



Installation & Operation Manual

KW-IOM-2067

October 2017

Part No. 31E02067

KYSOR/WARREN® **STRATUS Single** **Deck / Self-** **Contained Display** **Case**



Models:
SX1LC-SC

Applications:



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Introduction – General Information

This manual has been prepared for our customers and the personnel involved in installing and maintaining our cases.

Our STRATUS case line has been designed with a focus on things most important to your bottom line. Enhanced merchandise visibility, high energy efficiency, and merchandising flexibility have all merged in an attractive, modular design. Custom styles fit seamlessly into your floor plan and an eco-friendly design protects the environment while saving energy costs. The SX1LC-SC self-contained case is available in medium-temperature.

These cases should be installed and operated according to the instructions contained in this manual to ensure proper performance. They are designed for display of products in an air-conditioned store where temperature and humidity are maintained at a maximum of 75° dry-bulb temperatures and 55% relative humidity.

CAUTION: Failure to maintain maximum design conditions may result in operational issues such as the following: increased BTUH load, high product temperature, coil icing, product frosting, and external sweating.

These cases are connected to a single condensing unit. Installation and Service instructions are provided by the condensing unit manufacturer and are not part of this manual.

Case Description

Model	Description
SX1LC-SC	Self-contained: Sandwich, standard depth, single-deck, low front, display case with curved glass and produced in 4 ft. length.

Receiving/Shipping Damage/Lost Items

All equipment should be examined for shipping damage before and during unloading. If there is any damage, the carrier should be notified immediately and an inspection requested. The delivery receipt must be noted that the equipment was received damaged. If damage is of a concealed nature, you must contact the carrier within three (3) days following delivery. The consignee for all damages must file a claim with the carrier.

NOTE: All claims for shortages must be within 10 days after receipt of shipment.

Condensing Unit

The condensing unit is not intended to be removed from the case except in the event a compressor must be replaced. To remove the condensing unit, disconnect the flare suction/liquid connections on the base valves at the right front of the case.

CAUTION: Before attempting to remove the condensing unit, be sure that all electrical power to the case has been turned off. Also, caution should be used when releasing pressure on the refrigerant system.

NOTE: The refrigerant charge for this case is very critical. If the case should need to be recharged, an accurate charging device must be used. No refrigerant should be released into the atmosphere; it must be reclaimed. There are several different refrigerant configurations to these units, refer to Case Data for detail.

CAUTION: During installation and service of this equipment, precautions should be taken to prevent loss of refrigerant to the atmosphere.

Case Data

SX1LC-SC

Capacities

Length (FT)	Facing Area (FT)	Cubic Capacity (FT)
4	12.28	10.68
6	18.39	16.03

Refrigeration Data

BTUH per FT of Case		Evap. Temp.	Discharge Air	
LED	T8		Temp	Velocity (1 hr. after defrost)
960	968	18°F - 24°F	24°F - 30°F	225 FPM

Add 13 BTUH/FT for additional LED canopy light

Electrical Data

Length	Power Supply	Refrigerant	ECM Fan	Anti-Sweat	Condensate Pan Heater	Condensing Unit
			Amps	Amps	Amps	Amps
4'	115V/60/1	R-404A	0.12	0.1	8.3	9.7
6'	115V/208V/60/1	R-404A	(115V)	(115V)	4.8 (208V)	9.7 (208V)

Length	Power Supply	Minimum Circuit	Maximum Overcurrent Protection	Refrigeration Cycle	Defrost Cycle
		Amps	Amps	Amps	Amps
4'	115V/60/1	21.6	25	19.2	9.8
6'	208V/60/1	19.2	25	17.8	7

Defrost Data

Defrost	Per Day	Fail Safe	Termination
Off Cycle	6	45 min	+45°F Coil

Set defrost intervals for every 4 hours.

Note: Temperature is measured in discharge air. Defrost frequency is at design conditions. Higher temperature or humidity may require more defrost and longer fail-safes. These cases are not designed to operate environments where the ambient temperature is greater than 75°F and the relative humidity is greater than 55%.

CAUTION: Failure to maintain maximum design conditions may result in operational issues such as the following: increased BTUH load, high product temperature, coil icing, product frosting, and external sweating.

CAUTION: Failure to properly install electrical wiring and control wiring as per wiring diagram(s), defrost settings, and temperature set-points may result in operational issues such as: increased BTUH load, high product temperature, coil icing, product frosting, and external sweating.

NOTE: Refer to www.kysorwarren.com for other electrical data and information.

Case Installation

Preparation: Prepare the installation area as follows:

1. Clean area where case is to be installed.
2. Verify installation area is at least 15 feet from any outside entrances or heating and cooling outlets.
3. Ensure floor loading will support the case and the case contents.
4. Ensure proper AC power is available. Refer to case AC input requirements located in the electrical connections section of this manual.
5. Ensure expansion valve in case is the proper valve for the type of refrigerant used at the installation site.

