Installation and Operation Manual



RH14E Series Rethermalizer

Covering Models:
RH14E-1　RH14E-2

Execution standard：EN 60335-1, EN 60335-2-47
Waterproof level：IPX4
CAUTION: Read the instructions before using the machine.

This Document Contains Confidential information, the Dissemination, Publication, Copying or Duplication of this Document or any hardware, software, or ideas described herein without Prior Written Authorization is Strictly Prohibited.
© 2023 Middleby Food Service Equipment (Qingdao) Co., Ltd.

TO THE PURCHASER, OWNER AND STORE MANAGER

Please review these warnings prior to posting them in a prominent location for reference.

WARNING

DO NOT store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

WARNING

Improper installation, alteration, service or maintenance can cause property damage, injury or death. Read the installation, operating and maintenance instructions thoroughly before installing or servicing this appliance.

WARNING

Installation, maintenance and repairs should be performed by a Middleby China Authorized Service technician or other qualified personnel. Installation, maintenance or repairs by an unauthorized and unqualified personnel will void the warranty.

WARNING

Installation and all connections must be made according to national and local regulations and codes in force.

WARNING

A country approved all pole circuit breaker with a minimum open contact gap of 3mm must be used for proper installation. (CE countries)

WARNING

During the warranty period if a customer elects to use a non-original part or modifies an original part purchased from Middleby China and/or its Authorized Service and Parts companies, this warranty will be void. In addition, Middleby China and its affiliates will not be liable for any claims, damages or expenses incurred by the customer which arises directly or indirectly, in whole or in part, due to the installation of any modified part and/or received from an unauthorized service centre.

WARNING

This appliance, when installed, must be electrically grounded in accordance with local codes, or in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70, or the Canadian Electrical Code, CSA C22.2, as applicable.

WARNING

Adequate means must be provided to LIMIT the movement or this appliance without depending on the electrical cord connection. Single appliances equipped with legs must be stabilized by installing anchor straps. All appliances equipped with casters must be stabilized by installing restraining chains.

WARNING

DO NOT alter or remove structural material on the appliance to accommodate placement under a ventilation hood.

WARNING

This appliance is intended for professional use only and should be operated by fully trained and qualified personnel.

WARNING

If the supplied power cord is damaged, it must be replaced by a Middleby China Authorized Service and Parts company technician, or a similarly qualified person in order to avoid a hazard.

WARNING

The power supply must be disconnected before servicing, maintaining or cleaning this appliance.

WARNING

The appliance is NOT jet stream approved. DO NOT clean the appliance with a water jet.

This Document Contains Confidential information, the Dissemination, Publication, Copying or Duplication of this Document or any hardware, software, or ideas described herein without Prior Written Authorization is Strictly Prohibited.
© 2023 Middleby Food Service Equipment (Qingdao) Co., Ltd.

WARNING

DO NOT attempt to move this appliance or transfer hot liquids from one container to another when the unit is at operating temperature or filled with hot liquids. Serious personal injury could result if skin comes in contact with the hot surfaces or liquids.

WARNING

DO NOT sit or stand on this appliance. The appliance's front panel, tank, splash back, tank cover, work shelf, drain board is not a step. Serious injury could result from slipping, falling or contact with hot liquids.

WARNING

NEVER use the appliance as a step for cleaning or accessing the ventilation hood. Serious injury could result from slips, trips or from contacting hot liquids.

WARNING

The water level should be maintained at the level line. DO NOT turn the appliance on until the heating elements are fully covered with water at all times. Serious injury could result from hot steam vapours off the heating element.

WARNING

If overflow drain is not equipped or if overflow drain stop is used, do not leave appliance unattended while filling with water. Over filling the appliance can cause serious injuries and damage the equipment.

WARNING

Completely shut the appliance down when the water is being drained from the appliance. This will prevent the appliance from heating up during the draining and filling process. Serious injury and heating element damage can occur.

WARNING

This appliance is intended for indoor use only.

WARNING

DO NOT operate appliance unless all panels and access covers are attached correctly.

WARNING

It is recommended that this appliance be inspected by a qualified service technician for proper performance and operation on a yearly basis

This Document Contains Confidential information, the Dissemination, Publication, Copying or Duplication of this Document or any hardware, software, or ideas described herein without Prior Written Authorization is Strictly Prohibited.
© 2023 Middleby Food Service Equipment (Qingdao) Co., Ltd.

Please properly keep this I&O manual for future reference.

Model: _____ Serial No.: _____ Installation Date: _____

Rethermalizer conditional warranty

Middleby China warrants to the original user of its commercial Rethermalizer that the said appliance will be free from defects in material and workmanship under normal use for a period of one (1) year from the date of installation, with appropriate documentation, to a maximum of fifteen (15) months from the date of manufacture, subject to the following additions, exceptions, exclusions and limitations.

This warranty is limited to the repair or replacement at the Company's option, without charge, of any part found to be defective within the warranty period.

How to Keep Your Warranty in Force

- Make sure any shipping damages are reported immediately. Damages of this nature are the responsibility of the carrier and must be reported by the receiver.
- Install the unit properly. This is the responsibility of the installer and the procedures are outlined in the manual.
- Do not install it in a home or residence.
- Maintain it properly. This is the responsibility of the user of the appliance and the procedures are outlined in the manual.
- Adjustments, such as calibration, levelling, tightening of fasteners, plumbing or electrical connections normally associated with initial installation are outlined in the manual and are not covered under warranty.
- Damage due to flood, fire or other acts of God is not covered under warranty.
- Use it for what it is intended. If it is used for a purpose other than for which it was intended or designed, any resulting damages are not covered under the warranty.
- Do not materially alter or modify the appliance from the condition in which it left the factory.
- Do not obliterate, remove or alter the serial number rating plate.
- Use only Genuine OEM parts from Middleby China or its Authorized Service and Parts Distributors. Use of non-OEM parts is not covered under warranty.
- If any other failure occurs which is not attributable to a defect in materials or workmanship, it is not covered.
- This warranty specifically excludes parts which wear or would be replaced under normal usage, including, but not limited to, electric lamps, fuses, interior or exterior finishes and gaskets.

