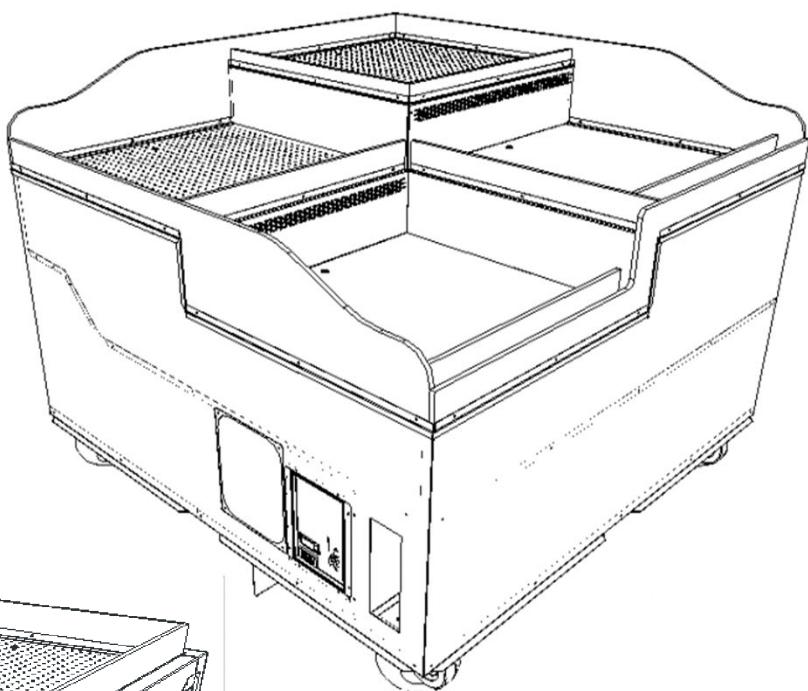
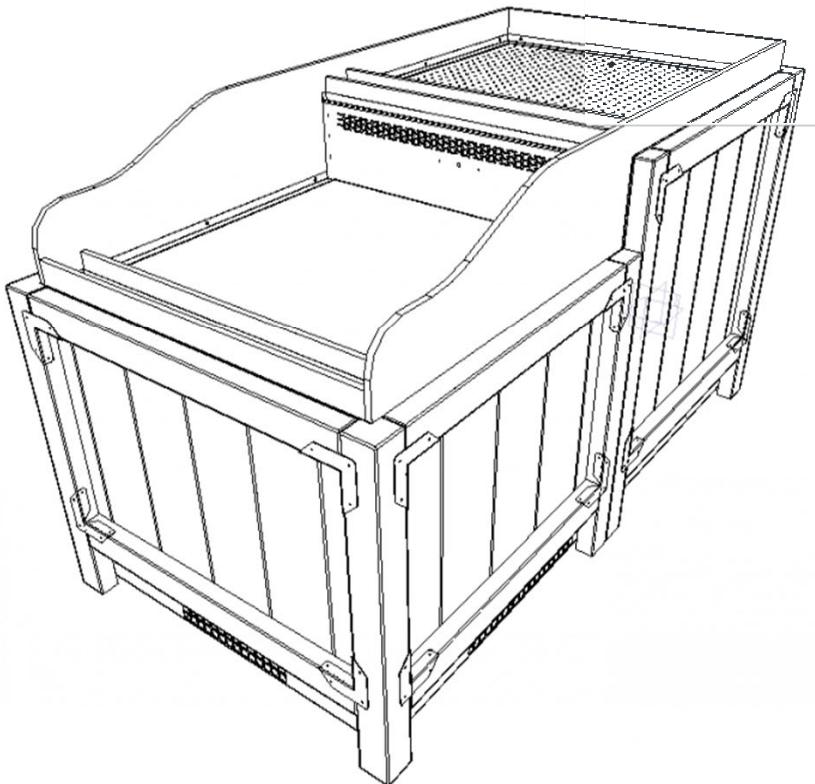


HUSSMANN®/CHINO
MOBILE PRODUCE CASE
REMOTE
SELF-CONTAINED

Installation
& Operation
Manual
REV. 1123



**MOBILE PRODUCE CASE
REMOTE
SELF-CONTAINED**

Table of Contents

General Information	3
Installation	4
Case Refrigeration	5
Condensate Pan Setup	5
Controller Programmed Parameters	6
Electrical	10
Wiring Diagram Index	10
Wiring Diagrams and Spec Sheets	11-19
Service	20
Maintenance	23
Warranty	24
Controller Manuals	26-27

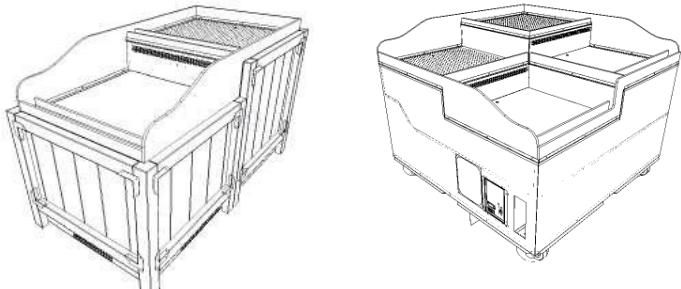
General Information

Case Description:

This Booklet specifically covers the

Following models:

Mobile Produce MPC



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 as well as a remote option. 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 . 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
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(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.

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

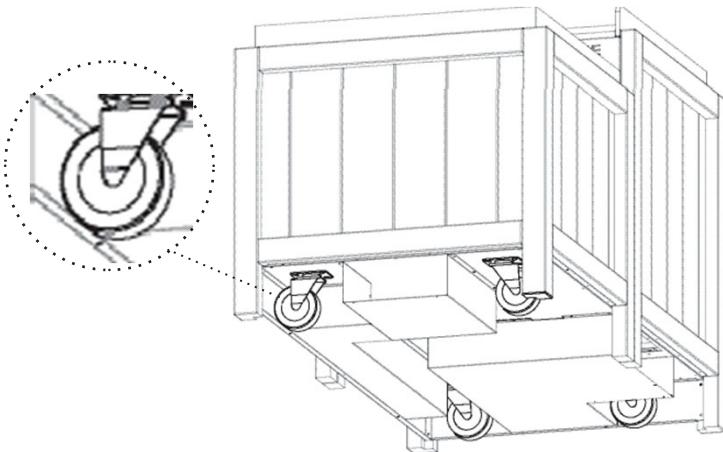
Skid Removal

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.

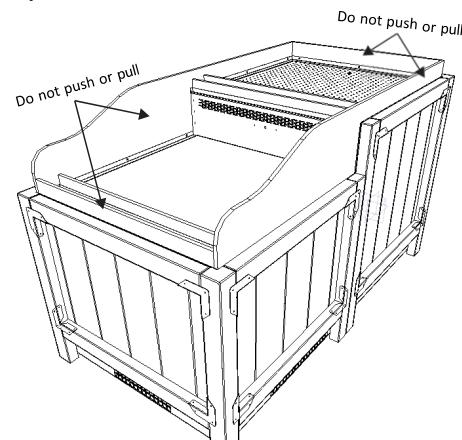
Casters not only speed up the process, but they also reduce the chance of damage from raising and lowering cases with "J" bars to place them on dollies, skates or rollers. In most situations, one or two persons can move the case with ease.



Do not Push, Pull, Adjust or Manipulate the Mobile Produce Case by any glass component.

Doing so will result in:

- Severe damage to such components
- Glass or Acrylic breakage
- Serious injury



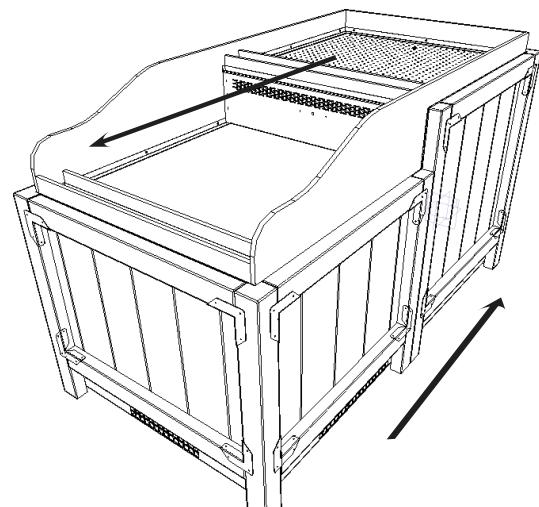
Never stand on the Mobile Produce Case deck for any reason. These surfaces are not steps and are not designed to support such loads.

Doing so will result in:

- Damage to case
- Serious injury to user

Moving Mobile Produce Case

Refer to shaded areas of description below for proper grasp locations in movement of case which will not damage Mobile Produce Case or components.



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 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	29°F to 33°F	20 minutes every 4 hours	Off Time	52°F Evap Temp	20

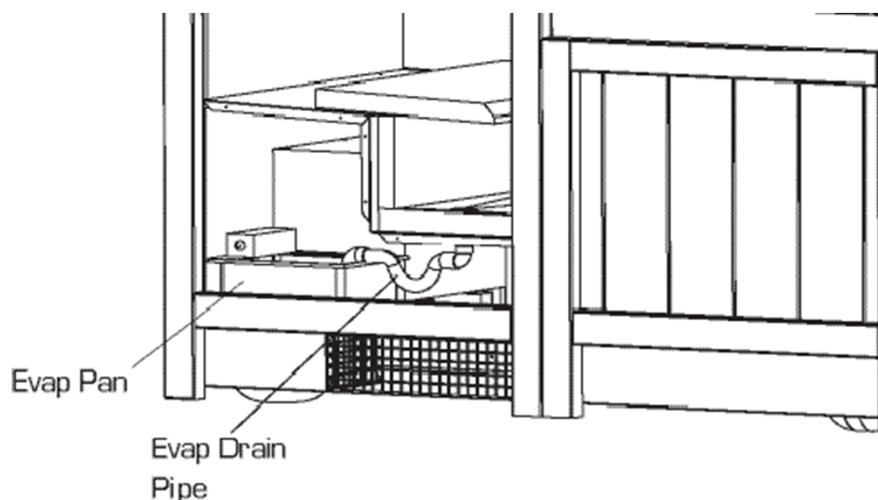
1. The Controller controls refrigeration temperature. This is factory installed in the control panel. Adjust this control to maintain the discharge air temperature shown. Measure discharge air temperatures at the center of the honeycomb. The defrost setting is factory set as shown above.

