

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.                                    | 0392457 | Fan Motor, Evaporator (120V) (MO.4410101)                  | (1)           | D.                        | Ballast, Electronic |   | (4)           |
|                                       | 0425336 | Fan Blade (120V) (FB.0425336) embossing toward motor       |               |                           | 0355716             | <b>2 lamps</b> (120V) (BA.0355716)                            |               |
|                                       | 0436517 | Fan Motor, Evaporator (220V) (FB.4410105)                  |               |                           | 0355398             | <b>3 lamps</b> (120V) (BA.4480188)                            |               |
|                                       | 0440141 | Fan Blade (220V) (FB.4780828) 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.                                    | 0137880 | Optional Adjustable Refrigeration Thermostat ((CT)4481084) | (3)           | E.                        |                     | Fluorescent Lamp  | (5)           |
|                                       |         |  |               |                           |                     | <i>Replace with like fixtures</i>                             |               |



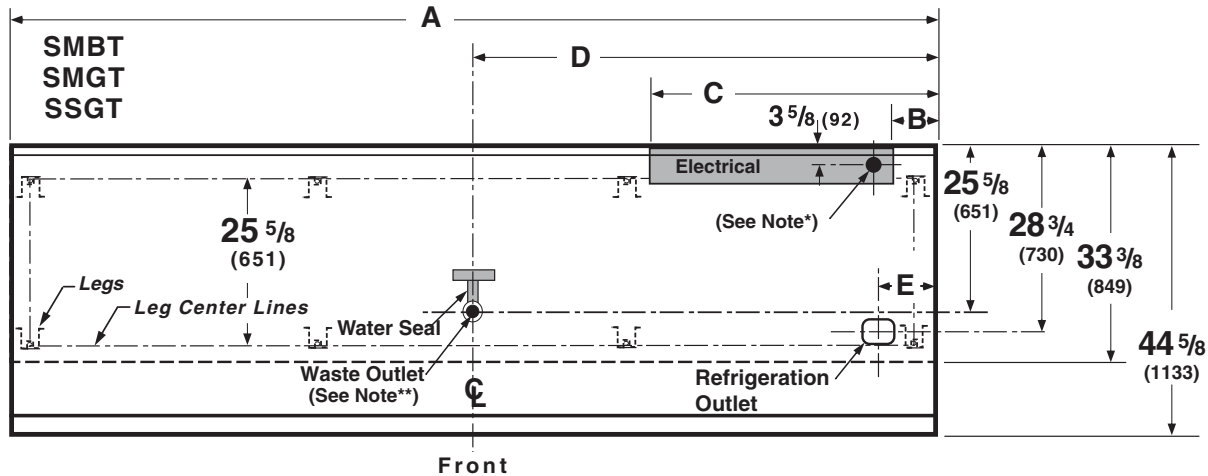
# Engineering Plan Views

## PHYSICAL DATA

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

### Meat & Delicatessen Flat Hinged Glass Models

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<br>(Note: Includes bumper)                         | 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)       |

**Excel SMGT**  
**Meat / Delicatessen**

**REFRIGERATION DATA**

**Note:** This data is based on store temperature and humidity that does not exceed 75°F and 55% R.H. Schedule defrost at night while lights are off.

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

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

**DEFROST DATA**

|  |             |
|--|-------------|
|  | <b>SMGT</b> |
| <b>Frequency (hr)</b>  | 24          |
| <b>Defrost Water (lb/ft/day)</b>                               | 0.17        |
| ( $\pm 15\%$ based on case configuration and product loading). |             |

|                           |             |
|---------------------------|-------------|
|                           | <b>SMGT</b> |
| <b>OFFTIME (minutes)</b>  | 70          |
| <b>Failsafe (minutes)</b> | 90          |

**ELECTRIC OR GAS** Not Recommended

**CONVENTIONAL CONTROLS**

|   |                        |
|---|------------------------|
| <b>Low Pressure Backup Control</b>                                | <b>SMGT</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.

