

H SERIES

turbofan[®]

**H8D-UC / H8D-FS-UC /
H10D / H10D-FS
Series**

**Hot Holding Cabinets
(Digital Operation)**

Installation and Operation Manual

turbofan
CONVECTION OVEN SYSTEMS

MOFFAT

MANUFACTURED BY

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In line with policy to continually develop and improve its products, Moffat Ltd. reserves the right to change the specifications and design without prior notice.

Contents List

H8D-UC / H8D-FS-UC / H10D / H10D-FS Series

Model Numbers Covered in this Manual

H8D-UC	- Turbofan Hot Holding Cabinet - Under Counter, 8 x 1/1 GN / 8 x US Half Size Trays.
H8D-FS-UC	- Turbofan Hot Holding Cabinet - Under Counter, 8 x US Full Size Trays.
H10D	- Turbofan Hot Holding Cabinet - 10 x 1/1 GN / 10 x US Half Size Trays.
H10D-FS	- Turbofan Hot Holding Cabinet - 10 x US Full Size Trays.

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Introduction

Before using your new Holding Cabinet, please read this instruction manual carefully, pay particular attention to any information labelled 'WARNING', 'CAUTION', 'IMPORTANT' or 'NOTE' in this manual.



Warning
Indicates a hazardous situation which, if not avoided, will result in death or serious injury.



Caution
Indicates a hazardous situation which, if not avoided, will result in minor or moderate injury.

If you are unsure of any aspect of installation, instructions or performance of your Holding Cabinet, contact your TURBOFAN dealer promptly. In many cases a phone call could answer your question.

Should you contact your TURBOFAN dealer on any matter concerning this Holding Cabinet, please have the information provided opposite, readily available.

This manual must be kept by the owner for future reference.

A record of **Date of Purchase**, **Date of Installation** and **Serial Number of Holding Cabinet** should be recorded in area provided below.

The serial number of this Holding Cabinet can be found on the Technical Data Plate located on front right hand side panel, see diagram in 'Installation Section'.

Model Number:

Serial Number:

Dealer:

Service Provider:

Date Purchased:

Date Installed:

Safety Information

For your safety, please pay attention to the following symbols marked on the appliance.

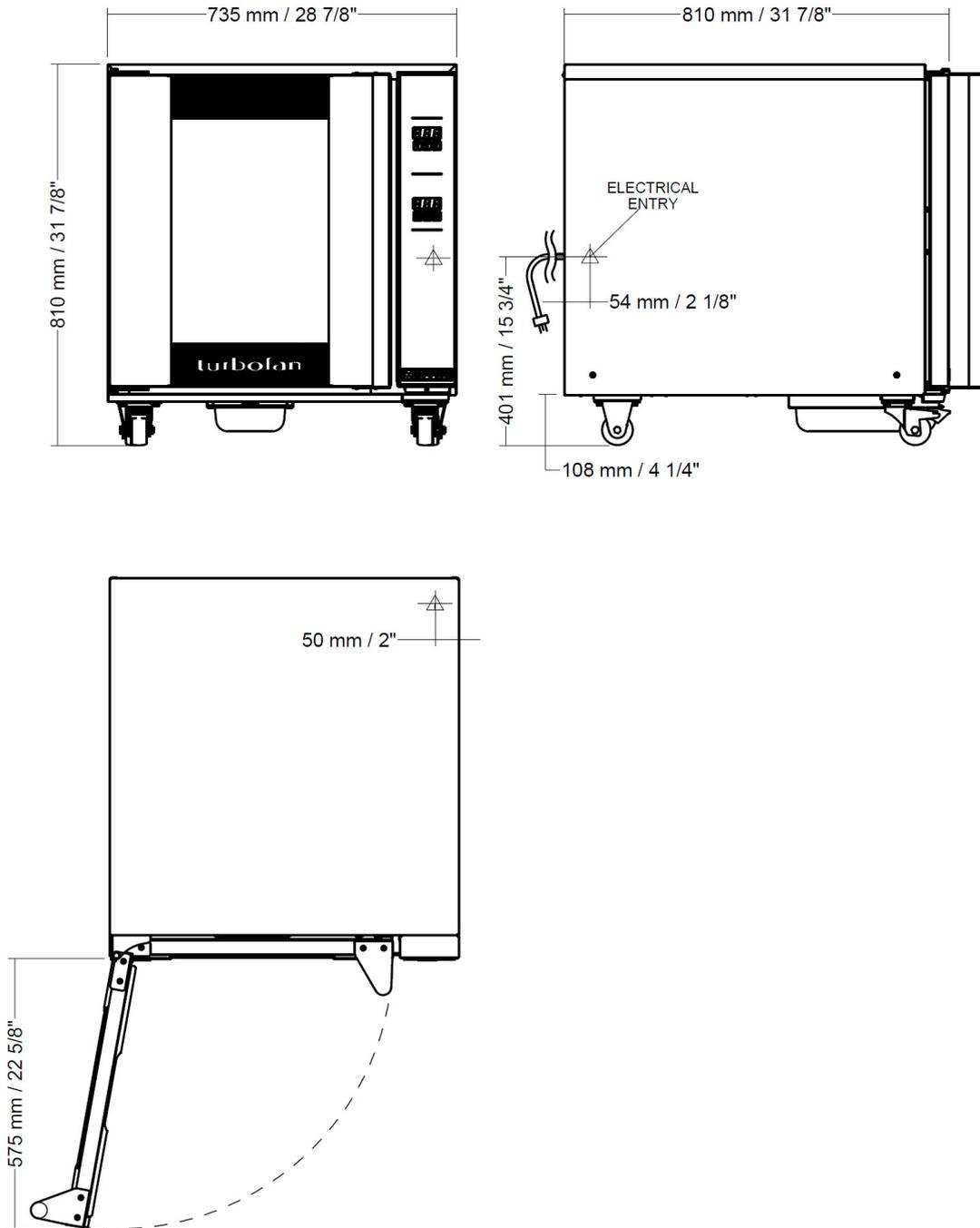
- Risk of electric shock.



