HUSSMANN Excel



C2NX-XLE

Technical Data Sheet P/N 0486794 L

> **NSF®** Certified February 2017

> > **DOE 2017 Energy Efficiency** Compliant



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FI
E C A

Item Part # **Description** Wiring Item #

FAN ASSEMBLIES

4 Ft, 8 Ft, 10 Ft* & 12 Ft

A. **7W Standard Energy Efficient** Fan Assembly (1) 0477654 Fan Motor, Evaporator (MO.4410545) 0142780 Fan Blade (FB.0142780)

6 Ft & 10 Ft*

A. 4W Standard Energy Efficient Fan Assembly (1) 0477653 Fan Motor, Evaporator (MO.4410544)

0382383 Fan Blade (FB.4780617)

* 10 Ft uses both.

THERMOSTATS

B. 0411744 Standard Non-adjustable (2) Defrost Thermostat (CT.0411744)

C. Optional Adjustable Refrigeration Thermostat (3)

HEATERS

D.		Canopy Anti-Sweat Heater	(4)
	0512499	4 ft (HE.4851174)	
	0512500	6 ft (HE.4851175)	
	0512501	8 ft (HE.4851176)	
	0489674	10 ft (HE.4850979)	
	0512503	12 ft (HE.4851178)	

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Item Part # Wiring Item # Description

LAMPS AND BALLASTS

Ballast, Electronic (5)		(5)
0508087	1 lamp (BA.4482491)	
0508088	2 lamps (BA.4482489)	
0508089	3 lamps (BA.4482488)	
0508090	4 lamps (BA.4482490)	
	Fluorescent Lamp	(6)
	Replace with like fixtures	
	0508087 0508088 0508089	0508088 2 lamps (BA.4482489) 0508089 3 lamps (BA.4482488) 0508090 4 lamps (BA.4482490) Fluorescent Lamp

LED FIXTURES AND POWER SUPPLY

G. 0501213	Power Supply (EP.4481861)	(7)
H.	LED Canopy Fixture	(8)
	Replace with like fixtures	
I.	LED Shelf Fixture	(9)
	Replace with like fixtures	

NOTE: For LED lighting parts contact your Hussmann service representative at 1-800-922-1919. Please have your model and serial number available. Descriptions including size and color are at www.hussmann.com/ServiceAndParts.

Note: Revision L: Added note on page 4. Other changes marked with by bar, underline or circle.

Engineering

Plan Views

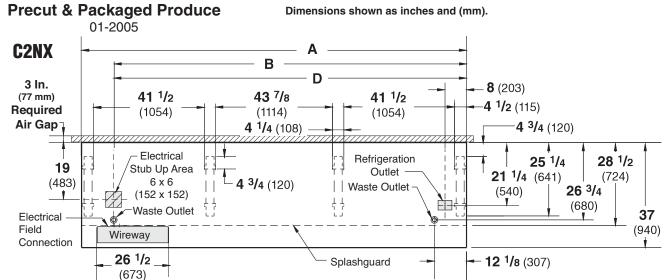
PHYSICAL DATA

Merchandiser Drip Pipe (in.)
Merchandiser Liquid Line (in.)
Merchandiser Suction Line (in.)

3/₈ 7/₈

 $1^{1/4}$

Dairy/Delicatessen



NOTE: Case-to-Case Electrical Connections are made IN FRONT OF SPLASHGUARD.

