

M5NX-EP

P/N 0502642_J
NSF® Certified
April 2017

DOE 2017
Energy Efficiency
Compliant



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Item	Part #	Description	Wiring Item #	Item	Part #	Description Wirin	g Item #
FAN A	ASSEMBLIES			LED	FIXTURES AN	D POWER SUPPLY	
8 Ft &	& 12 Ft			E.	0501213	Power Supply (EP.448186	1) (5)
A.	12W Standar	d Energy Efficient Fa	an Assembly (1)	F.		LED Canopy Fixture	(6)
	0477655	Fan Motor, Evapo	rator			Replace with like fixtures	
		(MO.4410546)		G.		LED Shelf Fixture	(7)
	0461805	Fan Blade (FB.4780	0446)			Replace with like fixtures	

THERMOSTATS

B. Optional Adjustable Refrigeration Thermostat (2)

LAMPS AND BALLASTS

C.	Ballast, Ele	ectronic	(3)
	0480130	2 lamps (BA.4481676)	
	0480131	3 lamps (BA.4481654)	
	0480132	4 lamps (BA.4481677)	
D.		Fluorescent Lamp	(4)
		Replace with like fixtures	

Data sheet-Excel-M5NX-EP

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

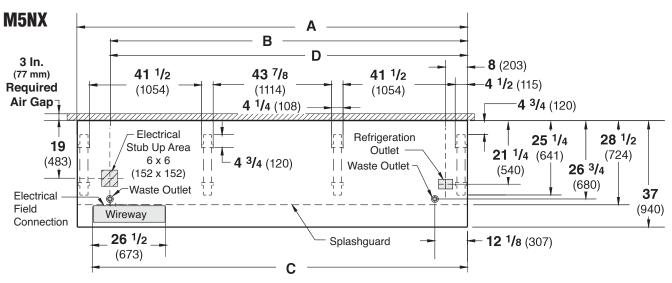
Engineering Plan Views

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

Meat / Delicatessen

09-2005

Dimensions shown as in. and (mm).



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

_		\sim	R I	T
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	8 ft	12 ft
General		
(A) Case Length (without ends or partitions)	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)	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)

Dimensions shown as in. and (mm).

DOE 2017 nergy 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.

3 In. (77 mm) Required Air Gap 34 ⁵/8 M5NX-EP (880)7 1/4 (183) 47 1/2 53 ⁵/8 (1206)(1362)78 ³/8 (1991)C 25 1/4 0 (641)П **FAN** 21 1/4 8 7/8 (540)Refrigeration (225)Outlet === 23 5/8 (600)**7 ⁵/8** (194) 4 3/4 (120) -Electrical Case to Case **21** ¹/₄ (540) Connections **25 ¹/**4 (641) **26** ³/4 (680) **28** ¹/₂ (724) **37** (940)

Estimated Charge**			M5NX-EF
8 ft	2.7 lb	43 oz	1.2 kg
12 ft	3.9 lb	62 oz	1.8 kg

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

NSF Certification

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

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Meat / Delicatessen

REFRIGERATION DATA

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

M5NX-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.

Btu/hr/ft — Unlit Shelves‡

M5NX-EP	Parallel	Conventional
Unlit	1493	1633

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

DEFROST DATA

M5NX-EP

Frequency (hr) 6 Defrost Water (lb/ft/day)_ _10.5

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

O FF T IME	M5NX-EP	
Time (minutes)	30	

ELECTRIC OR GAS Not Recommended

CONVENTIONAL CONTROLS

Low Pressure Backup Control

M5NX-EP

CI/CO* 19°F/9°F

Indoor Unit Only,

Pressure Defrost Termination* 48°F

*Use a Temperature Pressure Chart to determine PSIG conversions.

Excel M5NX-EP **Meat / Delicatessen**

Electrical Data		40.0	
Number of Fans—12W	8 ft 2	12 ft 3	
Number of Pails—12 W	2	3	
	Amp		Watts
Even eveden Een	8 ft	12 ft	8 ft 12 i
Evaporator 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 17
Minimum Circuit Ampacity	0.00	1.10	
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	
Maximum Over Current Protection 120V	20	20	
Maximum Over Current Protection 230V	15	15	
Standard Lighting (T-8 fluorescent) 1 Row Canopy	0.51	0.77	59 85
ONLY LIGHTING CONFIGURATIONS THAT ARE COMPLIANT WITH	THE U.S. DEPT. OF E	NERGY (DOE) 2017	REGULATION ARE AVAILABLE I
SALE FOR USE IN THE U.S.A.			
Optional Lighting (T-8 fluorescent)			
Additional 1 Row Canopy	0.51	0.77	59 85
Additional 2 Row Canopy	1.02	1.54	118 170
Additional 3 Row Canopy	1.53	2.31	177 255
1 Row Rail Light	0.51	0.77	59 85
2 Rows of Shelves	1.02	1.54	118 170
3 Rows of Shelves	1.52	2.31	177 255
4 Rows of Shelves	2.04	3.08	236 340
5 Rows of Shelves	2.55	3.85	295 42:
EcoShine II Canopy			
EcoShine II	0.32	0.48	38.6 58.
EcoShine II HO	0.44	0.66	53.0 79.
E coShine II Rail Light —1 Row	0.16	0.25	19.8 29.
EcoShine II Shelves			
2 Rows of Shelves	0.33	0.49	39.5 59.
3 Rows of Shelves	0.49	0.74	59.3 89.

