HUSSMANN® Excel

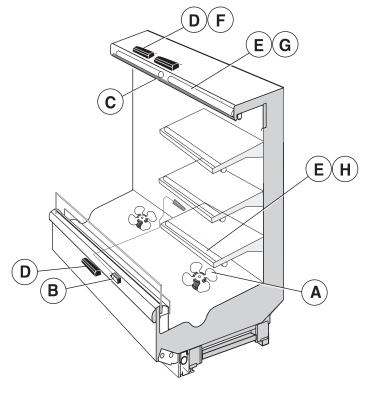


Technical Data Sheet P/N 0494876_N

NSF® Certified

April 2017

DOE 2017
Energy Efficiency
Compliant





Scan QR code to access product information on your mobile device.

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 Ite	m #	Item	Part #	Description	Wiring Item #
FAN A	ASSEMBLIES				LAMP	S AND BALLA	STS	
8 Ft &	& 12 Ft				D.	Ballast, Elec	tronic	(4)
A.	12W Standar	d Energy Efficient	Fan Assembly	(1)		0480130	2 lamps	
	0477655	Fan Motor, Evapor	ator			0480131	3 lamps	
	0461805	Fan Blade				0480132	4 lamps	
					E.		Fluorescent Lamp	(5)
6 Ft (Only						Replace with like fixt	ures
A.	7W Standard	Energy Efficient F	an Assembly	(1)			•	
	0477654	Fan Motor, Evapor	ator		LED	FIXTURES AN	D POWER SUPPLY	
	0142780	Fan Blade			F.	0501213	Power Supply	(6)
					G.		LED Canopy Fixture	(7)
THER	MOSTATS						Replace with like fixt	ures
В.	Optional Adju	stable Refrigeration	Thermostat	(2)	H.		LED Shelf Fixture	(8)
	1	C					Replace with like fixt	
НЕАТ	ERS						1	
C.	0488622	Canopy Anti-Swea	t Heater	(3)				

Datasheet-Excel-C3X-LGEP

0488623

0488624

Note: Revision N: April 2017. Updated LED energy values. Other changes marked with a bar, circle or underline.

8 ft

12 ft

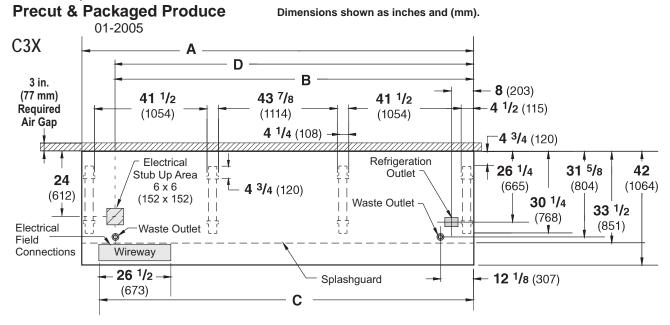
Engineering

Plan Views

PHYSICAL DATA

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

Dairy/Delicatessen



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

FRONT

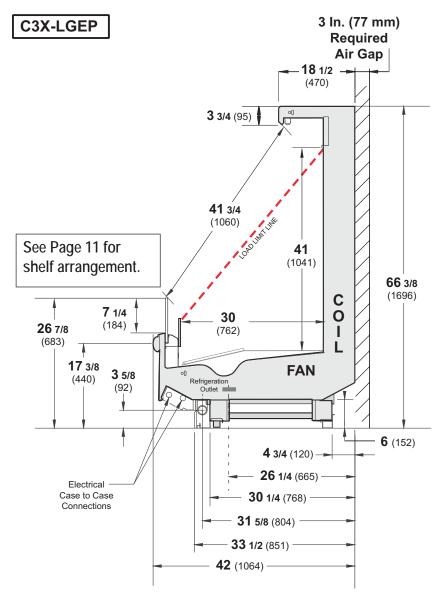
	6 ft	8 ft	12 ft
General			
(A) Case Length (without ends or partitions)	72 3/8 (1838)	96 3/8 (2448)	144 1/2 (3670)
(Each end and insulated partition adds $1^{-1/2}$ in. (38 mm) to case line up.)			
Maximum O/S dimension of case back to front			
(includes bumper)	42 (1064)	42 (1064)	42 (1064)
Back of case to front of splashguard	33 1/2 (851)	33 1/2 (851)	33 1/2 (851)
Back of case to O/S edge of front leg	30 1/4 (768)	30 1/4 (768)	30 1/4 (768)
Distance between edges of external legs and center legs	29 1/2 (750)	41 1/2 (1054)	41 1/2 (1054)
Distance between edges of center legs	NA	NA	43 7/8 (1114)
Distance between front legs and splashguard	2 3/4 (70)	2 3/4 (70)	2 3/4 (70)
Electrical Service (Electrical Field Wiring connection point)			
(B) RH End of case to center of stub up area	60 1/4 (1530)	84 1/4 (2140)	132 3/8 (3363)
Back of case to center of stub up area	24 (612)	24 (612)	24 (612)
Length of electrical wireway Wireway	26 1/2 (673)	26 1/2 (673)	26 1/2 (673)
(C) RH End of case to LH end of wireway	66 1/8 (1680)	90 1/8 (2289)	138 1/4 (3511)
Waste Outlets (One each end)			
(D) RH End of case to the center of LH waste outlet	60 1/4 (1530)	84 1/4 (2140)	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)
Back O/S of case to center of waste outlets	31 5/8 (804)	31 5/8 (804)	31 5/8 (804)
Schedule 40 PVC drip pipe	1 1/4 (32)	1 1/4 (32)	1 1/4 (32)
Refrigeration Outlet			
Back of case to center of refrigeration outlet	26 1/4 (665)	26 1/4 (665)	26 1/4 (665)
RH end of case to center of refrigeration outlet	8 (203)	8 (203)	8 (203)

