Product Manual

EXL1250/EXL1260

Cooler Carbonators

Part Number 3B6067 Issue A (21/09/2016)

Introduction and Specification

Contents

Introduction

The EXL1250 and EXL1260 are high capacity cold carbonators incorporating soda recirculation. They are designed in a modular fashion to cover a range of control options, with single or twin mechanical thermostats, or a digital thermostat which are specified at time of order. They also have the capacity to incorporate up to 8 syrup cooling coils.

The wiring schematics included in the following pages reflect this modularity:

Specification

Dimensions	900mm(W) 525mm(D) – EXL1250 640mm(D) – EXL1260 600mm(H)	**Compressor**	Danfoss SC21F
Dry Weight	EXL1250 76kg EXL1260 82kg	**This product contains fluorinated greenhouse gas with a GWP of 1300 in an hermetically sealed system**	
Wet Weight	EXL1250 141kg EXL1260 147kg		
Supply	230Vac/50Hz	**Refrigerant**	R134a, 370g
Rated Input	1840W	**Climatic Class**	N
Rated Current	8A	**Heat Dump Noise Emissions (@1m)**	60dB
Fuse Rating	13A	**Net cooling power 24°C ambient, during recovery, no recirc**	570W
IP Rating	N/A	**Potable water inlet pressure**	1 bar min 4 bar max
CO2 Pressure	4 bar	**Nominal ice bank**	20kg

Model Numbering, Installation and Commissioning

Unit number (ZZZZZZZ) (Y) (X)

Key:

(ZZZZZZZ) **Base Type**

(Y) **Module Type**

(X) **Number of coils**

Reference	Part #	Description
ZZZZZZZ	**BASE**	
	EXL1250	Integral
Y	**MODULES**	Thermostats
M	1A5868	Mechanical thermostat
E	1A5869	Digital control
T	1A5892	Twin mechanical thermostats
ZZZZZZZ	**BASE**	
	EXL1260	Split
Y	**MODULES**	Thermostats
M	1A5889	Mechanical thermostat
E	1A5890	Digital control
T	1A5893	Twin mechanical thermostats
X	**COILS**	
0 to 8	1A5769	Number of coils, from 0 to 8.

Installation and Commissioning

- The unit must be installed by a competent person, on a firm level surface capable of supporting the weight of the machine when the bath is filled, and all connections made. It is important that the ventilation openings in the machine are not blocked to allow the free movement of air for both the integral and split versions. Inadequate ventilation will shorten the life of the fridge system.

- Locate a container beneath the bath overflow to prevent any water spillage as ice is formed in the bath, and fill the bath with cold water until it comes out of the overflow.

- Turn off the soda recirc pump and disable the can fill circuit by means of the 2 switches located under the deck cover, next to the pcb. **Important: Great care must be taken on commissioning the machine when power is applied to the unit.** Power may now be applied to the machine to allow the fridge to form an ice bank while the rest of the system is installed.

