

Item	Part #	Description	Wiring Item #	Item	Part #	Description	Wiring Item #
FAN ASSEMBLIES AND THERMOSTATS				LAMPS AND BALLASTS			
A.	9W Fan Assembly		1	D.	<u>0428648</u>	Ballast, Electronic 2 lamps	4
	0047000	Fan Motor, Evaporator					
	0315470	Fan Blade embossing toward motor		D.	<u>0428649</u>	Ballast Electronic 3 lamps	4
B.	0411744	Standard Non-adjustable Thermostat	2	E.		Fluorescent Lamp <i>Replace with like fixtures</i>	5
C.	0137880	Optional Adjustable Refrigeration Thermostat	3				

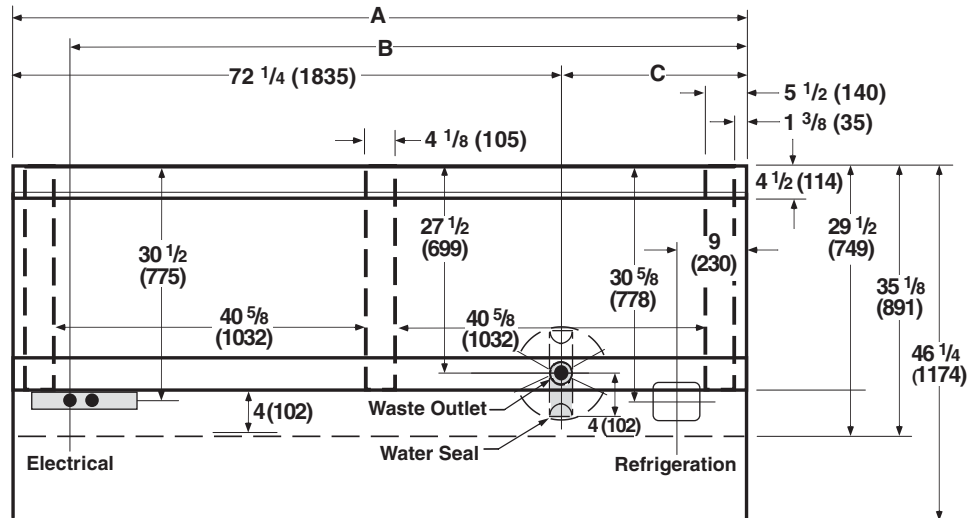
Note: Changed items have been underlined.





Engineering Plan View

Dimensions shown as inches and (mm).

