

# metos

Serving trolley

RTS

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Installation and operation manual

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## 1. Table of Contents

HEADING	PAGE
<b>1. TABLE OF CONTENTS</b>	<b>2</b>
<b>2. INTRODUCTION</b>	<b>4</b>
<b>3. PRODUCT IDENTIFICATION</b>	<b>5</b>
<b>4. TROLLEY IDENTIFICATION</b>	<b>5</b>
<b>5. STANDARDS AND CERTIFICATION</b>	<b>6</b>
<b>6. PACKAGING, HANDLING, FORWARDING AND TRANSPORT</b>	<b>7</b>
<b>7. TROLLEY DESCRIPTION</b>	<b>8</b>
<b>8. SAFE MODE</b>	<b>9</b>
<b>9. CORRECT USE</b>	<b>9</b>
<b>10. WORKING ENVIRONMENT</b>	<b>9</b>
<b>11. ECOLOGICAL DISPOSAL</b>	<b>9</b>
<b>12. GENERAL SAFETY PRECAUTIONS</b>	<b>10</b>
<b>13. CONNECTING TO THE POWER SUPPLY</b>	<b>11</b>
<b>14. CONTROL PANEL</b>	<b>12</b>
<b>15. STANDARD WORKING PROCESS</b>	<b>13</b>
<b>16. PROGRAMMING</b>	<b>14</b>
<b>17. DEFAULT PARAMETERS FOR R1 SOFTWARE</b>	<b>16</b>
<b>18. SPECIAL FEATURES</b>	<b>17</b>
<b>19. SAFETY FEATURES</b>	<b>17</b>
<b>20. TRAY LAYOUT</b>	<b>18</b>
<b>21. TRAY LOADING</b>	<b>18</b>
<b>22. CONNECTION TO THE POWER SUPPLY</b>	<b>19</b>
<b>23. STARTING SEQUENCE</b>	<b>19</b>
<b>24. FLOW CHART</b>	<b>20</b>
<b>25. DAILY CLEANING PROCEDURES</b>	<b>21</b>
<b>26. WATER JET CLEANING</b>	<b>21</b>
<b>27. POWER WASHING</b>	<b>22</b>
<b>28. CLEANING SCHEDULE</b>	<b>23</b>
<b>29. CLEANING BY HAND</b>	<b>23</b>
<b>30. DIVIDERS</b>	<b>24</b>
<b>31. TOWING ATTACHMENT</b>	<b>25</b>
<b>32. TOWING PROCEDURE FOR THE RTS</b>	<b>25</b>
<b>33. TOWING SAFETY</b>	<b>26</b>
<b>34. ERROR CODES</b>	<b>27</b>
<b>35. FAULT FINDING CONT.</b>	<b>27</b>
<b>36. REGULAR MAINTENANCE</b>	<b>28</b>
<b>37. MAINTENANCE</b>	<b>29</b>
<b>38. TECHNICAL ASSISTANCE AFTER SALES SERVICE</b>	<b>30</b>
<b>39. PREVENTATIVE MAINTENANCE</b>	<b>30</b>

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<b><u>40.</u></b>	<b><u>WARRANTY AND SERVICE CALLS</u></b>	<b><u>31</u></b>
<b><u>41.</u></b>	<b><u>SPARE PARTS</u></b>	<b><u>32</u></b>
<b><u>42.</u></b>	<b><u>WARRANTY</u></b>	<b><u>33</u></b>
<b><u>43.</u></b>	<b><u>DIMENSIONS</u></b>	<b><u>34</u></b>
<b><u>44.</u></b>	<b><u>INSTALLATION EUROPE</u></b>	<b><u>35</u></b>
<b><u>45.</u></b>	<b><u>INSTALLATION CANADA/USA</u></b>	<b><u>36</u></b>
<b><u>46.</u></b>	<b><u>ELECTRICAL SPECIFICATION</u></b>	<b><u>37</u></b>

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## 2. Introduction

In choosing the Burlodge **RTS** trolley you have the most advanced, purpose designed unit of its kind available today. With careful use and regular maintenance, your unit will give you many years of trouble free service.

This manual is an integral part of the safety of your trolley and a guide for all operators and maintenance staff. It contains important information on the operation and maintenance of your Burlodge trolley.

Ensure all personnel read this manual carefully, are fully conversant with its contents and receive any additional training that may be required to enable them to operate and maintain the trolley in a safe and correct manner. Pay particular attention to the safety information included in the text.

Keep this manual in a safe place where it is accessible to all personnel at all times. This manual is a guide only and will be supplemented by on-site training designed for your individual requirements.

It is important to note that the programme settings in this manual are purely an example and will vary to the actual settings for your trolley and site. When you receive your trolley, it will be programmed to the standard default factory settings but will be re-programmed to suit your specific conditions.

Please Note: Before installing or using your Burlodge trolley, it must be checked by a licensed electrician to ensure that it will be connected to an appropriate power supply. The voltage and frequency must correspond to the data plate. Refer to the instructions given in the "Installation" section.

It is important to use the trolley only in the way that is described in this manual. Burlodge will not be responsible for any damage that may result through incorrect use or failure to follow the instructions in this manual.

This manual relates to all trolleys in the RTS series.

The following abbreviations are used in this manual to identify each individual model and options:

Options      ◆

The following symbols are used in this manual to highlight important text:



Read carefully highlights text that is important to safety



Electrical Caution Required



Caution Required



Correct action or procedure



Prohibited action or procedure


### 3. Product Identification

MANUFACTURER	BURLODGE S.r.l.
ADDRESS	Via CA' BERTONCINA No. 43 24068 Seriate (BG) - Italy Tel. 0039 035 4524900 Fax 0039 035 302994
TYPE OF DOCUMENT	Operating and Maintenance Instructions
TYPE	Regeneration/Hot Line Single Tray Trolley
MODEL	RTS
SERIAL NUMBER	
YEAR OF MANUFACTURE	

### 4. Trolley Identification

A data plate as shown below is attached above the cold right hand door and contains all the data necessary for the identification of the trolley.

Under no circumstances should this plate be removed, as this would invalidate the warranty. It would also no longer be possible to identify the trolley for future technical assistance and correct spare parts.

		<b>RTS</b> SOT.300
Date 03-2004		Serial n. 12345
Volts 400V~ 3P+N	Hertz 50	Watts 8200
Gas R404A 18,6 oz ( 530g )		Low Press.
<b>CE</b>	Made in EC	High Press.

## 5. Standards and Certification

### Technical Standards Applied

The RTS has been designed to the following standards.

#### Low voltage directives

- EEC 73/23\*
- EEC 93/68\*

#### EMC directives

- EEC 89/336\*
- EEC 92/31\*

#### Technical safety standards

- EN 60335-1\*
- EN 60335-2-42\*
- EN 60335-2-49\*
- UL197\*\*
- UL471\*\*

#### Technical EMC standards

- EN 55014\*
- EN 55022\*
- EN 55104\*
- EN 61000-3-2\*
- EN 61000-3-3\*

#### Sanitary standards

- NSF 59\*\*\*

- \* 50 Hertz models
- \*\* 60 Hertz models
- \*\*\* all models



## 6. Packaging, Handling, Forwarding and Transport

When received, all shipments must be inspected for any damage to the pallets or packaging. Any damage found or any discrepancy in the number of items delivered must be noted on the carrier's consignment note. This document shows the number of pallets and packages delivered while an itemised description of the goods is listed on the Burlodge packing slip attached to the consignment note. This documentation may vary.

If the packaging is not removed while the carrier is present, the terms "Unopened" or "Contents Unexamined" or similar should be noted on the consignment note. The goods must be thoroughly checked for any physical signs of damage and any damage found must be reported to Burlodge by fax or telephone within 2 days from date of delivery. A written confirmation must follow within 5 working days together with a photocopy of the accompanying document on which the Model and Serial number of the damaged trolley/goods must be indicated.

Unloading and handling in the Shipping/Receiving warehouse is the responsibility of the client. Burlodge is not responsible for any damage that may occur within this area. For unloading and unpacking, proceed as follows:

### Unloading:

- Unloading must be carried out by qualified staff (forklift operator) using a forklift truck with a suitable load-bearing capacity for the weight of the trolley, which is indicated on the packaging.
- The trolley is packed on a single pallet and may contain other small items inside the trolley.

