



Concepts Serving Systems

Use & Care Manual

Please read this manual completely before attempting to install or operate this equipment!
Notify carrier of damage! Inspect all components immediately. See page 2.



Effective June 2010

Important Warning And Safety Information

WARNING Read This Manual Thoroughly Before Operating, Installing, Or Performing Maintenance On The Equipment.



WARNING Failure To Follow Instructions In This Manual Can Cause Property Damage, Injury Or Death.



WARNING Do Not Store Or Use Gasoline Or Other Flammable Vapors Or Liquids In The Vicinity Of This Or Any Other Appliance.



WARNING Unless All Cover And Access Panels Are In Place And Properly Secured, Do Not Operate This Equipment.



WARNING Do Not Clean With Water Jet.



CAUTION Observe the following:



- Minimum clearances must be maintained from all walls and combustible materials.
- Keep the equipment area free and clear of combustible material.
- Adequate clearance for air openings.
- Operate equipment only on the type of electricity indicated on the specification plate.
- Retain this manual for future reference.

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Serial Number Information

If your unit is **heated**, the serial tag is located above the louvered panel near the on/off switch.

Refrigerated units have the serial tag located in the compressor area near the on/off switch.

Understorage units often have the serial tag located on the left inside the storage area.

All purpose counters, utility equipment or delivery carts do not require serial numbers but a model tag is placed at the top of the pylon on the back of the unit.

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

This manual covers standard units only. If you have a custom unit, consult the customer service department at the number listed below.

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Receiving And Inspecting The Equipment

Even though most equipment is shipped crated, care should be taken during unloading so the equipment is not damaged while being moved into the building.



The units with LiquiTec technology cold pans contain a non-toxic eutectic fluid within a sealed inner liner. This fluid may leak if the tank is punctured so care must be taken when uncrating and setting in place. The eutectic fluid is non-toxic and may be flushed down a disposal drain. If the LiquiTec unit cold pans leak, immediately call the Delfield service department directly at 1-800-733-8821 not your local service agent.

1. Visually inspect the exterior of the package and skid or container. Any damage should be noted and reported to the delivering carrier immediately.
2. If damaged, open and inspect the contents with the carrier.
3. In the event that the exterior is not damaged, yet upon opening, there is concealed damage to the equipment notify the carrier. Notification should be made verbally as well as in written form.
4. Request an inspection by the shipping company of the damaged equipment. This should be done within 10 days from receipt of the equipment.
5. Check the lower portion of the unit to be sure legs or casters are not bent.
6. Also open the compressor compartment housing and visually inspect the refrigeration package. Be sure lines are secure and base is still intact.
7. Freight carriers can supply the necessary damage forms upon request.
8. Retain all crating material until an inspection has been made or waived.

Uncrating the Equipment

First cut and remove the banding from around the crate. Remove the front of the crate material, use of some tools will be required. If the unit is on legs remove the top of the crate as well and lift the unit off the skid. If the unit is on casters it can be "rolled" off the skid.

Specifications

This manual covers standard units only. If you have a custom unit, consult the customer service department at the number listed below.

Cashier Counter				
Model	Length	Width	Height	Ship Weight
DCCS-SD	45.00"	36.00"	36.00"	270lbs/122kg
DCCS-SDW	45.00"	54.00"	36.00"	320lbs/145kg
DCCS-SDWL	45.00"	54.00"	36.00"	295lbs/134kg
DCCS-SDWR	45.00"	54.00"	36.00"	295lbs/134kg
DCCS-DD	72.00"	36.00"	36.00"	540lbs/245kg
DCCS-DDW	72.00"	54.00"	36.00"	590lbs/268kg
DCCS-DDWL	72.00"	54.00"	36.00"	565lbs/256kg
DCCS-DDWR	72.00"	54.00"	36.00"	565lbs/256kg

FlexiShield™ Food Shields Radial Glass Front, Single Tier with Glass Shelf, Single Service, Inside & Outside									
Model	L	W	H	Ship Weight	Model	L	W	H	Ship Weight
DCFSRIG-2	38.47"	18.00"	18.00"	Contact Factory	DCFSROG-2	43.09"	18.00"	18.00"	Contact Factory
DCFSRIG-3	53.43"	18.00"	18.00"	Contact Factory	DCFSROG-3	59.85"	18.00"	18.00"	Contact Factory
DCFSRIG-4	68.17"	18.00"	18.00"	Contact Factory	DCFSROG-4	76.35"	18.00"	18.00"	Contact Factory
DCFSRIG-5	82.61"	18.00"	18.00"	Contact Factory	DCFSROG-5	92.53"	18.00"	18.00"	Contact Factory

FlexiShield™ Food Shields Radial Single Tier, Fixed Sneeze Guard Front, Dual Service				
Model	L	W	H	Ship Weight
DCFSRKD-2	40.78"	35.50"	14.75"	Contact Factory
DCFSRKD-3	56.64"	35.50"	14.75"	Contact Factory
DCFSRKD-4	72.26"	35.50"	14.75"	Contact Factory
DCFSRKD-5	87.57"	35.50"	14.75"	Contact Factory

FlexiShield™ Food Shields Radial Single Tier, Fixed Sneeze Guard Front, Single Service, Inside & Outside									
Model	L	W	H	Ship Weight	Model	L	W	H	Ship Weight
DCFSRIKS-2	38.47"	18.00"	14.75"	Contact Factory	DCFSROKS-2	43.09"	18.00"	14.75"	Contact Factory
DCFSRIKS-3	53.43"	18.00"	14.75"	Contact Factory	DCFSROKS-3	59.85"	18.00"	14.75"	Contact Factory
DCFSRIKS-4	68.17"	18.00"	14.75"	Contact Factory	DCFSROKS-4	76.35"	18.00"	14.75"	Contact Factory
DCFSRIKS-5	82.61"	18.00"	14.75"	Contact Factory	DCFSROKS-5	92.53"	18.00"	14.75"	Contact Factory

