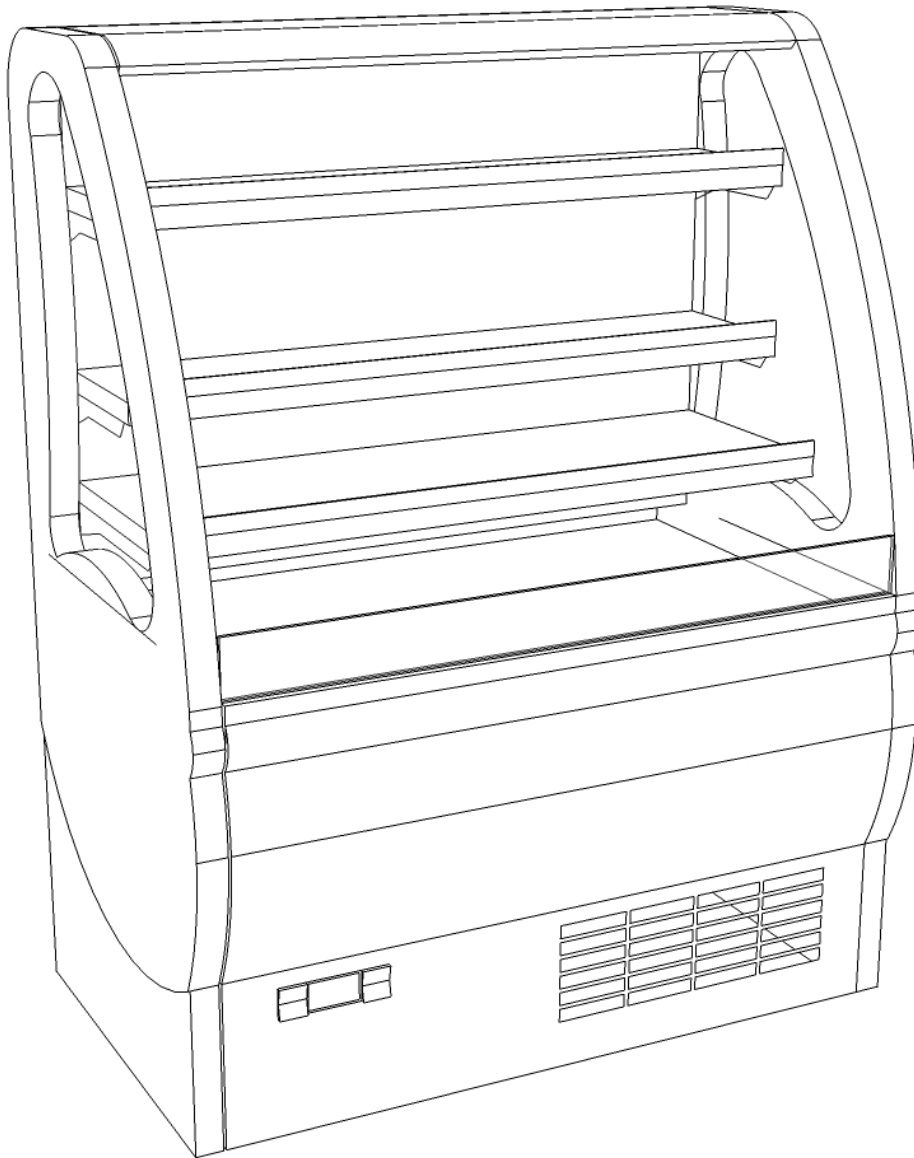


OAC-2

LOW-PROFILE OPEN AIR COOLER



PO Box 195
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TECHNICAL SUPPORT: 1.888-685-8324
www.mtlcool.com