The following data is indicated on the packaging:

- Destination
- Order no.
- Pallet no.
- Gross weight
- Sender
- Contents

### Unpacking:

Proceed as follows:

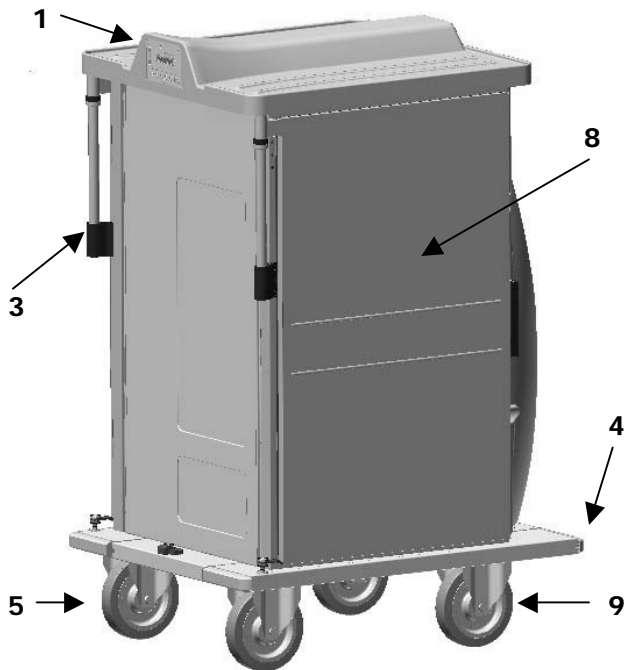
- Carefully cut the nylon straps.
- Remove the cardboard box.
- Cut the nylon straps holding the trolley to the wooden pallet.
- Remove the wooden slats blocking the castors.
- Unlock the brakes on the front swivel castors.
- With the use of a ramp, carefully wheel the trolley from the pallet **paying particular attention to the refrigeration system underneath the trolley, (when applicable ♦)**
- At least 2 people may be required to unload the trolley from the pallet. Ensure that protective clothing and eyewear are worn and that the correct tools are used to carry out the above operation.
- NB: the consignee, in compliance with the local laws and regulations, must dispose of packaging material.

### Cleaning:

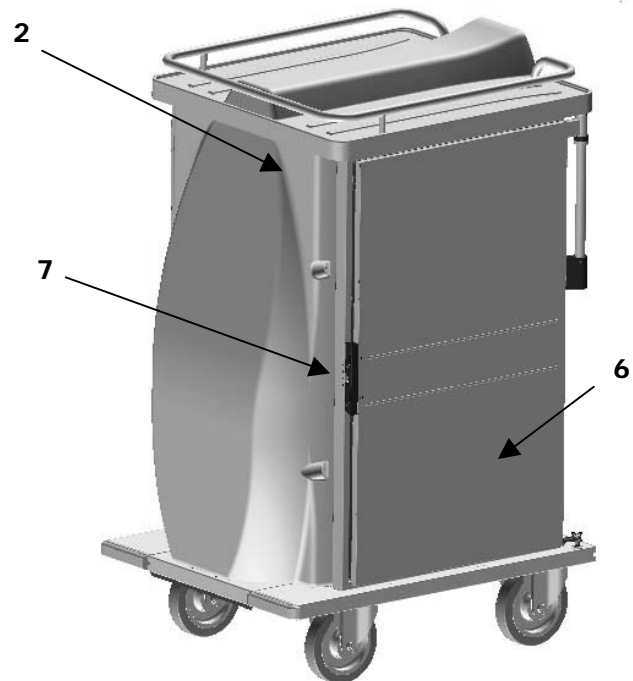
The trolley should be cleaned prior to being used. Follow the instructions that are given in the "Cleaning Procedure" section. If the trolley is to be stored, it must be repacked and protected by the original packaging.



## 7. Trolley Description



**RTS front side view**



**RTS back side view**

For identification purposes the section of the trolley where the control panel is located is referred to as the front of the trolley. This then identifies all right and left-hand components of the trolley.

Key to figures					
1	Control Panel	4	Lower Bumper	7	Door Latch
2	Power Plug	5	Swivel Castor with Brake	8	Right Door
3	Push Handles	6	Left Door	9	Fixed castors

## 8. Safe Mode



It is essential to have the trolley in a safe condition before any cleaning or maintenance takes place.

This is referred to in this manual as the SAFE MODE.

The trolley is in the SAFE MODE under the following conditions:

- Fully isolated from any power source.
- The cable, if supplied, is correctly secured in the holder.
- The oven chamber is at ambient temperature, i.e. below 30 °C (86 °F).
- Brakes are applied on the swivel castors.
- Oven and cold side fans are stopped.

## 9. Correct Use

The **RTS** has been designed for the following uses:

- Maintaining of plated meals above +65°C (+149°F).
- Meal service of hot and cold foods.
- Holding of cold plated meals prior to service.

It is not recommended that the trolley be used for any other purpose than described above.

## 10. Working Environment




In order to guarantee the correct and safe functioning of your Burlodge trolley, it should be used in a clean, dry environment with temperatures between +3°C (+37°F) and +30°C (+86°F) and with a maximum relative humidity of 65%.

Your Burlodge trolley must be protected from external weather conditions at all times.

## 11. Ecological Disposal

It is the responsibility of the user to ensure that local laws and regulations are complied with when dismantling the trolley and disposal of all packaging and freight materials.

If your trolley is fitted with the **Battery Display System** option remove the battery and dispose of it correctly, before dismantling the trolley.

-  Do not dispose of it into a fire as it may explode.
-  Do not short circuit
-  Do not tamper or damage it.

## 12. General Safety Precautions



**WARNING** - The trolley must be properly connected to earth through the power supply cable.

Always disconnect the trolley from the power supply before attempting to move it.

Always hold the plug and not the cable when connecting and disconnecting the trolley.



Before starting any cleaning always disconnect the trolley from the power source and wait at least one minute to allow the fans to stop rotating. Refer to the "Safe Mode" section.

Secure the trolley by using the brakes on the two swivel castors to prevent the trolley from rolling away. Avoid moving the trolley over uneven door thresholds, steps and irregular flooring to ensure that both the castors and the refrigeration system are not subjected to mechanical damage.



Never pull on the power cable to withdraw the plug.

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

Do not let the power cable rest on or touch hot surfaces or hang over sharp edges.

Never open the doors fully at the end of the cycle open the doors slowly to allow excess heat to escape.

Never place the trolley close to any sources of heat i.e. gas ranges, dishwasher's etc.

Never use sharp instruments on the control panel fascia - always use your fingers.

**WARNING.** It is dangerous for anyone other than a fully trained authorized service agent or other fully trained personnel to perform a service repair.

**All transport routes should be checked for any obstructions that may damage the trolley or cause a hazard to operating personnel**

### 13. Connecting to the Power Supply



#### Connecting

Proceed as follows:

- Ensure that the power supply is switched off before introducing the plug to the socket.
- Allow adequate space around the trolley so that it is safe and accessible
- Apply the brakes on the swivel castors.
- Ensure that the power cord is clear of any hazards and not being stretched.
- Hold the plug firmly in your hand.
- The blue display on the control panel will confirm power to the unit.

#### Disconnecting

Proceed as follows:

- Ensure that the brakes on the swivel castors are still applied.
- Hold the plug firmly, and withdraw it from the socket.
- Place the plug in the holder on the front of the trolley.

The above are given as general guidelines, but may vary depending on the type of plug and socket used. Therefore, it is essential that you follow the instructions given by the manufacturer of the specific type and model of plug and socket used.



- Always check the power cord before every use.
- Always hold the plug body and not the power cable to withdraw the plug.
- Always store the plug in the plug holder.

