
Manual de usuario para Refrigeradores y Armarios

Modelos

Reach in
Merchandiser

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SPECIFICATION CHART

TYPE UNIT	SIZE	APPLICATION	TYPE DOOR	DOOR QTY.	TYPE GAS	AMOUNT GAS (Oz.)	VOLTAGE (V)	AMPERAGE (A)
REACH IN	17	REFRIGERATION	SOLID	3	R-134A	9.8	115	5.2
			GLASS				220	3.1
	17	FREEZER	SOLID	3	R-404A	16.6	115	9.8
			GLASS				220	4.5
	23	REFRIGERATION	SOLID	1	R-134A	11.3	115	5
			GLASS				220	3.1
	23	REFRIGERATION	SOLID	1	R-290	4.2	115	2.0
			GLASS				220	1.5
	ECO-23	REFRIGERATION	SOLID	1	R-290	2.5	115	2.0
		FREEZER	SOLID	1	R-290	2.5	115	4.5
	23	FREEZER	SOLID	1	R-404A	16.6	115	9.8
							220	4.5
	49	REFRIGERATION	SOLID	2	R-134A	13.4	115	6.9
			GLASS				220	3.5
49	REFRIGERATION	SOLID	2	R-290	4.6	115	3.0	
		GLASS				220	2.0	
49	FREEZER	SOLID	2	R-404A	21.5	115	11.5	
						220	4.5	
72	REFRIGERATION	SOLID	3	R-404A	22.2	115	12.0	
		GLASS				220	6.5	
72	FREEZER	SOLID	3	R-404A	22.5	115	8.5	
		GLASS				220		
MERCHANDISER	17	REFRIGERATION	GLASS	1	R-134A	9.8	115	5
		220	3.2					
	17	FREEZER	GLASS	1	R-404A	16.6	115	9.8
		220	4.5					
	23	REFRIGERATION	GLASS	1	R-134A	11.3	115	5.2
		220	3.2					
		REFRIGERATION	GLASS	1	R-290	4.2	115	2.0
		220	1.5					
	23	FREEZER	GLASS	1	R-404A	16.6	115	9.8
		220	4.5					
	35-SD	REFRIGERATION	SLIDE GLASS	2	R-134A	16.6	115	6.9
			220				3.5	
	37	REFRIGERATION	GLASS	2	R-134A	16.6	115	6.9
		220	3.5					
		FREEZER	GLASS	2	R-404A	21.5	115	11.5
		220	6.5					
	47-SD	REFRIGERATION	SLIDE GLASS	2	R-134A	16.6	115	6.9
			220				3.5	
49	REFRIGERATION	GLASS	2	R-134A	16.6	115	6.9	
	220	3.5						
	REFRIGERATION	GLASS	2	R-290	4.6	115	3.0	
	220	2.0						
49	FREEZER	GLASS	2	R-404A	23.6	115	11.5	
	220	6.5						
72	REFRIGERATION	GLASS	3	R-134A	22.2	115	12.5	
	FREEZER*	GLASS	3	R-404A	22.2	220	12	

*Two unit of condensing

MACHINE INTRODUCTION

1.1 Introduction to machine & models

Reach Ins feature dual and triple panel glass door, contributing to energy efficiency and savings.

Standard digital control displays precise temperature for customer convenience while LED lights showcase the best out of your products.

Details make this line unique.

- New enhanced digital controller and display.
- Digital controller refrigerators to keep food quality for longer period of time.
- Door alarm and user friendly controls to adapt to different environments.
- Factory balanced refrigeration system, environmentally friendly R-134a / R-404A.
- Stainless steel covered corner floor to meet NSF requirements.
- 4" castors and door locks standard.
- Recessed door handles.

1.2 Important safety information



DANGER: Power must be turned off and disconnected from the power source whenever performing maintenance, repair or cleaning the condensing unit.

If machine still running when power is off, disconnect power at the circuit breaker before unplugging the machine.



WARNING: Machine and compressor warranties are void if failure is due to improper electrical installation.

Do not introduce hot foods, chemical or corrosive products, drugs, or open beverage bottles.

1.3 For R290 (Propane) refrigerant units



Warning: this unit uses R-290(propane) as refrigerant. These hydrocarbon refrigerants are highly environmentally compatible but also are flammable and combustible. Please read this manual thoroughly before installing and operating the unit. Please take cautions measures to avoid risk of fire or explosion.

PLEASE REFERER TO LABEL INSIDE THE CABINET TO CHECK REFRIGERATION TYPE AND VOLUME.



DANGER - Risk of fire or explosion. Flammable refrigerant used. Do not use mechanical devices to defrost refrigerator. Do not puncture refrigerant tubing.



DANGER - Risk of fire or explosion. Flammable refrigerant used. To be repaired only by trained service personnel. Do not puncture refrigerant tubing.



CAUTION - Risk of fire or explosion. Dispose of properly in accordance with federal or local regulations. Flammable refrigerant used.



CAUTION - Risk of fire or explosion. Flammable refrigerant used. Consult repair manual/owner's guide before attempting to service this product. All safety precautions must be followed.



CAUTION - Risk of fire or explosion due to puncture of refrigerant tubing; follow handling instructions carefully. Flammable refrigerant used.



WARNING

- Keep ventilation opening in the appliance enclosure or in the built-in structure, clear of obstruction.
- Do not use mechanical devices or other means to accelerate the defrosting process, other than those recommended by the manufacturer.
- Do not damage the refrigerant circuit.
- Do not use electrical appliances inside the food storage compartments of the appliance, unless they are of a type recommended by the manufacturer.

 **WARNING**

- Handle the unit with care in order to avoid any serious damages to the refrigeration system.
- The refrigerant tubing, condenser, evaporator coils are easily prone to damage while handling, moving, installing, and cleaning the unit, which may lead to fire or even explosion.
- Refrigerant squirting out of the pipes could ignite or cause an eye injury. If a leak is detected, avoid any open flames or potential sources of ignition and air out the room in which the appliance is standing for several minutes.
- In order to avoid the creation of a flammable gas-air mixture in case of a leak in the refrigerating circuit, the size of the room in which the appliance is placed depends on the amount of refrigerant used. The amount of refrigerant in your particular appliance is shown on the label inside the cabinet.



This appliance contains a small amount of propane (R-290) a gas with high environmental compatibility, but it is also combustible. When transporting and installing the appliance, care should be taken to ensure that no part of the refrigerating circuit are damaged.

- Never start up an appliance showing any signs of damage. When in doubt, contact a qualified service professional.
- In case of any hazardous activities such as fire or explosion, move the unit away from any source of ignition to a well ventilated area.
- Further service and repair must be done by a qualified technician who is familiar with the safety standards, and also has thorough understanding and knowledge of the flammable refrigerants.
- Any and all technicians handling these units must be equipped with proper personal protection and equipment and follow applicable safety measures and precaution to avoid risk of fire or explosion.

INSTALLATION

2.1 General information

You can find in you equipment the following symbols, or stickers to identify some type of warnings or useful information about your equipment.



2.2 Transport, handling, unpacking, location

Upon receiving your new equipment, check the package and the machine for any damages that may have occurred during transportation. Visually inspect the exterior of the package, if damaged, open and inspect the contents with the carrier. Any damage should be noted and reported on the delivering carrier's receipt.

In the event that the exterior is not damaged, yet upon opening, there is concealed damage to the equipment notify the carrier immediately. Notification should be made verbally as well as in written form. Request an inspection by the shipping company of the damaged equipment.

Retain all crating material until inspection has been made. Contact the dealer through which you purchased the unit.

