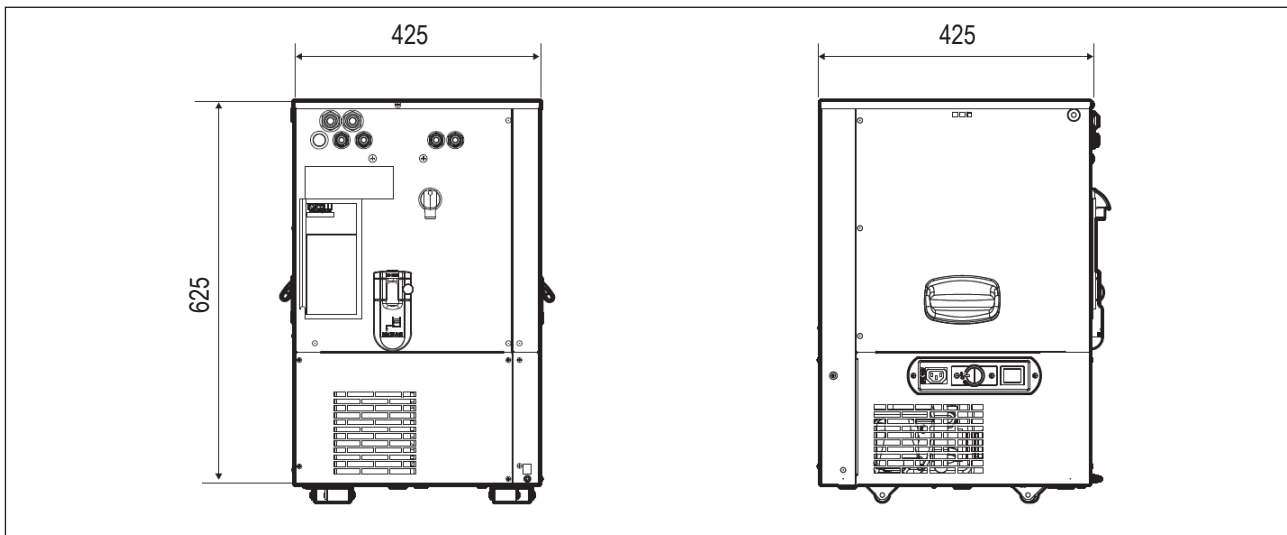
- Dual Fan with Controller (kit no: 93159NZ)

Technical specification

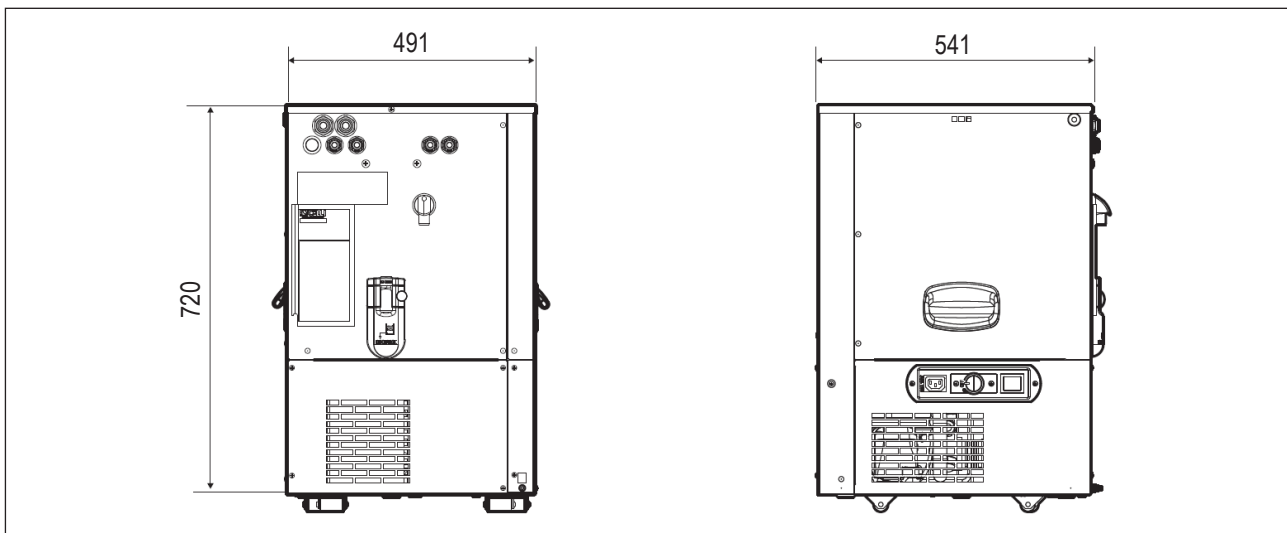
Te-Mix Aqua-15/L HCS90NZ, HCF90NZ (add 25mm for roller feet, 40mm for handles)



Te-Mix Aqua-25/L HCS120NZ, HCF120NZ (add 25mm for roller feet, 40mm for handles)



Te-Mix Aqua-50/L HCS200NZ, HCF200NZ (add 25mm for roller feet, 40mm for handles)



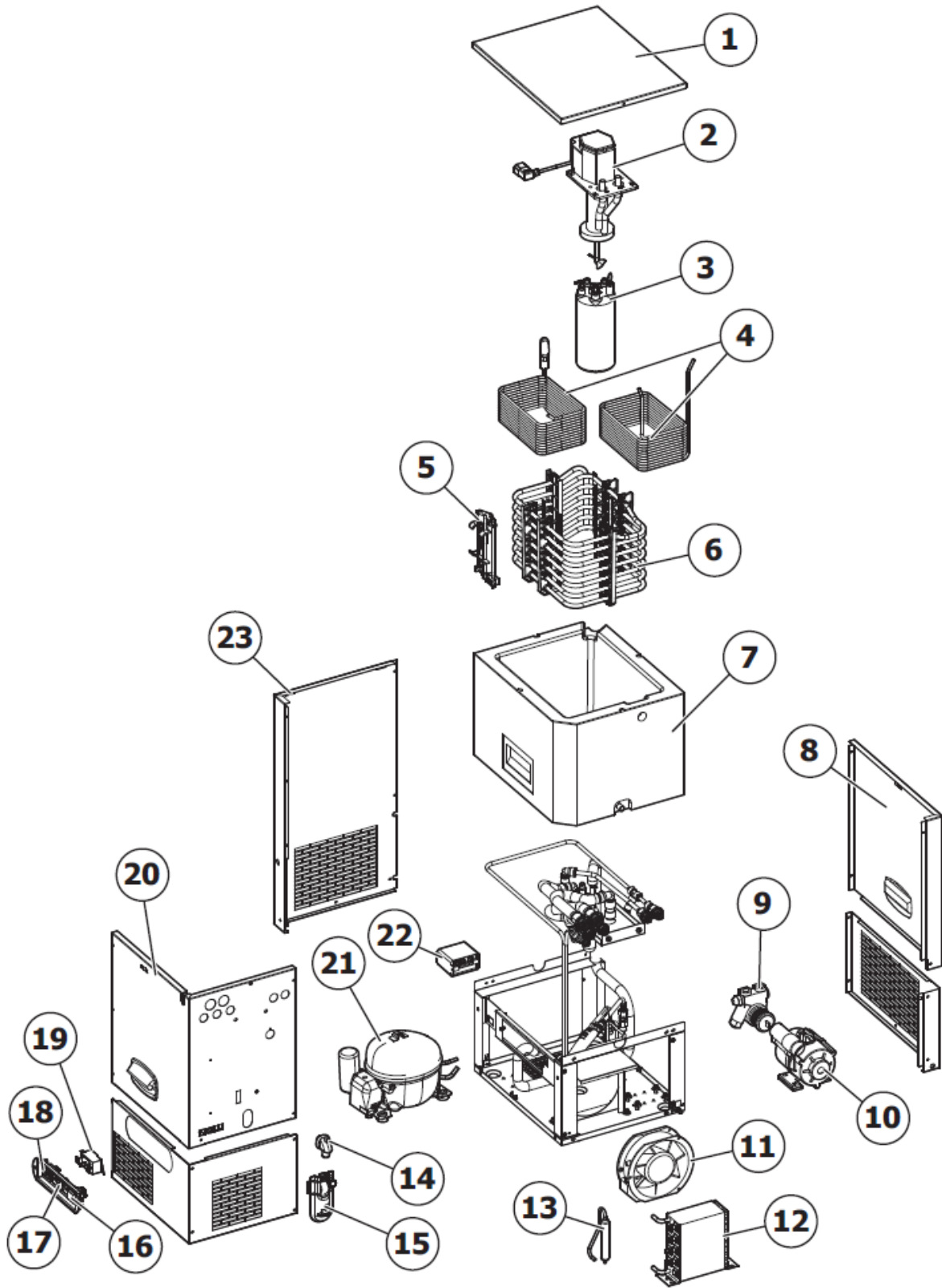
Technical specification

	Te-Mix Aqua 15	Te-Mix Aqua 25	Te-Mix Aqua 50
Power supply	220-240V, 10A, 50/60Hz		
Working room temperature	5 to 32 °C		
Inlet water pipe Ø (mm)	½" BSP (G ½")		
Inlet water pressure (kPa)	250 to 700 kPa (2.5 to 7 bar)		
Tank capacity (L)	14	20	44
Ice bank (kg)	7	10	21
Cold water coil	AISI 304 Stainless Steel		
Refrigerant	R134a		
Compressor cooling power (W), at ambient 32°C	400	513	905
Carbonation pump (L/h)	200	200	300
Carbonator volume (cc)	1100	1100	2000
Carbonation pump motor (W)	120	120	200
Dimensions W x D x H (mm) Add 25mm to H, for wheels	407 x 333 x 585 mm	425 x 425 x 625 mm	491 x 541 x 720 mm
Net weight (kg)	34kg	37kg	49kg

The machine is designed and built in such a way as to reduce the noise level at the source.

