OPERATIONAL

TECHNICAL MANUAL

B-Smart Station

BURLODGE

BURLODGE

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1. GENERAL SAFETY INFORMATION

This "User's Manual" complies with the relevant EU guidelines and forms an integral part of the B-Smart Station, which is the central component of the B-Smart Meal Regeneration and/or Maintenance Distribution System. It contains instructions for the

- correct installation
- efficient operation
- proper maintenance of the B-Smart Station

The measures specified by Burlodge for the safe and reliable operation of the B-Smart System apply in their entirety. They do not affect the national and international standards and regulations that apply at the installation location. In particular, the following safety precautions must be observed:

- To ensure the safe operation of the B-Smart System, the operating instructions set out in this User's Manual must be adhered to at all times during the installation, operation and maintenance of the B-Smart Station. In cases of doubt, or if problems arise that are not dealt with, or are not covered in sufficient detail in the User's Manual, contact Burlodge.
- All installation and maintenance work on the B-Smart Station must be performed by service personnel who have been approved by Burlodge.
- Before connecting the B-Smart Station to the mains, make sure that the mains power supply complies with the mains power specifications set out in Section 3 of this User's Manual, and that the earthing system used complies with the relevant safety standards for electrical appliances.

The B-Smart System was designed and constructed for the purpose of regenerating meals and maintaining the temperature of hot and cold foods. Burlodge accepts no liability for damage to persons or property, or, specifically, to the B-Smart Station or to a B-Smart Shuttle Trolley if such damage has resulted from the incorrect use of the B-Smart System or the B-Smart Station, or from their use for purposes other than those for which these units were designed and constructed.

Instructions of particular importance in this manual are characterized by the following symbols:

⚡ **Warning.** The type of warning is indicated by a symbol and explained in the accompanying text in more detail. Direct or indirect danger to life and limbs of the user and / or third parties when the instructions are not followed precisely.

⚠ **Caution.** The type of caution is indicated by a symbol and explained in the accompanying text in more detail. Potential risk of injury or damage to property when the instructions are not followed precisely.

Read Operator's Manual before using this product.

<u>Instructions related to Safe Operation</u>

⚡ **WARNING**

- The Station must be properly grounded through the power supply cable.
- Always disconnect the Station from the power supply before attempting to move it or carrying out any cleaning or maintenance work.
- Never pull on the power cable to withdraw the plug.
- Some surfaces will be hot during and after a cycle.
- Always switch off the Station when not in use.
- Engineering work should only be carried out by fully trained or authorised personnel.

- Do not attempt to use the Station if the power cable is damaged, worn or frayed. Call our Service Department or your Authorised Service Agent to replace the cable immediately.

⚠ CAUTION

- Secure the Station by using the parking brakes on the swivel castors to prevent the Station from rolling away.
- Never place this product close to any sources of heat i.e. gas ranges or dishwashers etc.
- Never use sharp instruments on the control panel fascia - always use your fingers.

This appliance is not intended for use by any person (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

- **Children being supervised not to play with the appliance**

2. APPLIANCE DATA

APPLIANCE TYPE: B-SMART STATION

MODEL DESIGNATIONS: B-SMART Station:
BLDM0A.360 STATION - 3P/N/E - 400V 50Hz 8KW
BLDM0A.380 STATION - 3P/N/E - 400V 50Hz 10KW
BLDM0A.460 STATION - 3P/E - 230V 50Hz 8KW
BLDM0A.480 STATION - 3P/E - 230V 50Hz 10KW
BLDM0A.760 STATION - 3P/G - 208V 60Hz 8KW

MANUFACTURER: Burlodge Srl
Via Ca' Bertoncina No. 43
24068 Seriate (BG) – Italy
Tel. 0039 035 4524900
Fax 0039 035 302994

The B-Smart complies with the following harmonized European directives:
DIRECTIVES: 2014/35/EU Low-Voltage Directive (LVD)
2014/30/EU Electromagnetic Compatibility (EMC) Directive
2006/42/EC Machine Directive
2011/65/EU Directive Restricting the Use of Certain Hazardous Substances (RoHS2)

R&TTE: 1999/05/CE

The B-Smart System complies with the following European standards (in their applicable version and with related Amendments):

SAFETY: EN 60335-1
EN 60335-2-49
EN 60335-2-89

EMC: EN 55014-1
EN 55014-2
EN 61000-3-2
EN 61000-3-3
EN 62233

3. TECHNICAL DATA

External dimensions:	968 x 782 x 1 359mm / 38.1 x 30.7 x 53.5" (W x D x H)
Supply voltage:	220-240V 3P+E or 380-400V 3P+N+E 208-220V 3P+G
Frequency:	50/60Hz
Power requirement Combined heating and cooling:	8.1 kW or 10.0kW
Refrigerated compartment only:	1.5 kW (all versions)
Heating system:	Forced air convection
Refrigeration system:	Forced air convection
Climate class:	Climate class 5. Tropicalize compressor 43°C/110°F. Recommend ambient working temperature between 10°C/50°F and 30°C/86°F during heating cycle.
Evaporators:	Copper with Aluminium fins
A-weighted emission sound pressure level:	59,7 dB(A)
Heat output:	Max heat output: approx. 6300 Btu/h (EU); 7260 Btu/h (NA) Typical cycle output: approx. 4300 Btu/h
Protection class:	IPX4
Weight of empty B-Smart Station:	165 kg/364 lbs

Refrigerant Data:

The following information is in compliance with the Regulation 517/2014/EU on fluorinated greenhouse gases.

- The refrigerant gas used is denominated R507 (50% HFC-143a + 50% HFC-125). Quantity is 1kg/2.2 lbs.
- In accordance with what is stated in the Regulation 517/2014/EU, it is possible to calculate the GWP (Global Potential Warming) value of this gas, which is:

$$GWP_{R507} = 50\%\ GWP_{HFC\text{-}143a} + 50\%\ GWP_{HFC\text{-}125} = 3985$$

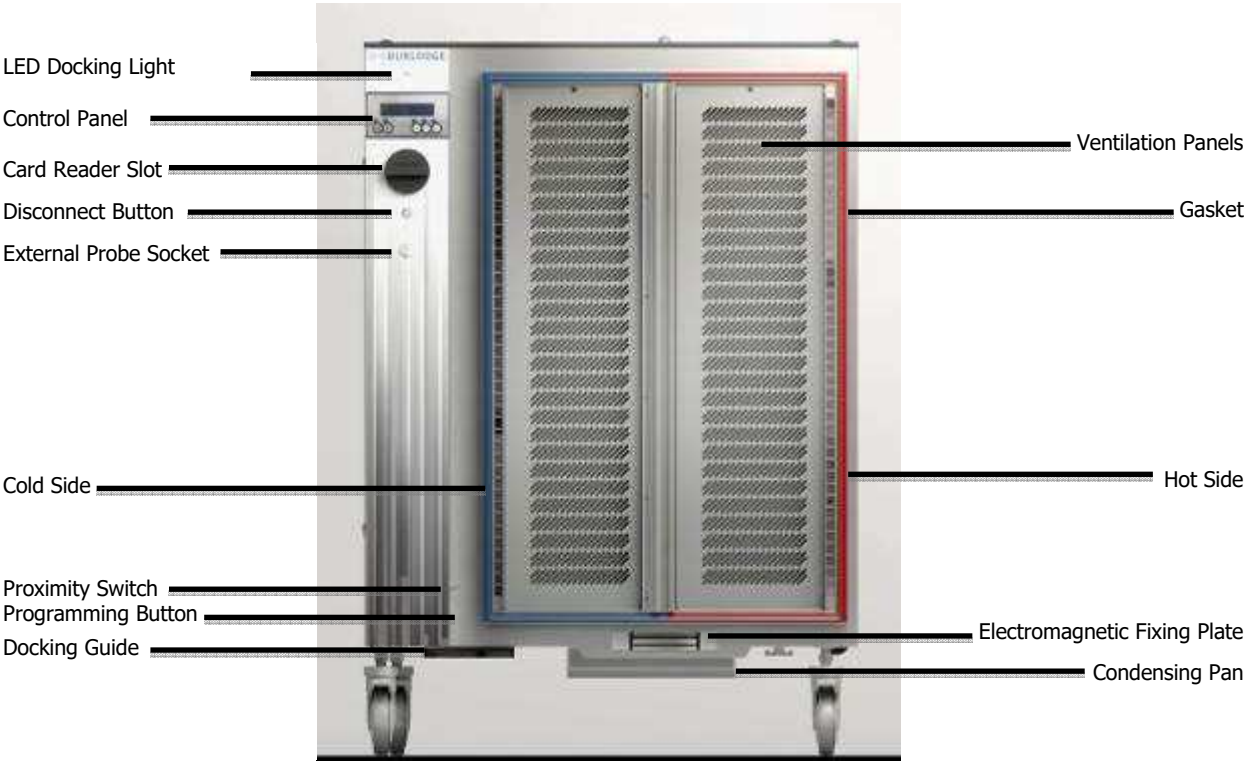
End-of-life disposal and recycling

Old electrical appliances contain valuable raw materials. We will be happy to arrange for the appropriate recycling / disposal of Dock-Rite units that have reached the end of their useful working lives. Contact us for further information.

4. DESCRIPTION OF THE B-SMART STATION

The B-Smart System is an efficient, easy-to-operate meal-regeneration and transport system designed specifically for use in hospitals where space is at a premium. It consists of a Station and a Shuttle. Although the B-Smart Station has wheels, it is primarily intended for fixed stationary use. It can be positioned in a hospital ward, or in a meal-distribution room in the vicinity of the hospital kitchen. The B-Smart Shuttle is an enclosed trolley with two insulated compartments for warm and cold trayed meals. The Shuttle is docked against the B-Smart Station and held securely in position by an electromagnet on the Station. The Station can be operated in a simultaneous heating-and-cooling mode, or in cooling mode only. The Station is constructed of WNr.1.4301 18/10 (AISI 304) stainless steel.

The B-Smart Station consists of the following components:



- The B-Smart Docking Station is divided into two sections: a convection heating and refrigerated section located on the right and a refrigerated ventilated section on the left. The air intake is through the ventilation panel, heated and/or cooled and blown out by powerful fans through the side ventilation outlets.
- Easily removable colour-coded perimeter and central gaskets ensure an air tight seal between the heated and the cooled compartments when the Shuttle is docked.
- The control panel is located to the left and is easily accessible even when the Shuttle is docked.
- The docking guide is located on the left and is used to align the trolley correctly to the Station.
- An electromagnet locks the shuttle to the Station during use and is located at the bottom (do not pull hard when connected, shuttle should always have the parking brakes applied).
- The condensing pan with electrical heater operates when the Docking Station is ON and the Shuttle is connected. The condensing pan is removable for deep cleaning.
- The program button allows programming, data download, and maintenance to be carried out without the requirement of a Shuttle being connected.
- The proximity switch tells the Shuttle to activate the docking process (red/green LED and docking electromagnetic plate).
- The height-adjustable wheels ensure perfect docking of the Shuttle Trolley against the Station.

- Two adjustable horizontal spacer bolts positioned at the bottom corners of the back panel and two pneumatic pistons are located at the top to maintain an optimum distance between the Station and the wall behind it.

Equipotential Connector

The equipotential connector is located at the back on the Station and is marked by a sticker with a symbol. The bonding conductors having nominal cross-sectional areas up to 10mm^2/0.015in^2.

5. INSTALLATION

a) Unpacking

1. Remove outer box and inner packaging.
2. Remove batons which are holding the wheels in position on the pallet.
3. Lift or roll Station off the pallet carefully by means of a ramp. Do not drop the Station from the pallet onto the floor.
4. Always push and pull the Station from the left hand side (control panel side), i.e. sideways, as it is the widest and most stable section of the Station.
5. All packaging must be disposed of in compliance with local laws and regulations.

⚠ **Caution:**

- Ensure that no damage is caused to persons or to the trolley by using a ramp or by following manual handling local safety guidelines.

b) Positioning, alignment and installation

It is extremely important that the Docking Station is properly installed and the height adjusted to the Shuttle in order to ensure easy docking and air tight seals between the Shuttle and the Station. It is recommended that the floor is as flat as possible. The Station must be fixed to a solid wall.

⚡ **Warning:**

- After the installation of the Station, tests should be performed to ensure that the system complies with all applicable safety standards and regulations. In particular, measures should be taken to ensure that the power supply line to the Station is adequately protected, that the Station is properly grounded, and that earthing and potential equalization comply with all the local standards and regulations applying to electrical installation.

⚠ **Caution:**

- We recommend that the power supply is always located higher than the Station and on its left hand side.

i. Spacer bolt and pneumatic piston fitting

The Station is supplied with two pneumatic pistons and two spacer bolts, proceed as follows to fit them at the back of the Station:

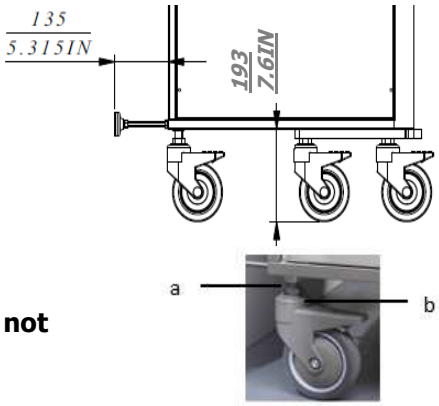
1. Fix the pneumatic pistons to the top of the Station. Ensure that the lock nut is tightened.
2. Fit the spacers to the bottom of the Station. Approx. length of the bottom spacers should be 135mm/5.31” (i.e. 10mm/0.39” less than pneumatic pistons at top).
3. Position the Station against a solid wall in a desired location.

