HUSSMANN®/CHINO

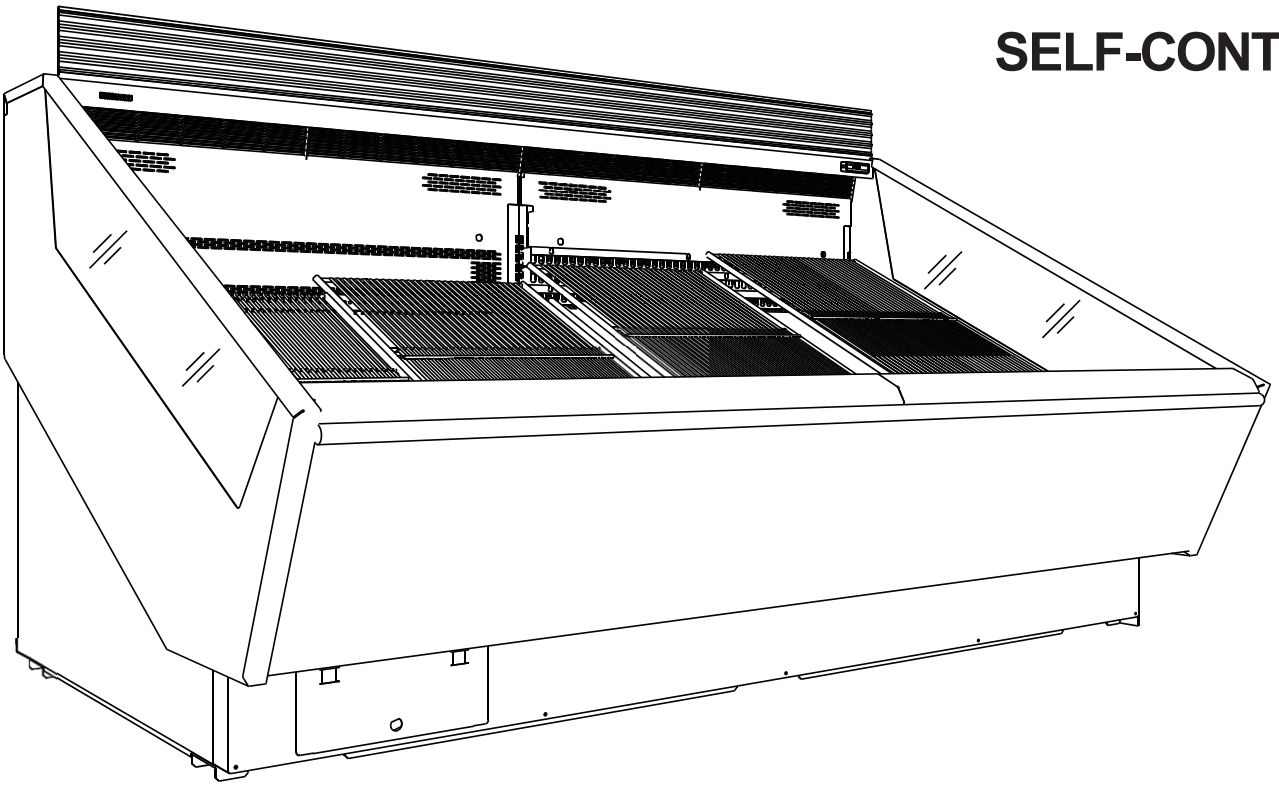
MPC-ETN

MOBILE PRODUCE CASE
SELF-CONTAINED

Installation & Operation Manual

REV. 1122

MOBILE PRODUCE CASE
SELF-CONTAINED



INSTALLATION & OPERATION GUIDE

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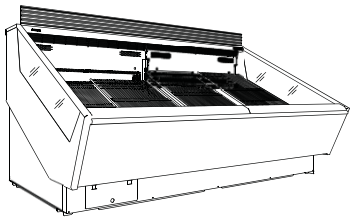
General Information

Case Description:
This Booklet specifically covers the Following models:
Mobile Produce MPC-ETN-S



Description: Mobile Produce Case model series are Multi-deck, spot merchandisers designed for non-critical temperature applications such as: Non Hazardous Produce. They are available as self-contained models. Each self-contained model will have it's 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 . 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.

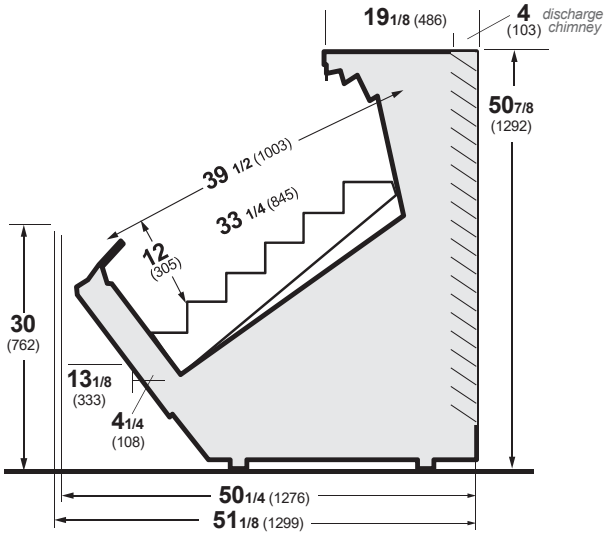
Hussmann Chino Product Control: The serial number and shipping date of all equipment has been recorded in Hussmann's files for warranty and replacement part purposes. All correspondence pertaining to warranty or parts ordering must include the serial number of each piece of equipment involved, in order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

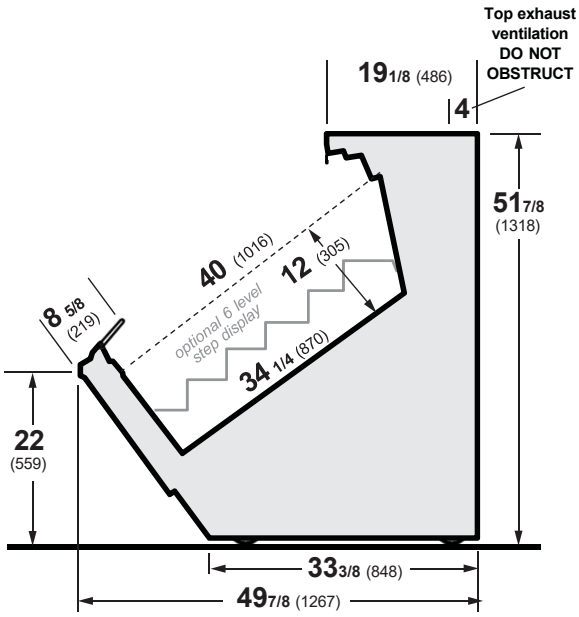
Keep this booklet with the case at all times for future reference.

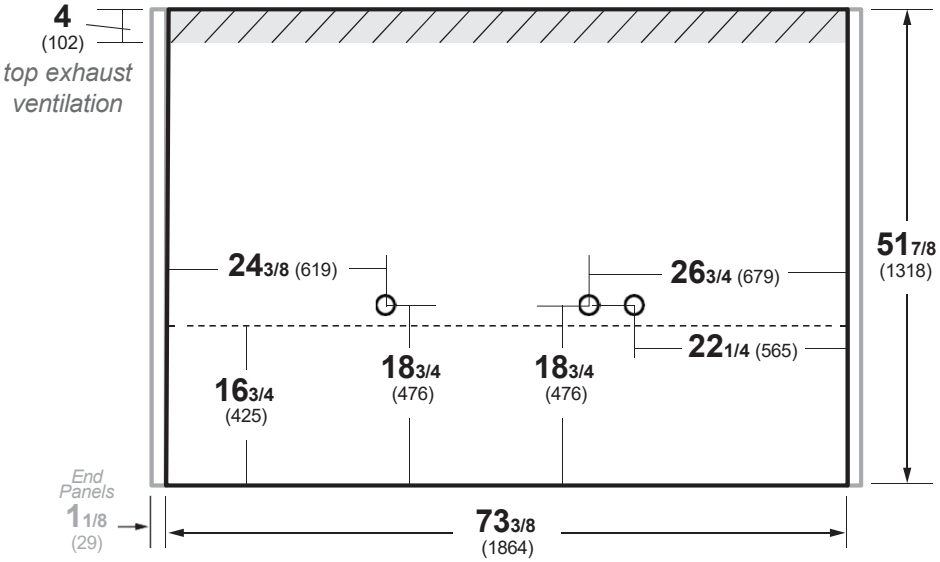
HUSSMANN®/CHINO
A publication of HUSSMANN® Chino
13770 Ramona Avenue • Chino, California 91710
(909) 628-8942 FAX
(909) 590-4910
(800) 395-9229

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

Case Sections







Installation

Location
The Mobile Produce Case display has been designed for use only in air conditioned stores where temperature and humidity are maintained either 75°F ambient and 55% RH.