Condensate Pan Setup

Setup:

There is one condensate evaporator pan on this unit for self-contained models. The drain pipe from the case feed 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

MPC 3x6

PGM0008A01

STANDARD CASE REV A 8/7/17

Parameter	Co e	Min	Max	Default	A tual (C)	A tual (F)
Temperature (set point)						
produce (Type I)	---	-50.0°C	50.0°C	2.0°C	-2.2	28
Thermostat						
Differential	r01	0.1 K	20.0K	2.0 K	3.9	7
Max. limitation of setpoint setting	r02	-49.0°C	50°C	50.0°C	4.4	40
Min. limitation of setpoint setting	r03	-50.0°C	49.0°C	-50.0°C	-3.9	25
Adjustment of temperature indication	r04	-20.0 K	20.0 K	0.0 K	0.0 K	
Temperature unit (°C=0/°F=1)	r05	0	1	0	1	
Correction of the signal from S4	r09	-10.0 K	+10.0 K	0.0 K	0.0 K	
Correction of the signal from S3	r10	-10.0 K	+10.0 K	0.0 K	0.0 K	
Manual service, stop regulation, start regulation (-1, 0, 1)	r12	-1	1	0	1	
Displacement of reference during night operation	r13	-10.0 K	10.0 K	0.0 K	0.0 K	
Definition and weighting, if applicable, of thermostat sensors - S4 % (100% = S4, 0% = S3)	r15	0 %	100%	100%	100%	
The heating function is started a number of degrees below the thermostats cutout temperature	r36	-15.0 K	-3.0 K	-15.0 K	-15.0 K	
Activation of reference displacement r40	r39	OFF	ON	OFF	OFF	
Value of reference displacement (activate via r39 or DI)	r40	-50.0 K	50.0 K	0.0 K	0.0 K	
Alarm						
Delay for temperature alarm	A03	0 min	240 min	30 min	30 min	
Delay for door alarm	A04	0 min	240 min	60 min	60 min	
Delay for temperature alarm after defrost	A12	0 min	240 min	90 min	60	
High alarm limit	A13	-50.0°C	50.0°C	8.0°C	7.8	46
Low alarm limit	A14	-50.0°C	50.0°C	-30.0°C	-5.6	22
Alarm delay D11	A27	0 min	240 min	30 min	30 min	
Alarm delay D12	A28	0 min	240 min	30 min	30 min	
Signal for alarm thermostat. S4 % (100% = S4, 0% = S3)	A36	0 %	100%	100%	100%	
Compressor						
Min. ON-time	c01	0 min	30 min	0 min	1	
Min. OFF-time	c02	0 min	30 min	0 min	2	
Time delay for cutin of comp.2	c05	0 sec	999 sec	0 sec	0 sec	
Compressor relay 1 must cutin and out inversely (NC-function)	c30	0 OFF	1 ON	0 OFF	0 OFF	
Defrost						
Defrost method (none/;</=AS/>RIN<)	d01	no	bri	<;	<;	
Defrost stop temperature	d02	0.0°C	25.0°C	6.0°C	12.2	54
Interval between defrost starts	d03	0 hours	240	8 hours	6	
Max. defrost duration	d04	0 min	180 min	45 min	30	
Displacement of time on cutin of defrost at start-up	d05	0 min	240 min	0 min	0 min	
Drip off time	d06	0 min	60 min	0 min	0 min	
Delay for fan start after defrost	d07	0 min	60 min	0 min	0 min	
Fan start temperature	d08	-15.0°C	0.0°C	-5.0°C	-5.0°C	
Fan cutin during defrost	d09	0	2	1	1	
0: Stopped 1: Running 2: Running during pump down and defrost						
Defrost Sensor (0=time, 1=S5. 2=S4)	d10	0	2	0	0	
pump down delay	d16	0 min	60 min	0 min	0 min	
Drain delay	d17	0 min	60 min	0 min	0 min	
Max. aggregate refrigeration time between two defrosts	d18	0 hours	48 hours	0 hours		
Defrost on demand - S5 temperature's permitted variation during frost build-up. On central plant choose 20 K (=off)	d19	0.0 K	20.0 k	20.0 K		
Delay of hot gas defrost	d23	0 min	60 min	0 min	0 min	
Fan						
Fan stop at cutout compressor	F01	no	yes	no	no	
Delay of fan stop	F02	0 min	30 min	0 min	0 min	
Fan stop temperature (S5)	F04	-50.0°C	50.0°C	50.0°C	50.0°C	

HACCP					
Actual temperature measurement for the HACCP	h01				
Last registered peak temperature	h10				
Selection of function and sensor for the HACCP function.	h11	0	2	0	0
HACCP function. 1 = S4 used (maybe also S3). 2 = S5					
Alarm limit for the HACCP function	h12	-50.0°C	50.0°C	8.0°C	8.0°C
Time delay for the HACCP alarm	h13	0 min.	240 min.	30 min.	30 min.
Select signal for the HACCP function. S4% (100% = S4,	h14	0%	100%	100%	100%
Real time clock					
Six start times for defrost.	t01-	0 hours	23 hours	0 hours	0 hours
Setting of hours. 0=OFF					
Six start times for defrost.	t11-	0 min	59 min	0 min	0 min
Setting of minutes. 0=OFF					
Clock - Setting of hours	t07	0 hours	23 hours	0 hours	0 hours
Clock - Setting of minute	t08	0 min	59 min	0 min	0 min
Clock - Setting of date	t45	1	31	1	1
Clock - Setting of month	t46	1	12	1	1
Clock - Setting of year	t47	0	99	0	0
Miscellaneous					
Delay of output signals after start-up	o01	0 s	600 s	5 s	5 s
Input signal on DI1. Function:	o02	1	11	0	0
Network address	o03	0	240	0	0
On/Off switch (Service Pin message)	o04	OFF	ON	OFF	OFF
Access code 1 (all settings)	o05	0	100	0	0
Used sensor type (Pt /PTC/NTC)	o06	Pt	ntc	Pt	Pt
Display step = 0.5 (normal 0.1 at Pt sensor)	o15	no	yes	no	no
Max hold time after coordinated defrost	o16	0 min	60 min	20	20
Select signal for display view. S4% (100% = S4, 0% = S3)	o17	0%	100%	100%	100%
Input signal on DI2. Function:	o37	0	12	0	0
Configuration of light function (relay 4)	o38	1	3	1	1
Activation of light relay (only if o38=2)	o39	OFF	ON	OFF	OFF
Rail heat On time during day operations	o41	0%	100%	100	100
Rail heat On time during night operations	o42	0%	100%	100	100
Rail heat period time (On time < Off time)	o43	6 min	60 min	10 min	10 min
Case cleaning. 0=no case cleaning. 1=Fans only. 2>All	o46	0	2	0	0
Selection of EL diagram. See overview page 6	o61	1	10	1	1
Download a set of predetermined settings. See overview	o62	0	6	0	0
Access code 2 (partly access)	o64	0	100	0	0
Save the controllers present settings to the	o65	0	25	0	0
Load a set of settings from the programming key	o66	0	25	0	0
Replace the controllers factory settings with the present	o67	OFF	On	OFF	OFF
Service					
Status codes are shown on page 17	S0-S33				
Temperature measured with S5 sensor	u09				
Status on DI1 input. on/1=closed	u10				
Temperature measured with S3 sensor	u12				
Status on night operation (on or off) 1=closed	u13				
Temperature measured with S4 sensor	u16				
Thermostat temperature	u17				
Read the present regulation reference	u28				
Status on DI2 output. on/1=closed	u37				
Temperature shown on display	u56				
Measured temperature for alarm thermostat	u57				
Status on relay for cooling	u58				
Status on relay for fan	u59				
Status on relay for defrost	u60				
Status on relay for railheat	u61				
Status on relay for alarm	u62				
Status on relay for light	u63				
Status on relay for valve in suction line	u64				
Status on relay for compressor 2	u67				

*) Can only be set when regulation is stopped (r12=0)

**) Can be controlled manually, but only when r12=-1

***) With access code 2 the access to these menus will be limited

Factory setting

If you need to return to the factory-set values, it can be done in this way:

- Cut out the supply voltage to the controller

- Keep both buttons depressed at the same time as you reconnect the supply voltage