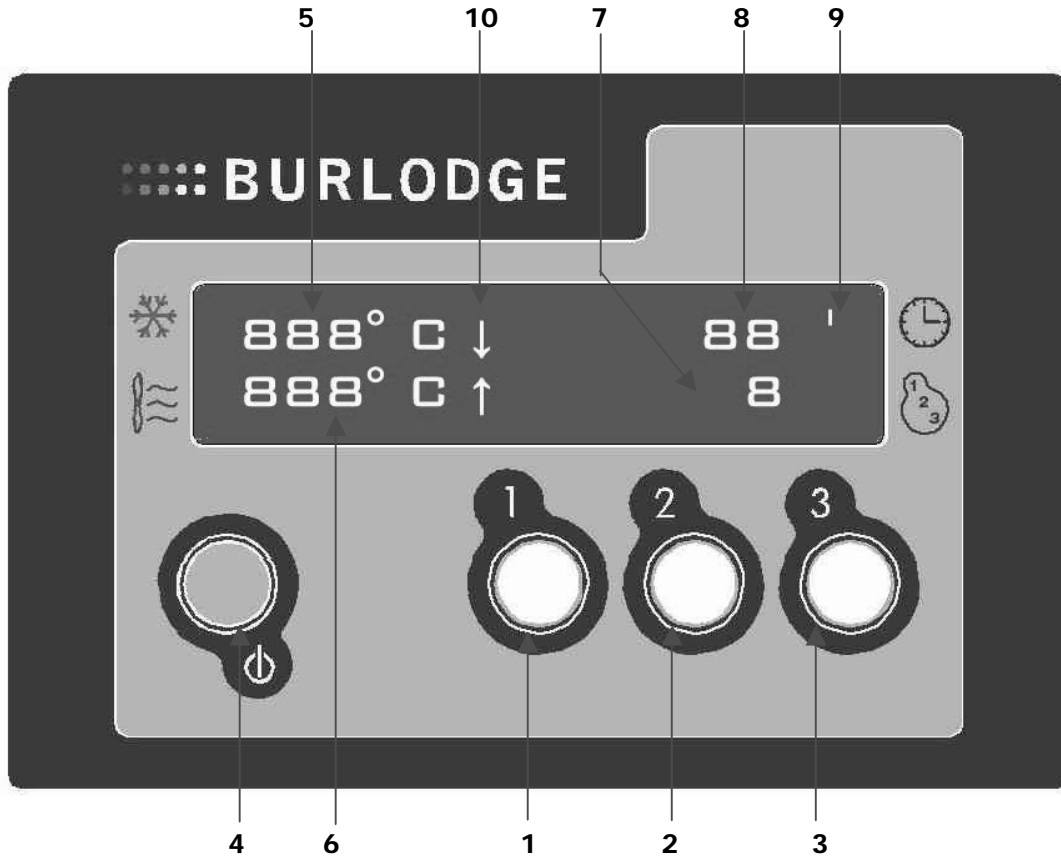


- Never use the trolley if there are any signs of damage or fraying to the power cord.
- Never use wet hands and ensure that both the plug and wall sockets are dry.
- Never disconnect the trolley during a retherm cycle. ALWAYS stop the cycle and turn the trolley off before disconnecting from the power supply.

## 14. Control Panel



RTS control panel:



### Keyboard

1. Start/Stop touch pad for cycle 1
2. Start/Stop touch pad for cycle 2
3. Start/Stop touch pad for cycle 3
4. Power On/Off touch pad
5. Display indicating fridge side temperature
6. Display indicating oven side temperature
7. Display running cycle (when programming mode: number of "group of parameters")
8. Remaining cycle time
9. Flashing each second, it shows that a cycle is running
10. ↓ Refrigeration : ↑ Heating

## Display

The display, consisting of 2 rows and 16 figures, is divided in four parts. Each part shows the information related to the icon at its side.



**Fridge:** 3 digits showing the fridge side temperature. It is followed by "°C" or "°F" that indicates the temperature mode (°Celsius or °Fahrenheit). If the value of the temperature is positive no sign appears. If the value is negative, it is shown by "-" sign.



**Oven:** 3 digits showing the oven side temperature. The temperature value is followed by "°C" or "°F" according to the setting parameter.



**Cycle time:** 2 digits showing the remaining cycle time. This value is shown during the cycle only and indicates the remaining minutes to the oven cycle end. The character [ ' ], that follows the minutes' value, flashes indicating that the time is running.



**Cycle running:** It shows which of the three cycles is running. When no cycle is working, there is no indication on the display in this area.



**Heating process active:** If this figure is shown, it indicates that the oven side heating elements are working. When the temperature setting is reached, the figure disappears and it will be shown again when the temperature is the setting value less the hysteresis value.



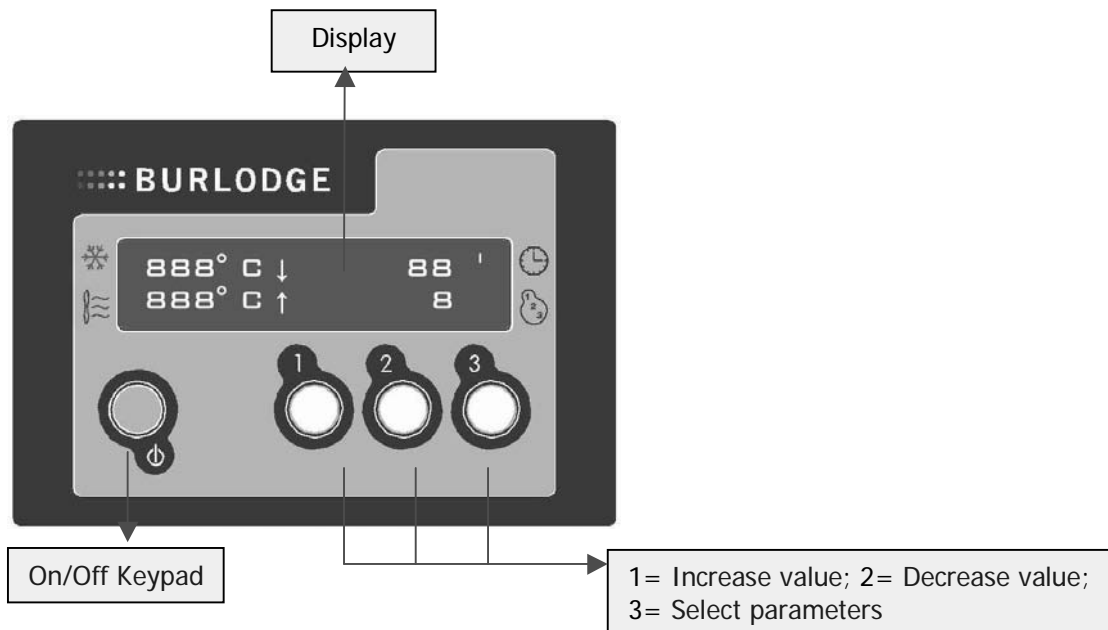
**Cooling process active:** If this figure is shown, it indicates that the fridge is working. When the temperature setting is reached, the figure disappears and it will be shown again when the temperature is the setting value plus the hysteresis value.

## 15. Standard working process

- Connect the trolley to the main supply, the display turns on.
- If OFF appears on display, push On/Off keypad "4" to turn on the trolley.
- If the trolley is in On status, the display shows the oven and the fridge temperature.
- If no cycle is activated, the fridge side is working only.
- To start an oven cycle, press the keypad corresponding to the desired one (1 or 2 or 3).
- Two minutes before the cycle end, the number of the cycle flashes on the display indicating that the cycle is going to end.
- At the end of the cycle the buzzer starts working.
- To stop an oven cycle, press the corresponding keypad (if cycle 2 is active, press 2). Or press On/Off that will stop both the oven and the fridge.
- If, at the end of the cycle, an additional cycle is programmed (parameters "V" not at 0), pressing the keypad corresponding to the cycle just run, a "V" appears and the additional cycle starts working.

