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<td>34</td>
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<td>FAULT CODE 01</td>
<td>34</td>
</tr>
<tr>
<td>FAULT CODE 02</td>
<td>34</td>
</tr>
<tr>
<td>FAULT CODE 04</td>
<td>34</td>
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<td>FAULT CODE 07</td>
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MAGIQTOUCH COMPATIBLE EVAPORATIVE COOLERS
WHAT’S NEW IN 2014/15?

The previous Breezair and Braemar range has been replaced with MagIQtouch compatible models.

<table>
<thead>
<tr>
<th>Previous Model</th>
<th>New Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXH</td>
<td>EXQ</td>
</tr>
<tr>
<td>EZH</td>
<td>EZQ</td>
</tr>
<tr>
<td>LCB</td>
<td>LCQ</td>
</tr>
<tr>
<td>-</td>
<td>EXS</td>
</tr>
<tr>
<td>-</td>
<td>LCS</td>
</tr>
</tbody>
</table>

Introduction of the MagIQtouch Controller brings the following changes:

COMMUNICATION CABLE
• Cable type
  26AWG 7/0.16, 6 core flat communication cable with 6P/6C RJ12 plug connections (not backwards compatible with previous models)
• Cable lengths
  Maximum recommended cable lengths changed due to increased power requirements of the MagIQtouch Controller. Maximum cable length from Controller to first cooler is 25m.

COMMISSIONING
• Installation Wizard
  The introduction of a step by step Installation Wizard displayed on the MagIQtouch Controller to assist with commissioning.

FAULT MANAGEMENT
• Fault display
  Displayed with full explanation and service contact details.
• Fault resolution
  Service menu assists with diagnosing faults, troubleshooting instructions, and retrieving component information.
• Component testing
  Service Operating Screen provides full control of all water management components on a single screen, making testing easier.
• Removing/Replacing faulty MagIQtouch products
  Automatic detection & step by step on screen instructions.

USER OPERATION
• Clearer, more intuitive touch screen interface for easy operation
• New operation features (e.g. 7 day program)
MAGIQTOUCH CONTROLLER

With a touch screen user interface and inbuilt temperature sensor, the MagIQtouch Controller will operate Seeley International’s new range of Breezair and Braemar models, including EXQ, EZQ, EXS, LCQ and LCS models.

The MagIQtouch Controller can be used on its own to operate an evaporative cooler.

A single MagIQtouch Controller can also be used with a MagIQtouch Air Sensor, which provides more flexibility with the mounting location of the Controller.

MOUNTING LOCATION

The MagIQtouch Controller, with in-built temperature sensor, should be placed approximately 1.5 mets above the floor, in the most used room of the home.

Placement is critical for correct functioning of the temperature sensing thermostat inside the controller.

The following points must be taken into consideration:

- Avoid direct sunlight exposure.
- Avoid mounting on external walls.
- Avoid mounting the wall control near heat sources such as stoves and televisions.
- Do not locate in the direct airflow of the duct outlets.
- Do not locate in strong drafts or in dead spots such as cupboards/drawers.
- Always seal the cable entry hole. Hot or cold air coming through the wall may interfere with the temperature measurement.

If a MagIQtouch Air Sensor is to be installed with a single Controller, the above location instructions should be applied to the Air Sensor. In this case, the controller location is not important.

CAUTION! Always make sure there are no electrical cables, gas or water pipes, or the like, behind where you intend to drill.

CABLE LENGTHS

The maximum recommended cable length is 25m from MagIQtouch Controller to first cooler. This is to ensure adequate power is delivered to the Controller for correct operation.
MAGIQTOUCH AIR SENSOR

The MagIQtouch Air Sensor is an optional extra product which allows more flexibility with where the MagIQtouch Controller is mounted.

Each Controller has a temperature sensor mounted inside it which dictates how the cooler operates. In the past, this has restricted the locations where the Controller could be mounted for successful operation of the cooler.

This optional Air Sensor allows Controller to be mounted in a location not ideal for temperature sensing (e.g. cupboard, hallway, etc.). The installer can set up the MagIQtouch Controller to take its temperature readings from this external sensor and run the cooler accordingly.

Details of the MagIQtouch Air Sensor kit are as follows:

094328
MagIQtouch Air Sensor

<table>
<thead>
<tr>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qty</td>
</tr>
<tr>
<td>-----</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>2</td>
</tr>
</tbody>
</table>

MOUNTING LOCATION

The Air Sensor will be used instead of the MagIQtouch Controller for temperature sensing. Follow the mounting location instructions in the MagIQtouch Controller section.

MOUNTING OPTIONS

Screw Boss Mounting
If permanently fixing the sensor, pull off the front panel to expose the 2 screw bosses inside.

Keyhole Mounting
If using the keyhole mounting method, first remove the break-out pieces using a small screw driver to lever upwards. The piece can then be pulled out.

Important! Be careful not damage the electronics board inside the sensor when removing the break-outs. Do not punch inwards, but twist and pull out!
MAGIQTOUCH LINK MODULE

The MagIQtouch Link Module is a small “T-junction” electronics board, mounted in its own waterproof enclosure, which is used to connect multiple MagIQtouch products together.

094274
MagIQtouch Link Module in Enclosure

<table>
<thead>
<tr>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qty</td>
</tr>
<tr>
<td>------</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>1</td>
</tr>
</tbody>
</table>

No Link Module is required for a simple 1 cooler, 1 controller installation.

However, Link Modules are required in the following scenarios:

Scenario A
1 x MagIQtouch Air Sensor requires 1 x Link Module.

If mounting in an exposed or humid location, ensure that the cable glands are facing downwards.

Caution! Extra low voltage communication cable should be located away from power cables. Cross power cables perpendicularly, never run alongside.

Cover screw heads with the provided caps to seal the enclosure.
MAGIQTOUCH LINK MODULE

CONNECTING CABLES

Each connector on the board is labelled with possible connection options, listed in order of priority. Always use the top option where possible.

**Important!** Correct cable connection is essential for successful operation of the system!

The illustration below indicates connection priorities.

**SETTING DIPSWITCH**

After connecting the cables, ensure the dipswitch is set correctly. The following table indicates how the dipswitch should be set depending on what product is connected next to it.

<table>
<thead>
<tr>
<th>Cable Connected To</th>
<th>Set Switch To</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaporative Cooler</td>
<td>OFF</td>
</tr>
<tr>
<td>Gas Ducted Heater</td>
<td>ON</td>
</tr>
<tr>
<td>MagIQtouch Air Sensor</td>
<td>ON</td>
</tr>
</tbody>
</table>

**Example:**

![Diagram of cable connection and dipswitch settings](image)
UNDERSTANDING THE MAGIQTOUCH SYSTEM

COMPONENT ADDRESSES

Each MagIQtouch component (e.g. cooler, heater, controller or sensor) leaves the factory with a default address.

During the installation process, each MagIQtouch component in the system must be assigned a UNIQUE address!

Important! For this reason certain MagIQtouch components of the same type must be powered and/or connected ONE AT A TIME otherwise communication will be corrupted!

Important! This also means that any MagIQtouch component being introduced to an existing installation must be set to the default factory address. If it has been used in another installation, it must be RESET (refer pg??).

Note! Link Modules are an exception to this rule.

Link modules provide a T-junction to connect MagIQtouch components into the main communication line. The Controller communicates through, and not directly to, the link module and therefore is not given an address.

BEFORE POWER-UP

To ensure the MagIQtouch component addressing process is completed correctly, the following must be done before power up of the Controller:

If there are no more than 1 of each component type (e.g. 1 cooler, 1 heater, 1 air sensor), then ensure all are correctly connected and powered before power up of the controller.

If there are 2 or more evaporative coolers, ensure only the first is both connected and powered when connecting the controller for the first time.

(Note! It is possible to have the remaining coolers connected, as long as they are unpowered - or vice versa.)

If there are any link modules, zone controls, single air sensors or slaves, ensure that all are connected, powered (where relevant) and any dipswitches are set correctly! (More details to follow in later slides)
SYSTEM DIAGRAMS

Single Evaporative Cooler

![Diagram of Single Evaporative Cooler](ILL1785-A)

**Major Appliances:**

<table>
<thead>
<tr>
<th>Appliance</th>
<th>Included in Control Kit</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaporative Cooler</td>
<td>094632 MagIQtouch Controller</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>094694 20m Cable</td>
<td>1</td>
</tr>
</tbody>
</table>

Gas Ducted Heater (+ Optional Add-on Cooler)

![Diagram of Gas Ducted Heater](ILL1758-B)

**Major Appliances:**

<table>
<thead>
<tr>
<th>Appliance</th>
<th>Included in Control Kit</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaporative Cooler</td>
<td>094632 MagIQtouch Controller</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>094694 20m Cable</td>
<td>1</td>
</tr>
</tbody>
</table>

**Additional Kits Required:**

<table>
<thead>
<tr>
<th>P/N</th>
<th>Description</th>
<th>Cable Included</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>094328</td>
<td>MagIQtouch Air Sensor</td>
<td>20m</td>
<td>1</td>
</tr>
<tr>
<td>094274</td>
<td>MagIQtouch Link Module, in Enclosure</td>
<td>3m</td>
<td>1</td>
</tr>
</tbody>
</table>
SYSTEM DIAGRAMS cont

Multiple Evaporative Coolers

<table>
<thead>
<tr>
<th>Appliance</th>
<th>Included in Control Kit</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaporative Cooler</td>
<td>094632 MagIQtouch Controller</td>
<td>1</td>
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<td>094694 20m Cable</td>
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<th>Description</th>
<th>Cable Included</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>094328</td>
<td>MagIQtouch Air Sensor</td>
<td>20m</td>
<td>1</td>
</tr>
<tr>
<td>094274</td>
<td>MagIQtouch Link Module, in Enclosure</td>
<td>3m</td>
<td>1</td>
</tr>
</tbody>
</table>
Multiple Evaporative Coolers

Note! Evaporative cooler supplied with 20m cable.

