

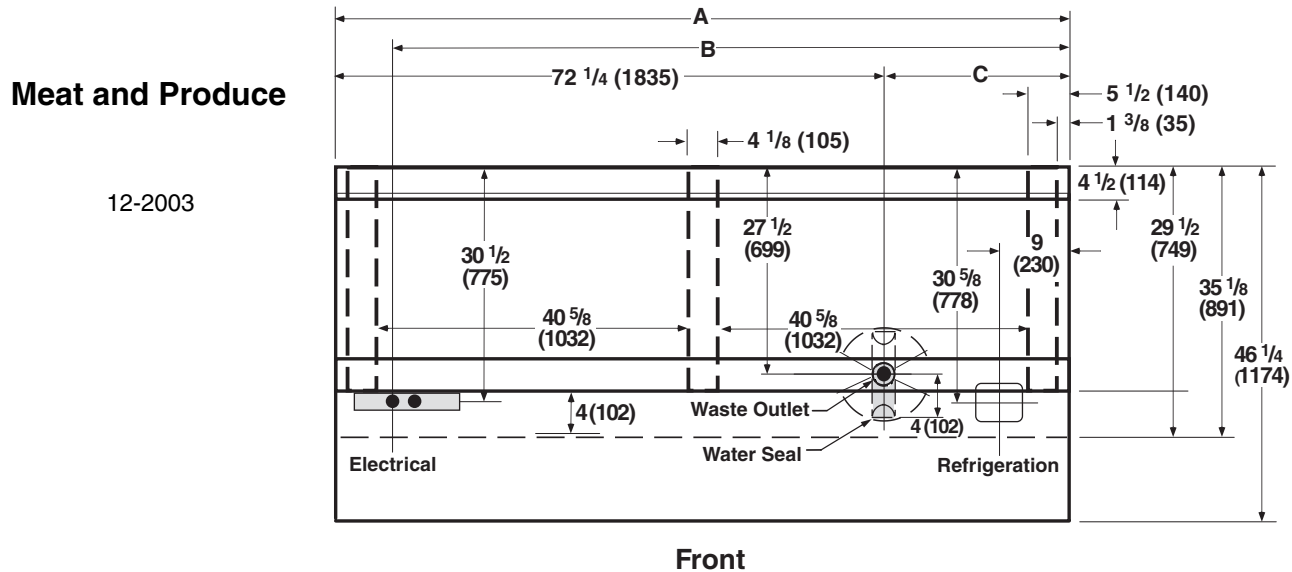
We reserve the right to change or revise specifications and product design in connection with any feature of our products. Such changes do not entitle the buyer to corresponding changes, improvements, additions or replacements for equipment previously sold or shipped.

Item	Part #	Description	Wiring Item #	Item	Part #	Description	Wiring Item #
<b>FAN ASSEMBLIES AND THERMOSTATS</b>				<b>LAMPS AND BALLASTS</b>			
A.	<u>9W Fan Assembly</u>		(1)	D.	0428648	Ballast, Electronic <b>2 lamps</b>	(4)
	0047000	Fan Motor, Evaporator		D.	0428649	Ballast, Electronic <b>3 lamps</b>	(4)
	0407532	Fan Blade embossing toward motor		E.		Fluorescent Lamp <i>Replace with like fixtures</i>	(5)
C.	0137880	Optional Adjustable Refrigeration Thermostat	(3)				