No user serviceable parts inside.
Qualified service person access only.
Disconnect from power before servicing.

Specifications

H8D-FS-UC Electric Hot Holding Cabinet



Electrical Specifications - H8D-FS-UC

- 230V-240V, 50HZ, 1P+N+E, 2.05kW.
- 208V-240V, 60HZ, 1P+N+E, 2.05kW
- 220V-240V, 50HZ, 1P+N+E, 2.05kW
- 220V-240V, 60HZ, 1P+N+E, 2.05 kW

Weight:

81kgs (179lbs) (Excluding Baking Trays).

Holding Cabinet Tray Details:

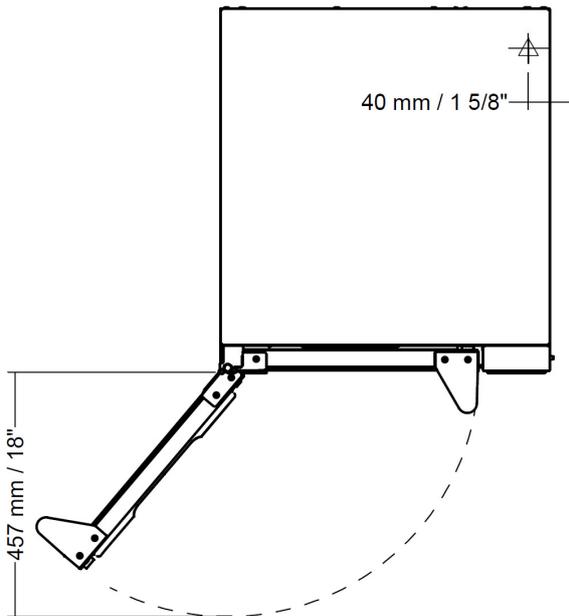
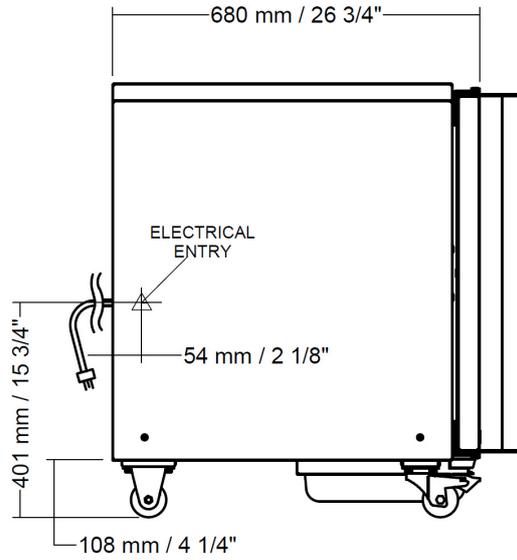
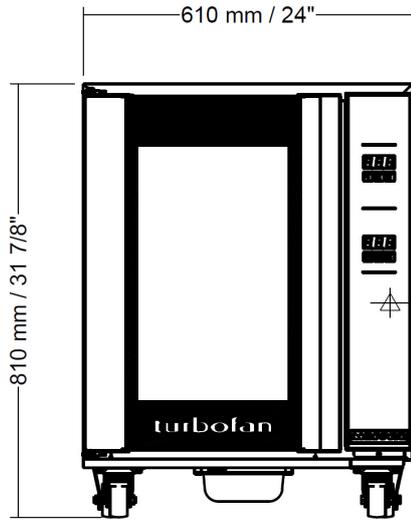
- Tray Size; Qty 8, 18" x 26" US Full Size Pans.
- Tray Spacing 74mm / 2⁷/₈".

Minimum Installation Clearances:

	Rear	L/H Side	R/H Side
H8D-FS-UC	25mm / 1"	0mm / 0"	0mm / 0"

Specifications

H8D-UC Electric Hot Holding Cabinet



Electrical Specifications - H8D-UC

- 230V-240V, 50HZ, 1P+N+E, 1.3kW.
- 110V-120V, 60HZ, 1P+N+E, 1.3kW
- 220V-240V, 50HZ, 1P+N+E, 1.3kW
- 220V-240V, 60HZ, 1P+N+E, 1.3kW

Weight:

65kgs (143lbs) (Excluding Baking Trays).

Holding Cabinet Tray Details:

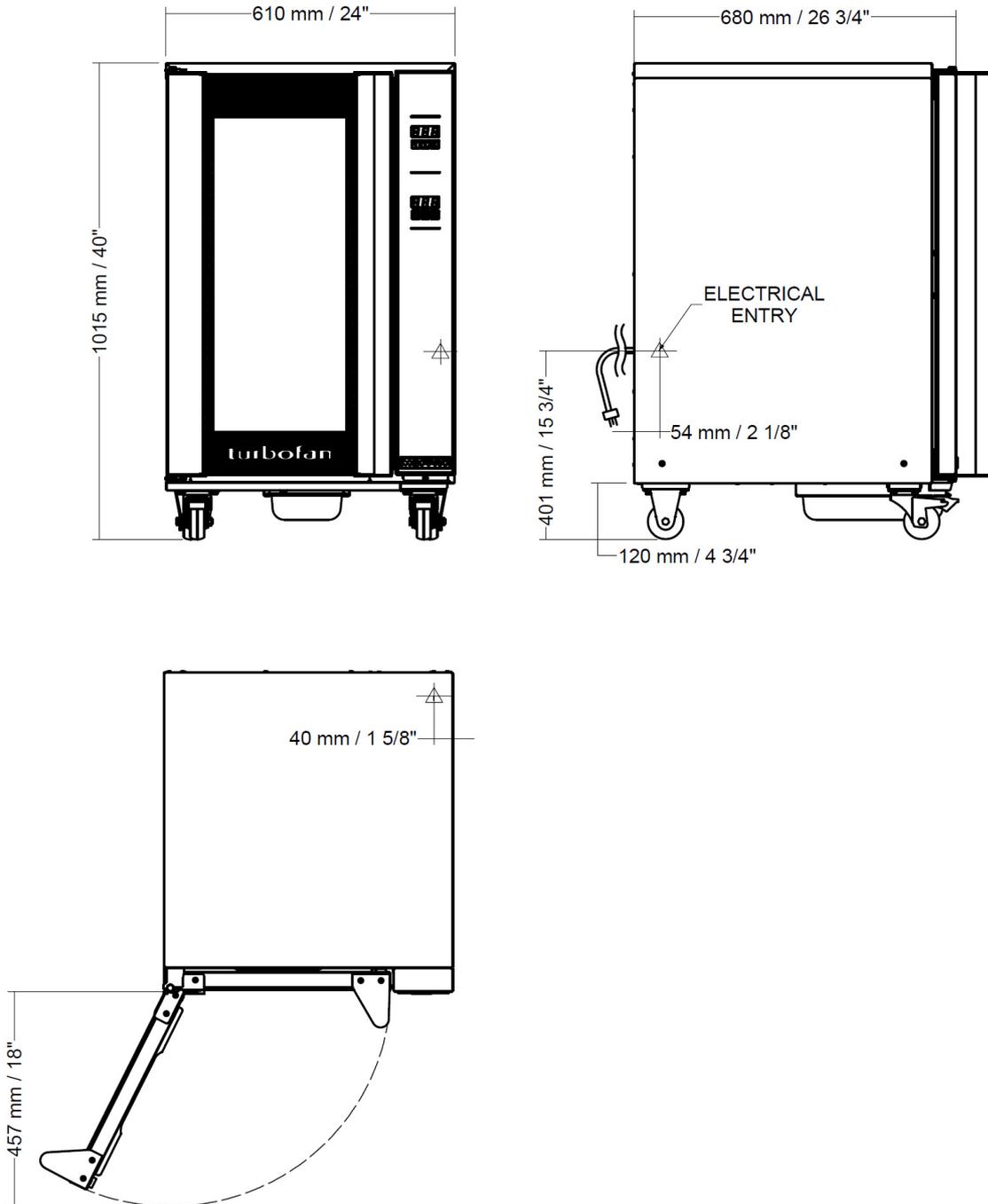
- Tray Size; Qty 8, 12" x 20" 1/1 GN Steam Pans.
- Qty 8, US Half Size Sheet Pans.
- Tray Spacing 74mm / 2 7/8".

Minimum Installation Clearances:

	Rear	L/H Side	R/H Side
H8D-UC	25mm / 1"	0mm / 0"	0mm / 0"

Specifications

H10D Electric Hot Holding Cabinet



Electrical Specifications - H10D

- 230V-240V, 50HZ, 1P+N+E, 1.3kW.
- 110V-120V, 60HZ, 1P+N+E, 1.3kW
- 220V-240V, 50HZ, 1P+N+E, 1.3kW
- 220V-240V, 60HZ, 1P+N+E, 1.3kW

Weight:

77.5kgs (171lbs) (Excluding Baking Trays).

Holding Cabinet Tray Details:

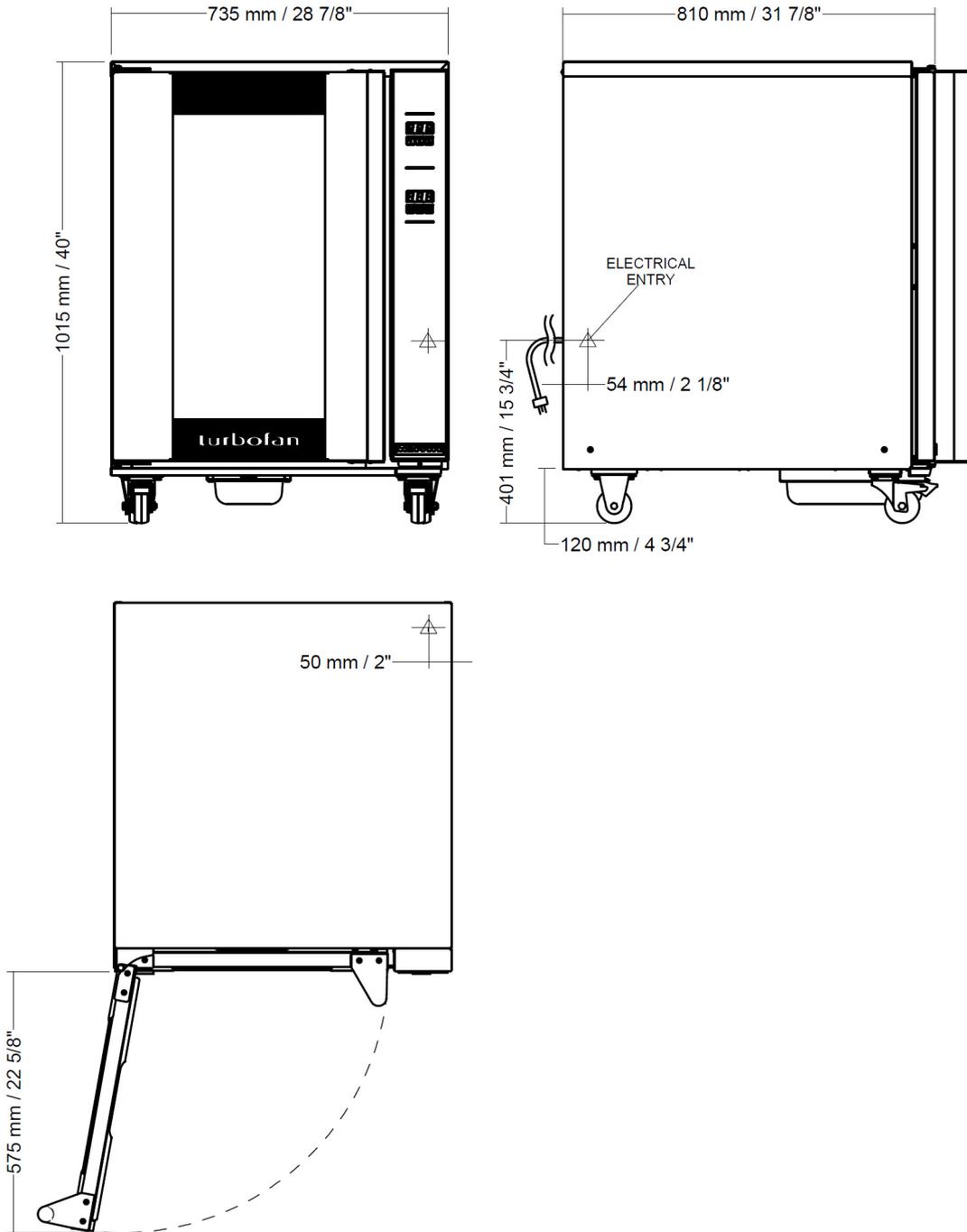
- Tray Size; Qty 10, 12" x 20" 1/1 GN Steam Pans.
- Qty 10, US Half Size Sheet Pans.
- Tray Spacing 74mm / 2⁷/₈".

Minimum Installation Clearances:

	Rear	L/H Side	R/H Side
H10D	25mm / 1"	0mm / 0"	0mm / 0"

Specifications

H10D-FS Electric Hot Holding Cabinet



Electrical Specifications - H10D-FS

- 230V-240V, 50HZ, 1P+N+E, 2.05kW.
- 208V-240V, 60HZ, 1P+N+E, 2.05kW.
- 220V-240V, 50HZ, 1P+N+E, 2.05kW.
- 220V-240V, 60HZ, 1P+N+E, 2.05kW.

Weight:

88kgs (194lbs) (Excluding Baking Trays).

Holding Cabinet Tray Details:

- Tray Size; Qty 10, 18" x 26" US Full Size Pans.
- Tray Spacing 74mm / 2⁷/₈".

Minimum Installation Clearances:

	Rear	L/H Side	R/H Side
H10D-FS	25mm / 1"	0mm / 0"	0mm / 0"

Installation

Installation Requirements

Important:

- Installation shall comply with local electrical, health and safety requirements.
- It is most important that this Holding Cabinet is installed correctly and that Holding Cabinet operation is correct before use.
- If you have any questions regarding proper installation and / or operation of this Holding Cabinet, please contact your local Turbofan distributor.

Unpacking

- Remove all packing.
- Check equipment and parts for damage. Report any damage immediately to the carrier and distributor.
- Remove protective plastic coating from side panels.
- Check that the following parts have been supplied with your Holding Cabinet:
 - Side Racks.
 - Condensation Collection Pan.
- Report any deficiencies to distributor who supplied Holding Cabinet.
- Check available power supply is correct to as shown on Rating Plate located on front lower corner of right hand side panel. Refer to 'Technical Data' in 'Specifications' section.

Location

- Position the Hot Holding Cabinet in its working position.
- The Hot Holding Cabinet should be positioned so that operating panel and cabinet shelves can be easily reached for loading and unloading.



Clearances

- To ensure correct ventilation for motor and controls, the following minimum installation clearances are to be adhered to:

	H8D-UC	H8D-FS-UC	H10D	H10D-FS
Rear	25mm / 1"	25mm / 1"	25mm / 1"	25mm / 1"
L/H Side	0mm / 0"	0mm / 0"	0mm / 0"	0mm / 0"
R/H Side	0mm / 0"	0mm / 0"	0mm / 0"	0mm / 0"

Clearance From Source of Heat.

Where the appliance is located next to a source of heat, a minimum distance of 300mm (12") from the appliance sides is required.

Electrical Connection



Warning

**This Holding Cabinet must be earthed / grounded.
If the supply cord is damaged, it must be replaced by a suitably qualified person in order to avoid a hazard.**

Each Hot Holding Cabinet should be connected to an adequately protected power supply and an isolation switch mounted adjacent to, but not behind the Hot Holding Cabinet and must be readily accessible to the operator. This switch must be clearly marked and readily accessible in case of fire.

Check that the electricity supply is correct to as shown on the Technical Data Plate on the front right hand corner of the holding cabinet side panel.

The Hot Holding Cabinets are supplied with electrical cords fitted. Ensure that the appliance is fitted with the appropriate power cord and plug.

Positioning of Hot Holding Cabinet

Correctly locate the Hot Holding Cabinet into its final operating position and lock the front castors to retain the holding cabinet in it's location.

