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Item	Part #	Description	Wiring Item #	Item	Part #	Description	Wiring Item #
<b>FAN ASSEMBLIES AND THERMOSTATS</b>				<b>LAMPS AND BALLASTS</b>			
A.	0392457	Fan Motor, Evaporator (120V) (MO.4410101)	(1)	E.	Electronic Ballast		(5)
	0409512	Fan Blade (120V) (FB.0409512) embossing toward motor			0355716	<b>2 lamps</b> (120V) (BA.0355716)	
	0436517	Fan Motor, Evaporator (220V) (MO.4410105)			0355398	<b>3 lamps</b> (120V) (BA.4480118)	
	0409513	Fan Blade (220V) (FB.0409513) embossing toward motor			0440215	<b>2 lamps</b> (230V 50-60 Hz) (BA.4481267)	
B.	0404551	Fan Motor, Ambient (120V) (MO.0404551)	(2)		0428652	<b>3 lamps</b> (230V 50-60 Hz) (BA.4480897)	
	0404552	Fan Motor, Ambient (220V) (MO.4410590)			0385104	Ballast Transformer (230V 50-60 Hz, per ballast) (TR.4481191)	
C.	<u>0382028</u>	Standard Non-adjustable Defrost Thermostat (CT.0382028)	(3)	F.	Fluorescent Lamp		(6)
					<i>Replace with like fixtures</i>		
D.	0137880	Optional Adjustable Refrigeration Thermostat (CT.4481084)	(4)				



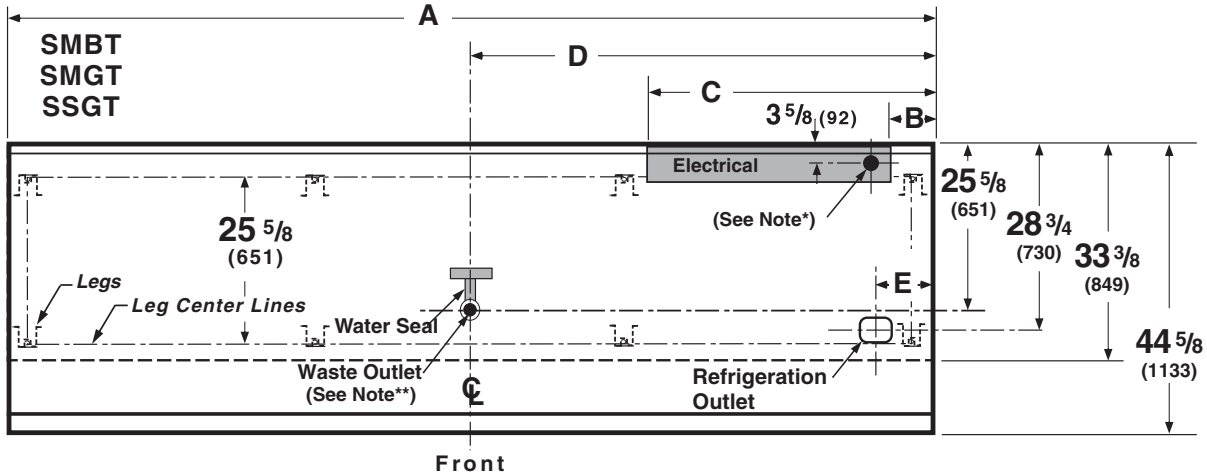
# Engineering Plan Views





## PHYSICAL DATA

Merchandiser Drip Pipe (in.)	1 1/2
Merchandiser Liquid Line (in.)	3/8
Merchandiser Suction Line (in.)	5/8

## Meat & Delicatessen

Dimensions shown as in. and (mm).