When selecting the location for placement of this case, avoid the following conditions:

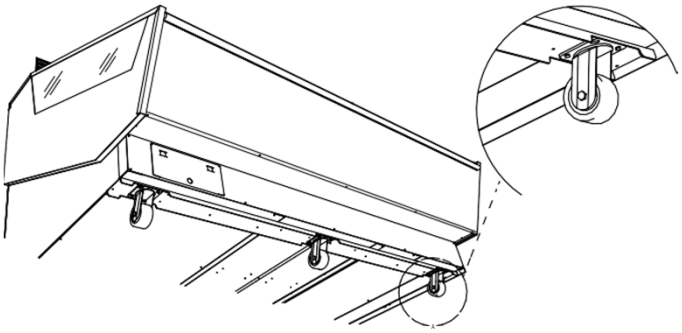
Excessive air movement
- Doors
- Air-conditioned vents
- Other air sources

Excessive heat
- Windows
- Sun
- Flood lamps 8 feet or less from the product
- Other heat sources

Skid Removal
Unstrap case from skid and roll case off to move near placing location

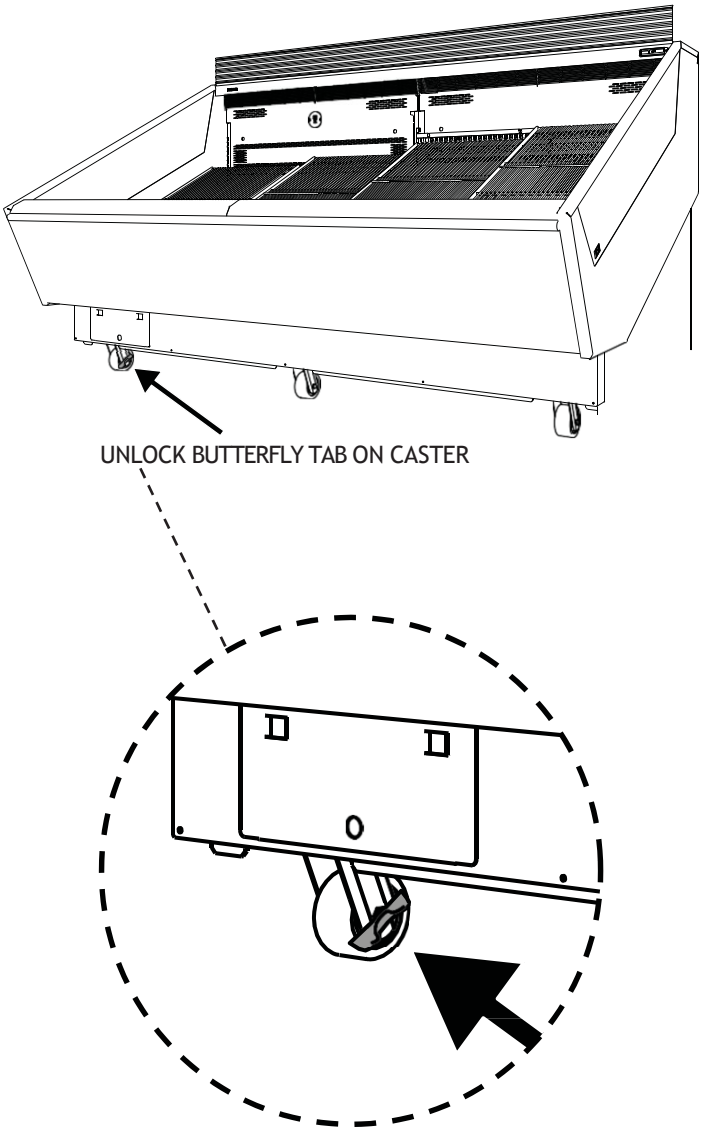
Note:
Cases are manufactured and shipped to stores with casters installed on the base frame to make the job of moving cases easier for everyone involved with the manufacturing, shipping and installation process.

Casters not only speed up the process, but they also reduce the chance of damage from raising and lowering cases with ”J” bars to place them on dollies, skates or rollers. In most situations, one or two persons can move the case with ease.



Never stand on the Mobile Produce Case deck for any reason. These surfaces are not steps and are not designed to support such loads.
Doing so will result in:
- Damage to case
- Serious injury to user

Moving Mobile Produce Case
Refer to illustration below, all casters must be switched to the unlocked position before transporting the merchandiser. Ensure to check all six caster located at the corners and center of the front and rear at the perimeter of the merchandiser are unlocked to properly transport.



Case Refrigeration

Operation

Each self-contained model is equipped with its own condensing unit located beneath the display area. The unit will be charged per nameplate refrigerant and shipped from the factory with all service valves open, completely ready for operation when electrical power has been connected.
The self-contained refrigeration system which is thermostatically regulated. The thermostat in the case is set to a certain cut out point in which the case will refrigerate until that cut out point is reached and will cease to refrigerate the case by the thermostat.

Controls and Adjustments

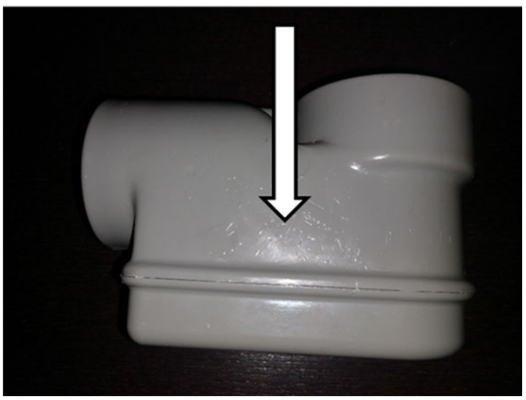
Refrigeration Controls			Defrost Controls			
Model	Product Application	Discharge Air Temperature	Defrost Frequency Cycle	Type of Defrost	Termination Temperature	Fail-safe Time (Minutes)
Mobile Produce	Non-Critical Temp	27°F	30 minutes every 6 hours	Off Time	48°F Evap Temp	40

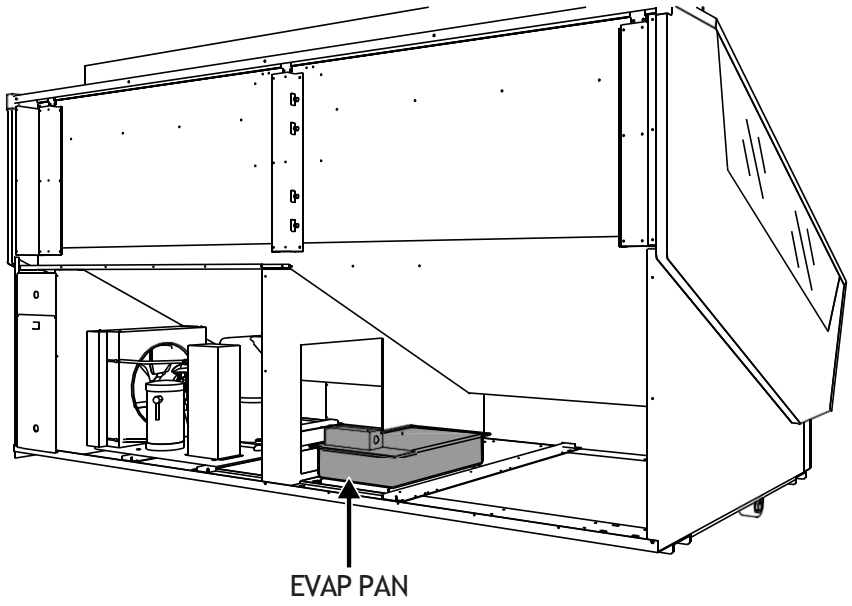
1. The Danfoss Controller controls refrigeration temperature. This is factory installed in the control panel. Adjust this control knob to maintain the discharge air temperature shown. Measure discharge air temperatures at the center of the honeycomb. The defrost setting is factory set as shown above.

