

# **Operator's Manual**

# **Reach-in QuickChiller™**

QCI-20 QCI-45 QCI-60



MN-39963-EN

REV.01 11/18

EN





# **Manufacturer's Information**

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Manufacturer Alto-Shaam, Inc.

P.O. Box 450

W164 N9221 Water Street Menomonee Falls, WI 53052

**Original instructions** The content in this manual is written in American English.

# FOREWORD

# Enjoy your Alto-Shaam QuickChiller™!

QuickChiller Technology The Alto-Shaam QuickChiller features technology that reduces food waste and preserves food quality until service. The QuickChillers use a combination of low temperature and high velocity air that rapidly removes heat from the cabinet. This allows food to be stored longer without losing quality.

# **Extend Your Manufacturer's Warranty**

Register

Register your Alto-Shaam appliance online. Registering your appliance ensures prompt service in the event of a warranty claim. You will also receive direct notifications of software updates and additional product information.

Your personal information will not be shared with any other company.

www.alto-shaam.com/warranty



# FOREWORD



Manufacturer's Information	. 2
<b>Foreword</b> Enjoy your Alto-Shaam QuickChiller™!	. 3 . 3
Table of Contents	5
Safety	7
The Meaning of Signal Words	. 7
Appliance Description and Intended Use	
Safety Precautions	
Safety Precautions for Flammable Refrigerants (R290)	. 11
	. 11
Installation	13
Dimension Drawings	
How to Receive the Appliance	
How to Unpack the Chiller	
Installation Checklist	
How to Install the Chiller	. 18
Operation	21
How to Turn On and Off the Chiller	. 21
How to Pre-cool the Chiller	
How to Run a Soft Chill or Freeze Cycle	
How to Defrost the Chiller	
How to View Cycle Information	
Maintenance	27
How to Clean the Chiller	
Service Parts	29
Service Parts for Model QCI-20	
Service Parts for Model QCI-45	
Service Parts for Model QCI-60	
Evaporator for Model QCI-20	
Evaporator for Model QCI-45	
Evaporator for Model QCI–60	
Control Panel for Model QCI–45 and QCI–60	
Compressor of Model QCI–20	
Compressor for Model QCI–45	
Compressor for Model QCI–60	
Control Box for Model QCI–20 and QCI–45	



# TABLE OF CONTENTS

	Control Box for Model C	JCI-60	•			•		•	•	•		•	•	•	•	41
	Label			 											. •	42
٧	Varranty														4	43
	Warrantv															43



# **The Meaning of Signal Words**

This manual contains signal words where needed. These signal words must be obeyed to reduce the risk of death, personal injury, or equipment damage. The meaning of these signal words is explained below.



### DANGER

Danger indicates a hazardous situation which, if not avoided, will result in serious injury or death.



### **WARNING**

Warning indicates a hazardous situation which, if not avoided, could result in serious injury or death.



### **CAUTION**

Caution indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

Notice indicates a situation which, if not avoided, could result in property damage.



**NOTE:** Note indicates additional information that is important to a concept or procedure.



# **Appliance Description and Intended Use**

# Appliance Description

Alto-Shaam's QuickChiller™ system provides a cooking solution that reduces food waste and preserves food flavor until service. The QuickChiller series rapidly removes heat from foods using a combination of low temperature and high velocity air.

### **Configurations**

The Reach-in QuickChiller is available in three configurations: QCI–20, QCI–45, and QCI–60.

QCI-20	
Chill capacity	20kg
Freeze capacity	10kg
Refrigerant	R290
Test pressure	40 bar
QCI-45	
Chill capacity	45kg
Freeze capacity	20kg
Refrigerant	R542A
Test pressure	40 bar
QCI-60	
Chill capacity	60kg
Freeze capacity	25kg
Refrigerant	R542A
Test pressure	40 bar

### Intended use

The QuickChillers are intended to chill and freeze food only. Any other use is prohibited.

### **Residual risks**

This appliance is manufactured using ISO-certified processes. The appliance is designed with maximum safety in mind; however, there are residual risks to operators of this QuickChiller. Residual risks include exposure to cold and exposure to frozen products.

### Possible misuse

Misuse of this appliance includes loading the cabinet with anything other than a food product. Misuse also includes chilling or freezing anything that is a liquid in an enclosed container.



# **Safety Precautions**

### Before you begin

Read and understand all instructions in this manual.

### **Electrical precautions**

Obey these electrical precautions when using the appliance:

- Connect the appliance to a properly grounded outlet. Do not use the appliance if it is not properly grounded. Consult an electrician if there is any doubt that the outlet used is properly grounded.
- Keep the cord away from hot surfaces.
- Do not attempt to service the appliance or its cord and plug.
- Do not operate the appliance if it has a damaged cord or plug.
- Do not immerse the cord or plug in water.
- Do not let the cord hang over the edge of a table or counter.
- Do not use an extension cord.

