

VICTORY[®]

INSTALLATION AND OPERATING INSTRUCTIONS for all Hydrocarbon ACRS Air Curtain Refrigerator Models



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**SEE BACK COVER FOR
WARRANTY REGISTRATION**

WELCOME

Congratulations on your purchase of Victory food service equipment. Every employee welcomes you to the family of satisfied Victory customers.

From the earliest stages of production design, to focused steps in fabrication and assembly, rigid standards of quality are maintained by our staff of skilled employees. Victory strives to supply superior products through strict quality control guidelines exceeding industry standards, this means that each unit, given the proper maintenance will provide years of trouble free experience to its owner.

Additionally, Victory food service equipment has one of the best warranties in the food service industry, and backed by a professional staff of service technicians across the country.

We thank you for your choice and confidence in Victory Equipment.

For part inquiries or orders please call our Technical Service Department at (800) 684-1199. 8:00 AM to 5:00 PM EST.

Important Information

- PLEASE READ THESE INSTRUCTIONS CAREFULLY BEFORE INSTALLING OR USING, IF RECOMMENDED PROCEDURES ARE NOT FOLLOWED, WARRANTY CLAIMS MAY BE DENIED.
- Your warranty registration information is located with this manual. Please complete the card and submit it to Victory within TEN days of installation. Failure to properly register equipment may limit or void the warranty.
- Victory reserves the right to change specifications and product design without notice. Such revisions do not entitle the buyer to corresponding changes, improvements, additions, or replacements for previously purchased equipment.

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SAFETY

This appliance has been designed with your safety in mind. It has many features to keep you from being harmed. However, safe operation and maintenance are your responsibilities. This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

Children should be supervised to ensure that they do not play with the appliance.



Use: When using this unit, please:

- **Move it carefully.** If on casters be sure the casters do NOT run over the power cord.
- **Lock** the casters when in use.
- **Seek help.** This machine is heavy! Be sure to move with enough help to avoid tipping or dropping the cabinet.
- **Prevent children from playing in or on the cabinet.** Persons unable to use this product must be prevented access.
- **Follow all instructions.** There are many safety labels and directions on the unit. Heed them.
- **Watch your fingers.** There may be pinch points near the door hinges.



Maintenance

Do NOT:

- Clean a frozen evaporator with a sharp object
- Clean a dirty condenser with a sharp object.
- Store gasoline, kerosene or any other flammable material near the cabinet.

Do ALWAYS

- Use a Victory recommended technician certified to repair R290 equipment.
- Use ONLY Victory factory service parts. Use of non OEM parts can be dangerous because of the design changes needed to safely use R290.

Important Information to Add

Record the model number, serial number and the date of installation here for future reference. The model and serial numbers are on the unit's serial number dataplate, which is located on the left inside wall.

Model Number	
Serial Number	
Date of Installation	
Purchased From	



Observe the **Caution** and **Warning** notices. They are indicators of important safety information. Keep this manual for future reference.

SAFETY

Even though the cabinet weighs 320 pounds, it is easy to maneuver when in use. This is accomplished by the use of recessed side hand grips, a push bar handle (except on pass-thru models) with rubber bumpers and heavy duty non-marking casters. Since the condensing unit is located at the base of the cabinet, there is a low center of gravity making it more stable when transporting, and the operator has easy access to all pans at a comfortable working height.



CAUTION

NOTE: USE CAUTION WHEN MOVING THE REFRIGERATOR. Do not damage the power cord when moving. Always use the side hand grips and / or the push bar handle to move it.



IMPORTANT INFORMATION

This unit is intended to be used in a commercial application. That includes bars and restaurants.

If installed in a residence some commercial service companies may not be able to service it on site.

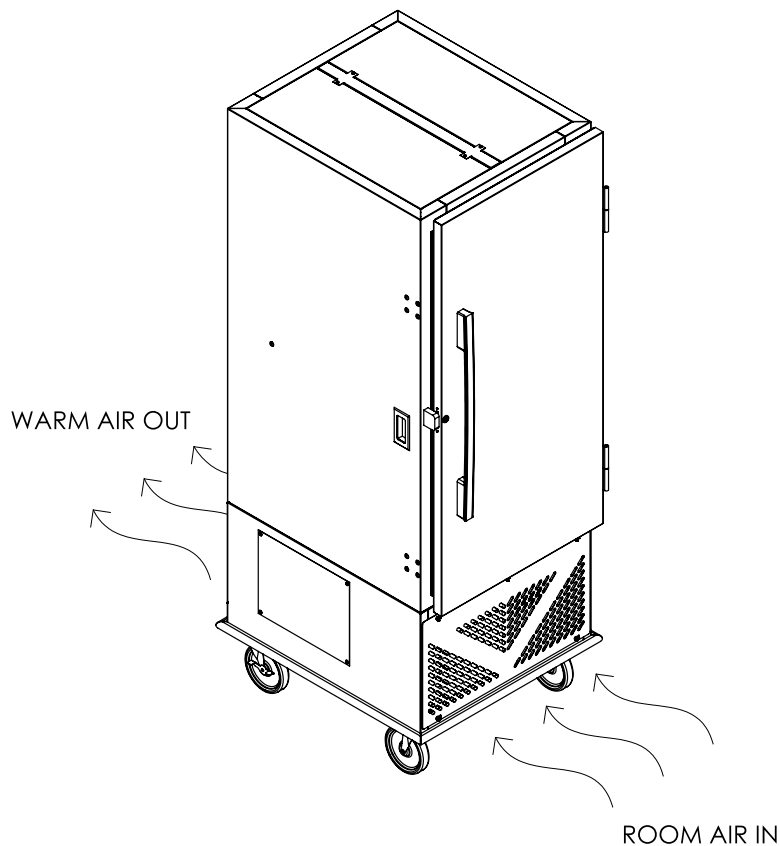
The manufacturer has designed and produced this machine with the finest in materials. The manufacturer assumes no liability for units that have been altered in any way. Alterations or part substitutions will void the warranty.

Limitations

The machine is designed for use indoors in a controlled environment. It must be kept dry, not overheated or subjected to excessive cold. May only be connected to a dedicated electrical circuit. Extension cords are not permitted.

	Minimum	Maximum
Voltage	103.5	126.5
Room Air Temp	60° F	100° F

Air Flow, all models



Agency Approvals

These marks appear on the dataplate or serial tag, located in the inside of the left wall. The dataplate also contains the model and serial numbers as well as electrical requirements.