Multi-deck, 4 Display Levels, Low Front with Glass



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.

Estimated Charge (lb)**C3X-LGEP

6 ft	2.8
8 ft	3.7
12 ft	5.1

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

Excel C3X-LGEP

Dairy / Delicatessen Precut and Packaged Produce

REFRIGERATION DATA

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

C3X-LGEP§	Unlit	Lit
Discharge Air °F	32	30
Evaporator ${}^{\circ}F$	28	26
Unit Sizing °F	26	24

§ 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‡

C3X-LGEP	Parallel	Conventional
Unlit	1118	1193

Add 10 Btu/hr/ft *per shelf row* for LED fixtures.

Add 20 Btu/hr/ft *per shelf row* for fluorescent lamps.

DEFROST DATA

C3X-LGEF

Frequency (hr)	8
Defrost Water (lb/ft/day)	6

($\pm 15\%$ based on case configuration and product loading.

OFFTIME	C3X-LGEP
Failsafe Minutes	30

ELECTRIC OR GAS Not Recommended

CONVENTIONAL CONTROLS

Low Pressure Backup Control

C3X-LGEP

CI/CO* 19°F / 9°F

Indoor Unit Only, Pressure Defrost

Termination* 48°F

*Use a Temperature Pressure Chart to determine PSIG conversions.

Excel C3X-LGEP

Dairy / Delicatessen
Precut and Packaged Produce

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 ech ica	1 1/2/12

Licelie	ai Data	- a.	0.0	100			
	4.7	6 ft	8 ft	12 ft			
	of Fans—12W	_	2	3			
Number	of Fans—7W	2	_	_			
			A			XX 7~44~	
		(64	Amperes		C 64	Watts	12.64
Б 4		6 ft	8 ft	12 ft	6 ft	8 ft	12 ft
Evaporat		0.00	0.40	0.00	• 0		
120V	50/60Hz Standard Energy Efficient	0.38	0.60	0.90	28	36	54
230V	50/60Hz Standard Energy Efficient	0.20	0.30	0.45	28	36	54
230V	60Hz Export	0.50	0.66	0.99	78	100	150
230V	50Hz Export	0.56	0.76	1.14	84	114	171
Minimun	n Circuit Ampacity						
120V	50/60Hz Standard Energy Efficient	0.58	0.80	1.10			
230V	50/60Hz Standard Energy Efficient	0.40	0.50	0.65			
230V	60Hz Export	0.70	0.86	1.19			
230V	50Hz Export	0.76	0.96	1.34			
Maximur	n Over Current Protection 120V	20	20	20			
	n Over Current Protection 230V	15	15	15			
Anti-swe	at Heaters						
120V	50/60Hz Standard	0.15	0.20	0.30	18	24	36
Standard	Lighting (T-8 Fluorescent)						
1 Row	Canopy	0.51	0.51	0.77	59	59	85

ONLY LIGHTING CONFIGURATIONS THAT ARE COMPLIANT WITH THE U.S. DEPT. OF ENERGY (DOE) 2017 REGULATION ARE AVAILABLE FOR SALE FOR USE IN THE U.S.A.

Optional Lighting (T-8 Fluorescent)						
Additional 1 Row Canopy	0.51	0.51	0.77	59	59	85
1 Row Rail Light	NA -	– Glass fr	ront does not a	ccept rail light		
1 Row of Shelves	0.51	0.51	0.77	59	59	85
2 Rows of Shelves	1.02	1.02	1.54	118	118	170
3 Rows of Shelves	1.53	1.53	2.31	177	177	255
EcoShine II Canopy						
EcoShine II	0.24	0.32	0.48	28.9	38.6	58.0
EcoShine II HO	0.33	0.44	0.66	39.5	53.0	79.4
EcoShine II Shelves						
1 Row of Shelves	0.12	0.16	0.25	14.1	19.8	29.7
2 Rows of Shelves	0.23	0.33	0.49	28.2	39.5	59.3
3 Rows of Shelves	0.35	0.49	0.74	42.3	59.3	89.0

120V 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

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

Excel C3X-LGEP Dairy / Delicatessen Precut and Packaged Produce

Product Data

 Recommended Usable Cube ¹ (Cu Ft/Ft)
 4.77 ft³/ft (0.44 m³/m)

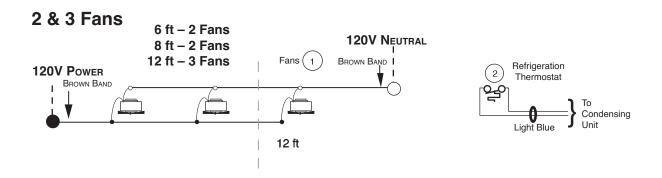
 AHRI Total Display Area ² (Sq Ft/Ft)
 4.02 ft²/ft (1.23 m²/m)

 Shelf Area ³ (Sq Ft/Ft)
 6.02 ft²/ft (1.84 m²/m)

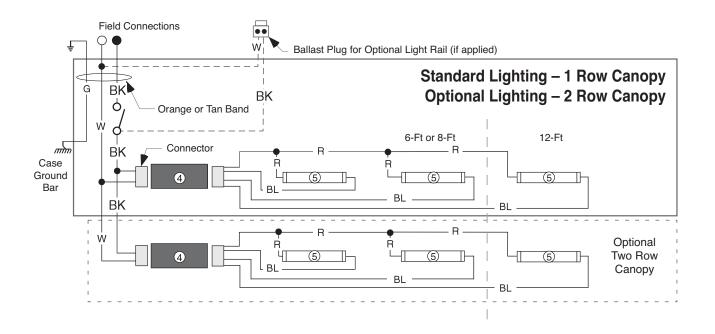
- ¹ AHRI Refrigerated Volume less shelving and other unusable space: Refrigerated Volume/Unit of Length, ft³/ft [m³/m]
- ² Computed using AHRI 1200 standard methodology: Total Display Area, ft² [m²]/Unit of Length, ft [m]
- ³ Shelf surface area is composed of bottom deck plus standard shelf complement, as shown in the Hussmann *Product Reference Guide*. The standard shelf complement for this model is (1) row of 12-inch shelf, (1) row of 14-inch shelf and (1) row of 16-inch shelf.

ESTIMATED SHIPPING WEIGHT 4							
Case				Solid End			
	6 ft	8 ft	12 ft	(each)			
lb (<i>kg</i>)	800 (363)	1000 (454)	1200 (544)	100 (45)			

Fan Wiring Offtime Defrost



Canopy Light Circuits — Fluorescent Fixtures



WARNING

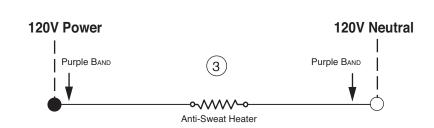
All components must have mechanical ground, and the merchandiser must be grounded.

CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS

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

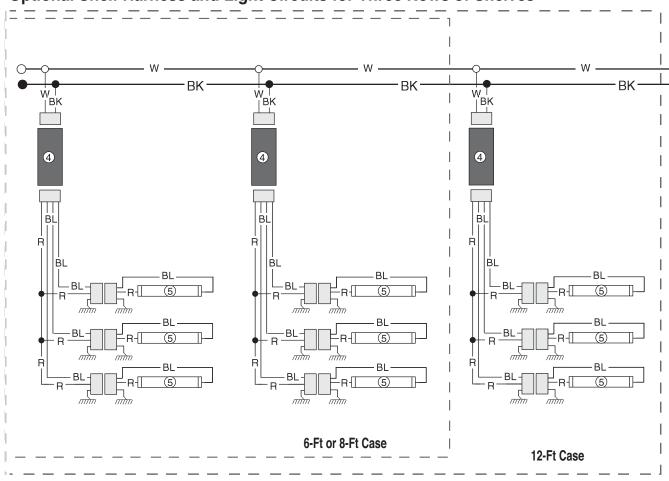
• = 120V Power \bigcirc = 120V Neutral \bot = Field Ground \longrightarrow = Case Ground