### **Usage precautions**

Obey these usage precautions when using the appliance:

- Only use this appliance for its intended use of chilling or freezing.
- Use utensils and protective clothing when loading and unloading the appliance.
- Use caution when using the appliance. Floors adjacent to the appliance may become slippery.
- Do not cover or block any of the openings of this appliance.
- Do not use this appliance near water such as a sink, in a wet location, near a swimming pool, or similar locations.

# Maintenance precautions

Obey these maintenance precautions when maintaining the appliance:

- Obey precautions in the manual, on tags, and on labels attached to or shipped with the appliance.
- Do not store the appliance outdoors.
- Do not clean the appliance with metal scouring pads.
- Do not use corrosive chemicals when cleaning the appliance.
- Do not use a hose or water jet to clean the appliance.
- Do not use the appliance cavity for storage.
- Do not remove the top cover or side panels. There are no user-serviceable components inside.



# SAFETY

### **Operator training**

All personnel using the appliance must have proper operator training. Before using the appliance:

- Read and understand the operating instructions contained in all the documentation delivered with the appliance.
- Know the location and proper use of all controls.
- Keep this manual and all supplied instructions, diagrams, schematics, parts lists, notices, and labels with the appliance if the appliance is sold or moved to another location.
- Contact Alto-Shaam for additional training if needed.

# Operator qualifications

Only trained personnel with the following operator qualifications are permitted to use the appliance:

- Have received proper instruction on how to use the appliance.
- Have demonstrated their ability with commercial kitchens and commercial appliances.

The appliance must not be used by:

- Persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision concerning use of the appliance by person responsible for their safety.
- People impaired by drugs or alcohol.
- Children should be supervised to ensure that they do not play with the appliance.
- Children shall neither clean nor maintain the appliance.

# Condition of appliance

### Only use the appliance when:

- All controls operate correctly.
- The appliance is installed correctly.
- The appliance is clean.
- The appliance labels are legible.

# Servicing the appliance

- Only trained personnel are permitted to service or repair the appliance. Repairs that are not performed by an authorized service partner or trained technician, or the use of non-factory parts, will void the warranty and relieve Alto-Shaam of all liability.
- To prevent serious injury, death or property damage, have the appliance inspected and serviced at least every three to six (3–6) months by an authorized service partner or trained technician.
- Contact Alto-Shaam for the authorized service partner in your area.



# Personal Protective Equipment (PPE)

Wear the following Personal Protective Equipment (PPE) while cleaning the appliance:

- Protective gloves
- Protective clothing
- Eye protection
- Face protection

# Safety Precautions for Flammable Refrigerants (R290)



WARNING: Fire or Explosion hazard.

Only trained personnel shall service equipment that uses flammable refrigerants.

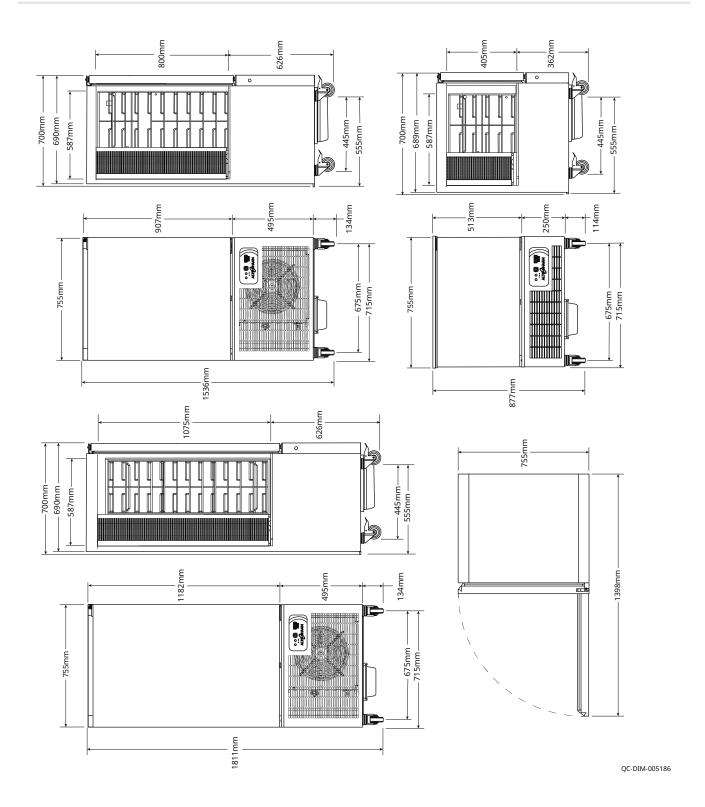
R290 refrigerant is highly pure propane. R290 refrigerant is flammable. Obey the following when installing, maintaining, or servicing equipment that uses R290 refrigerant.

