

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<br><b>2 lamps</b>                 | (4)           |
|                                       | 0047000                | Fan Motor, Evaporator                           |               | D.                        | 0428649 | Ballast, Electronic<br><b>3 lamps</b>                 | (4)           |
|                                       | 0407532                | Fan Blade<br>embossing toward motor             |               | E.                        |         | Fluorescent Lamp<br><i>Replace with like fixtures</i> | (5)           |
| C.                                    | 0137880                | Optional Adjustable<br>Refrigeration Thermostat | (3)           |                           |         |   |               |

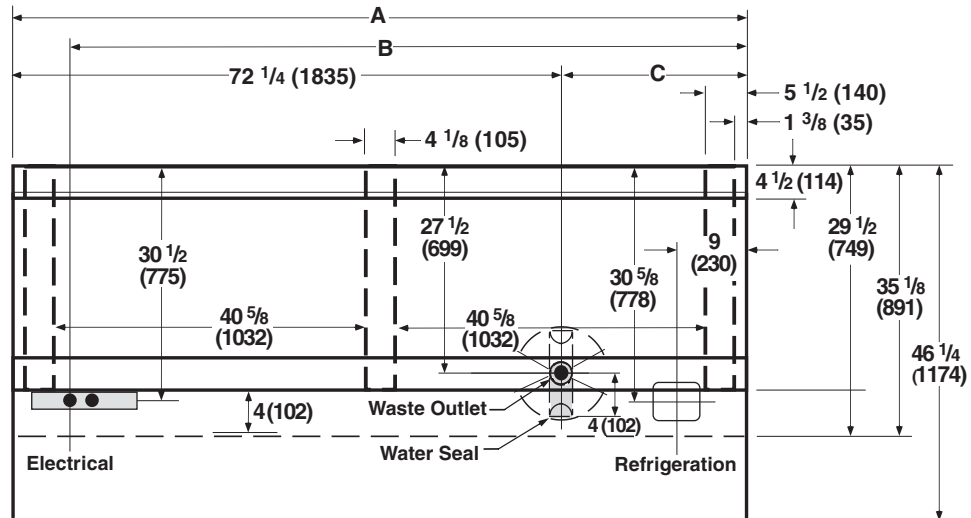
**Note:** Changed items have been underlined.





# Engineering Plan View

Dimensions shown as inches and (mm).