CAUTION: To prevent condensation on the end panels of cases, a minimum of 6.0 inches between walls or other cases is required for airflow. If 6.0 inches is not possible, then the space between the cases must be completely filled and sealed or an updraft fan kit must be installed to provide air circulation through the space.

Installation

The following instructions are provided for unpacking, moving, loading, and lifting the case prior to installation.

NOTE: READ ALL INSTRUCTIONS CAREFULLY BEFORE BEGINNING INSTALLATION.

Unpacking

WARNING! Use caution when removing the strapping in the following procedure, as the shelves are very heavy and could fall causing personal injury or equipment damage.

1. Ensure the evaporator cover is installed correctly with the deck pans installed.
2. Move the case into position, install, and perform the operational checkout procedures following the instructions within this manual.

CAUTION: Be careful not to damage the factory-installed end while moving the case. Use the case lift points on the case to move it to the proper location.

Installing Case

1. Ensure all preparation for installation, as outlined in the above paragraphs, have been fully complied with and are complete.
2. Allow a minimum of 6.0 inches between the rear of the case and the store walls and/or other cases. This space reduces the possibility of condensation problems. It may be necessary to provide forced air ventilation in some installations.

Electrical Connections - General

An electrical box is provided with each refrigerator for wiring your fan and light circuits. This is an approved method by the Underwriters' Laboratories; however, field wiring must be in accordance with local and national electrical codes.

All field connections are made in the electrical box. Make sure that proper voltage is supplied to your refrigerator. Check refrigerator nameplate for the required voltage for fans, lights, and defrost heaters.

NOTE: ALL REFRIGERATORS MUST BE GROUNDED.

The Recommended Control Settings in the Case Data shows the electrical ratings for your case. This is the same information that appears on your refrigeration nameplate.

NOTE: Fan motors must operate continuously and panel must be marked sufficiently to prevent the fan motors from being turned off accidentally. When refrigerators are multiplexed, add the total of these amperage values to determine wire size and circuit protection. Anti-condensate controllers can be used to control the anti-condensate heater.

WARNING! Ensure the Kickplate does not come in contact with the case electrical wiring. Live electrical wiring that comes in contact with the case is a shock hazard that may cause severe injury or death by electrocution.

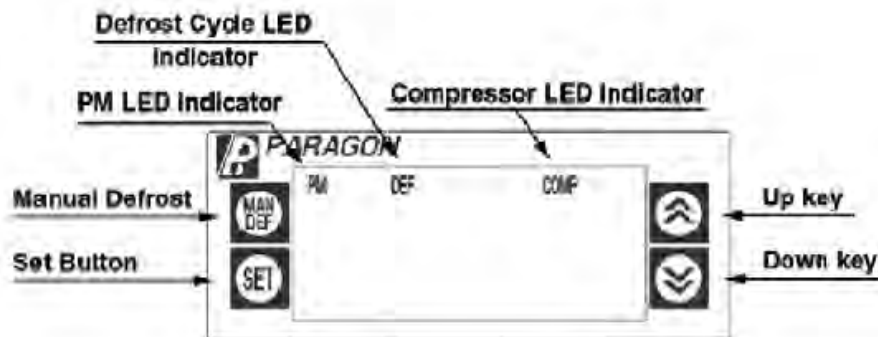
WARNING! Always disconnect the electrical power at the main disconnect when servicing or replacing any electrical component. This includes, but is not limited to, such items as fans, heaters, thermostats and light bulbs. Failure to disconnect the electrical power may result in personal injury or death.

Electrical Termination

All electrical connections are made in the control box located in the base of the case.



Paragon ERC-2 Set-Up Instructions



To change time of day and setpoint temperature (First Level), follow these steps:

1. Press and hold SET for five (5) seconds. The display will show “CLoC.”
2. Press SET again to change the time of day.
3. Press UP or DOWN until the correct time of day is displayed.
4. Press SET to accept the new time.
5. Press DOWN to go to the next parameter -- Setpoint Temperature. The display will show “SEt.”
6. Press SET to change the setpoint temperature.
7. Press UP or DOWN to go to the desired setpoint. The range is -40 to 60°F.
8. Press SET to accept the change.
9. Press DOWN to exit the first level of programming.

NOTE: During programming, if no button is pressed for thirty (30) seconds, the control will go back to the normal operation mode. This is valid for both programming levels.

NOTE: When changing the time, press and hold the MAN DEF button for three (3) seconds to change the AM / PM mode.

To change the other parameters (Second Level), follow these steps:

1. Press and hold SET and DOWN for ten (10) seconds. The display will show “dSPL.” Press SET to change the parameter.
2. Press UP or DOWN to change options, time, or temperature for the currently selected parameter. Press SET to accept new value.
3. Press DOWN to go to the next parameter. Then, go back to step 2. After the last parameter is displayed (ALHi), the display will return to the normal operating condition.

