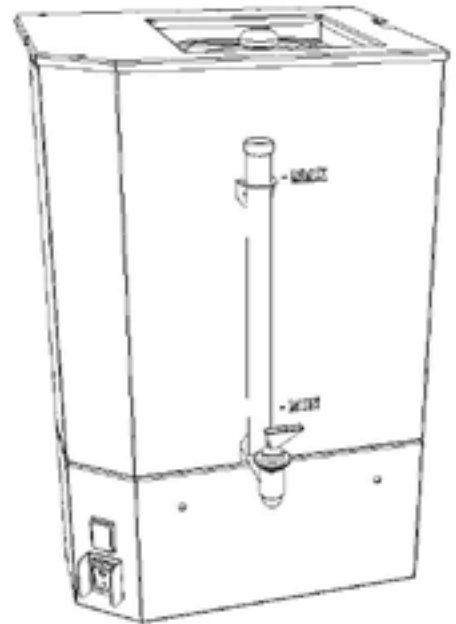
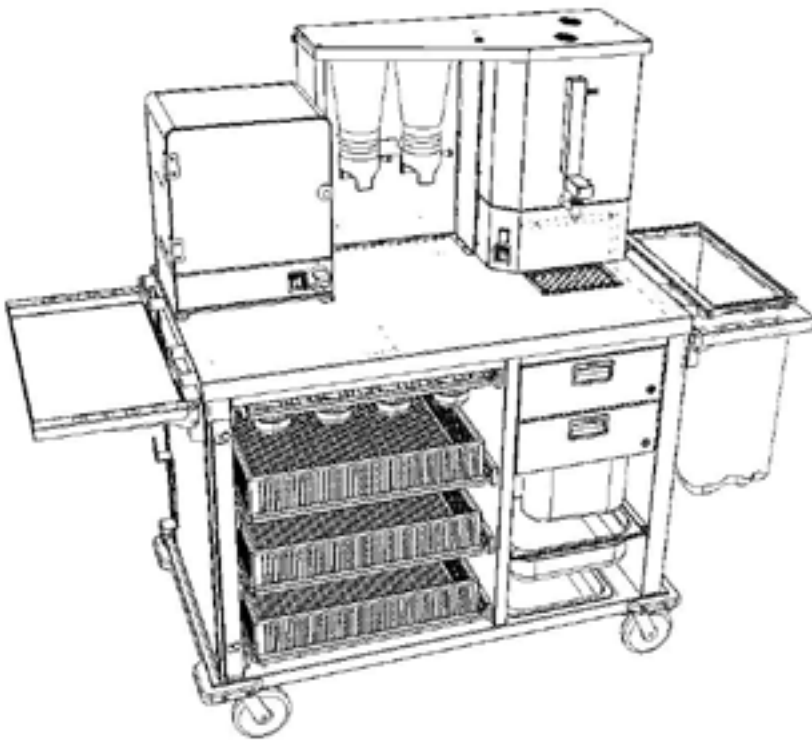




# Beverage Trolley with water-boiler. Models BBTX & BBTC



## Operating & Service Manual





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.



**Prior to ANY service calls please:** Consult manual for basic fault-finding advice and information required to place the call. Check warranty/maintenance terms and conditions.



These appliances are marked in compliance with the relevant Low Voltage & EMC Directives. Voltage stated on unit data plate.



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

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 unit is used must be dry, clean with temperatures between 3°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. For cleaning instructions, refer to section ##.



**Warning!** Pay particular attention to the method of operation and care required for the proper use of electrical power connections, plugs, and sockets.

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# 1: General Electrical Safety

## Electrical requirements:

All electrical units are configured to suit a single phase supply operation unless specified or requested prior to the order.

H07RN- F cable type is fitted as standard.

It is the purchasers responsibility to outline any particular site requirements such as electrical supply, phase requirements, cable type, length, and control requirements prior to order.

Factory fitted with 2 metre 13amp supply cable(s).