Condensate Pan Setup

Setup:
There is one condensate evaporator pan on this unit. The drain pipe from the case feeds into the condensate pan, once water levels are high enough in the condensate pan the float switch level is triggered which will then trigger the heater to raise temperature therefore evaporating the water into the case airstream.

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





Programmed Parameters

Parameter	Description	Value	Min	Max
1	Freezer Cut-in warm	32°F	-40ºC (-40ºF)	40ºC (104ºF)
2	Freezer Cut-out warm	28°F	-40ºC (-40ºF)	40ºC (104ºF)
3	Freezer Cut-in cold	22°F	-40ºC (-40ºF)	40ºC (104ºF)
4	Freezer Cut-out cold	18°F	-40ºC (-40ºF)	40ºC (104ºF)
5	Compressor ON time delay at Controller Power Up	0 min 0 sec	0 sec	59 min 59 sec
6	Compressor Minimum (ON) time	4 min 0 sec	0 sec	30 min 59 sec
7	Compressor Minimum (OFF) time	0 min 30 sec	0 sec	59 min 59 sec
8	Potentiometer off position	10º	5º	57º
9	Potentiometer on position	15º	9º	61º
10	On-Off logical function	1	0=disable or 1=enable	
11	Controller Operation Temperature Units	1	0=Celsius or 1=Fahrenheit	
12	Sensor failure mode (compressor and fan relay failure mode)	3	0=Relays fail OPEN 2=Relays fail CLOSE 3=Duty cycle	
13	Compressor On Time if Sensor failed	0 hour 6 min	1 min	59 hour 59 min
14	Compressor Off Time if Sensor failed	0 hour 2 min	1 min	59 hour 59 min
15	Defrost Function	1	0=disable 1=System run time 2=Compressor run time	
16	Defrost Method	2	1=Electric 2=Off-cycle 3=reverse cycle	
17	Time to first defrost(Initial frost build time)	2 hour 0 min	10 min	71 hour 59 min
18	Time to subsequent defrost	4 hour 0 min	10 min	71 hour 59 min
19	Defrost duration Time (failsafe)	0 hour 30 min	1 min	4 hour 59 min
20	Defrost Termination temperature	50°F	-40ºC (-40ºF)	40ºC (104ºF)
21	Drip time	0 min 0 sec	0 sec	59 min 59 sec
22	Defrost Cycle at power on	0	0=disable or 1=enable	
23	Evaporator Temp. Sensor	1	0=disable or 1=enable	
24	Defrost Termination Method	2	0=disable 1=Evap. Sensor 2=Control Sensor 3=Digital Switch (close)	
25	Temperature Initiated Defrost Function	1	0=disable or 1=enable	
26	Temperature Initiated Defrost (T = Tspace-Tevap.)	4°F	0ºC (0ºF)	40ºC (72ºF)
27	Temperature Initiated Defrost Time Delay	3 min 0 sec	0 sec	59 min 59 sec
28	Temperature Initiated Defrost Time Delay After Defrost	30 min 0 sec	0 sec	59 min 59 sec
29	Temperature Alarm Enable	1	0=disable or 1=enable	
30	High Temperature Alarm - Warm	42°F	-40ºC (-40ºF)	40ºC (104ºF)
31	Low Temperature Alarm - Warm	24°F	-40ºC (-40ºF)	40ºC (104ºF)
32	High Temperature Alarm - Cold	34°F	-40ºC (-40ºF)	40ºC (104ºF)
33	Low Temperature Alarm - Cold	16°F	-40ºC (-40ºF)	40ºC (104ºF)
34	Temperature Alarm Differential	4°F	1ºC (2ºF)	10ºC (18ºF)
35	Temperature Alarm Time delay	0 hour 30 min	0 min	4 hour 59 min
36	Temperature Alarm Disable Time after Start Up	2 hour 0 min	0 min	17 hour 59 min
37	Temperature Alarm Delay after Defrost	1 hour 0 min	0 min	17 hour 59 min
38	Buzzer Function	1	0=disable or 1=enable	
39	Buzzer Period	24.9 sec	0.2 sec	24.9 sec
40	Led Alarm Function	1	0=disable or 1=enable	
41	Led Alarm Period	2.0 sec	0.4 sec	24.8 sec
42	Defrost Display Lock (display indication during defrost)	1	0=display temperature read 1=lock the display on temp. 2=display DF	
43	Sensor Fault Monitoring Time	1 min 0 sec	5 sec	59 min 59 sec
44	Display Temperature Offset	0°F	-40ºC (-72ºF)	40ºC (72ºF)
45	Display Unlock Time	0 hour 10 min	0 min	1 hour 59 min
46	Show Parameter Code Number	1	0=disable or 1=enable	
47	Parameter Code Number	6	0	99
48	Maximum Compressor Run Function	0	0=disable or 1=enable	
49	Maximum Compressor Run Time	2 hour 0 min	0 min	17 hour 59 min
50	Defrost Heater Duty Cycle Function	0	0=disable or 1=enable	
51	Heater On Time	1 min 0 sec	5 sec	59 min 59 sec
52	Heater Off Time	0 min 30 sec	0 sec	59 min 59 sec

Spec Sheet

SELF-SERVICE PRODUCE EURO TABLE NARROW REVISION DATE 10/07/19

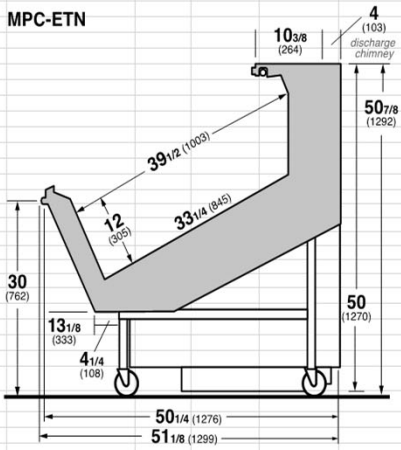
HUSSMANN - MPC-ETN SELF-CONTAINED (CHINO)

Intertek Intertek

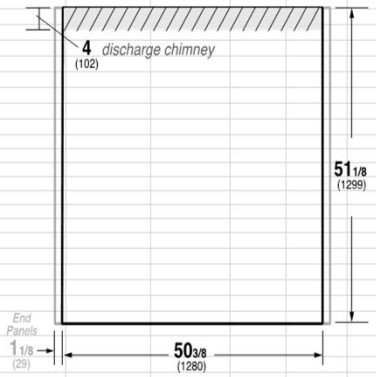
DOE 2017 Energy Efficiency Compliant

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

MPC-ETN



MPC-ETN



REFRIGERATION DATA:

CASE LENGTHS	CASE USAGE*	CONVENTIONAL CAPACITY ** (BTU/HR/FT)	DISCHARGE AIR * (°F)	VELOCITY (FT/MIN)
4',6'	SS PRODUCE	980	31~33	275~325

***APPROVED FOR NON-CRITICAL TEMP PRODUCE ONLY**
***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.
3) RATING CONDITION IS NSF TYPE I, 75°F/55% RH

REFRIGERATION DATA CONTINUED:

CONTROLLER / AIR SENSOR SETTINGS			DEFROST TYPE	FAILSAFE TIME (MIN)	DEFROST FRE-QUENCY (#/DAY)	TERM. TEMP (°F) AIR	DRIP TIME (MIN)	DEFROST WATER (LBS/DAY/FT)
USAGE	SET POINT (°F)	DIFFER-ENTIAL (°F)						
SS PRODUCE	20	4	OFF TIME	30	6	50	NA	3.8

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

END PANEL WIDTH KEY		
# OF END PNLS	END PNL WIDTH (IN.)	TOTAL ADDED LENGTH (IN.)
1	1.125	1.125
2	1.125	2.25

ELECTRICAL DATA:

STANDARD FANS, HEATERS, LED LIGHTS (115 VOLT)

CASE LENGTH	EVAPORATOR FANS					OPTIONAL CANOPY LIGHTS LED		OPTIONAL LED NOSE 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
4'	2	6.7	20	0.2	16	0.1	10	0.1	10	0.2	21	0.2	23	N/A	N/A	N/A
6'	4	6.7	15	0.5	32	0.1	15	0.1	15	0.3	30	0.3	34	N/A	N/A	N/A

CONDENSING UNIT AND EVAPORATIVE PANS

CASE LENGTH	CONDENSING UNIT					EVAPORATIVE PAN			EST. REFG. CHRG. (LBS)	NEMA PLUG
	NOM. HP	REFRIG.	Hz/Ph	Volts	RLA	VOLTS	AMPS	WATTS		
4'	1/2	R-404A	60 / 1	120	10.5	120	8.3	1000	2.7	L5-30P
6'	3/4		60 / 1	240	6.8	240	6.3	1500	4.1	L14-30P
4'	1/2	R-448A	60 / 1	120	10.5	120	8.3	1000	2.7	L5-30P
6'	3/4		60 / 1	240	9.0	240	6.3	1500	4.1	L14-30P

OPTIONAL HIGH OUTPUT LED LIGHTS (115 VOLT)

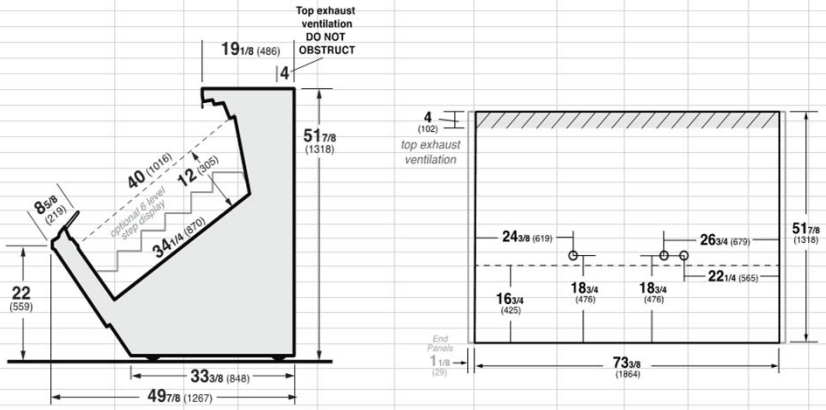
CASE LENGTH	CANOPY LIGHTS H.O. LED OPTIONAL		OPTIONAL NOSE H.O. LED		MAX. H.O. LED LOAD	
	AMPS	WATTS	AMPS	WATTS	AMPS	WATTS
4'	0.1	15	0.1	10	0.2	26
6'	N/A	N/A	N/A	N/A	N/A	N/A

SELF-SERVICE PRODUCE REVISION DATE ######

HUSSMANN - MPC-ETN-T SELF-CONTAINED (CHINO) (TOP EXHAUST)

Intertek Intertek

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.



REFRIGERATION DATA:

CASE LENGTHS	CASE USAGE*	CONVENTIONAL CAPACITY ** (BTU/HR/FT)	DISCHARGE AIR * (°F)	VELOCITY (FT/MIN)
4',6'	SEE BELOW	980	31~33	275~325

***APPROVED FOR NON-CRITICAL TEMP PRODUCE ONLY**
***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.
3) RATING CONDITION IS NSF TYPE I, 75°F/55% RH

REFRIGERATION DATA CONTINUED:

CONTROLLER / AIR SENSOR SETTINGS				DEFROST TYPE	FAILSAFE TIME (MIN)	DEFROST FRE-QUENCY (#/DAY)	TERM. TEMP (°F) AIR	DRIP TIME (MIN)	DEFROST WATER (LBS/DAY/FT)
USAGE		SET POINT (°F)	DIFFER-ENTIAL (°F)						
SELF-CONTAINED	MEAT	20	4	OFF TIME	30	6	50	NA	3.8
	DELI	25	4						
	PRODUCE	30	4						

END PANEL WIDTH KEY		
# OF END PNLS	END PNL WIDTH (IN.)	TOTAL ADDED LENGTH (IN.)
1	1.125	1.125
2	1.125	2.25

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					OPTIONAL CANOPY LIGHTS LED		OPTIONAL LED NOSE 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
4'	2	6.7	15	0.2	16	0.1	10	0.1	10	0.2	21	0.2	23	N/A	N/A	N/A
6'	4	6.7	15	0.5	32	0.1	15	0.1	15	0.3	30	0.3	34	N/A	N/A	N/A

CONDENSING UNIT AND EVAPORATIVE PANS

CASE LENGTH	CONDENSING UNIT					EVAPORATIVE PAN			EST. REFG. CHRG. 404A (OZ)	NEMA PLUG
	NOM. HP	REFRIG.	Hz/Ph	Volts	RLA	VOLTS	AMPS	WATTS		
4'	1/2	R-404A	60 / 1	120	10.5	120	8.3	1000	2.7	L5-30P
6'	3/4	R-404A	60 / 1	240	6.8	240	6.3	1500	4.1	L14-30P

OPTIONAL HIGH OUTPUT LED LIGHTS (115 VOLT)

CASE LENGTH	CANOPY LIGHTS H.O. LED OPTIONAL		OPTIONAL NOSE H.O. LED		MAX. H.O. LED LOAD	
	AMPS	WATTS	AMPS	WATTS	AMPS	WATTS
4'	0.1	15	0.1	10	0.2	26
6'	N/A	N/A	N/A	N/A	N/A	N/A

Electrical

Wiring Color Code

STANDARD CASE WIRE COLOR CODE
CODIGO DE COLORES DE LOS ALAMBRES PARA LAS VITRINAS ESTANDAR
CODE COULER POUR FILS DE BOITIER NORMALISE

COLOR DESCRIPTION	DESCRIPCION	DESCRIPTION
GROUND	TIERRA MASA	MASSE
ANTI-SWEAT	ANTICONDENSACION	ANTI-SUINTEMENT
LIGHTS	LUCES	ECLAIRAGE
RECEPTACLES	ENCHUFES	PRISE DE COURANT
T-STAT/SOLENOID 230VAC	TERMOSTATO/SOLENOIDE (230VAC)	SOUPAPE A SOLENOID (230 VAC)
T-STAT/SOLENOID 115VAC	TERMOSTATO/SOLENOIDE (115VAC)	SOUPAPE A SOLENOID (115 VAC)
T-STAT/SOLENOID 24VAC	TERMOSTATO/SOLENOIDE (24VAC)	SOUPAPE A SOLENOID (24 VAC)
FAN MOTORS	VENTILADORES	VENTILATEUR
BLUE CONDENSING UNIT	UNIDAD DE CONDENSACION	UNITE DE CONDENSATION

USE COPPER CONDUCTORS ONLY
UTILISEZ LES CONDUCTEURS DE CUIVRE SEULEMENT
UTILICE LOS CONDUCTORES DE COBRE SOLAMENTE
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.**

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.