Refrigerated P.O.P. Display Solutions

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SAFETY & PRECAUTIONS

Symbol Legend



CAUTION



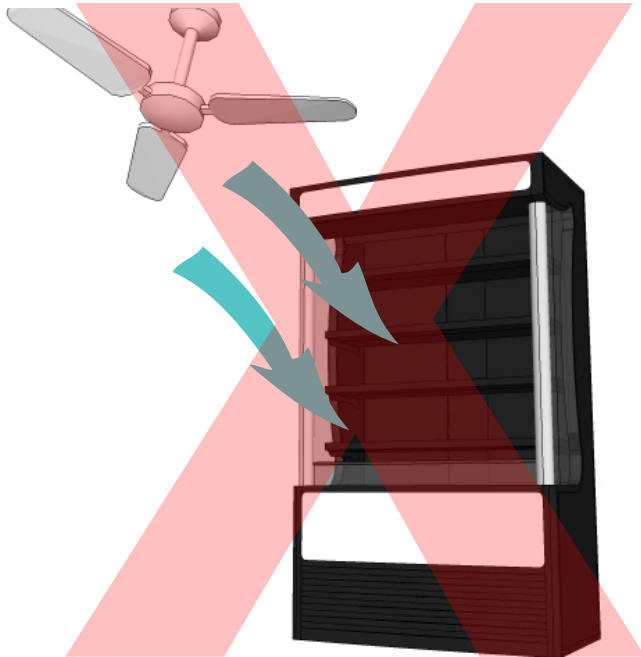
TWO PEOPLE REQUIRED

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INSTALLATION REQUIREMENTS FOR OPEN AIR REFRIGERATED VISUAL MERCHANDISERS

Location:

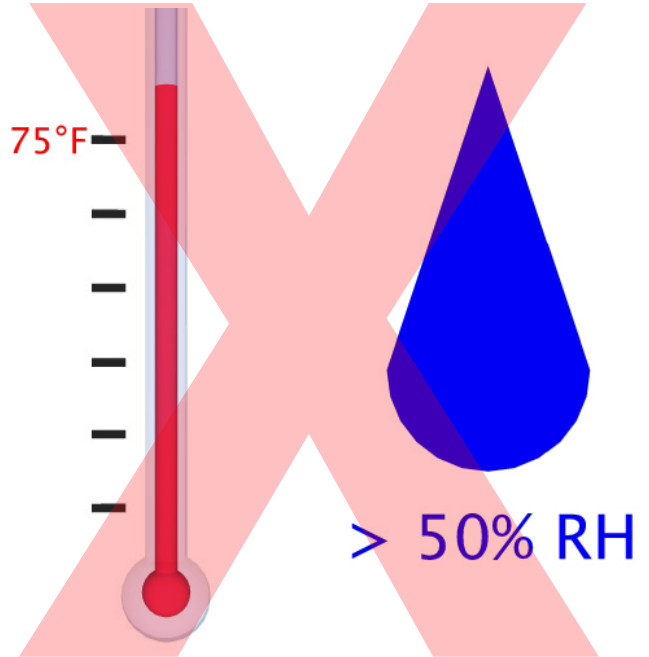


- **DO NOT** place the cooler in a location with air drafts that could disrupt the air curtain.

Electrical:

120 Volts Model

- A dedicated power line from the breaker box is required.
- 20 amp breaker.
- The wire gauge should be sufficient to limit the voltage drop under a 15 amp load to 3 %.



- **DO NOT** place cooler in a location with ambient temperatures over 23°C or 50% RH

220 Volt Model

- A dedicated power line from the breaker box is required.
- 20 amp breaker.
- The wire gauge should be sufficient to limit the voltage drop under a 10 amp load to 3%. (Please consult factory for voltage drop calculations based on line lengths.)