- Do not smoke.
- Do not puncture refrigerant tubing.
- Do not use mechanical means to defrost the appliance.
- Remove sources of ignition from the area.
- Work only when the area is well-ventilated.
- Use a combustible gas detector when checking for leaks.
- Have a fire extinguisher nearby.
- Follow the appropriate authority's regulations for charge pressure. The use of flammable gases is currently limited, according to the standards EN378-1, EN60335-2-24 and EN60335-2-89, for fluid charges of 150g on hermetically sealed devices





# **Dimension Drawings**



# **How to Receive the Appliance**

**Action** 

3.

# **Responsible parties**

When an Alto-Shaam preferred carrier is used, shipping damage is a matter between Alto-Shaam and the carrier. In such cases, contact Alto-Shaam customer service.

When an Alto-Shaam non-preferred carrier is used, shipping damage is a matter between the carrier and the consignee. In such cases, the carrier is assumed to be responsible for the safe delivery of the merchandise, unless negligence can be established on part of the shipper.

# Receive the appliance

When receiving the appliance, do the following.

	•	
1	l <b>.</b>	<b>Inspect</b> the equipment while it is still in the truck or immediately after it is moved to the receiving area. Do not wait until after the equipment is moved to a storage area.
2	2.	<b>Inspect and count</b> all merchandise received. Do not sign a delivery receipt or a freight bill until you have done so.

**Note** all damage to packaging and to the equipment on the carrier's receipt.

- 4. **Request** the driver sign the delivery receipt. If the driver refuses to sign, make a note of this refusal on the delivery receipt.
- 5. **Write** the following on the delivery receipt if the driver refuses to allow an inspection: Driver refuses to allow inspection of containers for visible damage.
- 6. **Contact** the carrier immediately upon finding damage, and request an inspection. **Follow** the carrier's policies and procedures.

### **Alto-Shaam policy**

It is the policy of Alto-Shaam to assist customers in collecting claims that have been properly filed and actively pursued. Alto-Shaam cannot, however, file damage claims, assume the responsibilities for damage claims, or accept deductions in payment for damage claims.

# **How to Unpack the Chiller**

# Before you begin

# Make sure you have:

- An appropriate lifting device and enough personnel to safely move and position the weight of the appliance.
- Cutting tools to remove the packaging.

### Unpack the oven

To unpack the appliance, do the following.

### Step Action

1. **Save** all packing materials for inspection by the carrier.



**NOTE:** Examine the chiller for damage. If the chiller has been damaged, do not use the chiller until it has been inspected by an authorized service provider. Contact your carrier or Alto-Shaam customer service.

- 2. **Cut** the restraining straps.
- 3. **Remove** the plastic wrap.
- 4. **Remove** the cardboard corners.
- 5. **Remove** the chiller from the pallet using an appropriate lifting device.

### Result

The chiller is now unpacked.



# **Installation Checklist**

Installation of the QuickChiller  $^{\rm IM}$  is to be completed only by an authorized Alto-Shaam service partner.

Place this form with the QuickChiller's records.



**WARNING:** Electric shock and arc flash hazard.

Use caution when measuring line voltage and line current.

Wear Personal Protective Equipment (PPE).

Installation date:	Start up date:
Location name:	Location address:
Contact name:	
Contact phone number:	Appliance model number:
Contact email:	Appliance serial number:
	Appliance rated voltage:

Appliance physical	Dam	aged	
condition	Yes No Record any damage	Record any damage	
Front of appliance			
Left side			
Back of appliance			
Right side			
Top and bottom/legs			

Appliance visual inspection (outside)	Yes	No
Is there room to move the appliance through hallways, doors, and paths to reach its destination?		
Is there adequate air flow and ventilation around the appliance?		
Is the water collection tray installed correctly?		
Is the factory supplied cord in good condition?		
Can the factory supplied cord reach the wall supply without the use of an		
extension cord?		
Is the appliance level? Check front to back and side to side.		

Appliance visual inspection (internal)		amaged
Appliance visual hispection (internal)	Yes	No
Check all wiring for any loose connections.		
Check the overall system for any damage from shipping or installation.		

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Electrical:	Record	
Check the data tag rated voltage to the supplied voltage.		
Check the supplied voltage to the appliance for proper		
voltage and phase.		

Appliance operating inspection	Yes	No
Was the appliance tipped or laid flat during transportation or installation? If yes, leave upright for 24 hours before starting the compressor.		
Start the appliance and verify operation.		

# **How to Install the Chiller**

# Before you begin

### Make sure you have:

- Spirit (bubble) level
- An appropriate lifting device and enough personnel to safely move and position the weight of the chiller.

### Requirements

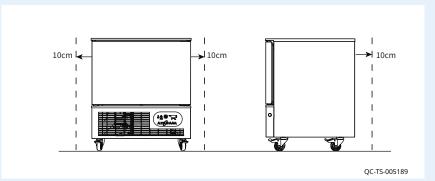
- The chiller must be installed on a level surface.
- There must be 10cm between the walls and the unit.
- The chiller must not be installed in any area where it may be affected by:
  - steam
  - grease
  - dripping water
  - high temperature
  - any other severely adverse conditions

### Position the chiller

To position the chiller, do the following.

