Delfield®

Fresh Solutions, Fit For You

Specification Line®
GA Series

Original Instructions
Installation, Operation and Maintenance Manual

This manual is updated as new information and models are released. Visit our website for the latest manual.

Part Number: 9294997E 12/24

WELBILT
an Ali Group Company

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

Use appropriate safety equipment during installation and servicing.

⚠ DANGER

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

⚠Warning

Do not damage the refrigeration circuit when installing, maintaining or servicing the unit.

⚠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

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

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.

⚠Caution

Use caution handling, moving and use of the "GreenGenius™" R290 refrigerators to avoid either damaging the refrigerant tubing or increasing the risk of a leak. Components shall be replaced with like components. Servicing shall be done by a factory authorized service personnel to minimize the risk of possible ignition due to incorrect parts or improper service.

Notice

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

Notice

Warranty may be deemed invalid if other than authorized OEM (original equipment manufacture) replacement parts are used in Delfield equipment. This product utilizes Ecomate blowing agent methyl formate

Notice

This product utilizes Ecomate blowing agent methyl formate

Table of Contents

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		
GADBR1P-SH GADTR1P-SH	GADFL2P-S GADRL2P-S	-
Reach-In Freezer		
GAF1P-S(H)	GAF2P-S(H)	GAF3P-S(H)
GAF1P-S(H)-I3Z	GAF2P-S(H)-I3Z	GAF3P-S(H)-I3Z
Pass-Thru Freezer		
GAFPT1P-S(H)	GAFPT2P-S(H)	-
Roll-In Freezer		
GAFRI1P-S	GAFRI2P-S	-
Reach-In Heated		
GAH1-G(H)	GAH2-G(H)	-
GAH1-S(H)	GAH2-S(H)	-
Pass-Thru Heated		
GAHPT1-G(H)	GAHPT2-G(H)	-
GAHPT1-S(H)	GAHPT2-S(H)	-
Roll-In Heated		
GAHRI1-G	GAHRI2-G	-
GAHRI1-S	GAHRI2-S	-
Roll-Thru Heated		
GAHRT1-S	GAHRT2-S	-
Reach-In Refrigerator		
GAR1P-G(H)	GAR2P-G(H)	GAR3P-G(H)
GAR1P-S(H)	GAR2P-S(H)	GAR3P-S(H)
GAR1P-S(H)-I3Z	GAR2P-S(H)-I3Z	GAR3P-S(H)-I3Z
Pass-Thru Refrigerator		
GARPT1P-G(H)	GARPT2P-G(H)	-
GARPT1P-S(H)	GARPT2P-S(H)	-
Roll-In Refrigerator		
GARRI1P-G	GARRI2P-G	-
GARRI1P-S	GARRI2P-S	-
Roll-Thru Refrigerator		
GARRT1P-S	GARRT2P-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:

- National Sanitation Foundation (NSF)
- Underwriters Laboratories (UL)
- Underwriters Laboratories of Canada (cUL)

Additional Certifications

Models are certified by:

- Enerlogic®

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 on page 8.
- 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.

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.

Either a drain line connection must be installed or an electric evaporator pan (see page 19)

Weight, Capacity & Dimensions of Equipment

Model	Weight	Shelf Qty	Shelf Area	Volume	Length	Depth	Height
Reach-In Dual Temperature							
GADBR1P-SH GADTR1P-SH	398lbs (181kg)	(2X)2	(2X)8ft² (7432cm²)	(2X)8.6ft³ (244L)	27.40” (70cm)	32.44” (82cm)	79.50” (202cm)
GADFL2P-S GADRL2P-S	575lbs (261kg)	6	25.25ft² (23458cm²)	42ft³ (1189L)	55.22” (140cm)	32.44” (82cm)	79.50” (202cm)
Reach-In Freezer							
GAF1P-S(H)	354lbs (161kg)	3	11.5ft² (10684cm²)	21ft³ (595L)	27.40” (70cm)	32.44” (82cm)	79.50” (202cm)
GAF2P-S(H)	495lbs (225kg)	6	25.25ft² (23458cm²)	46ft³ (1303L)	55.22” (140cm)		
GAF3P-S(H)	772lbs (350kg)	9	39ft² (36232cm²)	71ft³ (2011L)	83.00” (211cm)		
Roll-In Freezer							
GAFRI1P-S	466lbs (211kg)	NA	NA	37ft³ (1048L)	34.00” (86cm)	34.00” (86cm)	89.00” (226cm)
GAFRI2P-S	690lbs (313kg)	NA	NA	76.5ft³ (2166L)	66.00” (168cm)		
Reach-In Heated							
GAH1-G(H)	361lbs (164kg)	3	11.5ft² (10684cm²)	21ft³ (595L)	27.40” (70cm)	32.44” (82cm)	79.50” (202cm)
GAH1-S(H)	333lbs (151kg)						
GAH2-G(H)	640lbs (290kg)	6	25.5ft² (23690cm²)	46ft³ (1303L)	55.22” (140cm)		
GAH2-S(H)	630lbs (286kg)						
Pass-Thru Heated							
GAHPT1-G(H)	361lbs (164kg)	3	11.5ft² (10684cm²)	23ft³ (651L)	27.40” (70cm)	34.75” (88cm)	79.50” (202cm)
GAHPT1-S(H)	333lbs (151kg)						
GAHPT2-G(H)	640lbs (290kg)	6	25.5ft² (23690cm²)	50ft³ (1416L)	55.22” (140cm)		
GAHPT2-S(H)	630lbs (286kg)						
Roll-In Heated							
GAHRI1-G	486lbs (220kg)	NA	NA	37ft³ (1048L)	34.00” (86cm)	34.00” (86cm)	89.00” (226cm)
GAHRI1-S	446lbs (202kg)						
GAHRI2-G	745lbs (338kg)	NA	NA	76.5ft³ (2166L)	66.00” (168cm)		
GAHRI2-S	715lbs (324kg)						
Roll-Thru Heated							
GAHRT1-S	465lbs (211kg)	NA	NA	39ft³ (1104L)	34.00” (86cm)	36.12” (92cm)	89.00” (226cm)
GAHRT2-S	683lbs (310kg)	NA	NA	80.5ft³ (2280L)	66.00” (168cm)		
Reach-In Refrigerator							
GAR1P-G(H)	351lbs (159kg)	3	11.5ft² (10684cm²)	21ft³ (595L)	27.40” (70cm)	32.44” (82cm)	79.50” (202cm)
GAR1P-S(H)	236lbs (107kg)						
GAR2P-G(H)	495lbs (225kg)	6	25.25ft² (23458cm²)	46ft³ (1303L)	55.22” (140cm)		
GAR2P-S(H)	322lbs (146kg)						
GAR3P-G(H)	767lbs (348kg)	9	39ft² (36232cm²)	71ft³ (2011L)	83.00” (211cm)		
GAR3P-S(H)	485lbs (220kg)						
Pass-Thru Refrigerator							
GARPT1P-G(H)	472lbs (214kg)	3	12.12ft² (11260cm²)	23ft³ (651L)	27.40” (70cm)	34.75” (88cm)	79.50” (202cm)
GARPT1P-S(H)	448lbs (203kg)						
GARPT2P-G(H)	680lbs (308kg)	6	26.5ft² (24619cm²)	50ft³ (1416L)	55.22” (140cm)		
GARPT2P-S(H)	652lbs (296kg)						
Roll-In Refrigerator							
GARRI1P-G	486lbs (220kg)	NA	NA	37ft³ (1048L)	34.00” (86cm)	34.00” (86cm)	89.00” (226cm)
GARRI1P-S	446lbs (202kg)						
GARRI2P-G	745lbs (338kg)	NA	NA	76.5ft³ (2166L)	66.00” (168cm)		
GARRI2P-S	715lbs (324kg)						
Roll-Thru Refrigerator							
GARRT1P-S	486lbs (220kg)	NA	NA	39ft³ (1104L)	34.00” (86cm)	36.12” (92cm)	89.00” (226cm)
GARRT2P-S	683lbs (310kg)	NA	NA	80.5ft³ (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.

- Plug units with "GreenGenius™" R290 refrigerant into a receptacle that is a minimum of 14" (36cm) above the floor.
- 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				
GADBR1P-SH GADTR1P-SH	6.7	115, 60, 1	Ref. 0.20 Frzr. 0.315	5-15P
GADFL2P-S GADRL2P-S	11.4	115, 60, 1	Ref. 0.22 Frzr. 0.55	5-15P
Reach-In Freezer				
GAF1P-S(H)	7.2	115, 60, 1	0.55	5-15P
GAF2P-S(H)	10.0	115, 60, 1	0.68	5-15P
GAF3P-S(H)	14.7	115, 60, 1	(2X)0.55	5-20P
GAF1P-S(H)-I3Z	7.2	115, 60, 1	0.55	5-15P
GAF2P-S(H)-I3Z	10.0	115, 60, 1	0.68	5-15P
GAF3P-S(H)-I3Z	14.7	115, 60, 1	(2X)0.55	5-20P
Pass-Thru Freezer				
GAFPT1P-S(H)	10.0	115, 60, 1	0.55	5-15P
GAFPT2P-S(H)	14.6	115, 60, 1	(2X)0.55	5-20P
Roll-In Freezer				
GAFRI1P-S	10.0	115, 60, 1	0.68	5-15P
GAFRI2P-S	14.6	115, 60, 1	(2X)0.55	5-20P
Reach-In Heated				
GAH1-G(H)	6.0	208-240, 60, 1	NA	6-20P
GAH1-S(H)	6.0			
GAH2-G(H)	10.5	208-240, 60, 1	NA	6-20P
GAH2-S(H)	10.5			
Pass-Thru Heated				
GAHPT1-G(H)	6.0	208-240, 60, 1	NA	6-20P
GAHPT1-S(H)	6.0			
GAHPT2-G(H)	10.5	208-240, 60, 1	NA	6-20P
GAHPT2-S(H)	10.5			
Roll-In Heated				
GAHRI1-G	6.0	208-240, 60, 1	NA	6-20P
GAHRI1-S	6.0			
GAHRI2-G	10.5	208-240, 60, 1	NA	6-20P
GAHRI2-S	10.5			
Roll-Thru Heated				
GAHRT1-S	6.0	208-240, 60, 1	NA	6-20P
GAHRT2-S	10.5	208-240, 60, 1	NA	6-20P
Reach-In Refrigerator				
GAR1P-G(H)	4.2	115, 60, 1	0.22	5-15P
GAR1P-S(H)	4.2			
GAR2P-G(H)	6.0	115, 60, 1	0.35	5-15P
GAR2P-S(H)	6.0			
GAR3P-G(H)	6.5	115, 60, 1	0.38	5-15P
GAR3P-S(H)	6.5			
GAR1P-S(H)-I3Z	4.2	115, 60, 1	.22	5-15P
GAR2P-S(H)-I3Z	6.0		.33	
GAR3P-S(H)-I3Z	6.5		.35	
Pass-Thru Refrigerator				
GARPT1P-G(H)	4.5	115, 60, 1	0.22	5-15P
GARPT1P-S(H)	4.5			
GARPT2P-G(H)	6.2	115, 60, 1	0.35	5-15P
GARPT2P-S(H)	6.2			
Roll-In Refrigerator				
GARRI1P-G	4.5	115, 60, 1	0.35	5-15P
GARRI1P-S	4.5			
GARRI2P-G	6.4	115, 60, 1	0.38	5-15P
GARRI2P-S	6.4			

Model	Amps	V, Hz, Ph	H.P.	Nema Plug
Roll-Thru Refrigerator				
GARRT1P-S	4.5	115, 60, 1	0.35	5-15P
GARRT2P-S	6.4	115, 60, 1	0.38	5-15P

ENERGY USE

Model	Energy Use in kWh	Energy Star® Certified
Reach-In Dual Temperature		
GADBR1P-SH GADTR1P-SH	4.2576	
GADFL2P-S GADRL2P-S	4.87025	
Reach-In Freezer		
GAF1P-S	5.863	
GAF1P-SH	5.59	✓
GAF2P-S	10.65	
GAF2P-SH	9.69	✓
GAF3P-S	10.50	✓
GAF3P-SH	12.20	✓
Pass-Thru Freezer		
GAFPT1P-S	5.1112	
GAFPT1P-SH	5.2623	
GAFPT2P-S	9.337	✓
GAFPT2P-SH	11.3327	✓
Roll-In Freezer		
GAFRI1P-S	7.6144	✓
GAFRI2P-S	14.3393	✓
Reach-In Heated		
GAH1-G	159.3144	✓
GAH1-GH	183.6433	✓
GAH1-S	141.1322	✓
GAH1-SH	145.0789	✓
GAH2-G	302.5585	✓
GAH2-GH	299.055	✓
GAH2-S	245.5875	✓
GAH2-SH	233.8808	✓
Pass-Thru Heated		
GAHPT1-G	228.636	✓
GAHPT1-GH	234.906	✓
GAHPT1-S	171.9222	✓
GAHPT1-SH	192.0701	✓
GAHPT2-G	421.2567	
GAHPT2-GH	408.354	
GAHPT2-S	290.2969	✓
GAHPT2-SH	300.2424	✓
Roll-In Heated		
GAHRI1-G	308.6124	✓
GAHRI1-S	241.5638	✓
GAHRI2-G	560.6883	
GAHRI2-S	427.798	✓
Roll-Thru Heated		
GAHRT1-S	295.3889	✓
GAHRT2-S	504.6286	✓
Reach-In Refrigerator		
GAR1P-G	2.08	✓
GAR1P-GH	1.66	✓
GAR1P-S	1.37	✓
GAR1P-SH	1.70	✓
GAR2P-G	3.18	✓
GAR2P-GH	2.91	✓
GAR2P-S	2.71	✓
GAR2P-SH	2.49	✓
GAR3P-G	4.92	✓
GAR3P-GH	4.55	✓
GAR3P-S	3.59	✓
GAR3P-SH	3.54	✓
Pass-Thru Refrigerator		
GARPT1P-G	2.4461	
GARPT1P-GH	2.4620	
GARPT1P-S	1.7873	✓
GARPT1P-SH	1.9876	
GARPT2P-G	3.6743	✓
GARPT2P-GH	3.5395	✓
GARPT2P-S	2.3019	✓
GARPT2P-SH	2.4898	✓
Roll-In Refrigerator		
GARRI1P-G	2.7366	✓
GARRI1P-S	2.2998	✓
GARRI2P-G	5.1789	✓
GARRI2P-S	5.1258	
Roll-Thru Refrigerator		
GARRT1P-S	2.4859	✓
GARRT2P-S	4.6395	

Refrigeration

Model	Heat of Rejection (BTU)	BTU/Hour Capacity	R290 Charge
Reach-In Dual Temperature			
GADBR1P-SH GADTR1P-SH	Ref. 232 Frzr. 401	Ref. 1431 Frzr. 1094	Ref. 78g Frzr. 62g
GADFL2P-S GADRL2P-S	Ref. 420 Frzr. 790	Ref. 1920 Frzr. 2035	Ref. 113g Frzr. 93g
Reach-In Freezer			
GAF1P-S(H)	790	2035	93g
GAF2P-S(H)	1380	2485	109g
GAF3P-S(H)	1800	4070	(2X)110g
Pass-Thru Freezer			
GAFPT1P-S(H)	930	2035	93g
GAFPT2P-S(H)	1630	4070	(2X)110g
Roll-In Freezer			
GAFRI1P-S	1401	2261	109g
GAFRI2P-S	2458	4523	(2X)110g
Reach-In Refrigerator			
GAR1P-G(H)	570	1920	113g
GAR1P-S(H)	420	1920	113g
GAR2P-G(H)	930	2540	113g
GAR2P-S(H)	620	2540	113g
GAR3P-G(H)	1400	3865	118g
GAR3P-S(H)	940	3865	118g
Pass-Thru Refrigerator			
GARPT1P-G(H)	690	1860	113g
GARPT1P-S(H)	460	1860	113g
GARPT2P-G(H)	1260	3760	113g
GARPT2P-S(H)	800	3760	113g
Roll-In Refrigerator			
GARRI1P-G	800	2470	113g
GARRI1P-S	680	2470	113g
GARRI2P-G	1460	3760	118g
GARRI2P-S	1230	3760	118g
Roll-Thru Refrigerator			
GARRT1P-S	830	2470	113g
GARRT2P-S	1530	3760	118g

NOM RATINGS

Modelos	Tensión (V~)	Corriente (A)	Frecuencia (Hz)	Capacidad (L)	Consumo límite (Wh/L)	Consumo de aparato (Wh/L)	Ahorro (%)	Cantidad de refrigerante (g)
GAF1P-S	115	7.2	60	594.6	34.0	9.5	72.0	93
GAF1P-SH	115	7.2	60	594.6	34.0	9.6	71.7	93
GAF2P-S	115	10	60	1302.5	31.4	17.4	44.5	109
GAF2P-SH	115	10	60	1302.5	31.4	7.4	76.4	109
GAFRI1P-S	115	10	60	1047.7	31.9	7.9	75.2	109

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

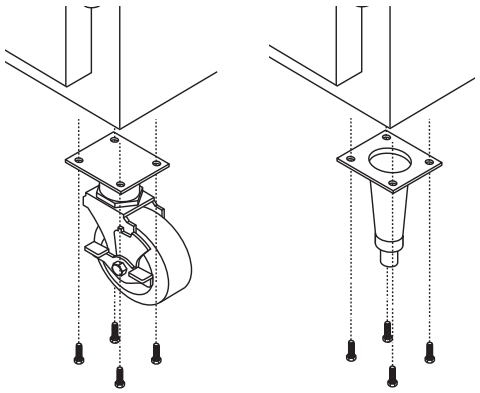
All single-section units require that the swivel casters be mounted on the front and rigid casters be mounted on the rear.

