

Carts & Kiosks

Indoor/Outdoor Serving

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.



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

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

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

⚠ DANGER

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

⚠ 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

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

⚠ DANGER

Serious injury or death can occur from inhaling high concentrations of refrigerant vapors. These vapors also reduce oxygen levels in confined areas. Contact with liquid can cause frostbite. All containers, equipment and hoses are under high pressure. Do not puncture or damage these components.

⚠ Warning

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision concerning use of the appliance by a person responsible for their safety. Do not allow children to play with this appliance.

⚠ Warning

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

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 touch refrigeration lines inside units; some may exceed temperatures of 200°F (93.3°C).

⚠ Caution

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

Notice

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

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Section 1

General Information

Model Numbers

This manual covers standard units only.

NOTE: For custom units, consult Manitowoc KitchenCare at 1-844-724-CARE (2273).

| Heated Serving Carts With Heated Understorage | |
|---|---------|
| SH-2CRT | SH-5CRT |
| SH-3CRT | SH-6CRT |
| SH-4CRT | |

| Heated Serving Carts Without Heated Understorage | |
|--|------------|
| SH-2-NUCRT | SH-5-NUCRT |
| SH-3-NUCRT | SH-6-NUCRT |
| SH-4-NUCRT | |

| Refrigerated Cold Pan Serving Carts | |
|-------------------------------------|--------------|
| SCSC-36-BCRT | SCSC-74-BCRT |
| SCSC-50-BCRT | SCSC-96-BCRT |
| SCSC-60-BCRT | |

| LiquiTec Refrigerated Cold Pan Serving Carts | |
|--|---------------|
| SCSC-36-EFCRT | SCSC-74-EFCRT |
| SCSC-50-EFCRT | SCSC-96-EFCRT |
| SCSC-60-EFCRT | |

| Heated and Refrigerated Combo Carts | |
|-------------------------------------|---------------|
| SHCR-50-BCRT | SH2CR-74-BCRT |
| SHCR-60-BCRT | SH2CR-96-BCRT |
| SHCR-74-BCRT | SH3CR-96-BCRT |
| SHCR-96-BCRT | SH4CR-96-BCRT |
| SH2CR-62-BCRT | |

| Heated and Ice Cooled Combo Carts | |
|-----------------------------------|---------------|
| SHC-50-NUCRT | SH2C-74-NUCRT |
| SHC-60-NUCRT | SH2C-96-NUCRT |
| SHC-74-NUCRT | SH3C-74-NUCRT |
| SHC-96-NUCRT | SH3C-96-NUCRT |
| SH2C-62-NUCRT | SH4C-96-NUCRT |

| Frost Top Serving Carts | |
|-------------------------|---------------|
| SCFT-36-NUCRT | SCFT-74-NUCRT |
| SCFT-50-NUCRT | SCFT-96-NUCRT |
| SCFT-60-NUCRT | |

| Ice Cooled Cold Pan Cart With Understorage | |
|--|-----------|
| SCI-36CRT | SCI-74CRT |
| SCI-50CRT | SCI-96CRT |
| SCI-60CRT | |

| Ice Cooled Cold Pan Cart Without Understorage | |
|---|--------------|
| SCI-36-NUCRT | SCI-74-NUCRT |
| SCI-50-NUCRT | SCI-96-NUCRT |
| SCI-60-NUCRT | |

| Beverage Cart With Urn & Dry Understorage | |
|---|-----------|
| SCU-36CRT | SCU-74CRT |
| SCU-50CRT | SCU-96CRT |
| SCU-60CRT | |

| Beverage Cart With Urn, No Understorage | |
|---|--------------|
| SCU-36-NUCRT | SCU-74-NUCRT |
| SCU-50-NUCRT | SCU-96-NUCRT |
| SCU-60-NUCRT | |

| All Purpose Cart With Hinged Door Dry Storage | |
|---|----------|
| SC-28CRT | SC-60CRT |
| SC-36CRT | SC-74CRT |
| SC-50CRT | SC-96CRT |

| All Purpose Cart With Enclosed Base No Storage | |
|--|-------------|
| SC-28-NUCRT | SC-60-NUCRT |
| SC-36-NUCRT | SC-74-NUCRT |
| SC-50-NUCRT | SC-96-NUCRT |

| Milk Cart | |
|-----------|-----------|
| SCM-36CRT | SCM-60CRT |
| SCM-50CRT | SCM-74CRT |

| Ice Cream Cart | |
|----------------|-----------|
| SCF-36CRT | SCF-60CRT |
| SCF-50CRT | SCF-74CRT |

| Milk and Ice Cream Cart | |
|-------------------------|------------|
| SCFM-50CRT | SCFM-74CRT |

| Cashier Cart | |
|--------------|-----------|
| SCS-30CRT | SCS-50CRT |
| SCS-36CRT | |

| Traystand Cart | |
|----------------|------------|
| SCTS-28CRT | SCTS-36CRT |

Options

FOOD WELLS

| N8600 Series Self Contained Combination Hot/Cold Food Wells | |
|--|-------|
| N8630 | N8669 |
| N8643 | N8681 |
| N8656 | |

| N8700DESP Series Individually Controlled Energy Savings Heated Food Wells | |
|--|------------|
| N8717-DESP | N8759-DESP |
| N8731-DESP | N8773-DESP |
| N8745-DESP | N8787-DESP |

Serial Number Information

Heated units have a serial tag located above the louvered panel near the on/off switch.

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

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

All purpose carts, 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.

Warranty Information

Visit

http://www.delfield.com/minisite/service/warranty_info 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 (ULC) (Indoor Only)

Section 2 Installation

⚠ DANGER

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

⚠ DANGER

Legs or casters must be installed and the legs or casters must be screwed in completely to prevent bending. When casters are installed the mass of this unit will allow it to move uncontrolled on an inclined surface. These units must be tethered/secured to comply with all applicable codes.

⚠ DANGER

Use appropriate safety equipment during installation and servicing.

⚠ DANGER

Do not lift the condensing unit by the refrigerant tubing or other components. These features will not support the condensing unit weight. Injury and unit damage may occur!

⚠ DANGER

This equipment contains refrigerant charge. Installation of the line sets must be performed by a properly trained and EPA certified refrigeration technician aware of the dangers of dealing with refrigerant charged equipment.

