

Model Overview

Introduction

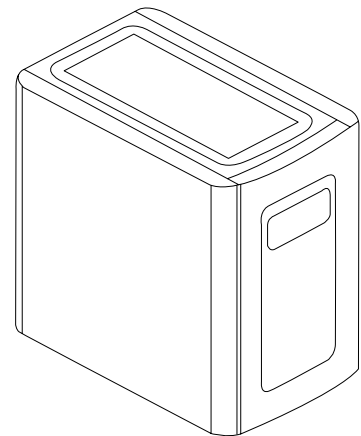
The u1 epitomises cutting-edge design and innovation with its contoured tap and compact under-counter unit. This is our most discreet range and will fit into any environment seamlessly. The under-counter dispensers supplied

with this tap are manufactured with the most modern and innovative technologies. All the materials and components are tested during the entire production process in order to satisfy all expectations.

20-Litre:

Alongside a robust steel frame this dispenser features stylish, injection moulded front side and top panels.

COOLING SYSTEM	High efficiency compression system with capillary control. Environmentally friendly R134A refrigerant.
COLD TEMPERATURE	2°C to 11°C.
OUTPUT PER HOUR	18 litres cold < 12°C and 16 litres sparkling <12°C.
DISPENSE	Swan Neck Faucet with ergonomically designed and situated light touch sensitive controls.
MAX RUNNING POWER CONSUMPTION	85-100 watt.
POWER SUPPLY	IEC Power – Fused Socket.
WATER CONNECTION	Mains in (3.5bar max) - 1/4" Push Fit/Faucet - 6mm Push Fit.
CO2 CONNECTION	1/4" Push Fit.
DIMENSIONS	(w x d x h) 230 x 360 x 390mm
WEIGHT	17.1kg
CUPBOARD VENTILATION	Recommended

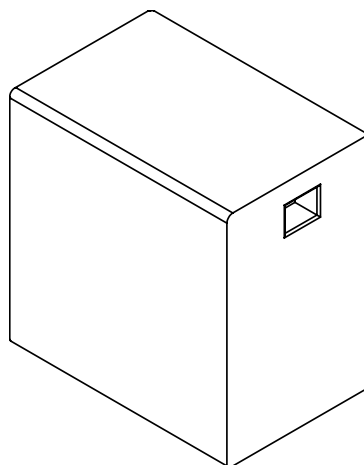


Introduction - Continued

30-Litre:

With its low noise characteristics this unit can be installed in any environment where limited space is an issue. It is controlled by microprocessor which, via specially fitted sensors, will notify the user of any malfunctions and automatically turn off the dispenser when dangerous conditions arise. A separate monitoring system will also let the operator know when the water filter needs to be replaced.

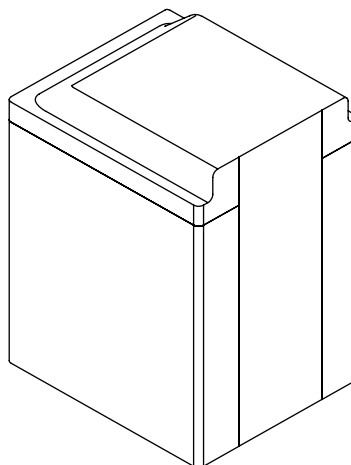
COOLING SYSTEM	High efficiency compression system with capillary control. Environmentally friendly R134A refrigerant.
COLD TEMPERATURE	4°C to 8°C.
OUTPUT PER HOUR	30 litres cold and sparkling.
DISPENSE	Swan Neck Faucet with ergonomically designed and situated light touch sensitive controls.
MAX RUNNING POWER CONSUMPTION	150 watt.
POWER SUPPLY	IEC Power – Fused Socket.
WATER CONNECTION	Mains in (5bar max) - 3/4" Female BSP.
CO2 CONNECTION	1/4" Quick Fitting.
DIMENSIONS	(w x h x d) 245 x 365 x 375 mm
WEIGHT	16kg
CUPBOARD VENTILATION	Recommended



60-Litre:

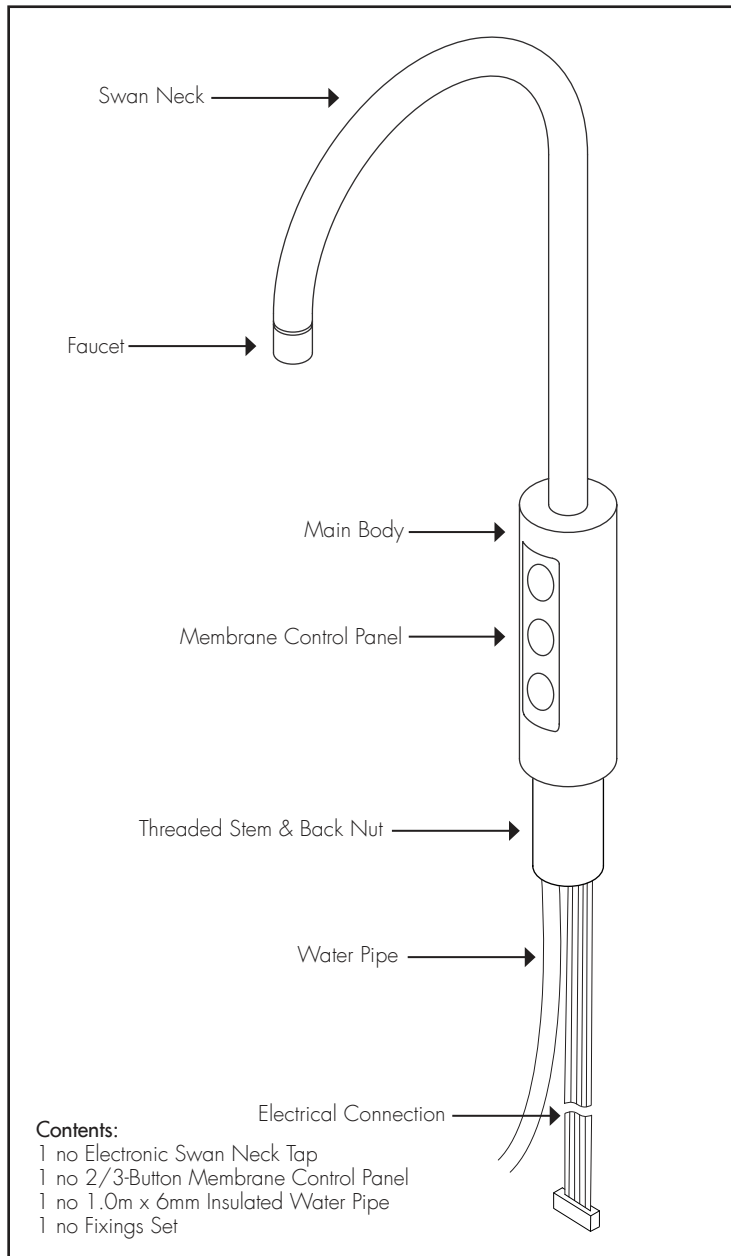
Using "Ice Bank" technology this unit can dispense up to 60 litres of water per hour, completely satisfying the demand of small, medium and large restaurants and catering areas with high performance and a compact design.

COOLING SYSTEM	High efficiency compression system with capillary control. Environmentally friendly R134A refrigerant.
COLD TEMPERATURE	2°C to 11°C.
OUTPUT PER HOUR	60 litres cold and sparkling at 10°C.
DISPENSE	Swan Neck Faucet with ergonomically designed and situated light touch sensitive controls.
MAX RUNNING POWER CONSUMPTION	360 watt.
POWER SUPPLY	IEC Power – Fused Socket.
WATER CONNECTION	Mains in (5bar max) - 8mm Quick Fitting.
CO2 CONNECTION	6mm Quick Fitting.
DIMENSIONS	(l x w x h) 269 x 467 x 510mm
WEIGHT	26kg
CUPBOARD VENTILATION	Recommended



Component/Feature Overview

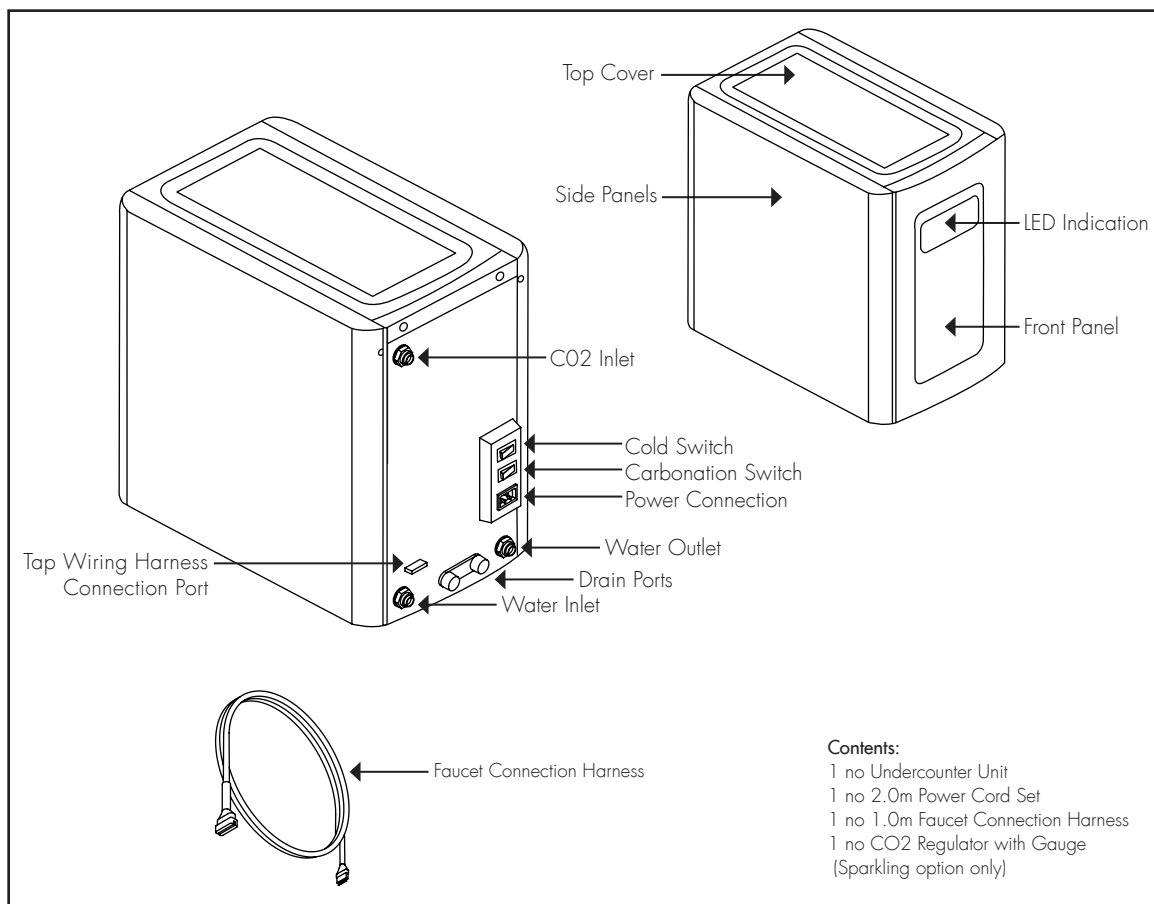
U1 Tap - Major Components



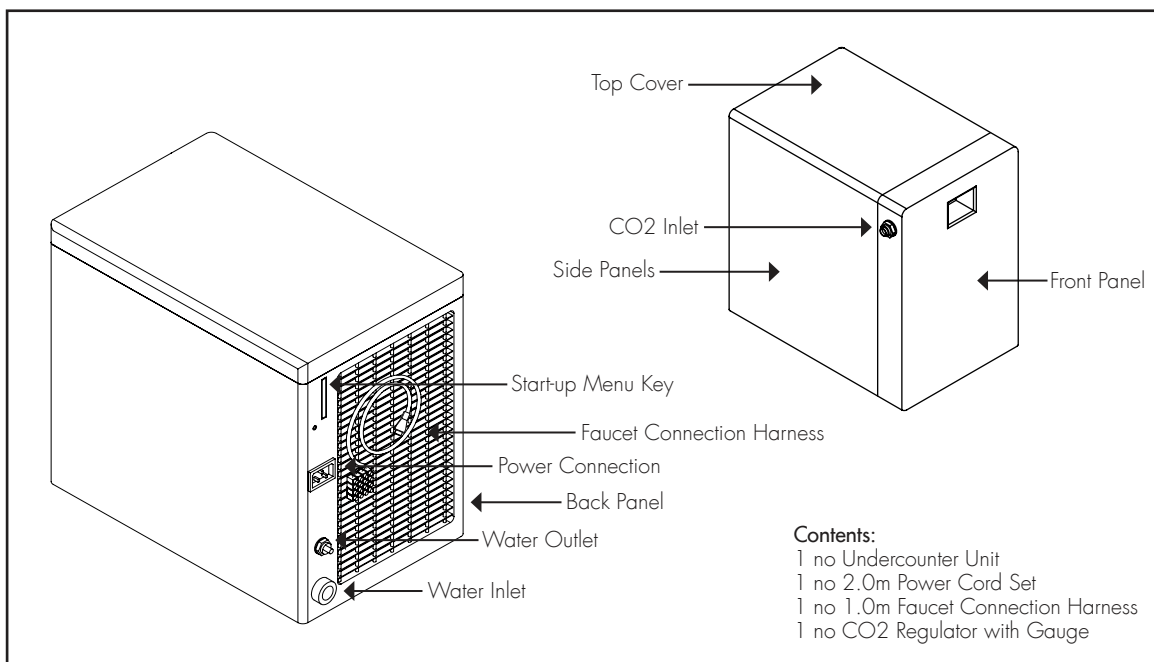
Please Note:

Mains Installation Kit & Filters are supplied as extra items according to individual ordering requirement.