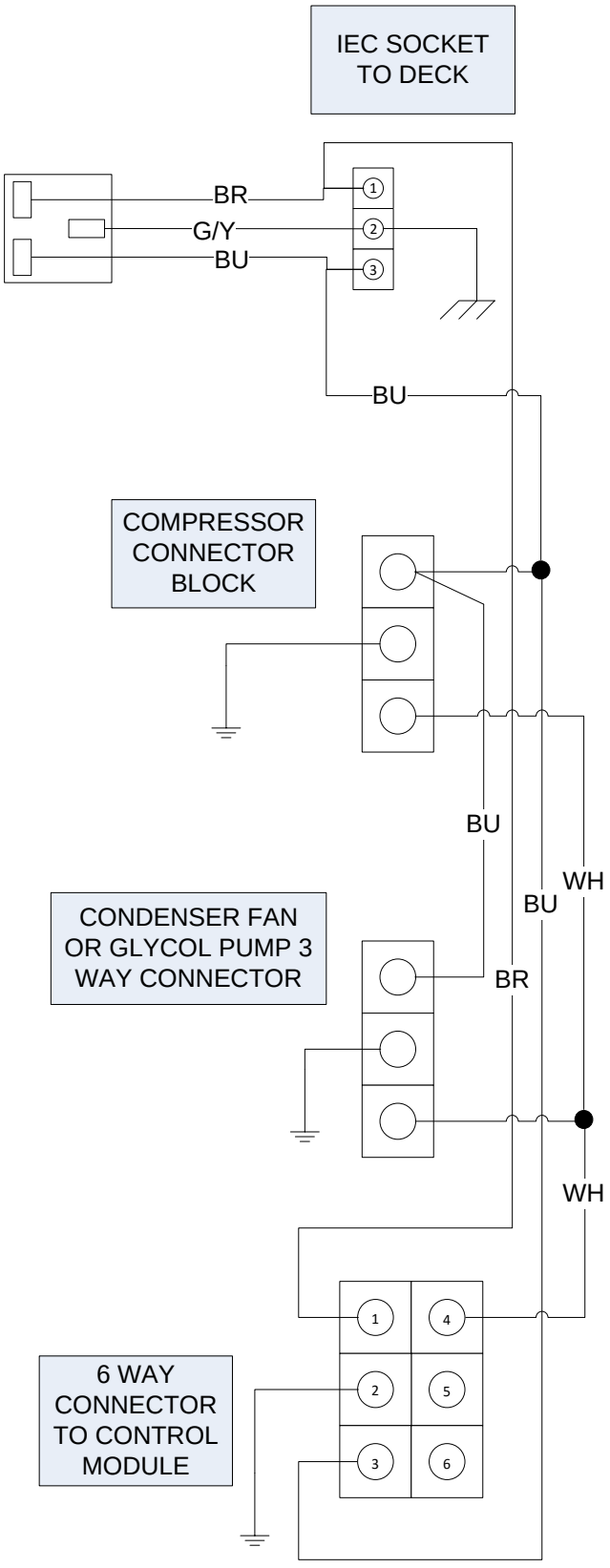
- Connect the water inlet to a potable water supply, connect the soda recirc lines to the bulkhead connectors, and connect the CO2 inlet turn it on. Purge the carbonator vessel by lifting the yellow lever of the pressure relief valve on top of the can, and let gas flow for up to 5 seconds. Turn on the water supply and turn on the can fill circuit. The can fill pump will now operate and fill the carbonator can.

- Once the carbonator is filled, the rest of the circuit should be primed and as much air as possible removed from the circuit, before the soda recirc pump is operated. Damage to the pump will occur if it is left to run dry.