**Note:** Changed items have been underlined.

# Engineering Plan View

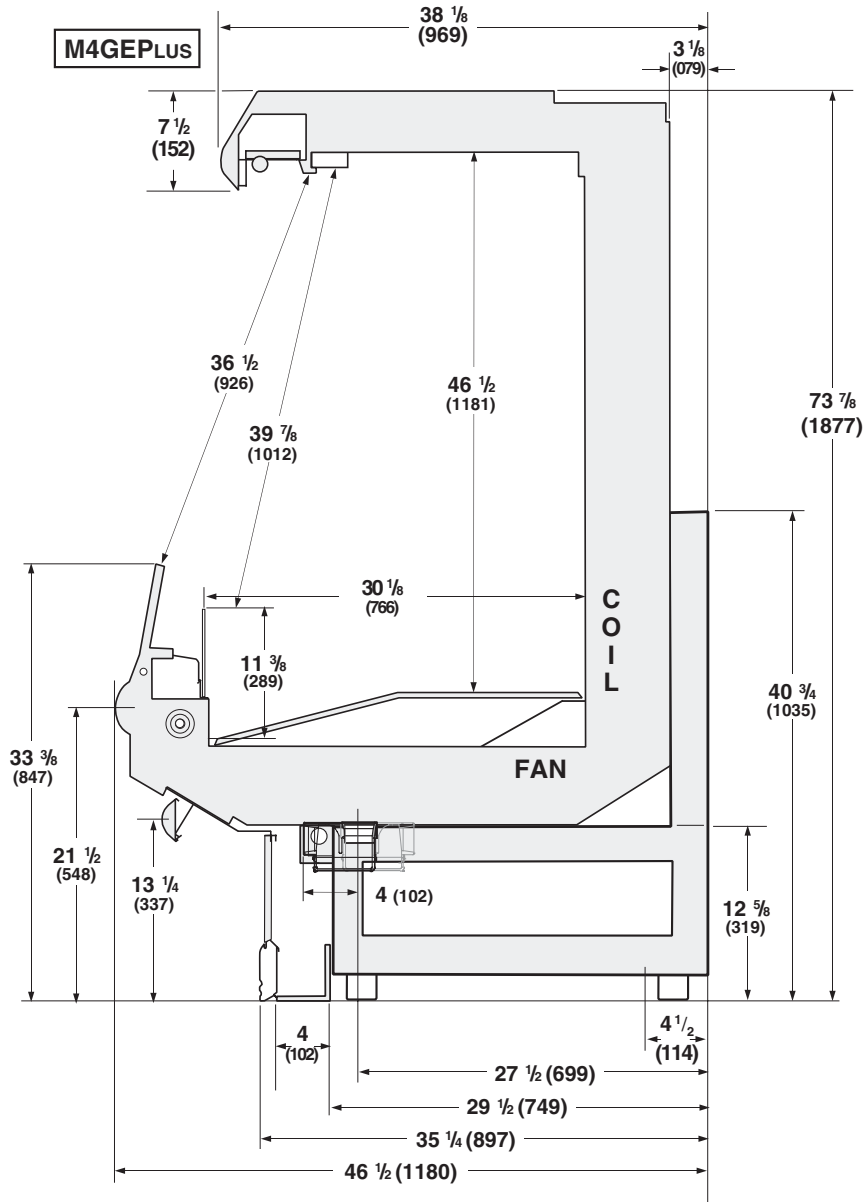
Dimensions shown as inches and (mm).



General	8 Ft	12 ft
<b>(A)</b> Length of Case ( <i>without ends or partitions</i> )	96 <sup>3</sup> / <sub>8</sub> (2448)	144 <sup>1</sup> / <sub>2</sub> (3670)
Maximum outside dimensions of case back to front ( <i>includes bumper</i> )	46 <sup>1</sup> / <sub>4</sub> (1174)	46 <sup>1</sup> / <sub>4</sub> (1174)
Back of case to front of splashguard	35 <sup>1</sup> / <sub>8</sub> (891)	35 <sup>1</sup> / <sub>8</sub> (891)
Back of case to outside edge of front skidrail	29 <sup>1</sup> / <sub>2</sub> (749)	29 <sup>1</sup> / <sub>2</sub> (749)
Width of skidrail	4 <sup>1</sup> / <sub>2</sub> (114)	4 <sup>1</sup> / <sub>2</sub> (114)
Right end of case to inside edge of external support	5 <sup>1</sup> / <sub>2</sub> (140)	5 <sup>1</sup> / <sub>2</sub> (140)
Distance between inside edges of external support and center support	40 <sup>5</sup> / <sub>8</sub> (1032)	40 <sup>5</sup> / <sub>8</sub> (1032)
Distance between inside edges of center supports	NA	44 (1118)
Width of external support	4 <sup>1</sup> / <sub>8</sub> (105)	4 <sup>1</sup> / <sub>8</sub> (105)
Stub-up area between front skidrail and splashguard	4 (102)	4 (102)
Right edge of case (excluding end) to inside edge of external support	1 <sup>3</sup> / <sub>8</sub> (35)	1 <sup>3</sup> / <sub>8</sub> (35)
<b>Electrical Service</b> ( <i>Electrical Field Wiring connection point</i> )		
<b>(B)</b> Right end of case to center of farthest knockout	88 <sup>3</sup> / <sub>8</sub> (2245)	136 <sup>1</sup> / <sub>2</sub> (3467)
Back outside of case to center of knockout	30 <sup>1</sup> / <sub>2</sub> (775)	30 <sup>1</sup> / <sub>2</sub> (775)
Length of electrical raceway	34 <sup>1</sup> / <sub>2</sub> (878)	34 <sup>1</sup> / <sub>2</sub> (878)
<b>Waste Outlet</b>		
<b>(C)</b> Right end of case to center of waste outlet	24 <sup>1</sup> / <sub>8</sub> (613)	72 <sup>1</sup> / <sub>4</sub> (1835)
Left end of case to center of waste outlet	72 <sup>1</sup> / <sub>4</sub> (1835)	72 <sup>1</sup> / <sub>4</sub> (1835)
Back outside of case to center of waste outlet	27 <sup>1</sup> / <sub>2</sub> (699)	27 <sup>1</sup> / <sub>2</sub> (699)
<b>Water Seal</b>		
Edge of water seal to center of waste outlet	4 (102)	4 (102)
Outside diameter of drip pipe	1 <sup>1</sup> / <sub>2</sub> (38)	1 <sup>1</sup> / <sub>2</sub> (38)
<b>Refrigeration Outlet</b>		
Right end of case to center of refrigeration outlet	9 (230)	9 (230)
Back outside of case to center of refrigeration outlet	30 <sup>5</sup> / <sub>8</sub> (778)	30 <sup>5</sup> / <sub>8</sub> (778)