Note:

- When pushing the Station against the wall ensure that pneumatic pistons always protrude by 10mm in relation to the spacers

ii. Wheel adjustment

The Station is always adjusted at the correct height. The height should be approx. 193mm/7.6" from floor as shown in drawing.
If further adjustments are required to change the wheel height proceed as follows:



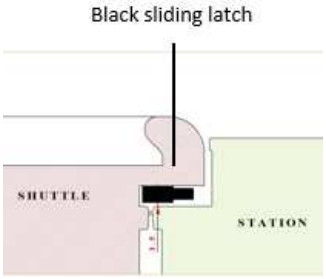
1. With a 30mm/1.18" spanner unlock the lock nut (a).
2. Turn wheel nut shaft (b) to desired height. **Do not tighten lock nut at this stage.**

Note:

- Do not apply the wheel brake when adjusting the height as it will stop the shaft from rotating.

iii. Alignment of Shuttle to Station

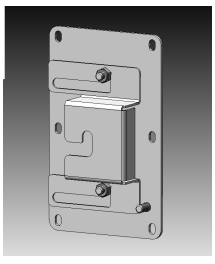
1. Open all doors of the Shuttle prior to commencing the aligning process with the Station.
2. Push the shuttle against the Station.
3. Ensure that the black sliding latch of the Shuttle does not interfere with the gasket frame of the Station. If needed (i.e. due to uneven floor), adjust the Station height so that there is a gap of 3.5mm/0.134" between the black sliding latches of the Shuttle and the gasket frame of the Station.
4. Ensure that the Shuttle is also parallel to the Station when viewed from the front.
5. Check the alignment by looking inside the Shuttle and/or outside where the gaskets meet between the Station and the Shuttle.
6. Make final adjustments to the wheels to ensure perfect alignment and tighten lock nut (a).



iv. Wall fixing

The Station can be fitted to the wall in two ways by means of a **wall fixing bracket** or **foot releasing mechanism.**
Once steps i, ii and iii are correctly completed and you are happy with the alignment, mark the floor where the wheels are located with tape to mark the position of the alignment. This is so that it can be repositioned in the same place at a later stage.

1

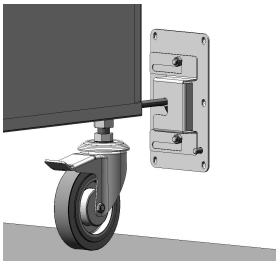


a) Bracket (optional)

The wall bracket is made up of two parts; the plate that fixes onto the wall and the sliding carriage.

In order to fix the wall fixing bracket to the wall proceed as follows:

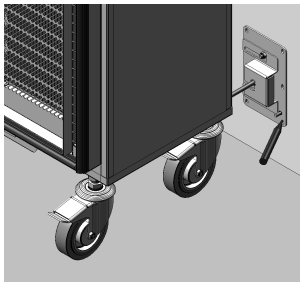
2



1. Position the sliding carriage of the wall bracket into the 'lock' positions (1) i.e. the carriage needs to be placed in a downward position on its vertical slot.
2. Engage the sliding carriage by sliding it sideways onto the spacer bolt into its top vertical position (2).

3. Push the Station against the wall and use the fixing bracket as a template.
4. Mark the wall (3)
5. Remove the Station and fix the bracket onto the wall.
6. Repeat process for the second bracket.

3



In order to fix the Station onto the brackets, proceed as follows:

1. Position the sliding carriage into the 'open' position by lifting and pulling the carriage outwards.
2. Push the Station against the brackets
3. Slide the brackets into the 'lock' position.
4. Ensure that all wheels are facing forward and the parking brakes are applied.

Note:

- Apply pressure on the Station to compress the pneumatic piston when sliding the brackets into the 'lock' position.

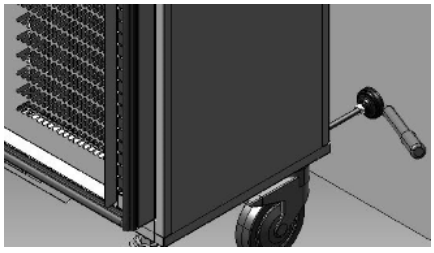
⚠ Caution

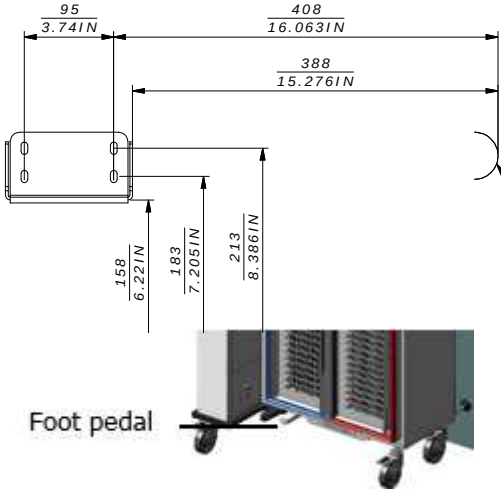
- The bottom adjustable spacers need to be 10mm/0.39" shorter than the top pneumatic piston. To ensure this, shorten bottom spacer by 10mm/0.39" and tighten lock nut (i.e. approx. 135mm/5.31" from the back of the Station). This is to allow the pneumatic piston at the top to absorb the docking force applied by the Shuttle and apply pressure at the top of the Shuttle and Station to ensure a correct and tight seal.
- When docking the Shuttle, the pneumatic pistons should compressed first before the electromagnetic plate makes contact.

b) Foot releasing mechanism

In order to fix the foot releasing mechanism plate to the wall proceed as follows:

1. Position the Station against the wall in the desired position.
2. Mark the right hand spacer bolt on the wall (see drawing).
3. Remove Station.
4. Position the plate at 388mm/15.28" to the left of the marking at a height of 155mm/6.1" (see drawing).
5. Fix the plate to the wall.





In order to lock the Station onto the plate, proceed as follows:

1. Push the Station against the plate until the pedal automatically engages.
2. Ensure all wheels are facing forward and the parking brakes are applied.
3. To unlock the Station press the foot pedal (located at the front) downwards.

Note:

- Apply pressure on the Station to compress the pneumatic piston when sliding the brackets into the 'lock' position.

Caution

- The bottom adjustable spacers need to be 10mm/0.39" shorter than the top pneumatic piston. To ensure this, shorten bottom spacer by 10mm/0.39" and tighten lock nut (i.e. approx. 135mm/5.31" from the back of the Station). This is to allow the pneumatic piston at the top to absorb the docking force applied by the Shuttle and apply pressure at the top of the Shuttle and Station to ensure a correct and tight seal
- When docking the Shuttle, the pneumatic pistons should compress first before the electromagnetic plate makes contact.

6. CONTROL PANEL AND DATALOGGER (BCard-Wise)

Note: Audible Warning

- Quick intermittent beeps denote the alarm status
- A slow intermittent beep denotes normal status, i.e. end of cycle
- Every time a touchpad is pressed a short beep sounds.

