

# SC112G

## SERENE Four Glass Sided Chiller

Type: HSC112A/Z089



**serene**<sup>®</sup>

from SKOPE

SC112G  
SERENE Four Glass Sided Chiller  
Type: HSC112A/Z089  
User Manual

MAN10555  
Rev. 5.0 Oct. 2015

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# 1 Installation

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**Safety First** Always observe safety precautions when using any electrical appliance. Read these instructions carefully and retain them for future reference.

- When the appliance is used by or near young children or infirm persons, close supervision is necessary, especially to ensure children do not play with it.
- Do **not** use this appliance for other than its intended use.
- Do **not** cover the grilles or block the entry or exhaust of airflow by placing objects up against the refrigeration system.
- Do **not** probe any opening.
- Only use this appliance with the voltage specified on the cabinet rating label affixed to the appliance.
- Ensure the appliance has adequate ventilation as this is essential to economical, high performance.
- Be careful not to touch moving parts and hot surfaces.
- For your own safety and that of others, ensure that all electrical work is done by authorised personnel.
- If the power supply flexible cord becomes damaged, it must be replaced by an authorised service agent or similarly qualified person in order to avoid a hazard.
- This appliance is not designed to be stable in motion. Use extreme caution when moving or transporting it.
- Ensure all necessary safety precautions are observed during installation or removal of the appliance.
- Do **not** store explosive substances such as aerosol cans with a flammable propellant in this appliance.

## WARNING

**Always** disconnect the chiller from the mains power supply before cleaning or maintenance.

## CAUTION

**Never** overload the power supply, which could damage the chiller and product. See the rating label inside the cabinet for the safe power supply and current draw.

## Positioning the Chiller

**Climate Class** The chiller is designed to operate within a climate class 3 environment (25°C @ 60% RH).

**Location** Select a suitable location for the chiller away from direct sunlight and heat sources e.g. radiators, baseboard heaters, cooking appliances etc.

This chiller is intended to sit on a raised benchtop. Ensure the bench will support the chiller which could weigh up to 120kg when fully loaded.

The front door (electronic controller side) is fitted with a door switch. Position the chiller so that the front door opens to the customer side of the benchtop. This enables the door switch to detect customer door openings.



### IMPORTANT

Ensure the controller faces the customer side of the benchtop

**Ventilation** Ensure adequate ventilation is provided around the chiller. The chiller is designed for free-standing installation only, and should not be recessed or enclosed in a cabinet.

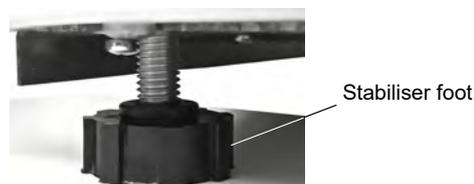
**Installation** When installing the chiller:

#### Guidelines

- Remove all packaging material from the inside and outside of the chiller.
- Ensure the chiller is positioned on a level surface so the doors shut and seal correctly, and to prevent the condensate tray from overflowing.
- Ensure the installation surface is capable of supporting the fully loaded chiller.
- Allow adequate space for door opening. The self-closing doors have pre-tensioned internal torsion bars.
- Do not overload the power supply (see the rating label inside the cabinet for power supply and current draw information).
- Position the front door (electronic controller side) towards the customer.

**Power Cord** The chiller is fitted with a 2 metre flexible power cord with a 3-pin plug, which exits the front of the refrigeration system.

**Levelling** Adjust the four stabiliser feet (see image below) to ensure the chiller sits on a level surface so that both doors shut and seal correctly. Turn the stabiliser foot clockwise to raise and anti-clockwise to lower the cabinet.



## 2 operation

### Automatic Start-Up

After the chiller has been positioned in a suitable place, plug it in and check the following activity.

| Item           | Activity  |
|----------------|---|
| Condenser fan  | The condenser fan starts immediately and can be heard.  |
| Evaporator fan | The evaporator fan will start after a few seconds. The evaporator fan turns off when the front door (electronic controller) is opened and turns on again when the front door is closed. |
| Lighting       | The lights that illuminate the cabinet interior will come on when the chiller is turned on.   |
| Compressor     | The compressor will start after a few minutes. The compressor turns off when the product temperature reaches +2°C and turns on when the product temperature rises to +5°C.              |

### Loading Product

Let the chiller run for 30 minutes before loading it with product the first time. When loading the cabinet shelves with product:

- Allow adequate air space around each item to ensure even cooling and efficient operation of the chiller.
- Remove some product if the shelves are flexing. The maximum loading for each shelf is 25kg.
- Do not let anything overhang the shelves, this might stop the doors from shutting or even break something.