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INSTALLATION REQUIREMENTS FOR THE OAC G-AIR REFRIGERATED VISUAL MERCHANDISER

WIRE GAUGE FOR 3% VOLTAGE DROP IN SUPPLY CIRCUITS												
115 Volt	Distance In Feet To Center of Load											
Amps	20	30	40	50	60	70	80	90	100	120	140	160
2	14	14	14	14	14	14	14	14	14	14	14	14
3	14	14	14	14	14	14	14	14	14	14	14	12
4	14	14	14	14	14	14	14	14	14	14	12	12
5	14	14	14	14	14	14	14	14	14	12	10	10
6	14	14	14	14	14	14	14	14	12	10	10	10
7	14	14	14	14	14	12	12	12	10	10	10	8
8	14	14	14	14	12	12	12	10	10	10	8	8
9	14	14	14	12	12	12	10	10	10	8	8	8
10	14	14	14	12	12	10	10	10	10	8	8	8
12	14	14	12	12	10	10	10	8	8	8	8	6
14	14	14	12	10	10	10	8	8	8	6	6	6
16	14	12	12	10	10	8	8	8	8	6	6	6
18	14	12	10	10	8	8	8	8	8	8	8	5
20	14	12	10	10	8	8	8	6	6	6	5	5
25	12	10	10	8	8	6	6	6	6	5	4	4
30	12	10	8	8	6	6	6	6	5	4	4	3
35	10	10	8	6	6	6	5	5	4	4	3	2
40	10	8	8	6	6	5	5	4	4	3	2	2
45	10	8	6	6	6	5	4	4	3	3	2	1
50	10	8	6	6	5	4	4	3	3	2	1	1

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INSTALLATION REQUIREMENTS FOR THE OAC G-AIR REFRIGERATED VISUAL MERCHANDISER

WIRE GAUGE FOR 3% VOLTAGE DROP IN SUPPLY CIRCUITS												
230 Volt	Distance In Feet To Center of Load											
Amps	20	30	40	50	60	70	80	90	100	120	140	160
5	14	14	14	14	14	14	14	14	14	14	14	14
6	14	14	14	14	14	14	14	14	14	14	14	12
7	14	14	14	14	14	14	14	14	14	14	14	12
8	14	14	14	14	14	14	14	14	14	14	12	12
9	14	14	14	14	14	14	14	14	14	12	12	10
10	14	14	14	14	14	12	12	12	12	12	10	10
12	14	14	14	14	12	12	12	12	12	10	10	10
14	14	14	14	12	12	12	12	12	10	10	10	8
16	14	14	14	14	12	12	12	10	10	10	8	8
18	14	14	14	12	12	12	10	10	10	8	8	8
20	14	14	14	12	10	10	10	10	10	8	8	8
25	14	14	12	12	10	10	10	10	8	8	6	6
30	14	12	12	10	10	10	8	8	8	6	6	6
35	14	12	10	10	10	8	8	8	8	6	6	5
40	14	12	10	10	8	8	8	6	6	6	5	5
50	12	10	10	8	6	6	6	6	6	5	4	4
60	12	10	8	6	6	6	6	6	5	4	4	3
70	10	10	8	6	6	6	5	5	4	4	2	2
90	10	8	6	6	5	5	4	4	3	3	1	1
100	10	8	6	6	5	4	4	3	3	2	1	1

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HOW TO MAINTAIN YOUR MTL COOL FREEZER / REFRIGERATOR TO ACHIEVE THE MOST EFFICIENT AND SUCCESSFUL OPERATION

WARNING!

Use this appliance for its intended purpose as described in this Owner Manual.

SAFETY PRECAUTIONS

- Before using this freezer/refrigerator, it must be positioned and installed in accordance with the Installation Instructions.
- **DO NOT** allow children to climb, hang or stand on the shelves in the freezer/refrigerator. Serious damage could be caused to both the children and the unit.
- **DO NOT** touch the cold surfaces in the freezer compartment when hands are damp or wet. Skin may stick to these extremely cold surfaces.
- **DO NOT** use or store gasoline or other flammable vapours and liquids in the area of this or any other appliance.
- Keep fingers out of “pinching” areas; spaces between doors and between the doors and cabinet are necessarily small. Be careful when closing the doors.
- Before cleaning or making any repairs, unplug the freezer/refrigerator.