To activate the display connect the Shuttle to the Station. Please refer to docking in Shuttle manual.

Temperature values shown below are for display purposes only as temperatures can be set in either °F or °C.

a) LCD Display during cold holding

If automatic cycle start is programmed (see above), the |->1@07:00 string indicates that cycle 1 will automatically start at 07:00. This string does not appear if the Station has been programmed for a manual start.

b) LCD display during cycle

Note:

- Two minutes prior to end of cycle the time icon on will flash on and off – this is a warning to indicate the cycle is nearly finished.

- At the end of the cycle the oven will automatically turn off and the Station will beep – at this point the timer will flash "00".

c) To activate a manual cycle:

1. Connect Shuttle (refer to shuttle manual). The display will activate and refrigeration will start.
2. Select the desired cycle.

Note:
- If the display is OFF press touch pad ON.

d) Automatic cycle

The B-Smart can be programmed to automatically start 3 times a day at pre-selected times:

1. Connect the Shuttle. The Station will activate and the cycle will automatically start at the programmed start time.

Note:
- There is a 30 minute delay window where the cycle will automatically start should the Shuttle not be connected prior to the original start time. Should it be connected after the 30 minute window, the display will show the next meal automatic cycle start time.
- A manual cycle can still be selected when the Station is programmed to an automatic start.

e) To stop a cycle and/or disconnecting a Shuttle

At the end of the cycle the time display will flash "00", the beep will sound.

1. Press the Cycle button once (that you originally selected) to stop the cycle
2. To disconnect the Shuttle when ready to serve trays, press the Disconnect button

Note:
- When a cycle is stopped, the Station will carry on refrigerating on the cold side
- A cycle can also be stopped by pressing the disconnect button. The shuttle will disconnect from the Station, the display will switch OFF and the Station will stop working.

f) Function Touch Pad

The F (Function) button has four functions:

a. Probing menu
b. Wastage menu
c. Maintenance cycle
d. Time and date

In order to select the correct function proceed as follows:

1. The above functions can be selected by pressing the F button repeatedly to the required function.

Note:
- The function touch pad operates when the Station is not in cycle.

g) Food probing

Probing can only be carried out if the Shuttle is connected to the Station and the display is ON. A dedicated optional food probe is required for probing.

In order to probe:

1. Connect the probe to the socket.
2. Press the 'F' button. The display will show the probe temperature, i.e. 33, and the scroll down menu with the food products.
3. Select the desired product by scrolling down or up on the touch pad 1 or 2.
4. To log this temperature press touch pad 3 or use the button located on the top of the temperature probe, you will hear a long beep if the temperature has been logged properly. The recorded value will appear on the right of the selected menu item on the display.

Note:

- If three dashes (- - -) are displayed instead of the food temperature the probe is not connected.
- Do not hold either the touch pad 3 or the probe button down for more than two seconds as the (- - -) will appear on the display.
- Whichever type of temperature probe you are using, make sure that the probe is sanitized in between and before every use by using an antiseptic wipe.
- When inserting the probe tip into the centre of the food product be sure not to penetrate the food through to the plate underneath as this will give you a false reading.

⚠ **Caution:**

- When probing, be aware of hot surfaces and trayware temperatures - use appropriate safety ware
- Do not place the probe or measure temperatures inside either the oven or refrigerated chambers
- Do not use the probe on frozen products
- Do not overstretch the probe cable.

h) Wastage menu

The Wastage Function allows the user to record food wastage at the end of each meal.

In order to record wastage:

1. Select the desired product by scrolling down or up on the touch pad 1 or 2.
2. Press touch pad 3 to enter.
3. Use touch pad 1 or 2 to enter quantities of portions.
4. Press touch pad 3 to enter.

Note:

- To return to the main menu press the F button repeatedly till the desired menu appears.

i) Maintenance Cycle

The Maintenance Cycle allows the holding of trays at correct temperatures in the event that trays are not ready to be served.

In order to start a manual maintenance cycle:

1. Press the F button until M appears, the set temperature and set time will appear
2. Press touch pad 3 to start the maintenance cycle.

Note:

- The maintenance cycle must be programmed in order to work. If it has not been programmed, then the time set display will show 'OFF'.
- If the maintenance cycle has been programmed then it will automatically start at the end of the cycle.
- At the end of the cycle, 3 beeps will sound to denote that the maintenance cycle is about to start.
- During a maintenance cycle the time counts up.

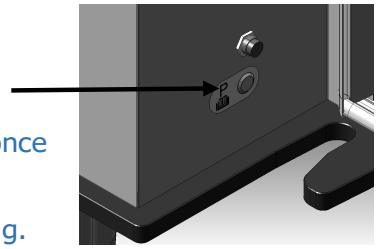
j) Time and Date menu

The Time and date display shows the actual time and date programmed.

7. PROGRAMMING

Programming can be set by either connecting the shuttle to the Station or by pressing the programming button (button is located on the bottom lower right of the display next to the docking plate).

1. Press OFF
2. Press and hold cycle 1 and cycle 3 simultaneously then press the ON touch pad (whilst holding cycle 1 and 3); "PROGRAM" will be displayed.
3. Press Cycle 2 immediately (within 2 seconds).



⚠ Caution:

Please be aware that the programming button must be deactivated once programming has been completed as this function only activates the display and deactivates all the functions including heating and cooling.

a) Programming technical functions

Overview of functions:

- Fridge temperature – temperature of cold section.
- Cold temperature heated section – cold temperature of heated section.
- Refrigeration hysteresis – temperature differential between refrigeration switching ON and OFF.
- Security "SC" 1 - The heating cycle will not start if the temperature of the cold section is above the set temperature (i.e. 10º C -50°F). SC1 will be displayed on the display instead of the hot side temperature. A heating cycle will only commence once the cold side temperature is under the set SC1 value.

- Security "SC" 2 - If, during the heating cycle, the cold section exceeds the set temperature (i.e. 15°C - 59°F), SC2 will be displayed instead of the hot side temperature along with an intermittent audible alarm. The heating cycle will continue even though the unit is in an alarm status.
- Boost cycle – 5" additional cycle should temperatures need boosting.

  In order to start a Boosting cycle:

  1. Press either the just complete heating cycle or any of the three cycles. The set time of 5' and the selected cycle will appear on the display.
  2. To stop a boosting cycle press the cycle pad shown on the display.

     Note:
     - Boosting cycle only selected if the heated section is above 70º C /158°F.

- Key pad lock – Option of locking the key pad on control panel to prevent unauthorized use.

  Note:
  - When setting the key pad lock to 'Y" (screen 2) the blue BCardWise must be inserted.
  - The blue BCardWise must be pre-activated with BWise.

- Temperature measure unit °C °F – Centigrade or Fahrenheit degree selection

In order to change a value proceed as follows:

1. Press touch pad 3 to select the desired function, it will flash.
2. Press touch pad 1 or 2 to adjust the value.
3. Press touch pad 3 to enter and move to the next function.