Initial Start-Up

Before using the new Hot Holding Cabinet;

1. Please refer to Operation Section of this manual for details on how to correctly operate and shutdown the Holding Cabinet.

Technical Data Plate Location

Technical Data Plate for the Holding Cabinets is located at bottom left corner of RH side panel.

Operation

Operation Guide

- Turbofan Hot Holding Cabinets have been designed to provide simple operation.
- This Hot Holding Cabinet is intended for use in a commercial kitchen and must only be put to the use for which it was intended, i.e. Holding of food products. To use this Hot Holding Cabinet correctly, please read the following sections carefully:-

Digital Hot Holding Cabinet Control Panel - Description of Controls

Timer Keys

Three Separate Timers.
Press to start pre-set timer.
Press and hold to cancel timer.
Three timers can run simultaneously.
Press timer key to show time, if more than 1 timer running.
Hold for 2 seconds to set time.
Use Up/Down/Set keys to change timer settings.

Timer LEDs

Timer LEDs are 'Off' when timer not running.
Timer LEDs 'Flash' when timer is running and time is displayed.
If more than 1 timer is running, only displayed time timer LED flashes.
Timer LED is 'On' when a timer is running but not displayed.

Temperature Display

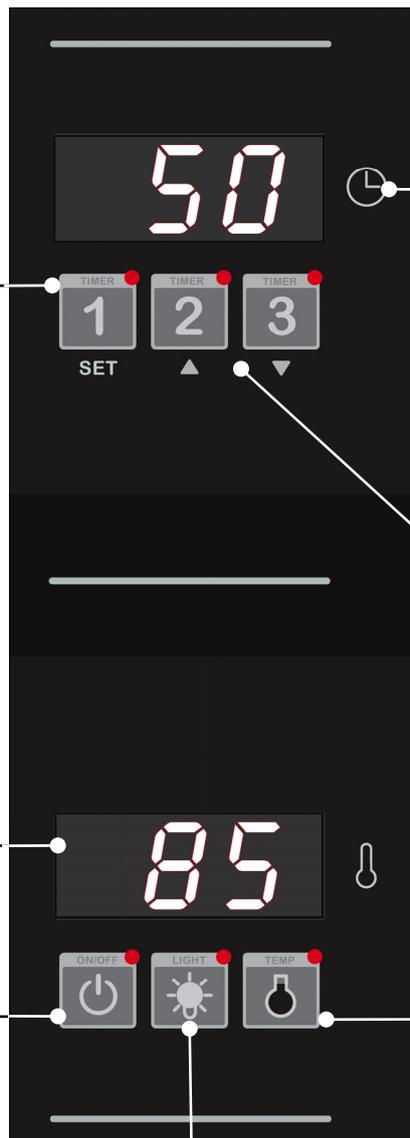
Shows Set Hold Temperature.
Shows Actual Temperature if 'Temp' Key is pressed.
Display flashes when setting Temp.

'ON / OFF' Key

Used to turn Holding Cabinet 'On / Off'.

'ON / OFF' LED

LED is 'On' when Holding Cabinet is in 'Stand-By' mode.



Timer Info Display

Timer display "----" when no timer running.
Timer(s) running - displays time count down.
Least remaining time shown as default.
If timer time is being set - 'Time' flashes.

Hold Timers or Hold Time 'INF'

Timers can be set for count down time, or,
Timers can be set for 'INF', indefinitely count up hold timing.

'SET / UP / DOWN' Keys

Used to 'Change / Set' timers.
Used to 'Change / Set' hold temperature.

* After 2 seconds, hold down Timer or Temp Key.

'TEMP' Key

Press to display Actual Temperature.
Hold for 2 seconds to change 'Set Temperature'.

'TEMP' LED

LED is 'On' when Holding Cabinet is heating.
LED is 'Off' when Holding Cabinet is at set temperature.

'Light' Key

Press to turn Cabinet lights 'On / Off'.

'Light' LED

LED is 'On' when Holding Cabinet lights are 'On'.

Operation

Operation



Caution

Some parts of this Hot Holding Cabinet will become HOT during the Hold Mode and could cause burns if touched accidentally.

Using the Hot Holding Cabinet

1. TURN 'ON'.



Press 'On-Off' button.

2. SET TEMPERATURE.



Press and hold 'Temp' button for 2 seconds.
Press ▲ or ▼ to adjust the set temperature.



Press the 'SET' button to set the temperature.

3. SET TIMERS.



Press and hold the 'TIMER' button required, for 2 seconds.
Press ▲ or ▼ to adjust the set time.



Press the 'SET' button to set the timer.

Repeat the actions to set the other timers.

4. STARTING A TIMER.



Press the desired 'TIMER' button to start the timer operation.

5. CANCELLING A TIMER.



Press and hold the 'TIMER' button required to cancel the timer.

- **Press any button**, to cancel the 'Time Up' alarm.



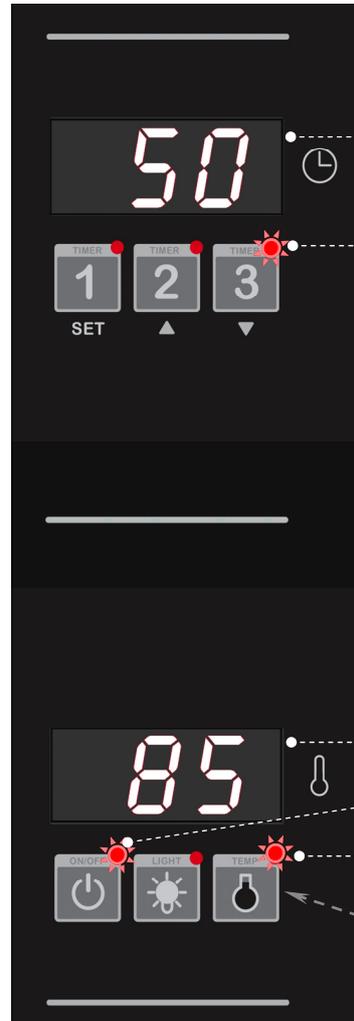
- **Press 'Temp' button**, to check 'Actual' temperature of hot holding cabinet at any time during operation.



