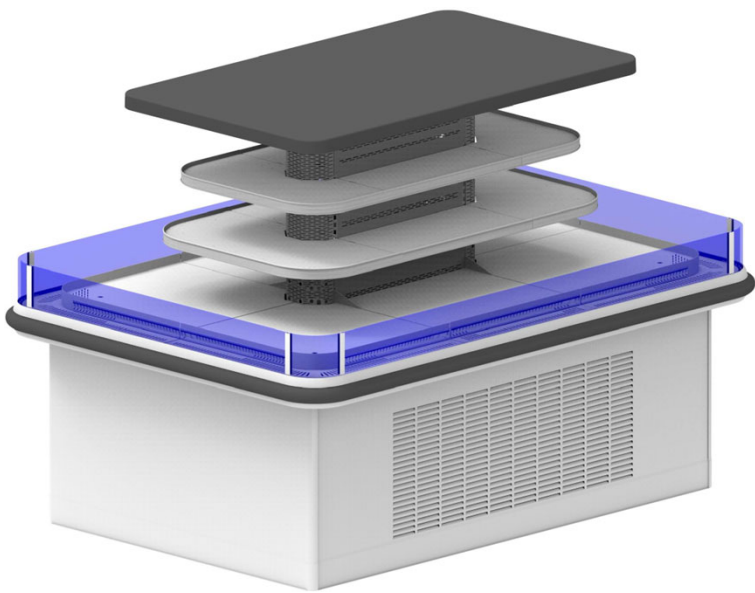
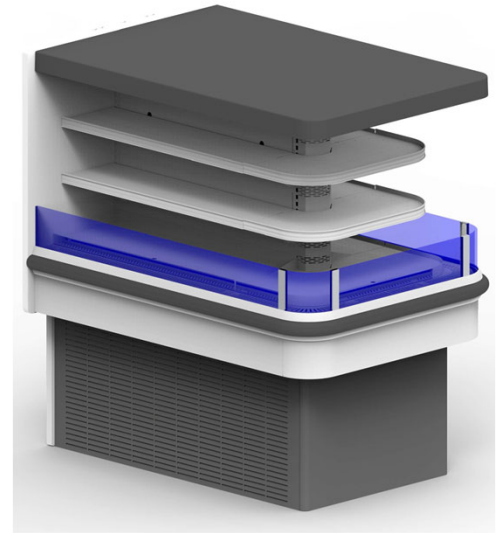
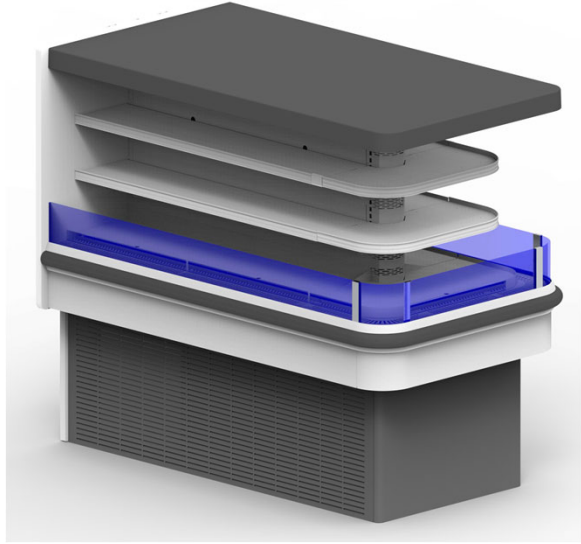


**HUSSMANN®**  
**TY3ECRC and TYA3ECRC**  
**END/ISLAND CASE**

Installation  
& Operation  
Manual

REV. 1023

**SELF-CONTAINED**



**TY3ECRC and TYA3ECRC**  
**(ENTYCE)**  
END/ISLAND CASE  
EXTENDED CANOPY  
ROUND CORNER  
SELF-CONTAINED

**TABLE OF CONTENTS**

General Information	-----	4
Installation Checklist	-----	5-6
Section and Plan Views	-----	7
Data / Spec Sheets	-----	8-10
Installation	-----	11
Evap Pan Information	-----	11
Clearances for Case	-----	12
Body Panel Removal	-----	13
Lifting Instructions	-----	14-15
Electrical Information	-----	16
Electrical Components	-----	16
Wiring Diagram Information	-----	17
Case Parameters	-----	17
Controller Operation Guide	-----	26
Maintenance	-----	28
Cleaning / Sanitizing	-----	28
Service Information	-----	29
User Information	-----	30
Stocking / Load Limits	-----	30
Trouble Shooting	-----	31-32
Replacement Parts	-----	33



# WARNING

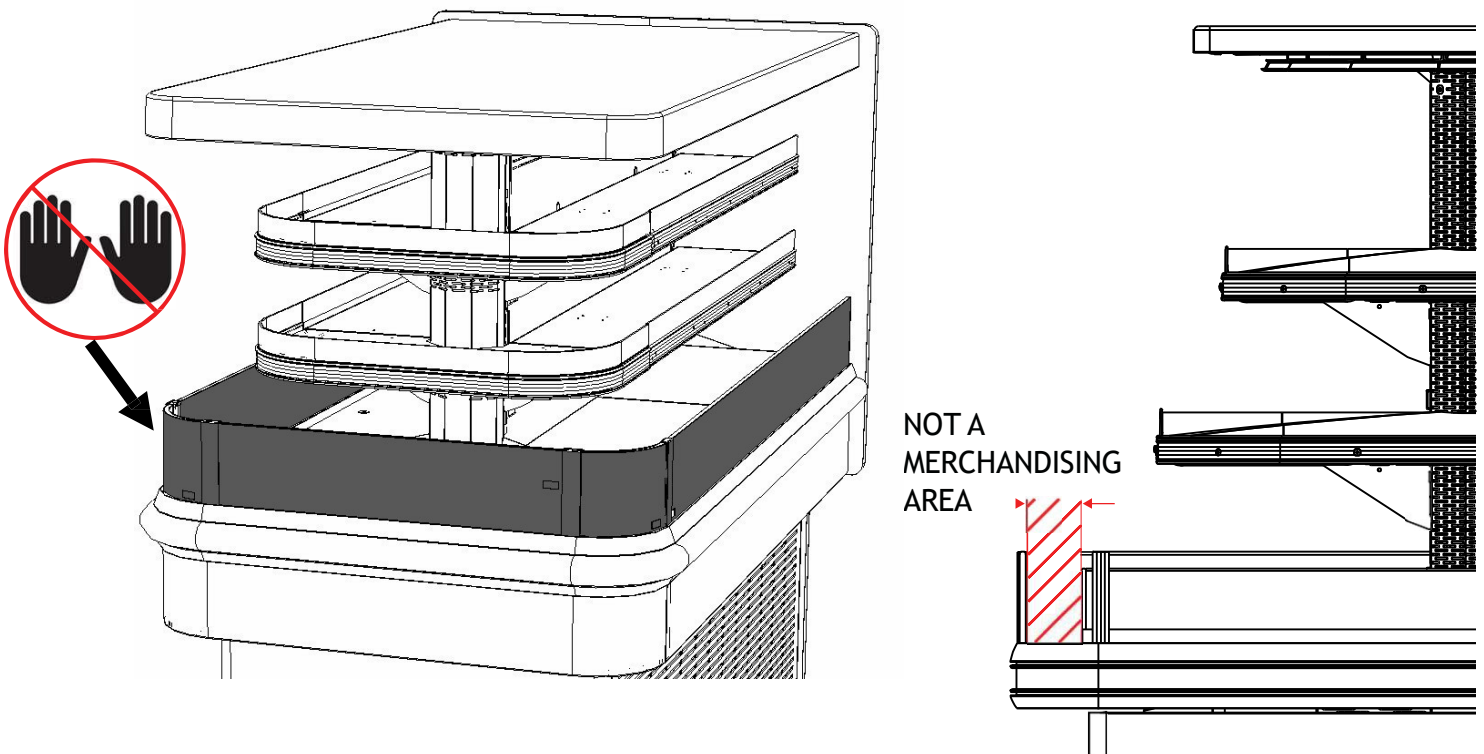
1. Do Not Push, Pull, Adjust, or Manipulate the Entyce case by any glass component

- Doing so will result in severe damage to such components
- Glass or Acrylic Breakage may result in serious injury
- See lifting and transport instructions for proper moving technique

2. Never stand on the Entyce Top, Deck, or any Shelves for any reason.

These surfaces are not steps and are not designed to support such loads.

- Misusing these surfaces as steps will result in damage to the case
- Misusing these surfaces as steps may result in serious injury to the user
- These surfaces are intended for the storage and merchandising of food products
- Use a ladder or designed structure to work above the case (Do not lean on case)

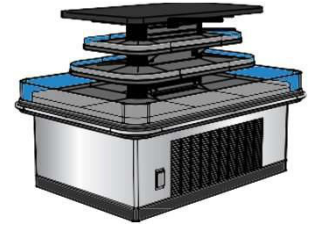


## General Information

### Case Description:

This Booklet specifically covers the following models:

- |                    |                    |
|--------------------|--------------------|
| - TY3ECRC-3X4.5E-S | -TYA3ECRC-3X4.5E-S |
| - TY3ECRC-3X5.5E-S | -TYA3ECRC-3X5.5E-S |
| - TY3ECRC-4X6E-S   | -TYA3ECRC-4X6E-S   |
| - TY3ECRC-5X7I-S   | -TYA3ECRC-5X7I-S   |



**Description:** The TY3-ECRC-S model series are multi-deck, spot merchandisers designed for medium temperature applications such as: Deli/Dairy/Beverage. They are available as either remote type models, which require separate condensing unit connections, or self-contained models. Each self-contained model will have its own condensing unit, factory installed beneath the display area of the case ready for operation when electrical service is connected.

**Shipping Damage:** All equipment should be thoroughly examined for shipping damage before and during unloading. This equipment has been carefully inspected at our factory and the carrier has assumed responsibility for safe arrival. If damaged, either apparent or concealed, claim must be made to the carrier.

**Apparent Loss or Damage:** If there is an obvious loss or damage, it must be noted on the freight bill or express receipt and signed by the carrier's agent; otherwise, carrier may refuse claim. The carrier will supply necessary claim forms.

**Concealed Loss or Damage:** When loss or damage is not apparent until after all equipment is uncrated, a claim for concealed damage is made. Make request in writing to carrier for inspection within 15 days and retain all packaging. The carrier will supply inspection report and required claim forms.

**Location/Store Conditions:** The refrigerated merchandisers have been designed for use only in air-conditioned stores where temperature and humidity are maintained either 75°F ambient and 55% RH or 80°F and 55% RH . DO NOT allow air conditioning, electric fans, ovens, open doors or windows (etc.) to create air currents around the merchandiser, as this will impair its correct operation.

**Shortages:** Check your shipment for any possible shortages of material. If a shortage should exist and is found to be the responsibility of Hussmann Chino, notify Hussmann Chino. If such a shortage involves the carrier, notify the carrier immediately, and request an inspection. Hussmann Chino will acknowledge shortages within ten days from receipt of equipment.

**Hussmann Chino Product Control:** The serial number and shipping date of all equipment has been recorded in Hussmann's files for warranty and replacement part purposes. All correspondence pertaining to warranty or parts ordering must include the serial number of each piece of equipment involved, in order to provide the customer with the correct parts.

Keep this booklet with the case at all times for future reference.

## HUSSMANN®/CHINO

A publication of HUSSMANN® Chino  
13770 Ramona Avenue • Chino, California 91710  
(909) 628-8942 FAX  
(909) 590-4910  
(800) 395-9229



This equipment is to be installed to comply with the applicable NEC, Federal, State, and Local Plumbing and Construction Code having jurisdiction.

**HUSSMANN ENTYCE ISLAND INSTALLATION CHECKLIST**

Date: \_\_\_\_\_ Store: \_\_\_\_\_ Tech Name: \_\_\_\_\_

Case Model# \_\_\_\_\_ Serial# \_\_\_\_\_

Cond. Unit Model# Serial# \_\_\_\_\_

**Cases Check / Initial**

- \_\_\_\_\_ Prior to beginning review the installation manual on moving, lifting, and setting the case
- \_\_\_\_\_ Report any damage to Hussmann Account Manager or Sales representative right away
- \_\_\_\_\_ Shipping pins, boards, clips, tape removed and disposed of
- \_\_\_\_\_ Intake must be facing away from store entrance doors
- \_\_\_\_\_ Height clearance measured from the floor must be minimum 10 ft vertically
- \_\_\_\_\_ Minimum of 36 in. clearance between case intake/discharge if near an open aisle for proper airflow
- \_\_\_\_\_ 8 feet of clearance must be maintained from a solid wall for Intake/Discharge of condensing unit
- \_\_\_\_\_ Case must be located minimum 15 ft away from entry doors
- \_\_\_\_\_ If case is located near windows and direct sunlight is present, the windows are tinted or shaded
- \_\_\_\_\_ Case set location has been reviewed for artificial airflows that can disrupt the case air curtain, entry door air curtains, HVAC registers etc.
- \_\_\_\_\_ Cases must be level/plum for proper draining of condensate

**Plumbing Check / Initial**

- \_\_\_\_\_ Case condensate Floor sink \_\_\_\_\_ Electric Evap pan \_\_\_\_\_ Condensate pump \_\_\_\_\_
- \_\_\_\_\_ There are no water leaks from the case

**Refrigeration Check / Initial**

- \_\_\_\_\_ This case application refrigerant is \_\_\_\_\_ 448A \_\_\_\_\_ ( Self Contained)
- \_\_\_\_\_ Leak check all valves, connections, lines with electronic leak detector and soap
- \_\_\_\_\_ Verified that there are no refrigerant leaks, and that any detected leaks have been repaired
- \_\_\_\_\_ The defrost schedule has been reviewed in the installation manual and the systems has been set accordingly
- \_\_\_\_\_ Defrost frequency per day \_\_\_\_\_ Defrost Off time \_\_\_\_\_ Defrost Termination Temp \_\_\_\_\_
- \_\_\_\_\_ Allow the case to run and cycle on factory setpoint for 4 hours.
- \_\_\_\_\_ Check store conditions after unit has stabilized. Unit is manufactured to operate in 80F 55 RH max. Adjust store conditions accordingly.
- \_\_\_\_\_ Case Setpoint \_\_\_\_\_ adjust accordingly based on store conditions.
- \_\_\_\_\_ Case Discharge temp \_\_ 30° to 34° \_\_\_\_\_
- \_\_\_\_\_ Case TXV Superheat setting \_\_\_\_\_ 6° to 8° \_\_\_\_\_ (Should be < 10 Degrees)

See the following sheet to continue...