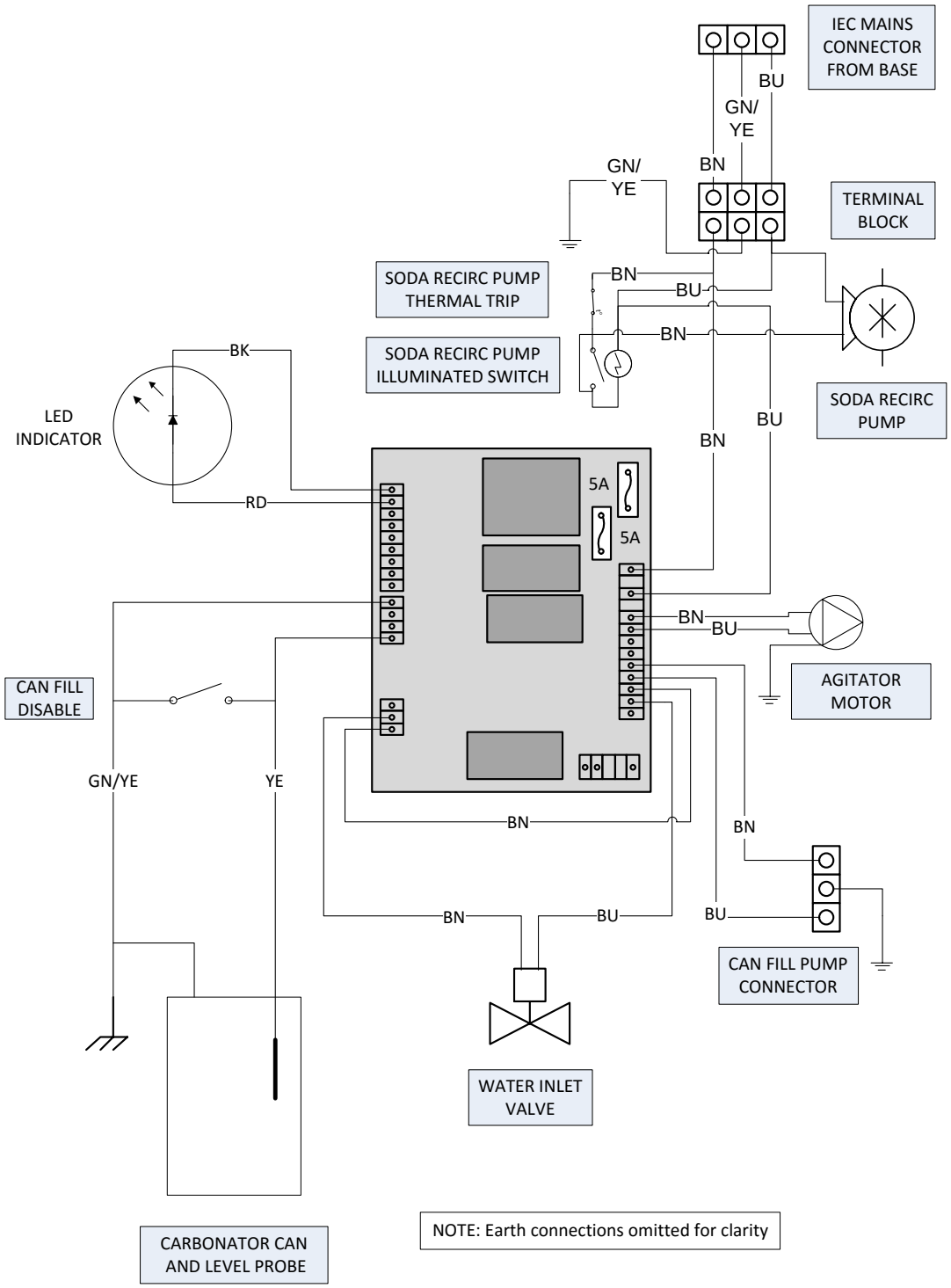
- To achieve optimum carbonation, all air must be purged from the pipework, carbonator can, and the soda recirc circuit. To this end, it is suggested that the soda recirc pump be turned on, and the pump allowed to prime the circuit. All air from the circuit will tend to be pumped back to the can, so it is suggested that this be vented regularly while the circuit is being primed.

- Optimum carbonation will only be achieved once the fridge has achieved normal working temperature and there is Ice present in the bath.

