

We reserve the right to change or revise specifications and product design in connection with any feature of our products. Such changes do not entitle the buyer to corresponding changes, improvements, additions or replacements for equipment previously sold or shipped.

Item	Part #	Description	Wiring Item #	Item	Part #	Description	Wiring Item #
FAN ASSEMBLIES AND THERMOSTATS				LAMPS AND BALLASTS			
A.	7W Standard	Fan Assembly	(1)	D.	Ballast, Electronic		
	0058698	Fan Motor, Evaporator (MO.4410102)			0466234	2 lamps (BA.4480823)	(4)
	0142780	Fan Blade (FB.0142780) embossing toward motor			0466235	3 lamps (BA.4480901)	
	7W Energy Efficient	Fan Assembly	(1)	E.	Fluorescent Lamp		(5)
	0477654	Fan Motor, Evaporator (MO.4410545)			<i>Replace with like fixtures</i>		
	0142780	Fan Blade (FB.0142780) embossing toward motor					
B.	Standard Non-adjustable Defrost Thermostat		(2)				
	0411744	(CT.0411744)					
C.	Optional Adjustable Refrigeration Thermostat		(3)				

Note: This merchandiser is a unitized assembly of either:
two (2) C2N8CMU 8 ft merchandisers joined with two (2) C2N6CEMU end merchandisers
OR
two (2) C2N12CMU 12 ft merchandisers joined with two (2) C2N6CEMU end merchandisers
This merchandiser can also be shipped unassembled.

Note: Revision B adds NSF certification on pages 1 & 3 and updates electrical data on page 8. Changes are marked with vertical bar in margin or underlined or circled.

Engineering Plan Views

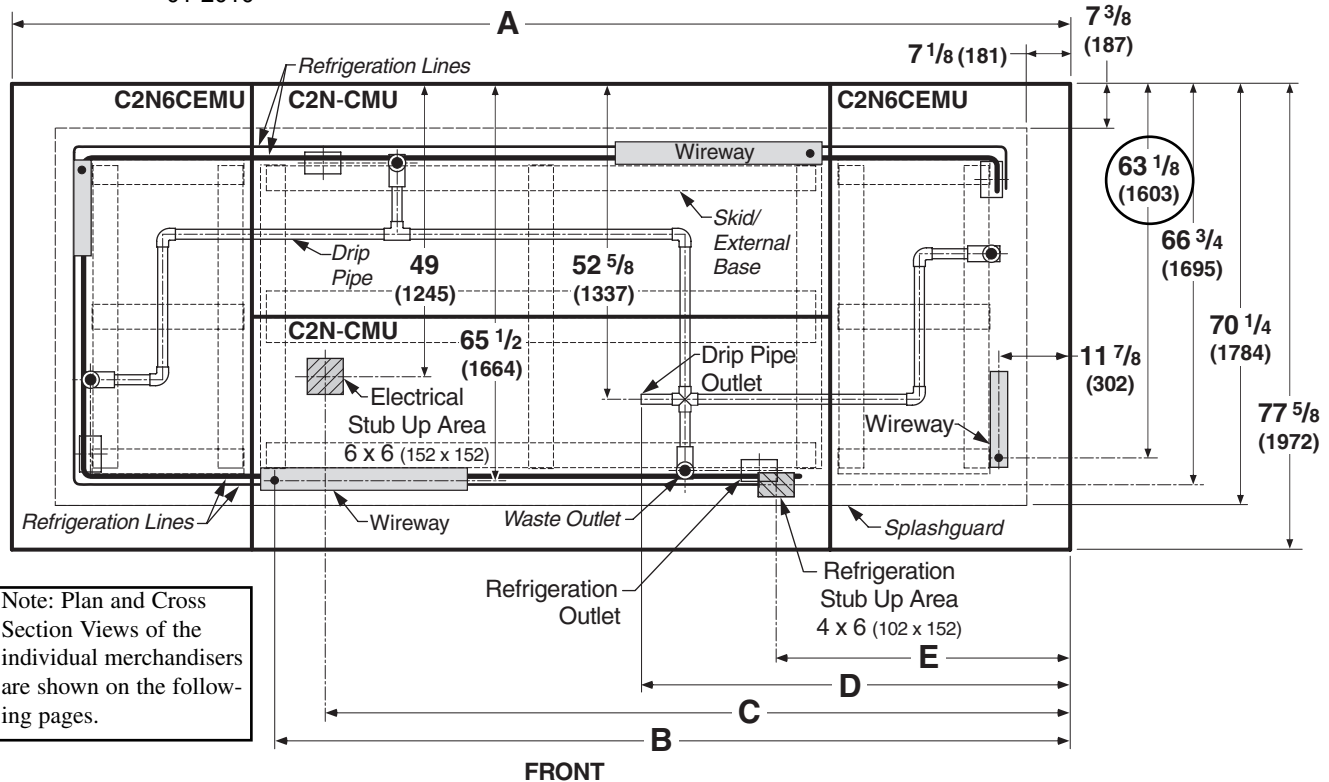
PHYSICAL DATA

Merchandiser Drip Pipe (in.)	1 1/4
Merchandiser Liquid Line (in.)	3/8
Merchandiser Suction Line (in.)	7/8



C2N-CMU Unitized Island

01-2010

Dimensions shown as inches and (mm).