Electrical diversity is not applicable; as a non-domestic installation, provision must be included for all appliances, socket-outlets etc., to operate simultaneously at full power.

## RCD protection:

It is highly recommended that supplementary electrical protection be utilized with all appliances. We strongly advise the incorporation of a suitable residual current device (RCD).

While an RCD can decrease the probability of an electrical injury, it is important to note that a shock can still result in severe or even fatal injuries. Therefore, it is crucial to consider an RCD as a supplementary measure in reducing the risk of individuals being harmed by electricity, rather than relying solely on its effectiveness.

The most optimal location for an RCD is within the main switchboard, as this ensures continuous protection of the electrical supply. In cases where this is not feasible, an alternative option for enhanced safety is to utilize an electrical socket outlet that includes an RCD or to employ a plug-in RCD adaptor. These alternatives can provide additional layers of protection.

In order to minimize the risk of injury to individuals, it is recommended that the tripping current of the RCD should not exceed 30 milliamperes (mA). RCDs with a higher tripping current are typically employed for the purpose of fire protection.



Warning! Multiple units must not be connected to a double 13amp power socket, each unit should be connected to a separate 13amp power socket. Additionally any Moffat appliances fitted with 2 x 13amp plugs must also be connected to two separate 13amp power sockets. Do not connect two 13amp plugs to a 13amp double socket.



# 1: General Electrical Safety

## UK 13 Amp ~230V plugs

The structure and wiring of an electric plug appear to be simple. However, the electrical hazards associated with the unsafe use of electric plugs should not be overlooked.

Occupational accidents, such as electric shocks, burns, fires and explosion, that result from the improper selection, wiring, handling, usage, repairing and maintenance of electric plugs are not uncommon. They can result in damage of equipment, lost of properties and production time, and more importantly, casualties. In view of the serious consequences of the accidents, it is essential to understand the safe use of electric plugs at work. In case of doubts, please seek the advice and assistance of competent persons, such as qualified electrical engineers, electrical technicians, and registered electrical workers.

- Ensure plugs meet British standard BS.1363.
- Do not overload sockets and switch off before inserting or removing the plug.
- Regularly check the 13amp socket plug and cable are safe in good condition.
- Check for damage or cracks, any indication of overheating discolouration etc.
- Look for signs of connection pin damage, pins must protrude straight and true.
- Do not use if the plug is a slack fit in the socket, poor contact will cause overheating.
- Do not splash sockets with water or any other liquid.
- Handle with care, do not pull on the cable or allow the cable to be strained.
- Regularly inspect for defects. Plugs must be kept clean away from any dirt oil or grease.

## Power Cables

Ensure that the cable is securely fastened within the plug and that there are no visible internal wires exposed. Inspect the cable for any cuts, or damaged.

Cables must not be temporarily repaired or re-joined if damaged.

If the supply cord is damaged, it must be replaced by the manufacturer, service agent or suitably qualified person.



Warning! Power cables and plugs on mobile units are frequently damaged when the plugs are left connected to wall sockets while the mobile unit is being moved. This accidental practice poses a significant safety risk and should be emphasized by the duty holder as a potential safety concern.

## Power Extensions and cables

Power extensions are not recommended, if an extension lead is used beware of the following.

- Never plug more than one appliance into a multi-way adapters / multi-way extension.
- Do not cross a pathway, leads being continually walked over will become damaged.
- Do not allow the cable to become over taut or over-stretched or continually bent.
- Do not allow cables to become tangled. Position carefully preventing risk of tripping.
- Only use an extension lead which was bought ready-assembled.
- Do not use an extension lead that is more than 15 metres long.
- Only use extension leads fitted with suitably insulated connectors and plugs.
- Always check the extension lead plug contains the correctly rated fuse.
- If using a cable drum extension, it should be completely unwound to avoid overheating.

## 2: Electrical Specification



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

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



A mains cable, type H07RN-F, conforming to code designation 60245 IEC 57, is supplied.