Schematics – Base Wiring

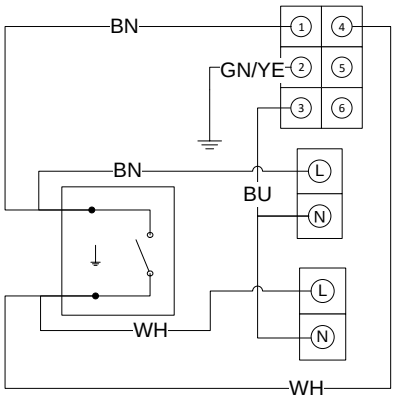


Schematics – Deck Wiring



Schematics – Module wiring

SINGLE MECHANICAL THERMOSTAT

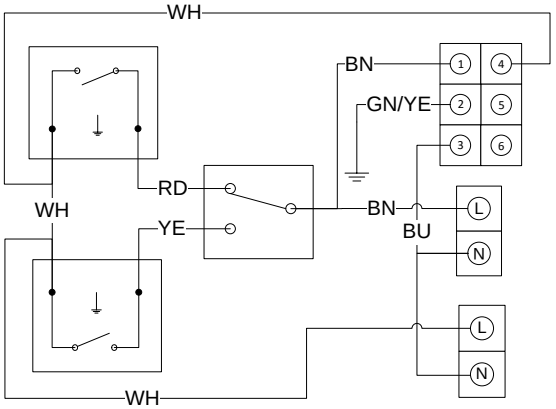


6 – WAY MODULE CONNECTOR

POWER ON INDICATOR

FRIDGE ON INDICATOR

TWO MECHANICAL THERMOSTATS AND SELECTION SWITCH