Multi-deck, 4 Display Levels, and Front Glass

Dimensions shown as inches and (mm).



**NSF Certification**

These merchandisers are manufactured to meet ANSI /National Sanitation Foundation (NSF®) Standard #7 requirements.

**Impact M4GEPLUS  
Meat and Delicatessen**

**REFRIGERATION DATA**

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

M4GEPLUS	UNLIT	LIT
Discharge Air °F	31	29
Evaporator °F	28	26
Unit Sizing °F	26	24

Btu/hr/ft*	M4GEPLUS	
	UNLIT	LIT
Parallel	1000	1045
Conventional	1090	1140

\*For all refrigeration equipment other than Hussmann, use conventional Btu values.

**DEFROST DATA**

Frequency Hrs	6
Defrost Water (lb/ft/day)	8
(± 15% based on case configuration and product loading).	

OFFTIME	M4GEPLUS
Time (minutes)	35

**ELECTRIC OR GAS** Not Recommended

**CONVENTIONAL CONTROLS**

Low Pressure Backup Control	
CI/CO**	M4GEPLUS
	19°F / 9°F

**Indoor Unit Only, Pressure Defrost**

Termination**	48°F
**Use a Temperature Pressure Chart to determine PSIG conversions.	

**PHYSICAL DATA**

Drip Pipe (in.)	1 1/2
Liquid Line (in.)	3/8
Suction Line (in.)	7/8

**Estimated Charge (lb)\*\*\***

	M4GEPLUS
8 ft	3.1
12 ft	4.5

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

**Length Added to Lineup by**

Each End (in.)	1 1/2
Each Insulated Partition (in.)	1 1/2

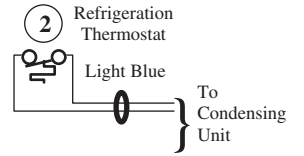
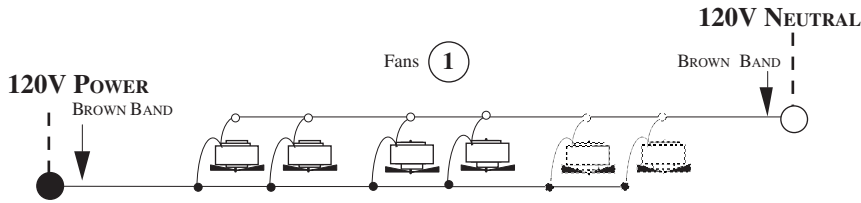
<b>Impact M4GEPLUS</b> <b>Meat and Delicatessen</b>
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**Electrical Data**

