Operating Manual

Refrigerated Undercounter/Upright

This manual covers the Installation, Operation and Routine Maintenance requirements for the following Topaz Refrigeration product:

HTU2SS – HTU3SS / LTU2SS – LTU3SS

HTU2GS – HTU3GS

HT1SS – HT2SS/ LT1SS – LT2SS

Provided the instructions in this Operating Manual are read and implemented correctly, the optimum performance and reliability of your equipment should be maintained.

1. Introduction

Commercial foodservice refrigeration such as this unit supplied by Topaz Refrigeration is designed specifically to store product already chilled or frozen, at the required temperature.

Should product be loaded into these refrigeration cabinets that is not already chilled or frozen, the performance of your equipment could very well be compromised, and other stored product adversely affected.

The electronic controller of your Topaz Refrigeration cabinet is factory set at a predetermined temperature level and defrost frequency as determined by the type and application of cabinet.

Typical pre-set temperatures are **1°C to 5°C for Fridges & -20°C to -16°C for Freezers**

Transportation

Transport the cabinet in the upright position at all times.

Should access challenges be experienced when manoeuvring the equipment into position, such as moving through doorways etc., then it is permissible to tilt the cabinet by no more than 30° from the vertical.

If tilting of the cabinet during transport or positioning has been necessary, then the cabinet must be allowed to stand for at least two hours before being powered on and operated.

Note: Proper handling equipment must be used to move and position cabinets due to the awkward size and weight of most units.

2. Cabinet Location

All commercial refrigeration equipment generates considerable heat as a part of normal operation.

Ventilation

Any refrigeration equipment that is operated in a small, unventilated area, especially in warm weather, can cause the compressor to over-heat and possibly result in it being permanently damaged.

The least it will do is cause the refrigerator to use an excessive amount of electricity and possibly allow the contents to become spoiled. It is recommended that the cabinet be installed in an air-conditioned environment.

It is essential to ensure that the room in which the cabinet is to be installed has adequate ventilation.

NOTE: FAILURE TO OBSERVE VENTILATION GUIDELINES WILL VOID THE MANUFACTURER'S WARRANTY!

3. Installation

SAFETY

This appliance is not intended for use by children or infirmed persons without supervision.

Children should be supervised to ensure they do not play with this appliance.

Do NOT use this appliance for other than its intended purpose.

Regulations require that all electrical work must be carried out by authorised persons only.

If the supply cord is damaged, it must only be replaced by a TOPAZ authorised service agent or suitably qualified person in order to avoid a hazard.

Never use or store explosive or corrosive chemicals in or around this cabinet.

General Notes

OLD CABINETS

Please ensure that old / redundant cabinets are disposed of safely and legally. We would recommend that any doors are removed prior to disposal to ensure safety.

UNPACKING

Carefully remove all exterior and interior packing and accessories. Ensure all such material is disposed of safely.

LEVEL

The cabinet should stand level to ensure the correct operation of the self-closing doors and proper drainage of the condensate from the evaporator.

CASTORS

All self-contained cabinets are fitted with castors for ease of movement to allow for cleaning under the cabinet. Models fitted with castors are non-adjustable, therefore a level platform/floor should be provided where cabinet is to be located.

Two lockable castors are fitted to the front, they must be locked to prevent accidental cabinet movement during operation and use. This can be achieved by pressing the locking tab down. Ensure that both castors are locked.

Remember to release the castor locks before attempting to move the cabinet.

DRAINAGE

All self-contained cabinets have a heated vaporiser tray fitted using hot gas waste from the compressor which generally eliminates the need for connection to an external drain. However, in areas of high humidity it may be necessary to connect the drain to an external point.

4. Mains Connection

This cabinet is suitable for connection to a nominal 10amp, 240-volt, 50 Hz power supply. A dedicated power outlet might need to be used depending on circuit loading. If in doubt, please consult an electrician for advice.

Do not use power boards, double adaptors or the like.

We recommend supplementary electrical protection with the use of a Residual Current Device (RCD)

5. Operation

General

The cabinet is factory set according to the specifications for a general storage display refrigerator. There is no need to adjust the controller as this may alter the design performance.

Cabinet Lighting

This cabinet is fitting with an energy efficient long-life LED light. When replacing faulty lights, always ensure that replacement lights are the correct type and wattage.