The table below indicates the various functions, default values and ranges.

FUNCTION	ICON	VALUES	
		Default values °C °F	Range
System Parameters			
Fridge temperature		3°C 38°F	0°C ⇔ 25°C (OFF) 32°F ⇔ 077°F (OFF)
Cold temperature heated section*		3°C 38°F	0°C ⇔ 25°C (OFF) 32°F ⇔ 77°F (OFF)
Refrigeration hysteresis	Δ	2°C 2°F	2°C⇔ 5°C 2°F⇔ 9°F
Security 1**	SC1	10°C 50°F	(Fridge T + 1)⇔ 44 – OFF C (Fridge T + 1)⇔ 111 – OFF F
Security 2***	SC2	15°C 59°F	(Safety 1 + 1) ⇔ 45 – OFF C (Safety 1 + 1) ⇔ 111 – OFF F
Boost cycle****		OFF	OFF ⇔ 5'
Keypad lock (smart card)		N	N (OFF) ⇔ Y (ON)
Temperature measure unit °C / °F	°C/°F	°C	°C ⇔ °F

* Selecting OFF will switch the refrigeration OFF in the oven section

** Setting Security 1 (SC1) OFF will automatically set Security 2 (SC2) OFF
Security 1 (SC1) minimum value is the fridge temperature + 1 degree
*** Security 2 (SC2) minimum value is Security 1 (SC1) + 1°. If the oven side temperature is above 70°C/158°F, SC" will increase by 5° C/41°F
**** Selecting OFF will disable the Boost Cycle

Settings	**Parameters appearing during cycle 1 ("1" in the central part)**						
	Cycle 1	Oven temperature		125°C	257°F		60 ⇔ 125 °C 140 ⇔ 257 °F
		Total cycle time		38			3 ⇔ 60 Minutes
		Ventilation temperature		110°C	230°F		59 C ⇔ oven setup temp.-1°C 138 ⇔ oven setup temp.-1°F
		Ventilation time		5			2 min ⇔ cycle time – 1 min
		Fridge temperature		3°C	38°F		0 ⇔ 25 (OFF) °C 32 ⇔ 77 (OFF) °F
	Parameters appearing during cycle 2						
	Cycle 2	Oven temperature		125°C	257°F		60 ⇔ 125 °C 140 ⇔ 257 °F
		Total cycle time		38			3 ⇔ 60 Minutes
		Ventilation temperature		110°C	230°F		59 C ⇔ oven setup temp.-1°C 138 ⇔ oven setup temp.-1°F
		Ventilation time		5			2 min ⇔ cycle time – 1 min
		Fridge temperature		3°C	38°F		0 ⇔ 25 (OFF) °C 32⇔ 77 (OFF) °F
	Parameters appearing during cycle 3						
	Cycle 3	Oven temperature		125°C	257°F		60 ⇔ 125 °C 140 ⇔ 257 °F
		Total cycle time		38			3 ⇔ 60 Minutes
		Ventilation temperature		110°C	230°F		59 C ⇔ oven setup temp.-1°C 138 ⇔ oven setup temp.-1°F
		Ventilation time		5			2 min ⇔ cycle time – 1 min
		Fridge temperature		3°C	38°F		0 ⇔ 25 (OFF) °C 32⇔ 77 (OFF) °F

b) Programming regeneration cycles 1, 2 and 3

In order to change a value of cycle 1, 2 and 3 proceed as follows:

1. Press touch pad 3 to select the desired cycle, it will flash
2. Press touch pad 1 or 2 to adjust value
3. Press touch pad 3 to enter and move to the next settings

c) Programming maintenance cycle

Maintenance cycle can be automatically added at the end of cycle 1, 2 or 3. If programmed and not set to OFF.

In order to change the maintenance cycle temperature time or cycle:

1. Press touch pad 3 to the desired value, it will flash.
2. Press touch pad 1 or 2 to adjust value.
3. Press touch pad 3 to enter and move to the next settings.

Note:

- During a maintenance cycle the cold section temperature is the set value programmed in the fridge temperature parameter and not the fridge temperature during a cycle.

	FUNCTION	ICON	VALUES	
			Default values	Permissible values
Press key 3 to enable the setting of values				
SYS				
	Cycle M temperature	Left	70°C 158 F	0 ⇔ 90°C 32°F ⇔ 194 °F
	Cycle M time	Right	0	0 (off) ⇔ 150’

d) Programming automatic wake-up and cycle start

The Station can be programmed to wake up at certain times. To do so the shuttle needs to be connected. It can also be set to start the cycles automatically. This wake up and automatic start cycle can be programmed 3 times a day.

In order to enter the wake up and automatic cycle start:

1. Press touch pad 3 to the desired entry, it will flash.
2. Press touch pad 1 or 2 to adjust the entry.
3. Press touch pad 3 to enter and move to the next entry.

Note:

- There are no automatic cycle start times for the weekend.
- To set wake-up to OFF set time to 1:59am.
- A wake-up time can be set without setting a subsequent automatic cycle start time.
- An automatic cycle start time can be set even if a wake up time has not been programmed.
- Both the wake up and automatic start time will still work if the shuttle is connected within a 30min windows of the set times.
- The weekend times are automatically copied from the week day settings. Note that the weekend settings will be overwritten line by line when entering weekday settings.

⚠ **Caution:**

- To view weekend settings use touch pad 2 to scroll, not 3. Only use touch pad 3 when changes are required.
- When the Station is programmed with the wake up or automatic cycle start and the shuttle is connected the display will show.

e) Programming date and time

In order to set the date, time and day of the week:

1. Press touch pad 3 to enter when the date icon is flashing.
2. Press touch pad 3 to the desired entry, it will flash.
3. Press touch pad 1 or 2 to adjust the entry.
4. Press touch pad 3 to enter and move to the next entry.

Note:

- Once the date icon flashes, press 2 to proceed to daylight saving menu.
- Day 1 of week equates to Monday

Parameters				
Weekday Settings	When these parameters are under modification numbers 1,2,3,4 and 5 will flash			
			Default settings	Range
	1st Meal Of the day	Wake – Up time	OFF	02:00 ⇔ 23:59
		Cycle number	OFF	OFF ⇔ 03
		Oven cycle Time	OFF	02:00 ⇔ 23:59
	2nd Meal Of the day	Wake – Up time	OFF	02:00 ⇔ 23:59
		Cycle number	OFF	OFF ⇔ 03
		Oven cycle Time	OFF	02:00 ⇔ 23:59
	3rd Meal Of the day	Wake – Up time	OFF	02:00 ⇔ 23:59
		Cycle number	OFF	OFF ⇔ 03
		Oven cycle Time	OFF	02:00 ⇔ 23:59
Parameters				
Weekend Settings	When these parameters are under modification numbers 6 and 7 will flash			
	1st Meal Of the day	Wake – Up time	OFF	02:00 ⇔ 23:59
		Cycle number	OFF	OFF ⇔ 03
		Oven cycle Time	OFF	02:00 ⇔ 23:59
	2nd Meal Of the day	Wake – Up time	OFF	02:00 ⇔ 23:59
		Cycle number	OFF	OFF ⇔ 03
		Oven cycle Time	OFF	02:00 ⇔ 23:59
	3rd Meal Of the day	Wake – Up time	OFF	02:00 ⇔ 23:59
		Cycle number	OFF	OFF ⇔ 03

f) Daylight saving

Daylight saving time changes occur automatically.