	4 ft	6 ft	8 ft	12 ft
<b>General</b>				
<b>(A)</b> Case Length	48 1/4 (1226)	72 1/4 (1835)	96 3/8 (2448)	144 1/2 (3670)
Maximum O/S dimension of case back to front <i>(Note: Includes bumper)</i>	44 5/8 (1134)	44 5/8 (1134)	44 5/8 (1134)	44 5/8 (1134)
Back of case to front of splashguard	33 3/8 (848)	33 3/8 (848)	33 3/8 (848)	33 3/8 (848)
Center of rear legs to center of front legs	25 5/8 (651)	25 5/8 (651)	25 5/8 (651)	25 5/8 (651)
Each End and Partition adds 1 1/2 in. (38 mm) to the length of the lineup.				
<b>Electrical Service</b> 				
<b>(B)</b> RH end of case to Electrical raceway right edge	7 (178)	7 (178)	7 (178)	7 (178)
<b>(C)</b> RH end of case to Electrical raceway left edge	41 3/8 (1051)	32 3/4 (831)	44 1/2 (1131)	44 1/2 (1131)
Back of case to center of knockout	3 5/8 (92)	3 5/8 (92)	3 5/8 (92)	3 5/8 (92)
* Electrical Field Wiring Connection Point				
<b>Waste Outlet</b> 				
<b>(D)</b> RH end of case to the center of waste outlet	24 (610)	24 (610)	24 (610)	72 1/4 (1835)
Back of case to center of waste outlet	25 5/8 (652)	25 5/8 (652)	25 5/8 (652)	25 5/8 (652)
<b>Water Seal</b>				
Center of tee to center of waste outlet 	11 3/8 (289)	11 3/8 (289)	11 3/8 (289)	11 3/8 (289)
Outside diameter of drip piping	1 1/2 (38)	1 1/2 (38)	1 1/2 (38)	1 1/2 (38)
** Field installed water seal outlets, tees, and connectors are shipped with the merchandiser.				
<b>Refrigeration Outlet</b> 				
Back of case to center of refrigeration outlet	28 3/4 (731)	28 3/4 (731)	28 3/4 (731)	28 3/4 (731)
<b>(E)</b> RH end of case to center of refrigeration outlet	9 3/8 (238)	9 3/8 (238)	9 3/8 (238)	9 3/8 (238)
Outside diameter of the liquid line	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)
Outside diameter of the suction line	5/8 (16)	5/8 (16)	5/8 (16)	5/8 (16)



**REFRIGERATION DATA**

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

	<b>SMBT</b>
<b>Discharge Air (°F)</b>	24
<b>Evaporator (°F)</b>	18
<b>Unit Sizing (°F)</b>	16
<b>Btu/hr/ft</b>	<b>SMBT</b>
<b>Parallel</b>	420
<b>Conventional</b>	450

**DEFROST DATA**

	<b>SMBT</b>
<b>Frequency (hr)</b>	12
<b>Defrost Water (lb/ft/day)</b>	0.20
<i>(± 15% based on case configuration and product loading).</i>	

<b>OFFTIME</b>	<b>SMBT</b>
<b>Temp Term (°F)</b>	43°
<b>Failsafe (minutes)</b>	90

**ELECTRIC OR GAS** Not Recommended

**Standard Defrost Thermostat**  
Close on rise: close 43°F — open 33°F

**CONVENTIONAL CONTROLS**

<b>Low Pressure Backup Control</b>	<b>SMBT</b>
<b>CI/CO (Temp °F)*</b>	<b>11°F/1°F</b>
<b>Indoor Unit Only, Pressure Defrost Termination (Temp °F)*</b>	<b>Not Recommended</b>