Loading

Before loading any product, allow the cabinet to reach normal operating temperature. All forced draught commercial refrigeration units require constant air flow throughout the cabinet to maintain desired temperature. Correct loading of the cabinet must be considered for effective and efficient refrigeration performance. Door opening frequency and duration should be kept to a minimum. At all times, large items such as cardboard boxes should be placed at the bottom of the cabinet to avoid restricting the cold air from the evaporator.

Your cabinet is designed to operate at 38°C (36°C for Freezers) Ambient & 65% RH. Temperature & Humidity levels above 38°C (36°C for Freezers) & 65% RH may cause excessive condensation.

Never block the internal air vents that circulate the air within the cabinet. Allowing space for the air to circulate around the inside of the cabinet will help keep your product at the correct temperature.

Automatic Defrost

All force draught cabinets in the Topaz range have an automatic defrost and this function is monitored by the electronic controller fitted to all cabinets. All cabinets have a heated tray fitted using hot gas waste from the compressor. These vaporiser trays will thaw and evaporate ice and moisture from the evaporator. This vaporising action results in steam emission and/or sounds of boiling water that may be heard. **This is a normal consequence of the auto-defrost function.** Check the source of any concerns prior to calling for service.

Electronic Controller

Typical Controller Displays

Under normal operating conditions the Electronic Refrigeration Controller displays the internal temperature of the cabinet at the sensor point. It also controls the operation of the internal LED light.

Indicators

The controller includes indicator lights to show the status of the compressor and defrost cycle. The compressor and defrost indicator lights will cycle on and off during normal operation of the cabinet.

Buttons

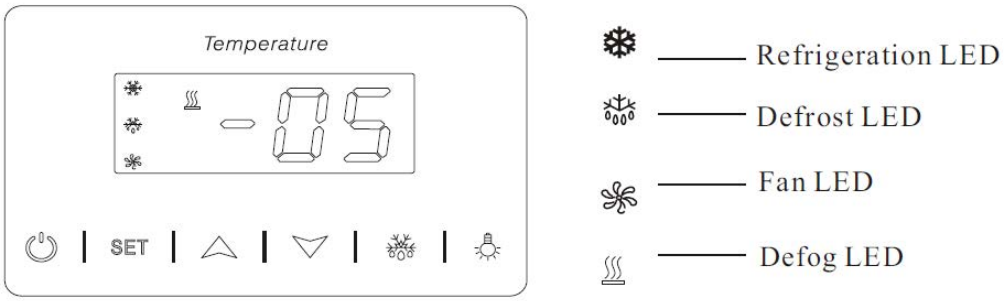
1. Temperature Setting: Press set button. The set temperature value will be displayed. While flashing press ⏶ or ⏷ button to modify the set point. To store a new set point and exit press set

2. Internal LED Light (if fitted): Press ☼ button to turn on the internal LED light. Press again to turn off light.

3. Manual Defrosting (If required): Press and hold ❄ button for six seconds. Cabinet will enter a defrost cycle, once completed it will return to normal operation.

Note: If no button is pressed within 10 seconds, the controller will return to normal operation where the cabinet temperature is displayed.

Note: Further Engineering details on all controller parameter set points can be obtained from Topaz Refrigeration.



6. Cleaning

Cleaning Cabinet Surfaces

Exterior

The cabinet is finished in a hard-wearing stainless steel and if cared for correctly, will keep the 'as new' look for many years. Normal day to day cleaning should be carried out with a soft cloth and soapy water. Never use abrasive cleaners, scouring pads or such materials on cabinets as these products can permanently damage the surface and, over time, may cause corrosion. Do not use any cleaning agents of a caustic based nature, as these will have a detrimental effect on the cabinet surfaces.

Interior

Interior cleaning should be done on a regular basis with warm water and a soft cloth. Dry thoroughly afterwards. Remove shelves for easy cleaning if required.

Cleaning Door Gaskets

Clean weekly with warm mild soapy water (do not use harsh detergents) and a soft cloth.

DO NOT use a sharp knife to scrape or clean the gasket!