### Step Action

- 1. **Make sure** that:
  - The location where the chiller is being installed is rated to support the weight of the chiller.
  - The chiller is within 1.5 meters of the appropriate electrical outfit.
  - You follow the chiller clearance guidelines.



2. **Move** the chiller to the installation location and onto the final resting surface.

The chiller is now correctly positioned.

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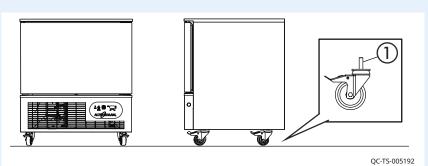


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### Level the chiller

To level the chiller, do the following.

3. **Check** the level of the chiller using a spirit (bubble) level. Check front to back and side to side.



**Adjust** the screw jacks  $\bigcirc$  to achieve levelness if necessary. **Adjust** the screw jacks on the front legs to align the door.

The chiller is now level.

### **Connect power**

To connect electric power to the chiller, do the following.

# 4. Allow the chiller to stand for 2 hours before connecting it to power. 5. Connect the plug to the electric outlet. QC-TS-005195

The chiller is now connected to power.

### **Water Drain**

Water from defrosting can be drained in one of two ways:

- By installing the drip tray
- By connecting a direct line



# INSTALLATION



# OPERATION

# **How to Turn On and Off the Chiller**

Before you begin

Make sure the chiller is installed correctly.

Turn on the chiller

To turn on the chiller, do the following.

Step	Action
1.	Connect the chiller to electric power.
	The chiller turns on and enters standby mode.

The chiller is now turned on.

Turn off the chiller

To turn off the chiller, do the following.

Step	Action
2.	<b>Disconnect</b> the chiller from electric power.
	NOTICE  If the chiller will not be used for a prolonged period, unplug it from electric power to protect the refrigeration equipment.

The chiller is now turned off.

# How to Pre-cool the Chiller

**Background** 

Pre-cool the chiller before running a cycle to lower the cabinet temperature for optimum performance.

Before you begin

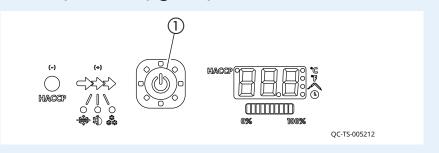
Make sure the chiller is turned on.

**Procedure** 

To pre-cool the chiller, do the following.

## Step Action

1. **Press** the Cycle Launch key ①. The cycle starts.



Allow the cycle to run for 15 minutes.



**NOTE:** The chiller will start in soft chill mode by default. Do not select hard chill or defrost when pre-cooling the chiller.

2. **Press and hold down** the Cycle Launch key after 15 minutes to stop the cycle. The error code 'rEG' will show on the display to indicate the cycle did not complete. The error code will clear after selecting a cycle.

Result

The chiller has been pre-cooled.

# How to Run a Soft Chill or Freeze Cycle

# Before you begin

### Make sure:

- The inner cavity of the chiller has been cooled. See topic *How to Pre-cool the Chiller*
- You have loaded food items into the chiller.



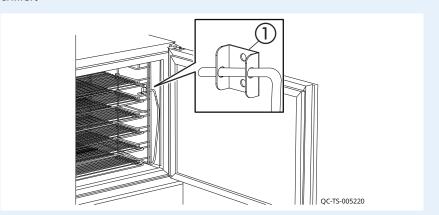
**NOTE:** The cycle will automatically start in probe mode if the probe is inserted in hot food. The cycle will automatically start in timer mode if the probe is placed in the immediate surrounding area.

### **Procedure**

To run a soft chill or freeze cycle, do the following.

### Step Action

1. **Put** the probe in the hot food or place it on the probe support ① inside the chiller.

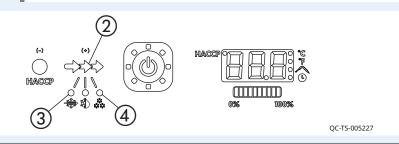


2. **Press** the Select Cycle key ② successively to select a cycle.

The Soft Chill LED ③ activates when Soft Chill is selected and the Freezing LED ④ activates when Freezing is selected.



**NOTE:** The Soft Chill cycle will cool the food item slower than the Freezing cycle. It is useful for cooling more delicate food items.



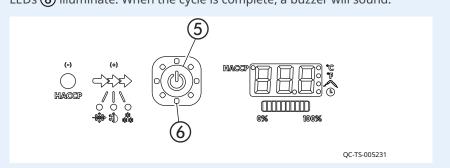
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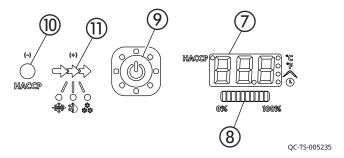
### Step Action

3. **Press** the Cycle Launch key (5) to start the chosen cycle. The Cycle in Progress LEDs (6) illuminate. When the cycle is complete, a buzzer will sound.



**During the cycle** 

The top display (7) shows the temperature and the bottom display (8) shows the cycle's progress.