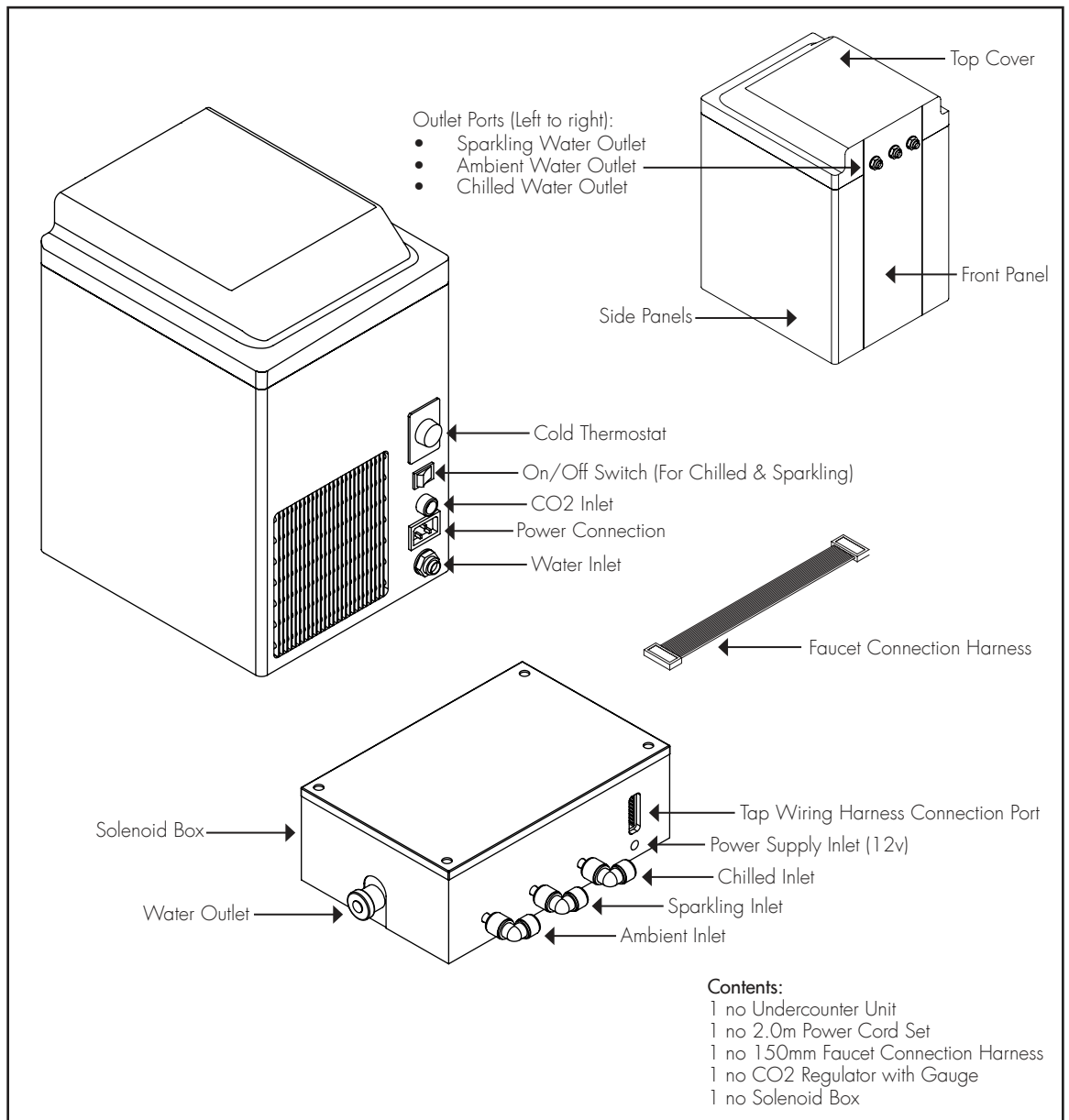
20-Litre - Major Components



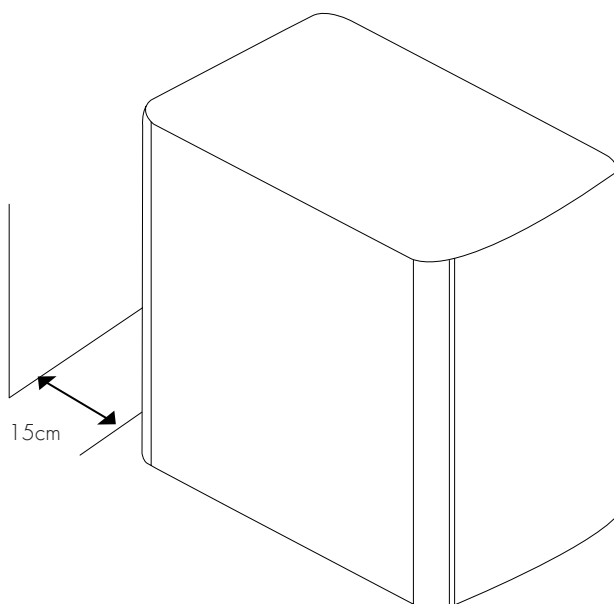
30-Litre - Major Components



60-Litre - Major Components



General Safety

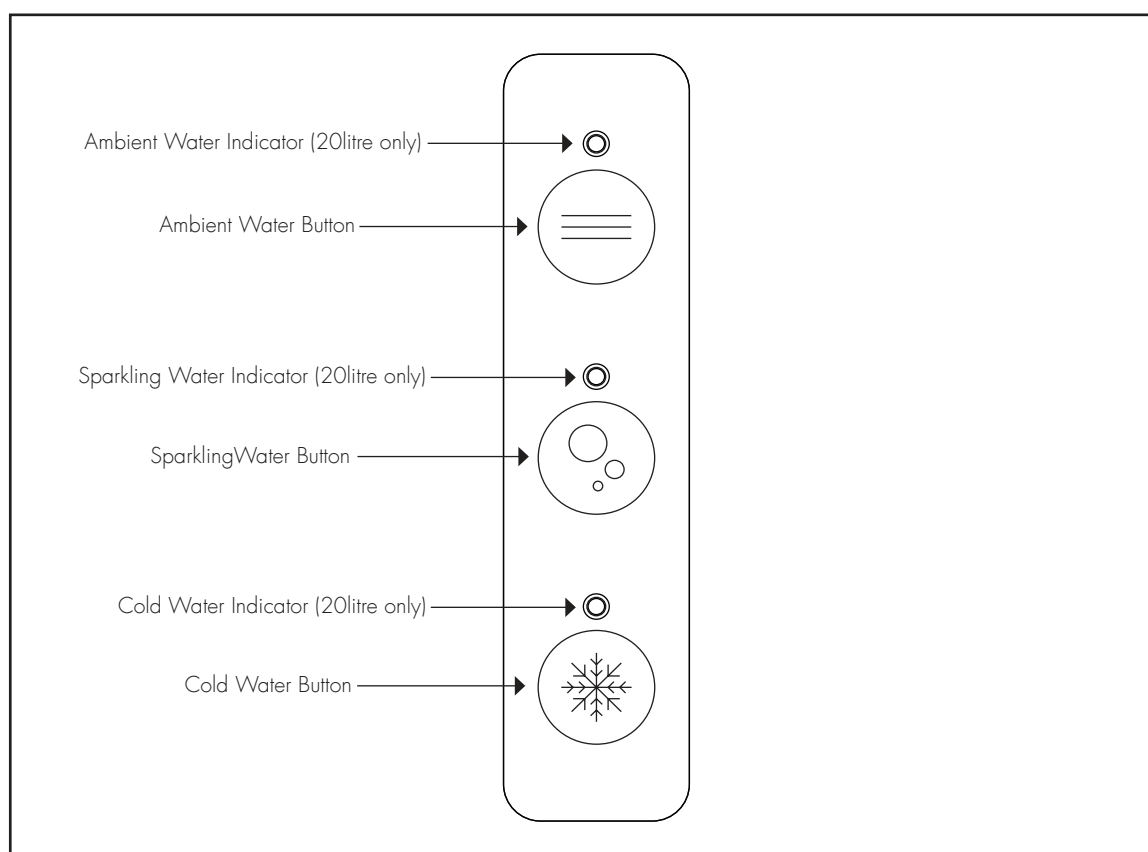


- Always place the dispenser in its vertical position, on a surface which can capably support its weight.
- During use this machine must remain in its upright position.
- Always leave a space no less than 15cm between the wall and dispenser.
- Keep the machine away from sunlight, heat and moisture.
- Power and water supply points must be available near the dispenser, and must meet the criteria specified in the 'Specification' section of this manual.
- The environment where this machine is installed must be free of dust and corrosive/explosive gases.
- After extended disuse (more than 15 days) of the dispenser it may be necessary to unplug and thaw the machine.
- Ensure adequate ventilation if the unit is placed in a cupboard.

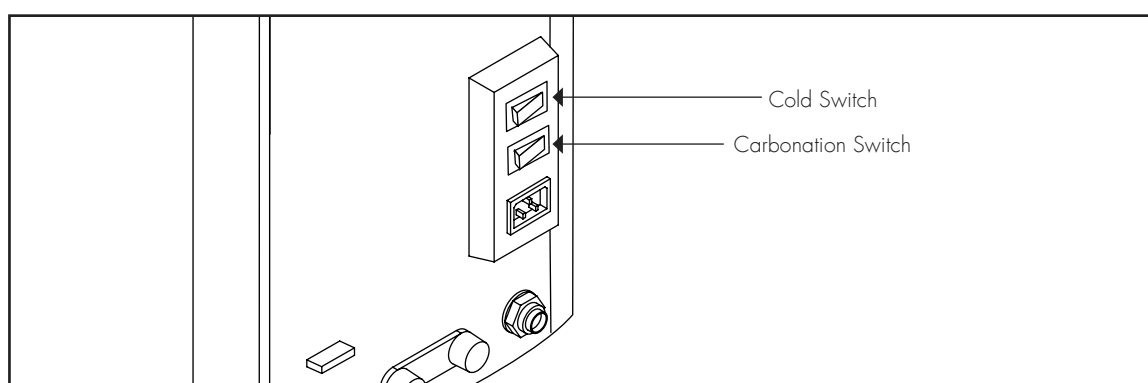


Operation

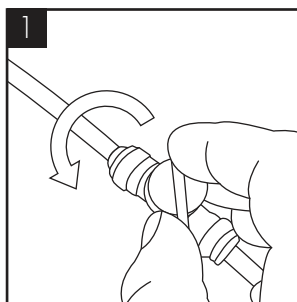
Functions & Controls



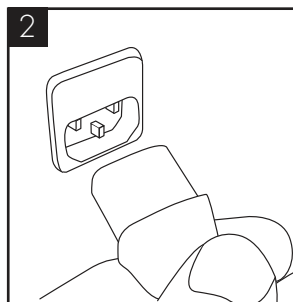
20-Litre Controls



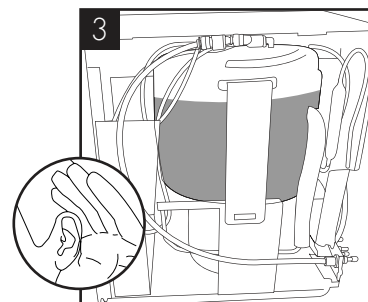
20-Litre - Initial Cold Water Operation



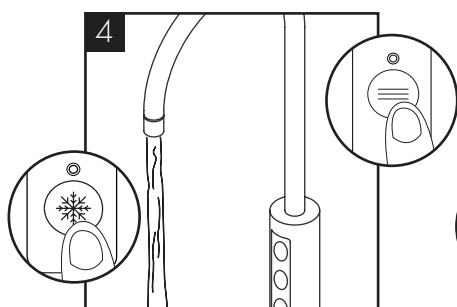
Turn on the water supply and check for any leaks.



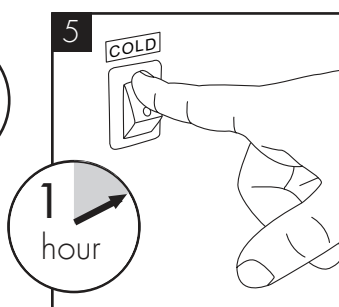
Connect the IEC power cord-set to the electricity supply, and switch on power.



The Direct Chill system should now be heard to begin filling. This may continue for a few minutes depending upon water pressure. (NB: Any immediate whining noise from the DC pump should soon stop as the water level in the system rises).



Upon completing the installation process, proceed to flush out the dispense water lines using the buttons on the tap. We recommend that a minimum of 10lts is flushed through the unit. (Cold approx. 8lts and Ambient approx. 2lts).



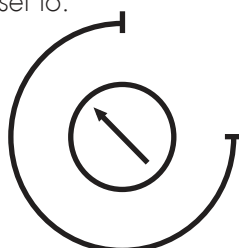
Allow up to 1hr for the initial cooling cycle to complete.

NOTE:

If model includes the sparkling dispense option please refer to page 19.

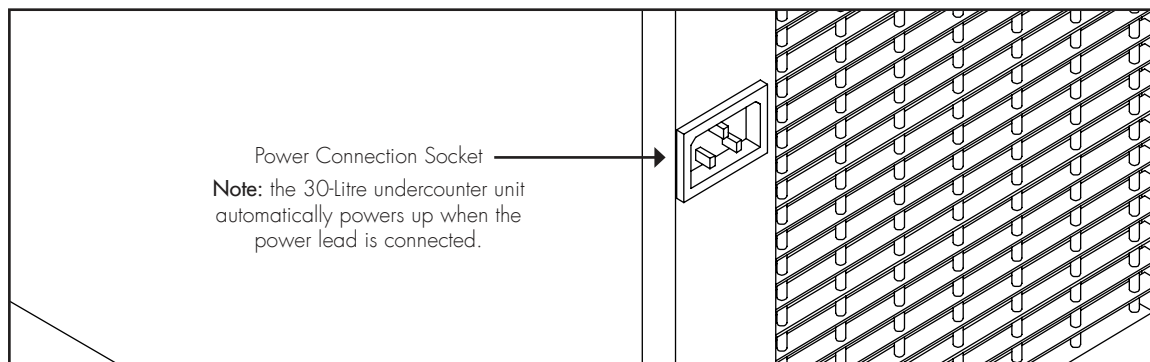
Cold Thermostat

Factory set to:



NB: Turn clockwise to decrease water temperature

30-Litre Controls



30-Litre - Initial Cold Water Operation

After carrying out the installation procedures detailed in the previous chapter, run the initial cold water operation as follows:

1. Ensure the CO2 bottle is properly connected to the dispenser (see page 20).
2. Place a container with a capacity of 5 litres under the tap.
3. Dispense at least 3 litres of both ambient

- and chilled water.
4. Hold the sparkling water button until sparkling water is dispensed.

30-Litre - Temperature Control

The cold water temperature control has 3 settings – 4c, 6c and 8c. The undercounter unit is factory set to 6c.

If any adjustment is required, please carry out the following steps:

1. Locate the button on the back top left of the unit (see Fig 1).

2. Press and hold the button for approximately 3 seconds until you hear the signal beep, continue to hold whilst counting the number of beeps. Use table below to set the temperature:

1 beep	4°C
2 beeps	6°C
3 beeps	8°C

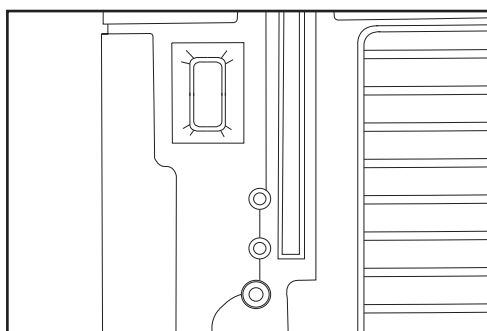


Fig 1

3. To change the setting: After carrying out steps 1 & 2, continue to hold the button on the back -

3a. To decrease the temperature, press the ambient dispense button 1x to reduce one stage or 2x to reduce two stages.

3b. To increase the temperature, press the cold dispense button 1x to raise one stage or 2x to raise two stages.



4. Release the programming button to save the selected setting.

5. Press and hold the programming button again and count the number of beeps to confirm the setting is saved.

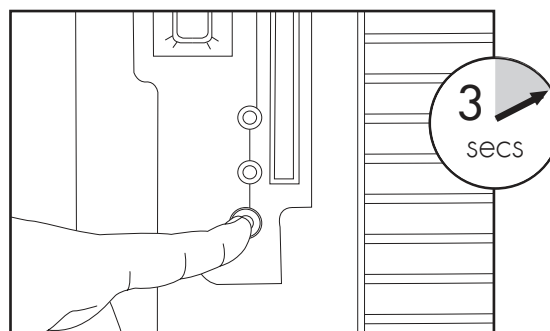
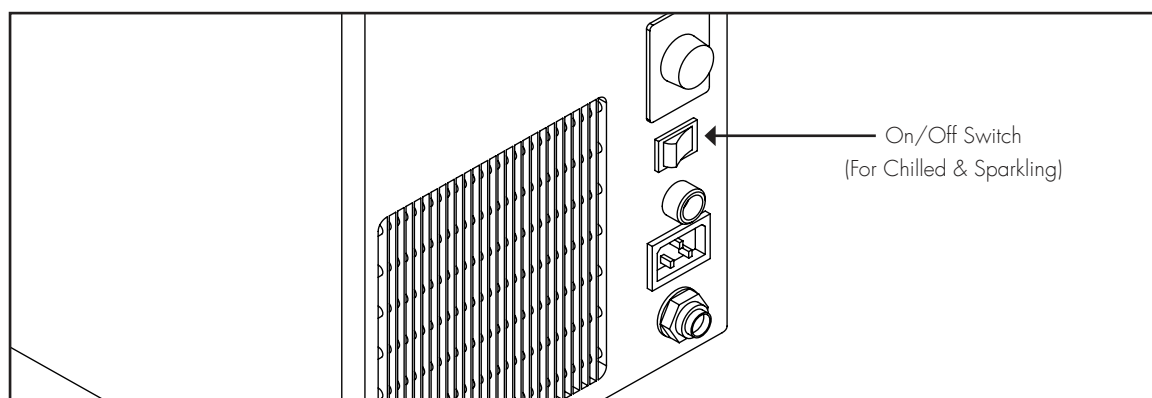


Fig 2

60-Litre Controls



60-Litre - Initial Cold Water Operation

After carrying out the installation procedures detailed in the previous chapter, run the initial cold water operation as follows:

1. Lift the upper plastic cover off of the dispenser by pulling it up.
2. If not done already, fill the ice tank with clean water paying special attention not to wet any of the electrical components.
3. Fill the ice tank to the arrow that indicates the maximum level (see Fig 1). After filling the tank do not move the dispenser as doing so could cause water to spill from the tank. **NOTE:** if this device is operated without water in the ice tank it will cause serious damage to the machine.
4. Dry any drops or splashes caused by filling the ice tank.
5. Pull the ring of the safety valve on the carbonator, releasing gas for at least 2/3 seconds (see Fig 2).
6. Open the water shut off valve on the supply line.
7. Place a container with a capacity of at least 5 litres under the dispensing taps.
8. Dispense at least 3/4 litre of ambient still water, and at least 3/4 litre of chilled water.
9. Position the thermostat switch to number 7, and wait for 2 - 3 minutes.
10. Position the 5 litre container under the sparkling water tap and dispense until only gas comes out.
11. Replace the upper plastic cover and wait for 90 - 120 minutes before dispensing water again so ice may form in the tank.
12. Once started the device must be left operating permanently. If the power supply is interrupted for more than 2 - 3 hours it could cause faults within the ice tank and consequently freeze the water coil. **NOTE:** If a similar anomaly occurs follow ice bank defrosting procedure (see page 26).