In order to set the daylight saving times for both summer and winter:

1. Press touch pad 3 to the desired entry, it will flash.
2. Press touch pad 1 or 2 to adjust the entry.
3. Press touch pad 3 to enter and move to the next entry.

Note:

- The actual time change occurs on Sunday at 2am in March for the summer time change, and at 3am for the winter time change. For the southern hemisphere, the opposite occurs.

Clock	Month for hour increase	03	1 to 12
	Day for hour increase	30	1 to 31
	Month for hour decrease	10	1 to 12
	Day for hour decrease	26	1 to 31

8. BCARDWISE USE

There are two types of Cards, BCardWise (blue strip) and BCardWise+ (yellow strip). BCardWise can be used for three main functions:

1. Control panel key lock and user ID
2. Download program
3. Upload program

BCardWise+ can be used to download events.

a) Control Panel Keypad Lock

For the BCardWise to function, the control panel settings (refer to section 7 Programing) need to be activated and set to "Y".

To unlock the control panel:

1. Insert BCardWise, the display will show the user card number and name if programmed set Keypad Lock to "N".

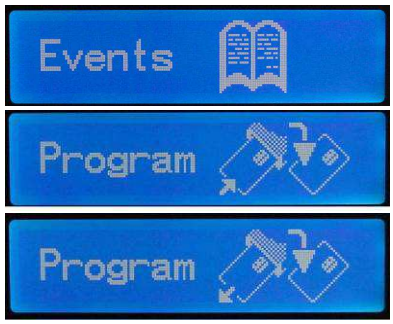
Note:

- The event is recorded only after the machine has been switched ON.
- The BCardWise must be pre-activated with BWise.

b) Downloading a program

In order to download a program:

1. Press touch pad OFF .
2. Press and hold touch pad 1 and simultaneously press the ON touch pad (whilst holding touch pad 1).
3. Press touch pad 2 twice to select program.
4. Insert the BCardWise (arrow in); the card number will appear.
5. Press touch pad 3.
6. Remove the card when the display shows (arrow out).



Note:

- Programming download does not include time settings.
- The BCardWise must be pre-activated with BWise.

c) Uploading a program

The BCardWise can be used to upload programs onto a Station.

In order to upload a program:

1. Press touch pad OFF.
2. Press and hold touch pad 2 and simultaneously press the ON touch pad (whilst holding touch pad 2).
3. Insert the BCardWise within 5 secs, the display will show the user card number and name if programmed.
4. Remove the BCardWise when the display shows (arrow out).

Note:

- Programming download does not include time settings.

d) BCardWise+ (yellow strip)

BCardWise+ allows events to be downloaded from a Station and uploaded onto BWise.

In order to download events:

1. Press touch pad OFF.
2. Press and hold touch pad 1 and simultaneously press the ON touch pad (whilst holding touch pad 1) 'Events' will appear.
3. Press touch pad 2 to select 'Datalog'.
4. Insert the BCardWise+ (arrow in).
5. Remove the BCardWise+ when the display shows (arrow out).

9. PROGRAMMING A MACHINE FROM 'RESET'

If the software crashes then the machine will automatically go to reset.

To reset a machine:

1. Press touch pad 3. The 'Serial n.' will appear.
2. Press touch pad 3 again, the first two digits will flash.
3. Press touch pad 1 or 2 to select required entry.
4. Press 3 to enter.
5. Repeat process for the other two groups of digits.
6. Press 2 to enter when 'Serial n.' flashes.
7. The programming screen will appear and the machine will have to be reprogrammed as described in section 7.

10. EVENTS LOGGER

The Station is able to store events, these events can be read on the display. The events can also be read with optional BCardWise+ or uploaded to BWise with the additional Wi-Fi or LAN boards.

In order to read events:

1. Press touch pad OFF.
2. Press and hold touch pad 1 and simultaneously press the ON touch pad (whilst holding touch pad 1).
3. Press touch pad 3 to enter 'Events'.
4. Press touch pad 1 or 2 to scroll down events list.
5. To exit 'Events' list press touch pad F.
6. Press OFF to return to normal use.

11. SET LANGUAGE

The Station can be set in various languages; English, Italian, French, German and Dutch.
To set language:

1. Press touch pad 2.
2. Press touch pad 3 again, the word ''ENGLISH" (or selected language) will flash.
3. Press touch pad 1 & 2 to scroll down to select langauge.
4. Press 3 to confirm the selected language.
5. Press OFF to exit.

12. LINE MONITORING COMMUNICATION SIGNAL

This function is applicable when the optional Wi-Fi or LAN boards have been fitted in order to check the communication with BNetWise.
To check connection:

1. Press touch pad 2 until line screen appears.

Note:

- 'in' will appear next to the computer symbol if the Station is receiving information from the PC.
- 'out' will appear next to the computer symbol if the Station is sending information to the PC.
  If nothing appears, no communication is taking place.

13. SPECIAL FEATURES

a) Power Supply Failure (OPTIONAL)

In case of power failure, the Station is fitted with an optional system which allows the shuttle to stay connected onto the magnetic catch for approx. 4 seconds. The cycle will restart from when it was interrupted as soon as the power is back as long as the temperature of the oven is above 45°C/158 °F. If below the cycle time will reset.

b) Memory Back Up

The parameter settings will remain in the memory even if the trolley is disconnected from the mains supply.

14. CLEANING

Before starting to clean the B-Smart Station, make sure that it is in a safe operational mode and is NOT connected to the mains power supply.

a) General remarks on the cleaning of the B-Smart Station

- All external surfaces should be cleaned twice a week with a damp cloth.
- Under no circumstances should a high-pressure water cleaner be used to clean the Station.

- Surfaces with hard-to-remove deposits of dirt should be cleaned with a solution of water and soap applied with a cloth.
- Do not use abrasive pads to clean the B-Smart Station.
- The Station should be left to dry for as long as necessary after cleaning.

b) Cleaning of the Operating Fascia and the Control Panel

- The Operating Fascia and the Control Panel should be wiped clean once a week with a damp cloth.

c) Cleaning of the condenser

The condenser is a part of the refrigeration unit. It is housed in one of the technical compartments on the left-hand side of the Station.

In order to clean the condenser, proceed as follows:

1. Disconnect the Station from the mains and ensure that it is safe to work on.
2. Remove the side panel to access the electrical compartment.
3. Remove the stainless-steel condenser cover.
4. Remove accumulations of dirt with a vacuum cleaner (if necessary with a wet/dry version). Be careful not to bend the condenser fins out of shape during cleaning.
5. Reapply the condenser cover and electrical panel cover.