- **Press 'Light' button**, to turn 'On / Off' the Holding Cabinet light.



- **Press and hold 'On / Off' button**, for 2 seconds to turn 'Off' the Holding Cabinet.



Time Display - shows
Timer with least remaining
time as default.

Timer 'On' Indicator

Temperature Display -
shows the set temperature.

Power 'On' Indicator

Heating 'On' Indicator

To check the actual holding cabinet temperature during preheat or cooking, press 'Temperature' button. Actual temperature will display briefly on 'Temperature Display' before the display reverts to the pre-set temperature.

This holding cabinet can be used without using the 'Timer' as it is purely a timer and does not control the operation of the holding cabinet.

If the 'Timer' is set to the 'Infinity' setting **Inf**, the timer will count elapsed time to a maximum of 999 minutes.

Controller - Operator Settings

Setting the Operator Accessible Parameters

With the Holding Cabinet in 'Stand-By' Mode (i.e. Power to Holding Cabinet but both displays are blank).

1. ENTERING THE OPERATOR SETTING MODE.

Press and hold 'Set'  and 'Temp'  buttons together.

Upper Display will show .

Lower Display will flash .

2. SETTING PASSWORD (OPERATOR PASSWORD - 123).

Press and hold  button until password  is displayed on the lower display.

Press 'Set'  button to confirm password.

Upper Display will show one of the parameter codes, eg. .

Lower Display will show the value of the setting, eg. .

3. SETTING THE PARAMETERS.

Press  or  buttons to select the parameter required.

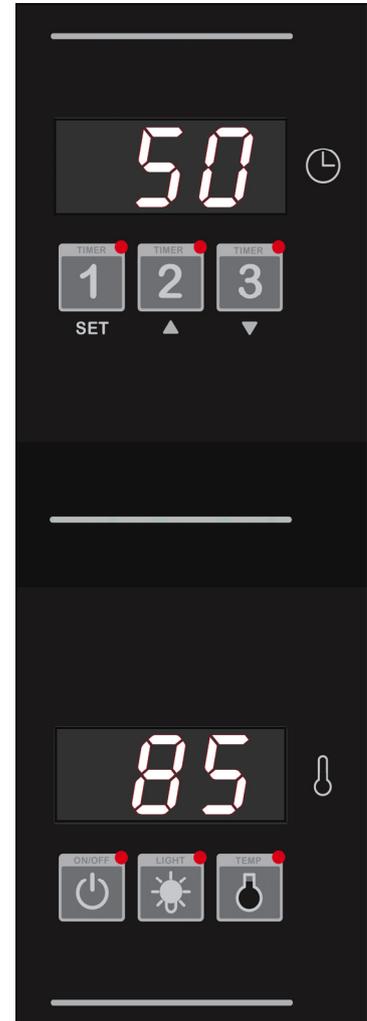
Press 'Set'  button to confirm setting required. Lower Display will flash.

While Lower Display is flashing, press  or  buttons to select the value required.

Press 'Set'  button to confirm setting required. Lower Display will stop flashing.

4. EXITING THE OPERATOR SETTING MODE.

Press 'On/Off'  button to return to Stand-By Mode.



Controller Parameters and Default Settings

Para. No.	Description	Min	Max	U o M	Default	Pass ⁰
L-O	Time Light stays On. Duration of time for which light stays 'On'. Pressing 'Light' Key will turn oven light 'On / Off'. If 1-60min set, oven light will turn off after set time elapsed.	0	60	min	0	U
voL	Buzzer Volume. Volume of buzzer can be adjusted between '0' -No Buzzer and '10' maximum volume.	0	10	---	5	U

Cleaning and Maintenance

Cleaning Guidelines



Caution

Always turn 'Off' the electrical power supply at the mains supply before commencing cleaning.

This Hot Holding Cabinet is not water proof. Do not use water jet spray to clean interior or exterior of the appliance.

To achieve the best results, cleaning must be regular and thorough. If any small faults occur, have them looked at promptly. Don't wait until they cause a complete breakdown.

NOTE:

- Carefully read and follow the safety instructions on the label of the cleaning product to be used.
- DO NOT use harsh abrasive scouring pads or abrasive detergents as they could damage the Hot Holding Cabinet.
- Ensure that any detergent or cleaning material has been completely removed after each cleaning.

To keep your Hot Holding Cabinet clean and operating at peak efficiency, follow the procedures shown below:-

Hot Holding Cabinet Cleaning

NOTE:

- If Hot Holding Cabinet usage is very high, cleaning procedure should be carried out more frequently.

Stainless Steel Surfaces

1. Clean exterior surfaces of Hot Holding Cabinet with, a damp cloth moistened with a mild detergent solution, or a soft bristled brush.
2. Hardened deposits or discolouration may require a good quality stainless steel cleaner. Always apply cleaner when appliance is cold and rub in direction of the grain.
3. Dry all components thoroughly with a dry cloth and polish with a soft dry cloth.
4. Ensure Hot Holding Cabinet chamber is cool. Do not use wire brushes, steel wool or other abrasive materials to clean interior of cabinet.
5. Once a week, remove side racks and clean any build up of product from Hot Holding Cabinet interior, using a mild anti bacterial detergent and hot water solution and a soft bristled brush.
6. Dry Hot Holding Cabinet thoroughly with a soft dry cloth.