- Pressing the Cycle Launch key (9) for several seconds will stop the cycle process.
- Pressing the Cycle Launch key briefly, then key (-) (10) or key (+) (11), will allow you to change the time or final probe temperature.

Result

At the end of the cycle, a buzzer sounds. Pressing any key will turn it off.

# **How to Defrost the Chiller**

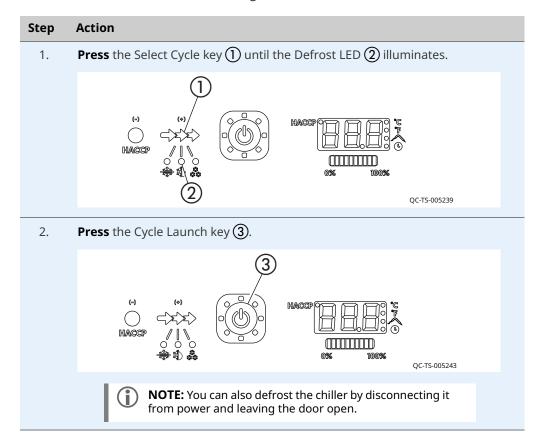
# Before you begin

### Make sure:

- The chiller is turned on.
- Nothing obstructs the drain located on the bottom of the drip tank in front of the evaporator.
- The drip tray has been emptied.

### **Procedure**

To defrost the chiller, do the following.



Result

The chiller enters a defrost cycle. When complete, the chiller enters standby mode.



# **How to View Cycle Information**

# Before you begin

Make sure the chiller is turned on.

The chiller can display information on the previous cycle if it is in Standby mode or it can display information on a currently running cycle.

### **Procedure**

To view information on a cycle, do the following.

# 1. Press the Information key ①. Two numbers appear on the display. If the chiller is in standby mode, the first number displayed is the duration of the previous cycle and the second number is the final temperature of the previous cycle. If the chiller is currently running a cycle, the first number displayed is the time spent from the beginning of the cycle and the second number is the

**Result** 

The cycle information is displayed on the screen.

remaining time to completion.

# **How to Clean the Chiller**

# Before you begin



WARNING: Electric shock hazard.

Disconnect the chiller from electric power.

NOTICE

Do not use a pressure hose when cleaning the appliance.

NOTICE

Do not use steel pads, wire brushes, or scrapers when cleaning.

# Daily cleaning procedure

To clean the chiller daily, do the following.

Step	Action
1.	Make sure the chiller is turned off.
2.	<b>Remove</b> any spills and dirt with disposable paper wipes or a damp cloth.
3.	<b>Clean</b> the outside of the chiller with soap and water or a neutral nonabrasive detergent.
4.	<b>Rinse and dry</b> the outside of the chiller thoroughly.

# Weekly cleaning procedure

To clean the chiller weekly, do the following.

Step	Action
1.	Make sure the chiller is turned off.
2.	<b>Spray</b> the exterior areas of the chiller with stainless steel polish.
	NOTICE  Use only non-caustic cleaners.  Do not use cleaners that contain sodium hydroxide (lye) or phosphorus.
3.	<b>Clean</b> the exterior areas of the chiller with a non-abrasive nylon scrub pad.
4.	<b>Clean</b> the interior of the chiller with a non-abrasive nylon scrub pad.

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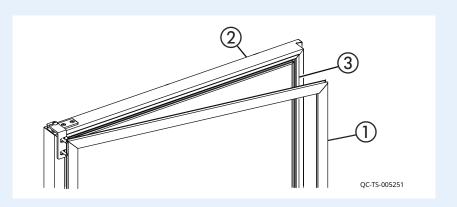
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### Clean the door seal

To clean the door seal, do the following.

5. **Separate** the door seal ① from the door ② by starting from the middle and working toward the ends.

**NOTICE** Use caution to avoid tearing or pulling out the receiving profile (3) built into the door insulation.



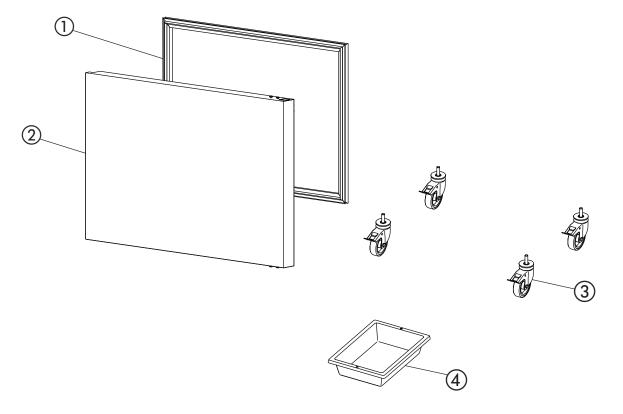
- 6. **Clean** the folds of the seal using a damp cloth to remove dirt.
- 7. **Reattach** the door seal to the door.
- 8. **Connect** the chiller to power.

Result

The chiller is now clean.