**Electrical Check / Initial**

- \_\_\_\_\_ Make sure the electrical installation complies with national, state, and local codes
- \_\_\_\_\_ Proper electrical power and leads have been run to case and condensing unit
- \_\_\_\_\_ Connect electrical from electrical disconnects to case wiring
- \_\_\_\_\_ Case lights are all verified for location and operation
- \_\_\_\_\_ Case fans are verified for operation and are free of noise and obstruction

**General Maintenance**

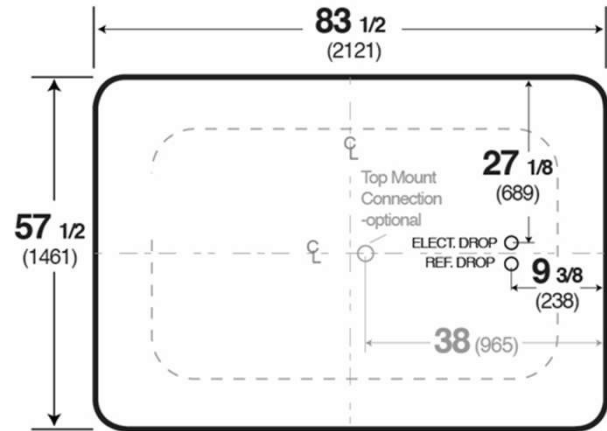
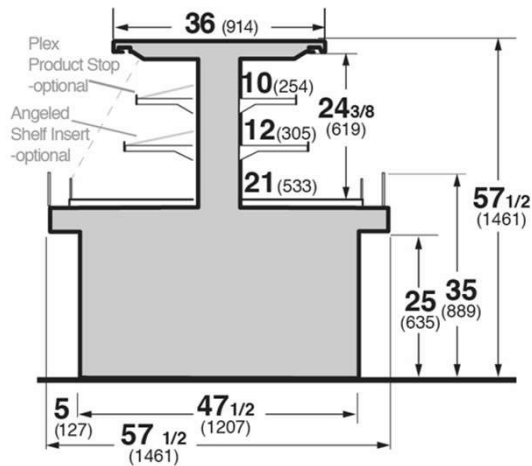
Self-contained applications:

- Keeping the condenser coil clean will minimize required service and lower electrical costs. The condenser coil is accessible by remove lower intake panel.
- The condenser coil should be checked on a monthly schedule and cleaned by removing dust and other debris build-up from the tube assembly and fins with a vacuum or soft bristled brush. When properly cleaned you should be able to see through the condenser coil.
- Inspect drain screens for debris. If debris is present remove and dispose. Do Not put debris down drain on a self-contained unit.
- Inspect honeycomb for dust buildup. Remove and clean with warm water and mild soap.

## Cut and Plan Views

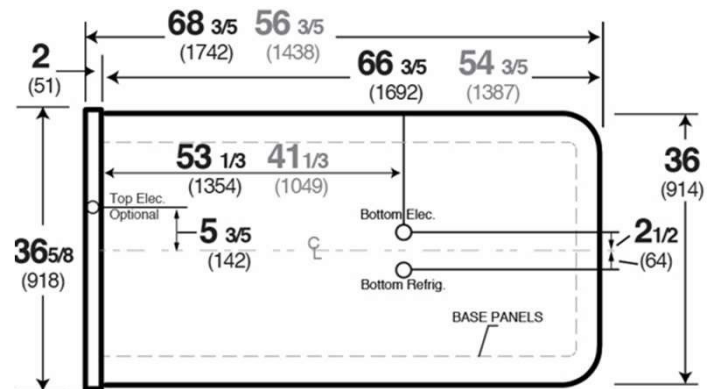
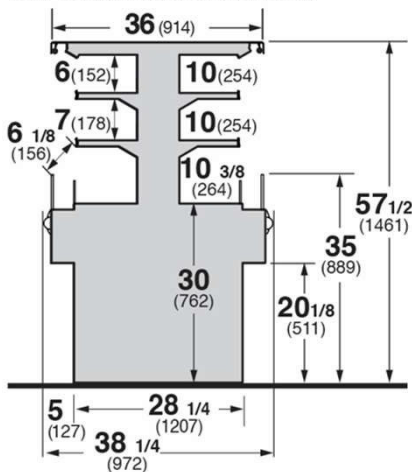
### TY3ECRC-5x7I-S TYA3ECRC-5x7I-S

5'w x 7'l Island Self-Contained Merchandiser



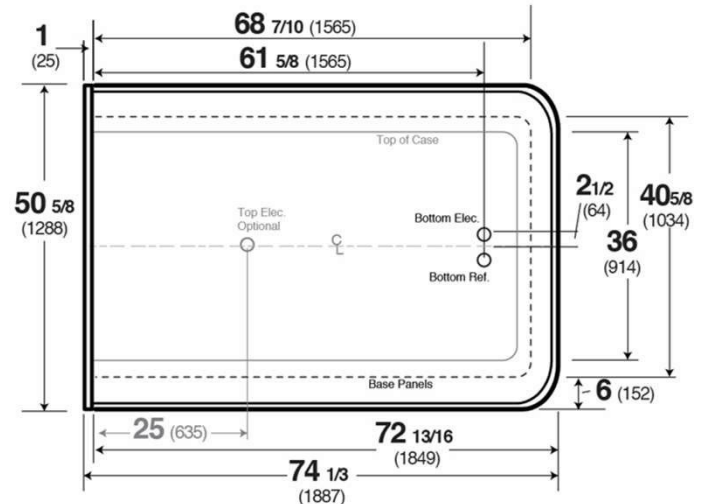
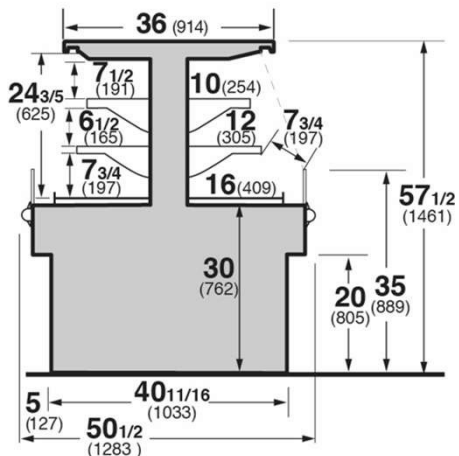
### TY3ECRC-3x3.5 or 4.5E-S TYA3ECRC-3x5.5 or 4.5E-S

3's x 5.5'L or 4.5'L Flat End Self-Contained Merchandiser



### TY3ECRC-4x6E-S TYA3ECRC-4X6E-S

4'w x 6'L Flat End Self-Contained Merchandiser

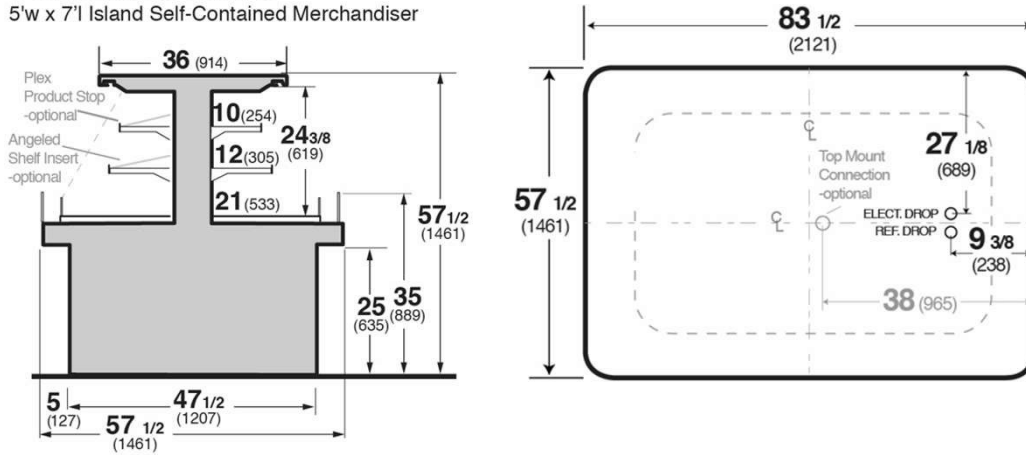



**SELF-SERVICE DELI**
**HUSSMANN – TY(A)3ECRC-5X7I-S SELF-CONTAINED**


Hussmann refrigerated merchandisers configured for sale for use in the United States meet or surpass the requirements of the DOE 2017 energy efficiency standards.

**TY3ECRC-5x7I-S  
TYA3ECRC-5x7I-S**

5'w x 7'l Island Self-Contained Merchandiser


**REFRIGERATION DATA:**

CASE LENGTHS	CASE USAGE	CONVENTIONAL CAPACITY *** (BTU/HR)	AVERAGE DISCHARGE AIR** (°F) (SEE SETPOINTS BELOW)	VELOCITY (FT/MIN)
5X7I	DELI TYPE 1	15470	30 ~ 34	125~175
5X7I	DELI TYPE 2	16100	30 ~ 34	125~175

**\*\*FRONT DISCHARGE AIR MEASURED INSIDE AIR CURTAIN HONEYCOMB**
**\*\*\*REFRIGERATION NOTES:**

- 1) CAPACITY FOR REFERENCE ONLY
- 2) APPROVED UP TO TYPE II CONDITIONS (80°F/55% RH)
- 3) DEFROST FOR IS BASED ON TERMINATION TEMP, WHICH UNDER NORMAL CIRCUMSTANCES, IS SHORTER THAN FAILSAFE TIME.

**REFRIGERATION DATA CONTINUED:**

ELEC. THERMOSTAT / AIR SENSOR SETTINGS			DEFROST TYPE	TIME (MIN)	DEFROST FREQUENCY (#/DAY)	TERM. TEMP (°F) COIL ONLY	DRIP TIME	DEFROST WATER (LBS/DAY/FT)
USAGE	SET POINT (°F)	DIFFERENTIAL (°F)						
TYPE 1	24	12	OFF TIME	50	12	46	N/A	12
TYPE 2	24	12	OFF TIME	50	12	46	N/A	14.5

**ELECTRICAL DATA:**
**STANDARD FANS, HEATERS, LED LIGHTS (115 VOLT)**

CASE LENGTH	EVAPORATOR FANS					CANOPY LIGHTS LED		OPTIONAL LED SHELF LIGHTS		MAX. LED LOAD (W/ALL OPTIONS)		ANTI-SWEAT HEATERS		CONVENIENCE OUTLETS (OPTIONAL)		
	# OF EVAP FANS	BLADE DIA. (IN.)	BLADE PITCH (°)	AMPS	WATTS	AMPS	WATTS	AMPS	WATTS	AMPS	WATTS	AMPS	WATTS	# OUTLETS	VOLTS	AMPS
5X7I	6	8	25	1.8	48	0.6	70	0.3	31	0.9	101	0.5	60	1	120	15

**CONDENSING UNIT AND EVAPORATIVE PANS**

CASE LENGTH	CONDENSING UNIT					EVAPORATIVE PAN			NEMA PLUG	MOPD (AMPS)	EST. REFG. CHR.G. (LBS)
	NOM. HP	REFRIG.	Hz/Ph	Volts	RLA	VOLTS	AMPS	WATTS			
5X7I	3	R-448A	60 / 1	208	18.0	208	9.6	2000	CS6365C	50	9.0

**OPTIONAL HIGH OUTPUT LED LIGHTS (115 VOLT)**

CASE LENGTH	CANOPY LIGHTS H.O. LED		OPTIONAL SHELF		MAX. H.O. LED LOAD	
	AMPS	WATTS	AMPS	WATTS	AMPS	WATTS
5X7I	N/A	N/A	N/A	N/A	N/A	N/A

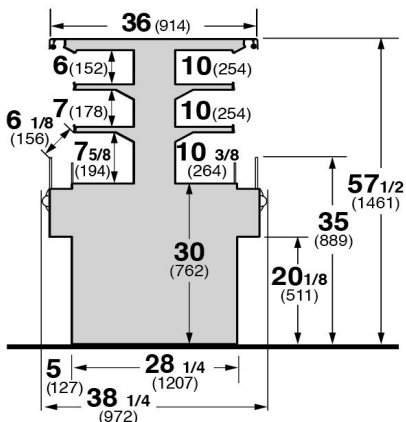




Hussmann refrigerated merchandisers configured for sale for use in the United States meet or surpass the requirements of the DOE 2017 energy efficiency standards.

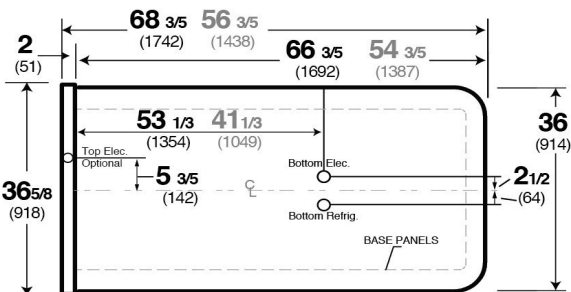
TY3ECRC-3x5.5 or 4.5E-S
TYA3ECRC-3x5.5 or 4.5E-S

3'w x 5.5'L or 4.5'L Flat End Self-Contained Merchandiser



TY3ECRC-3x5.5 or 4.5E-S
TYA3ECRC-3x5.5 or 4.5E-S

3'w x 5.5'L or 4.5'L Flat End Self-Contained Merchandiser



REFRIGERATION DATA:

Table with 5 columns: CASE LENGTHS, CASE USAGE, CONVENTIONAL CAPACITY, AVERAGE DISCHARGE AIR, VELOCITY.

\*\*FRONT DISCHARGE AIR MEASURED INSIDE AIR CURTAIN HONEYCOMB

\*\*\*REFRIGERATION NOTES:

- 1) CAPACITY FOR REFERENCE ONLY
2) DEFROST FOR IS BASED ON TERMINATION TEMP, WHICH UNDER NORMAL CIRCUMSTANCES, IS SHORTER THAN FAILSAFE TIME.

REFRIGERATION DATA CONTINUED:

Table with 9 columns: CASE LENGTH, ELEC. THERMOSTAT / AIR SENSOR SETTINGS, DEFROST TYPE, TIME, DEFROST FREQUENCY, TERM. TEMP, DRIP TIME, DEFROST WATER.

END PANEL WIDTH KEY

Table with 3 columns: # OF END PNLS, END PNL WIDTH, TOTAL ADDED LENGTH.

ELECTRICAL DATA:

STANDARD FANS, HEATERS, LED LIGHTS (115 VOLT)

Table with 17 columns: CASE LENGTH, EVAPORATOR FANS, CANOPY LIGHTS LED, OPTIONAL LED SHELF LIGHTS, MAX. LED LOAD, ANTI-SWEAT HEATERS, CONVENIENCE OUTLETS.

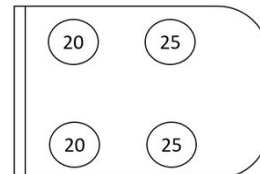
CONDENSING UNIT AND EVAPORATIVE PANS

Table with 11 columns: CASE LENGTH, CONDENSING UNIT, EVAPORATIVE PAN, NEMA PLUG, EST. REFG. CHR.G.

OPTIONAL HIGH OUTPUT LED LIGHTS (115 VOLT)

Table with 7 columns: CASE LENGTH, CANOPY LIGHTS H.O. LED, OPTIONAL SHELF, MAX. H.O. LED LOAD.

