Item | Part # | Description | Wiring Item #
--- | --- | --- | ---

**FAN ASSEMBLIES**

4 Ft, 8 Ft & 12 Ft

A. 25W Standard Energy Efficient Fan Assembly (1)
   - 0501485 Fan Motor, Evaporator (MO.4410701)
   - 0501484 Fan Blade (FB.4780657)

6 Ft Only

A. 7W Standard Energy Efficient Fan Assembly (1)
   - 0477654 Fan Motor, Evaporator (MO.4410545)
   - 0142780 Fan Blade (FB.0142780)

**THERMOSTATS**

B. Optional Adjustable Refrigeration Thermostat (2)

**LAMPS AND BALLASTS**

C. Ballast, Electronic (3)
   - 0491389 1 lamp (BA.4481689)
   - 0480130 2 lamps (BA.4481676)
   - 0480131 3 lamps (BA.4481654)
   - 0480132 4 lamps (BA.4481677)

D. Fluorescent Lamp (4)
   - Replace with like fixtures

**LED FIXTURES AND POWER SUPPLY**

E. 0501213 Power Supply (EP.4481861) (5)

F. LED Canopy Fixture (6)
   - Replace with like fixtures

G. LED Shelf Fixture (7)
   - Replace with like fixtures

**NOTE:** For LED lighting parts contact your Hussmann service representative at 1-800-922-1919. Please have your model and serial number available. Descriptions including size and color are at [WWW.HUSSMANN.COM/SERVICEANDPARTS.](http://WWW.HUSSMANN.COM/SERVICEANDPARTS.)

Note: Revision L adds optional EcoShine II LED rail light, pages 4 and 8; removes discontinued LED data; and revises optional LED shelf light wiring diagrams, pages 9 and 10. Other changes marked by bar, underline or circle.
### Dimensions shown as inches and (mm).

#### General

**Case Length (without ends or partitions)**
- 4 ft: 48 3/8 (1229)
- 6 ft: 72 3/8 (1838)
- 8 ft: 96 3/8 (2448)
- 12 ft: 144 1/2 (3670)

(Each end and insulated partition adds 1 1/2 in. (38 mm) to case line up.)

**Maximum O/S dimension of case back to front (includes bumper)**
- 4 ft: 42 (1064)
- 6 ft: 42 (1064)
- 8 ft: 42 (1064)
- 12 ft: 42 (1064)

**Back of case to front of splashguard**
- 4 ft: 33 1/2 (851)
- 6 ft: 33 1/2 (851)
- 8 ft: 33 1/2 (851)
- 12 ft: 33 1/2 (851)

**Back of case to O/S edge of front leg**
- 4 ft: 30 1/4 (768)
- 6 ft: 30 1/4 (768)
- 8 ft: 30 1/4 (768)
- 12 ft: 30 1/4 (768)

**Distance between edges of external legs and center legs**
- 4 ft: NA
- 6 ft: 29 1/2 (750)
- 8 ft: 41 1/2 (1054)
- 12 ft: 41 1/2 (1054)

**Distance between edges of center legs**
- 4 ft: NA
- 6 ft: NA
- 8 ft: NA
- 12 ft: 43 7/8 (1114)

**Distance between front legs and splashguard**
- 4 ft: 2 3/4 (70)
- 6 ft: 2 3/4 (70)
- 8 ft: 2 3/4 (70)
- 12 ft: 2 3/4 (70)

#### Electrical Service

**RH End of case to center of stub up area**
- 4 ft: 36 1/4 (921)
- 6 ft: 60 1/4 (1530)
- 8 ft: 84 1/4 (2140)
- 12 ft: 132 3/8 (3363)

**Back of case to center of stub up area**
- 4 ft: 24 (612)
- 6 ft: 24 (612)
- 8 ft: 24 (612)
- 12 ft: 24 (612)

**Length of electrical wireway**
- 4 ft: 26 1/2 (673)
- 6 ft: 26 1/2 (673)
- 8 ft: 26 1/2 (673)
- 12 ft: 26 1/2 (673)

**RH End of case to LH end of wireway**
- 4 ft: 42 1/8 (1070)
- 6 ft: 66 1/8 (1680)
- 8 ft: 90 1/8 (2289)
- 12 ft: 138 1/4 (3511)