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REFRIGERANT DISPOSAL

All refrigeration products contain refrigerants, which under the Guidelines of Federal Law must be removed before disposal of product. It is the consumer's responsibility to comply with federal and local regulations when disposing of this product.

- Never clean refrigerator parts with flammable fluids. The fumes can create a fire hazard or explosion.
- **DO NOT** store or use gasoline or any other flammable vapors and liquids in the vicinity of this or any other refrigerator. The fumes can create a fire hazard or an explosion.

HOW TO CONNECT ELECTRICITY

- This refrigerator should be properly grounded for your safety.
- If the outlet is a standard 2-prong outlet, it is your responsibility and obligation to have it replaced with the properly grounded 3-prong wall outlet. The power cord of this refrigerator is equipped with a three-prong plug which mates with standard three prong wall outlets to minimize the possibility of electrical shock. **DO NOT**, under any circumstances, cut or remove the third ground prong from the power cord supplied.
- The cord should be secured behind the refrigerator and not left exposed or dangling to prevent accidental injury.



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- Repair or replace immediately all power cords that have become frayed or otherwise damaged.
- **DO NOT** use a cord that shows cracks or abrasion damage along its length or at either end.
- Never unplug the refrigerator by pulling the power cord.
- Always grip the plug firmly and pull straight out from the receptacle.
- **DO NOT** use an extension cord with this appliance. If the power cord is too short, have a qualified electrician or service technician install an outlet near the appliance. Use of an extension cord can negatively affect the performance of the unit. The refrigerator should always be plugged into its own individual electrical circuit (unless specified otherwise), which has a voltage rating that matches the rating plate.
- When removing the refrigerator from the wall, be careful not to roll over or damage the power cord.