Canopy Anti-Sweat Heater



Optional Shelf Lighting Fluorescent Fixtures

Optional Shelf Harness and Light Circuits for Three Rows of Shelves



WARNING

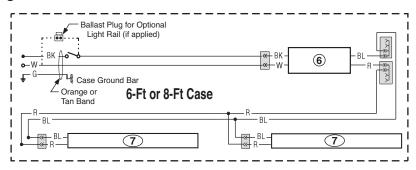
All components must have mechanical ground, and the merchandiser must be grounded.

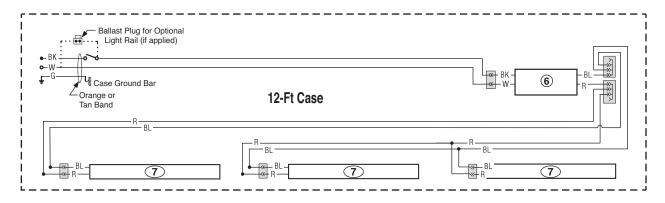
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Optional Canopy Light Circuits — LED Fixtures

EcoShine II LED Canopy Lighting - 1 Row





WARNING

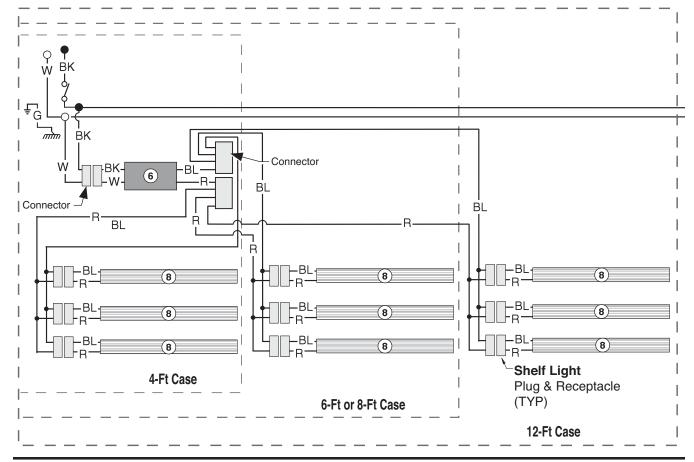
All components must have mechanical ground, and the merchandiser must be grounded.

CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS

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

• = 120V Power \bigcirc = 120V Neutral $\frac{1}{2}$ = Field Ground $\stackrel{\text{min}}{=}$ = 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 G = Green BL = Blue BK = Black W = White

• = 120V Power \bigcirc = 120V Neutral $\frac{1}{7}$ = Field Ground $\stackrel{\text{min}}{\text{min}}$ = Case Ground

Excel C3X-LGEP

Dairy/Delicatessen

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.

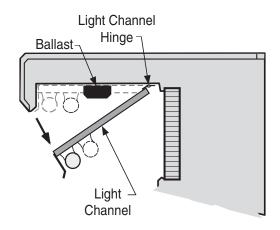
To access the ballast:

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

 Remove Screws

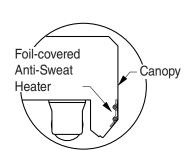
- 2. Lower light channel which will pivot on hinge.
- 3. Service or replace ballasts as required.
- 4. Reassemble items as they were originally installed.

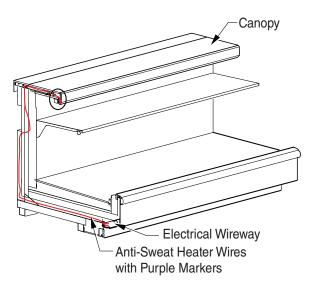
NOTE: Rail lamp ballast is located in the electrical raceway.



CANOPY ANTI-SWEAT HEATER

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





Excel C3X-LGEP

Dairy/Delicatessen

Precut & Packaged Produce

SHELF CONFIGURATION

This case is designed for three (3) shelves.

The depth of the shelves used are critical to case performance.

The use of peg shelves is NOT recommended on C3X-LGEP cases. Depth and angle requirements are listed below.

Top Shelf		
Shelf Depth	Shelf Angle	
12 inches	0°,10°,15°,30°,45°	
14 inches	30°,45°	

Second Shelf Depth	·
14 inches	0°,10°,15°,30°,45°
16 inches	30°,45°

Third Shelf Shelf Depth Shelf Angle	
16 inches	0°,10°,15°,30°,45°
18 inches	30°,45°