Set the following parameters as described:

Set Clock to local time.	SEt = 21	CLHr = 12HR	dSPL = rSP°
dSP = F	dFtP = Elec	EFAN = Yes	CFAN = On
dFin = Tday	CoFF = 0	Con = 0	Alrd = 0
CPrn = 0	nodF = 6	dEF1 = 4	dEFd = 35 minutes
Fand = 0	Pudn = 0	driP = 0	diF = 8
tDEF = n/a	dEF = 45°	FAn = n/a	ALLo = 18
ALHi = 60			

**Set defrost intervals at every 4 hours.*

Parameter	Display Symbol	Description	Range / Options
Display Status	dSPL	Information shown on the display during operation conditions.	tdAy - time of day rSP° - zone temperature (refrigerated space) CyCL - cycle between time and zone temperature Epr - evaporator coil temperature
Clock Format	CLHr	Format of the time (12 / 24 hour mode)	12Hr - AM / PM Format 24Hr - 24 hour Format
Temperature Format	°dSP	Temperature Degrees	°F - degrees Fahrenheit °C - degrees Celsius
Defrost Type	dFtP	Type of defrost used in the application	ELEC - electric heater defrost / off cycle HgAS - hot gas
Fan Status During Defrost	EFAN	Enable or not the fan during defrost	no - fan is turned off during defrost yES - fan remains on during defrost
Fan Status During Normal Mode	CFAN	Enable or not the fan during normal compressor on/off mode	on - fan is always on during normal mode CyAP - fan cycles with compressor
Defrost Interval	dFin	Type of defrost interval	TdAy - time of day setpoint CPrn - compressor run time tdEF - temperature initiated defrost
Minimum Compressor Off Time	CoFF	Minimum time that the compressor will remain turned off	Range: 0 - 15 minutes
Minimum Compressor On Time	Con	Minimum time that the compressor will remain turned on	Range: 0 - 15 minutes
Alarm Delay	ALrd	Time delay before the alarm goes off after the temperature falls off the two alarm setpoints	Range: 0 - 59 minutes
Compressor Run Time	CPrn	Time the compressor will run between defrosts	
Number of Defrosts	nodF	Number of defrosts per day	from 0 - 8 (0 means 1 defrost every 48 hours)
Defrost Start Time	dEF1-8	Start time of each defrost	
Defrost Duration	dEFd	Defrost duration time (Back up for defrost termination temperature)	Range: 0 mins - 4 hours
Fan Delay	FAnd	Delay time for the fan after defrost (back up for fan cut-in temperature)	Range: 0 - 15 minutes
Pump Down	Pudn	Pump down duration	Range: 0 - 59 minutes
Drip Time	driP	Drip Time Duration	Range: 0 - 59 minutes
Setpoint Differential	diF°	Cut-in temperature differential (NOTE: cut-in is cut-out plus differential)	Range: 1 - 25°
Temperature Initiated Defrost	tdEF	Temperature that will initiate a defrost cycle	Range -40 to 40°F / -40 to 4°C
Defrost Termination Temperature	dEF	Temperature in the evaporator that will terminate the defrost cycle	Range: 0 - 75°F / -18 to 24°C
Fan Cut-in Temperature	FAn°	Temperature that will turn the fan on after defrost	Range: -40 to 60°F / -40 to 16°C
Low Temperature Alarm	ALLo	Low temperature setpoint that will make the alarm go off and the error message appear on the display	Range: -40 to 83°F / -40 to 28°C
High Temperature Alarm	ALHi	High temperature setpoint that will make the alarm go off and the error message appear on the display	Range: -40 to 83°F / -40 to 28°C

STRATUS Single Deck / Self-Contained Display Case



NOTE: To change from degrees C to F, and vice versa, the user must reprogram all the parameters that are related to the temperature. The unit DOES NOT convert the parameters automatically from degrees C to F or vice versa.