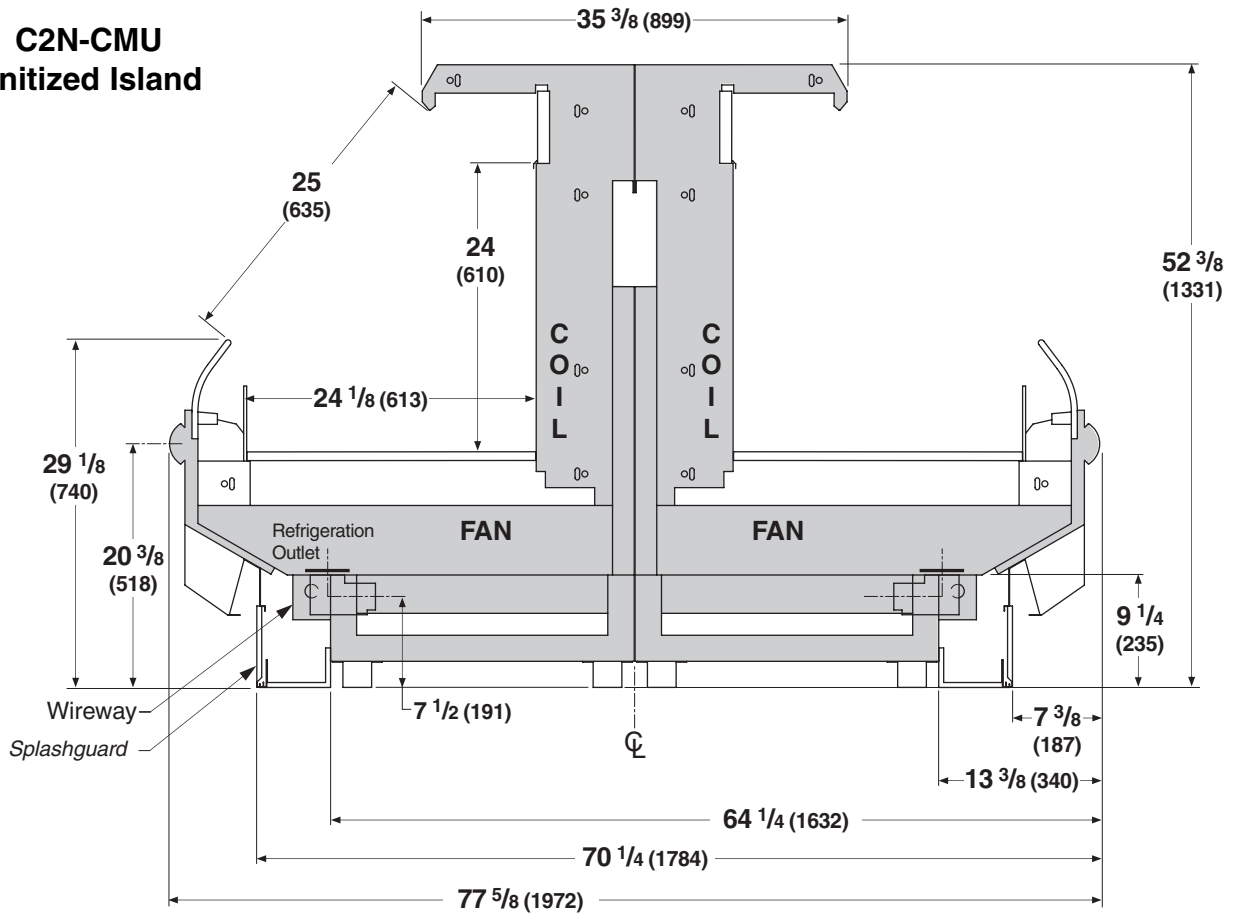
Note: Plan and Cross Section Views of the individual merchandisers are shown on the following pages.