DANGER

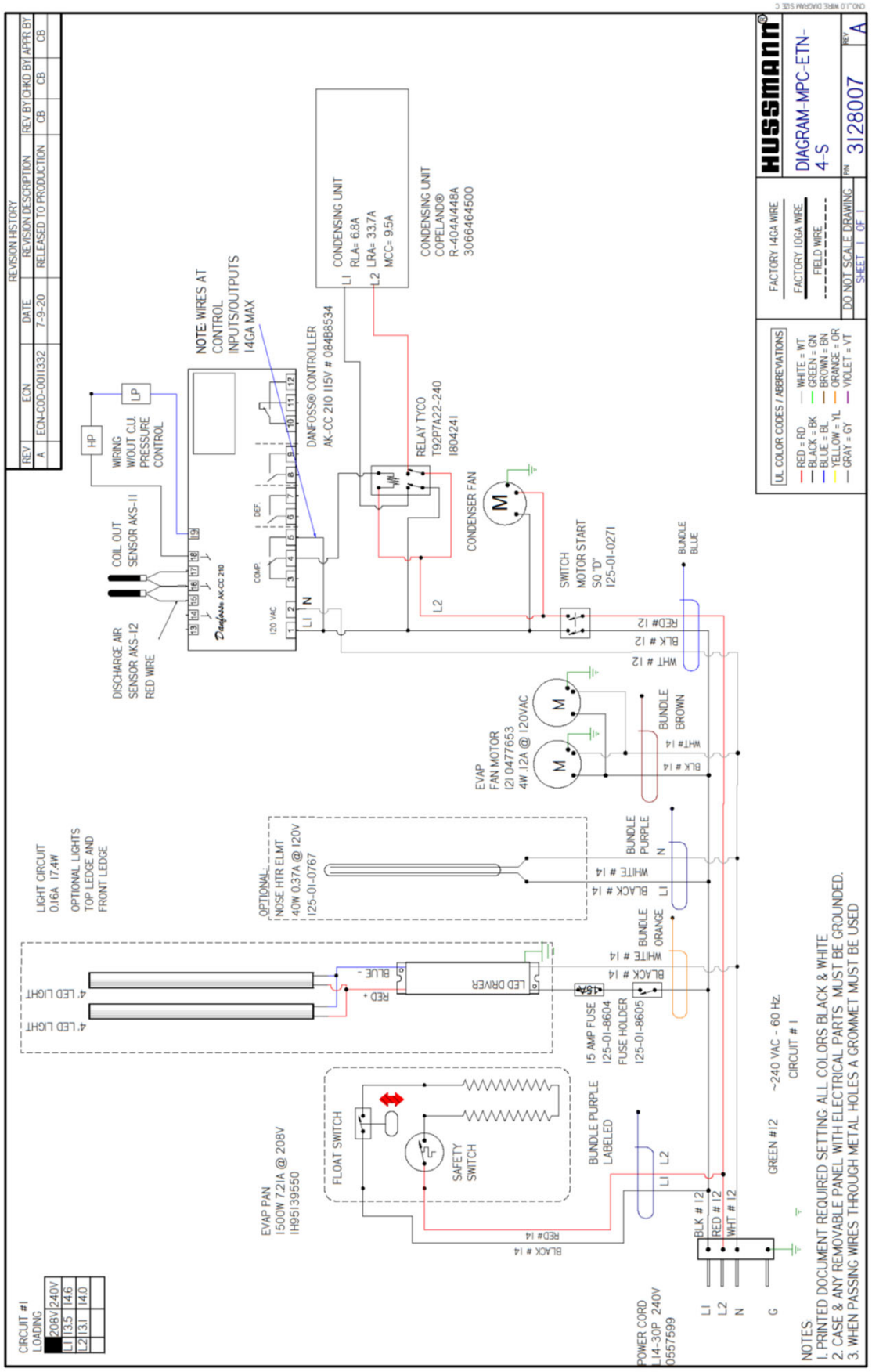
BEFORE SERVICING ALWAYS DISCONNECT ELECTRICAL POWER AT THE MAIN DISCONNECT WHEN SERVICING OR REPLACING ANY ELECTRICAL COMPONENT.

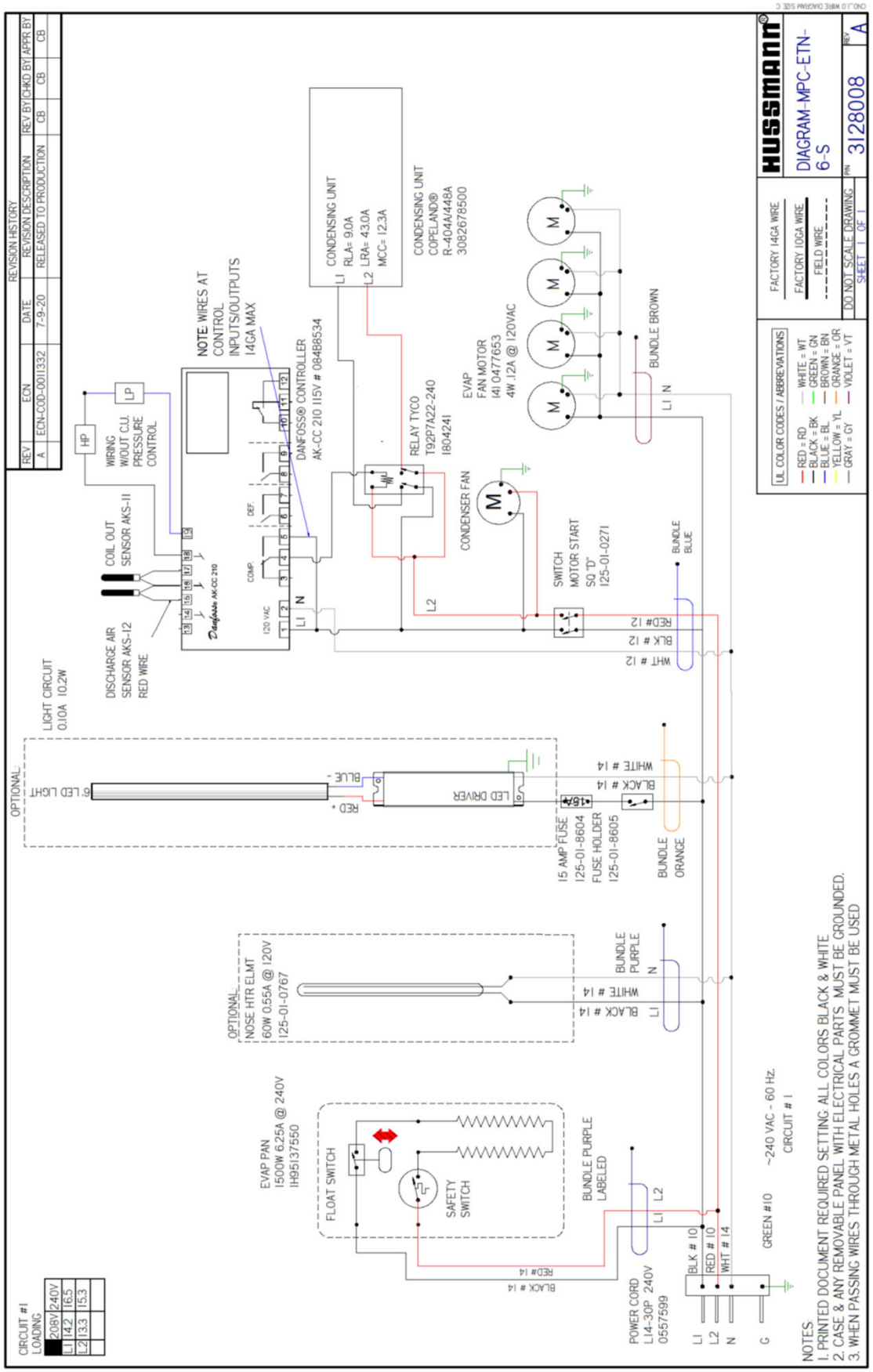
This includes (but not limited to) Fans, Heaters Thermostats, and Lights.