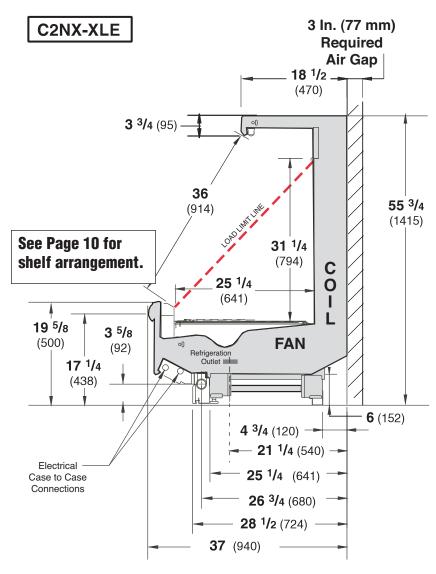
C -

	4 ft	6 ft	8 ft	10 ft	12 ft
General					
(A) Case Length (without ends or partitions)	48 3/8 (1229)	72 3/8 (1838)	96 3/8 (2448)	120 1/2 (3061)	144 1/2 (3670)
(Each end and insulated partition adds 1 ½ in. (38 mm) to case	e line up.)				
Maximum O/S dimension of case back to front					
(includes bumper)	37 (940)	37 (940)	37 (940)	37 (940)	37 (940)
Back of case to front of splashguard	28 1/2 (724)	28 1/2 (724)	28 1/2 (724)	28 1/2 (724)	28 1/2 (724)
Back of case to O/S edge of front leg	25 1/4 (641)	25 1/4 (641)	25 1/4 (641)	25 1/4 (641)	25 1/4 (641)
Distance between edges of external legs and center legs	NA	29 1/2 (750)	41 1/2 (1054)	29 1/2 (749)	41 1/2 (1054)
Distance between edges of center legs	NA	NA	NA	43 7/8 (1114)	43 7/8 (1114)
Distance between front legs and splashguard	2 3/4 (70)	2 3/4 (70)	2 3/4 (70)	2 3/4 (70)	2 3/4 (70)
Electrical Service (Electrical Field Wiring connection po	oint)				
(B) RH End of case to center of stub up area	36 1/4 (921)	60 1/4 (1530)	84 1/4 (2140)	108 1/4 (2750)	132 3/8 (3363)
Back of case to center of stub up area	19 (483)	19 (483)	19 (483)	19 (483)	19 (483)
Length of electrical wireway Wireway	26 1/2 (673)	26 1/2 (673)	26 1/2 (673)	26 1/2 (673)	26 1/2 (673)
(C) RH End of case to LH end of wireway	42 1/8 (1070)	66 1/8 (1680)	90 1/8 (2289)	114 1/4 (2902)	138 1/4 (3511)
Waste Outlets (One each end)					
(D) RH End of case to the center of LH waste outlet	36 1/4 (921)	60 1/4 (1530)	84 1/4 (2140)	108 1/4 (2750)	132 3/8 (3363)
RH End of case to the center of RH waste outlet	12 1/8 (307)	12 1/8 (307)	12 1/8 (307)	12 1/8 (307)	12 1/8 (307)
Back O/S of case to center of waste outlets	26 3/4 (680)	26 3/4 (680)	26 3/4 (680)	26 3/4 (680)	26 3/4 (680)
Schedule 40 PVC drip pipe	1 1/4 (32)	1 1/4 (32)	1 1/4 (32)	1 1/4 (32)	1 1/4 (32)
Refrigeration Outlet					
Back of case to center of refrigeration outlet	21 1/4 (540)	21 1/4 (540)	21 1/4 (540)	21 1/4 (540)	21 1/4 (540)
RH end of case to center of refrigeration outlet	8 (203)	8 (203)	8 (203)	8 (203)	8 (203)

Multi-deck, 4 Display Levels, Low Front, 55 In. Back, Narrow Footprint

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.

Dimensions shown as inches and (mm).



NSF Certification

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

Estimat	ted Charge **	C2NX-XLE		
4 ft	1.2 lb	19 oz	0.5 kg	
6 ft	1.6 lb	26 oz	0.7 kg	
8 ft	2.3 lb	37 oz	1.0 kg	
10 ft	2.8 lb	45 oz	1.3 kg	
12 ft	3.3 lb	53 oz	1.5 kg	

^{**}This is an average for all refrigerant types. Actual refrigerant charge may vary by approximately half a pound (8 oz/0.2 kg).

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Dairy/Delicatessen

Precut & Packaged Produce

REFRIGERATION DATA

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

	C2NX-XLE§
Discharge Air °F	29
Evaporator °F	21
Unit Sizing °F	19

§ Average evaporator temperature shown. Use dew point for high glide refrigerants for unit sizing. Care should be taken to use the dew point in PT tables for measuring and adjusting superheat. Adjust evaporator pressure as needed to maintain discharge air temperature shown.

Btu/hr/ft — Unlit Shelves ‡

C2NX-XLE	Parallel	Conventional
4ft/8ft/12ft	1039	1114
6ft	1042	1117

[‡] Add 10 Btu/hr/ft *per shelf row* for LED fixtures. Add 20 Btu/hr/ft *per shelf row* for fluorescent lamps.

DEFROST DATA

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Frequency (hr) 6

Defrost Water (lb/ft/day) 7
(±15% based on case configuration and product loading.

OFFTIME	C2NX-XLE
Temp Term °F	48°F
Failsafe Minutes	30

ELECTRIC OR GAS Not Recommended

Standard Defrost Thermostat

Close on rise: close 48°F – open 33°F

CONVENTIONAL CONTROLS

Low Pressure Backup Control

C2NX-XLE

CI/CO* 14°F / 4°F

Indoor Unit Only, Pressure Defrost Termination* 48°1

*Use a Temperature Pressure Chart to determine PSIG conversions.