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

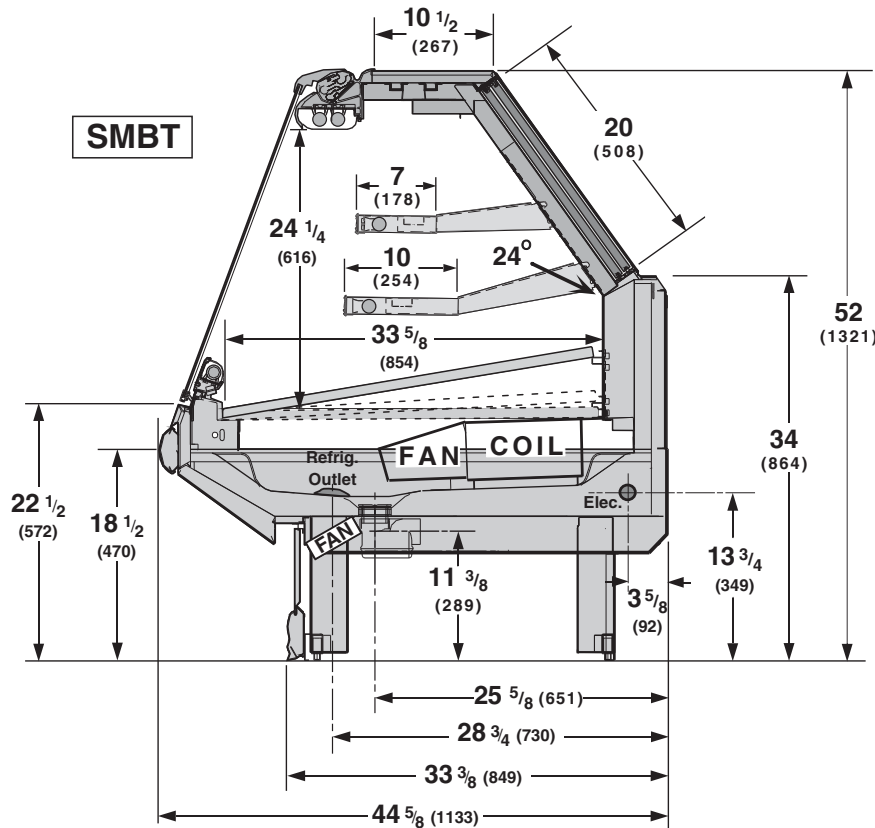
**PHYSICAL DATA**

<b>Estimated Charge (lb)**</b>			
<b>4 ft</b>	0.75 lb	12 Oz	0.35 kg
<b>6 ft</b>	1.0 lb	16 Oz	0.5 kg
<b>8 ft</b>	1.5 lb	24 Oz	0.7 kg
<b>12 ft</b>	2.0 lb	32 oz	0.9 kg

\*\*This is an average for all refrigerant types. Actual refrigerant charge may vary by approximately 0.5 lb (8 oz / 0.2 kg).

<b>Length Added to Lineup by:</b>	
<b>Each Plastic End w/ Bumper (in.)</b>	3 1/2
<b>Each End/Partition (in.)</b>	1 1/2

Dimensions shown as in. and (mm).



**NSF Certification**

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

### Electrical Data

Number of Fans	4 ft	6 ft	8 ft	12 ft
<b>Refrigeration (120V 60hz) – 4W</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>3</b>
<b>Ambient Air Wipe – 15W</b>	<b>2</b>	<b>4</b>	<b>4</b>	<b>6</b>
<b>Export Refrigeration (230V 50 hz) – 4W</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>3</b>
<b>Export Ambient Air Wipe – 15W</b>	<b>2</b>	<b>4</b>	<b>4</b>	<b>6</b>