The weighted sound pressure level "A" is lower than 70 dB (A).

Te-Mix Aqua 15 (HCS90NZ / HCF90NZ)

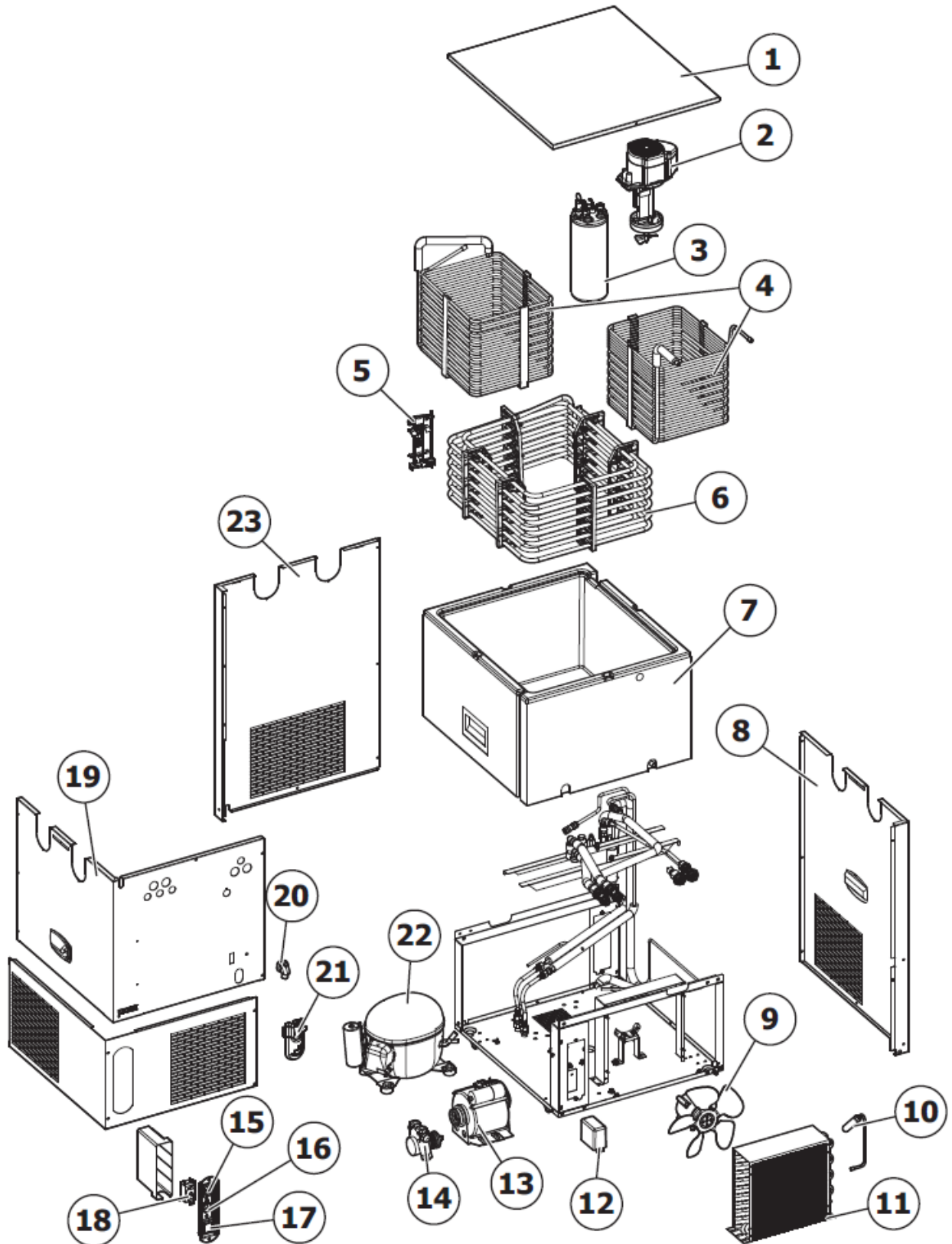


Technical specification

- 1 - UPPER COVER
- 2 - STIRRER PUMP
- 3 - CARBONATOR
- 4 - COILS
- 5 - BRACKET FOR THERMOSTAT CAPILLARY TUBE
- 6 - EVAPORATOR
- 7 - INSULATING TANK
- 8 - SIDE PANEL
- 9 - CARBONATION PUMP (order code - 2311361)
- 10 - CARBONATION PUMP MOTOR
- 11 - FAN UNIT
- 12 - CONDENSER
- 13 - DEHYDRATOR FILTER
- 14 - OVERFLOW DRAINAGE
- 15 - DRAINAGE POINT FOR EMPTYING TANK
- 16 - ON/OFF LIGHT SWITCH
- 17 - THERMOSTAT KNOB
- 18 - RECIRCULATION PUMP SOCKET
- 19 - MECHANICAL THERMOSTAT (order code - 2311360)
- 20 - FRONT/SIDE PANEL
- 21 - COMPRESSOR
- 22 - LEVEL CONTROL UNIT
- 23 - REAR PANEL

Technical specification

Te-Mix Aqua 25/50L (HCF120NZ, HCF200NZ, HCS120NZ, HCS200NZ)



Technical specification

- 1 - UPPER COVER
- 2 - STIRRER PUMP
- 3 - CARBONATOR
- 4 - COILS
- 5 - BRACKET FOR THERMOSTAT CAPILLARY TUBE
- 6 - EVAPORATOR
- 7 - INSULATING TANK
- 8 - SIDE PANEL
- 9 - FAN AND FAN MOTOR
- 10 - DEHYDRATOR FILTER
- 11 - CONDENSER
- 12 - LEVEL CONTROL UNIT
- 13 - CARBONATION PUMP MOTOR
- 14 - CARBONATION PUMP
- 15 - RECIRCULATION PUMP SOCKET
- 16 - THERMOSTAT KNOB
- 17 - ON/OFF LIGHT SWITCH
- 18 - MECHANICAL THERMOSTAT
- 19 - FRONT/SIDE PANEL
- 20 - OVERFLOW DRAINAGE
- 21 - DRAINAGE POINT FOR EMPTYING TANK
- 22 - COMPRESSOR
- 23 - REAR PANEL

Before installation

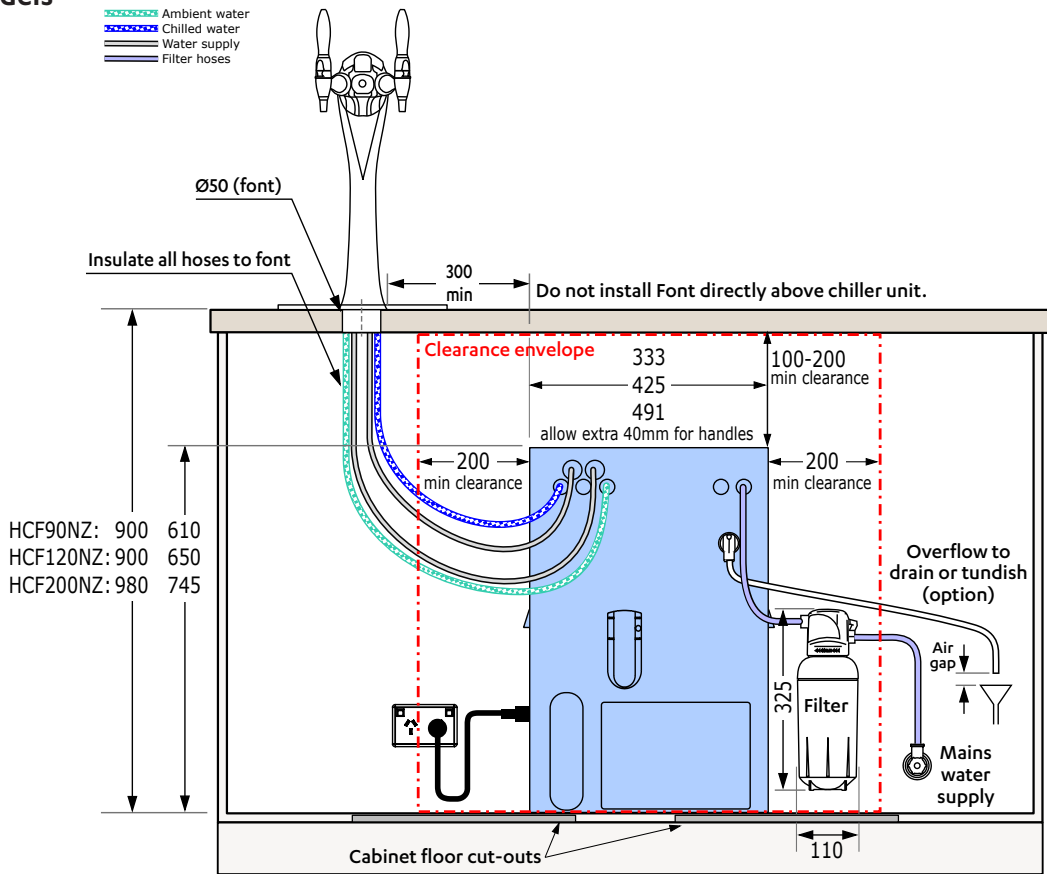
- A. Read the instructions. Note: All fittings are supplied with the appliance kit.
- B. A user easily-accessible 220-240V AC, 10A power outlet is required. The appliance must be connected in accordance with current local electrical regulations. See Technical specification and the appliance rating plate for power ratings. Check cable and plumbing against inlet/outlet positions before proceeding.
- C. Ensure a potable water supply connection with working pressure of 250 - 700 kPa (2.5 - 7.0 bar), with isolating valve within reach of the hoses, and positioned so that the connection point and the stop cock will not be obstructed when the under-counter chiller is installed.
- D. A 350 kPa (3.5 bar) pressure limiting valve (supplied) must be fitted.
- E. All plumbing must comply with the relevant parts of AS/NZS 3500.
- F. All electrical must comply with AS/NZS 3000 wiring rules.
- G. Check the underbench cupboard supporting the appliance is adequate for the total weight of the appliance.
- H. The appliance must operate within ambient temperatures of 5°C - 32°C.
- I. Frost protection: if the appliance is located where ambient air temperature could fall below 5°C, do not turn off electrically. This safeguard does not offer the same protection to the connecting pipework and fittings.
- J. The appliance must be placed upright with its base in a horizontal position.