Meat and Produce

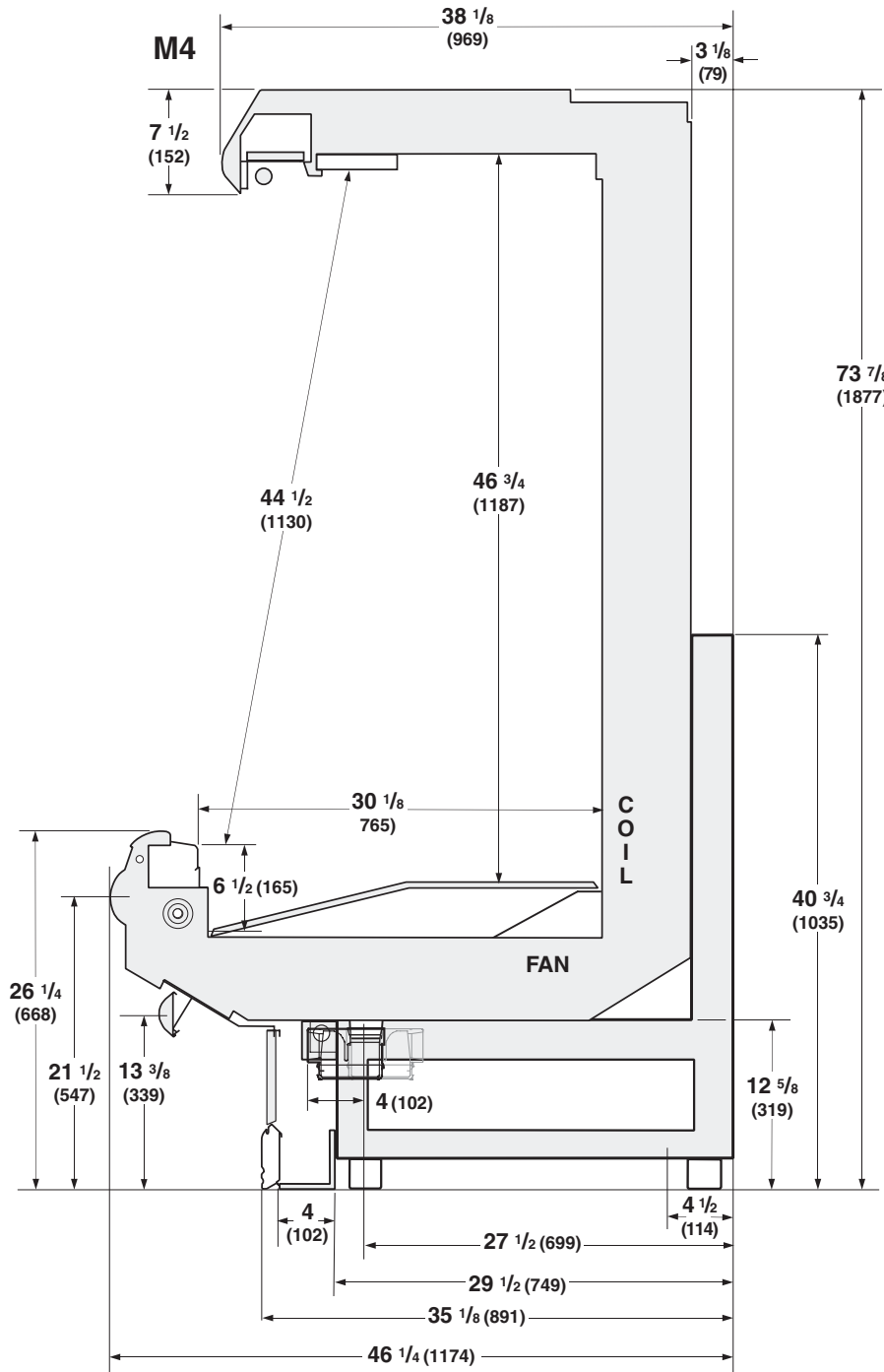
09-2003



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

Impact M4
Meat and Delectessen

Dimensions shown as inches and (mm).