### Door Lock

The chiller is fitted with security door locks. Use the supplied keys to lock and unlock the door as necessary.



### Lighting

The cabinet interior is lit by four corner LED strip lights. The lights will switch on and off depending on chiller usage. The lights can also be manually switched on and off using the light button on the electronic controller faceplate (see page 7).

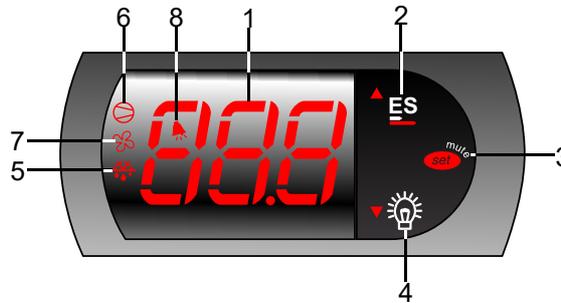
## Electronic Controller

**Introduction** The electronic controller is visible through a cut-out in the front panel. It uses temperature probes and a door switch to collect data and runs the chiller accordingly. The electronic controller can be manually switched between 'Normal' and 'Energy Saving' operating modes. Additionally, the controller can be programmed to automatically switch the chiller between 'Normal' and 'Energy Saving' modes depending on chiller usage (see page 8 for more information).

To ensure efficient operation, the electronic controller forces a defrost cycle when required.

**Door Switch** The front door (electronic controller side) is fitted with a door switch which tells the electronic controller when the door is opened and closed. If the door is opened for an extended period an alarm will sound. Press the alarm button on the electronic controller to mute the alarm (see below).

**Faceplate** Because the electronic controller plays such an important role, it's helpful to know the parts of the faceplate you may use.



| No. | Item | Description  |
|-----|------|--|
| 1   |      | Cabinet temperature or messages. The temperature is what the sensor inside the chiller detects, and not necessarily the product temperature. However, they are very close depending on how the controller is set to sense temperature. |
| 2   |      | <b>Energy Save (up):</b> Press to view the current chiller mode. 'ECO' = Energy Saving and 'nor' = Normal.<br>Press and hold for 3 seconds to switch the chiller between 'Energy Save' and 'Normal' mode.                              |
| 3   |      | <b>Set (mute):</b> Press to mute the alarm. Press and hold to access parameters.   |
| 4   |      | <b>Light (down):</b> Press and hold to switch the cabinet lights on and off.   |
| 5   |      | <b>Defrost:</b> ON when the defrost is activated. Flashes when the activation of the defrost is temporarily delayed due to procedures in progress.   |
| 6   |      | <b>Compressor:</b> ON when the compressor and condenser fan starts. Flashes when activation of the compressor is temporarily delayed.  |
| 7   |      | <b>Fan:</b> ON when the internal cabinet fans are activated. Flashes when activation of the fans is temporarily delayed.   |
| 8   |      | <b>Alarm:</b> ON when alarm is signalled.  |

**Normal and Energy Saving Modes**

The electronic controller can be switched between two operating modes: 'Normal' mode and 'Energy Saving' mode. When in Normal mode, the interior lights are on and the internal temperature is regulated to the setpoint setting (see page 9). When in Energy Saving mode, the interior lights are off and the internal temperature is raised slightly above the setpoint.

To switch the chiller between Normal and Energy Saving modes, press and hold the Energy Save (up) button on the electronic controller faceplate (see page 7).

To turn the lights on or off without switching between Normal and Energy Saving mode, press the Light button on the electronic controller faceplate.

The electronic controller can be programmed to automatically switch the chiller between 'Normal' and 'Energy Saving' modes depending on customer usage. If the front door (electronic controller side) is not opened for a set amount of time, the chiller will automatically enter Energy Saving mode. To set the times for automatic switching between Normal mode and Energy Saving mode, follow the procedure below.