To install the legs or casters:

1. Remove unit from skid.

   NOTE: The bolts used to hold the unit to the skid should be re-used as the fourth hex head bolt for each caster or leg plate installation. The bolt should not measure over 2" (5cm) in length.

2. Raise unit to access leg/caster mounting holes on bottom of unit.
3. Attach the legs or casters to bottom of cabinet using hex head bolts.



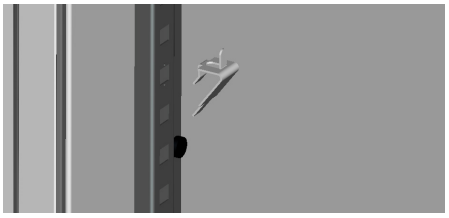
Level & Stable

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.

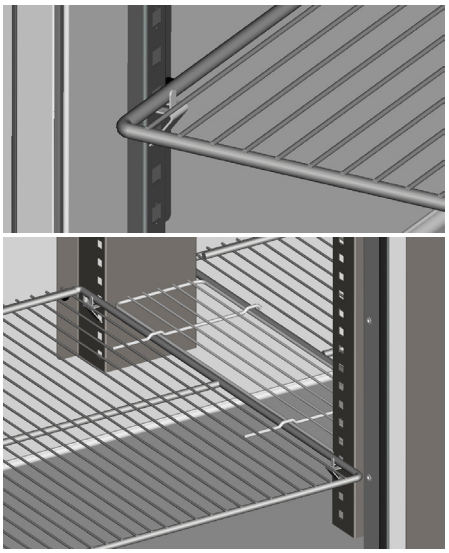
- It is very important that all legs are properly adjusted to keep the cabinet level, evenly distribute the weight and to make sure the unit will not rock, lean or be unstable.
- Cabinets with casters must have the caster brake set so the cabinet cannot move. Shim casters if necessary to level unit.
- 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.

Standard Shelf Installation

1. Insert the clips into the pilaster holes at the desired shelf heights.



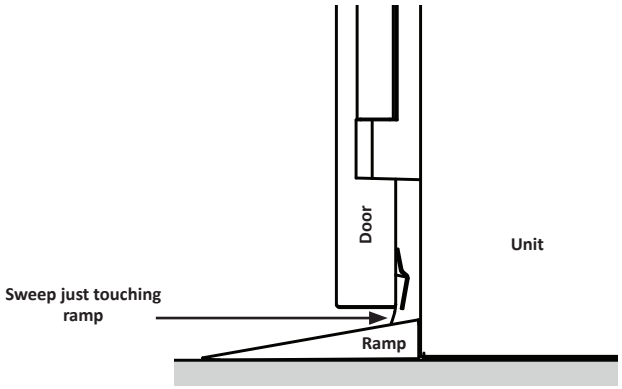
2. Set the shelves on the clips.



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.

Electric condensate evaporator mounting instruction

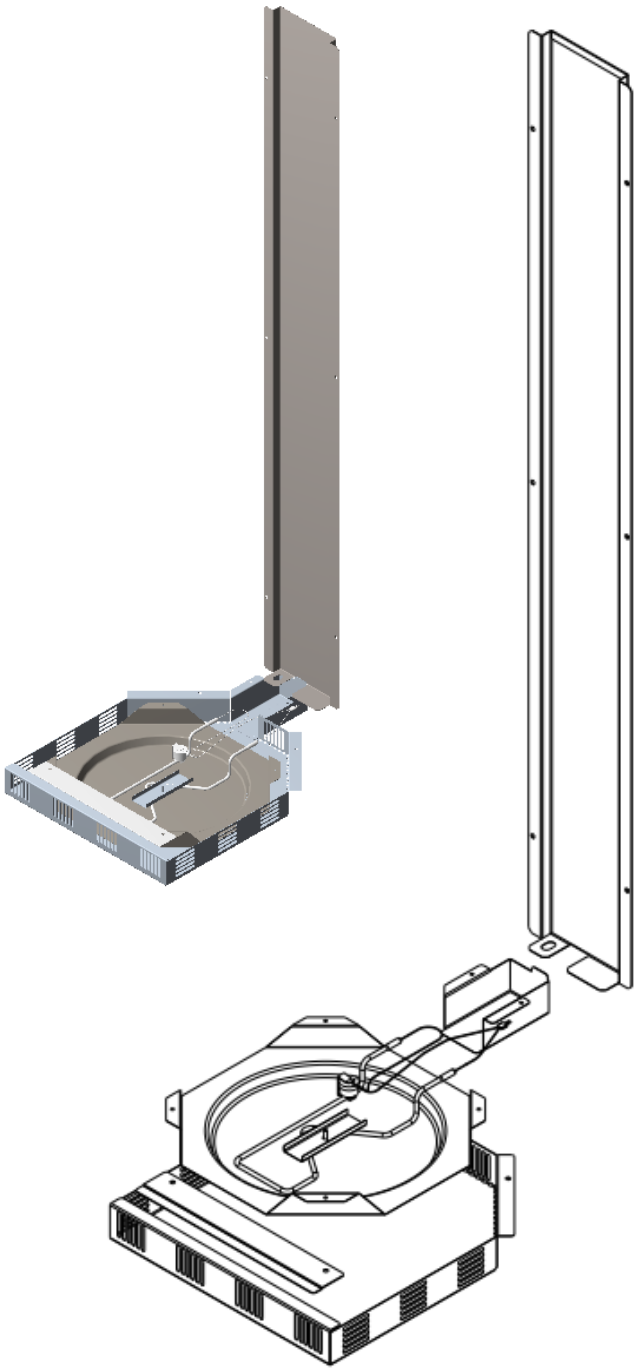
**** Unplug unit power cord before beginning work****

If retro-fitting electric condensate evaporator on unit that is already in the field start at Step 1. If unit has been ordered with condensate evaporator from the factory please start at Step 7.

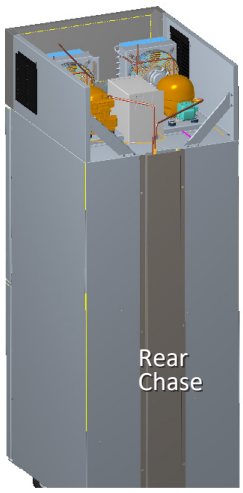
Kit #000-BH7-0032KT

Includes:

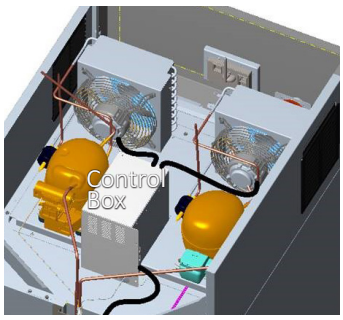
000-BH7-0032	ASSY, COND EVAP, 120V, 1DR	1
000-BH6-0030	ASSY, SPOT, COND EVAP PAN,	1
019-AMS-0031	PAN, CONDENSATE, EVAP	1
9321094	STUD, 10-24X.75, S/S	1
000-CV6-0031	ASSY, CVR, COND EVAP	1
019-CX5-0031	COVER, COND PAN, 1DR DT, GA	1
271-CX2-0030	CLIP, SPRT, CVR	1
027-CZJ-0036	CHASE, DRAIN, DT	1
161-AE5-0033	CLIP, CONDENSATE PAN, 5,	1
2183387	CORD, #51C EVAP	1
2187277	HARNESS, JUMPER, EVAP, COND	1
2194659	HEATER, 115V-100W, 1A,	1
9295094	INSTRUCTION, EVAP, COND, DT	1
9321061	WASHER, #10, LOCK, INSIDE	1
9321127	NUT, 10-24, S/S, WING	1
9321353	SCREW, #10X.50, S-H-HW-TEK	8
027-CZJ-0001	CHASE, MECH, DT	1



Step 1. Remove (6) screws holding vertical rear chase on back of unit and remove chase. Save screws, chase can be discarded.



Step 2. Remove (2) screws from control box cover and remove cover, save cover and screws. Find freezer condenser fan motor cord and follow cord back into the control box.



STEP 3. Remove the bushing strain relief from the side of the control box that holds the wiring that passes down the rear vertical chase.

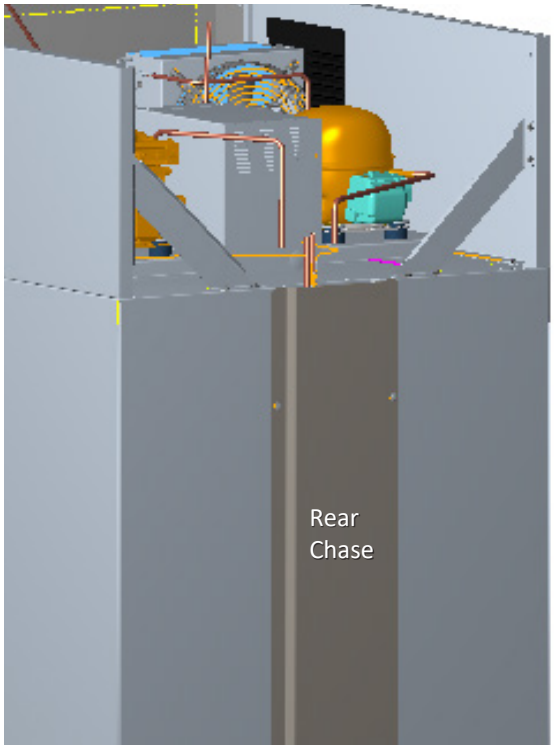
Pass the end of the jumper harness with piggyback insulated terminal connectors through the bushing strain relief until the protective sleeve can be secured by the bushing strain relief. Re-mount the bushing strain relief back into the side of the control box.

Step 4. Inside of control box, unplug the female freezer condenser fan motor cord connections from the main harness. Plug into the male fully insulated terminals from the jumper harness into the main harness where the freezer condenser fan motor cord connections were previously at, black to black and white to white. View wiring diagram on last page for pre and post wiring example.

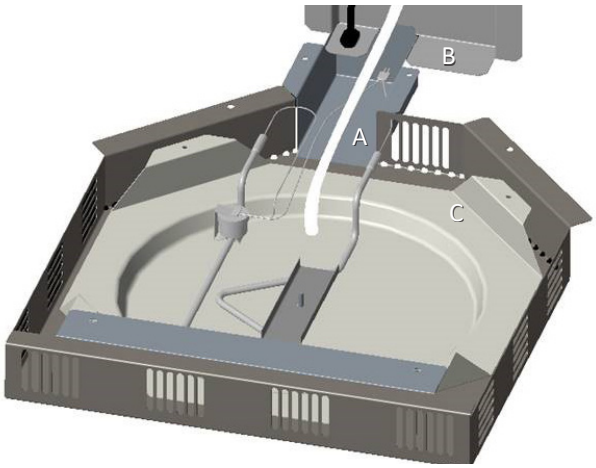
Re-mount control box cover on top of control box with same screws.

STEP 5. Route the jumper harness down the vertical raceway at the rear center of the unit. Locate the black harness that is mounted into the bottom bend of the new vertical rear chase and connect the stripped wires into the Wago nuts on the jumper harness.

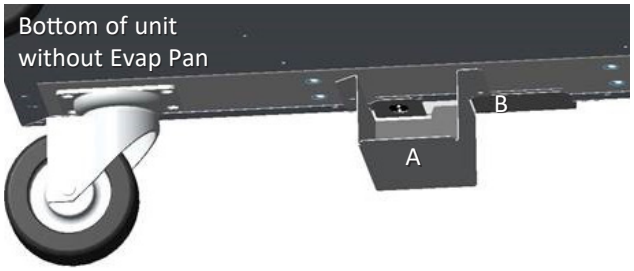
STEP 6. Mount the newly provided rear chase with the (6) screws that held the previous rear vertical chase.



STEP 7. At the bottom of the cabinet, align the galvanized horizontal chase to the rear vertical chase and mount with (2) self-drilling screws. The drain tube should pass through the open notched area at the bottom of the vertical rear chase and bend through the horizontal chase. Plug the cord from the condensate evaporator heating element which is mounted in the evaporator pan into the receptacle that is mounted in the bottom bend of the rear vertical chase.

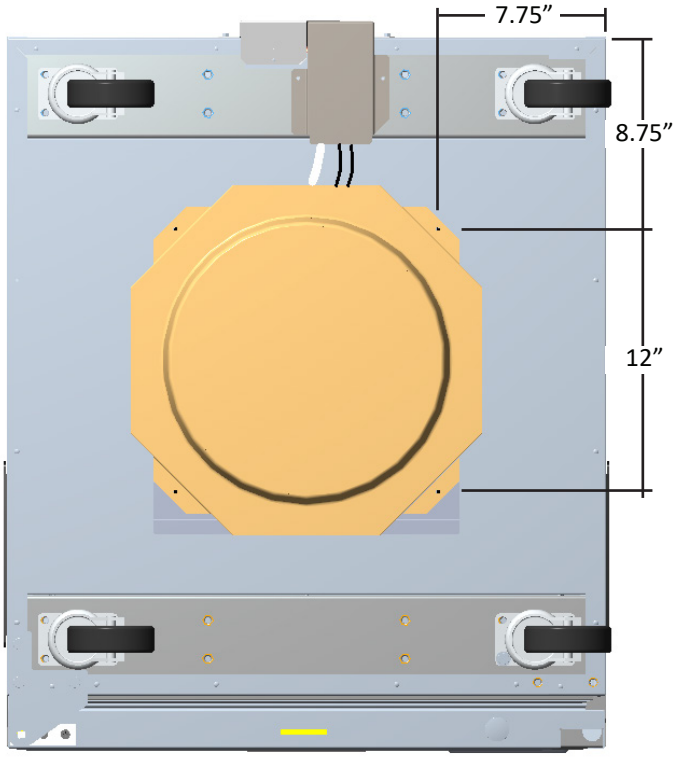


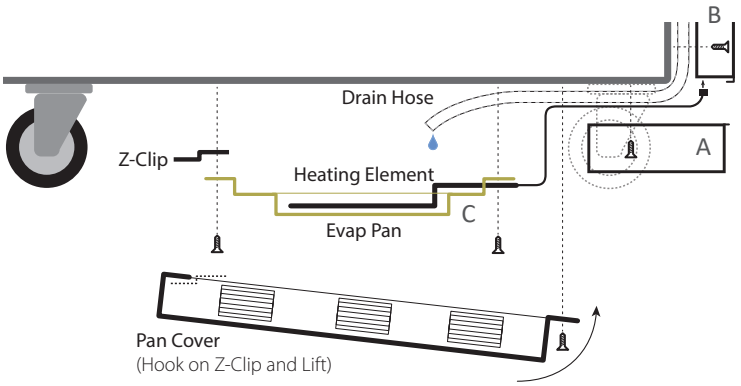
Step 8. Locate the pan as shown in the picture above and mount with (4) self-drilling screws. Make sure to place the Z-clip between the front (2) mounting holes in the evaporator pan and the bottom of the cabinet. This Z-clip will hold the front bend of the condensate evaporator cover. Route the drain tubing into the center of the evaporator pan. If drain tube is too long, it may be cut down in length. Tubing should end near center of evaporator pan to assure condensate flows into pan.



Step 9. Hook the front bend of the condensate evaporator cover on the Z-clip and mount the cover with (2) self-drilling screws at the rear.

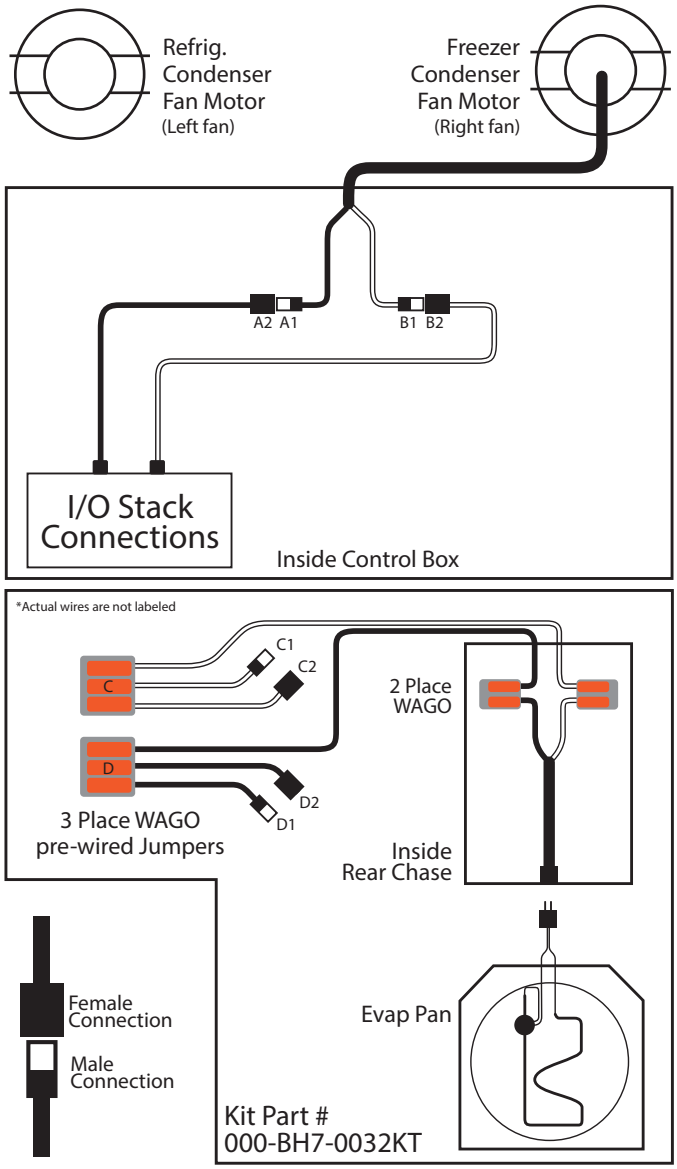
STEP 10. Plug unit power cord back in. Once unit is powered up, the condensate evaporator will cycle ON whenever the freezer compressor and condenser fan motor are running.





