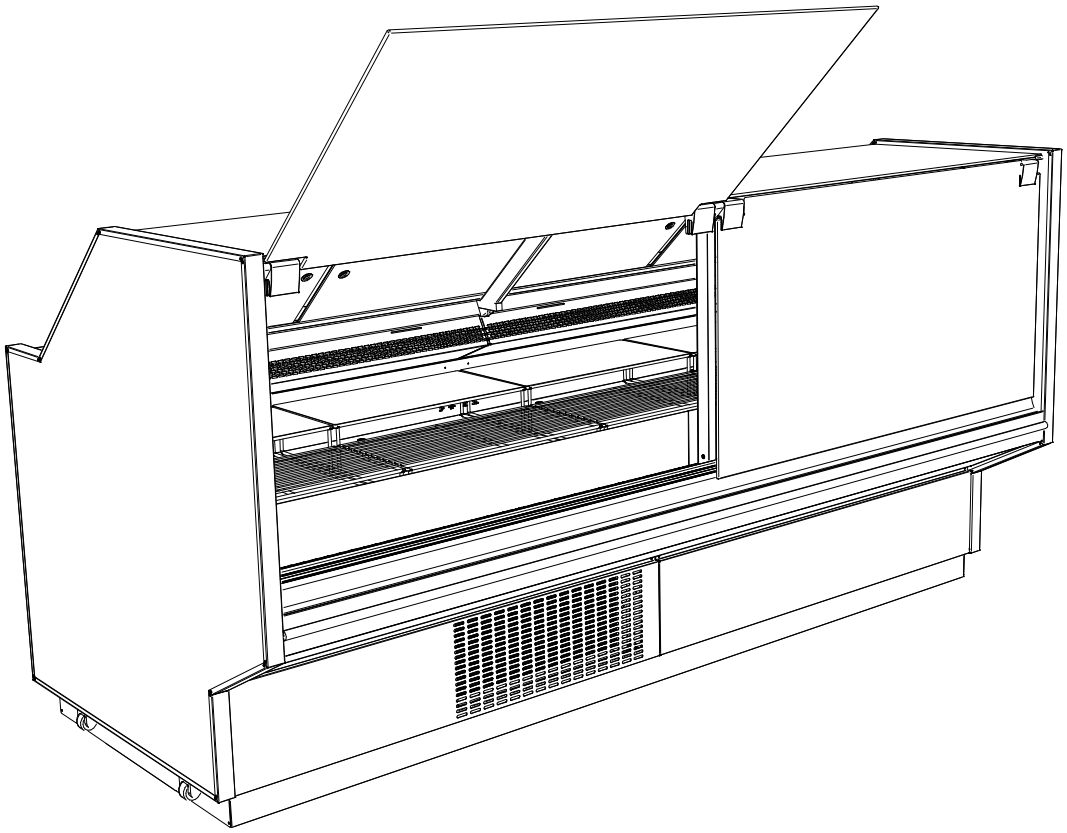

VLL726BLS Self Contained Deli Case

Installation Manual

The following models are covered by this Manual

VLL726BLS-2, VLL726BLS-3, VLL726BLS-4, VLL726BLS-6