	<b>8 Ft</b>	<b>12 Ft</b>		
<b>Number of Fans — 9W</b>	<b>4</b>	<b>6</b>		
	<b>Amperes</b>		<b>Watts</b>	
<b>Merchandiser</b>	<b>8 Ft</b>	<b>12 Ft</b>	<b>8 Ft</b>	<b>12 Ft</b>
<b>Fans</b>				
Standard (120V 60Hz)	2.80	4.20	220	330
Energy Efficient (120V 60Hz)	1.52	2.28	100	150
Export (230V 50Hz)	1.52	2.28	228	342
<b>Constant on Anti-sweat Heaters</b>	NA			
<b>Cycling Anti-sweat Heaters</b>	NA			
<b>Minimum Circuit Ampacity</b>				
With Standard Fans (120V 60Hz)	3.00	4.40		
Export (230V 50Hz)	1.72	2.48		
With Energy Efficient Fans (120V 60Hz)	1.72	2.48		
<b>Maximum Over Current Protection 120V</b>	20	20		
<b>Maximum Over Current Protection 230V</b>	15	15		
<b>Supplemental Gas Heaters</b>	NA			
<b>208V 1Φ Electric Defrost</b>	NA			
<b>Standard Lighting</b>				
1 Row Canopy	0.51	0.77	59	85
<b>Optional Lighting</b>				
1 Row Canopy and 1 Rail	1.02	1.54	118	170
2 Row Canopy	1.02	1.54	118	170
2 Row Canopy and 1 Row Rail	1.53	2.31	177	255
3 Row Canopy	1.53	2.31	177	255
3 Row Canopy and 1 Rail	2.04	3.08	236	340
<b>Optional Shelf Lighting</b>				
1 Row of Shelves	0.51	0.77	59	85
2 Rows of Shelves	1.02	1.54	118	170
3 Rows of Shelves	1.53	2.31	177	255