Specifications									
Model	Length	Depth	Height	Ship Weight	Model	Length	Depth	Height	Ship Weight
DCBU-38	38.00"	36.00"	36.00"	171lbs/78kg	DCBU-T38	38.00"	36.00"	36.00"	171lbs/78kg
DCBU-52	52.00"	36.00"	36.00"	234lbs/106kg	DCBU-T52	52.00"	36.00"	36.00"	234lbs/106kg
DCBU-66	66.00"	36.00"	36.00"	297lbs/135kg	DCBU-T66	66.00"	36.00"	36.00"	297lbs/135kg
DCBU-80	80.00"	36.00"	36.00"	360lbs/163kg	DCBU-T80	80.00"	36.00"	36.00"	360lbs/163kg
DCBU-94	94.00"	36.00"	36.00"	423lbs/192kg	DCBU-T94	94.00"	36.00"	36.00"	423lbs/192kg
DCBU-120	120.00"	36.00"	36.00"	540lbs/245kg	DCBU-T120	120.00"	36.00"	36.00"	540lbs/245kg



Specifications, continued

Self-Contained Frost Top Serving Counter							
Model	Length	Depth	Height	H.P.	V/Hz/Ph	Amps	Ship Weight
DC-FT2	38.00"	36.00"	36.00"	1/4	115/60/1	7.5	399lbs/181kg
DC-FT3	52.00"	36.00"	36.00"	1/4	115/60/1	7.5	546lbs/248kg
DC-FT4	66.00"	36.00"	36.00"	1/4	115/60/1	7.5	693lbs/314kg
DC-FT5	80.00"	36.00"	36.00"	1/4	115/60/1	7.5	840lbs/381kg
DC-FT6	94.00"	36.00"	36.00"	1/3	115/60/1	8.0	987lbs/448kg

Heated Serving Counter								
Model	Length	Depth	Height	Watts	# of 12x20 Pans Held	V/Hz/Ph	Amps	Ship Weight
DC-H2	38.00"	36.00"	36.00"	2000	2	115/60/1	16.6	228lbs/103kg
DC-H3	52.00"	36.00"	36.00"	3000/4000	3	208-230/60/1	15.0/16.0	312lbs/142kg
DC-H4	66.00"	36.00"	36.00"	4000/4800	4	208-230/60/1	20.0/22.0	396lbs/180kg
DC-H5	80.00"	36.00"	36.00"	5000/6000	5	208-230/60/1	24.0/27.0	480lbs/218kg
DC-H6	94.00"	36.00"	36.00"	6000/7200	6	208-230/60/1	29.0/32.0	564lbs/256kg

Ice Cooled Serving Counter					
Model	Length	Depth	Height	# of 12x20 Pans Held	Ship Weight
DC-IC2	38.00"	36.00"	36.00"	2	209lbs/95kg
DC-IC3	52.00"	36.00"	36.00"	3	286lbs/130kg
DC-IC4	66.00"	36.00"	36.00"	4	363lbs/165kg
DC-IC5	80.00"	36.00"	36.00"	5	440lbs/200kg
DC-IC6	94.00"	36.00"	36.00"	6	517lbs/235kg

Self-Contained LiquiTec® Cold Pan Serving Counter									
Model	Length	Depth	Height	# of 12x20 Pans Held	H.P.	V/Hz/Ph	Amps	BTU	Ship Weight
DC-L2	38.00"	36.00"	36.00"	2	1/4	115/60/1	7.5	379	342lbs/155kg
DC-L3	52.00"	36.00"	36.00"	3	1/4	115/60/1	7.5	569	468lbs/212kg
DC-L4	66.00"	36.00"	36.00"	4	1/4	115/60/1	7.5	758	594lbs/269kg
DC-L5	80.00"	36.00"	36.00"	5	1/4	115/60/1	7.5	948	720lbs/327kg
DC-L6	94.00"	36.00"	36.00"	6	1/4	115/60/1	7.5	1138	846lbs/384kg

Self-Contained Mechanically Cooled Serving Counter									
Model	Length	Depth	Height	# of 12x20 Pans Held	H.P.	V/Hz/Ph	Amps	BTU Load	Ship Weight
DC-MC2	38.00"	36.00"	36.00"	2	1/4	115/60/1	7.5	379	323lbs/147kg
DC-MC3	52.00"	36.00"	36.00"	3	1/4	115/60/1	7.5	569	442lbs/200kg
DC-MC4	66.00"	36.00"	36.00"	4	1/4	115/60/1	7.5	758	561lbs/254kg
DC-MC5	80.00"	36.00"	36.00"	5	1/4	115/60/1	7.5	948	680lbs/308kg
DC-MC6	94.00"	36.00"	36.00"	6	1/3	115/60/1	8.0	1138	799lbs/362kg

Specifications, continued

Radial Utility Serving Counter				
Model	Length	Depth	Height	Ship Weight
DCRU-O	103.32"	36.00"	36.00"	464lbs/210kg
DCRU-I	103.32"	36.00"	36.00"	464lbs/210kg
DCRU-OT	103.32"	36.00"	36.00"	464lbs/210kg
DCRU-IT	103.32"	36.00"	36.00"	464lbs/210kg