Reference: 9H07750001

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July 2019 Rev: A

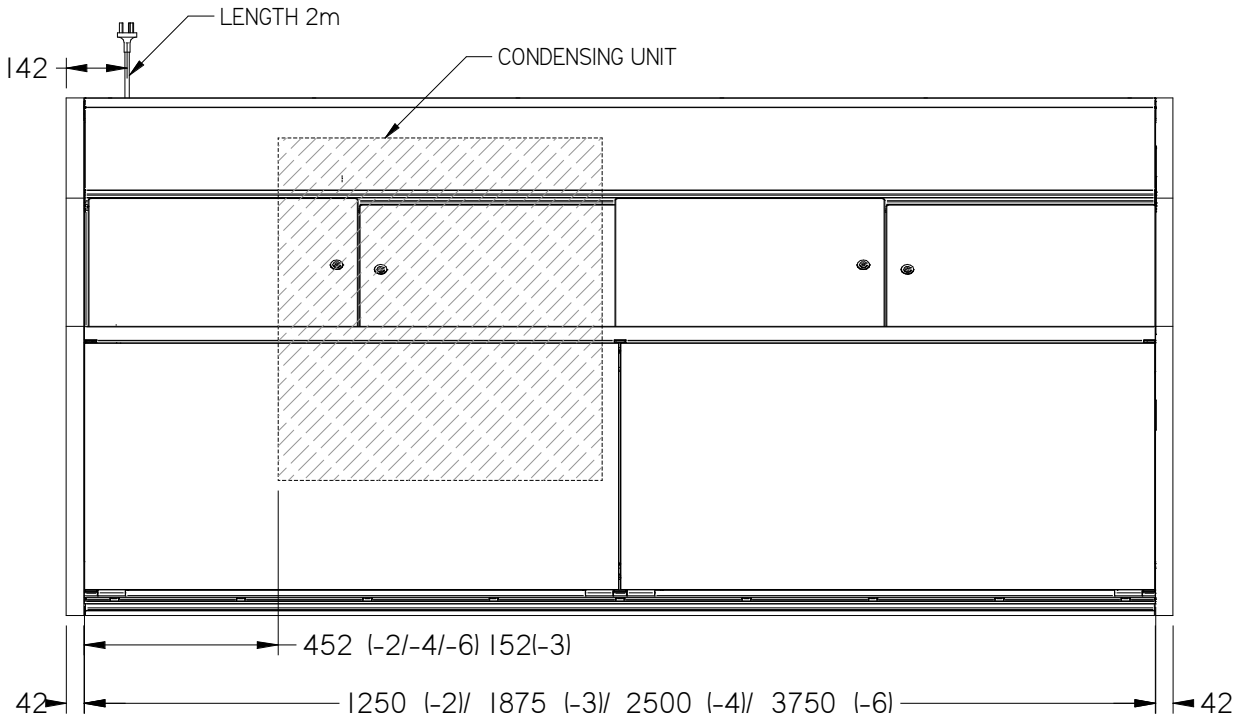
Contents

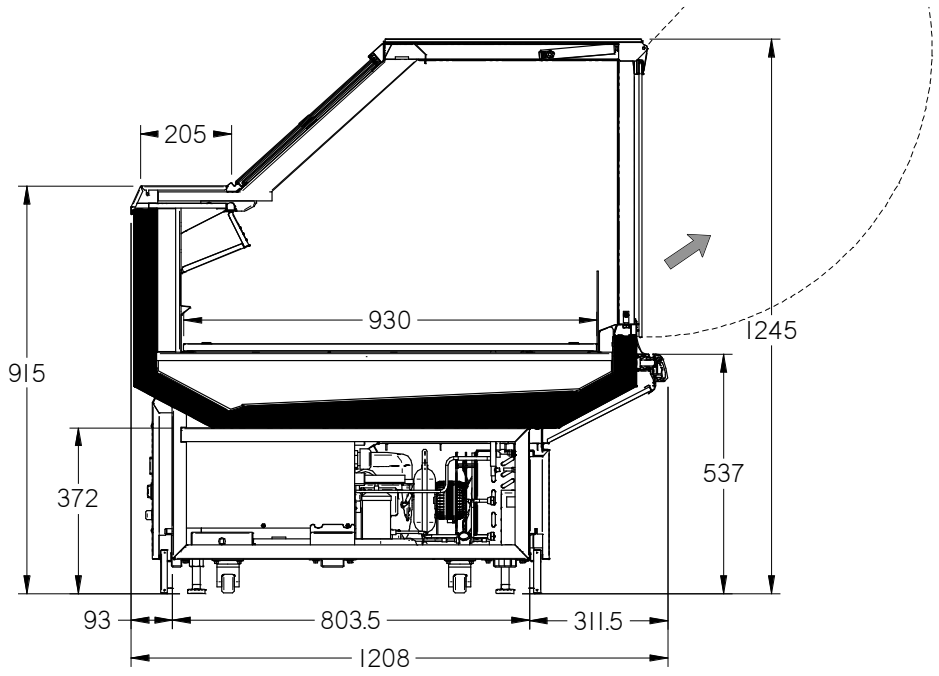
Pre-installation

Warning!