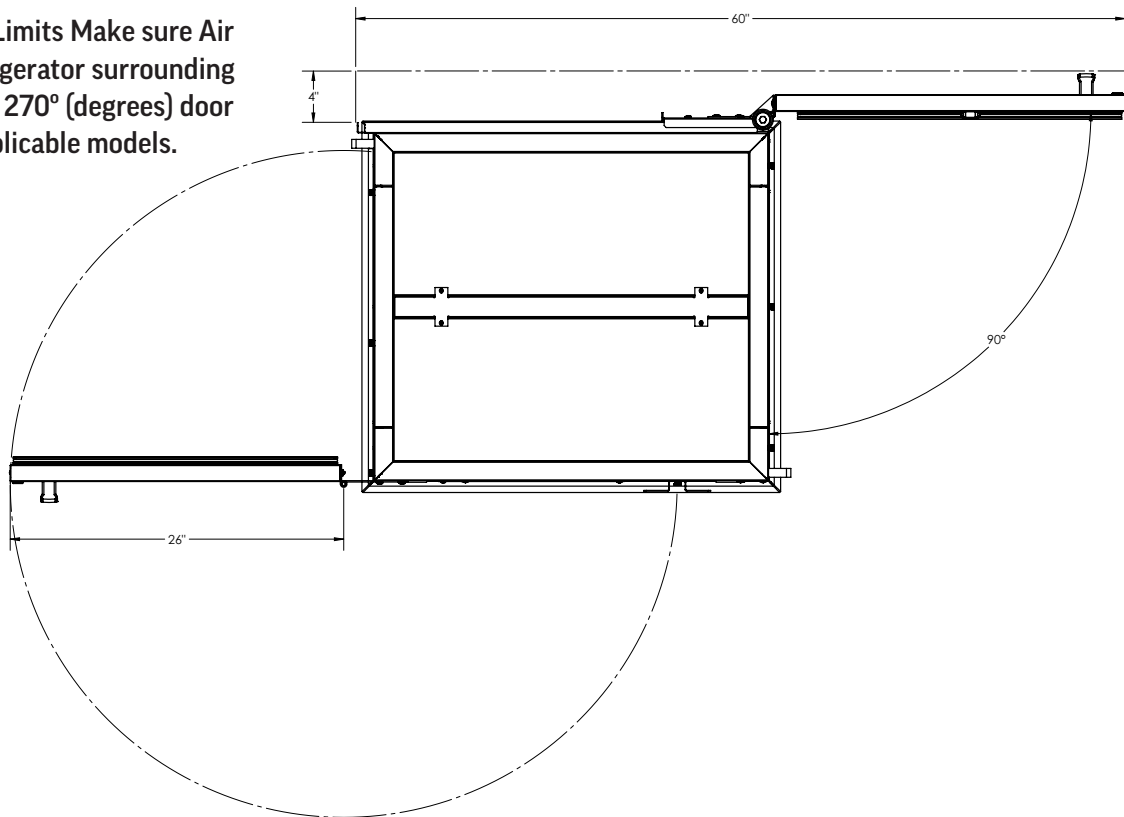


PRODUCT INFORMATION

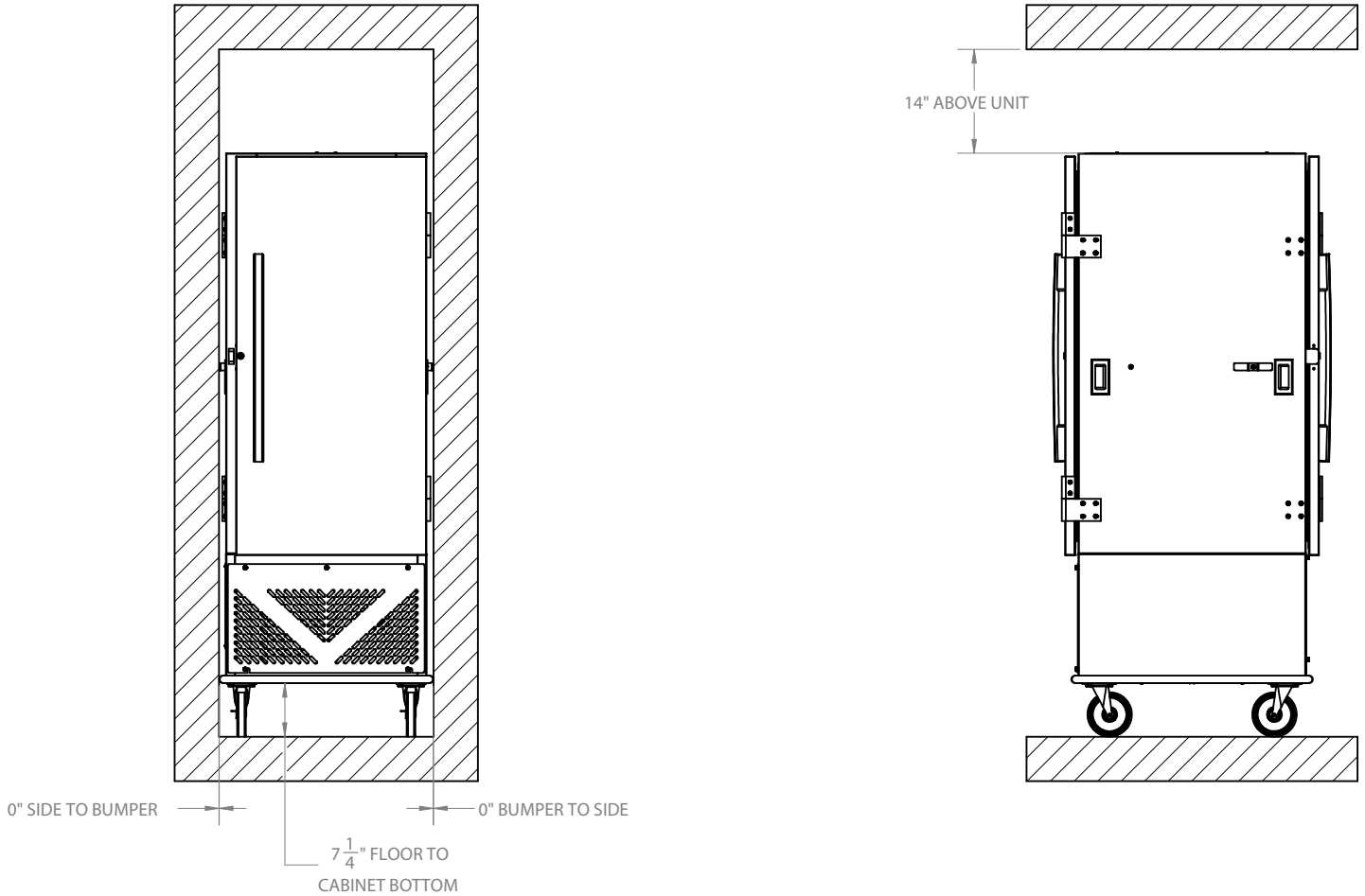
Model	Cabinet Dimensions w x d x h (Inches)	Sections	Half or Full Door	Glass or Solid Door	Full Load Amps	Refrigerant Type / Charge (g) / Charge (oz)
ACRS-1D-S1-HC	29 3/4 x 37 5/8 x 78 7/8	1	Full	Solid	8.3	R-290 / 150 / 5.29
ACRS-1D-S1-G-HC	29 x 36 1/4 x 78 7/8			Glass		
ACRS-1D-S1-PT-HC	29 x 38 x 78 7/8			Solid		
ACRS-1D-S1-PT-SD-HC	33 3/8 x 38 1/4 x 78 7/8			Solid		

- Refrigerator will maintain product temperature at or below 41°F for up to 90 minutes with the door open when used as directed.
- All models are 115 volts, 60 Hz AC, and are equipped with a NEMA 5-20P plug.
- ALWAYS REFERENCE YOUR EQUIPMENT DATA PLATE AMPS, REFRIGERANT AND REFRIGERANT CHARGE FOR THE MOST UP TO DATE AND ACCURATE VALUES.
- There are no access valves on the refrigeration system.

Door Swing Limits Make sure Air Curtain Refrigerator surrounding supports the 270° (degrees) door swing on applicable models.



CLEARANCE AND PLACEMENT



Placement

Consider the following when selecting a location for your Refrigerator:

Clearance:

- 14 in. at the above the unit
- 0.0 in. at the push bar,
- 0.0 in. at the left side
- 0.0 in. at the right side
- 7.25 in. at the bottom

Floor Load: The floor on which the Refrigerator is located must be even and level, free from vibrations, and strong enough to support the combined weights of the unit and maximum product load.

Ventilation: Grille area at front must be free and clear of any object or wall.

Power Outlet: The installation of this appliance requires a dedicated power outlet located within the length of the unit's power cord and be accessible for the purpose to disconnect power.