	C2N8CMU / C2N6CEMU	C2N12CMU / C2N6CEMU
General		
(A) Overall Case Assembly Length	176 3/8 (4480)	224 1/2 (5703)
Maximum O/S dimension of case back to front (includes bumper)	77 5/8 (1972)	77 5/8 (1972)
Back of case to front of splashguard	70 1/4 (1784)	70 1/4 (1784)
Back of case to O/S edge of front skid rail	64 1/4 (1632)	64 1/4 (1632)
Width of skid rail	4 1/4 (102)	4 1/4 (102)
RH end of case to outside edge of external support	13 3/8 (340)	13 3/8 (340)
Stub-up area between front skid rail and splashguard	4 3/4 (121)	4 3/4 (121)
Electrical Service  (Electrical Field Wiring connection point)		
(B) RH End of case to center of farthest knockout	133 3/8 (3388)	181 1/2 (4610)
Back O/S of case to center of knockout	65 1/2 (1664)	65 1/2 (1664)
(C) RH End of case to center of Electrical Stub Up Area	118 3/8 (3007)	166 1/2 (4229)
Drip Pipe Outlet		
(D) RH End of case to the center of drip pipe outlet	71 1/2 (1816)	119 5/8 (3038)
Back of case to the center of drip pipe outlet	52 5/8 (1337)	52 5/8 (1337)
Schedule 40 PVC drip pipe	1 1/4 (32)	1 1/4 (32)
<i>Note: Water seal outlet must clear front skid rail.</i>		
Refrigeration Stub Up Area 		
Back of case to center of refrigeration stub up area	66 3/4 (1695)	66 3/4 (1695)
(E) RH end of case to center of refrigeration stub up area	49 (1245)	49 (1245)

Impact
C2N-CMU
Dairy / Delicatessen
Precut & Packaged Produce

Dimensions shown as inches and (mm).

C2N-CMU
Unitized Island



NSF® Certification

This merchandiser is manufactured to meet ANSI/NSF® (National Sanitation Foundation) Standard #7 requirements for construction, materials & cleanability.

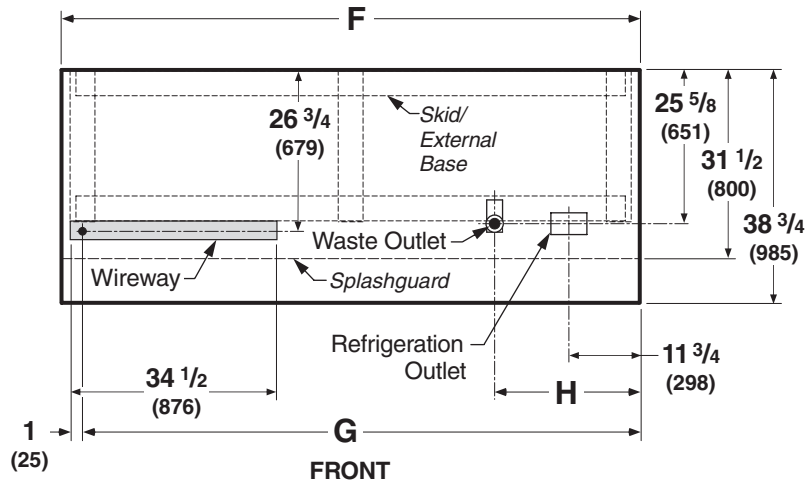
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
Engineering Plan Views

Dimensions shown as inches and (mm).