All refrigeration, electrical and plumbing work must be carried out by licensed and appropriately trained mechanics

Case Services Dimensions





VLL726BLS

figure 1 case services

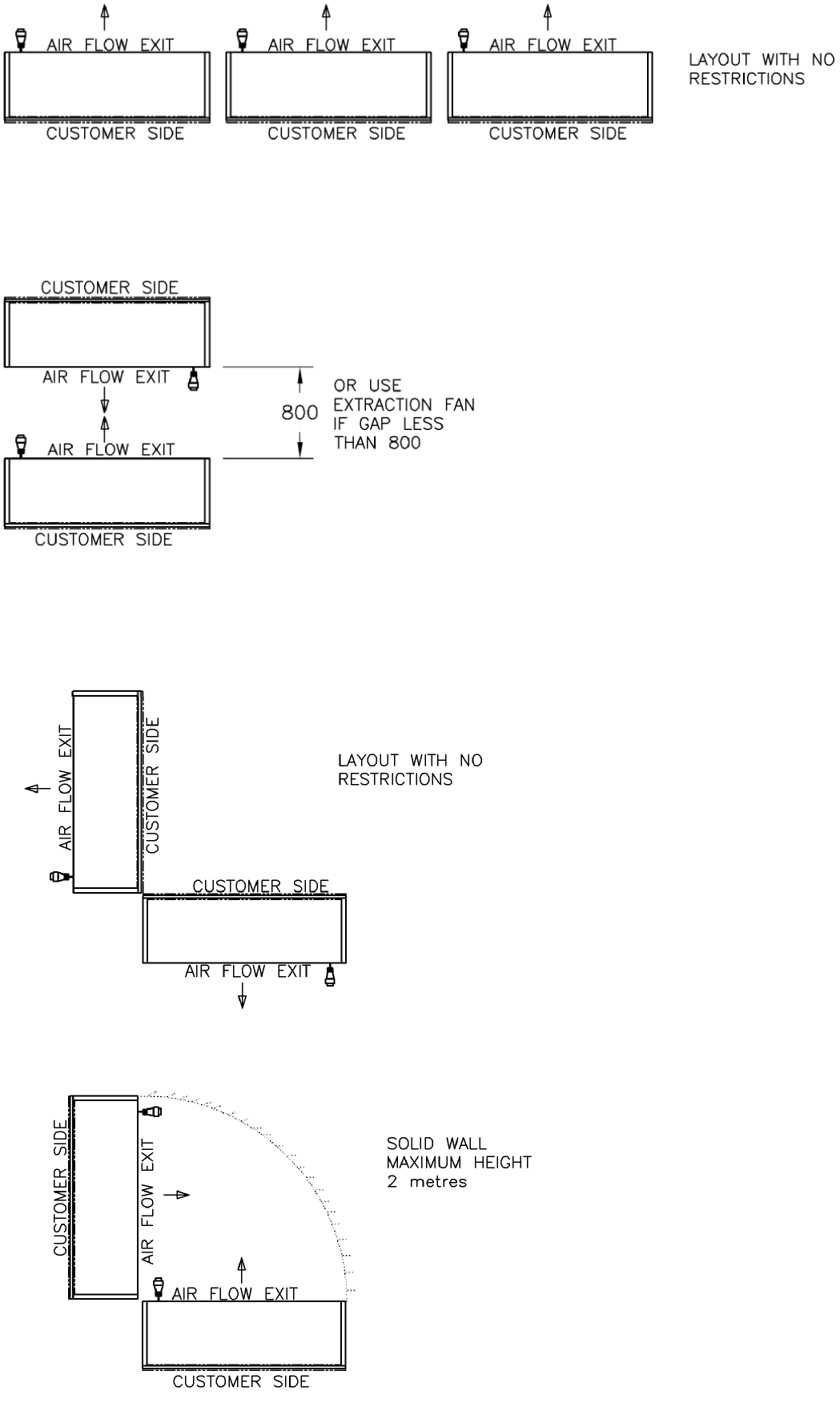


figure 2 acceptable group configurations

NOTE:

Installing into an alcove is not recommended and will void the warranty

This information is a reference only. Always refer to the latest **P**roduct **E**ngineering **D**ata sheet (PED).

Operating Environment

Cases have been factory tested to AS1731, 25°C at 60% RH. For best performance, store temperature should be maintained at or below 24°C at 50% RH, if not an "air ventilation kit" may be required.

To avoid condensation build-up, cases should be positioned to allow air to freely circulate around the underside and rear of the case. Ideally, the floor will be level.