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

0.99

1.24

0.66

0.82

4 Rows of Shelves

5 Rows of Shelves

79.1

98.9

118.6

148.3

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

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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) 5.76 ft³/ft (0.54 m³/m) 3.96 ft²/ft (1.21 m²/m) 6.96 ft²/ft (2.12 m²/m)

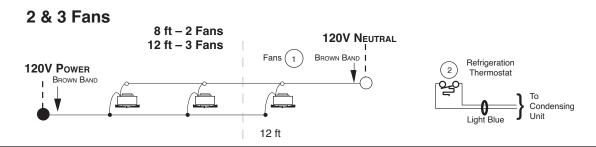
³ Shelf surface area is composed of bottom deck plus standard shelf complement, as shown in the Hussmann *Product Reference Guide*. The standard shelf complement for this model is (1) row of 12-inch shelf, (1) row of 14-inch shelf and (1) row of 16-inch shelf.

ESTIMATED SHIPPING WEIGHT 4						
Case			Solid End			
	8 ft	12 ft	(each)			
$\mathbf{lb}\;(kg)$	1100 (499)	1500 (680)	100 (45)			
⁴ Actual weights will vary according to optional kits included.						

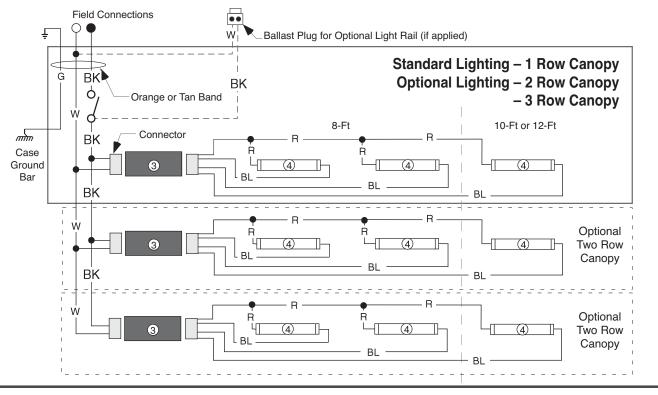
¹ AHRI Refrigerated Volume less shelving and other unusable space: Refrigerated Volume/Unit of Length, ft³/ft [m³/m]