MPC 6x6					PGM0011A01	
Parameter	Co e	Min	Max	Default	Actual (C)	Actual (F)
Temperature (set point)					STANDARD CASE REV A 8/7/1	
produce (Type I)	---	-50.0°C	50.0°C	2.0°C	-2.2	28
Thermostat						
Differential	r01	0.1 K	20.0K	2.0 K	3.9	7
Max. limitation of setpoint setting	r02	-49.0°C	50°C	50.0°C	4.4	40
Min. limitation of setpoint setting	r03	-50.0°C	49.0°C	-50.0°C	-3.9	25
Adjustment of temperature indication	r04	-20.0 K	20.0 K	0.0 K	0.0 K	
Temperature unit (°C=0/°F=1)	r05	0	1	0	1	
Correction of the signal from S4	r09	-10.0 K	+10.0 K	0.0 K	0.0 K	
Correction of the signal from S3	r10	-10.0 K	+10.0 K	0.0 K	0.0 K	
Manual service, stop regulation, start regulation (-1, 0, 1)	r12	-1	1	0	1	
Displacement of reference during night operation	r13	-10.0 K	10.0 K	0.0 K	0.0 K	
Definition and weighting, if applicable, of thermostat sensors - S4% (100%-S4, 0%-S3)	r15	0%	100%	100%	100%	
The heating function is started a number of degrees below the thermostats cutout temperature	r36	-15.0 K	-3.0 K	-15.0 K	-15.0 K	
Activation of reference displacement r40	r39	OFF	ON	OFF	OFF	
Value of reference displacement (activate via r39 or DI)	r40	-50.0 K	50.0 K	0.0 K	0.0 K	
Alarm						
Delay for temperature alarm	A03	0 min	240 min	30 min	30 min	
Delay for door alarm	A04	0 min	240 min	60 min	60 min	
Delay for temperature alarm after defrost	A12	0 min	240 min	90 min	60	
High alarm limit	A13	-50.0°C	50.0°C	8.0°C	7.8	46
Low alarm limit	A14	-50.0°C	50.0°C	-30.0°C	-5.6	22
Alarm delay Dl1	A27	0 min	240 min	30 min	30 min	
Alarm delay Dl2	A28	0 min	240 min	30 min	30 min	
Signal for alarm thermostat. S4% (100%-S4, 0%-S3)	A36	0%	100%	100%	100%	
Compressor						
Min. ON-time	c01	0 min	30 min	0 min	1	
Min. OFF-time	c02	0 min	30 min	0 min	2	
Time delay for cutin of comp.2	c05	0 sec	999 sec	0 sec	0 sec	
Compressor relay 1 must cutin and out inversely (NC-function)	c30	0 OFF	1 ON	0 OFF	0 OFF	
Defrost						
Defrost method (none/<;/=AS/>RIN<)	d01	no	bri	<;	<;	
Defrost stop temperature	d02	0.0°C	25.0°C	6.0°C	12.2	54
Interval between defrost starts	d03	0 hours	240	8 hours	6	
Max. defrost duration	d04	0 min	180 min	45 min	30	
Displacement of time on cutin of defrost at start-up	d05	0 min	240 min	0 min	0 min	
Drip off time	d06	0 min	60 min	0 min	0 min	
Delay for fan start after defrost	d07	0 min	60 min	0 min	0 min	
Fan start temperature	d08	-15.0°C	0.0°C	-5.0°C	-5.0°C	
Fan cutin during defrost 0: Stopped 1: Running 2: Running during pump down and defrost	d09	0	2	1	1	
Defrost Sensor (0=time, 1=S5. 2=S4)	d10	0	2	0	0	
pump down delay	d16	0 min	60 min	0 min	0 min	
Drain delay	d17	0 min	60 min	0 min	0 min	
Max. aggregate refrigeration time between two defrosts	d18	0 hours	48 hours	0 hours		
Defrost on demand - S5 temperature's permitted variation during frost build-up. On central plant choose 20 K (=off)	d19	0.0 K	20.0 k	20.0 K		
Delay of hot gas defrost	d23	0 min	60 min	0 min	0 min	
Fan						
Fan stop at cutout compressor	F01	no	yes	no	no	
Delay of fan stop	F02	0 min	30 min	0 min	0 min	
Fan stop temperature (S5)	F04	-50.0°C	50.0°C	50.0°C	50.0°C	

HACCP					
Actual temperature measurement for the HACCP	h01				
Last registered peak temperature	h10				
Selection of function and sensor for the HACCP HACCP function. 1 = S4 used (maybe also S3). 2 = S5	h11	0	2	0	0
Alarm limit for the HACCP function	h12	-50.0 C	50.0 C	8.0 C	8.0 C
Time delay for the HACCP alarm	h13	0 min.	240 min.	30 min.	30 min.
Select signal for the HACCP function. S4% (100% = S4,	h14	0%	100%	100%	100%
Real time clock					
Six start times for defrost. Setting of hours. 0=OFF	t01-	0 hours	23 hours	0 hours	0 hours
Six start times for defrost. Setting of minutes. 0=OFF	t11-	0 min	59 min	0 min	0 min
Clock - Setting of hours	t07	0 hours	23 hours	0 hours	0 hours
Clock - Setting of minute	t08	0 min	59 min	0 min	0 min
Clock - Setting of date	t45	1	31	1	1
Clock - Setting of month	t46	1	12	1	1
Clock - Setting of year	t47	0	99	0	0
Miscellaneous					
Delay of output signals after start-up	001	0 s	600 s	5 s	5 s
input signal on Di1. Function4	002	1	11	0	0
Network address	003	0	240	0	0
On/Off switch (Service Pin message)	004	OFF	ON	OFF	OFF
Access code 1 (all settings)	005	0	100	0	0
Used sensor type (Pt /PTC/NTC)	006	Pt	ntc	Pt	Pt
Display step = 0.5 (normal 0.1 at Pt sensor)	015	no	yes	no	no
Max hold time after coordinated defrost	016	0 min	60 min	20	20
Select signal for display view. S4% (100% = S4, 0% = S3)	017	0%	100%	100%	100%
input signal on Di2. Function4	037	0	12	0	0
Configuration of light function (relay 4)	038	1	3	1	1
Activation of light relay (only if o38=2)	039	OFF	ON	OFF	OFF
Rail heat On time during day operations	041	0%	100%	100	100
Rail heat On time during night operations	042	0%	100%	100	100
Rail heat period time (On time < Off time)	043	6 min	60 min	10 min	10 min
Case cleaning. 0=no case cleaning. 1=Fans only. 2>All	046	0	2	0	0
Selection of EL diagram. See overview page 6	061	1	10	1	1
Download a set of predetermined settings. See	062	0	6	0	0
Access code 2 (partly access)	064	0	100	0	0
Save the controllers present settings to the	065	0	25	0	0
Load a set of settings from the programming key	066	0	25	0	0
Replace the controllers factory settings with the	067	OFF	On	OFF	OFF
Service					
Status codes are shown on page 17	S0-S33				
Temperature measured with S5 sensor	u09				
Status on Di1 input. on/1=closed	u10				
Temperature measured with S3 sensor	u12				
Status on night operation (on or off) 1=closed	u13				
Temperature measured with S4 sensor	u16				
Thermostat temperature	u17				
Read the present regulation reference	u28				
Status on Di2 output. on/1=closed	u37				
Temperature shown on display	u56				
Measured temperature for alarm thermostat	u57				
Status on relay for cooling	u58				
Status on relay for fan	u59				
Status on relay for defrost	u60				
Status on relay for railheat	u61				
Status on relay for alarm	u62				
Status on relay for light	u63				
Status on relay for valve in suction line	u64				
Status on relay for compressor 2	u67				

Electrical

Wiring Color Code

STANDARD CASE WIRE COLOR CODE CÓDIGO DE COLORES DE LOS ALAMBRES PARA LAS VITRINAS ESTÁNDAR CODE COULEUR POUR FILS DE BOÎTIER NORMALISÉ		
COLOR DESCRIPTION	DESCRIPCION	DESCRIPTION
GROUND	TIERRA MASA	MASSE
ANTI-SWEAT	ANTICONDENSACION	ANTI-SUENTEMENT
LIGHTS	LUCES	ECLAIRAGE
RECEPTACLES	ENCHUFES	PRISE DE COURANT
T-STAT/SOLENOID 230VAC	TERMOSTATO/SOLENOIDE (230VAC)	SOUPAPE A SOLENOIDE (230 VAC)
T-STAT/SOLENOID 115VAC	TERMOSTATO/SOLENOIDE (115VAC)	SOUPAPE A SOLENOIDE (115 VAC)
T-STAT/SOLENOID 24VAC	TERMOSTATO/SOLENOIDE (24VAC)	SOUPAPE A SOLENOIDE (24 VAC)
FAN MOTORS	VENTILADORES	VENTILATEUR
BLUE CONDENSING UNIT	UNIDAD DE CONDENSACIÓN	UNITÉ DE CONDENSATION

USE COPPER CONDUCTORS ONLY
UTILISEZ LES CONDUCTEURS DE CUIVRE SEULEMENT
UTILICE LOS CONDUCTORES DE CODRE SOLAMENTE

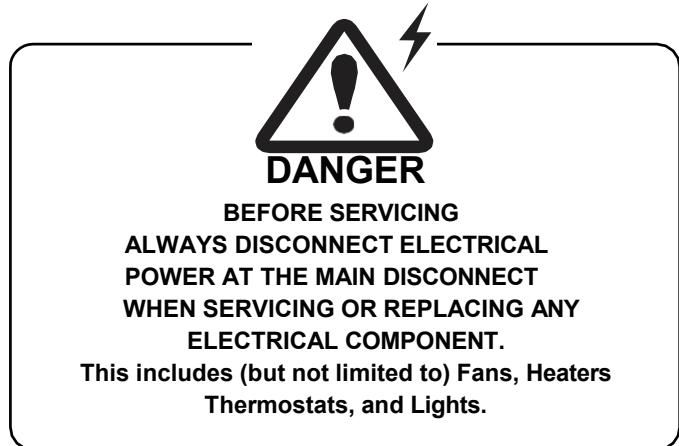
430-01-0338 R101003

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.