Regularly check gasket for damage that can be caused by being struck with sharp objects such as the edge of a tray or a knife. Damaged gaskets that do not seal correctly can increase the amount of power that is consumed and cause the evaporator to ice up. Either condition can cause the temperature within the cabinet to increase.

Do not use any cleaning agents of a caustic based nature on door gaskets. Always ensure the gasket (including the gasket folds behind the inner edge), is kept clean and moisture free.

Cleaning Cabinet Condenser

The condenser is located at either the right-hand end or top of the cabinet in the compressor compartment. It looks like an assembly of black fins.

Failure to keep the condenser clean will lead to higher temperatures in the cabinet, higher running costs and in most cases failure of the compressor or other components. A clean condenser is a critical factor in keeping your product operating correctly.

NOTE: FAILURE TO OBSERVE CONDENSER CLEANING GUIDELINES WILL VOID THE MANUFACTURER'S WARRANTY!

Condenser Cleaning Procedure

1 Turn the power off at the power point and unplug the power supply lead. If the power point is not readily accessible, turn off the isolation switch or the circuit breaker in the switchboard.

2 Pull open the compressor compartment door (undercounters only) to gain access to the condenser.

3 Using a nylon brush carefully remove dust and dirt build up from the condenser face ensuring dust is not pushed back into condenser fins.

Cleaning Condenser Fins

To avoid personal injury by cuts, take care not to directly contact the fins as they are quite thin and sharp. The fin material is fragile and if bent can detrimentally alter the performance of the condenser unit.

4 The use of a vacuum cleaner will help in cleaning up the dislodged material.

5 After removing all dirt from the condenser close the compressor compartment door (undercounters only).

6 Reconnect the electrical supply and restart the cabinet.

NOTE: IF IN DOUBT THE CONDENSER SHOULD BE CLEANED BY A SUITABLY QUALIFIED PERSON.

7. Routine Maintenance

The refrigerator is completely automatic in operation; that is, there is no need to manually defrost. A maintenance program however, is required to ensure a long life and trouble free use.

A suggested maintenance program is as follows:

Daily

1. Take note of the cabinet operating temperature. It is suggested that this be done at approximately the same time of day, to reduce temperature fluctuations caused by heavy use and/or the loading of a large quantity of product.

2. Write these daily temperature readings in a small notebook. In this way, an average minimum and maximum operating temperature will be easily (and accurately) calculated for insertion into the Cabinet Service Log.

3. Wipe all external surfaces with a soft cloth and warm soapy water. Rinse and wipe dry.

NOTE: Before any extensive cleaning, always switch off the electrical supply and remove the plug from the electrical outlet.

4. Correct loading must be considered, to ensure correct air flows within cabinet.

Weekly

In addition to the daily maintenance items, cleaning of the door gasket each week is critical to the cabinet working efficiently.

Monthly

Follow the daily and weekly tasks as listed.

From the daily noted operating temperatures, determine the average maximum and minimum temperatures and record in the Cabinet Service Log (see next). It is suggested that this task is completed at the beginning of each month.

The condenser must be cleaned once a month of dust and other debris that will have collected. In some applications, the condenser may need to be checked more frequently. For example in a dusty environment or where flour is prevalent, condenser cleaning should be carried out every fortnight. By monitoring the amount of condenser clogging that occurs, the frequency can be adjusted to suit individual situations.

All condenser cleaning must be entered into the cabinet service log when the service takes place. **Failure to do so will void warranty obligations** by Topaz Refrigeration and/or their suppliers/service providers, as tangible evidence will be required to support most warranty claims.

Cabinet Service Log

IMPORTANT: Warranty may be void if there is no evidence that a preventative maintenance program has been carried out on the equipment.

It is best practice to create and maintain a cabinet service log to ensure that this work is carried out regularly and at recommended frequencies. Be sure to complete, sign and date the log when any preventative maintenance or service is carried out on the cabinet.