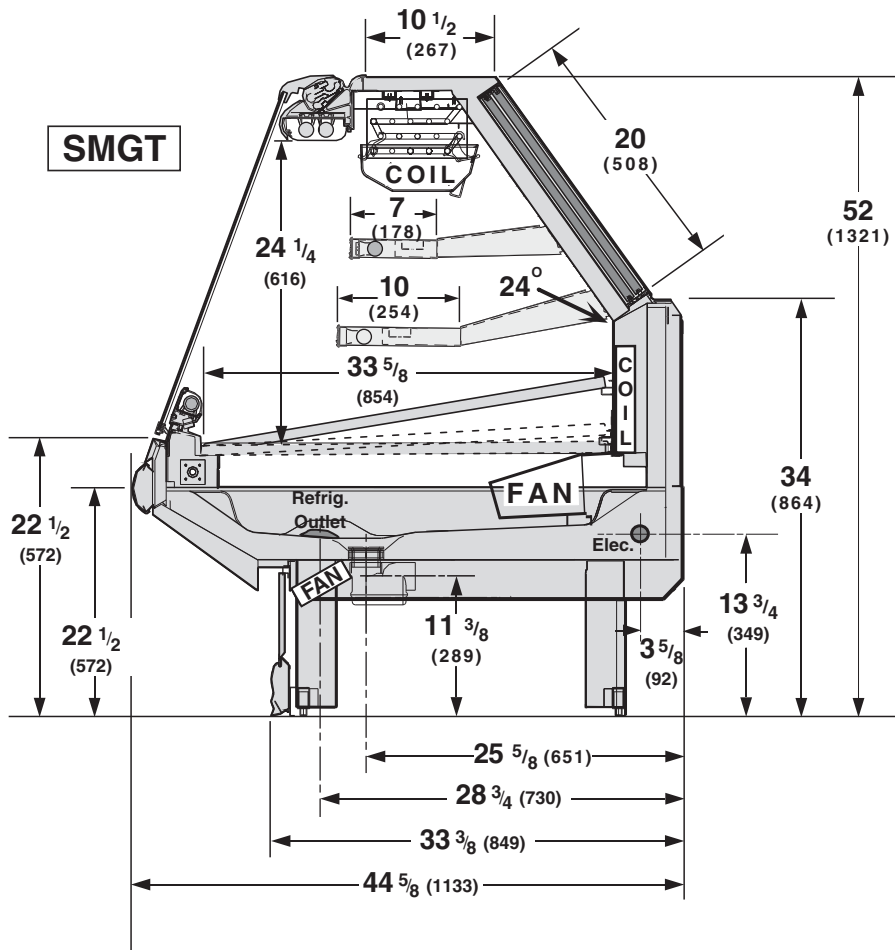
**PHYSICAL DATA**

|                                |         |       |         |
|--------------------------------|---------|-------|---------|
| <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).



**NOTE:**  
Lighted or unlighted shelves may be used.

**NSF Certification**

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

### Electrical Data

|   | <b>4 ft</b> | <b>6 ft</b> | <b>8 ft</b> | <b>12 ft</b> |
|---|-------------|-------------|-------------|--------------|
| <b>Number of Fans</b>                         |             |             |             |              |
| <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>     |

| <b>Merchandise</b>                          | <b>Amperes</b> |             |             |              | <b>Watts</b> |             |             |              |
|---|----------------|-------------|-------------|--------------|--------------|-------------|-------------|--------------|
|   | <b>4 ft</b>    | <b>6 ft</b> | <b>8 ft</b> | <b>12 ft</b> | <b>4 ft</b>  | <b>6 ft</b> | <b>8 ft</b> | <b>12 ft</b> |
| <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           |

| <b>Standard Lighting (120V 60hz)</b> | <b>4 ft</b> | <b>6 ft</b> | <b>8 ft</b> | <b>12 ft</b> | <b>4 ft</b> | <b>6 ft</b> | <b>8 ft</b> | <b>12 ft</b> |
|--------------------------------------|-------------|-------------|-------------|--------------|-------------|-------------|-------------|--------------|
| 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           |
| <b>Optional Lighting</b>             |             |             |             |              |             |             |             |              |
| 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) | 2.13 ft <sup>3</sup> /ft (0.20 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.