⚠ 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.

⚠ Warning

Be sure all cooking equipment resting on the equipment stand is properly anchored. Consult the manufacturer's instructions for the cooking equipment to determine the proper mounting technique. It is the owner's and operator's responsibility to securely anchor cooking equipment to the equipment stand.

⚠ Warning

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

⚠ Warning

Remove all removable panels before lifting and installing.

Notice

After installing casters, the unit must stand upright for twenty-four (24) hours before being powered up to assure oil return to the compressor sump.

Notice

Optional sink water heater **MUST** be filled with water before connecting the water heater to power to prevent damage to the heater.

Notice

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. 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. If the LiquiTec unit cold pans leak, immediately call KitchenCare 1-844-724-CARE (2273).

Location

⚠ Warning

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

⚠ 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

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

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

- Frost top carts are intended for indoor use only. All other refrigerated carts can be used indoor and outdoor.
- 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.
- All four casters **MUST** be locked once positioned.
- Recommended air temperature is 41° - 86°F (5° - 30°C) .
- Proper air supply for ventilation is **REQUIRED AND CRITICAL** for safe and efficient operation. Refer to Clearance Requirements chart on page 10.
- Do not obstruct the flow of ventilation air. Make sure the air vents of the equipment are not blocked.
- 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.

Outdoor Unit Requirements

⚠ DANGER

Risk of Electric Shock. Do not use an extension cord. Connect appliance cord directly to a dedicated outlet suitable for installation in damp or wet locations and protected by a Ground Fault Circuit Interrupter (GFCI) in accordance with local codes. If an outlet is not provided, contact a qualified electrician for proper installation.

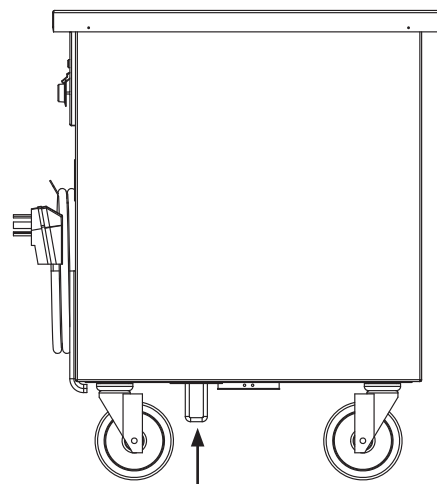
⚠ Caution

Winterizing is mandatory. Failure to perform the winterizing process will void the warranties. Winterizing will prevent broken water lines.

All food pan openings will be supplied with pan covers that must be used.

Outdoor units have waterproof breaker panels.

Two anchor points are located on the bottom of each outdoor unit. Chains must be attached to anchor points to secure them.



Weight of Equipment

| Model | Weight |
|---------------|----------------|
| SC-28-NUCRT | 120lbs (54kg) |
| SC-28CRT | 165lbs (75kg) |
| SC-36-NUCRT | 160lbs (73kg) |
| SC-36CRT | 185lbs (84kg) |
| SC-50-NUCRT | 180lbs (82kg) |
| SC-50CRT | 205lbs (93kg) |
| SC-60-NUCRT | 210lbs (95kg) |
| SC-60CRT | 240lbs (109kg) |
| SC-74-NUCRT | 240lbs (109kg) |
| SC-74CRT | 270lbs (122kg) |
| SC-96-NUCRT | 280lbs (127kg) |
| SC-96CRT | 310lbs (145kg) |
| SCF-36CRT | 475lbs (215kg) |
| SCF-50CRT | 525lbs (238kg) |
| SCF-60CRT | 575lbs (261kg) |
| SCF-74CRT | 625lbs (283kg) |
| SCFM-50CRT | 500lbs (227kg) |
| SCFM-74CRT | 590lbs (268kg) |
| SCFT-36-NUCRT | 380lbs (172kg) |
| SCFT-50-NUCRT | 455lbs (206kg) |
| SCFT-60-NUCRT | 540lbs (245kg) |
| SCFT-74-NUCRT | 610lbs (277kg) |
| SCFT-96-NUCRT | 680lbs (308kg) |
| SCI-36-NUCRT | 200lbs (91kg) |
| SCI-36CRT | 240lbs (109kg) |
| SCI-50-NUCRT | 245lbs (111kg) |
| SCI-50CRT | 285lbs (129kg) |
| SCI-60-NUCRT | 280lbs (127kg) |
| SCI-60CRT | 320lbs (145kg) |
| SCI-74-NUCRT | 330lbs (150kg) |
| SCI-74CRT | 360lbs (163kg) |
| SCI-96-NUCRT | 380lbs (172kg) |
| SCI-96CRT | 400lbs (181kg) |
| SCM-36CRT | 400lbs (181kg) |
| SCM-50CRT | 450lbs (204kg) |
| SCM-60CRT | 500lbs (227kg) |
| SCM-74CRT | 550lbs (249kg) |
| SCS-30CRT | 180lbs (82kg) |
| SCS-36CRT | 210lbs (95kg) |
| SCS-50CRT | 270lbs (122kg) |
| SCSC-36-BCRT | 350lbs (159kg) |