Wiring Diagram Index

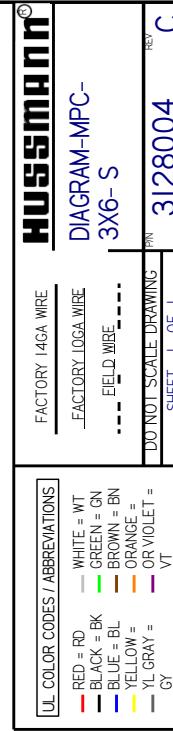
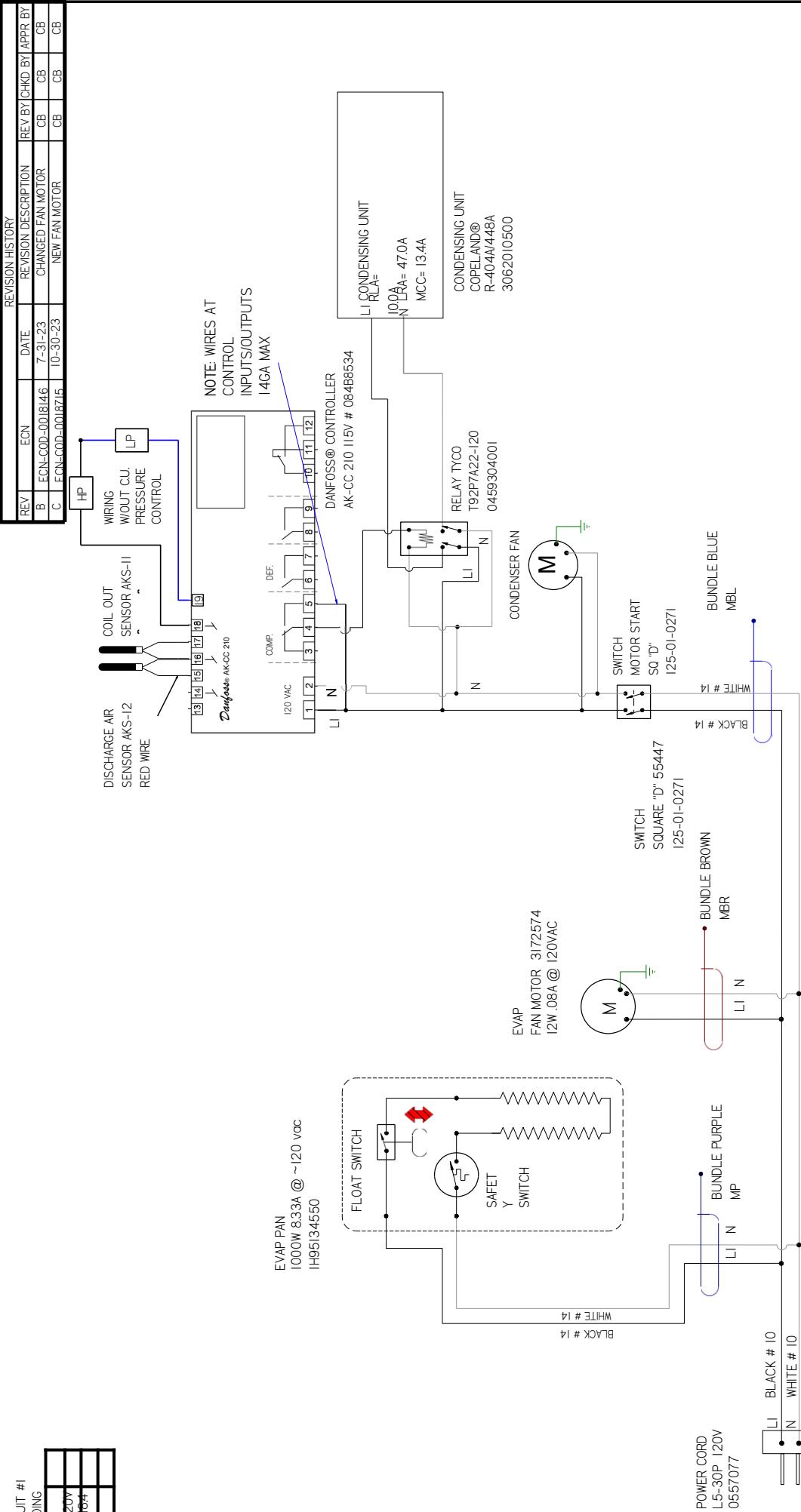
MPC-3X6-S R-404A/448A	3X6	3128004
MPC-3X9-S R-404A/448A	3X9	3128005
MPC-6X6-S R-404A/448A	6X6	3128006
MPC-3X3-S DAN FOSS	3 X 3	3085927
MPC-3X6-S DAN FOSS	3 X 6	3036674
MPC-3X9-S DAN FOSS	3 X 9	3075528
MPC-6X6-S DAN FOSS	6 X 6	3036675

Specification Sheets

Model	Description	Size
Mobile Produce	MPC-3X6-SC and MPC-6X6-SC	2Case and 4Case
Mobile Produce	MPC-3X6-R and MPC-6X6-R	2Case and 4Case