C2N-CMU Side Merchandiser

11-2009

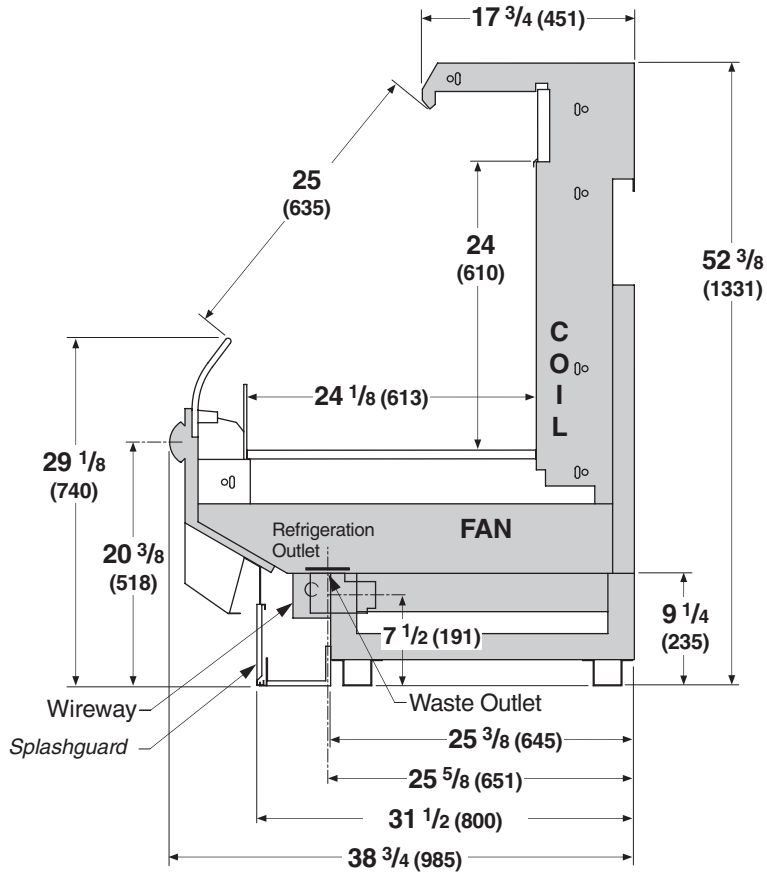


General	C2N8CMU (8 ft)	C2N12CMU (12 ft)
(F) Case Length (<i>without ends or partitions</i>)	96 ³ / ₈ (2448)	144 ¹ / ₂ (3670)
Maximum O/S dimension of case back to front (<i>includes bumper</i>)	38 ³ / ₄ (985)	38 ³ / ₄ (985)
Back of case to front of splashguard	31 ¹ / ₂ (800)	31 ¹ / ₂ (800)
Back of case to O/S edge of front skid rail	25 ³ / ₈ (645)	25 ³ / ₈ (645)
Width of skid rail	4 ¹ / ₄ (102)	4 ¹ / ₄ (102)
RH end of case to outside edge of external support	1 ³ / ₈ (35)	1 ³ / ₈ (35)
Distance between edges of external support and center support	40 ¹ / ₂ (1029)	40 ¹ / ₂ (1029)
Distance between edges of center supports	NA	44 (1118)
Stub-up area between front skid rail and splashguard	4 ³ / ₄ (121)	4 ³ / ₄ (121)
Electrical Service  (<i>Electrical Field Wiring connection point</i>)		
(G) RH End of case to center of farthest knockout	93 ¹ / ₄ (2369)	141 ³ / ₈ (3591)
Back O/S of case to center of knockout	26 ³ / ₄ (679)	26 ³ / ₄ (679)
Length of electrical raceway	34 ¹ / ₂ (876)	34 ¹ / ₂ (876)
Waste Outlet 		
(H) RH End of case to the center of waste outlet	24 ¹ / ₈ (613)	72 ¹ / ₄ (1835)
LH End of case to the center of waste outlet	72 ¹ / ₄ (1835)	72 ¹ / ₄ (1835)
Back of case to the center of waste outlet	25 ⁵ / ₈ (651)	25 ⁵ / ₈ (651)
Water Seal 		
Edge of water seal to center of waste outlet	4 (102)	4 (102)
Schedule 40 PVC drip pipe	1 ¹ / ₄ (32)	1 ¹ / ₄ (32)
<i>Note: Water seal outlet must clear front skid rail.</i>		
Refrigeration Outlet 		
Back of case to center of refrigeration outlet	25 ⁵ / ₈ (651)	25 ⁵ / ₈ (651)
RH end of case to center of refrigeration outlet	11 ³ / ₄ (298)	11 ³ / ₄ (298)

Dimensions shown as inches and (mm).

Impact
C2N-CMU
Dairy / Delicatessen
Precut & Packaged Produce

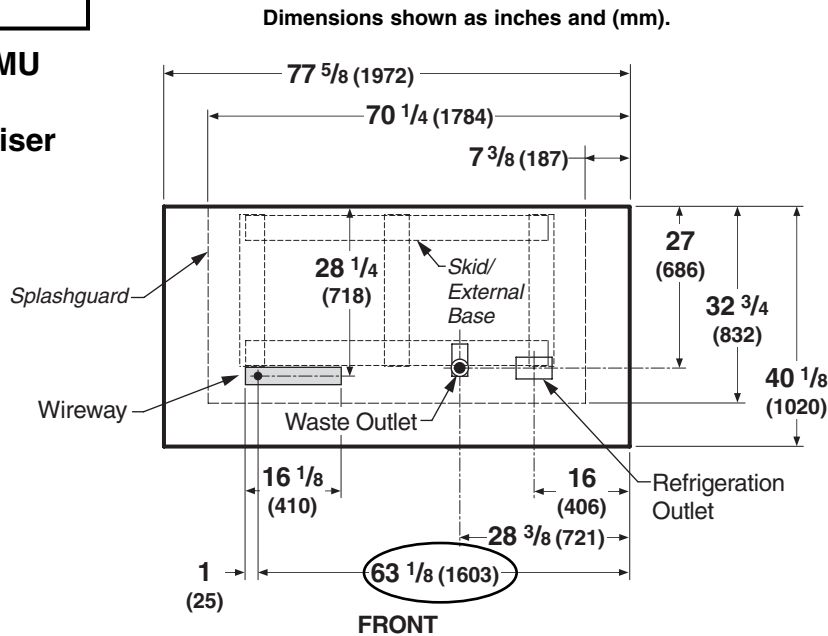
C2N-CMU
Side
Merchandiser



Engineering Plan Views

C2N6CEMU End Merchandiser

01-2010



C2N6CEMU

(Used on each end of
8 ft or 12 ft assemblies)