Merchandise	Amperes				Watts			
	4 ft	6 ft	8 ft	12 ft	4 ft	6 ft	8 ft	12 ft
<b>Refrigeration Fans</b>								
Standard (120V 60hz)	0.31	0.62	0.62	0.93	24	48	48	72
Energy Efficient(120V 60hz)	NA	NA	NA	NA	NA	NA	NA	NA
Export: 230V 50 hz	0.18	0.36	0.36	0.54	27	54	54	81
<b>Ambient Air Wipe Fans</b>								
Standard (120V 60hz)	0.26	0.52	0.52	0.78	15	30	30	45
Energy Efficient(120V 60hz)	NA	NA	NA	NA	NA	NA	NA	NA
Export: 230V 50 hz	0.13	0.26	0.26	0.39	15	30	30	45
<b>Constant On Anti-sweat Heaters</b>	NA	NA	NA	NA	NA	NA	NA	NA
<b>Cycling Anti-sweat Heaters</b>	NA	NA	NA	NA	NA	NA	NA	NA
<b>Minimum Circuit Ampacity</b>								
With Standard Fans (120V 60hz)	0.77	1.34	1.34	1.91				
With Energy Efficient Fans (120V 60hz)	NA	NA	NA	NA				
With Export Fans (230V 50 hz )	0.51	0.82	0.82	1.13				
<b>Maximum Over Circuit Protection 120V</b>	<b>20</b>	<b>20</b>	<b>20</b>	<b>20</b>				
<b>Electric Defrost Heaters (208V)</b>	NA	NA	NA	NA	NA	NA	NA	NA
<b>Gas Defrost Heaters (208V)</b>	NA	NA	NA	NA	NA	NA	NA	NA

Standard Lighting* (120V 60hz)	4 ft	6 ft	8 ft	12 ft	4 ft	6 ft	8 ft	12 ft
2 Row Canopy	0.49	0.80	0.98	1.42	58	92	116	170
1 Row Rail	0.49	0.40	0.49	0.71	58	46	58	85

Optional Lighting	4 ft	6 ft	8 ft	12 ft	4 ft	6 ft	8 ft	12 ft
1 Row Ledge	0.49	0.40	0.49	0.71	58	46	58	85
2 Row Shelves	0.49	0.80	0.98	1.42	58	92	116	170

115V Lighting Circuit Total = Standard Lighting + Total Optional Lighting + Optional Shelf Lighting

230V Lighting Circuit Total = Multiply 115V Lighting Circuit Total by 0.52

**Product Data**

<i>Recommended Usable Cube</i> <sup>1</sup> (Cu Ft/Ft)	2.61 ft <sup>3</sup> /ft (0.24 m <sup>3</sup> /m)
<i>ARI Total Display Area</i> <sup>2</sup> (Sq Ft/Ft)	1.86 ft <sup>2</sup> /ft (0.57 m <sup>2</sup> /m)
<i>Shelf Area</i> <sup>3</sup> (Sq Ft/Ft)	4.22 ft <sup>2</sup> /ft (1.29 m <sup>2</sup> /m)

<sup>1</sup> ARI Refrigerated Volume less shelving and other unusable space: Refrigerated Volume/Unit of Length, ft<sup>3</sup>/ft [m<sup>3</sup>/m]  
<sup>2</sup> Computed using ARI 1200 standard methodology: Total Display Area, ft<sup>2</sup> [m<sup>2</sup>]/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 one 7-inch shelf and one 10-inch shelf.

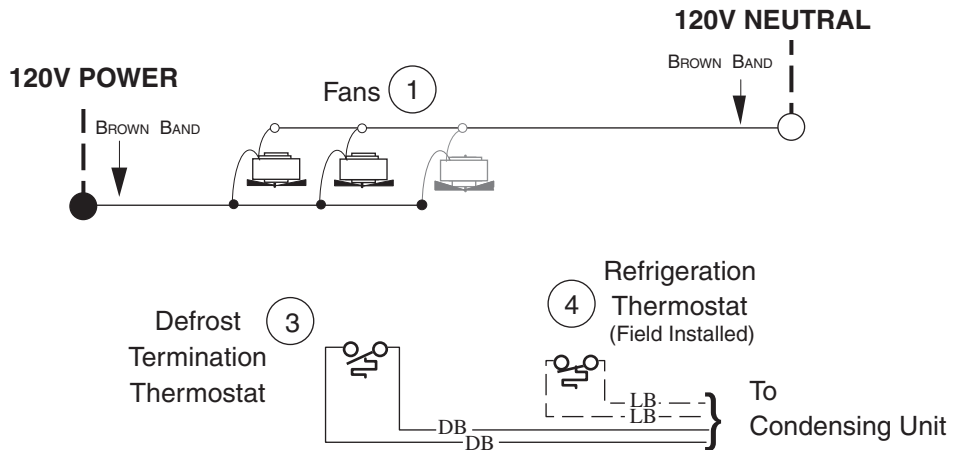
<b>ESTIMATED SHIPPING WEIGHT <sup>5</sup></b>						
<b>Case</b>					<b>Solid End</b>	<b>Glass / Plastic End</b>
	<i>4 ft</i>	<i>6 ft</i>	<i>8 ft</i>	<i>12 ft</i>	<i>(each)</i>	<i>(each)</i>
<b>lb (kg)</b>	700 (318)	800 (363)	900 (408)	1300 (590)	70 (32)	100 (45)

<sup>5</sup> Actual weights will vary according to optional kits included.

## Fan Wiring Offtime Defrost

4 ft case has 1 Fan  
6 ft case has 2 Fans  
8 ft case has 2 Fans  
12 ft case has 3 Fans

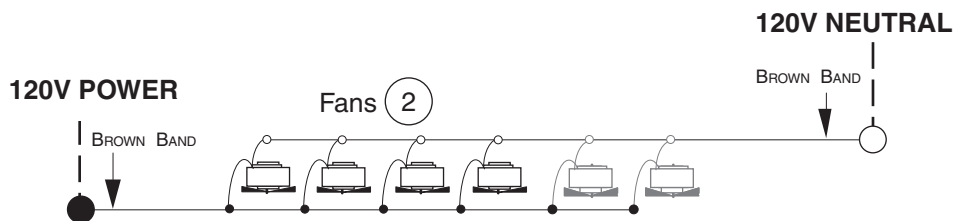
### Fans



## Ambient Fan Wiring Glass Air Wipe

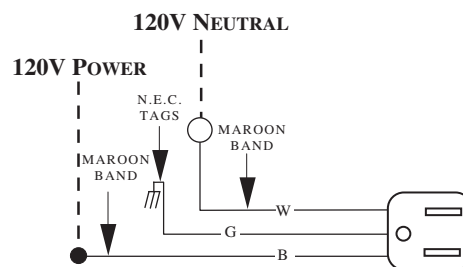
4 ft case has 2 Fan  
6 ft case has 3 Fans  
8 ft case has 4 Fans  
12 ft case has 6 Fans