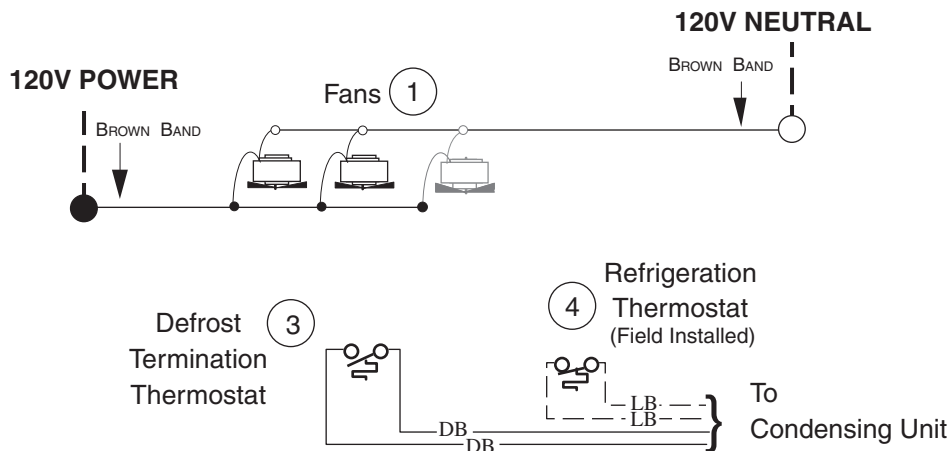
| <b>ESTIMATED SHIPPING WEIGHT <sup>5</sup></b> |             |             |             |              |                  |                            |
|---|-------------|-------------|-------------|--------------|------------------|----------------------------|
| <b>Case</b>                                   |             |             |             |              | <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

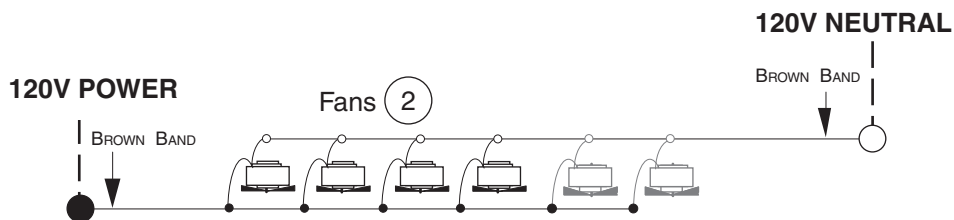
### Fans



## Ambient Fan Wiring Glass Air Wipe

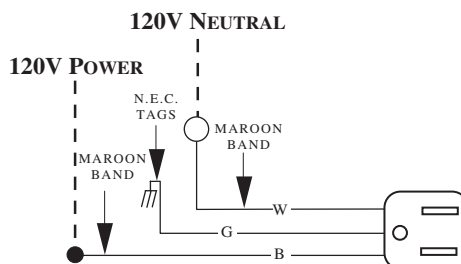
4 ft case has 2 Fan  
6 ft case has 3 Fans  
8 ft case has 4 Fans  
12 ft case has 6 Fans