Check the compressor compartment housing and visually inspect the refrigeration package. Be sure lines are secure and base is still intact.

2.3 Intended use and restrictions

This equipment is not designed for personal, family, or household purposes, and its sale for such purposes is not intended. In the event the equipment is so used, this warranty shall be null and void, and the equipment is so used, this warranty shall be null and void, and the equipment shall be deemed to have been sold "as is-where is" without any warranty of any kind, including without limitation any warranty of title, non-infringement, merchant-ability or fitness for a particular purpose. The equipment's are conforms to UL and NSF- 7 standards.

2.4 Manufacturer's identification label description

The data plate is located inside the cabinet, near the top front, left corner. Under no circumstances should the data plate be removed from the unit. The data plate is essential to identify the particular features of your machine and it is of great benefit to installers, operators, and maintenance personnel. It is recommended that, in the event the data plate is removed, you copy down the essential information in this manual for reference before installation. Removal of data plate will void the warranty.

		19032041			
		FIM970306PH5		MADE IN MEXICO	
Model	MOD	ABBC 58 G	SN	8101678173	2019
Electricals	115V 50/60Hz		1P	6.5A	
Pot. Frigorífica Refrig. Capacity (BTU/hr / W)	2345/690	Lámpara Lamp	5.0 W	Descarche Defrost	0.0
Calefactor Heater	0	Clase Climat. Climate Class	N	Temp.	-2°C / 5°C
Peso Neto Net Weight (Libras / Kg)		Agente Expandente Blowing Agent	ECO	Condensación Condenser	VENT
PCA GWP	1430	Refrigerant	R-134a	Carga Refrig. Refrig. Weight (Onzas / g)	9.9/280
Presión de diseño lado de baja Low side pressure design (PSI / BAR)	132/9	Compresor Compressor (HP)	1/3		
Presión de diseño lado de alta High side pressure design (PSI / BAR)	300/20				
N	[Barcode]		8101678173		
MOD.	ABBC G 58 115V 50/60Hz		19032041		
N	[Barcode]		8101678173		
MOD.	ABBC G 58 115V 50/60Hz		19032041		
Serial Number (10 digits)					

2.5 Installation and assembly

Units represented in this manual are intended for indoor use only. Be sure the location chosen has a floor strong enough to support the total weight of the unit and contents. For the most efficient operation, be sure to provide good air circulation inside and outside of the unit.

INSIDE CABINET

The first cleaning must be made when you unpack the unit and before switching it on. Clean it with water and a mild detergent. When it is clean and dry, insert the accessories in the appropriate places, for the best use of the user.

OUTSIDE CABINET

Be sure the unit has good air circulation around it. Avoid hot corners and locations near stoves and ovens. It is recommended the unit be installed no closer than 2" from any wall. The place where the refrigerator is placed must be open and clean, avoiding that the fan of the condensing unit absorbs materials which are deposited then into the condenser blades and coil, which can produce failures.

The unit should not be installed under ambient temperatures higher than 100 °F.

If the relative humidity is higher than 60 %, the door frames may sweat water. This is not a malfunctioning of the unit.

2.6 Connections

Refer to the amperage data in this manual or on data plate and your local code or the National Electrical Code to be sure unit is connected to the proper power source. Verify correct incoming voltage according to the Data Plate information.

The data plate is located inside the unit, near the top front left corner. Under any circumstances should the data plate be removed from the unit!

The data plate is essential to identify the particular features of your unit and is of great benefit to installers, operators and maintenance personnel. It is recommended that, in the event the data plate is removed, you copy down the essential information in this manual for reference before installation.

A protected circuit of the correct voltage and amperage must be run for connection of the supply cord. Unit must be grounded and connected in accordance with NEC Article 422 Appliances.

OPERATION

3.1 General information.

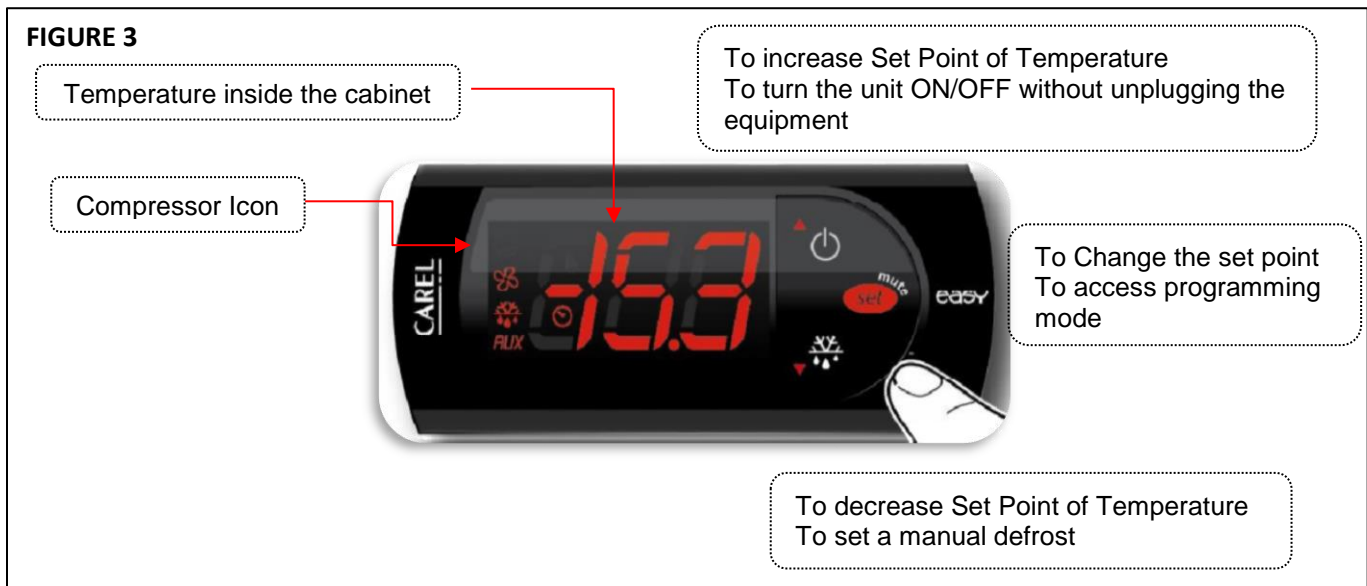
Good air flow inside the cabinet is critical. Do not block air flow to the fans. Allow three inches of space along the front, back, and sides.

3.2 Control panel description.

3.2.1 Electronic Control

After connecting your unit, turn ON general switch located next to the controller. The display will light up showing the temperature inside the unit. Also, the compressor and fan icons will flash for a period of three minutes. After this delay the unit will start cooling.