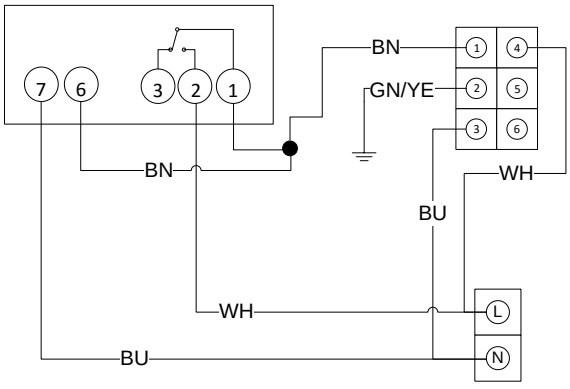


6 – WAY MODULE CONNECTOR

POWER ON INDICATOR

FRIDGE ON INDICATOR

ELIWELL ELECTRONIC CONTROL

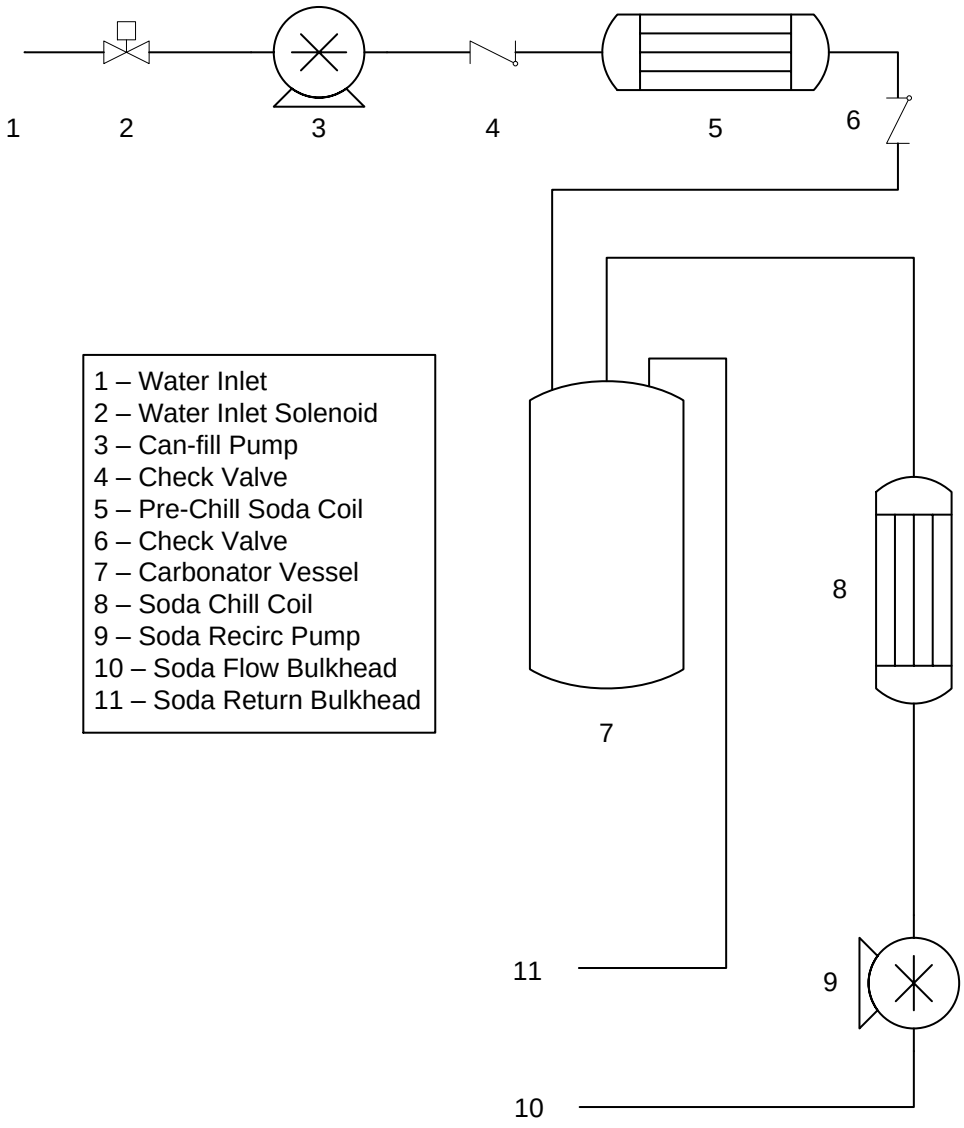


6 – WAY MODULE CONNECTOR

FRIDGE ON INDICATOR

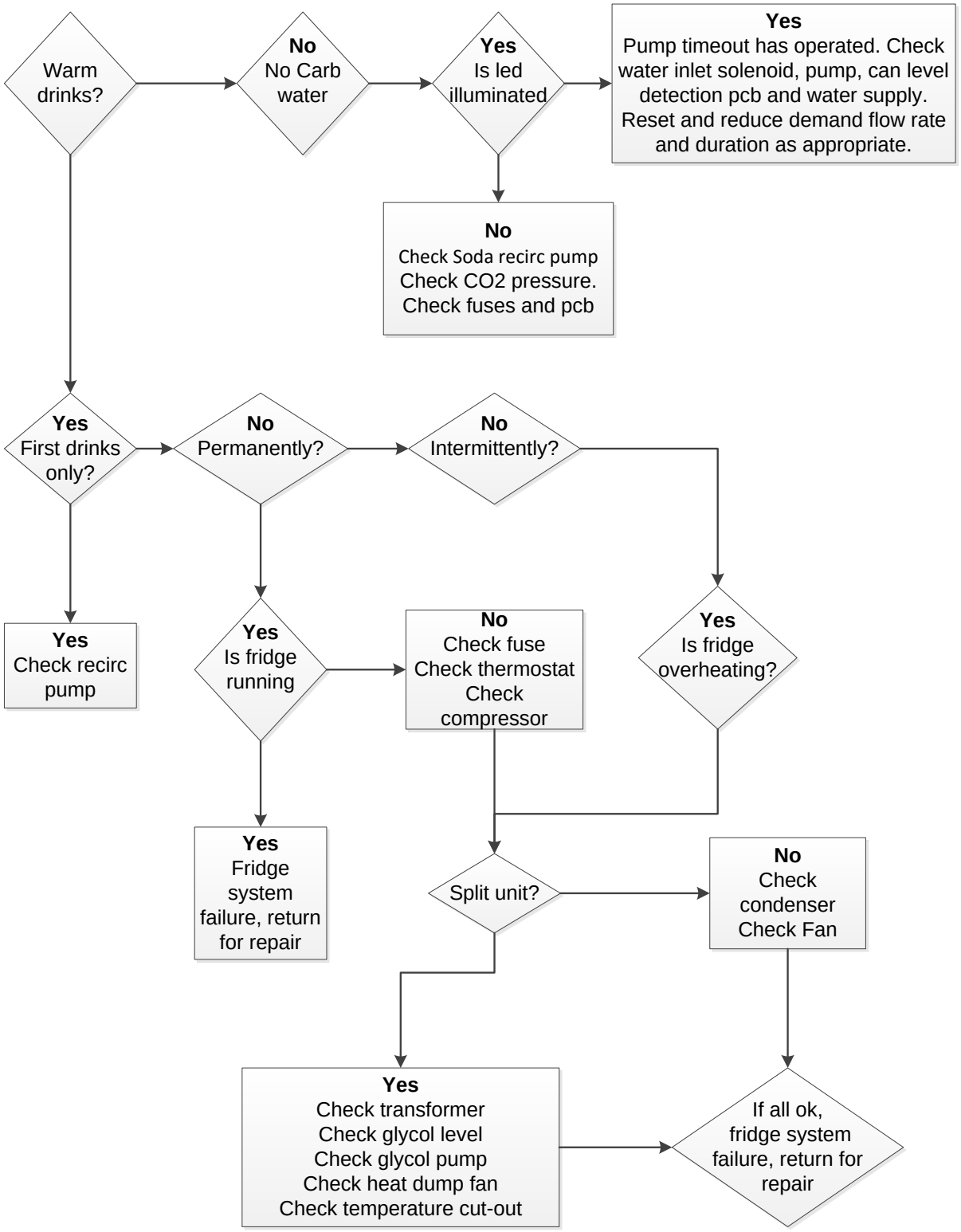
NOTE: Earth connections omitted for clarity

