



Operating & Service Manual





Therma flow heating system









To ensure the best results from this unit please take the time to read and follow all safety, installation and maintenance guidelines carefully before proceeding to install. Keep this manual in a safe place for future consultation.



These appliances are marked in compliance with the relevant regulations Voltage stated on unit data plate.



Warning! Please pay attention to sections of the manual displaying this symbol.



Warning! Depending on your unit model, this unit's system may be charged with a flammable refrigerant (R290).

The appliance must only be used for the purpose it was designed for and may become unsafe if used for any other purpose. Operators should be trained. The room where this trolley is used must be dry, clean with temperatures between 16°C and 25°C and with a maximum relative humidity of 60%. This unit is for indoor use only and has an IPX4 rating.



Warning! Do not attempt to use a hose or water jet to clean this unit. or cleaning instructions, refer to section 15.



Warning! The heated models display area exceeds 60°C. Care must be taken when loading food.



Warning! Do not cover or block any internal or external air vents.



Warning! Always switch the unit off when not in use, before moving and before cleaning or maintenance procedures.



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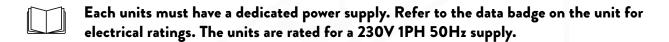
1: Electrical Specification



This appliance must be earthed and damaged cables must be replaced by a suitably qualified person!

	1 Phase Cable	3 Phase Cable
Live (L1)	Brown	Brown
L2	X	Black
L3	X	Grey
Neutral	Blue	Blue
Earth	Yellow & Green (Striped)	Yellow & Green (Striped





2: Specification

Model	Weight (kg)	Dimensions W X D X H (mm)	Electrical Supply	Power Rating (kw)
GOM12	69	600 x 650 x 880	13amp	1.20
GOM13	109	600 x 650 x 1580	13amp	1.80
GOM14	135	600 x 650 x 1858	13amp	2.40
GOM22	95	900 x 650 x 880	13amp	2.40
GOM23	146	900 x 650 x 1580	32amp	3.60
GOM24	181	900 x 650 x 1858	32amp	4.80
GOM13C	113	900 x 650 x 1580	13amp	1.0
GOM14C	130	900 x 650 x 1858	13amp	1.0



Chilled unit's system are charged with flammable refrigerant (R290)



Before commencing there are certain environmental parameters that must be followed please read the additional conditions on page 5 & 6



3: General Installation

Before installation please read the following points:

- When placing in position ensure there is adequate access.
- Ensure that the unit is installed on a flat even surface
- Ensue that the table or counter where table top type units are sited can safely support the weight of the unit.
- These units can simply be butted up together to form a food service line.
- Mobile types roll into position and apply the brakes.
- Before installing, it is recommended that the floor is swept clean.



This equipment is designed to be operated by suitably qualified persons. It is the responsibility of the Supervisor or equivalent to instruct users, provide suitable P.P.E., show the mains isolating switch location, and inform users that parts may become hot, causing injury if touched.



To ensure the satisfactory operation and optimum efficiency of this unit, it is imperative that the ambient room conditions where the units are being used do not exceed a room temperature of 25°c or exceed a relative room humidity of 60%. Do not install units where there is high radiated heat, e.g. direct sunlight, room heaters, or bright spot lights. Do not install units in draughty conditions where the air movement is greater than 0.2mtr/sec. (e.g. near doors, windows, air conditioning units or fans)

Should conditions exceed the above, the display units may not maintain food temperatures at the required levels. E & R Moffat cannot accept responsibility for the performance of the units being used in extreme conditions.

Moving Position.

Prior to moving the unit, it is essential to isolate and disconnect the power cord from the wall socket. This precautionary measure helps prevent any electrical hazards during the repositioning process. Additionally, it is important to stow the electrical power cord properly to avoid any potential damage while moving the unit.

Furthermore, it is crucial to note that the units are not designed to pass over ledges or obstacles. Care should be taken to ensure that the wheels can move freely without any obstructions. It is also important to ensure that the wheels never come into contact with the power cord, as this can cause damage to the cord and pose a safety risk. By following these guidelines, the unit can be moved safely and without any unnecessary complications.