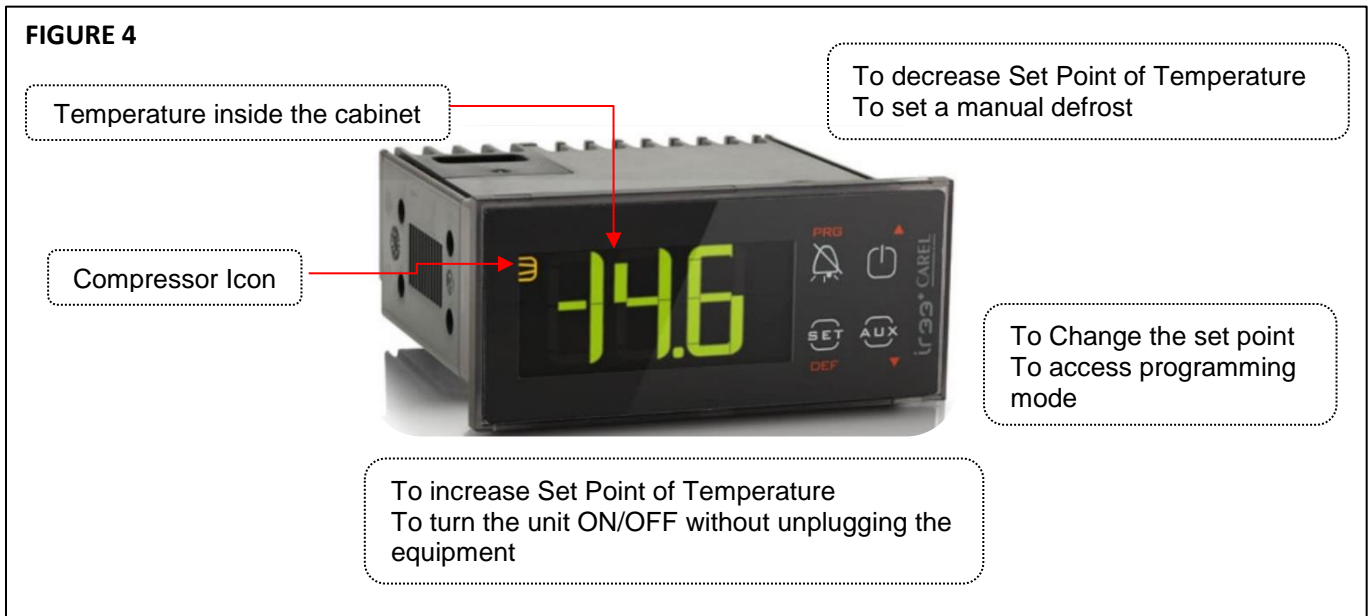
Verify you don't have any alarms on the temperature controller. If after you turn ON the equipment the controller shows the alarm icon or an error code, call for technical service. They will help you fix the problem.



3.2.2 Electrónica Control (IR33+)

(ONLY FREEZERS)

The operating parameters can be modified using the front keypad. Access differs depending on the type: set point, frequently-used parameters (F) and configuration parameters (C). The type of parameter is specified in the table of parameters. Access to the configuration parameters is protected by a password for the configuration parameters that prevents unwanted modifications or access by unauthorized persons. The password can be used to access and set all the control parameters.



3.2.3 Electronic Control (Advance)

After connecting your unit, turn ON rocker switch located next to the controller. The display will light up showing the temperature inside the unit. Also, the compressor and fan icons will flash for a period of three minutes. After this delay the unit will start cooling.

Verify you don't have any alarms on the temperature controller. If after you turn ON the equipment the controller shows the alarm icon or an error code, call for technical service. They will help you fix the problem.

FIGURE 5

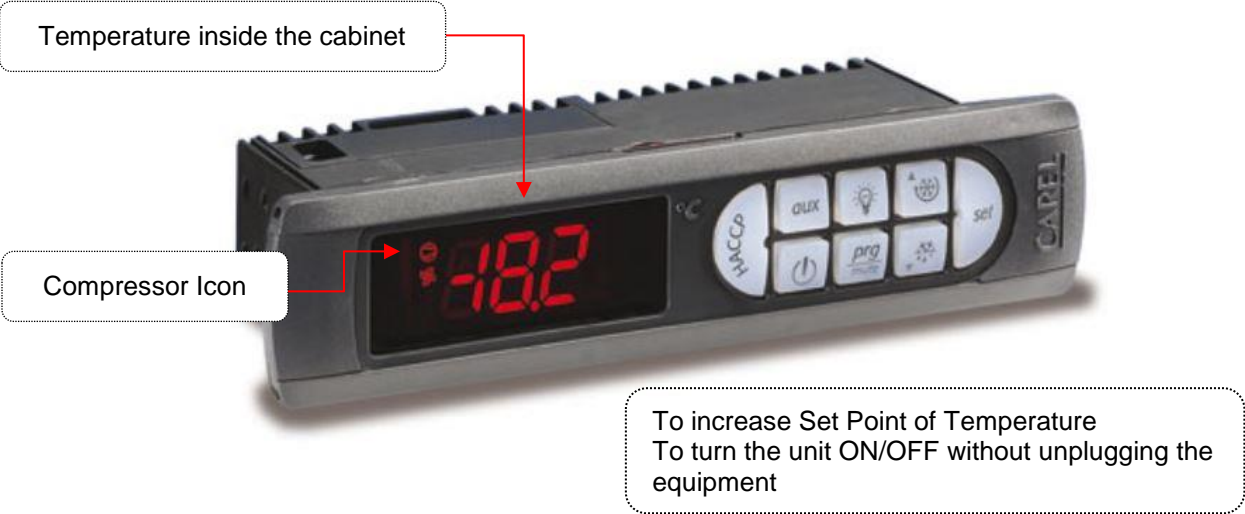
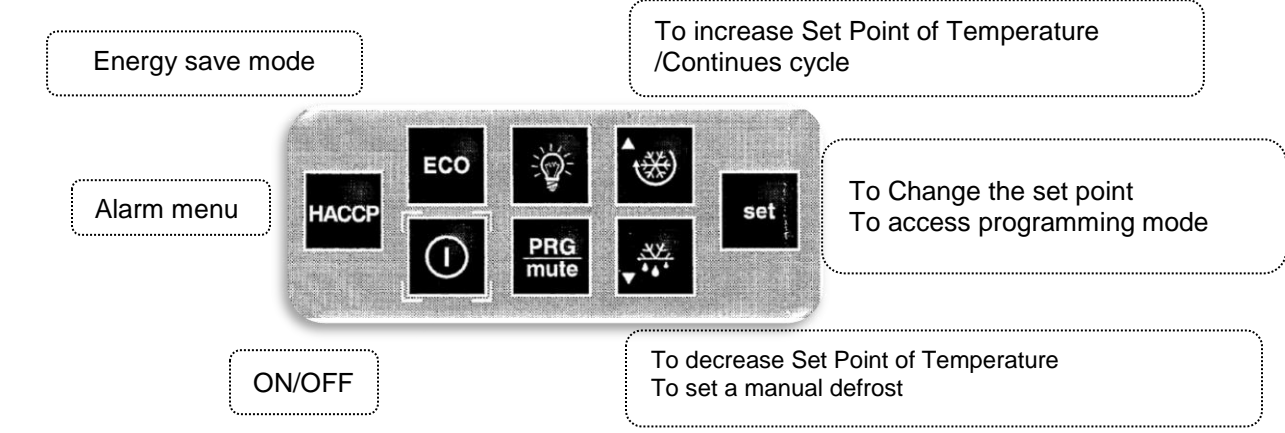


FIGURE 6



3.3 Machine settings and programs

3.3.1 Setting and programs.

Changing the Set Point of the temperature on the controller

The unit comes with a factory default set point (32°F Refrigerators). These set values will make the unit perform at its maximum capacity. Therefore, it is not recommended to change the set point. If set point needs to be changed, follow the next steps.

1. Push the SET button for one second. You should see a flashing number. Release the button.



2. Press the up and down arrows to increase or decrease the set temperature. Then press the set button to save the new set point.



Note:

The maximum value you can set in the controller is: For refrigerators: 5°C (40°F)

3. If you wish decrease the value of the set point for a new temperature, press the button DOWN arrow (see the picture below). Press this button to reach the desired value. Release the button and then press the SET button to keep, and save, the new value.