### Major Appliances:

<table>
<thead>
<tr>
<th>Appliance</th>
<th>Included in Control Kit</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaporative Cooler</td>
<td>094632 MagIQtouch Controller</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>094694 20m Cable</td>
<td>1</td>
</tr>
</tbody>
</table>

### Additional Kits Required:

<table>
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<tr>
<th>P/N</th>
<th>Description</th>
<th>Cable Included</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>094328</td>
<td>MagIQtouch Air Sensor</td>
<td>20m</td>
<td>1</td>
</tr>
<tr>
<td>094281</td>
<td>MagIQtouch Link Module, Board Only</td>
<td>0.2m</td>
<td>1</td>
</tr>
</tbody>
</table>
**INSTALLATION OPTIONS**

**DEFAULT SINGLE COMPONENT**

The first screen of the System Definition phase gives the below options:

![System Installation Wizard](ILL1753-A)

DEFAULT SINGLE COMPONENT can be used for an installation containing only a single cooler (or heater without zones), without sensors, and where the installer wants to apply only default settings.

No further definition is required. The installation process is completed automatically by the controller.

**MULTIPLE COMPONENTS**

For all other installation types the MULTIPLE COMPONENTS option must be selected.

This will commence the Installation Wizard which steps through the steps of System Definition and Installation.

![System Installation Wizard](ILL1861-A)

**INSTALLATION WIZARD**

**PHASE 1 - SYSTEM DEFINITION**

For multiple component systems the installation wizard begins with a “System Definition” phase. The installer must define exactly what components will be installed. The screens that follow will depend on what has been defined.

![System Installation Wizard](ILL1611-B)

**PHASE 2 - INSTALLATION**

Do not worry about memorising a particular sequence of screens for this process. The steps and screens the controller moves through may change depending on the installation. Simply follow the instructions displayed on the screen.

**Just remember… Do not** power-up/connect components until instructed to do so by the Controller!

And if the Controller can’t detect a component or comes across a fault, it will tell you and give instructions of how to fix the problem.

If any problems occur during the installation phase it is possible to reset the whole system and start again from the beginning.
CONTROLLER OR SYSTEM RESET

It is possible to reset the whole system (including all connected components) or the controller only.

Use a pin or paperclip to press and hold the reset button located at the back of the controller.

This will cause the following screen to appear:

Note! Resetting the whole system will mean that every component connected to the wall control will be given the factory default address. After resetting a whole system it will be necessary to go through the ‘System Installation Wizard’ again from the start.
The SETTINGS menu in the MagIQtouch replaces the parameters menu used in the past controllers.

Some settings are protected by an access code to prevent customers changing important parameters.

The access code is 7378

The SETTINGS menu contains a GENERAL menu relating to the Controller and the system as a whole, COOLER and HEATER menus depending on what has been installed, and a SERVICE menu containing component details and fault information.

**Note!** The controller will only display the menus and menu items that are relevant to the installed system.

Navigate through the menus by tapping the heading tabs at the top of the screen.

**Time and Date**
Set or adjust time and date.

**Language**
Set language (more languages coming soon).

**Child Access Lock**
Restrict access to any system change by applying a pin code.

**Standby Screen Brightness**
Adjust screen brightness when controller goes into sleep mode.

**Temperature Sensor Selection**
Option displayed if Master Air Sensor installed. Choose which temperature sensor the controller uses to control the system.

**Software Revision**
Display MagIQtouch Controller software revision.

**Simple Mode Lock**
Lock the operation screen to “Simple Display” unless the “MORE” button is pressed and held.

**System Configuration**
View or modify components installed within the system. For more information see “MANAGING COMPONENTS” section.

**System Reset**
Reset either the controller only or the whole system (including Controller and all coolers/heaters/components) connected within the system.

**Temperature Calibration**
Apply an offset to the temperature sensor as required.
COOLER MENU

The COOLER and HEATER menus include settings or information related to the specific Seeley International cooling or heating products installed within the system.

More information about the specific settings of these products is provided in the separate product installation guide.

- No Drain Control - salinity control external to electronics eg. continuous bleed.
- No Water Thermostatic - allows Thermostatic control in VENT mode. No water present. Cooling performance is limited.

Weather Seal Open Speed
The cooler fan will turn on at the specified weather seal opening speed for the first 10 seconds each time it starts up. It will then return to the set fan speed.

Prewet
When COOL mode is activated, the pump will run for 90 seconds before the fan is switched on.

Salinity Level
Sets the salinity level at which the tank will drain in “SALINITY MEASUREMENT” mode.

Tank Drain Delay
Sets the time delay before the drain valve opens after the pump in the cooler is turned off.

Autostart
Automatically restarts the cooler in the last operating mode after a power outage.

SERVICE MENU

The SERVICE menu contains information and functions for competent service personnel.

For more details refer to the MANAGING FAULTS section.
MANAGING FAULTS

When a component in the system experiences a fault, the controller will be notified and a fault screen will appear. The operator can then choose to resolve the issue or ignore it.

So long as a fault remains in the system, a small fault icon will be displayed at the right hand side of the lower taskbar.

By pressing this icon, the operator can access information about all current faults.

FAULT CATEGORIES

Faults fall into four categories:

1. **Auto Reset Fault** – a minor fault that is not communicated to the operator but is recorded in the fault history.
2. **Running Fault** - this fault allows the component to operate, with reduced functionality. If the fault is resolved, the fault icon will no longer be displayed in the lower taskbar.
3. **Service Fault** – a serious fault which will cause the component in question to shut down but may be resolved by the user.
4. **Service Agent Fault** – a serious fault which will cause the component to shut down and requires a service agent to resolve.

SERVICE MENU

The SERVICE menu contains information and functions for competent service personnel.

Each cooler installed within the system is listed under the SERVICE menu.

A fault symbol appears next to the component name when a fault exists.

Access to each cooler is locked with a service pin code. The pin code is 7378.
MANAGING FAULTS cont

Once the pin code is entered you will have access to component specific information. This information includes:

- About Appliance
- Fault Log
- Running History
- Last Known Operating Condition
- Service Operating Screen

SERVICE OPERATING SCREEN

The ‘Service Operating Screen’ for each component installed in the system. This screen can be used as a testing or troubleshooting tool.

The ‘Service Operating Screen’ for evaporative coolers allows the service agent to:

- Turn the cooler ON or OFF
- Set the fan speed
- Turn the pump, solenoid or drain valve ON or OFF

<table>
<thead>
<tr>
<th>Component</th>
<th>Status</th>
<th>Resulting Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pump</td>
<td>ON</td>
<td>Tornado pump active, water pumping over pads</td>
</tr>
<tr>
<td></td>
<td>OFF</td>
<td>Pump off</td>
</tr>
<tr>
<td>Solenoid</td>
<td>ON</td>
<td>Solenoid open (water filing tank)</td>
</tr>
<tr>
<td></td>
<td>OFF</td>
<td>Solenoid closed</td>
</tr>
<tr>
<td>Drain</td>
<td>ON</td>
<td>Drain closed (energised)</td>
</tr>
<tr>
<td></td>
<td>OFF</td>
<td>Drain open</td>
</tr>
</tbody>
</table>

For multi-cooler installations, all other coolers except the cooler being displayed will continue to operate as they were at the time of entering the ‘Service Operating Screen’.

Other coolers of the same type can be accessed from the ‘Service Operating Screen’ quickly, by using the scroll left/right buttons.

Important! When a new cooler is selected, the previously displayed cooler will return to the operation state that was occurring at the time of entering the ‘Service Operating Screen’.

COOLER ELECTRONICS BOX

Fault diagnostics can also be accessed from the cooler electronics box itself.

For more details refer to “DIAGNOSTICS FAULT CODES” within the Breezair (pg 23) and Braemar (pg 32) cooler sections of this document.
MANAGING COMPONENTS

ADDING COMPONENTS

The Controller keeps a list of all the installed components and regularly checks that all components are responding.

To add a new component, simply connect it to the system and power up. The Controller will detect that a new component has been added and lead you through the set-up process.

Important! It is important that new components of the same type are connected ONE AT A TIME.

REPLACING COMPONENTS

To replace a faulty component with a new one, disconnect the old component. The Controller will display a warning message (unless the component has previously been ignored).

Choose the ‘IGNORE’ option.

Now connect and power up the new, replacement component.

The Controller will detect the new component and will give you the option to REPLACE the faulty component or install it as a new component. Choose REPLACE.

Important! If you are replacing more than one faulty component, it is important that new components of the same type are connected ONE AT A TIME.

REMOVING COMPONENTS

If a component is to be removed from the installation and never replaced, it can be deleted from the MagiQtouch Controller’s memory.

Go to the GENERAL menu in SETTINGS. Scroll down to the menu item ‘SYSTEM CONFIGURATION’.

After entering the correct pin-code (7378), the Controller will do a scan to find what is connected to the system. The screen will then display a list of all components in the installation (both functional and faulty).
At this point, disconnect the component to be removed and press the MODIFY button. This should cause the MagIQtouch Controller to display a warning message where the component can be deleted.

**Important!** This process will permanently delete the component from the system.

If you plan to replace a faulty component with a new one in the future, then the IGNORE option on the above screen should be selected.
MANAGING THE CONTROLLER

CONNECTING A PRE-USED CONTROLLER
System Configuration is stored in the Controller memory chip and CANNOT be transferred from one controller to another.