UNPACKING AND SET UP

Carefully inspect the shipping carton for damage. This is the only time that shipping damage may be claimed. If damage is suspected, open the carton immediately and, if there is damage, retain the carton and contact the shipper to make a claim. Do NOT contact the manufacturer.

Uncrating

1. Tools Needed: $\frac{3}{4}$ " box wrench, adjustable wrench, level, flat head screw driver, and box cutter.
2. Unwrap all stretch wrapping from exterior by either unwrapping around unit, or by using a knife and cutting material on one of the 4 cardboard corner posts to avoid scratching the unit.
3. Remove corner posts from unit and any other loose pieces and remove top cap from unit.
4. INSPECT UNIT for any possible shipping damages or other issues.
5. Move cabinet as close to final location as possible while still attached to skid

Do NOT tip unit on its front or sides. If tipped onto the back, unit must not be started for 24 hours.

Note: additional clear plastic protective wrap is applied directly to any product with a glass door.

Skid Removal

1. Unbolt unit from skid by unhooking brackets on sides of unit anchored to vertical pieces of skid.
2. Remove protective vinyl coating from all interior and exterior surfaces.

Leveling

Cabinets must be leveled when installed. Level should be measured on the headrail.

The floor on which the cabinet will rest must be even/level, free of vibration and strong enough to support the combined weights of the cabinet plus the maximum product load.

Failure to level your cabinet may result in door not sealing, closing correctly, or condensed water not draining properly.

There are NO features in the cabinet for leveling, The cabinet must be placed on a level surface.

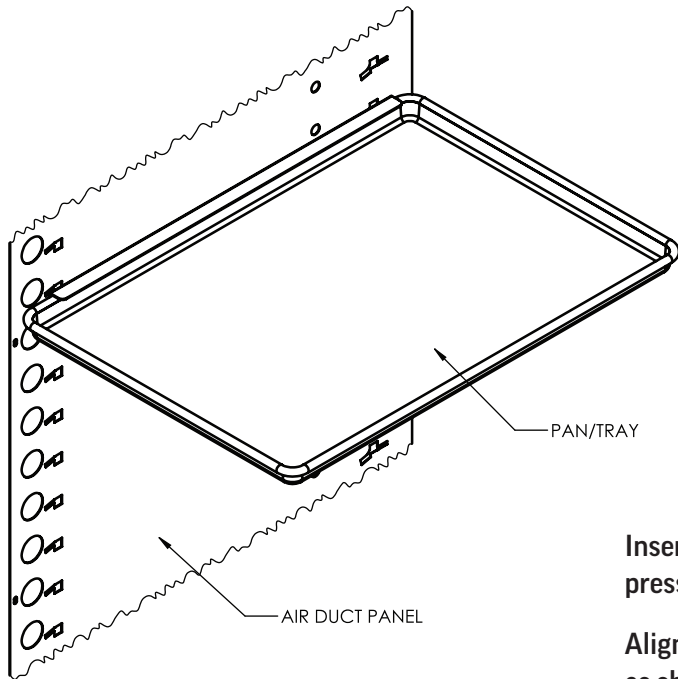
Pan Slides

The slides are attached by means of keyhole slots to the air distribution ducts on 3-3/4" (inch) centers for maximum air circulation. On certain models, pan slides may be tipped in the cutouts on the walls of the units to allow pans to tip and slide forward depending on the application of the unit.

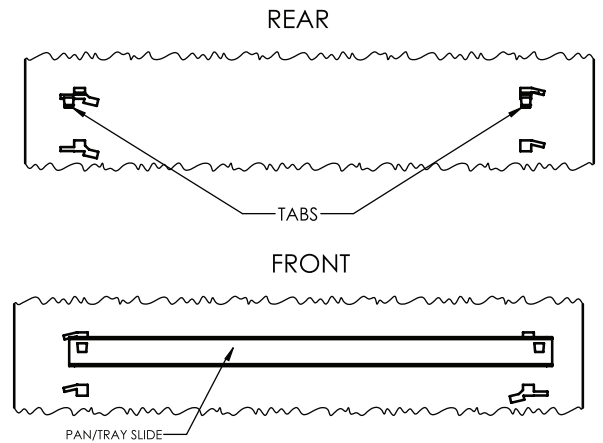
Pan slides should all be installed into the unit with pans even if pans are not loaded with product to help ensure proper airflow throughout the cabinet.

Pan slides are designed to bottom support 18" x 26" (inch) pans and are easily removable; no tools required.

PAN SLIDE INSTALLATION



HORIZONTAL PAN



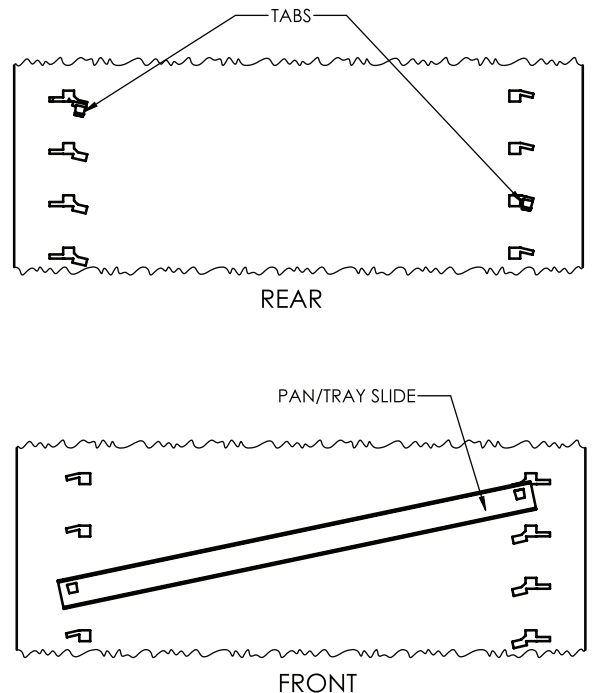
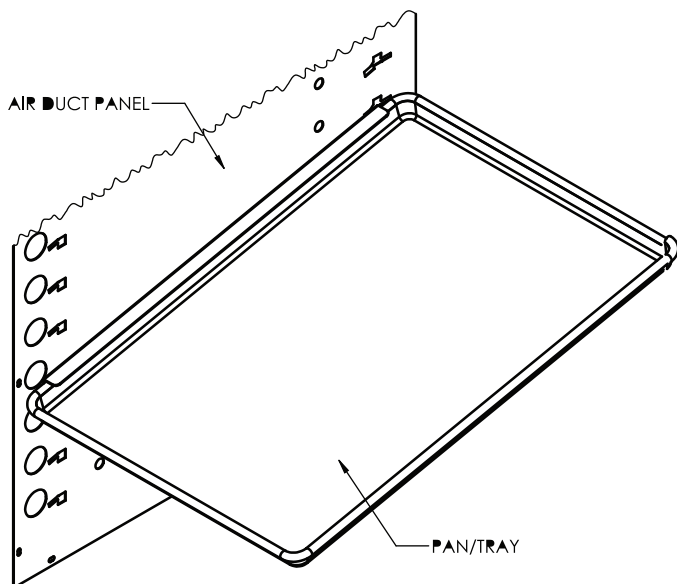
Insert the back tab of the pan/tray slide into the square cut out and press down to lock in place.

Align the front tab with the square cut out and press down, locking it as shown.

Line up both front and back tabs with the cut outs and pull forward into the rectangle cut outs to lock it in place, as shown.

Note: The front of the pan/tray slide should be two notches lower than the back.

ANGLED PAN



ELECTRICAL

This is a cord-connected unit, and must be connected to its own **dedicated** power supply. Check the dataplate on the machine to confirm the voltage and per the dataplate use the correct fuses or HACR circuit breakers.