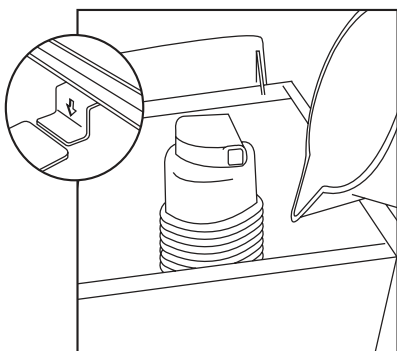


Fig 1

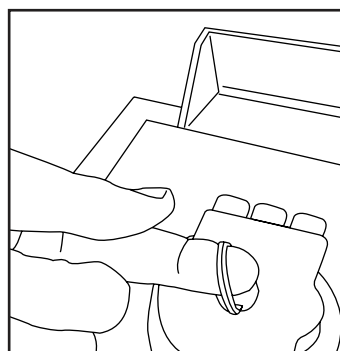
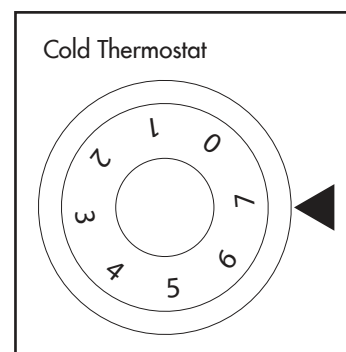
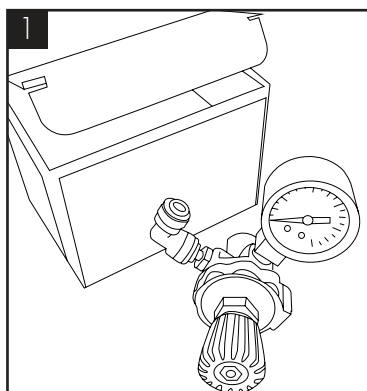


Fig 2

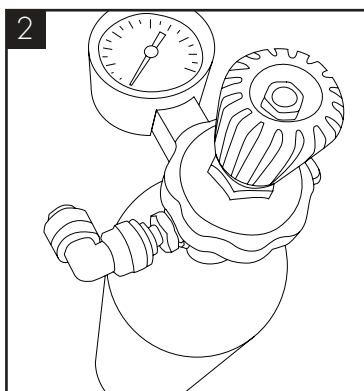


Turn clockwise to decrease water temperature

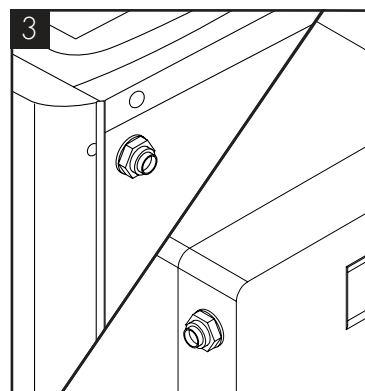
20/30-Litre - CO2 Bottle Installation



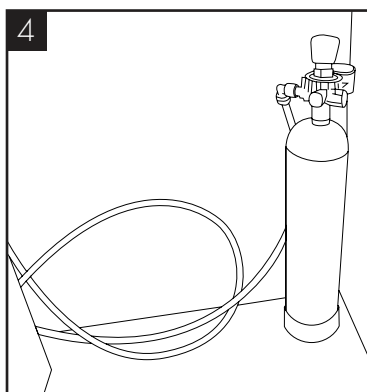
1
Unpack CO2 Regulator and fit elbow fitting to spigot outlet.



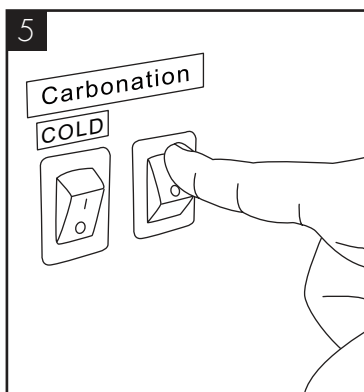
2
Attach the regulator to the disposable CO2 bottle, ensuring the small pressure relief vent in the stem is facing away from you or anyone else. Ensure the regulator is closed. Hand tighten securely.



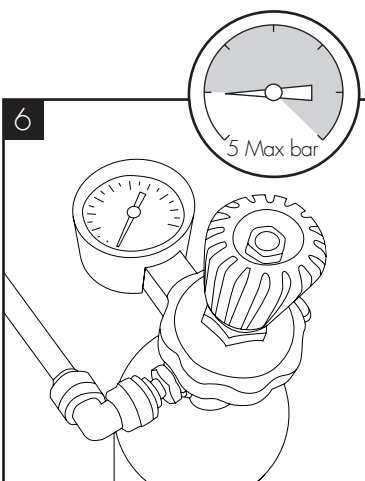
3
Connect the assembled CO2 bottle and regulator to the CO2 inlet on the back (20L) or side (30L) panel using a 1/4" pipe.



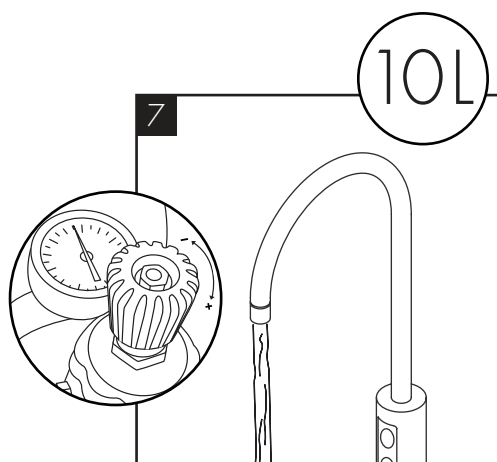
4
Stand the cylinder in a suitable place.



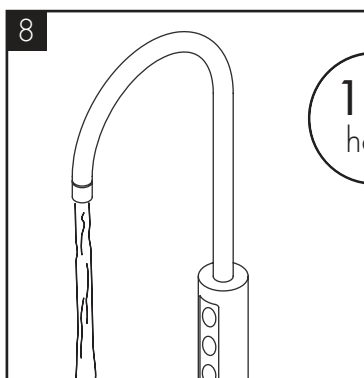
5
On the 20litre variant: Do not open the regulator valve until the carbonated switch has been turned on.



6
After completing the water installation, turn on the soda power switch and the pump will run. Allow the carbonation tank to fill. (The carbonation pump will run for between 15 seconds - 2 minutes). We recommend between 3.5 - 5 bar (max). Do not exceed 5 bar pressure.



7
Flush through approximately 10 litres of water using the sparkling button. Depending on the inlet water pressure, on the 20litre model you may have to pause approx. every 500ml to allow the carbonation tank to refill. Check and adjust the CO2 pressure accordingly.



8
It will be necessary to leave the machine for up to 1 hour for sparkling water to develop, by absorbing the CO2.

30/60-Litre - Refillable CO2 Bottle Installation

NOTE:

- Before connecting the CO2 bottle ensure the gas being used is food certified.
 - Do not lay the CO2 bottle on its side whilst attaching the pressure reducer, make sure it is always in an upright position when carrying out this task.
 - Always ensure the reducer's working pressure is higher than the cylinders max pressure.
 - Do not place hands or any other part of the body near the gas as this may cause freeze burns.
 - A small amount of gas leakage during set-up/replacement is normal.
1. Connect the assembled CO2 bottle and regulator to the CO2 inlet on the rear panel (60L) using a 6mm pipe or side panel (30L) using a 1/4" pipe (see Fig 1)
 2. In instances where a refillable CO2 bottle is being used screw the pressure reducer on to the gas bottle with a spanner (28mm). If however a single-use gas bottle is in operation, screw the reducer on to the bottle by hand.
 3. If using a refillable gas bottle open it by turning the upper hand grip counter-clockwise (item 1- fig 2).
 4. Ensure the CO2 bottle is securely connected to the dispenser using the 1/4" plastic tube.
 5. Insert one end of the tube into the quick fit coupling at the rear or side of the machine, and the other connected to the reducer of the gas bottle.
 6. Open the gas bottle by turning the upper hand grip counter-clockwise (item 1- fig 2).
 7. Turn the black handle of the pressure reducer clockwise (turning towards the + sign) (item 2- fig 2).
 8. Check that any connection points are free of leaks using soapy water.

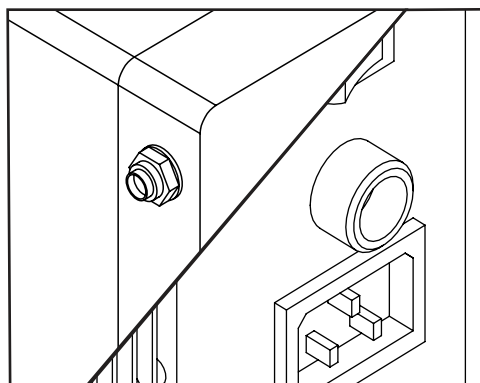


Fig 1

Adjusting Sparkling Water

By adjusting the pressure reducer it is possible to increase or decrease the amount the amount of CO2 present in the water; the optimal recommended values range from 2 – 5 bar. A higher pressure will increase the amount of carbonation in the water, with a lower pressure producing 'slightly sparkling' water. CO2 pressure must be set at +0.5Bar > incoming water pressure.

Replacing a Refillable CO2 Tank

1. Detach the CO2 bottle from any supporting chains or belts.
2. Close the valve at the top of the bottle by turning it clockwise until completely locked (item 1- fig 2).
3. Close the pressure reducer by turning the knob anticlockwise (item 2- fig 2).
4. Remove the CO2 pipe from the pressure reducer, and detach the other end from the dispenser.
5. Screw the adapter (optional) for the external CO2 bottle to the new pressure reducer and tighten it firmly.
6. Connect one end of the new CO2 pipe to the pressure reducer and the other to the appropriate connection point on the dispenser (see page 5 or 6).
7. Screw the ring nut of the adapter assembled on the pressure reducer to the CO2 bottle.
8. Open the valve at the top of the new CO2 bottle.
9. Reattach any chains or belts removed from the bottle and return it to its normal position.
10. Check for leaks using soapy water.

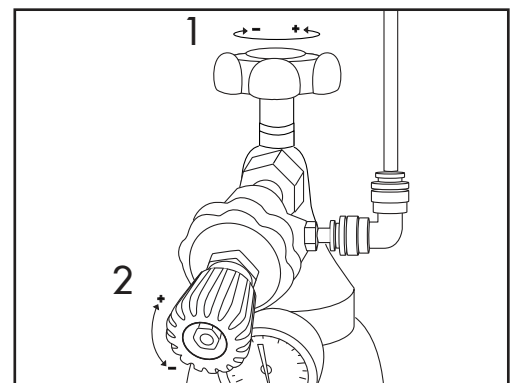
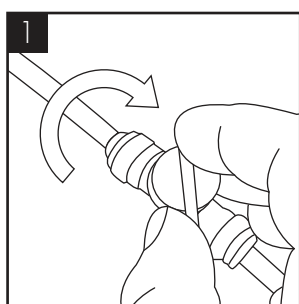


Fig 2

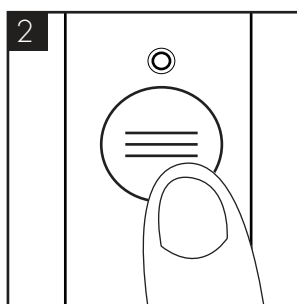
Maintenance & Cleaning

Sanitisation Guide

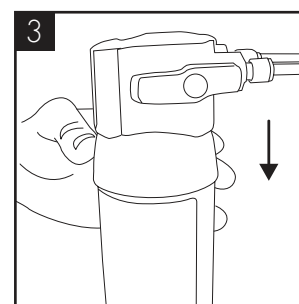
NOTE: All maintenance operations must be carried out with the dispenser switched off. This operation must only be carried out by trained staff. Every 6 months a sanitisation procedure is recommended as follows:



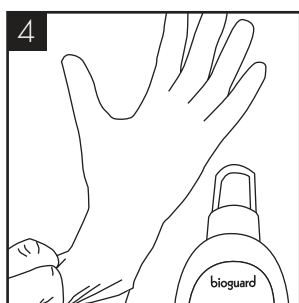
Turn off incoming mains water.



Briefly press cold/ambient dispense button to release internal water pressure from the machine.



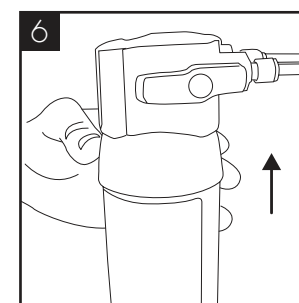
Remove the existing filter.



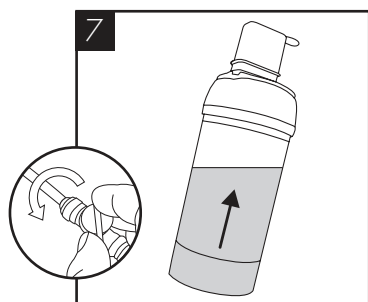
Use Bioguard Hand Gel and put on protective gloves.



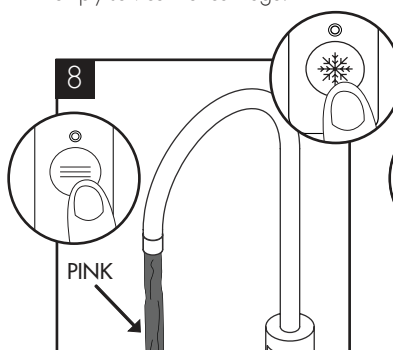
Add 25 ml of Bioguard Internal Sanitisation fluid to a clean and empty service filter cartridge.



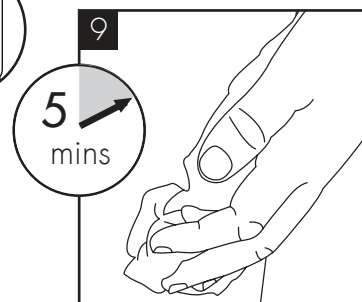
Connect to filter head.



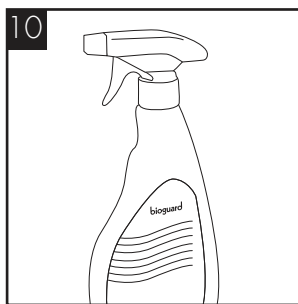
Turn on incoming water, allow service cartridge/doser to fill.



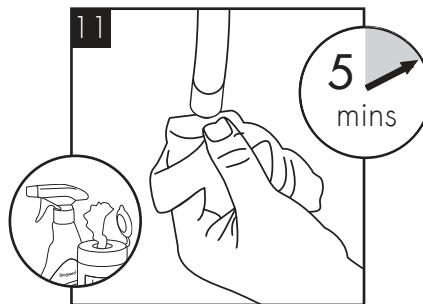
Dispense water using the cold button until the water appears pink. Briefly press the ambient button too.



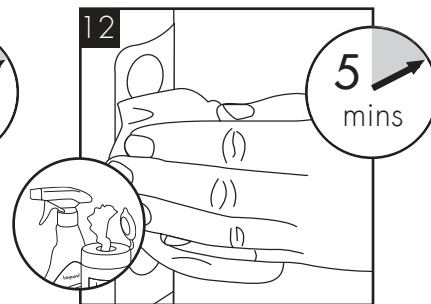
Leave the solution inside machine for sanitisation to take effect (minimum 5 minutes) while thoroughly cleaning the machine externally



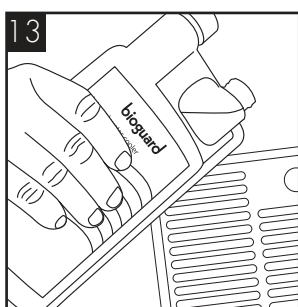
For this we recommend the use of Bioguard Foam Descaler & Sanitiser Spray.