3X4.5E FAN BLADES





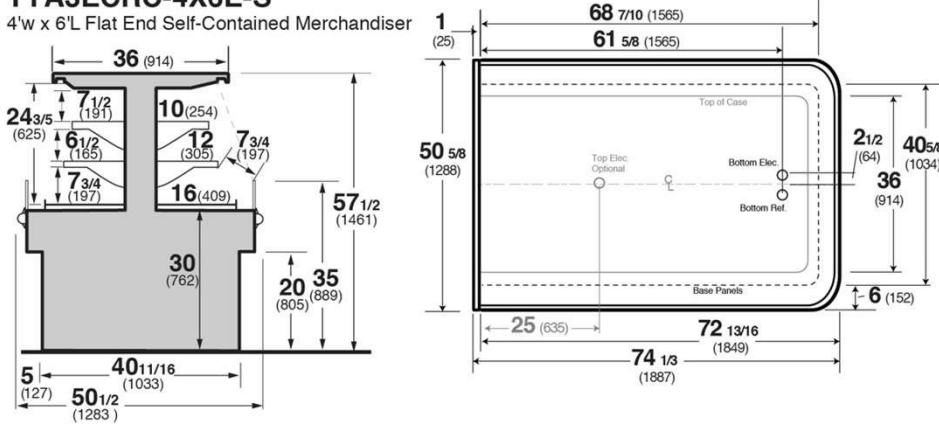
**SELF-SERVICE DELI**  
**HUSSMANN – TY(A)3ECRC-4X6E-S**

REVISION DATE 04/07/2021

**DOE 2017** Energy Efficiency Compliant  
 Hussmann refrigerated merchandisers configured for sale for use in the United States meet or surpass the requirements of the DOE 2017 energy efficiency standards.

**TY3ECRC-4x6E-S**  
**TYA3ECRC-4X6E-S**

4'w x 6'L Flat End Self-Contained Merchandiser



**REFRIGERATION DATA:**

CASE LENGTHS	CASE USAGE	CONVENTIONAL CAPACITY ** (BTU/HR/FT)	AVERAGE DISCHARGE AIR* (°F) (SEE SETPOINTS BELOW)	VELOCITY (FT/MIN)
6E	SS DELI	2100	32~36	125~175

\*FRONT DISCHARGE AIR MEASURED INSIDE AIR CURTAIN HONEYCOMB

\*\*REFRIGERATION NOTES:

- 1) CAPACITY FOR REFERENCE ONLY.
- 2) USE DEW POINT FOR HIGH GLIDE REFRIGERANTS. CARE SHOULD BE TAKEN TO USE THE DEW POINT IN P/T TABLES FOR MEASURING AND ADJUSTING SUPERHEAT. ADJUST EVAPORATOR PRESSURE AS NEEDED TO MAINTAIN THE DISCHARGE AIR TEMPERATURE SHOWN.
- 3) RATING CONDITION IS NSF TYPE II, 80°F/55% RH

**REFRIGERATION DATA CONTINUED:**

CONTROLLER / AIR SENSOR SETTINGS			DEFROST TYPE	FAILSAFE TIME (MIN)	DEFROST FREQUENCY (#/DAY)	TERM. TEMP (°F) AIR	DRIP TIME (MIN)	DEFROST WATER (LBS/DAY /FT)
USAGE	SET POINT (°F)	DIFFERENTIAL (°F)						
TYPE 1	24	8	OFF TIME	50	6	52	NA	NA
TYPE 2	23	8	OFF TIME	50	6	52	NA	NA

END PANEL WIDTH KEY		
# OF END PNLS	END PNL WIDTH (IN.)	TOTAL ADDED LENGTH (IN.)
1	1.125	1.125

4) DEFROST IS BASED ON TERMINATION TEMP, WHICH UNDER NORMAL CIRCUMSTANCES, IS SHORTER THAN FAILSAFE TIME.

**ELECTRICAL DATA:**

**STANDARD FANS, HEATERS, LED LIGHTS (115 VOLT)**

CASE LENGTH	EVAPORATOR FANS					CANOPY LIGHTS LED		OPTIONAL LED SHELF LIGHTS		MAX. LED LOAD (W/ ALL OPTIONS)		ANTI-SWEAT HEATERS		CONVENIENCE OUTLETS (OPTIONAL)		
	# OF EVAP FANS	BLADE DIA. (IN.)	BLADE PITCH (°)	AMPS	WATTS	AMPS	WATTS	AMPS	WATTS	AMPS	WATTS	AMPS	WATTS	# OUTLETS	VOLTS	AMPS
6E	6	8	15	1.8	48	0.8	87	0.4	50	1.2	137	0.70	80	1	115	15

**CONDENSING UNIT AND EVAPORATIVE PANS**

CASE LENGTH	CONDENSING UNIT					EVAPORATIVE PAN			EST. REFG. CHR.G. (LBS)
	NOM. HP	REFRIG.	HZ/Ph	Volts	RLA	VOLTS	AMPS	WATTS	
6E	2	R-448A	60/1	240	19.0	208	7.2	1500	5.2

**OPTIONAL HIGH OUTPUT LED LIGHTS (115 VOLT)**

CASE LENGTH	CANOPY LIGHTS H.O. LED		OPTIONAL SHELF		MAX. H.O. LED LOAD	
	AMPS	WATTS	AMPS	WATTS	AMPS	WATTS
6E	N/A	N/A	N/A	N/A	N/A	N/A

## Installation

### Store Conditions

- Case is designed to operate at temperatures at either 75°F at 55% relative humidity or 80°F at 55% relative humidity. Case must be kept in that environment to ensure case performance and product safety.
- Do not position the case near an HVAC vent.
- Do not position the case near an entrance door. Outside ambient conditions may have an adverse affect on the refrigeration performance, a minimum of 15 ft clearance is required from doors.
- Do not position the case tight against a ceiling or soffit. A minimum clearance 10 ft above the unit is required for proper condensing unit air circulation.
- Do not block case intake or exhaust vent panel (supplies critical intake air flow to the compressor)



#### **DANGER**

**DO NOT** place Self Contained versions of this case, having the electric evaporator pan, underneath or adjacent to any flammable structure or structure housing flammable merchandise!

### Uncrating the Stand

Place the fixture as close to its permanent position as possible. Remove the top of the crate. Detach the walls from each other and remove from the skid. Unbolt the case from the skid. The fixture can now be lifted off the crate skid. **Lift only at base of stand! See page 14 for the lift points.**

## Condensate Evaporator Pan Setup and Maintenance

#### Setup:

The merchandiser comes factory equipped with an Evaporator Pan, to which the drain pipes from the case feed condensate water into the Evaporator Pan. This pan will turn on when the float switch level is triggered, evaporating any drained water from the merchandiser. The evaporator pan is placed into a metal receiver. The metal receiver is there to collect excess water that may overspill in case of (a) failure of the condensate pans or (b) store conditions being above design specification causing more condensate water to be formed than expected.

#### Maintenance:

Care must be taken to ensure that the condensate pans operate properly at the store. These units are designed to operate at either 75°F ambient and 55% relative humidity (RH) or 80°F ambient and 55% RH. If stores are operating above this condition, case performance will be severely affected. If such a condition is noted, Evaporator pan must be checked periodically to see if excess water is being collected. If water has accumulated, water must be siphoned out of the receiver. Care must be taken while performing this step. Unit power should be shut off for electrical safety. Once water has been removed and metal receiver is dried out, unit power can be turned back on. Correct the store conditions and ensure temperature and relative humidity are within stated parameters. Call a HVAC technician if the A/C is not working properly.

See pg 12. Figure 1

### Do Not Install the Vented Panels of the self-contained model against a wall or other storage fixture

Located in the lower sides of the self-contained models are vented panels. These panels allow air circulation to the condensing unit. Blocking or restricting air circulation through these panels can cause poor performance and damage the refrigeration system.

### Exterior Loading

These models have not been structurally designed to support excessive external loading. **Do not walk on case tops:** This could cause serious personal injury and damage to the fixture.



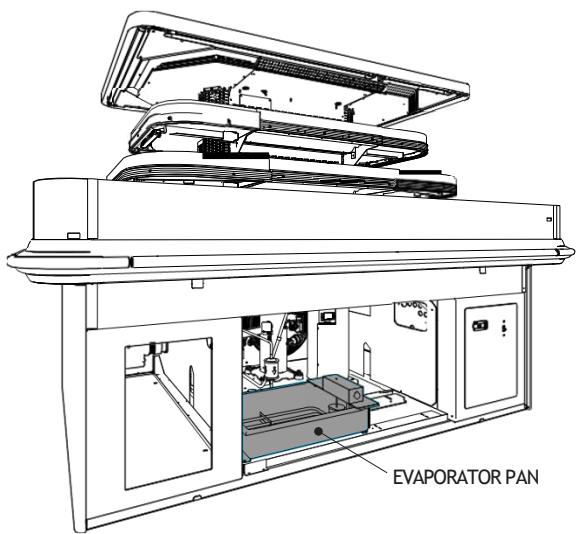
#### **ATTENTION INSTALLER**

**It is the contractor's responsibility to install case(s) according to local construction and health codes.**

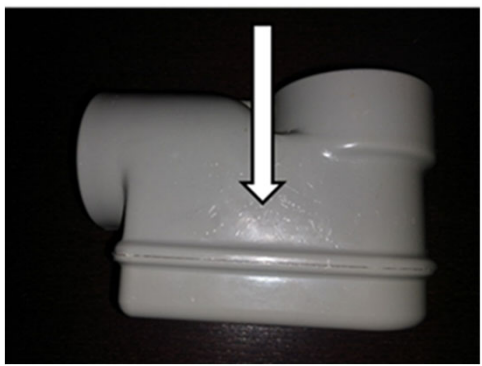
### Leveling

**A LEVEL CASE IS NECESSARY TO ENSURE PROPER OPERATION AND WATER DRAINAGE.**

Figure1



**WARNING!**  
Do NOT apply thread sealer to ABS P-Trap.

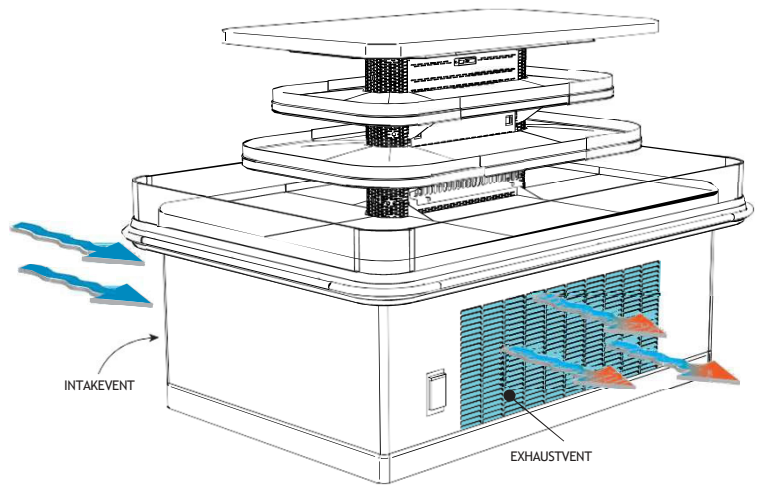


### Clearances

Minimum Clearances for Self-Contained cases are to be followed as instructed for proper placement inside store locations.

- Intake and exhaust clearances are to be a minimum of 8 ft when placed next to a solid wall.
- Height clearance measured from floor follows as a minimum of 10 ft vertically.
- Minimum of 36 in. clearance if near an open aisle is required for proper cycle ventilation. (Assumed 8 ft clearance from solid wall)
- Case set location to be at least 15ft away from any entrance/exit door

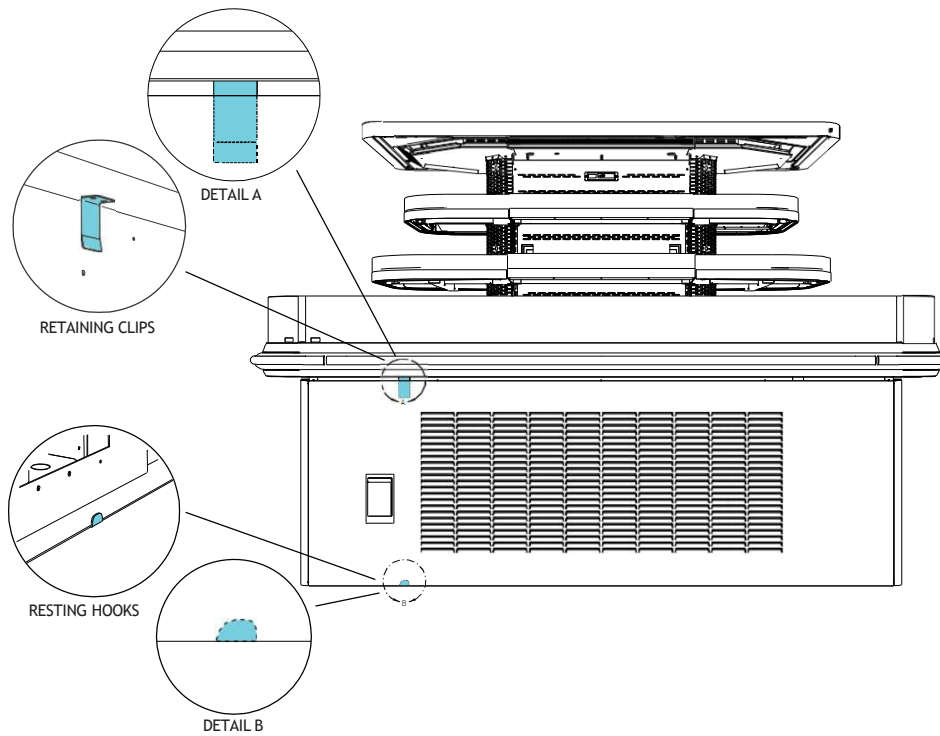
**IMPORTANT NOTE**  
OBSTRUCTING AIR VENTS WILL AFFECT CASE PERFORMANCE WHICH COULD POTENTIALLY LEAD TO CASE FAILURE.



## Body Panel Removal

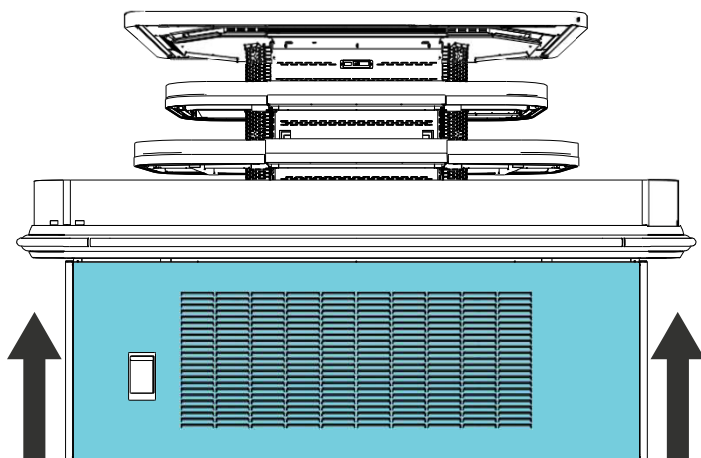
The merchandiser's body panels are designed with slots located on top and bottom. The body panels are held in place by retaining clips located at the top of the case which the slots slide into and resting hooks located at the bottom of the case which the slots rest onto.