PLEASE SEE BELOW PARAGON DISPLAY AND ERROR CODES

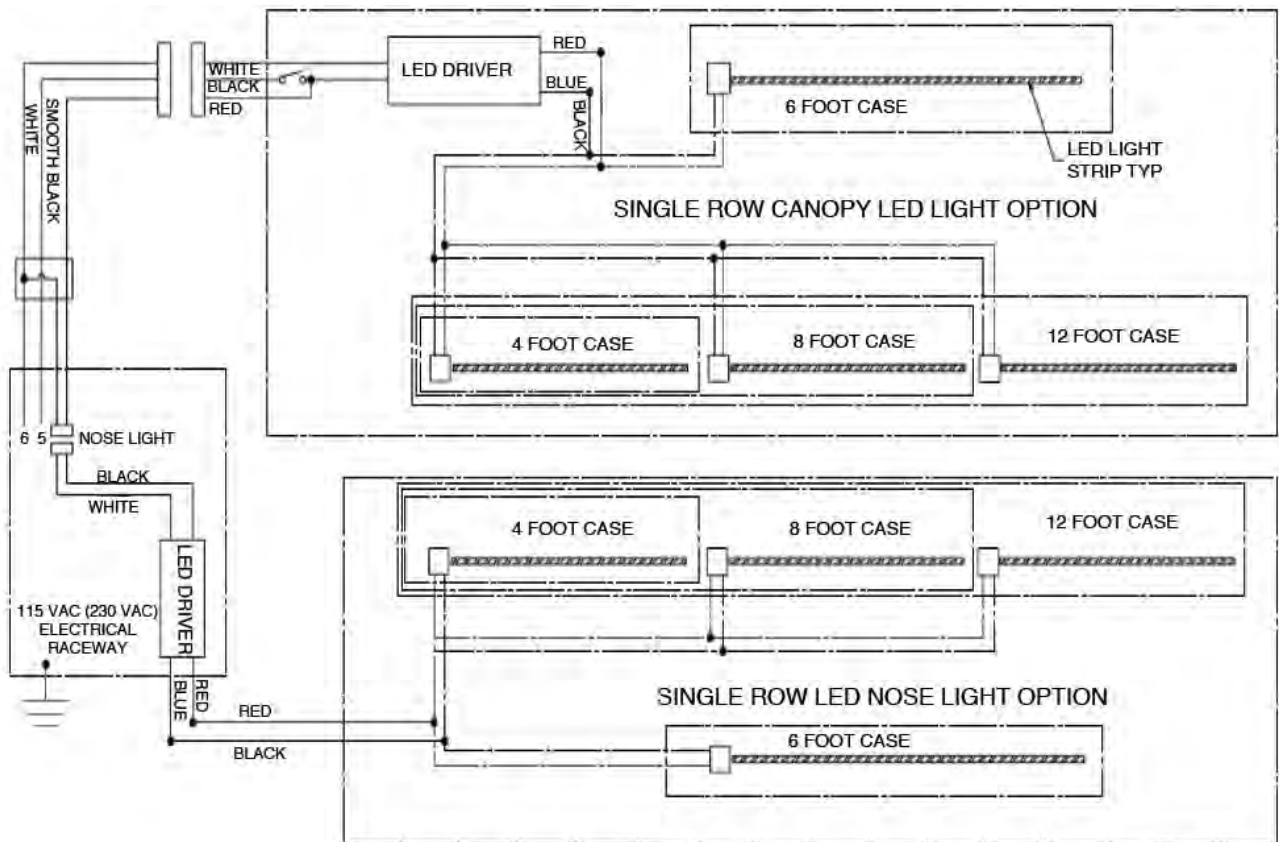
Display	Control Status
Error 1	ERC Fault - software or hardware failure
Error 2	ERC Communications Fault - indicates that there is a problem with the display module cable
Error 3	Zone Sensor Fault - indicates an open or shorted temperature sensor
Error 4	Evaporator Sensor Fault - indicates an open or shorted evaporator sensor
Error 6	Low Temperature Alarm - indicates that the temperature has dropped below the low alarm setpoint
Error 7	High Temperature Alarm - indicates that the temperature has risen above the high alarm setpoint

For error codes 1 and 2, cut the power to the unit and correct the problem to reset the display.

For error codes 3 and 4, press the UP or DOWN button on the display to reset the message. If the display still shows the error message, the sensor must be replaced.

The error codes 6 and 7 will automatically reset once the temperature is back within the two setpoints.

Wiring Diagram



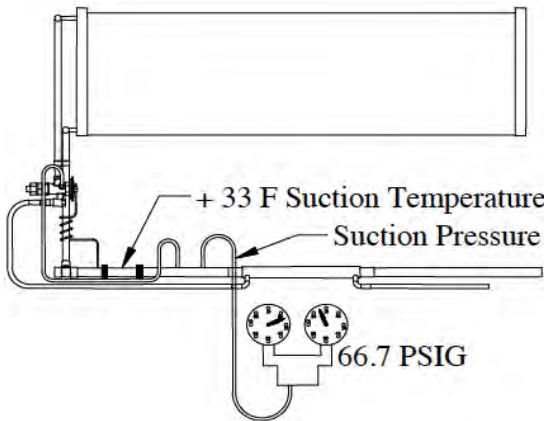
Expansion Valve and Superheat

CAUTION: During service of this equipment, precautions should be taken to prevent loss of refrigerant to the atmosphere. Always install the expansion valve stem cap after making valve adjustments.