| Model | Weight |
|---------------|----------------|
| SCSC-36-EFCRT | 380lbs (172kg) |
| SCSC-50-BCRT | 425lbs (193kg) |
| SCSC-50-EFCRT | 455lbs (206kg) |
| SCSC-60-BCRT | 500lbs (227kg) |
| SCSC-60-EFCRT | 530lbs (240kg) |
| SCSC-74-BCRT | 575lbs (261kg) |
| SCSC-74-EFCRT | 615lbs (279kg) |
| SCSC-96-BCRT | 650lbs (295kg) |
| SCSC-96-EFCRT | 680lbs (308kg) |
| SCTS-28CRT | 150lbs (68kg) |
| SCTS-36CRT | 192lbs (87kg) |
| SCU-36-NUCRT | 170lbs (77kg) |
| SCU-36CRT | 200lbs (91kg) |
| SCU-50-NUCRT | 190lbs (86kg) |
| SCU-50CRT | 230lbs (104kg) |
| SCU-60-NUCRT | 230lbs (104kg) |
| SCU-60CRT | 270lbs (122kg) |
| SCU-74-NUCRT | 260lbs (118kg) |
| SCU-74CRT | 300lbs (136kg) |
| SCU-96-NUCRT | 300lbs (136kg) |
| SCU-96CRT | 340lbs (154kg) |
| SH-2-NUCRT | 225lbs (102kg) |
| SH-2CRT | 380lbs (172kg) |
| SH-3-NUCRT | 275lbs (125kg) |
| SH-3CRT | 460lbs (209kg) |
| SH-4-NUCRT | 330lbs (150kg) |
| SH-4CRT | 550lbs (249kg) |
| SH-5-NUCRT | 420lbs (191kg) |
| SH-5CRT | 660lbs (299kg) |
| SH-6-NUCRT | 510lbs (231kg) |
| SH-6CRT | 720lbs (327kg) |
| SH2C-62-NUCRT | 350lbs (159kg) |
| SH2C-74-NUCRT | 410lbs (186kg) |
| SH2C-96-NUCRT | 430lbs (195kg) |
| SH2CR-62-BCRT | 575lbs (261kg) |
| SH2CR-74-BCRT | 690lbs (313kg) |
| SH2CR-96-BCRT | 740lbs (336kg) |
| SH3C-74-NUCRT | 420lbs (191kg) |
| SH3C-96-NUCRT | 450lbs (204kg) |
| SH3CR-96-BCRT | 750lbs (340kg) |
| SH4C-96-NUCRT | 450lbs (204kg) |
| SH4CR-96-BCRT | 760lbs (345kg) |

| Model | Weight |
|--------------|----------------|
| SHC-50-NUCRT | 300lbs (136kg) |
| SHC-60-NUCRT | 350lbs (159kg) |
| SHC-74-NUCRT | 400lbs (181kg) |
| SHC-96-NUCRT | 425lbs (193kg) |
| SHCR-50-BCRT | 475lbs (215kg) |
| SHCR-60-BCRT | 575lbs (261kg) |
| SHCR-74-BCRT | 688lbs (312kg) |
| SHCR-96-BCRT | 730lbs (331kg) |

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.

Notice

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.

Notice

Do not position the air intake vent near steam or heat exhaust of another appliance.

| Sides/Back |
|------------|
| 2.0" (5cm) |

Dimensions

Model options may change dimensions.

| Model | Length | Depth | Height |
|---|-------------|------------|------------|
| SC-28-NUCRT SC-28CRT SCTS-28CRT | 28" (71cm) | 30" (76cm) | 38" (97cm) |
| SCS-30CRT | 30" (76cm) | 30" (76cm) | 38" (97cm) |
| SC-36-NUCRT SC-36CRT SCF-36CRT SCFT-36-NUCRT SCI-36-NUCRT SCI-36CRT SCM-36CRT SCS-36CRT SCSC-36-BCRT SCSC-36-EFCRT SCTS-36CRT SCU-36-NUCRT SCU-36CRT SH-2-NUCRT SH-2CRT | 36" (91cm) | 30" (76cm) | 38" (97cm) |
| SC-50-NUCRT SC-50CRT SCF-50CRT SCFM-50CRT SCFT-50-NUCRT SCI-50-NUCRT SCI-50CRT SCM-50CRT SCS-50CRT SCSC-50-BCRT SCSC-50-EFCRT SCU-50-NUCRT SCU-50CRT SH-3-NUCRT SH-3CRT SHC-50-NUCRT SHCR-50-BCRT | 50" (127cm) | 30" (76cm) | 38" (97cm) |
| SC-60-NUCRT SC-60CRT SCF-60CRT SCFT-60-NUCRT SCI-60-NUCRT SCI-60CRT SCM-60CRT SCSC-60-BCRT SCSC-60-EFCRT SCU-60-NUCRT SCU-60CRT SH-4-NUCRT SH-4CRT SHC-60-NUCRT SHCR-60-BCRT | 60" (152cm) | 30" (76cm) | 38" (97cm) |

| Model | Length | Depth | Height |
|--|-------------|------------|------------|
| SH2CR-62-BCRT SHC2-62-NUCRT | 62" (157cm) | 30" (76cm) | 38" (97cm) |
| SC-74-NUCRT SC-74CRT SCF-74CRT SCFM-74CRT SCFT-74-NUCRT SCI-74-NUCRT SCI-74CRT SCM-74CRT SCSC-74-BCRT SCSC-74-EFCRT SCU-74-NUCRT SCU-74CRT SH-5-NUCRT SH-5CRT SH2C-74-NUCRT SH2CR-74-BCRT SH3C-74-NUCRT SHC-74-NUCRT SHCR-74-BCRT | 74" (188cm) | 30" (76cm) | 38" (97cm) |
| SC-96-NUCRT SC-96CRT SCFT-96-NUCRT SCI-96-NUCRT SCI-96CRT SCSC-96-BCRT SCSC-96-EFCRT SCU-96-NUCRT SCU-96CRT SH-6-NUCRT SH-6CRT SH2C-96-NUCRT SH2CR-96-BCRT SH3C-96-NUCRT SH3CR-96-BCRT SH4C-96-NUCRT SH4CR-96-BCRT SHC-96-NUCRT SHCR-96-BCRT | 96" (244cm) | 30" (76cm) | 38" (97cm) |

Electrical Service

DANGER

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

DANGER

Copper wire suitable for at least 167°F (75°C) must be used for power connections.

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.

VOLTAGE

All electrical work, including wire routing and grounding, must conform to local, state and national electrical codes. The following precautions must be observed:

- The equipment must be grounded.
- A separate fuse/circuit breaker must be provided for each unit.
- A qualified electrician must determine proper wire size dependent upon location, materials used and length of run (minimum circuit ampacity can be used to help select the wire size).
- The maximum allowable voltage variation is $\pm 10\%$ 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.

RATED AMPERAGES, HORSEPOWER & POWER CORD CHART

DANGER

Units with two power cords must be plugged into individual branch circuits. During movement, cleaning or repair it is necessary to unplug both power cords.

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.

Important

Due to continuous improvements, this information is for reference only. Please refer to the equipment serial plate to verify electrical data. Serial plate information overrides information listed here.