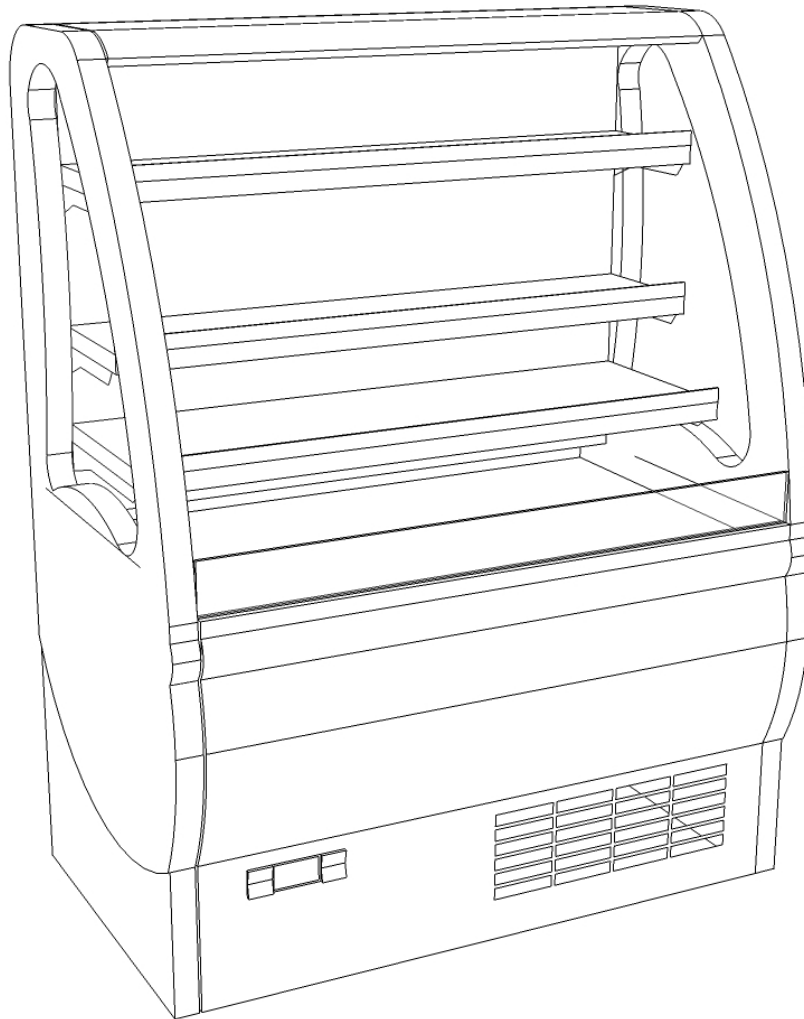


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INSTALLATION

- 1) With at least two people, carefully remove the OAC-2 from its pallet.
- 2) Plug in the OAC-2 into the dedicated power outlet.

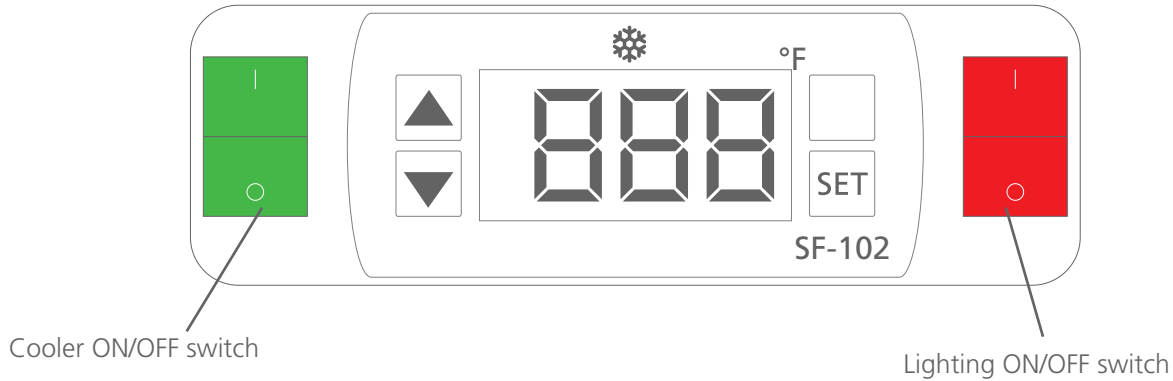


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DIGITAL CONTROLLER FUNCTIONS & SETTINGS



PANEL OPERATIONS

- Set temperature (compressor stop temperature) adjustment
 - Press **SET** button, the set temperature is displayed.
 - Press **▲** or **▼** to modify and store the displayed value.
 - Press **SET** button to exit the adjustment and display the unit interior temperature.
 - If idle for 10 or more seconds, the unit interior temperature will be displayed.
- Parameter setup
 - Press **SET** button and hold for 6 seconds to enter the parameter setup mode while E1 flashes.
 - Press **SET** button again to toggle through the parameters (see table below).
 - Press **▲** or **▼** buttons, the value will be displayed and can be modified and stored.
 - If idle for 10 seconds the unit interior temperature will be displayed.

PARAMETER	FUNCTION	SET RANGE	DEFAULT
S	Set Point	0 to 5°C	1°C
E1	Lower set point limit	0°C	0°C
E2	Raise set point limit	Set Temperature 5°C	5°C
E3	Temperature Hysteresis	-17 to -7 °C	-16°C
E4	Comp. start delay time	0 ~ 10 min	4 min
E5	Offset on room temp.	-20 to -15°C	-17°C
E6	Offset on evap. temp.	-20 to -15°C	-17°C
F1	Max. frost duration	1 ~ 60 min	10 min
F2	Defrost interval time	0 ~ 24 hr	2 hr
F3	Defrost termination temp.	0 ~ 20 °F	8°C
F4	Display during defrost	0=Norm. disp., 1=Last value before defrost	1
C1	Temperature unit	0 = °F , 1 = °C	°C

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FUNCTION DETAILS

1. Temperature control

- After the delay time, the compressor starts operating when cold room temperature is \geq (set temp. + Hysteresis), and will be off when interior unit temperature is \leq set temp.
- To protect the compressor, it cannot re-start unless the time when the compressor stops is longer than the delay time (Parameter E4).