“If the supply cord is damaged, it must be replaced by the manufacturer, service agent or suitably qualified person”

	Rating (kw)	Supply Voltage	Amps per phase
<b>BBTX &amp; BBTC (trolley with boiler)</b>	2.8	230	13 amp
<b>BBTW (water-boiler)</b>	2.2	230	10 amp
<b>Optional TW1 (toast warmer)</b>	0.3	230	1.5amp



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.

This appliance is intended to be used in household and similar applications such as:

- Staff kitchen areas in shops, offices and other working environments;
- Farm houses;
- By clients in hotels, motels and other residential environments;
- Bed and breakfast type environments

## 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
- Mobile trolley roll into position and apply the brakes.
- Before installing, it is recommended that the floor is swept clean.

### Commissioning

- Remove all packaging & plastic coatings from the appliance.
- Check for any damage.
- Assemble all parts, shelves and drawers etc.
- Place the appliance in its intended location - on a flat, level surface and apply trolley brakes.
- Always ensure unit is clean before operation.
- Ensure all switches are in the OFF position.
- Connect the mains input plug to the socket outlet.
- Turn on and check the unit is functioning correctly.

### 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

#### 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.



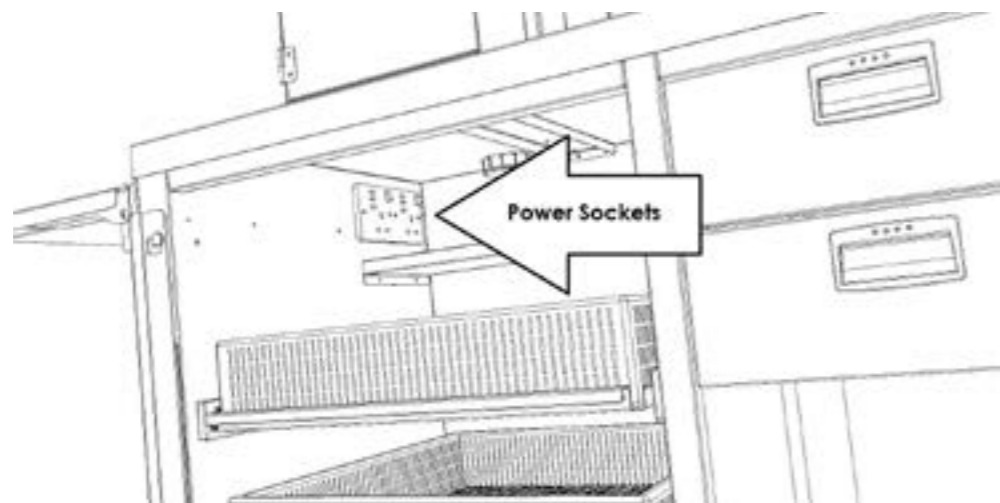
**To prevent any movement of the unit once it is placed in the desired location, it is recommended to utilize the castor brakes that are fitted on free-standing models. These castor brakes are specifically designed to secure the unit in place. They are located on the front of the unit and should be applied 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.**

The breakfast / beverage trolley is designed for easy serving of breakfast, tea and coffee, specifically in a care home or hospital ward location.

The trolley is supplied with drawers for cutlery and condiments also there is pull out dish-wash type crockery baskets and a additional pull out drawer holding cereal containers. These are all container under the work top, Up on top there are dispensers for coffee and sugar or hot chocolate, and an integrated water boiler. On the operators left hand side there is a space where the optional toast warmer can be fitted.



**In behind where the crockery baskets are fitted there is an on-board double 13amp socket, this is where the water boiler and optional Toast warmer are plugged in. The double socket is connected internally to the external 13amp power cable and plug. This allows easy operation using one plug to power everything fitted to the trolley.**



### 4: Operation (water-boiler)

#### First Use

1. Unlock with keys supplied and flip up top cover.
2. Pull out water-boiler lid
3. Ensure the tap is in the off position.
4. Fill up with fresh cool water to maximum level.  
Check the water level through the glass tube on the front.
5. Replace the boiler lid and press the green power switch to the on position.  
The amber light will illuminate showing when the element in the boiler is on.
6. Leave for 30min to boil up or until the amber light switches off.
7. Drain the water and dispose of the water removing any loose particles and dust from the system.