Power Cord

This 115 volt model is equipped with a cord and 5-20P plug.

If the power cord becomes damaged, it must be replaced with the identical cord.

GFCI

Units that utilize variable speed compressor technology can experience nuisance tripping on Class A GFCI outlets which have a trip limit of 4 to 6 mA. To avoid this issue in a location that requires GFCI circuit protection, Victory recommends using either an Eaton, SCF20, or HUBBELL Model Number GFRST83W 20A Heavy Duty Hospital Grade Self-Test GFCI Receptacle.

Follow All National and Local Codes

This unit must be grounded. Do not use extension cords and do not disable or by-pass ground prong on electrical plug.

Initial Start Up

Plug the power cord into the proper power supply.

The cabinet will soon begin to blow warm air out of lower back area, and cool air will flow from the inside blower.

The cabinet temperature has been set at the factory and should not need adjustment, however if it was changed, the standard setting is 36° F.

Cautions

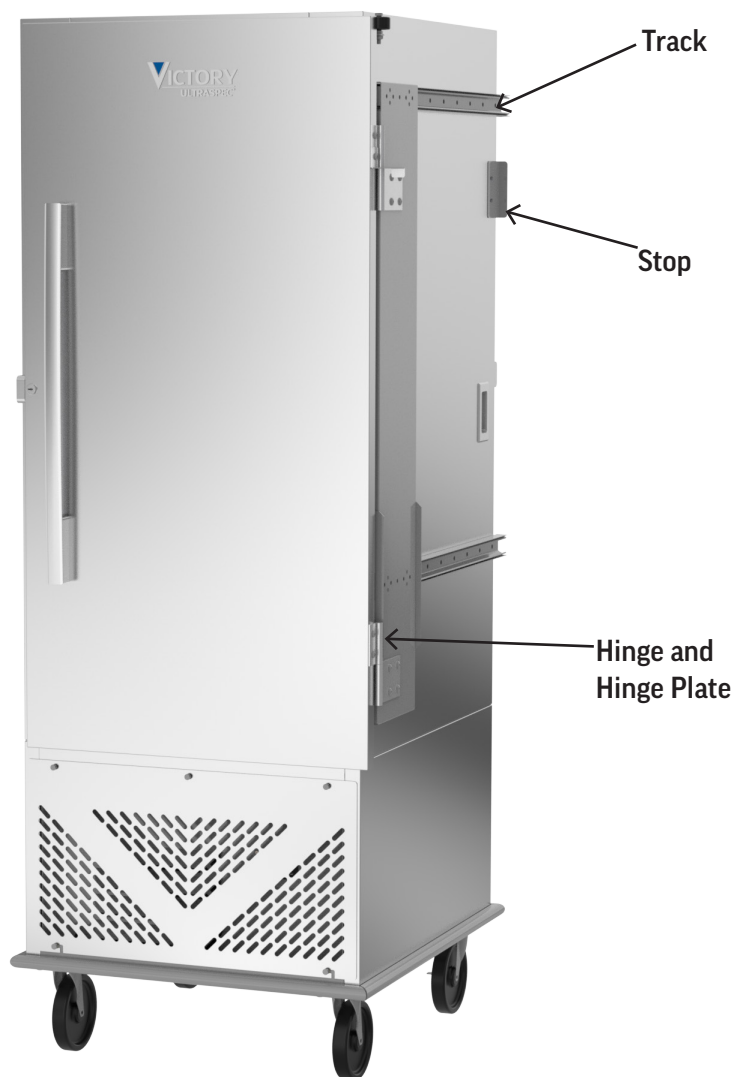
Care must be taken whenever moving or servicing the unit. The refrigerant is contained in a sealed system, but if released it may be flammable.

SLIDING DOOR PASS-THRU MODEL

Certain models feature a door that, when opened, may be secured to the side of the cabinet, keeping it out of the way when loading or unloading product.

Those models have tracks on the side and hinge plates on the door that engage those tracks.

Open the door normally until it is at 90 degrees from the cabinet, then carefully push it back onto the tracks. There is a stop at the back to prevent it from going back too far.



USING THE UNIT

Operation is simple, just keep it connected to the correct power supply and the refrigerator will maintain the internal temperature it has been set to. Keep the doors closed as much as possible to avoid unnecessary run time.

The controller displays the current internal temperature.

Adjusting the set temperature lower will NOT cause the system to lower the temperature faster. When on, the refrigeration system is always operating at maximum.

The temperature was set at the factory at 36° F, but you can adjust it to your own selected temperature. See page 17.

The Refrigerator will automatically defrost as needed, there is no set time for defrost. Push and immediately release the "melting" or defrost button for a manual defrost.

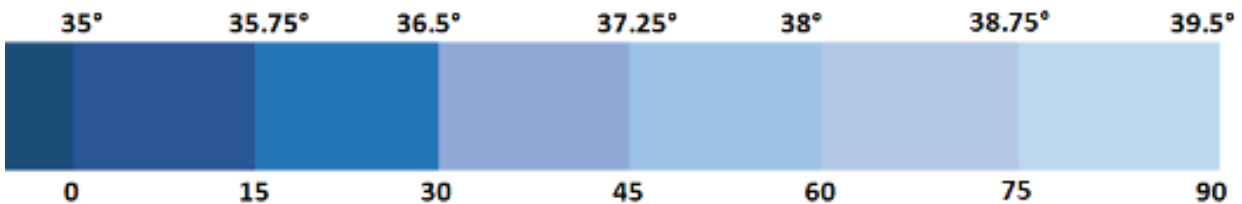
The internal fan will be on when the compressor is on and when the unit is not in defrost.

The compressor and condenser fan motor will only be on when the controller senses an increase in internal cabinet temperature passed the set point.



ADDING PRODUCT



Temperature graph below shows the product temperature increase over a 90 minute period with a starting product temperature of 35 degrees



Use these guidelines for the best use of your ACRS unit

1. Product should be loaded at 35°F, or pre-load the product and allow to temper in the ACRS for approximately 2 hours
2. All pans should be placed on slides to ensure the best performance of the unit
3. After product is loaded allow cabinet to pull down to temperature for at least an hour before serving
4. **Unload oldest trays first to maintain** temperatures of product (First In, First Out)
5. **UNIT CAN OPERATE FOR 90 MINUTES ONLY WITH DOOR OPEN**
6. After 90 minute door opening, door should be closed and allow product to cool for 3 hours before another 90 minute door open cycle

SEQUENCE OF OPERATIONS

	ON		OFF	
COMPONENT	OPERATION	CONTROLLER ACTION	OPERATION	CONTROLLER ACTION
COMPRESSOR	Compressor turns on when the cabinet temperature is above the sum of the set point and the dead band	The Compressor Contact is energized	Compressor turns off when the cabinet temperature is equal to or less than the set point	The Compressor Contact is de-energized
		RTN400 terminals 10, 11		RTN400 terminals 10, 11
CONDENSER FAN	The Condenser Fan turns on when the Compressor is running	The Condenser Fan is wired to the light relay on control	The Condenser Fan turns off when the Compressor is not running	The Condenser Fan is wired to the light relay on control
		RTN400 terminals 10, 11		RTN400 terminals 10, 11
EVAPORATOR FAN	The Evaporator Fan runs continuously whenever the unit is plugged in.	The Evaporator Fan is connected to line voltage.	The Evaporator Fan runs continuously whenever the unit is plugged in.	The Evaporator Fan is connected to line voltage.
LIGHT	The light will turn on when the door is open or door button is pressed (LSR/F light switch behind bottom grille) 	The Light Contact is energized	The light will turn off when the door is closed or the door button is pressed 	The Light Contact is de-energized
		RTN400 terminals 13,14		RTN400 terminals 13,14
FACE HEATERS	The Face Heaters turn on when the Compressor is running	The Compressor Contact is energized	The Face Heaters turn off when the Compressor is not running	The Face Heater are wired to the Compressor Contact