8. Troubleshooting

PROBLEM	POSSIBLE CAUSE	ACTION
Cabinet not working	Is there power to the cabinet?	Check mains lead is plugged in. Check there is power to the GPO.
Cabinet temperature too high	Condenser blocked with dirt.	Clean thoroughly- see “cleaning section”.
	Warm/fresh product has entered cabinet.	Wait 30mins for air to stabilise.
	Cabinet defrost is on or just recently finished.	Wait for defrost to end. May be up to 30min.
	Refrigeration fault.	Call service engineer.
	Poor ventilation.	Refer to ventilation section.
	Evaporator has iced up, stopping cold air flow through cabinet.	Check for warm/ambient product in cabinet.
		Check for over loading.
		Check for doors not sealing.
		Check for set point too low.
	Set point inadvertently changed.	Program controller to correct values.
Cabinet temperature too low	Refrigeration fault.	Call service engineer.
	Set point inadvertently changed.	Program controller to correct values.
No display at all in temperature indicator	Interruption to power supply.	Check mains lead is plugged in. Check power is switched on. Check mains fuse.
Cabinet door does not close properly	Cabinet not levelled correctly.	Adjust as required.
	Damaged or worn door gasket	Call service engineer to replace door gasket.

9. Warranty

How to make a warranty call

Prior to making a warranty call please check the items in "Troubleshooting". If after checking those items, the problem remains, please call the warranty department on **1800 338 148**

Have the following information available when you call the warranty department:

• Cabinet model and serial number – this can be found on the label on the back of the cabinet.

• The name of the business, the address a contact name and phone number.

• The name of the dealer from whom you purchased the equipment.

• A brief description of the problem.

Note: All warranty claims must be logged with and authorised by Topaz Refrigeration prior to any work being carried out.

Note: Topaz Refrigeration approved warranty work undertaken by authorised service agents is arranged during normal working hours only Monday – Friday, 8am to 5.30pm, excluding public holidays.

10. Equipment Warranty Details (Please also refer to our full Terms and Conditions of Sale, available upon request)

16. Liability / Warranty

16.1 Except as the Terms specifically state, or as contained in any express warranty provided in relation to the goods or services, the Agreement does not include by implication any other term, condition or warranty in respect of the quality, merchantability, acceptability, fitness for purpose, condition, description, assembly, manufacture, design or performance of the goods or services or any contractual remedy for their failure.

16.2 Topaz products are not designed for nor have the appropriate certifications, licences or accreditations for use in personal, domestic or household applications. The Customer warrants that Topaz products will not be used for such applications. To the extent permitted by law, Topaz specifically does not warrant its products used in such applications.

16.3 If the Customer is a consumer nothing in these Terms restricts, limits or modifies the Customer's rights or remedies against Topaz for failure of a statutory guarantee under the ACL.

16.4 If the Customer on-supplies the goods to a consumer and:

(a) the goods or services are not of a kind ordinarily acquired for personal, domestic or household use or consumption, then the amount specified in section 276A(1) of the ACL is the absolute limit of Topaz liability to the Customer;

(b) the goods or services are of a kind ordinarily acquired for personal, domestic or household use or consumption, payment of any amount required under section 274 of the ACL is the absolute limit of Topaz liability to the Customer;

howsoever arising under or in connection with the sale, installation, use of, storage or any other dealings with the goods or services by the Customer or any third party.

16.5 If clause 16.2 or 16.4 do not apply, then other than as stated in the Terms or any written warranty statement Topaz is not liable to the Customer in any way arising under or in connection with the sale, installation, use of, storage or any other dealings with the goods or services by the Customer or any third party.

16.6 Topaz is not liable for any indirect or consequential losses or expenses suffered by the Customer or any third party, howsoever caused, including but not limited to loss of perishables, loss of turnover, profits, business or goodwill or any liability to any other party except to the extent of any liability imposed by the ACL.

16.7 Nothing in the Terms is to be interpreted as excluding, restricting or modifying or having the effect of excluding, restricting or modifying the application of any State or Federal legislation applicable to the sale of goods or supply of services which cannot be excluded, restricted or modified.

16.8 Where the Customer is a consumer, the following mandatory statement applies: Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

16.9 Topaz warrants, subject to the exclusions and limitations below, the goods will be free from defects in materials and workmanship for the applicable warranty period set out below ("Warranty").

16.10 Subject to the remainder of clause 16, Topaz, in its reasonable discretion if it deems necessary, will repair or replace any goods to remedy any fault covered by Warranty, provided that:

(a) the goods may have acceptable variance; and

(b) any replacement or repaired goods will only be warranted for the unexpired portion of the Warranty period attached to the original goods.