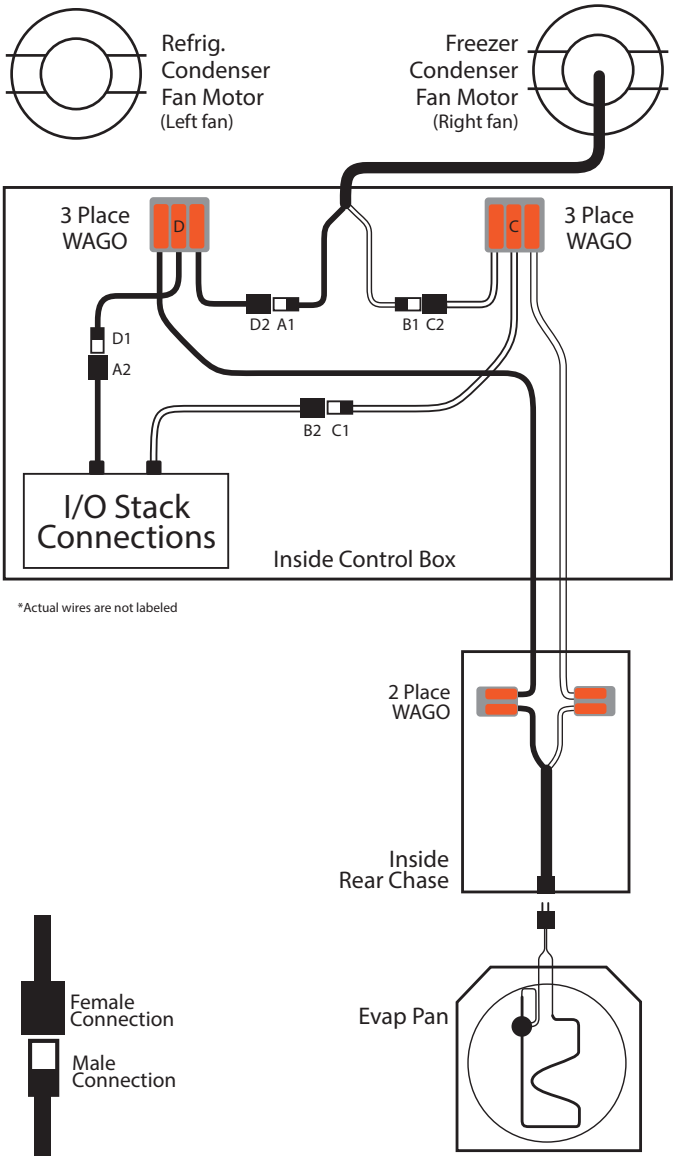
Pre-Installation

View from back of unit



Finished Installation

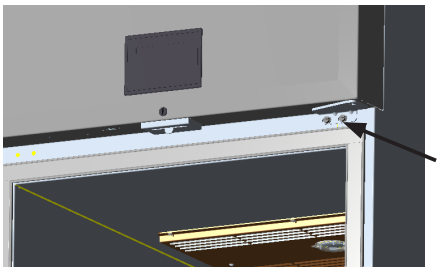
View from back of unit



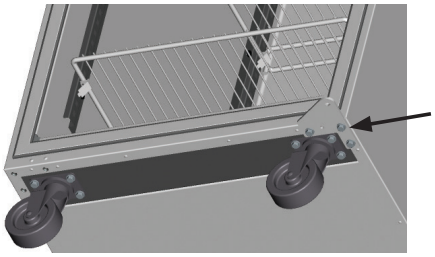
Reversible Door Instructions

APPLICABLE TO FULL DOOR MODELS

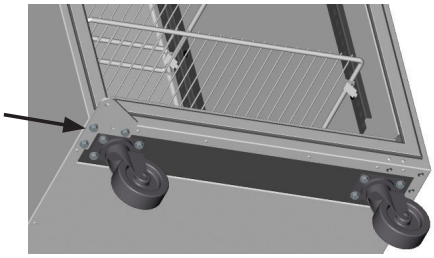
1. Open the door.
2. Remove two bolts securing the hinge bracket above the door.



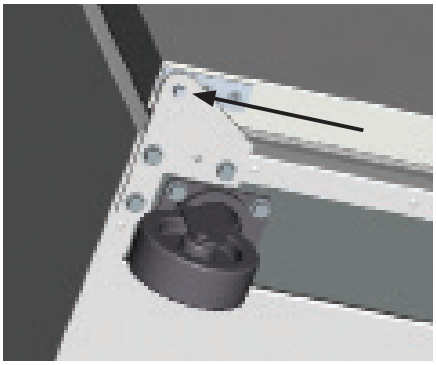
3. Lift the door up and out.
4. Save the hinge bracket.
5. Remove three bolts securing the hinge bracket to the bottom of the unit.



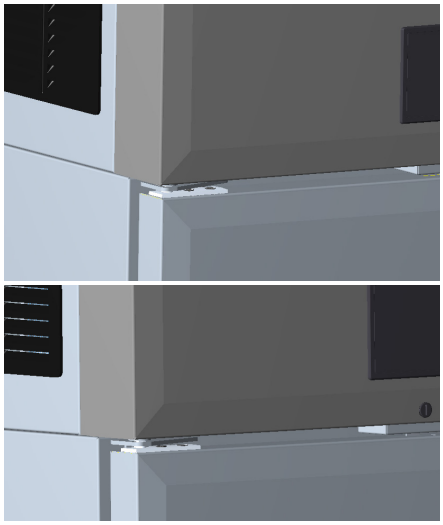
6. Flip it over and install it on the opposite side.



7. Rotate the door 180°.
8. Move the white nylon washer from the top hinge pin to the bottom hinge pin.
9. Insert the bottom hinge pin into the hinge bracket.



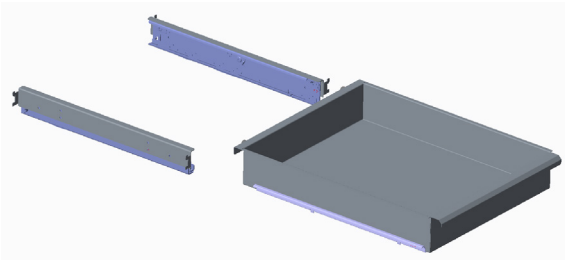
10. Locate the provided alternate top hinge bracket.
11. Place the hinge bracket over the top hinge pin.
12. Open the door.
13. Using the original screws install the hinge bracket on the new side in the vacant lock holes.



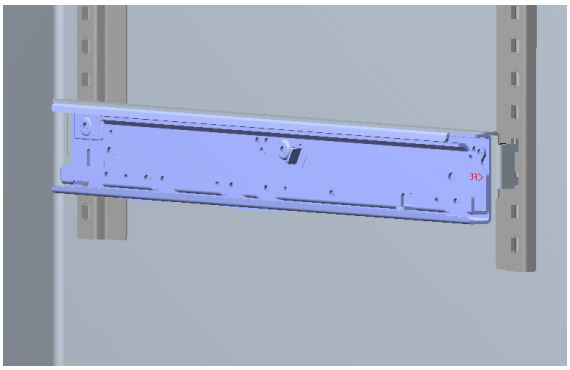
14. Check for proper closure and gasket seal.
15. Adjust hinges as needed.

Accessory Interior Drawer Installation

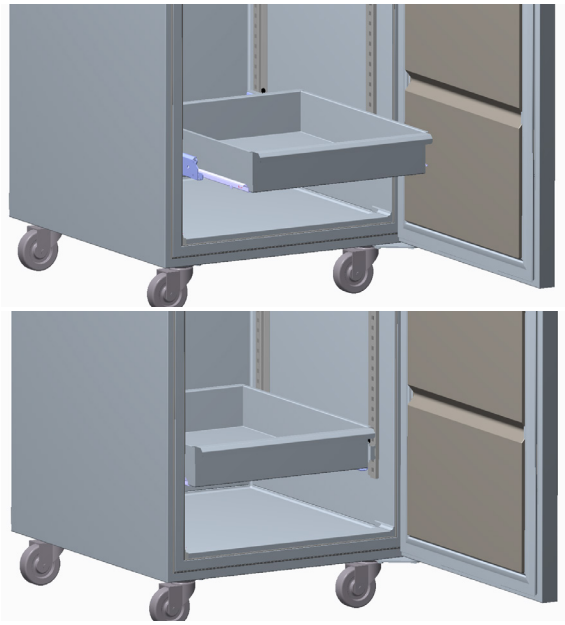
1. Accessory drawer installation requires two tracks and a drawer.



2. Hang the drawer tracks on the pilaster strips across from each other. Verify the tracks are lined up evenly.



3. Slide the drawer box into the tracks slowly.
When the drawer box is half way in it will hit a STOP.
Lift the front of the drawer up slightly to continue.



T-2 Tray Slide Installation

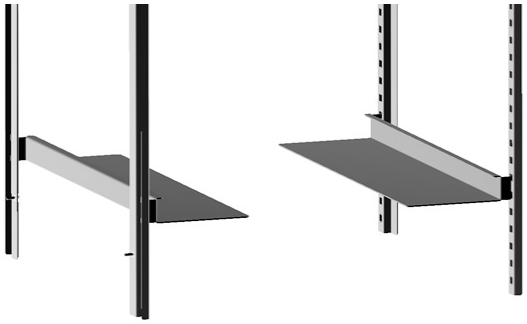
Universal Bottom Support for 12” x 20” and 18” x 26” pans

Installed T-2 tray slide with both size pans

System Name	T-2
Slide Style	Tray
Support Style	Bottom
Compatible with 12” x 20” Pans	Yes
Compatible with 18” x 26” Pans	Yes

- The T-2 (Universal) tray slide system is designed to support both 12” x 20” and 18” x 26” pans by the bottom.
- The tray slide is an L shaped piece of formed stainless steel.
- Each set of tray slides is mounted at the same height across a door section.
- For each pan, one set of two (2) tray slides is used.

Centerline Spacing				
2.0”	**3.0”**	**4.0”**	**5.0”**	**6.0”**
Maximum Tray Slides for a Full Section				
23	15	12	9	8
Maximum Tray Slides for a Half Section (Top or Bottom)				
10	7	5	4	4

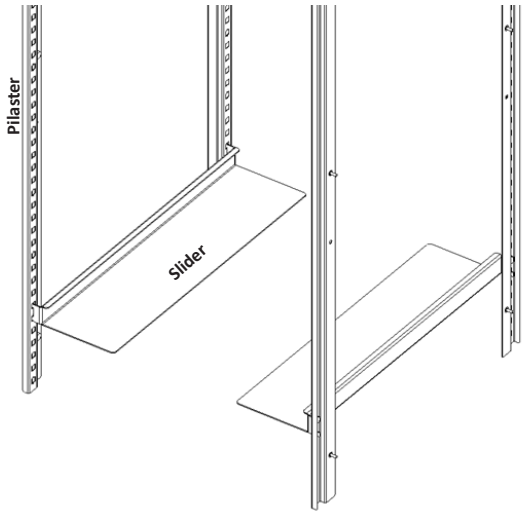


T-2 Tray Slide System

T-2 Installation Instructions

1. For each pan, two (2) tray slides will be used. Each tray slide must have another tray slide at the same height, on the opposite side of the door section. Mount the tray slides onto the pilasters by sliding the tabs down into the pilaster cutouts. Make sure that all tabs are engaged securely to each pilaster.

NOTE: A dead-blow hammer is recommended to seat the tab into the cutouts.

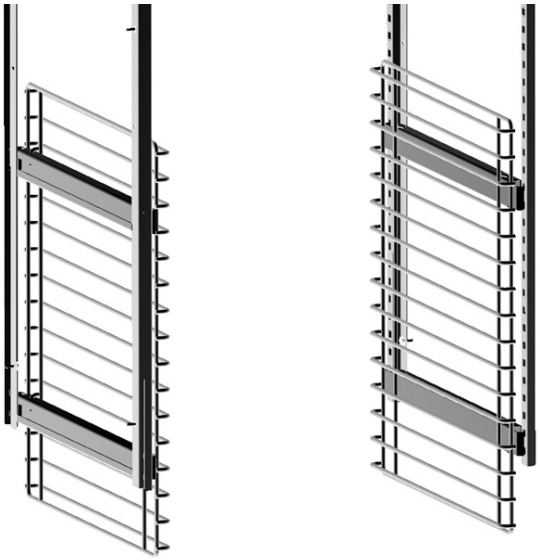


2. Verify that all tray slides are lined up evenly.

NOTE: An easy check to verify correct installation is to slide a pan onto each slide. If the pan is held securely, and is level inside the door section, the installation has been successful.

T-4 Rack Slide Installation

Edge Support for 18” x 26” pans



Installed T-4 Tray Slide for 18”x 26” pan

System Name	T-4
Slide Style	Rack
Support Style	Edge
Compatible with 12” x 20” Pans	No
Compatible with 18” x 26” Pans	Yes

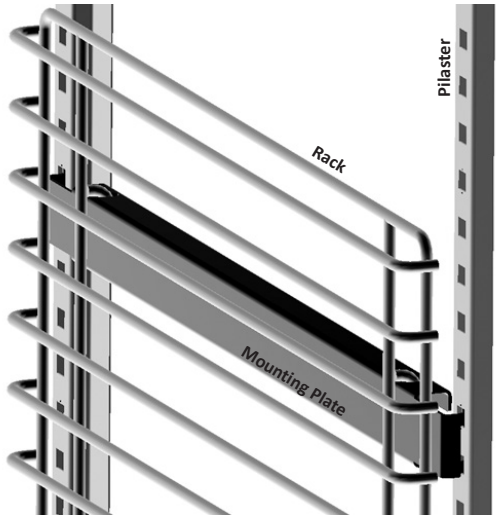
- The T-4 rack slide system is designed to support 18” x 26” pans by the edge of the pan.
- The T-4 rack slide system consists mounting plates for each side, and a set of racks.
- The racks are formed of heavy gauge metal wire.
- Each set of rack slides is mounted at the same height across a door section.
- Each rack uses two (2) mounting plates.

T-4 Installation Instructions

1. Start assembling the mounting plates at the bottom of the door section. Place a bottom mounting plate so that each set of tabs engages a cutout on the pilaster. Push the mounting plate down to secure the plate to the cutouts.

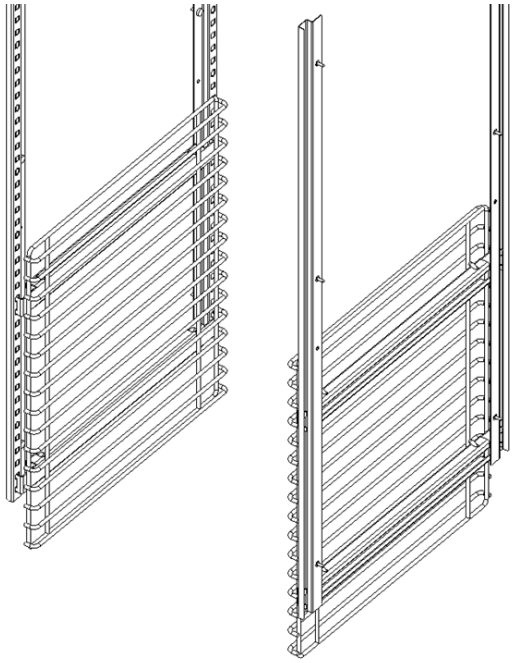
NOTE: A dead-blow hammer is recommended to seat the tab into the cutouts.

2. On the same side place a top mounting plate with the bottom edge 20” (51cm) above the top of the lower mounting plate.
3. Repeat steps 1-2 on the opposite side. Verify that all mounting plates are lined up across the door section.
4. For a full section installation, repeat steps 1-3 for the upper half.
5. Place each rack on two (2) mounting plates.



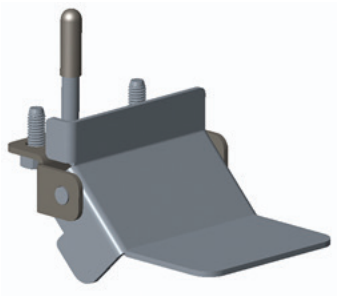
6. Verify that all tray slides are lined up evenly.

NOTE: An easy check to verify correct installation is to slide a pan of the appropriate size into each slide. If the pan is held securely, and is level inside the door section, the installation has been successful.