The expansion valve furnished with your case has been sized for maximum coil efficiency. To adjust superheat, perform the following:

1. Place a thermocouple near the expansion valve bulb. Read the suction line pressure as near coil as possible. If closest is at the condensing unit, estimate suction line loss at 2 PSIG.
2. Convert coil suction pressure to temperature. The difference between coil temperature and the thermocouple temperature is superheat. Use average superheat when expansion valve is hunting.
3. Do not set the superheat until cases have pulled down to operating temperature and never open or close the valve over $\frac{1}{4}$ turn between adjustments and allow 10 minutes or more between adjustments.
4. Superheat should be set at 6-8°F.
5. After the initial setting, the superheat should be rechecked when product is stocked and at designed temperature.

Superheat Calculations



Example: R404
 + 33 F Suction temperature
 \pm 28 F Suction pressure converted to temperature
 = +5 F Superheat

Operation

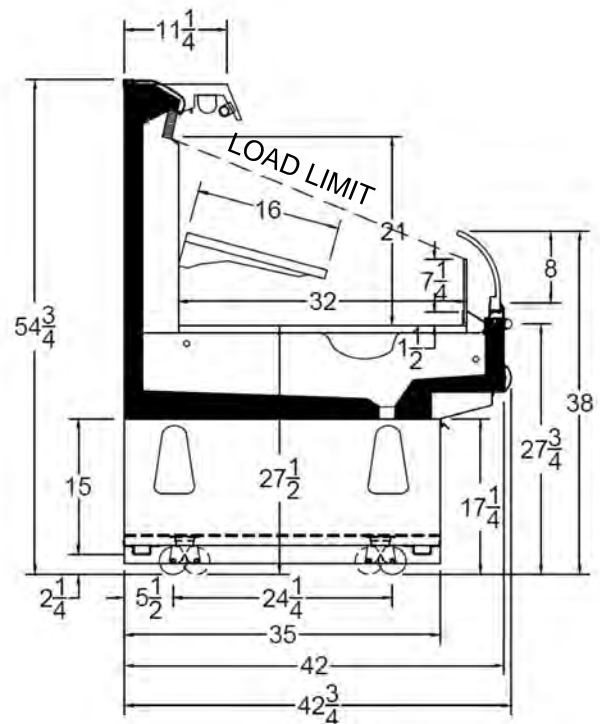
Merchandise should not be placed in the fixture until all controls have been adjusted and the case is at the proper temperature. **AT NO TIME SHOULD THE CASE BE STOCKED BEYOND THE LOAD LINE OR OVER THE FRONT EDGE OF THE ADJUSTABLE SHELVES.**

CAUTION: Air discharge and return flues must remain open and free of debris or obstruction at all times to provide proper refrigeration and air current performance.

CAUTION: Do not allow any product, signs, debris, etc., to block these grilles.

CAUTION: Do not use any non-approved shelving, display racks, or any accessory that could hamper air current performance.

WARNING! Do not walk on top of the cases! This could result in damage to the case and serious personal injury could occur. These cases are not designed to support excessive external weight. Do not use top of cases for storage.



Off cycle defrost is standard on these models and the fans run continuously.

Cleaning

As a general rule, always use mild soap and water to wipe the case down. Special precautions must be taken when cleaning some components of the case.

Exterior surfaces should be cleaned with warm water and mild soap to protect and maintain the finish. Do not use cleaners containing abrasive materials or ammonia, which will scratch or dull the finish. The waste outlet should be flushed with water following each cleaning.

Interior surfaces may be cleaned with most mild soap formulas, ammonia based cleaners, and sanitizing solutions with no harm to the surface.

WARNING! Always shut power off during the cleaning process. Cleaning the case with electrical power applied is a shock hazard that may cause serious injury or death.

WARNING! DO NOT USE HOT WATER ON COLD GLASS SURFACES. This could cause the glass to shatter and could result in personal injury. Glass fronts and ends should be warm before applying hot water.

CAUTION: The following could damage the case:

- Use of cleaning products containing chlorine, chloride ion, the words Bleach, is not recommended for unpainted stainless steel surfaces as it may cause rust to form. The operational warranty of the equipment will be voided if these products cause rust to form on the SS parts or any other parts of the equipment.
- Do not use solvent, oil, or acidic-based cleaners on any interior surfaces as the surface may become damaged.

- Do not use abrasive cleaners and scouring pads, as these will mar the finish.
- Never introduce water into the case faster than the waste outlet can release it.
- Do not use steam or high pressure systems to clean the case, as seals may be broken which will cause the case to leak.

Condensing Units

Follow the previous general cleaning of the interior and exterior parts with the exception of **DO NOT USE WATER HOSE** to clean evaporator or tub of the case.

CAUTION: Condensing units should have at least 18" clearance from any wall or other obstruction in order to operate properly.

WARNING! Always shut power off at the main breaker during the cleaning process. Cleaning the case or condensing unit with electrical power applied is a shock hazard that may cause serious injury or death.

CAUTION: **DO NOT FLUSH WITH WATER.** This case is not connected to a drain system and has its own evaporating pan with limited capacity.

Condensing Units: Once a month compressed air should be blown through evaporator to clear any debris or dust – opposite to direct normal air flow.