Limitations of Liability

In the event of a warranty or other claim, the sole obligation of Middleby China will be the replacement, at the Company's option, of the component part. Any repair or replacement under this warranty does not constitute an extension in time to the original warranty. Parts covered under this warranty will be repaired or replaced, at the Company's option with new or functionally operative parts. The liability of Middleby China on any claim of any kind, including claims based on warranty, express or implied contract, negligence, strict liability or any other legal theories will be exclusively the repair of the appliance. The liability will not include, and the purchaser specifically renounces any right to recover special, incidental, consequential or other damages of any kind, including, but not limited to, injuries to persons, damage to property, loss of profits or anticipated loss of the use of this appliance.
If any provision of this warranty is unenforceable under the law of any jurisdiction, that provision only will be inapplicable there, and the remainder of the warranty will remain unaffected. The maximum exclusion or limitation allowed by law will be substituted for the unenforceable provision.
This warranty gives you specific legal rights. You may have other rights which vary based on jurisdiction.

This Document Contains Confidential information, the Dissemination, Publication, Copying or Duplication of this Document or any hardware, software, or ideas described herein without Prior Written Authorization is Strictly Prohibited.
© 2023 Middleby Food Service Equipment (Qingdao) Co., Ltd.

Contents

page

Part One—Brief Introduction----------6

Ⅰ. Main function of Rethermalizer ----------6

Ⅱ. Component of Rethermalizer----------6

Ⅲ. Specification of Rethermalizer----------8

Part Two— Installation----------9

Ⅰ. Component installation----------
10

Ⅱ. Ventilation System ---------- 11

Ⅲ. Installation **----------11**

1. Power connection ----------11
2. Inlet water connection----------11
3. Outlet water connection----------12
4. Adjustment level----------12
5. Initial cleaning ----------12

Part Three- Operating instruction----------13

Ⅰ. Startup ----------13

Ⅱ. Shutdown ----------13

Ⅲ. Controller programming & Operations ----------14

1. Schematic of controller ----------14
2. Controller buttons functions ----------15
3. Controller programming instructions----------15
4. Displays Descriptions ----------16
5. Controller operations ----------17

Part Four- Cleaning and maintenance---------- 18

Ⅰ. Tank & accessories cleaning----------18

Ⅱ. Outer surface cleaning ---------- 19

Ⅲ. Tank descaling ----------20

Ⅳ. Check power supply cord ----------20

Part Five-Troubleshooting ---------- 21

Part Six-Circuit diagram ----------22

Notice
See Part Six in this manual for circuit diagram.
A printed copy of this manual is included in the Rethermalizer's accessories pack.

This Document Contains Confidential information, the Dissemination, Publication, Copying or Duplication of this Document or any hardware, software, or ideas described herein without Prior Written Authorization is Strictly Prohibited.
© 2023 Middleby Food Service Equipment (Qingdao) Co., Ltd.

Part One-Brief Induction

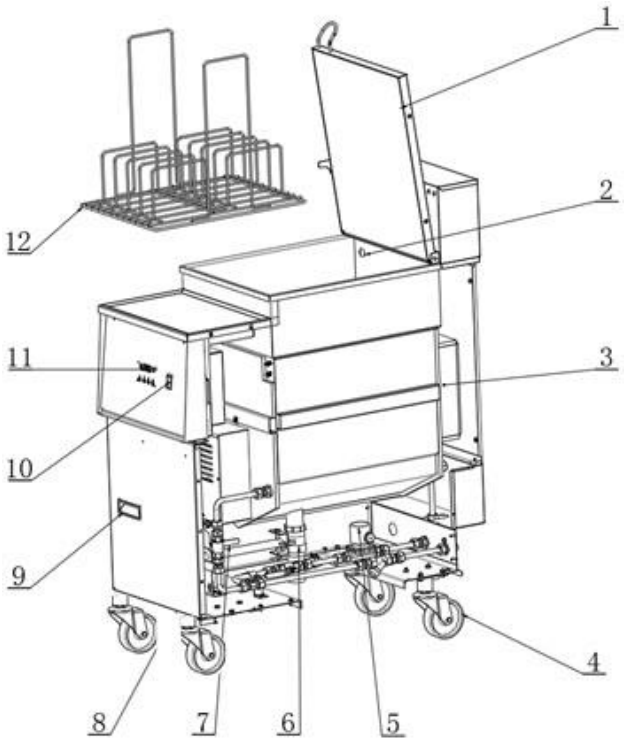
Ⅰ. Main function of Rethermalizer

Rethermalizer is mainly used for the reheating a wide variety of pre-cooked, pre-packaged food products such as soups, vegetables, meat, entrees, sauces etc.