Note:

- The condenser should be checked and cleaned on a regular basis
- Do not bend the condenser–fins out of shape during cleaning. If necessary, straighten the fins with a fin evaporator comb

d) Step-by-step procedure for the cleaning of evaporators

In order to clean the evaporator, proceed as follows:

1. Disconnect the Station from the mains and ensure that it is safe to work on.
2. Remove the ventilation panels at the front of the Station by unscrewing the top screw.
3. Remove accumulations of dirt with a vacuum cleaner (if necessary with a wet/dry version). If, however, any of the fins have become warped, they should be brought back to their original shape and alignment with a special-purpose evaporator comb.
4. Spray a suitable cleaning agent on the surfaces of the fins and allow ten minutes for the cleaning agent to work. Rinse the surfaces of the fins with clean water from a hand spray or other type of low-pressure water dispenser.

⚠ Caution:

- Do not bend the evaporator fins out of shape during cleaning. If necessary, straighten the fins with a fin evaporator comb.
- Various products can be used to clean and disinfect the evaporators; however, products that contain acids are not suitable for this purpose.
- Recommended cleaning products that comply with the following standards can be used: Bactericide: EN 1040, Legionella: EN 1276, Fungicide: EN 1275. Please follow instructions as described on the packaging.

e) Cleaning of external surfaces

- Use a soft cloth with a pH-neutral detergent (i.e. with a pH value of between 6 and 8) to clean the external surfaces of the Station.
- Never attempt to clean the stainless-steel surfaces of the Station with a wire brush, a steel-wool cleaning pad or a scraper.
- This appliance shall not be cleaned with a water jet.

15. REGULAR CHECKS

In order to ensure correct operation of the Station, regular visual checks should be carried out. Refer to the list below for examples of the recommended items to be checked:

COMPONENT	ACTION REQUIRED	FREQUENCY
Swivel wheels	Check that • The brakes are working properly • The wheels are undamaged	Every three months
Condensation pan	Check that • The drain is not clogged • The collection pan is correctly positioned and sitting securely in place	Weekly
Proximity switch	Check that the sensor is • Not damaged • Functioning correctly	Weekly
Operating Fascia and Control Panel	Check that • The key membranes are not damaged • The display and all buttons and keys are working properly	Every three months
Mains lead and plug	Make sure that • The mains lead is not damaged • The pins on the plug are not damaged • The plug connector screws are properly tightened	Every six months
Gaskets	Check that gaskets • Are correctly fitted • All seals/gaskets are free from damage	Every six months
Station wall fixing	Check that • the Station is correctly fixed on its brackets or foot pedal release mechanism • that the Shuttle properly docks to the Station	Daily

16. ADDITIONAL NOTES

The Station is a technologically highly developed product, and should be treated with care. In particular, careful note should be taken of the points listed below. Following the procedures outlined will prevent personal injury, harm to the environment, and damage to property.

- Refrigerant type R507A is used in the refrigerating circuit. Under no circumstances should this refrigerant be allowed to escape into the environment. Servicing of the refrigerating circuit should therefore be performed by qualified and authorised technicians only. All service operations must be performed in strict compliance with the regulations applying to the prevention of refrigerant leaks and the recovery of refrigerants.

- Burlodge expressly disclaims all responsibility for problems arising from modifications that have been undertaken by unauthorised technicians, or without the consent of the manufacturer. Burlodge further disclaims responsibility for any malfunctions resulting from the fitting of non-original spare parts.

- Non-authorised changes to, or modifications of, the original design and operating features of the Burlodge System could lead to the violation of safety, health and/or environmental regulations, which in turn could result in the voiding of the Certification of Conformity granted in respect of various component parts of the B-Smart System.

17. ERROR CODES

The operator is informed of any abnormalities by a series of error messages that appear on the display in code form. If the abnormality prevents the use of the trolley, it is accompanied by an audible alarm. The error codes are fully explained together with the possible causes and the suggested corrective action in the following table.

CODE	EXPLANATION	POSSIBLE CAUSE
	Display is lit but when trying to operate the Station via keyboard nothing happens	Password parameter set to "Y"
ACTION	Use the BSmartWise card to unlock the keyboard	
H1	Fault on the chilled side probe	Probe failure or loose connection
ACTION	Request Technical Assistance	
H1	Fault on the chilled side probe	Temperature has exceeded the safety limit of 180°C / 356°F
ACTION	Request Technical Assistance	
H3	Auto shut down of all functions	Oven probe failure or loose connection
ACTION	Request Technical Assistance	
H3	Auto shut down of all functions	Oven temperature has exceeded the safety limit of 180°C / 356°F
ACTION	Request Technical Assistance	
L3	Oven set temperature has not been achieved during the cycle	Program set incorrectly
ACTION	Refer to the PROGRAMMING section to reprogram the Station to the correct Settings	
OL	Thermal Limit prevents the start of a regeneration cycle	Continuous use of a regeneration cycle
ACTION	Allow the oven section to cool down below 60°C / 140°F then restart cycle	
RESET	Auto shut down trolley in safe mode	Electrical disturbances through power supply
ACTION	Press "3": this will reset the Station and will enter in programming mode (see section "Programming a New Machine from a 'Reset')	
RESET	Auto shut down Station in safe mode	CPU unit faulty
ACTION	Request Technical Assistance	
?	BCardWise data not recognized	BCardWise is empty or contains programming data of a different Station
ACTION	Reprogram the BCardWise with BWise software using a Station parameter list	
SC1	The cycle does not start	Fridge side temperature is too high (double fridge only)
ACTION	Wait until the fridge side temperature is below the SC1 value (10°C default)	
SC2	Warning, the fridge temperature is above the allowed limit during a cycle	The shuttle cold side door is open (double fridge only) or refrigeration is not working
ACTION	Close the door	

18. FAULT FINDING

Fault finding should only be carried out by authorized and qualified personnel. The wiring diagram is located inside the technical compartment.

Before placing a service call ensure that power is available to the Station.