REFRIGERATION DATA

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

	M4	M4E
Discharge Air °F	28	29
Evaporator °F	18	21
Unit Sizing °F	16	19

Btu/hr/ft**	M4	M4E
Parallel	1325	1270
Conventional	1405	1350

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

DEFROST DATA

	M4	M4E
Frequency (hr)	6	6
Defrost Water (lb/ft/day)	8	8

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

OFFTIME	M4	M4E
Temp Term °F	48°F	48°F
Failsafe Minutes	25	30

ELECTRIC OR GAS Not Recommended

Standard Defrost Thermostat

Close on rise: close 48°F – open 33°F

CONVENTIONAL CONTROLS

Low Pressure Backup Control	M4	M4E
CI/CO**	12/2°F	14/4°F

Indoor Unit Only, Pressure Defrost Termination** 48°F

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

PHYSICAL DATA

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

Estimated Charge (lbs)***	M4	M4E
8 ft	2.3	2.7
12 ft	3.3	3.9

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

Length (in.) Added to Lineup by Each End or Insulated Partition	1 1/2
--	-------

NSF Certification

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

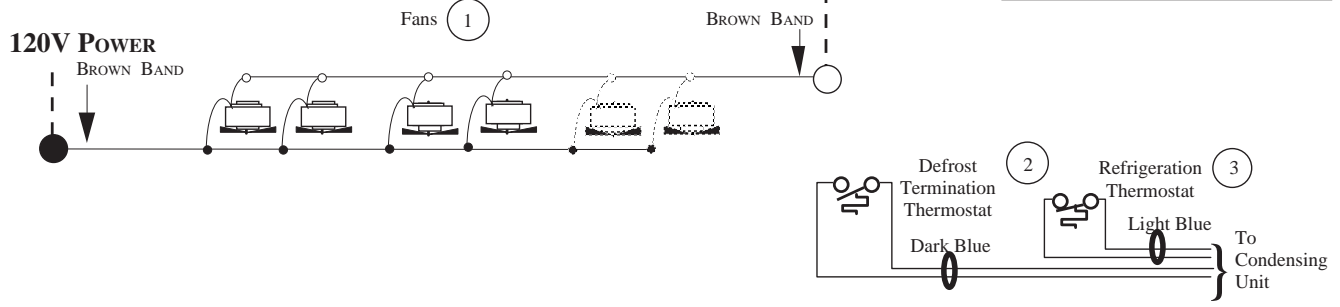
Impact M4 Meat and Delicatessen
--

Electrical Data

	8 Ft	12 Ft		
Number of Fans — 9W	4	6		
	Amperes		Watts	
Merchandise	8 Ft	12 Ft	8 Ft	12 Ft
Fans				
Standard (120V 60Hz)	<u>2.80</u>	<u>4.20</u>	<u>210</u>	<u>330</u>
Export (230V 50Hz)	<u>1.52</u>	<u>2.28</u>	<u>228</u>	<u>342</u>
Energy Efficient (120V 60Hz)	<u>1.52</u>	<u>2.28</u>	<u>100</u>	<u>150</u>
Constant on Anti-sweat Heaters	NA			
Cycling Anti-sweat Heaters	NA			
Min. Circuit Ampacity				
With Standard Fans (120V 60Hz)	<u>3.00</u>	<u>4.40</u>		
Export (230V 50Hz)	<u>1.72</u>	<u>2.48</u>		
With Energy Efficient Fans (120V 60Hz)	<u>1.72</u>	<u>2.48</u>		
Maximum Over Current Protection 120V	20	20		
Maximum Over Current Protection 230V	<u>15</u>	<u>15</u>		
Supplemental Gas Heaters	NA			
208V 1Φ Electric Defrost	NA			
Standard Lighting				
1 Row Canopy	0.51	0.77	59	85
Optional Lighting				
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	<u>1.53</u>	<u>2.31</u>	<u>177</u>	<u>255</u>
3 Row Canopy and 1 Row Rail	<u>2.04</u>	<u>3.08</u>	<u>236</u>	<u>340</u>
Optional Shelf Lighting				
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