Ⅱ. Components—see figure 1-1 and figure 1-2

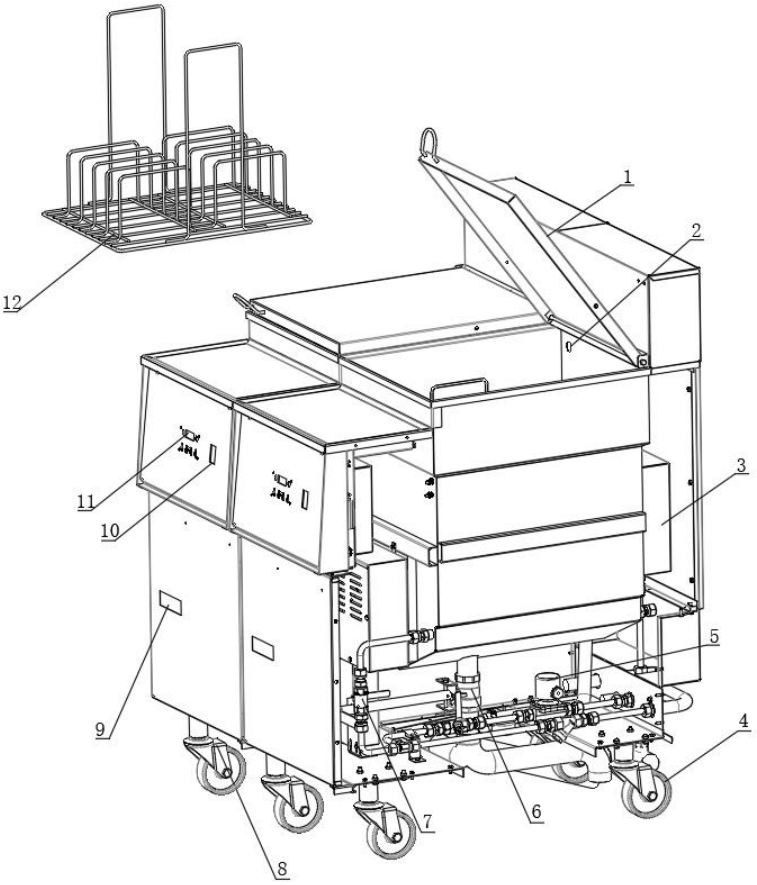
1. Tank cover.
2. Overflow drain outlet.
3. Preheat tank
4. Universal casters
5. Inlet solenoid valve
6 Drain valve
7. Manual inlet valve
8. Swivel casters.
9. Cabinet door
10. Power switch
11. Control panel
12. Vertical food rack

Figure **1-1**. Component of RH14E-1



This Document Contains Confidential information, the Dissemination, Publication, Copying or Duplication of this Document or any hardware, software, or ideas described herein without Prior Written Authorization is Strictly Prohibited.
© 2023 Middleby Food Service Equipment (Qingdao) Co., Ltd.

Figure **1-2**. Component of RH14E-2



This Document Contains Confidential information, the Dissemination, Publication, Copying or Duplication of this Document or any hardware, software, or ideas described herein without Prior Written Authorization is Strictly Prohibited.
© 2023 Middleby Food Service Equipment (Qingdao) Co., Ltd.

III. Specifications

Model：RH14E-1

INDIVIDUAL FRYER SPECIFICATIONS			
Cooking Area/Depth		**Preheat tank Capacity**	**Water Capacity**
12 1/2 x 14 x 18 1/2 in (32 x 36 x 47cm)		11Lbs (5kg)	147Lbs (67kg)
Preheat time(25°C-85°C)		**Standby recovery time (98°C-100°C)**	
<30MIN		< 30S	
ELECTRICAL REQUIREMENTS	**Nominal Amps Per Line (50/60 HZ)**		
	3 Phase "Y" (4 wire + ground)		
Power	380/220V	400/230V	
9kW	14A	15A	
PRODUCT		**SHIPPING INFORMATION (Approximate)**	
Size H x W x L	**Net Weight**	**Shipping Crate Size H x W x L (Approximate)**	**Shipping Weight**
46 x 16 x 35 in (117 x 41x89.5cm)	198 Lbs (90 kg)	54 x 23 x 38 in (136 x 58x 96cm)	231 Lbs (105 kg)
CONNECTION			
Inlet connection		**Drainage connection**	
The inlet water is connected by 1/2 pipe , and it is recommended to use filtered water.		Drainage is connected by 1 1/4 pipe, it is recommended to use heat-resistant materials.	

Model：RH14E-2

INDIVIDUAL FRYER SPECIFICATIONS			
Cooking Area/Depth		**Preheat tank Capacity**	**Water Capacity**
12 1/2 x 14 x 18 1/2 in (32 x 36 x 47cm) per tank		11Lbs (5kg)	147Lbs (67kg) per tank
Preheat time(25°C-85°C)		**Standby recovery time (98°C-100°C)**	
<30MIN		< 30S	
ELECTRICAL REQUIREMENTS	**Nominal Amps Per Line (50/60 HZ)**		
	3 Phase "Y" (4 wire + ground)		
Power	380/220V	400/230V	
9kWx2	14Ax2	15Ax2	
PRODUCT		**SHIPPING INFORMATION (Approximate)**	
Size H x W x L	**Net Weight**	**Shipping Crate Size H x W x L (Approximate)**	**Shipping Weight**
46 x 32 x 35 in (117 x 82x89.5cm)	338Lbs (153 kg)	54 x 41x 41 in (136 x 104 x 104cm)	393 Lbs (178 kg)
CONNECTION			
Inlet connection		**Drainage connection**	
The inlet water is connected by 1/2 pipe , and it is recommended to use filtered water.		Drainage is connected by 1 1/4 pipe, it is recommended to use heat-resistant materials.	