Radial Heated Serving Counter								
Model	Length	Depth	Height	Watts	# of 12x20 Pans Held	V/Hz/Ph	Amps	Ship Weight
DCRU-H2	103.32"	36.00"	36.00"	2000	2	115/60/1	16.6	563lbs/255kg
DCRU-H3	103.32"	36.00"	36.00"	3000/4000	3	208-230/60/1	15.0/16.0	604lbs/274kg
DCRU-H4	103.32"	36.00"	36.00"	4000/4800	4	208-230/60/1	20.0/22.0	645lbs/293kg
DCRU-H5	103.32"	36.00"	36.00"	5000/6000	5	208-230/60/1	24.0/27.0	685lbs/311kg

Radial Ice Cooled Serving Counter					
Model	Length	Depth	Height	# of 12x20 Pans Held	Ship Weight
DCRU-IC2	103.32"	36.00"	36.00"	2	540lbs/245kg
DCRU-IC3	103.32"	36.00"	36.00"	3	578lbs/262kg
DCRU-IC4	103.32"	36.00"	36.00"	4	616lbs/279kg
DCRU-IC5	103.32"	36.00"	36.00"	5	654lbs/297kg

Radial Self-Contained LiquiTec® Cold Pan Serving Counter									
Model	Length	Depth	Height	# of 12x20 Pans Held	H.P.	V/Hz/Ph	Amps	BTU	Ship Weight
DCRU-L1	103.32"	36.00"	36.00"	1	1/4	115/60/1	7.5	292	633lbs/287kg
DCRU-L2	103.32"	36.00"	36.00"	2	1/4	115/60/1	7.5	379	679lbs/308kg
DCRU-L3	103.32"	36.00"	36.00"	3	1/4, 1/4	115/60/1	7.5/7.5	292/379	848lbs/385kg
DCRU-L4	103.32"	36.00"	36.00"	4	1/4, 1/4	115/60/1	7.5/7.5	379/379	894lbs/406kg

Radial Self-Contained Mechanically Cooled Serving Counter									
Model	Length	Depth	Height	# of 12x20 Pans Held	H.P.	V/Hz/Ph	Amps	BTU Load	Ship Weight
DCRU-MC2	103.32"	36.00"	36.00"	2	1/4	115/60/1	7.5	379	604lbs/274kg
DCRU-MC3	103.32"	36.00"	36.00"	3	1/4	115/60/1	7.5	569	644lbs/292kg
DCRU-MC4	103.32"	36.00"	36.00"	4	1/4	115/60/1	7.5	758	684lbs/310kg
DCRU-MC5	103.32"	36.00"	36.00"	5	1/4	115/60/1	7.5	948	724lbs/328kg

Transition Counters				
Model	Length	Depth	Height	Ship Weight
DC-T22	25.81"	36.00"	36.00"	86lbs/39kg
DC-T45	38.64"	36.00"	36.00"	171lbs/78kg
DC-T90	59.40"	36.00"	36.00"	315lbs/143kg
DC-TT45	38.64"	36.00"	36.00"	171lbs/78kg
DC-TT90	59.40"	36.00"	36.00"	315lbs/143kg
DCRU-T22	18.92"	36.00"	36.00"	86lbs/39kg
DCRU-T45	37.12"	36.00"	36.00"	171lbs/78kg
DCRU-T90	68.59"	36.00"	36.00"	315lbs/143kg
DCRU-TT45	37.12"	36.00"	36.00"	171lbs/78kg
DCRU-TT90	68.59"	36.00"	36.00"	315lbs/143kg



Installation: Heated Units

Location

Do not install the unit near combustible objects or surfaces affected by heat or moisture.

Leveling

The unit must be level, both front and back and left to right, in order to maintain an equal water depth throughout the wells.



Electrical Connections

Connections must be made in accordance with all applicable local codes and/or the National Electrical Code. Refer to the amperage data on page 3 and the wiring diagrams on pages 8 and 9. A standard unit is provided with a power cord and 3-prong grounded

plug. All units should be plugged into a grounded receptacle with its own circuit protection that matches the amperage of the plug.

Before the unit is used the first time for serving:

- Turn the temperature knob to “10” and heat the well for 15 minutes. Do not be alarmed if smoke appears; this preheat should burn off any residue or dust that has adhered to the food well element

Installation: Refrigerated Units

Location

Be sure the location chosen has a floor strong enough to support the total weight of the cabinet and contents. Reinforce the floor as necessary to provide for maximum loading.

For the most efficient refrigeration, be sure to provide good air circulation inside and out.

Inside cabinet: Do not pack unit so full that air cannot circulate. Take care not to block air flow to the fans and allow space along the sides.

Outside cabinet: Be sure the unit has access to ample air; avoid hot corners and locations near stoves and ovens. It is suggested the rear of the unit be no less than two inches from any wall, partition or any other object which will restrict exhaust air flow.

Leveling

A level cabinet looks better and will perform better because the doors will line up with the door frames properly, and the cabinet will not be subject to unnecessary strain.

Stabilizing

Some models are supplied on casters for your convenience, for ease of cleaning underneath and mobility.



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.

Plumbing

Refrigerated units have a drain that exits the unit on the bottom, and is located on the operator's left side. Standard units on casters or legs will have a bronze faucet that fits a standard garden hose. Units on legs with optional remote drain valve

handle will have 1" threaded pipe extending from bottom of unit. On standard units, a stainless steel access panel or hinged louver will be provided for access to drain connections.



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

Electrical connection

A standard refrigerated unit is provided with a power cord and 3-prong grounded plug.

The unit should be plugged into a receptacle with its own circuit protection that matches the amperage of the plug.



Refer to the amperage data on page 3 or the serial tag data and your local code or the National Electrical Code to be sure the unit is connected to the proper power source. A protected circuit of the correct voltage and amperage must be run for connection of the supply cord or permanent connection to the unit.