Follow the below steps in order to remove body panels and vice versa to re-install to the merchandiser.



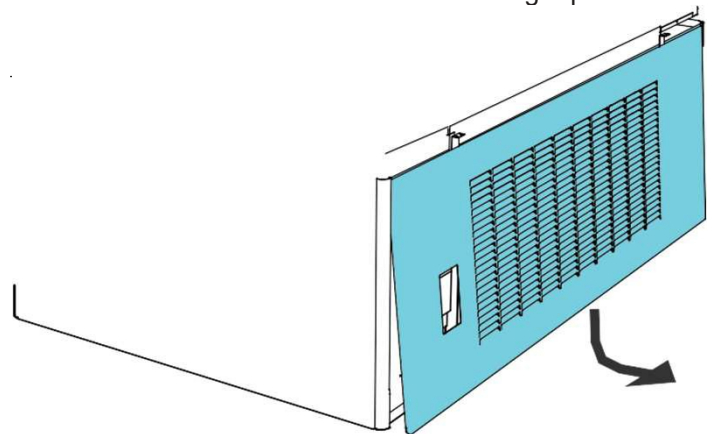
### Step 1

Raise body panel in upward motion to lift bottom slots from resting hooks at bottom of case.



### Step 2

Pull body panel outward clearing over lower resting hooks and down to extract slots from retaining clips.

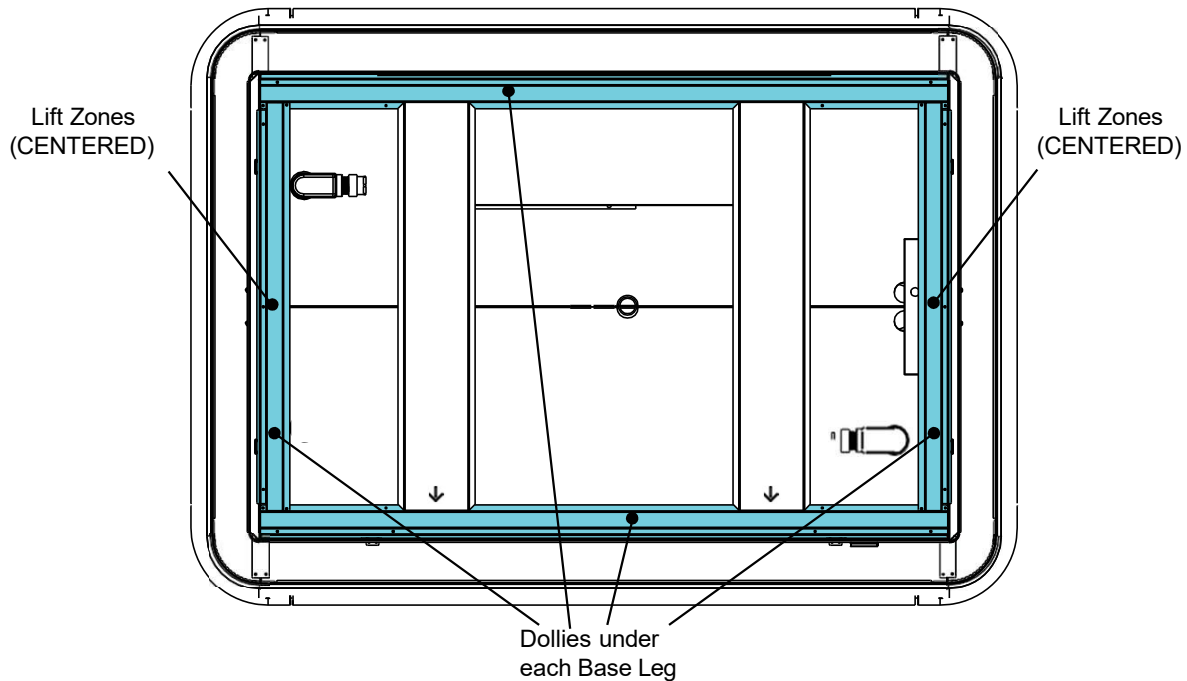


### Attach Body Panels

To attach the body panels back onto the merchandiser follow the steps in reverse order.

# Lifting Instructions

## Entyce Lifting and Transport Instructions



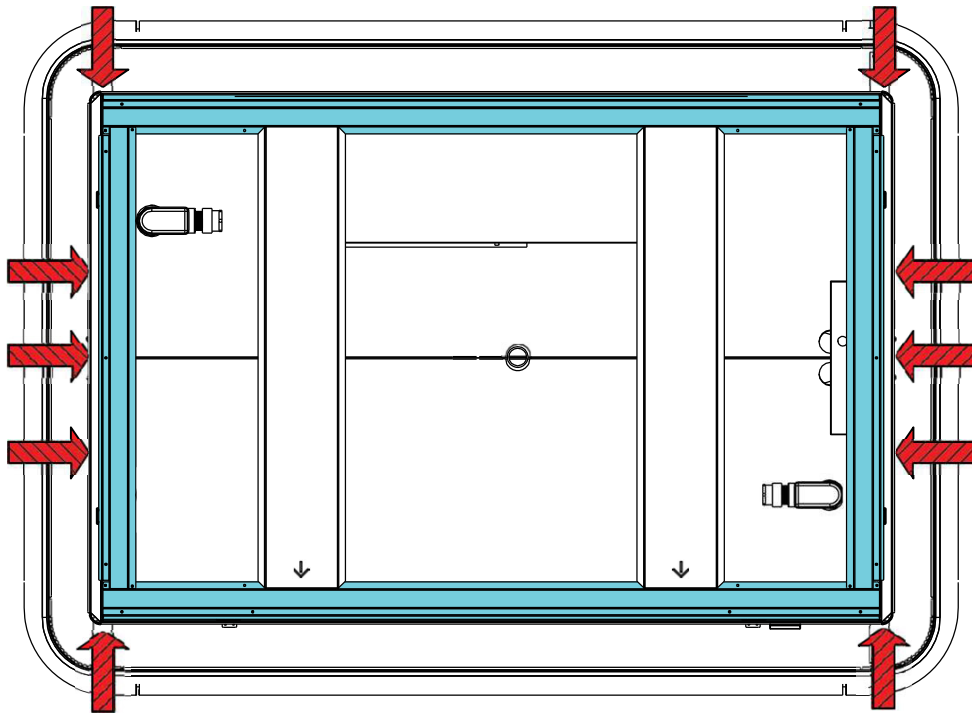
1. The TY3ECRC is not recommended to be lifted by a forklift due to critical refrigeration components underneath merchandiser. For the safest process defer to using J-Bars



Use of forklift may damage critical refrigeration components and or drainage piping. Use a spotter when placing forks. Preferable method of movement is to use J-Bars or Jacks.

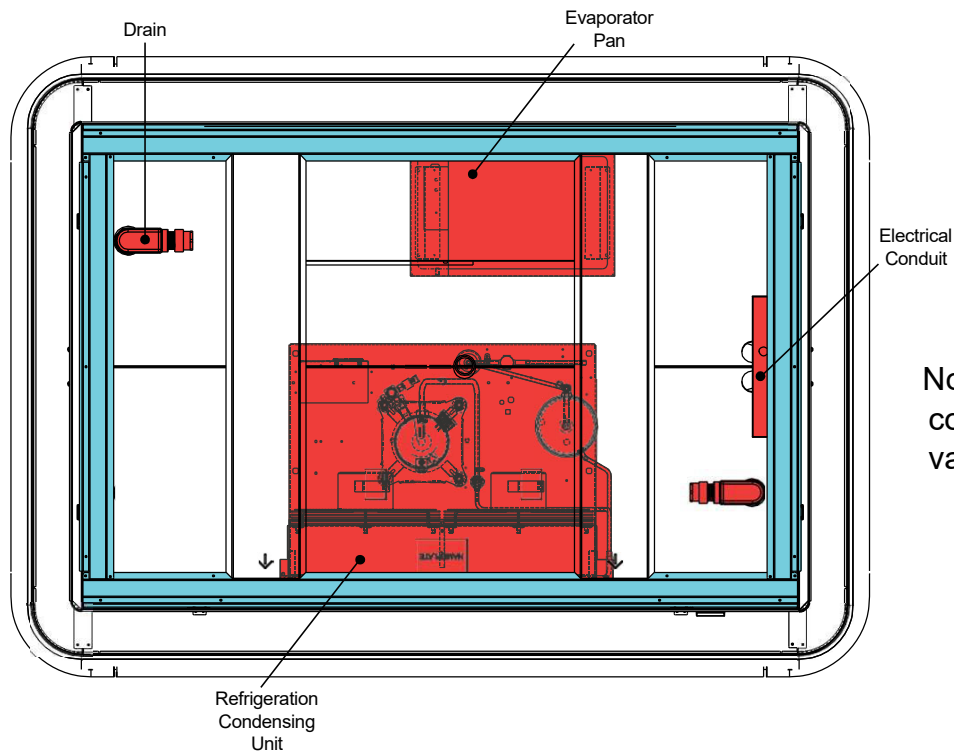
2. Remove splash guards and lower body panels before lifting with a jack. Serious damage will occur if the body panels are not removed (see pg. 13 for body panel removal).
3. The Entyce can be raised at one end to allow the placement of rollers or dollies then repeated to raise opposite end.
4. Never drag or push the Entyce by ANY COMPONENT including ANY GLASS. This will result in damage to the base, and possibly damage to other components and or injury/serious bodily harm.
7. Evenly support the entire base structure on rollers or dollies before attempting to move. Each Base Leg must have its own dollie to properly support the case.
8. Smaller dollies (36 in. or less) will require one dollie per corner at all four corners to ensure a safe transporting process

## Lifting Instructions (Cont'd)



8. While using J-Bars, use the specified set points to support the case based of the size of dollies being utilized.

- Raise one end of the case first.
- One J-Bar is usually sufficient to lift the case, use multiple J-Bars at specified lift zones if one does not satisfy the safe lift of the merchandiser.
- Place Dollies and chock wheels before lifting the other side. Be sure that the dollies are evenly spaced in order to carry weight of the case



9. Avoid all contact when lifting or transporting merchandiser in order to prevent any damage to the listed critical refrigeration and electrical components.

# Electrical

Standard Case Wire Color Code	
Color Description	Color
■ Ground	Green
■ Anti-Sweat	Purple
■ Lights	Orange
■ Receptacles	Yellow
■ T-Stat/Solenoid 230VAC	Red/Black
■ T-Stat/Solenoid 115VAC	White/Black
■ T-Stat/Solenoid 24VAC	Red/White
■ Fan Motors	Brown
Blue Condensing Unit	

Use Copper Conductors Only  
430-01-0338 R101003

**CASE MUST BE GROUNDED**


NOTE: Refer to label affixed to case to determine the actual configuration as checked in the "TYPE INSTALLED" boxes.

Standard lighting for all refrigerated models will be full length LED Lights located within the case at the top.

## Field Wiring and Serial Plate Amperage

Field Wiring must be sized for component amperes printed on the serial plate. Actual ampere draw may be less than specified. Field wiring from the refrigeration control panel to the merchandisers is required for refrigeration thermostats. Case amperes are listed on the wiring diagram, but always check the serial plate.

Wiring diagram information can be found on page 17.

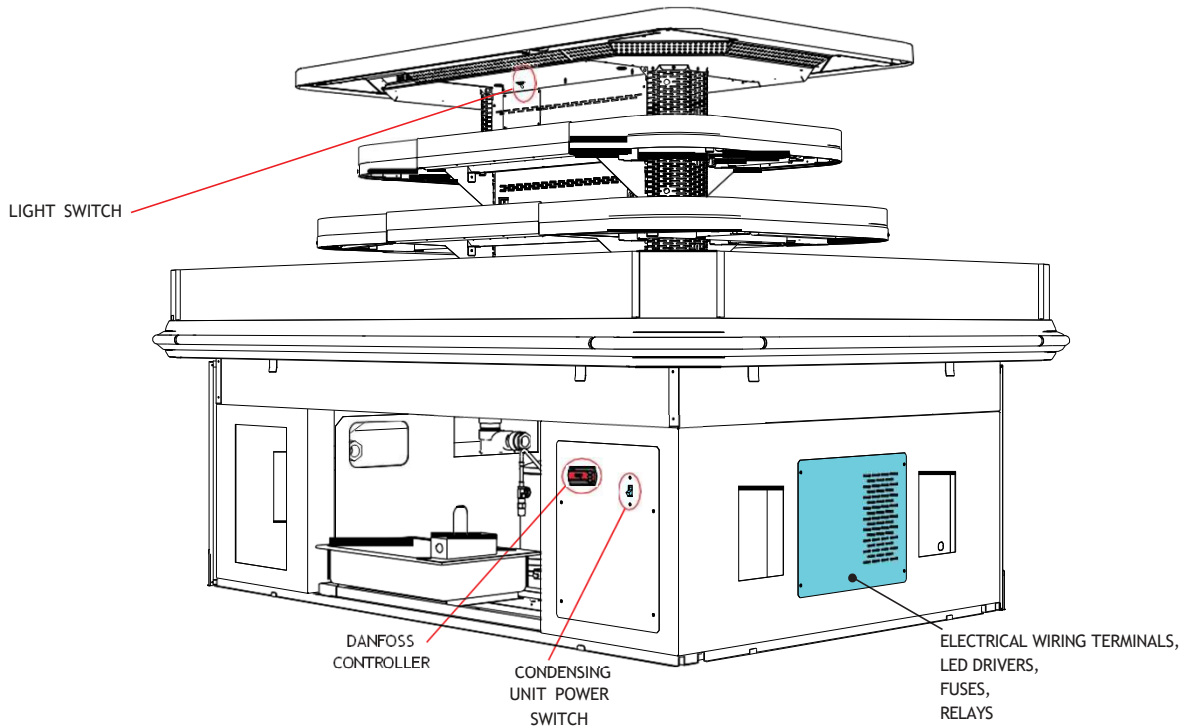


**DANGER**

**BEFORE SERVICING  
ALWAYS DISCONNECT ELECTRICAL  
POWER AT THE MAIN DISCONNECT  
WHEN SERVICING OR REPLACING ANY  
ELECTRICAL COMPONENT.**

**This includes (but not limited to) Fans, Heaters  
Thermostats, and Lights.**

## Electrical Components Location





## Electrical Wiring Diagram Index

<b>TY3ECRC-3X4.5E-S</b>	<b>4.5'</b>	<b>3141053</b>
<b>TY3ECRC-3X5.5E-S</b>	<b>5.5'</b>	<b>3138635</b>
<b>TY3ECRC-4X6E-S</b>	<b>6'</b>	<b>3140950</b>
<b>TY3ECRC-6X8I-S</b>	<b>8'</b>	<b>3129201</b>