## 16. Programming

### Control panel and programming keypads



#### Groups of parameters :

In order to make the insert of the setting parameters easier, the same have been divided into six groups

- ❑ Group “Cycle 1” = Oven + fridge first cycle settings
- ❑ Group “Cycle 2” = Oven + fridge second cycle settings
- ❑ Group “Cycle 3” = Oven + fridge third cycle settings
- ❑ Group “V” = Additional cycle parameters settings.
- ❑ Group “F” = Fridge temperature setting when not in cycle.
- ❑ Group “°C/°F” = It allows temperatures shown on display in °C or °F mode

#### Programming sequence

- Keep pressed keypad 1 and 3 and switch on the trolley by On/Off keypad, release On/Off keypad. Wait until a letter “P” appears on display’s left side.
- Press keypad number 2 within 3 seconds (to avoid the trolley to start in “normal” mode).
- The “Burlodge” logo and software version appear on display.
- After about 2 seconds, the display will show the cycle1 settings (oven and fridge temperature setting on the display’s left side and time plus cycle number on the right side).
- **Cycle number 1 flashing (Group 1 parameters)**
  - ❑ To access to cycle 1 parameters, press keypad 3 until the parameter you want to modify is flashing. Press keypad number “1” to decrease or press keypad “2” to increase the value. Confirm by keypad “3”. Next parameter is flashing (if necessary, modify and confirm the new value). When the cycle number flashes again, press “2” for next group or “1” for the previous one.
  - ❑ To move directly to “Cycle 2” parameters, press keypad “2”.
- **Cycle number 2 flashing (Group 2 parameters)**
  - ❑ To access to “Cycle 2” parameters, press keypad “3” until the parameter you want to modify is flashing. Press keypad number “1” to decrease or press keypad “2” to increase the value. Confirm with keypad “3”. Next parameter is flashing (if necessary, modify and confirm the new value). When the cycle number flashes again, press “2” for next group or “1” for the previous one.
  - ❑ To move directly to “Cycle 3” parameters, press keypad “2”.

- **Cycle number 3 flashing (Group 3 parameters)**
  - ❑ To access to “Cycle 3” parameters, press keypad “3” until the parameter you want to modify is flashing. Press keypad number “1” to decrease or press keypad “2” to increase the value. Confirm by keypad “3”. Next parameter is flashing (if necessary, modify and confirm the new value). When the cycle number flashes again, press “2” for next group or “1” for the previous one.
  - ❑ To move directly to “Cycle V” parameters, press keypad “2”.
  
- **Cycle V flashing (Group V parameters).**

“V” means “ventilation” and allows to set an additional cycle (time and temperature at the oven side).  
Note: The fridge temperature will follow the set of cycle just elapsed.

  - ❑ To access to “Cycle V” parameters, press keypad “3” until the parameter you want to modify is flashing. Press keypad number “1” to decrease or press keypad “2” to increase the value. Confirm by keypad “3”. Next parameter is flashing (if necessary, modify and confirm the new value). When the figure “V” flashes again, press “2” for next group or “1” for the previous one.
  - ❑ To move directly to “Cycle F” parameters, press keypad “2”.
  
- **Cycle F flashing (Group F parameters).**

This parameter allows to set the fridge temperature when outside a cycle.

  - ❑ To access to “Cycle F” parameter, press keypad “3” until the parameter you want to modify is flashing. Press keypad number “1” to decrease or press keypad “2” to increase the value. Confirm by keypad 3. When the figure “F” flashes again, press “2” for next group or “1” for the previous one.
  - ❑ To move directly to “Cycle °C/°F” parameters, press keypad “2”.
  
- **Cycle °C/°F flashing (Group °C/°F parameters).**

This parameter allows to set the temperature in °C or in °F.

  - ❑ To access to “Cycle °C/°F” parameter, press keypad “3” until the parameter you want to modify is flashing. Press keypad number “1” or “2” to change from °C to °F. Confirm by keypad 3. When the figure “°C/°F” flashes again, press “2” for next group or “1” for the previous one.
  - ❑ To return directly to “Cycle 1” parameters, press keypad “2”.
  
- **To return to normal operation mode, turn off and on the trolley by On/Off keypad.**

## Programming the trolley at the first installation or in case of general reset.

Normally the trolley doesn't need this programming mode since presetted during the final control.

In case of general reset status, (for maintenance) if the trolley is turned on, the display shows the figure “Reset” followed by a beep-beep sound, at one second frequency.

- Press keypad “3”. The “Burlodge” logo and display version will appear on display.
- After about 2 seconds, the display will show the cycle 1 settings (oven and fridge temperature setting on the display's left side and time plus cycle number on the right side).
- From this point, follow the programming sequence as indicated in paragraph “Programming sequence”.



## 17. Default parameters for R1 Software

- Following table shows the default settings and range parameters.
- To access to the programming mode, follow as indicated in "Programming sequence" paragraph.
- Attention! Default values depend from software release, which can be shown in "programming" mode.
- The fridge can be disabled by setting its temperature in OFF. It can be done by increasing the fridge set value over 25°C or 78°F (rows with figure \*).

		Step	°C	°F	Values Ranges
<b>Group Cycle 1 parameters</b>					
Cycle 1	Oven set Temperature	1	100	212	0 ⇔ 120°C ; 32 ⇔ 248°F
	Fridge set Temperature	2	1	32	0 ⇔ 25°C, 26(off); 32 ⇔ 78°F (79off) *
	Cycle 1 Time	3	10		3 ⇔ 40 minutes
<b>Group Cycle 2 parameters</b>					
Cycle 2	Oven set Temperature	4	100	212	0 ⇔ 120°C ; 32 ⇔ 248°F
	Fridge set Temperature	5	1	32	0 ⇔ 25°C, 26(off); 32 ⇔ 78°F (79off) *
	Cycle 2 Time	6	12		3 ⇔ 40 minutes
<b>Group Cycle 3 parameters</b>					
Cycle 3	Oven set Temperature	7	100	212	0 ⇔ 120°C ; 32 ⇔ 248°F
	Fridge set Temperature	8	1	32	0 ⇔ 25°C, 26(off); 32 ⇔ 78°F (79off) *
	Cycle 3 Time	9	15		3 ⇔ 40 minutes
<b>Additional cycle " V " parameters</b>					
Other parameters	Cycle " V " Temperature	10	80	176	0 ⇔ 100°C ; 32 ⇔ 212°F
	Cycle "V" Time	11	0		0 ⇔ 40 minutes
<b>"F" parameter</b>					
Other parameters	Fridge set outside cycle	12	1	32	0 ⇔ 25°C, 26(off); 32 ⇔ 78°F (79off) *
<b>Temperature mode parameter</b>					
Other parameters	°Celsius / °Fahrenheit	13	°C		°C ⇔ °F

Press On/Off keypad

## 18. Special Features

### Memorised Power Supply Failure

Various start-up procedures and oven cycle settings are kept in memory. In the case of a power failure, the cycle will restart when the power fail is back. The cycle will continue from where it was interrupted. During the interrupted cycle or power failure, if the temperature of the oven goes below 45°C (158°F), the oven cycle time is reset and a new cycle will need to be started manually.

### Audible Warning

Quick intermittent beeps denote the alarm status.  
A slow intermittent beep denotes normal status i.e. end of a cycle.

### Memory Back Up

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

## 19. Safety Features



Your Burlodge trolley includes the following built-in safety features:

### Active Safety Features:

- High limit temperature thermostats.
- Thermally protected motors.
- Castors with brakes.
- Auto shut down for oven probe failure.
- Microprocessor based software.
- Error codes.
- Scrolling temperature displays on oven and fridge temperatures.

### Passive Safety Features:

- Fixed fan guards .
- All-round rubber bumpers to absorb impacts.

## 20. Tray Layout

Keep the products that are to be kept cold and the products that are to be heated or boosted on separate sides of the tray allowing a space for the divider between the two sets of products.



## 21. Tray Loading

**Tray loading direct into the RTS with fixed module.**

**Apply the brakes on the castors on the front of the unit** when loading (always use your feet and never your hands).

- Open the first door (left or right) and start loading from the bottom level. Push the tray into position.
- Load the tray with the items to be heated on the side signed by red labels. Ensure the tray is fully home, commence loading the trays .
- Close the door turn the RTS around and open the opposite door, commence loading again ensuring that the side of the tray with the items to be heated is signed by red labels.
- Close the door.