### Fans



## Receptacles

### Electric Service Receptacle



### WARNING

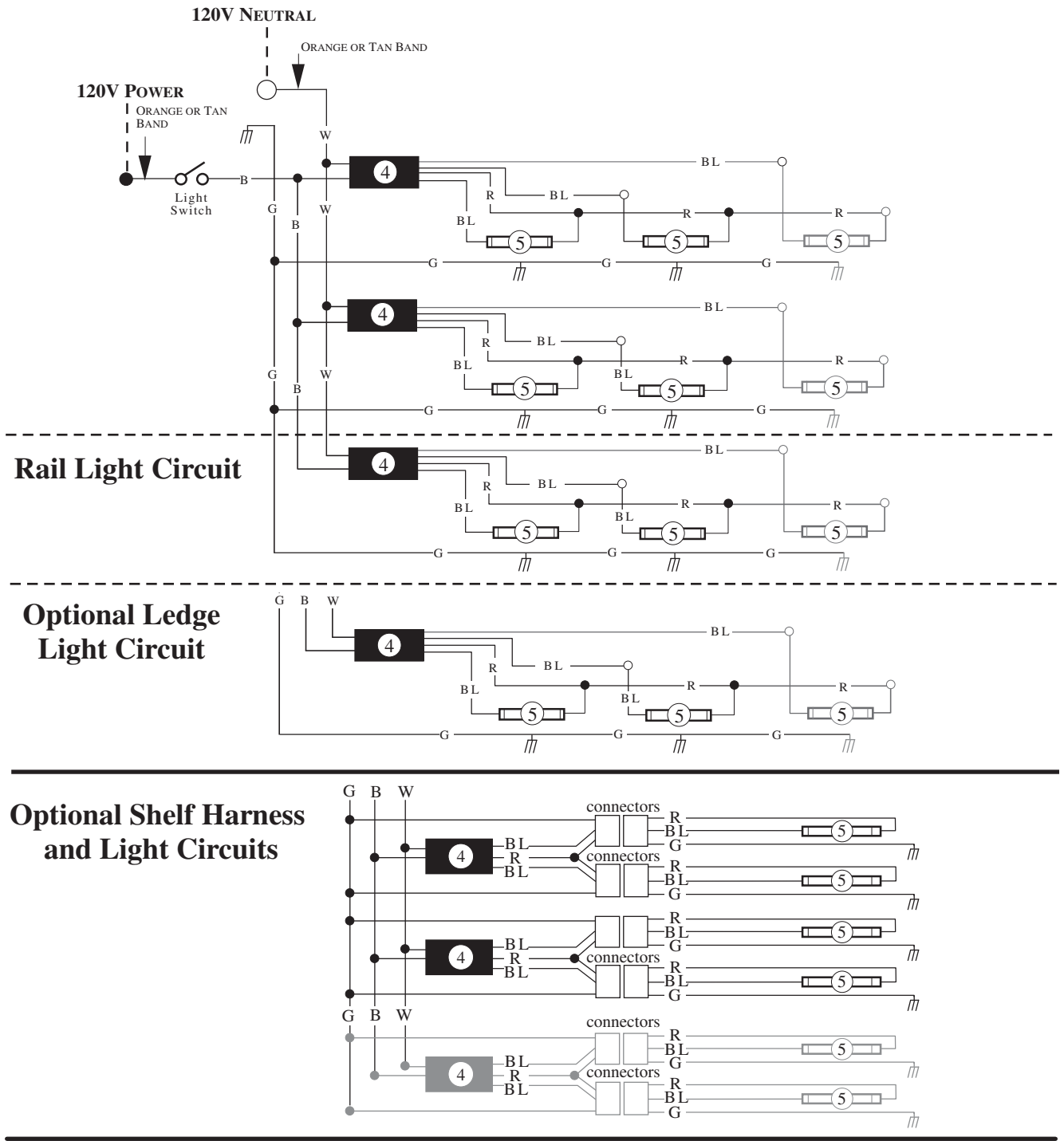
All components must have mechanical ground, and the merchandiser must be grounded.  
Circled Numbers = Parts List Item Numbers  
Grayed components in 12 foot models only.

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



### 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 B = Black W = White

● = 120V POWER ○ = 120V NEUTRAL ≡ = Field GROUND ≡ = Case GROUND