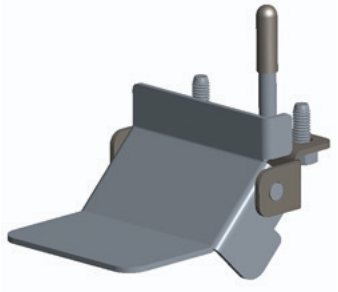


Optional Foot Pedal Installation Instruction

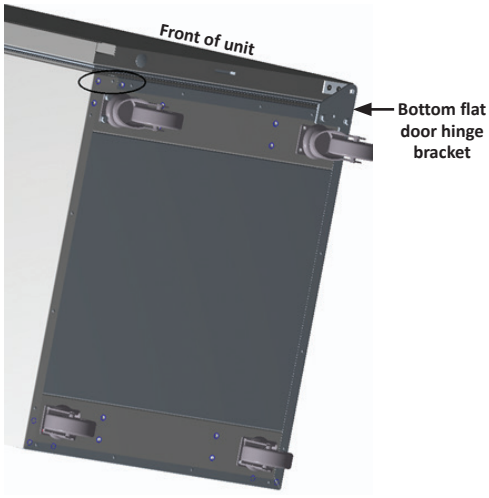
- If the optional foot pedal is ordered for a right hinged door, ensure part #000-D10-0031



- If the optional foot pedal is ordered for a left hinged door, ensure part # 000-D10-0030 is received.

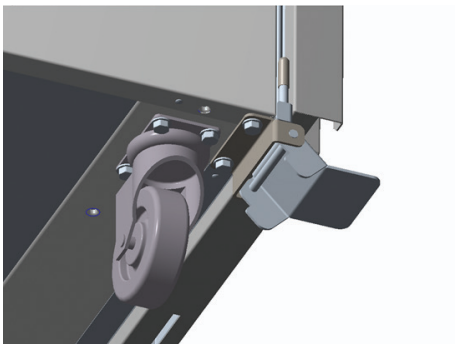


1. Locate foot pedal placement. Placement is on the bottom of the cabinet, opposite of the bottom flat door hinge bracket.



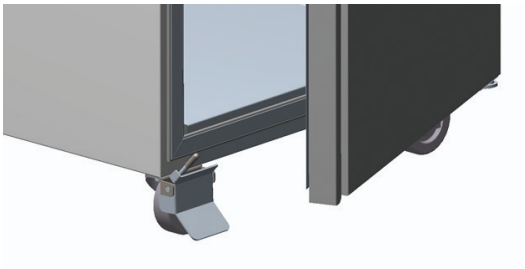
2. Mount foot pedal door assist with (2) 5/16-18 bolts that are provided, use ½" socket or wrench. Foot pedal plate should be facing forward and parallel to the floor when door is closed.

Front View



Bottom Side View

3. Step down on top of foot pedal plate and door will swing open.



Foot Pedal When Door Is Open

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.

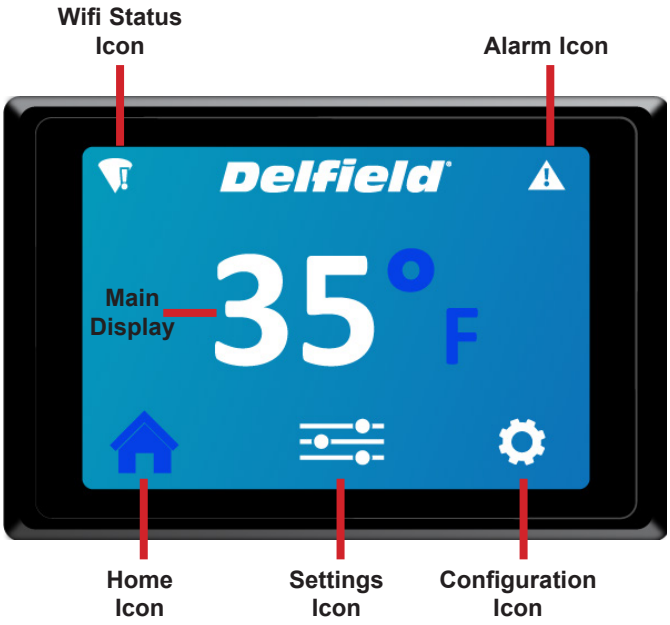
Warning

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.



GA Touchscreen Controls

WIFI STATUS ICON:

- Shows status of connetion (strength and availibility)

ALARM ICON:

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

MAIN DISPLAY:

- Shows cabinet display/defrost icon/ system standby

HOME ICON:

- Returns to main display

SETTINGS ICON

- Set Box Temperature (needs lock screen password)
- Alarm management (needs lock screen password)
- Frame Heater (when applicable)
- Diagnostics
- Network Connection (needs lock screen password)
- Rapid Pull Down
- Units
- Defrost type (when applicable)

CONFIGURATIONS ICON

- Interior light
- Time/Date (needs lock screen password)
- Password
- Language
- LCD Brightness
- Manual Defrost (when applicable)
- Firmware Update (needs lock screen password)
- Reset Factory Settings (needs lock screen password)
- Unit Standby (needs lock screen password)

LOCKED SCREEN PASSWORD

Some operations within the GA touchscreen require a managers password: 211276. For further information on the password access visit page 29

REFRIGERATOR & FREEZER OPERATION

- Delfield refrigerators are designed to maintain an operational temperature of 36°F to 40°F (2°C to 4°C).
- Delfield freezers are designed to maintain an operational temperature of 0°F (-18°C).

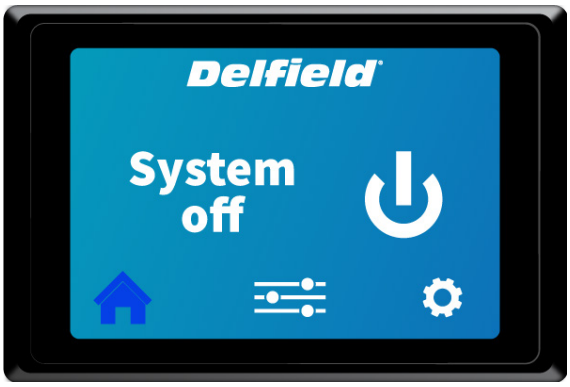
REFRIGERATOR & FREEZER START UP

Note

Display responds to finger touch only. Do not use utensils or other objects to operate the display. Use of these objects could damage the display.

This also covers anytime power is disconnected then reconnected.

1. Plug the unit in.
2. The screen will appear after a 30 second delay.
3. Select the power icon, located on the right of the screen.



4. The touchscreen will move through the following two screens.

5. The unit will continue though the Defrost mode. The compressor and condenser fan as well as the evaporator fan will remain off until this initial defrost is complete. This initial defrost cycle may take up to 35 minutes to complete.
6. The defrost icon will continue on the display for an additional 30 minutes while the cooling cycle cools the box to the set temperature. Then the box temperature will be displayed.

7. The temperature control will cycle the compressor, evaporator fan motor and condenser fan motor to maintain box temperature at the control setting.

Power Down

1. From the settings screen, select Unit Standby.

2. Access to this page requires the manager password.
3. Slide over the System Power button to off.
4. Setting system power to off will shut down the cooling or heating system only. Power will remain to control.

Settings Screen\Unit Standby

5. If the unit is a heated cabinet, allow unit to cool down.
6. Clean equipment as discussed in the maintenance section of this manual.

EVAPORATOR FAN OPERATION

During normal operation the evaporator fan may cycle and/or pulse independently of the compressor. Consult Technical Support at 1-844-724-CARE if you are unsure of the proper function.

	Cooling Cycle		Defrost Cycle
	Compressor On	**Compressor Off**	**Compressor Off**
Refrigerator	Evap Fan On	Cycles On 2-Min, Off 2-Min	Evap Fan On
Freezer	Evap Fan On	Evap Fan Off	Evap Fan Off

Locked Screen Password (further)

1. When a function is password protected, the password enter screen will appear. Type in the either the manager password or the service password.
   - The icon ∧ in the bottom left will toggle the keyboard between uppercase, lower case and numbers.
   - The manager password is 211276.

2. After the correct password is entered, the display will proceed to the password protected function.
   - All features protected by the entered password will remain active until the display is not active for 10 seconds. The display will return to the home screen and the password accessed features will be locked.
   - Three attempts are allowed with incorrect passwords then the touchscreen will return to the home screen.

HEATED CABINET OPERATION

DANGER

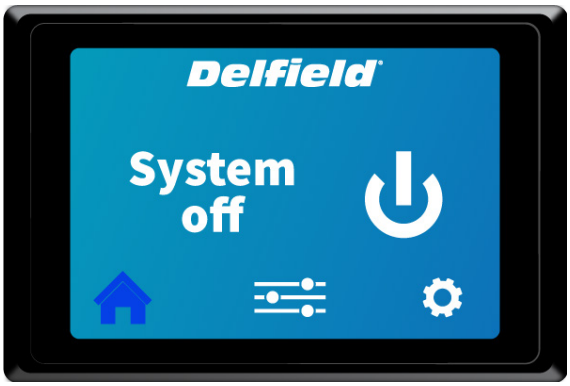
The unit surface is very hot! Avoid direct contact with skin; use appropriate protective apparel, such as gloves.

Delfield heated cabinets are designed to maintain an operational temperature of 165°F (73°C).

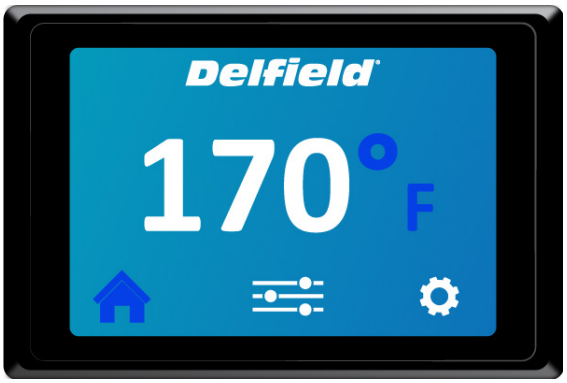
Heated Cabinet Start Up

This also covers anytime power is disconnected then reconnected.

1. Plug the unit in.
2. The screen will appear after a 30 second delay.
3. Select the power icon, located on the right of the screen.



4. The home screen will display. Allow unit to warm-up before use. It may take up to two hours to reach the desired temperature.



FAN OPERATION

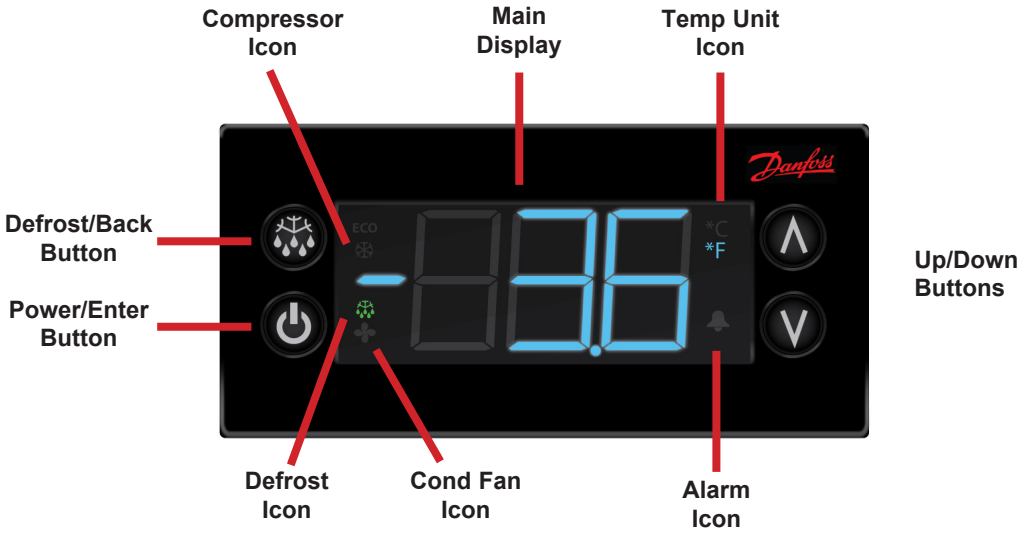
When heating elements are ON, fan is ON.

When heating elements are OFF, fan cycles OFF for 2 minutes, then ON for 1 minute and repeating this cycle until control turns heating elements back ON.

SCREEN VARIATIONS

- If there is a cabinet temperature probe failure three dashes will replace the cabinet temperature. The active alert icon will also display. The three dashes will be displayed as long as the temperature probe failure continues.

- When the cabinet has been turned off and power is still connected, the power icon will replace the temperature. The display remains active for service functions and to turn the cabinet back on.



GA-GB Model Danfoss Controls

Controls/Programming/Settings

Refrigerator Operation

Refrigerators are factory set at mid-range to maintain about 38ºF (3°C) box temperature.

1. At initial start-up or anytime power is disconnected, then reconnected to the unit, the control will go into defrost mode.
2. The control will enter a DEFROST mode and the display will read dEF. The compressor and condenser fan as well as the evaporator fan will remain off until this initial defrost is complete. This initial defrost cycle may take up to 35 minutes to complete.
3. The display will continue to read dEF for an additional 30 minutes while the cooling cycle cools the box to the set temperature.
4. Then the digital thermostat will display box temperature.
5. The temperature control will cycle the compressor, evaporator fan motor and condenser fan motor to maintain box temperature at the control setting. For more information see R290 Evaporator Fan Operation on page 42.

Refrigerator Defrost

The temperature control also monitors the evaporator temperature and will turn off the compressor and condenser fan motor when needed to allow accumulated frost on the evaporator to clear. During this defrost cycle, the digital temperature display will read dEF. After the defrost cycle is complete, the temperature control will return to a normal cooling cycle, but the display will continue to read dEF until the evaporator returns to normal cooling temperatures (up to 30 minutes).

Freezer Operation

Freezers are factory set at mid-range to maintain about -2°F (-19°C) box temperature.

1. At initial start-up or anytime power is disconnected, then reconnected to the unit, the control will go into defrost mode
2. The control will enter a DEFROST mode and the display will read dEF. The compressor and condenser fan as well as the evaporator fan will remain off until this initial defrost is complete. This initial defrost cycle may take up to 35 minutes to complete.
3. The display will continue to read dEF for an additional 30 minutes while the freezing cycle cools the box to the set temperature.
4. Then the thermostat will display box temperature.
5. The temperature control will cycle the compressor, evaporator fan motor and condenser fan motor to maintain box temperature at the control setting. For more information see R290 Evaporator Fan Operation on page 34.

Freezer Automatic Defrost

The control also monitors compressor total running time and will enter a defrost cycle after total compressor running time is greater than seven hours since the last defrost cycle OR if evaporator coil temperature drops below -30°F (-34°C) (indicating excessive frost on the coil).

Freezer Manual Defrost

If a manual defrost is desired, hold the upper left button for five seconds or unplug the unit for several seconds, then plug unit back in. This will cause the control to re-initialize and then enter a defrost cycle.

When the control enters the defrost mode, it switches off the evaporator fan motor, compressor and condenser fan motor,

and switches on the defrost heater to warm the evaporator coil. Thereby melting all frost accumulated during the previous refrigeration cycle. The digital temperature display will now read dEF. The control will continue the defrost cycle for a MINIMUM of six minutes and a MAXIMUM of 35 minutes depending on the amount of frost accumulated on the evaporator coil.

After the defrost cycle is complete, the control returns to a normal refrigeration cycle, however the evaporator fan motor will not switch on until the evaporator reaches -5°F (-21°C) or two minutes AFTER the compressor and condenser fan motor have begun operating. The digital temperature display will continue to read dEF until the evaporator has returned to normal freezing temperatures (up to 30 minutes).

Control Display

Operation / Indication			
Status	**Displayed**	🔊	**Comments**
Normal (°C)	Temp. [°C]		Unit depends on setting (parameters in control)
Normal (°F)	Temp. [°F]		
Show set-point	Temp.		
Set to Defrost	dEF / Temp		Depends on setting (parameters in control or as chosen by upper left button)
Sensor 1 defect	E01 🔔	X	Air sensor
Sensor 2 defect	E02 🔔	X	Coil sensor
Sensor 3 defect	E03 🔔	X	Open
Sensor 4 defect	E04 🔔	X	Open
High temperature alarm	Hi 🔔	X	Automatically switching at 2 sec rate
Low temperature alarm	Lo 🔔	X	
Line voltage too high, above 140 volts	uHi 🔔	X	
Line voltage too low, below 96 volts	uLi 🔔	X	
Control calls for cooling for more than 24 hours straight	LEA 🔔	X	Time includes defrost. Error will go away if the control cycles off the compressor or if the power is shut off. If error is on a cold pan it could be related to a high ambient temperature or not shutting the rail off nightly.

🔔 All alarms sound for approximately 10 seconds and then are silent for 50 seconds. It will do that for 15 cycles and then remain silent. The alarm code will still be present on the display until the fault clears.

R290 Temperature Control & Display Operation

Press upper or lower right button.

- Display show actual set-point (blinking).
  - If buttons untouched for 3 seconds returns to normal.
- Increase set-point by pressing upper button. Max value depends on parameters in control.
- Decrease set-point by pressing lower button. Min value depends on parameters in control.
  - If buttons untouched for 3 seconds returns to normal and stores new set-point.