**Hot water and steam may cause scalding injury, be careful when operating the Tap.**

- Push the tap lever down to allow water to pour out and release to stop.
- The tap lever can also be pulled up and set in a locked open position.

**Do not remove the lid while the water is boiling.**



The water boils up and controls at around 96 degrees C

There is a low water safety feature.

Th capacity is 10 litres.



**Do not allow the water to run dry.**

- Boil dry protection will switch of element if water level is to low.
- To re-set switch of power allow unit to cool down and re-fill.



The boiler is manufactured from 304 grade stainless steel and will therefore not corrode. However, any inclusions or deposits in the water supply or other water vessel used to refill the boiler, may corrode inside the tank. It is essential that this boiler is cleaned with a mild detergent and rinsed thoroughly before use. Repeat this at regular intervals thereafter



## 4: Operation (water-boiler)

### General Use

#### Switching On

1. Plug the trolley into a 13amp power outlet and switch it on.
2. Unlock with keys supplied and flip up top cover.
3. Pull out water-boiler lid.
4. Ensure the tap is in the off position.
5. Fill up with fresh cool water to maximum level.  
Check the water level through the glass tube on the front.
6. Replace the boiler lid and press the green power switch to the on position.  
The amber light will illuminate showing when the element in the boiler is on.
7. Leave for 30min to boil up or until the amber light switches off.

#### Using the Boiler

1. Place a cup, mug or pot directly under the tap.
2. Gently pull the tap lever forwards. Water will pour from the boiler. The tap will spring back when released. **CAUTION**, Do not pull the lever too quickly or boiling water may splash.
3. Never allow the water level to drop to the level of the tap. If no water pours when operating the tap, check the water level. If the level is low, fill the boiler immediately.
4. The water level should be checked at regular intervals. Adding small quantities of water at regular intervals is more efficient than refilling the boiler when it is nearly empty.
5. To turn the boiler off, simply press the green switch to the off position.
6. Switch power off at the socket disconnect and carefully wrap the power cord up on the cable holder located on the end of the trolley.



**When moving the trolley to another location always switch power off at the socket disconnect and carefully wrap the power cord up on the cable holder located on the end of the trolley.**

## 5: Accessories

### General Use

#### Powder & Sugar dispensers

1. Wall mounted coffee & sugar dispensers, each with a 1.5 litre capacity.
2. The “Click Dispenser” mechanism is set to dispense 1 x teaspoon per click and is great for dispensing sugar, coffee, creamer, sweetener and many more powders!
3. One unit is set to dispense 1 x sugar, and one is set to dispense 1 x powders.
4. Suitable for coffee, sugar, creamer, sweetener, and cocoa powder.

#### Condiment Drawer

Pull out top drawer on left hand with six removable 1/9th size GN containers.

#### Crockery Baskets

Pull out heavy duty slides holding three 500mm square dish wash type crockery baskets.

#### Cutlery Drawer

Pull out top drawer on right hand with a removable segmented cutlery containers.

#### Cereal Containers

Pull out drawer on right hand holding four cereal containers.

#### Cake Tray

Low level GN1/1 size gastronorm type 100mm deep slide out pan.

#### Cleaning cloth holder

Low level lift out GN 2/3rd size gastronorm type pan, 65mm deep.

#### Cereal Containers

Pull out drawer on right hand holding four cereal containers.

#### Waste bin

BBTX has plastic bin and work top funnel the BBTC model has a fold down waste bag holder.