**Never force the tray.**



**NEVER LEAVE TRAYS NOT FULLY INSERTED.  
FAILURE TO DO THIS CONSEQUENTLY DAMAGE THE DOOR, THE TRAY OR DIVIDERS.**



**Ensure that trays are correctly supported by both wires support.**

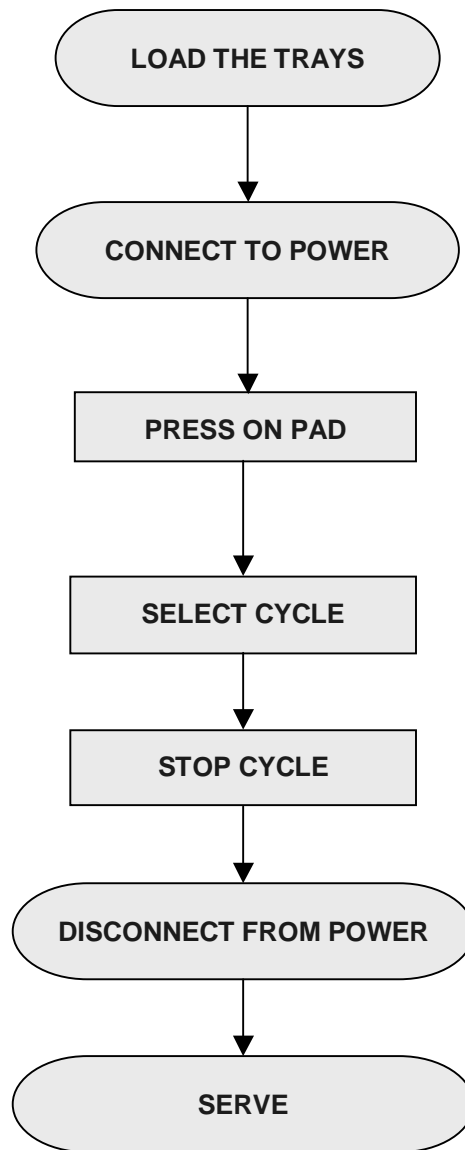
## 22. Connection To The Power Supply

- Check that all the doors are tightly closed. Allow adequate space around the trolley so that it is safe and accessible and that the brakes have been applied.
- Ensure that the power supply is switched off.
- Ensure that the power cord is clear of any hazards and not being stressed.
- Holding the plug firmly in your hand, align and introduce the plug into the wall socket.
- The blue display on the control panel will confirm power to the trolley.
- Press the 'ON' pad.
- The refrigeration will commence automatically.

The above are given as general guidelines, but may vary depending on the type of plug and socket used. Therefore it is essential that you follow the instructions given by the manufacturer for the specific type and model of plug and socket used.

## 23. Starting Sequence

- Select the required cycle, e.g. Cycle 1. The number corresponding to the selected cycle will appear accompanied by a single beep confirming the selection.
- Display will continuously show temperatures of the cold and oven compartments together with the countdown timer.
- Two minutes prior to the end of the cycle, the number of the selected cycle will start to flash on and off to inform you that the cycle is near completion.
- At the end of the cycle, the oven will automatically switch off. The buzzer will sound and the number of the selected cycle will continue to flash and the countdown timer will flash "0" until the cycle has been cancelled.
- To cancel the cycle and buzzer, press the keypad corresponding of cycle just elapsed.
- If setted, immediately, the "V" cycle will start and the countdown timer will became a countup indicating from how many time the "V" cycle is proceeding.
- The Refrigeration in the cold compartment will now remain on until the Power OFF touch pad is pressed.

**24. Flow chart**

## 25. Daily Cleaning Procedures

- Move the trolley to a safe area before cleaning.
- Ensure the trolley is in the SAFE MODE before commencing cleaning.
- When required, the silicon chamber gaskets can be easily removed. Remember to do this one section at a time and remember which one goes where! Always remove the silicon gasket by pushing on the back edge and never by pulling on the front thin edge.
- Use a hot soapy solution to wipe both compartments then rinse with water. Cleaning solutions should be food safe and must be thoroughly rinsed and wiped dry.
- Leave heavily soiled surfaces to soak for about fifteen minutes in order to allow ease of cleaning.
- All exterior panels can be cleaned with hot soapy water and rinsed with clean water.
- Clean the control panel with a damp cloth only.
- Once all cleaning has been completed polish the exterior of the trolley with food safe stainless steel polish. Do not polish any interior surfaces including the inner faces of the doors.
- Never use any type of abrasive cleaning pads or abrasive cleaners, as these will damage the surface of the A.B.S. protection panels and top.
- Every month take care to remove the basin under the bumper and clean it. Take also care to remove dust from the condenser covered by the basin (see Figure 7).

## 26. Water Jet cleaning

- The trolley has been designed to be cleaned by water jet machines or into washing tunnel.
- Do not use water steam in any case. It could damage seriously electronic parts.
- Before proceeding with any washing operation ensure that the trolley is in **safe mode** conditions.
- The trolley power plug must be covered with its own cap, furnished with both panel or cable plug options.
- The washing operations can be done differently with doors open or closed.
- After washing, take care to remove the basin under the bumper and empty all water inside to avoid leaving water on the floor during transport and trolley movement ( see Figure 7)
- Be careful that the detergents used during washing operations are not abrasive or corrosive



Figure 7

**27. Power Washing**

- Maximum permitted water pressure 1.5 bar (21PSI).
- Minimum permitted distance 0.5 meters (18 inches).
- Power washing must only be carried out in areas that have been specifically designed for this process.
- Dry thoroughly immediately after cleaning.
- The use of hard water may cause a build up and leave a white residue.

If any of the electrical components are accidentally sprayed with water, (e.g. the power supply plug) under no circumstances should the trolley be used until it is completely dry and an authorized electrician has checked and passed it safe to use. Burlodge, or its authorized service agents, must carry out any repairs during the period of warranty. Failure to comply with these requirements may invalidate the warranty of the trolley.

## 28. Cleaning Schedule

### Cleaning Schedule After Every Meal Service

COMPONENT	HANDWASH	SANITIZE	DISHWASH	JETWASH	POLISH	NOTES
Oven Compartment	✓	✓	x	✓	x	Wipe dry after cleaning
Chilled Compartment	✓	✓	x	✓	x	Wipe dry after cleaning
Interior Surfaces	✓	✓	x	✓	x	Never use polish
Silicon Gaskets	✓	✓	x	✓	x	Can be left to soak before cleaning
Exterior ABS Panels	✓	✓	x	✓	✓	Wipe dry after cleaning
Exterior st. steel Panels	✓	✓	x	✓	✓	Use non abrasive hard surface cleaner
Touch Pad Controls	✓		x	✓	x	Use slightly damp cloth only
ABS Front Panel	✓		x	✓	✓	Use slightly damp cloth only
Trays	✓	✓	✓	✓	x	Do not use abrasive cleaning pads
Aluminum Bumpers	✓	x	x	✓	x	Wipe dry after cleaning

Failure to carry out daily cleaning may lead to discoloration of the stainless steel and silicon gaskets.

**Caution!** Any over spray of polish or other cleaning products on the floor can cause a serious hazard.

Deep cleaning should be scheduled so that the trolley is maintained at the correct level of cleanliness. Under normal conditions, deep cleaning should be carried out at monthly intervals. This may be varied to suit site conditions.

Remove the fan protection panels every six months for cleaning. For safety reasons trained staff only should remove these panels, with the use of the correct hand tools.

**Caution! Do not use any abrasive or caustic products for cleaning. Use of these products will permanently damage the components and surfaces of the trolley.**

## 29. Cleaning By Hand



Use two containers: one containing water plus detergent and one containing clean warm water with an added sanitizer (hard water should be avoided wherever possible), with separate soft lint free cloths. Each cloth should be rinsed and wrung in its appropriate container.

Clean with a cloth using the water with the added detergent, wringing the cloth so that all the water is removed, then rinse with the clean cloth, using clean warm water in conjunction with a sanitizing agent and dry.

If there is any spillage of water into the electrical components (e.g. the power supply plug) under no circumstances should the trolley be used until it is completely dry and an authorized electrician has checked and passed it safe to use. Burlodge, or its authorized service agents, must carry out any repairs during the period of warranty. Failure to comply with these requirements may invalidate the warranty of the trolley.



### 30. Dividers

- The central wall with the dividers can be easily extract removing the pin at the bottom Figure 1 and unscrewing the hand screw under the top Figure 2. Obviously the operation needs that the trays have been removed



Figure 1



Figure 2

- At this point the central wall can slide on the bottom and top guides and can be completely extracted Figure 3
- To remove each single divider, unscrew completely the hand grip shown in Figure 4, so that the little aluminium part can be taken off. The first divider is free to be removed and to extract the others is sufficient unscrew just a little the other handle grip and slide up each piece Figure 5
- The divider can be cleaned either in a dishwasher or by hand.



Figure 3



Figure 4

- To replace the gasket simply pull the gasket and remove it Figure 6 .Be careful to correctly home reposition the gasket.



