

DSL Series

Original Instructions Installation, Operation and Maintenance Manual

This manual is updated as new information and models are released.

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Safety Notices

Warning

Read this manual thoroughly before operating, installing or performing maintenance on the equipment. Failure to follow instructions in this manual can cause property damage, injury or death.

DANGER

Do not install or operate equipment that has been misused, abused, neglected, damaged, or altered/modified from that of original manufactured specifications.

DANGER

Never stand on the unit! They are not designed to hold the weight of an adult, and may collapse or tip if misused in this manner.

DANGER

Keep power cord AWAY from HEATED surfaces. DO NOT immerse power cord or plug in water. DO NOT let power cord hang over edge of table or counter.

DANGER

All utility connections and fixtures must be maintained in accordance with local and national codes.

Warning

Authorized Service Representatives are obligated to follow industry standard safety procedures, including, but not limited to, local/national regulations for disconnection / lock out / tag out procedures for all utilities including electric, gas, water and steam.

Warning

Do not store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance. Never use flammable oil soaked cloths or combustible cleaning solutions, for cleaning.

Warning

Risk of fire/flammable materials.
R-290 is a refrigerant class A3 per ANSI/ASHRAE 34



A3

Warning

This product contains chemicals known to the State of California to cause cancer and/or birth defects or other reproductive harm. Operation, installation, and servicing of this product could expose you to airborne particles of glasswool or ceramic fibers, crystalline silica, and/or carbon monoxide. Inhalation of airborne particles of glasswool or ceramic fibers is known to the State of California to cause cancer. Inhalation of carbon monoxide is known to the State of California to cause birth defects or other reproductive harm.

Warning

Do not use electrical appliances inside the food storage compartments of the appliance, unless they are of the type recommended by the manufacturer.

Warning

Use caution when handling metal surface edges of all equipment.

Warning

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 concerning use of the appliance by a person responsible for their safety. Do not allow children to play with this appliance.

Warning

Keep clear of obstruction all ventilation openings in the appliance enclosure.

Notice

Proper installation, care and maintenance are essential for maximum performance and trouble-free operation of your equipment. Visit our website www.delfield.com for manual updates, translations, or contact information for service agents in your area.

Notice

This product utilizes Ecomate blowing agent methyl formate.

Caution

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

Notice

NOTICE TO SERVICE AGENT

Ensure that the area is in the open or that it is adequately ventilated before breaking into the system or conducting any hot work. A degree of ventilation shall continue during the period that the work is carried out. The ventilation should safely disperse any released refrigerant and preferably expel it externally into the atmosphere.

Check that cabling will not be subject to wear, corrosion, excessive pressure, vibration, sharp edges, or any other adverse environmental effects. The check shall also take into account the effects of aging or continual vibration from sources such as compressors or fans.

Under no circumstances shall potential sources of ignition be used in the searching for or detection of refrigerant leaks. A halide torch (or any other detector using a naked flame) shall not be used.

The following leak detection methods are deemed acceptable for all refrigerant systems.

Electronic leak detectors may be used to detect refrigerant leaks but, in the case of flammable refrigerants, the sensitivity might not be adequate, or might need re-calibration. (Detection equipment shall be calibrated in a refrigerant-free area.) Ensure that the detector is not a potential source of ignition and is suitable for the refrigerant used.

Leak detection equipment shall be set at a percentage of the LFL of the refrigerant and shall be calibrated to the refrigerant employed, and the appropriate percentage of gas (25 % maximum) is confirmed.

Leak detection fluids are also suitable for use with most refrigerants but the use of detergents containing chlorine shall be avoided as the chlorine can react with the refrigerant and corrode the copper pipe-work.

NOTE Examples of leak detection fluids are:

- bubble method,
- fluorescent method agents.

If a leak is suspected, all naked flames shall be removed/ extinguished.

If a leakage of refrigerant is found which requires brazing, all of the refrigerant shall be recovered from the system. or isolated (by means of shut off valves) in a part of the system remote from the leak

Notice

Do not store explosive substances such as aerosol cans with a flammable propellant in this appliance.

Notice

This appliance tested to Climate Class 5 (40°C/104°F) temperature and 40% relative humidity.

Notice

Component parts shall be replaced with like components so as to minimize the risk of possible ignition due to incorrect parts.

Notice

This appliance is to be installed in accordance with the Safety Standard for Refrigeration Systems, ANSI/ASHRAE 15.

Notice

Shelf weight capacity is 30lb/ft² of usable shelf space.

Notice

All maintenance, service, and repair operations shall only be carried out by competent persons properly trained in refrigeration repair and service, with specific training for the use of flammable refrigerants. Examples of such working procedures are:

- Breaking into the refrigerating circuit
- Opening of sealed components
- Opening of ventilated enclosures

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Section 1

General Information

Model Numbers

This manual covers the following models:

One Door Section	Two Door Section	Three Door Section
Reach-In Dual Temperature		
DSLDTTR1-SH DSLDTBR1-SH	DSLDTFL2-S DSLDTRL2-S	-
Reach-In Freezer		
DSLFF1-S(H)	DSLFF2-S(H)	DSLFF3-S(H)
DSLFF1-G(H)	DSLFF2-G(H)	DSLFF3-G(H)
Pass-Thru Freezer		
DSLFP1-S(H)	DSLFP2-S(H)	-
Roll-In Freezer		
DSLFR1-S	DSLFR2-S	-
Reach-In Heated		
DSLH1-G(H)	DSLH2-G(H)	-
DSLH1-S(H)	DSLH2-S(H)	-
Pass-Thru Heated		
DSLHP1-G(H)	DSLHP2-G(H)	-
DSLHP1-S(H)	DSLHP2-S(H)	-
Roll-In Heated		
DSLHR1-G	DSLHR2-G	-
DSLHR1-S	DSLHR2-S	-
Roll-Thru Heated		
DSLHRT1-S	DSLHRT2-S	-
Reach-In Refrigerator		
DSLRR1-G(H)	DSLRR2-G(H)	DSLRR3-G(H)
DSLRR1-S(H)	DSLRR2-S(H)	DSLRR3-S(H)
DSLRR1-S(H)	DSLRR2-S(H)	DSLRR3-S(H)
Pass-Thru Refrigerator		
DSLRRPT1-G(H)	DSLRRPT2-G(H)	-
DSLRRPT1-S(H)	DSLRRPT2-S(H)	-
Roll-In Refrigerator		
DSLRR1-G	DSLRR2-G	-
DSLRR1-S	DSLRR2-S	-
Roll-Thru Refrigerator		
DSLRRRT1-S	DSLRRRT2-S	-

Serial Number Information

The model number and serial number are on the identification plate. The identification plate is located near the top front corner of the left interior wall.

Always have the serial number of your unit available when calling for parts or service.

Warranty Information



Visit

<http://www.delfield.com/warranty> to:

- Register your product for warranty.
- Verify warranty information.
- View and download a copy of your warranty.

Regulatory Certifications

Models are certified by:

-  Underwriters Laboratories (UL)
-  UL-EPH

Section 2 Installation

⚠ DANGER

Installation must comply with all applicable fire and health codes in your jurisdiction.

⚠ DANGER

Use appropriate safety equipment during installation and servicing.

Location

⚠ Warning

This equipment must be positioned so that the plug is accessible unless other means for disconnection from the power supply (e.g., circuit breaker or disconnect switch) is provided.

⚠ Warning

Adequate means must be provided to limit the movement of this appliance without depending on or transmitting stress to the electrical cord.

⚠ Warning

To avoid instability the installation area must be capable of supporting the combined weight of the equipment and product. Additionally the equipment must be level side to side and front to back.

⚠ Warning

This equipment is intended for indoor use only. Do not install or operate this equipment in outdoor areas.

The location selected for the equipment must meet the following criteria. If any of these criteria are not met, select another location.

- Units are intended for indoor use only.
- The location **MUST** be level, stable and capable of supporting the weight of the equipment.
- The location **MUST** be free from and clear of combustible materials.
- Equipment **MUST** be level both front to back and side to side.
- Position the equipment so it will not tip or slide.
- Front casters **MUST** be locked once positioned.
- Recommended air temperature is 60° - 100°F (16° - 38°C).

- Proper air supply for ventilation is **REQUIRED AND CRITICAL** for safe and efficient operation. Refer to Clearance Requirements chart below.
- Do not obstruct the flow of ventilation air. Make sure the air vents of the equipment are not blocked.
- Do not install the equipment where air vents are blowing directly at it.
- Do not install the equipment directly over a drain. Steam rising up out of the drain will adversely affect operation, air circulation, and damage electrical / electronic components.

Location Requirements

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

	Minimum	Maximum
Refrig. Voltage	103.5	126.5
Heater Voltage	208	240
Room Temp	60°F (15°C)	100°F (37.7°C)

Clearance Requirements

⚠ DANGER

Minimum clearance requirements are the same for noncombustible locations as for combustible locations. The flooring under the appliance must be made of a noncombustible material.

⚠ DANGER

Risk of fire/shock. All minimum clearances must be maintained. Do not obstruct vents or openings.

Top
12.00" (305mm)

- Keep the vents clean and free of obstruction.
- Casters or optional legs must be used and not removed.

Drain Connections

⚠ Warning

Moisture collecting from improper drainage can create a slippery surface on the floor and a hazard to employees. It is the owner's responsibility to provide a container or outlet for drainage.