### Dixell Controller

<b>TY3EC-3X4.5E-S W/XR75 CTLR</b>	<b>4.5'</b>	<b>3168381</b>
<b>TY3ECRC-4X6E-S W/XR75 CTLR</b>	<b>6'</b>	<b>3157152</b>
<b>TY3ECSQ-4X6I-S W/XR75 CTLR</b>	<b>6'</b>	<b>3156421</b>

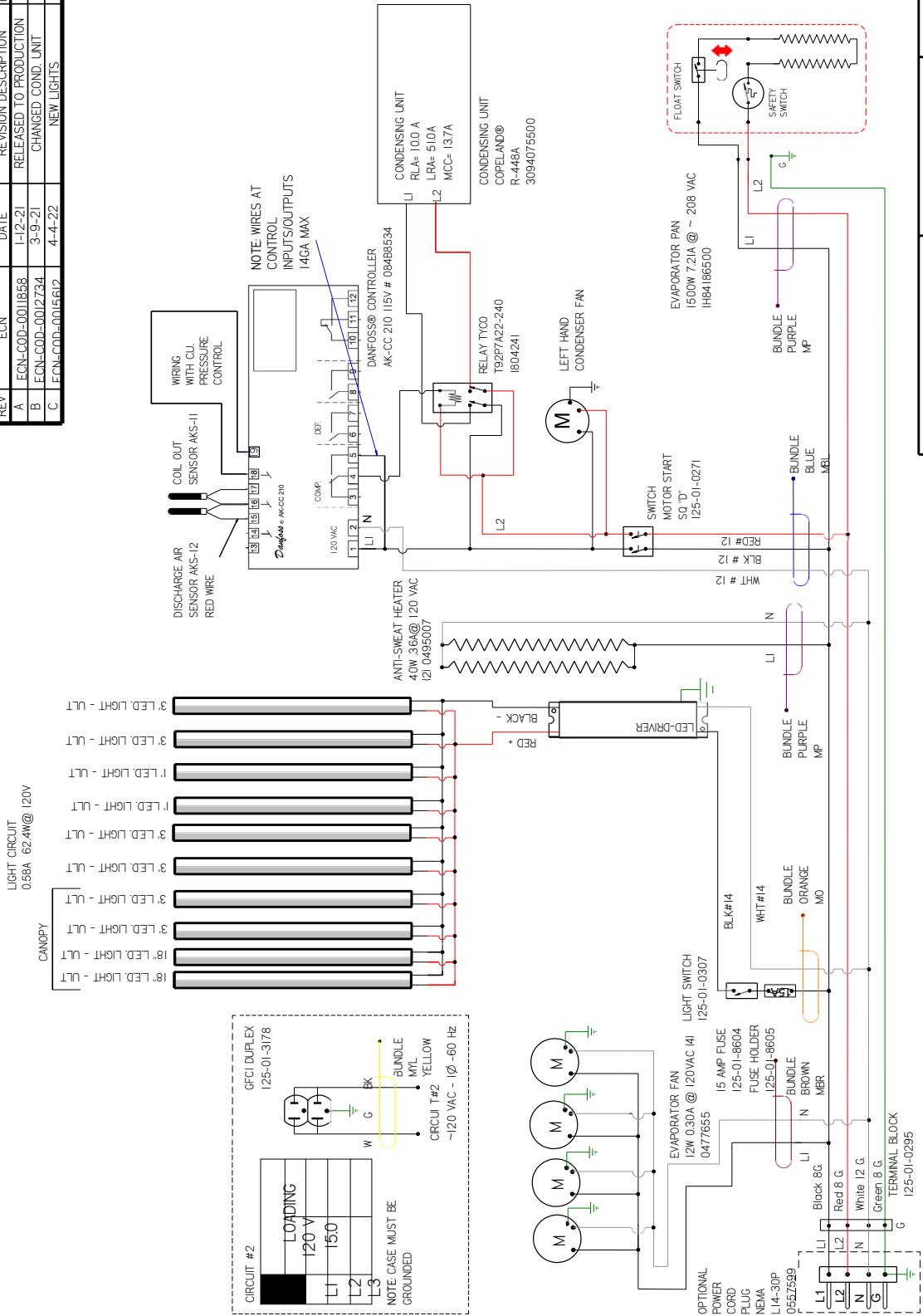
### Case Parameters and Setpoints

<b>TY3ECRC</b>				
<b>Parameter</b>	<b>3X4.5E-S</b>	<b>3X5.5E-S</b>	<b>4X6E-S</b>	<b>5X7I-S</b>
Program (TY3)	PGM0045A03	PGM0045A06	PGM0045A01	PGM0045A04
Program (TYA3)	3154654	3143624	N/A	3118555
Type I Setpoint [°F / °C]	28 / -2.2	24 / -4.4	24 / -4.4	24 / -4.4
Type II Setpoint [°F / °C]	23 / -5.0	23 / -5.0	23 / -5.0	24 / -4.4
Differential [°F / °C]	8 / 4.5	8 / 4.5	8 / 4.5	12 / 6.4
Defrost Termination Air Temp [°F / °C]	46 / 7.8	47 / 8.3	52 / 11.1	46 / 7.8
Interval Between Defrost Starts [hr]	2	2	4	2
Max Defrost Duration [min]	40	40	50	50

REVISION HISTORY						
REV	ECN	DATE	REVISION DESCRIPTION	REV BY	CHKD BY	APPR BY
A	ECN-COD-0011858	1-12-21	RELEASED TO PRODUCTION	CB	CB	CB
B	ECN-COD-0012734	3-9-21	CHANGED COND. UNIT	CB	CB	CB
C	ECN-COD-0015612	4-4-22	NEW LIGHTS	AL	CB	CB

CIRCUIT #1	
DWG	Z08Y Z40V
REV	17A 197
REV	14S 172

2



**HUSSMANN®**

**DIAGRAM- TY3EERC- 3X4.5E-**

**UL COLOR CODES / ABBREVIATIONS**  
 RED = RD  
 BLACK = BK  
 BLUE = BL  
 YELLOW = YL  
 GRAY = GR  
 WHITE = WT  
 GREEN = GN  
 BROWN = BN  
 ORANGE = OR  
 PURPLE = VT

**FACTORY 14GA WIRE**  
 - FACTORY LOGA WIRE  
 - FIELD WIRE  
 - DO NOT SCALE DRAWING

**SHEET 1 OF 1**

**3141053**

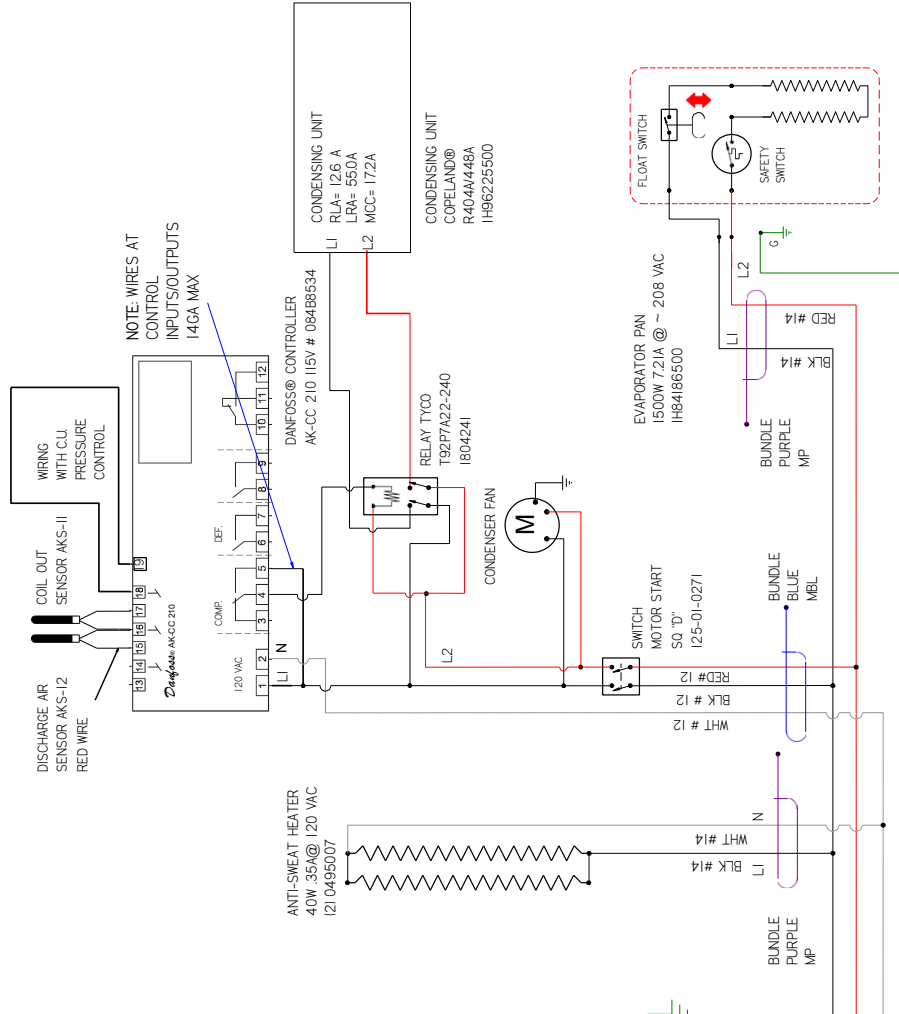
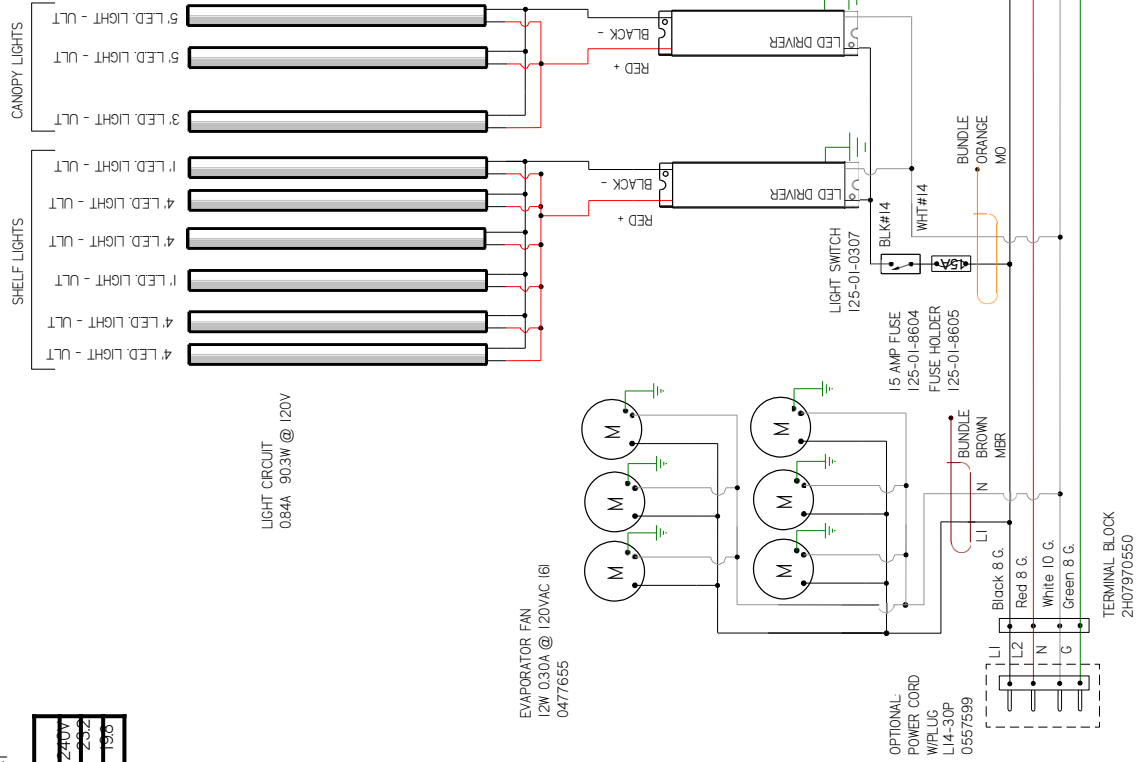
NOTES:  
 1. PRINTED DOCUMENT REQUIRED SETTING: ALL COLORS BLACK & WHITE  
 2. CASE & ANY REMOVABLE PANEL WITH ELECTRICAL PARTS MUST BE GROUNDED.  
 3. WHEN PASSING WIRES THROUGH METAL HOLES A GROMMET MUST BE USED

CIRCUIT #1  
LOADING

Z08V	Z40V
L1	L2
L3	L4
L5	L6
L7	L8
L9	L10
L11	L12
L13	L14
L15	L16
L17	L18
L19	L20

2

REV	ECN	DATE	REVISION DESCRIPTION	REV BY	CHKD BY	APPR BY
A	ECN-000-001864	12-9-20	RELEASED TO PRODUCTION	CB	CB	CB
B	ECN-000-0016612	4-4-22	NEW LIGHTS	AL	CB	CB



**HUSSMANN**  
DIAGRAM-  
TY3EERC- 3X5.5E-  
S  
3138635  
SHEET 1 OF 1

UL COLOR CODES / ABBREVIATIONS  
 RED = RD  
 BLACK = BK  
 BLUE = BL  
 YELLOW = YL  
 GRAY = GR  
 WHITE = WT  
 GREEN = GN  
 BROWN = BN  
 ORANGE = OR  
 PURPLE = VT