Press upper left button for 5 seconds.

- Start defrost.

Press lower left button for 5 seconds.

- Unit goes into stand-by mode.
  - The display will read off, then a period.
- Press the lower left button again for 5 seconds.
  - The display will read on.
  - The unit will then start up in the defrost mode, and display will read dEF.

Power Switch

All freezers, two and three refrigerators are equipped with a power disconnect switch located behind the louvered end panel. Switch must be in the on position for the unit to operate. If the switch is turned off, then returned to the on position, the unit will enter a defrost cycle and the display will read dEF.

Light Switch

GB glass door units will have a light switch located behind the louvered panel next to the power switch.

Energy Saver Switch

Select freezers are equipped with an energy saver switch for service use. It is located in the electrical box behind the front shroud. It controls the length of time that heat is applied to the door perimeter. The normal operating position for this switch is the on position, providing the shortest amount of time. If excessive condensation is observed on the door opening, switch to the off position with the help of an authorized service agent. The off position will increase the length of time the door heater is on.

Temperature Alarm

The alarm will sound and flash “HI” or “LO” 90 minutes after the unit has reached its alarm temperature point or after any power interruption if the temperature is above or below the alarm set points. Refrigerators are factory set at mid-range to maintain about 38°F (3°C) box temperature. The high refrigerator temperature point is 50°F (10°C). The low refrigerator temperature point is 25°F (-4°C). Freezers are factory set at mid-range to maintain about -2°F (-19°C) box temperature. The high freezer temperature point is 20°F (-7°C). Freezers do not have a low temperature point.

EVAPORATOR FAN OPERATION

Depending on the units requirements, units may have evaporator fans that run continually or cycle on and off when power is applied. If you have a unit that you notice the fan is cycling, please see the operations sequence below.

During normal operation the evaporator fan may cycle and/or pulse independently of the compressor. Consult Technical Support at 1-844-724-CARE if you are unsure of the proper function.

	Cooling Cycle				**Defrost Cycle**	
	Compressor On		**Compressor Off**		**Compressor Off**	
	Evap Fan On	**Evap Fan Off**	**Evap Fan On**	**Evap Fan Off**	**Evap Fan On**	**Evap Fan Off**
Refrigerator	X		Cycles On 2-Min, Off 2-Min		X	
Freezer	X			X		X

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.

New Hinge Cartridge Installation

Watch a Delfield TechTalk Video on Door Hinges here!

- Full doors have a cartridge hinge on both the bottom and top of the door.
- Half doors only have one cartridge hinge, the bottom hinge of the bottom half door and the top hinge of the top half door.

1. Install the new cartridge into the door as received. The new cartridge will be in the CLOSED position.

2. **As you unload the hinge tension be careful to hold on tight because you should feel the strong spring tension as you rotate the hinge.** Place the hinge bracket on the square hinge pin and rotate it ½ turn to the outside of the door.

3. After the hinge has been rotated, it will now be in the OPEN position and NOT under spring tension.

4. Mount the door back onto the cabinet with the door OPEN. The door should now close properly.
5. Begin closing the door, the door should finish closing on it's own. If the door stays open remove the door and hinge bracket.
6. Using the hinge bracket rotate the square peg on the cartridge until you feel tension and resistance if you move the hinge in either direction. The hinge is now in the CLOSED position. Repeat instructions starting with step 2.

Adding pressure to Door Hinges

1. With a 3/8" nut driver remove the nuts and bottom hinge from the unit.

2. Remove door from unit.
3. Remove two screws from the bottom of the door to replace the hinge cartridge.

4. Place a white spacer on the bottom hinge pin.

5. Place the hinge on the hinge pin, rotate it and ensure there is tension in both directions.

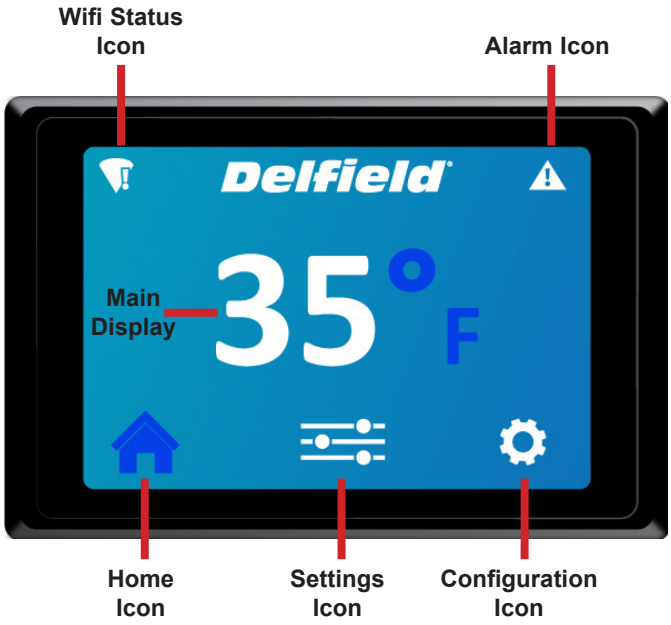
6. Rotate the door hinge 160°-180°.

7. Hold the hinge, twist the door and slide the top pin into the top hinge.
8. Screw the bottom hinge to the unit.

9. Check the door alignment. Check that it shuts and seals. Adjust the bottom hinge if necessary.

Section 5
Control Settings & Configurations

GA Touchscreen Control



GA Touchscreen Controls

WIFI STATUS ICON:

- Shows status of connetion (strength and availibility)

ALARM ICON:

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

MAIN DISPLAY:

- Shows cabinet display/defrost icon/ system standby

HOME ICON:

- Returns to main display

SETTINGS ICON

CONFIGURATIONS ICON

Settings Adjustments

SET BOX TEMPERATURE

Configuration Screen\Set Box Temperature
Screen For Dual Temperature Cabinet Shown

- Access to this page requires the manager password (211276).
- Increase and decrease the cabinet temperature set point using the up and down arrows.
- Set point can only be adjusted within the set point limits.
- Refrigeration factory setting is 35.6°F, set point limits are 30°F and 60°F.
- Freezer factory setting is -1.4°F, set point limits are -5°F and 36°F.
- Heated cabinet factory setting is 165°F, set point limits are 120°F and 200°F.

ALARM MANAGEMENT

- Access to this page requires the manager password (211276).
- Selecting this Icon switches the audible alarm between Off and On. On is the factory setting.

FRAME HEATER

- Factory setting is on Power Save Mode
- Additional options are Always On & Always Off

DIAGNOSTICS

From here you can select the following:

- Relay Status - Report of active relays
- Data History - Download Diagnostics & HAACP as well as view Energy & Temperature charts
- Model Informatin - View model & wireless information
- Temperature Probes - View units probe readings
- Relay Outputs - Test the functionality of the relays in real time for testing individual components in the unit

NETWORK CONNECTION

Configuration Screen\Network Connection

- Ethernet: will display local area network name and icon if it is connected.
- WiFi: will display the WiFi network name and signal strength if it is connected.
- Ethernet and WiFi both offer access to a IP Address Setup screen. Select the cog icon.

- Manage network connection by selecting “Set Up Connection.”
- Screen will list up to eight networks, their name, type of security, and signal strength using an icon.
- Use the scroll bar on the right of the screen to see additional networks. Select a listed network and the display will navigate to the complete network setup.
- Selecting cancel navigates to the previously viewed screen and cancels the network setup.
- Select the empty password box to bring up a keyboard. Type in the password, each character will appear as an asterisk. Connect will appear in the lower right corner.
- If the incorrect password is entered the entry will disappear. Retry in the empty password box.
- If no password is required, security type will list None, neither password nor empty box will display and connect will appear in the lower right corner.
- Selecting Connect will complete the internet setup and navigate back to the Network Connection screen.

RAPID PULL DOWN

This will require the managers password (211276), doing so will allow the ability to select a toggle.

UNITS

- The selected mode/button will be gray.
- Selecting Fahrenheit sets the cabinet temperature units to Fahrenheit. This is the factory default.
- Selecting Celsius sets the cabinet temperature units to Celsius.

DEFROST TYPE (REFRIGERATOR & FREEZER)

- Access to this page requires the manager password (211276).
- The selected mode/button will be gray.
- Selecting Adaptive Defrost activates this defrost mode. This is the factory default.

Adaptive Defrost

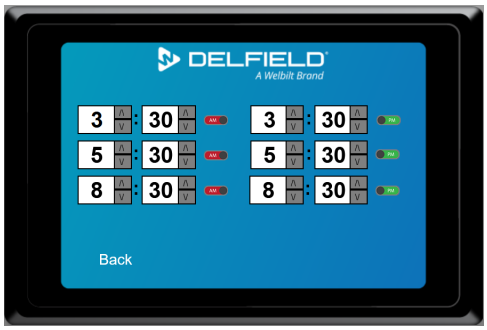
The temperature control monitors the evaporator temperature and will turn off the compressor and condenser fan motor when needed to allow accumulated frost on the evaporator to clear. Additionally the freezer evaporator fan will turn off and the defrost heater will switch on to warm the coil. During this defrost cycle, the control will display a defrost icon. After the defrost cycle is complete, the temperature control will return to a normal cooling cycle, but the defrost icon will continue on the display until the evaporator returns to normal cooling temperatures (up to 30 minutes). The freezer evaporator fan motor will not switch on until the evaporator reaches -5°F (-21°C) or two minutes AFTER the compressor and condenser fan motor have begun operating.

The temperature control monitors evaporator temperature and compressor run time to determine the proper time for a positive defrost cycle. A defrost cycle can occur as often as every 60 minutes under extremely heavy usage. It can last a minimum of 2 minutes in a refrigerator or 6 minutes in a freezer. The compressor will remain off until the evaporator coil temperature exceeds:

- 41°F (5°C) or the controller reaches a time limit of 75 minutes on a refrigerated unit.
- 55°F (13°C) or the controller reaches a time limit of 35 minutes on a freezer.

Time of Day Defrost

- Selecting Time of Day Defrost activates this defrost mode.
- Time of Day Defrost requires defrost times to be set up.



Configuration Screen\Defrost Type\Time of Day Defrost

- Six defrost times are allowed.
- A blank hour and minutes will be an inactive time.
- If no defrost times are assigned, no defrost will occur.
- Increase and decrease the defrost time settings using the up and down arrows.

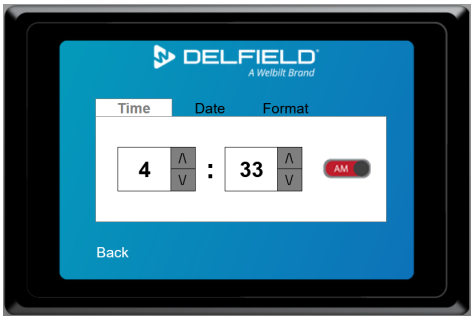
Configurations Adjustment

INTERIOR LIGHT

1. From the settings screen select Interior Lights.

- The selected mode/button will be gray.
- Selecting Always Off switches the interior light to be off at all times.
- Selecting Always On switches the interior light to be on at times when the unit is on. This is the factory default.

TIME / DATE



Settings Screen\Time|Date\Format Tab

- The Format Tab has two date and two time choices.
- Select the desired date and time format. The active choice will be gray.
- MM/DD/YR is the default. 12 Hr Clock is the default.

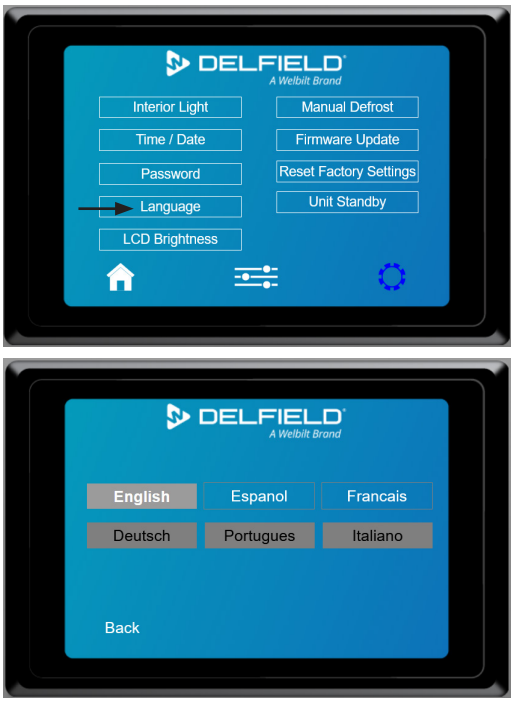
Date Format Choices

Time Format Choices

- Increase and decrease the hour and minutes using the up and down arrows.
- Based on the clock format chosen the hours can be set through 12 or 24.
- Select the AM/PM icon to switch between the two. The icon will not be available if the 24 Hr Clock is selected
- Increase and decrease the Month, Day and Year using the up and down arrows.
- 20 precedes the year setting.

Language

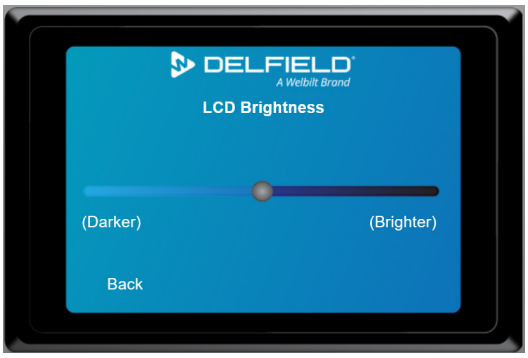
- From the settings screen, the language button remains the fourth button down on the left regardless of language.



Settings Screen\Language

- Language in the light gray box is current selection. English is default.
- Select a language in a white box to change.
- Languages in dark gray boxes are not yet available.
- English remains the top left button regardless of language.

LCD Brightness



Settings Screen\LCD Brightness

- LCD default is 50%.
- Slide the small circle along the line to the right to increase the brightness, left to decrease.

NOTE: Adjusting brightness to 60% or less will increase the life of the display.

Manual Defrost

- Access to this page requires the manager password (211276).
- Off is the factory setting.
- When On is selected the defrost will cycle once and return to normal operation.
- Hours 1 through 12 will be available if a 12 hour clock format has been selected on the Time/Date page. The AM/PM icon will allow you to switch between the two.
- Hours 1 through 23 will be available if a 24 hour clock format has been selected on the Time/Date page.
- Minutes can be set 00 through 59.

Firmware Update

Follow the instructions on screen.

You will need to download the updated Firmware from the www.Delfield.com website.

Reset Factory Settings

Return the unit to its factory settings.

Completing this will require you to first record the units serial number and model type within the Diagnostics > Model Information screen.

Once the unit is reverted to its factory settings, you will need to re-enter the serial number and model type with in the Firmware Update screen. When selection the Firmware update screen, the password lock screen will appear. Enter the Manufacturers password: 9014766419 (the entirity of the password will not appear in the screen) and press Enter. This will allow you to now re-enter the Model Information previously recorded.

Unit Standby

Inputting the managers password (211276) will reveal a System Power option to put the unit into system standby, turning the heating or cooling system off but leaving power to the control.

Web Application

KITCHENCONNECT

This online application is an equipment monitoring tool.

Register:

1. Navigate to https://www.welbiltdigital.com/
2. Select Register.
3. Enter Information in at least the required fields.
4. Select Submit.
5. Enter your email and password.
6. Select Login.

Mobile Application

SPECIFICATION LINE CONNECT

This mobile application is an equipment monitoring tool.

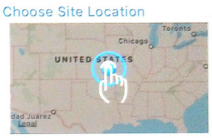
To Download The Mobile Application:

1. Open either Apple iTunes or Google PlayStore.
2. Search for Specification Line Connect.
3. Select and install.
4. Open the application. The Welbilt W logo is the application icon.

Application Operation

Set Up A Site

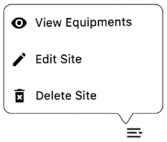
1. Select + Add Site.
2. Fill in all site information. All fields are required.
    - Site ID (Max 30 Characters)
    - Site Name (Max 20 Characters)
    - Site Manager Name (Max 20 Characters)
    - Site Email ID (Max 50 Characters)
    - Site Address (Max 50 Characters)
    - Country (From a Menu)
    - State (From a Menu
    - City (Max 20 Characters)
    - Postal Code (Max 10 Characters)
3. Select Choose Site Location to put a pin on the map.



4. Select Submit.

5. The new site will be added to the home page.

Edit Or Delete Site



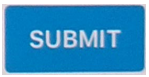
1. Select the menu icon next to the site.
2. Edit and Delete Site are available actions.
3. Edit will bring up the site information page.
4. Delete will require confirmation.

Set Up Equipment

1. Select the menu icon next to the site.
2. Select View Equipments.
3. Select + Add.

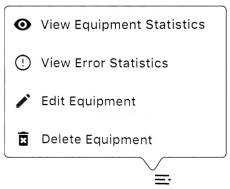
4. Fill in all equipment information. All fields are required.

    NOTE: Serial number entered must match equipment.
    - Equipment Serial Number (Max 30 Characters)
    - Equipment Name (Max 20 Characters)
    - Equipment Type (From a Menu)
    - Equipment Model (From a Menu)



5. Select Submit.
6. The new equipment will be connected to the site.

Edit Or Delete Equipment



1. Select the menu icon next to the equipment.
2. Edit and Delete Equipment are available actions.
3. Edit will bring up the equipment information page.
4. Delete will require confirmation.