General

- Case Length
- Maximum O/S dimension of case back to front *(includes bumper)*
- Back of case to front of splashguard
- Back of case to O/S edge of front skid rail
- Width of skid rail
- RH end of case to outside edge of external support
- Distance between edges of external support and center support
- Distance between edges of center supports
- Stub-up area between front skid rail and splashguard

- 77 ⁵/₈ (1972)
- 40 ¹/₈ (1020)
- 32 ³/₄ (832)
- 26 ³/₄ (679)
- 4 ¹/₄ (102)
- 12 ⁵/₈ (321)
- 19 ⁷/₈ (505)
- NA
- 4 ³/₄ (121)

Electrical Service *(Electrical Field Wiring connection point)*

- RH End of case to center of farthest knockout
- Back O/S of case to center of knockout
- Length of electrical raceway

- 63 ¹/₈ (1603)
- 28 ¹/₄ (718)
- 16 ¹/₈ (410)

Waste Outlet

- RH End of case to the center of waste outlet
- LH End of case to the center of waste outlet
- Back of case to the center of waste outlet

- 28 ³/₈ (721)
- 49 ¹/₄ (1248)
- 27 (686)

Water Seal

- Edge of water seal to center of waste outlet
- Schedule 40 PVC drip pipe
- Note: Water seal outlet must clear front skid rail.*

- 4 (102)
- 1 ¹/₄ (32)

Refrigeration Outlet

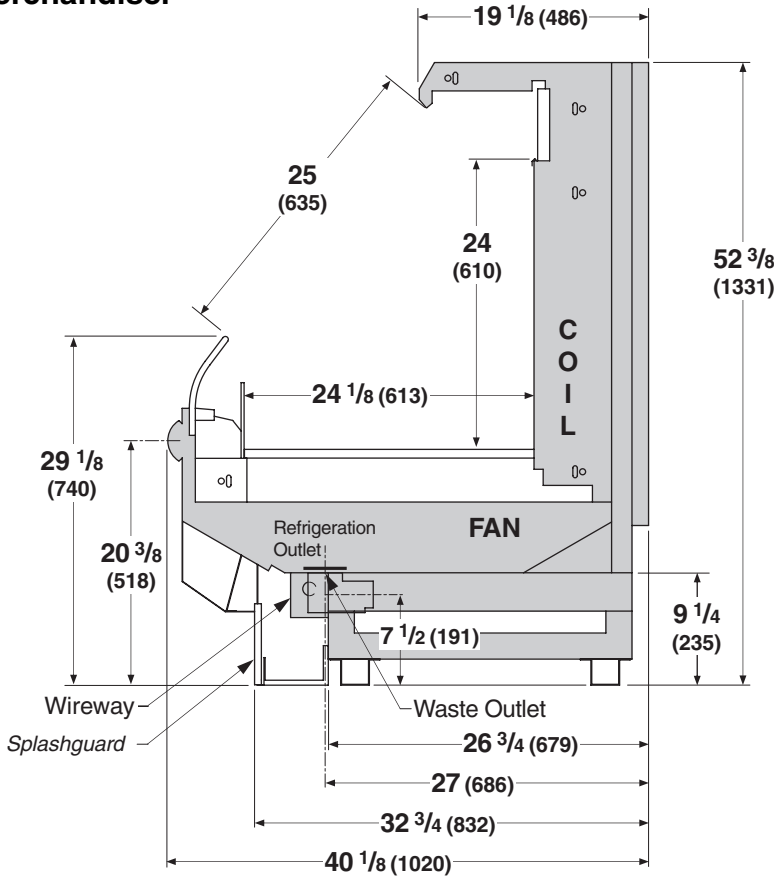
- Back of case to center of refrigeration outlet
- RH end of case to center of refrigeration outlet

- 27 (686)
- 16 (406)

Dimensions shown as inches and (mm).

Impact
C2N-CMU
Dairy / Delicatessen
Precut & Packaged Produce

C2N6CEMU
End
Merchandiser



REFRIGERATION DATA

Note: This data is based on store temperature and humidity that does not exceed 75°F and 55% R.H.