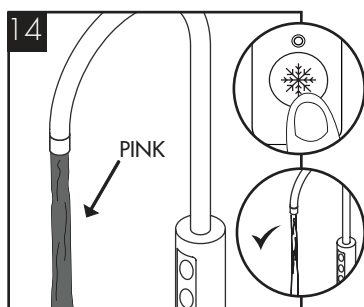
Pay particular attention to the dispense faucet and the push button controls. For this use Bioguard External Sanitiser & Clear Spray and Sanitising Wipes.



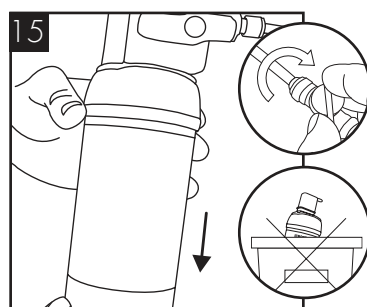
Attend to any cosmetic marks with Bioguard Rejuvenator & Protector as needed.



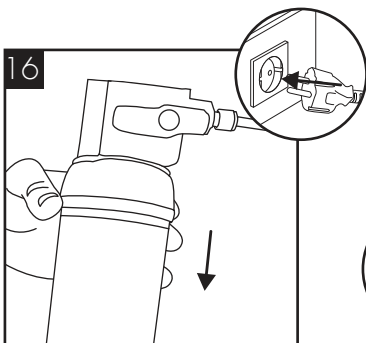
Remember to include the drip tray. If a Waste Overflow System is fitted, empty this and flush through with a small amount of sanitisation fluid if needed.



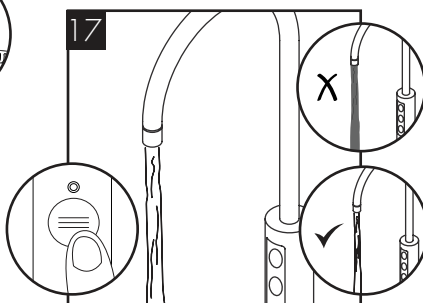
When the external cleaning (minimum 5 minutes) is completed, flush the machine using the cold button with clean water until the dispense water runs clear. Repeat briefly with the ambient button.



Turn off water and remove the service filter. Retain service filter for reuse.



Fit new filter. Turn on incoming water supply and reconnect the power.



Pre-flush the new filter to waste using the ambient button until the water appears clear and is free of air. Flush through a small amount of water to check all functions.



Please note that this sanitisation fluid contains an active caustic/alkaline agent. Always use responsibly and with care remembering that due to its alkaline nature unnecessary concentrated/prolonged contact with any materials, including metals, can cause damage. Always rinse all contact surfaces after use with clean water.

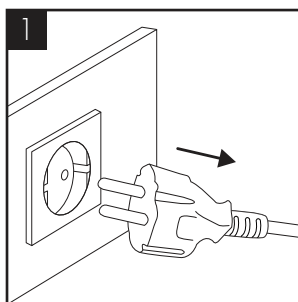


Avoid skin contact and wear protective gloves when handling sanitisation fluids.

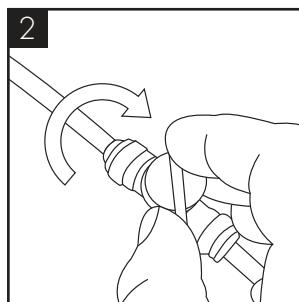


In the event of any skin contact, flush immediately with clean, cold water.

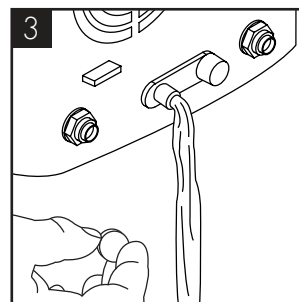
20-Litre - Draining the Direct Chill Tank



Please make sure the machine is completely disconnected from electricity before carrying out any maintenance work.

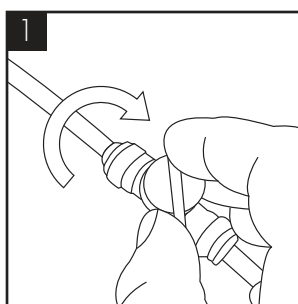


Turn off the water supply.

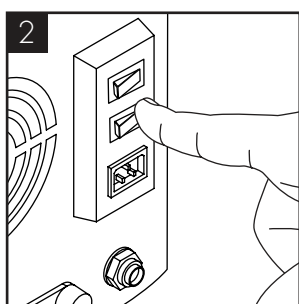


To drain the Direct Chill tank, remove the cap on the drain port at the back of the machine. We recommend it is refilled immediately upon draining being completed.

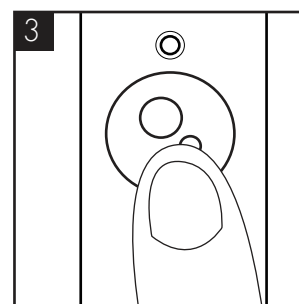
20-Litre - Emptying the CO2 Tank



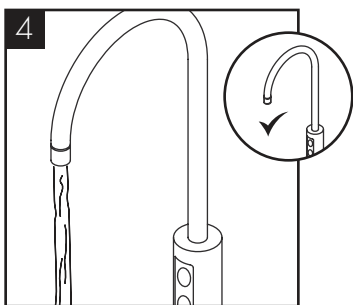
Turn off the water supply.



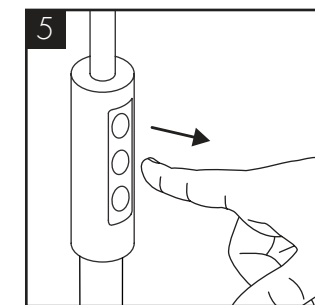
Switch off the Carbonation System switch on the back of the unit.



Press and hold the Sparkling water dispense button until all the water is expelled and only CO2 gas is being released.



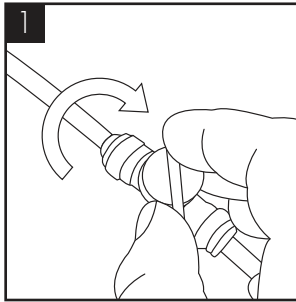
The tank is empty of sparkling water when only CO2 is being released.



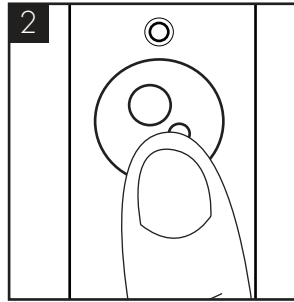
Ensure to release the Sparkling water button and take care to avoid releasing excess amounts of CO2 gas as this may damage the tank.

30-Litre - Emptying the CO2 Tank

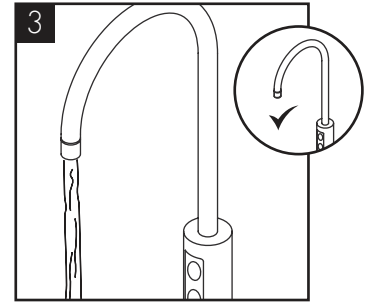
NOTE: Chilled & Ambient models do not drain. Direct Chill water is situated in a factory sealed tank.



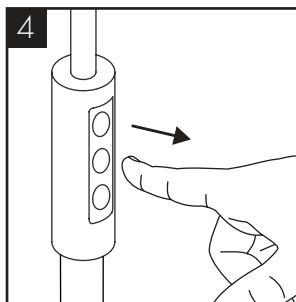
Turn off the water supply.



Press and hold the Sparkling water dispense button until all the water is expelled and only CO2 gas is being released.

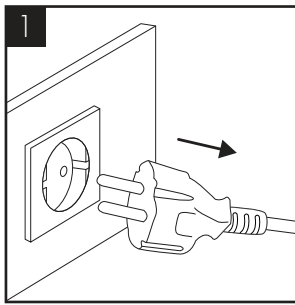


The tank is empty of sparkling water when only CO2 is being released.

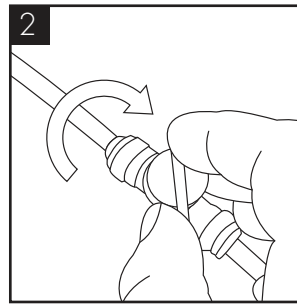


Ensure to release the Sparkling water button and take care to avoid releasing excess amounts of CO2 gas as this may damage the tank.

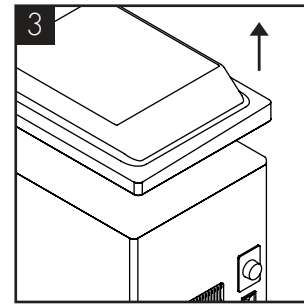
60-Litre - Draining the Direct Chill Tank



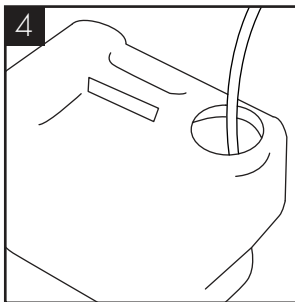
Please make sure the machine is completely disconnected from electricity before carrying out any maintenance work.



Turn off the water supply.

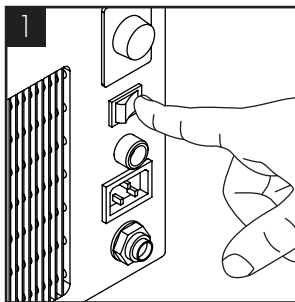


Remove the top cover of the water dispenser.

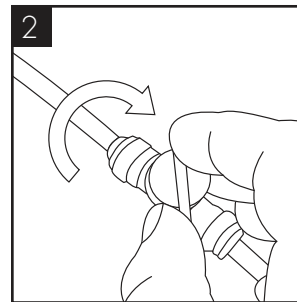


Siphon the water from the cold tank into a suitable container.

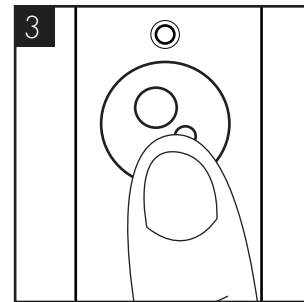
60-Litre - Emptying the CO2 Tank



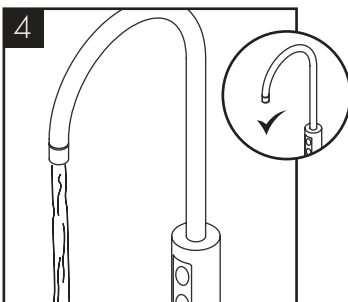
Turn off the chilled and sparkling switch at the rear of the machine. Ensure the solenoid box is still turned on.



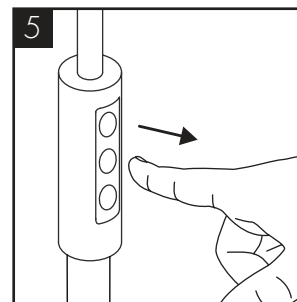
Turn off the water supply.



Press and hold the Sparkling water dispense button until all the water is expelled and only CO2 gas is being released.



The tank is empty of sparkling water when only CO2 is being released.



Ensure to release the Sparkling water button and take care to avoid releasing excess amounts of CO2 gas as this may damage the tank.

Ice Tank Defrosting & Emptying - 60-Litre

Should the icebank require defrosting we recommend the following procedure:

1. Keeping the power switch on, turn the thermostat to 0.
2. Make sure water is frequently dispensed from the chilled water tap.
3. Leave the device turned on for at least 12 – 24 hours.
4. Check there is no ice in the tank.
5. Set the thermostat to 6 or 7 and wait at least 90 – 120 minutes before refilling the ice tank.
6. After defrosting shut off the water supply, the CO₂ gas, and remove

the power plug.

7. Locate a rubber tube approximately 2m long and a large container.
8. Insert one end of the tube into the bottom of the ice tank and siphon the water through the tube letting it flow in to the container.
9. Ensure the ice tank is completely emptied.

NOTE: Do not remove water from the ice tank by tilting the machine. Water could spill from the tank and cause damage to electrical components within the machine.

Advanced Troubleshooting

20-Litre - Fault Diagnosis: No Water Dispenses

Problem/Report	Possible Cause	Suggested Action
From Ambient or Cold Valve	Button not being pressed enough.	Press button firmly.
	Faulty controls PCB.	Replace Control PCB – Check for 24 VDC outputs if necessary.
	"Waterblock" tripped off.	Reset "Waterblock" (and check for cause of leakage).
	Faulty dispense control panel membrane switch.	Check and replace if required.
	Faulty Solenoid Valve.	Valve clicking but no water - Check if hole in centre of washer is clear.
		Check valve action. Carefully dismantle valve and clean out/ part replace/ complete replace as needed.
		If there is output, replace solenoid coil/ whole valve coil/ whole valve assembly complete.
	Leak detector has disabled dispense operation.	Check for internal leakage, ensure probes are dry and reset.
From Cold Valve.	Firstly all as for Ambient Tap.	Carry out checks and actions as for ambient tap.
	Chiller tank frozen – Faulty Thermostat/ Incorrect Setting.	Thaw out and check thermostat. Replace thermostat or reset temperature set point.
	Chiller tank Frozen-faulty tank pump.	Thaw out and check operation. Replace Air pump if necessary.

20-Litre - Fault Diagnosis: No Water Dispenses (Continued)

Problem/Report	Possible Cause	Suggested Action
From Ambient or Cold Valve	Button not being pressed enough.	Press button firmly.
	Faulty controls PCB.	Replace Control PCB – Check for 24 VDC outputs if necessary.
From Cold Valve.	Firstly as for Ambient and or Cold Dispense.	Carry out the checks and actions as for Ambient Dispense.
	Low or no CO ₂ .	Check and replace cylinder as necessary.
	Pump not operating.	Check carbonator level Control System.
		Check probes connected/leads attached. Check power supply to pump.
	Carbonator Tank over pressurised with CO ₂ .	Switch Sparkling System off, shut off CO ₂ supply and release CO ₂ from carbonator. Switch Sparkling system on, then check pump operation. If normal, open CO ₂ supply after pump has stopped.
	Pump Feed Solenoid Valve.	Check valve function: <ul style="list-style-type: none"> • If no input DC voltage, check rectifier and level control module. • If input but no function, check valve coil. Replace parts as needed.
	Carbonation System switched off.	Switch on (Switch on back of the machine).

20-Litre - Fault Diagnosis: Water Dispenses but not correct Temperature

Problem/Report	Possible Cause	Suggested Action
Ambient Water too warm.	Low usage and/or fed from water supply pipe in warm ducting.	Advise user replacing external causes and solutions.
Cold water not Cold.	Cooling switched off.	Check switch positions as necessary.
	Compressor runs and switching off (cool/warm to touch) - Thermostat set too high.	Decrease Cold Thermostat set point.
	Faulty Thermostat.	Replace Thermostat.
	Compressor runs but not Switching off (Hot to touch).	Please contact technical support.
	Refrigeration problem.	Please contact technical support.
	Compressor not running at all.	Check voltage path through the machine.
	No electricity power supply.	Check power cord connected and live, and machine is switched on.
	Compressor only hums slightly/ briefly.	Check and replace relays.
	Relays loose.	Check and refit relays.
	Compressor Faulty.	Please contact technical support.
	DC Tank Empty	Check water level and replace level control module in fill valve as needed.

20-Litre - Fault Diagnosis: Water Leaks

Problem/Report	Possible Cause	Suggested Action
Water lying on top edge of lower door panel and / or bottom of Cabinet.	Overflowing Waste Container.	Empty Waste Container and check drainpipe is not blocked.
Water lying in bottom of machine.	Faulty Water System Level Sensors.	Check operation and replace batteries if needed.
	Leak in supply inlet pipe-work and/or filter.	Locate and repair accordingly.
	Leak from machine water pipe work fittings.	Locate and repair accordingly. Check pressure and fit pressure reducing valve if needed.
	DC tank over overfilling	Check level control module and fill valve function.