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Number of Fans—7W 1 - 2 1 3 Number of Fans—4W - 2 - 2 -	
Amperes Watts	
4 ft 6 ft 8 ft 10 ft 12 ft 4 ft 6 ft 8 ft 10 ft 12 ft	t
Evaporator Fan	
120V 50/60Hz Standard Energy Efficient 0.19 0.24 0.38 0.43 0.57 14 16 28 30 42	
230V 50/60Hz Standard Energy Efficient 0.10 0.12 0.20 0.22 0.30 14 16 28 30 42 230V 60Hz Export 0.25 0.30 0.50 0.55 0.75 39 48 78 87 117	
230V 50Hz Export 0.28 0.36 0.56 0.64 0.84 42 54 84 96 126	
Minimum Circuit Ampacity †	
120V 50/60Hz Standard Energy Efficient 0.39 0.44 0.58 0.63 0.77	
230V 50/60Hz Standard Energy Efficient 0.30 0.32 0.40 0.42 0.50	
230V 60Hz Export 0.45 0.50 0.70 0.75 0.95	
230V 50Hz Export 0.48 0.56 0.76 0.84 1.04	
Maximum Over Current Protection 120V 20 20 20 20 20	
Maximum Over Current Protection 230V 15 15 15 15 15	
Anti-sweat Heaters	
120V 50/60Hz Standard 0.10 0.15 0.20 0.25 0.30 12 18 24 30 36	
120	
Standard Lighting (T-8 Fluorescent)	
1 Row Canopy 0.26 0.51 0.51 0.77 0.77 30 59 59 85 85	
0 TO TO THE ORDER AND THE ORDE	
ONLY LIGHTING CONFIGURATIONS THAT ARE COMPLIANT WITH THE U.S. DEPT. OF ENERGY (DOE) 2017 REGULATION ARE AVAILABLE FOR ANY DEPT. I.S. A	OR
SALE FOR USE IN THE U.S.A.	
Optional Lighting (T-8 Fluorescent)	
Additional 1 Row Canopy 0.26 0.51 0.51 0.77 0.77 30 59 59 85 85	
1 Row Rail Light 0.26 0.51 0.51 0.77 0.77 30 59 59 85 85	
3 Rows of Shelves 0.77 1.53 1.53 2.31 2.31 90 177 177 255 255	
EcoShine II Canopy	
1 Row Canopy — EcoShine II 0.23 0.35 0.46 — 0.70 27.8 41.4 55.6 — 83.4	ŀ
1 Row Canopy — EcoShine II HO 0.28 0.42 0.56 — 0.84 34.0 50.5 67.2 — 100.8	3
For China H D - H Links 1 D	,
EcoShine II Rail Light —1 Row 0.09 0.13 0.17 — 0.26 10.2 15.3 20.5 — 30.7	
EcoShine II Shelf	
2 Rows of Shelves 0.17 0.26 0.34 — 0.51 20.5 30.7 40.9 — 61.4	
3 Rows of Shelves 0.26 0.38 0.51 — 0.77 30.7 46.0 61.4 — 92.1	

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

Please note: some combinations of fluorescent lights on this case model may not be compliant with DOE 2017 and may not be available to order in the US and Canada. More lighting options are available with LED lights. The Hussmann Product Configurator will not allow lighting options that do not comply with the DOE 2017 standards.

¹²⁰V LED Lighting Circuit Total = Canopy Lighting + Shelf Lighting + Optional Rail Lighting

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

[†] MCA does not include Canopy A/S Heaters because heaters are wired separately from fans.

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Product Data

Recommended Usable Cube ¹ (Cu Ft/Ft)

AHRI Total Display Area ² (Sq Ft/Ft)

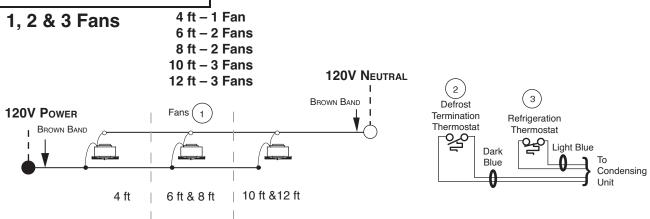
Shelf Area ³ (Sq Ft/Ft)

3.72 ft³/ft (0.35 m³/m) 3.02 ft²/ft (0.92 m²/m) 4.29 ft²/ft (1.31 m²/m)