Note - Detailed power information is marked on the data plate of the Rethermalizer. Please refer to the circuit diagram in Part 6 of this manual.

This Document Contains Confidential information, the Dissemination, Publication, Copying or Duplication of this Document or any hardware, software, or ideas described herein without Prior Written Authorization is Strictly Prohibited.
© 2023 Middleby Food Service Equipment (Qingdao) Co., Ltd.

Part Two-Installation

This Rethermalizer can heat the water to the set temperature within 30 minutes and continually monitor the water temperature and maintain the water temperature at the set temperature via the digital controller. The temperature probe of the controller has been calibrated before leaving the factory. It is particularly important to get familiar with the safety instructions and usage of the equipment and keep this manual in a safe and convenient place for future reference.

Warning: Improper installation, alteration, service or maintenance can cause property damage, injury or death. Read the installation, operating and maintenance instructions thoroughly before installing or servicing this appliance.
Warning: DO NOT store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
Warning: This appliance must be installed with the legs or casters provide.
Warning: Do NOT install a floor drain directly under the cabinet of the appliance. Steam from a floor drain can limit the life of internal components.
Warning： Cut off the power supply before installing or servicing this appliance.
Caution: This appliance must be connected to a power supply having the same voltage and phase as specified on the data plate of the appliance. The appliance must be grounded in accordance with local code
Caution: This equipment must be installed so that the plug is accessible unless other means for disconnection from the power supply (e.g. a circuit breaker) is provided.
Warning： DO NOT install this appliance next to a deep fat fryer. A splash over of water into the hot oil may cause a flash fire.
Caution: DO NOT obstruct the flow of ventilation, or air openings around the appliance. Adequate clearance around the appliance is necessary for servicing and proper component ventilation. Ensure that you meet the minimum clearance requirements specified in this manual.
Caution: To prevent equipment damage and/or personal injury, do not tilt the appliance onto any two of its casters or legs, or pull the appliance by the splash back.
Caution: DO NOT sit or stand on this appliance. The appliance's front panel, tank, splash back, tank cover, work-shelf, drain board is not a step. Serious injury could result from slipping, falling or contact with hot liquids.

Caution: All installation procedures for RHE-14 series Rethermalizer shall conform to the local national or international regulations or conventions, including installation position, power connection, ventilation system, etc. These regulations and provisions take precedent over the recommendations and guidelines in this manual.

This Document Contains Confidential information, the Dissemination, Publication, Copying or Duplication of this Document or any hardware, software, or ideas described herein without Prior Written Authorization is Strictly Prohibited.
© 2023 Middleby Food Service Equipment (Qingdao) Co., Ltd.

I. RH14E Rethermalizer installation components

RH14E series Rethermalizer installation components

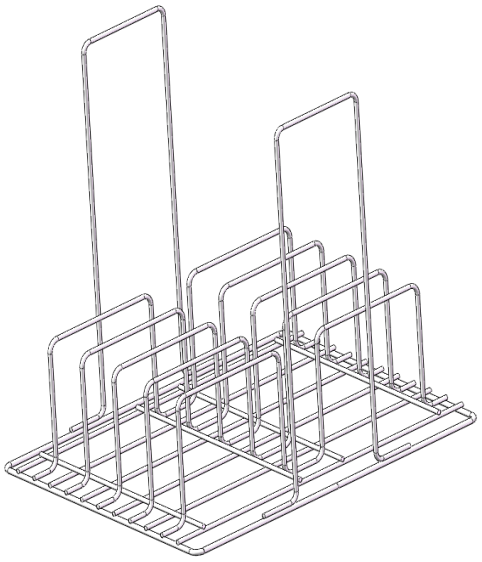
Accessories list

Item.	Quantity	Parts No.	Description
1	1	11106.0025	Cleaning brush
2	1	10502.0003	Vertical food rack

Figure **2—1.** RH14E series Rethermalizer installation components



1



2

This Document Contains Confidential information, the Dissemination, Publication, Copying or Duplication of this Document or any hardware, software, or ideas described herein without Prior Written Authorization is Strictly Prohibited.
© 2023 Middleby Food Service Equipment (Qingdao) Co., Ltd.

II. Ventilation System

It is strongly recommended to install ventilation system to the Rethermalizer so that the steam generated by cooker can be rapidly exhausted. Your ventilation system should be designed to allow for easy cleaning. Ventilation and fire safety systems must comply to local and national codes.

Frequent cleaning and proper maintenance of the ventilation system and the appliance will reduce the chances of fire.

III. Installation

Installation, maintenance and repairs should be performed by a Middleby China Authorized Service company technician or other qualified personnel. Installation, maintenance or repairs by an unauthorized and unqualified personnel will void the warranty. Installation and all connections must be made according to national and local regulations and codes in force. This manual provides important installation information.

1. Power connections：

The circuit diagram is in Part 6 of this manual . Power requirements for Rethermalizer are as follows.

Machine model	Voltage	Power	Wiring system
RH14E-1	380~400V	9kW	Three phase five wire system
RH14E-2	380~400V	18kW	Three phase five wire system

Warning: This equipment must be installed so that the plug is accessible unless other means for disconnection from the power supply (e.g. a circuit breaker) is provided.