PROBLEM	EXPLANATION	POSSIBLE CAUSE
LCD not ON	No power to the Station	Power supply failure
ACTION	Check the power supply	
PROBLEM	EXPLANATION	POSSIBLE CAUSE
LCD not ON	No power to the Station	Line fuse blown
ACTION	Find and rectify cause for the failure, then replace the line fuse	
LCD not ON	No supply from the transformer	Transformer safety fuse blown
ACTION	Find and rectify cause for the failure, then replace transformer safety fuse	
LCD not ON	Internal oven high limit thermostat tripped	Temperature in the oven chamber has exceeded 180°C / 356°F
ACTION	Find and rectify cause of oven temperature, then reset the oven high limit thermostat	
LCD not ON	Internal motor safety switch has tripped	Motor overheat
ACTION	Find and rectify cause for the failure. The thermostat will automatically reset when the temperature of the motor cools down	
Shuttle docked to the Station green LED ON LCD display not ON	Internal oven high limit thermostat tripped	Temperature in the oven chamber has exceeded 180°C / 356°F
ACTION	Find and rectify cause of oven temperature, then reset the oven high limit thermostat	

19. SERVICE CALLS, SPARE PARTS, WARRANTY AND PREVENTATIVE MAINTENACE

a) Service calls

Before you contact the Burlodge Service Department or Authorised Service Agent, please make sure that a competent electrician has carried out the following checks:

1. Check the power supply.
2. Check the power cable, plug and internal fuses.
3. Check for any visual damage.

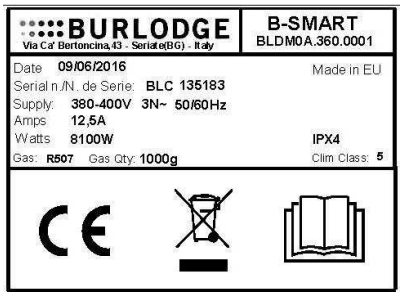
⚡ Warning

Under no circumstances remove or interfere with any part of the Station even if it is disconnected from the power supply. If the trolley still does not operate, contact your local service agent or Burlodge Service Department.

Please ensure that you give the following information when placing a call with the Service Department (refer to the rating plate at the rear of the trolley): (ID_PLATE)

- The Series name
- Model code
- Date of manufacture
- Serial number

- The location of the equipment.
- A detailed description of the problem.
- Your name, department, position and phone number.



b) Spare parts

Use only original Burlodge spare parts, they are an exact replacement. Use of other spare parts may compromise the safety and performance of the trolley. Burlodge, or its authorised service agents, must carry out any repairs during the period of warranty. Failure to comply with these requirements may invalidate the warranty and all certifications of the trolley. When ordering spare parts or requesting technical assistance, always refer to the data plate to identify the trolley.

c) Warranty

The standard warranty is one-year parts and labor or as per contract. Commencing 14 months from the date of delivery or 12 months from the date of commissioning, whichever expires first.
All equipment except china, trays and consumable components is covered against faulty material or workmanship. In the unlikely event of any valid failures, Burlodge or its authorised agents will repair the trolley free of any charges.

The following will not be covered by the warranty and may invalidate it:

- **Damage during unloading or storage**
- **Incorrect installation**
- **Neglect or misuse of the equipment**
- **Use of the trolley other than described in this manual**
- **Fire, water or frost damage**
- **Using parts not supplied by Burlodge/Authorized Service Agent**
- **Service carried out by service companies not authorized by Burlodge**
- **False calls**
- **Voltage fluctuations exceeding ± 10 % of the nominal voltage**
- **Power failure**
- **Damaged power cord or plug**
- **Re-programming after commissioning and after initial training will not be covered by the warranty.**

Only authorised persons may carry out repairs during the warranty period or in compliance with the Burlodge contract. Should the Customer fail to comply with these requirements, both the initial warranty period and all certification of the trolley will automatically become invalid.

This manual is provided to assist you to resolve some of the problems you may incur. Please make sure that you refer to this manual before placing a service call as we reserve the right to charge for any calls that could have been resolved by reading this manual.

d) Preventative Maintenance

All equipment must be serviced at six monthly intervals. Correct preventative maintenance is essential to ensure the reliable and safe operation of the trolley and to ensure the longest economical life of the equipment. Only competent and fully trained personnel only may carry out servicing to the manufacturer's specifications.

Burlodge offers a wide range of service contracts covering this equipment provided such equipment is operated and maintained in accordance with the manufacturer's recommendations. You will have the peace of mind that comes with having a fully trained service force able to support this product anywhere it is located through preventive maintenance contracts and after sales service.

For further information and for specialized contracts, please contact the Burlodge Technical Department.

20. PLUG CONNECTIONS

The electrical installation must conform to the National and local Electrical Codes.

380-400V 3P+N+E 50Hz (8 or 10 kW)

Phase R (L1): Brown
Phase S (L2): Black
Phase T (L3): Grey
Neutral N : Blue
Earth E : Yellow/Green

Plug fitted is a 16 amp 400v, N+E plug (BS4343 - EN60309-2)

220-240V 3P+E 50Hz (8 or 10 kW)

Phase R (L1): Brown
Phase S (L2): Black
Phase T (L3): Grey
Earth E : Yellow/Green

Plug fitted is a 32 amp 230V+E plug (BS4343 - EN60309-2)

Shipping Dimens. (mm) 1005 x 800 x 1800	**Refrigerant Gas** Gas R507 (50% HFC-143a+50% HFC-125), GWP =3985, Gas Qty 1000g	**Shipping weight** 180kg	**Actual weight** 165kg	**Sound Press. Lev.** 59,7 dB(A)

Model	**Code**	**Refrigeration**	**Rated Voltage (50/60 Hz)**	**Rated Power (KW)**	**Rated Current L1/L2/L3 (A)**	**Heat Output KW–(Btu/h) Max/typical***
Short	BLDM0A.360 BLDM0A.380	Single/Double	380- 400V-3 P/N/E	8.1 10.0	12/11/11 16/15/15	1.86/1.26* (6340/4300)
Long	BLDM0A.460 BLDM0A.480	Single/Double	230V-3 P/E	8.1 10.0	23/23/24 25/25/26	1.86/1.26* (6340/4300)
*While in cooling and heating during a typical cycle						

208-220V 3PH+G 60Hz (8 kW)

Phase X (L1): Orange
Phase Y (L2): Black
Phase Z (L3): Red
Ground G : Green

Plug fitted is a 208/220V-3 PH+G 30A NEMA L15-30 type HBL 2721
This plug has a water protection class IPX0

The ID plate of the Station specifies IP = X0

Shipping Dimensions (mm) 1005 x 800 x 1800 39.57" x 31.5" x 70.87"	**Refrigerant Gas** Gas R507 (50% HFC-143a+50% HFC-125), GWP =3985, Gas Qty 1000g	**Shipping weight** 180kg (396.83 lbs)	**Actual weight** 165kg (363.76 lbs)	**Sound Press. Lev.** 59,7 dB(A)

Model	**Code**	**Refrigeration**	**Rated Voltage (60 Hz)**	**Rated Power (kW)**	**Rated Current L1/L2/L3 (A)**	**Heat Output KW–(Btu/h) Max/typical***
B-Smart Station	BLDM0A.760	Single/Double	208V-30A-3 P/G	8.3	24/23/24	2.13/1.26* (7260/4300*)
*While in cooling and heating during a typical cycle						

Burlodge reserves the right to amend this User's Manual from time to time at its discretion.

Non-authorised changes to, or modifications of, the original design and operating features of the Burlodge System could lead to the violation of safety, health and/or environmental regulations, which could result in voiding the Declaration of Conformity and the Safety Mark carried by the equipment.