# Fan Wiring Offtime Defrost

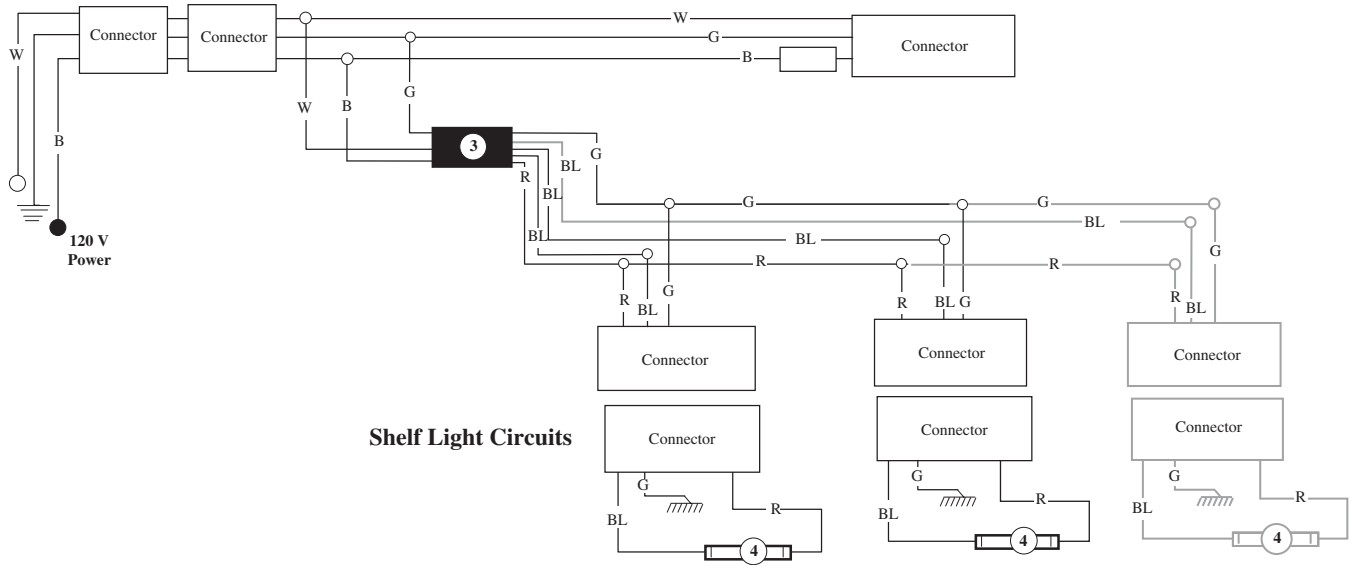
## 4 & 6 Fans



## Optional Shelf Harness and Light Circuits for One Row of Shelves

# Shelf Lighting

### Shelf Harness



### WARNING

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

CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS

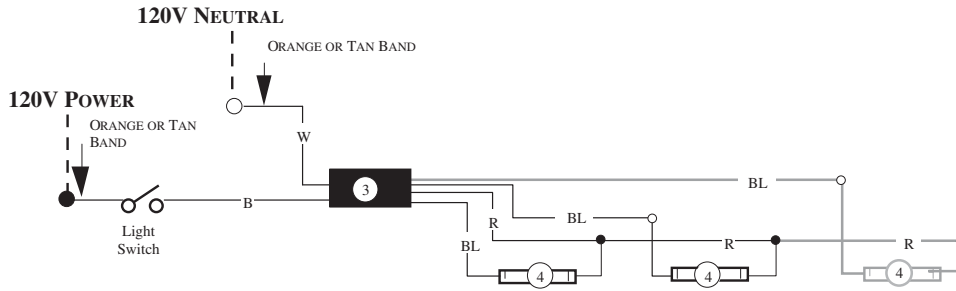
Grayed components in 12 foot models only.

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

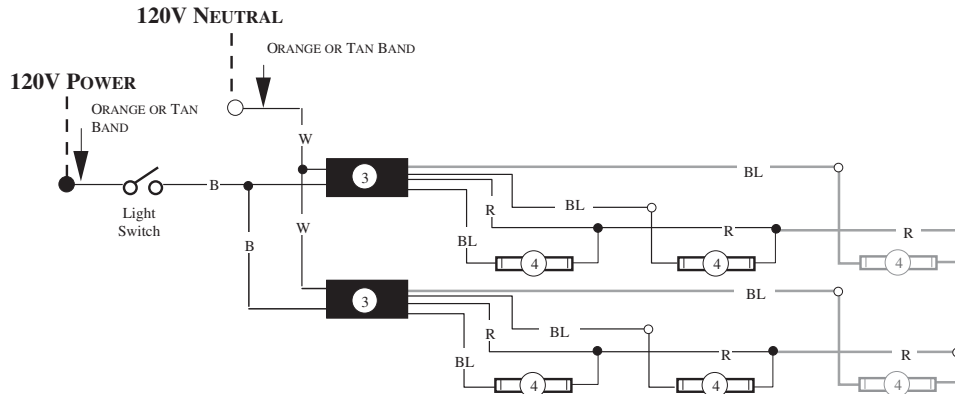
● = 120V POWER ○ = 120V NEUTRAL ≡ = FIELD GROUND ≡≡ = CASE GROUND

# Light Circuits

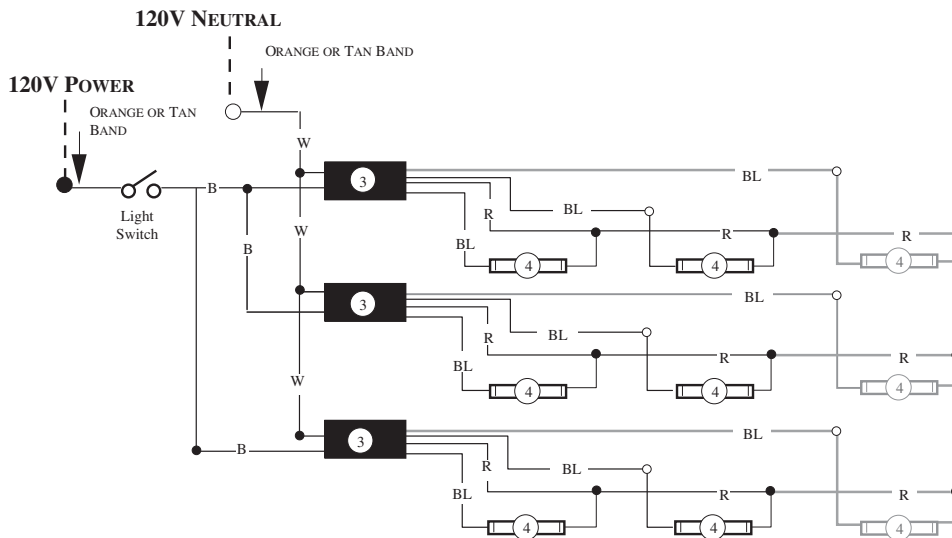
## Standard Lighting 1 Row Canopy or Optional 1 Row Rail



## Optional Lighting 2 Rows Canopy



## Optional Lighting 3 Row Canopy



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