# E PARTS

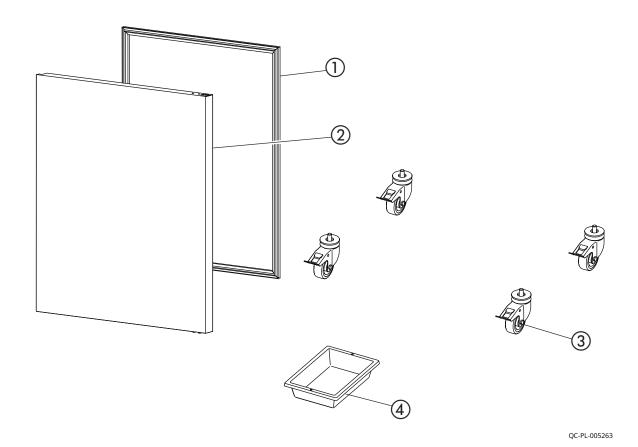
# **Service Parts for Model QCI-20**



ID	Part No.	Description
1	638625-FOS	Magnetic door gasket
2	664406G-FOS	Door
3	622133-FOS	Castors Ø80 with brake
4	638199-FOS	Water drawer

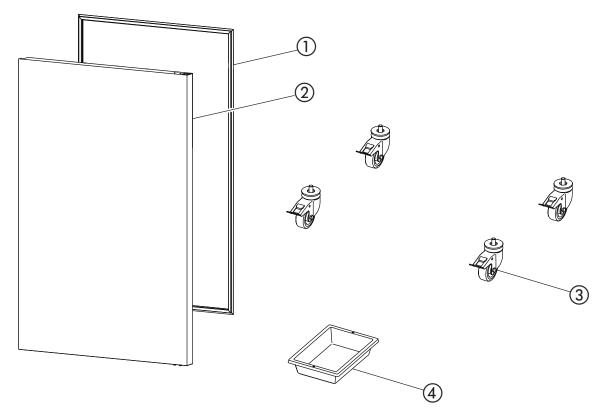


# **Service Parts for Model QCI-45**



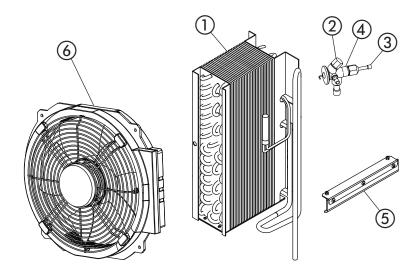
ID	Part No.	Description
1	638626-FOS	Magnetic door gasket
2	664406H-FOS	Door
3	622131-FOS	Castors Ø100 with brake
4	638199-FOS	Water drawer

# **Service Parts for Model QCI-60**



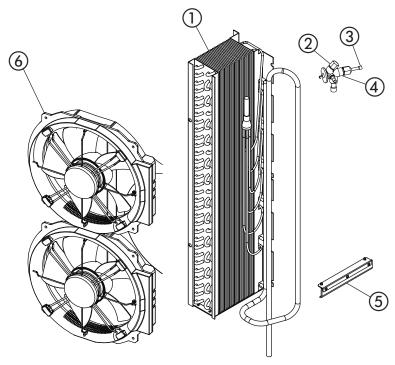
ID	Part No.	Description
1	638627-FOS	Magnetic door gasket
2	664406I-FOS	Door
3	622131-FOS	Castors Ø100 with brake
4	638199-FOS	Water drawer

# **Evaporator for Model QCI-20**



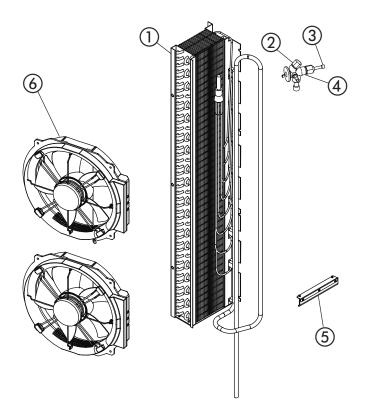
ID	Part No.	Description
1	652271-FOS	Evaporator coil 4N15T 130LT
2	651141-FOS	Thermostatic expansion valve
3	651161-FOS	Reducer adapter 1/4"
4	651135-FOS	Reducer nozzle N°00
(5)	684943A-FOS	Compartment splash band assembly
6	645595-FOS	Evaporator fan Ø300

# **Evaporator for Model QCI-45**



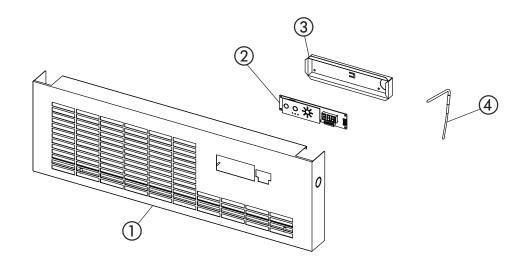
ID	Part No.	Description
1	652272-FOS	Evaporator coil 4N31T 130LT
2	651141-FOS	Thermostatic expansion valve
3	651160-FOS	Reducer adapter 3/8"
4	651136-FOS	Reducer nozzle N°01
(5)	684943A-FOS	Compartment splash band assembly
6	645595-FOS	Evaporator fan Ø300