3: General Installation

Table top models:

To ensure the safety of both the unit and personnel, it is important to make appropriate arrangements for lifting and positioning. This will help minimize the risk of damage or injury. Sufficient personnel should be available to handle each unit, while adhering to the health and safety policies of the company or site. By following these measures, potential hazards can be mitigated effectively.



Table top units are heavy, an adequate amount of personnel (or lifting gear if available) should be used, to avoid any risk of injury or damage to the unit.

Ensure the power cable is not damage or trapped under the feet when moving into the final position.

Free-standing mobile models:

To maintain the proper functioning of the equipment, it is crucial to keep it in a vertical orientation at all times. Once the unit has been placed in the desired location, the brakes should be secured to prevent any unintentional movement. This will help ensure the stability and integrity of the equipment, reducing the risk of damage or disruption to its operation.



To prevent any movement of the unit once it is placed in the desired location, it is recommended to utilize the castor brakes that are fitted on free-standing models. These castor brakes are specifically designed to secure the unit in place. They are located on the front of the unit and should be applied to ensure stability and prevent any unintended movement. By engaging the castor brakes, the unit will be effectively immobilized, reducing the risk of accidents or damage.

General all models:

- 1. Remove all packaging & plastic coatings from the appliance.
- 2. Check for any damage.
- 3. Assemble all parts, including shelves,etc.
- 4. Ensure all switches are in the OFF position.
- 5. Connect the mains input plug to the socket outlet.
- 6. Turn on and check the unit is functioning correctly.



4: Operation Heated Models

Heated display units are designed to keep pre-heated food at a regulated serving temperature and are suitable for the display of most types of hot food. Designed with individually controlled shelves maintaining a safe and compliant temperature within. Each level is fully adjustable between 60°C and 90°C.



The controlled air temperature is factory set to operated at 85°C. These units are not designed to cook or heat up cold food.

Control are positioned on the front behind a slide up perspex window.



The display zones have low height perspex screens positioned top and bottom these screens must be fitted. Food held in the display will not maintain proper temperature if the screens are removed

Each individual display level is controlled independently with a dedicated on / off switch and digital display. There is one green illuminated on / off switch for the full vertical display lights.

- 1. Setting the black shelf zone switch to "I" turns power on.
- 2. The zone digital display will illuminate and show the current shelf temperature.
- 3. The shelf zone area will start to heat up. (The standard factory setting is 85° C.)
- 4. Switch on the green switch to illuminate the display area.
- 5. Setting the black shelf zone switch to "O" turns power off.



The shelf zones will take approximately 45min to reach operating temperature.

Do not load any food products into the shelf zone before the set temperature is reached.

Set each zone to the desired display temperature.

The individual zones can be used heated and set at different temperatures or left unheated in an ambient condition.



The food to be displayed must be cooked and at the proper temperature before placing into the unit. Transfer hot food immediately into appropriate packaging and place directly into the display zone. Follow local regulations and check food temperatures are maintained regularly.

NOTE: The temperature displayed on each control is an indication of each operating zone.

Not the core temperature of the food in the zones



4: Operation Heated Models

Adjusting the temperature:

The minimum and maximum temperature limits are factory set, the controlled temperature of each zone can be set anywhere between the limits 60°C and 90°C.

To view the set temperature of a zone.

Press the **"SET"** button twice





To change the temperature of a zone.

Press and release the "SET" button once SET will be displayed on the screen.

- Press and release the "SET" button a second time, the current set-point temperature will be displayed.
- While the current set point is displaying, use the "up or down arrow" buttons to change temperature.



The up arrow button increases the desired set temperature the down arrow reduces the temperature.

When the required setting is displayed press and release the set button to save that temperature.

- Leave the control alone and after 15 seconds the current zone temperature will be displayed. Alternatively press the power button to save the setting.(top right hand button)



Control panel No 1:- all heated models have this type.



Control panel No 2:- all heated 3 shelf models have control panel No 1 and control panel No 2



Control panel No 3:- all heated 4 shelf models have control panel No 1 and Control panel No 3



4: Operation Heated Models

Merchandising:

"E&R Moffat Ltd acknowledges that different products have varying display time requirements based on their core temperature. It is crucial to consider these requirements to ensure optimal quality and safe temperature for consumption. However, E&R Moffat Ltd does not accept responsibility for any variances or loss of quality that may occur due to product differences."