Side Racks

1. Lift up and remove side racks for cleaning.
2. Clean racks with a mild anti bacterial detergent and hot water solution, using a soft bristled brush.
3. Dry racks thoroughly with a dry cloth and polish with a soft dry cloth.
4. Refit racks into Hot Holding Cabinet.

Condensation Channel

1. Below the door is a condensation channel for collecting door condensation run-off. This is then fed into a condensation pan.
2. Empty condensation pan on a regular basis and once a week, wipe out condensation channel and pan with a damp cloth moistened with warm water and a mild detergent solution.
3. Dry with a soft dry cloth.



Door

1. Wash door with warm water and a mild detergent solution using a soft sponge in straight lines up and down inner and outer surfaces of door. Rinse with clean, warm water and dry off.
2. Dry the door thoroughly with a soft dry cloth.
3. Clean door glass with a conventional glass cleaner.

Door Seal

Clean door seal with warm water and a detergent solution using a soft sponge when required.

Should the door seal become dirty, it can be removed for a more thorough cleaning should this be necessary:-

1. To remove 1 piece seal, pull seal forward until it pulls out of location groove around the door. **Note the way seal is fitted to door, with lip facing inwards.**
2. Check seal for wear and damage and replace if damaged or worn.
3. The seal may be washed in a sink, taking care not to cut or damage the seal .
4. Dry the seal thoroughly with a soft dry cloth before re-fitting.
5. To refit seal, have seal lip facing into centre of door.
6. Press seal into locating groove around door until seal is properly located.



Periodic Maintenance

NOTE: All maintenance operations should only be carried out by a qualified service person.

Controls and mechanical parts should be checked and adjusted periodically by a qualified service person. It is recommended that the appliance is serviced every 6 months.

Fault Finding

This section provides a reference to the more common problems that may occur during the operation of your Hot Holding Cabinet. This fault finding guide is intended to help you correct, or at least accurately diagnose problems with your Hot Holding Cabinet.

You may encounter a problem not covered in this section, please contact your service provider who will require the following information:-

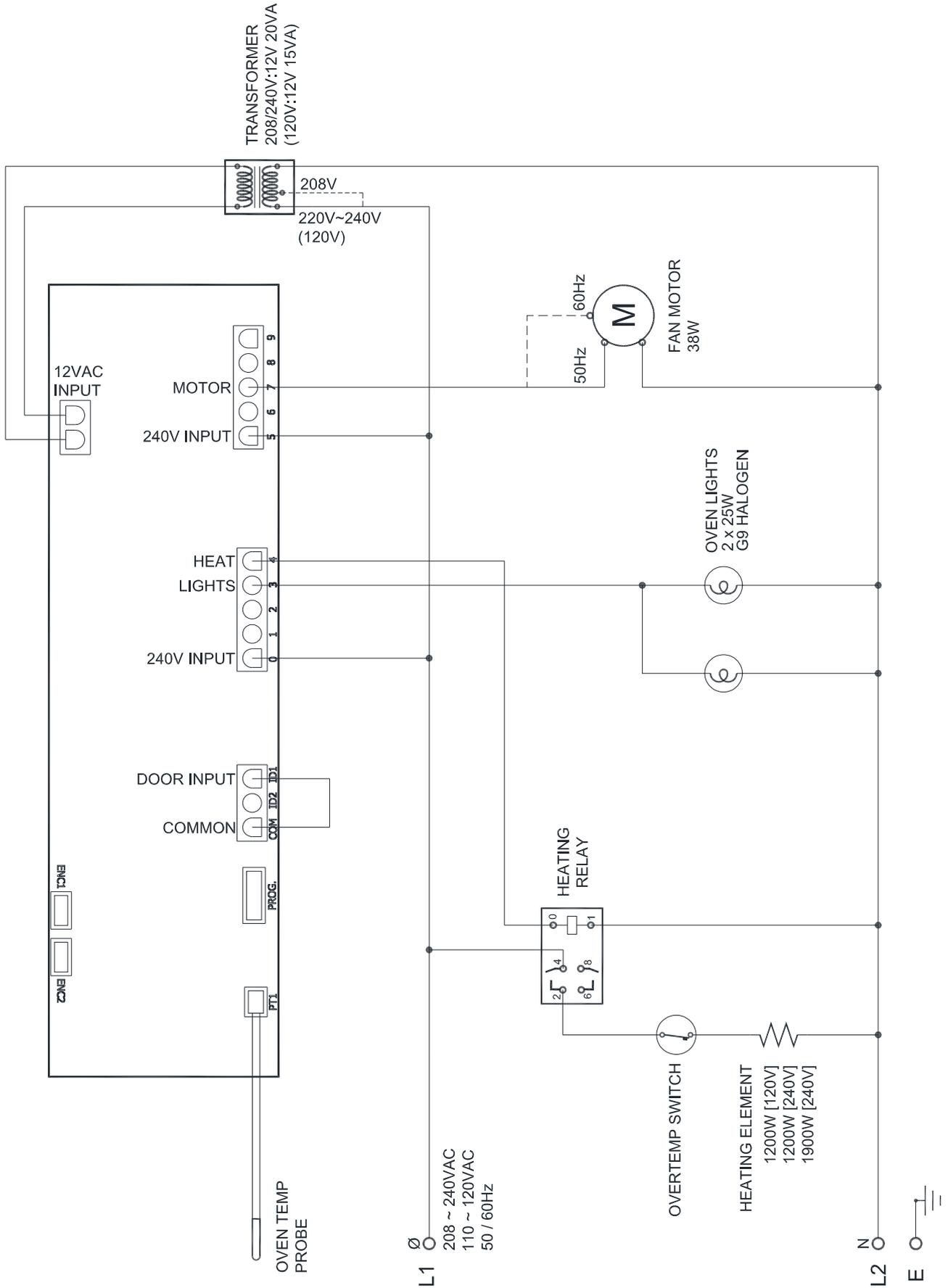
When fault finding a problem, always use a process of elimination starting with the simplest solution and working through to the most complex. Never overlook the obvious.