Warning: This appliance must be electrically grounded in accordance with local or national codes

2. Inlet water connection：

It is recommended that the appliance be connected to hot water supply. This will greatly decrease the time it takes for the appliance to reach operating temperature. Prior to installation, a water treatment specialist should inspect the water supply. Water hardness should contain no more then 2.0 grains/gallon. The pH level should be between 6.5 and 8.0. These conditions can be obtained with the use of a properly maintained water softener. The incoming water pressure should be between 150 kPa to 280kPa. For higher water pressures, a high-pressure regulator must be installed to inlet plumbing to avoid damage caused by water hammer. The maximum allowable incoming water temperature is 180°F (82°C). Filter water is recommended for water intake to the Rethermalizer.

WARNING: When water is at a high temperature and high pressure, excessive splashing of hot water may occur that could result in injury**.**

This Document Contains Confidential information, the Dissemination, Publication, Copying or Duplication of this Document or any hardware, software, or ideas described herein without Prior Written Authorization is Strictly Prohibited.
© 2023 Middleby Food Service Equipment (Qingdao) Co., Ltd.

Caution: When manual water re-filling is used, turn off manual inlet valve when the water level reaches the position of the upper water level probe.

3. Outlet water connection：

The drain outlet at the bottom of each tank is 40mm stainless steel pipe. Each tank also has an overflow line. The overflow connection is after the drain valve to provide an unobstructed overflow path. The drain and overflow line for each tank is connected together to form a common drain line. Since the Rethermalizer drains hot water, the drain pipe must be made of a heat-resistant material.

4. Level adjustment:

When you receive your appliance it is completely assembled with casters. This appliance must be installed with legs or casters; it cannot be curb mounted. Curb mounting will seriously inhibit this appliance's ability to effect proper component ventilation. The legs/casters must be installed before connecting the appliance to the power supply. The legs provide the necessary height to meet sanitation requirements and assure adequate air supply for the electrical component ventilation.

Adjust the height and level the appliance by loosening the 2 locking screws and adjusting the leveling devices on the casters. Re-tightened locking screws after making the height adjustments.

The Rethermalizer is now connected and ready to start operations. It is equipped with automatic water replenishing system. Turn on the power switch on the front panel and the inlet solenoid valve will be activated. Water will pass thru the preheating tank located at the back of the main tank before flowing into the main tank. The water level is monitored by the dual water level probes of the controller; to reach the preset water level and maintain the water level in normal use.

Note: the appliance will not be heat if the water level does not reached the water level probe position

5. Initial cleaning：

When your appliance is shipped, many of its parts are covered with a thin coat of oil for protection. Before the appliance is ready for cooking it must be cleaned. This will remove the oil coating and any foreign matter that may have accumulated during storage and shipment. Follow these steps:

1. Fill the tank with water and add the appropriate amount of grease dissolving cleaner.
2. Turn on the Rethermalizer and wait for the water to reach its normal operating temperature and let the equipment soak for a few minutes to allow the oil and dirt to fully dissolve and soften. Clean the tank with the heat resistance brush.
3. When the cleaning is complete, turn off the Rethermalizer and drain the tank.
4. Allow the tank to cool, then rinse the tank continuously with clean water until the detergent is completely & thoroughly rinsed from the tank.
5. The tank is now clean and ready to use.

This Document Contains Confidential information, the Dissemination, Publication, Copying or Duplication of this Document or any hardware, software, or ideas described herein without Prior Written Authorization is Strictly Prohibited.
© 2023 Middleby Food Service Equipment (Qingdao) Co., Ltd.

Part Three-Operation Instruction

Note: Default operating temperature of this Rethermalizer is set at 195 ° f (91 ° c).		
Ⅰ	**Startup**	
1	Ensure that the appliance manual inlet is turned off.	
2	Close all drain valves	
3	Open the incoming water supply valve	
4	Turn on power switch	When the power switch is turned on, water begins to fill the tank automatically. When the water level reaches the lower probe of the controller, the heater starts to heat. When the water level reaches the higher probe of the controller, the water inflow stops. When the water level is lower than the probe of the controller, the water tank starts to replenish water automatically.

Note: when the water inlet solenoid valve fails, manual water replenishment can be carried out by manual water inlet

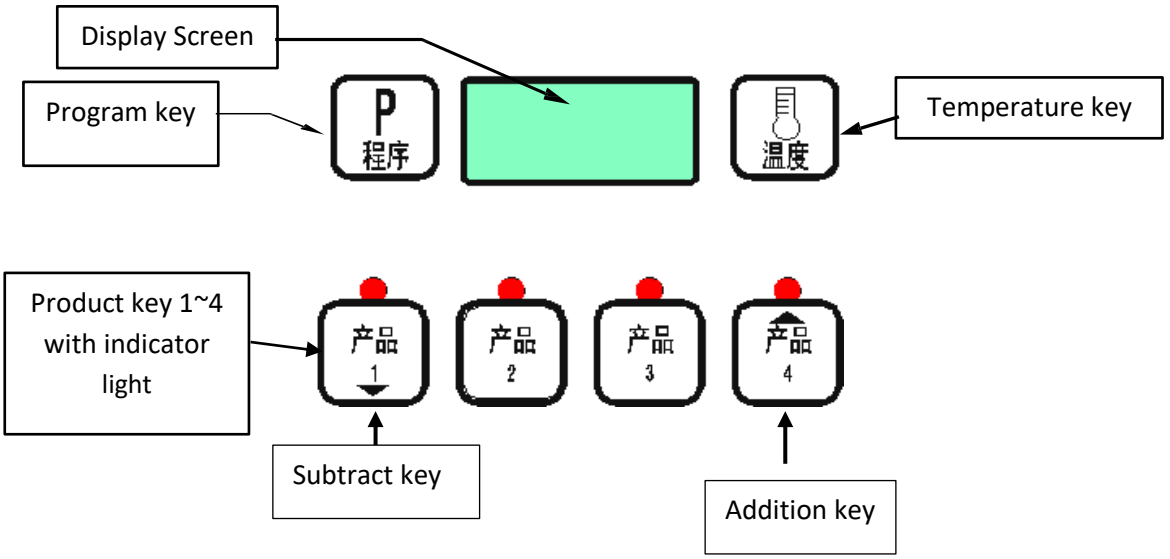
Ⅱ	**Shutdown**	
1	Turn off power switch	
2	Open the main tank drain valve	With the water temperature at 45℃ or below, open the valve to release water Use the manual refill to replenish water to speed up the cooling of the water in the tank.