CIRCUIT #1
LOADING

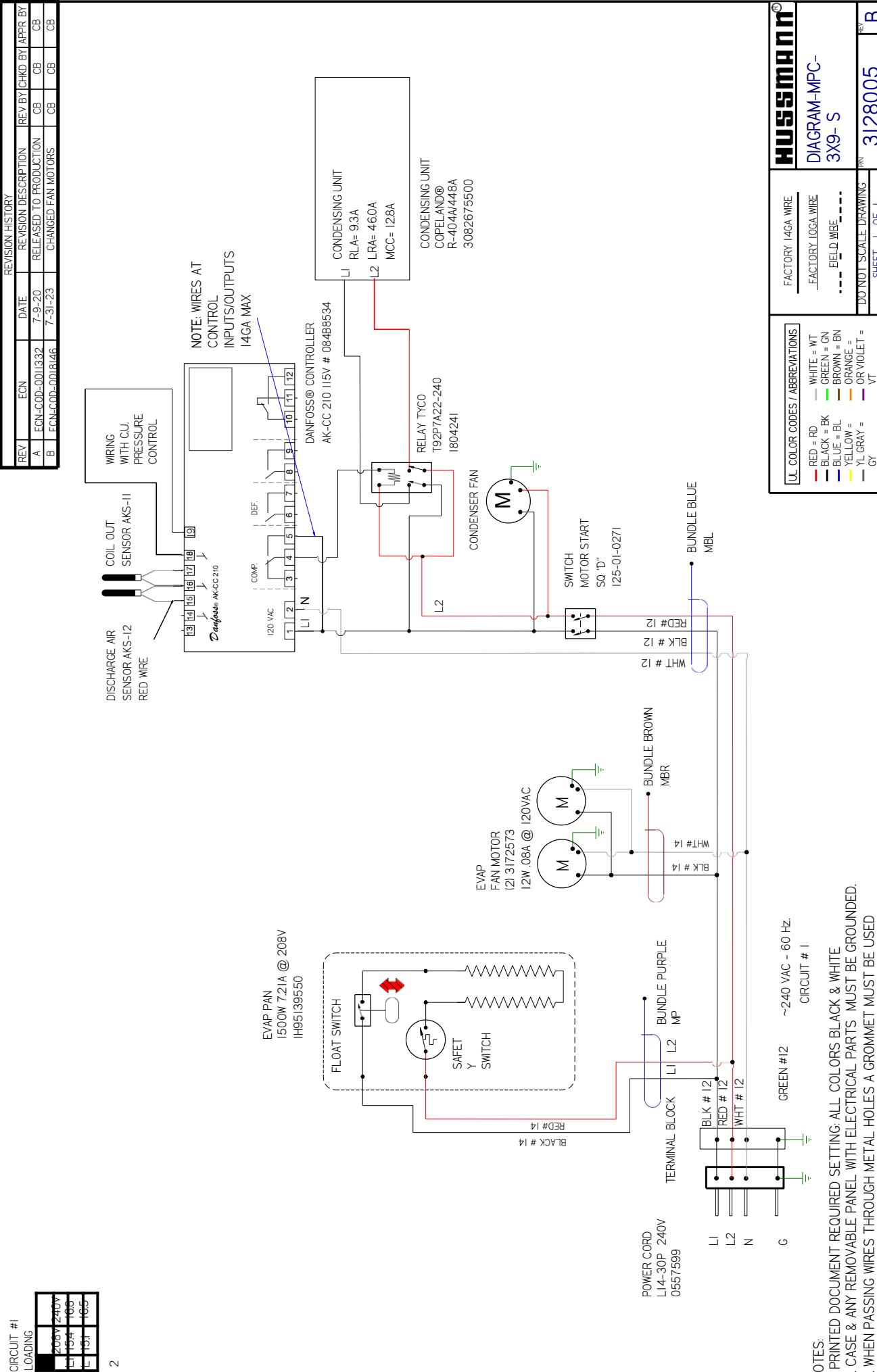
120V	
115V	
105V	

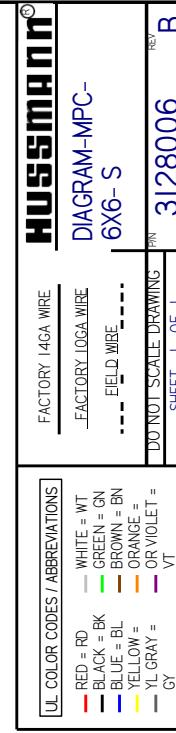
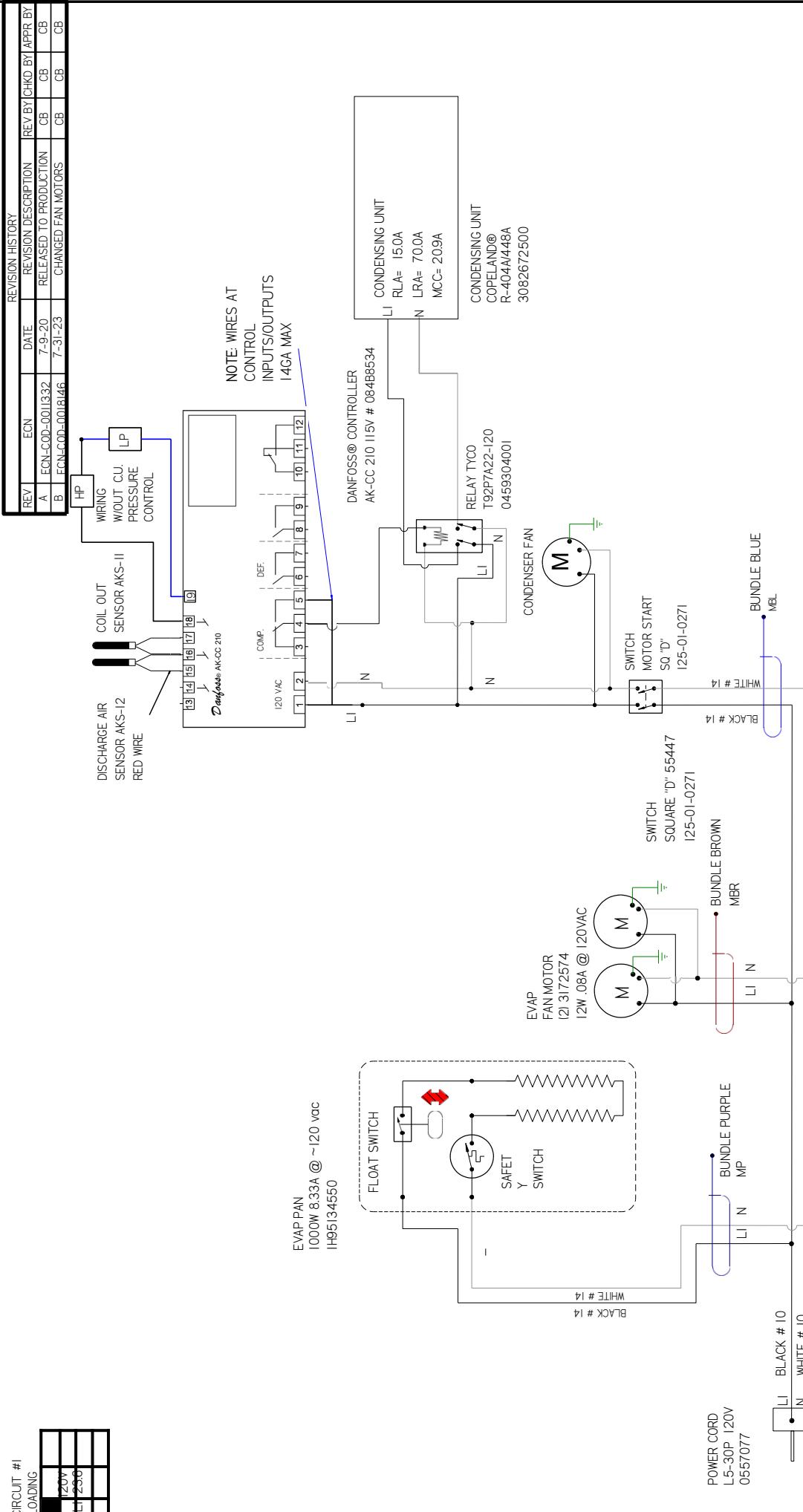


CIRCUIT #1
LOADING

208V 240V	
125V 100	
125V 100	

2



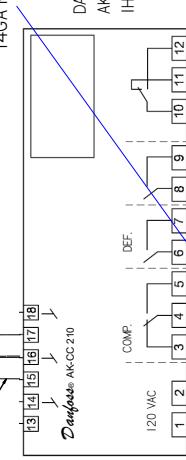


REVISION HISTORY					
REV	ECN	DATE	REV BY	CHG BY	APPR BY
A	ECN-CAP-0015945	2019/01/22			
B	ECN-CAP-0016903	2019/04/15	RELEASED TO PRODUCTION	CB	CB
C	ECN-CAP-0018439	2023/08/02	CHANGED POWER CORD	CB	CB
D	ECN-CAP-0018115	2023/10/30	NEW FAN MOTOR	CB	CB

CIRCUIT #1
LOADING
L1 120V
L1 125

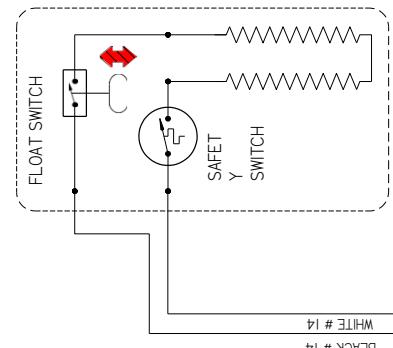
DISCHARGE AIR
SENSOR AKS-12
RED WIRE

NOTE: WIRES AT
CONTROL
INPUTS/OUTPUTS
14GA MAX

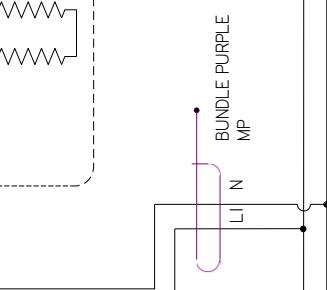


DANFOSS® CONTROLLER
AK-CC 210 115v # 084-B8534
IH56892500

EVAP PAN
1000W 0.33A @ ~120 vac
IH95134550



WHITE # 14
BLACK # 14
BUNDLE PURPLE
MP



POWER CORD
L5-30P 120V
0557077

GREEN #10
~120 VAC - 60 Hz
CIRCUIT # 1



NOTES
CASE MUST BE GROUNDED
WHEN PASSING WIRES THROUGH METAL HOLES A GROMMET MUST BE USED

MATERIAL - NA
DATE DRAWN - 1-22-19
DRAWN BY - CRAIG BOOREY
REVIEWED BY - CRAIG BOOREY
APPROVED BY - CRAIG BOOREY
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES.
DECIMALS XX ±03, XXX
±010
ANGLES ±2°

HUSSMANN®
DIAGRAM-MPC-
REF -
SHEET 1 OF 3
3X3 - S
THIRD ANGL
E
PROJECTION

3085927 | D



CIRCUIT #:
LOADING

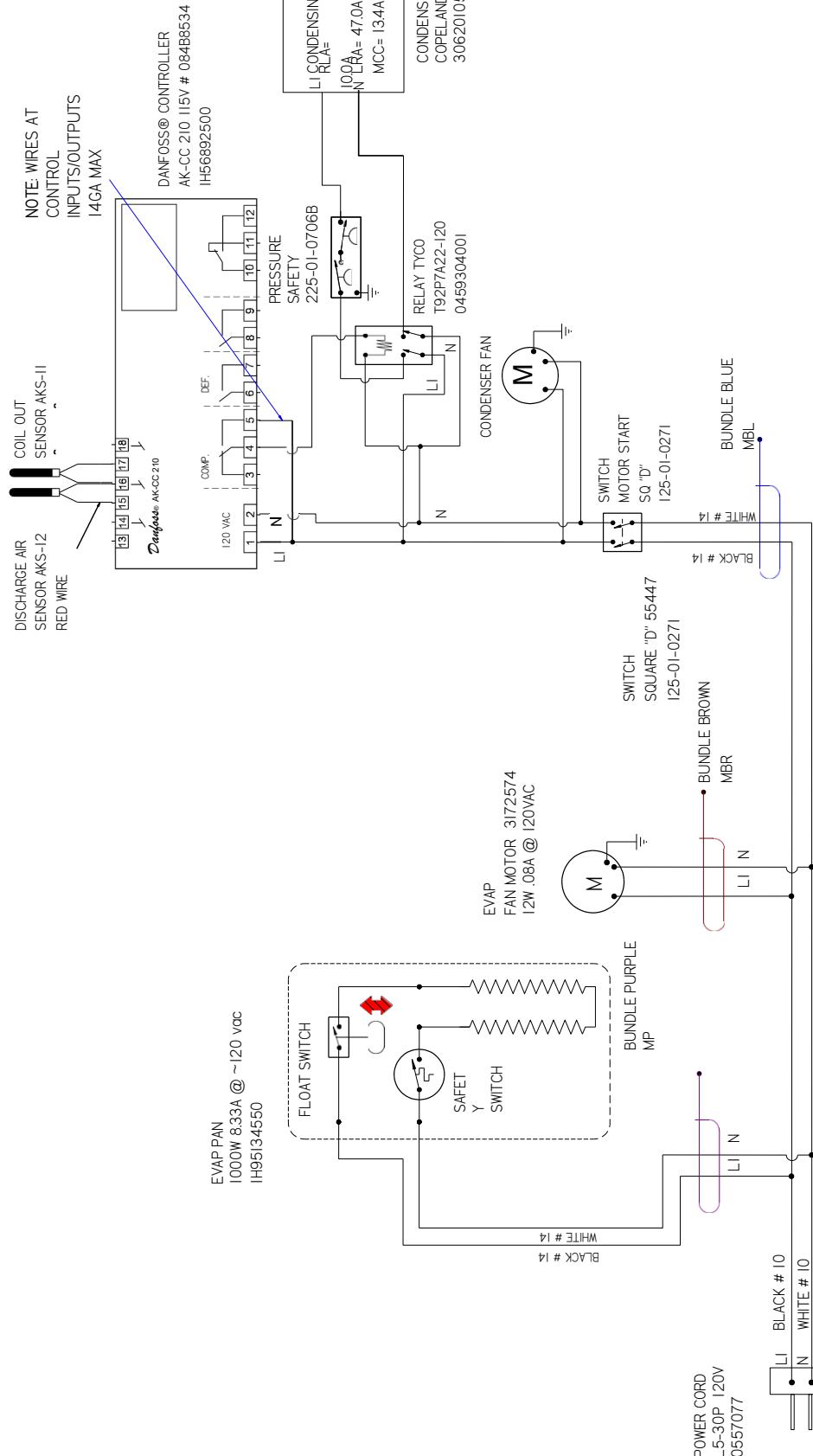
	120V	
	16A	

REV	ECN	DATE	REV BY	CHG'D BY	APPR'D BY
A	ECN-CAP-000828	20/7/06/20			
B	ECN-CAP-0008202	20/7/06/20			
C	ECN-CAP-004655	20/8/06/27			
D	ECN-CAP-004654	20/8/07/24			
E	ECN-CAP-004653	20/9/07/15			
F	ECN-CAP-004652	20/3/07/02			
G	ECN-CAP-004651	20/3/07/01			