Units with plugs are supplied with approximately 9ft cords, maximum 10ft.

| Model | Voltage, Cycle, Phase | Amps | HP | NEMA Plug for Indoor Use | Pin & Sleeve Plug for Outdoor Use (IEC 60309) |
|--|-----------------------|------|-----|--------------------------|---|
| SC-28-NUCRT SC-28CRT SC-36-NUCRT SC-36CRT SC-50-NUCRT SC-50CRT SC-60-NUCRT SC-60CRT SC-74-NUCRT SC-74CRT SC-96-NUCRT SC-96CRT | NA | NA | NA | NA | NA |
| SCF-36CRT SCF-50CRT | 115 V, 60 Hz, 1 Ph | 7.1 | 1/4 | 5-15P | 320P4W |
| SCF-60CRT SCF-74CRT | 115 V, 60 Hz, 1 Ph | 8.0 | 1/3 | 5-15P | 320P4W |
| SCFM-50CRT | 115 V, 60 Hz, 1 Ph | 7.1 | 1/4 | 5-15P | 320P4W |
| SCFM-74CRT | 115 V, 60 Hz, 1 Ph | 8.0 | 1/3 | 5-15P | 320P4W |
| SCFT-36-NUCRT SCFT-50-NUCRT SCFT-60-NUCRT SCFT-74-NUCRT SCFT-96-NUCRT | 115 V, 60 Hz, 1 Ph | 7.0 | 1/4 | 5-15P | NA |

| Model | Voltage, Cycle, Phase | Amps | HP | NEMA Plug for Indoor Use | Pin & Sleeve Plug for Outdoor Use (IEC 60309) |
|---|------------------------------|-------------|-----------|---------------------------------|--|
| SCI-36-NUCRT SCI-36CRT SCI-50-NUCRT SCI-50CRT SCI-60-NUCRT SCI-60CRT SCI-74-NUCRT SCI-74CRT SCI-96-NUCRT SCI-96CRT | NA | NA | NA | NA | NA |
| SCM-36CRT SCM-50CRT SCM-60CRT SCM-74CRT | 115 V, 60 Hz, 1 Ph | 7.0 | 1/4 | 5-15P | 320P4W |
| SCS-30CRT SCS-36CRT SCS-50CRT | NA | NA | NA | NA | NA |
| SCSC-36-BCRT SCSC-36-EFCRT SCSC-50-BCRT SCSC-50-EFCRT SCSC-60-BCRT SCSC-60-EFCRT SCSC-74-BCRT SCSC-74-EFCRT SCSC-96-BCRT SCSC-96-EFCRT | 115 V, 60 Hz, 1 Ph | 7.0 | 1/4 | 5-15P | 320P4W |
| SCTS-28CRT SCTS-36CRT SCU-36-NUCRT SCU-36CRT SCU-50-NUCRT SCU-50CRT SCU-60-NUCRT SCU-60CRT SCU-74-NUCRT SCU-74CRT SCU-96-NUCRT SCU-96CRT | NA | NA | NA | NA | NA |
| SH-2-NUCRT | 120/208-230 V, 60 Hz, 1 Ph | 11.0 | NA | 14-20P | 420P12W |
| SH-2CRT | 120/208-230 V, 60 Hz, 1 Ph | 15.0 | NA | 14-20P | 420P12W |
| SH-3-NUCRT | 120/208-230 V, 60 Hz, 1 Ph | 16.0 | NA | 14-20P | 420P12W |
| SH-3CRT | 120/208-230 V, 60 Hz, 1 Ph | 20.0 | NA | 14-30P | 430P12W |
| SH-4-NUCRT | 120/208-230 V, 60 Hz, 1 Ph | 22.0 | NA | 14-30P | 430P12W |
| SH-4CRT | 120/208-230 V, 60 Hz, 1 Ph | 26.0 | NA | 14-50P | 460P12W |
| SH-5-NUCRT | 120/208-230 V, 60 Hz, 1 Ph | 28.0 | NA | 14-50P | 460P12W |
| SH-5CRT | 120/208-230 V, 60 Hz, 1 Ph | 31.0 | NA | 14-50P | 460P12W |
| SH-6-NUCRT | 120/208-230 V, 60 Hz, 1 Ph | 33.0 | NA | 14-50P | 460P12W |
| SH-6CRT | 120/208-230 V, 60 Hz, 1 Ph | 37.0 | NA | 14-50P | 460P12W |

| Model | Voltage, Cycle, Phase | Amps | HP | NEMA Plug for Indoor Use | Pin & Sleeve Plug for Outdoor Use (IEC 60309) |
|--|----------------------------|------|-----|--------------------------|---|
| SH2C-62-NUCRT SH2C-74-NUCRT SH2C-96-NUCRT | 120/208-230 V, 60 Hz, 1 Ph | 11.0 | NA | 14-20P | 420P12W |
| SH2CR-62-BCRT | 120/208-230 V, 60 Hz, 1 Ph | 16.0 | 1/4 | 14-20P | 420P12W |
| SH2CR-74-BCRT SH2CR-96-BCRT | 120/208-230 V, 60 Hz, 1 Ph | 18.0 | 1/4 | 14-30P | 430P12W |
| SH3C-74-NUCRT SH3C-96-NUCRT | 120/208-230 V, 60 Hz, 1 Ph | 16.0 | NA | 14-20P | 420P12W |
| SH3CR-96-BCRT | 120/208-230 V, 60 Hz, 1 Ph | 23.0 | 1/4 | 14-30P | 430P12W |
| SH4C-96-NUCRT | 120/208-230 V, 60 Hz, 1 Ph | 22.0 | NA | 14-30P | 430P12W |
| SH4CR-96-BCRT | 120/208-230 V, 60 Hz, 1 Ph | 29.0 | 1/4 | 14-50P | 460P12W |
| SHC-50-NUCRT SHC-60-NUCRT SHC-74-NUCRT SHC-96-NUCRT | 120 V, 60 Hz, 1 Ph | 9.0 | NA | 5-15P | 320P4W |
| SHCR-50-BCRT SHCR-60-BCRT SHCR-74-BCRT SHCR-96-BCRT | 120 V, 60 Hz, 1 Ph | 16.0 | 1/4 | 5-20P | 320P4W |