Condition	Compressor	Condenser Fan	Evaporator Fan	Lights
Cabinet Temp > Set point + Dead band	ON	ON	ON	ON or OFF
Cabinet Temperature <= Set point	OFF	OFF	ON	ON or OFF
Defrost	OFF	OFF	ON	ON or OFF

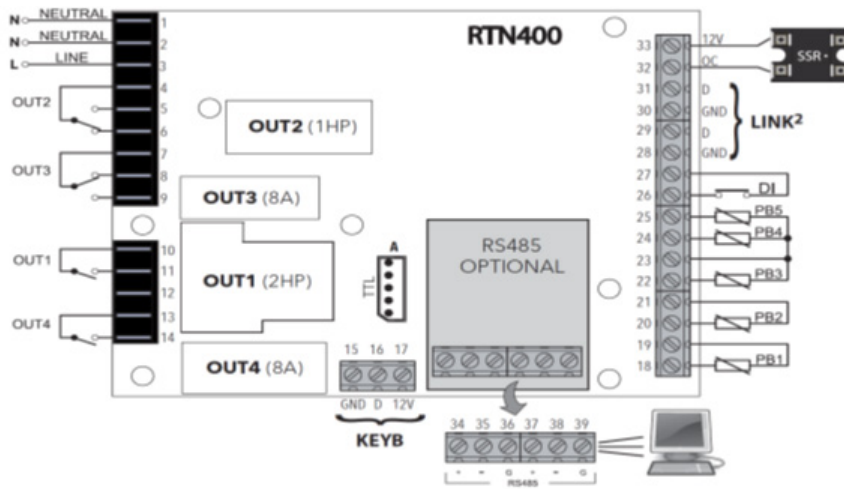
CONTROL PANEL DISPLAY









Control Panel Indicators

No	Icon	LED	Operation	Meaning
1		Compressor	Permanently On	Compressor On
			Blinking	Delay, protection or start-up blocked
			OFF	Otherwise
2		Defrost	Permanently On	Defrost active
			Blinking	Activated manually or from Digital input
			OFF	Otherwise
3		Fans	Permanently On	Fans active
			OFF	Otherwise
4		Reduced SET / Economy	Permanently On	Energy saving active
			Blinking	Reduced setpoint active
			OFF	Otherwise
5		Alarm	Permanently On	Alarm active
			Blinking	Alarm acknowledged
			OFF	Otherwise
6		°F readout	Permanently On	°F setting (dro = 1)
			OFF	Otherwise
7		AUX	Permanently On	Aux output active and/or light on
			Blinking	Deep cooling on
			OFF	Otherwise
8		°C readout	Permanently On	°C setting (dro = 0)
			OFF	Otherwise

NOTE: When switched on, the instrument panel performs a lamp test and for a few seconds, the display and LEDs flash to verify their condition and proper operation.



Relay/Probe	Description	Terminal
Out 1	Compressor	10,11
Out 2	Evaporator Fan	4, 5
Out 3	Defrost Element	7, 9
Out 4	Light (or alarm relay if electronic Lock model)	13, 14
PB1 –	Air/control probe	18, 19
PB2	Evaporator/defrost probe	20, 21
PB3	Condenser probe	22, 23
PB4&5	not used	
DI	digital input/Door switch	26, 27
KEYB	Display connection	15, 16, 17

LIGHT	STANDBY	UP	DOWN	ESC	SET (Enter)
Press and Hold	Press and Hold	Press and Release	Press and Release	Press and Release	Press and Release
<ul style="list-style-type: none"> Long press (>5 sec) Toggles light on and off. 	<ul style="list-style-type: none"> Places unit in Standby Mode. If LED is on Device is off. 	<ul style="list-style-type: none"> Scrolls the menu items Increases the values. Long press (>5 sec) starts manual defrost 	<ul style="list-style-type: none"> Scrolls the menu items Decreases the values. Long press (> 5 sec) starts deep cooling cycle 	<ul style="list-style-type: none"> Returns up one level with respect to the current menu. Confirms the parameter value 	<ul style="list-style-type: none"> Accesses the machine status menu and displays any alarms (if present)
					

ELECTRONIC CONTROLLER PARAMETER CHANGES

Note: Key pad has a 3 second lock feature. Set key must be pressed for 3 seconds and released before keys will become active. Key pad will beep when unlocked and normal key pad operations performed.

Setting the Operating Set Point

To change the operating set point, press and release the set button to enter the machine menu. "set" will appear on the display.



Press and release the set button again to view the set point.



Use the up and down button to change the set point. When adjustment is finished, use the escape button to exit out of the machine status menu.



Viewing Alarm Codes

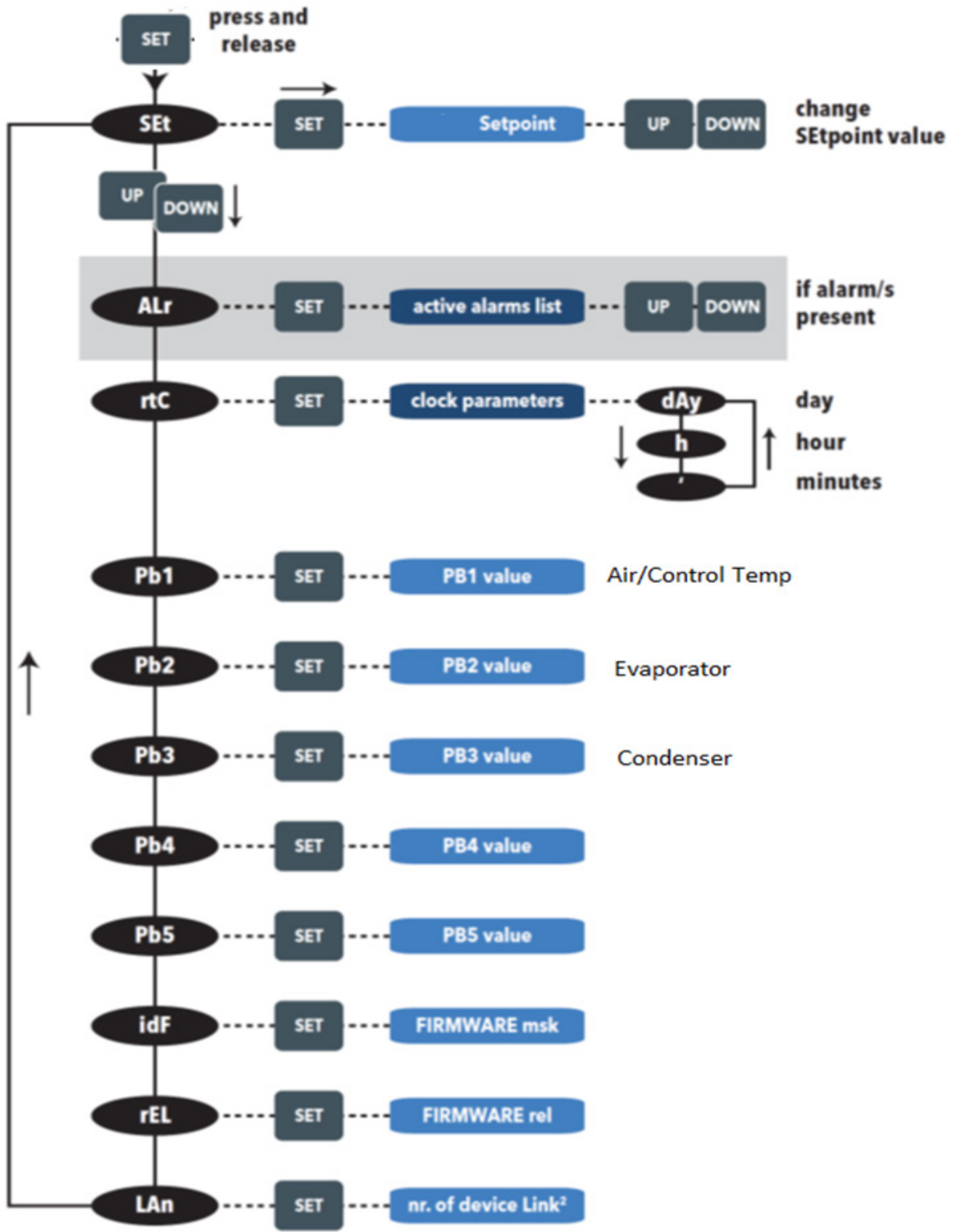
To view the alarm codes, press the set button to enter the machine status menu. "Set" will appear on the display.