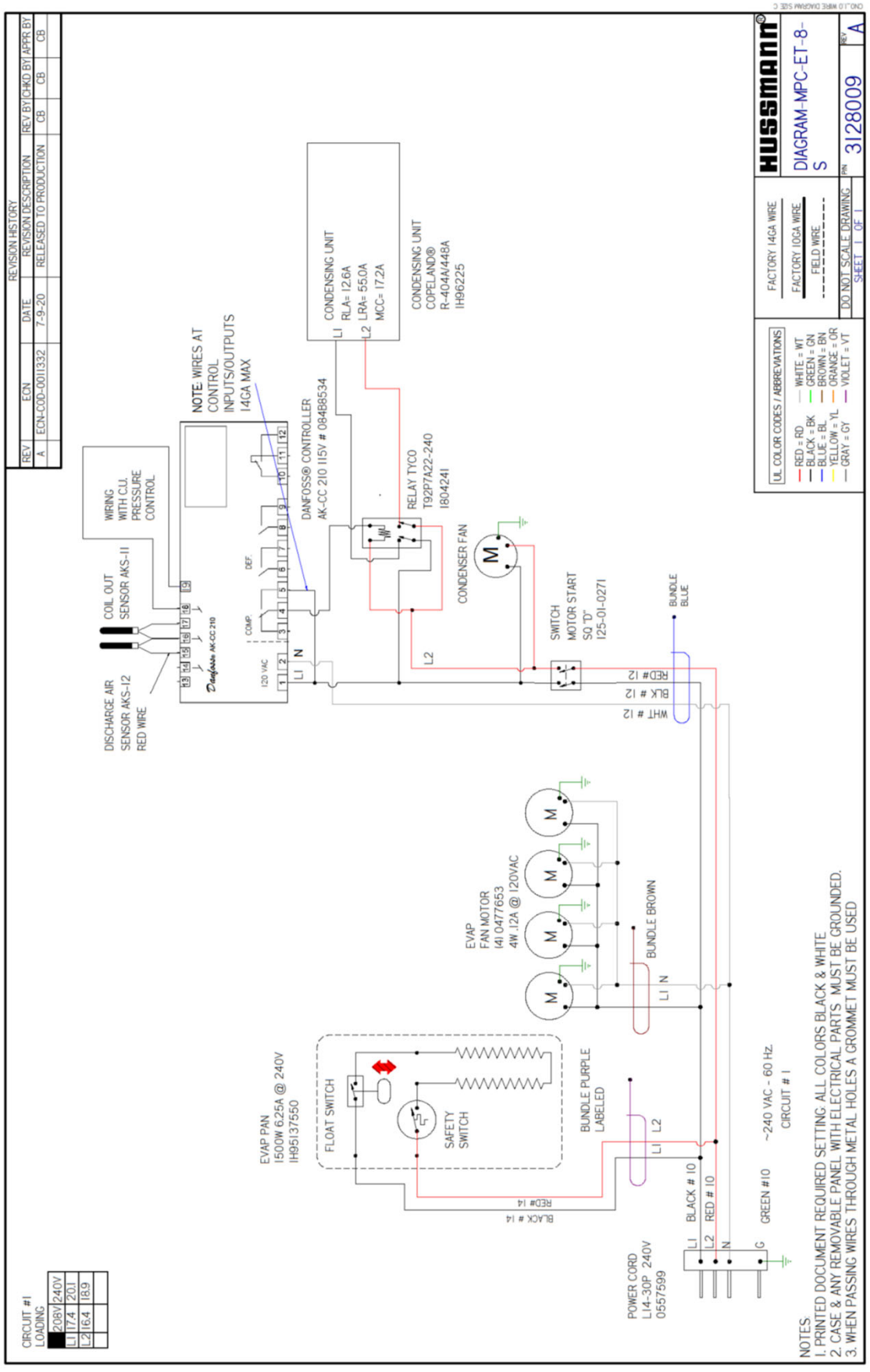
Wiring Diagram Index

MPC-ETN-4-S R-404A/448A	4'	3128007
MPC-ETN-6-S R-404A/448A	6'	3128008
MPC-ET-8-S R-404A/448A	8'	3128009
MPC-ETN-41-S R-404A/448A	4'	3128010

Wiring Diagram




REVISION HISTORY
REV | ECN | DATE | REVISION DESCRIPTION | REV BY | CHKD BY | APPR BY
A | ECN-COD-0011332 | 7-9-20 | RELEASED TO PRODUCTION | CB | CB | CB
HUSSMANN
DIAGRAM-MPC-ETN-6-S
3128008
REV A
DO NOT SCALE DRAWING
SHEET 1 OF 1
FACTORY 14GA WIRE
FACTORY 10GA WIRE
FIELD WIRE
UL COLOR CODES / ABBREVIATIONS
RED = RD
BLACK = BK
BLUE = BL
YELLOW = YL
GRAY = GY
WHITE = WT
GREEN = GN
BROWN = BN
ORANGE = OR
VIOLET = VT
NOTE: WIRES AT CONTROL INPUTS/OUTPUTS 14GA MAX
DANFOSS® CONTROLLER AK-CC 210 115V # 084B8534
CONDENSING UNIT RLA= 9.0A LRA= 43.0A MCC= 12.3A
CONDENSING UNIT COPELAND® R-404A/448A 3082678500
RELAY TYCO T92P7A22-240 1804241
EVAP FAN MOTOR 141 0477653 4W .12A @ 120VAC
CONDENSER FAN
SWITCH MOTOR START SQ "D" 125-01-0271
BUNDLE BROWN
BUNDLE BLUE
BUNDLE ORANGE
BUNDLE PURPLE
BUNDLE PURPLE LABELED
WHT # 12
BLK # 12
RED# 12
WHITE # 14
BLACK # 14
15 AMP FUSE 125-01-8604
FUSE HOLDER 125-01-8605
OPTIONAL
6' LED LIGHT
LED DRIVER
LIGHT CIRCUIT 0.10A 10.2W
OPTIONAL
NOSE HTR ELMT 60W 0.55A @ 120V 125-01-0767
EVAP PAN 1500W 6.25A @ 240V 1H95137550
FLOAT SWITCH
SAFETY SWITCH
DISCHARGE AIR SENSOR AKS-12 RED WIRE
COIL OUT SENSOR AKS-11
WIRING W/OUT C.U. PRESSURE CONTROL
HP
LP
POWER CORD L14-30P 240V 0557599
BLK # 10
RED # 10
WHT # 14
GREEN #10
~240 VAC - 60 Hz.
CIRCUIT # 1
CIRCUIT #1 LOADING
208V 240V
L1 14.2 16.5
L2 13.3 15.3
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