Important! Any pre-used Controller must be reset before it is connected to another existing system.

Once the controller has been reset, the installation process is the same as if it were new.

CONNECTING A NEW CONTROLLER TO AN EXISTING SYSTEM
System configuration information is stored on the Controller memory chip and cannot be transferred from one Controller to another. If a new Controller is connected to an existing system it will first need to scan the system to see what is there.

Connect the Controller to the system. Ensure all components are powered.

Choose the ‘EXISTING SYSTEM WITH NEW CONTROL’ option.

The Controller will scan for one type of component at a time. The operator can skip to the next scan once they see all components of a particular type have been found.

Once all components have been found the Controller will display a summary list of what it has found. If this configuration is accepted, the controller will be ready to operate the system.
### BREEZAIR EXQ / EZQ / EXS
#### EVAPORATIVE COOLER
#### QUICK REFERENCE GUIDE

<table>
<thead>
<tr>
<th>Component</th>
<th>EXQ</th>
<th>EZQ</th>
<th>EXS</th>
<th>Part No.</th>
<th>Watts</th>
<th>Total Max Amps</th>
<th>Motor Resistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fan Motor (Variable)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>130</td>
<td></td>
<td></td>
<td></td>
<td>095929</td>
<td>500w</td>
<td>3.8</td>
<td></td>
</tr>
<tr>
<td>150</td>
<td></td>
<td></td>
<td></td>
<td>095936</td>
<td>550w</td>
<td>3.8</td>
<td></td>
</tr>
<tr>
<td>170</td>
<td></td>
<td>175</td>
<td>180</td>
<td>095943</td>
<td>750w</td>
<td>5.8</td>
<td></td>
</tr>
<tr>
<td>190</td>
<td></td>
<td>200</td>
<td></td>
<td>095950</td>
<td>1100w</td>
<td>7.3</td>
<td></td>
</tr>
<tr>
<td>210</td>
<td></td>
<td>220</td>
<td></td>
<td>095967</td>
<td>1500w</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>215</td>
<td></td>
<td>215</td>
<td></td>
<td>095967</td>
<td>1500w</td>
<td>8.8</td>
<td></td>
</tr>
</tbody>
</table>

Each winding should be approximately equal to the others (+/-10ohm)

---

<table>
<thead>
<tr>
<th>Component</th>
<th>EXQ / EZQ / EXS</th>
<th>Part No.</th>
<th>Voltage</th>
<th>Ohms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tornado</td>
<td>✓</td>
<td>095806</td>
<td>240vac</td>
<td>122 + -6</td>
</tr>
<tr>
<td>Drain valve</td>
<td>Optional</td>
<td>105345</td>
<td>24vac</td>
<td></td>
</tr>
<tr>
<td>Solenoid valve</td>
<td>Optional</td>
<td>834320</td>
<td>24vac</td>
<td>40 + -10%</td>
</tr>
<tr>
<td>Cooler Electronics Box</td>
<td>✓</td>
<td>114705</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

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**Note!** The EXQ/EZQ/EXS cooler electronics box is fully backwards compatible with 2004/05 product. It is not compatible with 2003/04 EXD and EZD Icon product.

**LEGEND**

- A - Hall Effect LED
- B - Thermal Overload LED
- C - Fan Speed LED
- D - Power LED
- E - Water Probes
- F - Motor Power
- G - Motor Overtemp Sensor Lead
- H - Drain Valve
- I - Tri Colour Diagnostic LED
- J - Red Water Manager Status Diagnostic LED
- K - Circuit Breaker
- L - Inlet Solenoid
- M - Controller Cable
- N - Pump
- O - Mains Power Isolation Switch
- P - Circuit Breaker
- Q - Mains Connector

**DANGEROUS VOLTAGES INSIDE**

**WARNING**


**FRONT VIEW**

**UNDERSIDE VIEW**

**CONFIGURATION OF DRAIN VALVE WITH SHORTING PLUG**

**Note!** This procedure is not backward compatible for 2001 CPMD’s and is only an aid to installation.

A shorting plug should be fitted to the cooler electronics box of coolers that do not have a drain valve installed (i.e. those with bleed tray).

The shorting plug must be inserted before power is applied to the cooler electronics. At power on the electronics recognises the water probes are not connected and automatically operates as “NO DRAIN CONTROL”.

**Note!** This will override what has been set in the MagiQTouch Controller SETTINGS menu.

If the shorting plug is removed whilst power is on, the change will not be noticed by the cooler electronics until the next power on, when parameters will be automatically changed.
BREEZAIR EXQ / EZQ / EXS
EVAPORATIVE COOLER cont

DIAGNOSTIC FAULT CODES

Breezair EXQ/EZQ/EXS coolers incorporates a Seeley electronically commutated Direct Drive Motor.

Diagnostic fault codes can be viewed on the cooler electronics box.

<table>
<thead>
<tr>
<th>LED</th>
<th>Indicates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hall Effect</td>
<td>Direct drive motor is rotating.</td>
</tr>
<tr>
<td>Thermal O/L</td>
<td>Motor temperature sensor is working, and motor is operating within its temperature range.</td>
</tr>
<tr>
<td>Fan Speed</td>
<td>Motor is rotating at the correct speed for the given Controller setting.</td>
</tr>
<tr>
<td>Power</td>
<td>Mains power is applied to the motor when the ON button of the Controller has been pressed.</td>
</tr>
</tbody>
</table>

**Note!** To accurately diagnose faults in the EXQ/EZQ/EXS product, we recommend that Service Technicians use a MagiQtouch compatible Controller and a short test lead at the cooler. This way the functions of the cooler, as well as the diagnostic LED’s can be immediately observed in relation to the commands issued by the Controller.

**IMPORTANT SAFETY NOTE!**
When any side panels are removed, always test Evaporative Coolers with the pump disconnected or in Ventilation mode, as wet roof surfaces can create a safety hazard. Also care must be taken when working in close proximity to moving parts.

**LED#1 HALL EFFECT SENSORS**

(Glows GREEN in normal operation)

“ON” when all 3 Hall effect sensors are providing signals to the control board. If any sensor stops transmitting a signal, the GREEN LED will go out (indicating a faulty motor).

**LED#2 MOTOR THERMAL OVERLOAD**

(Glows GREEN in normal operation)

“ON” when thermal overload in motor is closed and “OFF” when thermal overload is open circuit.

**Note!** If motor does not spin for more than 30 secs, the Thermal O/L LED will turn “OFF”.

<table>
<thead>
<tr>
<th>LED</th>
<th>Indicates</th>
</tr>
</thead>
<tbody>
<tr>
<td>ON</td>
<td>Normal Operation</td>
</tr>
<tr>
<td>OFF</td>
<td>Thermal Overload in motor tripped. (CAUTION! Motor in overload mode may re-start without warning.)</td>
</tr>
</tbody>
</table>

**Note!** If motor does not spin for more than 30 secs, the Thermal O/L LED will turn “OFF”.

SEELEY INTERNATIONAL - SERVICE GUIDE | 25
**BREEZAIR EXQ / EZQ / EXS EVAPORATIVE COOLER** cont

**LED#3  FAN SPEED**

(GLows GREEN in normal operation)

Will go “OFF” if motor rotates less than 30% of set speed, or does not turn for 30 seconds.

- Low Voltage power supply can effect the fan speed and cause the fan to shut down.
- Check voltage power supply is within specifications of 230V + or - 10%. (207 - 253V).
- Shorting between phase windings in the motor.
- Worn bearings causing motor to seize.
- Refer also to Technical Bulletin A14/08 shown on page 39.

<table>
<thead>
<tr>
<th>LED</th>
<th>Indicates</th>
</tr>
</thead>
<tbody>
<tr>
<td>ON</td>
<td>Normal Operation within 30% of setting.</td>
</tr>
<tr>
<td>OFF</td>
<td>The Fan Speed LED will extinguish if the motor rotates less than 30% of set speed*, and the motor will stop within approximately 30 seconds at speed 10 (longer at lower speeds), or if the fan remains stationary for 30 seconds after it was supposed to start. The Fan Speed LED will extinguish &amp; Thermal O/L &amp; Hall Effect LED will go out.</td>
</tr>
</tbody>
</table>

* ‘SET SPEED’ – **Is the fan/motor speed as selected by the operator or by the thermostat in the MagQtouch Controller. Each motor speed has a specified value of input power assigned to it (factory set). Regardless of installation conditions the input power to the motor is held constant at that specific value. Data from sensors in the motor is converted to RPM in the electronic module. The speed at each of the 10 settings is allowed to vary +/- 20%. As soon as the motor RPM moves outside those limits (for any of the above listed causes) a fault mode is initiated and the LED behaves as stated above.**
HALL EFFECT THERMAL OIL FAN SPEED POWER

(BLINKS GREEN in normal operation)
“ON” whenever power applied to the motor drive circuit from the controller. Will illuminate whenever the controller asks the Fan to operate. NB: If the POWER LED is ON but no other motor LED’s, check the Motor Sensor cable is plugged in correctly. If it is, the motor is faulty.

<table>
<thead>
<tr>
<th>LED</th>
<th>Indicates</th>
</tr>
</thead>
<tbody>
<tr>
<td>ON</td>
<td>Normal Operation, Controller “ON”</td>
</tr>
<tr>
<td>OFF</td>
<td>Controller “OFF”</td>
</tr>
</tbody>
</table>

DIAGNOSTIC LED
The top LED glows green or red acting as a diagnostic indicator. If the top LED is double flashing green, everything is ok, this is normal operation.