Weight, Capacity & Dimensions of Equipment

Model	Weight	Shelf Qty	Shelf Area	Volume	Length	Depth	Height
Reach-In Dual Temperature							
DSLDTBR1-SH DSLDR1-SH	398lbs (181kg)	(2X)2	(2X)8ft ² (7432cm ²)	(2X)8.6ft ³ (244L)	27.40" (70cm)	32.44" (82cm)	79.50" (202cm)
DSLDFL2-S DSLDR2-S	575lbs (261kg)	6	25.25ft ² (23458cm ²)	42ft ³ (1189L)	55.22" (140cm)	32.44" (82cm)	79.50" (202cm)
Reach-In Freezer							
DSLFI-S(H)	354lbs (161kg)	3	11.5ft ² (10684cm ²)	21ft ³ (595L)	27.40" (70cm)	32.44" (82cm)	79.50" (202cm)
DSLFI-S(H)	495lbs (225kg)	6	25.25ft ² (23458cm ²)	46ft ³ (1303L)	55.22" (140cm)		
DSLFI-S(H)	772lbs (350kg)	9	39ft ² (36232cm ²)	71ft ³ (2011L)	83.00" (211cm)		
DSLFI-G(H)	354lbs (161kg)	3	11.5ft ² (10684cm ²)	21ft ³ (595L)	27.40" (70cm)		
DSLFI-G(H)	495lbs (225kg)	6	25.25ft ² (23458cm ²)	46ft ³ (1303L)	55.22" (140cm)		
DSLFI-G(H)	772lbs (350kg)	9	39ft ² (36232cm ²)	71ft ³ (2011L)	83.00" (211cm)		
Roll-In Freezer							
DSLFR1-S	466lbs (211kg)	NA	NA	37ft ³ (1048L)	34.00" (86cm)	34.00" (86cm)	89.00" (226cm)
DSLFR2-S	690lbs (313kg)	NA	NA	76.5ft ³ (2166L)	66.00" (168cm)		
Reach-In Heated							
DSLH1-G(H)	361lbs (164kg)	3	11.5ft ² (10684cm ²)	21ft ³ (595L)	27.40" (70cm)	32.44" (82cm)	79.50" (202cm)
DSLH1-S(H)	333lbs (151kg)						
DSLH2-G(H)	640lbs (290kg)	6	25.5ft ² (23690cm ²)	46ft ³ (1303L)	55.22" (140cm)		
DSLH2-S(H)	630lbs (286kg)						
Pass-Thru Heated							
DSLHPT1-G(H)	361lbs (164kg)	3	11.5ft ² (10684cm ²)	23ft ³ (651L)	27.40" (70cm)	34.75" (88cm)	79.50" (202cm)
DSLHPT1-S(H)	333lbs (151kg)						
DSLHPT2-G(H)	640lbs (290kg)	6	25.5ft ² (23690cm ²)	50ft ³ (1416L)	55.22" (140cm)		
DSLHPT2-S(H)	630lbs (286kg)						
Roll-In Heated							
DSLHRI1-G	486lbs (220kg)	NA	NA	37ft ³ (1048L)	34.00" (86cm)	34.00" (86cm)	89.00" (226cm)
DSLHRI1-S	446lbs (202kg)						
DSLHRI2-G	745lbs (338kg)	NA	NA	76.5ft ³ (2166L)	66.00" (168cm)		
DSLHRI2-S	715lbs (324kg)						
Roll-Thru Heated							
DSLHRT1-S	465lbs (211kg)	NA	NA	39ft ³ (1104L)	34.00" (86cm)	36.12" (92cm)	89.00" (226cm)
DSLHRT2-S	683lbs (310kg)	NA	NA	80.5ft ³ (2280L)	66.00" (168cm)		
Reach-In Refrigerator							
DSLRI-G(H)	351lbs (159kg)	3	11.5ft ² (10684cm ²)	21ft ³ (595L)	27.40" (70cm)	32.44" (82cm)	79.50" (202cm)
DSLRI-S(H)	236lbs (107kg)						
DSLRI-G(H)	495lbs (225kg)	6	25.25ft ² (23458cm ²)	46ft ³ (1303L)	55.22" (140cm)		
DSLRI-S(H)	322lbs (146kg)						
DSLRI-G(H)	767lbs (348kg)	9	39ft ² (36232cm ²)	71ft ³ (2011L)	83.00" (211cm)		
DSLRI-S(H)	485lbs (220kg)						
Pass-Thru Refrigerator							
DSLRT1-G(H)	472lbs (214kg)	3	12.12ft ² (11260cm ²)	23ft ³ (651L)	27.40" (70cm)	34.75" (88cm)	79.50" (202cm)
DSLRT1-S(H)	448lbs (203kg)						
DSLRT2-G(H)	680lbs (308kg)	6	26.5ft ² (24619cm ²)	50ft ³ (1416L)	55.22" (140cm)		
DSLRT2-S(H)	652lbs (296kg)						
Roll-In Refrigerator							
DSLRII1-G	486lbs (220kg)	NA	NA	37ft ³ (1048L)	34.00" (86cm)	34.00" (86cm)	89.00" (226cm)
DSLRII1-S	446lbs (202kg)						
DSLRII2-G	745lbs (338kg)	NA	NA	76.5ft ³ (2166L)	66.00" (168cm)		
DSLRII2-S	715lbs (324kg)						
Roll-Thru Refrigerator							
DSLRT1-S	486lbs (220kg)	NA	NA	39ft ³ (1104L)	34.00" (86cm)	36.12" (92cm)	89.00" (226cm)
DSLRT2-S	683lbs (310kg)	NA	NA	80.5ft ³ (2280L)	66.00" (168cm)		

Electrical Service

⚠ DANGER

Check all wiring connections, including factory terminals, before operation. Connections can become loose during shipment and installation.

⚠ Warning

This appliance must be grounded and all field wiring must conform to all applicable local and national codes. Refer to rating plate for proper voltage. It is the responsibility of the end user to provide the disconnect means to satisfy the authority having jurisdiction.

- All electrical work, including wire routing and grounding, must conform to local, state and national electrical codes.
- The equipment must be grounded.
- A separate fuse/circuit breaker must be provided for each unit.
- The maximum allowable voltage variation is ±10% of the rated voltage at equipment start-up (when the electrical load is highest).
- Check all green ground screws, cables and wire connections to verify they are tight before start-up.

GROUND FAULT CIRCUIT INTERRUPTER

Ground Fault Circuit Interrupter (GFCI/GFI) protection is a system that shuts down the electric circuit (opens it) when it senses an unexpected loss of power, presumably to ground. Welbilt does not recommend the use of GFCI/GFI circuit protection to energize our equipment. If code requires the use of a GFCI/GFI then you must follow the local code. The circuit must be dedicated, sized properly and there must be a panel GFCI/GFI breaker. We do not recommend the use of GFCI/GFI outlets to energize our equipment as they are known for more intermittent nuisance trips than panel breakers.

ELECTRICAL SPECIFICATION CHART

Maximum 10ft (3m) cord with plug.

Model	Amps	V, Hz, Ph	H.P.	Nema Plug
Reach-In Dual Temperature				
DSLDTBR1-SH DSLDR1-SH	6.7	115, 60, 1	Ref. 0.20 Frzr. 0.315	5-15P
DSLDFL2-S DSLDR2L2-S	11.4	115, 60, 1	Ref. 0.22 Frzr. 0.55	5-15P
Reach-In Freezer				
DSL1F1-S(H)	7.2	115, 60, 1	0.55	5-15P
DSL2F2-S(H)	10.0	115, 60, 1	0.68	5-15P
DSL3F3-S(H)	14.7	115, 60, 1	(2X)0.55	5-20P
DSL1F1-G(H)	9.1	115, 60, 1	0.75	5-15P
DSL2F2-G(H)	13.9	115, 60, 1	(2x)0.75	5-20P
DSL3F3-G(H)	13.9	115, 60, 1	(2x)0.75	5-20P
Pass-Thru Freezer				
DSL1PT1-S(H)	10.0	115, 60, 1	0.55	5-15P
DSL2PT2-S(H)	14.6	115, 60, 1	(2X)0.55	5-20P
Roll-In Freezer				
DSL1RI1-S	10.0	115, 60, 1	0.68	5-15P
DSL2RI2-S	14.6	115, 60, 1	(2X)0.55	5-20P
Reach-In Heated				
DSL1H1-G(H)	6.0	208-240, 60, 1	NA	6-20P
DSL1H1-S(H)	6.0			
DSL2H2-G(H)	10.5	208-240, 60, 1	NA	6-20P
DSL2H2-S(H)	10.5			
Pass-Thru Heated				
DSL1HT1-G(H)	6.0	208-240, 60, 1	NA	6-20P
DSL1HT1-S(H)	6.0			
DSL2HT2-G(H)	10.5	208-240, 60, 1	NA	6-20P
DSL2HT2-S(H)	10.5			
Roll-In Heated				
DSL1RI1-G	6.0	208-240, 60, 1	NA	6-20P
DSL1RI1-S	6.0			
DSL2RI2-G	10.5	208-240, 60, 1	NA	6-20P
DSL2RI2-S	10.5			
Roll-Thru Heated				
DSL1HRT1-S	6.0	208-240, 60, 1	NA	6-20P
DSL2HRT2-S	10.5	208-240, 60, 1	NA	6-20P
Reach-In Refrigerator				
DSL1R1-G(H)	4.2	115, 60, 1	0.22	5-15P
DSL1R1-S(H)	4.2			
DSL2R2-G(H)	6.0	115, 60, 1	0.35	5-15P
DSL2R2-S(H)	6.0			
DSL3R3-G(H)	6.5	115, 60, 1	0.38	5-15P
DSL3R3-S(H)	6.5			
Pass-Thru Refrigerator				
DSL1RPT1-G(H)	4.5	115, 60, 1	0.22	5-15P
DSL1RPT1-S(H)	4.5			
DSL2RPT2-G(H)	6.2	115, 60, 1	0.35	5-15P
DSL2RPT2-S(H)	6.2			
Roll-In Refrigerator				
DSL1RRI1-G	4.5	115, 60, 1	0.35	5-15P
DSL1RRI1-S	4.5			
DSL2RRI2-G	6.4	115, 60, 1	0.38	5-15P
DSL2RRI2-S	6.4			
Roll-Thru Refrigerator				
DSL1RRT1-S	4.5	115, 60, 1	0.35	5-15P
DSL2RRT2-S	6.4	115, 60, 1	0.38	5-15P