- **Model and Serial Number of Hot Holding Cabinet, can be found on the Technical Data Plate located on front right hand side panel of the cabinet.**

Fault	Possible Causes	Remedy
The Hot Holding Cabinet does not operate / start.	Mains isolating switch on the wall, circuit breaker or fuses are 'Off' at the power board. Transformer faulty. Control Panel is faulty.	Turn 'On'. Call for service. Call for service.
No Heat.	No operating temperature set on the Control Panel. Cabinet Overtemp tripped. Heating Relay faulty. Control Panel faulty. The element is faulty.	Set an operating temperature on the Control Panel. Call for Service. Call for Service. Call for Service. Call for Service.
Slow Recovery.	Overloading of cabinet. Door opened unnecessarily.	Reduce batch size. Do not open unnecessarily.
The Hot Holding Cabinet lights not illuminating.	Blown bulbs. Control Panel faulty.	Replace bulbs. Call for service.
Fan does not operate.	Fan obstructed. Fan motor faulty. Control Panel faulty.	Clear obstruction. Call for service. Call for service.
Door does not close.	Tray in way of door. Door seal obstruction.	Correctly position tray in rack. Correctly refit door seal. (Refer to the 'Cleaning' Section).

Electrical Schematic

Electrical Schematic



Replacement Parts List

Important:

Only genuine authorized replacement parts should be used for servicing and repair of this Holding Cabinet. Instructions supplied with parts should be followed when replacing components. For further information and servicing instructions, contact your nearest authorized service provider or Turbofan Dealer.

When ordering replacement parts, please quote part number and description as listed below. If part required is not listed, request part by description and quote model number and serial number which is shown on Technical Data Plate.

Part No.	Description	H8D-UC	H8D-FS-UC	H10D	H10D-FS
240219	Control Panel Laminated H10D			●	●
240243	Control Panel Laminated H8D-UC	●	●		
240270	Digital Controller Kit	●	●	●	●
234429	Transformer 208 / 240 - 12V, 20VA	●	●	●	●
234430	Transformer 120V - 24VAC, 15VA (110-120V Only)	●		●	
026160	Terminal Block FV110B	●	●	●	●
238881	Relay DPST HF92F 30A 240VAC	●	●	●	●
240311	Relay DPST HF92F 30A 120VAC	●		●	
237447K	Temperature Probe Kit	●	●	●	●
234080	Element 240V, 1200W (H8D-UC, H10D, 220-240V)	●		●	
234081	Element 120V, 1200W (H8D-UC, H10D, 110-120V)	●		●	
240177	Element 240V, 1900W (H8D-FS-UC, H10D-FS)		●		●
013431K	Motor 208 / 240V, 50/60Hz	●	●	●	●
025387K	Motor 110 / 120V, 60Hz	●		●	
022042	Fan Blade	●	●	●	●
240402	Overtemp Switch	●	●	●	●
236214	Lamp Holder G9 25W (Bulb included.)	●	●	●	●
231814	Lamp Bulb G9/25W 230V HALOGEN	●	●	●	●
233884	Lamp Bulb G9/25W 120V HALOGEN	●		●	
021354	Gasket	●	●	●	●
021352	Glass Lens	●	●	●	●
021353	Support Frame	●	●	●	●
234626	Door Hinge Set Top (H8D-FS-UC, H10D-FS)		●		●
234627	Door Hinge Set Bottom (H8D-FS-UC, H10D-FS)		●		●
235851	Door Hinge Set Top (H8D-UC, H10D)	●		●	
235852	Door Hinge Set Bottom (H8D-UC, H10D)	●		●	
234680	Door Pivot Pin Assembly	●	●	●	●
236299	Door Hinge Gasket (H8D-UC, H10D)	●		●	
240116	Magnet Catch Plate	●	●	●	●
237741	Door Magnet	●	●	●	●
238378	Door Handle (H8D-UC, H8D-FS-UC)	●	●		
236473	Door Handle (H10D, H10D-FS)			●	●
241442	Door Seal H8D-UC	●			
241443	Door Seal H8D-FS-UC		●		
241440	Door Seal H10D			●	
241444	Door Seal H10D-FS				●
238390	Castor 65mm Rigid PU	●	●		
238391	Castor 65mm Swivel PU D/Brake	●	●		
234216	Castor 75mm Rigid Rubber			●	●
234217	Castor 75mm Swivel Rubber D/Brake			●	●
238423	Rack LH H8D-UC (1/1 GN)	●			
238424	Rack RH H8D-UC (1/1 GN)	●			
238730	Rack H8D-UC (1/2 US Pan)	●			
240241	Rack H8D-FS-UC		●		
236521	Rack RH H10D (1/1 GN)			●	
236622	Rack LH H10D (1/1 GN)			●	
238731	Rack H8D-UC (1/2 US Pan)			●	
240217	Rack H10D-FS				●
239482	Condensation Collection Pan	●	●	●	●