REVISION HISTORY

NOTE: WIRES AT
CONTROL
INPUTS/OUTPUTS
14GA MAX

DISCHARGE AIR
SENSOR AKS-12
RED WIRE



HUSSMANN®
DIAGRAM-MPC-
3X6-S
REF -
SHEET 1 OF 3
SPECIFIED DIMENSIONS ARE IN INCHES.
THIRD ANGL
E
PROJECTION

3036674 | G

MATERIAL = NA
DATE DRAWN - 6-20-17
DRAWN BY - CRAIG BOOREY
REVIEWED BY - CRAIG BOOREY
APPROVED BY - CRAIG BOOREY
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES.
DECIMALS XX ±.03, XXX
±0.10
ANGLES ± 2°

PROJECTION



REVISION HISTORY				
REV	ECN	DATE	REV BY	CHG BY
A	ECN-CAP-001451	20/09/09/21	RELEASED TO PRODUCTION	CB APP BY
B	ECN-CAP-0016803	20/09/04/15	CHANGED POWER CORD	CB CB
C	ECN-CAP-0019893	20/09/07/24	CHANGED CONDENSER	CB CB
D	ECN-COD-0018439	20/09/08/02	CHANGED FAN MOTOR	CB CB
E	ECN-COD-0018715	20/09/07/30	NEW FAN MOTORS	CB CB

CIRCUIT #!
LOADING

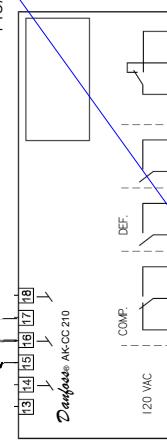
Z20Y	Z40V
L1	151
L2	120
N	140

2

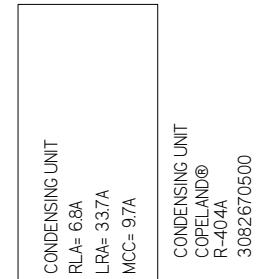
NOTE WIRES AT
CONTROL
INPUTS/OUTPUTS
14GA MAX

DISCHARGE AIR
SENSOR AKS-12
RED WIRE

Danfoss® AK-CC 210



DANFOSS® CONTROLLER
AK-CC 210 115V # 084B8534
IH56992500



CONDENSING UNIT
 L1 RLAF= 6.8A
 L2 LRAn= 3.37A
 MCC- 97A
 3082670500

CONDENSER FAN
 M

SWITCH
 SO "D"
 125-01-0271

BUNDLE BLUE
 MBL

EVAP
 FAN MOTOR
 12W.08A @ 120VAC
 M

BUNDLE BROWN
MBR

BLACK # 12
 RED # 12
 GREEN # 2
 CIRCUIT # 1

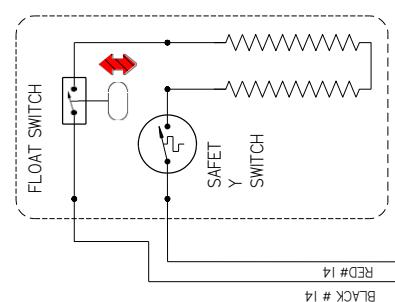
POWER CORD
 LI4-30P 240V
 0557599
 TERMINAL BLOCK
 125-01-0295

L1
 L2
 N
 G

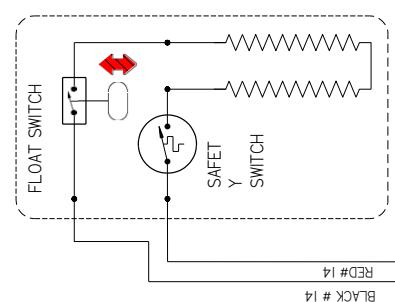
BUNDLE PURPLE
 MP

BLACK # 12
 RED # 12
 WHI # 12

~240 VAC - 60 Hz



EVAP PAN
 1500W 7.21A @ 208V
 IH95139550



NOTES
 CASE MUST BE GROUNDED
 WHEN PASSING WIRES THROUGH METAL HOLES A GROMMET MUST BE USED

HUSSMANN®
 HUSSMANN-GF-LI SHEET SE 0
 DATE DRAWN 9-21-18
 DRAWN BY -CRAIG BOOREY
 REVIEWED BY -CRAIG BOOREY
 APPROVED BY -CRAIG BOOREY
 UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES.
 DECIMALS XX ±.03, XXX
 ±0.10
 ANGLES ± 2°

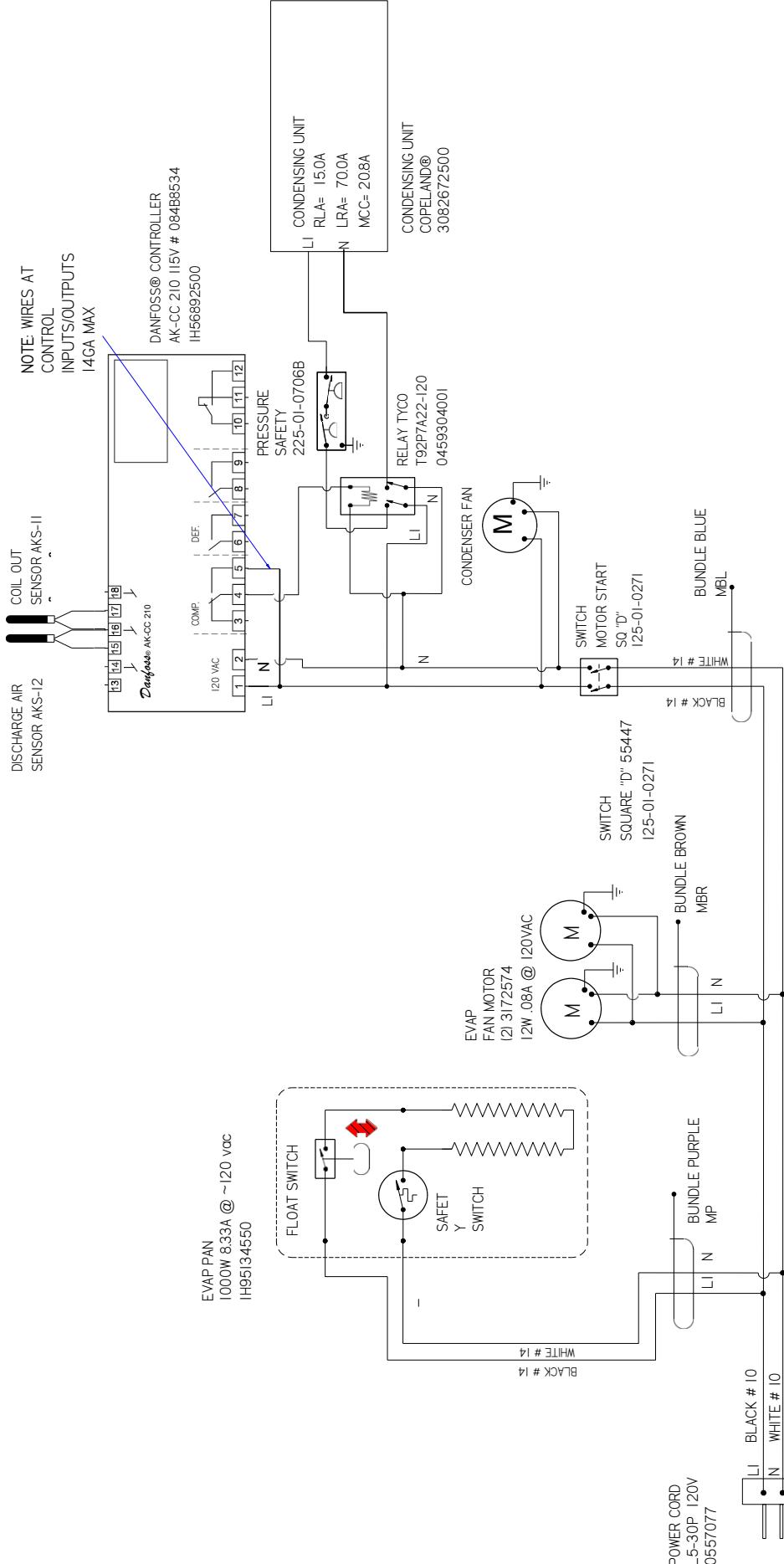
DIAGRAM-MPC-
 REF -
 SHEET LOF -
 3X9- S
 PROJECTION
 E

3075528

CIRCUIT #1
LOADING

	120v	
	230	

REVISION HISTORY		
REV	ECN	DATE
A	ECN-CAP-000828	20/07/06/21
B	ECN-CAP-000820/2	20/07/06/21
C	ECN-CAP-004605	20/09/06/21
D	ECN-CAP-001602	20/09/04/21
E	ECN-COR-0018439	20/03/05/22



HUSSMANN®
DIAGRAM-MPC-
REF - 6X6-S
SHEET 1 OF 3
SPECIFIED DIMENSIONS ARE IN INCHES.
THIRD ANGL E
PROJECTION
3036675 | E

MATERIAL = N/A
DATE DRAWN - 6-21-17
DRAWN BY - CRAIG BOOREY
REVIEWED BY - CRAIG BOOREY
APPROVED BY - CRAIG BOOREY
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES.
DECIMALS XX ±.03, XXX ±.010
ANGLES ± 2°