"All items placed in the display should adhere to the correct packaging or container requirements, following in-store procedures and best practices. If any products are found to be in damaged packaging, it is important to promptly remove them from the equipment and clean the area as soon as possible."

Do not block any internal or external air vents.



Legal requirements mandate that all products displayed for an extended period within a heated display area must be periodically probed during trading.

This is to ensure that the core temperature of the product remains above the legal holding temperature set by the local authority. For specific instructions on how to conduct product probing, please refer to the in-house operations manual.

To maximize the shelf-life of a particular food product at a safe temperature, it is prudent to enter the product into the holding unit while it is as hot as possible. This practice helps to maintain the product's quality and safety standards for an extended period

The equipment is not intended to actively increase the temperature of the products. Instead, the products naturally cool and regulate their temperature over the course of the display period to maintain good quality. It is crucial to ensure that the initial core temperature of the products is as high as possible to maximize the display time. Regardless of the entry temperature, the product will gradually decrease in temperature during its display time. However, a lower entry temperature will result in a shorter display time.



E&R Moffat Ltd does not assume responsibility for any variances or loss of quality that may arise as a result of product differences or poor display and merchandising methods.



Calibrated probes should always be used to probe and record food temperatures.



5: Installation Conditions Refrigerated Models.

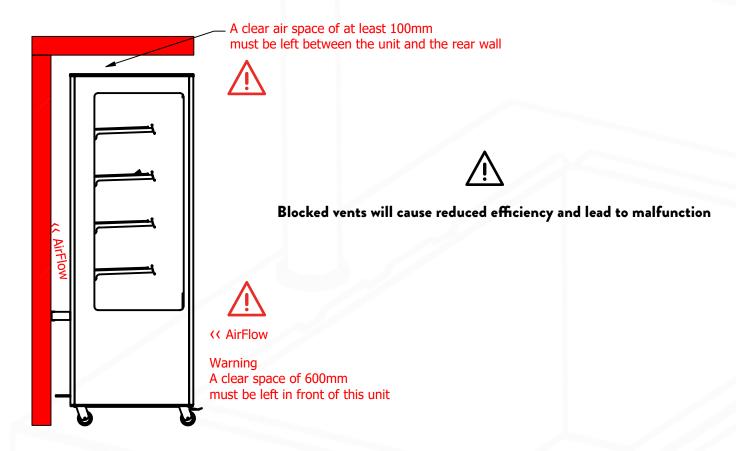
Refrigerated Unit Venting

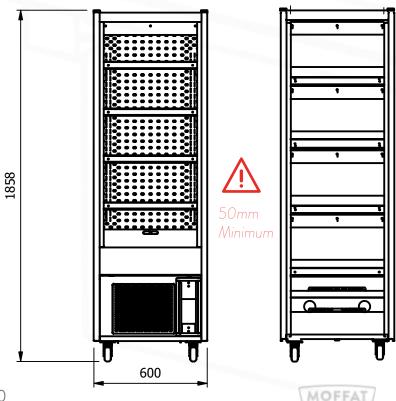
When installing these refrigerated units, allowances must be made for air venting.

It is crucial that there is an unrestricted air flow through the under slung compressor and condensing coil.

Proper venting must be provided ensuring cool air from the room can be pumped in through the condensing coil and out the other side.

The hot air blown out from the opposite side 'must not' be allowed to be sucked back through.





When a chilled unit is to be placed next to a heated model, a clear space of 50 mm must be left between the units.

5: Installation Conditions Refrigerated Models.