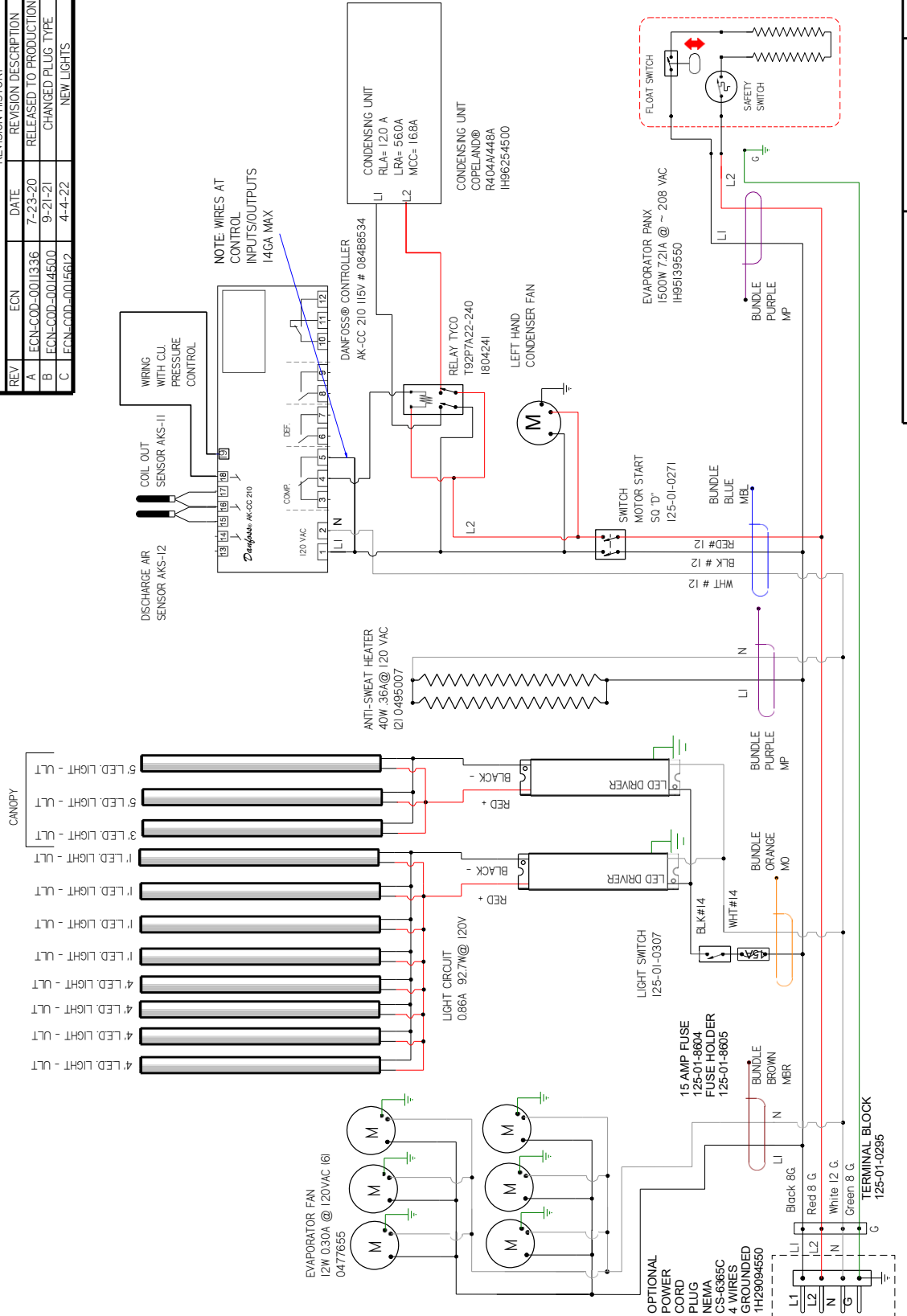
FACTORY 14GA WIRE  
 - FACTORY LOGA WIRE  
 - FIELD WIRE  
 - DO NOT SCALE DRAWING

- NOTES:
1. PRINTED DOCUMENT REQUIRED SETTING: ALL COLORS BLACK & WHITE
  2. CASE & ANY REMOVABLE PANEL WITH ELECTRICAL PARTS MUST BE GROUNDED.
  3. WHEN PASSING WIRES THROUGH METAL HOLES A GROMMET MUST BE USED

CIRCUIT #1

LOADING	24
L1	22
L2	16
	6

REV	ECN	DATE	REVISION DESCRIPTION	REV BY	CHKD BY	APPR BY
A	ECN-COD-0011336	7-23-20	RELEASED TO PRODUCTION	CB	CB	CB
B	ECN-COD-0014500	9-21-21	CHANGED PLUG TYPE	CB	CB	CB
C	ECN-COD-0015612	4-4-22	NEW LIGHTS	AL	CB	CB



**HUSSMANN**  
**DIAGRAM-**  
**TY3ECRC-4X6E-S**

FACTORY 14GA WIRE  
 -FACTORY LOGA WIRE  
 -FIELD WIRE  
 -DO NOT SCALE DRAWING

UL COLOR CODES / ABBREVIATIONS  
 RED = RD  
 BLACK = BK  
 BLUE = BL  
 YELLOW = YL  
 GRAY = GR  
 WHITE = WT  
 GREEN = GN  
 BROWN = BN  
 ORANGE = OR  
 PURPLE = VT

DO NOT SCALE DRAWING  
 SHEET 1 OF 1

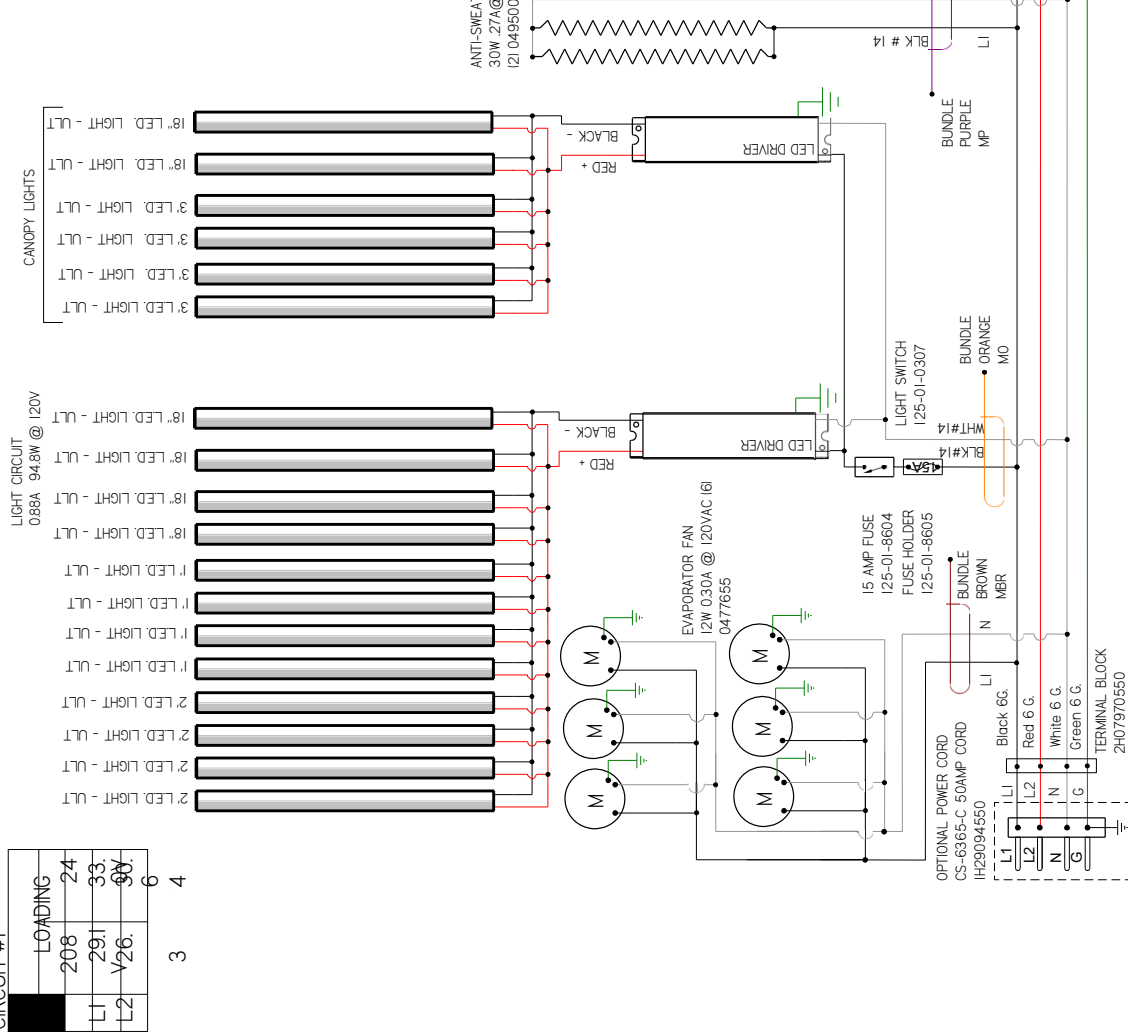
- NOTES:
1. PRINTED DOCUMENT REQUIRED SETTING: ALL COLORS BLACK & WHITE
  2. CASE & ANY REMOVABLE PANEL WITH ELECTRICAL PARTS MUST BE GROUNDED.
  3. WHEN PASSING WIRES THROUGH METAL HOLES A GROMMET MUST BE USED

3140950

137

REV	ECN	DATE	REVISION DESCRIPTION	REV BY	CHKD BY	APPR BY
A	ECN-COD-0011337	7-22-20	RELEASED TO PRODUCTION	CB	CB	CB
B	ECN-COD-0011340	7-30-20	CHANGED CUJ ADDED CNTCTR	CB	CB	CB
C	ECN-COD-0015612	4-5-22	NEW LIGHTS	AL	CB	CB

CIRCUIT #1	LOADING
208	24
L1	291
L2	V26
	6
	4



NOTE: WIRES AT CONTROL INPUTS/OUTPUTS 14GA MAX

**HUSSMANN**  
**DIAGRAM- TY3E3RC- 6X8I-S**  
**3129201**

FACTORY 14GA WIRE  
 -FACTORY LOGGA WIRE  
 -FIELD WIRE  
 -DO NOT SCALE DRAWING  
 SHEET 1 OF 1

**UL COLOR CODES / ABBREVIATIONS**  
 RED = RD  
 BLACK = BK  
 BLUE = BL  
 YELLOW = YL  
 GRAY = GR  
 WHITE = WT  
 GREEN = GN  
 BROWN = BN  
 ORANGE = OR  
 PURPLE = VT

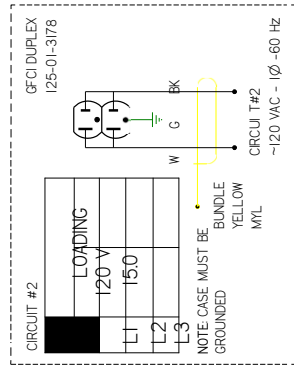
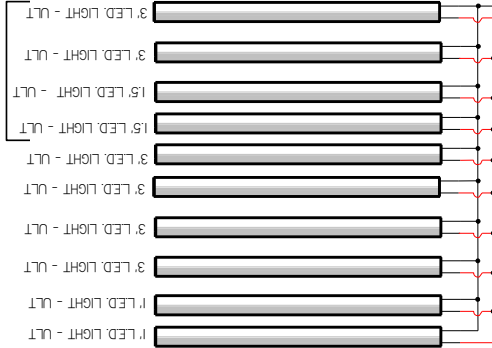
- NOTES:
1. PRINTED DOCUMENT REQUIRED SETTING: ALL COLORS BLACK & WHITE
  2. CASE & ANY REMOVABLE PANEL WITH ELECTRICAL PARTS MUST BE GROUNDED.
  3. WHEN PASSING WIRES THROUGH METAL HOLES A GROMMET MUST BE USED

CIRCUIT #1

W	D	W	D	W	D
150	250V	100	100	100	100

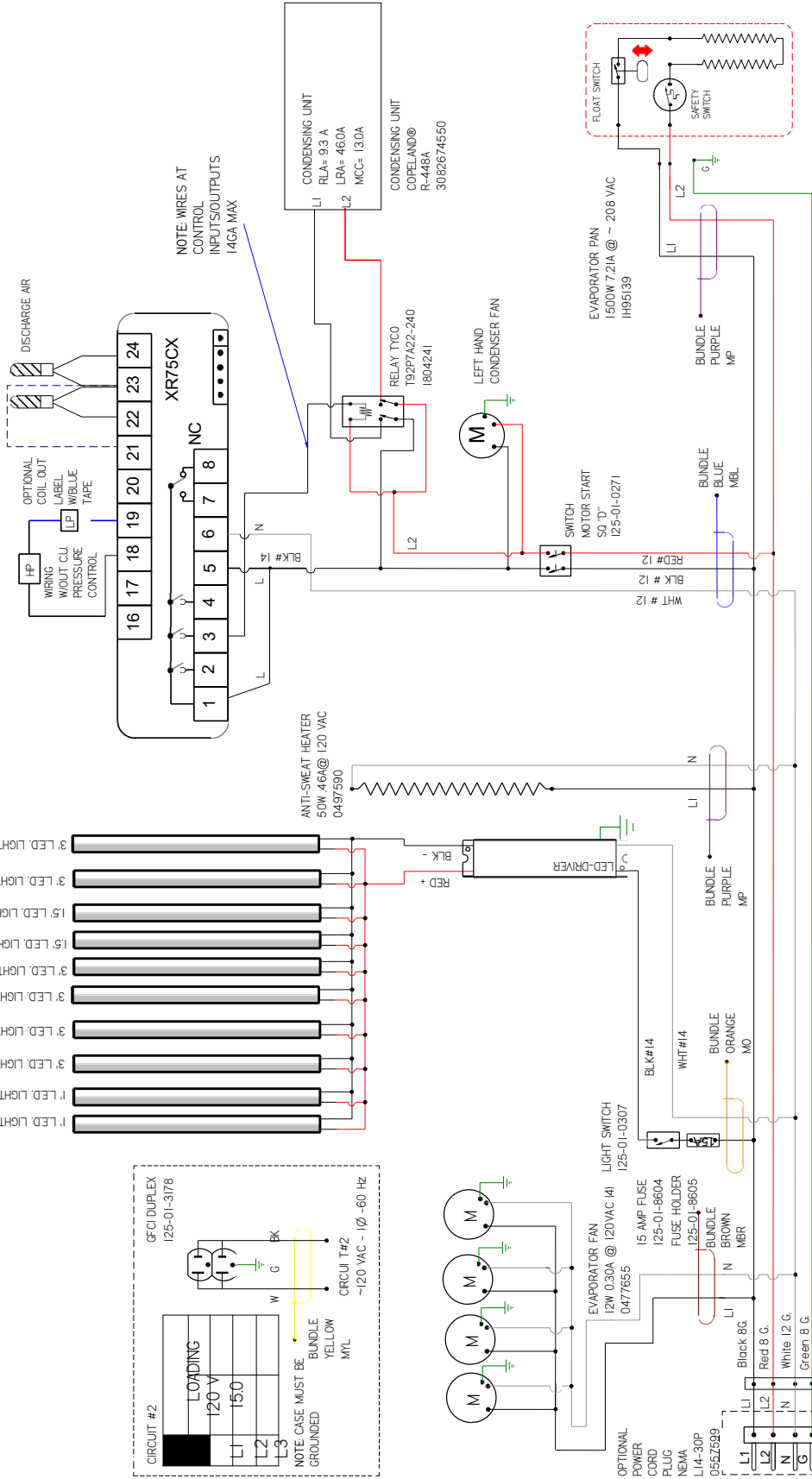
LIGHT CIRCUIT  
0.58A 62.4W @ 120V

CANOPY



REV	ECN	DATE	REVISION DESCRIPTION	REV BY	CHKD BY	APPR BY
A	ECN-COD-0016099	6-27-22	RELEASED TO PRODUCTION	CB	CB	CB

REVISION HISTORY



NOTE WIRES AT CONTROL INPUTS/OUTPUTS 14GA MAX

- NOTES:
1. PRINTED DOCUMENT REQUIRED SETTING: ALL COLORS BLACK & WHITE
  2. CASE & ANY REMOVABLE PANEL WITH ELECTRICAL PARTS MUST BE GROUNDED.
  3. WHEN PASSING WIRES THROUGH METAL HOLES A GROMMET MUST BE USED