Figure 5

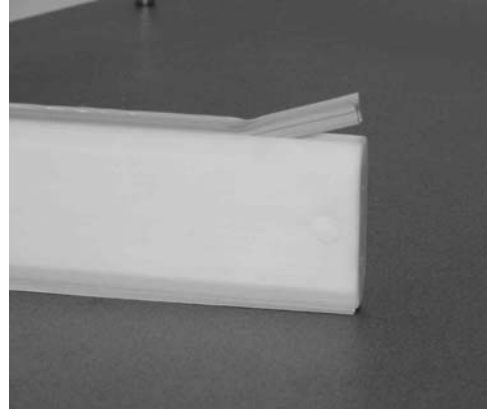


Figure 6

### 31. Towing Attachment

The RTS, can be fitted with a tow bar. The towing attachment has been designed and constructed to be used in conjunction with a towing hitch towing up to a maximum of two RTS at a time at a maximum speed of 7km / 4 miles per hour.

### 32. Towing Procedure For The RTS



#### Coupling

- Ensure all doors are closed correctly and the power cable has been stored.
- Check that all items that have not been secured are removed from the RTS.
- Ensure the floor is flat.
- Release the brakes on the castors.
- Align the front of the RTS to the rear of the towing hitch
- Extract and locate the tow arm ring on to the towing center of the towing hitch.
- Secure the safety pin on the towing hitch
- If towing two RTS, align the front of the second RTS to the rear of the first RTS.
- Push the second RTS and connect the tow arm ring to the rear-towing pin of the first RTS.

#### Un- Coupling

- If there is more than one RTS always commence from the last RTS being towed.
- Ensure the floor is flat and even.
- Remove the safety pin.
- Press down the towing foot pedal and release the tow arm from the towing center, push the arm until it reaches its stop position completely hidden.
- Caution! The towing arm is spring loaded, so take additional care when carrying out this procedure.
- Apply the brakes before leaving the RTS.
- Repeat this operation for the first RTS to uncouple it from the towing hitch (this part of the operation may vary slightly depending on the towing attachment fitted to the towing hitch).

### 33. Towing Safety



#### DO ENSURE

- Extra care is taken in areas where there are patients and pedestrians.
- The floor is flat and even.
- All doors are closed.
- All unsecured items have been removed from the RTS prior to transportation.
- The cable is stored in the correct position and cannot be snagged during transportation.
- That the towing arm is fully extended and located correctly.
- The safety pin has been inserted.
- Reduce speed when negotiating corners and inclines.



#### DO NOT

- Tow more than two RTS at one time.
- Uncouple on uneven floors or inclines.
- Exceed the speed of 7km / 4 miles per hour.
- Tow outside or over rough or uneven surfaces including expansion joints.
- Leave the tow bar in the extended position when the units are not being towed.

**34. Error Codes**

The operator is informed of any abnormalities by a series of error messages that appear on the displays 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
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.
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.
ACTION Request Technical Assistance		

**35. Fault Finding cont.**

The two tables below are a guide for authorized technical personnel and should only be carried out by a competent electrician.

Table one refers to checks that should be made before placing any service calls.

TABLE ONE		
PROBLEM	EXPLANATION	POSSIBLE CAUSE
No blue display	No power to the trolley.	Power supply failure.
ACTION Check power supply to wall plug.		
No blue display	No power to the trolley.	Power supply failure.
ACTION Check connections in the plug.		
No blue display	No power to the trolley.	Power supply failure.
ACTION Check power supply cable for any damage and continuity.		

Table two refers to checks that can only be carried out by Authorized technical personnel during the period of warranty.

TABLE TWO		
PROBLEM	EXPLANATION	POSSIBLE CAUSE
No blue display	No power to the trolley.	Line fuse blown.
ACTION Find and rectify cause for the failure, then replace the line fuse.		
No blue display	No supply from the transformer.	Transformer safety fuse blown.
ACTION Find and rectify cause for the failure, then replace transformer safety fuse.		
No blue display	Internal oven high limit thermostat tripped.	Temperature in the oven chamber has exceeded 165°C / 329°F.
ACTION Find and rectify cause of oven temperature, then reset the oven high limit thermostat		
No blue display	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		

### 36. Regular Maintenance

The maintenance checks listed in the table below should be carried out as an interim service between the full six monthly service. It is also valid as quarterly checks in the first twelve months of use. At the end of this period a full service is required to the manufacturer's specification.

RTS			
COMPONENT	VISUAL	OPERATIONAL	NOTES
Power Supply Plug	✓		Check the plug for damage to the pins or strain relief and that all screws are tight.
Power Supply Cable	✓	✓	Check for any damage, abrasion, cuts, or fraying which could compromise the insulation and the integrity of the power supply cable.
Cable gland	✓	✓	Check the cable gland nut is tight and the power supply cable is firmly gripped in the connector.
ABS Front Panel	✓	✓	Check all the retaining screws are in place and not loose. Check the panel has not been damaged and is held firmly against the seal.
Touch Pad Controls	✓	✓	Check the membrane is not damaged. Ensure all the displays, LEDs and touch pads function correctly.
Door Latches	✓	✓	Check the latch for correct operation.
Doors	✓	✓	Check that they close correctly against the silicon gaskets.
Door Hinges	✓	✓	Check for excessive wear in the bushings or in the up and down movement of the door.
Towing Unit Pole End (Optional)	✓	✓	Check the spring to ensure it holds the pole at the correct tension so that it does not drop down and it springs back instantly when pushed down. <b>The spring must be replaced annually.</b>
Towing Unit Female End (Optional)	✓	✓	Check the spring to ensure it holds the pole at the correct tension so that it does not drop down and it springs back instantly when pushed down. <b>The spring must be replaced annually.</b>
Castors	✓	✓	Ensure the brakes function correctly and the wheels are free and not damaged. Check that the retaining nuts are tight and not entangled with mop strings or other materials.

## 37. Maintenance

### Safety Precautions And Preparing For Maintenance

A maintenance program to maintain the trolley in optimal condition is clearly defined in four different categories.

Daily cleaning (refer to Daily Cleaning Procedure and Cleaning By Hand sections)

Periodic cleaning (refer to Daily Cleaning Procedure and Cleaning By Hand sections)

User maintenance (refer to Interim Maintenance section)

Maintenance schedule to manufacturer's recommendations. Contact Burlodge Technical Department for specialized training.

### Checks Before Every Use

EQUIPMENT	VISUAL	OPERATIONAL	NOTES
Power Supply Plug	✓		Do not use if there are any signs of damage
Power Supply Cable	✓		Do not use if there are any signs of damage
Touch pad Controls	✓	✓	Do not use if there are any signs of damage
Door Latches	✓	✓	Report any defect for immediate repair
Tow Unit	✓	✓	Do not use if there are any signs of damage
Castors	✓	✓	Do not use if there are any signs of damage
Doors	✓	✓	Do not use if there are any signs of damage

The trolley operator should carry out the checks referred to in the above table.

### Servicing

All servicing must be performed by Burlodge authorized agents and must be to the manufacturer's specification and at the required intervals.

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**38. Technical Assistance After Sales Service****Technical Assistance**

Burlodge offers a wide range of service contracts. Standard, Comprehensive and Fully Comprehensive contracts are available along with the option to have your in-house staff trained to act as Burlodge Service Agents. For further information and for specialised contracts contact our Service Department. The Burlodge support team is unrivalled in its experience in the field. Burlodge technical service has been designed to ensure our customers experience the minimum delay possible when a fault or problem is encountered. This brings you the benefit of after sales support with a strong technical network. Burlodge is well aware that down time must be minimised. Our Authorised Service Agents are in your locality to provide comprehensive, quick service.

**39. 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. 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 specialised contracts, please contact the Burlodge Technical Department.

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#### 40. Warranty And 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:

- check the power supply
- check the power cable, plug and internal fuses
- check for any visual damage

Under no circumstances remove or interfere with any part of the RTS 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)

		<b>RTS</b> SOT.300
Date 03-2004		Serial n. 12345
Volts 400V~ 3P+N	Hertz 50	Watts 8200
Gas R404A 18,6 oz ( 530g )		Low Press.
<b>CE</b>	Made in EC	High Press.

- The Series name (i.e. RTS)
- 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

**Caution:**

Any electrical testing by untrained personnel is extremely hazardous and may cause permanent damage to the onboard electronics if not carried out correctly.