| Option | Voltage, Cycle, Phase | Amps | HP |
|----------------|------------------------|-----------|-----|
| N8630 | 120 V, 60 Hz, 1 Ph | 25.0 | 1/4 |
| N8643 N8656 | 120/240 V, 60 Hz, 1 Ph | 21.0 | 1/4 |
| N8669 | 120/240 V, 60 Hz, 1 Ph | 42.0 | 1/4 |
| N8681 | 120/240 V, 60 Hz, 1 Ph | 42.0 | 1/3 |
| N8717-DESP | 208-230 V, 60 Hz, 1 Ph | 2.4/2.7 | NA |
| | 240 V, 50 Hz, 1 Ph | 2.1 | NA |
| N8731-DESP | 208-230 V, 60 Hz, 1 Ph | 4.8/5.4 | NA |
| | 240 V, 50 Hz, 1 Ph | 4.2 | NA |
| N8745-DESP | 208-230 V, 60 Hz, 1 Ph | 7.2/8.1 | NA |
| | 240 V, 50 Hz, 1 Ph | 6.3 | NA |
| N8759-DESP | 208-230 V, 60 Hz, 1 Ph | 9.6/10.8 | NA |
| | 240 V, 50 Hz, 1 Ph | 8.4 | NA |
| N8773-DESP | 208-230 V, 60 Hz, 1 Ph | 12.0/13.5 | NA |
| | 240 V, 50 Hz, 1 Ph | 10.5 | NA |
| N8787-DESP | 208-230 V, 60 Hz, 1 Ph | 14.4/16.2 | NA |
| | 240 V, 50 Hz, 1 Ph | 12.6 | NA |

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.

⚠ Warning
 If a refrigerated base does not have a condensate evaporator supplied, you must connect the condensate line to a suitable drain. Otherwise, water will collect on the floor, causing a potentially hazardous situation.

The installer/owner is responsible for the correct drain connections.

- Standard units on casters will have a bronze faucet that fits a standard garden hose 0.75 in (19mm).
- Units on legs with optional remote drain valve handle will have 1.0 in (25 mm) 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.

Heat of Rejection

| Model | BTU/Hour |
|--|-----------------------------------|
| SC-28-NUCRT SC-28CRT SC-36-NUCRT SC-36CRT SC-50-NUCRT SC-50CRT SC-60-NUCRT SC-60CRT SC-74-NUCRT SC-74CRT SC-96-NUCRT SC-96CRT | NA |
| SCF-36CRT | 915 |
| SCF-50CRT | 1350 |
| SCF-60CRT | 1456 |
| SCF-74CRT | 1609 |
| SCFM-50CRT | Refrigerator 789 Freezer 1580 |
| SCFM-74CRT | Refrigerator 1199 Freezer 2040 |
| SCFT-36-NUCRT | 435 |
| SCFT-50-NUCRT | 595 |
| SCFT-60-NUCRT | 717 |
| SCFT-74-NUCRT | 827 |
| SCFT-96-NUCRT | 921 |
| SCI-36-NUCRT SCI-36CRT SCI-50-NUCRT SCI-50CRT SCI-60-NUCRT SCI-60CRT SCI-74-NUCRT SCI-74CRT SCI-96-NUCRT SCI-96CRT | NA |
| SCM-36CRT | 1114 |
| SCM-50CRT | 1190 |
| SCM-60CRT | 1328 |
| SCM-74CRT | 1535 |
| SCS-30CRT SCS-36CRT SCS-50CRT | NA |
| SCSC-36-BCRT SCSC-36-EFCRT | 1102 |
| SCSC-50-BCRT SCSC-50-EFCRT | 1240 |
| SCSC-60-BCRT SCSC-60-EFCRT | 1343 |

| Model | BTU/Hour |
|---|----------|
| SCSC-74-BCRT SCSC-74-EFCRT | 1423 |
| SCSC-96-BCRT SCSC-96-EFCRT | 1487 |
| SCTS-28CRT SCTS-36CRT SCU-36-NUCRT SCU-36CRT SCU-50-NUCRT SCU-50CRT SCU-60-NUCRT SCU-60CRT SCU-74-NUCRT SCU-74CRT SCU-96-NUCRT SCU-96CRT SH-2-NUCRT SH-2CRT SH-3-NUCRT SH-3CRT SH-4-NUCRT SH-4CRT SH-5-NUCRT SH-5CRT SH-6-NUCRT SH-6CRT SH2C-62-NUCRT SH2C-74-NUCRT SH2C-96-NUCRT | NA |
| SH2CR-62-BCRT | 1423 |
| SH2CR-74-BCRT | 1102 |
| SH2CR-96-BCRT | 1343 |
| SH3C-74-NUCRT SH3C-96-NUCRT | NA |
| SH3CR-96-BCRT | 1240 |
| SH4C-96-NUCRT | NA |
| SH4CR-96-BCRT | 1102 |
| SHC-50-NUCRT SHC-60-NUCRT SHC-74-NUCRT SHC-96-NUCRT | NA |
| SHCR-50-BCRT SHCR-60-BCRT SHCR-74-BCRT | 1102 |
| SHCR-96-BCRT | 1240 |

| Option | BTU/HourHP |
|------------|------------|
| N8681 | 1138 |
| N8717-DESP | NA |
| N8731-DESP | NA |
| N8745-DESP | NA |
| N8759-DESP | NA |
| N8773-DESP | NA |
| N8787-DESP | NA |

| Option | BTU/HourHP |
|--------|------------|
| N8630 | 379 |
| N8643 | 569 |
| N8656 | 758 |
| N8669 | 948 |

Section 3 Operation

⚠ DANGER

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

⚠ DANGER

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

⚠ DANGER

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

⚠ Warning

Do not use electrical appliances or accessories other than those supplied by the manufacturer.

⚠ Warning

Overloading shelves can damage equipment or cause bodily injury.

⚠ 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

Do not use electrical appliances inside the food storage compartment of this appliance.

⚠ Warning

Damp or wet hands may stick to cold surfaces.

⚠ Warning

Do not contact moving parts.

⚠ Warning

Use caution when handling metal surface edges of all equipment.