**WIRE MARKER COLORS/ABBREVIATIONS**

BLACK = MBK	MAROON =
BLUE = MBL	MNR ORANGE =
BROWN = MBR	MO PINK = MPI
DARK BLUE =	PURPLE = MP
MBG GREEN = MG	RED = MR
LIGHT BLUE = MLB	YELLOW = MYL

**UL COLOR CODES / ABBREVIATIONS**

RED = RD	WHITE = WT
BLACK = BK	GREEN = GN
BLUE = BL	BROWN = BN
YELLOW =	ORANGE =
YL GRAY =	OR VIOLET =
GY	VT

**HUSSMANN**

DIAGRAM-TY3EC-3X  
4.5E-S WXR75 CTLR

DO NOT SCALE DRAWING

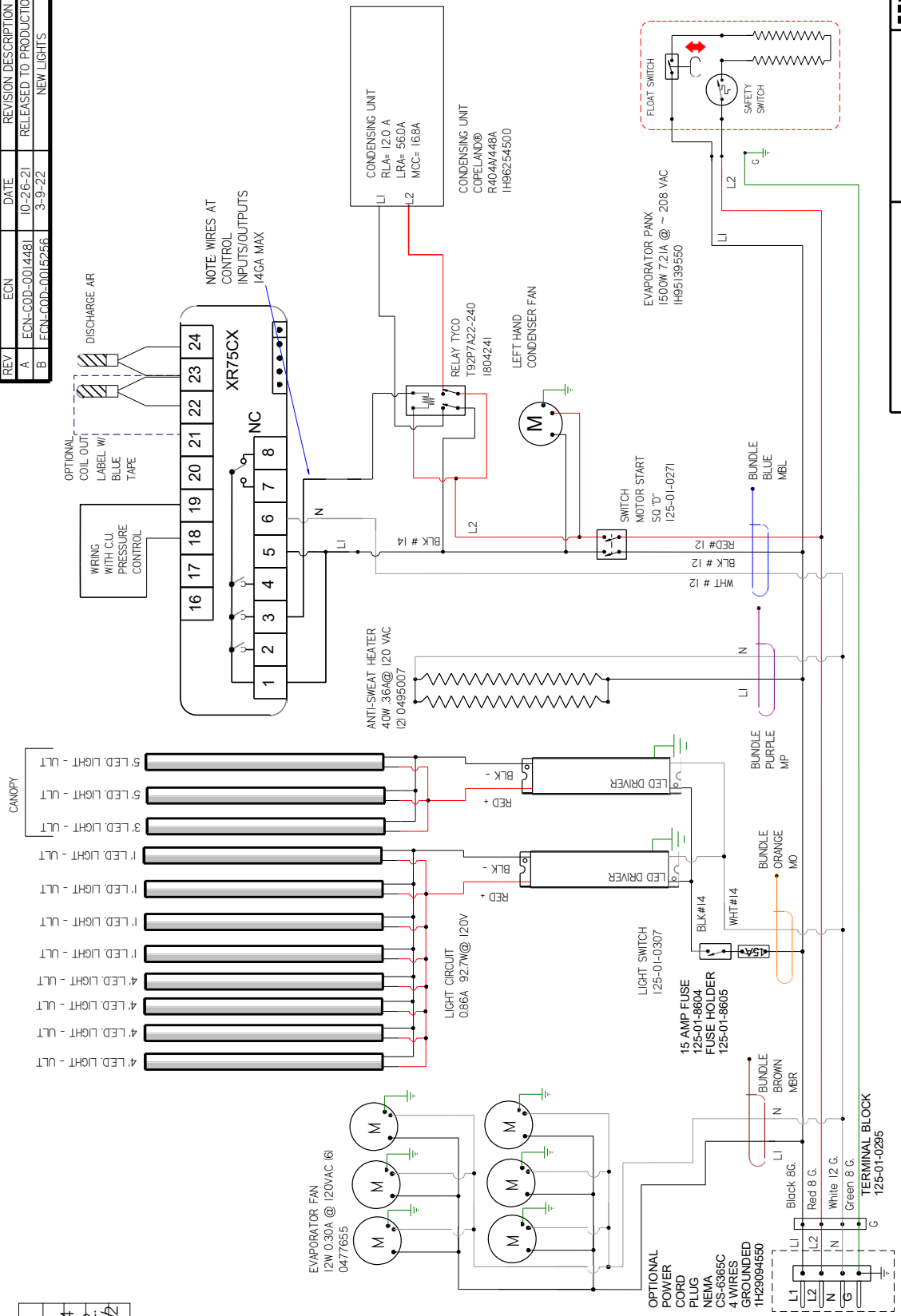
SHEET 1 OF 1

3168381

CIRCUIT #1

LOADING	24
208	22
L1	193
L2	V167
	2

REV	ECN	DATE	REVISION DESCRIPTION	REV BY	CHKD BY	APPR BY
A	ECN-COD-001448L	10-26-21	RELEASED TO PRODUCTION	AL	CB	CB
B	ECN-COD-0016256	3-9-22	NEW LIGHTS	AL	CB	CB



**HUSSMANN**  
**DIAGRAM-**  
**TY3ECRC-4X6E-S**

UL COLOR CODES / ABBREVIATIONS  
 RED = RD  
 BLACK = BK  
 BLUE = BL  
 BROWN = BR  
 DARK BLUE = DBL  
 MAROON = MRO  
 MMR ORANGE = MMR ORANGE  
 MO PINK = MPI  
 PURPLE = MP  
 MGB GREEN = MGB GREEN  
 LIGHT BLUE = MLB  
 WHITE = WT  
 GREEN = GN  
 BROWN = BN  
 ORANGE = OR  
 YL GRAY = YL GRAY  
 OR VIOLET = OR VIOLET  
 VT

WIRE MARKER COLORS/ABBREVIATIONS  
 MAROON = MRO  
 MMR ORANGE = MMR ORANGE  
 MO PINK = MPI  
 PURPLE = MP  
 RED = MR  
 LIGHT BLUE = MLB  
 YELLOW = MYL

FACTORY 14GA WIRE  
 - FACTORY LOGA WIRE  
 - FIELD WIRE - - -  
 - - - - -  
 - - - - -

DO NOT SCALE DRAWING  
 SHEET 1 OF 1

- NOTES:  
 1. PRINTED DOCUMENT REQUIRED SETTING: ALL COLORS BLACK & WHITE  
 2. CASE & ANY REMOVABLE PANEL WITH ELECTRICAL PARTS MUST BE GROUNDED.  
 3. WHEN PASSING WIRES THROUGH METAL HOLES A GROMMET MUST BE USED

3157152

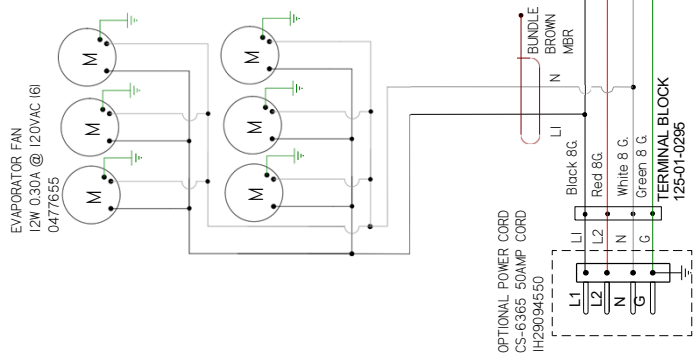
B

CIRCUIT #1

#1	DESCRIPTION	REV. BY	CHKD. BY	APPR. BY
200V	Z4V			CB
220V	Z0V			CB
193V	VZ9			CB

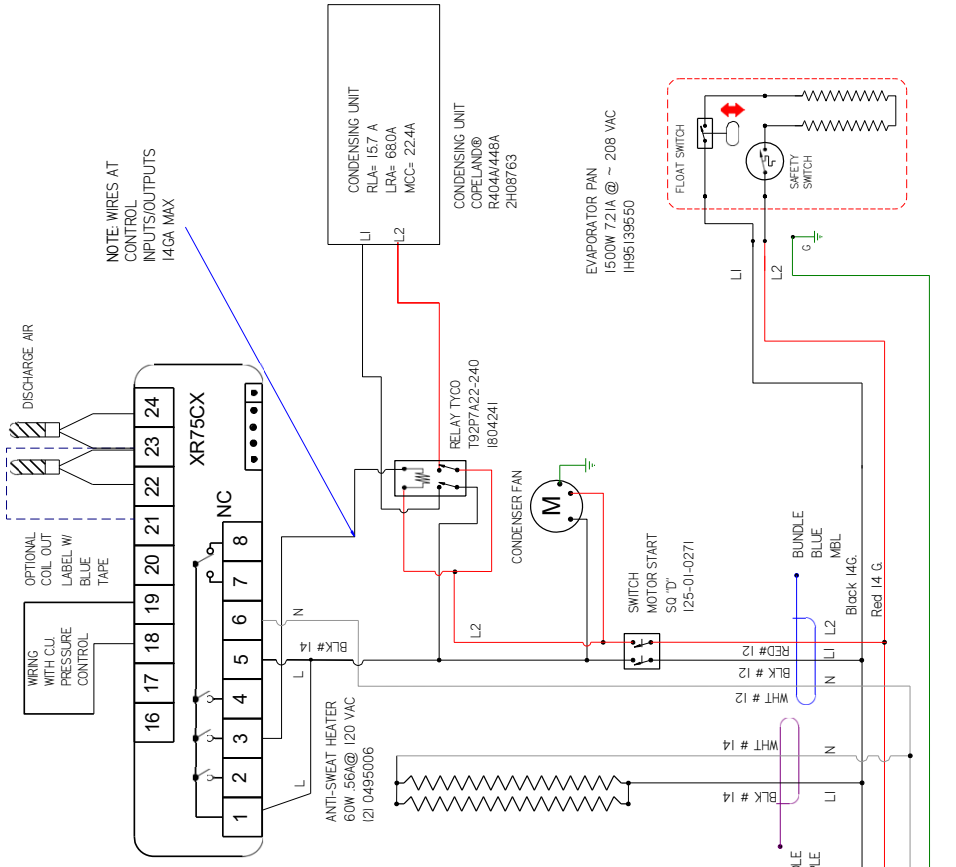
LIGHT CIRCUIT 116A 125.6W @ 120V

CANOPY



REV	ECN	DATE	REVISION DESCRIPTION	REV BY	CHKD BY	APPR BY
A	ECN-COD-0014503	10-8-21	RELEASED TO PRODUCTION	CB	CB	CB
B	ECN-COD-0014506	10-21-21	LABELLED COIL OUT SENSOR	CB	CB	CB
C	ECN-COD-0015256	3-9-22	NEW LIGHTS	AL	CB	CB

NOTE: WIRES AT CONTROL INPUTS/OUTPUTS 14GA MAX



**WIRE MARKER COLORS/ABBREVIATIONS**

BLACK = MBK	MAROON =
BLUE = MBL	MMR ORANGE =
BROWN = MBR	MOP PINK = MPI
DARK BLUE =	PURPLE = MP
MDB GREEN = MG	RED = MR
LIGHT BLUE = MLB	YELLOW = MYL

**UL COLOR CODES / ABBREVIATIONS**

RED = RD	WHITE = WT
BLACK = BK	GREEN = GN
BLUE = BL	BROWN = BN
YELLOW =	ORANGE =
YL GRAY =	OR VIOLET =
GY	VT

**FACTORY 14GA WIRE**

- FACTORY 10GA WIRE
- FIELD WIRE
- DO NOT SCALE DRAWING

**HUSSMANN**  
**DIAGRAM-TY3ECSQ-4X6I-S WXR75**  
**3156421**  
 SHEET 1 OF 1

NOTES:  
 1. PRINTED DOCUMENT REQUIRED SETTING: ALL COLORS BLACK & WHITE  
 2. CASE & ANY REMOVABLE PANEL WITH ELECTRICAL PARTS MUST BE GROUNDED.  
 3. WHEN PASSING WIRES THROUGH METAL HOLES A GROMMET MUST BE USED



## CA Warning



This warning does not mean that Hussmann products will cause cancer or reproductive harm, or is in violation of any product-safety standards or requirements. As clarified by the California State government, Proposition 65 can be considered more of a ‘right to know’ law than a pure product safety law. When used as designed, Hussmann believes that our products are not harmful. We provide the Proposition 65 warning to stay in compliance with California State law. It is your responsibility to provide accurate Proposition 65 warning labels to your customers when necessary. For more information on Proposition 65, please visit the California State government website.

ENGINEERING  
TOMORROW





*Danfoss*

UserGuide

## Controller for temperature control AK-CC210

ADAP-KOOL® Refrigeration control systems







- ①  Open Camera
- ②  iPhone User  
Hold the camera up to the QR code
-  Android User  
Open QR Code Reader app if necessary.  
Hold the camera up to the QR code
- ③  Tap the notification to be taken to the destination of the QR code



## XR75CX Digital Controller for Medium-Low Temperature Refrigeration Applications Installation and Operation Manual



- ①  Open Camera
- ②  iPhone User  
Hold the camera up to the QR code
-  Android User  
Open QR Code Reader app if necessary.  
Hold the camera up to the QR code
- ③  Tap the notification to be taken to the destination of the QR code

## General Maintenance

- Inspect and clean condenser coil monthly. Clean using a vacuum cleaner with a wand attachment and a soft (non-metallic) brush to remove dirt and debris. DO NOT bend fins. Always wear gloves and protective eyewear when cleaning near sharp coil fins and dust particles. When properly cleaned, you should be able to see through the condenser coil
- Inspect drain screens for debris. Remove if present. DO NOT put debris down the drain
- Inspect honeycomb for dust buildup. Remove and clean with water and mild soap
- Ensure no price tags, placards, debris, or merchandising garnish is sitting in the return air
- Ensure shelves are not stocked outside of their limits (See Load limit representation on page 22)

## Case Cleaning

To ensure long life, proper sanitation and minimum maintenance costs, the refrigerator should be thoroughly cleaned frequently. SHUT OFF FAN BEFORE CLEANING: It can be unplugged within the case, or shut off entire case at the source. The interior bottom may be wiped with any domestic soap or detergent based cleaners.

**WARNING! DO NOT USE WATER HOSES!** A self contained case empties into an evaporator pan that WILL OVERFLOW IF TOO MUCH WATER IS INTRODUCED during cleaning

- USE WATER AND A MILD DETERGENT FOR THE EXTERIOR ONLY
- Wipe interior with damp non-abrasive cloth. Soap and hot water are not enough to kill bacteria; a sanitizing solution must be included with each cleaning process to eliminate bacteria.
- Clean any visible debris surrounding or on top of the drain location. The drain is located under the deck pans.
- DO NOT USE A CHLORINATED CLEANER ON ANY SURFACE.
- DO NOT USE ABRASIVES OR STEEL WOOL SCOURING PADS (these will mar the finish)

## Sanitizing

It is essential to establish a regular cleaning procedure. This will minimize bacteria causing discoloration which leads to degraded product appearance and significantly shortening product shelf life.