Note:



The minimum value you can set in the controller is: For refrigerators: -1°C (30°F)

Manual Defrost

To select manual defrost, hold the button DOWN arrow for 5 seconds. The snow flake icon will appear on the display. When this icon is solid it indicates that the equipment is in Defrost mode.

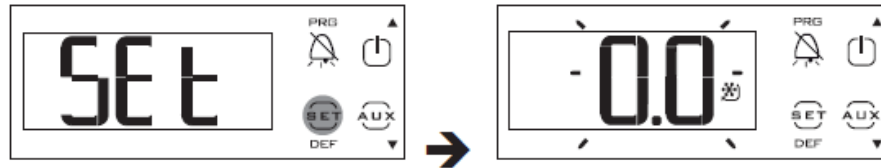


To exit manual defrost, hold the DOWN button arrow for 5 seconds. The snow flake icon will turn off. Wait 2 minutes for the compressor to start

3.3.2 Setting and programs (IR33+)

To change the set point St (default =0°C)

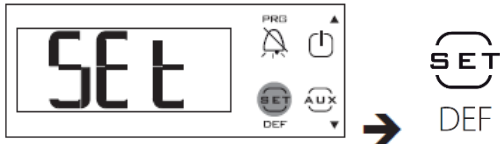
1. Press Set for more than 1 s: the display shows Set and then the current value of St;
2. Press UP/DOWN until reaching the desired value;
3. Press Set to save the new value of St.



Manual defrost

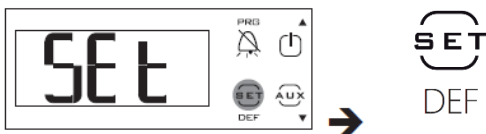
To activate a defrost the defrost probe must measure a temperature less than the end defrost temperature

ACTIVATION: press for 5 seconds:

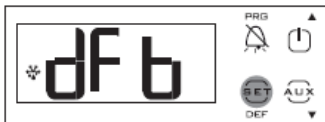


After 5 seconds, the display shows the start defrost signal (dFb) for 3 s. The controller enters defrost mode, with the corresponding icon shown on the display, together with the message "dEF" if set accordingly by parameter d6. The defrost relay is also activated.

DEACTIVATION: press for 5 seconds:



Example: defrost activation



Example: defrost deactivation



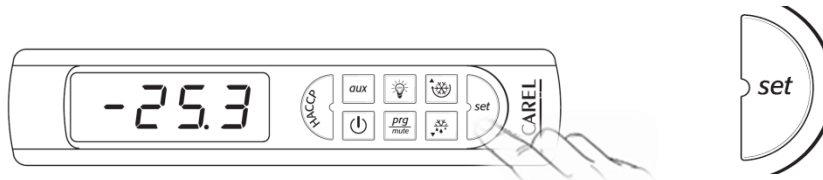
IF YOU NEED MORE INFORMATION PLEASE CONTACT THE TECHNICAL SUPPORT

3.3.3 Setting and programs (Advance)

Changing the Set Point of the temperature on the controller

The unit comes with a factory default set point (32°F Refrigerators). These set values will make the unit perform at its maximum capacity. Therefore, it is not recommended to change the set point. If set point needs to be changed, follow the next steps.

1. Push the SET button for one second. You should see a flashing number. Release the button.



2. Press the up and down arrows to increase or decrease the set temperature. Then press the set button to save the new set point.



Note:

The maximum value you can set in the controller is: For refrigerators: 5°C (40°F)

3. If you wish decrease the value of the set point for a new temperature, press the button DOWN arrow (see the picture below). Press this button to reach the desired value. Release the button and then press the SET button to keep, and save, the new value.



Note:

The minimum value you can set in the controller is: For refrigerators: -1°C (30°F)

Manual Defrost

To select manual defrost, hold the button DOWN arrow for 5 seconds. The snow flake icon will appear on the display. When this icon is solid it indicates that the equipment is in Defrost mode.



To exit manual defrost, hold the DOWN button arrow for 5 seconds. The snow flake icon will turn off. Wait 2 minutes for the compressor to start

MAINTENANCE

4.1 General safety rules

Neglecting the condenser coil cleaning procedures WILL VOID YOUR WARRANTY associated with the compressor or cost to replace the compressor!

Proper cleaning of stainless steel requires soft cloths or plastic scouring pads. Never use steel pads, wire brushes or scrapers!

4.2 Machine cleaning and maintenance routine

Cleaning solutions need to be alkaline or non-chloride cleaners. Any cleaner containing chlorides will damage the protective film of the stainless steel. Chlorides are also commonly found in hard water, salts, and household and industrial cleaners. If cleaner containing chlorides are used be sure to rinse repeatedly and dry thoroughly upon completion.

Routine cleaning of stainless steel can be done with soap and water. Extreme stains or grease should be cleaned with a non-abrasive cleaner and plastic scrub pad. There are also stainless steel cleaners available which can restore and preserve the finish of the steels protective layer.

Never use an acid based cleaning solution! Many food products have an acidic content which can deteriorate the finish. Be sure to clean the ALL food products from any stainless steel surface. Common items include peppers, tomatoes and other vegetables.

4.2.1 Cleaning the Condenser Coil

Disconnect machine. Remove front bottom panel and carefully slide out the condensing unit. The condenser coil requires regular cleaning; recommended every 30-60 days, depending of the accumulation of dust and grease. If the buildup on the coil consists of only light dust and debris the condenser coil can be cleaned with a simple brush. Heavier dust build up may require a vacuum or even compressed air to blow through the condenser coil. If heavy grease is present there are de-greasing agents available for refrigeration use and specifically for the condenser coils. The condenser coil may require a spray with the de-greasing agent and then blown through with compressed air.

Be sure all electrical and mechanical parts are dry before turning on the power.

Never use a high pressure water wash for this cleaning procedure as water can damage the electrical components located near or at the condenser coil. Do not place filter material in front of condenser coil. This material blocks air-flow to the coil similar to having a dirty coil!

If you keep the Condenser clean you will minimize your service expense and lower your electrical costs. Failure to maintain a clean condenser coil can initially cause high temperatures and excessive run times. Continuous operation with dirty or clogged condenser coils can result in compressor failures.

To put back the condensing unit in its place, slide in the unit carefully. BE SURE DRAIN PIPE IS LOCATED OVER THE PAN. Replace front bottom panel

4.2.2 Cleaning the Gasket

Gaskets require regular cleaning to prevent mold and mildew build up and also to keep the elasticity of the gasket. Gasket cleaning can be done with the use of warm soapy water. Avoid full strength cleaning products on gaskets as this can cause them to become brittle and prevent proper seals. Also, never use sharp tools or knives to scrape or clean the gasket which could possibly tear the gasket and rip the bellows.

Gaskets can easily be replaced and do not require the use of tools or authorized service persons.

The gaskets can be pulled out of the grove in the door and new gaskets can be “pressed” back into place.

4.2.3 Draining the Unit

Each unit has a drain located inside the unit which removes the condensation from the evaporator coil and evaporates it at an external condensate evaporator pan. Each drain can become loose or disconnected from moving or bumping the drain.

IF YOU NOTICE EXCESSIVE WATER ACCUMULATION ON THE INSIDE OF THE UNIT be sure the drain tube is connected from the evaporator housing to the condensate evaporator drain pan.

IF WATER IS COLLECTED UNDERNEATH THE UNIT you may want to check the condensate evaporator drain tube to be sure it is still located inside the drain pan. The leveling of the unit is important as the units are designed to drain properly when on a level surface, if your floor is not level this can also cause drain problems. Be sure all drain lines are free of obstructions; typically food product is found blocking drain lines causing water to back up and overflow the drain pans.