This Document Contains Confidential information, the Dissemination, Publication, Copying or Duplication of this Document or any hardware, software, or ideas described herein without Prior Written Authorization is Strictly Prohibited.
© 2023 Middleby Food Service Equipment (Qingdao) Co., Ltd.

3	Open the drain valve of the preheating tank	
4	Unplug or Turn off main power	

III. Controller Programming & Operations:

1. Schematic of controller:



This Document Contains Confidential information, the Dissemination, Publication, Copying or Duplication of this Document or any hardware, software, or ideas described herein without Prior Written Authorization is Strictly Prohibited.
© 2023 Middleby Food Service Equipment (Qingdao) Co., Ltd.

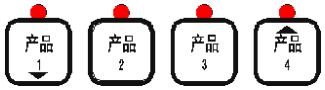
2. Controller Buttons Functions:



Press and hold for 3 seconds to enter programming mode. "ProG" will appear on the display. Programming mode will exit automatically if no key is pressed within 2 minutes.



Press and hold for 3 seconds to enter the temperature programming mode. “ProG” will appear on display.



Each button can be set for individual product rethermalizing time. When the button is pressed, the top indicator flashes until the countdown time has lapsed & the button is pressed again to stop the alarm.

Product menu key 1 is also use for decreasing the setting value during programming.

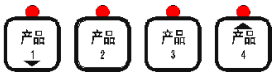
Product menu key 4 is also use for increasing the setting value during programming.

3. Controller programming instructions：

- **Program Product Time Cycle**

Press and hold the key 

for 3 seconds to enter programming mode and the screen will display "ProG". If you do not press the product key within 2 minutes, the programming mode will automatically exit.

Select a Product button 

to program. The display will alternate between "ti-z" and "xx:xx", if the time is in minutes and seconds. If the time is in hours and minutes, the display will alternate between "ti-z" and "xHxx". Where z is the Product button number and x is the time value. If there is no activity within 5 seconds, the display will return to the alternate display state.

Adjust the time by using product button 1 (to subtract time) and product button 4 (to add time).

The longer the button is held, the faster the time scrolls.

Note: If the time is 60 minutes or more, "H" will appear on the display as "HHMM". For example: 2 hours and 30 minutes, it will be displayed as: "2H30". If the time is less than 60 minutes, the display will revert to MM:SS. When the desired time is reached, press the Program button to accept & store.

This Document Contains Confidential information, the Dissemination, Publication, Copying or Duplication of this Document or any hardware, software, or ideas described herein without Prior Written Authorization is Strictly Prohibited.
© 2023 Middleby Food Service Equipment (Qingdao) Co., Ltd.

- **Program Pre-alarm Time**.

The display will now alternate between “ALrz” and xx:xx (if the times is in minutes and seconds) or xH:xx (if the time is in hours and minutes).

If a Pre-alarm is desired within the Product time cycle, adjust the time by using Product button 1 (to subtract time) and Product button 4 (to increase time). The Pre-alarm time must be less than the Product time cycle. Once the desired time is reached, press the program key to accept and store.

You can now set the Product total time cycle & Pre-alarm time for other product buttons or exit the programming mode. To program the other product buttons, select the next button and repeat the above steps.

To exit the programming mode, press the Program button again and the display will return to the idle mode.

- **Program Temperature**.

Press the temperature button for 3 seconds to enter temperature programming mode and "ProG" will appear on the display. Press the product key 1 or the product key 4 to toggle the display between "°C" or "°F". Select one by pressing temperature button again. At this point, enter the desired set temperature. The screen will display alternately "SEtt" and "XXXZ" (X is temperature value, Z is temperature measure unit). Press Product button 1 (to subtract) or Product button 4 (to add) to adjust the desired set temperature. The longer the button is held, the faster the temperature scrolls. Press the temperature button again to accept & store and to exit the temperature programming mode.

4. Displays Descriptions：



Indicates that a temperature probe or the probe circuit has failed. The "PErr" will continue to display and alarm will sound until the problem is fixed. All Product time cycles will end.



Indicates that the top liquid level probe or the probe circuit has failed. This error display is accompanied by an alarm.



Indicates that the bottom liquid level probe or the probe circuit has failed. This error display is accompanied by an alarm.

This Document Contains Confidential information, the Dissemination, Publication, Copying or Duplication of this Document or any hardware, software, or ideas described herein without Prior Written Authorization is Strictly Prohibited.
© 2023 Middleby Food Service Equipment (Qingdao) Co., Ltd.



The controller is in normal operating mode and the actual temperature is below the preset temperature range.



The controller is in normal operating mode and the actual temperature is within a preset temperature range. It is ready to start a Product timing cycle.



The controller is in normal operating mode and a product button is activated and the timer is running.



The controller is in normal operating mode and the product timing has lapsed.