REVISION HISTORY
REV | ECN | DATE | REVISION DESCRIPTION | REV BY | CHKD BY | APPR BY
A | ECN-COD-0011332 | 7-9-20 | RELEASED TO PRODUCTION | CB | CB | CB
NOTE: WIRES AT CONTROL INPUTS/OUTPUTS 14GA MAX
WIRING WITH C.U. PRESSURE CONTROL
COIL OUT SENSOR AKS-11
DISCHARGE AIR SENSOR AKS-12 RED WIRE
DANFOSS® CONTROLLER AK-CC 210 115V # 084B8534
CONDENSING UNIT RLA= 12.6A LRA= 55.0A MCC= 17.2A
CONDENSING UNIT COPELAND® R-404A/448A 1H96225
RELAY TYCO T92P7A22-240 1804241
CONDENSER FAN
SWITCH MOTOR START SQ "D" 125-01-0271
BUNDLE BLUE
WHT # 12
BLK # 12
RED# 12
EVAP FAN MOTOR (4) 0477653 4W .12A @ 120VAC
BUNDLE BROWN
EVAP PAN 1500W 6.25A @ 240V 1H95137550
FLOAT SWITCH
SAFETY SWITCH
BUNDLE PURPLE LABELED
BLACK # 14
RED# 14
POWER CORD L14-30P 240V 0557599
BLACK # 10
RED # 10
GREEN #10
~240 VAC - 60 Hz.
CIRCUIT # 1
NOTES
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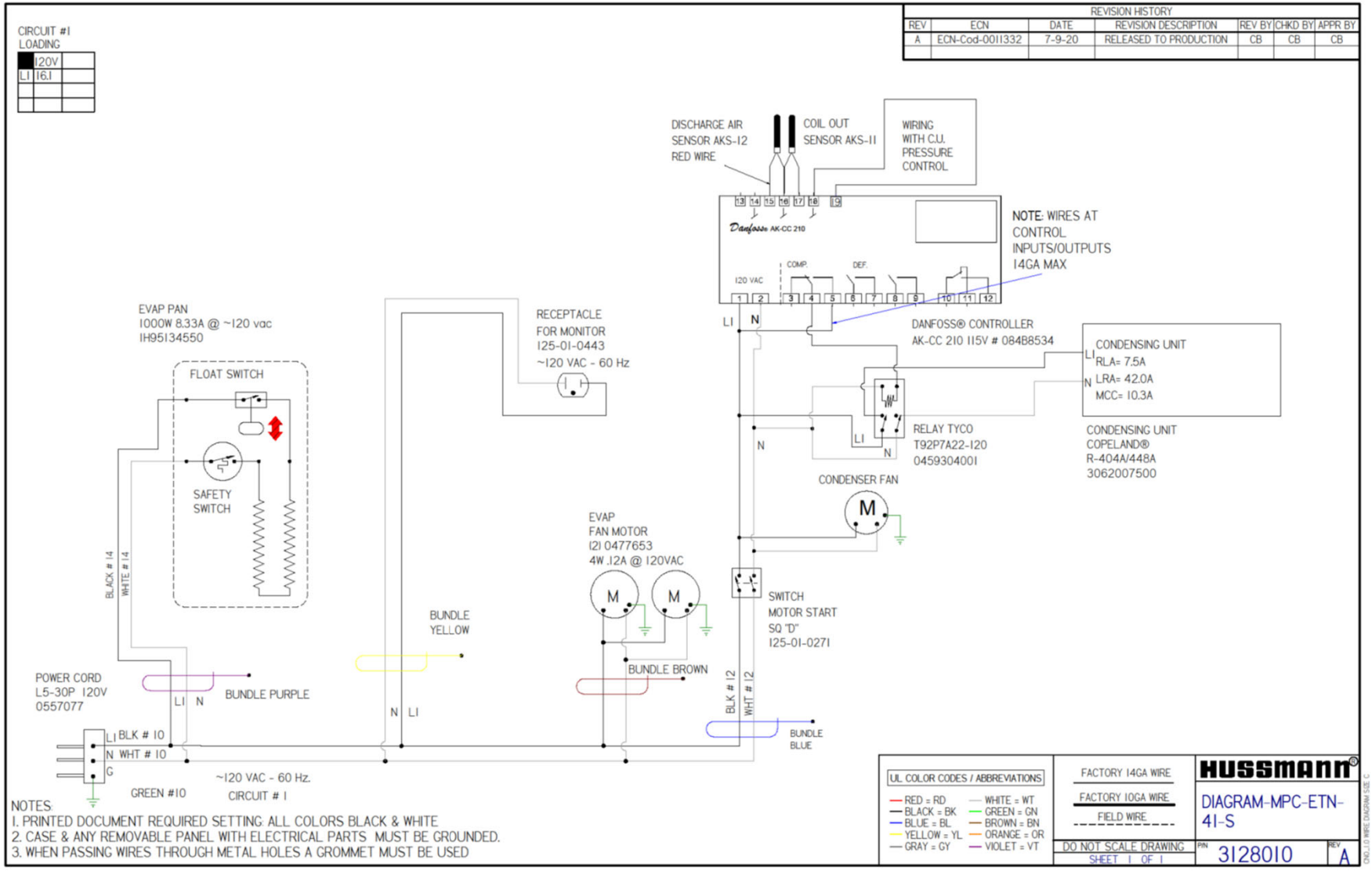
CIRCUIT #1 LOADING
208V 240V
L1 17.4 20.1
L2 16.4 18.9
UL COLOR CODES / ABBREVIATIONS
RED = RD
BLACK = BK
BLUE = BL
YELLOW = YL
GRAY = GY
WHITE = WT
GREEN = GN
BROWN = BN
ORANGE = OR
VIOLET = VT
FACTORY 14GA WIRE
FACTORY 10GA WIRE
FIELD WIRE
DO NOT SCALE DRAWING
SHEET 1 OF 1
HUSSMANN
DIAGRAM-MPC-ET-8-S
PN 3128009
REV A


CIRCUIT #1
LOADING
120V
LI 16.1
REVISION HISTORY
REV | ECN | DATE | REVISION DESCRIPTION | REV BY | CHKD BY | APPR BY
A | ECN-Cod-0011332 | 7-9-20 | RELEASED TO PRODUCTION | CB | CB | CB
DISCHARGE AIR SENSOR AKS-12 RED WIRE
COIL OUT SENSOR AKS-11
WIRING WITH C.U. PRESSURE CONTROL
Danfoss AK-CC 210
NOTE: WIRES AT CONTROL INPUTS/OUTPUTS 14GA MAX
120 VAC
COMP.
DEF.
DANFOSS® CONTROLLER AK-CC 210 115V # 084B8534
CONDENSING UNIT
RLA= 7.5A
LRA= 42.0A
MCC= 10.3A
CONDENSING UNIT COPELAND®
R-404A/448A
3062007500
RELAY TYCO
T92P7A22-120
0459304001
CONDENSER FAN
EVAP PAN
1000W 8.33A @ ~120 vac
1H95134550
FLOAT SWITCH
SAFETY SWITCH
RECEPTACLE FOR MONITOR
125-01-0443
~120 VAC - 60 Hz
EVAP FAN MOTOR
(2) 0477653
4W .12A @ 120VAC
SWITCH MOTOR START
SQ "D"
125-01-0271
BUNDLE YELLOW
BUNDLE BROWN
BUNDLE BLUE
BUNDLE PURPLE
BLACK # 14
WHITE # 14
BLK # 12
WHT # 12
POWER CORD
L5-30P 120V
0557077
BLK # 10
WHT # 10
GREEN #10
~120 VAC - 60 Hz.
CIRCUIT # 1
NOTES:
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VIOLET = VT
FACTORY 14GA WIRE
FACTORY 10GA WIRE
FIELD WIRE
DO NOT SCALE DRAWING
SHEET 1 OF 1
HUSSMANN®
DIAGRAM-MPC-ETN-41-S
P/N 3128010
REV A

Danfoss Controller Operation

ENGINEERING TOMORROW

User Guide

Controller for temperature control
AK-CC 210

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

Service

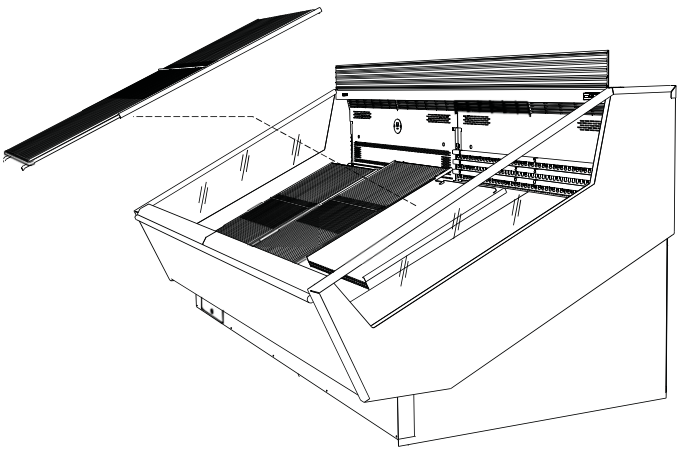
WARNING !

DISCONNECT THE ELECTRICAL POWER WHEN SERVICING OR REPLACING ANY ELECTRICAL COMPONENT.

IMPORTANT INFORMATION

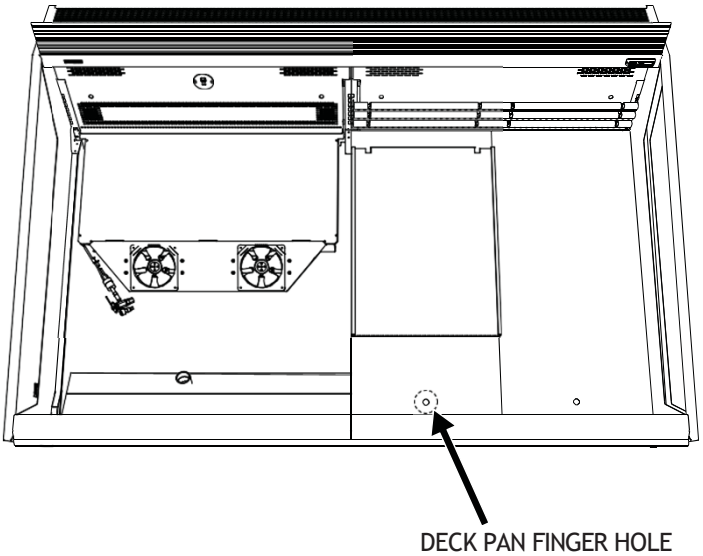
FOR PROMPT SERVICE
When contacting the factory regarding problems, be sure to have the Case Model and Serial Number handy. This information is on a plate located on the case itself.