Use the up and down button to scroll the alarm folder in the menu. ALr will appear on the display.

Press the set button to enter into the list of active alarms. Use the up and down button to scroll thru the alarms. Once alarm codes have been viewed, use the escape button to exit out the menu and view set point.





Code Description	Description	LED	Relay	Reset	Parameters involved to Enable alarm
E1	Probe Pb1 failure	ON	Active	Automatic	Ont, Oft
E2	Probe Pb2 failure	ON	Active	Automatic	Ont, Oft
E3	Probe Pb3 failure	ON	Active	Automatic	Ont, Oft
E4	Probe Pb4 failure	ON	Active	Automatic	Ont, Oft
E5	Probe Pb5 failure	ON	Active	Automatic	Ont, Oft
EL	LINK2 probe failure	ON	Active	Automatic	Ont, Oft
Ei	Virtual probe failure	ON	Active	Automatic	Ont, Oft
AH1	HIGH temperature 1 alarm	ON	Active	Automatic	SP1, Att,Afd,HA1,PAO,dAO,OAO,tA1
AL1	LOW temperature 1 alarm	ON	Active	Automatic	SP1, Att,Afd,HA1,PAO,dAO,OAO,tA1
AH2	HIGH temperature 2 alarm	ON	Active	Automatic	SP2, Att,Afd,HA2,PAO,dAO,OAO,tA2
AL2	LOW temperature 2 alarm	ON	Active	Automatic	SP2, Att,Afd,HA2,PAO,dAO,OAO,tA2
EA	External alarm	ON	Active	Automatic	PEA, EAL
OPd	Door open alarm	ON	not active	Automatic	PEA, tdO
Ad2	End of defrost due to time-out	ON	not active	Automatic	dE1, dE2, dAt
Prr	Preheating alarm	ON	not active	Automatic	
E10	Clock alarm	ON	not active	Automatic	
HiP	HIGH voltage alarm	ON	not active	Automatic	SPH, SPL, dFL, SoU
LoP	LOW voltage alarm	ON	not active	Automatic	SPH, SPL, dFL, SoU
nPA	General pressure switch alarm	ON	not active	Automatic	PEn, PEi
LPA	High pressure switch alarm	ON	not active	Automatic	PEn, PEi
HPA	Low pressure switch alarm	ON	not active	Automatic	PEn, PEi
PA	General pressure switch alarm	ON	not active	Manual	PEn, PEi

CLEANING AND MAINTENANCE

Cleaning Schedule:

Cabinet	Condenser coil	Gaskets	Routine maintenance
Daily wipe down	Quarterly cleaning	Daily inspection, check that hinges are tight to the cabinet.	Annually
Weekly interior		Every two years.	

Daily Exterior Cleaning

It is much easier to clean on a regular basis than to have to remove stains once they have built up.

1. Wash with a clean sponge and a mild detergent that does not contain chlorine.
2. Rinse with clean water.
3. Dry with a soft cloth.
4. Polish with a soft cloth, wiping with the grain.
5. Wipe weekly with stainless steel cleaner.


Weekly Interior Cleaning

1. Remove all food, food related items and shelves. Store the food at a safe temperature.
2. Disconnect power to the unit (unplug it or switch the breaker off).
3. Remove all loose food particles from the inside walls, floor, door liner and ceiling.
4. Scrub all interior surfaces and door gaskets with a warm (100°F to 110°F) detergent solution and a soft scrub brush.
5. Rinse with clean water and allow to air dry.
6. Return the shelves to the unit and secure them.
7. Restore power.
8. Return food to the unit when it has reached a safe temperature.

CONDENSER CLEANING

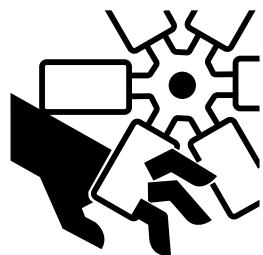
Keeping the condenser coil clean is critical to efficient operation.

1. Unplug unit from power supply.

**CAUTION**

Rotating fan blade can cause personal injury.

Unplug unit from power supply before beginning to clean condenser



2. Remove 5 thumb screws and access grille at the bottom front of the cabinet.

3. Examine condenser surface, if dusty, brush and vacuum the dust and lint from the surface of the coil. Brush up and down to avoid damaging the fins. Use care to not disturb the wires connected to the controller.

Note: If the coil is greasy, the coil will need to be cleaned with coil cleaner and that should be left to an experienced technician.

4. Place access grille back on cabinet and secure it with the original 5 thumb screws.

Note: Air filters are not recommended as they restrict the flow of cooling air.

METHODS FOR CLEANING STAINLESS STEEL

Cleaning Needed	Cleaning Agent	Method of Application	Affect on Finish
Smears and fingerprints	Areal 20, Lac-O-Nu, Lumin Wash O'Cedar Cream Polish, Stainless Shine.	Rub with cloth as directed on the package.	Satisfactory for use on all finishes. Provides barrier film to minimize prints.
Stubborn Spots and Stains, Baked-On Splatter, and Other Light Discolorations	Allchem Concentrated Cleaner.	Apply with damp sponge or cloth. Rub with damp cloth.	Use in direction of polish lines on No. 4 (polished) finish. May scratch No. 2 (mill) and Nos. 7 and 8 (polished) finishes.
	Samae, Twinkle or Cameo Copper Cleaner	Rub with damp cloth.	
	Grade FFF Italian pumice, whiting, or talc.	Rub with dry cloth.	
	Liquid NuSteel Paste NuSteel or DuBois Temp. Copper's Stainless Steel Cleaner Revere Stainless Cleaner Household cleansers, such as Old Dutch, Lighthouse, Sunbrite, Wyandotte, Bab-O, Gold Dust, Sapolio, Bon Ami, Ajax, or Comet Grade F Italian Pumice, Steel Bright, Lumin Cleaner, Zud, Restore, Sta-Clean, or Highlite. Penny-Brite or Copper-Brite.	Use small amount of cleaner. Rub with dry cloth using a small amount of cleaner. Apply with damp sponge or cloth. Rub with a damp cloth. May contain chlorine bleaches. Rinse thoroughly after use. Rub with a damp cloth. Rub with a dry cloth using a small amount of cleaner.	
Heat tint or discoloration	Penny-Brite or Copper-Brite. Past NuSteel, DuBois Temp, or Tarnite. Revere Stainless Steel Cleaner. Allen Polish, Steel Bright, Tenacious Deposits, Rusty Discolorations, Industrial Atmospheric Stains Wyandotte, Bab-O or Zud.	Rub with a dry cloth. Rub with a dry cloth or stainless steel wool. Apply with damp sponge or cloth. Rub with a damp cloth.	
Burnt-On Foods and Grease Fatty Acids, Milkstone (where swabbing or rubbing is not practical)	Easy-Off, De-Grease-It, 4 to 6% hot solution of such agents as trisodium phosphate or sodium tripolyphosphate or 5 to 15% caustic soda solution	Apply generous coating. Allow to stand for 10-15 minutes. Rinse. Repeated application may be necessary.	Excellent removal, satisfactory for use on all finishes.
Tenacious Deposits, Rusty Discolorations, Industrial Atmospheric Stains	Oakite No. 33, Dilac Texo 12, Texo NY, Flash-Klenz, Caddy Cleaner, Turco Scale 4368 or Permag 57.	Swab and soak with clean cloth. Let stand 15 minutes or more according to directions on package, then rinse and dry.	Satisfactory for use on all finishes
Hard Water Spots and Scale	Vinegar. 5% oxalic acid, 5% sulfamic acid, 5 to 10% phosphoric acid, or Dilac, Oakite No. 33, Texo 12, Texo N.Y.	Swab or wipe with cloth. Rinse with water and dry. Swab or soak with cloth. Let stand 10-15 minutes. Always follow with neutralizer rinse, and dry.	Satisfactory for all finishes. Satisfactory for all finishes. Effective on tenacious deposits or where scale has built up.