ENERGY USE

Model	Energy Use in kWh	Energy Star® Certified
Reach-In Dual Temperature		
DSLDTBR1-SH DSLDR1-SH	4.26	
DSLDFL2-S DSLDR2-S	4.87	
Reach-In Freezer		
DSLDF1-S	5.86	
DSLDF1-SH	5.59	
DSLDF2-S	10.65	
DSLDF2-SH	9.69	
DSLDF3-S	10.50	
DSLDF3-SH	12.20	✓
DSLDF1-G	7.68	
DSLDF1-GH	7.68	
DSLDF2-G	10.13	✓
DSLDF2-GH	10.13	✓
DSLDF3-G	12.59	
DSLDF3-GH	12.59	
Pass-Thru Freezer		
DSLDFPT1-S	5.11	
DSLDFPT1-SH	5.26	
DSLDFPT2-S	9.34	
DSLDFPT2-SH	11.33	
Roll-In Freezer		
DSLDFRI1-S	7.65	
DSLDFRI2-S	14.34	
Reach-In Heated		
DSLH1-G	159.32	
DSLH1-GH	183.64	
DSLH1-S	141.13	
DSLH1-SH	145.09	
DSLH2-G	302.56	
DSLH2-GH	299.05	
DSLH2-S	245.59	
DSLH2-SH	233.88	
Pass-Thru Heated		
DSLHPT1-G	228.64	
DSLHPT1-GH	234.91	
DSLHPT1-S	171.92	
DSLHPT1-SH	192.07	
DSLHPT2-G	421.26	
DSLHPT2-GH	408.35	
DSLHPT2-S	290.30	
DSLHPT2-SH	300.24	
Roll-In Heated		
DSLHRI1-G	308.61	
DSLHRI1-S	241.56	
DSLHRI2-G	560.69	
DSLHRI2-S	427.80	
Roll-Thru Heated		
DSLHRT1-S	295.39	
DSLHRT2-S	504.63	
Reach-In Refrigerator		
DSL1-G	2.08	
DSL1-GH	1.66	

Model	Energy Use in kWh	Energy Star® Certified
DSL1-S	1.37	
DSL1-SH	1.70	
DSL2-G	3.18	
DSL2-GH	2.91	
DSL2-S	2.71	
DSL2-SH	2.49	
DSL3-G	4.92	✓
DSL3-GH	4.55	✓
DSL3-S	3.59	
DSL3-SH	3.54	
Pass-Thru Refrigerator		
DSL1PT1-G	2.45	
DSL1PT1-GH	2.46	
DSL1PT1-S	1.79	
DSL1PT1-SH	1.99	
DSL1PT2-G	3.67	
DSL1PT2-GH	3.54	
DSL1PT2-S	2.30	
DSL1PT2-SH	2.49	
Roll-In Refrigerator		
DSL1RI1-G	2.74	
DSL1RI1-S	2.30	
DSL1RI2-G	5.18	
DSL1RI2-S	5.13	✓
Roll-Thru Refrigerator		
DSL1RT1-S	2.49	
DSL1RT2-S	4.64	

Refrigeration

Model	Heat of Rejection (BTU)	BTU/Hour Capacity	R290 Charge
Reach-In Dual Temperature			
DSLDTBR1-SH	Ref. 232	Ref. 1431	Ref. 78g
DSLDTDR1-SH	Frzr. 401	Frzr. 1094	Frzr. 62g
DSLDTFL2-S	Ref. 420	Ref. 1920	Ref. 113g
DSLDTRL2-S	Frzr. 790	Frzr. 2035	Frzr. 93g
Reach-In Freezer			
DSL1-S(H)	790	2035	93g
DSL2-S(H)	1380	2485	109g
DSL3-S(H)	1800	4070	(2X)110g
DSL1-G(H)	3675	2450	130g
DSL2-G(H)	7350	4900	(2x)130g
DSL3-G(H)	7250	4900	(2X)130g
Pass-Thru Freezer			
DSL1-S(H)	930	2035	93g
DSL2-S(H)	1630	4070	(2X)110g
Roll-In Freezer			
DSL1-S	1401	2261	109g
DSL2-S	2458	4523	(2X)110g
Reach-In Refrigerator			
DSL1-G(H)	570	1920	113g
DSL1-S(H)	420	1920	113g
DSL2-G(H)	930	2540	113g
DSL2-S(H)	620	2540	113g
DSL3-G(H)	1400	3865	118g
DSL3-S(H)	940	3865	118g
Pass-Thru Refrigerator			
DSL1-G(H)	690	1860	113g
DSL1-S(H)	460	1860	113g
DSL2-G(H)	1260	3760	113g
DSL2-S(H)	800	3760	113g
Roll-In Refrigerator			
DSL1-G	800	2470	113g
DSL1-S	680	2470	113g
DSL2-G	1460	3760	118g
DSL2-S	1230	3760	118g
Roll-Thru Refrigerator			
DSL1-S	830	2470	113g
DSL2-S	1530	3760	118g

Air Flow

Unit draws room ambient air in from the front of the upper shroud and expels heated air to atmosphere out through the back of the upper shroud.

Glass Door Support

Glass door units will ship with a door support bracket at the bottom of each section to prevent unnecessary shipping damage. The bracket should be removed before use.

Leg & Caster Installation

Warning

The unit must be installed in a stable condition with the front wheels locked. Locking the front casters after installation is the owner's and operator's responsibility.

Warning

Use a jack to lift the refrigeration unit off the ground just far enough to remove the leg/caster. Place blocking underneath the unit. Do not work underneath a raised unit without proper blocking. Do not lift the unit more than necessary to remove the leg/caster. Lifting the unit too far can make the unit unstable.

Caution

All single-section units require that the swivel casters be mounted on the front and rigid casters be mounted on the rear.

To remove the skid:

1. Securely lift or tilt the unit to access the hardware under the unit. If tilting the unit, securely block the unit to prevent injury or damage.

To install the legs or casters:

1. With unit raised or tilted to access leg/caster mounting holes on bottom of unit, attach the legs or casters to bottom of cabinet by threading the stem of the leg/caster into the 1/2" mounting hole.
2. Tighten the lock nut to the stem or caster.
3. If leveler plates are needed, loosen the stem leg/caster and insert the shim between the bottom of the cabinet and stem/caster. Re-tighten the stem and lock nut.

Level & Stable

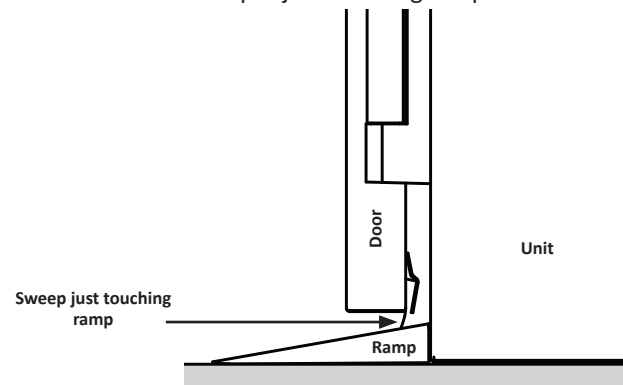
After the cabinet has been placed in the desired location, cabinets must be leveled. Level units from front to back and from side to side. Leveling will insure proper door operation and removal of condensate.

- It is very important that all legs are properly adjusted to keep the cabinet level, evenly distribute the weight and to make sure the unit will not rock, lean or be unstable.
- Cabinets with casters must have the caster brake set so the cabinet cannot move. Shim casters if necessary to level unit.
- Roll-In and roll-thru units must also be level. Shim the bottom of the unit if necessary. See Roll-In & Roll-Thru Installation on page 12.
- Adjust doors and hinges until doors close properly.

Roll-In & Roll-Thru Installation

NOTE: Local area codes may dictate other installation requirements not mentioned.

1. Verify unit is level with 4' Level. Shim as needed. Depending on the height of the shims, stainless trim may be needed to fill in a large gap between the unit and the floor.
2. Remove door sweep before making door adjustments.
3. Adjust doors hinges so door closes by itself.
 - A properly adjusted door will close and seal when the door is held open 3" or less with no assistance.
4. Reinstall door sweep. It may need to be reinstalled in new holes so that it does not interfere with the door closing.
 - If it is too tight to ramp it will hold door open.
 - Make sure sweep is just touching ramp when closed.



5. Verify once again that the door will close and seal when held open 3" or less.
6. If this is a multi-section unit make sure door stays shut or closes by itself when other doors are shut.
7. Using silicone, seal the ramp to the floor; seal the unit to the floor and walls. The silicone will make sure that no water can get under the unit or ramps. If shims and stainless trim are added they also need to be sealed to the unit and the floor.

Clearance and Placement

Placement

Consider the following when selecting a location for your Refrigerator:

Clearance:

- 12 in. at the top
- 0.0 in. at the rear
- 0.0 in. at the left side
- 0.0 in. at the right side

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.

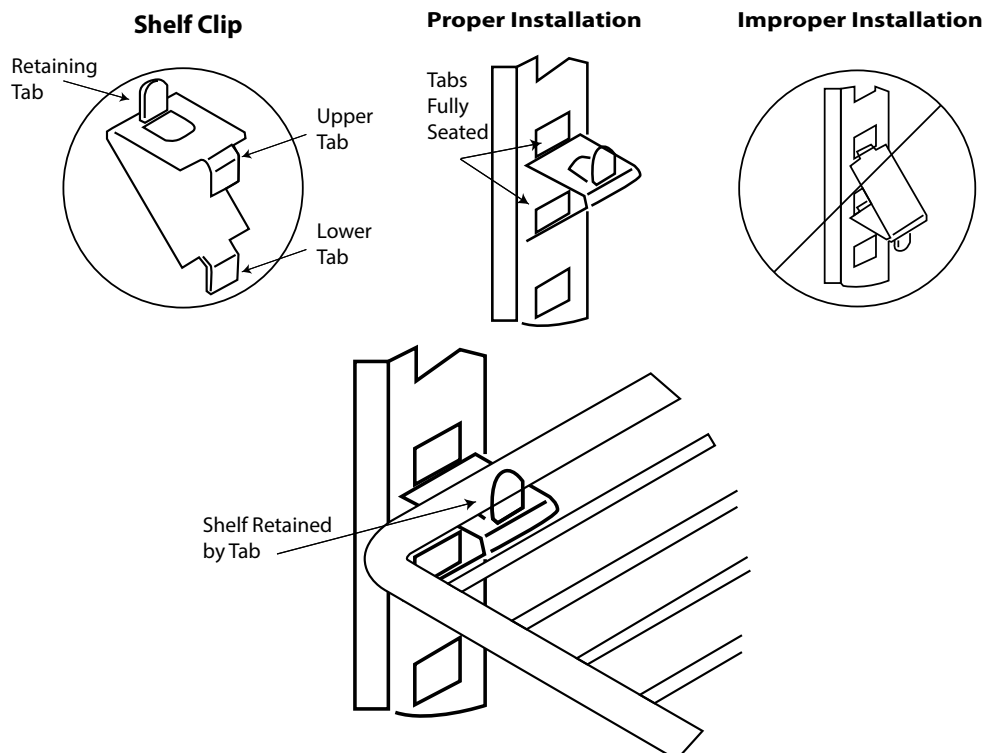
Ventilation: Grill area at front must be free and clear of any object or wall.