Meat and Produce

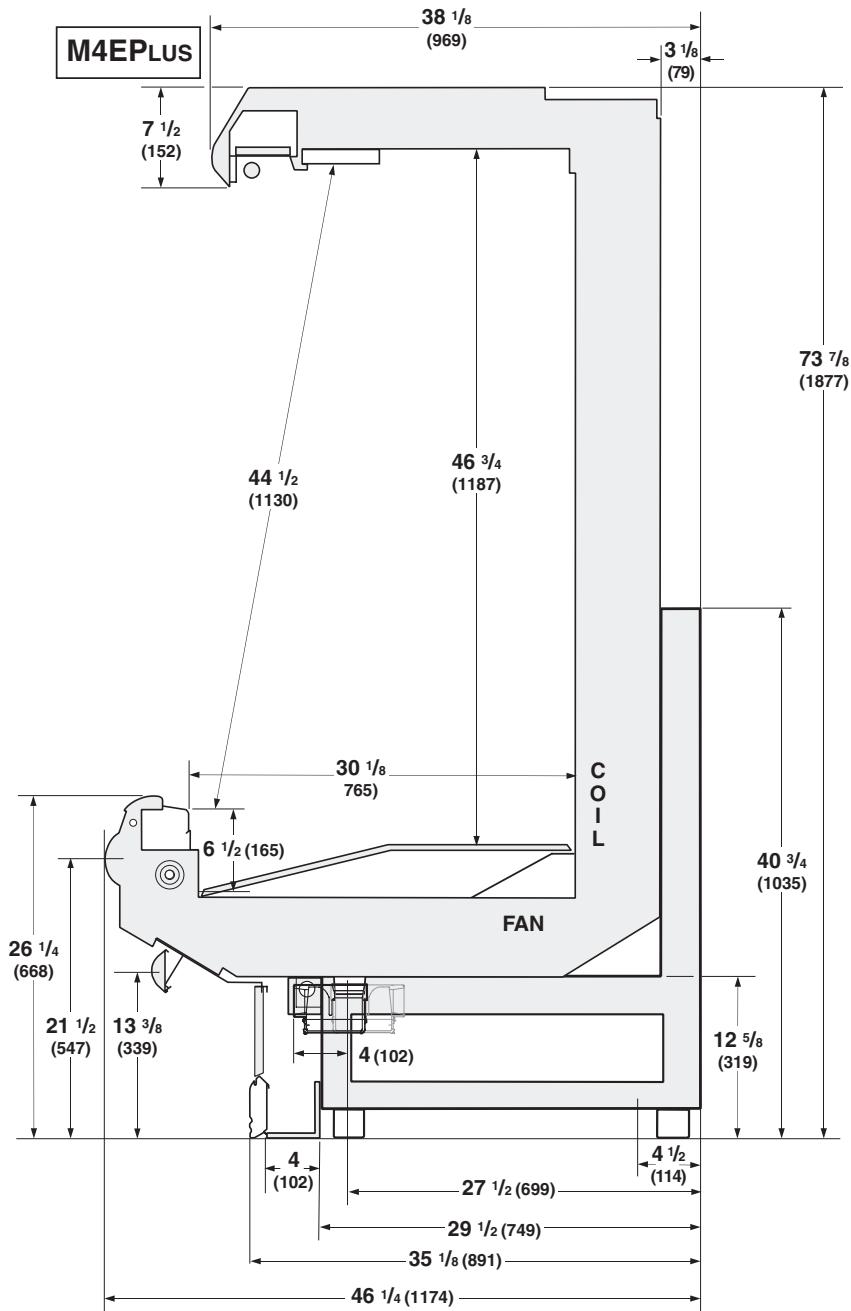
09-2003



| 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)   |

**Impact M4EPLUS**  
**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.

| M4EPLUS          | UNLIT | LIT |
|------------------|-------|-----|
| Discharge Air °F | 31    | 29  |
| Evaporator °F    | 28    | 26  |
| Unit Sizing °F   | 26    | 24  |

| Btu/hr/ft*   | M4EPLUS |      |
|--------------|---------|------|
|              | UNLIT   | LIT  |
| Parallel     | 1095    | 1185 |
| Conventional | 1190    | 1290 |

\*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        | M4EPLUS |
|----------------|---------|
| Time (minutes) | 30      |

**ELECTRIC OR GAS** Not Recommended

**CONVENTIONAL CONTROLS**

|                             |                       |
|-----------------------------|-----------------------|
| Low Pressure Backup Control |                       |
| CI/CO**                     | M4EPLUS<br>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)*** | M4EPLUS |
|--------------------------|---------|
| 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 |

**NSF Certification**

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

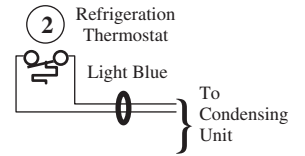
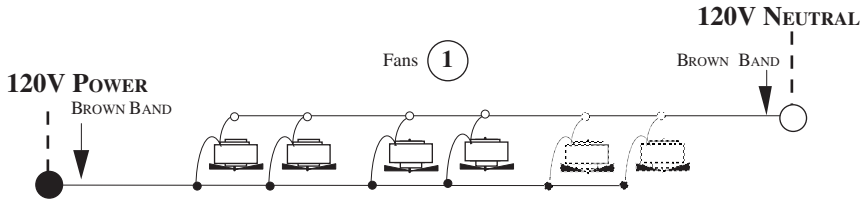
**Impact M4EPLUS**  
**Meat and Delicatessen**

**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         | 210          | 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>Min. 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 Row 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

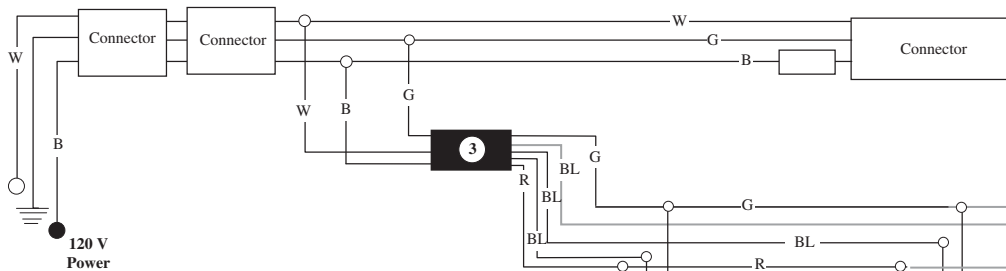
## 4 & 6 Fans



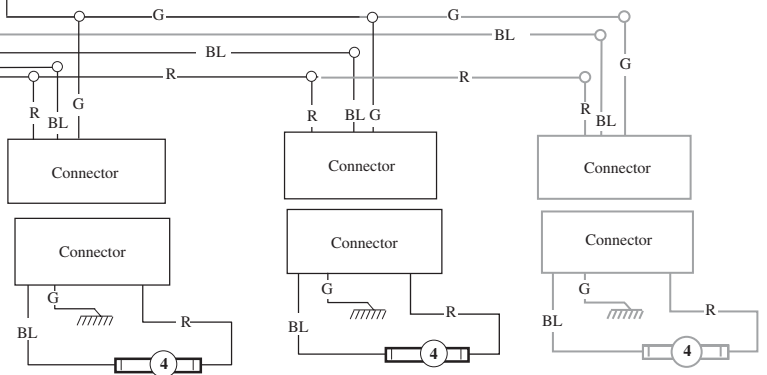
## Optional Shelf Harness and Light Circuits for One Row of Shelves