5. Controller operations：

Product button starts and stops

Start: Press the desired product key 

to start the timer. The Product set time will be displayed and start to countdown. The indicator light above the product key will flash. If the set time value is in hours and minutes, the display will show XH:XX (X stands for time value). If the set time is in minutes and seconds, the display will show XX:XX. “DONE” will be displayed at the end of the countdown and an alarm will sound. If no time is set on the product key, “DONE” will be displayed immediately and the alarm will sound.

Cancel timer before completion: Press and hold the active product button for 3 seconds or press it 3 times within 2 seconds.

Stop alarm after completion: Press the active product button once and the alarm will stop.

Activate Pre-alarm: If the product button has been set for pre-alarm, it will signal at the preset time during the Product timing cycle. The signal, a dual-rhythm beeping, will come on for 5 seconds. The display will also flash the Pre-alarm set time. After the 5 seconds, the countdown time will resume.

Check the actual temperature/set temperature：

Press the temperature key 

will display "AXXX". XXX is the actual temperature value. Press the temperature button for the second time within 5 seconds to display "PXXX". PXXX refers to the programmed set temperature. If this key is not pressed within 5 seconds, the display will return to idle or timer.

This Document Contains Confidential information, the Dissemination, Publication, Copying or Duplication of this Document or any hardware, software, or ideas described herein without Prior Written Authorization is Strictly Prohibited.
© 2023 Middleby Food Service Equipment (Qingdao) Co., Ltd.

Part four - Cleaning and Maintenance

Warning

Prior to any cleaning or maintenance of the Rethermalizer, follow these steps:
1. Turn off the Rethermalizer and wait for it to cool. Do not service or clean the Rethermalizer before it is cooled.
2. Turn off power supply to the Rethermalizer or unplug the power socket.

After the cleaning or maintenance is completed:
1. If the Rethermalizer has been moved, return it to its original location.
2. If the water supply or drain outlet line is disconnected, reconnect it.
3. Turn on the power supply to the Rethermalizer or plug in the power socket

Caution

Do not use water jet or pressure steam to clean the tank.

Do not use corrosive cleaning chemicals that can damage the surface of the tank.

Note

Any repairs or parts replacement must be carried out by Middleby China authorized technician.

		**Note:** **Do not use abrasive cleaning pad on the stainless steel surfaces.** **Do not use corrosive cleaning chemical.** **The exterior of the Rethermalizer can be cleaned with grease remover and polished with stainless steel cleaner**
I	Procedure: clean tank and accessories （Every day at closing time）	
	Supplies/tools：	Non-abrasive cleaning pad
		Cleaning brush

This Document Contains Confidential information, the Dissemination, Publication, Copying or Duplication of this Document or any hardware, software, or ideas described herein without Prior Written Authorization is Strictly Prohibited.
© 2023 Middleby Food Service Equipment (Qingdao) Co., Ltd.

		Remove the vertical food rack and the tank cover
1	Brush off food crumbs	Turn power switch off and let the tank water cool. Brush any food crumbs off the tanks sides with the cleaning brush
2	Cleaning	Drain out water in the tank. Use mild detergent to clean tank with non-abrasive cleaning pad. Rinse tank with clean water until detergent is completely rinsed from the tank.

II	Procedure: clean outer surface (at closing time each day)	
	Supplies:	Regular cleaner/stainless steel cleaner
	Tool：	Dry dishcloth
		Clean paper
1	Clean the outside surface of the Rethermalizer	Follow the shutdown procedure and allow water in the tank to cool down Spray the stainless steel cleaner over the dry rag
2	Wipe	Wipe the outer surface with a dry rag
3	Exterior glazing	Dry the surface Wipe with a clean paper

This Document Contains Confidential information, the Dissemination, Publication, Copying or Duplication of this Document or any hardware, software, or ideas described herein without Prior Written Authorization is Strictly Prohibited.
© 2023 Middleby Food Service Equipment (Qingdao) Co., Ltd.

Ⅲ	Procedure: water tank descaling (weekly)	
1	Fill water tank.	Fill the tank to the normal working water level
2	Add the scale remover and soak	Add an appropriate amount of scale remover (e.g. 250ML vinegar per small tank) and soak for more than 30 minutes.
3	Drain and wash the tank	Remove the descaling agent water, continue to use clean water to rinse tank, until there is no descaling agent residue。

Ⅳ	Procedure: check the power cord and plug (monthly)	
1	Check the power cord and plug	Check if it is broken/loose
2	Replace if needed	Contact the maintenance staff to replace it

Cleaning/maintenance frequency

content	frequency
Clean outer surface	Daily
Clean tank	Daily
Tank descaling	weekly
Check the power cord	monthly
Water descaling	yearly
Professional maintenance work performed by qualified technicians	yearly