Cases must not be positioned in areas that may be subject to heat or air currents such as ventilation ducts, open doors or windows, direct sunlight, electric fans or ovens, etc.

NOTE
Refer to product MSDS for all hazardous substances used during installation in relation to their application, PPE, first aid, disposal and emergency management.
Refer page 20 (Risk Analysis)

For MSDS sheet contact your Hussmann Representative

Handling and Transporting cases

Case dimensions can be found in the product engineering data sheets.
(This manual is a guide only. Always refer to the latest case information available from Hussmann Customer Service)

Always ensure that the moving device is of a suitable type, and has sufficient lifting capacity for the case weight and dimension. Always lift cases from the underside.

Refer to and follow the manual handling policies of your Company when moving cases.

CAUTION
Care must be taken to avoid damage to drainage outlets and electrical equipment mounted under or at the rear of cases.

Shipping Damage and Shortages

If possible, it is recommended that packaging be removed from the cases before they are moved into the store.

After removing packaging, inspect the case for any shipping damage and ensure that all case inclusions, such as trims etc are accounted for. Immediately report any shipping damage to the carrier and inform Hussmann Customer Service of any short supplies.

Installation

NOTE
Information in this manual is to be followed in conjunction with specifications, work practices and regulations of the customer, installing company and relevant industry.

Unwrap the cabinet and remove the shipping braces. Lift up cabinet and remove shipping base

Positioning and Levelling

CAUTION
Ensure the lifting capacity of the trolley, etc is sufficient for the case. Refer to the product engineering data tables at the front of this manual for case weights and Risk Analysis (page 22).

To position the cases:

1. If the plinth surface is not level, determine where the highest point of the plinth is, and position the case allocated to this position first.

2. Snap a chalk line on the floor to use as a guide for positioning the front of the cases in the line-up. Determine the position of the case and choose a part of the case that will relate to the chalk line.

3. Adjust the case height using the adjustable feet (if fitted) or metal shims (do **NOT** use **timber**) to ensure the case is level to **within +/- 1.5mm** from front to back and side to side and chassis of case is **NOT twisted**. Maximum 30mm adjustment.

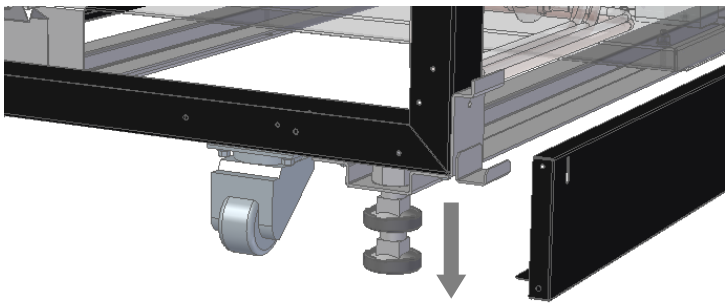


figure 3 levelling feet adjustment

Attaching Kickplates

- Use hex screws 4.2 x 13mm to fix the kickplate to the support.

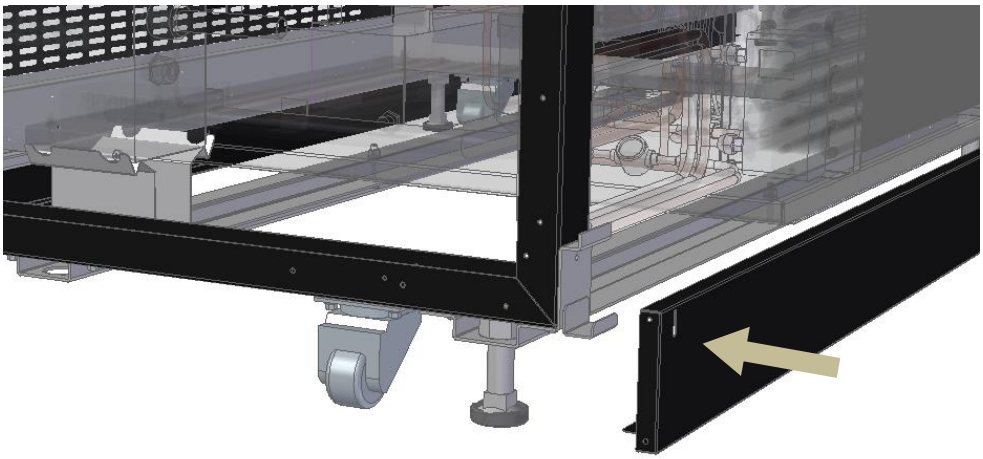


figure 4 kickplate support assembly

Mounting fixtures

Replace any racks and shelves etc. that may have been removed during installation, to store requirements

NOTE
Incorrect shelf configurations may compromise case performance.