20-Litre - Fault Diagnosis: Miscellaneous

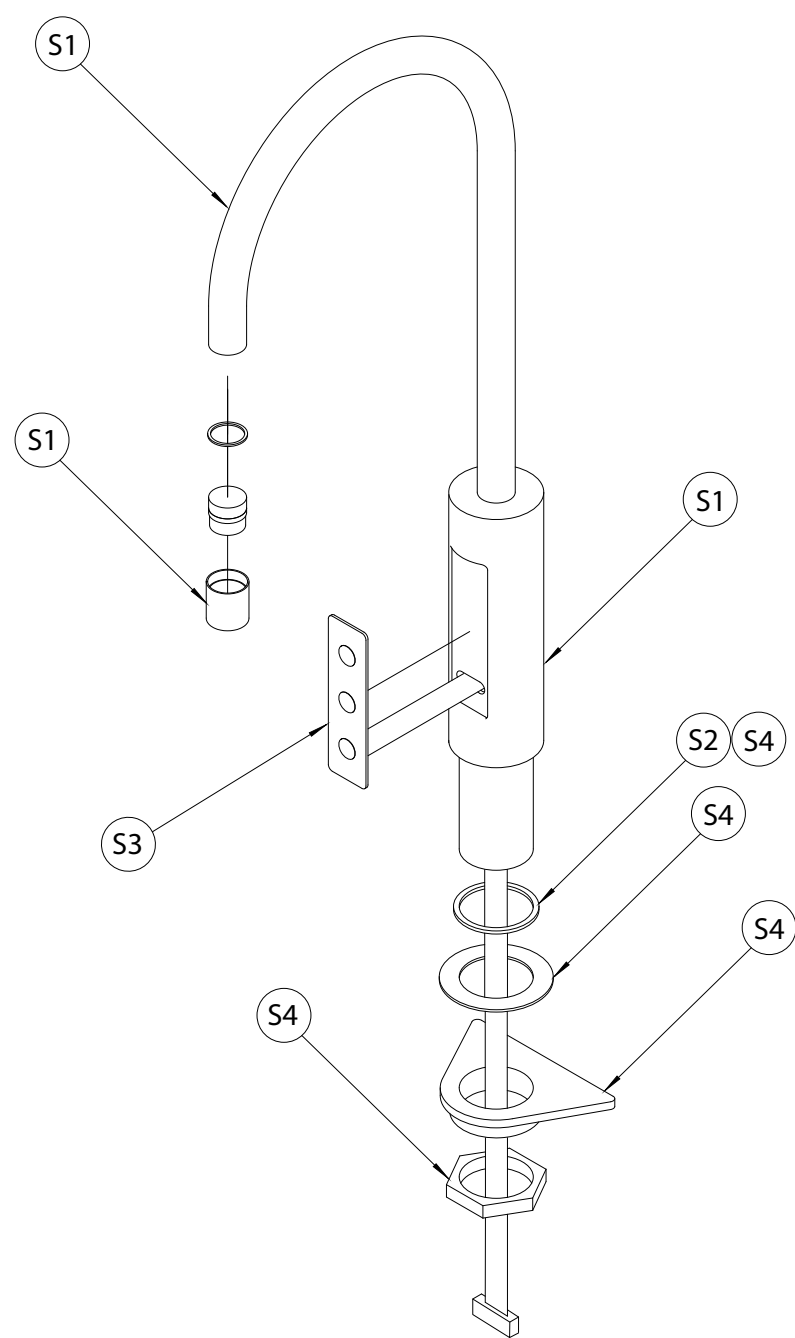
Problem/Report	Possible Cause	Suggested Action
Bleeping Noise.	Waste Container full/Internal water leak. (If fitted)	Empty Waste Container. Check and reset Leak Detector.
No LED Control Lights.	No electricity to Machine.	Check power supply and reconnect as necessary (Also check out other symptoms as described separately).
	Check Fuse in IEC Socket.	Replace if necessary.
	Faulty Control PCB (Machine working normally otherwise).	Replace Control PCB.
Machine shakes on Start-Up	Compressor Starting.	No action needed. This is quite normal.
	Level Surface.	
	Uneven Surface.	Level up machine using adjustable feet.
	Missing Fixings.	Replace missing fixings.
Tripping out Electricity supply.	Machine in high humidity environment.	Discuss possible repositioning with customer.
	Electrical circuitry faults.	Test, identify and address accordingly. See Electrical Diagrams (see page 40 or 41).
		Please contact technical support.
Slow but Continuous Water Dispense		
From Ambient or Cold Water Valve.	Low incoming Water pressure.	Consider re-plumbing to alternative supply if possible or boosting the inlet supply pressure.
From Sparkling Water Valve	Low/no CO2 Pressure.	Check Regulator and/or replace cylinder.
Intermittent Water Dispense		
From Ambient or Cold Water Valve	Trapped air in pipe work (especially where water pressure is low or after filter change).	Hold button on to purge air out. (This could take several minutes where pressure is low).
	Button Not being pressed enough.	Press button firmly N.B. This could be caused by a surrounding cold environment making the action stiffer.
	Faulty Control PCB.	Replace Control PCB.
From Ambient or Cold Water Valve and hammering noise.	Fluctuating mains water pressure situation.	Please contact technical support.
Continuous Water Dispense		
From Ambient/ Cold or Sparkling Water Valve.	Button jammed on/faulty.	Replace Control PCB and or/ button Panel as needed.
	Debris blocking hole in diaphragm washer.	Dismantle Valve and clean out.
	Faulty solenoid valve.	Check valve and replace if needed.

30 & 60-Litre Fault Diagnosis

Problem/Report	Possible Cause	Suggested Action
No Water Dispenses	Closed water tap.	Open the tap.
	The connection pipe to the tap is kinked or pressed shut.	Adjust the path of the pipe to prevent kinks or compression.
	No power supply.	Check the power cable is properly connected to the dispenser, and that any electrical components are operating correctly.
Only a Small Amount of Water Dispenses	Obstructed filter.	Replace the filter.
	Low inlet water pressure.	Please contact technical support.
Cold Water not Cold	Insufficient or obstructed ventilation.	Check the dispenser is positioned correctly with nothing obstructing the ventilation slots (see pages 12 - 14).
	Frozen coil or issues with ice tank.	Adjust the thermostat to a higher temperature. If this fails carry out the ice tank defrosting procedure (see page 26).
Water Leaks	Filter installed incorrectly.	Disconnect the power supply, close the interception valve and replace the filter (see pages 21 - 22).
	Internal damage.	Disconnect the power supply, close the interception valve and contact technical support.
Sparkling Water not Carbonated	Lack of CO2.	Replace the CO2 bottle (see page 20).
Only CO2 is Expelled When Dispensing Sparkling Water	Blocked water pump. No water supply	Disconnect the power supply, close the interception valve and contact technical support.
Sparkling Water is Dispensed in Splatters.	High CO2 pressure.	Reduce the CO2 pressure using the pressure reducer.
Only a Small Amount of Sparkling Water is Dispensed.	Low CO2 pressure.	Increase the CO2 pressure using the pressure reducer.
Bleeping Noise - 7 bleeps.	Refrigeration alarm.	Disconnect machine from power and contact technical support.
Bleeping Noise - 6 bleeps every 15 seconds.	Pump blockage.	Locate and repair accordingly.

Exploded Diagrams & Parts List

Tap Exploded Diagram

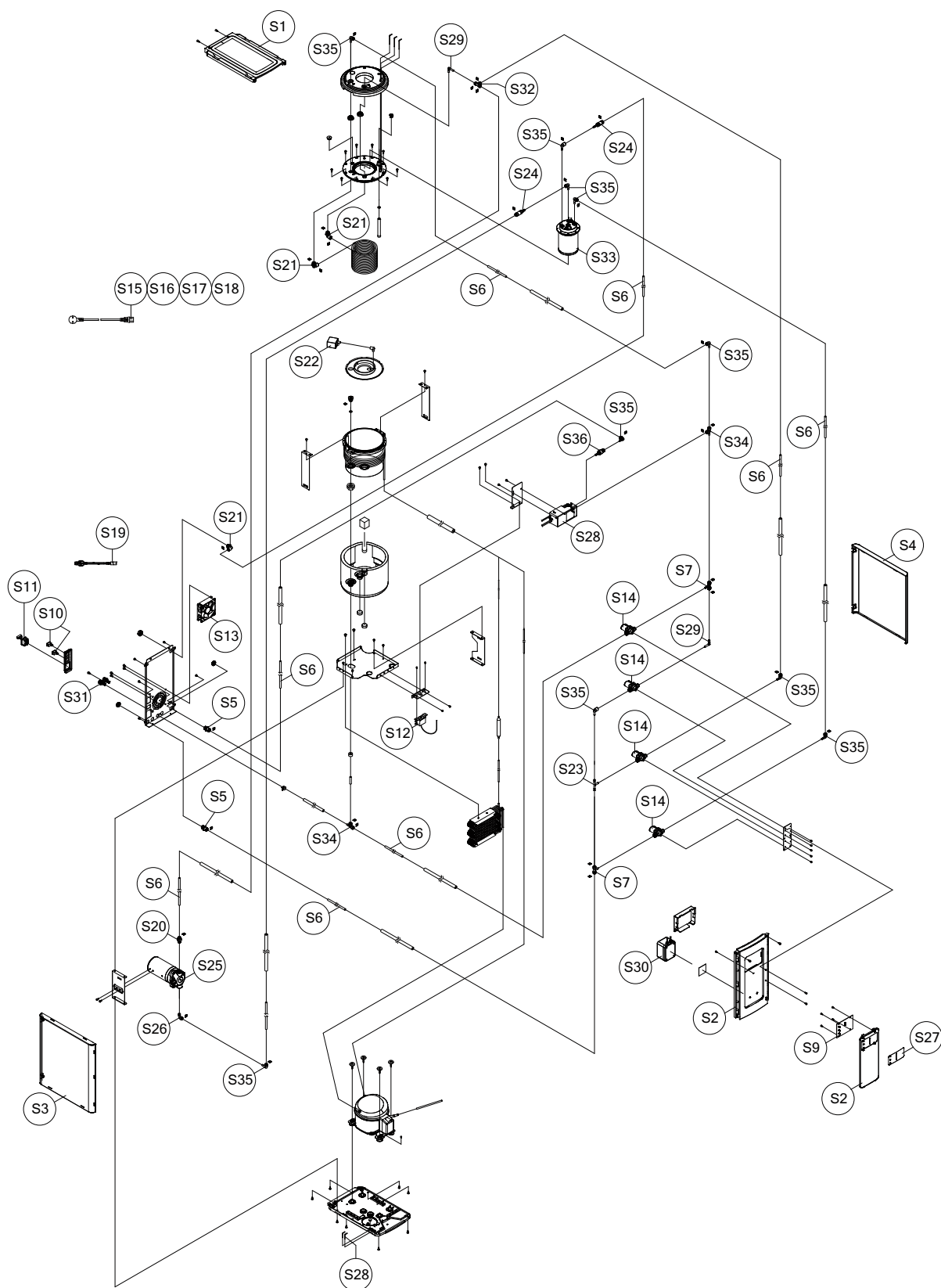


This exploded view diagram illustrates the assembly of a mechanical unit, likely a pump or motor. The components are numbered S1 through S30, indicating their assembly sequence. The diagram shows the following parts and their assembly order:

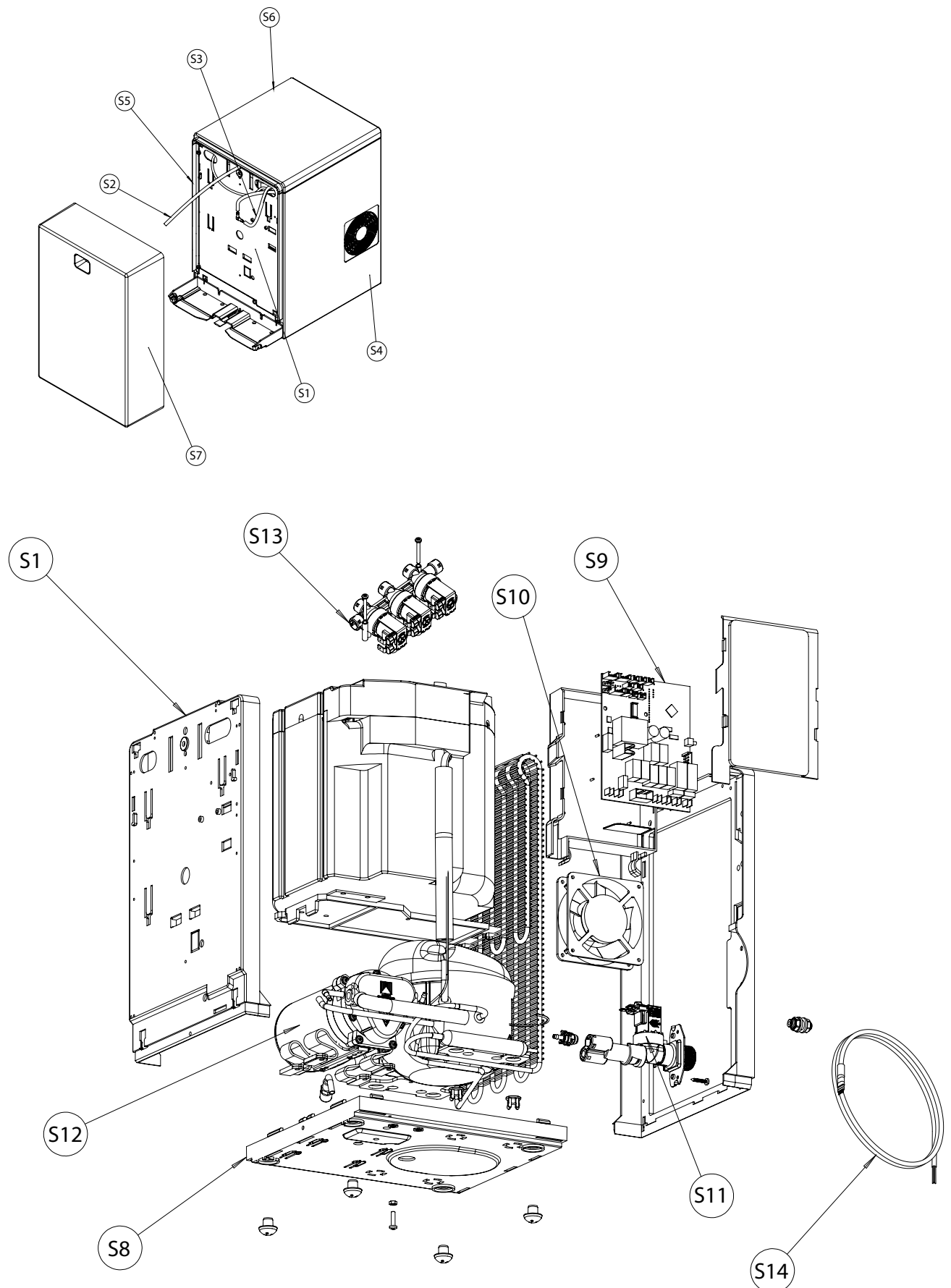
- S1**: Top cover plate.
- S2**: Motor housing.
- S3**: Motor housing flange.
- S4**: Motor housing flange gasket.
- S5**: Motor housing flange gasket.
- S6**: Motor housing flange gasket.
- S7**: Motor housing flange gasket.
- S8**: Motor housing flange gasket.
- S9**: Motor housing flange gasket.
- S10**: Motor housing flange gasket.
- S11**: Motor housing flange gasket.
- S12**: Motor housing flange gasket.
- S13**: Motor housing flange gasket.
- S14**: Motor housing flange gasket.
- S15**: Motor housing flange gasket.
- S16**: Motor housing flange gasket.
- S17**: Motor housing flange gasket.
- S18**: Motor housing flange gasket.
- S19**: Motor housing flange gasket.
- S20**: Motor housing flange gasket.
- S21**: Motor housing flange gasket.
- S22**: Motor housing flange gasket.
- S23**: Motor housing flange gasket.
- S24**: Motor housing flange gasket.
- S25**: Motor housing flange gasket.
- S26**: Motor housing flange gasket.
- S27**: Motor housing flange gasket.
- S28**: Motor housing flange gasket.
- S29**: Motor housing flange gasket.
- S30**: Motor housing flange gasket.