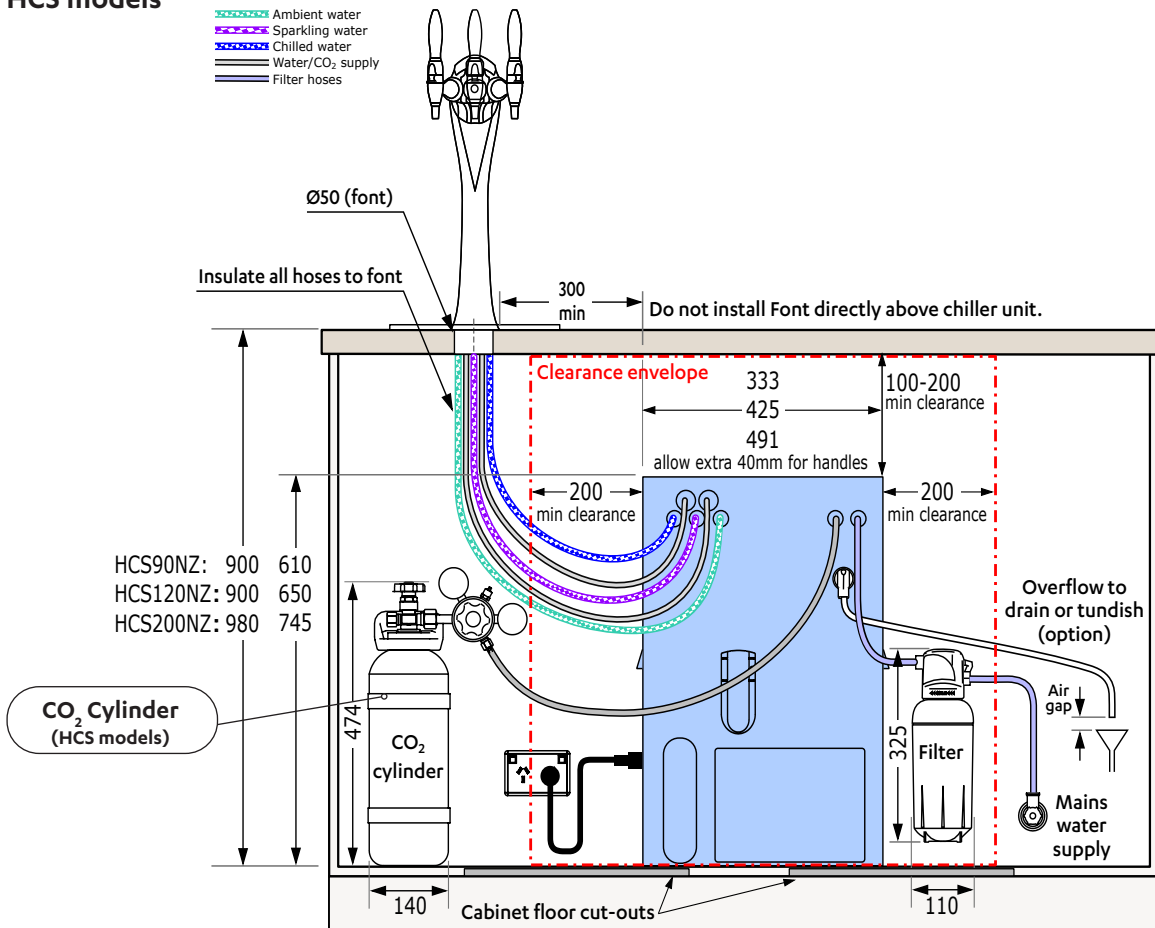
IMPORTANT! Do not proceed with the installation if these requirements are not met.

Installation layout diagram

HCF models



HCS models



Installation instructions

Step 1 – Install the Tap Font



In addition to normal tools, a 50mm diameter hole saw is required (not supplied).

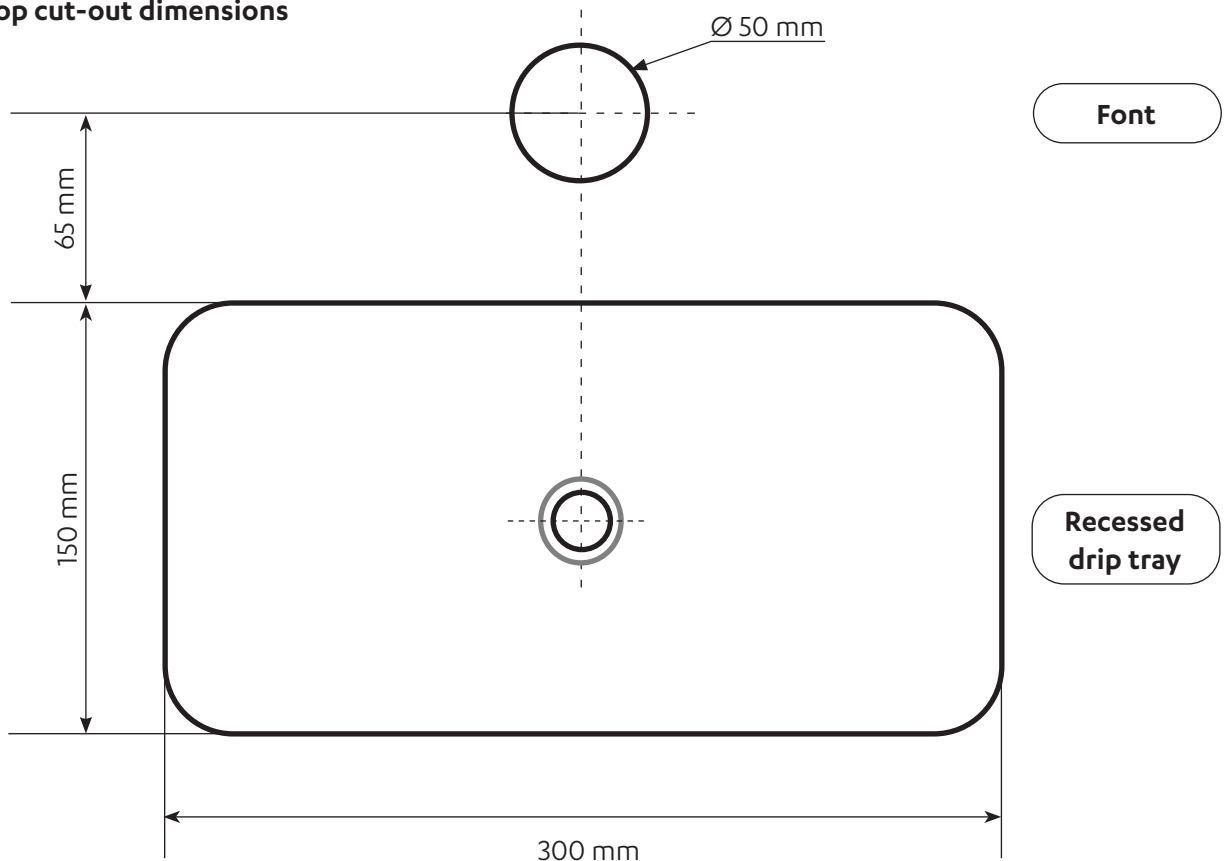
Double-check all sizes and positioning before cutting. Install only with the new hose-sets supplied.

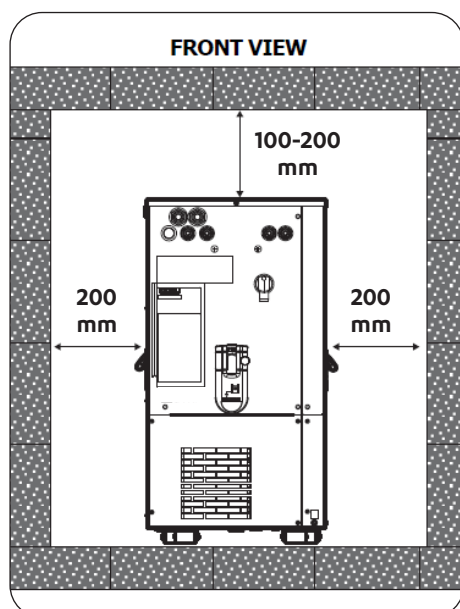
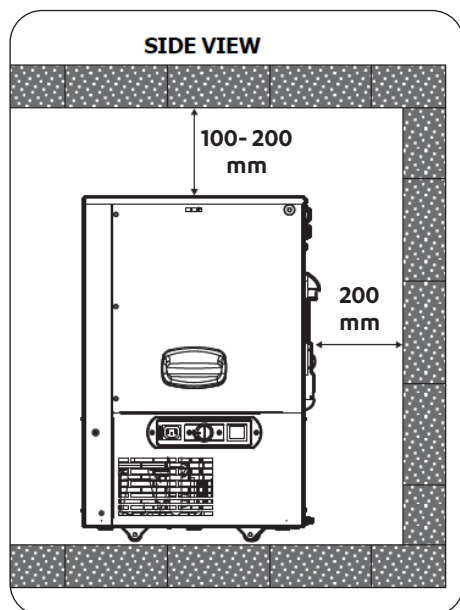
- Position the tap font on the benchtop. Position the centre of the drip tray directly below the font outlet taps.
- Mark and cut the 50 mm font hole.
- Pass the font hoses through the 50 mm hole. Fit the rubber base seal (supplied) to the base of the tap font to seal it on the benchtop. Secure the font from under the bench with the washer and nut.

Option - Recessed drip tray (part no 94742NZ):

- Cut the drip tray hole as shown in the diagram below.
- The drip tray rim should fit flush with the bench top. For a watertight seal, run a bead of silicone around the outside edge of the drip tray.
- Fit a 13mm ID drain hose (not supplied) to the outlet of the drip tray and run with a constant fall to a drain point.

Bench top cut-out dimensions





Step 2 – Install Chiller

2.1 Positioning

The chiller must be placed in a hygienically suitable environment, on a surface capable of bearing the weight of the machine complete with water. Do not place close to direct or indirect heat sources (ovens, stoves, radiators, etc.).

Locate close to electricity and water supply points. Ensure the power cable and water hose do not form an obstruction. The water connections and condenser need to be accessible for maintenance.

Protect from water splashes and place in a location with the temperature appropriate to the climate class stated on the EC nameplate, otherwise malfunctions may occur and warranty rights are forfeited.

2.2 Ventilation

Allow a minimum clearance of 200mm around the back, top and sides of the chiller unit.

For installation in an enclosed single cupboard, the vent kit and a double auxiliary fan kit (part no 93159) must be installed.

- Install the kickboard vent grille for external air intake.
- Install the fan at the top of the cupboard to extract hot air out of the cupboard (requires additional electrical power outlet).
- Cut-out in the cabinet floor.

For installation in an enclosed, double cupboard, the minimum ventilation requirement is:

- Perforated or expanded metal door with at least 60% open area
- 2x cut-outs in the cabinet floor to provide air intake.

If ventilation is insufficient, additional vents and fans may be installed as optional extras. Contact Zenith service for details.

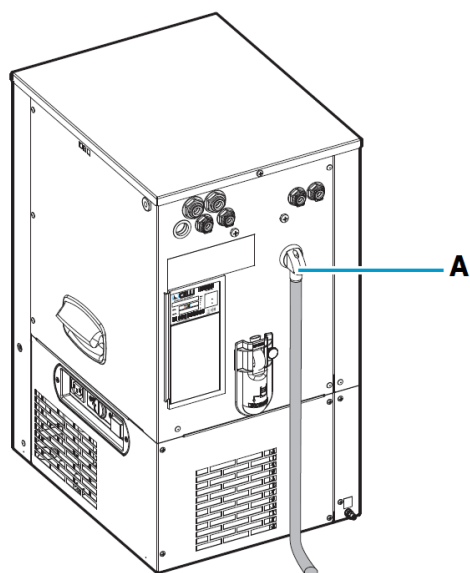
EC climate classes:

SN - For ambient temperatures from 10°C to 32°C

N - For ambient temperatures from 16°C to 32°C

ST - For ambient temperatures from 18°C to 38°C

T - For ambient temperatures from 18°C to 43°C

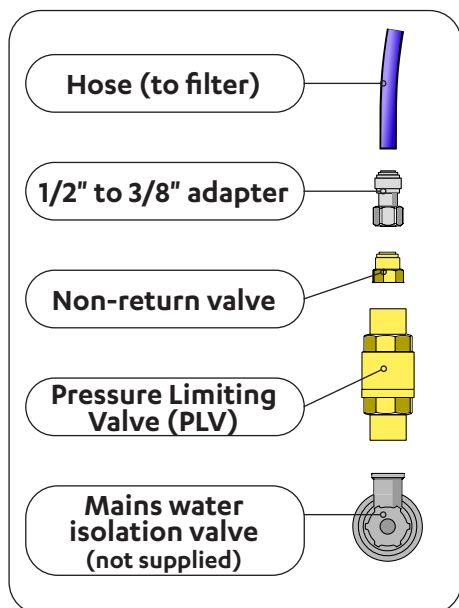


2.3 Overflow connection

Check the overflow connector is not obstructed. Use a tube to connect the overflow drainage connector (A) from the tank to a drainage point or a large container (not supplied).

A tundish to comply with AS3500 may be required if the unit is installed in a cupboard, or in an area not utilising a floor waste.

Installation instructions



2.4 Connect mains water and filter

All fittings are supplied with the appliance kit. As the installer, it is your responsibility to supply and install any additional valves as required by local regulations and relevant standards.

When cutting tubes, make a clean cut straight across the tube. Do not lengthen tubes beyond the maximum supplied length.

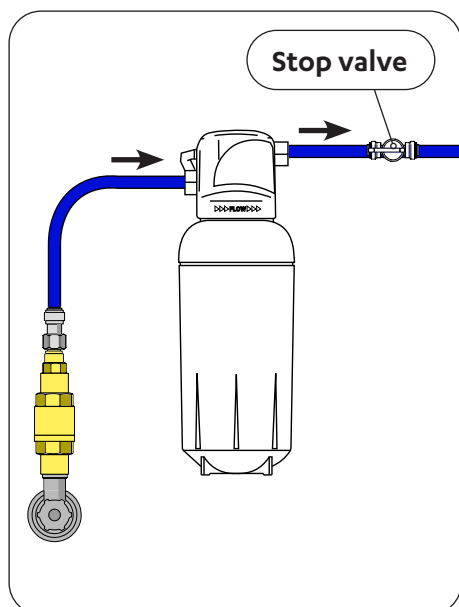
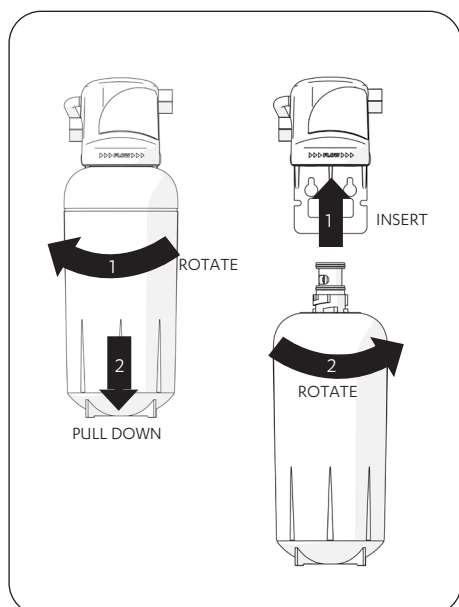
Ensure the electrical power is off and the power cord is unplugged.

Fit the pressure limiting valve, non-return valve and adapter to the mains water inlet, according to the diagram.

Connect the blue 9.5mm (3/8") hose between mains water supply and filter head.

Filter head

1. Choose a suitable location in the cupboard wall to mount the filter head bracket, within reach of the hoses between the mains water supply and the chiller water inlet. Allow clearance for the filter cartridge to be easily fitted and removed.
2. Mount the filter head bracket in an upright position, using the screws supplied.
3. Fit straight or elbow connectors (supplied) to the filter head inlet and outlet, as required for routing the hose. Measure and trim the blue hose to connect the water supply to the filter inlet.
4. Unpack the filter cartridge and remove the sanitary cap. Avoid touching the filter O-rings or filter opening as this may cause bacterial contamination of the cartridge.
5. Write today's date where shown on the label.
6. Slightly moisten the O-rings with regular tap water and align the front cartridge label to the left.
7. Gently but firmly push the cartridge up into the filter head and turn to the right, as far as it will go without forcing it. The cartridge should now be locked in position, with the front label facing forward.
8. The new filter should be flushed before use. Connect a hose to the filter outlet and place the open end of the hose into a bucket or container. Turn on the water supply and flush approximately 10 L through the filter. At this point you can fill the bath of the unit while flushing the filter.
9. Turn off the water supply. Wipe up any spills and dispose of the used cartridge and packaging thoughtfully.