Commissioning

Cleaning case

- Remove the PVC protective coating on stainless steel, where applicable
- Remove any residue, silicon or tape marks with a cloth moistened with rubbing alcohol
- Remove all debris from in and around the case
- Wipe case with a clean, damp cloth, if necessary

Starting up

- Check supply power is ready and correct voltage. (by Licensed Person)

Turn case power on

Start-up checks – by qualified persons only

- Check that all fans and lights (and light RCDs, if installed) are working correctly.
- Check the anti sweat circuit, ensuring the thermostat is set correctly.
- Set expansion valves and EPRs as per Product Engineering Data – Available from Hussmann.
- Approximately 24 hours after start-up, check that the case is at correct operating temperature (refer the Product Engineering Data).

Decommissioning

Plan and risk assess the decommissioning process to include the following:

- Isolate the case from both the refrigeration and electrical systems.
- Removal of the case is to be in the reverse order of installation listed previously.

Disposal

Case disposal is to be carried out by the following:

- Metal component removed and recycled
- Remaining by commercial waste management

Maintenance

General

- Do not use abrasive, solvent, ammonia or oil based cleaners
- Do not use steam or high-pressure systems to clean the case as they may reduce the life and alter the performance of the case
- The case does not have a floor drain. **Do not** bucket more than 2 liters into the case during cleaning
- Avoid contact between cleaning products and electrical components. Keep electrical connections dry at all times.
- Wear protective gloves to prevent scratches or cuts
- Wear safety glasses when there is a risk of splashing from water and cleaning solutions

Daily

Case should be cleaned and inspected by store staff on a daily basis

Inspection

- If an alarm system is not part of the refrigeration installation, the temperature of each case should be checked on a daily basis via the thermometer that is installed.

  The case temperature should be within the following ranges

  1°C – 5°C unless on defrost

- Visually check the case for damage or spills and take appropriate remedial action.

Clean

- Do not use hot water on cold glass surfaces as the glass may shatter and cause serious injury.
- When flushing the waste drain, do not use high-pressure water hoses and be careful not to introduce water faster than the waste outlet/drain can drain it. The case does not have a floor drain. Do not bucket more than 2 litres into the case during cleaning**.**

CAUTION

Do not climb in or on the case as this may result in personal injury and/or case damage.

1. Remove stock from the case and store below 5 °C
2. Turn off power to the case (electrical)
3. Remove all price tickets and any foreign materials from the case. Particularly the air return grill and defrost pan.
4. Remove shelves and clean with a sponge, warm water and mild detergent, then rinse and wipe dry
5. Remove the base trays, wash with mild soapy water and rinse.
6. Carefully flush the waste drain with a bucket of water and allow the base to drain.
7. Clean the drain area with a soft brush and warm water.
8. Clean the inside of the case (paying particular attention to the perforations in the rear panels) with a clean soft
cloth, warm water and mild detergent.
9. Clean glass or mirrored surfaces with a clean soft cloth and mild glass cleaner.
10. Wipe LED lamps with a dry cloth.
11. Clean bumpers and other plastic parts with a soft cloth and mild detergent, then wipe dry with a clean cloth
12. Clean the outside of the case with warm water and a disinfectant solution.
13. Replace base trays and shelves and turn on power.
14. Allow the case to attain correct working temperature (approximately 30 minutes) and restock the shelves.

NOTE

After cleaning, make sure to clean the area around the case to prevent slips and falls

Monthly

A thorough condenser clean and maintenance check should be carried out on a **monthly** basis by qualified and approved refrigeration and electrical engineers. The following procedures should be undertaken as **a minimum**.

Clean

- Clean the condenser unit with a soft brush or a vacuum cleaner. The dust and fluff obstructs the good air circulation. To reach the condenser unit, remove the protection grill, clean it very carefully (avoid touching other components) and put the grill back in its place.