# **Evaporator for Model QCI-60**



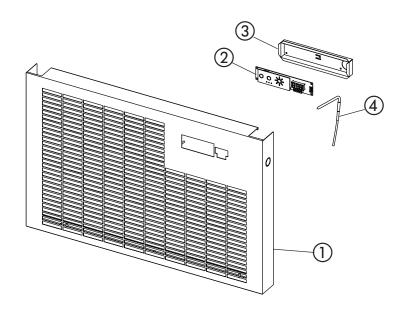
ID	Part No.	Description
1	652273-FOS	Evaporator coil 4N42T 130LT
2	651141-FOS	Thermostatic expansion valve
3	651160-FOS	Reducer adapter 3/8"
4	651138-FOS	Reducer nozzle N°03
(5)	684943A-FOS	Compartment splash band assembly
6	645595-FOS	Evaporator fan Ø300

# **Control Panel for Model QCI-20**



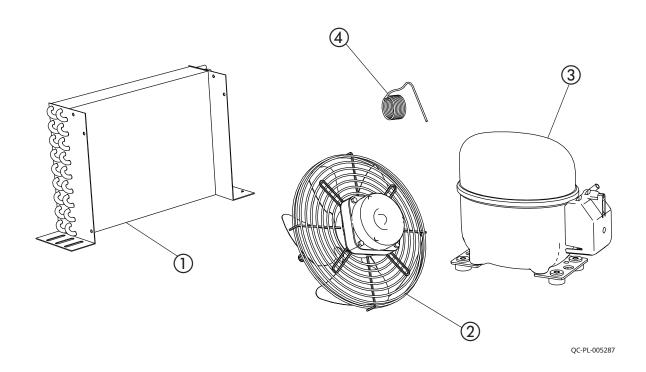
ID	Part No.	Description
1	679729-FOS	Control panel (fabricated part only)
2	651263-FOS	Controller board (front panel)
3	651264-FOS	Controller main board
4	651208-FOS	1 Point NTC core probe

# **Control Panel for Model QCI-45 and QCI-60**



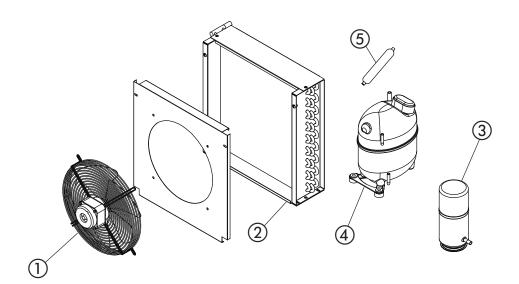
ID	Part No.	Description
1	679730-FOS	Control panel (fabricated part only)
2	651263-FOS	Controller board (front panel)
3	651264-FOS	Controller main board
4	651208-FOS	1 Point NTC core probe

# **Compressor of Model QCI-20**



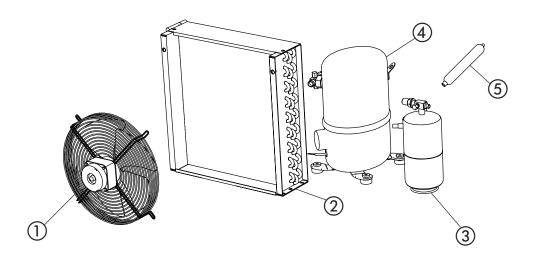
ID	Part No.	Description
1	652236-FOS	Condenser coil 4N9T 300LT
2	653309-FOS	Condenser fan 12W, Ø230/27°
3	653656-FOS	Compressor NEU 2168U de 50 Hz (R290)
3	653659-FOS	Compressor NEU 2168U de 60 Hz (R290) (option)
4	650022-FOS	Capillary 10/10

# **Compressor for Model QCI-45**



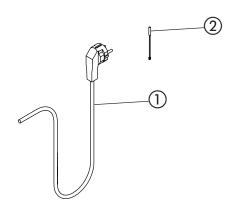
ID	Part No.	Description
1	653075-FOS	Condenser fan 25W Ø300
2	652237-FOS	Condenser coil 3N18T 446LT
3	653290-FOS	Refrigerant receiver 1.5L
4	653637-FOS	Compressor NJ2212GK 230V-50Hz
4	653648-FOS	Compressor NJ2212GK 60Hz
5	651022-FOS	Dehydrator 30 grs
		(in case of after sales service, it is recommended to use a solid cartridge dehydrator)