Power Outlet: Dedicated power outlet is located within the length of the unit's power cord.

Shelf Installation

1. Determine the proper location for the shelf clips.
2. Insert the top tab of the shelf clip into the desired hole of the pilaster. The retaining tab **MUST** be facing up as shown.

3. Rotate the clip downwards and insert the bottom tab into the matching hole in the pilaster. The clip may need to be squeezed slightly during installation.
4. Install all remaining clips.
5. Install shelves onto clips with the product retention bar facing up. Be careful not to dislodge clips during installation.
6. Place shelves so that the retaining tab on the clip captures the shelf as shown.
7. Confirm that the shelf is resting on ALL 4 clips and that the clips are securely attached to the pilasters.
8. Improper shelf clip installation could cause the shelf and / or the product on it to fall, resulting in damage to the unit and possible bodily injury.
9. Do NOT overload the shelves. The unit is designed to use all shelves that are supplied in an equally spaced manner. Contact Victory customer service if fewer shelves or a different configuration to ensure shelf overloading will not occur.



Section 3 Operation

DANGER

The on-site supervisor is responsible for ensuring that operators are made aware of the inherent dangers of operating this equipment.

DANGER

Do not operate any appliance with a damaged cord or plug. All repairs must be performed by a qualified service company.

DANGER

Keep power cord AWAY from HEATED surfaces. DO NOT immerse power cord in water. DO NOT let power cord hang over edge of table or counter.

Warning

Do not contact moving parts.

Warning

All covers and access panels must be in place and properly secured, before operating this equipment.

Warning

Do not use electrical appliances inside the food storage compartments of the appliance, unless they are of the type recommended by the manufacturer.

Warning

The operator of this equipment is solely responsible for ensuring safe holding temperature levels for all food items. Failure to do so could result in unsafe food products for customers.

Warning

Overloading shelves can damage equipment or cause bodily injury.

Warning

Damp or wet hands may stick to cold surfaces.

Warning

Do not block the supply and return air grills or the air space around the air grills. Keep plastic wrappings, paper, labels, etc. from being airborne and lodging in the grills. Failure to keep the air grills clear will result in unsatisfactory operation of the system.

Caution

Do not throw items into the storage area. Failure to heed this recommendation could result in damage to the interior of the cabinet or to the blower coil.

This section will cover the basic operations, start up and use of the models within this manual. For further information and operation of controls visit section 5: Control Settings and Configurations, which will cover the in depth settings within the following options.

INITIAL START-UP

Refrigerator

Plug the power cord into the proper power supply. The cabinet will soon begin to blow warm air out of the top area, and cool air will flow from the inside blower. The cabinet temperature has been set at the factory and should not need adjustment. Factory setpoint is 38°F.

Freezer

Plug the power cord into the proper power supply. The cabinet will soon begin to blow warm air out of the top area, and cool air will flow from the inside blower. The cabinet temperature has been set at the factory and should not need adjustment. Factory setpoint is 0°F.

Heated

Plug the power cord into the proper power supply. The cabinet will not heat until a selection mode is applied.

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Section 4 Maintenance

⚠ DANGER

It is the responsibility of the equipment owner to perform a Personal Protective Equipment Hazard Assessment to ensure adequate protection during maintenance procedures.

⚠ DANGER

Failure to disconnect the power at the main power supply disconnect could result in serious injury or death. The power switch DOES NOT disconnect all incoming power.

⚠ DANGER

Disconnect electric power at the main power disconnect for all equipment being serviced. Observe correct polarity of incoming line voltage. Incorrect polarity can lead to erratic operation.

⚠ Warning

Never use sharp objects or tools to remove ice or frost. Do not use mechanical devices or other means to accelerate the defrosting process.

⚠ Warning

When cleaning interior and exterior of unit, care should be taken to avoid the front power switch and the rear power cord. Keep water and/or cleaning solutions away from these parts.

⚠ Warning

When using cleaning fluids or chemicals, rubber gloves and eye protection (and/or face shield) must be worn.

⚠ Caution

Maintenance and servicing work other than cleaning as described in this manual must be done by an authorized service personnel.

Notice

Never use a high-pressure water jet for cleaning or hose down or flood interior or exterior of units with water. Do not use power cleaning equipment, steel wool, scrapers or wire brushes on stainless steel or painted surfaces.

Responsibility

You are responsible for maintaining the equipment in accordance with the instructions in this manual. Maintenance procedures are not covered by the warranty.

Maintenance	Daily	Weekly	Quarterly	After Prolonged Shutdown	At Start-Up
Interior	X			X	X
Gasket	X			X	X
Exterior	X			X	X
Drawer Track		X		X	X
Drain			X	X	X
Condenser Coil			X	X	X
Hinge screws			X	X	X

Interior Cleaning

The interior can be cleaned using soap and warm water. If this isn't sufficient, try ammonia and water or a nonabrasive liquid cleaner.

GASKETS

Gaskets require regular cleaning to prevent mold and mildew build up and also to retain the elasticity of the gasket. Clean them with water and mild soap (not citrus based). Avoid full strength cleaning products on gaskets as this can cause them to become brittle and crack. Never use sharp tools or knives to scrape or clean the gasket. Gaskets can be easily replaced and do not require the use of tools or an authorized service person. The gaskets are dart style and can be pulled out of the groove in the door. Place gasket in warm water to make the material more pliable for installation. Dry and press into place.



Watch a Delfield TechTalk Video on Cleaning & Replacing Door Gaskets here!

PREVENTING BLOWER COIL CORROSION

To help prevent corrosion of the blower coil, store all acidic items, such as pickles and tomatoes, in seal-able containers. Immediately wipe up all spills.

Exterior Cleaning

Notice

Never use an acid based cleaning solution on exterior panels! Many food products have an acidic content, which can deteriorate the finish. Be sure to clean the stainless steel surfaces of ALL food products.

Clean the area around the unit as often as necessary to maintain cleanliness and efficient operation.

Wipe exterior surfaces with a damp cloth rinsed in water to remove dust and dirt from the outside of the unit. Always rub with the "grain" of the stainless steel to avoid marring the finish. If a greasy residue persists, use a damp cloth rinsed in a mild dish soap and water solution. Wipe dry with a clean, soft cloth.

Never use steel wool or abrasive pads for cleaning. Never use chlorinated, citrus based or abrasive cleaners.

Stainless steel exterior panels have a clear coating that is stain resistant and easy to clean. Products containing

abrasives will damage the coating and scratch the panels. Daily cleaning may be followed by an application of stainless steel cleaner which will eliminate water spotting and fingerprints. Early signs of stainless steel breakdown are small pits and cracks. If this has begun, clean thoroughly and start to apply stainless steel cleaners in attempt to restore the steel.

Wipe casters with a damp cloth to prevent corrosion.

DRAIN

Each refrigerated unit has a drain located inside the unit that removes the condensation from the evaporator coil and routes it to an external condensate evaporator pan. Each drain can become loose or disconnected during normal use. If you notice water accumulation on the inside of the unit, be sure the drain tube is connected to the evaporator drain pan. If water is collecting underneath the unit, make sure the end of the drain tube is in the condensate evaporator. The leveling of the unit is important as the units are designed to drain properly when level. Be sure all drain lines are free of obstructions.

DOORS/HINGES

Over time and with heavy-use doors, the hinges may become loose. If this happens, tighten the screws that mount the hinge brackets to the frame of the unit. Loose or sagging doors can cause the hinges to pull out of the frame, which may damage both the doors and the hinges. In some cases this may require qualified service agents or maintenance personnel to perform repairs.

Cleaning the Condenser Coil

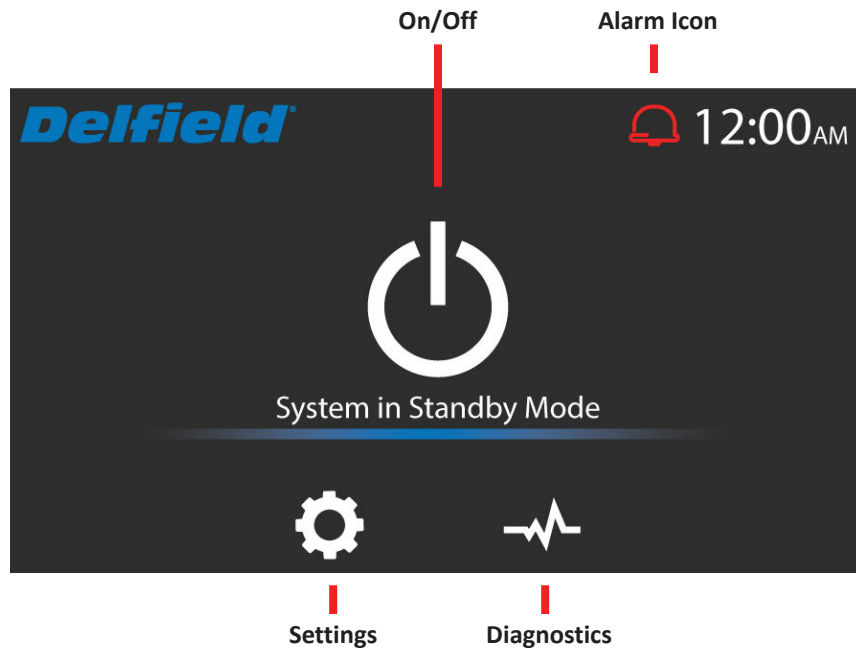
In order to maintain proper refrigeration performance, the condenser fins must be cleaned of dust, dirt and grease regularly. It is recommended that this be done monthly. If conditions are such that the condenser is totally blocked in a month, the frequency of cleaning should be increased. Clean the condenser with a vacuum cleaner or stiff brush. If extremely dirty, a commercially available condenser cleaner may be required.

Failure to maintain a clean condenser coil can initially cause high temperatures and excessive run times. Continuous operation with a dirty or clogged condenser coil can result in compressor failure. Neglecting the condenser coil cleaning procedures will void any warranties associated with the compressor and cost to replace the compressor.