⚠ Warning

The hand sink is to be used for hand washing only, not for consumption.

⚠ Warning

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

Notice

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

Notice

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.

Notice

Continuous opening and closing of the doors will hamper the unit's ability to maintain optimum refrigeration temperature. Top section is not intended for overnight storage. Product should be removed from pans. Pans can remain in unit while empty.

Notice

Do not place hot pans on/against the blue ABS liner. Do not throw items into the storage area. Failure to follow these recommendations could result in damage to the interior of the cabinet or to the blower coil. Overloading the storage area, restricting the airflow, and continuous opening and closing of the doors and drawers will hamper the unit's ability to maintain operational temperature.

Notice

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.

Controls/Programming/Settings

FROST TOP CARTS

Frost tops are designed to maintain an even layer of frost to pleasantly display product. Once turned on, the compressor will run continuously. There is no temperature control. 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.

HEATED AND REFRIGERATED COMBO CARTS

Combo carts are constructed of separate hot and cold wells with separate controls. Use the refrigerated cart setting information for the cold portion of the combo cart. Use the heated cart setting information for the hot portion of the combo cart.

REFRIGERATED CARTS

Mechanically cooled and LiquiTec series cold pans are adjusted at the factory to provide proper operation without any further adjustments.

It may become necessary to adjust the temperature. Temperature in a mechanically cooled pan is controlled by a pressure control, see page 23. LiquiTec cold pans have a thermostat 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.

If the mechanical 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.

LiquiTec cold pans are not intended to be used with ice. Turn LiquiTec cold pans ON an hour prior to use to allow for ample cool down time.

These units are not designed to cool warm food products. Items should be placed in the unit 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 is 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. To ensure product quality product must be rotated every four hours. Always place covers on pans when not serving to maintain temperatures.

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

HEATED CARTS

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.

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.

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.

 **Caution**

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 maintain temperatures, prevent food from drying out and to reduce your operating costs.

Heated Carts Wet Operation

 **Warning**

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 (82.2°C).

Fill the food well with about 2 in (51mm) of water and cover with lid or empty pan. To preheat water, 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.

To reduce preheating time, use hot water to fill the well.

Heated Carts Dry Operation - 1000 Watt

 **Warning**

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

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

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

Optional Heated Understorage

If necessary, preheat the heated understorage to desired temperature. Temperature range of understorage is 100°F to 200°F (38°C to 93°C). The temperature control knob is always the far left knob on the panel. Indicator light is also at the far left.

MILK AND ICE CREAM CARTS

To begin operation plug the electrical supply cord into a receptacle with the correct voltage. Each combination unit is constructed with two separate tanks. Follow the milk cart and the ice cream cart directions respectively for loading and defrosting.

The milk tank is set at the factory to maintain temperatures between 36°F and 40°F (2°C and 4°C). No further adjustment should be necessary. If a temperature adjustment is necessary the milk tank temperature is controlled by a thermostat 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. The ice cream tank is set at the factory to maintain temperatures between -5°F and 0°F (-15°C and -18°C). If a temperature adjustment is necessary follow the pressure control directions on page 23.

MILK CARTS

Milk carts are set at the factory to maintain temperatures between 36°F and 40°F (2°C and 4°C). No further adjustment should be necessary. If a temperature adjustment is necessary follow the pressure control directions on page 23. To begin operation plug the electrical supply cord into a receptacle with the correct voltage.

To load, place a complete layer of cartons or bottles standing upright on the load tray. Then place a divider tray on top of this layer, then another layer of cartons or bottles on this tray, then another tray and another layer, etc. As each additional tray is loaded, the elevators gradually lower. The last layer may be placed on top without the use of another tray. When loading the average tall half pint bottles, four layers may be loaded into each compartment standing upright and the fifth layer laying down. Always use covers when not serving to maintain temperatures.

Important

Use the divider trays provided between each successive layer of contents to assure the correct balance of the load and the proper action of the elevating mechanism.

Wire racks, when used, should be loaded completely. When placing one rack on top of the other, be sure the stacking lugs are properly aligned.

Milk carts require defrosting after 0.375 in to 0.5 in (10mm to 13mm) of frost forming. 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.

ICE CREAM CARTS

Ice cream carts are set at the factory to maintain temperatures between -5°F and 0°F (-15°C and -18°C). No further adjustments should be necessary. If a temperature adjustment is necessary follow the pressure control directions on page 23. To begin operation plug the electrical supply cord into a receptacle with the correct voltage.

To load, place two layers of ice cream on the load tray, then a tray, two additional layers of ice cream, then another tray, etc. Do not stack ice cream above the frost line on the interior of the freezer. Always use covers when not serving to maintain temperatures.

Ice cream carts require defrosting after 0.375 in to 0.5 in (10mm to 13mm) of frost forming. 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.

OPTIONAL N8600 HOT/COLD SERIES

Optional N8600 Hot Operation

N8600 Series hot and cold combination pans must be operated with water in the well for proper hot operation. Fill well with a minimum of 4 in (102mm) of water. Place function switch in HOT position to begin heating. Turn thermostat dial to the desired temperature.

Caution

Never use anything other than plain water in the wells or tank.

Caution

When operated at the highest temperature setting, the top of the unit will become very hot.

To turn unit off, simply move the function switch to OFF position. Drain water and allow unit to cool before cleaning or switching to cold operation.

Optional N8600 Cold Operation

Simply place the function switch to the COLD position. The compressor controller has been factory set and no temperature adjustment should be necessary. 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.

These units are not designed to cool warm food products. Items should be placed in the unit 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 is 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. To ensure product quality product must be rotated every four hours. Always place covers on pans when not serving to maintain temperatures.

Optional N8600 Switching From Hot To Cold Operation

1. Place the function switch in the OFF position and drain out hot water.
2. Allow the unit to cool until it can be safely cleaned.
3. When clean up procedures are complete, unit will be ready for cold operation. This takes about one hour.

Notice

To assure maximum compressor life, do not switch from "hot" to "cold" operation without allowing a cool down period. Never switch from hot to cold operation while hot water remains in the pans. Failure to observe this warning will greatly reduce compressor life and eventually cause premature compressor failure.