HELP

Trouble Diagnosis for the User		
Malfunction	Possible Cause	Likely Solution
No cooling - unit is silent	Unit not plugged in. Fuse or circuit breaker tripped. Power cord plug loose in outlet.	Connect to proper voltage circuit Replace fuse or reset breaker. Check outlet for loose connection, replace as needed
Unit cools but seems to be on all the time	Dirty condenser	Clean condenser
Space temperature too high	Dirty condenser Evaporator iced over Unit in high temperature environment	Clean condenser Defrost evaporator Reduce temperature of room
Space temperature too low	Temperature control	Adjust or replace control
Trouble Diagnosis for the Technician		
No cooling - compressor does not hum	Temp control stuck in open position	Replace temp control.
No cooling - compressor hums but does not start	Low voltage to unit. Compressor starting system failure	Check voltage, correct as needed. Check start relay and start capacitor. See next step.
No cooling - compressor starts but shuts off	Compressor start relay failure Compressor start capacitor failure	Replace relay. Replace capacitor.
No cooling - compressor cycles on and off	Overheating weak overload	Clean condenser, check fan motor and blade. Check refrigerant charge. Replace overload.
Unit cools, but is slow to pull cabinet temperature down	Evaporator fan not turning	Check fan(s), on multiple fan units one fan may be turning slowly and will need to be replaced.
Unit cools but turns on and off frequently	No product in cabinet. Temperature control defective Refrigeration issue	Fill cabinet Replace control Have system checked
Makes excessive noise	Tubing rattle Loose parts Bent or broken fan blade Noisy fan motor	Check tubing for routing Check for loose components Replace fan blade Replace fan motor

FOR THE SERVICE TECH - R290

Refrigeration service should only be attempted by a trained trade professional certified to work on R290 systems.

Here are some critical service items.

This list does not qualify anyone to service the unit. It is a reminder and checklist for the service tech. Keep these in mind for **R290 service**:

- Wire nuts are **NOT** to be used when changing an electrical part.
- The switches in this product are sealed, **only exact replacements** may be used.
- The process tubes are to be used for service access.
- Cut out (with tubing cutter) refrigeration components that are to be replaced. Do **NOT** un-braze.
- Because R290 can be vented into the air during service, the venting **MUST** be in an area free from flame or spark. It must be near an opened window or door.
- A sign noting service of a system containing propane must be attached to the unit during refrigeration service.
- A combustible gas leak detector must be used to inform anyone in the area when propane is present in the air.

Other Information:

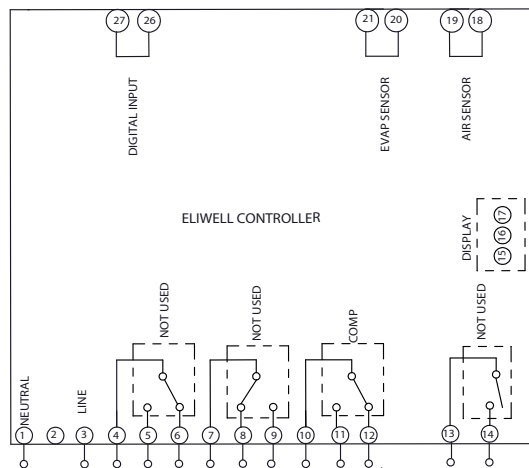
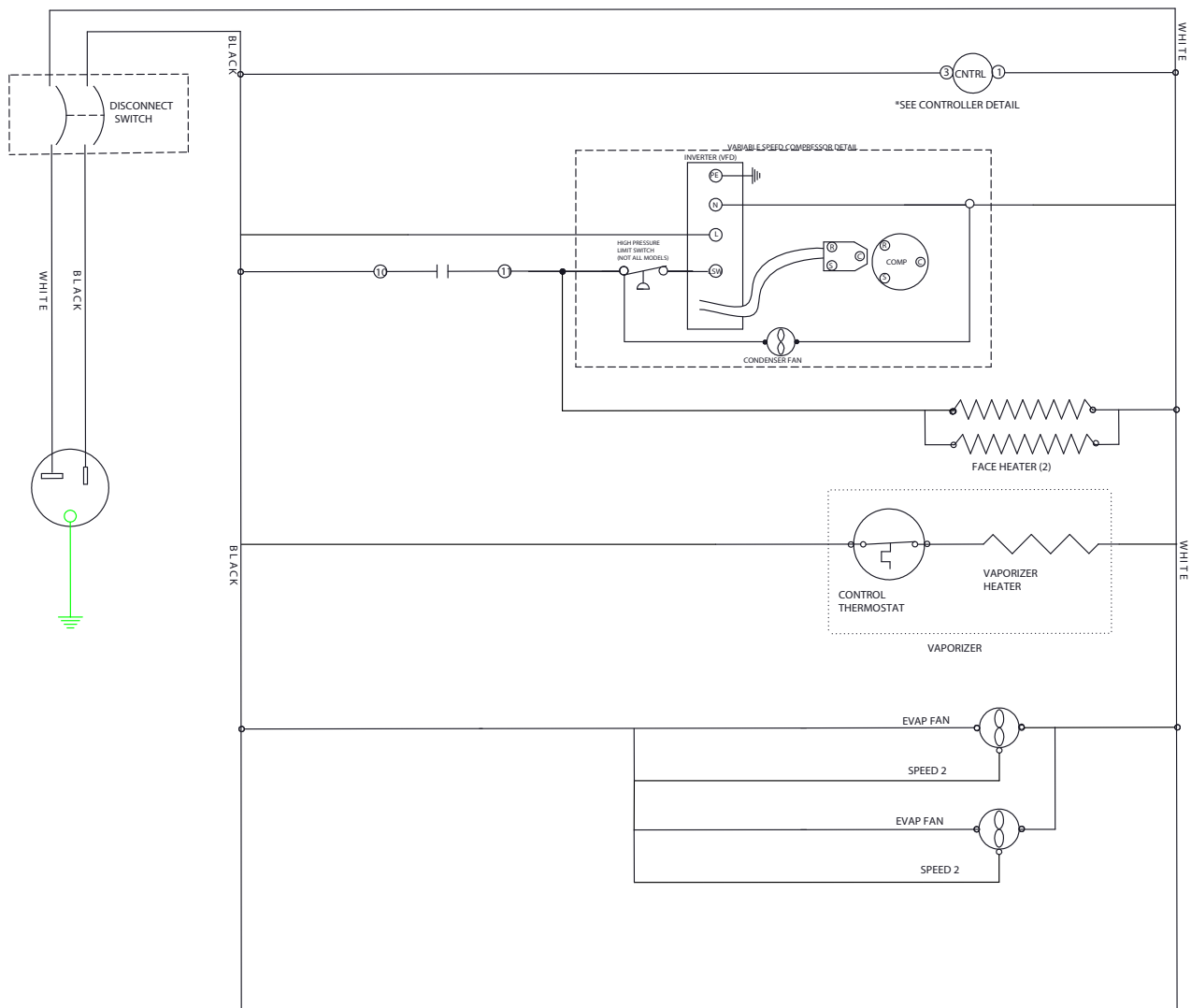
Evacuation: It is critical that a refrigeration system be leak free and internally dry. A thorough evacuation with a good vacuum pump with a micron gauge attached is the only way to ensure that the system is dry and ready for a charge of refrigerant.