EQUIPMENT MANAGEMENT

Converting .csv file to useable Excel file:

Highlight Column A

Go to the Data tab

- Under the Data Tools group, select Text to Columns

In the Convert Text to Column wizard, choose the Delimited file type and click next

- Select tab and comma, click next, and click finish

View Equipment Statistics

Tabs include:

- Summary tab includes the following statistics:
    - Cavity1 Temp Max/Min
    - Cavity2 Temp Max/Min
    - Ambient Temp Max/Min
    - Energy Used
    - Network
    - Signal Strength
- Latest Temperature Information
- Set Point Vs Cavity Vs Ambient Temperature
- Condenser Inlet Vs Outlet Temperature
- Evaporator Inlet Vs Outlet Temperature
- Energy Usage

Change the date range by clicking the calendar icon.

If the site has multiple pieces of equipment you can switch to the other equipment from the equipment menu.

Danfoss Electronic Control

CHANGING TEMPERATURE UNITS (°F TO °C) ON ERC112 CONTROL

1. Simultaneously hold the up and down arrows for 5 seconds to access menu for password protected parameters.

2. Screen should temporarily flash ***PAS*** and then move to a numeric screen.

3. Scroll to ***187*** using the up/down arrows and push the stand-by button (lower left button) to enter.

4. Scroll to ***dis*** using the up/down arrows and push the stand-by button (lower left button) to enter into the display menu.

5. Scroll to ***CFu*** using the up/down arrows and push the stand-by button (lower left button) to enter the display unit menu.

6. ***-F*** should be displayed indicating Fahrenheit. Use the down arrow to change it to ***-C*** for Celsius and hit the stand-by button (lower left button) to enter the change.

7. Push the defrost button (upper left button) to move out of the display unit menu.

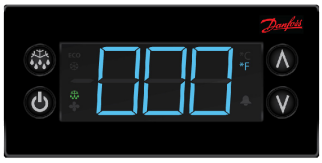
8. Push the defrost button (upper left button) to move out of the display menu and back to the normal display.

NOTE: For steps 7 and 8, display will return back to normal display after 30 seconds of inactivity.

REAL TIME PROBE READING

Follow the steps below to collect real time data from the temperature probes.

1. Simultaneously press the top and bottom arrows for 3 to 5 seconds
2. Screen will flash to “PAS” and then automatically display “000”



3. Scroll until “187” is displayed and press the stand-by button in the lower left corner of the control

4. Screen will flash to “PS3” in most cases. It could flash “PS2” in some of our specialized controls where we use “980” passcode to protect the setpoint with some of our chain customers. From there it will automatically go into the menus – typically the “tHE” menu (thermostat).

5. Press the up arrow so the display shows “SEr” for service and press the stand-by button.

6. Press the up arrow again so the display shows “Att” for air temperature sensor (sensor plugged into S1 on the control). This is the control sensor. Press the stand-by button to display what the sensor was reading at the time when the stand-by button was pressed.
7. Press the defrost button in the upper left corner to get out of the “Att” screen

8. Scroll so the display shows “Et1” for evaporator temperature sensor (sensor plugged into S2 on the control). This is the 1st defrost probe. Press the stand-by button to display what the sensor was reading at the time when the stand-by button was pressed.
9. Press the defrost button in the upper left corner to get out of the “Et1” screen

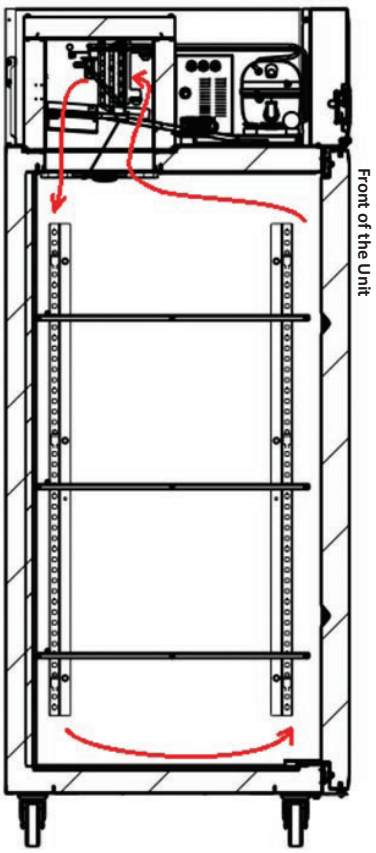
10. Units produced after 8/19 can see the second probe temperature. Scroll so the display shows “Et2” for evaporator temperature sensor (sensor plugged into S3 on the control – if so equipped). This is the 2nd defrost probe. Press the stand-by button to display what the sensor was reading at the time when the stand-by button was pressed.
11. Press the defrost button in the upper left corner to get out of the “Et2” screen

Section 6
Troubleshooting

HIGH TEMPERATURE SAFETY DEVICE

An automatic reset type safety device is mounted above the heater(s) behind the vertical air duct(s). This safety switch will open if the temperature exceeds 220°F (105°C) in the event of a fan failure or air duct obstruction. Whenever the switch opens, power to the heaters is interrupted. Once the safety switch cools sufficiently to automatically reset, operation of the heaters will resume.

Unit Air Flow Design



Refrigerator/Freezer Cross Section With Air Flow Arrows

LED Light Replacement

Important Notes

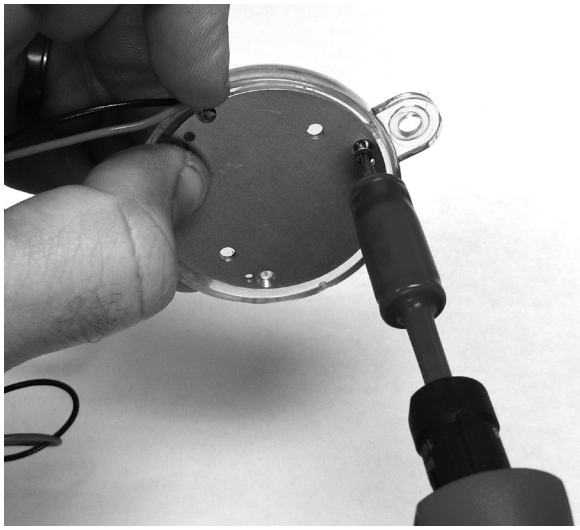
- Tools Required: **T6 Torx Bit** & Phillips Head screwdriver
- **Keep track of the light cover, all screws and wires. They will be reused.**

Removal

1. Unscrew the light fixture from the unit.

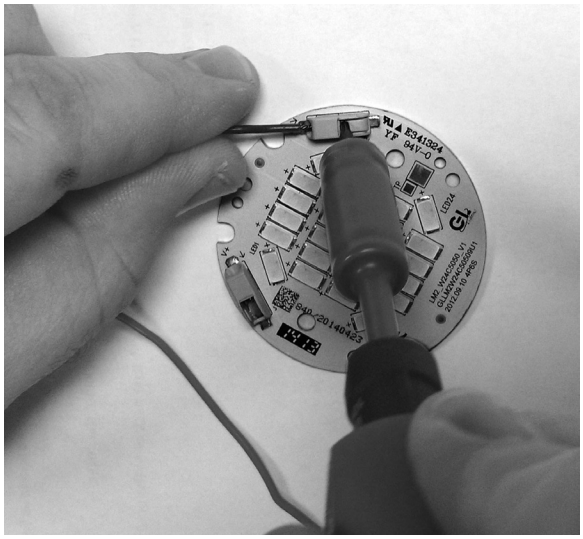
Two (2) Screws Secure the Light in the Unit

2. Unscrew the light from the cover with the T6 torx bit.



Four (4) Screws Secure the Light Cover On

3. Press the center of a raised tab to release the wire. Remove the wire. Repeat on second tab for second wire.



Pressing the Center of the Raised Tab Releases the Wire

4. Discard the old light.

Reinstall

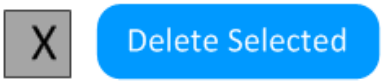
5. Press the center of a raised tab and insert a wire. Repeat on second tab with second wire. The wires are interchangeable.
6. Screw the cover back on the light.
7. Screw the light fixture back into the unit.

ALARM HISTORY SCREEN

- Home screen Top right features an active alert icon.
- Touch it to display the Alarm History screen.
- Control will store up to 20 messages.
- Use the next button or the scroll bar on the right of the screen to see additional alarms.
- Alarm information includes type, date and time.
- Types include:
    - High Temperature Alarm
    - Low Temperature Alarm
    - High Voltage Alarm
    - Low Voltage Alarm
    - Open Door Alarm
    - Sensor Alarm
    - Box Probe
    - Evap Outlet Probe
    - Continuous Compressor Run
    - Condenser Temperature too high
    - Maintenance Alert
    - Loss of Power
    - Power Restored

- Select a gray box to put an X in it or to remove the X.

- Delete Selected will delete all the messages with an X in their gray box.

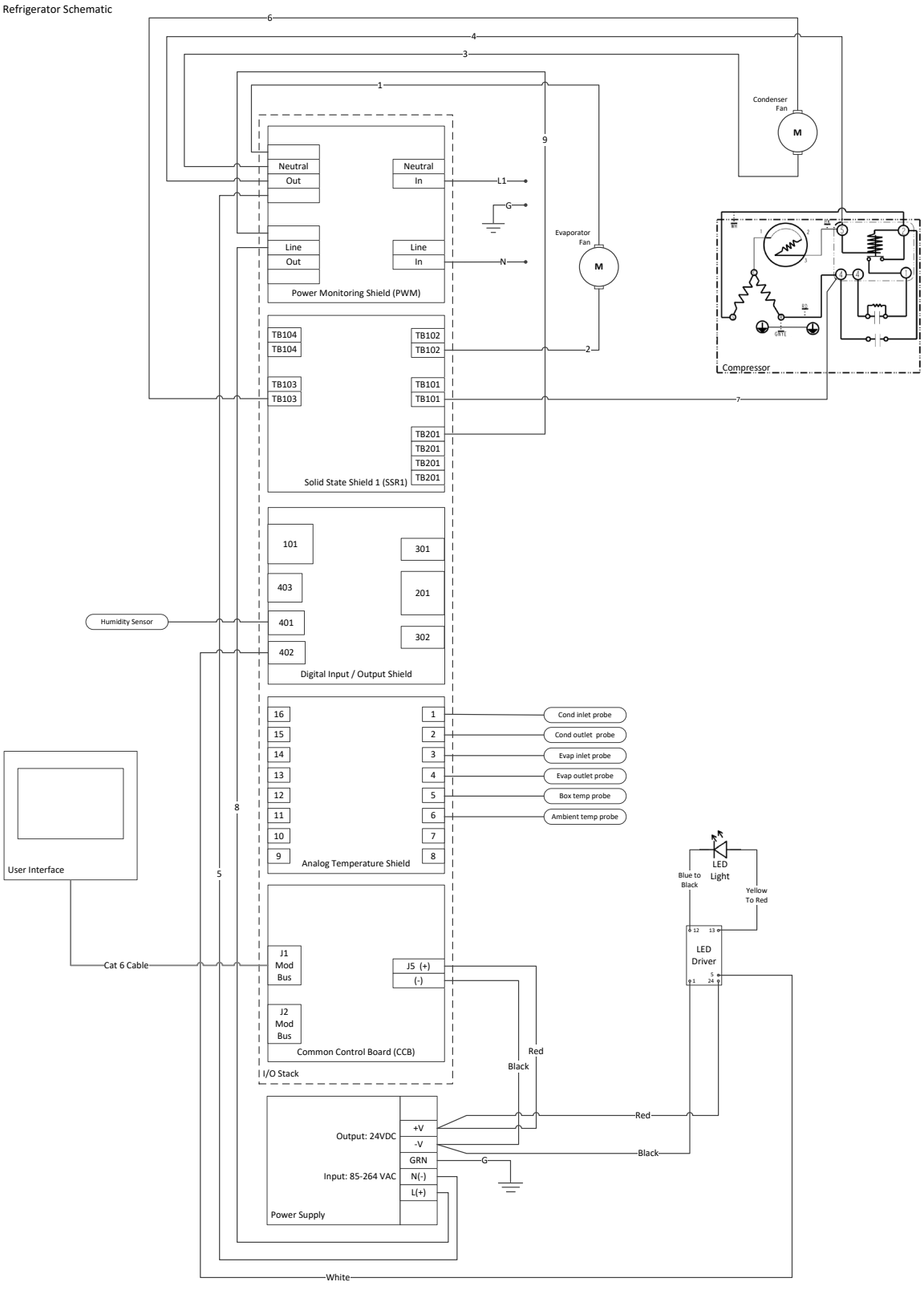


ALARM SCREENS

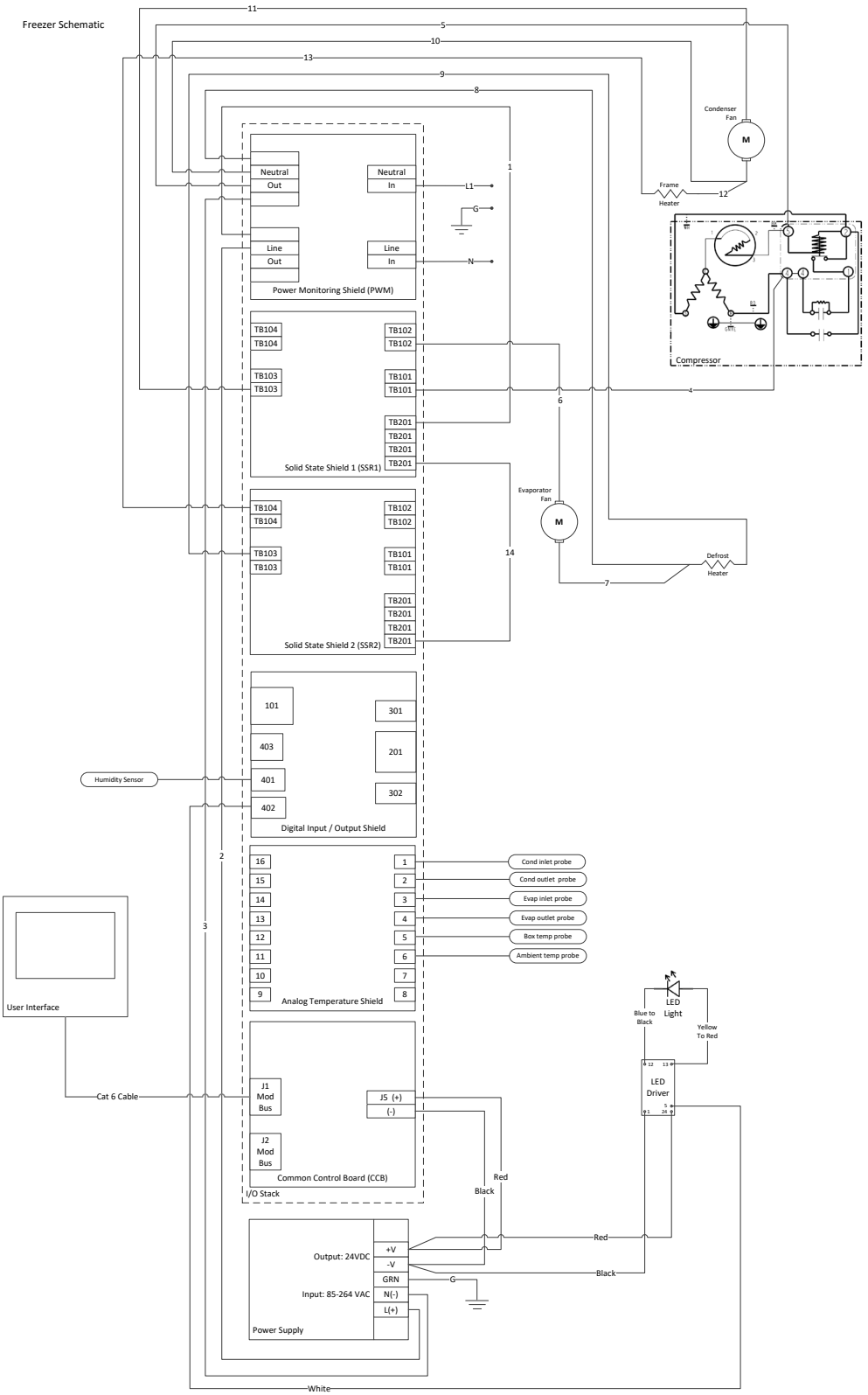
- From the Home screen select the active alert icon to go to the Alarm History screen.
- Select the alarm type to navigate to the alarm screen.