Six monthly

A thorough cleaning and maintenance check should be carried out on a **six monthly** basis by qualified and approved refrigeration and electrical engineers. The following procedures should be undertaken as a **minimum**.

Inspection

1. Check that all case panels and trims are secure and undamaged
2. Check for rust and paint damage
3. Ensure all cable connections, including screw terminals, earth leads and straps are secure

4. Ensure insulation to all electrical components including solenoid valves, fans, heaters, controls, earth terminals
and lights are sound
5. Carry out electrical safety tests, including earth continuity and insulation resistance
6. Check the defrost water dissipater tray heater is de-activated. When empty the water level is below the sensor tip.
7. Ensure that there are no refrigerant leaks.
8. Check that all fans, valves, lights and controls are working

Clean

CAUTION

The case does not have a floor drain. Do not bucket more than 2 litres into the case during cleaning.

1. Remove stock from the case and store below 5 °C
2. Turn off power to the case
3. Remove shelves and clean with a sponge, warm water and mild detergent, then rinse and wipe dry
4. Remove and clean the base trays with a sponge, warm water and mild detergent, then rinse and wipe dry
5. Remove any foreign material from the base of the case
6. Clean the evaporator coil and check it for damage
7. Remove honeycomb vents and wash in warm soapy water (All water must be removed from the honeycomb cells
before placing it back in the case). A vacuum cleaner may also be used to clean the honeycomb.
8. Wipe LED lamps with a dry cloth.
9. Carefully flush the waste drain and drain trap with a bucket of water and allow the base to drain.
10. Clean the waste drain/trap with a soft brush and warm water.
11. Wipe down the inside of the case, including the perforated air delivery panels and air return grill with a clean soft
cloth, warm water and mild detergent.
12. Clean glass or mirrored surfaces with a clean soft cloth and mild glass cleaner.
13. Clean the condenser unit with a soft brush or a vacuum cleaner. The dust and fluff obstructs the good air circulation. To reach the condenser unit, remove the protection grill, clean it very carefully (avoid touching other
components) and put the grill back in its place.
14. Clean the dissipater tray - To reach the dissipater tray, remove the protection grill, slide out the tray, remove the
lid, clean (avoid touching other components) and replace in backward order ensuring the drain is over the lid entry point of the tray
a. General clean with a sponge, warm water and mild detergent, then rinse and wipe dry.
b. Clean any rust, salt or deposits on and around the water level sensor assembly. There should not be any deposits that cause conductance to the sensor and activate the heater.

15. Clean the outside of the case with warm water and a disinfectant solution.
16. Clean bumpers and other plastic parts with a soft cloth and mild detergent, then wipe dry with a clean cloth
17. Replace base trays and shelves and turn on case power
18. Reload stock after 30 minutes.

Yearly

It is recommended that the dissipater tray sensor tip assembly be replaced

Servicing

No servicing of Hussmann cases, including the replacement of LED lamps, is to be undertaken by store staff. Please contact your service provider for all maintenance queries.

Trouble shooting

issue	possible reason	remedial action
Product temperature is higher than requirement	Store condition is warmer or more humid than climate class 3 (25°C/60%RH)	Check store air conditioner operation
	Refrigeration plant is not running or operating at inappropriate settings or conditions	Check for compressor rack if it is running. If rack is running and other possible reasons are eliminated then call refrigeration mechanic to check plant operation.
	Evaporator pressure is not set correctly	Check suction pressure settings at the case and if required adjust as per case specification
	Insufficient or no air flow appears at the case air curtain	Check if case fans are turned on or operating correctly. If any doubt of fan operation contact technician.
		Check if coil is frozen up. If frozen then check defrost settings as per the manufacturers guideline or set to suite the store operating condition. A colder store may require longer defrost duration. A humid store may need more frequent defrost.
	Case shelf arrangement has been deviated significantly from original specified setup	Re-do the shelf arrangement as per the original specification
	Air Return is blocked by merchandise	Remove merchandise to behind the load limit.
	None of above	Contact Hussmann
Products are freezing up	Store condition is too cold compared to design climate class 3	Check store air conditioner operation. If store condition can not be lifted, then adjust cabinet evaporator pressure and defrost strategy to suite
	Case evaporator pressure is lower than specification.	Adjust cabinet evaporator pressure to suite
Cabinet exterior is sweating	Store humidity is high	Check store air conditioner operation
	Insufficient ventilation	Check case ventilation under and at rear of the case. A fan kit may be needed. KITS: (Option Extra – ref Page 21) Case to Wall: 2500: 96A15-035 3750: 96A15-036
	Icon Controller settings (if fitted)	Check settings
	Case SST	SST set too low
Lights are not working	No power supply	Check supply is “on” and light switch is working.
	Lamp fittings (Tombstone, starter and ballast) are faulty	Call technician to check and replace in necessary
	Lamp failed	Replace lamp
Water spill on the floor.	The dissipater tray is full or leaking.	Contact service provider.
	Store humidity is too high. Boiling system is not functioning.	Check controller, wiring, level sensor and heater
The compressor doesn’t start after 2 minutes.	The supply cables is disconnected.	Reconnect plug.
	The circuit breaker has tripped.	Contact service provider
	The unit is damaged	Contact service provider