# Shelf Lighting

### Shelf Harness



### Shelf Light Circuits



### WARNING

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

CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS

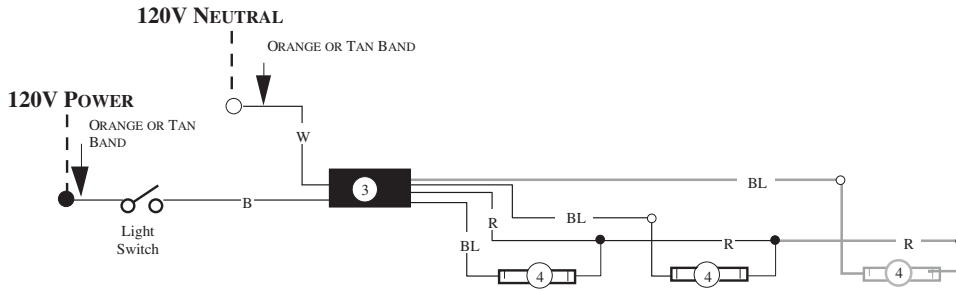
Grayed components in 12 foot models only.

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

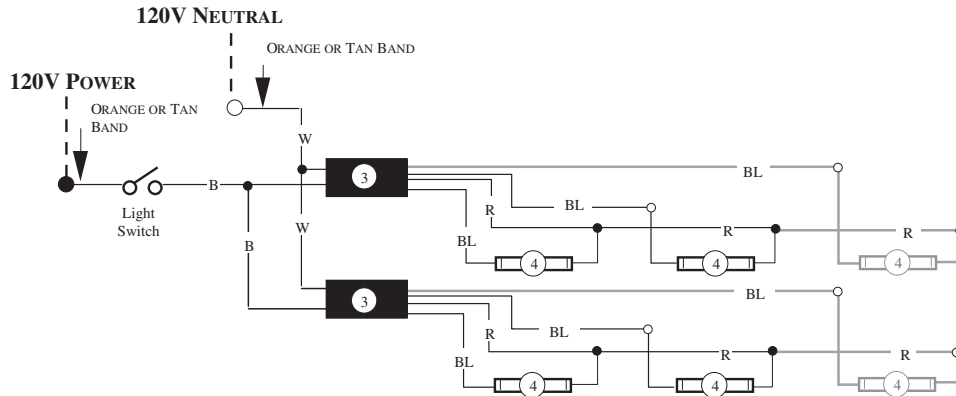
● = 120V POWER ○ = 120V NEUTRAL ≡ = FIELD GROUND ≍ = CASE GROUND

# Light Circuits

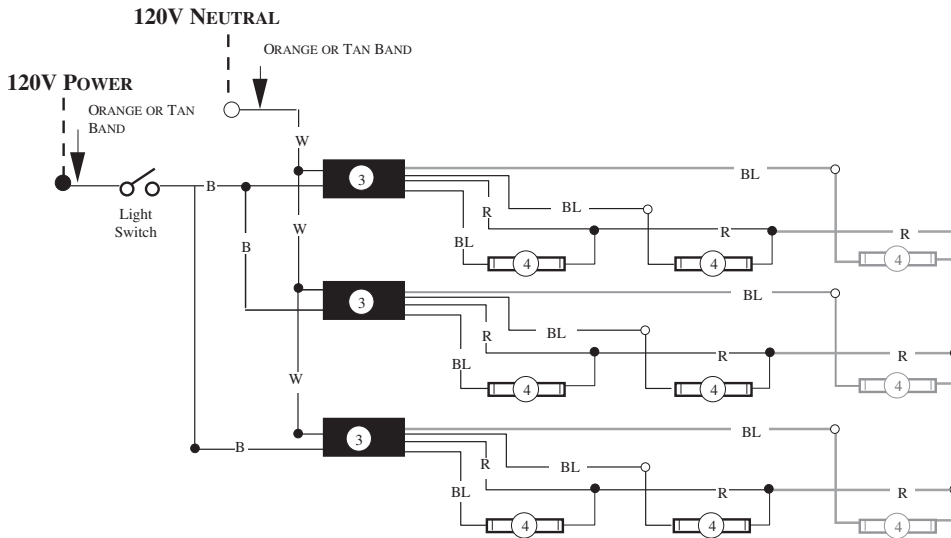
## Standard Lighting 1 Row Canopy or Optional 1 Row Rail



## Optional Lighting 2 Rows Canopy



## Optional Lighting 3 Row Canopy



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● = 120V POWER ○ = 120V NEUTRAL