Charging: The system is critically charged and the proper type and amount **MUST** be weighed in.

Overcharge symptoms: Unit will cool properly but the suction line temperature will be unusually cold. Compressor run time will be longer than normal.

Undercharge symptoms: Long run time, poor cooling and a hot compressor dome are the main symptoms of an undercharge.

FOR THE SERVICE TECH - WIRING DIAGRAM



LEGEND

RC	- RUN CAPACITOR
SC	- START CAPACITOR
OL	- OVERLOAD
Ⓢ	- CONTROLLER TERMINAL
⊙	- CONNECTION POINT

LIMITED WARRANTY

Warranty (Continental USA & Canada Only)

SEVEN (7) YEAR PARTS, LABOR, AND COMPRESSOR LIMITED WARRANTY

Victory® Refrigeration (Victory) warrants to the original purchaser of Victory branded equipment, that such equipment is free from defects in material and workmanship, under normal use, proper maintenance and service as indicated by Victory's installation and operation instructions, for a period of SEVEN (7) years from the date of installation, or eighty-seven (87) months from the date of shipment from the manufacturer, whichever is earlier. In addition, Victory® Refrigeration (Victory) warrants the hermetically/semi-hermetically sealed compressor (part only) for SEVEN (7) years; not to exceed eighty-seven (87) months from the date of shipment from Victory, provided upon receipt of the compressor, manufacturer examination shows the sealed compressor to be defective. This warranty does not cover freight for the replacement compressor or freight for return of the failed compressor. Also, this compressor-part only warranty does NOT apply to any electrical controls, condenser, evaporator, fan motors, overload switch, starting relay, capacitors, temperature control, filter/drier, accumulator, refrigeration tubing, wiring harness, labor charges, or supplies which are covered by the standard warranty above.

*Units shipped after 07/1/2024. Previous warranty applies to units shipped prior.

Exceptions:

- Warranty does not apply for units installed in a Residential application. Units are intended for Commercial use only.
- Blast Chillers carry a 3 year parts and labor warranty; 2 additional years for the compressor.

Normal wear type parts, such as light bulbs/lamps, gaskets, fuses, batteries, blast chiller/freeze probes, thermostat or electronic controller calibration and/or adjustment, and any normal maintenance items as outlined in the Owner's Manual, adjustment of door mechanisms or freight damage are not covered by this warranty. For this warranty, the original purchaser shall be deemed to mean the individual or company for whom the product was originally installed.

Proof of purchase must be supplied to Victory to validate the warranty. This warranty is valid only if equipment is properly installed, and started-up as outlined in the Owner's Manual.

Units that utilize variable speed compressor technology can experience nuisance tripping on Class A GFCI outlets which have a trip limit of 4 mA to 6 mA. To avoid this issue in a location that requires GFCI circuit protection, Beverage Air & Victory recommends using a HUBBELL Model Number GFRST83W 20A Heavy Duty Hospital Grade Self-Test GFCI Receptacle.

Removal or alteration of the serial/ data plate from equipment shall be deemed to release Victory from all warranty obligations or any other obligations, expressed or implied. The warranty does not cover installation, start-up, normal maintenance, food loss, or other consequential damage, and it excludes components that are removable without tools. Our obligation under this warranty shall be limited to repairing or replacing, including labor, any part of such product, which proves defective.

Victory reserves the right to examine any product claimed to be defective. The labor warranty shall be for self-contained units only and for standard straight time, which is defined as normal service rate time, for service performed during normal working hours. Any service requested outside of a servicer's normal working hours will be covered under this warranty at the normal rate and any additional overtime rate will be the responsibility of the equipment purchaser. Victory shall not be responsible for any costs incurred if the work is performed by other than Victory's authorized service personnel. Reimbursement claims for parts and/or labor service costs must be made in writing. Model, cabinet serial number and installation location must be shown on the claim. A receipted bill from the servicing agency must accompany the claim, together with full details of the service problems, diagnosis and work performed. Victory reserves sole discretion whether further documentation on a claim is to be submitted. Any part determined to be defective in the product should be returned to the company within thirty (30) days under the terms of this warranty and must be accompanied by a record of the cabinet model, serial number, with a return material authorization number (RMA#) issued by Victory.

LIMITED WARRANTY (CONTINUED)

Special installation/applications, including remote locations, are limited in coverage by this warranty. Any installation that requires extra work, and/or travel, to gain access to the unit for service is the sole responsibility of the equipment purchaser. Improper operation resulting from factors, including but not limited to, improper or negligent cleaning and maintenance, low voltage conditions, inadequate wiring, outdoor use and accidental damage are not manufacturing defects and are strictly the responsibility of the purchaser.

Except Blast Chillers, a product is designed for maintaining temperature and not bringing food to a desired temperature, so cannot be held responsible for this function under warranty.

Units must be in conditioned environments or warranty will be void.

Condenser coils must be cleaned at regular intervals. Failure to do so can cause compressor malfunction and will void warranty. Although cleaning requirements vary in accordance with the operation of various products, Victory recommends a minimum monthly cleaning.

NOTE: NO CLAIMS CAN BE MADE AGAINST THESE WARRANTIES FOR SPOILAGE OF PRODUCTS, LOSS OF SALES OR CONSEQUENTIAL DAMAGES. THE FOREGOING WARRANTIES ARE EXPRESSLY GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESS, IMPLIED, OR STATUTORY, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY DISCLAIMED, AND ALL OTHER OBLIGATIONS OR LIABILITIES ON OUR PART, AND WE NEITHER ASSUME, NOR AUTHORIZE ANY OTHER PERSON TO ASSUME FOR US, ANY OBLIGATION OR LIABILITY IN CONNECTION WITH THE SALE OF SAID REFRIGERATION UNITS OR ANY PARTS THEREOF.

These warranties shall not be assignable and shall be honored only in so far as the original purchaser.

These warranties do not apply outside the limits of the USA and Canada, nor do they apply to any part that has been subject to misuse, neglect, alteration, accident, or to any damage caused by transportation, flood, fire, acts of terrorism, or acts of God.

LIMITATION OF LIABILITY:

Victory or its 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, because of defects in material or workmanship. In no event shall Victory be liable for a sum more than the purchase price of the item.

THE ORIGINAL OWNER'S SOLE AND EXCLUSIVE REMEDY AND VICTORY'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.

07/2024

Warranty Registration

Register your product online at Victory.com/parts-service or fill out and mail the form below.

Cabinet Model Number: _____ Date Of Installation: _____

Cabinet Serial Number: _____

Location Of Product

Business Name: _____

Business Street: _____

Business City: _____ State: _____ Postal Code: _____

Mail to: Victory, 3779 Champion Blvd, Winston-Salem, NC 27105

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