**To change the time between 'Normal' and 'Energy Saving' modes**

1. Press and hold the **set** button for 3 seconds until **PS** is shown on the display, indicating entry into the controller settings menu.



2. Press the **down** button to scroll the menu until **r6** is shown on the display.

The **r6** value is the time (in hours) without the door being opened. When this time is reached (during store closing hours or quiet periods) the electronic controller will switch the chiller from 'Normal' mode to 'Energy Saving' mode. The **r6** value must be  $\geq 1$  hour.



**IMPORTANT**  
Do **not** set r6 to 0.

3. Press the **set** button. The current **r6** value (in hours) is shown on the display.
4. Press the **up** or **down** button to increase or decrease the value (in hourly increments).
5. Press the **set** button to temporarily save the new **r6** value.

6. Press the **down** button to scroll the menu until **r7** is shown on the display.

The **r7** value is the maximum time (in hours) that the chiller will stay in 'Energy Saving' mode. When this time is reached the electronic controller will switch the chiller from 'Energy Saving' mode to 'Normal' mode.



7. Press the **set** button. The current **r7** value (in hours) is shown on the display.
8. Press the **up** or **down** button to increase or decrease the value (in hourly increments).
9. Press the **set** button to temporarily save the new **r7** value.
10. Press and hold the **set** button for 3 seconds to permanently save the new values and exit the controller settings menu.

**Temperature Setpoint** The chiller temperature setpoint is factory set at 2°C for storage of perishable products (all shelves maintain temperatures below 5°C). The cabinet setpoint can be adjusted between 0°C and 4°C.

SKOPE do not recommend that the setpoint be changed unless it is absolutely necessary, and then only by small increments at a time.

**To view and adjust the temperature setpoint**

|  |   |
|--|---|
| 1. Press and hold the <b>set</b> button for 3 seconds until <b>PS</b> is shown on the display, indicating entry into the controller settings menu. |  |
| 2. Press the <b>up</b> or <b>down</b> button to scroll the menu until <b>St</b> is shown on the display.   |  |
| 3. Press the <b>set</b> button. The current setpoint value is shown on the display.  |   |
| 4. Press the <b>up</b> or <b>down</b> button to increase or decrease the setpoint value to the required temperature.                               |   |
| 5. Press the <b>set</b> button to temporarily save the setpoint value.   |   |
| 6. Press and hold the <b>set</b> button for 3 seconds to permanently save the setpoint value and exit the controller settings menu.                |   |

**Messages and Alarms** The following table explains messages and alarms that the electronic controller displays.

**Messages**

| Display   | Description  |
|---|--|
|  | The chiller is in 'Normal' mode and the electronic controller displays the chiller temperature.  |
|  | Message: The chiller is in 'Energy Saving' mode. When in Energy Saving mode the temperature inside the chiller is moderated and the cabinet lights turn off. The lights can be switched on and off by pressing the light button on the controller faceplate, and the chiller can be switched into 'normal' mode by pressing the Energy Saving button on the electronic controller faceplate. |
|  | Alarm: The front door has remained open for over two minutes. An alarm sounds, and the compressor and evaporator fan turn off.   |
|  | The chiller is in Cold Climate Protection mode. The chiller enters cold climate protection mode if the room ambient temperature gets too cold. The lights remain on and cannot be switched off.  |

**Alarms**

|   |   |
|---|---|
|  | Refrigeration system error. An alarm sounds. The controller turns the chiller off to avoid damage. Contact a service agent.   |
|  | Probe fault. An alarm sounds. Contact a service agent.  |
|  |   |
|  |   |
|  | Low voltage alarm. An alarm sounds. The mains voltage is low. An alarm sounds and the controller switches off the compressor. The controller will automatically reset the alarm once the mains voltage raises.  |
|  | High voltage alarm. An alarm sounds. The mains voltage is high. An alarm sounds and the controller switches off the compressor. The controller will automatically reset the alarm once the mains voltage drops. |
|  | Electronic controller fault. Contact a service agent.   |
|  |   |

## 3 Maintenance

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### Cleaning

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Many commercially available cleaning products contain solvents that may damage the plastic components of the chiller and cause them to crack. Do **not** use abrasive or corrosive cleaners or boiling water.