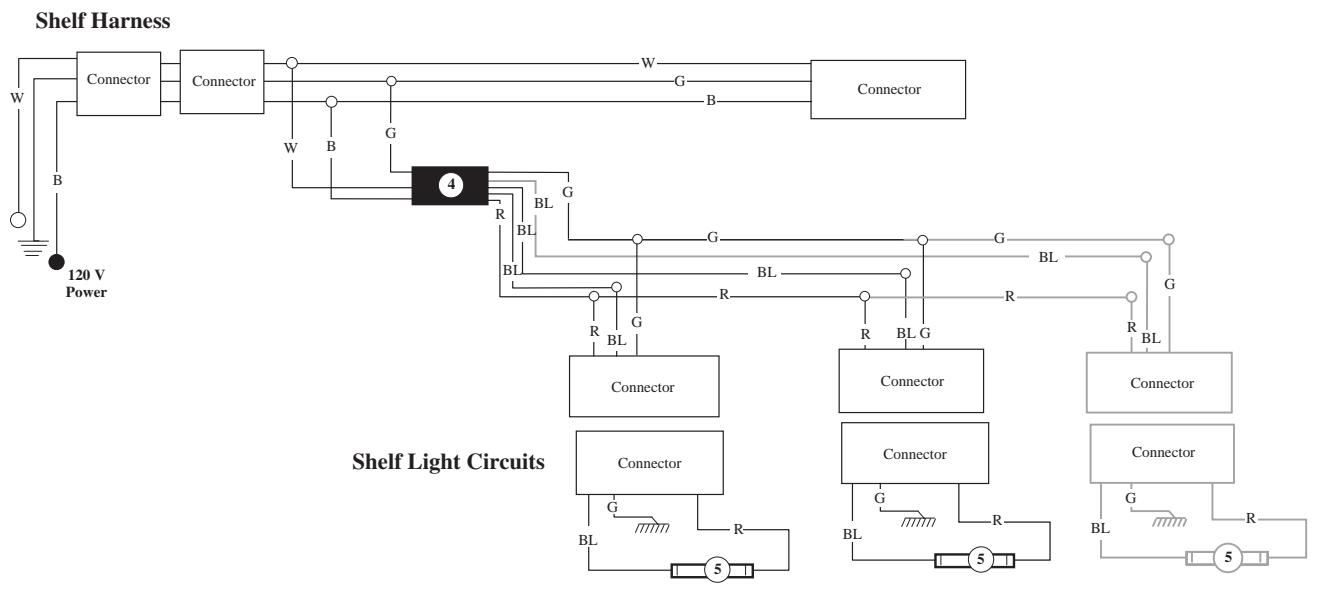
Fan Wiring Off-time Defrost

4 & 6 Fans



Optional Shelf Harness and Light Circuits for One Row of Shelves

Shelf Lighting



WARNING

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

CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS

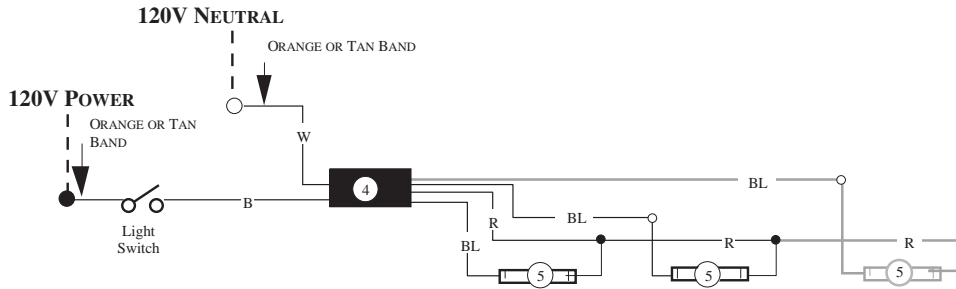
Grayed components in 12 foot models only.

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

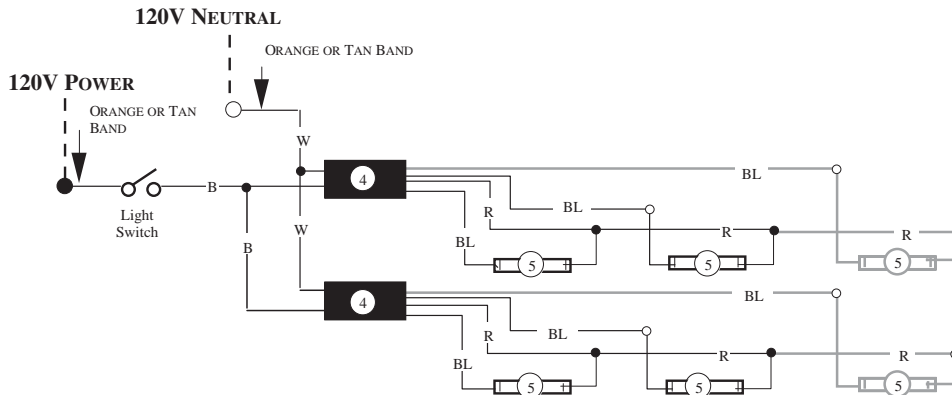
● = 120V POWER ○ = 120V NEUTRAL ≡ = FIELD GROUND ≡≡ = CASE GROUND

Light Circuits

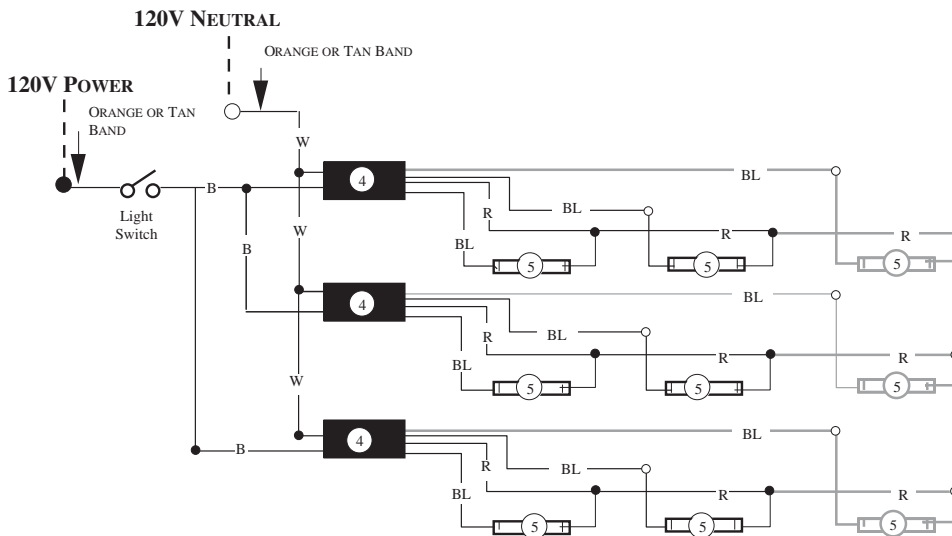
Standard Lighting 1 Row Canopy or Optional 1 Row Rail



Optional Lighting 2 Rows Canopy



Optional Lighting 3 Row Canopy



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