Section 7
Wiring & Parts

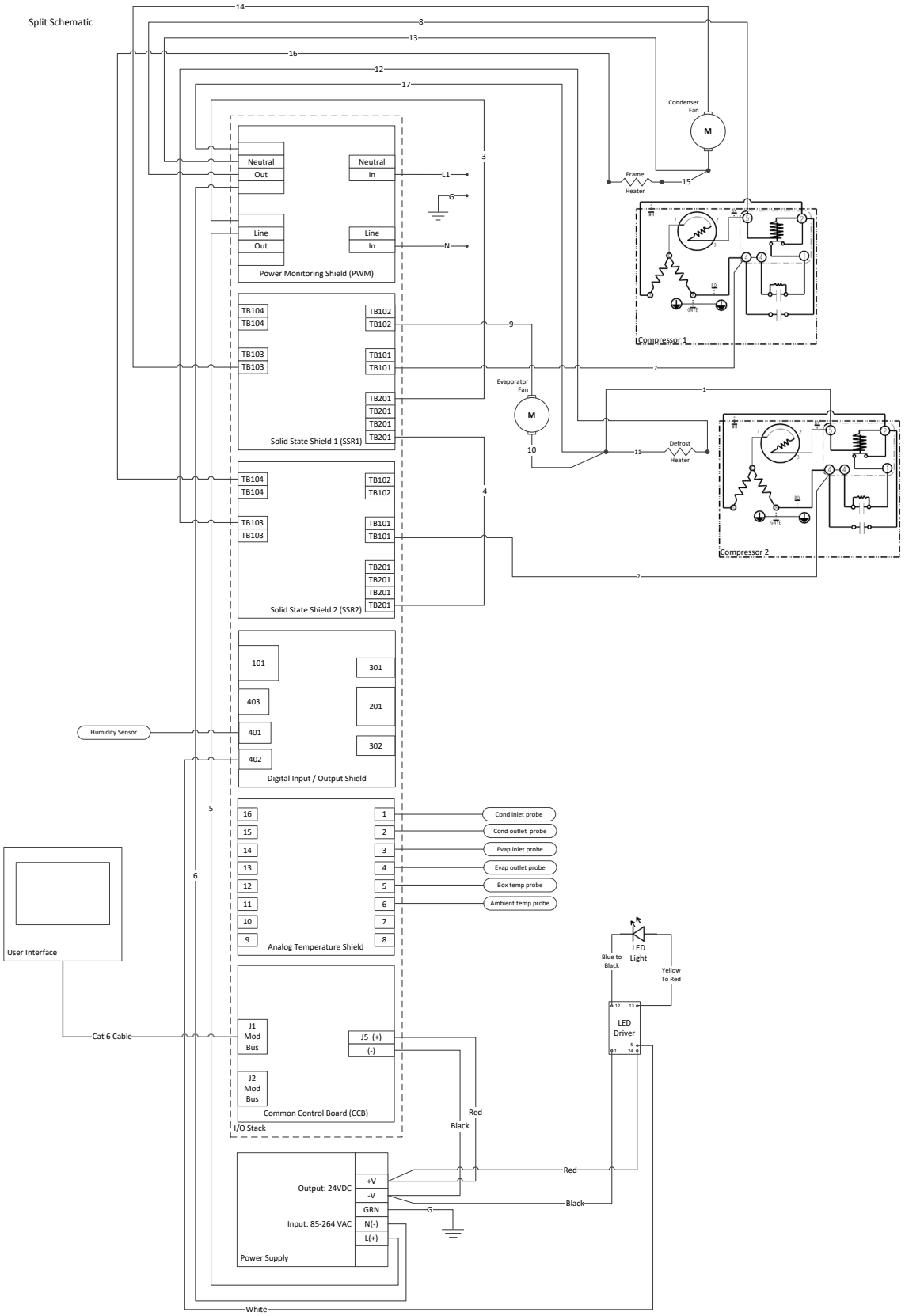
Refrigerator Wiring Diagram



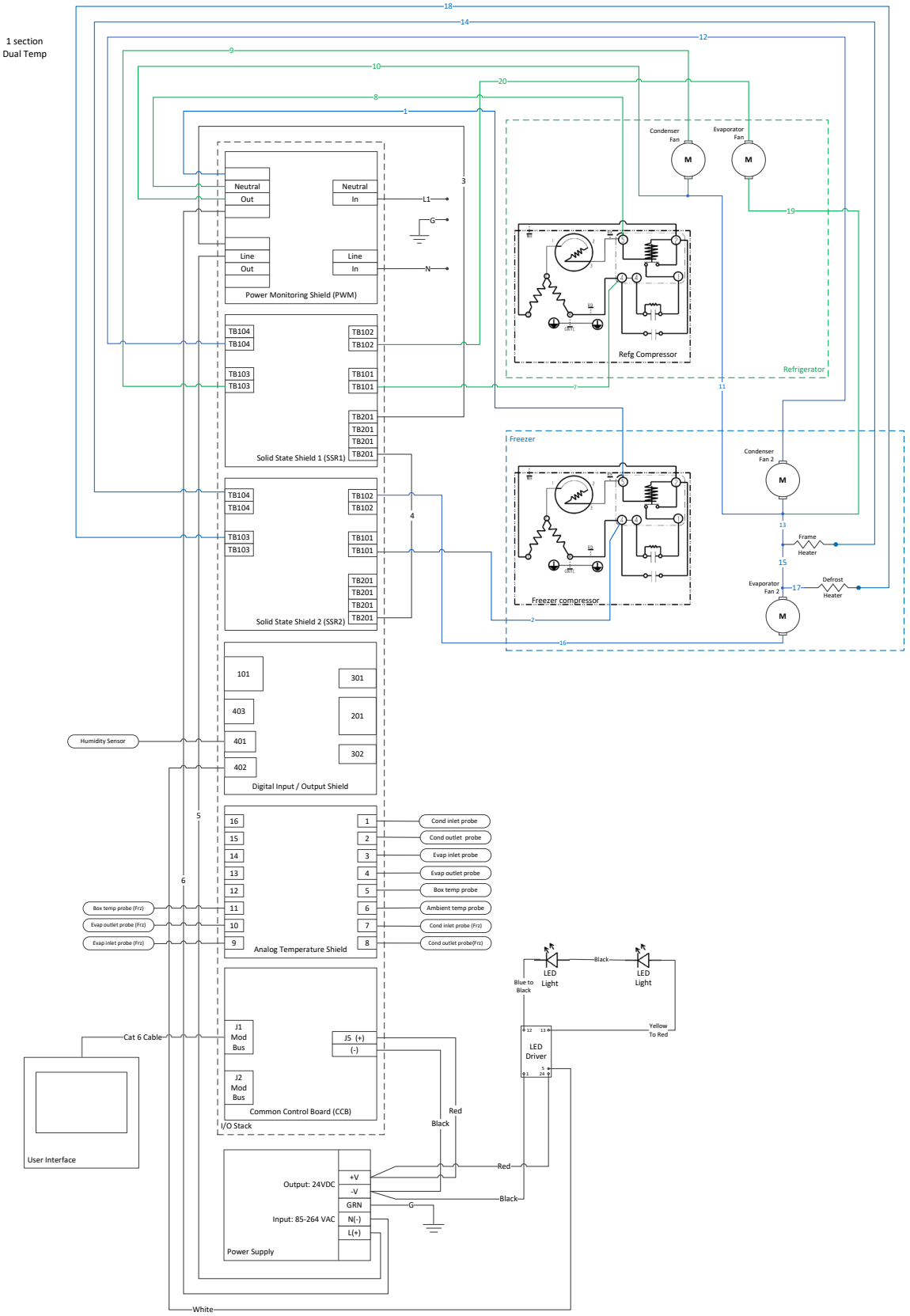
Freezer With One Compressor Wiring Diagram



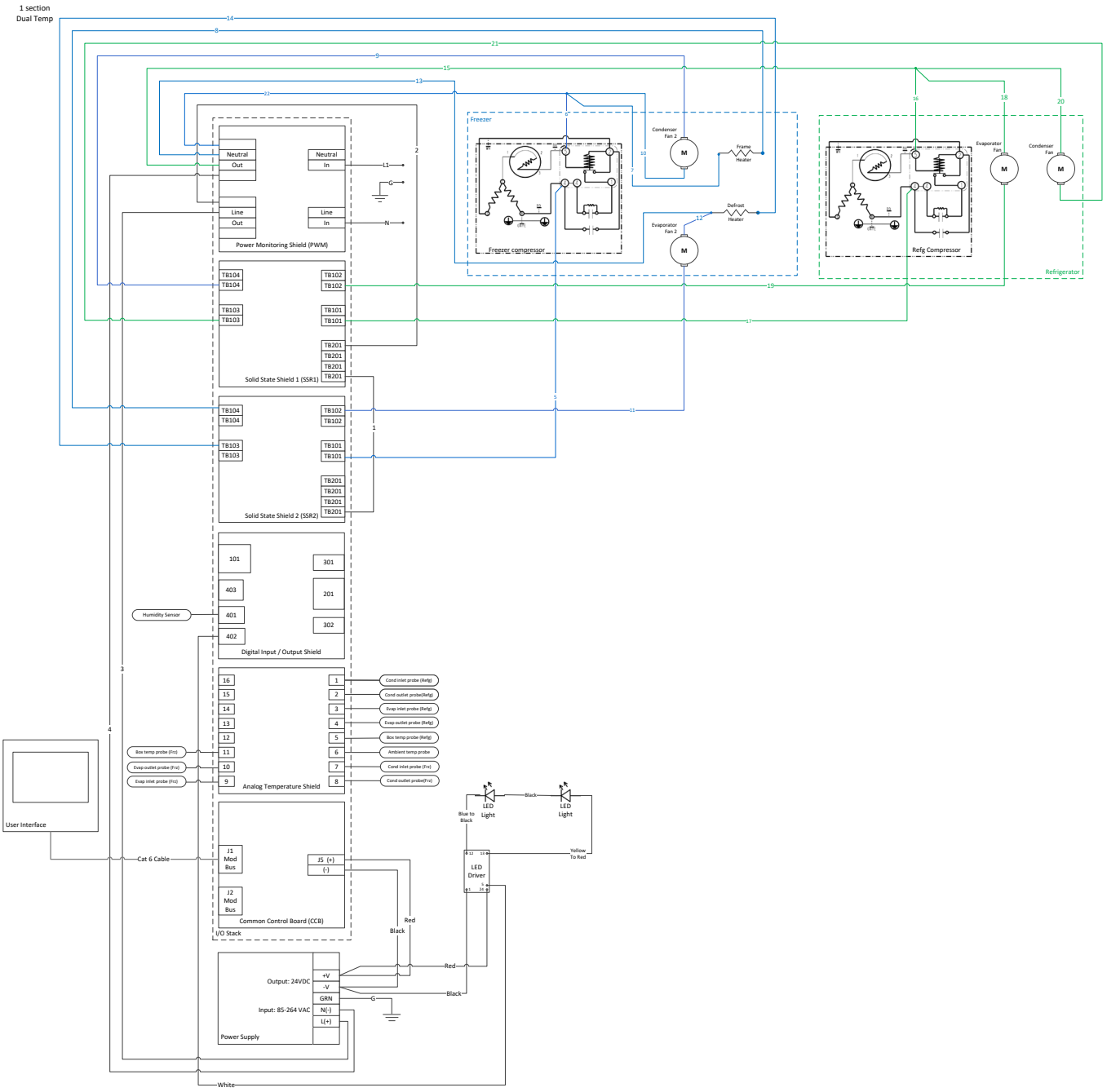
Freezers With Two Compressors Wiring Diagram



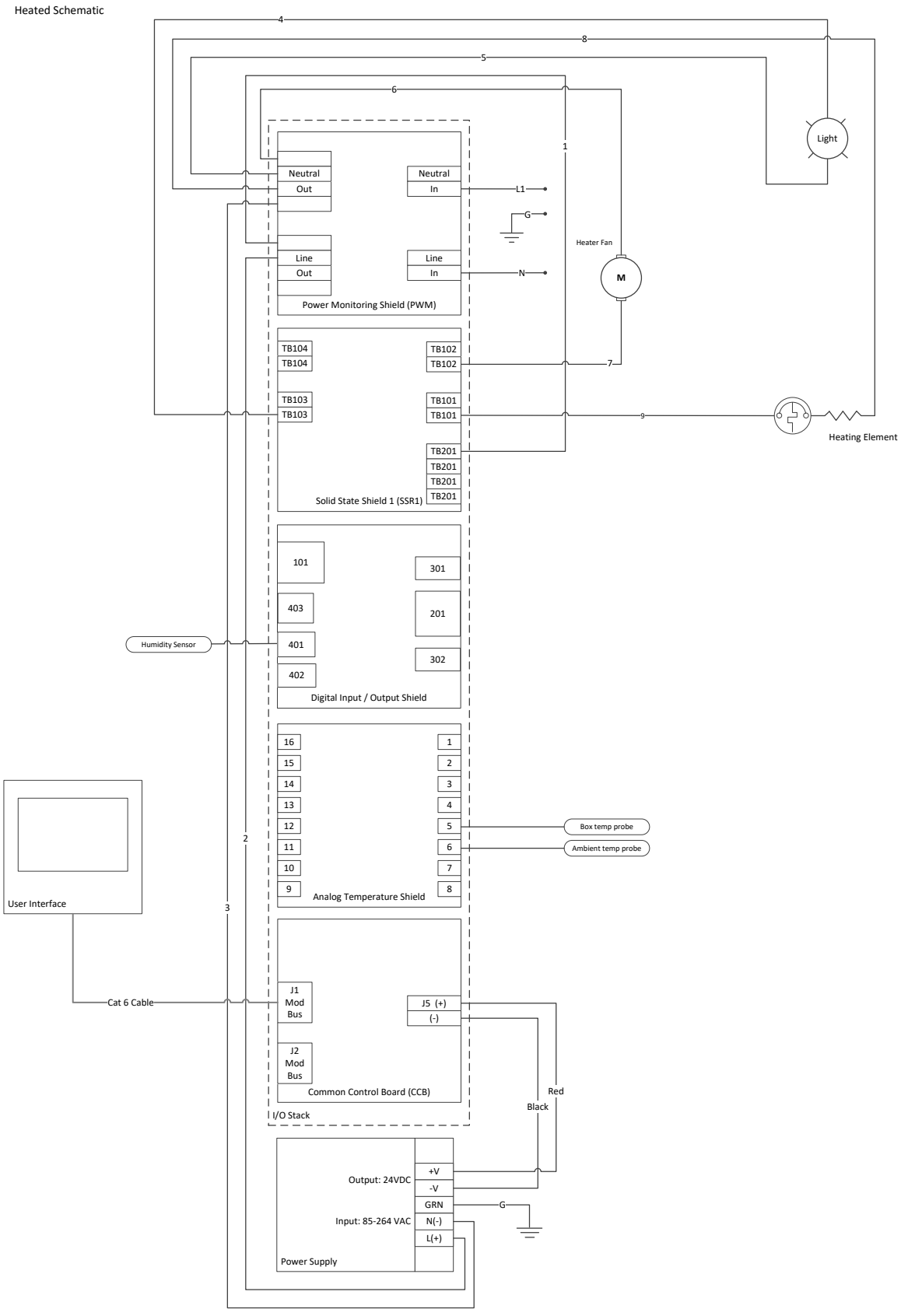
One Section Dual Temperature Wiring Diagram



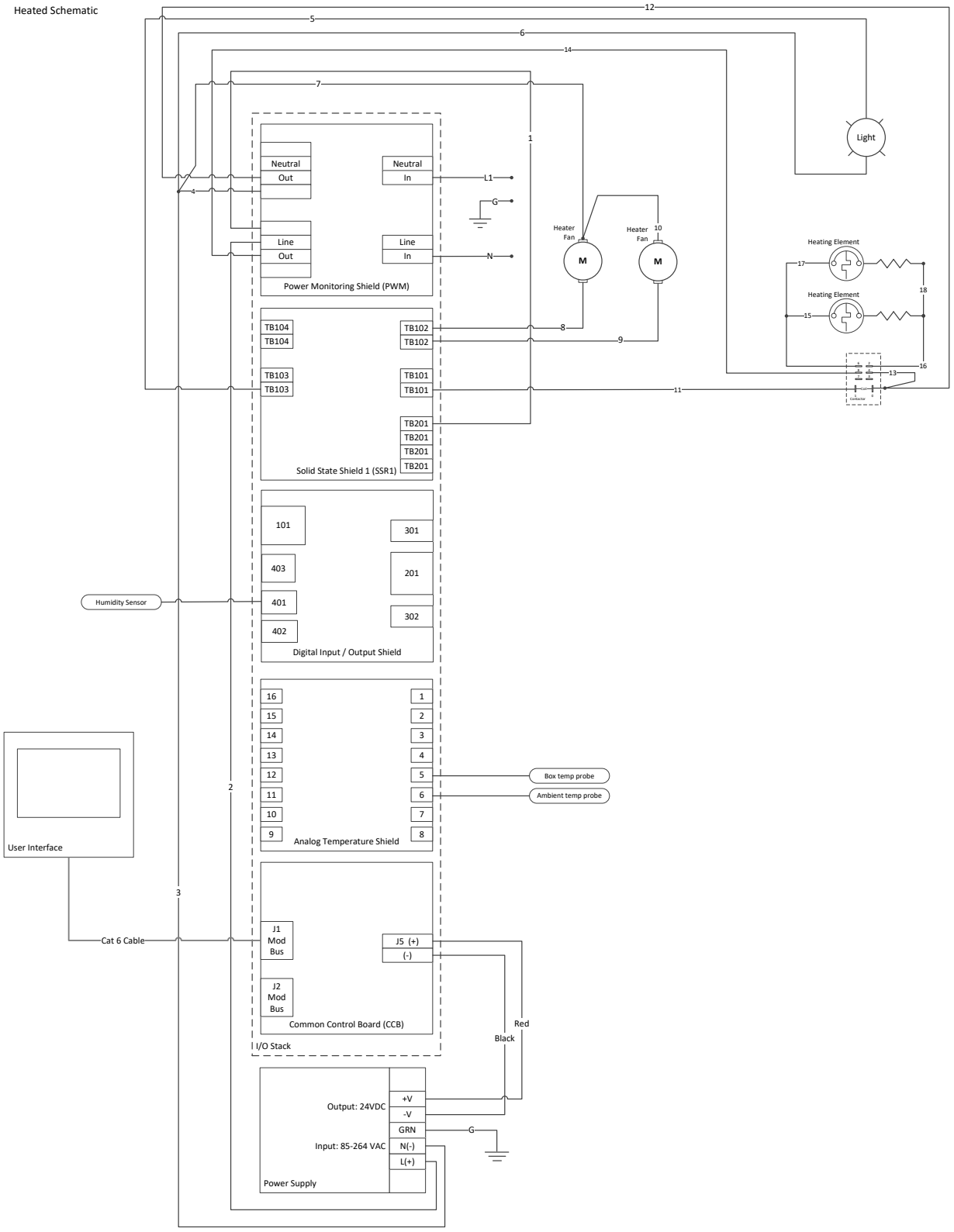
Two Section Dual Temperature Wiring Diagram