16.11 Unless stated otherwise, our standard warranty period and product covered is;

(a) 24 months from our original invoice date;

(b) Spare parts, 3 months from our original invoice date.

16.12 Provision of the Warranty is subject to:

(a) the Customer not being in breach of these Terms or any additional Agreement as may be in place;

(b) proof of purchase of the goods being directly from Topaz or an authorised distributor or agent of Topaz;

(c) Topaz or its representative, at its option, having access to the goods for the purposes of inspection and verification of any claim;

(d) the Customer accepting an invoice for any replacement parts claimed under Warranty, which will be reimbursed, excluding freight costs, only after confirmation of the claim by Topaz;

(e) The full payment of any invoices rendered by Topaz to the Customer for non Warranty work;

(f) the Customer has not repaired or undertaken to repair the goods without prior authorisation from Topaz nor altered the goods in any way;

(g) the Customer uses and maintains the goods in accordance with Topaz instructions and in accordance with commonly accepted operating practices;

(h) the Customer providing written notice within 3 days of delivery of any goods that it believes do not meet specifications or goods that are defective; and

(i) correct storage, siting and installation of the goods in accordance with Topaz instructions.

16.13 The following Warranty exclusions apply:

(a) Any product which Topaz publishes as excluded from application of this Warranty;

(b) Any product for which the Warranty period published by Topaz (in advertising material or otherwise) differs from the Warranty period outlined above;

(c) defects or malfunctions that are the result of incorrect or poor maintenance by the Customer;

(d) damage or alteration to the goods arising from circumstances outside the direct control of Topaz, including, without limitation, power surges, disruptions, flooding, fire or acts of god or where the goods are not used for their intended purpose;

(e) any part of a refrigeration cabinet which has been subject to misuse, neglect, alteration or changed in any manner, incorrect installation or accident that has been caused by the Customer or its invitee;

(f) the failure of goods that have been supplied to a Customer's specification or design and that failure was caused by a Customer specification or design fault;

(g) any problem that might arise due to poor installation or siting of the goods, including but not limited to, lack of sufficient fresh air circulation, marine or mobile applications;

(h) any problem that might arise out of the installation of remote cabinets, including but not limited to, blockages or leaks in the refrigeration system, replacement refrigerant and components including TX valves, and wiring issues with controllers;

(i) any third party equipment that the Customer might have specified;

(j) any installation or removal costs necessary to access or service the goods;

(k) any time spent on security clearance, inductions and suchlike;

(l) damage to, or breakage of, glass doors, gaskets, power leads, hinges, lights or plastic components; and

(m) the failure of gaskets, lights, hinges, locks, TX valves and batteries.

16.14 Topaz reserves the right to replace defective parts of the goods with parts and components of similar quality, grade and composition where an identical part or component is not available.

16.15 Goods presented for repair may be replaced by refurbished goods of the same type rather than being repaired. Refurbished parts may be used to repair the goods.

16.16 The Customer warrants to use the goods in accordance with:

(a) any instructions provided to it by Topaz from time to time;

(b) all government and local regulations, including but not limited to all relevant environmental laws and regulations governing the storage, installation, use, handling, maintenance and disposal of the goods.

(c) all necessary and appropriate precautions and safety measures relating to the storage, installation, use, handling and maintenance of the goods.

(d) Topaz approved Warranty work undertaken by authorised service agents is arranged during our normal working hours only (generally Monday – Friday, 8am to 4.30pm, excluding public holidays).

16.17 The Customer bears the cost of making the Warranty claim.

16.18 Approved Warranty repair work will be conducted for free only on the Australian mainland and within 50kms of a Topaz Authorised service agent premises. If the Customer is located more than 50km away, then any distance will be charged to the Customer on the excess at commercial rates.

16.19 Topaz makes no express warranties or representations other than as set out in this clause 16.

16.20 The repair or replacement of the goods or part of the goods is the absolute limit of Topaz liability under the Warranty.

16.21 The benefits of this Warranty are in addition to any rights and remedies imposed by Australian State and Federal legislation that cannot be excluded.

16.22 In the case of goods not manufactured by Topaz but are sourced from third parties and supplied by Topaz, this Warranty will not operate to extend the terms of the original manufacturer of those goods.

16.23 Our contact details are:

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