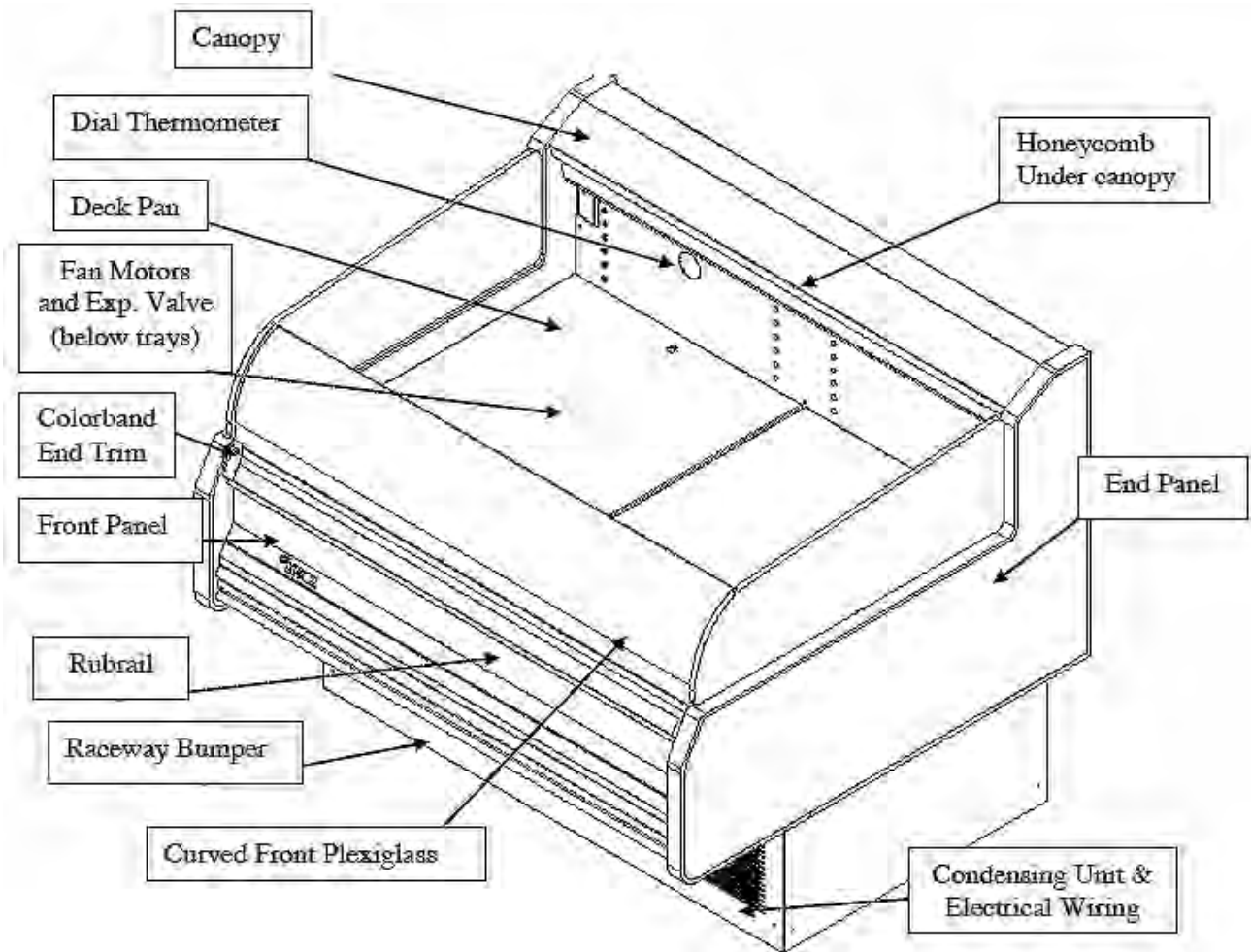
CAUTION: Care should be taken with compressed air. Debris and dust may be blown into eyes.

NOTE: Do not stack anything that may block airflow in front of louvers or rear of case. Self-contained cases draw air from back to front and blocking this airflow will cause case to overheat and shut down.

Honeycomb Assembly

The honeycomb should be cleaned every 6-8 months, depending on store conditions. The honeycomb may be cleaned with a vacuum cleaner or removed to be washed with soap and water. The honeycomb must be completely dry before returning it to the case.

Parts List and Drawings



Common Replacement Parts

Description	Part No.
Expansion Valve	03A25202
Evap Fan Motor	09A10114
Fan Wiring Harness	10M10499
Curved Front Plexiglass	13A10399
Plexiglass Wing End	13A10740
Honeycomb White	13A15147
Honeycomb Black	13A15148
Condensate Drain Pan (1000 Watt)	28H12042

NOTE: Standard parts are provided in the parts lists. Cases may be equipped with specialty parts that were incorporated into the case(s) at the time they were manufactured. It is important to have the case serial number when contacting Heatcraft Worldwide Refrigeration for replacement parts.