#### CAUTION

Isolate the chiller from the power supply before cleaning.

Wash with warm water and wipe down the chiller with a soft cloth or sponge, then rinse with clean warm water and dry with a soft cloth. The shelves can be lifted up and removed to assist with cleaning. Do **not** flush the cabinet with water.

### Shelves

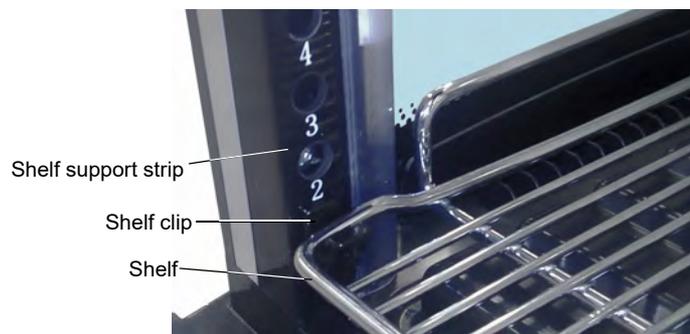
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**Adjusting the Shelves** The chiller is supplied with three wire shelves which may be positioned at different heights to suit various products. Each shelf is held in place with four shelf clips which engage in the shelf support strips.

#### To adjust the cabinet shelves

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1. Remove the shelves from the chiller.
  2. Remove the shelf clips from the four shelf support strips at each corner of the chiller interior.
  3. Establish the desired position for the shelves and securely engage a shelf clip in each of the shelf support strips.
  4. Sit the shelves onto the shelf support clips.
- 



### Lighting

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The chiller is lit by long life LED strip lighting. If any of the lights fail, contact an authorised service agent to service the lights.

## Troubleshooting

For problems with the chiller refer to the following table.

| Problem  | Possible Cause   | Suggestions   |
|--|--|---|
| <ul style="list-style-type: none"> <li>• Chiller not operating.</li> </ul>                 | <ul style="list-style-type: none"> <li>• Loss of power supply.</li> </ul>  | <ul style="list-style-type: none"> <li>• Check mains power supply.</li> </ul>   |
| <ul style="list-style-type: none"> <li>• Interior lights not on.</li> </ul>                | <ul style="list-style-type: none"> <li>• Electronic controller displays ECO indicating the chiller is in 'Energy Saving' mode.</li> <li>• Light switched off.</li> <li>• Electronic controller displays error message indicating a refrigeration system error.</li> <li>• Failed LED light.</li> </ul> | <ul style="list-style-type: none"> <li>• Switch the light on while keeping the chiller in night mode by pressing the light button on the electronic controller faceplate.</li> <li>• Change the chiller into 'Normal' mode by pressing and holding the Energy Saving button on the electronic controller faceplate, or hold the door open for ten seconds.</li> <li>• Switch light on via button on the electronic controller faceplate.</li> <li>• Arrange service call.</li> <li>• Arrange service call.</li> </ul> |
| <ul style="list-style-type: none"> <li>• Product is too warm.</li> </ul>                   | <ul style="list-style-type: none"> <li>• Frequent door opening.</li> <li>• Door not closing properly.</li> </ul>   | <ul style="list-style-type: none"> <li>• Limit door openings.</li> <li>• Check and clean door gasket.</li> </ul>  |
| <ul style="list-style-type: none"> <li>• Moisture build up on door or exterior.</li> </ul> | <ul style="list-style-type: none"> <li>• High humidity.</li> <li>• Frequent door opening.</li> <li>• Door not closing properly.</li> </ul>   | <ul style="list-style-type: none"> <li>• Check ambient operating temperature and reposition chiller if necessary.</li> <li>• Limit door openings.</li> <li>• Check and clean door gasket.</li> </ul>  |
| <ul style="list-style-type: none"> <li>• Chiller door does not shut properly.</li> </ul>   | <ul style="list-style-type: none"> <li>• Chiller is on an uneven surface.</li> <li>• Door is obstructed.</li> </ul>  | <ul style="list-style-type: none"> <li>• Level the chiller.</li> <li>• Check shelves and product.</li> </ul>  |

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