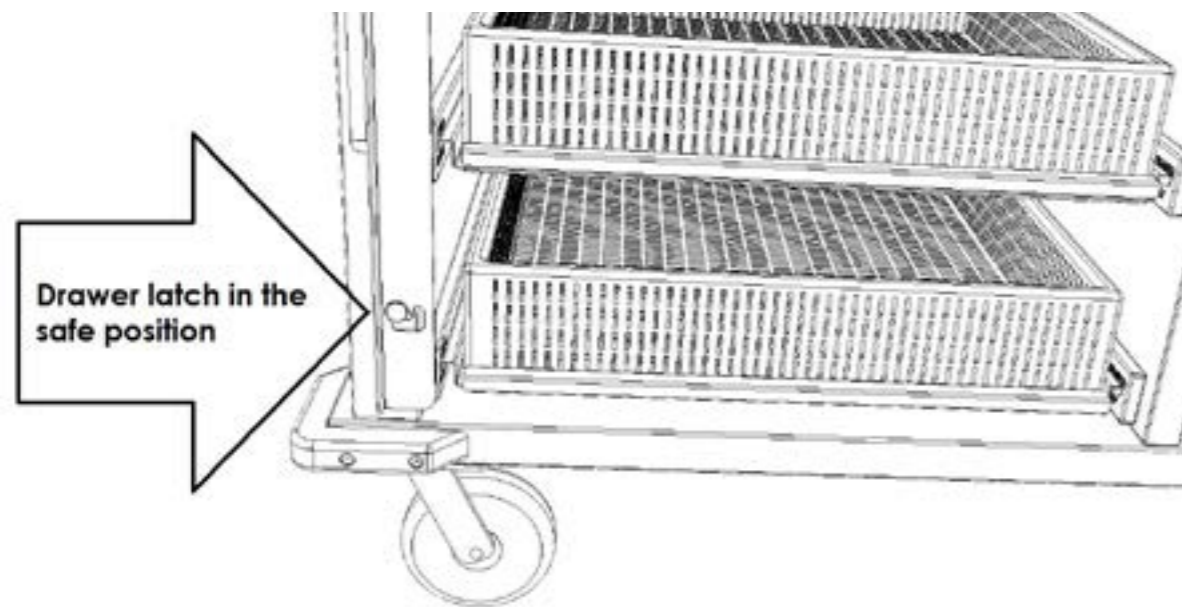
## 6: Drawer Safety Latch

### General Use

#### Drawers

Drawers runners can be unhooked for deep cleaning and maintenance.

On the right hand side of the trolley a safety latch mechanism can be applied, this secures the drawers from slipping out of position when the trolley is being wheeled round corners.



## 7: Manoeuvring Trolley



**Always ensure appliance has been unplugged and cable coiled safely. Push the trolley where possible, avoid pulling.**

- Higher push forces and neutral body postures are assumed when pushing, as opposed to pulling. Pulling can limit the direction of travel vision, can twist the back and neck and require high forces at the shoulder.
- Pulling increases the risk of foot and ankle injury from the trolley riding up during transfers.
- Proper footwear should be worn.
- To ensure a good grip stand with the legs at shoulder width. Stagger legs to get the trolley in motion.



## 8: Water-boiler De-scaling

### Removing Lime and Mineral Deposits

The water boiler tank should be de-scaled regularly to maintain efficient operation and water quality. The frequency depends on the hardness of the water.

The de-scaling procedure must be performed by trained personnel.



**Perform this procedure when the unit will not be used for a period of time, such as the end of the day.**

**Wear protective clothing.**

- Turn off the power and allow the water to cool.
- Isolate the boiler from the electrical supply.
- Drain the tank.
- Fill the tank with a mixture of 75% water and 25% white vinegar. Do not use flavoured vinegar.
- Replace tank lid and attach an 'Out of Use' notice to prevent use during de-scaling.
- Connect the power back up and switch on and run the boiler for 30 minutes.
- Isolate the boiler and allow the water to cool.
- Inspect the tank and inner element for scale deposits. If necessary repeat the de-scaling process.
- Drain and flush the tank with clean water.
- Wash the tank using water and a mild detergent. Rinse thoroughly and dry.



**Heavy scale build up may require additional treatments.**

## 9: Cleaning



**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.**

1. *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. *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!

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E&R Moffat website for further information:*