2.5 Connect mains water and chiller

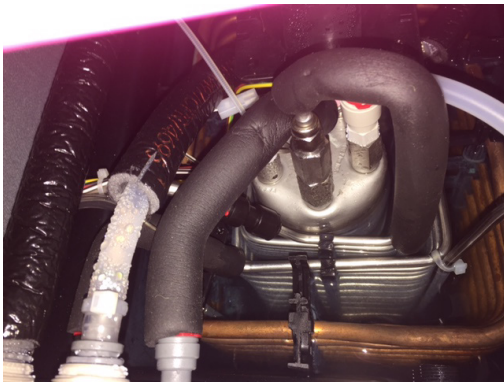
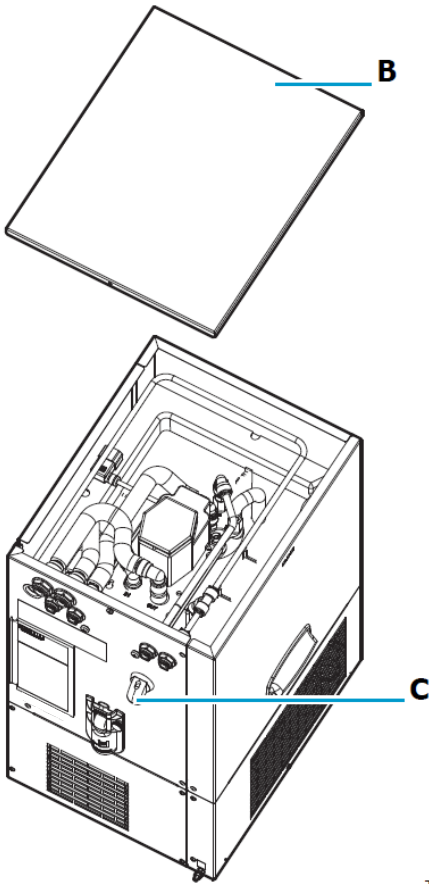
Install a T-off fitting in the hose from the filter outlet, for ambient water to tap (between filter and chiller). Connect one hose to an appropriate fitting at the inlet at the front of the chiller, marked "IN H₂O". The other hose will be connected to the tap for ambient water.

2.6 Fill the water tank

Remove the upper cover (B) by loosening the fixing screw.

Fill the tank with clean water until the level is about 2 cm (1 inch) below the hole (C) of the overflow connector.

Ensure no foreign bodies are in the tank.



View inside water tank



Fill to 20mm below
overflow outlet

Step 3 – Connect Carbon Dioxide (CO₂) Cylinder

(HCS sparkling models)



WARNING! Take care when working with high pressure carbon dioxide. The gas cylinder must be installed in an open plan area, or in an enclosed room with a volume no less than 50m³ per 2.64kg cylinder.

If more than 1 gas cylinder containing CO₂ is present within the same location, the recommended ventilated area should be in proportion to the number of gas cylinders stored in that location. A ventilated area is a non-enclosed area which could include the kitchen, living room etc. See gas bottle and MSDS sheet for a complete list of warnings (Zenithwater.com)

Secure the cylinder bracket

The gas cylinder must be secured vertically, held in place by a hook and loop strap fixed to a bracket. Mark out the bracket location on a suitable wall within 1 metre of the chiller. Ensure the gas cylinder, regulator and bracket assembly can comfortably fit with sufficient clearances before securing the bracket.

Connect the pressure regulator

The pressure regulator is supplied with interchangeable colour-coded pressure relief valves. The GREY-coloured, 100 psi pressure relief valve must be used for this application. If it is not fitted, unscrew the installed pressure relief valve and screw in the GREY-coloured valve.

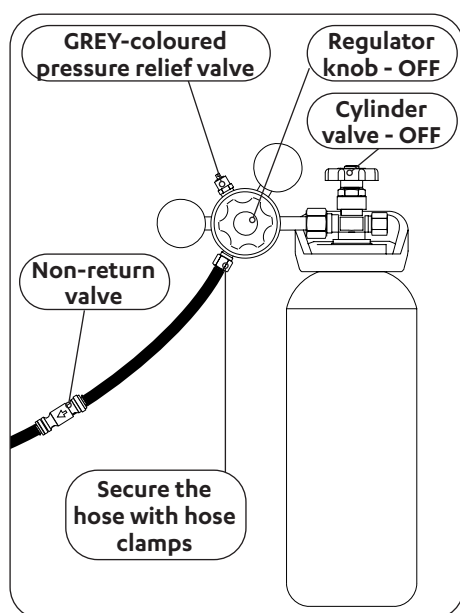
Attach the pressure regulator to the gas cylinder. Ensure all surfaces are clean and the plastic seal is fitted securely inside the large chrome nut. Do not force the seal to fit. A second plastic seal is provided as a spare.

Turn the regulator OFF by rotating the regulator knob all the way out, in an anti-clockwise direction.

Connect gas hose, non-return valve and stop valve

Use 2 hose clamps to secure the black hose to the barbed regulator outlet, taking care not to lose the small sealing ring (olive).

Install the non-return valve (supplied) in the black hose, close to the cylinder (approximately 300mm), checking the direction of flow matches the arrow on the valve.

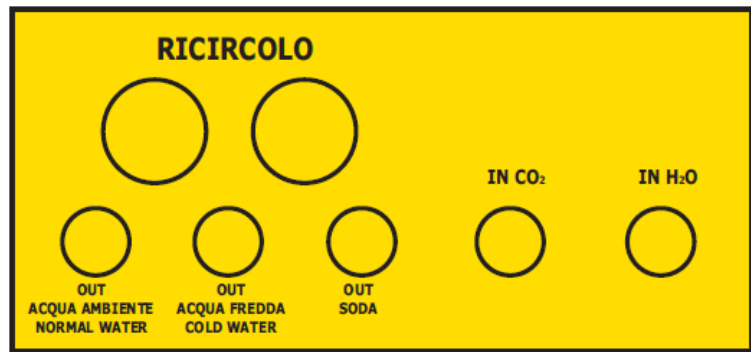
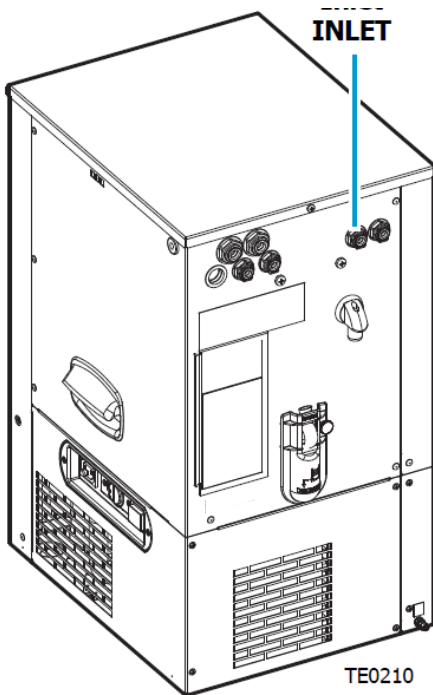


Installation instructions

Connect CO₂ hose to chiller

Measure and trim the black hose to connect to the gas inlet at the front of the chiller, marked "IN CO₂". Use straight and elbow fittings if required for routing.

Install a stop valve in the black hose, in an accessible location, (recommended 100 mm from the chiller inlet).



Adjust gas supply

- With the CO₂ cylinder closed, remove the air in the circuit by operating the sparkling tap for a few seconds.
- Slowly open the CO₂ cylinder valve by turning the knob anti-clockwise, until it is fully open.
- Adjust the regulator knob until the gauge shows between 400-600 kPa (4-6 bar, or 58-87 psi), depending on the degree of carbonation required.

Optimal carbonation

Ensure the inlet water pressure is below 300kPa (3 bar/45 psi). To improve carbonation, set a lower temperature on the chiller machine.

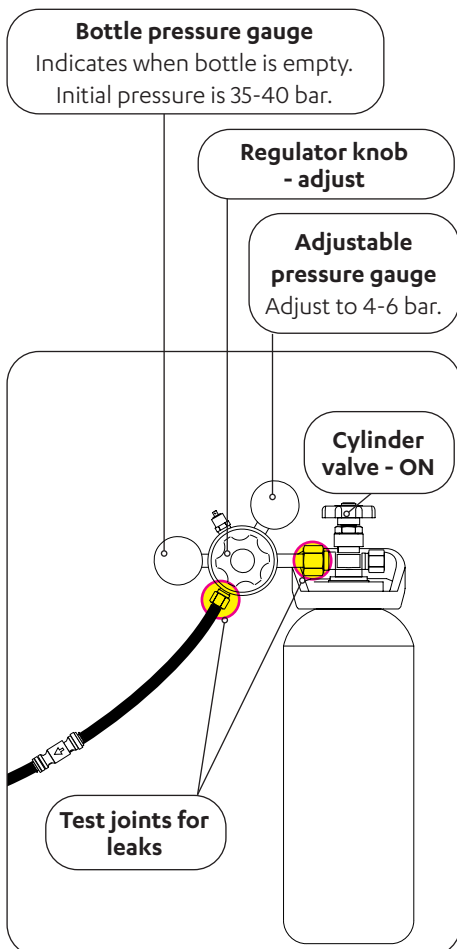
Test for gas leaks

IMPORTANT: After replacing a gas cylinder or after making a gas connection, test for gas leaks.