<table>
<thead>
<tr>
<th>Colour</th>
<th>Flash</th>
<th>Indicates</th>
</tr>
</thead>
<tbody>
<tr>
<td>No glow</td>
<td></td>
<td>No power or a failure has occurred. (Check power supply to cooler including isolating switch, circuit breaker and plug and socket connection in the roof space.)</td>
</tr>
<tr>
<td></td>
<td>Green</td>
<td>Running normally.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 Flash</td>
<td>Fault Code #1 Communication Failure</td>
</tr>
<tr>
<td></td>
<td>2 Flashes</td>
<td>Failure Code #2 Failure to detect water at probes.</td>
</tr>
<tr>
<td></td>
<td>4 Flashes</td>
<td>Failure Code #4 Failure to clear probes during drain.</td>
</tr>
<tr>
<td></td>
<td>7 Flashes</td>
<td>Fault Code #7 Incorrect Supply Frequency.</td>
</tr>
</tbody>
</table>

SALINITY LED
The bottom LED is red only and displays salinity setting information.

<table>
<thead>
<tr>
<th>Flash</th>
<th>Indicates</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Flash</td>
<td>WaterMiser® is operating and the measured salinity is below the set point.</td>
</tr>
<tr>
<td>2 Flashes</td>
<td>WaterMiser® is operating and the measured salinity is above the set point.</td>
</tr>
<tr>
<td>3 Flashes</td>
<td>The Salinity Control Method = set to drain every 65 minutes.</td>
</tr>
<tr>
<td>4 Flashes</td>
<td>Incorrect Salinity Control Method selected.</td>
</tr>
<tr>
<td>Continuously on</td>
<td>The probes are open circuit, or measured salinity is less than 20µs/cm (the water is very pure; i.e. has very little salt content).</td>
</tr>
</tbody>
</table>
BREEZAIR EXQ / EZQ / EXS EVAPORATIVE COOLER cont

FAN MOTOR TESTING

Remove 3 Pin motor plug. Using a multimeter, measure the resistance of the 3 separate windings in the configuration below.

Note! All 3 separate windings must measure approximately equal values. Significantly differing values indicate a faulty motor.

FAN MOTOR REMOVAL

Important! Always isolate the water and electricity supply to the cooler before performing motor maintenance work on coolers.

1. Remove pad frames.
2. Unplug motor cables (2) from Terminal Box.
3. Remove Dust Cap (rotate anti-clockwise).
4. Remove screw from Shaft end.
5. Cut cable ties & undo twist tie holding cables to scroll.
6. Remove outer screws from Scroll Brackets.
7. Remove fan assembly from Scroll.
8. Remove screw holding motor to fan.
10. Cut cable tie holding cables to shaft
11. Remove screw holding shaft to motor.
**BREEZAIR EXQ / EZQ / EXS EVAPORATIVE COOLER cont**

**EXQ130 & EXS140 COOLERS ONLY**

**Fan Motor Removal**

**Important!** Always isolate the water and electricity supply to the cooler before performing motor maintenance work on coolers.

The Fan/Motor assembly in small cabinet EXQ/EZQ/EXS coolers is removed via the air outlet located at the bottom of the scroll assembly. This requires the scroll assembly to be disconnected from the tank. Remove the cooler lid to provide the best access. For safety reasons, we recommend to remove the cooler’s scroll assembly from the roof before performing the motor change-over. This would require 2 persons.

1. Remove pad frames.

2. Unplug motor cables (2) from Terminal Box

3. Remove Dust Cap (rotate anti-clockwise

4. Remove screw from Shaft end).

5. Cut cable ties & undo twist tie holding cables to scroll.
BREEZAIR EXQ / EZQ / EXS
EVAPORATIVE COOLER cont

6. Remove 8 screws securing the coolers’ lid to the corner posts and scroll.

7. Pull back seals and remove screws from shaft adaptor and motor hubs.

8. Remove scroll to tank joining screws (8 places).

9. Lift & rotate scroll assay to expose the weatherseal flap.

10. Disengage weatherseal arm clips & remove arm. Disengage the opposite side taking care not to crack or break the clips. Remove the weatherseal.

11. Remove screws holding cutoff plate (2 places). Remove the cutoff plate.

12. From the non-motor lead side of the scroll, remove the shaft adaptor and pull the motor shaft from the fan.

13. Remove the motor fan assembly from the air outlet opening.
BREEZAIR EXQ / EZQ / EXS
EVAPORATIVE COOLER cont

14. Remove 4 screws holding the fan to the motor body (both sides).

Fan Motor Re-Assembly
The word “Harness” is moulded onto the flange of one fan half. Make sure this half is used on the cable harness side of the replacement motor.

- Replace motor & fan assembly in scroll.
- Refit motor shaft to scroll and motor/fan assy. Ensure Shaft Adaptor and Seals are refitted during this operation. Care must be taken not to damage the wiring loom.

- The remainder of the re-assembly is a reversal of the dis-assembly procedure.
- **Note!** Ensure all cut cable ties are replaced.
- Ensure the fan can rotate freely and is clear of obstructions before re-assembly.
- Cooler must be fully function checked on completion.
- Make sure all cables are tied back into their original positions, well away from any water sources to prevent moisture ingress.

REFITTING THE PAD FRAMES
Refit the pad frames by locating the bottom edge in the tank groove, then push the top in under the lid.
Refit the corner clips after replacing the pad frame(s).

**Note!** EXQ210 coolers have 2 x 90mm thick pads fitted to the front and rear, and 2 x 100mm thick pads fitted to the sides (facing the fan scroll inlets). The pads must be refitted to their original positions; otherwise a drop in performance, water carryover and ceiling damage or damage to internal cooler components may occur. The 100mm thick pads can be identified by a rebate at the bottom of the Chillcel.

EXTRA NOTES FOR EZQ MODEL ONLY
Before fitting the 4 main pad frames, make sure the 3 lower pads are refitted into their respective positions in the base of the cooler.

To refit the pad frame, locate the bottom edge in the tank groove, then push the top in under the lid. The frame should clip into the cooler with a firm push of the hand at the two points where the screwdriver was used. Remember to insert the corner clips after replacing the pad frame(s).
### Fan Motor (Variable)

<table>
<thead>
<tr>
<th>Component</th>
<th>LCQ</th>
<th>LCS</th>
<th>Part No.</th>
<th>Watts</th>
<th>Total Max Amps</th>
<th>Cap</th>
<th>Motor Resistance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>250</td>
<td>280</td>
<td>095684</td>
<td>340w</td>
<td>2.9</td>
<td>25uf</td>
<td></td>
</tr>
<tr>
<td></td>
<td>350</td>
<td>380</td>
<td>095691</td>
<td>430w</td>
<td>3.6</td>
<td>25uf</td>
<td></td>
</tr>
<tr>
<td></td>
<td>450</td>
<td>480</td>
<td>095707</td>
<td>600w</td>
<td>4.6</td>
<td>25uf</td>
<td></td>
</tr>
<tr>
<td></td>
<td>550</td>
<td>580</td>
<td>095714</td>
<td>950w</td>
<td>5.6</td>
<td>30uf</td>
<td></td>
</tr>
</tbody>
</table>

### Other Components

<table>
<thead>
<tr>
<th>Component</th>
<th>LCQ / LCS</th>
<th>Part No.</th>
<th>Voltage</th>
<th>Ohms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tornado</td>
<td>✔️</td>
<td>095806</td>
<td>240vac</td>
<td>122 + -6</td>
</tr>
<tr>
<td>Drain valve</td>
<td>✔️</td>
<td>105345</td>
<td>24vac</td>
<td></td>
</tr>
<tr>
<td>Solenoid valve</td>
<td>✔️</td>
<td>834320</td>
<td>24vac</td>
<td>40 + -10%</td>
</tr>
<tr>
<td>Cooler Electronics Box</td>
<td>✔️</td>
<td>114910</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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BRAEMAR LCQ / LCS EVAPORATIVE COOLER cont

COOLER ELECTRONICS

The Red LED (right-hand LED) is used to indicate the condition of water salinity and configuration of the water management system. Tri-Colour LED (left-hand LED) is used as an operational and fault indicator.

Note! Tri-colour LED double flashing Green (every 2 seconds) = Normal Operation

CONFIGURATION OF DRAIN VALVE WITH SHORTING PLUG

Note! This procedure is not backward compatible for 2001 CPMD’s and is only an aid to installation.

A shorting plug should be fitted to the cooler electronics box of coolers that do not have a drain valve installed (i.e. those with bleed tray).

The shorting plug must be inserted before power is applied to the cooler electronics. At power on the electronics recognises the water probes are not connected and automatically operates as “NO DRAIN CONTROL”.

Note! This will override what has been set in the MagIQtouch Controller SETTINGS menu.

If the shorting plug is removed whilst power is on, the change will not be noticed by the cooler electronics until the next power on, when

If an existing LCQ/LCS cooler requires the drain and solenoid valve to be removed, and you are not certain it will accept the shorting plug, the water management parameter can be set manually using the MagIQtouch Controller.

Go to the SETTINGS menu, and under the COOLER heading is the option “Water Manager”.

LEGEND

A - Controller Cable  E - Drain Valve
B - Speed Adjustment  F - Pump
C - Inlet Solenoid  G - Operation & Fault code LED’s
D - Water Sensor

Ensure that connection orientation is correct.

Note! Controller cable (A) used in MagIQtouch compatible products is different to previous models and is NOT interchangeable.

CAUTION! It is possible to insert plugs upside-down or to misalign the connections. Care must be taken to ensure correct orientation and alignment.

LEGEND

A - Circuit Breaker  C - Motor (240Vac)
B - Mains Connector  (Seelectric Motor Only)
BRAEMAR LCQ / LCS EVAPORATIVE COOLER cont

DIAGNOSTICS FAULT CODES

Fault codes can be viewed on the controller or on the cooler electronics box (tri-colour LED flashes). The left tri-colour LED indicator will double flash GREEN continuously to indicate normal operation. It will flash RED to indicate a fault. The number of flashes indicates the error code.