#### Waste Outlets

**RH End of case to the center of LH waste outlet**
- 4 ft: 36 1/4 (921)
- 6 ft: 60 1/4 (1530)
- 8 ft: 84 1/4 (2140)
- 12 ft: 132 3/8 (3363)

**RH End of case to the center of RH waste outlet**
- 4 ft: 12 1/8 (307)
- 6 ft: 12 1/8 (307)
- 8 ft: 12 1/8 (307)
- 12 ft: 12 1/8 (307)

**Back O/S of case to center of waste outlets**
- 4 ft: 31 5/8 (804)
- 6 ft: 31 5/8 (804)
- 8 ft: 31 5/8 (804)
- 12 ft: 31 5/8 (804)

**Schedule 40 PVC drip pipe**
- 4 ft: 1 1/4 (32)
- 6 ft: 1 1/4 (32)
- 8 ft: 1 1/4 (32)
- 12 ft: 1 1/4 (32)

#### Refrigeration Outlet

**Back of case to center of refrigeration outlet**
- 4 ft: 26 1/4 (665)
- 6 ft: 26 1/4 (665)
- 8 ft: 26 1/4 (665)
- 12 ft: 26 1/4 (665)

**RH end of case to center of refrigeration outlet**
- 4 ft: 8 (203)
- 6 ft: 8 (203)
- 8 ft: 8 (203)
- 12 ft: 8 (203)
REFRIGERATION DATA

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

<table>
<thead>
<tr>
<th>MODULAR PRODUCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>P4X-EP UNLIT</td>
</tr>
<tr>
<td>Discharge Air °F</td>
</tr>
<tr>
<td>Evaporator °F</td>
</tr>
<tr>
<td>Unit Sizing °F</td>
</tr>
</tbody>
</table>

* All display levels must use baffles.

Btu/hr/ft — Unlit Shelves‡

<table>
<thead>
<tr>
<th>P4X-EP Parallel Conventional</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNLIT</td>
</tr>
<tr>
<td>INSERT†</td>
</tr>
</tbody>
</table>

‡ Add 10 Btu/hr/ft per shelf row for LED fixtures. Add 20 Btu/hr/ft per shelf row for fluorescent lamps.

DEFROST DATA

P4X-EP

| Frequency (hr) | 6 |
| Defrost Water (lb/ft/day) | 9 |

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

OFFTIME

P4X-EP

| Time (minutes) | 30 |

ELECTRIC OR GAS

Not Recommended

CONVENTIONAL CONTROLS

Low Pressure Backup Control

P4X-EP

| CI/CO* | 21°F / 11°F |

Indoor Unit Only,

Pressure Defrost Termination* | 48°F |

*Use a Temperature Pressure Chart to determine PSIG conversions.

Estimated Charge**

<table>
<thead>
<tr>
<th>P4X-EP</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 ft</td>
</tr>
<tr>
<td>6 ft</td>
</tr>
<tr>
<td>8 ft</td>
</tr>
<tr>
<td>12 ft</td>
</tr>
</tbody>
</table>

**This is an average for all refrigerant types. Actual refrigerant charge may vary by approximately half a pound (8 oz/0.2 kg).

NSF Certification

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

† This is test data for one third-party insert. Contact your Hussmann representative for further information.
## Electrical Data

### Number of Fans—25W
- 4 ft: 1
- 6 ft: —
- 8 ft: 2
- 12 ft: 3

### Number of Fans—7W
- 4 ft: —
- 6 ft: 4
- 8 ft: —
- 12 ft: —

<table>
<thead>
<tr>
<th>Amperes</th>
<th>Watts</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 ft</td>
<td>6 ft</td>
</tr>
<tr>
<td>120V</td>
<td>0.60</td>
</tr>
<tr>
<td>230V</td>
<td>0.30</td>
</tr>
<tr>
<td>230V</td>
<td>0.66</td>
</tr>
<tr>
<td>230V</td>
<td>0.76</td>
</tr>
</tbody>
</table>