Use soapy water to perform a leak test. Turn OFF the gas at the cylinder and turn OFF the stop valve near the chiller. Apply a liberal amount of soapy water suds to the gas connections using a sponge or brush.

Slowly turn ON the gas at the cylinder. Inspect for leaks between the regulator and cylinder, and between the regulator and hose.. If bubbles appear and grow, there is a gas leak at the connection. Clean away the soapy residue and ensure the gas is turned off, then tighten/refit the leaking connections.

Allow approximately 1 hour after installation for the water to reach optimum chilled temperature and carbonation level.



Installation

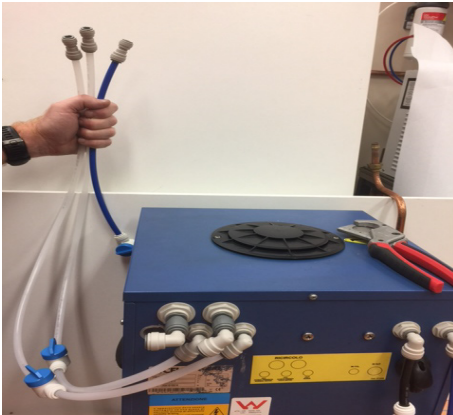
Step 4 – Connect hoses



1. Fit John Guest fittings to outlet connections - Chilled, Sparkling and Recirculation (2).



2. Add elbows to suit your installation.



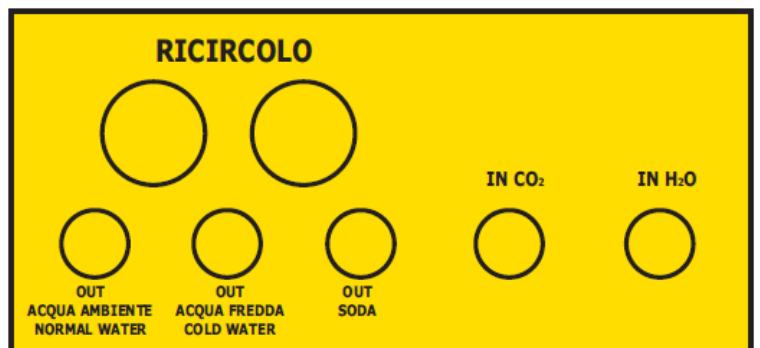
3. Measure and cut to length hoses from chiller outlet fittings. Fit JG stop valves and 3/8 to 5/16 straight adaptors ready for tap/font connection (Note: ambient T-off between filter and chiller).



4. Once tap is installed fit Sparkling / Chilled / Ambient lines with 3/8 to 5/16 adaptors to outlets from chiller.



5. Fit the 3/8 x 5/16 JG fittings to the two black recirculation hoses in the tap. Connect two recirculation hoses between tap and chiller, and cut to length.



Installation



6. Measure & split Armaflex to fit and wrap hoses to tap.



7. Tightly wrap split Armaflex for condensation control.

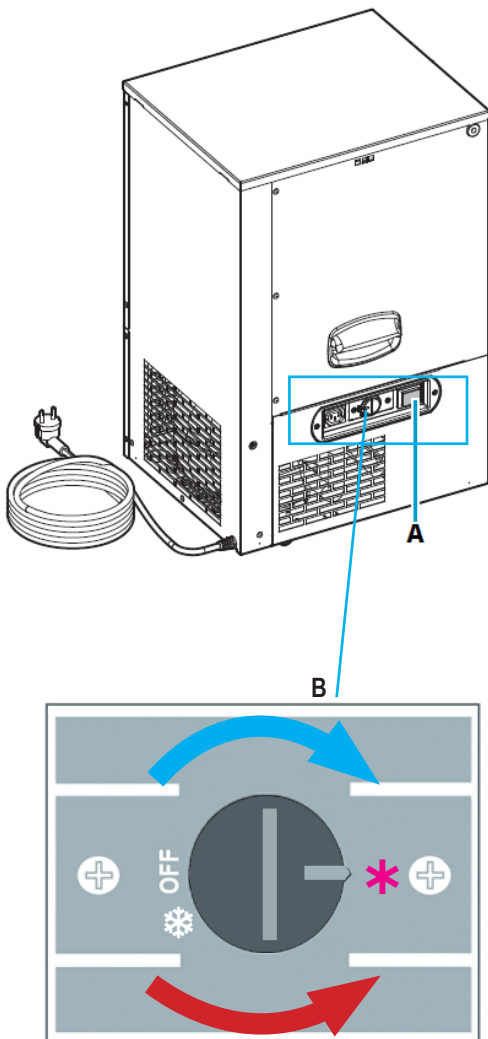


8. Wrap but expose the stop valves up to the Tap, so adjustment can be made if necessary. Mark the stop valves C/S/A for each water type.



9. Enclose end at chiller box with wrap and tape.

Step 4 – Commissioning



Connect the chiller power plug to an electrical power outlet. Turn the I/O switch to I (ON). The compressor, pump and fan will be powered.

Sanitise the system

The system must be sanitised at first installation. Sanitisation must be performed by a qualified technician. See page 27 for details.

Set the Temperature

The dispensed water temperature is adjusted via a thermostat below the front panel or side panel of the chiller. Turn the adjustment screw clockwise for colder water, or anti-clockwise for less cold water. The thermostat is set to the maximum cooling position by default. It is recommended to turn the thermostat halfway between the limits (B), to prevent ice formation.

Allow approximately 1 hour after installation for the water to reach optimum chilled temperature.

If the water circuit freezes, turn power OFF for at least 12 hours, to defrost. Adjust the thermostat anti-clockwise.

(HCS Sparkling models) Adjust the CO₂ gas supply

Dispense from the sparkling tap to release any air in the circuit and allow the pump to fill the carbonator with water. After around 1-2 minutes, the sparkling water pump stops.

Adjust the gas pressure regulator knob to between 4-6 bar (58-87 psi - 400-600 kPa), depending on the degree of carbonation required.

For an effective level of carbonation, the water must be sufficiently chilled. Allow approximately 1 hour after installation for the water to reach optimum chilled temperature.

Flush the system

Before consuming water from the HydroChill for the first time, purge the system by dispensing water from all taps for 5 minutes. This is essential in order to flush out the internal circuits and ensure that the HydroChill has been prepared correctly.

Operation

The HydroChill Tap Font has a tap handle to dispense each type of water:

- Still ambient and still chilled water (HCF models)
- Still ambient, still chilled and sparkling chilled water (HCS models)

Pull the tap towards you to dispense water. When released, that tap handle springs back to the "off" position.

To dispense water continuously to fill large vessels, push the tap handle forwards. The tap must be manually returned to the OFF position.

Stopping the HydroChill

If the HydroChill is to be left unused for a long period, disconnect the plug from the electricity mains. Turn off the water supply and the valve of the CO₂ bottle. Protect from heat and bad weather. Keep covered to protect from dust and/or splashes.

Sanitise the system and flush the filter before resuming operation.

Moving the HydroChill

Before moving the HydroChill, the ice bank must be emptied.

1. Disconnect power and water.
2. If ice has formed, allow 12 hours for the ice to melt.
3. Empty the water from the ice bank:
 - 80L models: Detach the water level indicator tube from the rear of the unit. Allow water to drain. Refit the tube.
 - 60L and 150L models: Open the top cover and use an external pump to extract water from the ice bank tank. Refit the cover.

If the machine needs to be shipped or stored:

The system must be sanitised (see page 27) and all water must be removed; very low temperatures may freeze any residue of sanitiser solution or water and may damage internal components.



If the HydroChill is out of order due to maintenance, fault, or any other reason, affix a clearly marked sign on the machine to prevent unauthorised use.

Always disconnect the machine from the electricity supply before performing maintenance.

When replacing components, use only genuine spare parts.

Contact your nearest service centre for assistance, service, spare parts or enquiries.

Daily maintenance

- Inspect pipelines. Ensure water, CO₂ and drain lines are not obstructed, crushed or leaking.
- Check the CO₂ supply is adequate and in good working order, and that the set pressure values are correct.
- Clean external surfaces:
 - Clean using a soft cloth and a stainless steel cleaner or neutral detergent.
 - To prevent damage, do not use abrasive materials, solvents, alcohol, etc. Do not clean with water jets.
 - Clean the dispensing nozzles with a diluted hydrogen peroxide solution or sanitisation wipes.
 - Clean the drip tray using a diluted lime-scale cleaner such as citric acid, or in a dishwasher.
 - Clean dust/dirt from condenser grille using a soft brush.
 - Dry thoroughly before putting the machine back into operation.

Clean condenser: every 3 months

The cooling condenser must be cleaned every three months, or when necessary, to prevent the build-up of dust and grease which may cause overheating and could damage the compressor beyond repair.

1. Disconnect from electricity supply.
2. Remove the front or side panel.
3. Gently clean the condenser fins using a soft brush, a vacuum cleaner or low-pressure compressed air.
4. Remove any dust from the cooling and electrical components.
5. Refit the panel.
6. Reconnect electrical supply.