4.3 Machine disposal

The product's life-cycle is around 7 to 10 year from first use and operation date.

The equipment is manufactured without dangerous or toxic materials. Some parts of the equipments are biodegradable.

The disposing after the **product's life-cycle** shall be determined by the customer according to the rules and laws established in the city or State of residence.

REMEMBER TO TAKE CARE OF THE ENVIRONMENT.

TROUBLESHOOTING CHART

5.1 Troubleshooting chart

Follow the next steps before requesting warranty service. Failure to do so, may result in service charges for you and may void your warranty:

- 1) Refrigerator doesn't work:
 - a. Check that the machine is still connected.
 - b. Check that the ON/OFF button is in the ON position.

- 2) Refrigerator doesn't reach temperature :
 - a. Verify unit is not on saving mode
 - b. Check that the thermostat is not in OFF position.
 - c. Check that the machine is not in the defrost cycle.
 - d. Ensure Equipment is in a ventilated place and removed minimum of 2 inches from any other appliance and away from any heat source.
 - e. The environment maximum temperature must be 38 °C/ 100°F.
 - f. To insure proper air flow, product must not be placed higher than the maximum level mark located on the internal wall of the unit.
 - g. If FREEZER, check that the temperature is not Celsius.
 - h. Check that the gasket is in good condition and door is sealed.
 - i. Check that the fan is moving. Open the door and press and hold doors witch for verification.
 - j. Don't put any food inside until the unit has reached the proper temperature.
 - k. If FREEZER, food must be previously frozen before being placed inside the cabinet.
 - l. Be sure castors or legs were installed.

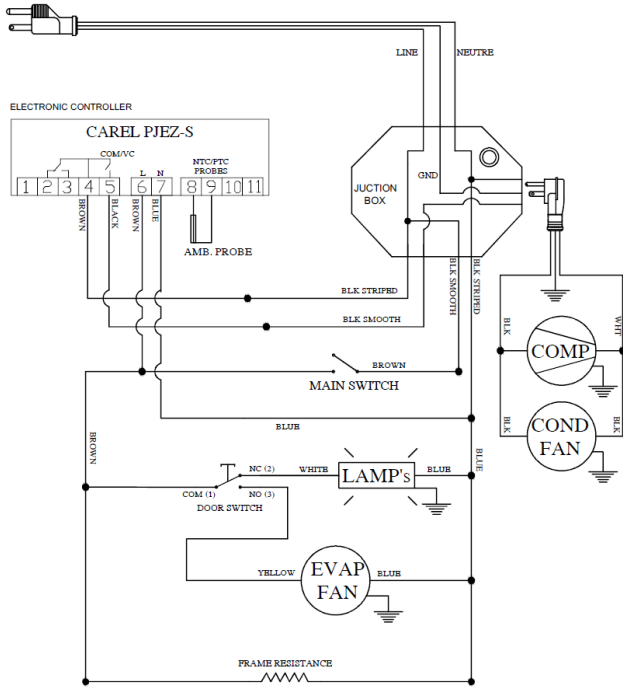
- 3) There is water inside the refrigerator:
 - a. Check that the drain pan inside the cabinet is in position.
 - b. Check that there is not food clogging the drain line.

- 4) There is water under the refrigerator:
 - a. Check that the drain pipe is over the pan.
 - b. Check that the cabinet is level.

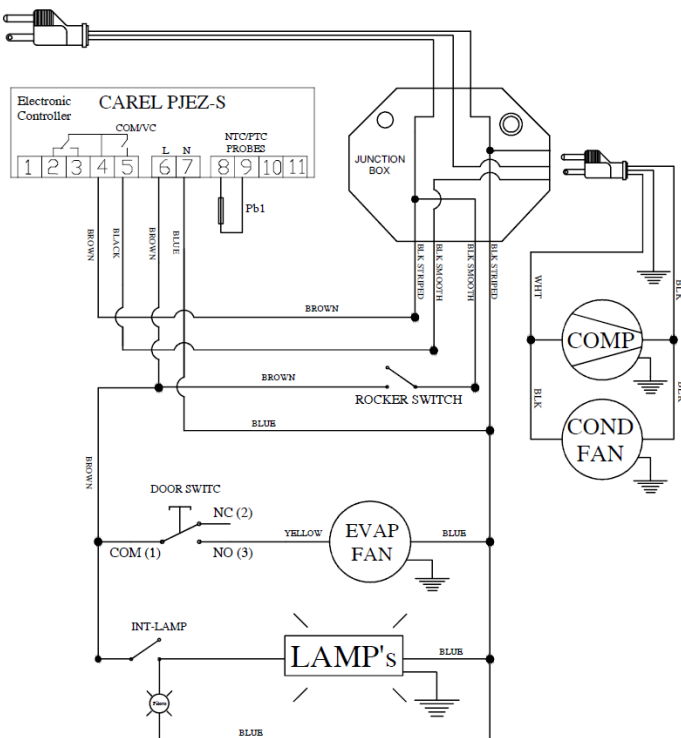
Warning: To insure proper operation of equipment, it is recommended that the unit is on for 24 hours prior to the introduction of perishables.

ELECTRIC DIAGRAM

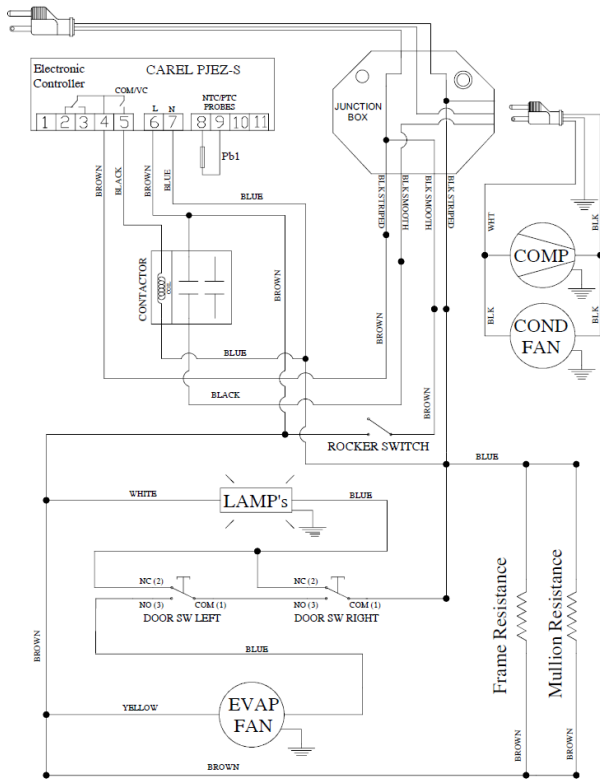
REACH IN REFRIGERATION - 23" (SOLID DOOR)



