Technical Data Sheet
P/N 0463861_J

NSF® Certified
September 2012

FAN ASSEMBLIES
8 Ft & 12 Ft
A. 7W Standard Energy Efficient Fan Assembly (1)
   0477654 Fan Motor, Evaporator (MO.4410545)
   0142780 Fan Blade (FB.0142780)

6 Ft Only
A. 4W Standard Energy Efficient Fan Assembly (1)
   0477653 Fan Motor, Evaporator (MO.4410544)
   0382383 Fan Blade (FB.4780617)

THERMOSTATS
B. 0411744 Standard Non-adjustable Defrost Thermostat (CT.0411744)
C. Optional Adjustable Refrigeration Thermostat(3)

LAMPS AND BALLASTS
D. Ballast, Electronic
   0480130 2 lamps (BA.4481676)
   0480131 3 lamps (BA.4481654)
   0480132 4 lamps (BA.4481677)
E. Fluorescent Lamp
   Replace with like fixtures (5)

LED FIXTURES AND POWER SUPPLY
F. 0501213 Power Supply (EP.4481861)
G. LED Canopy Fixture
   Replace with like fixtures (7)
H. LED Shelf Fixture
   Replace with like fixtures (8)

Note: Revision J adds optional EcoShine II LED rail light, pages 4 and 8; removes discontinued LED data; and revises optional LED shelf light wiring diagram, page 9. Other changes marked by bar, underline or circle.
### Engineering Plan Views

#### Bulk Produce

10-2004

Dimensions shown as inches and (mm).

### P2X

#### Dimensions

- **3 In. (77 mm) Required Air Gap**
- **Electrical Stub Up Area** 6 x 6 (152 x 152)
- **Wireway**
- **Splashguard**

#### General

<table>
<thead>
<tr>
<th></th>
<th>6 ft</th>
<th>8 ft</th>
<th>12 ft</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Case Length</strong> (without ends or partitions)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(A)</td>
<td>72 3/8 (1838)</td>
<td>96 3/8 (2448)</td>
<td>144 1/2 (3670)</td>
</tr>
<tr>
<td>(Each end and insulated partition adds 1 1/2 in. (38 mm) to case line up.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum O/S dimension of case back to front (includes bumper)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(B) RH End of case to center of stub up area</td>
<td>60 1/4 (1530)</td>
<td>84 1/4 (2140)</td>
<td>132 3/8 (3363)</td>
</tr>
<tr>
<td>Back of case to center of stub up area</td>
<td>24 (612)</td>
<td>24 (612)</td>
<td>24 (612)</td>
</tr>
<tr>
<td>Length of electrical wireway</td>
<td>26 1/2 (673)</td>
<td>26 1/2 (673)</td>
<td>26 1/2 (673)</td>
</tr>
<tr>
<td>(C) RH End of case to LH end of wireway</td>
<td>66 1/8 (1680)</td>
<td>90 1/8 (2289)</td>
<td>138 1/4 (3511)</td>
</tr>
</tbody>
</table>

#### Electrical Service

- **Electrical Field Wiring connection point**

#### Waste Outlets

- **One each end**

#### Refrigeration Outlet

- **Back of case to center of refrigeration outlet**
- **RH end of case to center of refrigeration outlet**

### Physical Data

- **Merchandiser Drip Pipe (in.)**: 1 1/4
- **Merchandiser Liquid Line (in.)**: 3/8
- **Merchandiser Suction Line (in.)**: 7/8
Multi-deck, 2 Display Levels

Hussmann refrigerated merchandisers configured for sale for use in the United States meet or surpass the requirements of the DOE 2012 energy efficiency standards.

**Refrrigeration Data**

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

- **P2X-E**
  - Discharge Air °F: 33
  - Evaporator °F: 24
  - Unit Sizing °F: 22

**Btu/hr/ft — Unlit Shelves**

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

**Defrost Data**

- **P2X-E**
  - Frequency (hr): 8
  - Defrost Water (lb/ft/day): 6

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

**OFFTIME**

- **P2X-E**
  - Temp Term °F: 48°F
  - Failsafe Minutes: 30

**Electric or Gas**

- Not Recommended

**Standard Defrost Thermostat**

Close on rise: close 48°F – open 33°F

**Conventional Controls**

- Low Pressure Backup Control
- CI/CO* 17/7°F

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

*Use a Temperature Pressure Chart to determine PSIG conversions.