Optional N8600 Switching From Cold To Hot Operation

No special procedure is required to switch from the cold to hot operation. Be certain to fill will with a minimum of 4 in (102mm) of water.

Caution

The unit is designed so that the compressor and the heating elements cannot operate at the same time. Continued operation of the compressor in the "hot position" is not normal.

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

N8600 Immersion Heater High Limit

As a safety feature, the N8600 food well immersion heater includes a high limit safety switch. If the heater gets too hot the safety switch will trip and turn the heater off. A pilot light on the control panel will illuminate when the safety switch is tripped. To reset the safety switch, first turn OFF the thermostat or Power switch and then determine if low water is the cause. If low water is not the cause, contact service for resolution. If low water is the cause, carefully remove food pans and refill the water. This will allow the immersion heater to cool and the safety switch will automatically reset. The unit must be turned OFF as directed or safety switch will not reset even if water is refilled to proper level. Replace food pans and turn thermostat or Power switch back on.

OPTIONAL N8700-DESP SERIES

These units are designed to hold warm food product between 140°F to 160°F (60°C to 71°C).

N8700-DESP series individually heated hot food units may be operated “wet” (with water in the wells) or “dry”. “Dry” operation using 4 in (102mm) deep pans produces optimum performance.

A power switch and digital control are provided for each individual heated food well. After the unit is hard wired to the electrical system, turn the power switch ON and the digital display will read OFF. Press Set and then use the arrows to select the desired temperature setting (1-10). The new temperature setting is entered three seconds after the last button is pressed. When the power switch is used to turn the well OFF and back ON the temperature setting will remain.

Caution

Never place food directly in well. Always use pans.

For most efficient operation, keep covered inserts in each well during preheating or when empty.

Always place covers on pans when not serving to maintain temperatures and prevent food from drying out.

Optional N8700 Wet Operation

Fill the food well with a minimum of 2 in (51mm) of water and cover with lid or empty pan. To preheat water, set temperature control at 3. 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 at lowest setting that will maintain proper food temperature. To reduce preheating time, use hot water to fill the well. Preheating time with room temperature water is one hour.

Caution

Never use anything other than plain water in the wells or tank.

Caution

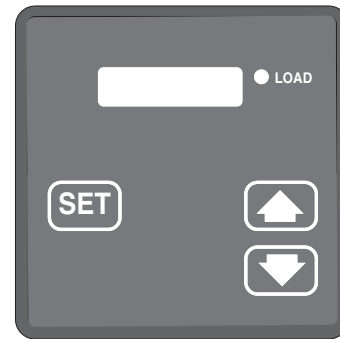
When operated at the highest temperature setting, the top of the unit will become very hot.

Optional N8700 Dry Operation

Dry operation is more efficient and is preferred.

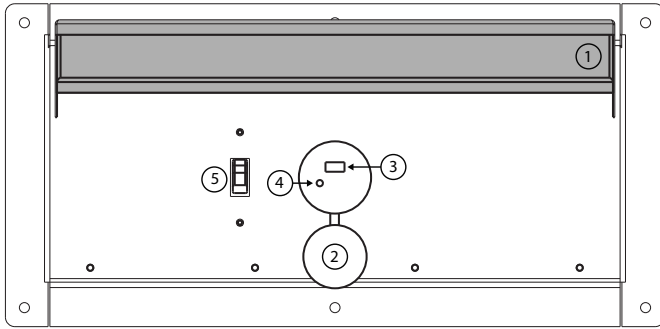
When operated dry, the bottom of the well will discolor. To clean, use a stainless steel cleaner or mild abrasive.

Optional N8700 Temperature Control



- **LED Display:** Indicates the temperature setting 0-10. At the first startup the display will read OFF.
- **SET:** When SET is depressed, the temperature setting is displayed and can be adjusted with the arrows.
- **LOAD Light:** Lit when well is heating.
- **Arrows:** After pressing SET, press the Up-Arrow to increase the temperature setting, press the Down-Arrow to decrease the temperature setting. The new temperature setting is entered three seconds after the last arrow is pressed.

Sound System



1. Open the sound system control area.
2. Flip off the port cover.
3. The USB port is for charging purposes. Connect your device to the USB for power.
4. Plug the audio into the AUX port.
5. Turn the power switch ON.
6. Control the audio, including volume, with the connected device.

Operational Checks

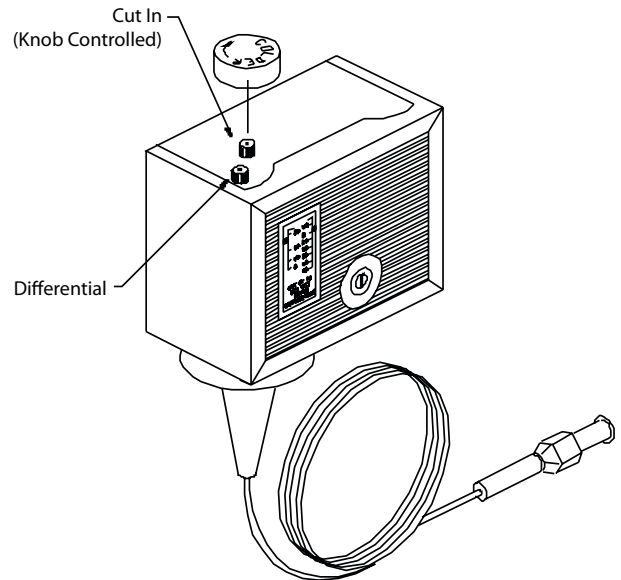
PRESSURE CONTROL

The models below have an adjustable pressure control that controls the temperature. It is located in the machine compartment. They are field adjustable and do not require a service agent. The adjustable control has the word COLDER near the knob, with an arrow to indicate the adjustment direction. Make small incremental adjustments if a temperature adjustment is necessary.