<table>
<thead>
<tr>
<th>Colour</th>
<th>Flash</th>
<th>Indicates</th>
</tr>
</thead>
<tbody>
<tr>
<td>No glow</td>
<td></td>
<td>No power or a failure has occurred. (Check power supply to cooler including isolating switch, circuit breaker and plug and socket connection in the roof space.)</td>
</tr>
<tr>
<td>Green</td>
<td>2 Flashes</td>
<td>Running normally.</td>
</tr>
<tr>
<td>Red</td>
<td>1 Flash</td>
<td>Fault Code #1 Communication Failure</td>
</tr>
<tr>
<td></td>
<td>2 Flashes</td>
<td>Fault Code #2 Failure to detect water at probes within 20 minutes.</td>
</tr>
<tr>
<td></td>
<td>4 Flashes</td>
<td>Fault Code #4 Failure to clear probes during drain within 4 minutes.</td>
</tr>
<tr>
<td></td>
<td>7 Flashes</td>
<td>Fault Code #7 Incorrect Supply Frequency (Hz)</td>
</tr>
</tbody>
</table>

FAULT CODE 01
(1 Red Flash)
Communication Failure

- Ensure the wall control cable is fitted correctly.
- Check that wall control cable is in good condition.

FAULT CODE 02
(2 Red Flashes)
Failure to detect water at probes within 20 minutes

- Ensure water pressure is sufficient to fill and maintain the tank to specified level within 20 minutes.
- In areas of hard or polluted water, blockage of the strainer/filter in the water inlet solenoid valve may restrict water flow.
- Water level set too low. For LCQ/LCS coolers the water level should be set to 5mm below the float valve base.
- Ensure probe plug is properly connected.
- Plug connections at electronic module upside down or misaligned.
- Water too pure for the probes to sense water is present.
- Pressure build up in pipes can lock up the solenoid valve when a non-return isolation valve is used in the water supply line. It is recommended to use a ball valve, i.e. NOT a non-return type of shut off valve.
- Check drain valve is closing and not cycling due to debris being caught under drain valve washer.

FAULT CODE 04
(4 Red Flashes)
Failure to clear probes during drain within 4 minutes

- Check the drain valve opens and water drains from the tank, with nothing obstructing the outflow of water. (e.g. drain hose kinked)
BRAEMAR LCQ / LCS EVAPORATIVE COOLER cont

- Excessive drain hose lengths or bends cause air locking and won’t allow water to drain.
- Build up of foreign material in drain hose not allowing water to drain away correctly.
- Screws used to fix drain hoses to drain adaptors restricting water from draining from tank.
- Drain valve has failed to open when drain was initiated.
- Inlet water solenoid not shutting off water when the drain is open.
- Water will only flow one way through the inlet water solenoid valve. Therefore, it must be installed correctly. Directional arrow must be pointing towards the float valve assembly. If not, water will not shut off. (Directional arrow can be found on the bottom of the solenoid valve body).
- Debris interfering with water sensor probes.
- Probes not clipped onto mounting brackets correctly.
- Check cooler is level and water drains quickly.

FAULT CODE 07

(7 Red Flashes)
Incorrect supply frequency (Hz)

This fault will only be seen when the mains power supply frequency deviates from normal frequency by more than 8%. Mains power supply frequency should be 50Hz. If the frequency deviates outside preset limits of 46-54Hz then this fault will be indicated.

- Petrol generators are the most likely cause of this type of fault. This typically will not occur on mains power supplies.

FAULT CODE 08

Power has been interrupted to the cooler electronics momentarily for less than 5 seconds

Note! Not indicated on the controller or cooler electronic box. However, fault will be logged in the fault history Log.

(Caused by short duration power outages).

- Isolator switch on cooler electronic box may have been turned OFF and back ON in less than five (5) seconds. Be sure to wait at least 6 seconds between power OFF and power ON.
- Check that mains power connection to the cooler electronics is secure.
- Check integrity of mains power supply. I.e. Active, Neutral and Earth terminations are in good condition and not loose.

If power interruption is LESS THAN 5 seconds: the cooler will turn OFF. With a remote control the cooler will restart operation the next time the remote transmits a signal (approximately 2 to 10 minutes between transmissions). Wall Controls will restart immediately power resumes.

If the power interruption is GREATER THAN 5 seconds: the cooler will restart operation the next time the Remote transmits a signal (approximately 2 to 10 minutes between transmissions). Wall controls will require manual restarting.
PREWET FUNCTION

FOR COOLERS WITH WATER MANAGEMENT SYSTEM FITTED

The following is a description of the Prewet function that occurs when COOL is selected for the first time by the MagIQtouch Controller. This ensures the pads are wet before the fan (blower) starts.

1. Drain Valve Closes.
2. 9 seconds after drain valve closes the inlet solenoid valve energises allowing water to enter tank.
3. The cooler electronics will now wait up to 8 minutes for water to reach the probes. If the water level has not reached the probes in that time then a fault code (02) is initiated (tri-coloured LED will flash red twice) and the cooler will shut-down.
4. 30 seconds after water reaches the probes the pump starts.
5. From the time the pump starts, the Prewet function continues for 2 minutes. At the end of this time, the fan (blower) starts at the speed indicated by the fan speed indicator on the wall control or remote control display.
6. If COOL is turned OFF at controller, the cooler will not commence Prewet function again unless the pump has run for less than 2 minutes in the previous 10 minutes of fan (blower) operation.

The Prewet function is set to occur by default. However it can be turned off in the SETTINGS menu.
**WATER COMPONENT TESTING**

To test water components using the touch controller, use the Service Operating Screen which can be accessed from the SERVICE menu in SETTINGS.

After entering the Service pin code (7378), select the evaporative cooler from the displayed list.

Scroll down and select the “Service Operating Screen” feature.

This will open a screen which allows direct control of the fan and all water components for testing and troubleshooting purposes.

**WATER SALINITY PROBE TESTING**

The pump, solenoid and drain valve can be operated tested from the Service Operating Screen. Each component has a corresponding ON/OFF slide button located under the “Water Management” heading.

<table>
<thead>
<tr>
<th>Component</th>
<th>Status</th>
<th>Resulting Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pump</td>
<td>ON</td>
<td>Tornado pump active, water pumping over pads</td>
</tr>
<tr>
<td></td>
<td>OFF</td>
<td>Pump off</td>
</tr>
<tr>
<td>Solenoid</td>
<td>ON</td>
<td>Solenoid open (water filing tank)</td>
</tr>
<tr>
<td></td>
<td>OFF</td>
<td>Solenoid closed</td>
</tr>
<tr>
<td>Drain</td>
<td>ON</td>
<td>Drain closed (energised)</td>
</tr>
<tr>
<td></td>
<td>OFF</td>
<td>Drain open</td>
</tr>
</tbody>
</table>

*Note! It is recommended that each component be operated one at a time to avoid problems. Care should also be taken to observe the water level in the tank to avoid overflow or running dry.

**WATER SALINITY PROBE TESTING**

- Clean the metal probes
- Set the multimeter to ohms mode
- Pin 1 - Blue wire = approx. 0 (zero) ohms
- Pin 2 - Black wire = approx. 0 (zero) ohms
- Pin 3 - Brown wire = approx 0 (zero) ohms (3 prong probes only)

# A reading of 5 ohms or greater indicates faulty probes.

* The brown wire (Pin 3) is not connected on 2 prong probes.
SETTING THE WATER LEVEL

To set the float level, ensure the drain is energised/closed by setting it to “ON”.

Set solenoid to “ON” (open) and allow tank (reservoir) to fill with water.

The float valve will eventually stop the water from entering the cooler. Wait for this to happen and check the water level.

If the level is too high rotate the float clockwise. Drain some water from the tank and allow it to refill to the new set point. If too low rotate the float in an anti-clockwise direction.

It is advisable to check the water level again after the float valve seal has “bedded in”.

Once the water level is correct, isolate the control box and reconnect the pump plug.
SEASONAL MAINTENANCE PROCEDURES AND CHECKS

Regular servicing of an evaporative cooler is essential in maintaining proper performance and reliability. There are numbers of areas that need to be routinely checked. It is important to note that all evaporative coolers have some consumable items such as filter pads, fan belts, water pumps and bearings etc., which deteriorate under normal operating conditions, and therefore require periodic replacement.

The frequency of service is largely dependent on the conditions under which the cooler is operated. External factors, such as air and water quality, can affect the serviceable life of the cooler and its components. Similarly, the amount and type of use can also have a significant impact. The guidelines listed below are intended to provide help in formulating a proper service regime. Local, and in some cases individual factors should be taken into account when deciding on the frequency of visits.

For access to Technical/Installation/Service Information register online at:
www.seeleyinternational.com/service

DEFINITIONS

Clean - To wash and/or remove all dirt, grit or debris.
Replace - To remove the existing item and replace with a specified genuine replacement part.
Check/Inspect - To visually inspect the item for correct operation, fitment and functionality.
Adjust - To test and make adjustment or alterations as required to meet set appliance specifications.

EXTERNAL INSPECTIONS

- Inspect external components, including pad frames, tank and lid assemblies for any damage or deterioration.
- Inspect dropper duct, flashing, support frames and roof cladding etc for any signs of corrosion.
- Inspect and test water supply stopcock for correct operation and leakage.

- Inspect and test electrical isolation switches (GPO’s, Circuit Breakers and fuses in meter box) for correct condition and operation.