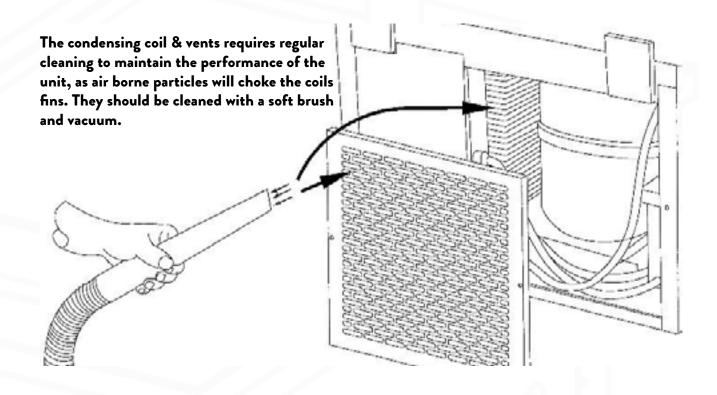


To ensure the satisfactory operation and optimum efficiency of this unit, it is imperative that the ambient room conditions where the units are being used do not exceed a room temperature of 25°c or exceed a relative room humidity of 60%.

Should conditions exceed the above, the display units may not maintain food temperatures at the required levels. E & R Moffat cannot accept responsibility for the performance of the units being used in extreme conditions.



Do not install units where there is high radiated heat, e.g. direct sunlight, room heaters, or bright spot lights. Do not install units in draughty conditions where the air movement is greater than 0.2mtr/sec. (e.g. near doors, windows, air conditioning units or fans]





These units require good airflow inside and outside. It is essential the vents in the external panels do not become blocked as this can cause the unit to fail, due to overheating. Internally good air flow must also be maintained, a small space should be left between all products.



6: Operation Refrigerated Models

Refrigerated display units are designed to keep pre-chilled food at a regulated serving temperature and are suitable for the display of most types of cold food. Designed to provide a chilled condition maintaining a safe and compliant temperature within. The Chilled display has an automatic defrost, and automatic condensate water evaporation system, eliminating the need to manually empty drip trays or on-site drainage.



The controlled air temperature is factory set to operate between 2°C and 5°C.

The Display unit is controlled by a green neon on/off switch and a digital control.

- · Connect plug to 13 Amp socket and switch on at mains socket.
- · Power on with green illuminated Switch
- Digital illuminates and controls the display temperature
- · Allow 30mins for the display too cool down before loading product
- \cdot The controlled air temperature is factory set to operate between 2° and 5°
- · Defrost is factory set to operate automatically when required
- When serving is complete all switches should be turned off.





To enable automatic defrost, the 13A plug must be constantly switched on. The green switch can be switched off when the cooling is no longer required, however, do not un-plug the unit from the mains power.



Product should already be 5° or below before loaded into the display

These units are not designed to chill down hot food



7: Cleaning

Food display models should be emptied and cleaned on a daily basis. It is essential that only trained personnel, who are suitable for carrying out cleaning procedures, perform these tasks.



Prior to cleaning the unit, please ensure that it is disconnected from the electric supply and allowed to cool down. Additionally, remove all food and packaging from the unit.

- Disconnect from mains and wait until appliance has cooled.
- 2. Wipe clean using hot, soapy water and soft, non-abrasive cloth. Ensure that the stainless steel is wiped in straight strokes following the grain of the material.
- 3. After wiping the surface, make sure to dry it thoroughly using a clean cloth. Avoid using scouring pads or any abrasive cleaners. For a more thorough cleaning, remove any accessories to access the internal areas. After cleaning, ensure that all perspex panels and fixings are properly replaced.
- 4. The chilled well has removable base sections for easy cleaning and maintenance. They should be removed periodically and the area beneath wiped clean.
- 5. The drain holes must also be kept clear from blockage.
- 6. Finish by carefully drying with a soft dry cloth or Kitchen Towels.



Do not use a water jet or pressure spray to clean this appliance.

Do not use scouring pads or abrasive cleaners of any type.

Do not use Solvents, bleach, Caustic Cleaners or biological powders on any surface.

It is important to prevent excess water from pooling on the glass shelf base.



Special care should be exercised when working around electrical parts, and excessive use of water should be avoided.



E&R Moffat Ltd cannot assume responsibility for any malfunctions or damages that may occur if the aforementioned cleaning procedures are not followed diligently. It is crucial to adhere to these cleaning procedures to ensure the proper functioning and longevity of the equipment.



Thank you for choosing E&R Moffat!

Scan the QR code below to visit the E&R Moffat website for further information:

