

Item	Part #	Description	Wiring Item #	Item	Part #	Description	Wiring Item #
FAN A	ASSEMBLIES			LED	FIXTURES ANI	D POWER SUPPLY	
8 Ft &	& 12 Ft			E.	0501213	Power Supply	(5)
A.	12W Standar	d Energy Efficient	Fan Assembly (1)	F.		LED Canopy Fixture	e (6)
	0477655	Fan Motor, Eva	porator			Replace with like fixtu	res
	0461805	Fan Blade		G.		LED Shelf Fixture Replace with like fixtu	(7)
THER	RMOSTATS					reputee with the juite.	. 05
В.	Optional Adj	ustable Refrigerat	ion Thermostat (2)				
Lami	PS AND BALLAS	TS					
C.	Ballast, Elec		(3)				

Datasheet-Excel-D5NX-EP

0480130

0480131

0480132

D.

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

(4)

2 lamps

3 lamps

4 lamps

Fluorescent Lamp

Replace with like fixtures

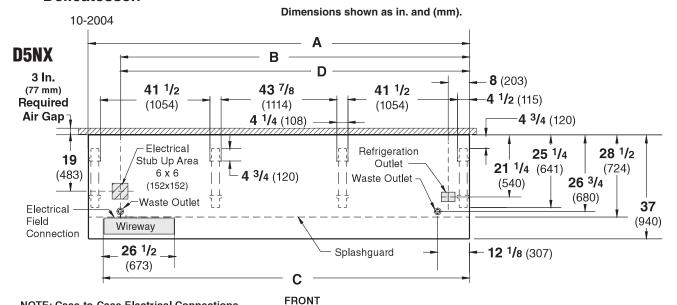
## **Engineering**

## **Plan Views**

## PHYSICAL DATA

Merchandiser Drip Pipe (in.) 1 \(^{1}/\_{4}\)
Merchandiser Liquid Line (in.) \(^{3}/\_{8}\)
Merchandiser Suction Line (in.) \(^{7}/\_{8}\)

## Narrow Dairy & Delicatessen



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

	8 ft	12 ft
General		
(A) Case Length (without ends or partitions)	96 <sup>3</sup> / <sub>8</sub> (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)	37 (940)	37 (940)
Back of case to front of splashguard	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)
Distance between edges of external legs and center legs	41 1/2 (1054)	41 1/2 (1054)
Distance between edges of center legs	NA	43 7/8 (1114)
Distance between front legs and splashguard	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	84 1/4 (2140)	132 3/8 (3363)
Back of case to center of stub up area	19 (483)	19 (483)
Length of electrical wireway Wireway	26 1/2 (673)	26 1/2 (673)
(C) RH End of case to LH end of wireway	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	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)
Back O/S of case to center of waste outlets	26 3/4 (680)	26 3/4 (680)
Schedule 40 PVC drip pipe	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)
RH end of case to center of refrigeration outlet	8 (203)	8 (203)

**DOE 2017 Energy Efficiency** Compliant

Hussmann refrigerated merchandisers configured for sale for use in the United States

#### Dimensions shown as in. and (mm).

meet or surpass the requirements of the DOE 2017 energy efficiency standards.

D5NX-EP	<b>34 <sup>5</sup>/8</b> (878)	3 In. (77 mm) Required Air Gap
7 1/4 (183)		
	AD LIMIT LINE	

	LOAD LIMIT LINE		
<b>50</b> 7/8 (1292)	3 ) . 6	<b>1</b> 49)	<b>81 3/4</b> (2077)
20.5/-	<b>25 <sup>3</sup>/8</b> - (644)	C 0 I	
23 5/8 (600) 21 1/4 3 5/8 (540) (540)	Refrigeration Outlet	AN	6 (152)

Estimated Charge **		D5NX-EP		
8 ft	3.7 lb	59 oz	1.7 kg	
12 ft	5.4 lb	86 oz	2.4 kg	

Electrical -Case to Case Connections

4 3/4 (120) --

**28** <sup>1</sup>/<sub>2</sub> (724)

**21 1/4** (540)

#### **NSF** Certification

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

## REFRIGERATION DATA

Excel D5NX-EP

**Dairy & Delicatessen** 

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

D5NX-EP§	UNLIT	Lit
Discharge Air °F	32	30
Evaporator °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.

#### Btulhrlft — Unlit Shelves‡

D5NX-EP	Parallel	Conventional
Unlit	1308	1388

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

#### **DEFROST DATA**

Frequency Hr	8
Defrost Water (lb/ft/day)	10.5

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

<b>O</b> FFTIME	D5NX-EP
Time (minutes)	30

ELECTRIC OR GAS Not Recommended

#### **CONVENTIONAL CONTROLS**

Low Pressure Backup Control

CI/CO\* D5NX-EP 19°F/9°F

Indoor Unit Only,

Pressure Defrost Termination\* 48°F

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

<sup>\*\*</sup>This is an average for all refrigerant types. Actual refrigerant charge may vary by approximately half a pound (8 oz/0.2 kg).

## Excel **D5NX-EP**Dairy & Delicatessen

Electrical	Data			
		8 ft	12 ft	
Number of	f Fans – 12W	2	3	
		Ampo	eres	Watts
		8 ft	12 ft	8 ft 12 ft
Evaporato	or Fan			
120V	50/60Hz Standard Energy Efficient	0.60	0.90	36 54
230V	50/60Hz Standard Energy Efficient	0.30	0.45	36 54
230V	60Hz Export	0.66	0.99	100 150
230V	50Hz Export	0.76	1.14	114 171
Minimum	Circuit Ampacity			
120V	50/60Hz Standard Energy Efficient	0.80	1.10	
230V	50/60Hz Standard Energy Efficient	0.50	0.65	
230V	60Hz Export	0.86	1.19	
230V	50Hz Export	0.96	1.34	
Mavimum	Over Current Protection 120V	20	20	
	Over Current Protection 230V	15	15	
11421111411	1 O VOI Current I Totalion 250 V	10	13	
Standard 1	Lighting (T-8 Fluorescent)			
1 Row	Canopy	0.51	0.77	59 85
			(202) 404	_
	HTING CONFIGURATIONS THAT ARE COMPLIANT WITH T	HE U.S. DEPT. OF E	NERGY (DOE) 2017	7 REGULATION ARE AVAILABLE FOR
SALE FOR U	USE IN THE U.S.A.			
Optional 1	Lighting (T-8 Fluorescent)			
	onal 1 Row Canopy	0.51	0.77	59 85
	onal 2 Row Canopy	1.02	1.54	118 170
	onal 3 Row Canopy	1.53	2.31	177 255
	Rail Light	0.51	0.77	59 85
	of Shelves	0.51	0.77	59 85
	of Shelves	2.04	3.08	236 340
5 Rows	of Shelves	2.55	3.85	295 425
	of Shelves	3.06	4.62	354 510
EcoShine	II Canany			
EcoShir		0.32	0.48	38.6 58.0
	ne II HO	0.32	0.66	53.0 79.4
ECOSIIII	ile II HO	0.44	0.00	33.0 /9.4
EcoShine	II Rail Light — 1 Row	0.16	0.25	19.8 29.7
EcoShine	II Shelf			
1 Row	of Shelves	0.16	0.25	19.8 29.7
4 Rows	of Shelves	0.66	0.99	79.1 118.6
5 Rows	of Shelves	0.82	1.24	98.9 148.3
	of Shelves	0.99	1.48	118.6 178.0

<sup>120</sup>V 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.

<sup>120</sup>V LED Lighting Circuit Total = Canopy Lighting + Shelf Lighting

<sup>230</sup>V Lighting Circuit Total = Multiply 120V Lighting Circuit Total by 0.52

# Excel D5NX-EP Dairy & Delicatessen

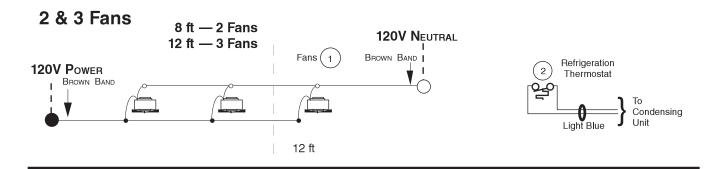
### **Product Data**

Recommended Usable Cube <sup>1</sup> (Cu FtlFt) AHRI Total Display Area <sup>2</sup> (Sq FtlFt) Shelf Area <sup>3</sup> (Sq FtlFt) 7.076 ft<sup>3</sup>/ft (0.66 m<sup>3</sup>/m) 4.240 ft<sup>2</sup>/ft (1.29 m<sup>2</sup>/m) 7.448 ft<sup>2</sup>/ft (2.27 m<sup>2</sup>/m)

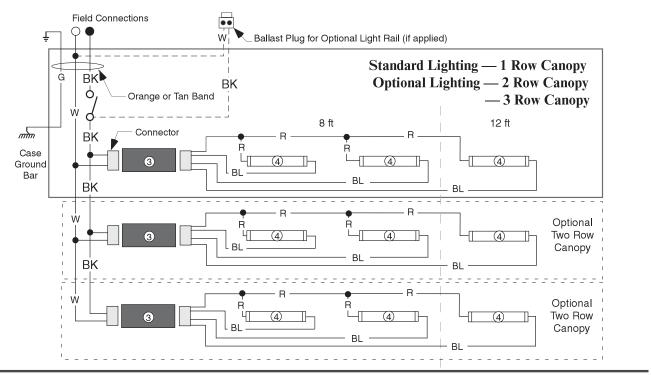
- <sup>1</sup> AHRI Refrigerated Volume less shelving and other unusable space: Refrigerated Volume/Unit of Length, ft³/ft [m³/m]
- $^2\,$  Computed using AHRI 1200 standard methodology: Total Display Area, ft² [m²]/Unit of Length, ft [m]
- <sup>3</sup> Shelf surface area is composed of bottom deck plus standard shelf complement, as shown in the Hussmann *Product Reference Guide*. The standard shelf complement for this model is (4) rows of 16-inch shelves.

ESTIMATED SHIPPING WEIGHT 4			
Case			Solid End
	8 ft	12 ft	(each)
<b>lb</b> (kg)	1200 (544)	1400 (635)	100 (45)

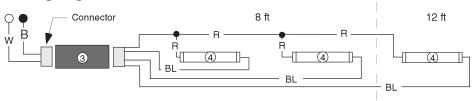
# Fan Wiring Offtime Defrost



## **Canopy Light Circuits— Fluorescent Fixtures**



## Optional Lighting — 1 Row Rail

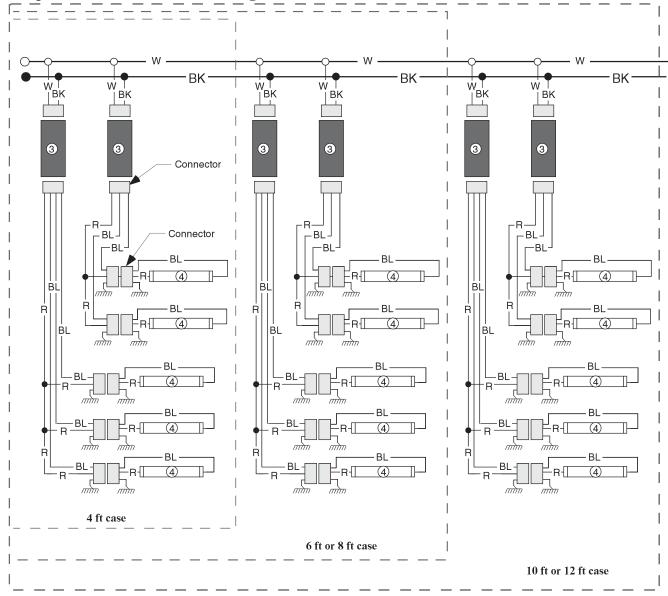


### **WARNING**

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

CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS

## Optional Shelf Harness and Light Circuits for Five Rows of Shelves



### **WARNING**

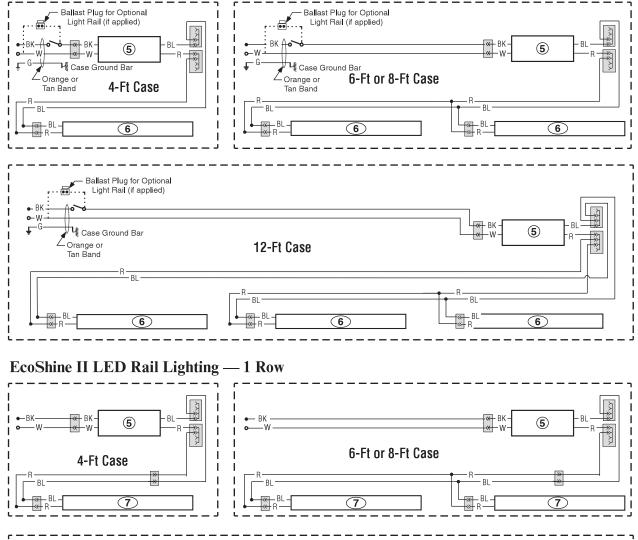
All components must have mechanical ground, and the merchandiser must be grounded.