PAD FRAME ASSEMBLIES

- Remove all pad frame assemblies.
- Inspect pad media
- Inspect pad-retaining components (pins, clips, wire mesh etc) for damage or corrosion and ensure they are correctly and securely fitted.

Chilcel is generally stable and should not require repositioning. These pads may also be gently hosed to remove loose material, however the Chilcel is fragile and care must be taken when handling or hosing to prevent damage. Visually inspect the flutes of the Chilcel for signs of deterioration or restriction. Replace pads as necessary.

WATER DISTRIBUTION SYSTEM

- Inspect and clean water pump strainer basket.
- Inspect all water spreaders for correct installation and security.
- Inspect all water distribution tubes and joints for security and leaks.
- Inspect and test water pump operation.
- Inspect and test float valve operation – Check and adjust water level as required
- Inspect and test drain operation
- Ensure there are no water leaks either internal or external from the cooler.
- Remove and clean all water spreaders.

FAN MOTOR

- Inspect fan motor and mounts for damage or corrosion.
- Inspect fan blades for damage.
- Test fan shaft and motor bearings for correct smooth operation.
SEASONAL MAINTENANCE PROCEDURES AND CHECKS cont

ELECTRICAL

☐ Inspect electrical connections within main terminal box.
☐ Inspect all electrical cables for damage and security.
☐ Inspect and test electrical isolation switch located on main control box.
☐ Check and record mains voltage.

CLEANING

☐ Drain and flush water reservoir.
☐ Thoroughly clean all internal and external surfaces removing dirt and mineral build-up.
☐ Clean blower wheel, blower wheel/fan and blades
☐ Clean water probe sense points
☐ Remove clean and check solenoid inlet filter

CONTROLS & OPERATION

☐ Inspect and test wall control or remote control in both Manual and Automatic modes.
☐ Test speed control and variation.
☐ Test thermostat operation and control.
☐ Check wall control or remote control display.
☐ Check weatherseal operation.
☐ Check motor “low speed” adjustment: in all variable speed belt drive and axial units LOW SPEED can be calibrated by a potentiometer located in the main control box. Motor low speed should be set approximately 600RPM (1 belt revolution per second) **Note!** This adjustment does not apply to direct drive ICON units

CHECK YOUR LOCAL REGULATIONS:

☐ In some areas and for some commercial installations local regulations have specific requirements for the maintenance of evaporative air conditioning systems.
☐ Generally these involve regular cleaning and maintenance at (3) monthly intervals or more frequently if necessary.
**TECHNICAL BULLETINS**

The following technical bulletins were published on the dates specified in the headings. For legal reasons the wording cannot be changed, however the information contained within these technical bulletin’s also apply to newer models.

See the below table for clarification:

<table>
<thead>
<tr>
<th>Old Model Description</th>
<th>New Model Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breezair EXH</td>
<td>Breezair EXQ or EXS</td>
</tr>
<tr>
<td>Breezair EZH</td>
<td>Breezair EZQ</td>
</tr>
<tr>
<td>Braemar LCB</td>
<td>Braemar LCQ or LCS</td>
</tr>
<tr>
<td>Icon Control Box</td>
<td>EXQ/EZQ/EXS Cooler Electronics</td>
</tr>
</tbody>
</table>

A001/12 SEELEY SERVICE MEMO 42
ICON CONTROL BOX FAN SPEED LED BEHAVIOUR 43
A02/09 CIRCUIT PROTECTION FOR ICON 44
A13/08 ICON ELECTRICAL POWER SUPPLY REQUIREMENTS 45
A16/08 WATER DISTRIBUTION HOSE CONNECTIONS 46
A06/07 FEC WATER SUPPLY REQUIREMENTS 47
Subject: Seeley Service & Spares Web Resource

Region: Australia

Author: Rob Mathews

Date: 8/01/2012

In September of 2011 we launched the Seeley Service Web resource (link below). This site contains a large library of Seeley International Service/Installation/Technical and Spare parts information. To access this information you will need to go:

www.seeleyinternational.com/service/

Brands and information covered on web site:
Breezair - Braemar Heating and Cooling - Haier - Tudor Romeo

• Latest Service Information
• Technical Bulletins
• Parts Lists
• Service Guides
• Installation Manuals
• Instruction Flyers for various Spare parts kits
• Product Specifications

Spare Parts Web Site

Seeley International officially launched it’s the Spare parts web site in January 2013. The web site provides Seeley International’s customers with online access to detailed spare parts information, to aid in identifying and ordering Seeley International spare parts for Braemar, Breezair, Coolair and Convair products.

This web site is available to the General Public / Spare Parts Distributors / Service Agents / Dealers and Installers, and aims to improve customer service, as well as promote the use of genuine spare parts.

The web site includes details about spare parts, spare images, descriptions, compatible models, replacement parts if obsolete, exploded diagrams and the functionality to be able to search by almost any aspect of the spare part required.

It also allows you to easily add spare parts to a “list”, select a spare parts distributor near you and send them an email order with the part information and quantity. The spare parts distributor will then get in touch to discuss pricing, arrange payment and delivery of the order.

The new spare parts web site is accessible on the Seeley International web site under the “GET SUPPORT” menu, and under the “SPARE PARTS” sub menu, or at this web address:

www.seeleyinternational.com/get-support/spare-parts/

Seeley International has a policy of continuous improvement in all areas. This is one of the many product improvements and enhancements that we are making to our large range of cooling and heating products.
**TECHNICAL BULLETIN:**
**ICON CONTROL BOX FAN SPEED LED BEHAVIOUR**

**SEELEY INTERNATIONAL**

Subject: Icon Control Box Fan Speed LED Behaviour  
Region: Australia  
Author: Rob Mathews  
Date: 12/09/2014

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**ICON Control Box Fan Speed LED Behaviour**

To accurately diagnose Icon products, we strongly recommend that Service Technicians use a CPMD compatible Wall controller and a short test lead (Pt number 862873) at the Cooler. This way all the functions of the cooler, as well as the Motor diagnostic LED’s can be observed in relation to the Wall control commands.

**IMPORTANT SAFETY:** When any side panels are removed, always test EVAP coolers with the pump disconnected or in ventilation mode, as wet roof surfaces can create a safety hazard! Also, care must always be taken when working near or around moving parts.

**The ICON fan speed LED behaves as follows:**

1. It glows solid green in normal operation.
2. The Fan Speed LED will extinguish if the motor rotates less than 30% of set speed*, and the motor will stop within approximately 30 seconds at speed 10 (longer at lower speeds), or if the fan remains stationary for 30 seconds after it was supposed to start.

**Fan under speed is usually associated with the following:**

- Shorting between phase windings inside the motor
- Worn bearings causing the motor to start to seize up
3. If motor rotates 20% faster than set speed* this LED will continually flash, and the motor will stop within approximately 30 seconds (sooner at higher speeds).

4. If the speed increases to 30% above the set speed* the LED will continue to flash and the motor will stop immediately

**Fan over-speed is usually associated with restricted (reduced) airflows:**

- Fan installed backwards (motor may have recently been changed)
- Weather damper jammed or not opening fully
- Undersized or squashed ductwork
- Registers (grilles, diffusers) not open
- Large extraction fans causing negative back pressure
- Voltage outside of specifications (less than 207volt or more than 253volt).

*’set speed’ – Is the fan/motor speed as selected by the operator or by the thermostat in the Wall Control. Each motor speed has a specified value of input power assigned to it (factory set). Regardless of installation conditions the input power to the motor is held constant at that specific value. Data from sensors in the motor is converted to RPM in the electronic module. The speed at each of the 10 settings is allowed to vary +/- 20%. As soon as the motor RPM moves outside those limits (for any of the above listed causes) a fault mode is initiated and the LED behaves as stated above.

**Seeley International has a policy of continuous improvement in all areas. This is one of the many product improvements and enhancements that we are making to our large range of cooling and heating products.**
Subject: Circuit Protection Icon EXH210 & EZH215
Region: Australia
Author: Rob Mathews
Date: 27/01/2009

**ELECTRICAL CIRCUIT PROTECTION INSTALLATION REQUIREMENTS**

In order to assist in preventing any unnecessary inconvenience to our Customers, Seeley International would like to comment on the circuit protection allowances that must be adhered to when installing Breezair Icon Coolers.

It is a requirement of Seeley International that all Coolers be wired a dedicated power circuit to the distribution board.

We have received field feedback on various imported brands of circuit breakers. The feedback indicates that high ambient temperature conditions can cause a de rating effect that causes premature tripping at much lower currents than their ratings indicate.

The maximum current draw for the EXH210 and EZH215 is 9.6amps. Therefore, when selecting circuit protection device for the EXH210 and EZH215, provisions must be made to allow for the varying thermal tolerances.

Please be aware that if a Warranty Service call reveals no fault with the Cooler charges will apply, as external Electrical and Plumbing Services are not covered by the manufacturer’s warranty.

We thank you for your support in this matter.

Seeley International has a policy of continuous improvement in all areas. This is one of the many product improvements and enhancements that we are making to our large range of cooling and heating products.
Subject: EXH EZH Icon Electrical Power Supply Requirements
Region: Australia
Author: Rob Mathews
Bulletin Number: A13/08
Date: 09/10/2008

Power Supply Brezair EXH & EZH Icon
The Breezair EXH and EZH ICON has been designed to operate safely and reliably within the Australian Standard for electrical supply of 230 volts +/- 10%; i.e. 253 volts maximum down to 207 volts minimum, on 50 Hz.

In the field, unless mains voltage falls below 207 volts the Breezair ICON coolers will function normally. However, if it falls below 207 volts the Icon automatically slows down the fan as it cleverly avoids internal electronic damage, which can often be the case with some inferior electronics. Depending on voltage behaviour, this decreasing in fan speed can occur without being noticed by the Customer. However, over an extended period of low voltage supply it may eventually shut down the cooler even though the wall control indicates the fan is running. The customer can reset the cooler at the wall control by turning the controller off and the back on, but they may need to try a lower fan speed if low voltage is still being experienced.