	C2N8CMU/ C2N6CEMU	C2N12CMU/ C2N6CEMU
Discharge Air (°F)	27	27
Evaporator (°F)	21	21
Unit Sizing (°F)	19	19

	C2N8CMU/ C2N6CEMU	C2N12CMU/ C2N6CEMU
Btu/hr/case*		
Parallel	28,840	37,080
Conventional	31,500	40,500

*Optional energy efficient motors reduce the refrigeration load by:
672 Btu/hr/case for C2N8CMU/C2N6CEMU
840 Btu/hr/case for C2N12CMU/C2N6CEMU

DEFROST DATA

	C2N8CMU/ C2N6CEMU	C2N12CMU/ C2N6CEMU
Frequency (hr)	6	6
Defrost Water (lb/day)	168	216

(± 15% based on case configuration and product loading).

	C2N8CMU/ C2N6CEMU	C2N12CMU/ C2N6CEMU
OFFTIME		
Temp Term (°F)	48°F	48°F
Failsafe (minutes)	30	30

ELECTRIC OR GAS Not Recommended

Standard Defrost Thermostat

Close on rise: close 48°F — open 33°F

CONVENTIONAL CONTROLS

Low Pressure Backup Control

	C2N8CMU/ C2N6CEMU	C2N12CMU/ C2N6CEMU
CI/CO**	17°F / 7°F	17°F / 7°F

Indoor Unit Only, Pressure Defrost

Termination** 48°F 48°F

**Use a Temperature Pressure Chart to determine PSIG conversions.

Estimated Charge (lb) per component case***

C2N8CMU / C2N6CEMU	7.8
C2N12CMU / C2N6CEMU	9.8

***This is an average for all refrigerant types. Actual refrigerant charge may vary by approximately half a pound.

Impact C2N-CMU Dairy / Delicatessen Precut & Packaged Produce
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Electrical Data*

* Values listed are for each individual merchandiser in the assembly. Each individual merchandiser in the assembly must be field connected separately per UL Requirements

	C2N6CEMU	C2N8CMU	C2N12CMU			
Number of Fans – 7W	2	2	3			
	Amperes			Watts		
	C2N6CEMU	C2N8CMU	C2N12CMU	C2N6CEMU	C2N8CMU	C2N12CMU
Evaporator Fans						
120V 60Hz Standard	1.00	1.00	1.50	78	78	117
120V 50Hz Standard	NA	NA	NA	NA	NA	NA
230V 60Hz Export	NA	NA	NA	NA	NA	NA
230V 50Hz Export	<u>0.50</u>	<u>0.50</u>	<u>0.75</u>	<u>78</u>	<u>78</u>	<u>117</u>
120V 60Hz Energy Efficient	0.38	0.38	0.57	28	28	42
230V 60Hz Energy Efficient	NA	NA	NA	NA	NA	NA
Minimum Circuit Ampacity						
120V 60Hz Standard	1.20	1.20	1.70			
120V 50Hz Standard	NA	NA	NA			
230V 60Hz Export	NA	NA	NA			
230V 50Hz Export	<u>0.70</u>	<u>0.70</u>	<u>0.95</u>			
120V 60Hz Energy Efficient	0.58	0.58	0.77			
230V 60Hz Energy Efficient	NA	NA	NA			
Maximum Over Current Protection 120V	20	20	20			
Maximum Over Current Protection 230V	15	15	15			
Standard Lighting (T-8 fluorescent)						
1 Row Canopy	<u>0.51</u>	<u>0.51</u>	0.75	<u>61</u>	<u>61</u>	90
Optional Lighting (T-8 fluorescent)						
Additional 1 Row Canopy	<u>0.51</u>	<u>0.51</u>	0.75	<u>61</u>	<u>61</u>	90
Additional 2 Row Canopy	<u>1.02</u>	<u>1.02</u>	1.50	<u>122</u>	<u>122</u>	180
1 Row Rail Light	<u>0.51</u>	<u>0.51</u>	0.75	<u>61</u>	<u>61</u>	90
Optional Shelf Lighting (T-8 fluorescent)						
1 Row of Shelves	<u>0.51</u>	<u>0.51</u>	0.75	<u>61</u>	<u>61</u>	90
2 Rows of Shelves	<u>1.02</u>	<u>1.02</u>	1.50	<u>122</u>	<u>122</u>	180

120V Lighting Circuit Total = Standard Lighting + Total Optional Lighting + Optional Shelf Lighting

230V Lighting Circuit Total = Multiply 120V Lighting Circuit Total by 0.52

Product Data

C2N8CMU / C2N6CEMU

<i>Recommended Usable Cube</i> ¹ (Cu Ft/Case)	68.22 ft ³ /case (1.93 m ³ /case)
<i>ARI Total Display Area</i> ² (Sq Ft/Case)	74.62 ft ² /case (6.93 m ² /case)
<i>Shelf Area</i> ³ (Sq Ft/Case)	114.33 ft ² /case (10.62 m ² /case)