# **Compressor for Model QCI-60**



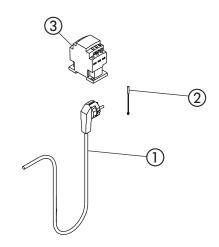
ID	Part No.	Description
1	653079-FOS	Condenser fan 146W Ø350 / 27°
2	652237-FOS	Condenser coil 3N18T 446LT
3	653119-FOS	Refrigerant receiver 2.2L
4	653217-FOS	Compressor FH2480Z R404A 230V-50Hz
4	653649-FOS	Compressor FH2480Z R404A 60Hz
(5)	651018-FOS	Drier FDB 083 S

# Control Box for Model QCI-20 and QCI-45



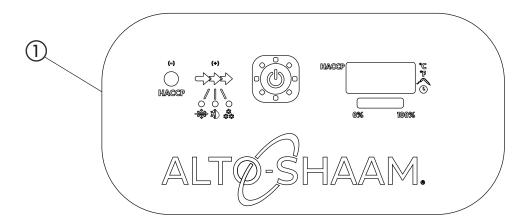
ID	Part No.	Description	
1	679845U-FOS	Supply cable 1~230V+T 10A UK	
2	651273-FOS	Ambient probe NTC 3M	

# **Control Box for Model QCI-60**



ID	Part No.	Description		
1	679844U-FOS	Supply cable 1~230V+T 16A		
2	651273-FOS	Ambient probe NTC 3M		
3	645102-FOS	Contactor LC1 D12		

# Label



ID	Part No.	Description
1	638641-FOS	Label

# WARRANTY

# Warranty

### Introduction

Alto-Shaam, Inc. warrants to the original purchaser only, that any original part found to be defective in material or workmanship will be replaced with a new or rebuilt part at Alto-Shaam's option, subject to provisions hereinafter stated.

### **Warranty Period**

The original parts warranty period is as follows:

- For all other original parts, one (1) year from the date of installation of appliance or fifteen (15) months from the shipping date, whichever occurs first.
- The labor warranty period is one (1) year from the date of installation or fifteen (15) months from the shipping date, whichever occurs first.
- Alto-Shaam will bear normal labor charges performed during standard business hours, excluding overtime, holiday rates or any additional fees.
- For the refrigeration compressor, if installed, the warranty period is five (5) years from the date of original installation of the appliance.
- For heating elements on Halo Heat® Cook and Hold ovens, the warranty period is for as long as the original owner owns the oven. This warranty period applies to units sold after 2/1/2009 and excludes holding-only ovens.
- To be valid, a warranty claim must be asserted during the applicable warranty period. This warranty is not transferable.

### **Exclusions**

This warranty does not apply to:

- Calibration.
- Replacement of light bulbs, rubber gaskets, grease filters, air filters, racks, jet plates, and/or the replacement of glass due to damage of any kind.
- Equipment damage caused by accident, shipping, improper installation or alteration.
- Equipment used under conditions of abuse, misuse, carelessness or abnormal conditions, including but not limited to, equipment subjected to harsh or inappropriate chemicals, including but not limited to, compounds containing chloride or quaternary salts, poor water quality, or equipment with missing or altered serial numbers.
- Equipment damage caused by use of any cleaning agents other than those recommended by Alto-Shaam, including but not limited to damage due to chlorine or other harmful chemicals.
- Any losses or damage resulting from malfunction, including loss of food product, revenue, or consequential or incidental damages of any kind..

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- Equipment modified in any manner from original model, substitution of parts other than factory authorized parts, unauthorized removal of any parts including legs, or unauthorized addition of any parts
- Equipment damage incurred as a direct result of poor water quality\*, inadequate maintenance of steam generators and/or surfaces affected by water. Water quality and required maintenance of steam generating equipment is the responsibility of the owner/operator.
- Equipment damage incurred as a result of not following the required maintenance schedule published in the manuals for the equipment.

### Conclusion

This warranty is exclusive and is in lieu of all other warranties, express or implied, including the implied warranties of merchantability and fitness for a particular purpose. No person except an officer of Alto-Shaam, Inc. is authorized to modify this warranty or to incur on behalf of Alto-Shaam any other obligation or liability in connection with Alto-Shaam equipment.

\*Refer to the product spec sheet for water quality standards.





Alto-Shaam World Headquarters W164 N9221 Water Street, P.O. Box 450 Menomonee Falls, WI 53052-0450, U.S.A.

Phone 800-558-8744; +1-262-251-3800

### Alto-Shaam Asia

Shanghai, China Phone +86-21-6173 0336

### Alto-Shaam Canada

Concord, Ontario Canada Toll Free Phone 866-577-4484 Phone +1-905-660-6781

### Alto-Shaam Central & South America

Miami, FL USA Phone +1-954-655-5727

### Alto-Shaam Middle East & Africa

Phone +971 4 321 9712

### Alto-Shaam France, L.L.C.

Aix en Provence, France Phone +33(0)4-88-78-21-73

### Alto-Shaam GmbH

Bochum, Germany Phone +49(0)234-298798-0

### Alto-Shaam Mexico

Leon, Mexico Phone +52 1 477-754-1305

### Alto-Shaam Russia

Moscow, Russia Phone +7-903-793-2331