On cord-connected units, an ON/OFF switch is located directly on the face of the compressor section. The switch must be turned to its OFF position and power supply disconnected whenever doing the following:

1. Performing maintenance functions.
2. Cleaning the refrigerated cabinet area.
3. Performing service or repair functions.

Under no circumstances should the unit be operated without the louvered panel in place.

Operation: Heated Units

After plugging in the power supply cord, select desired temperature by rotating the knob on the temperature control panel. Indicator light will come on when the switch is activated. Individual temperature control knobs and indicator lights are provided for each heated food well.

If the same temperature settings for each well are used every day, the temperature knobs can be left in their set position and the wells can be turned off using the ON/OFF switch at the end of the control panel.

When serving thick sauces always use the hot food well in "wet" operation. This provides more uniform temperature for the sauce. Product temperature should range from 140°F to 160°F



Never place food directly in well. Always use pans.

For most efficient operation, keep covered insets empty in each well during preheating and when the well is not in use.

Always place covers on pans when not serving to prevent food from drying out and to reduce your operating costs.

Wet operation

Fill the food well with about two inches of hot water and cover with lid or empty pan. To bring water to highest temperature, set temperature control at "High". With pans in place, wells will boil water. Food temperature will vary depending on type and amount of product. To minimize steam and water usage, set control to lowest setting that will maintain proper food temperature.



Steam can cause serious burns. Always wear some type of protective covering on your hands and arms when removing lids from the unit. Lift the lid in a way that will direct escaping steam away from your face and body. Water temperature will average 180°F.

Dry operation

Wet operation is usually much more efficient and is usually preferred. However, these units may be operated without water with no damage to the unit.



The dry well should never be preheated longer than 15 minutes. Only 6" deep pans should be used with dry food wells.



When operated dry, the well bottoms become very hot. Do not allow unprotected skin to contact any well surface.

When operated dry, the bottom of the well will discolor. To clean, use a stainless steel cleaner or mild abrasive.

Operation of optional heated understorage

If necessary, preheat the heated understorage to desired temperature. Temperature range of understorage is 80°F to 190°F. The temperature control knob is always the far left knob on the panel. Indicator light is also at the far left.

Operation: Mechanically Cooled Serving Counters

Mechanically cooled cold pans are adjusted at the factory to provide proper operation without any further adjustments. However, if it is necessary to adjust the temperature, the control is located in the machine compartment. Turn the knob clockwise as indicated on the control. Settings are from 1 thru 7, 7 being the coldest. Adjustments should be made gradually. Several small adjustments will be more effective than one large adjustment. It may take an hour or longer to realize the temperature change depending on the application and location of the unit.

Turn the cold pan on an hour or longer before loading product to achieve the desired temperature.

These units are not designed to cool warm food products. Items should be placed in the unit pre-cooled at least to the desired holding temperature, if not slightly colder. In some applications, a gradual warming of product may occur, particularly at the exposed top of the product. Stirring or rotation of the product

may be necessary to maintain overall temperature.

Warming of food product can occur very quickly outside of the unit. When loading or rotating product, avoid leaving food items in a non-refrigerated location for any length of time to prevent warming or spoilage.

The temperature control is used to turn the unit on and off as well as control the temperature of the cold pan. The settings range from 1 through 7, 7 being the coldest. To turn the cold pan off, turn the knob to the OFF position.

These units are not designed to be used with ice. If the cold pan is to be used with ice, it is recommended that the optional perforated bottoms be used. These will allow ice to melt properly.

The unit must be turned off when not in use or overnight for defrosting and cleaning.

Operation: LiquiTec Units

There is a switch on the compressor housing front to turn the units on and off. LiquiTec Series cold pans are adjusted at the factory to provide proper operation without any further adjustments. However, if it is necessary to adjust the temperature, the control is located in the machine compartment. Turn the knob clockwise as indicated on the control to adjust it colder. Adjustments should be made gradually. Several small adjustments will be more effective than one large adjustment. It may take an hour or longer to realize the temperature change depending on the application and location of the unit.

Turn the cold pan on an hour or longer before loading product to achieve the desired temperature.

These units are not designed to cool warm food products. Items should be placed in the unit pre-cooled at least to the desired holding temperature, if not slightly colder. In some applications, a gradual warming of product may occur, particularly at the exposed top of the products. Stirring or rotation of the product may be necessary to maintain overall temperature. Warming of food product can occur very quickly outside of the unit. When loading or rotating the product, avoid leaving food items in a non-refrigerated location for any length of time to prevent warming or spoilage.



The cold pan is not intended to be used with ice.

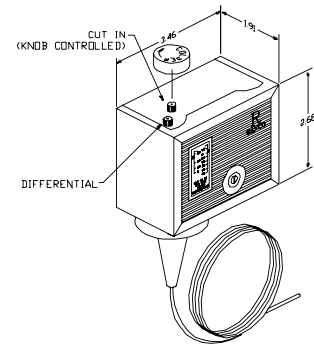
The unit must be turned off when not in use or overnight for defrosting and cleaning.

Temperature Control Settings:

17°F (8°C) differential

25°F (-4°C) cut-in

8°F (-13°C) cut-out



Operation: Frost Top Serving Counters

Frost tops are designed to maintain an even layer of frost to pleasantly display product. Once turned on, the compressor will run continuously. The unit should be turned off overnight or when not in use. There is no temperature control on the frost top series. The ON/OFF switch is the only means available to cycle the unit.

Since it takes time for the frost to accumulate initially, the unit

should be turned on approximately one hour before it is actually required. Product should not be placed on the frost top prior to turning the unit on, because it may freeze to the surface of the unit.

The unit must be turned off when not in use or overnight for defrosting and cleaning.

Maintenance

Drain Maintenance - Base

Each 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 in the machine compartment. 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.