One Section Heated Cabinet Wiring Diagram



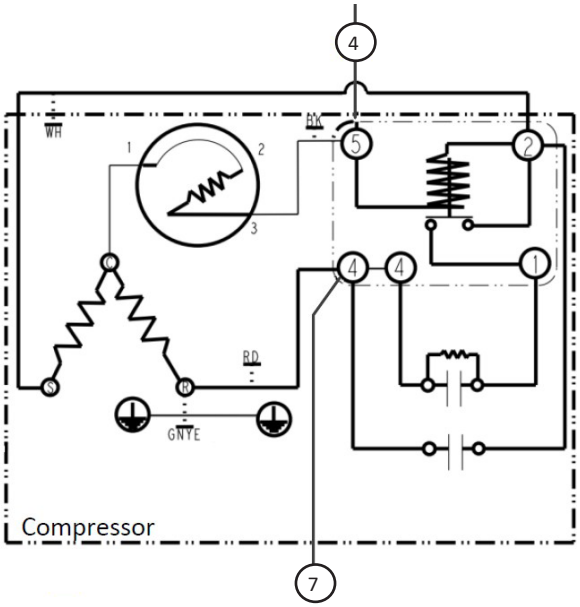
Two Section Heated Cabinet Wiring Diagram



3527145 Compressor Wiring

R290, 0.22HP

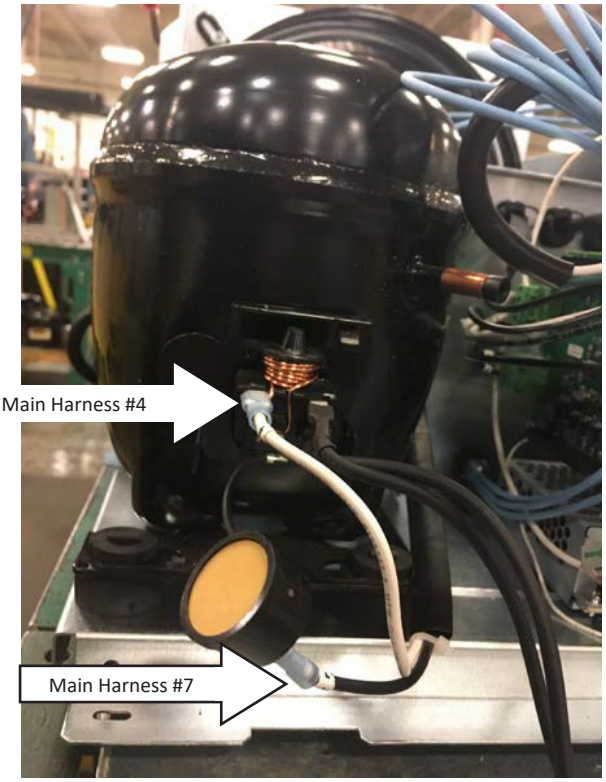
GAR1P, GARPT1P, REFRIGERATOR SIDE OF GADFL2P & GADRL2P

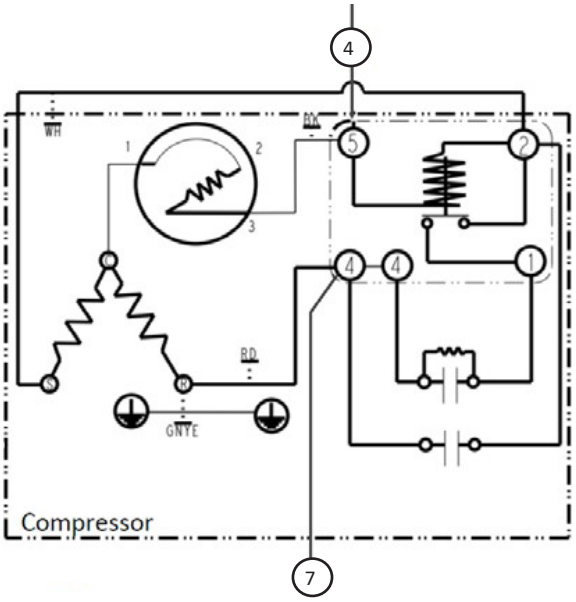


3527146 Compressor Wiring

R290, 0.33HP

GARRI1P, GARRT1P, GAR2P, GARPT2P

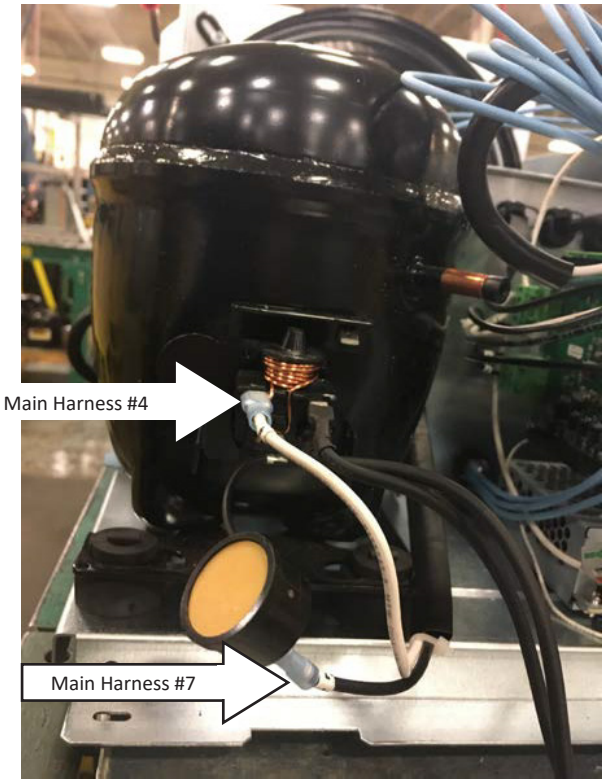


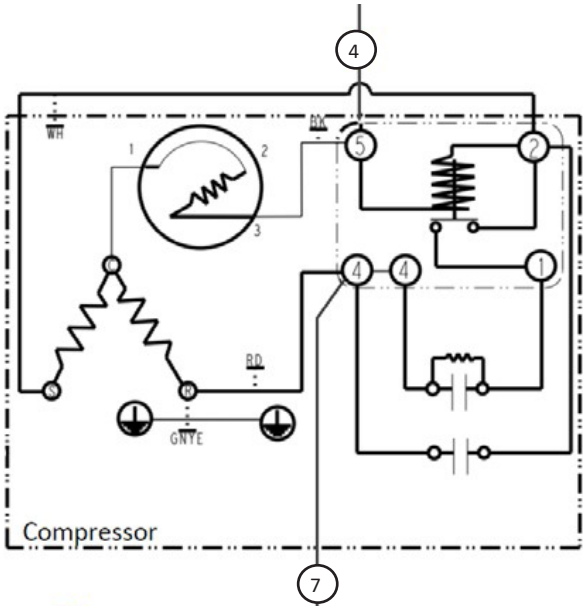


3527143 Compressor Wiring

R290, 0.355HP

GARRI2P, GARRT2P, GAR3P

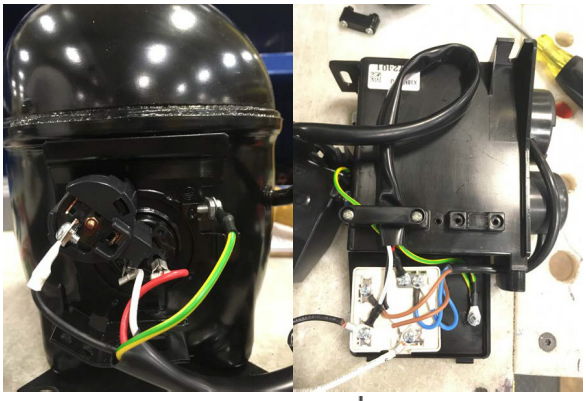


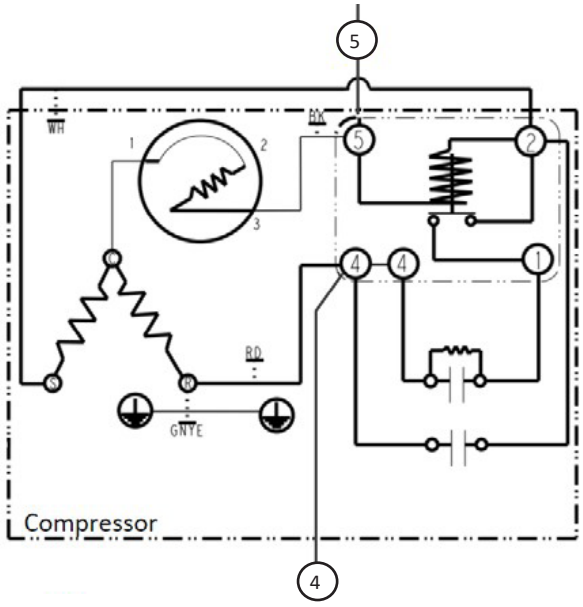


3527144 Compressor Wiring

R290, 0.55HP

GAF1P, GAFPT1P, FREEZER SIDE OF GADFL2P & GADRL2P

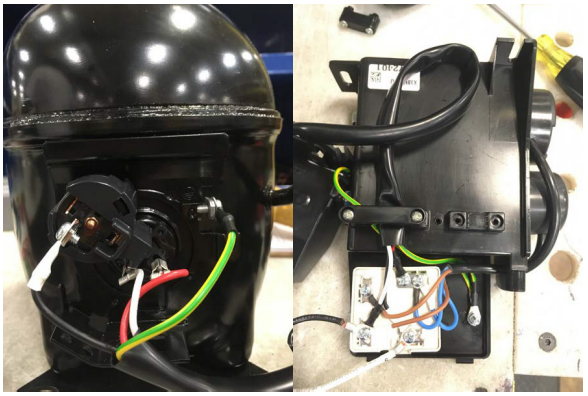


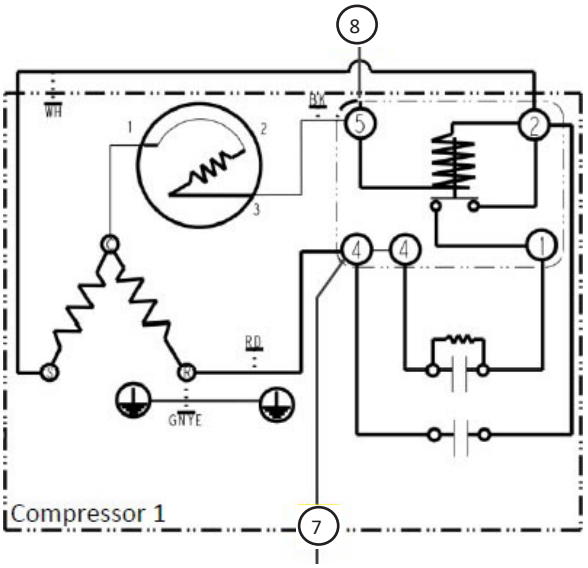


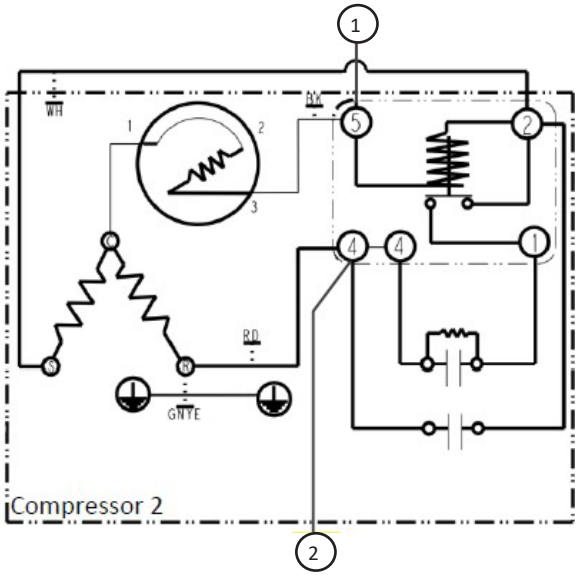
(2) 3527144 Compressor Wiring

R290, 0.55HP

GAFPT2P, GAF3P



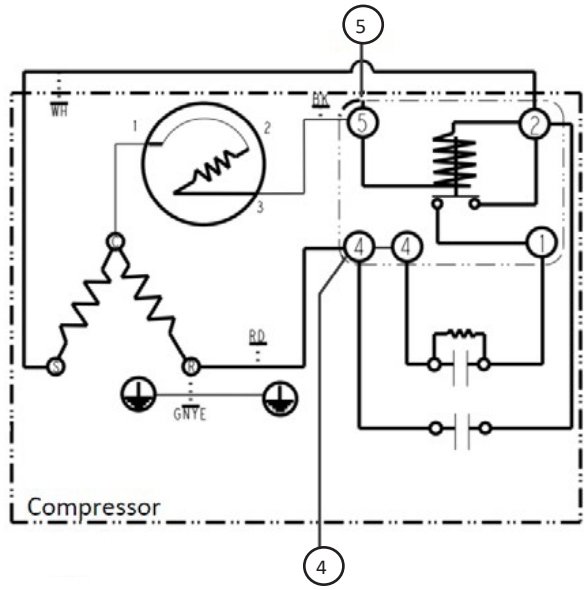




3527147 Compressor Wiring

R290, 0.68HP

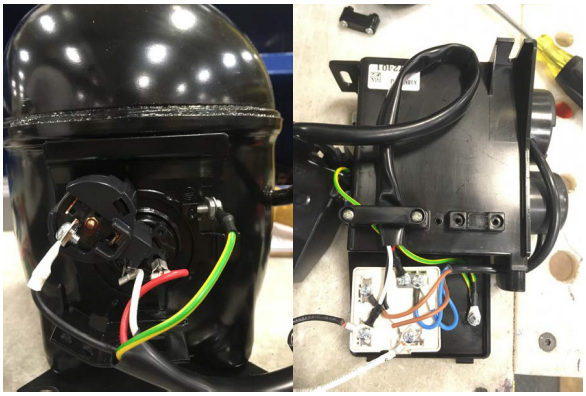
GAF2P

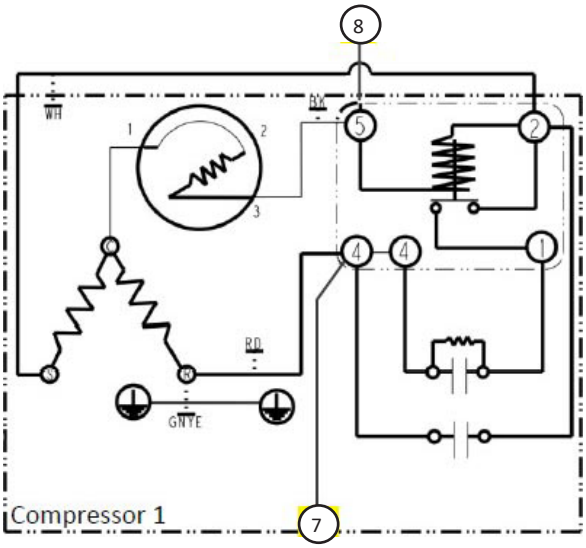


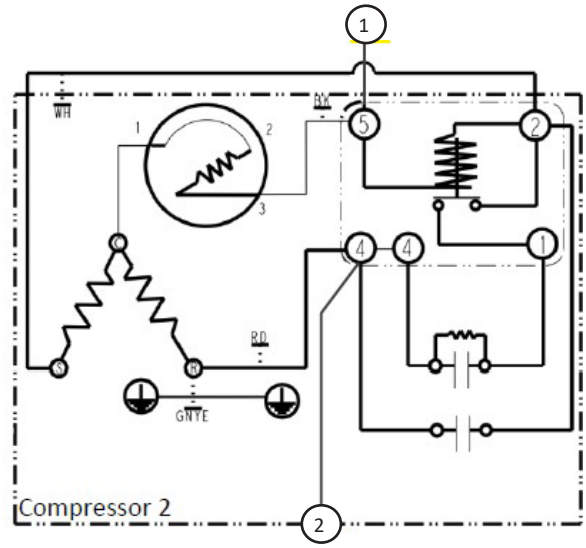
(2) 3527147 Compressor Wiring

R290, 0.68HP

GAFRI2P







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

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