CLEANING STAINLESS STEEL

Need	Cleaning Agent	Method	Affect
Smears and finger-prints	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 Cleane	Rub with damp cloth	
	Grade FFF Italian pumice, whiting, or talc.	Rub with damp cloth	
	Liquid NuSteel Paste NuSteel or DuBois Temp. Copper's Stainless Steel Cleaner Revere Stainless Cleaner Household cleansers	Use small amount of cleaner. Rub with dry cloth using a small amount of cleaner. Apply with damp sponge or cloth.	
Heat tint or discoloration	Penny-Brite or Copper-Brite. Past NuSteel, DuBois Temp, or Tarnite. Revere Stainless Steel Cleaner.	Rub with a dry cloth.	
Burnt-On Foods and Grease Fatty Acids	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.
Rusty Discolorations	Oakite No. 33, Dilac Texo 12, Texo NY, Flash-Klenz, Caddy Cleaner,	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	Swab or wipe with cloth. Rinse with water and dry.	Satisfactory for all finishes

Section 5 Control Settings & Configurations



DSL Touchscreen Control

ALARM ICON:

- Shows status of alarm activity
- Allows click to view previous alarms

DIAGNOSTICS ICON

- Temperature
- Relay Status

MAIN DISPLAY:

- Shows cabinet display/defrost icon/ system standby

SETTINGS ICON

- Unit Power (needs lock screen password)
- Set Box Temperature (needs lock screen password)
- Time/Date (needs lock screen password)
- Units
- Manual Defrost (when applicable)
- Language

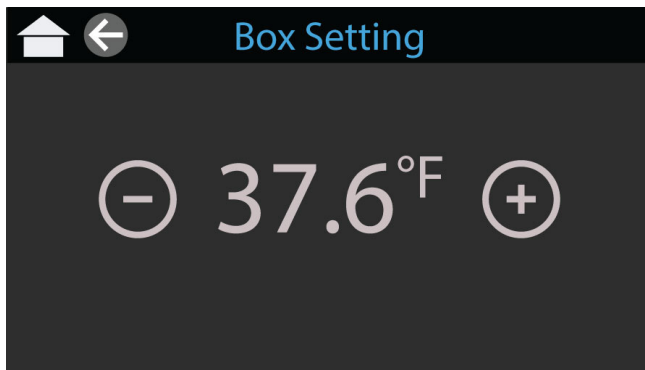
Settings Functions

SHUTTING OFF THE UNIT

Within the Settings management, select the Unit Power.
Enter the passcode (2112).
Selecting the enter button will return you to the Standby Mode.

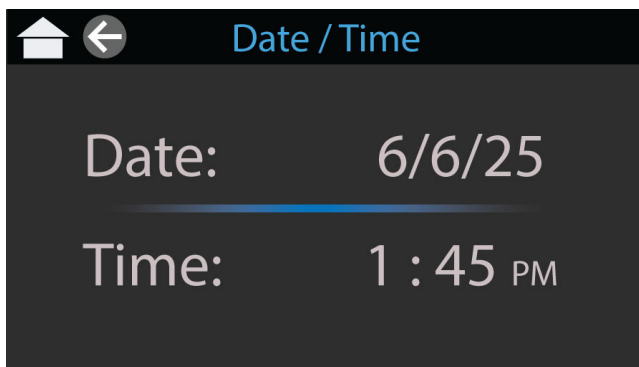
CHANGING BOX TEMPERATURE

Within the Settings management, select the Box Setting.
Enter the passcode (2112).
Using the plus or minus buttons, adjust the value to the desired setting.
Selecting the Back button will confirm the selection.



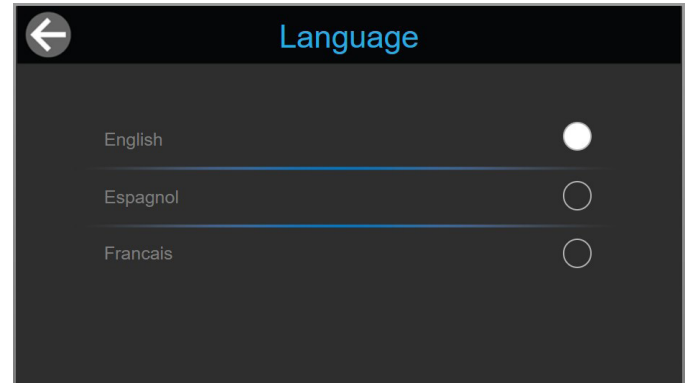
CHANGING DATE & TIME

Within the Settings management, select the Time/Date.
To adjust, touch the date or time. A prompt screen to adjust the data will appear.
Selecting the Back button will confirm the selection.



CHANGING LANGUAGE

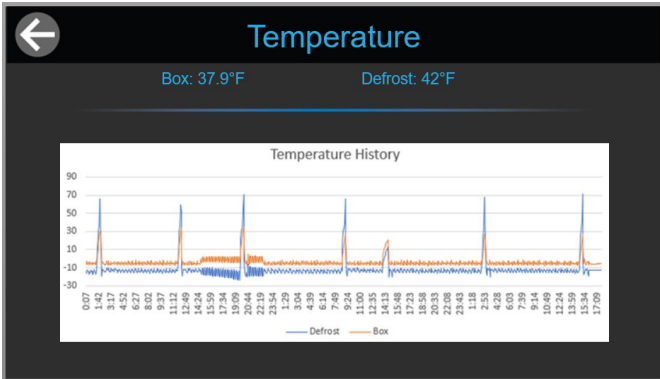
Within the Settings management, select the Language.
Select an option: English, Espagnol & Francais.
Selecting the Back button will confirm the selection.



Diagnostics Functions

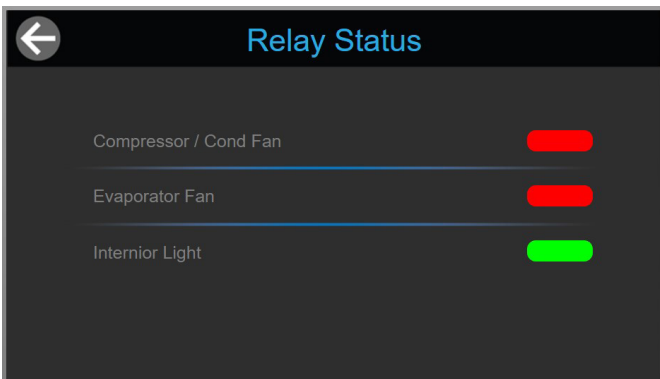
VIEWING TEMPERATURE

Selecting the Temperature function will display the history of the cabinet temperature.



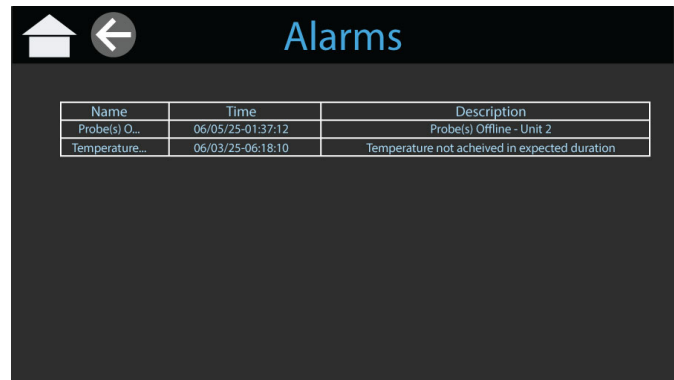
VIEWING RELAY STATUS

Selecting the Relay Status function will display available relays and if they are currently operating or not.



Alarm Function

Selecting the Alarm Icon from the main page will display the current alarm with the dates and times.



Section 6 Troubleshooting

PROBLEM > CAUSE > REMEDY

COOLED UNITS

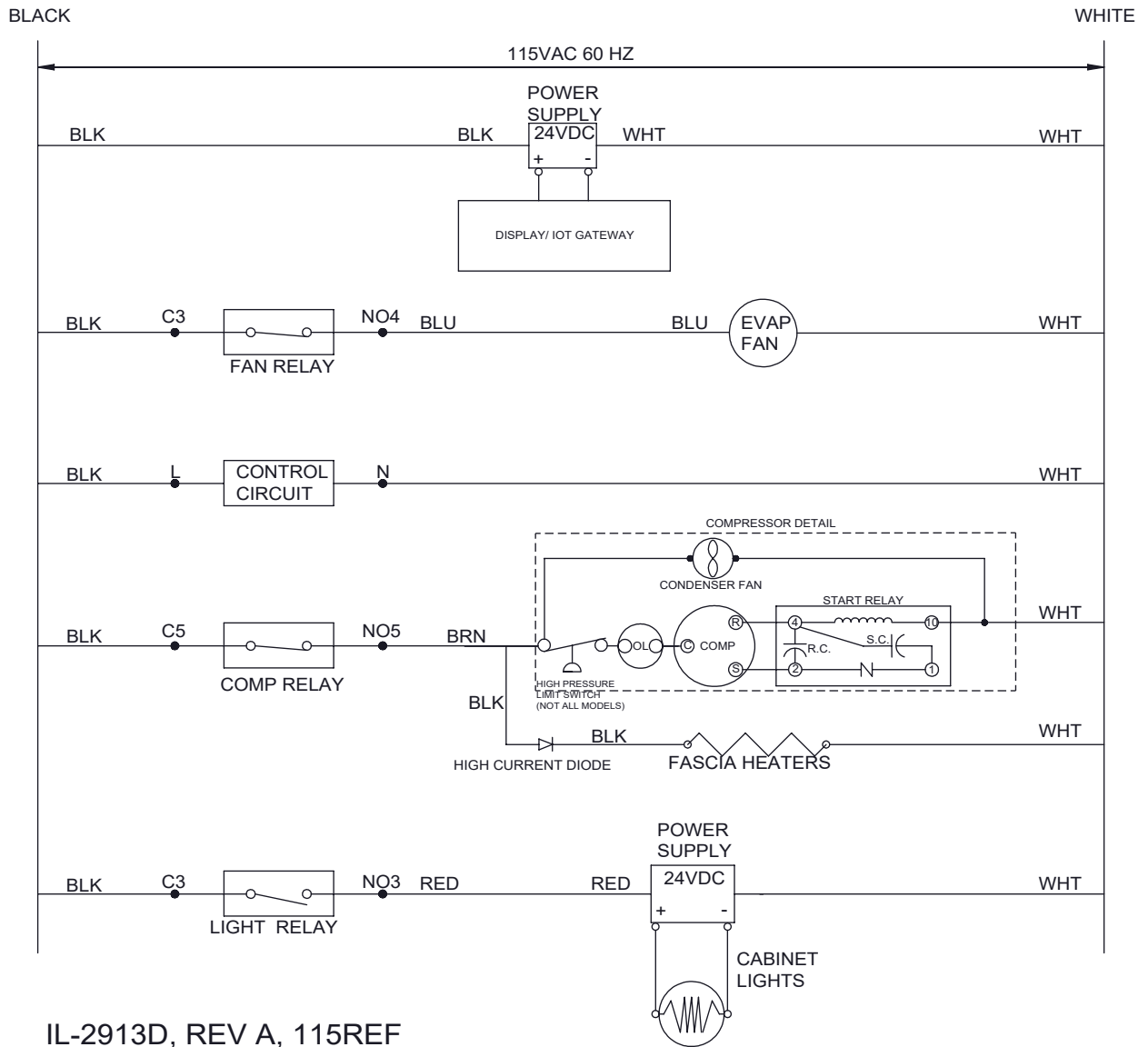
Problem	Probable Cause	Remedy
No cooling - unit is silent	Unit not plugged in. Fuse or circuit breaker tripped. Power cord plug loose in outlet.	Connect to proper voltage circuit Replace fuse or reset breaker. Check outlet for loose connection, replace as needed.
Unit cools but seems to be on all the time	Dirty condenser	Clean condenser.
Cabinet temperature too high	Dirty condenser Evaporator iced over Unit in high temperature environment	Clean condenser. Defrost evaporator. Reduce temperature of room.
Cabinet 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.
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.