### Minimum Circuit Ampacity

<table>
<thead>
<tr>
<th>120V</th>
<th>50/60Hz Standard Energy Efficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.80</td>
<td>0.96</td>
</tr>
<tr>
<td>1.40</td>
<td>2.00</td>
</tr>
<tr>
<td>0.50</td>
<td>0.60</td>
</tr>
<tr>
<td>1.10</td>
<td>1.52</td>
</tr>
<tr>
<td>0.86</td>
<td>1.20</td>
</tr>
<tr>
<td>2.18</td>
<td>2.48</td>
</tr>
<tr>
<td>0.96</td>
<td>1.32</td>
</tr>
<tr>
<td>2.48</td>
<td>2.88</td>
</tr>
</tbody>
</table>

### Maximum Over Current Protection 120V
- 20
- 20
- 20
- 20

Maximum Over Current Protection 230V
- 15
- 15
- 15
- 15

### Standard Lighting (T-8 fluorescent)
- 1 Row Canopy: 0.26 0.51 0.51 0.77 30 59 59 85

**ONLY LIGHTING CONFIGURATIONS THAT ARE COMPLIANT WITH THE U.S. DEPT. OF ENERGY (DOE) 2012 REGULATION ARE AVAILABLE FOR SALE FOR USE IN THE U.S.A.**

### Optional Lighting (T-8 fluorescent)

| Additional 2 Row Canopy | 0.26 | 0.51 | 0.51 | 0.77 | 30  | 59  | 59  | 85   |
| Additional 3 Row Canopy | 0.51 | 1.02 | 1.02 | 1.54 | 59  | 118 | 118 | 170  |
| 1 Row Rail Light        | 0.26 | 0.51 | 0.51 | 0.77 | 30  | 59  | 59  | 85   |
| 2 Rows of Shelves       | 0.51 | 1.02 | 1.02 | 1.54 | 59  | 118 | 118 | 170  |
| 3 Rows of Shelves       | 0.77 | 1.53 | 1.53 | 2.31 | 89  | 177 | 177 | 255  |
| 4 Rows of Shelves       | 1.02 | 2.04 | 2.04 | 3.08 | 118 | 236 | 236 | 340  |

### Ecosshine II Canopy

| Ecosshine II    | 0.26 | 0.37 | 0.51 | 0.77 | 30.8| 44.2| 61.6| 92.4 |
| Ecosshine II Plus| 0.23 | 0.35 | 0.46 | 0.70 | 27.8| 41.4| 55.6| 83.4 |
| Ecosshine II Plus HO | 0.28 | 0.42 | 0.56 | 0.84 | 34.0| 50.5| 67.2| 100.8|

### Ecosshine II Plus Rail Light — 1 Row
- 0.09 0.13 0.17 0.26 10.2 15.3 20.5 30.7

### Ecosshine II Plus Shelves

| 1 Row of Shelves | 0.09 | 0.13 | 0.17 | 0.26 | 10.2 | 15.3 | 20.5 | 30.7  |
| 2 Rows of Shelves| 0.17 | 0.26 | 0.34 | 0.51 | 20.5 | 30.7 | 40.9 | 61.4  |
| 3 Rows of Shelves| 0.26 | 0.38 | 0.51 | 0.77 | 30.7 | 46.0 | 61.4 | 92.1  |
| 4 Rows of Shelves| 0.34 | 0.51 | 0.68 | 1.02 | 40.9 | 61.4 | 81.9 | 122.8 |

120V Lighting Circuit Total = Standard Lighting + Total Optional Lighting + Optional Shelf Lighting
120V LED Lighting Circuit Total = Canopy Lighting + Shelf Lighting
230V Lighting Circuit Total = Multiply 120V Lighting Circuit Total by 0.52
Product Data

*Recommended Usable Cube* \(^{1}\) (*Cu Ft/Ft*)

\[ 7.29 \text{ ft}^3/\text{ft} \ (0.68 \text{ m}^3/\text{m}) \]