Caster Maintenance

Wipe casters with a damp cloth monthly to prevent corrosion.



The power switch must be turned to OFF and the unit disconnected from the power source whenever performing service, maintenance functions or cleaning the refrigerated area.

Refrigerators and Freezers

The interior and exterior can be cleaned using soap and warm water. If this isn't sufficient, try ammonia and water or a nonabrasive liquid cleaner. When cleaning the exterior, always rub with the "grain" of the stainless steel to avoid marring the finish. Do not use an abrasive cleaner because it will scratch the stainless steel and can damage the breaker strips and gaskets.

Stainless Steel Care and Cleaning

To prevent discoloration or rust on stainless steel several important steps need to be taken. First, we need to understand the properties of stainless steel. Stainless steel contains 70-80% iron, which will rust. It also contains 12-30% chromium, which forms an invisible passive film over the steel's surface, which acts as a shield against corrosion. As long as the protective layer is intact, the metal is still stainless. If the film is broken or contaminated, outside elements can begin to breakdown the steel and begin to form discoloration or rust. Proper cleaning of stainless steel requires soft cloths or plastic scouring pads.

NEVER USE STEEL PADS, WIRE BRUSHES OR SCRAPERS!

Cleaning solutions need to be alkaline based or non-chloride cleaners. Any cleaner containing chlorides will damage the protective film of the stainless steel. Chlorides are also commonly found in hard water, salts, and household and industrial cleaners. If cleaners containing chlorides are used be sure to rinse repeatedly and dry thoroughly. Routine cleaning of stainless steel can be done with soap and water. Extreme stains or grease should be cleaned with a non-abrasive cleaner and plastic scrub pad. Always rub with the grain of the steel. There are stainless steel cleaners available which can restore and preserve the finish of the steels protective layer. 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 passivity of the steel.



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

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 at least every three months. If conditions are such that the condenser is totally blocked in three months, 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.



Never use a high-pressure water wash for this cleaning procedure as water can damage the electrical components located near or at the condenser coil.

Preventing blower coil corrosion

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



Units with pans should be operated with pans in place. Operating the unit without all pans in place will lower efficiency and may damage the unit.

Defrosting

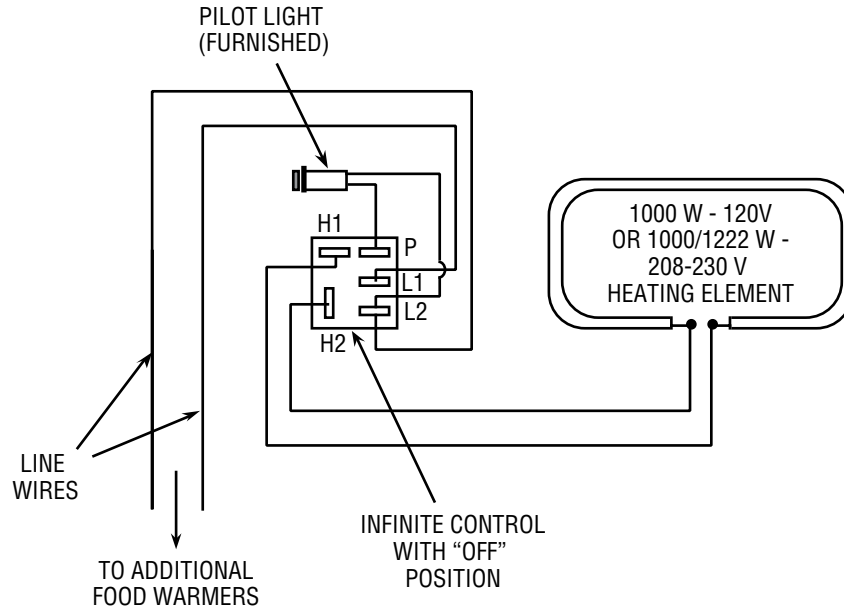
Refrigerated cold pans and frost tops should be defrosted daily. On/Off switch located above louver panel.

Never use sharp objects or tools to clean or scrape ice/frost build up from the refrigerated cold pans or frost tops. A puncture to the pan could cause irreparable damage to the refrigeration system.

Units with a Eutectic Fluid Cold Pan require the same precautions. The fluid is NOT refillable and loss of fluid due to a puncture would cause irreparable damage.

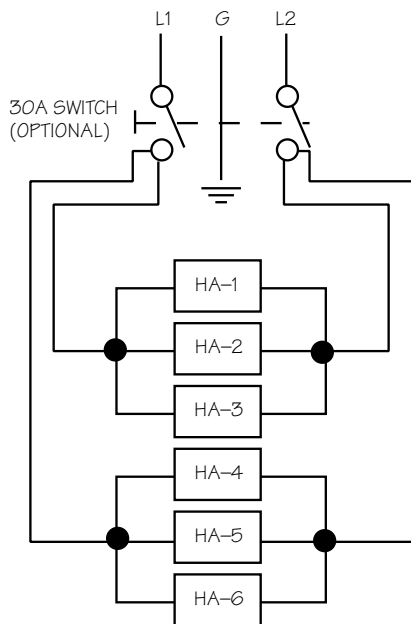
Over shelves and other items mounted to the top of the counters should never be installed in the field due to the potential damage to the refrigeration system.