HEATED UNITS

Problem	Probable Cause	Remedy
Cabinet Not Operating	Blown fuse or circuit breaker	Replace fuse or reset breaker.
	Power cord unplugged	Plug in power cord to designated receptacle. Cabinet cannot share same outlet with other equipment.
	Improper voltage supplied to cabinet	Correct supply voltage (remove extension cords or other equipment on circuit, etc).
	Main power switch and/or controller turned off	Turn on main power switch and/or controller.
	Defective high limit/heater safety switch	Internal high limit/heater safety may be defective. Contact the factory or an authorized service provider.
Cabinet not holding temperature	Cabinet not pre-heated before use	Turn cabinet on one (1) hour before use.
	Prolonged door opening of door ajar	Make sure door is closed when not in use. Avoid prolonged door openings.
	Door gasket not sealing properly	Check door gasket condition Adjust door or replace gasket.
	Controller setpoint is too low	Adjust controller setpoint to a higher temperature.
	Improper voltage supplied to cabinet	Correct supply voltage (remove extension cords or does not) other equipment on circuit, etc).
	Product load held too long	Hold product load inside cabinet per recommended temperature.
	Blower motor not operating or air duct is air duct is restricted,	Check blower motor and air duct for proper air flow. Try to carefully locate and remove the cause of air restriction.
	Heater elements not operating	Carefully check heater elements for proper operation.
Cabinet is overheating	Defective high limit/heater safety switch	If controller setpoint is adjusted to a lower setting and the internal cabinet temperature exceeds +200' F, turn off cabinet and contact the factory or an authorized service provider for further assistance.
	Defective blower motor	Check blower motor operation. If blower motor is not operating, contact the factory or an authorized service provider
Product load burning or boiling	Product load is too close to heating element	Rearrange product load so that it is not too close to heating element(s).
	Controller setpoint is too high	Adjust controller setpoint to a lower setting. Examples of holding times and temperatures are within the operator's manual.
Product load becoming soggy	Too much humidity or moisture inside cabinet	Adjust or close internal venting/damper knob to control moisture. Normally the internal venting/damper should be open for products such as breaded meats, fish, etc
	Product load held too long time	Hold product load inside cabinet per recommended time.
Cabinet is noisy	Part(s) loose	Locate and tighten loose part(s).
	Cabinet is not level	Level cabinet by adjusting legs or shimming caster.
Door will not close	Hinge(s) need adjustment	Apply shims to hinge until seals properly.