C2N12CMU / C2N6CEMU

<i>Recommended Usable Cube</i> ¹ (Cu Ft/Case)	87.71 ft ³ /case (2.48 m ³ /case)
<i>ARI Total Display Area</i> ² (Sq Ft/Case)	95.93 ft ² /case (8.91 m ² /case)
<i>Shelf Area</i> ³ (Sq Ft/Case)	146.98 ft ² /case (13.65 m ² /case)

¹ ARI Refrigerated Volume less shelving and other unusable space: Refrigerated Volume / Unit of Length, ft³/ft [m³/m]

² Computed using ARI 1200 standard methodology: Total Display Area, ft² [m²] / Unit of Length, ft [m]

³ Shelf surface area is composed of bottom deck plus standard shelf complement, as shown in the Hussmann *Product Reference Guide*. The standard shelf complement for this model is (1) row of 12-inch shelves, (1) row of 16-inch shelves.

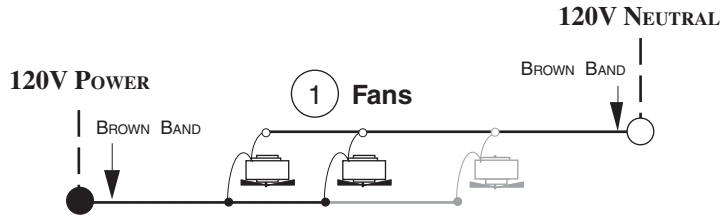
ESTIMATED SHIPPING WEIGHT ⁴

Case	C2N8CMU / C2N6CEMU	C2N12CMU / C2N6CEMU
lb (kg)	2000 (907)	2600 (1179)
⁴ Actual weights will vary according to optional kits included.		

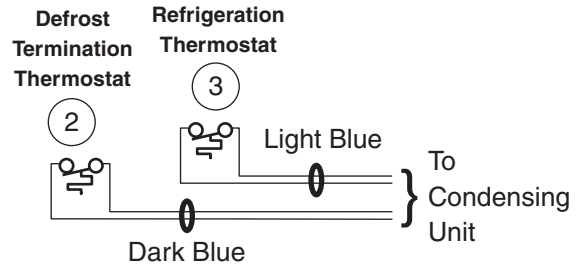
Fan Wiring Offtime Defrost

2 & 3 Fans

- C2N6CEMU — 2 Fans
- C2N8CMU — 2 Fans
- C2N12CMU — 3 Fans

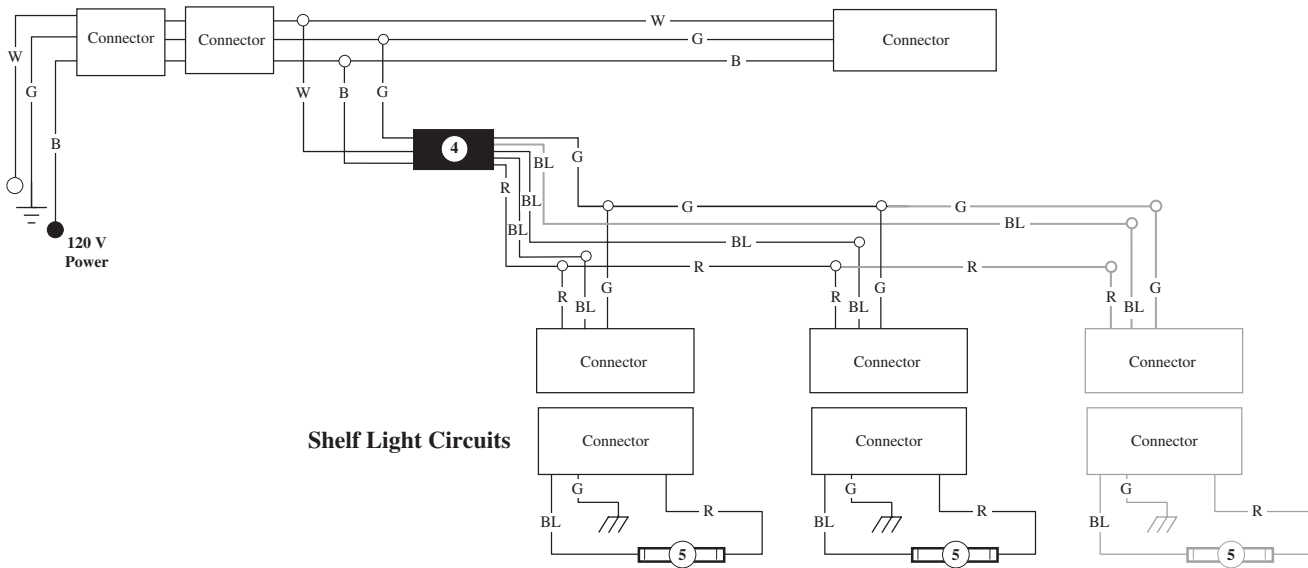


Thermostats



Optional Shelf Harness and Light Circuits for One Row of Shelves

Shelf Harness



WARNING

All components must have mechanical ground, and the merchandiser must be grounded.

CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS

R = Red Y = Yellow G = Green BL = Blue B = Black W = White

● = 120V POWER ○ = 120V NEUTRAL ⊥ = FIELD GROUND ≡ = CASE GROUND

Impact
C2N-CMU
Dairy / Delicatessen
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SHELF CONFIGURATION

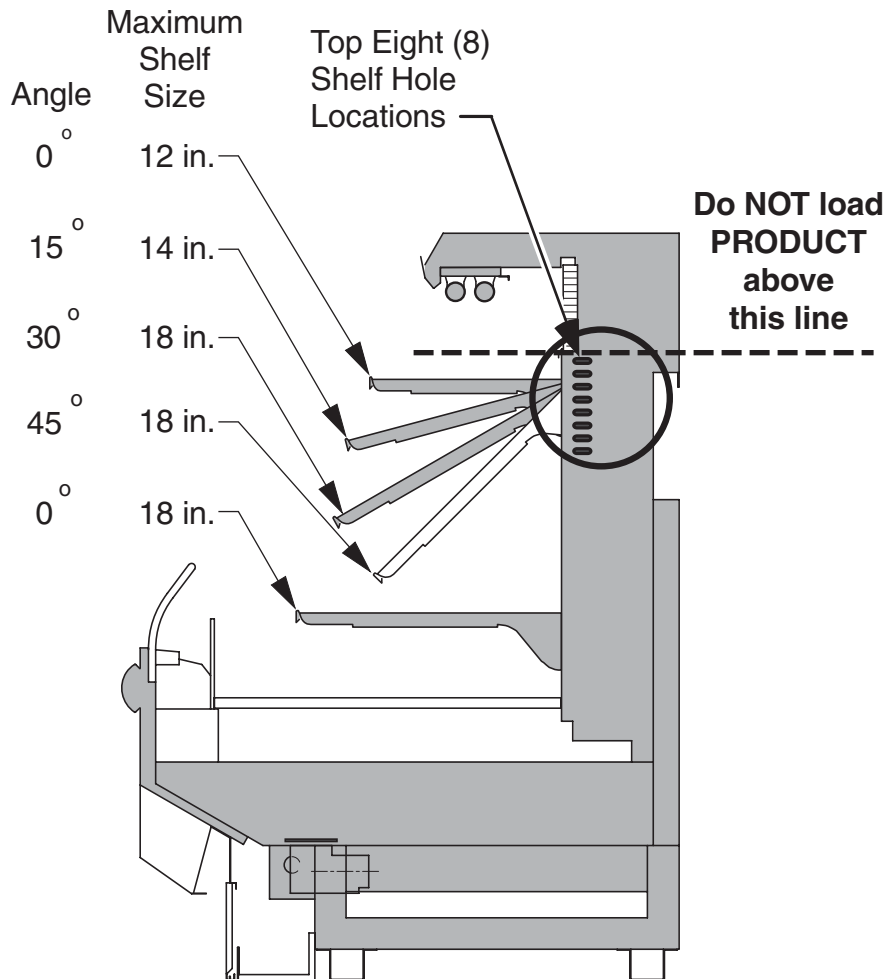
This merchandiser is designed for one or two shelves.

The depth of the shelf used in the top eight (8) shelf hole locations is critical to case performance.

If a shelf is placed in one of the top eight (8) locations it must comply with the angle/depth requirements listed below.

Shelf Angle	Maximum Shelf Depth
0°	12 in.
15°	14 in. or less
30°	18 in. or less
45°	18 in. or less

NOTE: Shelves placed in the lower positions may be up to 18 in. deep when positioned at a 0° angle.



The ballast for the canopy and shelf lamps is located behind the canopy on the left-hand end (when facing case) of the merchandiser.

To access the ballast:

1. Remove screws at bottom edge of canopy and rear of top panel.
2. Remove the one piece canopy top panel by moving panel forward slightly to clear flange in front then lifting up.
3. Service or replace ballasts as required.
4. Reassemble items as they were originally installed.

NOTE: Rail lamp ballast is located behind the lower front panel.