Sanitise: at startup, and every 6 months

Sanitisation must only be carried out by qualified technical service staff. Contact Zenith service for assistance.

Before carrying out the sanitisation, carefully read the instructions provided by the manufacturer of the sanitising product. Use personal protective equipment (gloves, masks, etc) and ensure the rooms are ventilated properly.

Sanitise the system upon first start-up, and every 6 months. Sanitisation must also be carried out if the HydroChill is not used for a period greater than 3 days. For short periods of non-use (2-3 days), it is recommended to dispense a few litres of water before using the machine.

Use cleaning agents or disinfectants approved for use in food industry. It is recommended to alternate neutral/slightly alkaline cleaning agents (e.g. liquid low-foam detergents for industrial dishwashers) for removing the organic substances, with agents containing citric or phosphoric acid for the removal of inorganic substances.

Cleaning solutions are generally prepared by mixing detergent with tap water according to manufacturer's instructions. Bleach sanitising solution may be prepared by mixing 5 g of 4% sodium hypochlorite solution (unscented bleach) per litre of tap water (20-40°C). Use the solution within 10 minutes of preparation. When using disinfectants with other active ingredients, follow the manufacturer's instructions.



CAUTION! Never exceed the maximum contact times and the maximum concentration specified by the manufacturer. After flushing the lines with the sanitising solution and allowing it to act for the necessary time, you must rinse thoroughly with clean water to make sure that all traces of sanitising agent have been eliminated completely.

Sanitisation procedure

- Switch off the machine and dispense through the taps until the system is completely empty.
- Disconnect the water inlet pipe from the mains. Connect it to the barrel containing the cleaning solution.
- Switch on the machine and dispense until the cleaning solution emerges (typically after 30 seconds or, if the coil is present, after a further 15 seconds/5 metres of coil, per line). Open the taps for 15 seconds, pause for 5 seconds; repeat 4 times. Reopen the taps for 30 seconds.
- Switch off the machine and dispense through the taps until the system is completely empty.
- Disconnect the barrel containing the cleaning solution and connect the mains water inlet pipe. Switch on the machine and rinse thoroughly, dispensing the fluid through each tap for at least 1 minute and, if the coil is present, dispense for another 30 seconds/5 metres of coil.
- Switch off the machine and dispense through the taps until the system is completely empty.
- Disconnect the mains water inlet pipe and connect it to the barrel containing the sanitising solution.
- Switch on the machine and dispense until the sanitising solution emerges (typically after 30 seconds or if the coil is present, after another 15 seconds/5 metres of coil). Wait for 10 minutes, then open each tap for 30 seconds.
- Do not dispense for 10-15 minutes, to allow the sanitising solution to act.
- Switch off the machine and dispense through the taps until the system is completely empty.
- Disconnect the barrel containing the sanitising solution and connect the mains water inlet pipe. Switch on the machine and rinse properly by dispensing the liquid for at least 3 minutes (at least 5 litres) from still water taps and at least 6 minutes (at least 10 litres) from the sparkling water taps.

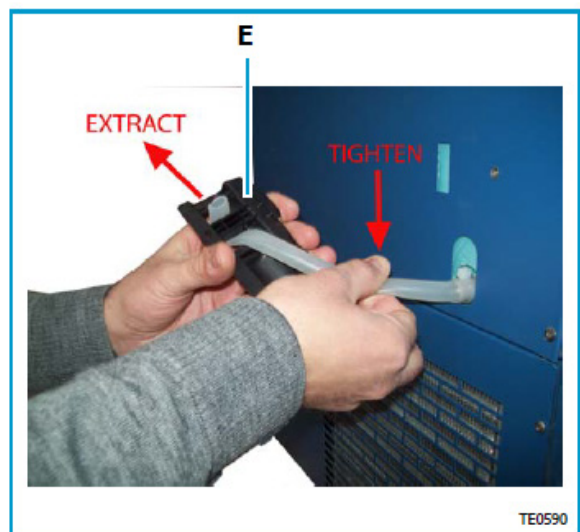
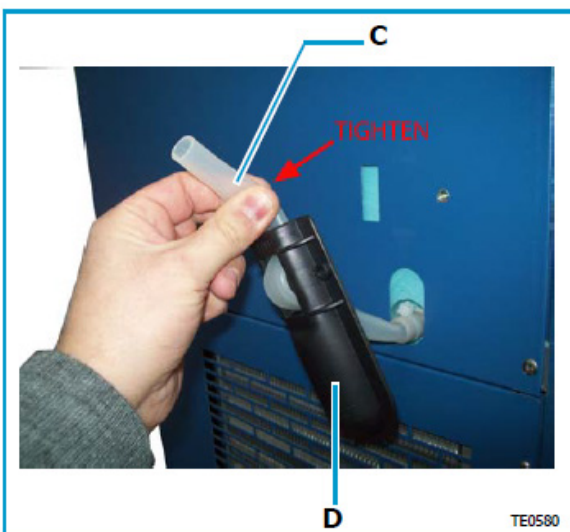
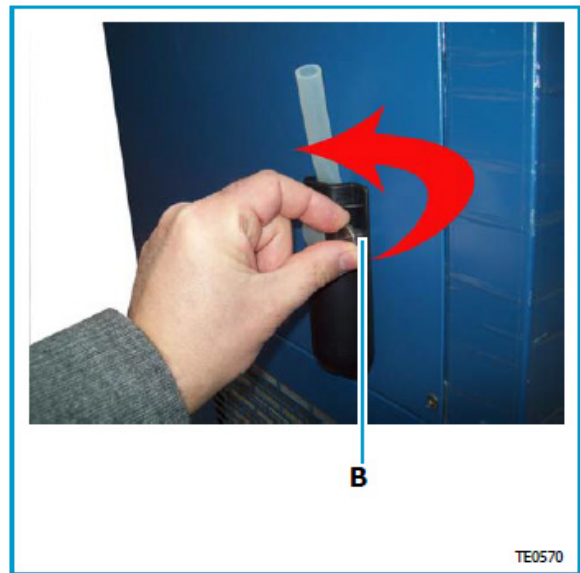
Replace ice bank water: every 12 months



CAUTION Do not put your hands inside the tank if the machine is running.

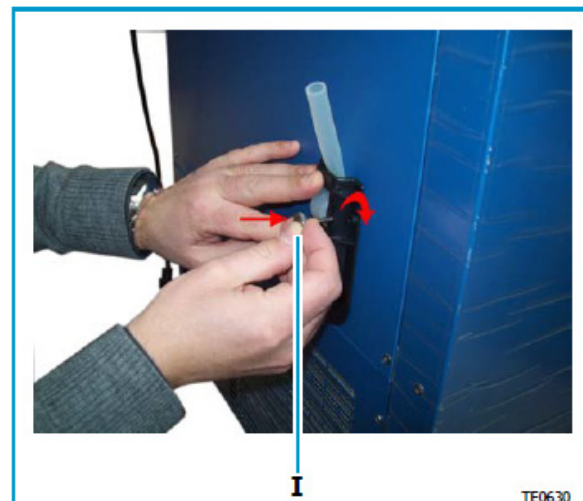
Empty the tank if the machine is to be left unused for a long time.

1. Disconnect power and water.
2. Remove the upper cover.
3. If ice has formed, allow 12 hours for the ice to melt.
4. Refer to the drainage system (A).
5. Loosen the fixing screw (B).
6. Hold the upper end of the tube (C) firmly to prevent spillage, then remove the plastic clip (D) from its seat, sliding it along the rubber tube.
7. Firmly hold the tube upstream from the clip to avoid any water seeping out, then remove the plastic clip from the tube (E).



Maintenance

8. Drain the liquid from the tank by releasing the tube (F).
9. Once the tank has been emptied, insert the tube in the lower slot of the plastic clip (G).
10. Turn the tube and insert it in the front of the upper slot (H). Slide the tube so you can insert the plastic clip in its seat.
11. Press the clip and insert the fixing screw (I). Tighten the screw, making sure the clip stays firmly in contact with the panel it is fixed to.
12. Refill the water in the ice bank.



Replace CO₂ Gas Cylinder



WARNING! Do not adjust flow pressure on the regulator when the cylinder is empty

1. Before changing the CO₂ gas cylinder, ensure you have a new CO₂ gas cylinder on hand.
2. Switch OFF the electrical power to the chiller.
3. Close the valve/tap on the empty gas cylinder.
4. Remove the regulator using a shifting spanner. Take care not to lose the gasket between the cylinder and the regulator.
5. Remove the old gas cylinder.
6. Unpack and position the new gas cylinder. Fit the regulator.
7. Open the sparkling water tap and drain approximately 3 litres of water, until the water turns clear and gas is no longer present.
8. Switch ON the chiller.
9. Turn gas on at the cylinder valve. Do not adjust the regulator.

Inspect carbonator liquid check valve: every 12 months

The carbonator liquid check valve prevents carbonated water from flowing backwards into the potable water supply. Inspect the check valve after any interruption in the water supply (plumbing work, earthquakes, etc.), and at least once a year in normal conditions.