The diagram shows the assembly sequence from the motor housing (S2) and flange (S3) up to the top cover (S1). The motor housing flange gasket (S4) is shown in multiple positions, indicating its placement around the motor housing. The motor housing flange gasket (S5) is shown in multiple positions, indicating its placement around the motor housing. The motor housing flange gasket (S6) is shown in multiple positions, indicating its placement around the motor housing. The motor housing flange gasket (S7) is shown in multiple positions, indicating its placement around the motor housing. The motor housing flange gasket (S8) is shown in multiple positions, indicating its placement around the motor housing. The motor housing flange gasket (S9) is shown in multiple positions, indicating its placement around the motor housing. The motor housing flange gasket (S10) is shown in multiple positions, indicating its placement around the motor housing. The motor housing flange gasket (S11) is shown in multiple positions, indicating its placement around the motor housing. The motor housing flange gasket (S12) is shown in multiple positions, indicating its placement around the motor housing. The motor housing flange gasket (S13) is shown in multiple positions, indicating its placement around the motor housing. The motor housing flange gasket (S14) is shown in multiple positions, indicating its placement around the motor housing. The motor housing flange gasket (S15) is shown in multiple positions, indicating its placement around the motor housing. The motor housing flange gasket (S16) is shown in multiple positions, indicating its placement around the motor housing. The motor housing flange gasket (S17) is shown in multiple positions, indicating its placement around the motor housing. The motor housing flange gasket (S18) is shown in multiple positions, indicating its placement around the motor housing. The motor housing flange gasket (S19) is shown in multiple positions, indicating its placement around the motor housing. The motor housing flange gasket (S20) is shown in multiple positions, indicating its placement around the motor housing. The motor housing flange gasket (S21) is shown in multiple positions, indicating its placement around the motor housing. The motor housing flange gasket (S22) is shown in multiple positions, indicating its placement around the motor housing. The motor housing flange gasket (S23) is shown in multiple positions, indicating its placement around the motor housing. The motor housing flange gasket (S24) is shown in multiple positions, indicating its placement around the motor housing. The motor housing flange gasket (S25) is shown in multiple positions, indicating its placement around the motor housing. The motor housing flange gasket (S26) is shown in multiple positions, indicating its placement around the motor housing. The motor housing flange gasket (S27) is shown in multiple positions, indicating its placement around the motor housing. The motor housing flange gasket (S28) is shown in multiple positions, indicating its placement around the motor housing. The motor housing flange gasket (S29) is shown in multiple positions, indicating its placement around the motor housing. The motor housing flange gasket (S30) is shown in multiple positions, indicating its placement around the motor housing.

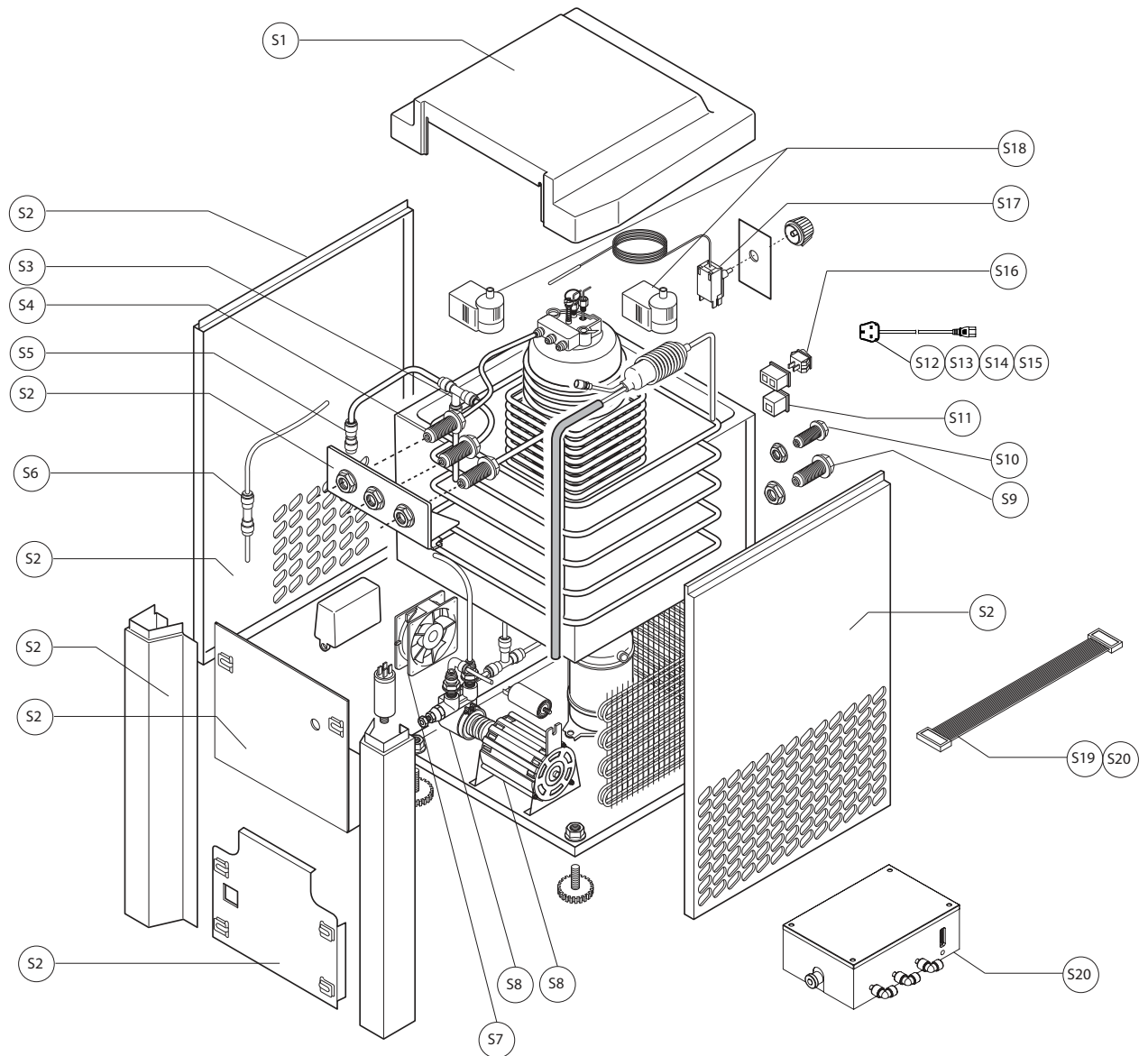
20-Litre - Chilled, Ambient & Sparkling Exploded Diagram



30-Litre - Chilled, Ambient & Sparkling Exploded Diagram



60-Litre - Chilled, Ambient & Sparkling Exploded Diagram



Tap Parts List

Borg & Overstrom Part No	Description	Diagram Ref:
601254	u1 Tap Assembly complete with O-ring, Nut and washer set	S1
603001	u1 tap replacement O-ring	S2
607131	u1 Tap Chilled & Ambient Control Panel Membrane	S3
607132	u1 tap Chilled, Ambient & Sparkling Control Panel Membrane	S3
603002	u1 tap O-ring, Nut and washer set	S4

20-Litre - Parts List

Borg & Overstrom Part No	Description	Diagram Ref:
602311	Top Panel	S1
602010	u1 Front Panel Assembly (without control panel label)	S2
602125	Left Side Panel	S3
602126	Right Side Panel	S4
131661	Bulkhead Fitting	S5
462003	1/4" Water Pipe, white, per metre	S6
131659	1/4" PF x 1/4" PF Stem Tee	S7
607416	24V Chilled & Ambient Transformer (including adhesive pad)	S8
171237	Main Control Board	S9
174231	On/Off Switch	S10
172163	IEC Fused Socket	S11
173264	Cold Thermostat	S12
174352	Fan	S13
173241	Solenoid Valve	S14
172152	IEC Power Cordset - UK	S15
172148	IEC Power Cordset - Shucko/EURO	S16
852108	IEC Power Cordset - Swiss	S17
172144	IEC Power Cordset - Danish	S18
172180	Swan Neck Faucet Connection Harness - 20Litre	S19
131664	1/4" PF x 3/8" BSP Male Straight Adaptor	S20
131642	1/4" PF Inlet Elbow	S21
175363	Circular DC Tank Circulation Pump Set	S22
131655	1/4" PF 3-Way Spigot Tee	S23
132448	SCV/1-Way Valve	S24
174378	Carbonation Pump Set	S25
131652	Angled 1/4" PFx3/8" BSP-Male Fitting	S26
191187	u1 Chilled & Ambient Control panel label	S27
191186	u1 Chilled, Ambient & Sparkling Control panel label	S27
193182	230V Leak Detector Assembly	S28
131661	1/4" Equal Elbow Stem only	S29
607410	24V Chilled, Ambient & Sparkling Transformer (including adhesive pad)	S30
131426	2-Port Drainage Outlet	S31
462318	Equal Tee 1/4" PF	S32
168180	Carbonator Tank	S33
131657	1/4" PF Spigot End Tee	S34
462368	Stem Elbow 1/4" x 1/4" PF	S35
194121	Grit Filter	S36

30-Litre - Parts List

Borg & Overstrom Part No	Description	Diagram Ref:
602023	U series 30L Internal Mounting Panel	S1
462113	4mm CO2 Pipe, per metre	S2
462114	6mm Water Pipe, per metre	S3
602128	U series 30L Right Side Panel	S4
602127	U series 30L Left Side Panel	S5
602312	U series 30L Top Panel	S6
302021	U series 30L Front Panel	S7
607452	U series 30L Base Panel	S8
607101	U series 30L Main Control PCB	S9
607411	12V Cooling Fan	S10
607323	U series 30L Inlet Solenoid Valve Assembly	S11
607421	U series 30L Carbonation Pump (Sparkling model only)	S12
607321	U series 30L Chilled & Ambient Dispense Solenoid Bank Assembly	S13
607322	U series 30L Chilled, Ambient & Sparkling Dispense Solenoid Bank Assembly	S13
607133	Swan Neck Faucet Connection Harness - 30Litre	S14

60-Litre - Parts List

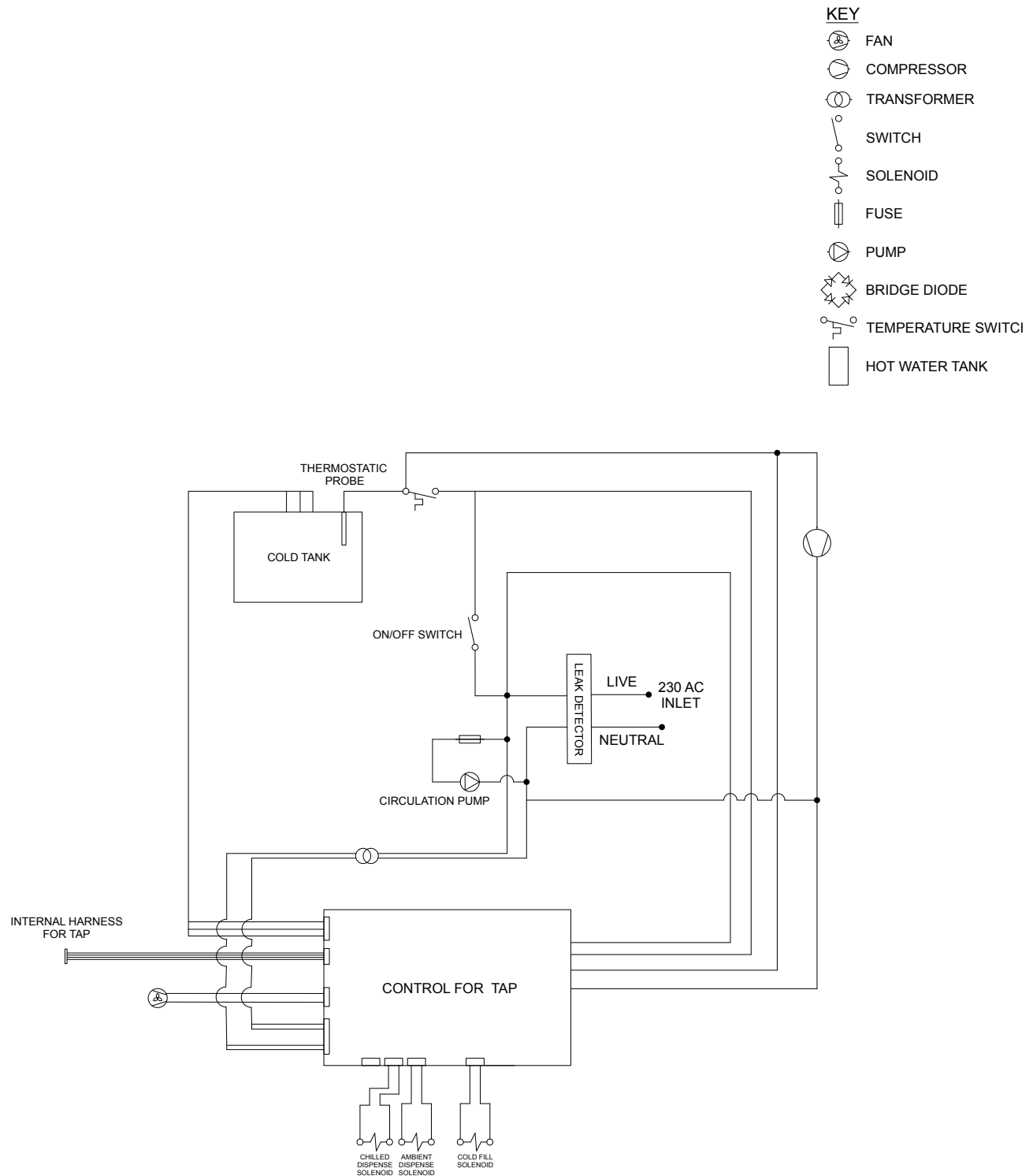
Borg & Overstrom Part No	Description	Diagram Ref:
602313	U series 60L Top Panel	S1
602204	U series 60L Metal Structure Assembly	S2
462360	T - Fitting 8mm	S3
462855	Bulk Head Fitting Ø 8mm	S4
462667	Non - Return Valve Ø 8mm	S5
462666	Non - Return Valve Ø 6mm	S6
607412	Cooling Fan	S7
607422	U series 60L Carbonation Pump Assembly	S8
462855	Bulk Head Fitting Ø 8mm	S9
462850	Bulk Head Fitting Ø 6mm	S10
172163	IEC Socket	S11
172144	IEC Power Cord set - Danish	S12
172148	IEC Power Cord set -Schuko/EURO	S13
172152	IEC Power Cord set - UK	S14
852108	IEC Power Cord set - Swiss	S15
607502	U series 60L On / Off Switch	S16
607432	U series 60L Thermostat Assembly	S17
607423	U series 60L Direct Chill Tank Circulation Pump	S18
607134	Swan Neck Faucet Connection Harness - 60Litre	S19
607334	u1 Solenoid Box (including Faucet connection harness and 12v power supply)	S20

20-Litre - Technical Information

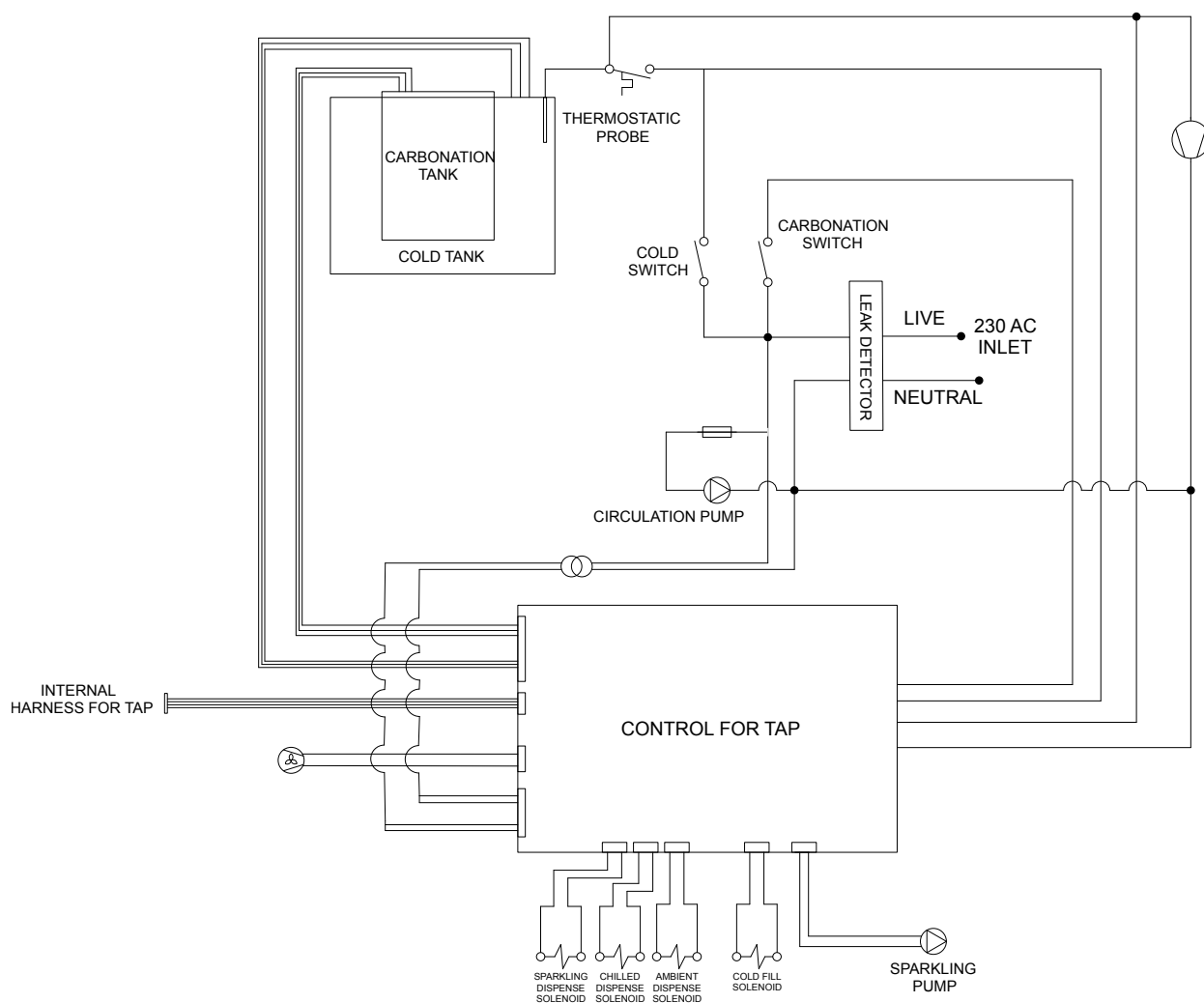
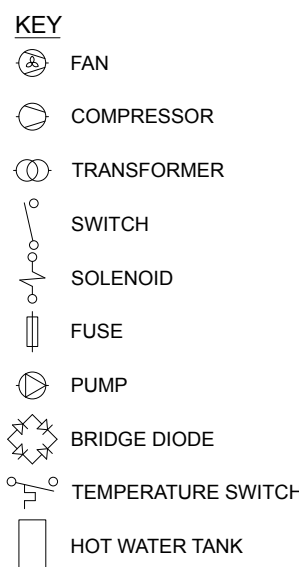
Specification (20Litre)