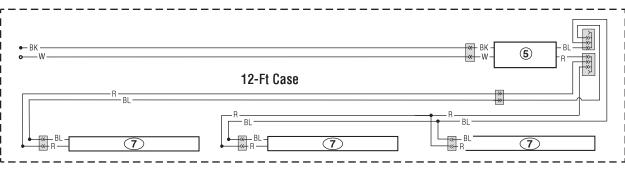
CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS

■ = 120V Power 
$$\bigcirc$$
 = 120V Neutral  $\frac{1}{2}$  = Field Ground  $\overrightarrow{mm}$  = Case Ground

## Optional Canopy and Rail Light Circuits — LED Fixtures

## EcoShine II LED Canopy Lighting — 1 Row





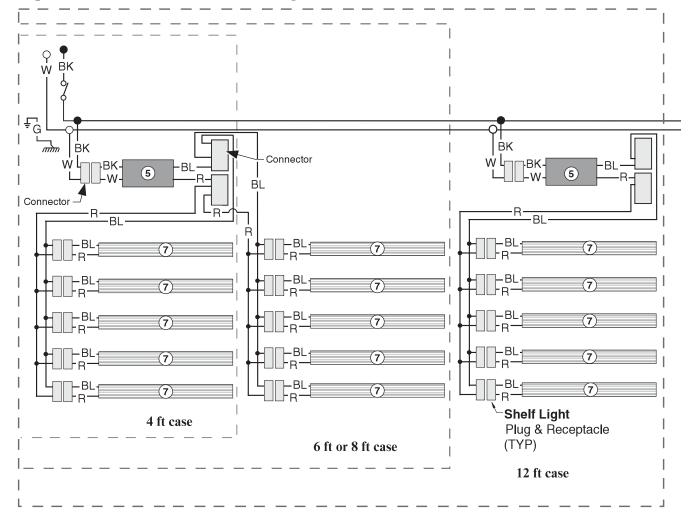
### **WARNING**

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

CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS

• = 120V Power 
$$\bigcirc$$
 = 120V Neutral  $\frac{1}{7}$  = Field Ground  $\frac{1}{12}$  = Case Ground

## Optional Shelf Harness and LED Light Circuits for 4 or 5 Rows of Shelves



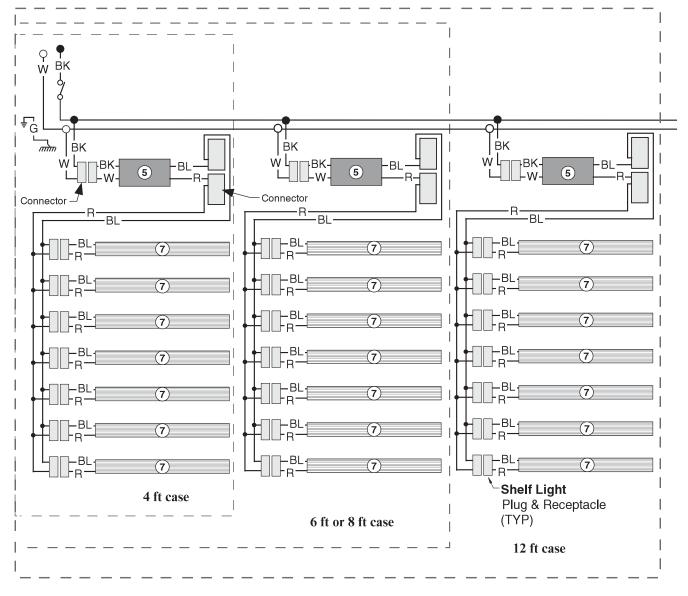
### WARNING

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

Circled numbers = Parts List Item Numbers

## Optional Shelf Lighting LED Fixtures

## Optional Shelf Harness and LED Light Circuits for 6 or 7 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  $\overrightarrow{mm}$  = Case Ground