Therefore, even if power fluctuations are experienced during the peak of summer, Icon Customers can keep their cooling system going by reducing fan speed (i.e. 7 or 8) at the wall control.

Explanation: The electronic motor module delivers constant power to the motor (not constant volts). Therefore, compensates voltage reductions by increasing current draw to maintain constant power (Volts x Amps = Watts (power)). With this in mind, the electronics has a current

Seeley International has a policy of continuous improvement in all areas. This is one of the many product improvements and enhancements that we are making to our large range of cooling and heating products.
IMPORTANT SAFETY: When any side panels are removed, always test EVAP coolers with the pump disconnected or in ventilation mode, as wet surfaces can create a safety hazard! Also, care must always be taken when working near or around moving parts.

INSTALLATION REMINDER
In order to avoid unnecessary inconvenience to our Customers, we ask that during commissioning of a Breezair Icon Series Evaporative cooler, the following checks are carried out:

• All water spreaders are correctly in place and secured to lid of cooler with screw.
• Check water distribution hoses are firmly fitted to spigots on the spreaders.
• Check water distribution hoses are firmly fitted to 4 way distributor from the pump.
• Ensure pads are correctly fitted into frames and washers that hold pads on pad pins are firm.
• Check level of Cooler in all directions, taking care to ensure that it does not lean backwards. If so, the unit must be leveled.
• Check all Inlet water supply connections have no leaks.
• Always fill the unit with water and initiate a drain to ensure all drain fittings and pipes have no leaks. The tank can be manually drained by pressing the remote control drain button (Horizon), or with a wall control (Harmony) in the “OFF” state, by pressing both the up and down buttons simultaneously until the letters “dr” appear on the screen.
• Check the water will fluently drain from the tank without air locking or obstructions. Also, check there are no leaks from drain hose joints.
• Drain water must not discharge onto the roof surface.
• Dropper and all roof penetrations are correctly flashed and sealed.
• As a final check, with all side panels in place and the unit running for a short period in cooling mode, ensure all 4 pads have even water saturation and there are no visible water leaks.
• The owner is instructed on how to isolate the water to the system in case of an emergency.

We thank you in advance for your co-operation in this matter.
In order to avoid unnecessary inconvenience to our Consumers, we would like to reinforce Seeley Internationals Water supply requirements outlined in our FEAC Coolers (Breezair, Braemar, Convair & Coolair) Installation Manuals.

**WATER REQUIREMENTS**

Installation of the Cooler water supply must conform to local plumbing rules, regulations and standards.

The following points and specifications for water supply must be adhered to:

- **Water Connection:** ½” inch BSP
- **Water Supply:** 800Kpa (115 psi) MAXIMUM

**Important!** If the water pressure exceeds this maximum specification then a pressure reducing valve is required and must be supplied and fitted by the installer.

- Install a manual shut off valve in the water supply line adjacent to the Cooler subject to local plumbing regulations. It is **recommended** to use a **¼ turn ball type shut off valve.** This allows the water supply to be isolated whenever work needs to be done on the Cooler. **It is recommended to use a stopcock**, i.e. NOT a non-return type of shut off valve.
- Flush the water pipe to remove any swarf (debris) before final fitting.

- In areas subject to freezing, the water line needs a drain down facility. This is when water can be drained from the Coolers water supply pipes during the winter periods to eliminate the risk of bursting pipes caused by the expansion of frozen water.

**Important!** Consequential damages for installations that do not comply with these requirements will not be accepted by Seeley International.
### MAGIQTOUCH SYSTEM TROUBLESHOOTING GUIDE

<table>
<thead>
<tr>
<th>Issue</th>
<th>Possible Cause</th>
<th>What to Check</th>
<th>What to Do</th>
</tr>
</thead>
<tbody>
<tr>
<td>At the beginning of a new installation, the MagIQtouch Controller is not showing the Power Up screen.</td>
<td>MagIQtouch Controller has already been used to control another system.</td>
<td>First screen displayed should be the Power Up screen with following options: “All New System” or “Existing system with new MagIQtouch Controller”</td>
<td>Press the Reset located at the rear of the Controller. Select “MagIQtouch Controller Only”. Start Installation.</td>
</tr>
<tr>
<td>An appliance is not detected during installation.</td>
<td>Incorrect wiring.</td>
<td>Check: 1. Cable connections are good 2. Link Module Dipswitches set correctly 3. Cable lengths are as per recommendations</td>
<td>Modify wiring if required. Make sure all the appliances are connected and powered up.</td>
</tr>
<tr>
<td>The appliance/control board was already installed in a previous system.</td>
<td></td>
<td>Reset Whole System (back Reset button). Power OFF/ON whole System. Start Installation.</td>
<td></td>
</tr>
<tr>
<td>The Master Air Sensor has not been detected.</td>
<td>Incorrect wiring.</td>
<td>Check: 1. Cable connections are good 2. Link Module Dipswitches set correctly 3. Cable lengths are as per recommendations</td>
<td>Modify wiring if required. Make sure all the appliances are connected and powered up.</td>
</tr>
<tr>
<td>Wrong dipswitch setting on the Link Module</td>
<td>If Air Sensor plugged into Link Module connector next to dipswitch, then dipswitch should be set to ON</td>
<td>Ensure dipswitch is set to ON.</td>
<td></td>
</tr>
<tr>
<td>The Air Sensor was already installed in a previous system.</td>
<td></td>
<td>Reset Whole System by (back Reset button). Power OFF/ON whole System. Start Installation.</td>
<td></td>
</tr>
<tr>
<td>The MagIQtouch Controller displays: “More than one unconfigured appliance connected.”</td>
<td>Two or more unconfigured appliances of the same type have been connected to the system at the same time.</td>
<td>Identify the recently connected appliances.</td>
<td>Disconnect all but one of these recently connected appliances. Select “Retry”.</td>
</tr>
</tbody>
</table>
## MagIQTouch System
### Troubleshooting Guide cont

<table>
<thead>
<tr>
<th>Issue</th>
<th>Possible Cause</th>
<th>What to Check</th>
<th>What to Do</th>
</tr>
</thead>
<tbody>
<tr>
<td>The MagIQTouch Controller displays a black screen. Unplugging/Replugging the comm’s cable does not help.</td>
<td>MagIQTouch Controller is stuck in a mode where its capacitor prevents a proper reset. It can happen if the comm’s cable is unplugged from the Controller while it was in its early initialization phase.</td>
<td>When the comm’s cable is connected to the Controller, the screen flashes quickly and then stays on a black screen.</td>
<td>Disconnect Controller and wait for 10 minutes before reconnection to discharge the capacitor.</td>
</tr>
<tr>
<td>The MagIQTouch Controller display is switching On/Off every 0.5 second (sometimes faster).</td>
<td>The power provided to the MagIQTouch Controller is too low. Cable length between the Controller and the first power source (Cooler, Heater, Zone Control Board) too long.</td>
<td>Check cable lengths: - If direct connection between Controller and appliance, cable length should not be above 40m. - In any other cases, cable length between Controller and the first power source should not be above 25m.</td>
<td>Rectify by using cable lengths specified in System Diagrams provided in the Installation manuals.</td>
</tr>
<tr>
<td>The MagIQTouch Controller displays the temperature sensed by the Controller internal sensor instead of the temperature sensed by the Master Air Sensor.</td>
<td>Wrong option is selected in the “Air Sensor Selection” option in the General Settings menu. The Controller will also automatically revert to the Internal Air Sensor if the Master Air Sensor is faulty.</td>
<td>“Master Air Sensor” should be selected in the “Air Sensor Selection” option.</td>
<td>Modify selection in “Air Sensor Selection” option.</td>
</tr>
<tr>
<td></td>
<td>The Link Module dipswitch is incorrectly set.</td>
<td>The dipswitch adds a diode to the power line. If incorrectly set, it can increase the voltage drop on the line.</td>
<td>Set dipswitch according to table printed on the Link Module electronics board.</td>
</tr>
<tr>
<td></td>
<td>The Link Module dipswitch is incorrectly set.</td>
<td>The dipswitch adds a diode to the power line. If incorrectly set it will block power to the Air Sensor.</td>
<td>Set dipswitch according to table printed on the Link Module electronics board.</td>
</tr>
</tbody>
</table>
# FREQUENTLY ASKED QUESTIONS

## MAGIQTOUCH CONTROLLER

<table>
<thead>
<tr>
<th>Topic</th>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compatibility</td>
<td>What is the difference between the old EXH/EZH Breezair Coolers and the new EXQ/EZQ models?</td>
<td>EXQ/EZQ Breezair coolers use a new, updated electronics box with a thicker, 6way communication cable.</td>
</tr>
<tr>
<td></td>
<td>Is the MagIQtouch Controller backwards compatible?</td>
<td>The MagIQtouch Controller cannot communicate with the old EXH/EZH electronics. However if the electronics box is upgraded and the communication cable is replaced with the new, 6way cable then yes, the MagIQtouch Controller could be used in an older installation.</td>
</tr>
<tr>
<td>Specifications</td>
<td>Why has the maximum recommended cable length been reduced to 25m?</td>
<td>The MagIQtouch Controller draws more power than the old manual controllers. As a result, it is recommended that the Controller be within 25m of the first power source (i.e. the first cooler in the system). For simple, single component installations a cable length of 30m or 40m may be possible. However it is incumbent upon the installer to test this set-up for each particular installation.</td>
</tr>
<tr>
<td></td>
<td>Can the Coolers in a Multi Cooler installation be operated independently?</td>
<td>No. Multiple coolers are operated by the MagIQtouch Controller in parallel. However individual cooler fault information can be extracted.</td>
</tr>
</tbody>
</table>
| Controller Technology | What if a customer is concerned about using touch screen technology and wants just an ON/OFF style controller. | The MagIQtouch Controller has a “simple” display which contains only basic operation control. Advanced features are hidden until the lower taskbar is expanded by the user. This taskbar can be locked by an installer (or advanced user) such that the customer will never accidentally enter into advanced screens. (Refer to SIMPLE LOCK in the SETTINGS menu) Simple display allows the following operation:

- ON / OFF
- Select between COOL or FAN ONLY
- Set temperature (when in COOL)
- Set fan speed (when in FAN ONLY) |
| Controller Modes    | What happened to the old "Auto" mode?                                   | "Auto" mode has been replaced by MANUAL Temperature Control mode in the new MagIQtouch Controller. In this mode the cooler fan speed will change in order to try to maintain the temperature specified by the user. |
|                     | What happened to the old "Manual" mode?                                 | The old "Manual" mode has been replaced by MANUAL Fan Speed Control mode in the new MagIQtouch Controller. In this mode the cooler will operate at a constant fan speed specified by the user. |
| Controller Software | Is it possible to update the software on a customer's existing Controller? | No. If a customer requires a software update they must purchase a new Controller.                                                                                                                    |
## FREQUENTLY ASKED QUESTIONS

### MAGIQTOUCH CONTROLLER cont

<table>
<thead>
<tr>
<th>Topic</th>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Installation</td>
<td>How is the MagIQtouch Controller mounted?</td>
<td>The MagIQtouch Controller comes with its own mounting bracket which can be fixed to the wall with screws and wall plugs (provided in the kit). Optional: The Controller mounting bracket holes are positioned such that they will line up with a standard power point mounting bracket which can be used in place of wall plugs.</td>
</tr>
<tr>
<td>Commissioning</td>
<td>What is involved in commissioning the MagIQtouch Controller?</td>
<td>On power-up, the MagIQtouch Controller commences an installation wizard which guides the installer through the process. Single coolers without any extra components can be installed quickly with a few button press. The controller will scan the system and display what it finds for confirmation. The installer is guided through multi-component installations with detailed instructions displayed on the screen.</td>
</tr>
</tbody>
</table>
### FREQUENTLY ASKED QUESTIONS

**EVAPORATIVE COOLER**

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>How much windows should be opened?</strong></td>
<td>To provide efficient cooling or ventilation the building must have sufficient exhaust openings to the outside of the building. To assist in airflow, open windows and outside doors that are farthest from the outlet vent in each room that has a vent installed. In the rooms that have vents you should provide an exhaust to the outside of the building approximately 2 times the opening area of the vent.</td>
</tr>
<tr>
<td><strong>Which windows should be opened?</strong></td>
<td>To provide efficient cooling or ventilation the building must have sufficient exhaust openings to the outside of the building. To assist in airflow, open windows and outside doors that are farthest from the outlet vent in each room that has a vent installed. In the rooms that have vents you should provide an exhaust to the outside of the building approximately 2 times the opening area of the vent.</td>
</tr>
<tr>
<td><strong>Can we fully open up the windows?</strong></td>
<td>If you open the windows too much you could reduce the cooling effect because you may also let the hot air in. Also on occasions of hot winds you may need to reduce the openings on the windward side of the house and increase the openings on the lee side to compensate. To provide efficient cooling or ventilation the building must have sufficient exhaust openings to the outside of the building. To assist in airflow, open windows and outside doors that are farthest from the outlet vent in each room that has a vent installed. In the rooms that have vents you should provide an exhaust to the outside of the building approximately 2 times the opening area of the vent.</td>
</tr>
<tr>
<td><strong>Can we vary the amount of cooling in any one area by decreasing other areas?</strong></td>
<td>Yes one of the principles of evaporative cooling allows you to do this, by the air from the outlets always taking the path of least resistance to escape the building. So with this in mind you can close the window in a room and open the internal door so the cool air can exhaust through to another area where an external opening has been provided. We recommend you experiment so you can get the best out of your Cooler. But always remember the air from the outlets must be exhausted somewhere to the outside of the building in order for the unit to work effectively.</td>
</tr>
<tr>
<td><strong>It’s a very humid day/night and the cooler does not perform, as I would normally expect – why?</strong></td>
<td>An evaporative Cooler uses the evaporation of moist air to produce a cooling effect. So when the air is very moist and the ambient humidity of the day is high, evaporation levels will be low. Thus, the cooling effect is reduced due to the Cooler not being able to evaporate sufficiently. In some situations it may prove beneficial to switch the Cooler to ventilation and run the fan on a high speed.</td>
</tr>
<tr>
<td><strong>I am getting hot air from the vents – why?</strong></td>
<td>Check that the wall control is set to the cool mode and that the water supply to the unit has not been turned off. Also in days during summer when the ambient humidity is high, the cooler will not reduce the temperature as much as on drier days.</td>
</tr>
<tr>
<td><strong>I get too much air through some grills and not enough through other grills. How can I change this?</strong></td>
<td>You need to contact the company who installed the system and ask them to balance your airflow within the ductwork. This cannot be achieved by any adjustment on the Cooler.</td>
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</tbody>
</table>
### FREQUENTLY ASKED QUESTIONS

**EVAPORATIVE COOLER**

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
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<tbody>
<tr>
<td>Can I use the cooler to clear my home of cooking smells, smoke and unpleasant odours?</td>
<td>Yes you can! The best method to achieve this is to open the windows up a little more than usual and then start the Cooler in ventilation mode on one of the higher fan speeds. This will exhaust the smells out of the building</td>
</tr>
<tr>
<td>Since installing my evaporative cooler I notice my water bills are slightly higher – why?</td>
<td>An evaporative Cooler uses water that evaporates into the air stream to give the cooling effect, plus some additional water is discharged to drain and replaced with fresh water when the water quality within the Cooler needs improving. Therefore all evaporative Coolers will use water and the amount varies with the size of the Cooler, the amount of cooling selected, and the ambient conditions.</td>
</tr>
</tbody>
</table>
| There is a constant stream of water coming out of the drainpipe from my air-conditioner when it is running – why? | Many of our models are fitted with a constant bleed water management system. If you have this type of system you will see a constant flow while the Coolers pump is operating. The amount will vary depending on the rate set by the installer so if you are in doubt of the setting of your bleed off you will need to contact the installer. Or if you are unaware of the installer call your local service company for a maintenance service. However, the Manufacturers warranty does not cover these types of checks or adjustments. However, if you have the water management or watermiser type fitted, the system is designed to monitor and control the quality of the water in the tank. Thus only draining water when the system really needs to. It does this by bleeding off water down through the drain, which is replaced with fresh water via water inlet float valve as the water level in the unit drops. The frequency at which the water manager bleeds off is determined by the quality of the water in the tank. A probe in the tank measures the water salinity (impurities) and when this rises above a set level the unit will drain some water. The frequency at which the water manager will allow water to bleed off is dependent on:  
1. The water supply quality,  
2. The temperature of the day,  
3. The humidity of the day,  
4. The wind of the day,  
5. The fan speed the unit is being run at and  
6. The size of the unit. |


### FREQUENTLY ASKED QUESTIONS cont

#### EVAPORATIVE COOLER cont

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<tr>
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<tbody>
<tr>
<td><strong>Every now and then my Cooler will drain some water. Is this ok?</strong></td>
<td>Yes this is normal and means your water management or watermiser system is working correctly. If you have the water management or watermiser type fitted the system is designed to monitor and control the quality of the water in the tank. It only drains water when the system really needs to. It does this by bleeding off water down through the drain, which is replaced with fresh water via water inlet float valve as the water level in the unit drops. The frequency at which the water manager bleeds off is determined by the quality of the water in the tank. A probe in the tank measures the water salinity (impurities) and when this rises above a set level the unit will drain some water. The frequency at which the water manager will allow water to bleed off is dependent on: 1) The water supply quality, 2) The temperature of the day, 3) The humidity of the day, 4) The wind of the day, 5) The fan speed the unit is being run at and 6) The size of the unit.</td>
</tr>
<tr>
<td><strong>What should I do if water flows from my drainpipe when the Cooler is turned off?</strong></td>
<td>If your Cooler has the “No seasonal Maintenance” feature then it will drain all the water out of the unit after a preset period of time (refer to your Owners Manual). Also after it rains you may see water dripping from the drainpipe, this is normal.</td>
</tr>
<tr>
<td><strong>What should I do if water continues to drip out of my drainpipe?</strong></td>
<td>Firstly this situation is not usual because after each time the Cooler drains water with its water management system there will be a period of drips until the pipe clears. Also after it rains you may see water dripping from the drainpipe.</td>
</tr>
<tr>
<td><strong>I use a rain water supply to my Cooler so do I need so much water being drained out with the water management system?</strong></td>
<td>With a constant bleed system you can reduce the flow rate and ask that you refer to your Owners Manual for information. With Water management or Water miser systems the controls constantly monitor the water quality so with better water quality less water will be drained away. It needs to be noted that the unit will only drain water when it needs to on this type of system which will be far less than the minimum rate on a constant bleed system.</td>
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</tbody>
</table>
It is the policy of Seeley International to introduce continual product improvement. Accordingly, specifications are subject to change without notice. Please consult with your dealer to confirm the specifications of the model selected.

**Spare Parts Information**

To identify and order Seeley International spare parts for Breezair, Braemar, Coolair and Convair products online go to:

seeleyinternational.com/get-support/spare-parts