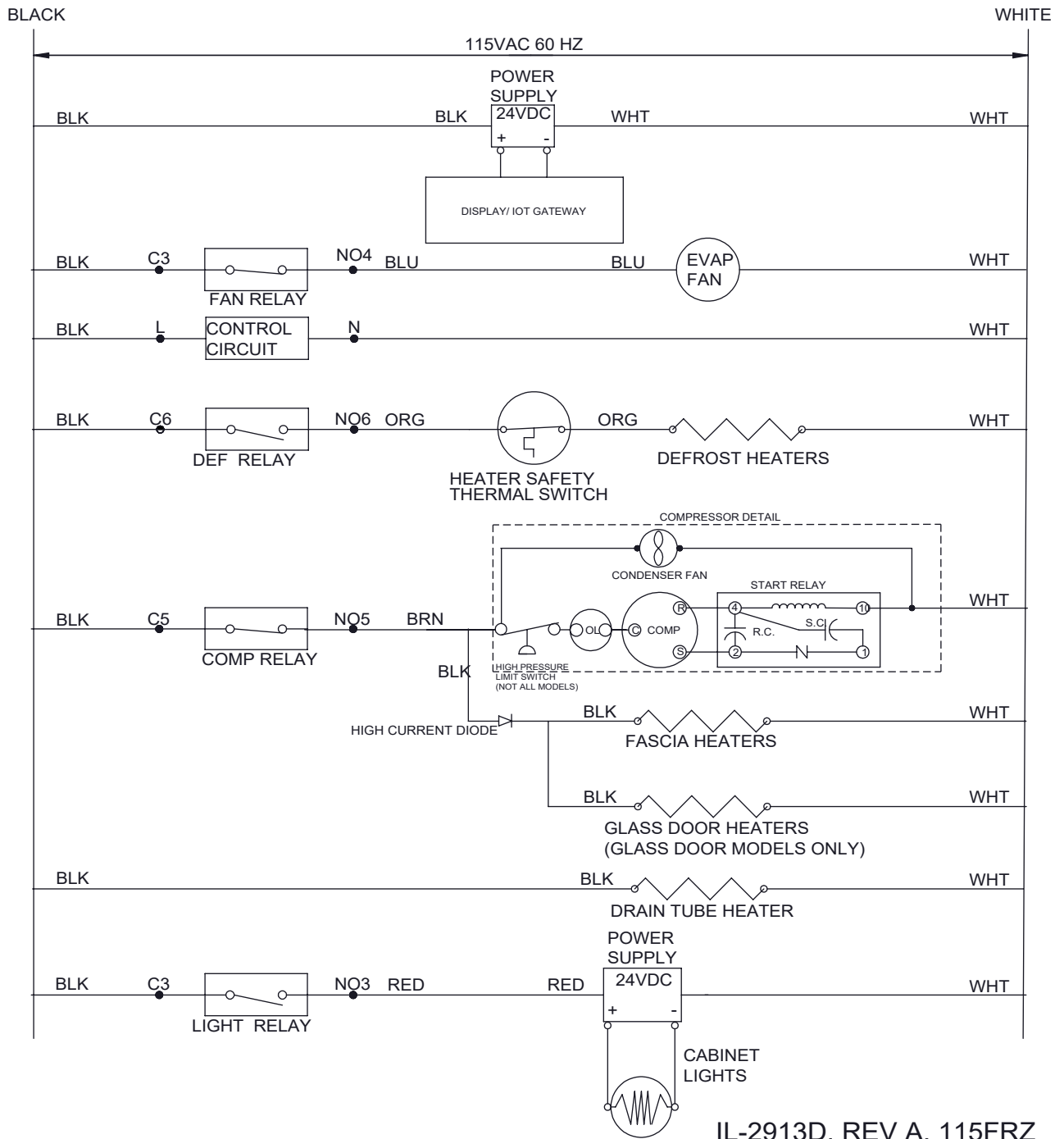
Section 7 Wiring & Parts

115V SINGLE SYSTEM DSL REFRIGERATOR COMPONENT WIRING



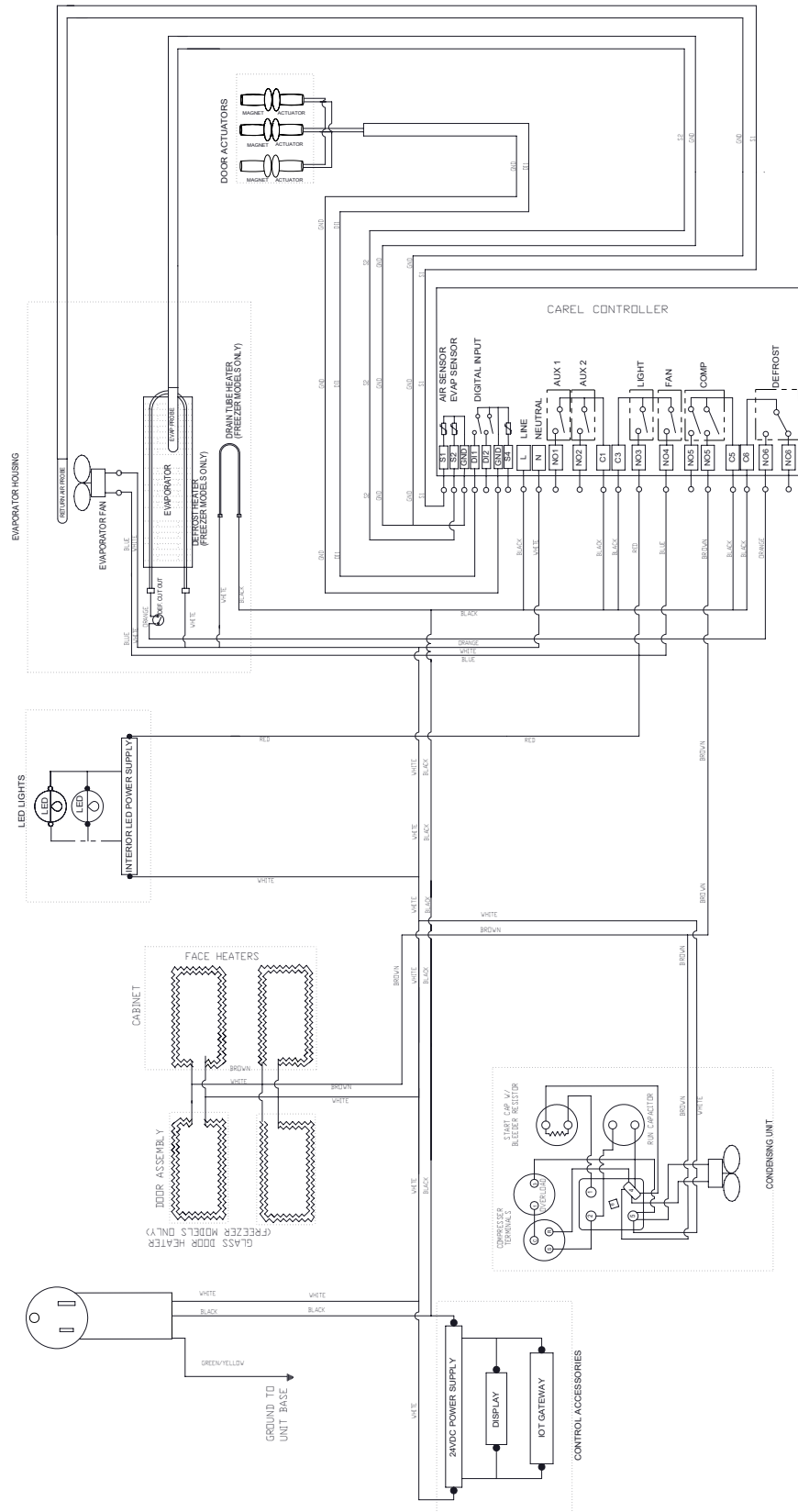
IL-2913D, REV A, 115REF

115V SINGLE SYSTEM DSL FREEZER COMPONENT WIRING

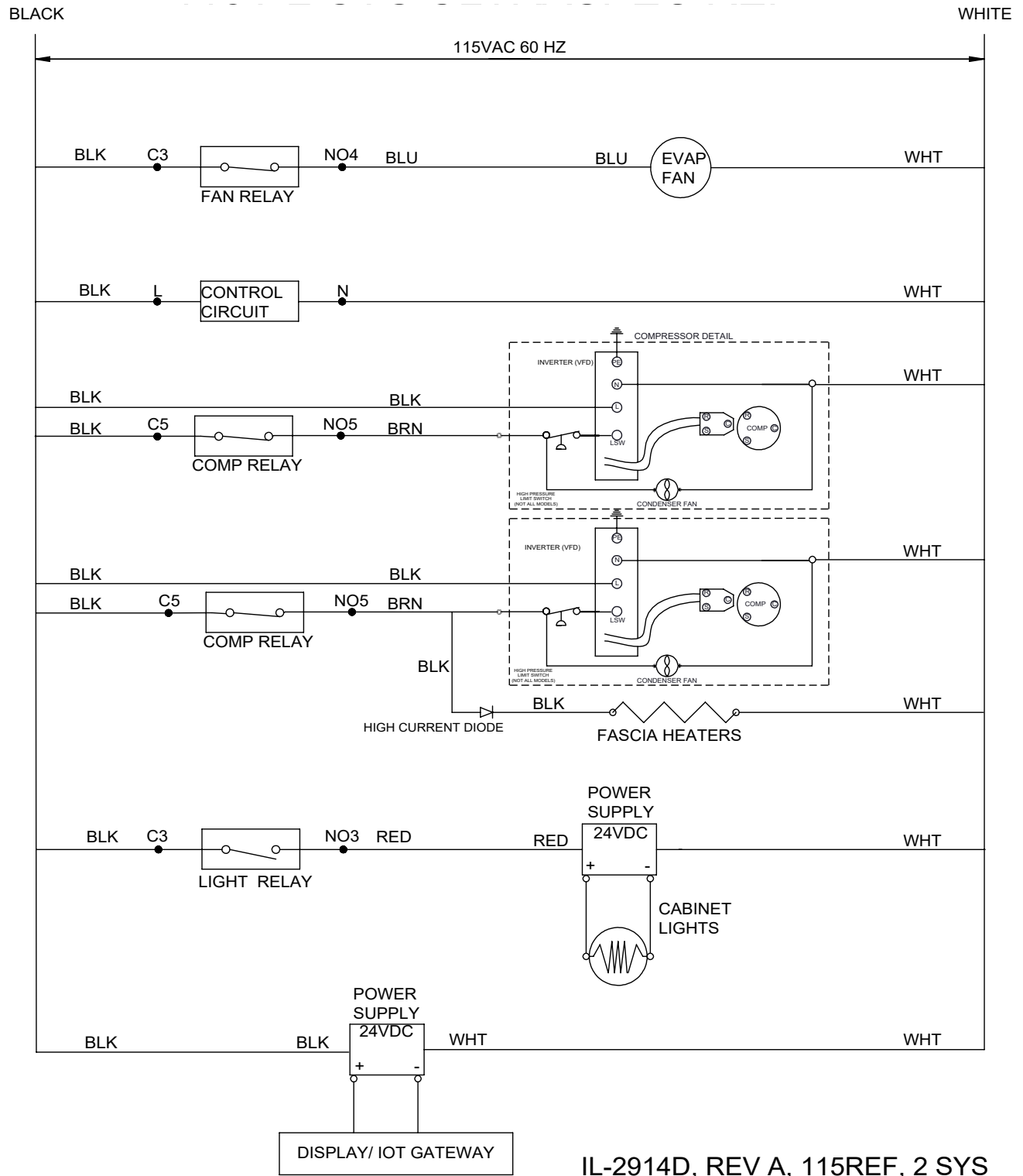


IL-2913D, REV A, 115FRZ

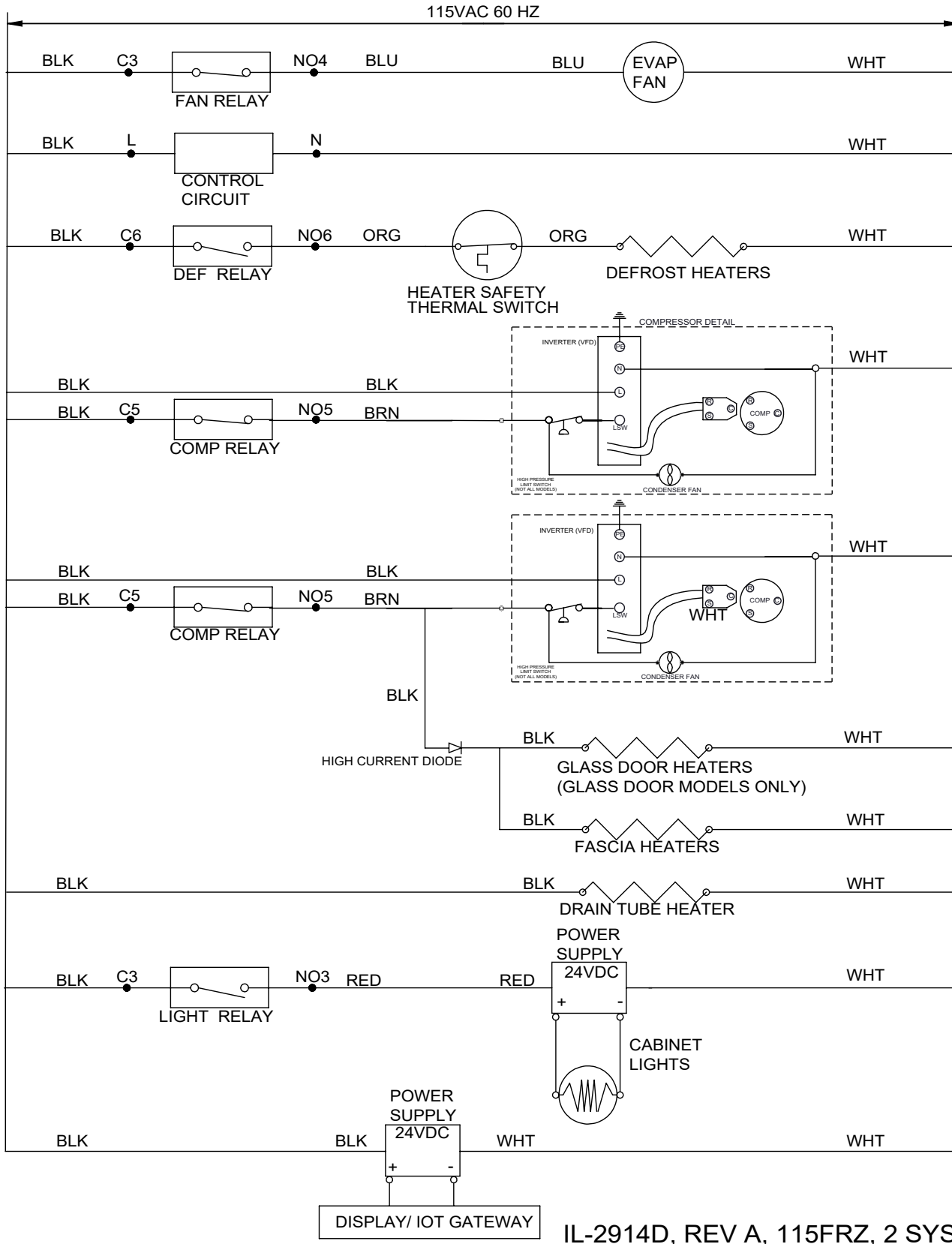
115V SINGLE SYSTEM DSL REFRIGERATOR & FREEZER CONTROL WIRING



115V 2 SYSTEM DSL REFRIGERATOR COMPONENT WIRING

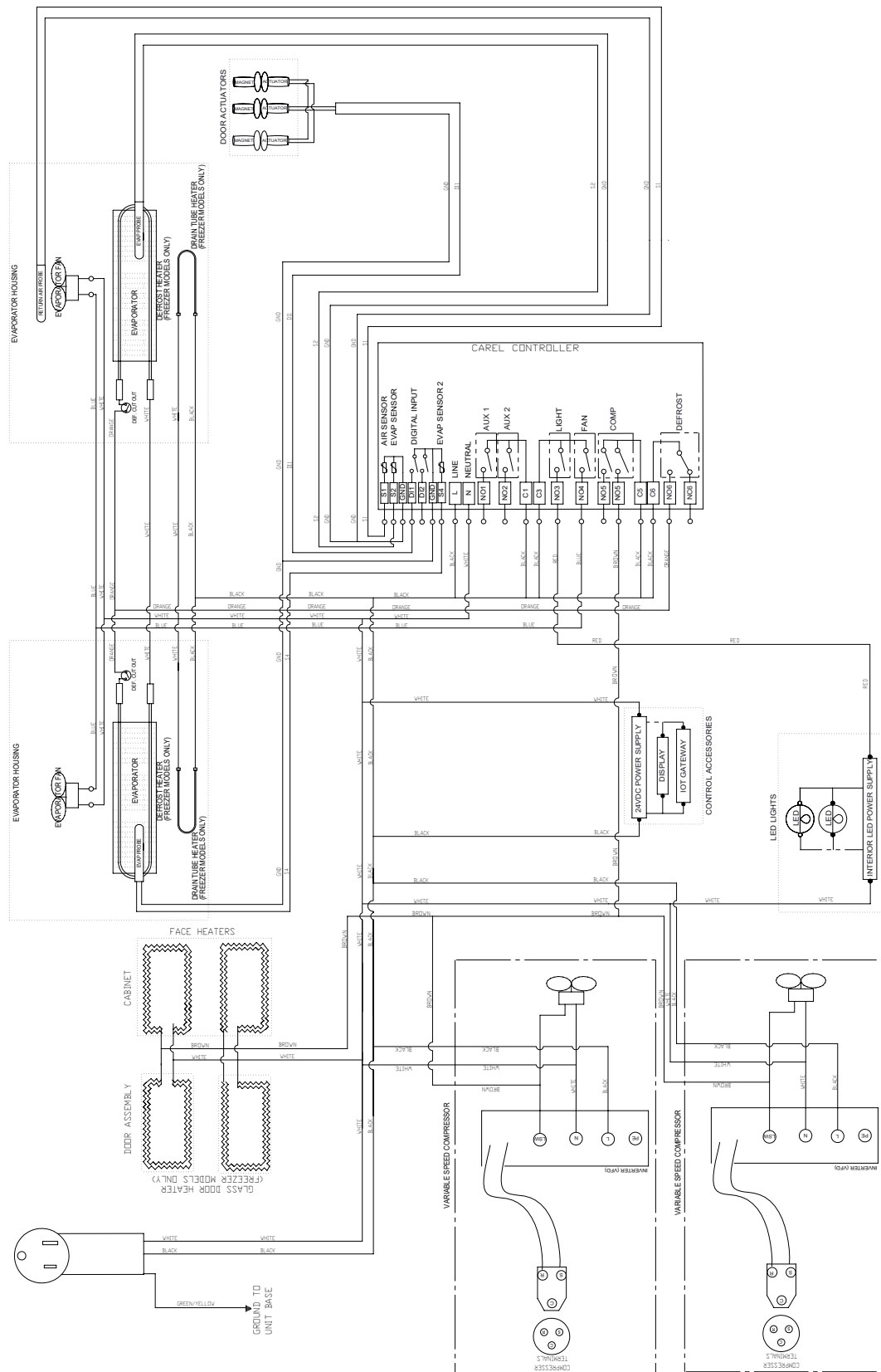


115V 2 SYSTEM DSL FREEZER COMPONENT WIRING

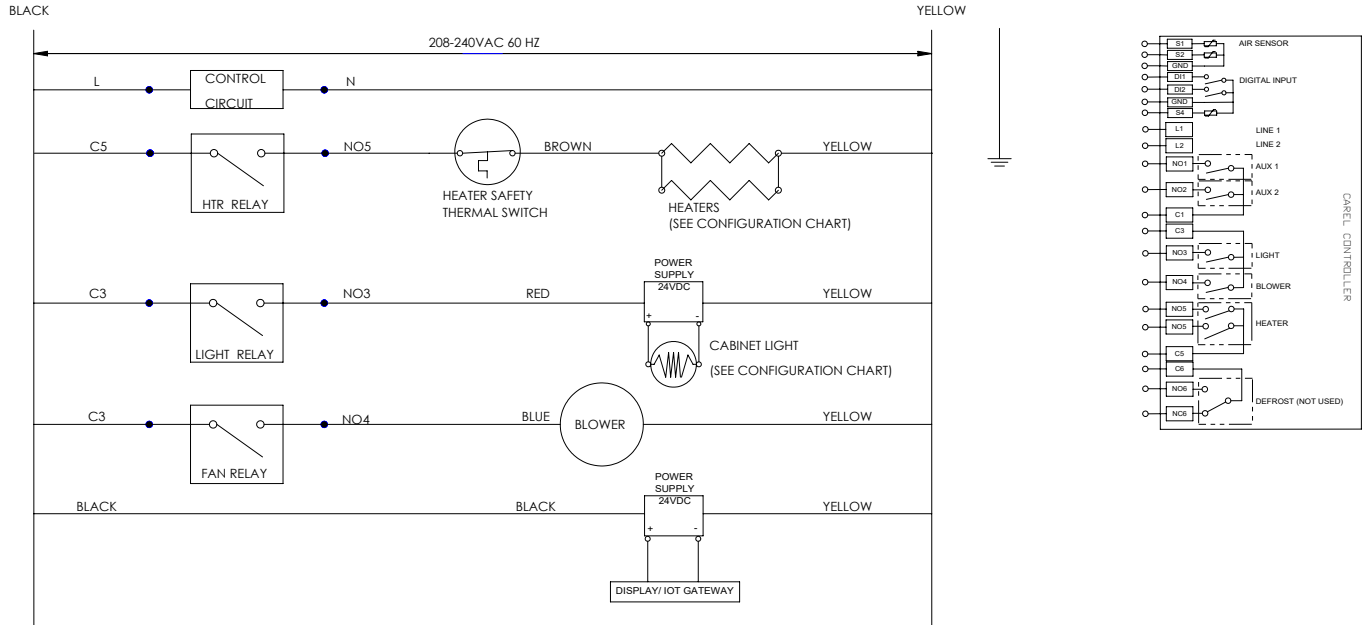


IL-2914D, REV A, 115FRZ, 2 SYS

115V 2 SYSTEM DSL REFRIGERATOR & FREEZER CONTROL WIRING

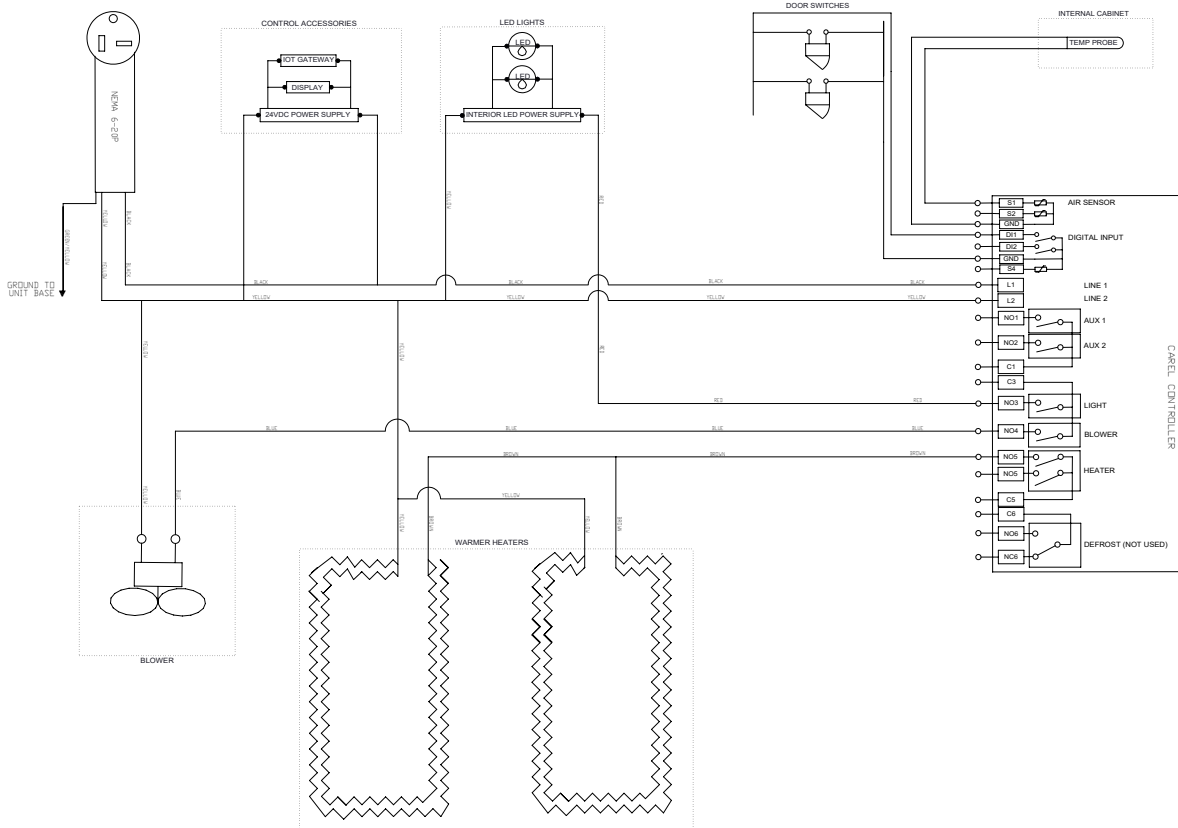


208-240V DSL WARMER WIRING



CONFIGURATION CHART		
	1 - SECTION	2 - SECTION
HEATERS	2	4
CABINET LIGHTS	1	2
BLOWER	1	1

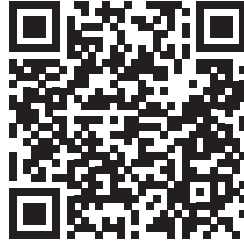
CONFIGURATION CHART SHOWS HOW MANY COMPONENTS ARE USED IN A 1 - SECTION AND 2 - SECTION WARMER. COMPONENTS ARE WIRED IN PARELL LIKE IN THE DIAGRAM ABOVE.



For the most up-to-date parts list, visit
<https://www.Delfield.com/Service/Parts-Lists>



In addition to the information contained in this manual, please find the
“Maintenance, Repair & Decommission Manual” at the following web address or QR:
<https://assets.welbilt.com/share/368D5258-360E-4DD7-A5178C2C964B3983/>



The information in the aforementioned manual must be read and understood by
the properly trained and authorized service agent prior to beginning work on the
refrigeration system.