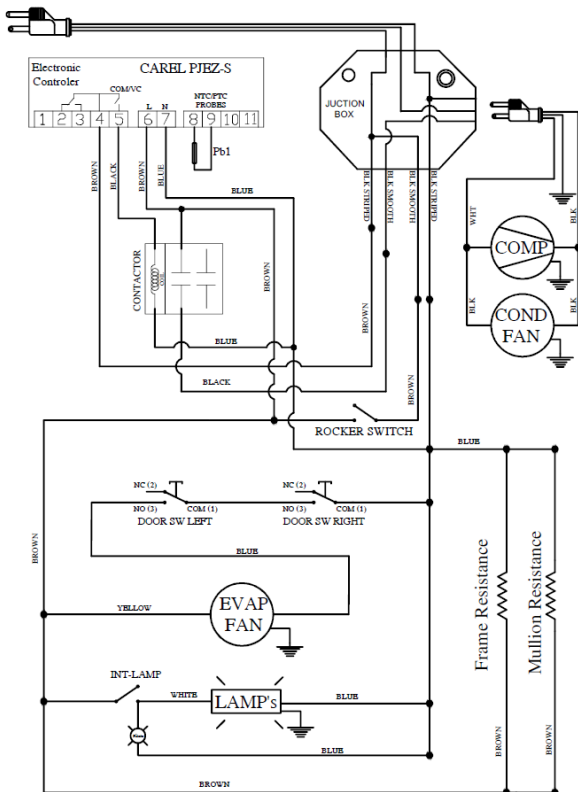
REACH IN AND MERCHANDISER REFRIGERATION 17"- 23" (GLASS DOOR)



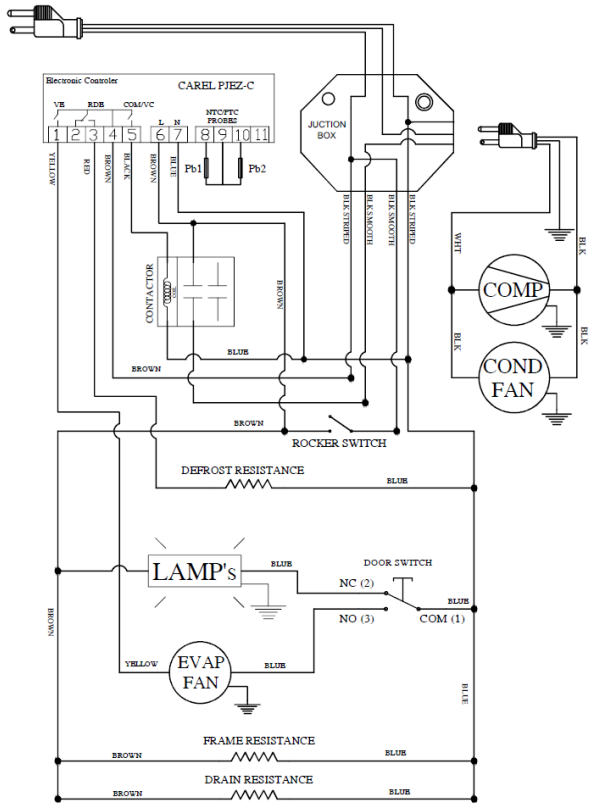
REACH IN REFRIGERATION 49" (SOLID DOORS)



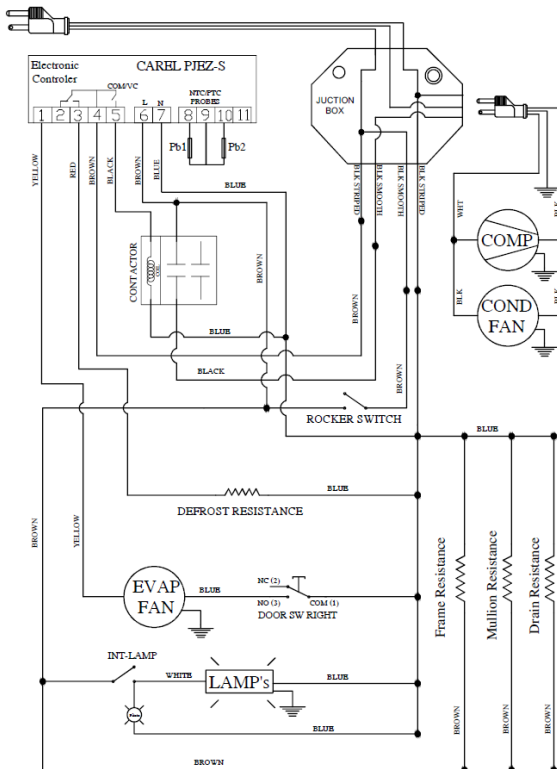
RECH IN AND MERCHANDISER REFRIGERATION 37" - 49" (GLASS DOORS)



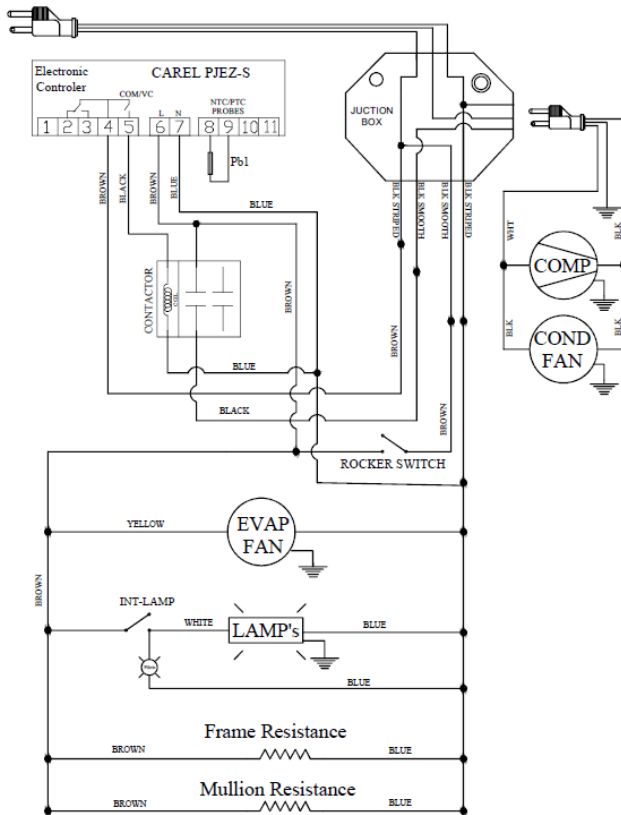
REACH IN FREEZER 17"-23" (SOLID DOOR)



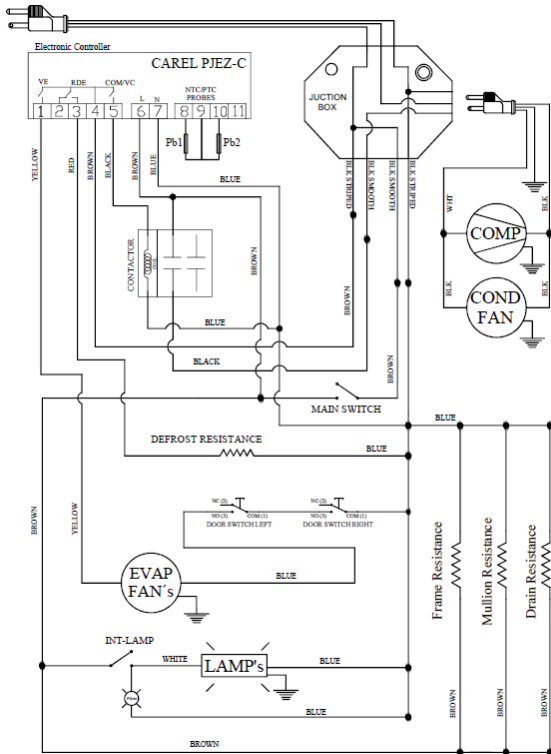
REACH IN AND MERCHANDISER FREEZER 17"-23" (GLASS DOOR)