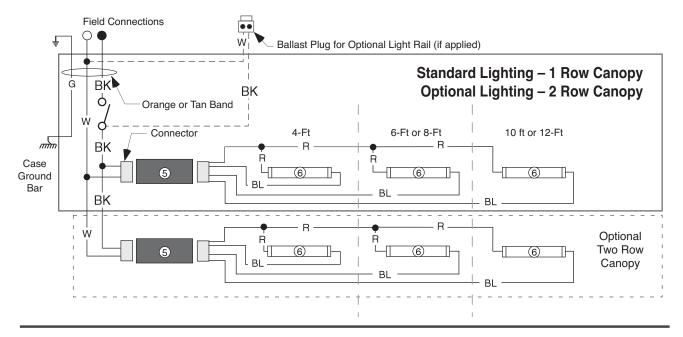
- 1 AHRI Refrigerated Volume less shelving and other unusable space: Refrigerated Volume/Unit of Length, ft³/ft [m³/m]
- ² Computed using AHRI 1200 standard methodology: Total Display Area, ft² [m²]/Unit of Length, ft [m]
- ³ Shelf surface area is composed of bottom deck plus standard shelf complement, as shown in the Hussmann *Product Reference Guide*. The standard shelf complement for this model is (1) row of 12-inch shelves and (1) row of 14-inch shelves.

ESTIMATED SHIPPING WEIGHT 4						
Case						Solid End
	4 ft	6 ft	8 ft	10 ft	12 ft	(each)
lb (<i>kg</i>)	600 (272)	800 (363)	1000 (454)	1100 (499)	1200 (544)	75 (34)

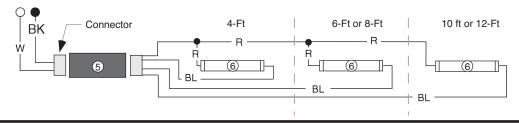




Canopy Light Circuits — Fluorescent Fixtures



Optional Lighting – 1 Row Rail



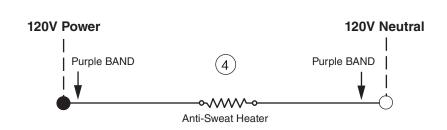
WARNING

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

CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS

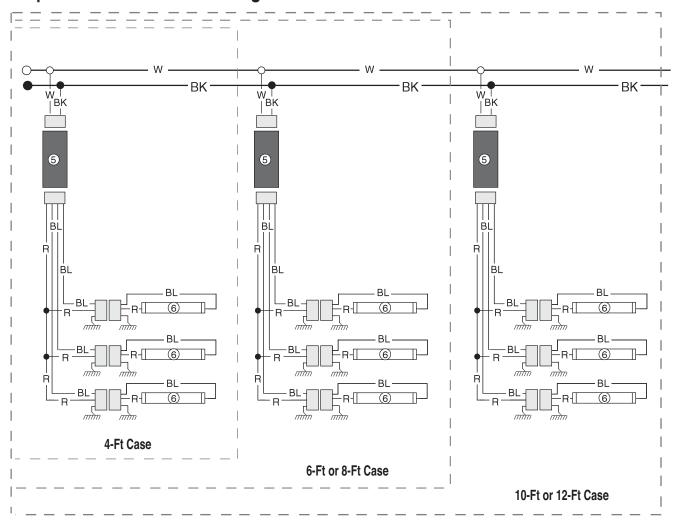
R = Red Y = Yellow G = Green BL = Blue BK = Black W = White \bullet = 120V Power \bigcirc = 120V Neutral \bot = Field Ground \longrightarrow = Case Ground

Canopy Anti-Sweat Heater



Optional Shelf Lighting Fluorescent Fixtures

Optional Shelf Harness and Light Circuits for Two or Three Rows of Shelves



WARNING

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

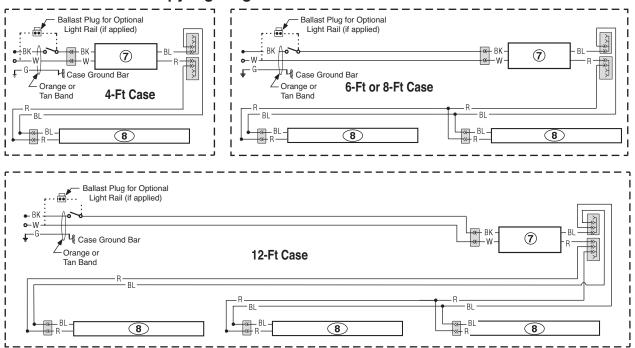
CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS

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

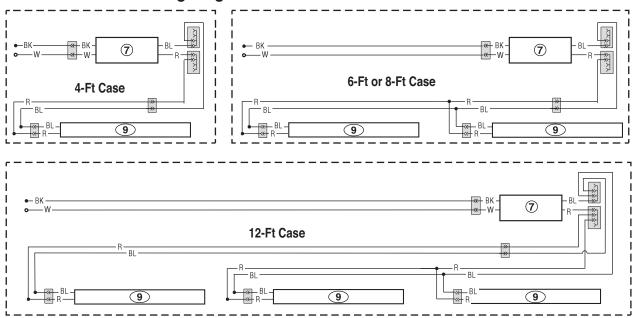
• = 120V Power \bigcirc = 120V Neutral $\frac{1}{2}$ = Field Ground $\stackrel{\text{min}}{}$ = Case Ground

Optional Canopy and Rail Light Circuits — LED Fixtures

EcoShine II LED Canopy Lighting – 1 Row



EcoShine II LED Rail Lighting - 1 Row



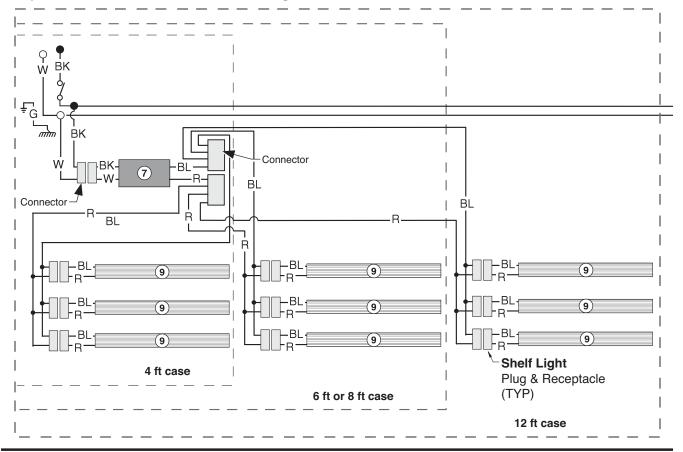
WARNING

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 BK = Black W = White \bullet = 120V Power \bigcirc = 120V Neutral \bot = Field Ground \longrightarrow = Case Ground

Optional Shelf Harness and LED Light Circuits for 2 or 3 Rows of Shelves



WARNING

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

CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS

$$R = Red \qquad G = Green \qquad BL = Blue \qquad BK = Black \qquad W = White$$

$$\bullet = 80V \ Power \qquad \bigcirc = 80V \ Neutral \qquad \stackrel{\bot}{=} = Field \ Ground \qquad \overrightarrow{mm} = Case \ Ground$$

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SHELF CONFIGURATION

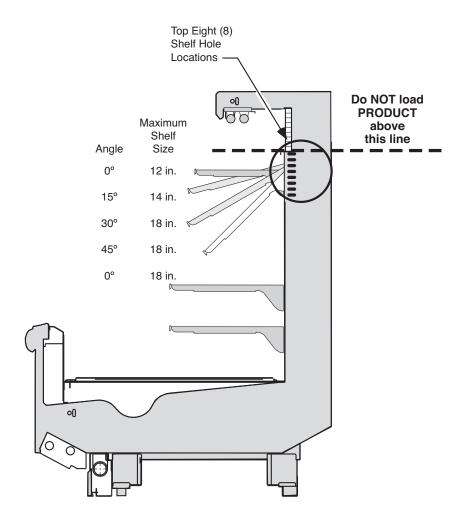
This merchandiser is designed for two or three shelves.

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.



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Precut & Packaged Produce

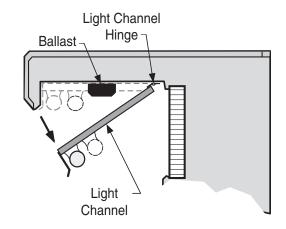
The ballast for the canopy and shelf lamps is located behind the canopy on the left-hand end (when facing case) of the merchandiser.

To access the ballast:

- 1. Remove screws at bottom edge of canopy and rear of light channel.
- Light Channel

 Remove Screws
- 2. Lower light channel which will pivot on hinge.
- 3. Service or replace ballasts as required.
- 4. Reassemble items as they were originally installed.

NOTE: Rail lamp ballast is located in the electrical raceway.



CANOPY ANTI-SWEAT HEATER

The canopy anti-sweat heater location is shown below. Connections are in the electrical wireway.