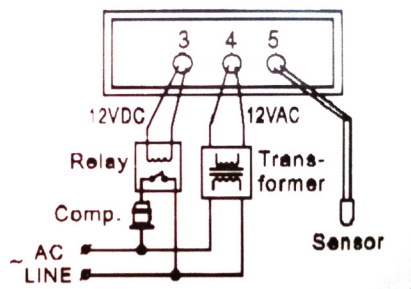
2. Abnormal work mode:

When room sensor is short-circuited or overheated (more than 49°C) “HH” is displayed. When the room sensor is open-circuited or temperature is too low (less than -40°C) “LL” is displayed. At that time the compressor operates automatically by the cycle of 10 minutes on and 5 minutes off.

NOTES FOR INSTALLATION

- The sensor cable leads must be kept separate from main voltage wires in order to avoid high frequency noise. Separate the power supply of the loads from the power supply of the controller.
- When installing the sensor should be placed with the head upward and the wire downward; the evaporator sensor must be installed between the fins of the evaporator in the area where ice is the thickest.
- Don't Place the evaporator probe near the electrical heater.
- In case of long-distance probe installation from the controller, the probe cable may be prolonged up to 100m max. without any re-calibration.
- The temperature controller can not be installed in the area with water drops.

CIRCUIT DIAGRAM



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WARRANTY INFORMATION

ONE YEAR PARTS AND LABOR WARRANTY:

MTL Technologies, Inc. (“MTL Cool”) warrants that every new MTL Cool refrigerated display cooler, the cabinet, and all parts shall not contain any defects in material or workmanship, under normal and proper use and maintenance service as specified by MTL Cool and upon proper installation and startup in accordance with the instructions provided with each MTL Cool unit. Except as otherwise set forth herein, MTL Cool’s obligation under this warranty is limited to a period of two years from the date of original shipment.

Any parts covered under this warranty that MTL Cool determines to have been defective within the two year Warranty Period is limited to the repair or replacement, including labor charges of defective parts or assemblies. The labor warranty shall include standard straight time labor charges only and reasonable travel time as determined by MTL Cool.

MTL Cool must authorize all labor. All costs not covered under warranty will be the responsibility of the original purchaser.

Our obligation under this warranty shall be limited to repairing or replacing F.O.B. factory any of such products, which proves thus defective which our examination shall disclose to our satisfaction to be defective.

- Any part returned to the company under the terms of this warranty must be accompanied by a record of the cabinet model, the MTL Cool serial number located on the back of the unit, and a return authorization number, and such return shall be on the basis of TRANSPORTATION CHARGES PREPAID BY MTL Cool.
- Improper operation due to low or high voltage conditions, inadequate wiring, and accidental damage are not manufacturing defects and are strictly the responsibility of the purchaser.

NO CLAIMS CAN BE MADE AGAINST THIS WARRANTY FOR LOSS OF PRODUCT

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The term “original purchaser” as used herein shall be deemed to mean that person, firm, association or corporation for whom the Refrigeration Unit referred to herein is originally purchased. These warranties are in lieu of all other warranties, expressed or implied, and of all other obligations or liabilities on our part. We neither assume nor authorize any other person to assume for us any other obligation or liability in connection with the sale of said refrigeration units or any part thereof. This warranty shall not be transferred and shall be honored only in so far as to the original purchaser.

WARRANTY CLAIMS

All claims for labor or parts must be made directly through MTL Cool. All claims should include: model number of the unit, the serial number of the cabinet, proof of purchase, date of installation, and all pertinent information supporting the existence of the alleged defect.

In case of a warranty claim relating to compressors, the compressor model tag must be returned to MTL Cool along with the above listed information.

TRANSPORTATION CLAIMS

In the event parts need to be sent back to MTL Cool, MTL Cool will accept parts under this warranty on the basis of transportation charges prepaid by MTL Cool.