Schematics – Soda Water Circuit



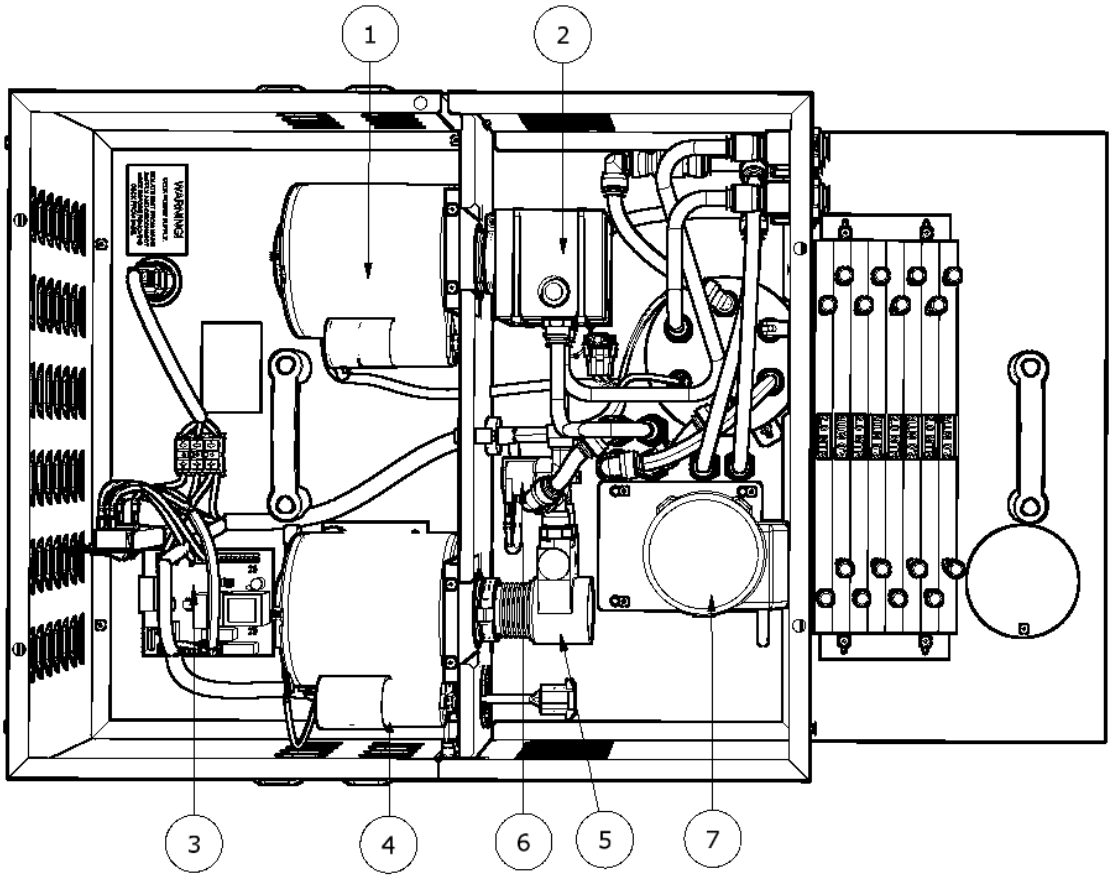
1 – Water Inlet
2 – Water Inlet Solenoid
3 – Can-fill Pump
4 – Check Valve
5 – Pre-Chill Soda Coil
6 – Check Valve
7 – Carbonator Vessel
8 – Soda Chill Coil
9 – Soda Recirc Pump
10 – Soda Flow Bulkhead
11 – Soda Return Bulkhead