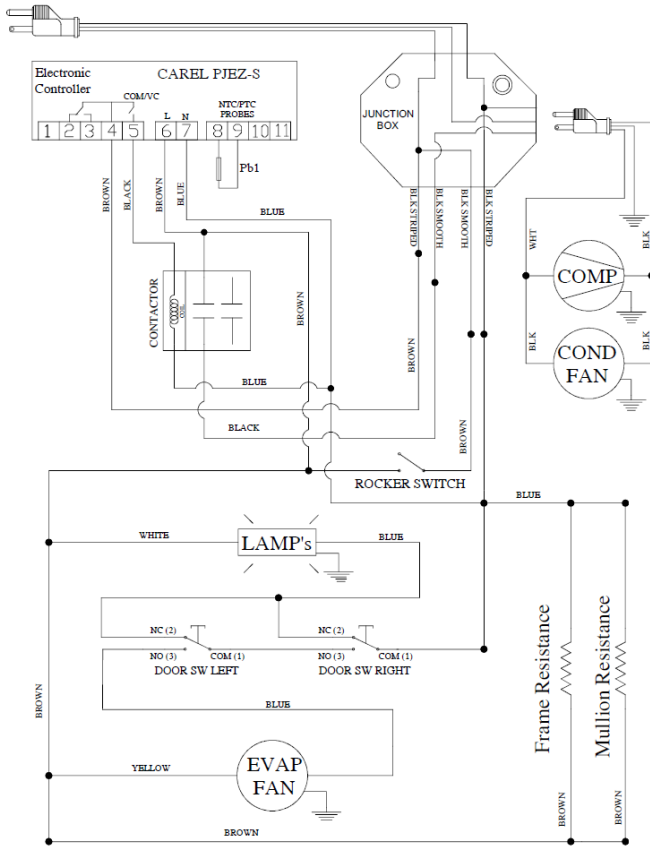
MERCHANDISER REFRIGERATION 35"-47" (SLIDE DOOR)



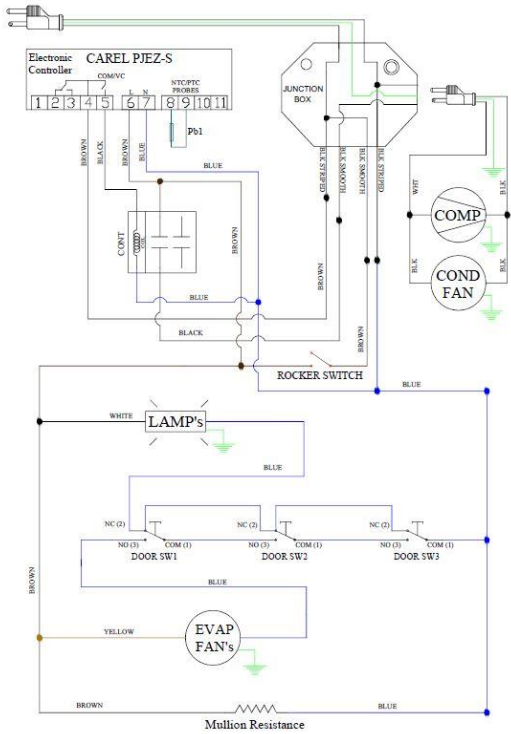
MERCHANDISER FREEZER 37"-49" (GLASS DOOR)



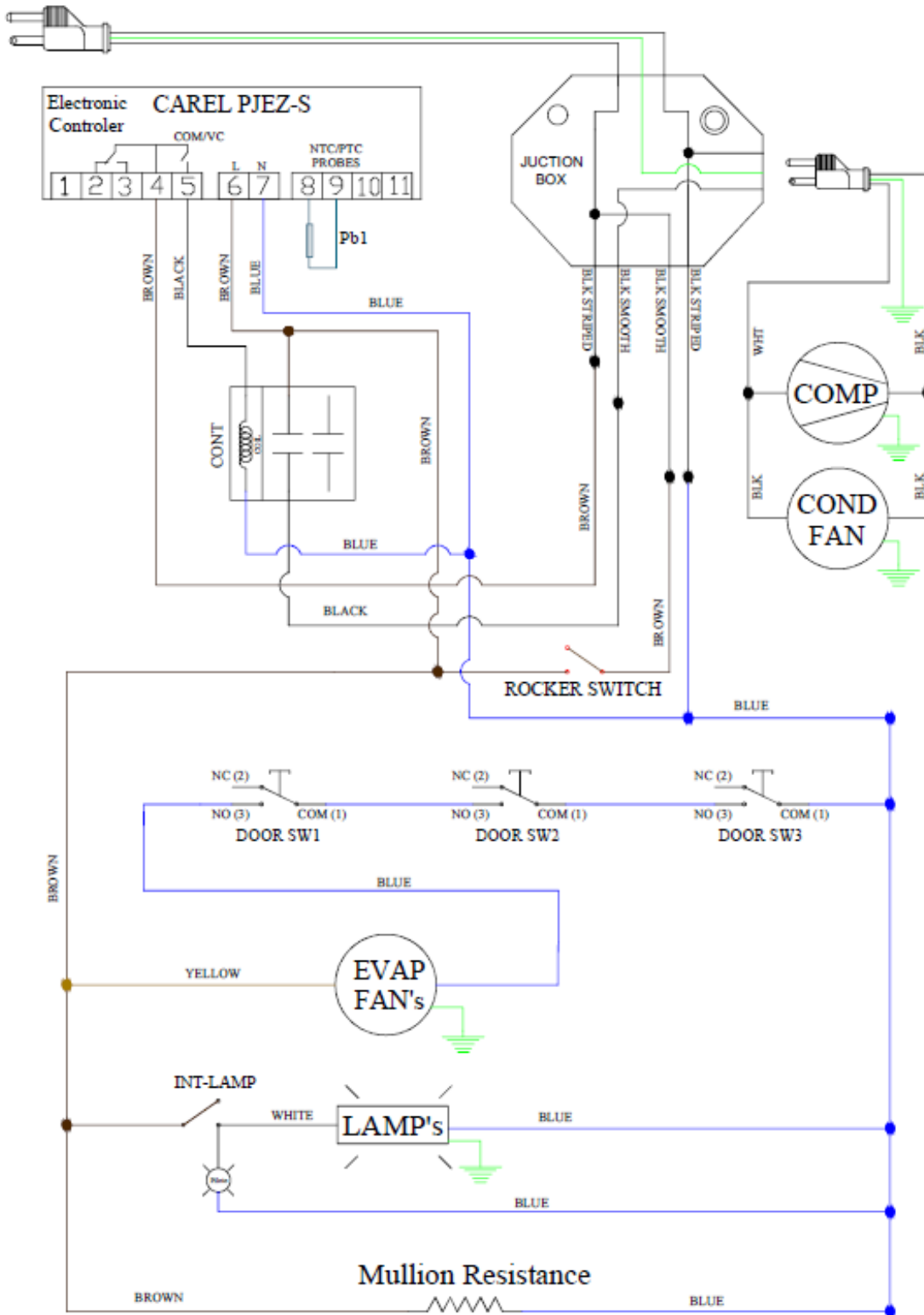
REACH IN FREEZER 49" (SOLID DOORS)



REACH IN REFRIGERATION 72" (SOLID DOORS)