WHAT IS NOT COVERED BY THIS WARRANTY

Except as otherwise set forth herein, MTL Cool’s sole obligation under this warranty is limited to either repair or replacement of parts, subject to the additional limitations below. This warranty neither assumes nor authorizes any person to assume obligations other than those expressly covered by this warranty.

NO CONSEQUENTIAL DAMAGES

MTL Cool is not responsible for economic loss, profit loss, or special, indirect, or consequential damages, including without limitation, losses or damages arising from food or product spoilage claims whether or not on account of refrigeration failure.

WARRANTY IS NOT TRANSFERABLE

This warranty is not assignable and applies only in favor of the original purchaser / user to whom delivered. Any unauthorized assignment or transfer shall void all warranties, expressed or implied, including all warrant of merchantability or fitness for a particular purpose.

IMPROPER USAGE

MTL Cool assumes no liability for parts or labor coverage for component failure or other damages resulting from improper usage or installation, moving to another location, or failure to clean and/or

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maintain product as set forth in the warranty packet provided with the unit.

ALTERATION, NEGLIGENCE, ABUSE, MISUSE, ACCIDENT, DAMAGES DURING TRANSIT, INSTALLATION, MOVING TO ANOTHER LOCATION, FIRE, FLOOD, OR ACTS OF GOD
MTL Cool is not responsible for the repair or replacement of any parts that MTL Cool determines have been caused after the date of purchase by alteration, neglect, abuse, misuse, accident, damage during transit or installation, fire flood, or act of God.

IMPROPER ELECTRICAL CONNECTIONS

MTL Cool is not responsible for the repair or replacement of failed or damaged components resulting from electrical power failure, the use of extension cords, low or high voltage, or voltage drops to the unit.

ITEMS THE WARRANTOR WILL NOT PAY FOR

- Service calls to correct the installation of your appliance, to instruct you how to use your appliance, to replace or repair fuses or to correct wiring or plumbing.
- Service calls to repair or replace appliance light bulbs or broken shelves. Consumable parts (such as filters) are excluded from warranty coverage.
- Damage resulting from accident, alteration, misuse, abuse, fire, flood, acts of God, improper installation not in accordance with electrical or plumbing codes, or use of products not approved by warrantor.
- Replacement parts or repair labor costs for units operated outside the U.S. or Canada.
- Repairs to parts or systems resulting from unauthorized modifications made to the display cooler.
- Expenses for travel and transportation for product service in remote locations.
- The removal and reinstallation of your display cooler if it is installed in an inaccessible location or is not installed in accordance with published installation instructions.

NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE: THERE ARE NO OTHER WARRANTIES, EXPRESSED, IMPLIED OR STATUTORY, EXCEPT THE one YEAR PARTS & LABOR WARRANTY AS DESCRIBED ABOVE. THESE WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, INCLUDING IMPLIED WARRANTY AND MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THERE ARE

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NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF.

OUTSIDE U.S.

This warranty does not apply to any warranty claims made on products sold or used outside of the United States and Canada.

LIMITATION OF LIABILITY

MTL Cool or their affiliates shall not be liable for any indirect, incidental, special or consequential damages, or losses of a commercial nature arising out of malfunctioning equipment or its parts or components thereof, as a result of defects in material or workmanship.

THE ORIGINAL OWNER'S SOLE AND EXCLUSIVE REMEDY AND MTL COOL'S SOLE AND EXCLUSIVE LIABILITY SHALL BE LIMITED TO THE REPAIR OR REPLACEMENT OF PARTS OR COMPONENTS CONTAINED IN THE EQUIPMENT IDENTIFIED ABOVE WHICH UNDER NORMAL USE AND SERVICE MALFUNCTION AS A RESULT OF DEFECTS IN MATERIAL OR WORKMANSHIP, SUBJECT TO THE APPLICABLE PROVISIONS AND LIMITATIONS STATED ABOVE.