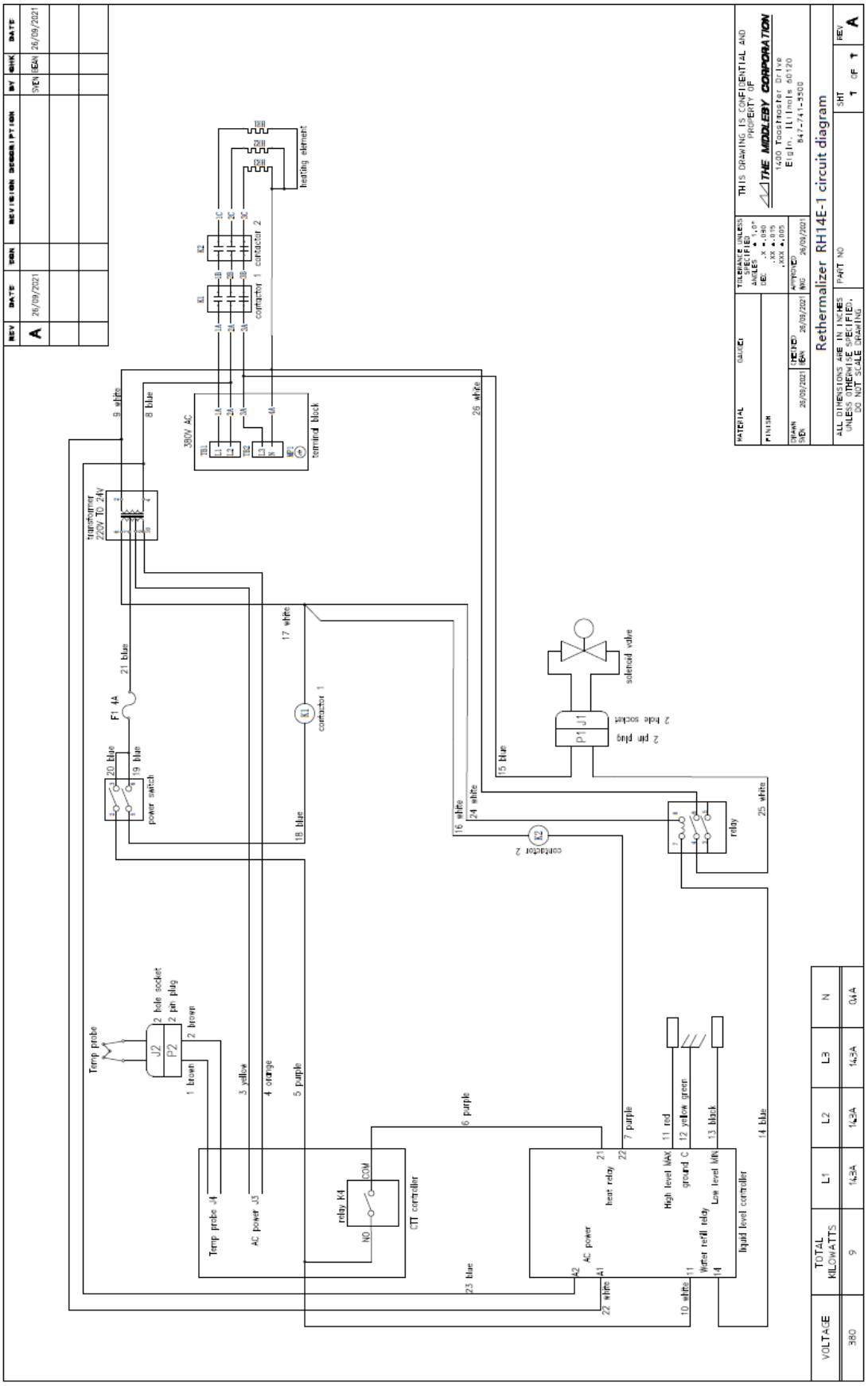
This Document Contains Confidential information, the Dissemination, Publication, Copying or Duplication of this Document or any hardware, software, or ideas described herein without Prior Written Authorization is Strictly Prohibited.
© 2023 Middleby Food Service Equipment (Qingdao) Co., Ltd.

Part Five - Troubleshooting

Problem	Possible reason	Improvement	Precautionary measure
Rethermalizer doesn't work	unplugged	Plug in	
	The fuse has blown out	Change the fuse	
	Power supply is not open	Check power outlets and circuit breakers	
Rethermalizer heats slowly	Drain valve leakage Heating wire damage	Close drain valve handle in place Contact maintenance personnel	
Water tank continues to fill	Solenoid valve not working Relay failure Dual water level probes or controller not working.	Contact maintenance	
Rethermalizer does not heat	Power switch is not on Water level too low Controller program glitch Others	Turn on power switch Fill the tank to the required water level Reset the programming in the controller. Contact maintenance	

This Document Contains Confidential information, the Dissemination, Publication, Copying or Duplication of this Document or any hardware, software, or ideas described herein without Prior Written Authorization is Strictly Prohibited.
© 2023 Middleby Food Service Equipment (Qingdao) Co., Ltd.

Part Six—Diagram



This Document Contains Confidential information, the Dissemination, Publication, Copying or Duplication of this Document or any hardware, software, or ideas described herein without Prior Written Authorization is Strictly Prohibited.
© 2023 Middleby Food Service Equipment (Qingdao) Co., Ltd.

Warning

Improper installation, alteration, service or maintenance can cause property damage, injury or death. Read the installation, operating and maintenance instructions thoroughly before installing or servicing this appliance.

Warning

Installation, maintenance and repairs should be performed by a Middleby China Authorized Service technician or other qualified personnel. Installation, maintenance or repairs by an unauthorized and unqualified personnel will void the warranty.

Caution

Use only Genuine OEM parts from Middleby China or its Authorized Service and Parts Distributors. Use of non-OEM parts is not covered under warranty.

Caution

Middleby China reserves the right to modify the product specifications.

Middleby Food Service Equipment (Qingdao) Co., Ltd.

Address: No. 1 Jinxuan Road, Chengyang District, Qingdao, Shandong Province

Zip code：266100

This Document Contains Confidential information, the Dissemination, Publication, Copying or Duplication of this Document or any hardware, software, or ideas described herein without Prior Written Authorization is Strictly Prohibited.
© 2023 Middleby Food Service Equipment (Qingdao) Co., Ltd.