NOTE: Standard parts are listed. Individual cases may have options different than listed and the serial number for these cases is required when ordering parts.

Warranty—Rev. January 2015

Standard Warranty:

Seller warrants to its direct purchasers that Products, including Service Parts, shall be of a merchantable quality, free of defects in material or workmanship, under normal use and service for a period of one (1) year from date of original equipment start-up, or eighteen (18) months from date of shipment by Seller, whichever first occurs. This warranty runs to only the original purchaser of equipment or part. Any Products covered by this warranty found to Seller's satisfaction to be defective upon examination at Seller's factory will at Seller's option, be repaired or replaced and returned to Buyer via lowest common carrier Ex-Works Seller's dock. This is buyer's sole and exclusive remedy and, except as provided in the next sentence, seller's sole and exclusive liability in connection with the warranty. Or Seller may, at its sole option, grant Buyer a credit for the purchase price of the defective Product. Buyer must prepay all costs for transportation of Products to Seller's factory.

Seller shall have no liability for expenses incurred for repairs made by Buyer except by prior, written authorization. Any claim under this warranty shall be made to Seller in writing within the warranty period specified above – otherwise such claim shall be deemed waived. Seller shall have no warranty obligation whatsoever if its products have been subjected to alteration, misuse, negligence, free chemicals in system, corrosive atmosphere, accident, or if operation is contrary to Seller's or manufacturer's recommendations, or if the serial number has been altered, defaced, or removed.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED, IMPLIED OR STATUTORY, INCLUDING, BUT NOT LIMITED TO ANY WARRANTY OF MERCHANTABILITY OR FITNESS, AND ALL OTHER OBLIGATIONS OR LIABILITIES OF SELLER ARE HEREBY DISCLAIMED.

Additional Warranties:

The Standard Warranty specified above applies to all Products and Service Parts unless modified by the following:

THERMO-FLEX™ OR FLOATING TUBE™ DESIGN COIL

Seller warrants the Thermo-Flex/Floating Tube Design Coil of the "BM", "BH", "CM", "CH", "HM", "HH", "MM", "ML" or "LH" series of Unit Coolers; coil section of the "BLV", "BDVS", "BBV", "JLD", "JDDS", "JBD", "BDT", "BDN", "BDS", "BDB", "BZT", "BZN", "BZS", "BZB", "CDD", "CDDS", "CDT", "CDN", "CDS", "CZT", "CZN", "CZS", "HDD", "HDDS", "HDT", "HDN", "HDS", "HZT", "HZN", "HZS", "LDV", "LDVS", "LDD", "LDDS", "LDT", "LDN", "LDS", "LZT", "LZN", "LZS" condensing units; and coil section of the "BN", "CN", "HN" or "LN" models of Air-cooled Condensers for a period of five (5) years from shipping date, in the event of any documented and verified (by Seller's representative) leaks in the coil tubes containing refrigerant at the point of and caused by tube contact with the end or center coil support sheets.

Seller will also reimburse the replacement cost of lost refrigerant for a period of five years from the date of shipment from leaks specifically caused by the reasons stated above. The replacement cost will be limited to one full system charge. The warranty specifically excludes leaks at header and weld joints, split tubes or leaks caused by failure to operate the product in accordance with published guidelines for operation and installation of equipment. The cost of replacement refrigerant will be limited to Seller's indexed nationwide average of refrigerant cost per pound. The warranty excludes any fines/fees related to refrigerant leaks.

Air-cooled CONDENSERS "BN", "CN", "HN", "LN" or "NRG" Models"

Seller warrants Air-cooled Condensers "BN", "CN", "HN", "LN" or "NRG" Models" for a period of two (2) years from date of original installation, or 30 months from the date of shipment by Seller, whichever first occurs.

Optional EC Condenser Fan Motors EC Motors

Seven (7) Blade motor assemblies - for a period of four (4) years from date of original installation, or fifty-four

(54) months from date of shipment by Seller, whichever first occurs.

Five (5) Blade motor assemblies - for a period of three (3) years from date of original installation, or forty-two (42) months from date of shipment by Seller, whichever first occurs.

Unit Cooler EC Fan Motors

Seller warrants EC Motors (made by McMillan) for a period of two (2) years from date of original installation, or thirty (30) months from date of shipment by Seller, whichever first occurs.

Beacon II™ CONTROL SYSTEMS

Seller warrants the Beacon II™ Control System for a period of three (3) years from the date of original installation, or forty-two (42) months from the date of shipment by Seller, whichever first occurs.

PRO3 PACKAGED REFRIGERATION SYSTEM:

Seller warrants the PRO3 Packaged Refrigeration System for a period of two (2) years from date of original installation, or thirty (30) months from date of shipment by Seller, whichever first occurs.