COOLING SYSTEM	High efficiency compression system with capillary control. Premium quality long life hermetic compressor. Compact internal condenser – fan assisted for greater efficiency. Environmentally friendly R134A refrigerant.
	3.5 litre stainless steel chiller tank with level control containing stainless steel cold water direct chill coil.
	Stainless steel carbonator tank with independent level control fitted inside coil.
COLD TEMPERATURE	2°C to 11°C.
OUTPUT PER HOUR	18 litres cold < 12°C and 16 litres sparkling <12°C.
DISPENSE	Swan Neck Faucet with ergonomically designed and situated light touch sensitive controls.
MAX RUNNING POWER CONSUMPTION	85-100 watt.
POWER SUPPLY	IEC Power – Fused Socket.
WATER CONNECTION	Mains in (3.5bar max) - 1/4" Push Fit/Faucet - 6mm Push Fit.
CO2 CONNECTION	1/4" Push Fit.
DIMENSIONS	(w x d x h) 230 x 360 x 390mm
WEIGHT	17.1kg

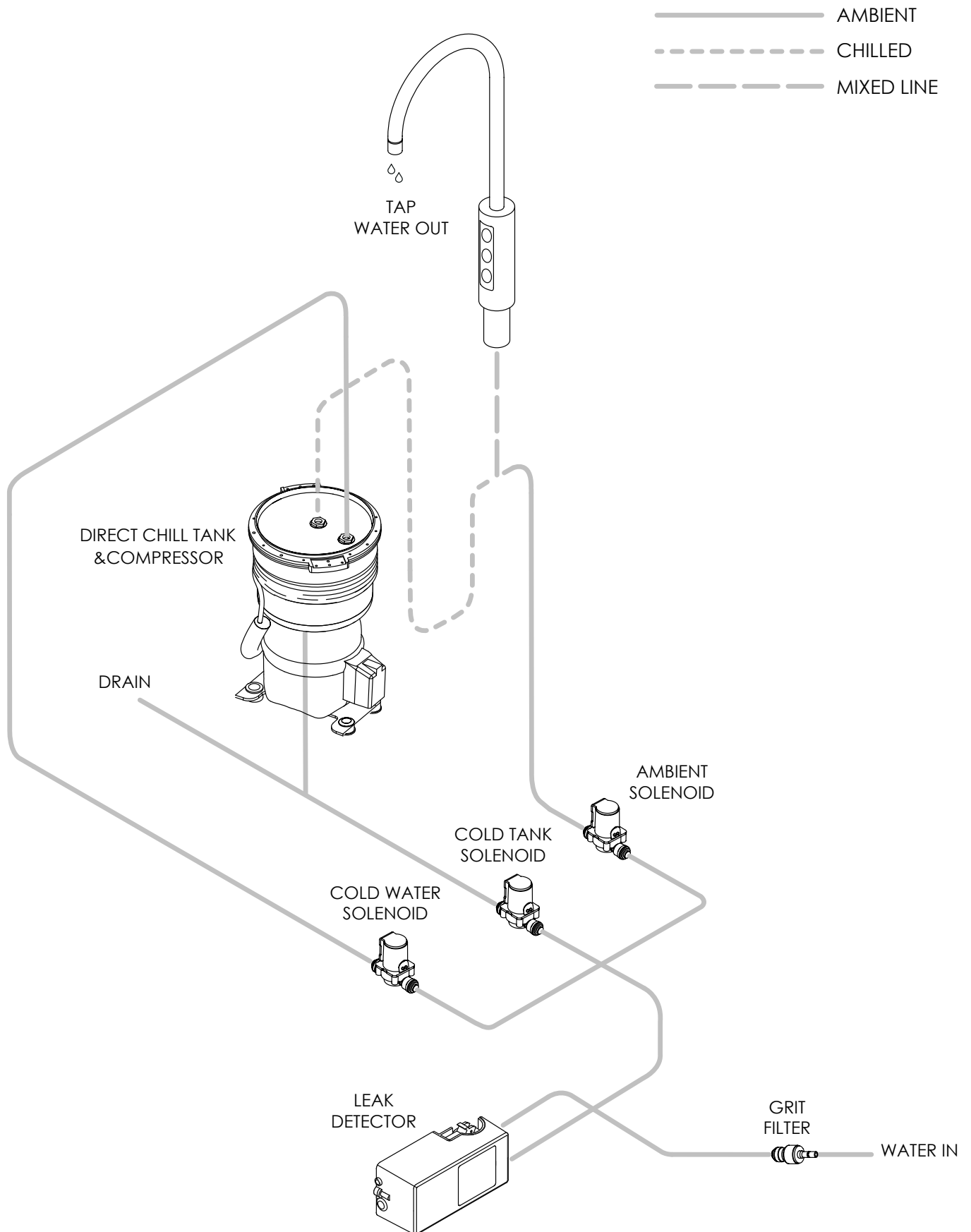
20-Litre - Chilled & Ambient Electrical Circuit Diagram



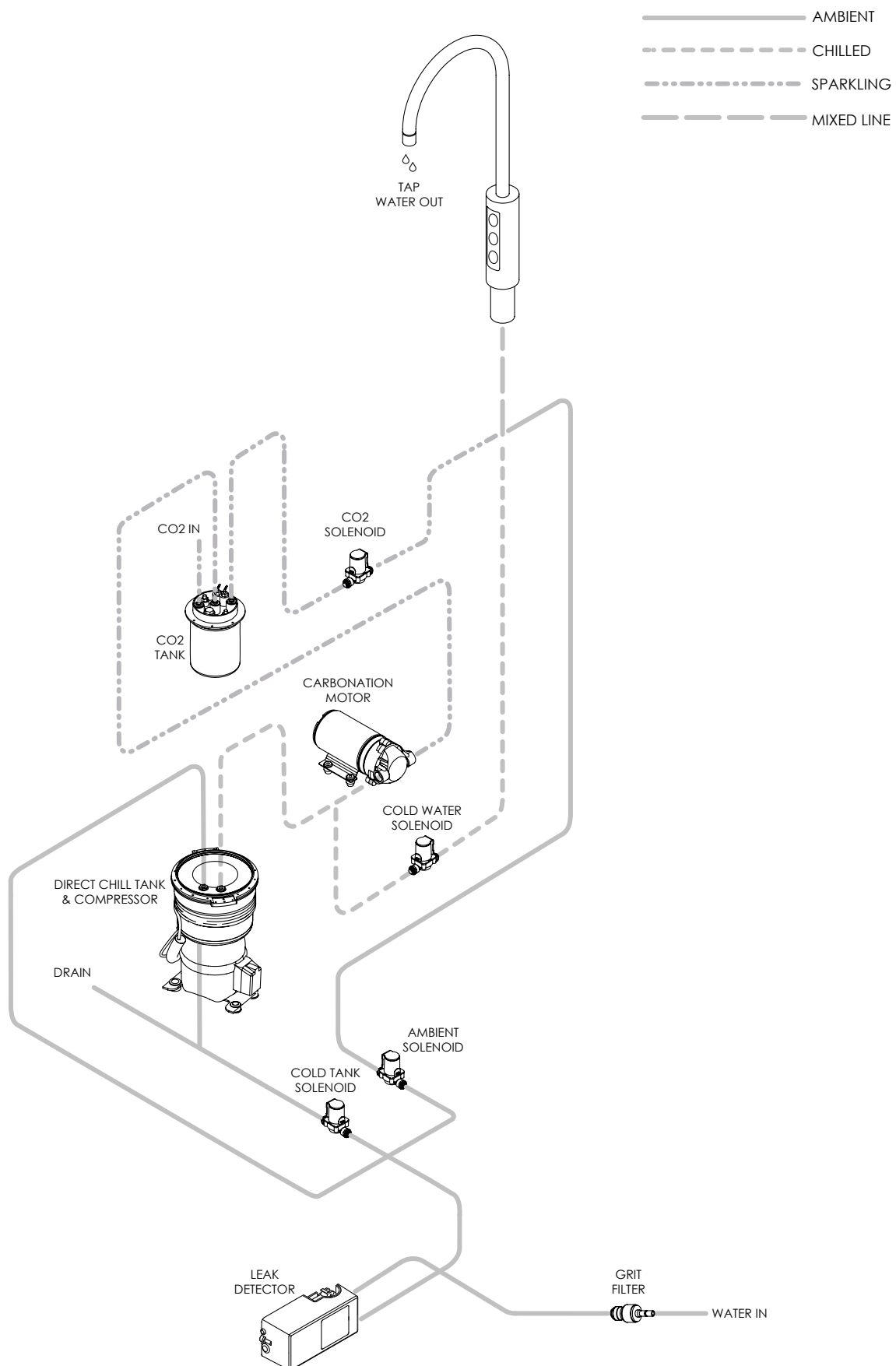
20-Litre - Chilled, Ambient & Sparkling Electrical Circuit Diagram



20-Litre - Chilled & Ambient Water Pathway Diagram



20-Litre - Chilled, Ambient & Sparkling Water Pathway Diagram

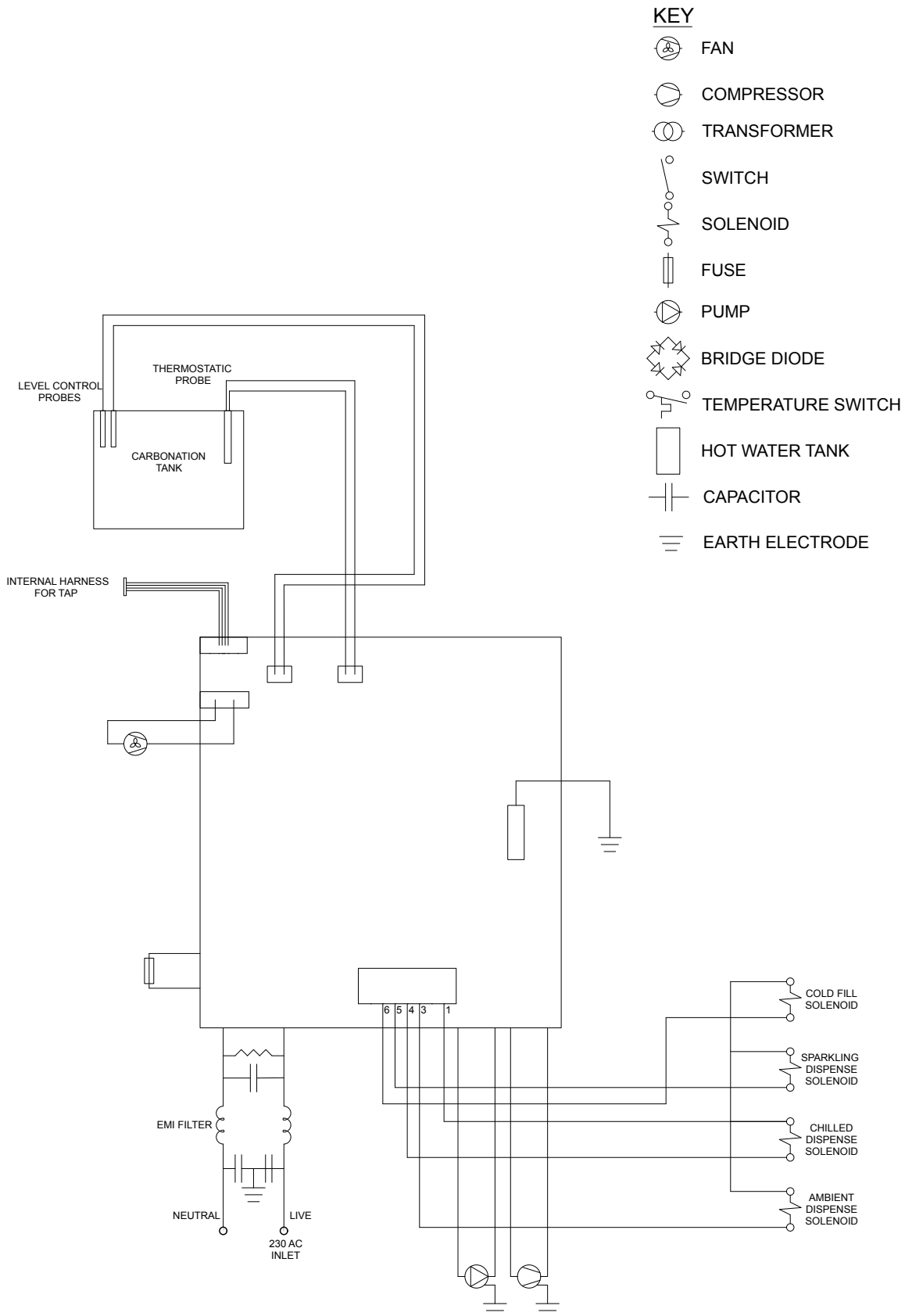


30-Litre - Technical Information

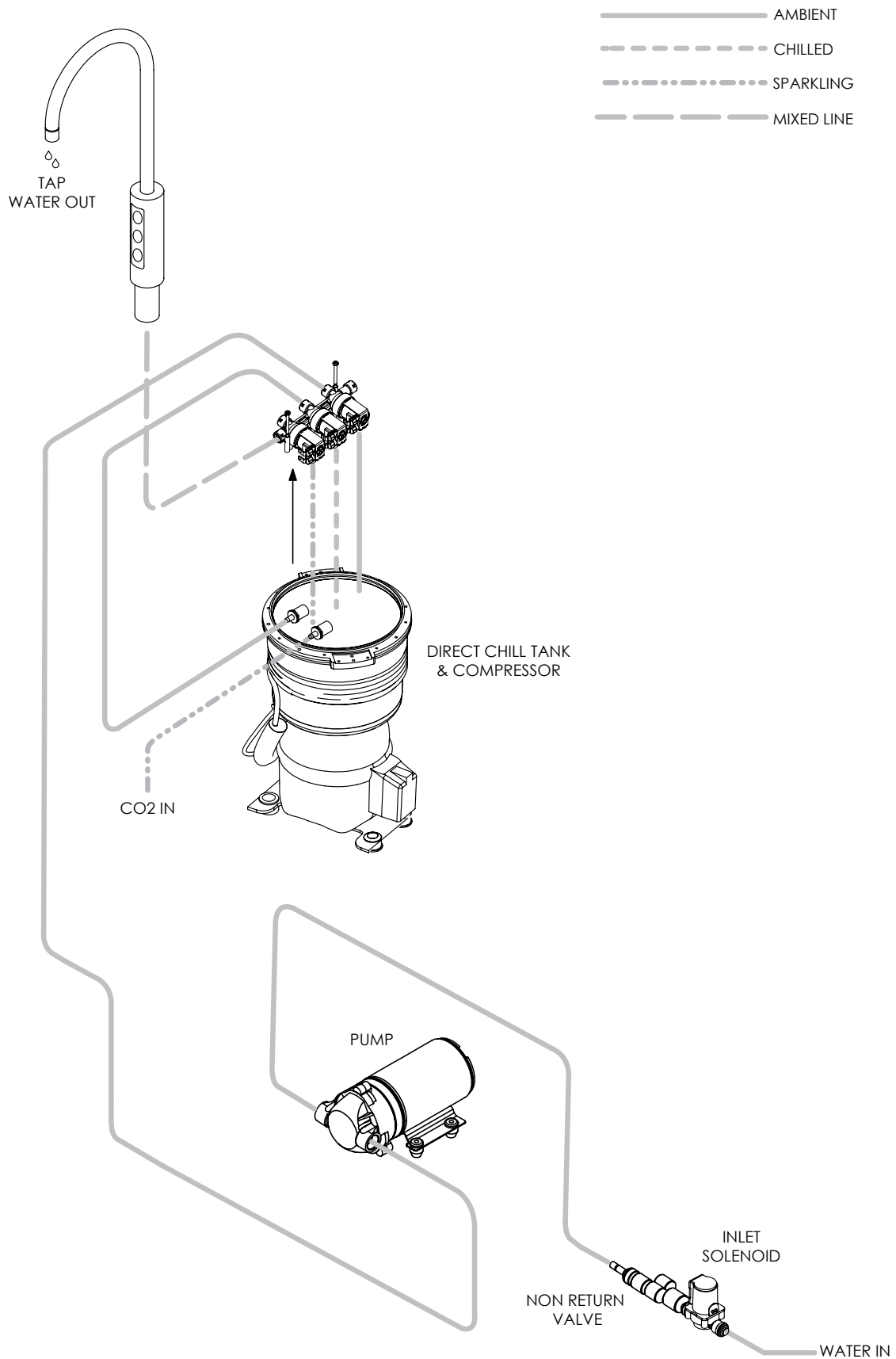
Specification (30-Litre)