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

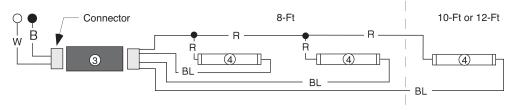
Fan Wiring Offtime Defrost



Light Circuits — Fluorescent Fixtures



Optional Lighting - 1 Row Rail



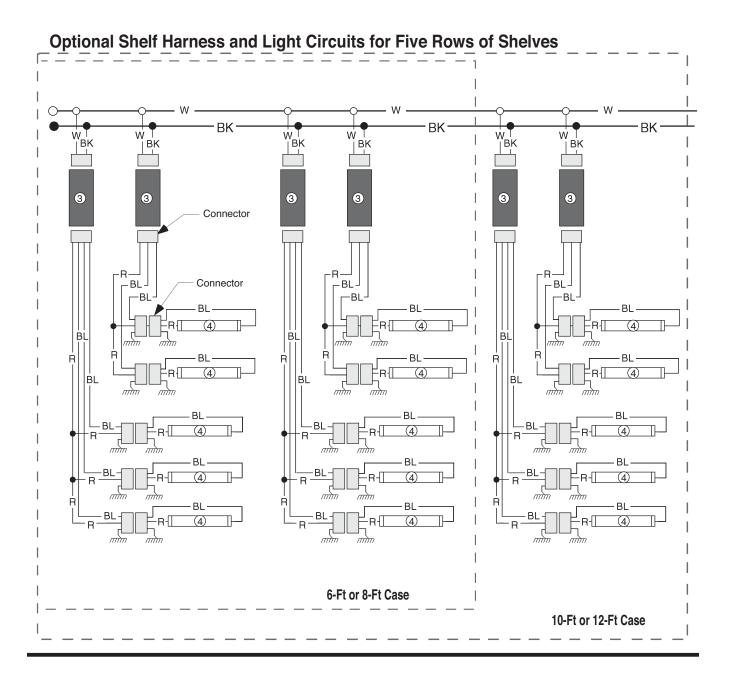
WARNING

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

CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS

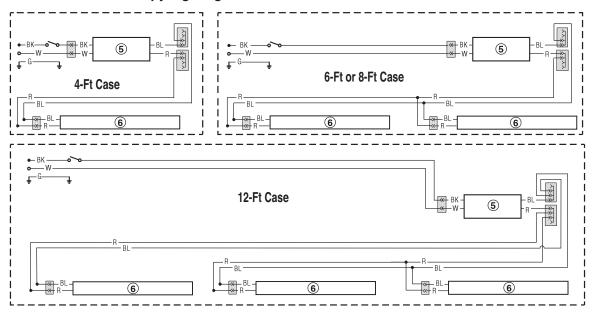
R = Red Y = Yellow G = Green BL = Blue BK = Black W = White \blacksquare = 120V Power \bigcirc = 120V Neutral \bot = Field Ground \longrightarrow = Case Ground

Optional Shelf Lighting Fluorescent Fixtures

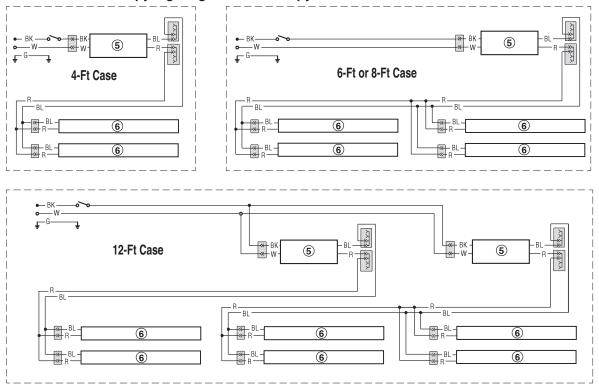


Optional Canopy and Rail Light Circuits — LED Fixtures

EcoShine II LED Canopy Lighting - 1 Row



EcoShine LED Canopy Lighting – 2 Row Canopy



WARNING

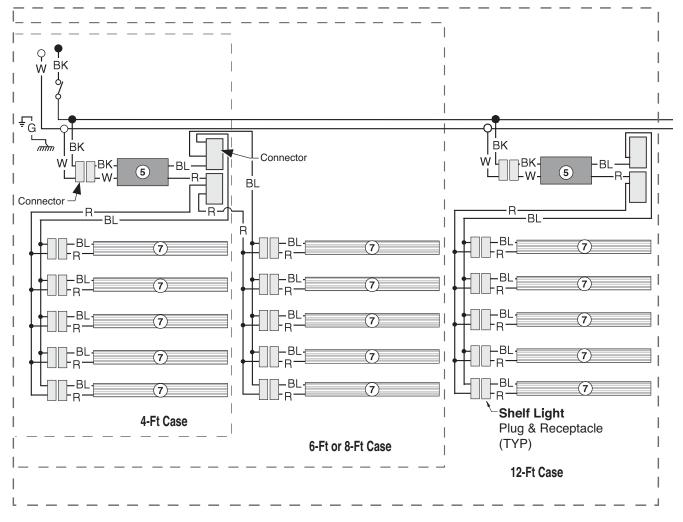
All components must have mechanical ground, and the merchandiser must be grounded.

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 4 or 5 Rows of Shelves



WARNING

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

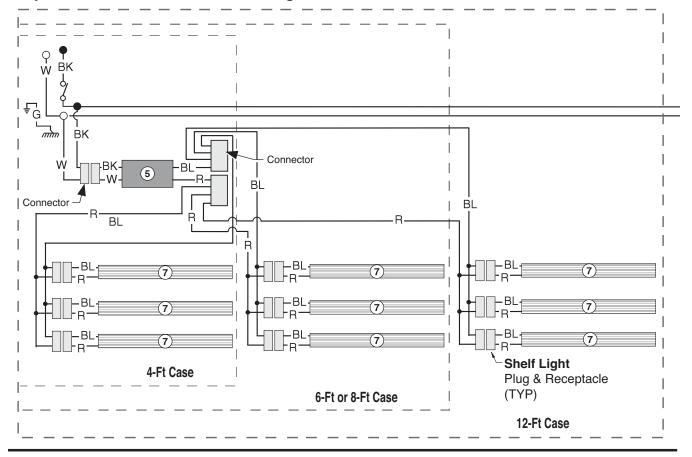
CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS

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

• = 70V Power \bigcirc = 70V Neutral $\frac{1}{7}$ = Field Ground $\stackrel{\text{min}}{\text{min}}$ = Case Ground

Optional Shelf Lighting LED Fixtures

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 $\frac{1}{2}$ = Field Ground \overrightarrow{mm} = Case Ground