NOTES
CASE MUST BE GROUNDED
WHEN PASSING WIRES THROUGH METAL HOLES A GROMMET MUST BE USED

HUSSMANN®
DIAGRAM-MPC-
REF - 6X6-S
SHEET 1 OF 3
SPECIFIED DIMENSIONS ARE IN INCHES.
THIRD ANGL E
PROJECTION
3036675 | E

MATERIAL = N/A
DATE DRAWN - 6-21-17
DRAWN BY - CRAIG BOOREY
REVIEWED BY - CRAIG BOOREY
APPROVED BY - CRAIG BOOREY
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES.
DECIMALS XX ±.03, XXX ±.010
ANGLES ± 2°

NOTES
CASE MUST BE GROUNDED
WHEN PASSING WIRES THROUGH METAL HOLES A GROMMET MUST BE USED

Spec Sheet

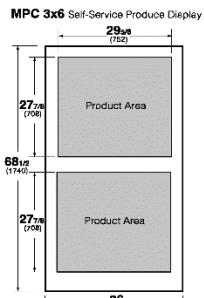
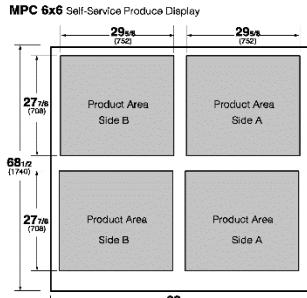
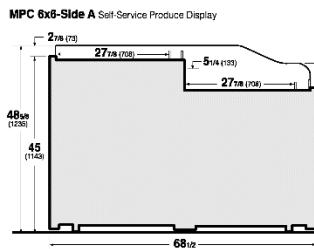


SELF-SERVICE NON-CRITICAL TEMP PRODUCE SELF-CONTAINED HUSSMANN - MPC-SC (CHINO)

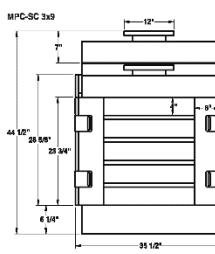
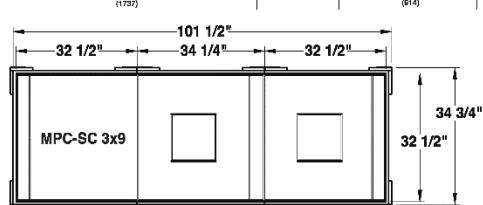
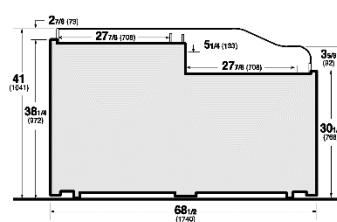
DOE 2017
Energy Efficiency
Compliant

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

REVISION DATE 11/16/22



MPC 3x6, MPC 6x6-Side B Self-Service Produce Display



REFRIGERATION DATA:

CASE LENGTHS	CASE USAGE	CONVENTIONAL CAPACITY ** (BTU/HR)	DISCHARGE AIR * (°F)	VELOCITY (FT/MIN)
3X3		1335	34~36	130~180
3X6		2670	34~36	130~180
3X9		4005	34~36	130~180
6X6		5340	34~36	130~180

*APPROVED FOR NON-CRITICAL TEMP PRODUCE ONLY.

**DISCHARGE AIR MEASURED AT UPPER SECTION OUTLETS.

***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:

USAGE	CONTROLLER / AIR SENSOR SETTINGS		DEFROST TYPE	FAILSAFE TIME (MIN)	DEFROST FREQUENCY (#/DAY)	TERM. TEMP (°F) AIR	Drip Time (min)	DEFROST WATER (LBS/DAY/FT)
	SET POINT (°F)	DIFFERENTIAL (°F)						
PRODUCE	28	7	OFF TIME	30	6	54	NA	1

ELECTRICAL DATA:

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
3X3	1	6.7	20	0.12	8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3X6	1	6.7	20	0.12	8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3X9	2	6.7	20	0.24	16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6X6	2	6.7	25	0.24	16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

ELECTRICAL DATA CONTINUED:

CASE LENGTH	CONDENSING UNIT					DRAIN EVAP PAN 1 PHASE			PLUG TYPE	EST. REFG. CHRG. (LBS)
	NOM. HP	REFRIG.	Hz / Ph	VOLTS	AMPS	AMPS	VOLTS	WATTS		
3X3	1/4		60 / 1	120	4.0	8.3	120	1000	L5-20P	0.8
3X6	1/2	R-404A	60 / 1	120	10.0	8.3	120	1000	L5-30P	1.8
3X9	3/4		60 / 1	240	6.8	7.2	240	1500	L14-30P	2.8
6X6	3/4		60 / 1	120	15.0	8.3	120	1000	L5-30P	3.7
3X6	1/4		60 / 1	120	10.0	8.3	120	1000	L5-30P	1.8
3X9	1	R-448A	60 / 1	240	9.3	7.2	240	1500	L14-30P	2.8
6X6	3/4		60 / 1	120	15.0	8.3	120	1000	L5-30P	3.7

Spec Sheet



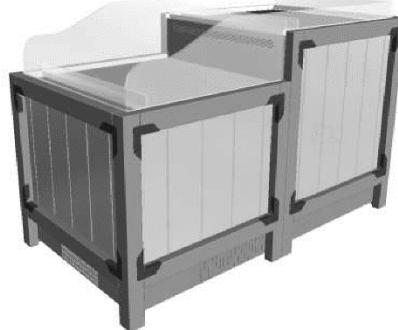
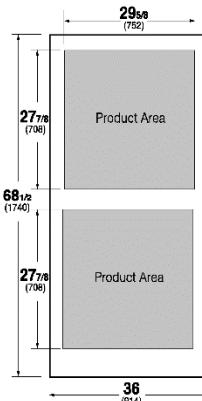
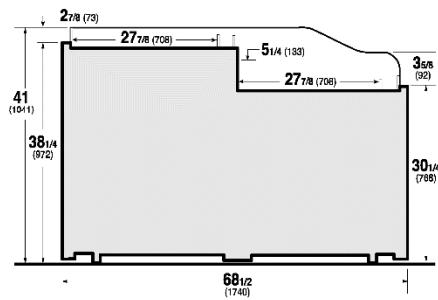
**SELF-SERVICE NON-CRITICAL TEMP PRODUCE REMOTE
HUSSMANN - MPC (CHINO)**

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.

REVISION DATE 05/17/17

MPC 3x6, MPC 6x6-Side B Self-Service Produce Display



REFRIGERATION DATA:

REFRIGERATION DATA:		CAPACITY *** (BTU/HR/FT)	TEMPERATURE (°F)		VELOCITY (FT/MIN)	
CASE LENGTHS	CASE USAGE*	RATING CONDITION	EVAPORATOR	DISCHARGE AIR ** (°F)		
		AHRI 1200	AHRI 1200			
3X6	NON-CRITICAL PRODUCE	705	22	34~36	130~180	

CASE LENGTHS	EST. REFG. CHRG. (LBS)	20°F GLYCOL 6° RISE	
		GPM	PSI
3X6	1.8	N/A	N/A

*APROVED FOR NON-CRITICAL TEMP PRODUCE ONLY.

**DISCHARGE AIR MEASURED AT UPPER SECTION OUTLETS.

*****REFRIGERATION NOTES:**

- 1) AHRI 1200 RATING POINT FOR ENERGY CONSUMPTION COMPARISON 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 I, 75°F/55% RH

REFRIGERATION DATA CONTINUED:

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	CUT IN (°F)	CUT OUT (°F)						
PRODUCE	32	29	OFF TIME	30	6	48	N/A	1.0

ELECTRICAL DATA:

Service

WARNING !

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

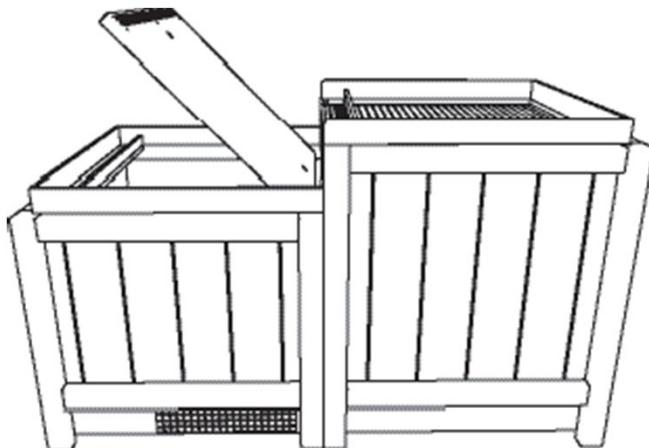


IMPORTANT INFORMATION

FOR PROMPT SERVICE

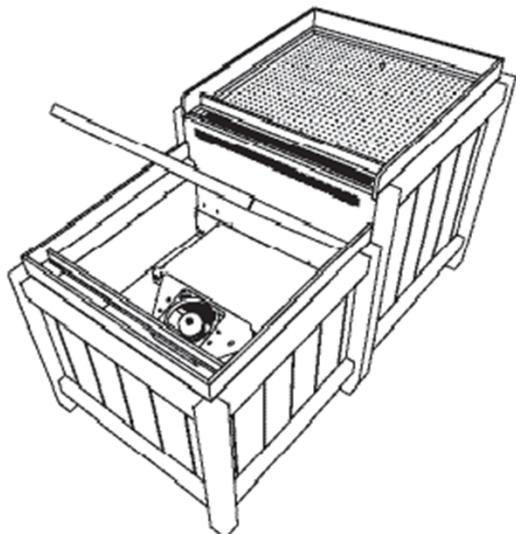
When contacting the factory regarding problems, be sure to have the Case Model and Serial Number handy. This information is on a plate located on the case itself.