*AHRI Total Display Area* \(^{2}\) (*Sq Ft/Ft*)

\[ 3.98 \text{ ft}^2/\text{ft} \ (1.21 \text{ m}^2/\text{m}) \]

*Shelf Area* \(^{3}\) (*Sq Ft/Ft*)

\[ 6.88 \text{ ft}^2/\text{ft} \ (2.10 \text{ m}^2/\text{m}) \]

---

\(^{1}\) AHRI Refrigerated Volume less shelving and other unusable space: Refrigerated Volume/Unit of Length, ft\(^3\)/ft \([\text{m}^3/\text{m}]\)

\(^{2}\) Computed using AHRI 1200 standard methodology: Total Display Area, ft\(^2\) \([\text{m}^2]\)/Unit of Length, ft \([\text{m}]\)

\(^{3}\) 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 (2) rows of 16-inch shelves and (1) row of 18-inch shelf.

---

### ESTIMATED SHIPPING WEIGHT \(^{4}\)

<table>
<thead>
<tr>
<th>Case</th>
<th>4 ft</th>
<th>6 ft</th>
<th>8 ft</th>
<th>12 ft</th>
<th>Solid End (each)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>lb (kg)</strong></td>
<td>700 (318)</td>
<td>900 (408)</td>
<td>1100 (499)</td>
<td>1400 (635)</td>
<td>100 (45)</td>
</tr>
</tbody>
</table>

---

\(^{4}\) Actual weights will vary according to optional kits included.
Fan Wiring
Offtime Defrost

1, 2, 3 & 4 Fans
4 ft — 1 Fan
6 ft — 4 Fans
8 ft — 2 Fans
12 ft — 3 Fans
120V Neutral

Light Circuits — Fluorescent Fixtures

Standard Lighting — 1 Row Canopy
Optional Lighting — 2 Row Canopy
— 3 Row Canopy

Optional Lighting — 1 Row Rail

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

Circled numbers = Parts List Item Numbers
R = Red  Y = Yellow  G = Green  BL = Blue  BK = Black  W = White
● = 120V Power  ○ = 120V Neutral  ▼ = Field Ground  □ = Case Ground
Optional Shelf Lighting
Fluorescent Fixtures

Optional Shelf Harness and Light Circuits for Four Rows of Shelves

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

CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS
R = Red  Y = Yellow  G = Green  BL = Blue  BK = Black  W = White
● = 120V POWER  ○ = 120V NEUTRAL  ‡ = FIELD GROUND  ♦ = CASE GROUND
Optional Canopy and Rail Light Circuits — LED Fixtures

EcoShine II LED Canopy Lighting — 1 Row

EcoShine II LED Rail Lighting — 1 Row

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

CIRCLED NUMBERS = Parts List Item Numbers

<table>
<thead>
<tr>
<th>R</th>
<th>Y</th>
<th>G</th>
<th>BL</th>
<th>BK</th>
<th>W</th>
</tr>
</thead>
<tbody>
<tr>
<td>= Red</td>
<td>= Yellow</td>
<td>= Green</td>
<td>= Blue</td>
<td>= Black</td>
<td>= White</td>
</tr>
</tbody>
</table>

● = 120V Power  ○ = 120V Neutral  ↓ = Field Ground   = Case Ground
Optional Shelf Harness and LED Light Circuits for 2 or 3 Rows of Shelves

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

CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS

R = Red      G = Green      BL = Blue      BK = Black      W = White
● = 120V POWER  ○ = 120V NEUTRAL  ↓ = FIELD GROUND  ｍｍ = CASE GROUND
Optional Shelf Lighting
LED Fixtures

Optional Shelf Harness and LED Light Circuits for 4 or 5 Rows of Shelves

4 ft case
6 ft or 8 ft case
12 ft case

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

CIRCLED NUMBERS = Parts List Item Numbers

R = Red     G = Green     BL = Blue     BK = Black     W = White
● = 70V POWER     ○ = 70V NEUTRAL     ↓ = FIELD GROUND     = CASE GROUND