Produce and Deck Pan Assembly



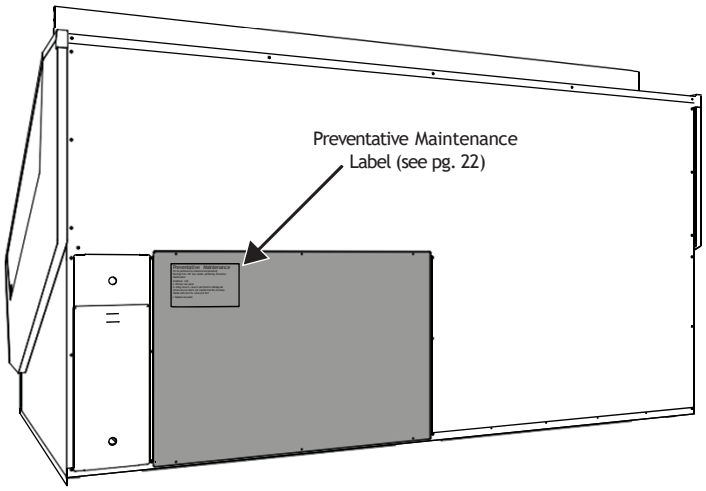
Gain access to Coil fan assembly

Lift bottom case deck pan using illustrated finger/access hole to gain access to coil and fan assembly .



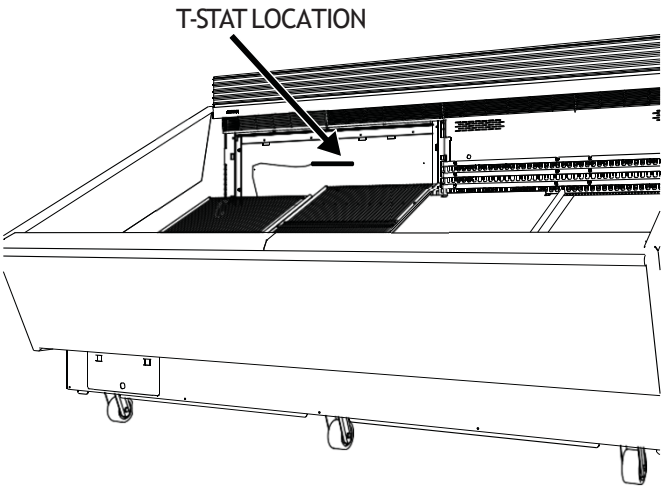
To access compressor area

Remove all screws around the perimeter of the access panel behind the case to expose compressor unit and condensate pan through open section of the rear wall.



Thermostat Sensor Access

Removing the rear interior wall will allow for acces to the Thermostat Sensor placed above the Coil against the rear wall.



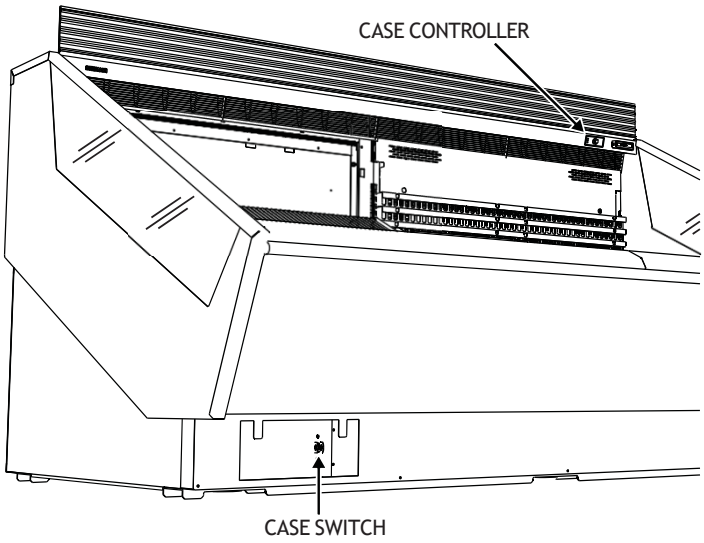
Service

Tips and Troubleshooting

Before calling for service:

- Check power. Ensure reliable electrical power supply to the equipment
- Check shelf loading. Overstocking will adversely affect case performance.
- If frost is collecting on fixture or product, verify that store Humidity Control is working properly, and that no outside doors/windows allow moisture into store.

Condensor and Danfoss Access Panel

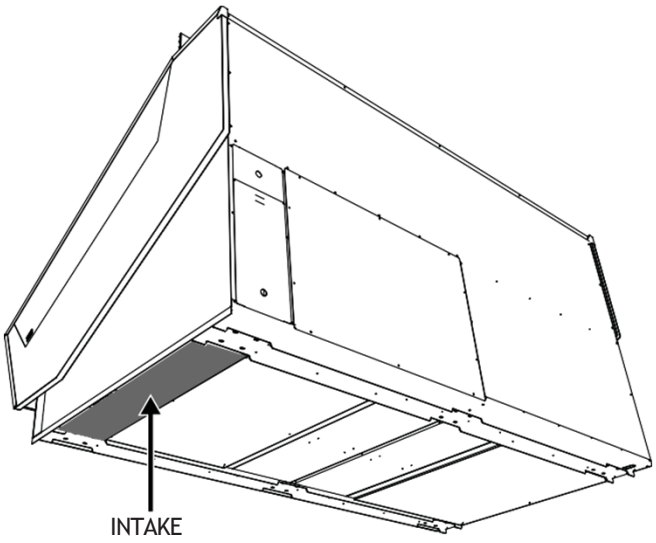


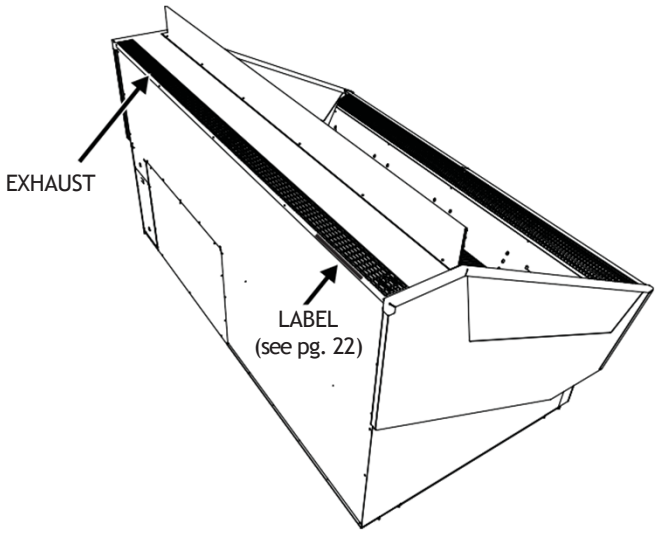
Removing the front panel will allow access to the follow components:

A. Thermostat Display
B. Danfoss Control
C. Case switch

Intake and Exhaust Vents

Be sure to keep vents clear and free of buildup. DO NOT BLOCK case Bottom or Top panel vents (supplies critical intake airflow to compressor.)





Maintenance

Case Cleaning

To insure 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. Sanitizing solutions will not harm the interior bottom,

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)
- DO NOT USE A CLEANING OR SANITIZING SOLUTION THAT HAS AN OIL BASE (these will dissolve the butyl sealants) or an AMMONIA BASE (this will corrode the copper components of the case)

Service

- Ensure front and rear intake panel vents remain clear and clean of any debris to ensure optimal case performance.
- 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.

Tips and Troubleshooting

Before calling for service:

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- Check shelf loading. Overstocking will adversely affect case performance.
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Warranty

Hussmann Specialty Products Service Department

IMPORTANT!
FPR PROMPT SERVICE WHEN CONTACTING HUSSMANN CORPORATION BE SURE TO HAVE CASE MODEL AND SERIAL NUMBER IN HAND

For any warranty or service issues not covered by this manual, for tech support, or for warranty service calls, please contact the Hussmann Specialty Products Service Department

If you have any questions concerning information on these instructions please contact:

Hussmann Technical Support.....866-785-8499
Hussmann Service Call Center.....800-922-1919
Hussmann Parts Department.....855-487-7778
Hussmann Warranty.....800-398-740