POWER SUPPLY VOLTAGE	230V - 50Hz
CLIMATE CLASS	SN
ROOM OPERATING TEMPRATURE	10 - 32 °C
QUANTITY OF REFRIGERATION GAS	R134a 40g
WATER PUMP TYPE	Membrane
CARBONATION SYSTEM	4 litres
DISPENSED WATER TEMPRATURE	4°C - 8°C
COLD AND SPARKLING WATER OUTPUT	30 l/h
WATER SYSTEM WORKING PRESSURE MIN-MAX	1.5 - 5 bar
CO2 WORKING PRESSURE MIN-MAX	2 - 5.5 bar
GROSS WEIGHT (ACCESSORIES EXCLUDED)	16kg (Unit Only)
UNDERCOUNTER UNIT DIMENSIONS	(w x h x d) 245 x 365 x 375 mm
STORAGE TEMPERATURE MIN/MAX	2 - 32°C
POWER CONSUMPTION: STANDBY MODE	1.38W
POWER CONSUMPTION: COMPRESSOR ON	75W
MAX POWER CONSUMPTION	150W - 0.68A

30-Litre - Electrical Circuit Diagram



30-Litre - Water Pathway Diagram



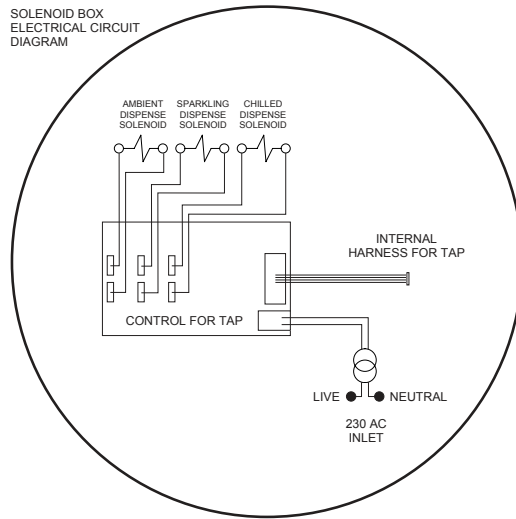
60-Litre - Technical Information

Specification (60-Litre)













POWER SUPPLY VOLTAGE	220/230V 50/60Hz Monophasic
MAX POWER CONSUMPTION	670W - 2.9A - Climatic Class SN
ROOM OPERATING TEMPERATURE	10 - 32°C / 50 - 89.6°F
COMPRESSOR POWER	180W - 1/8 Hp
QUANTITY OF REFRIGERATION GAS	R134a 98g
CONDENSATION OF VENTILATED AIR	Yes
COMPRESSOR TYPE	Reciprocating
WATER PUMP TYPE	Rotary
CARBONATION SYSTEM	Saturator
MINIMUM INLET WATER TEMPERATURE	5°C / 41°F
MAXIMUM INLET WATER TEMPERATURE	25°C / 77°F
DISPENSED WATER TEMPERATURE	Adjustable
COLD AND SPARKLING WATER OUTPUT	60l/hr at 10°C / 50°F (Room Temperature 25°C/77°F - Humidity 75%)
WATER and CO2 INLET FITTING	Quick Fitting - Water Ø 8mm - CO2 Ø 6mm
WATER SYSTEM WORKING PRESSURE MIN-MAX	150 - 500 kPa (1.5 - 5 bar)
CARBONATOR CAPACITY	1 litre
ICE TANK CAPACITY	7 Litres (Max fill = 6 Litres)
CO2 WORKING PRESSURE MIN-MAX	350 - 500 kPa (3.5 - 5 bar)
STORAGE TEMPERATURE MIN/MAX	Min 2°C/35.6°F - Max 40°C/104°F
UNDERCOUNTER UNIT DIMENSIONS	(l x w x h) 330 x 265 x 495mm
WEIGHT WITH PACKAGE	26kg

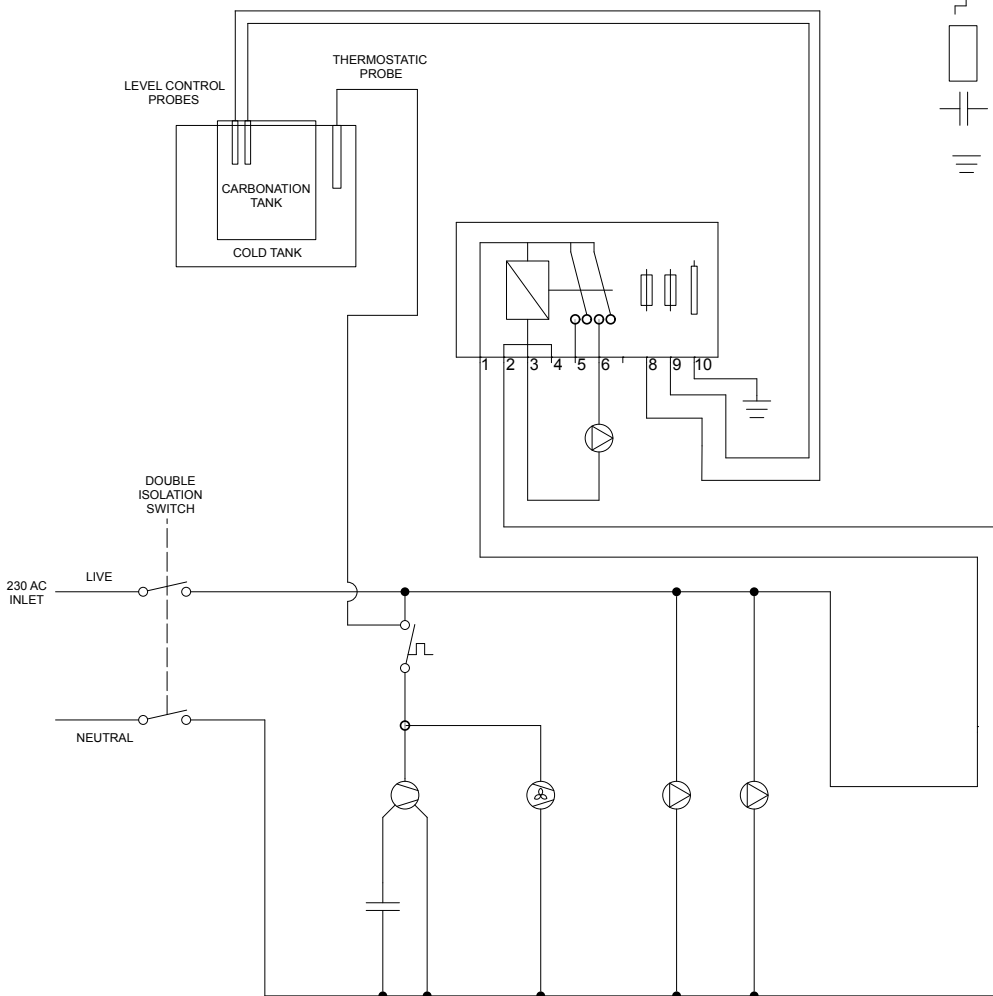
60-Litre - Electrical Circuit Diagram

SOLENOID BOX
ELECTRICAL CIRCUIT
DIAGRAM

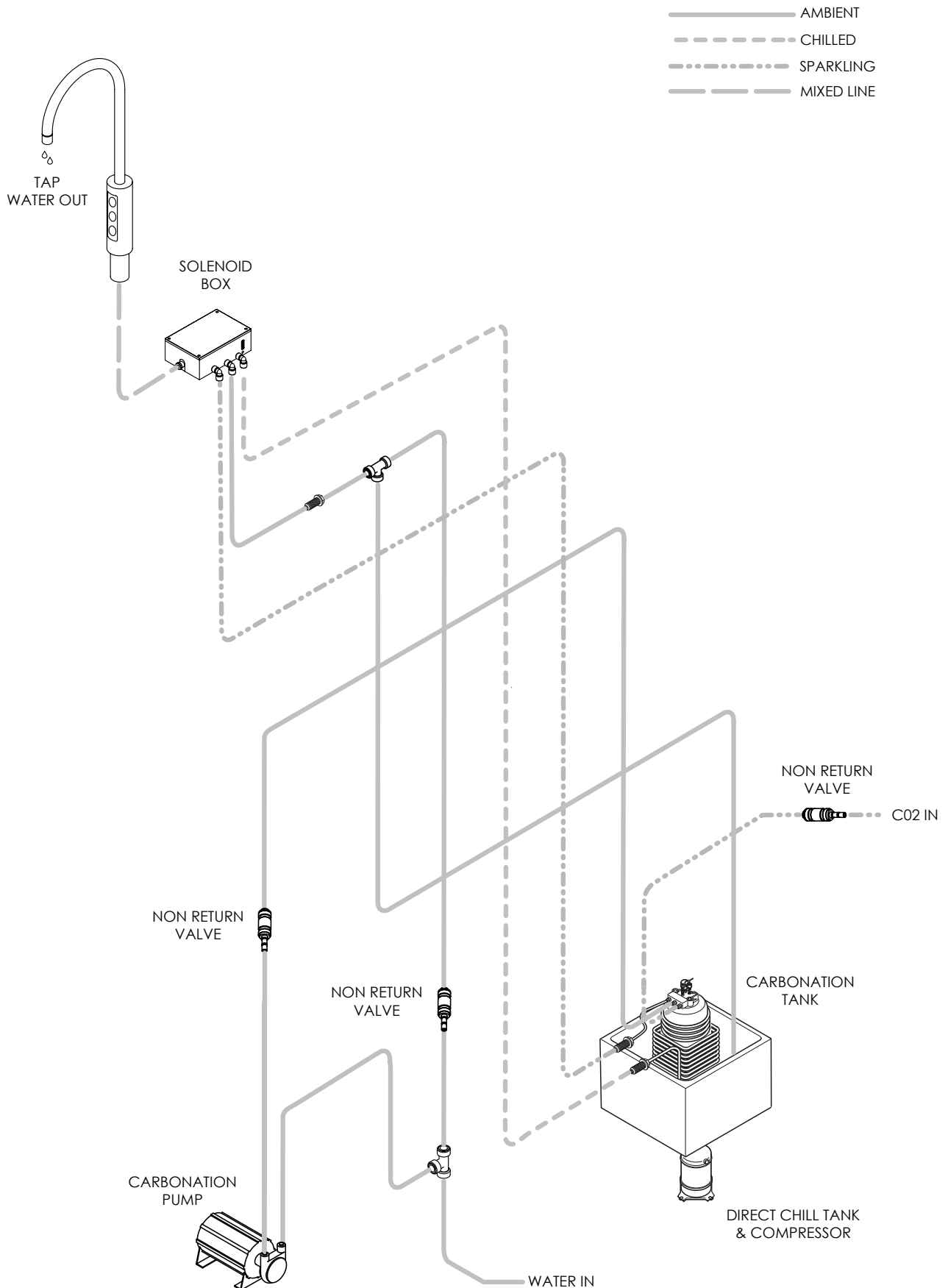


KEY

-  FAN
-  COMPRESSOR
-  TRANSFORMER
-  SWITCH
-  SOLENOID
-  FUSE
-  PUMP
-  BRIDGE DIODE
-  TEMPERATURE SWITCH
-  HOT WATER TANK
-  CAPACITOR
-  EARTH ELECTRODE



60-Litre - Water Pathway Diagram



CE Declaration of Conformity CE

Producer:

Borg & Overström

Synergy House
Fakenham Road
Morton-on-the-Hill
NR9 5SP
UK

Product Type:

Water Dispenser

Model Range:

u1 20L/ BK (Undercounter) Series

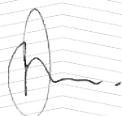
According to:

EMC Directive 2004/108/EC
WEEE Directive 2012/19/EU
RoHS Directive 2011/65/EU
LV Directive 2006/95/EEC
GPSP Directive 2001/95/EC

Applicable Regulations & Standards:

EN55014-1:2006+A1:2011
EN61000-3-12:2011
EN61000-6-3:2007/A1:2011
EN60204-1:2006/AC:2010
UK 2012 No.3032
UK 2006 No.3289

We declare that the above product(s) comply with the relevant basic requirements of the known EC regulations, provided the products are installed and used in accordance with the parameters of their design and purpose, as identified.



Daniel Lyon
Senior Managing Partner

Date February 2013

CE Declaration of Conformity CE

Producer:

Borg & Overström

Synergy House
Fakenham Road
Morton-on-the-Hill
NR9 5SP
UK

Product Type:

Water Dispenser

Model Range:

u1/u2 30L /BZ (Undercounter) Series

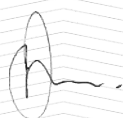
According to:

2014/35/EC - Directive 2014/35/EU of the European Parliament and council - 26/02/14
2014/30/EC - Directive 2014/30/EU of the European Parliament and council - 26/02/14
2011/65/CE - Directive 2011/62/EU of the European Parliament and council - 08/06/11
amending Directive 2001/83/EC

Applicable Regulations & Standards:

2006/95/CE - EN60335-1:2012 + A11:2014
EN60335-2-24:2010
EN60335-2-75:2002 + A1:2004 + A2:2008
EN62233:2008
2004/108/EC - EN55014-1:2006 + A1:2009 + A2:2011
EN55014-2:1997 + A1:2001 + A2:2008
EN61000-3-2:2006 + A1:2009 + A2:2009
EN61000-3-3:2013
2011/65/CE - EN50581:2012

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Senior Managing Partner

Date February 2017

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UK

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Water Dispenser

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u1/u2 60L /BZ (Undercounter) Series

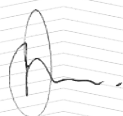
According to:

2014/35/EC - Directive 2014/35/EU of the European Parliament and council - 26/02/14
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Applicable Regulations & Standards:

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EN60335-2-24:2010
EN60335-2-75:2004 + A1:2005 + A11:2006 + A2:2008 + A12:2010
EN62233:2008
2014/30/EU - EN55014-1:2006 + A1:2009 + A2:2011
EN55014-2:2015
EN61000-3-2:2014
EN61000-3-3:2013
2011/65/EU - EN50581:2012

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Senior Managing Partner

Date February 2017

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