HYPERCORE™ Microchannel Coil

Seller warrants the Hypercore™ Microchannel Condenser Coil for a period of two (2) years from date of original installation, or thirty (30) months from date of shipment by Seller, whichever first occurs.

SMART DEFROST KIT™

Seller warrants the Smart Defrost Kit™ for a period of two (2) years from date of original installation, or thirty (30) months from date of shipment by Seller, whichever first occurs.

MOTOR COMPRESSORS:

Motor compressor replacements or exchanges shall be made through the nearest authorized wholesaler of the motor compressor manufacturer (not at Seller's factory) and no freight shall be allowed for transportation of the motor compressor to and from the wholesaler. The replacement motor compressor shall be identical to the model of the motor compressor being replaced. Additional charges which may be incurred throughout the substitution of other than identical replacements are not covered by this warranty. An optional, non-assignable, three (3) or four (4) year extended compressor warranty may be purchased for extra cost within the boundaries of the United States of America, its territories and possessions, and Canada. With this extended compressor warranty, replacements are administered by an authorized compressor distributor only. Replacements within the time period of the standard Warranty (as modified in some instances as stated above) are available through the distributor; for the remaining years, the purchaser must submit a proof-of-purchase of a compressor and supply it to Heatcraft Warranty Claims for reimbursement.

THIS WARRANTY SHALL NOT APPLY:

1. Glass is not guaranteed against breakage. If this refrigerator is equipped with a glazing assembly carrying the manufacturer's brand name (Thermopane, Twindow, etc.), the manufacturer's glazing warranty in effect at the time of this shipment is extended to that assembly.
2. **BULBS:** Light bulbs, fluorescent lamp tubes and LEDs are not covered by any warranty for length of life or for any type of breakage.
3. To the condensing unit used with refrigerated equipment unless same was sold and shipped by Seller
4. When this equipment or any part thereof is damaged by accident, fire, flood, act of God, alteration, abuse, misuse, tampering, when the original model and serial number plate has been altered, defaced, or removed or used other than the recommended application by Seller.
5. When this equipment or any part thereof is subject to operation on low, high or improper voltages. Low and high voltage is defined as more than a 5% drop below or 10% higher than name plate voltage ratings. NOTE: Proper field supply voltage to the equipment is the responsibility of the owner (end user).
6. To damage caused by overloading shelves or wire racks beyond the specified weight limits. The maximum weight limit for Seller's standard shelves and wire racks is 30lbs per square foot.
7. When this equipment or any part thereof is damaged, or when operation is impaired, due to failure to follow installation manual. NOTE: Proper installation is the responsibility of the installer, owner (end

user).

8. Operational issues caused by ambient environmental conditions outside of the specified limits. Seller's indoor equipment is specified to operate in a conditioned ambient environment not to exceed 75 degrees Fahrenheit or 55% relative humidity. NOTE: Providing specified ambient environmental conditions are the responsibility of the owner (end user).
9. To equipment with final destinations unknown to seller as indicated on the original sales order.
10. To labor cost for repair or replacement of parts.
11. To special or expedited freight or shipping charges or to customs duties to any country.
12. If the Warranty holder fails to comply with all the provisions, terms and conditions of this Warranty.

Parts replaced under this Warranty are warranted only through the remainder of the original Warranty.

Extended Service Agreements are provided by a third party not affiliated with Seller. The services provided by the third party are subject to the terms and conditions of the Extended Service Agreements and Seller is not responsible for those services or the third party's performance of its obligations.

IT IS EXPRESSLY UNDERSTOOD AND AGREED THAT SELLER SHALL NOT BE LIABLE TO BUYER, OR ANY CUSTOMER OF BUYER, FOR INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES, INCLUDING LOSS OF PROFITS, ADDITIONAL LABOR COSTS, LOSS OF REFRIGERANTS OR FOOD PRODUCT, OR ANY INJURY TO PERSON OR PROPERTY CAUSED BY DEFECTIVE MATERIAL OR PARTS OR FOR ANY DELAY OR MISPERFORMANCE IN THE PERFORMANCE DUE TO CAUSES BEYOND ITS CONTROL OR FOR ANY EXPENSES INCURRED BY REASON OF THE USE OR MISUSE BY BUYER OR THIRD PARTIES OF THE PRODUCTS. SELLER'S MAXIMUM LIABILITY FOR DIRECT DAMAGES IS LIMITED TO THE AMOUNT PAID BY THE BUYER FOR THE PARTICULAR ITEM OF EQUIPMENT OR PART INVOLVED.

NOTE: IN THE CONSTANT EFFORT TO IMPROVE OUR PRODUCTS, WE RESERVE THE RIGHT TO CHANGE AT ANY TIME SPECIFICATIONS, DESIGN, OR PRICES WITHOUT INCURRING OBLIGATION.

The company behind the brands you trust.™