Bottom Shelf and Evaporator Assembly



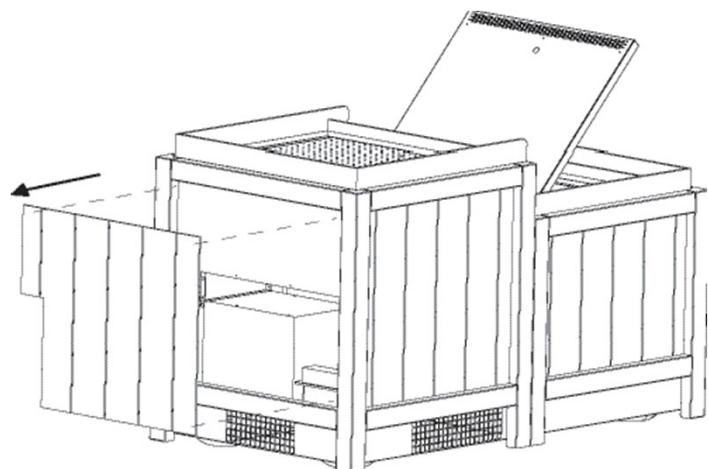
Gain access to Coil fan assembly

Lift bottom case deck pan near end of case to access Coil Fan Assembly. Underneath Deck pan will be Coil, Coil Fan, and TV Valve.



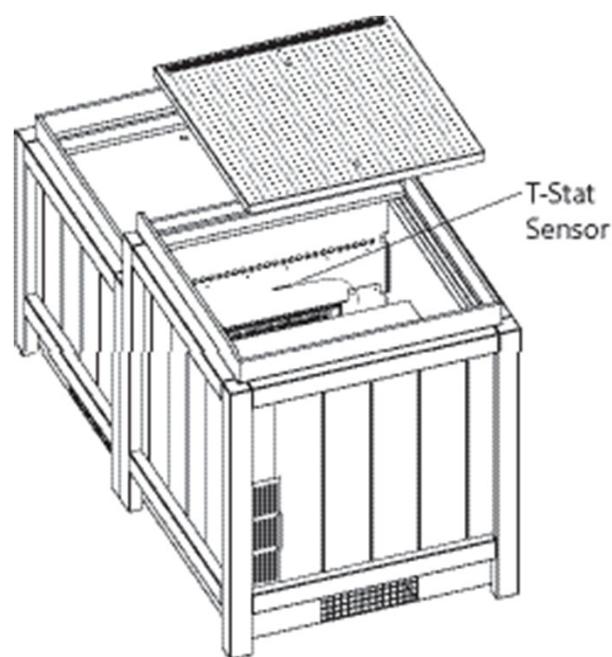
To access compressor area

Remove all four screws in each corner 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 top bin deck pan will allow for access to the Thermostat Sensor placed above the Coil Condenser against the dividing wall between the two bins.

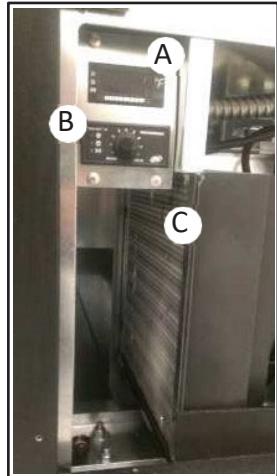


Service

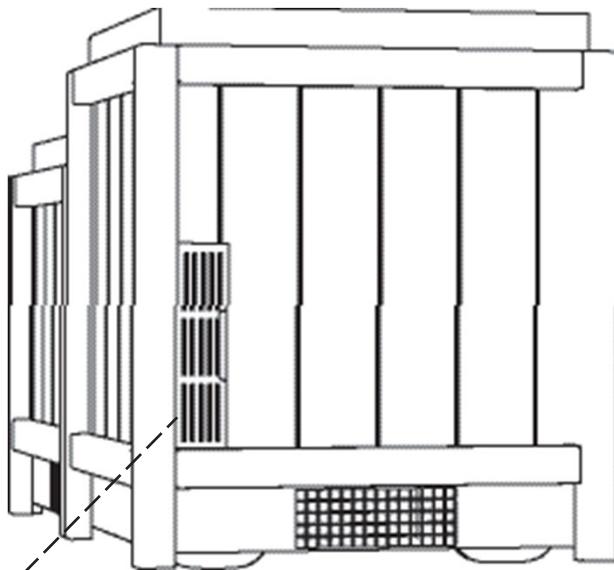
Tips and Troubleshooting

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 Controller Access Panel

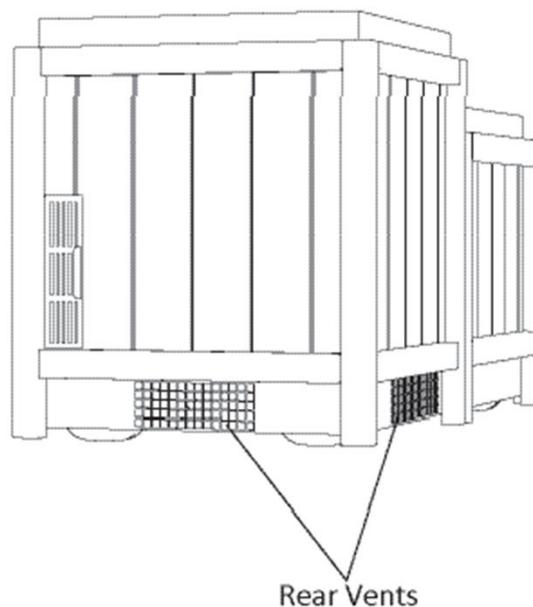
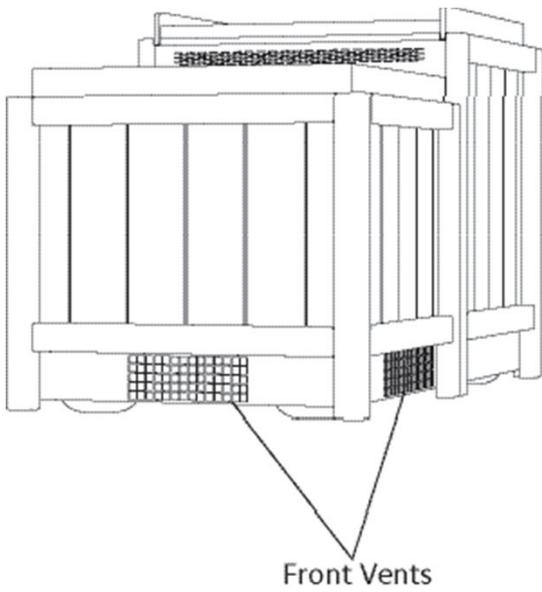


Removing the indicated panel will allow access to the following components:

- A. Thermostat Display
- B. Controller
- C. Condensor Coil

Intake and Exhaust Vents

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



Service

Compressor Area

Compressor Areas change for size of case and for air flow specifications. Use the diagram below to locate and identify components. Layouts will vary. For further information contact the factory.



- A. Dual Pressure Control
- B. Condenser Fan Motor
- C. condenser coil
- D. receiver
- E. filter drier
- F. site glass
- G. 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:

- 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.

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**

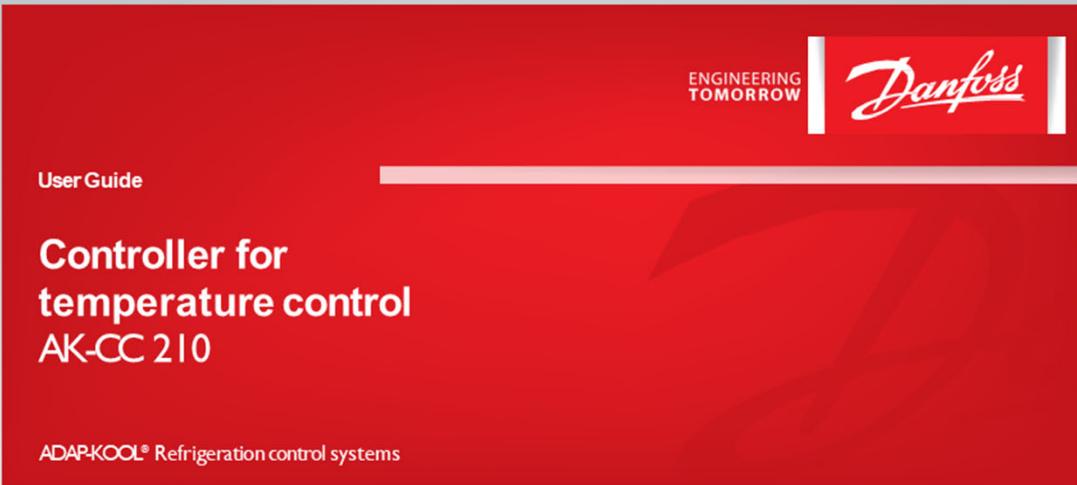
If you have any questions concerning information on these instructions please contact:

Hussmann Technical Support.....	866-785-8499
Hussmann Service Call Center.....	800-922-1919
Hussmann Parts Department.....	855-487-7778
Hussmann Warranty.....	800-398-7402



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.

Danfoss Controller



The image shows the Danfoss AK-CC 210 controller, a black digital temperature control unit. It features a red digital display showing '888' and three physical buttons labeled 'SET', '↑', and '↓'. A green terminal block is visible on top. The device is mounted on a white background.



A large QR code is located in the bottom left corner of the page.

- ①  Open Camera
- ②  iPhone User
Hold the camera up to the QR code
- ③  Android User
Open QR Code Reader app if necessary.
Hold the camera up to the QR code
- ④  Tap the notification to be taken to the destination of the QR code

026-1210 Rev 3 03-FEB-2015

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



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