### Fans



## Receptacles

### Electric Service Receptacle



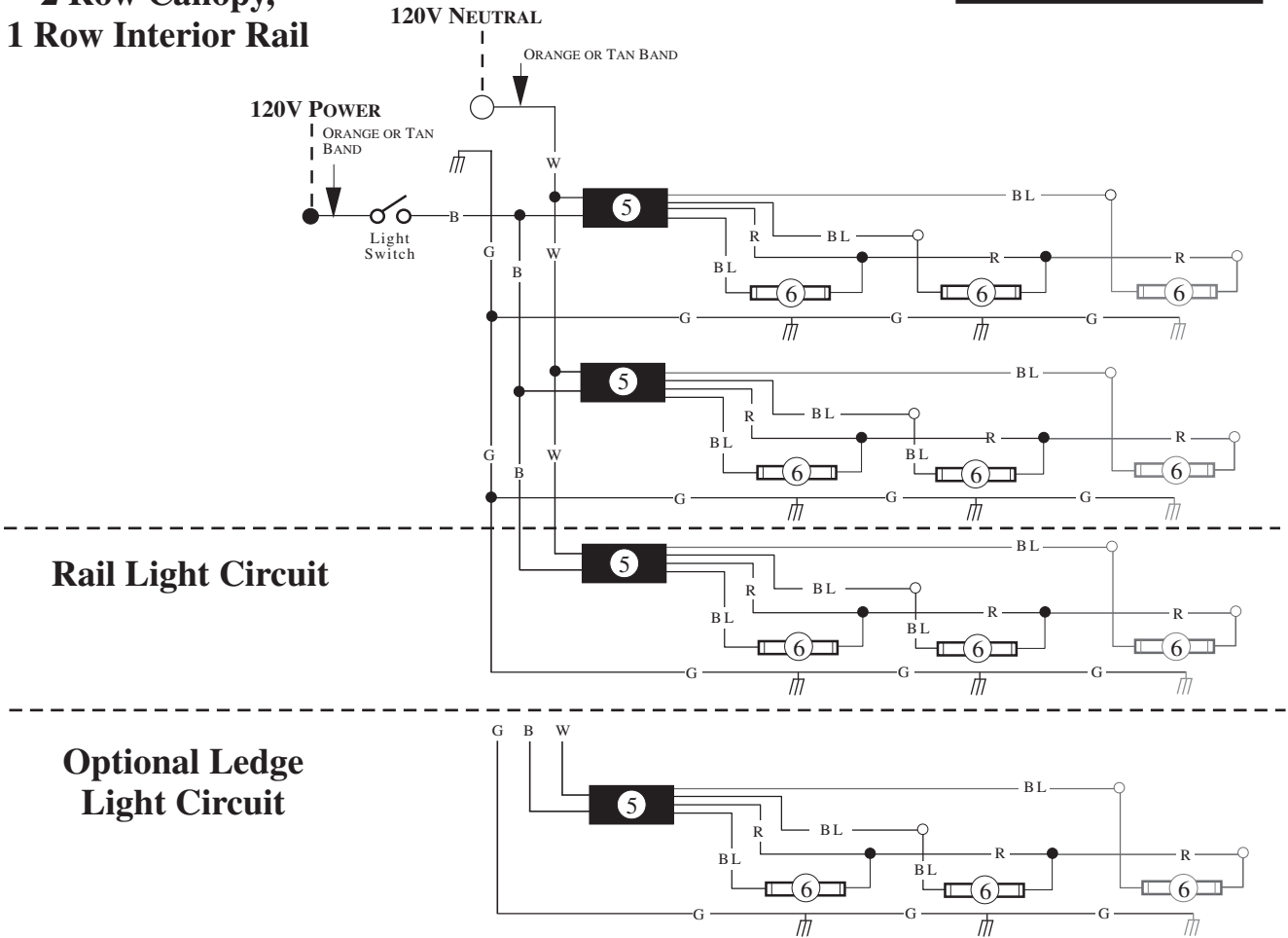
### WARNING

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 G = Green BL = Blue LB = Light Blue DB = Dark Blue B = Black W = White  
● = 120V POWER ○ = 120V NEUTRAL ≡ = Field GROUND ≡ = Case GROUND

**Standard Lighting  
2 Row Canopy,  
1 Row Interior Rail**

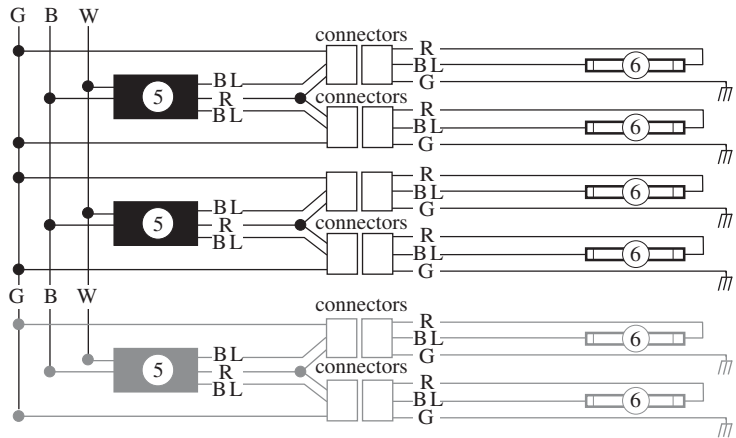
**Light Circuits**



**Rail Light Circuit**

**Optional Ledge  
Light Circuit**

**Optional Shelf Harness  
and Light Circuits**



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