## 41. 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.

### How To Order Spare Parts

The Spare Parts Table section is divided into different categories to assist you in identifying the parts you may require.

This table also highlights the parts that we recommend you keep in your stock.

Refer to the Diagrams in the Spare Parts section to initially identify the component.

When ordering spare parts or requesting technical assistance, always refer to the data plate to identify the trolley.

This information is essential to identify correctly the parts required for the trolley.

Please supply the following information:

		<b>RTS</b> SOT.300
Date 03-2004	Serial n. 12345	
Volts 400V~ 3P+N	Hertz 50	Watts 8200
Gas R404A 18,6 oz ( 530g )		Low Press.
<b>CE</b>	Made in EC	High Press.

- The Series name (i.e., RTS etc.)
- Model code
- Date of manufacture
- Serial number
- Part number
- Description of part
- Quantity required
- Your name, department, position and phone number
- Delivery address
- Invoicing address
- Purchase Order number

## 42. Warranty

### Standard 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  $\pm 10\%$  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**

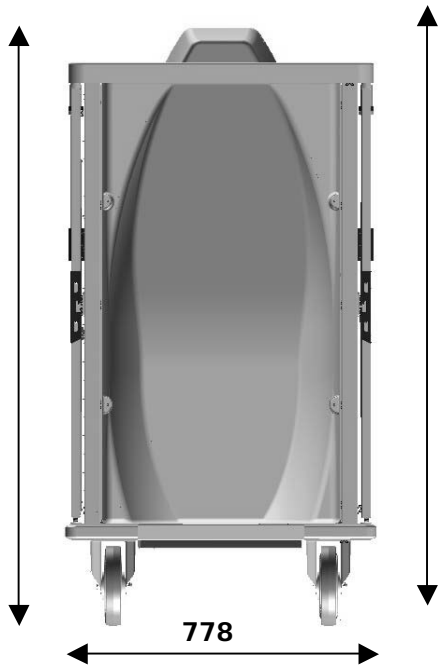
Only authorized persons may carry out repairs during the warranty period or in compliance with the Burlodge contract. Should the Customer fail to comply with these requirements, both the initial warranty period and all certification of the trolley will automatically become invalid.

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.

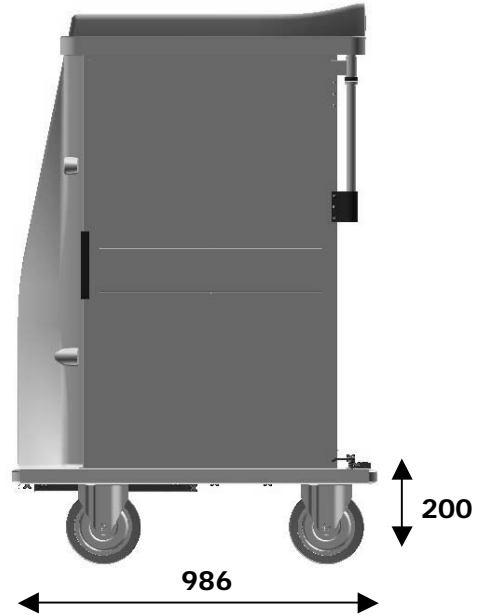
**43. Dimensions**

**RTS S&T**

**RTS T  
1722**



**RTS S  
1482**



Description	Pitch
RTS S 20 tray	92
RTS S 24 tray	80
RTS T 26 tray	92
RTS T 30 tray	80

#### 44. Installation EUROPE

The plug and cord on the trolley will be of a type and rating that meet the required electrical voltage and current requirements of the trolley. The measured supply voltage must be within 10% of the name plate rating. Check the rating plate on each piece of equipment for further details. If the power supply available does not suit the electrical requirements of the trolley, contact our Service Department or an Authorized Service Agent.

Check that the wall plug or cord set has been installed by a qualified electrician and is correctly connected to Earth. Ensure the power supply is compatible to that which is stated on the rating plate. Ideally the trolley should be connected to a interlocked switched socket incorporating both earth fault device and over current protection.

Ensure the plug or cord set is located so that the trolley cannot damage it, yet remains easily accessible to the operator without stressing the power cable.

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

The transportation route and access should be checked for any obstructions that may cause damage to the trolley.

#### Plug Connections RTS 400V 50Hz 3P+N+E

N.B.: If the plug is to be replaced, ensure that the plug is of the appropriate rating to correspond with the trolley data plate and that the conductors are connected to conform with the table below. The trolley is fitted as standard with a 16 amp 400v,N+E plug (BS4343 - IEC/EN60309-2)

Three Phase, Neutral and Earth

Phase R : Brown  
 Phase S : Black  
 Phase T : Black  
 Neutral N : Blue  
 Earth E : Yellow/Green

Cord set: (This will permit all of the functions of the RTS to operate with the exemption of the heating elements in the oven compartment.)

Single Phase, Neutral and Earth

Phase R : Brown  
 Neutral N: Blue  
 Earth E: Yellow/Green

#### Extended Cables RTS 400V 50Hz 3P+N+E



#### Do not use extended cables

Always avoid long cables. It is much safer to reposition the plug to a more appropriate location.

## 45. Installation CANADA/USA

The plug and cord on the trolley will be of a type and rating that meet the required electrical voltage and current requirements of the trolley. The measured supply voltage must be within 10% of the name plate rating. Check the rating plate on each piece of equipment for further details. If the power supply available does not suit the electrical requirements of the trolley, contact our Service Department or an Authorized Service Agent.

Check that the wall plug or cord set has been installed by a qualified electrician and is correctly connected to Earth. Ensure the power supply is compatible to that which is stated on the rating plate. Ideally the trolley should be connected to a interlocked switched socket incorporating both earth fault device and over current protection.

Ensure the plug or cord set is located so that the trolley cannot damage it, yet remains easily accessible to the operator without stressing the power cable.

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

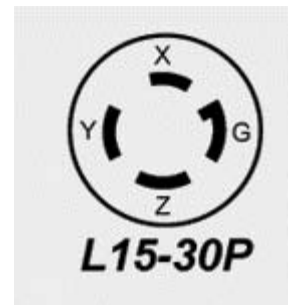
The transportation route and access should be checked for any obstructions that may cause damage to the trolley.

### Plug Connections RTS 208v 60Hz 3P+E

NOTE. If your trolley is supplied without a plug on the power supply cable or the plug must be replaced, ensure that the plug is an exact NEMA replacement (L15-30P) and that it corresponds with the trolley data plate. The conductors must be connected to conform to the table below.

Three Phase, Neutral and Earth

PLUG	SUPPLY
Phase X :	Orange
Phase Y :	Black
Phase Z :	Red
Earth E:	Green



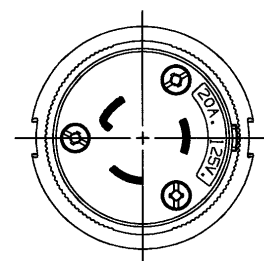
### Plug Connections RTS 208v 60Hz 2P+E

NOTE. If your trolley is supplied without a plug on the power supply cable or the plug must be replaced, ensure that the plug is an exact NEMA replacement (L6-20P) and that it corresponds with the trolley data plate. The conductors must be connected to conform to the table below.

Two Phases and Earth

PLUG	SUPPLY
Phase X :	White
Phase Y :	Black
Earth E:	Green

[50.]