Fault Finding



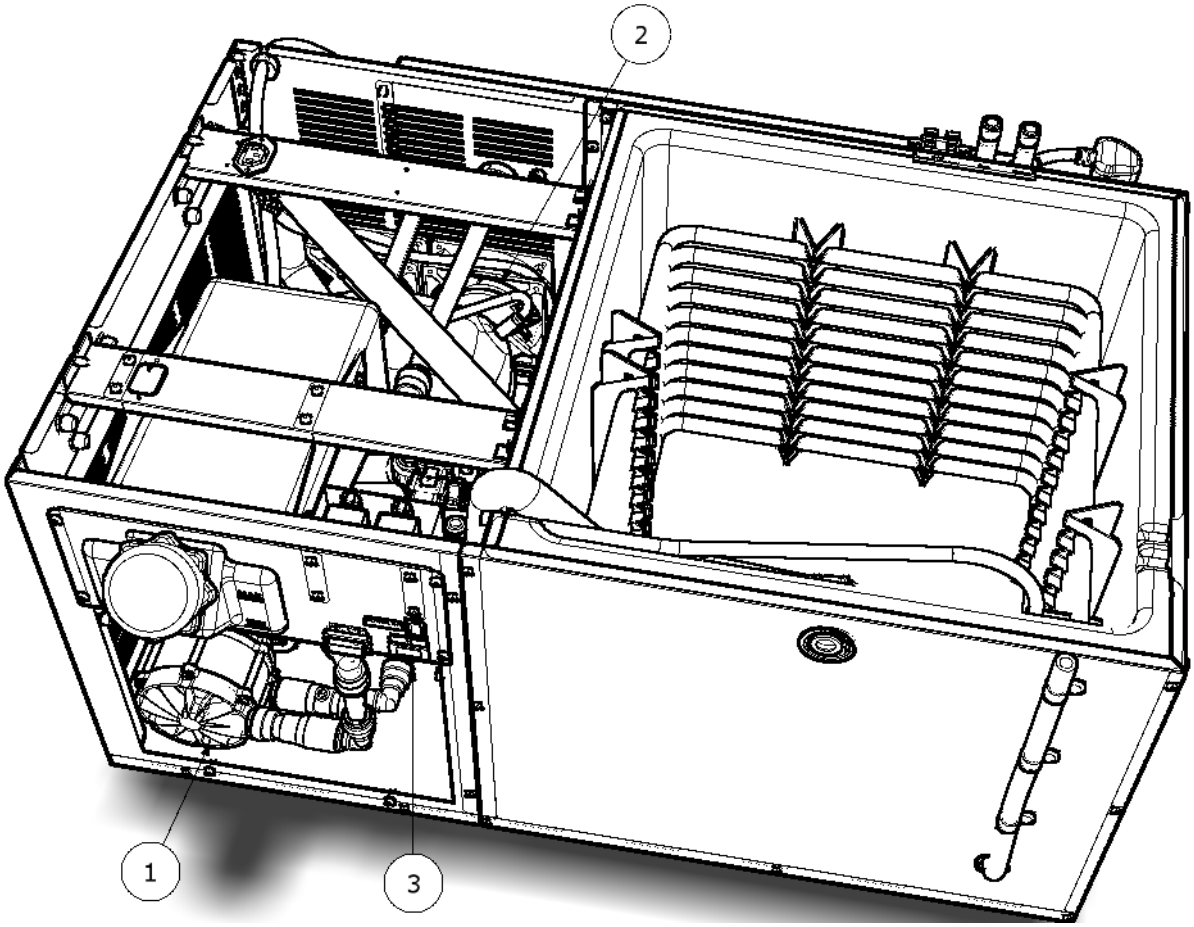
Replacement Parts – EXL1250/60 Deck

Item No	Description	Part No
1	Soda recirc pump motor only	1A5368
2	Soda recirc pump head assembly	1A5907
3	PCB	1A5417
4	Can fill pump motor only	1A5010
5	Can fill pump head assembly	1B6629
6	Water Inlet Solenoid	3B3641
7	Agitator	3B3333



Replacement Parts – EXL1250/60 Base

Item No	Description	Part No
	EXL1250	
N/A	Condenser fan motor	CPART0046F
	EXL1260	
1	Glycol pump – Totton GP20/18	3B4580
2	Axial fan	1B5514
N/A	Toroidal transformer	1A5662
N/A	Heat dump fan motor complete – HDU301	1A5742
N/A	Heat dump fan motor only	3B4830
N/A	Heat dump cartridge assembly – HDU301	1A5630
3	**Control module** Mechanical thermostat Eliwell control Eliwell 1.5m probe	 1A5891 3B3472 3B4341



Removal, Transportation and Disposal

Important: Before removal from the installation, ensure all electrical, product and gas connections are disconnected.

Disposal of Scrap Units

It is illegal to simply scrap a refrigeration unit. Before a unit can be scrapped it must first have the gas removed by a specialist using special equipment. Please contact Booth Dispensers Ltd., who will be happy to provide a quotation for disposal.

Transportation

Important: This unit must be transported in an upright position

As with all refrigeration systems, irreparable damage can be caused by laying the unit on its side or even transporting upside down. Where the unit is transported by a carrier, the carton should always be marked in a conspicuous manner, the correct upright position in which it must be handled.

If a unit has been transported incorrectly it should be placed in the correct upright position and left for 24 hours before attempting to run the system.

Failure to observe the above precautions could seriously damage the system, and would void any warranty.

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innovation in cooling

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