Wiring Diagram, Heated Serving Counter



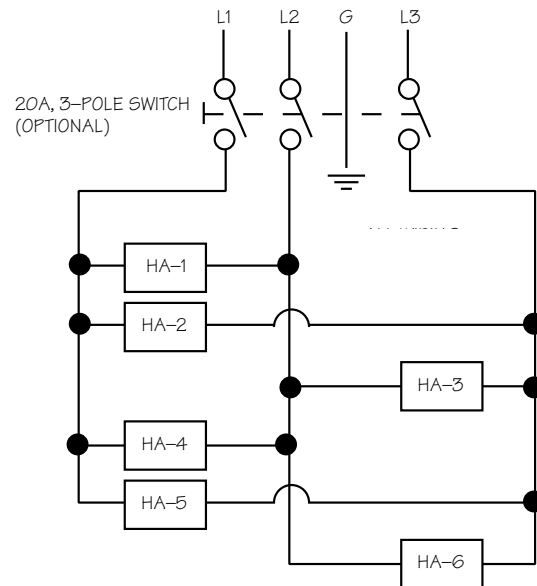
AMPERES IN LINE WIRES

# OF WARMERS	120V, 1 PHASE	208V, 1 PHASE	230V, 1 PHASE	208-230V, 3 PHASE		
				L1	L2	L3
2	16.7	9.6	10.6			
3	25	14.4	15.9	14.4/15.9	14.4/15.9	14.4/15.9
4	33.3	19.2	21.3	19.2/21.3	19.2/21.3	14.4/15.9
5		24	26.6	24/26.1	19.2/21.3	19.2/21.3
6		28.8	31.3	28.8/31.3	28.8/31.3	28.8/31.3



HA = HEATER ASSEMBLY

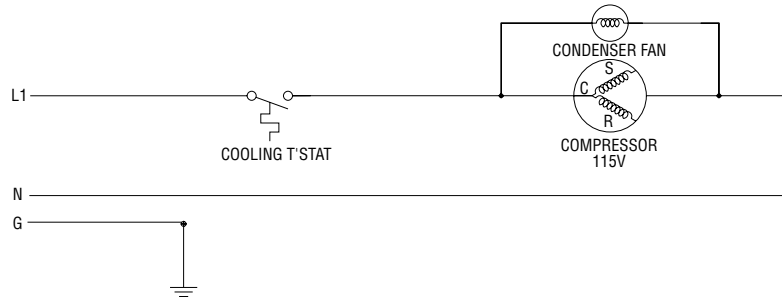
Standard Single Phase



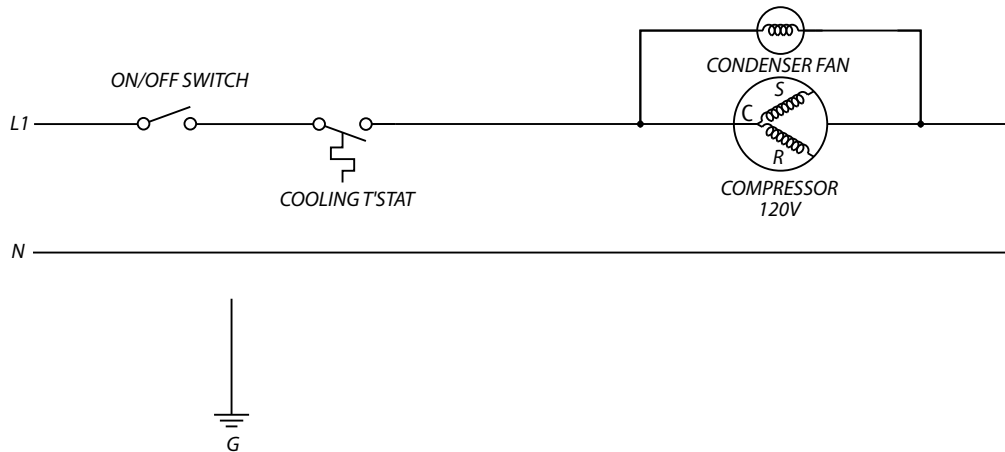
HA = HEATER ASSEMBLY

Optional Three Phase

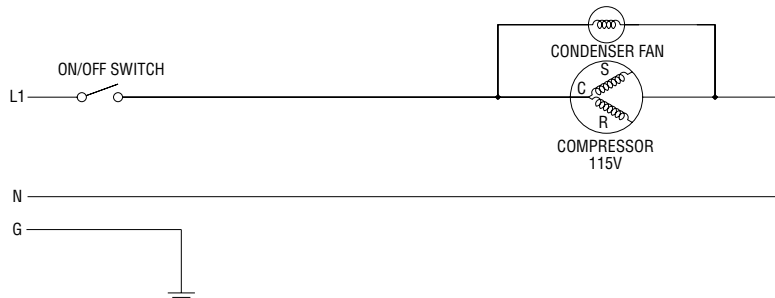
Wiring Diagram, Self-Contained Mechanically Cooled Serving Counter



Wiring Diagram, Self-Contained LiquiTec® Cold Pan Serving Counter



Wiring Diagram Self-Contained Frost Top Serving Counter



Standard Labor Guidelines To Repair Or Replace Parts On Delfield Equipment

Advice and recommendations given by Delfield Service Technicians do not constitute or guarantee any special coverage.

- A maximum of 1-hour is allowed to **diagnose a defective component**.
- A maximum of 1-hour is allowed for **retrieval of parts** not in stock.
- A maximum **travel distance** of 100 miles round trip and 2-hours will be reimbursed.
- Overtime, installation/start-up, normal control adjustments, general maintenance, glass breakage, freight damage, and/or correcting and end-user installation error will not be reimbursed under warranty unless pre-approved with a **Service Work Authorization** from Delfield. You must submit the number with the service claim.