### Extended Cables 208v 60Hz 2P+E



#### Do not use extended cables

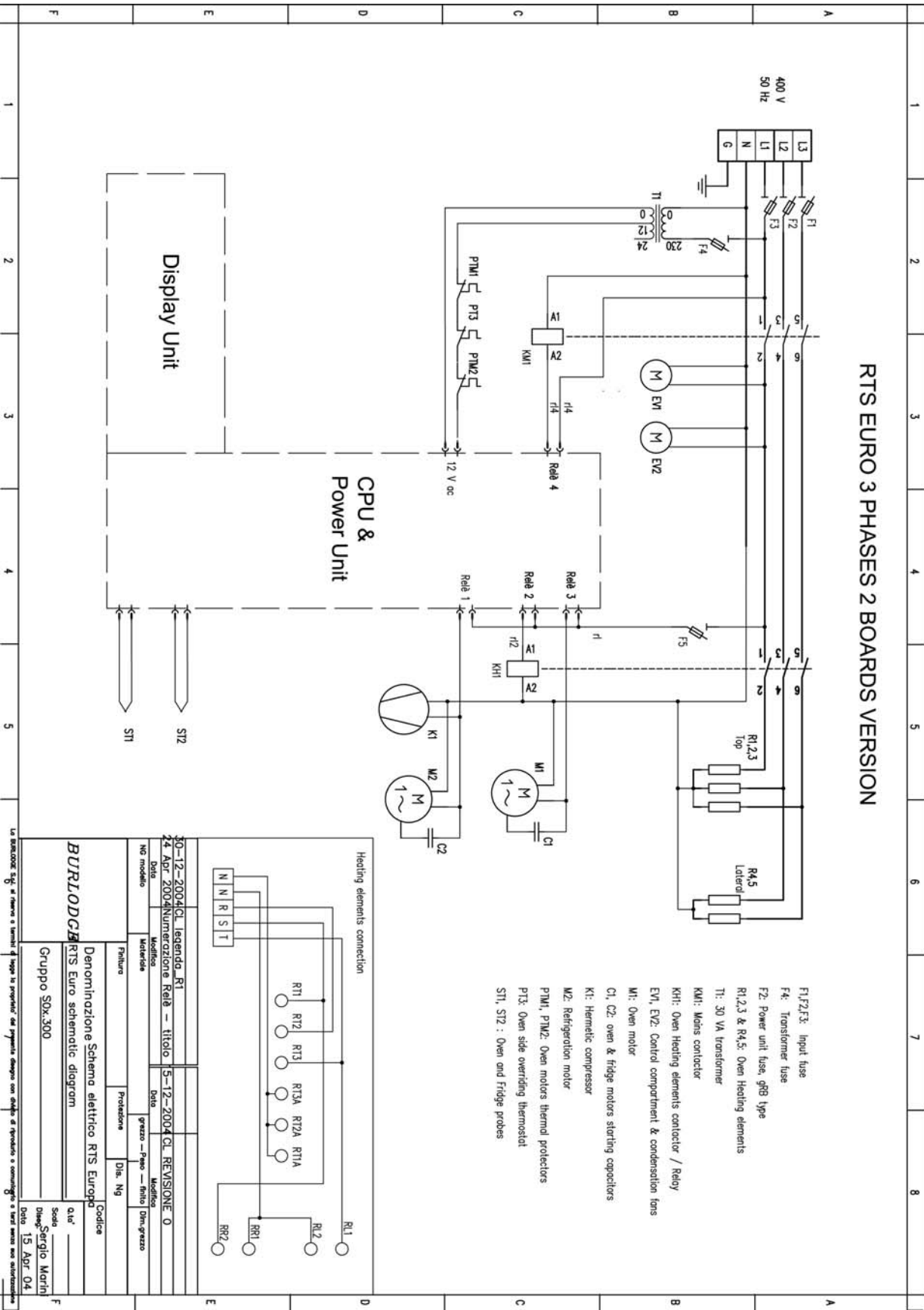
Always avoid long cables. It is much safer to reposition the plug to a more appropriate location.

**46. Electrical Specification****EUROPE**

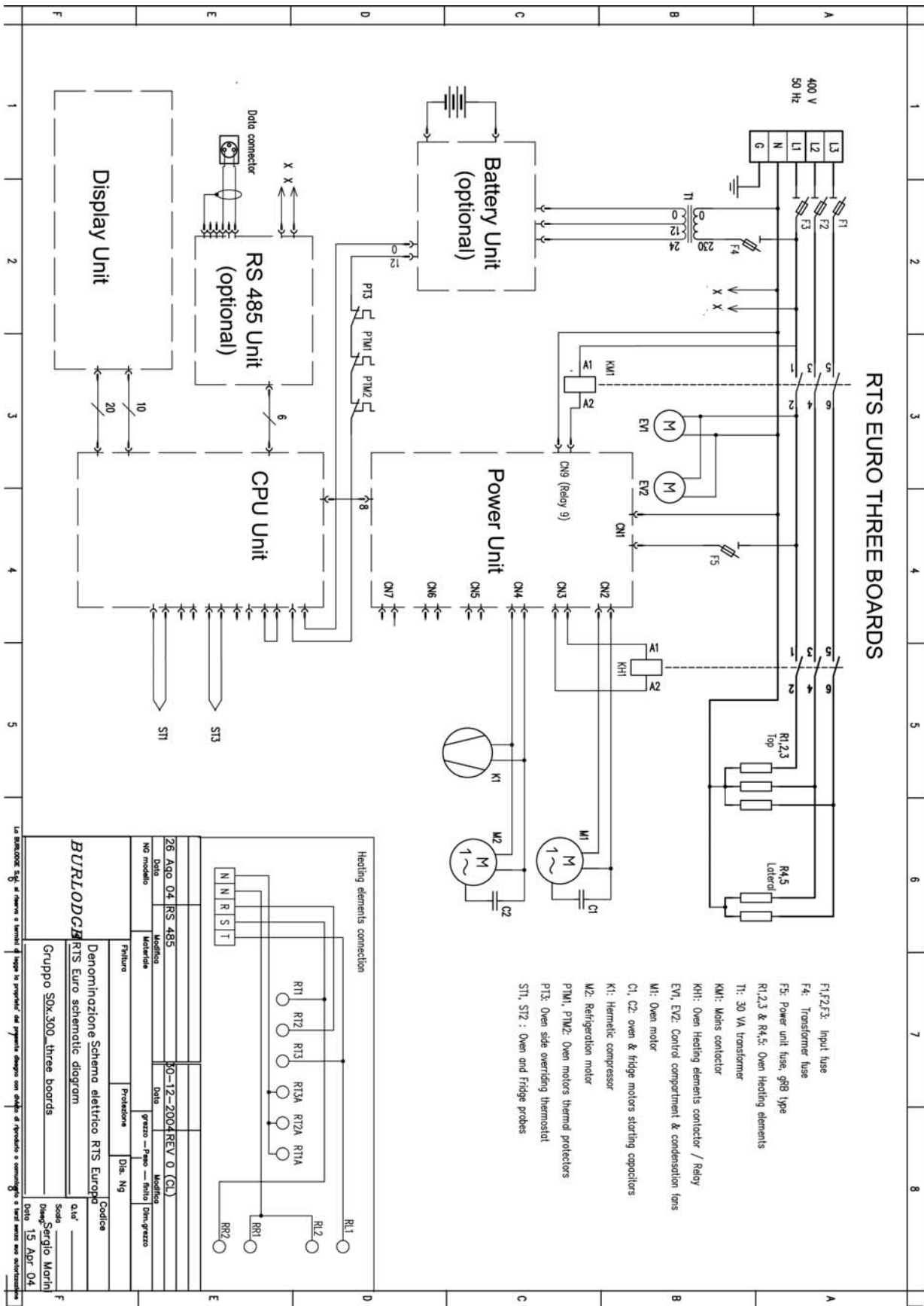
REF.	DESCRIPTION	Total		Refrigeration only	
		AMPS	KW	AMPS	KW
SOS.100	RTS-Short single refrigeration 230V-50 Hz 1 Phase	13	3,0	4,0	1,0
SOS.300	RTS-Short single refrigeration 400V-50 Hz 3 Phases	12	8,2	4,0	1,0
SOT.100	RTS-Tall single refrigeration 230V-50 Hz 1 Phase	13	3,0	4,0	1,0
SOT.300	RTS-Tall single refrigeration 400V-50 Hz 3 Phases	12	8,2	4,0	1,0

**CANADA/USA**

REF.	DESCRIPTION	Total		Refrigeration only	
		AMPS	KW	AMPS	KW
	400v 50Hz 3P+N+E				
SOS.500	RTS-Short single refrigeration 208V-60 Hz 2P+G	16	3,1	5,0	1,0
SOS.700	RTS-Short single refrigeration 208V-60 Hz 3P+G	20	6,2	5,0	1,0
SOT.500	RTS-Tall single refrigeration 208V-60 Hz 2P+G	16	3,1	5,0	1,0
SOT.700	RTS-Tall single refrigeration 208V-60 Hz 3P+G	20	6,2	5,0	1,0



Wiring diagram 3 phases 2 boards version



Wiring diagram 3 phases 3 boards version