1. Turn off power and mains water supply.
2. Disconnect the hose at the inlet to the valve, catching the water retained in the hose.
3. Turn off CO₂ at the top of the gas cylinder. Dry the valve inlet and observe for one minute for evidence of water leakage from the valve inlet.
4. Slowly release the gas pressure by pulling the relief valve. Observe the valve inlet for water leakage again.
5. If there is evidence of water leaking from the valve inlet, the valve is not functioning to prevent backflow and must be replaced.
6. Reassemble the water supply line. Turn on water, power and CO₂ supply.

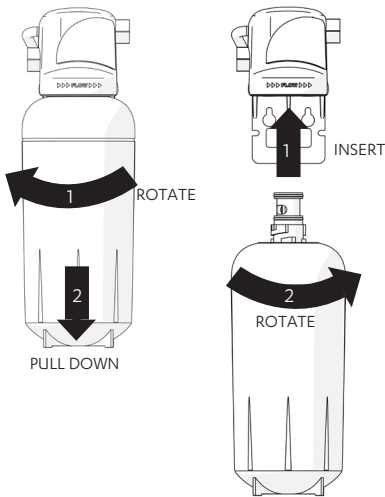
Replacing water filter: every 12 months

The water filter has a 12 month or 132 000 litre capacity. The filter may need to be replaced earlier, depending on local water quality conditions and usage, or if you notice unpleasant odours or tastes.

Some water may drip from the filter head (socket) during replacement. Keep a towel handy to dry up any drips.

To change the water filter:

1. Turn off water supply to the filter.
2. Open the ambient tap for a few seconds to relieve line pressure.
3. Close the stop valve between the filter and the chiller.
4. Place a cloth or towel under the filter cartridge to catch any water that may spill. Gently hold the filter cartridge and rotate the cartridge a quarter turn to the left, then gently pull down, keeping the cartridge level to avoid spills. Place spent cartridge in the sink or suitable container.
5. Unpack the replacement cartridge and write today's date where shown on the label.
6. Remove the sanitary cap. Avoid touching the filter O-rings or filter opening as this may cause bacterial contamination of the cartridge. Slightly moisten the O-rings with regular tap water and align the front cartridge label to the left.
7. Gently but firmly push the cartridge up into the filter head and turn to the right, as far as it will go without forcing it. The cartridge should now be locked in position, with the front label facing forward.
8. The new filter should be flushed before use. Disconnect the filter outlet hose from the stop valve, and place the open end of the hose into a bucket or container. Turn on the water supply and flush approximately 10 L through the filter.
9. Turn off the water supply and reconnect the hose to the stop valve.
10. Open the stop valve and turn on water supply.
11. Open ambient tap and run water to remove any air out of the line.
12. Wipe up any spills and dispose of the used cartridge and packaging thoughtfully.



If chiller is left unused

If the chiller is to be left unused for more than 2-3 days, disconnect the plug from the electricity supply. Turn off water supply and the valve of the CO2 bottle. Protect the chiller from heat, dust and water splashes.

If the machine needs to be moved, stored or shipped, the system must be sanitised. All water must be removed; very low temperatures may freeze any residue of sanitiser solution or water, which may damage internal components.

On resuming operation, sanitise the system before use.

Maintenance

Zenith GlobalPlus Water Filter ZGP 65S

Part number 92323NZ

These systems have been tested according to NSF/ANSI Standard 42 and/ or AS/NZS 4348 for the reduction of the substances listed below. The concentration of the indicated substances in water entering the system was reduced to a concentration less than or equal to the permissible limit for water leaving the system as specified in NSF/ANSI Standard 42 and/ or AS/NZS 4348

Contaminant Reduction	Avg. Influent	NSF/ANSI Specified Challenge Concentration	Avg. % Reduction	Avg. Product Water Concentration	NSF Reduction Requirements	NSF Test Report
Chlorine taste and odour	2.0 mg/L	2.0 mg/L ± 10%	96.6	0.07 mg/L	≥ 50%	J-00089365

Application guidelines / water supply parameters

Capacity	132,489 litres
Service flow	12.6 lpm
Water pressure	172-862 kPa (25-125 psi)
Water temperature	4.4 – 38 °C

Testing Condition: pH: 7+/-1

Temp: 20+/-5 Celsius

Pressure: 600 kPa +/- 100 kPa

Note that while the testing was performed under standard laboratory conditions, actual performance may vary. Systems must be installed and operated in accordance with manufacturer's recommended procedures and guidelines. Failure to do so may void warranty. See Warranty Card for Details. **Caution:** This filter system or cartridge is designed to be installed on the Cold water line. Do not install on Hot water line.

Warning: AS3497:1998 requires dual backflow prevention and certified pressure control device to be installed prior to filter system(s) that are plumbed into mains water supply. Failure to do so will not only void all warranty(s) on the filter system(s), but will put the home at risk of flooding in the event of damaged appliances during pressure surges.

Caution: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system. Systems certified for cyst reduction may be used on disinfected water that may contain filterable cysts.

To reduce the risk associated with property damage due to water leakage:

- Read and follow instructions before installation and use of this system
- Installation and use must comply with existing state or local plumbing codes
- Protect filter from freezing. Drain filter when room temperature drops below 4.4°C
- Contact plumbing professional if you are uncertain how to check your water pressure
- Do not install where water hammer conditions may occur. If water hammer conditions exist you must install a water hammer arrester. Contact a plumbing professional if you are uncertain how to check for this condition

- Install on cold water lines only. Do not install on hot water supply lines. The maximum operating water temperature of this filter system is 38°C
- The disposable filter cartridge must be replaced every 12 months or at the specified service cycle, whichever comes first
- Do not install near water pipes which will be in path of a drilling tool when selecting the position to mount the bracket
- Mount filter in such a position as to prevent it from being struck by other items used in the area of installation (waste baskets, etc.)

Note: Zip filter systems are designed for ease of installation. However, post-installation inspections are highly recommended. Check for leaks immediately after installation and once again after 24 hours. If leaks are detected, turn off water supply, drain water and inspect the leaks. If problem persists, contact the installer / plumber for rectification.

It is essential that operational, maintenance and filter replacement requirements be carried out for this product to perform as advertised.

Flush new cartridge for at least 2 minutes to remove trapped air bubbles.

If left unused for more than 24 hours, flush cartridge for 2 minutes before use.

Treatment and Tests – Table C1

This appliance meets the domestic water treatment appliance Standards AS/NZS 3497 and AS/NZS 4348 for the following water treatment process.

Class	Treatment Type	Function	Pass
I	Microbiological Status Will stop bacteria increasing, but will not remove them unless II (a) is ticked	Will stop bacteria increasing, but will not remove them unless II (a) is ticked	n/a
II	Microbiological Treatment		
II (a)	Bacteria Removal	Will remove inactive bacteria	n/a
II (b)	Virus Removal	Will remove inactive virus	n/a
II (c)	Protozoa Removal		n/a
III	Turbidity & Particulate Reduction	Will reduce cloudiness	n/a
IV	Taste & Odour Reduction	Will reduce taste and odour	✓
V	Chemical Treatment	Will decrease chlorine compounds	✓

Legend: ✓ = Pass Test N/A = Not applicable

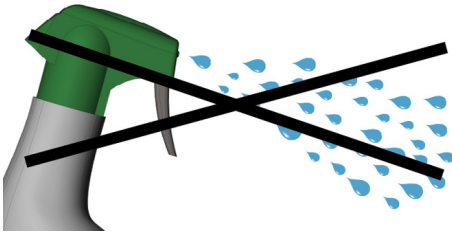
Note: the use of this appliance may increase the bacterial content of the water unless supplementary treatment is provided.

Troubleshooting

Call an electrician, a plumber, or Zenith service for assistance, service, spare parts or enquiries.

Symptom	Possible cause	Solution
The dispenser does not start up	Power supply failure	Check that power is present. If the power is OK, call Zenith service.
	Thermostat failure	Call Zenith service.
The cooling unit operates continually, and the water delivered is warm	Temperature is not set properly	Adjust thermostat.
	Condenser needs to be cleaned	Clean the condenser
	Fan is not working	Replace fan. Call Zenith service.
	Chiller ice bank does not have enough water	Fill chiller ice bank.
	Refrigerant gas leak	Call Zenith service.
Noisy water pump	Water supply failure	Check that water is reaching the machine
The dispenser does not deliver water	Water valve closed	Open the water valve.
	Water supply hose crushed or obstructed	Check and correct the path of the hose.
	No electricity supply	Check the power switch, electrical cable and connections.
	Water is frozen - thermostat set too low or has failed	Adjust thermostat; disconnect power for 12 hours to defrost. If problem persists, call Zenith service.
	Water filter blocked	Replace water filter.
The dispenser does not deliver sparkling water	CO ₂ cylinder is closed	Open the CO ₂ cylinder valve
	CO ₂ cylinder is empty	Replace the CO ₂ cylinder
	Electronic control unit malfunction	Call Zenith service.
	Pump failure	Call Zenith service.
Excessive noise or vibration	Chiller ice bank does not have enough water	Fill chiller ice bank.
	Cooling fan needs to be cleaned	Clean fan

Cleaning



Do not use strong, corrosive, spray or abrasive cleaners.
Clean the case with a soft cloth or brush and mild soap and water.
Clean the tap with a damp cloth.

End of life disposal

In order to help preserve our environment we ask that you dispose of this product correctly. Please contact your local city council for collection centre details.

Zenith Heaters Ltd

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