LABOR OF 1-HOUR IS ALLOWED TO REPLACE:

- Thermostat
- Infinite Switch
- Door Jamb Switch
- Solenoid Coil
- Hi-limit/Thermal Protector Switch
- Compressor Start Components and Overload Protector
- Defrost Timer
- Thermometer
- Contactor/Relay
- Transformer
- Evaporator/Condenser Fan Motor and Blade
- Circulating Fan Motor and Blade
- Fan Delay/Defrost Termination Switch
- Door Hinges, Locks, and Gaskets
- Condensate Element
- Springs/Lowerator

LABOR OF 2 HOURS TO REPLACE:

- Drawer Tracks/Cartridges
- Pressure Control
- Solenoid Valve
- Defrost Element
- Heating Element
- Locate/Repair Leak

LABOR OF 3 HOURS TO REPLACE:

- EPR or CPR Valve
- Expansion Valve
- Condenser or Evaporator Coil

LABOR OF 4 HOURS TO REPLACE

- Compressor

This includes recovery of refrigerant and leak check.

\$55.00 maximum reimbursement for refrigerant recovery (includes recovery machine, pump, torch, oil, flux, minor fittings, solder, brazing rod, nitrogen, or similar fees.)

REFRIGERANTS

- R22 A maximum of \$4.00/lb. or 25¢/oz. will be reimbursed.
- R134A A maximum of \$5.00/lb. or 31¢/oz. will be reimbursed.
- R404A A maximum of \$15.00/lb. or \$1.00/oz. will be reimbursed.

Parts List

Ice Cooled Units

243-ALS-003E	Bar, Divider, 21" x .90"
3234242	Drain, Plastic
265-102-0030	Perforated Bottom

Built-In Cold Pans

3526999	Compressor, Danfoss
3516454	Condenser Coil
3516225	Expansion Valve, 1/4 Ton
3516457	Fan Blade
2160020	Fan Guard
2162717	Fan Motor
3516322	Filter Drier
3234242	Plastic Drain
3516444	Relay, Overload, Compressor
2190154	Rocker Switch
2194787	Start Capacitor, Compressor
2194201	Thermostat

Drop-In Cold Pans

243-ALS-003E	Bar, Divider, 21" x .90"
3526695	Compressor, 1/4 HP
3516067	Condenser Coil
2194013	Fan Assy, 8 Blade
3516191	Filter Drier
3234242	Plastic Drain
2194099	Switch
3516047	Temp Control

Heated Steam Tables

3234572	Drain Screen
2194007	Heating Element, 208V
2194095	Indicator Light, Amber
2194110	Infinite Control, 208/240V
3234557	Knob
2194335	Safety Thermostat
2194212	Switch

Standard One Year Warranty (One year parts and labor.)

The Delfield Company ("Delfield") warrants to the Original Purchaser of the Delfield product (herein called the "Unit") that such Unit, and all parts thereof, will be free from defects in material and workmanship under normal use and service for a period of one (1) year from the date of shipment of the Unit to the Original Purchaser or, if the Original Purchaser returns the warranty card completely filled out including the date of installation within thirty (30) days of receipt of the Unit, one (1) year from the date of installation. During this one year warranty period, Delfield will repair or replace any defective part or portion thereof returned to Delfield by the Original Purchaser which Delfield determines was defective due to faulty material or workmanship. During this one year warranty period, Delfield will pay labor, crating, and freight incurred in the removal of the Unit of defective component and shipment to Delfield. A maximum of 1-hour is allowed to diagnose a defective component. A maximum of 1-hour is allowed for retrieval of parts not in stock. A maximum travel distance of 100 miles round trip and 2-hours will be reimbursed. Overtime, installation/start-up, normal control adjustments, general maintenance, glass breakage, freight damage, and/or correcting and end-user installation error will not be reimbursed under warranty unless pre-approved with a Service Work Authorization from Delfield. Delfield will pay the return costs if the Unit or part thereof was defective.

The term "Original Purchaser" as used herein means that person, firm, association, or corporation for whom the Unit was originally installed.

This warranty does not apply to any Unit or part thereof that has been subjected to misuse, neglect, alteration, or accident, such as accidental damage to the exterior finish, operated contrary to the recommendations specified by Delfield; or repaired or altered by anyone other than Delfield in any way so as to, in Delfield's sole judgement, affect its quality or efficiency. This warranty does not apply to any Unit that has been moved from the location where it was originally installed. This warranty also does not cover the refrigerator drier or the light bulbs used in the Unit. The warranty is subject to the user's normal maintenance and care responsibility as set forth in the Service and Installation Manual, such as cleaning the condenser coil, and is in lieu of all other obligations of Delfield. Delfield neither assumes, nor authorizes any other person to assume for Delfield, any other liability in connection with Delfield's products.

Removal or defacement of the original Serial Number or Model Number from any Unit shall be deemed to release Delfield from all obligations hereunder or any other obligations, express or implied.

Parts furnished by suppliers to Delfield are guaranteed by Delfield only to the extent of the original manufacturer's express warranty to Delfield. Failure of the Original Purchaser to receive such manufacturer's express warranty to Delfield. Failure of the Original Purchaser to receive such manufacturer's warranty shall in no way create any warranty, expressed or implied, or any other obligation or liability on Delfield's part in respect thereof.

If shipment of a replacement part is requested prior to the arrival in the Delfield factory of the part claimed to be defective, the Original Purchaser must accept delivery of the replacement part of a C.O.D. basis, with credit being issued after the part has been received and inspected at Delfield's plant and determined by Delfield to be within this warranty.

Under no condition does this warranty give the Original Purchaser the right to replace the defective Unit with a complete Unit of the same manufacturer or of another make. Unless authorized by Delfield in writing, this warranty does not permit the replacement of any part, including the motor-compressor, to be made with the part of another make or manufacturer.

No claims can be made under this warranty for spoilage of any products for any reason, including system failure.

The installation contractor shall be responsible for building access, entrance and field conditions to insure sufficient clearance to allow any hood(s), vent(s), or Unit(s) if necessary, to be brought into the building. Delfield will not be responsible for structural changes or damages incurred during installation of the Unit or any exhaust system.