⚠ Caution

In attempting to adjust the pressure control, you can do damage to your unit by accidentally adjusting the differential.

| Model | Cut-In | Differential |
|---|--------|--------------|
| Ice Cream Carts SCF-CRT & SCFM-CRT | 30# | 15# |
| Milk Carts SCM-CRT | 80# | 30# |
| Cold Pan Carts SCSC-BCRT & SHCR-BCRT | 55# | 30# |



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Section 4 Maintenance

Cleaning and Sanitizing Procedures

GENERAL

▲ Warning

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

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 | Monthly | After Prolonged Shutdown | At Start-Up |
|----------------------------|-------|--------|---------|--------------------------|-------------|
| Interior | X | | | X | X |
| Gasket | X | | X | X | X |
| Exterior | X | | | X | X |
| Glass Surfaces | X | | | X | X |
| Counter Protector Hardware | X | | | X | X |
| Drain | | X | | X | X |
| Condenser Coil | | | X | X | X |
| Casters | | | X | X | X |

INTERIOR CLEANING

Notice

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.

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.

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

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 gasket and 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.

Fiberglass and 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 or polish which will

eliminate water spotting, fingerprints and bring out the color of the fiberglass. Fiberglass surfaces should be waxed twice a year. 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.

COUNTER PROTECTOR GLASS & HARDWARE CLEANING

Notice

Never use window sprays or kitchen scouring compounds to clean plexiglas.

Clean daily with soap and water. Extreme stains or grease should be cleaned with a nonabrasive cleaner and plastic scrub pad. Polish the chrome when necessary with a soft cotton cloth.

DRAIN

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.

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.

CASTERS

Wipe casters with a damp cloth monthly to prevent corrosion.

DEFROSTING

Refrigerated cold pans and frost tops should be defrosted daily. Milk or Ice Cream dispensers require defrosting after 0.375" to 0.5" (10 mm to 13 mm) of frost forming. ON/OFF switch is located above louver panel.

Caution

Never use sharp objects or tools to clean or scrape ice/frost buildup 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.

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.

PREVENTING BLOWER COIL CORROSION

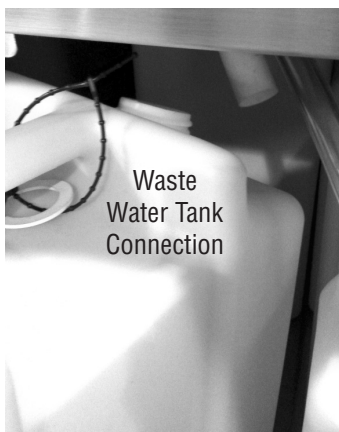
To help prevent corrosion of the blower coil, store all acidic items, such as pickles and tomatoes, in seal-able containers. Immediately wipe up all spills.

FIELD INSTALLATION

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.

Winterizing Optional Sink

Failure to perform the winterizing process will void the warranties.



FLUSHING THE RV ANTIFREEZE (AFTER WINTERIZING)

1. Fill the fresh water tank.
2. Turn on hot water at faucet to circulate fresh water through hot water system to purge all RV antifreeze.
3. Turn off hot water at faucet.
4. Turn on cold water at faucet to circulate fresh water through cold water system to purge all RV antifreeze.
5. Turn off cold water at faucet.
6. Drain waste water tank and re-install.

FOR CONDITIONS WHERE UNIT IS STORED ABOVE 40°F

1. Drain fresh water tank.
2. Drain waste water tank and re-install.
3. Cover unit with the provided black cover.

FOR CONDITIONS WHERE UNIT IS STORED BELOW 40°F

1. Drain fresh water tank.
2. Drain waste water tank and re-install.
3. Remove fresh water inlet from fresh water tank.
4. Insert fresh water inlet into RV antifreeze (NEVER USE AUTOMOTIVE ANTIFREEZE).
5. Turn on hot water at faucet to circulate RV antifreeze (NEVER USE AUTOMOTIVE ANTIFREEZE) through hot water system.
6. Turn off hot water at faucet.
7. Turn on cold water at faucet to circulate RV antifreeze (NEVER USE AUTOMOTIVE ANTIFREEZE) through cold water system.
8. Turn off cold water at faucet.
9. Drain waste water tank and re-install.

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Section 5 Troubleshooting

Problem -> Cause -> Correction Chart

| Problem | Cause | Correction |
|---|---|--|
| Cabinet not running | Fuse blown or circuit breaker tripped. | Replace fuse or reset circuit breaker. |
| | Power cord unplugged. | Plug in power cord. |
| | Thermostat set too high. | Set thermostat to lower temperature. |
| | Main power switch turned off. | Turn main power switch on. |
| | Cabinet in defrost cycle. (Freezer models) | Wait for defrost cycle to finish. |
| Condensing unit runs for long periods or continuously | Excessive amount of warm product placed in cabinet. | Allow adequate time for product to cool down. |
| | Prolonged door openings or door(s) ajar. | Make sure door(s) are closed when not in use. Avoid prolonged door openings. |
| | Door gasket(s) not sealing properly. | Check gasket condition. Adjust door or replace gasket if necessary. |
| | Dirty condenser coil. | Clean the condenser coil. |
| | Evaporator coil iced over. | Turn unit off and allow coil to defrost. Make sure thermostat is not set too cold. Also, check gasket condition. |
| Cabinet temperature is too high | Thermostat set too high. | Set thermostat to lower temperature. |
| | Poor air circulation in cabinet. | Re-arrange product to allow proper air circulation. |
| | Exterior thermometer is out of calibration. | Re-calibrate thermometer. |
| | Excessive amount of warm product placed in cabinet. | Allow adequate time for product to cool down. |
| | Prolonged door openings or door(s) ajar. | Make sure door(s) are closed when not in use. Avoid prolonged door openings. |
| | Dirty condenser coil. | Clean the condenser coil. |
| | Evaporator coil iced over. | Turn unit off and allow coil to defrost. Make sure thermostat is not set too cold. Also, check gasket condition. |
| Cabinet is noisy | Loose part(s). | Locate and tighten loose part(s). |
| Refrigerator is freezing product | Thermostat is set too low. | Set thermostat to higher temperature. |
| | Dirty condenser coil. | Clean the condenser coil. |
| | Not enough cabinet clearance for proper refrigeration system operation. | Move cabinet or make other adjustments to gain proper cabinet clearances. |
| Compressor will not start | Low voltage to cabinet. | Check and correct incoming voltage to cabinet. |
| Sound system audio has no volume | The cart amplifier is turned off or the volume is turned down. | Access the cart amplifier in the unit mechanical access with a screwdriver. The light indicates if it has power. Turn the volume all the way up. |

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