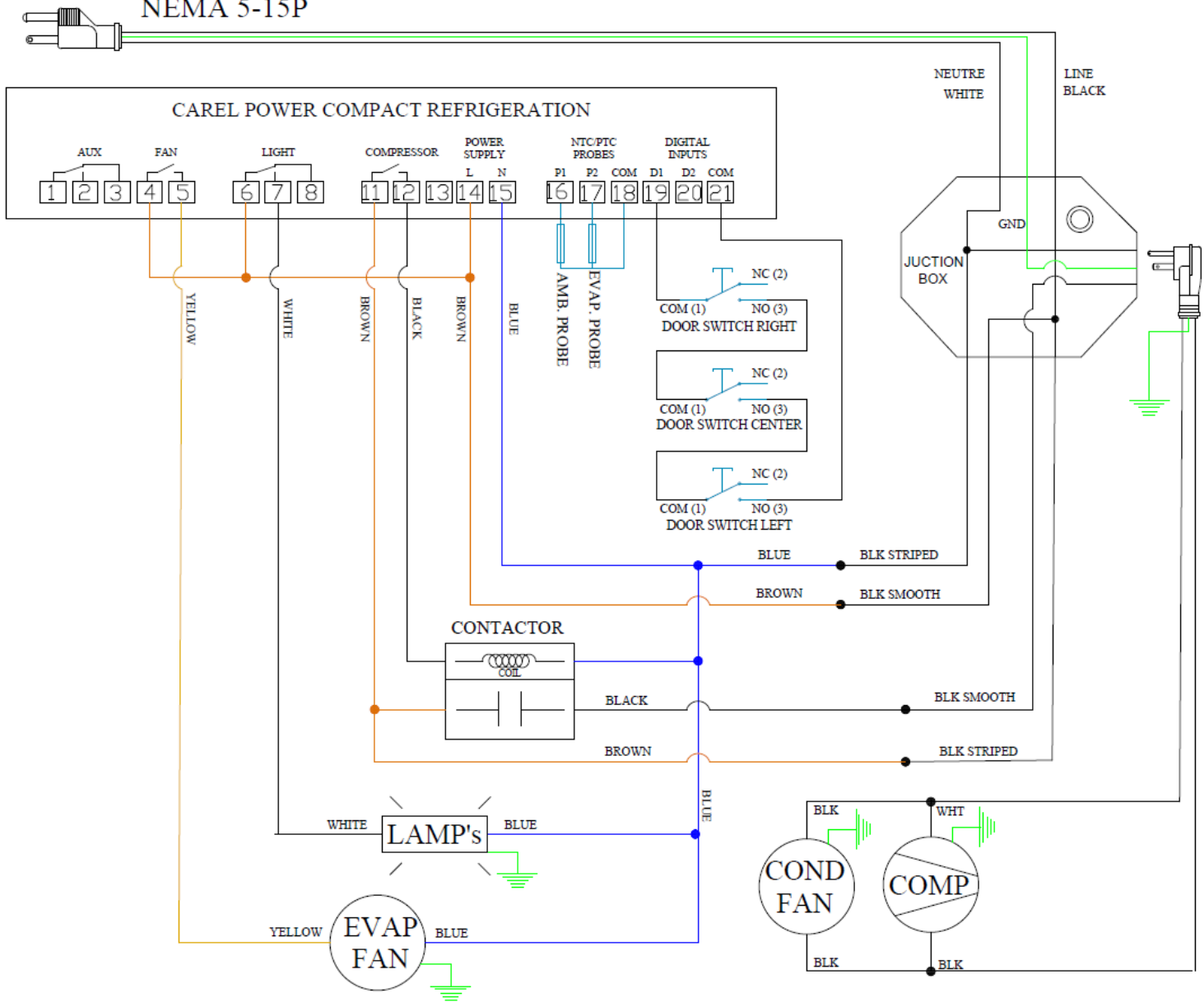


MERCHANDISER REFRIGERATION 72" (GLASS DOOR)

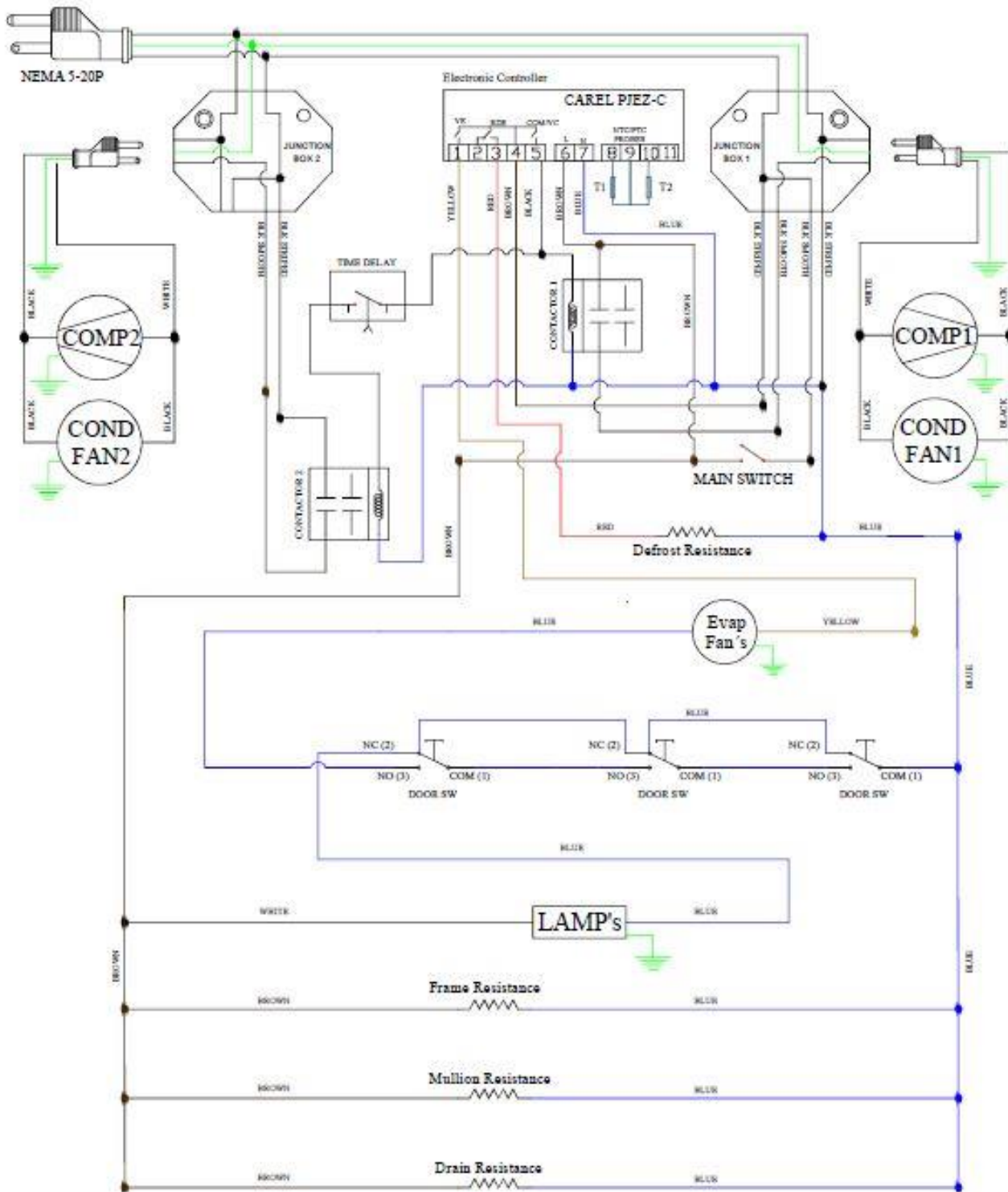


REACH IN REFRIGERATION 72" (SOLID DOORS)

NEMA 5-15P



REACH IN FREEZER 72"



REACH IN FREEZER 72"

NEMA 5-20P