Delfield shall not be liable in any manner for any default or delay in performance hereunder caused by or resulting from any contingency beyond Delfield's control, including, but not limited to, war, governmental restrictions or restraints, strike, lockouts, injunctions, fire, flood, acts of nature, short or reduced supply of raw materials, or discontinuance of the parts by the original part manufacturer.

Except as provided in any Additional Four Year Protection Plan, if applicable, and the Service Labor Contract, if applicable, the foregoing is exclusive and in lieu of all other warranties, whether written or oral, express or implied. This warranty supersedes and excludes any prior oral or written representations or warranties. Delfield expressly disclaims any implied warranties of merchantability, fitness for a particular purpose of compliance with any law, treaty, rule or regulation relating to the discharge of substances into the environment. The sole and exclusive remedies of any person relating to the Unit, and the full liability of Delfield for any breach of this warranty, will be as provided in this warranty.

Other than this Delfield Standard One Year Limited Warranty, any applicable Delfield Additional Four Year Protection Plan or applicable Delfield Service Labor Contract, the Original Purchaser agrees and acknowledges that no other warranties are offered or provided in connection with or for the unit or any other part thereof.

In no event will Delfield be liable for special, incidental or consequential damages, or for damages in the nature of penalties.

Additional Four Year Protection Plan (for Motor-Compressor only)

Delfield Model#	Serial #	Installation Date
<input type="text"/>	<input type="text"/>	<input type="text"/>

In addition to the Standard One Year Warranty on the Motor-Compressor contained in the above listed Delfield product (the "Unit"), The Delfield Company ("Delfield") also agrees to repair, or exchange with similar or interchangeable parts in design and capacity at Delfield's option, the defective Motor-Compressor contained in the Unit (the "Motor-Compressor"), or any part thereof, for the Original Purchaser only, at any time during the four (4) years following the initial one (1) year period commencing on the date of installation for the Original Purchaser. **Failure of the Original Purchaser to register the registration card containing the Original Purchasers name, address, date of installation, model number and serial number of the Unit containing the Motor-Compressor within 30 days from the date of installation shall void this warranty.** This additional warranty is only available if the Motor-Compressor is inoperative due to defects in material or factory workmanship, as determined by Delfield in its sole judgement and discretion. The Original Purchaser shall be responsible for returning the defective Motor-Compressor to Delfield prepaid, F.O.B. at the address shown on the back cover of this manual.

The term "Original Purchaser" as used herein means that person, firm, association, or corporation for whom the Unit was originally installed.

The term "Motor-Compressor" as used herein does not include unit base, air or water cooled condenser, receiver, electrical accessories such as relay, capacitors, refrigerant controls, or condenser fan/motor assembly. This warranty does not cover labor charges incidental to the replacement of parts. This warranty further does not include any equipment to which said condensing unit is connected, such as cooling coils, temperature controls or refrigerant metering devices. This warranty shall be void if the Motor-Compressor, in Delfield's sole judgement, has been subjected to misuse, neglect, alteration or accident, operated contrary to the recommendations specified by the Unit manufacturer, repaired or altered by anyone other than Delfield in any way so as, in Delfield's sole judgment, to affect its quality or efficiency or if the serial number has been altered, defaced or removed. This Warranty does not apply to a Motor-Compressor in any Unit that has been moved from the location where it was originally installed. The addition of methyl chloride to the condensing unit or refrigeration system shall void this warranty.

General Conditions

Delfield shall not be liable in any manner for any default or delay in performance hereunder caused by or resulting from any contingency beyond Delfield's control, including, but not limited to, war, governmental restrictions or restraints, strike, lockouts, injunctions, fire, flood, acts of nature, short or reduced supply of raw materials, or discontinuance of any part or the Motor-Compressor by the unit manufacturer.

Replacement of a defective Motor-Compressor is limited to one (1) Motor-Compressor by us during the four (4) year period. Delfield shall replace the Motor-Compressor at no charge.

This warranty does not give the Original Purchaser of the Motor-Compressor the right to purchase a complete replacement Motor-Compressor of the same make or of another make. It further does not permit the replacement to be made with a Motor-Compressor of another kind unless authorized by Delfield. In the event Delfield authorizes the Original Purchaser to purchase a replacement Motor-Compressor locally, only the wholesale cost of the Motor-Compressor is refundable.

Expressly excluded from this warranty are damages resulting from spoilage of goods.

Except as provided in any applicable Standard One Year Limited Warranty or applicable Service Labor Contract, the foregoing is exclusive and in lieu of all other warranties, whether written or oral, express or implied. This Warranty supersedes and excludes any prior oral or written representations or warranties. Delfield expressly disclaims any implied warranties of merchantability, fitness for a particular purpose or compliance with any law, treaty, rule or regulation relating to the Motor-Compressor, and the full liability of Delfield for any breach of this warranty, will be as provided in this warranty.

Other than any applicable Delfield Standard One year Limited Warranty, this Delfield Additional Four Year Protection Plan and any applicable Delfield Service Labor Contract, the Original Purchaser agrees and acknowledges that no other warranties are offered or provided in connection with or for the Motor-Compressor or any part thereof.

In no event will Delfield be liable for special, incidental or consequential damages, or for damages in the nature of penalties.



Notes

Notes





Mt. Pleasant, MI



Covington, TN

Thank you for choosing Delfield!

Help is a phone call away. Help our team of professional, courteous customer service reps by having your model number and serial number available at the time of your call (800) 733-8829

Model: _____ S/N: _____

Installation Date: _____



For a list of Delfield's authorized parts depots,
visit our website at www.delfield.com