It has increased noise	The condenser is dirty	Contact service provider.
	The evaporator is blocked with ice	Contact service provider.
	The compressor is damaged	Contact service provider.
The dissipater heater is on despite the tray water level being low	Level controller faulty	Contact service provider
	Rust, salt or other deposits bridging the sensor input signal	Contact service provider
	The sensor tip(s) short circuited	Contact service provider
The dissipater heater is on despite the tray water level being low	The condenser is dirty	Contact service provider
	The fluid is missing	Contact service provider
	The digital control unit is not regulated or is damaged	Contact service provider
	The evaporator is blocked with ice	Contact service provider

table 1 troubleshooting

Appendixes

Appendix 1 **Wiring diagrams** – Supplied with each case.

Appendix 2 Warranty

The information in this manual is for “Qualified Persons Only”. It is ***NOT*** an Installation Guide for ***“NON Qualified Persons”***.

To obtain warranty information or other support, contact your nearest Hussmann representative.

Please include the following:

Customer site location.
Cabinet model & serial number of product.
Reason for warranty.

Appendix 3 Risk analysis

Hazard	Control Measures
Electrical - Replacement of electrical components	Request a service call. Electrically isolate cases before works
Ergonomic - Moving/ positioning/ adjusting cases	Staff must be trained in the correct procedures for setting up cases and ergonomic practices. PPE must be worn
Falling - Connecting sensor probe wiring during installation	Use of barriers & fall arrest systems as appropriate & in accordance with State & Territory Legislation. Safe working at heights
Entanglement - Contact with fans when cleaning	Electrically isolate cases before work is carried out. Staff training,
Cuts and stabbing - Potential for cuts from broken fluorescent tube or during tube replacement	Electrically isolate cases. Staff not to replace tubes. Call service provider. PPE must be worn.
Electrical - Potential for electric shock when cleaning electrical fittings and components	Electrically isolate cases before work is carried out. Staff training, RCD. Keep electrical connections dry at all times.
Falling - Climbing on shelves	Staff must be trained in OH&S procedures. MUST not climb on shelves or cases.
Crushing - Hands or fingers may become pinched or crushed during the positioning of base trays, shelves & stock	Staff must be trained in the correct procedures for setting up cases and ergonomic practices
Slipping - Drain may leak or become blocked causing water spillage	Visual Inspection and regular maintenance. Request service call when necessary.
Cuts and stabbing - Potential for cuts caused by damaged or missing parts	Visual Inspection and regular maintenance. Request service call when necessary. PPE must be worn when handling broken or damaged parts.
Ergonomic - Stretching during the cleaning of the case and positioning of stock and shelves leading to strains and sprains	Staff must be trained in the correct procedures for cleaning cases & ergonomic practices. Cleaning tools which reduce the need for stretching should be used.
Slipping - Surfaces may become slippery due to spillage from the case during operation or cleaning	Visual Inspection. Appropriate remedial action.
Cuts and stabbing - Potential for cuts caused by sharp edges & evaporator coil during cleaning	PPE must be worn by staff
Cuts and stabbing - Cleaning cold glass surfaces with hot water	Staff must be trained in the correct procedures for cleaning cases and ergonomic practices
Crushing - fingers, hands or body between doors	Operators to always open and close doors using handles provided, ensuring the area is clear of other persons.
Electrical - electrical connections in cases	Electrically isolate cases before work begins. Must be carried out by a service provider. Staff training.

table 2 risk analysis