Soap and hot water are not enough: A sanitizing solution must be included with each cleaning process to eliminate this bacteria. Sanitizing solutions will not harm the interior bottom, however, these solutions should always be within the following guidelines:

- DO NOT Use a cleaning or sanitizing solution that has:
  - OIL BASE (these will dissolve the butyl sealants)
  - AMMONIA BASE (these will corrode the copper components of the case)
  - ACID Base (these will pit and damaged metal finishes)
- DO NOT Use chlorinated sanitizing solutions

1. Scrub thoroughly, cleaning all surfaces, with soap and hot water.
2. Rinse with hot water, but do not flood.
3. Apply the sanitizing solutions that meet the guidelines above.
4. Rinse thoroughly.
5. Dry completely before resuming operation.

## Plexiglass and Acrylic Care

Improper cleaning not only accelerates the cleaning cycle but also degrades the quality of this surface. Normal daily buffing motions can generate static cling attracting dust to the surface. Incorrect cleaning agents or cleaning cloths can cause micro scratching of the surface, causing the plastic to haze over time.

Hussmann recommends using a clean damp chamois, or a paper towel marked as "dust and abrasive free" with 210® Plastic Cleaner and Polish available by calling Sumner Labs at 1-800-542-8656. Hard, rough cloths or paper towels will scratch the acrylic and should not be used.

**WARNING**

**ALWAYS DISCONNECT THE ELECTRICAL POWER AT THE MAIN DISCONNECT WHEN SERVICING OR REPLACING ANY ELECTRICAL COMPONENT OF THIS REFRIGERATOR. THIS INCLUDES, BUT IS NOT LIMITED TO SUCH ITEMS AS FANS AND THERMOSTATS.**

**Service**

- To maintain good refrigeration performance, a refrigeration service person should be called periodically (at least twice a year) to clean the discharge honeycomb and remove any accumulated dirt from the condenser coil and condensate evaporator pan on self-contained models. **POOR CIRCULATION OF AIR THROUGH THE CONDENSER COIL WILL RESULT IN POOR REFRIGERATION PERFORMANCE.**
- Dirt accumulation inside the condensate evaporator pan will reduce the pan's capacity and affect the efficiency of the heater causing a burned out heater and an overflow of defrost water onto the store floor.

**Fan Blade Replacement**

The evaporator fan is located directly under the deck pan. Should the fan blade ever need servicing. **ALWAYS REPLACE THE FAN BLADE WITH THE RAISED EMBOSING SIDE OF THE BLADE INSTALLED TOWARD THE MOTOR.**

**Honeycomb Removal & Cleaning****CAUTION: DO NOT TEAR THE HONEYCOMB****1) Remove the honeycomb assembly as follows:**

Insert a small Phillips screwdriver behind the rear edge of the honeycomb on the right hand end and gently pull down. The bottom of the honeycomb will drop down. Continue down the length of the case, lifting the honeycomb out.

**2) To clean honeycomb:**

Mix powdered detergent, in warm water. (5 to 7 Tablespoons per gallon)

Immerse or spot clean the honeycomb. Use care not to damage the cell structure of the honeycomb.

Rinse thoroughly in clean water. Shake excess water from the honeycomb and dry. (If heat is used, do not exceed 140 F dry heat)

**3) Install honeycomb** by inserting the notched side up against the deflector and press upwards inserting the bottom of the honeycomb into the back ledge. Slide along the honeycomb, pressing the front edge upward into the ledge. Be careful no to damage the cells or cut yourself on the edges of the honeycomb.

**LED Driver Replacement**

The power supply for the LED fixtures is located under the case in a dedicated electrical box.

**For access to the ballast:**

- Remove body panels ( See Body panel Removal for reference pg.13)
- Remove screws to grill to expose electrical conduit
- Replace or service the ballast as required and replace the canopy in reverse order of removal

## User Information

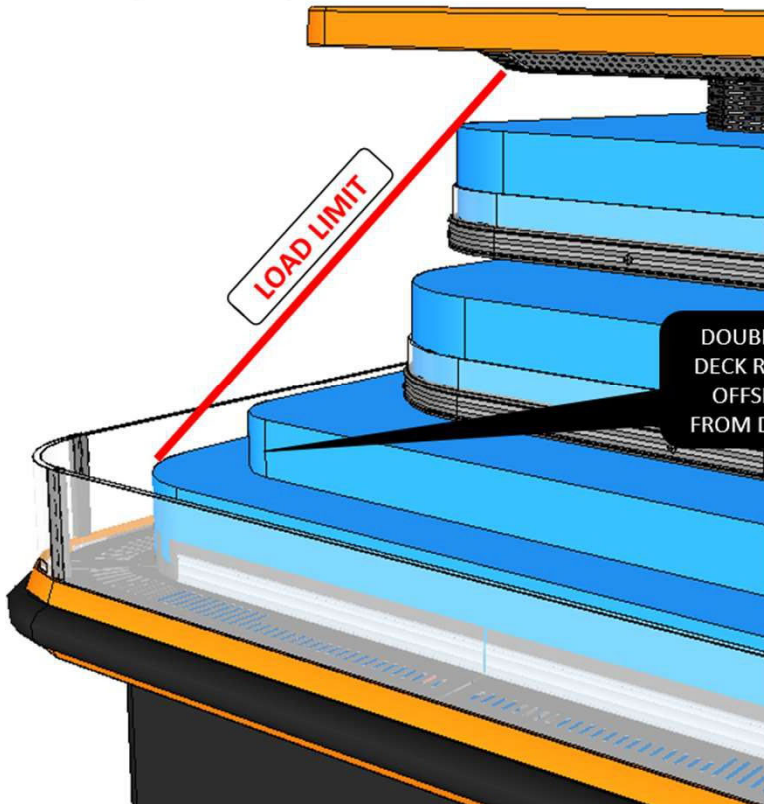
### Stocking

Improper temperature and lighting will cause serious product loss. Discoloration, dehydration and spoilage can be controlled with proper use of the equipment and handling of product. Product temperature should always be maintained at a constant and proper temperature. This means that from the time the product is received, through storage, preparation and display, the temperature of the product must be controlled to maximize life of the product. Hussmann cases were not designed to “heat up” or “cool down” product - but rather to maintain an item’s proper temperature for maximum shelf life. To achieve the protection required always:

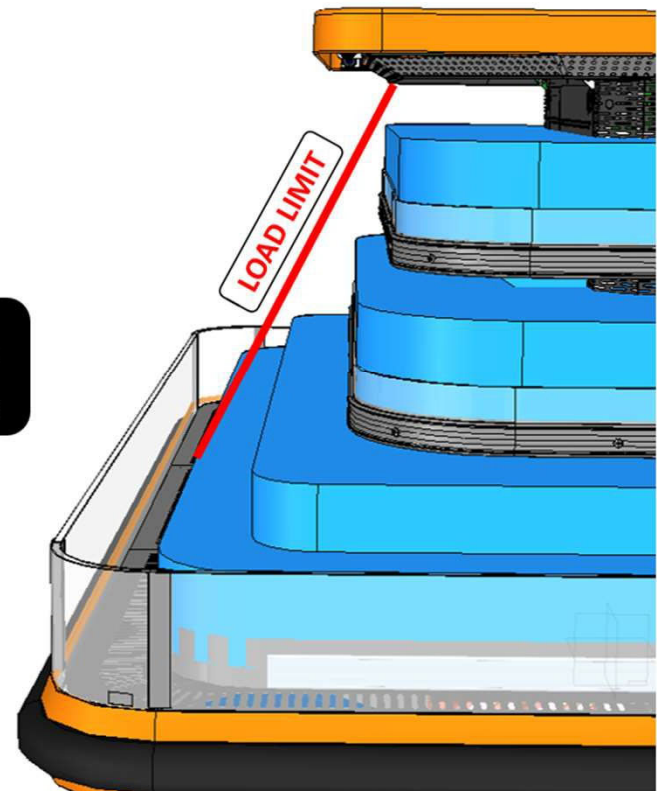
1. Minimize processing time to avoid damaging temperature rise to the product. Product should be at proper temperature.
2. Keep the air in and around the case area free of foreign gasses and fumes or food will rapidly deteriorate.
3. Maintain the display merchandisers temperature controls as outlined in the refrigerator section of this manual.
4. Do not place any product into these refrigerators until all controls have been adjusted and they are operating at the proper temperature. Allow merchandiser to operate a minimum of three (3) hours before stocking with any product.
5. When stocking, never allow the product to extend beyond the recommended load limit. Air discharge and return air flue must be unobstructed at all times to provide proper refrigeration.
6. Avoid the use of supplemental flood or spot lighting. Display light intensity has been designed for maximum visibility and product life at the factory.

### Load Limit

CORNER



SIDE / EDGE



## Trouble Shooting

Condition	Troubleshooting
Water is on the Floor	Caution! Water on flooring can cause much damage! Until cause is determined (and repaired), following these procedures:
	Use wet-dry vacuum (or mop & bucket) to remove standing water.
	Use 'catch pans' for water to drain into. Swap out regularly until case has completely drained.
	Check that the drain trap is free of debris.
	Check that the PVC drain pipes are correctly positioned over evaporator pan.
	Check store conditions. To prevent condensation in NSF® Type 1 environments, maximum conditions are to be 55% humidity / 75° Fahrenheit. For NSF® Type 2, maximum conditions are to be 55% humidity / 80° Fahrenheit. See serial label (on the CAD wall just above the deck pan) for NSF® Type of your case.
	Check that evaporator pan is wired properly or plugged in (if applicable).
	Caution! Evaporator pan may be malfunctioning. If so, water will overflow pan and seep onto flooring causing damage! Until evaporator pan is functioning (or is replaced).
	Caution! Disruption of power can cause water to overflow pan and seep onto flooring causing damage! Check that power to case is constant. Until power is restored, following these procedures:
	When power to case is restored, evaporator pan should function properly and water will no longer overflow onto flooring.
Fan Emits Excessive Noise	Check that the case is aligned, level and plumb.
	Check evaporator fan for cleanliness.
	Unplug fan motors; check motor shaft for excessive bearing wear.
	Check the fan motors are securely mounted in brackets.
	Verify that fan blades are securely mounted to fan motor.
	Check that nothing is obstructing fan blade rotation, or that the blade is not hitting anything.
	Check that the fan shroud is properly secured.
Fans are not Working	Check that the MAIN power switch is ON (if applicable on case model).
	Check that fans are plugged into fan shroud.
	Check for foreign material obstructing fan performance.
	Check that fan blades freely rotate within fan shrouds.
	Check that power is going to fans.
	Check that fan wiring is connected on terminal blocks.
System is not Operating	Check that the utility power is on.
	Check the circuit breaker box for tripped circuits.
	Check to make sure the condensing unit switch is on if the lights are working but the compressor will not come on. See page 16 for switch location.
Case is not Holding Temperature	If a large amount of warm product was added to the case, it will take time for the temperature to adjust. Product should be pre-chilled before placing in display case.
	Check Temperature Controller section in this manual
	Check that the case is not in the sun or near heat or air conditioning vent.
	Verify the store A/C is working and that environment is maintaining proper temperature and relative humidity.
	If case is located near outside doors, temperature fluctuation can hinder unit's ability to maintain temperature.
	Check Set Point Temperature; it may be adjusted too high.

## Trouble Shooting Continued

Condition	Troubleshooting
Case is not Holding Temperature (Continued)	Check Merchandising Planogram / Observe Load Limits -Evenly distribute product as much as possible -Avoid uneven stacking -Orient product on round ends or corner in a radial pattern in relation to the discharge air walls -Create a channel or path for discharge air to travel towards products at the edge of the merchandiser -Set product back from shelf or deck product stop by up to 1" to allow discharge air to surround the product -Merchandise product as flat as possible to keep it in contact with a shelf or deck pan surface -Move products with lower moisture content closer to the Center Discharge Column
Case Lights are not working	Check that Light switch is in the ON position
	Check for burned out bulbs. Turn lights off & replace.
	Clean dirt and dust from the bulbs to prevent flickering.
	Check to ensure voltage at LED Driver. If voltage is entering but not exiting the LED Driver, LED Driver is faulty.
	Check that ALL lights are plugged in and receptacles capped.
Control Display is Flashing	Check Temperature Controller section in this manual.
Condensing Unit is not Operating (Self-Contained units only)	Check Temperature Controller section in this manual.
	Check that the power is turned on.
	Review Temperature Controller's Settings for accuracy
	<p>The condensing unit may be equipped with its own controller and display. This controller is only for the condensing unit and does not control the temperature of the case. Do not adjust settings on this controller. Only a qualified service technician should attempt to change settings on this controller</p> <p>The Danfoss controller located on the switch panel (see page 16) is for case temperature control. Note that when the Danfoss controller is not calling for cooling, the display on the condensing unit controller will go off. This is considered normal operation.</p>



## Replacement Parts

COMPONENT / Spec	TY3ECRC-3X4.5E-S	TY3ECRC-3X5.5E-S	TY3ECRC-4X6E-S	TY3ECRC-5X7I-S
Condensing Unit	3082674500	1H96254500	1H96254500	2H17034500
Evap Fan Motor	0527610	0527610	0527610	0527610
Evap Fan Blade	CONTACT HUSSMANN PERFORMANCE PARTS			
Condensate Pan	3062591	3062591	1H95139550	3062592
Anti-Sweat Heater	0495007	0495007	0495007	0495006
LED Power Supply 24V	3117868	3117868	3079207	3117868
LED Power Supply 12V	3143163	3143163	3143163	3143163
Controller AKCC 210	0523087	0523087	1H56892500	0523087
Thermal Expansion Valve	3031934	3031934	3002476500	3031934
Sensor AKS 11 (COIL OUT)	E151764	E151764	1H90012500	E151764
Sensor AKS 12 (DISCHARGE)	3015028	3015028	3015028	3015028
Sensor CPC	0334802	0334802	0334802	0334802
Relay	1804241	1804241	1804241	1804241
Formed Top	3138243300	3138244300	3139299300	3089944300
Glass - Corner	3013963150	3013963150	3013963150	3013963150
Glass - Long End	3139998150	3138313150	3139311150	3112763150
Glass - Short End	3138312150	3138312150	3113812150	3013964150
Wiring Diagram	SEE PAGE 17			

CASE SERIAL # \_\_\_\_\_

HUSSMANN  
PERFORMANCE PARTS

855-487-7778 or [amparts@hussmann.com](mailto:amparts@hussmann.com)

Hours of Operation - 7AM-6PM CST, Monday-Friday

---

### Service Record

Last service date:    By:

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

---

**HUSSMANN®/Chino**  
Additional copies of this publication may be obtained by contacting:  
Hussmann® Chino  
13770 Ramona Avenue • Chino, California 91710  
(909) 628-8942 FAX  
(909) 590-4910  
(800) 395-9229  
[www.hussmann.com](http://www.hussmann.com)

The <i>MODELNAME</i> and <i>SERIALNUMBER</i> is required in order to provide you with the correct parts and information for your particular unit. They can be found on a small metal plate on the unit. Please note them below for future reference.
<b>MODEL:</b>
<b>SERIAL NUMBER:</b>