**Estimated Charge**

- **P2X-E**
  - 6 ft: 1.6 lb 26 oz 0.7 kg
  - 8 ft: 2.3 lb 37 oz 1.0 kg
  - 12 ft: 3.3 lb 53 oz 1.5 kg

**NSF Certification**

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

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**Excel P2X-E**

**Bulk Produce**

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**Dimensions shown as inches and (mm).**
### Electrical Data

<table>
<thead>
<tr>
<th></th>
<th>6 ft</th>
<th>8 ft</th>
<th>12 ft</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of Fans—7W</strong></td>
<td>—</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><strong>Number of Fans—4W</strong></td>
<td>2</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

#### Evaporator Fan

<table>
<thead>
<tr>
<th>Voltage/Hertz</th>
<th>120V 50/60Hz Standard Energy Efficient</th>
<th>230V 50/60Hz Standard Energy Efficient</th>
<th>230V 60Hz Export</th>
<th>230V 50Hz Export</th>
<th>230V 50/60Hz Standard Energy Efficient</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Amperes</strong></td>
<td>0.24</td>
<td>0.12</td>
<td>0.30</td>
<td>0.36</td>
<td>0.44</td>
</tr>
<tr>
<td><strong>Watts</strong></td>
<td>0.38</td>
<td>0.20</td>
<td>0.50</td>
<td>0.56</td>
<td>0.58</td>
</tr>
<tr>
<td><strong>12 ft</strong></td>
<td>0.57</td>
<td>0.30</td>
<td>0.75</td>
<td>0.84</td>
<td>0.77</td>
</tr>
<tr>
<td><strong>16 ft</strong></td>
<td>16</td>
<td>16</td>
<td>48</td>
<td>48</td>
<td>54</td>
</tr>
<tr>
<td><strong>28 ft</strong></td>
<td>28</td>
<td>28</td>
<td>78</td>
<td>78</td>
<td>84</td>
</tr>
<tr>
<td><strong>42 ft</strong></td>
<td>42</td>
<td>42</td>
<td>117</td>
<td>117</td>
<td>126</td>
</tr>
</tbody>
</table>

#### Minimum Circuit Ampacity

<table>
<thead>
<tr>
<th>Voltage/Hertz</th>
<th>120V 50/60Hz Standard Energy Efficient</th>
<th>230V 60Hz Export</th>
<th>230V 50Hz Export</th>
<th>230V 50/60Hz Standard Energy Efficient</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Amperes</strong></td>
<td>0.44</td>
<td>0.56</td>
<td>0.76</td>
<td>0.32</td>
</tr>
<tr>
<td><strong>Watts</strong></td>
<td>0.58</td>
<td>0.70</td>
<td>1.04</td>
<td>0.50</td>
</tr>
<tr>
<td><strong>12 ft</strong></td>
<td>0.77</td>
<td>0.95</td>
<td>1.04</td>
<td>0.50</td>
</tr>
<tr>
<td><strong>16 ft</strong></td>
<td>59</td>
<td>59</td>
<td>85</td>
<td>85</td>
</tr>
<tr>
<td><strong>20 ft</strong></td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
</tr>
</tbody>
</table>

#### Maximum Over Current Protection

- **120V**: 20 A
- **230V**: 15 A

### Standard Lighting (T-8 fluorescent)

<table>
<thead>
<tr>
<th>Configuration</th>
<th>Amperes</th>
<th>Watts</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Row Canopy</td>
<td>0.51</td>
<td>59</td>
</tr>
</tbody>
</table>

**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)

<table>
<thead>
<tr>
<th>Configuration</th>
<th>Amperes</th>
<th>Watts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional 1 Row Canopy</td>
<td>0.51</td>
<td>59</td>
</tr>
<tr>
<td>Additional 2 Row Canopy</td>
<td>1.02</td>
<td>118</td>
</tr>
<tr>
<td>Additional 3 Row Canopy</td>
<td>1.53</td>
<td>177</td>
</tr>
<tr>
<td>1 Row Rail Light</td>
<td>0.51</td>
<td>59</td>
</tr>
<tr>
<td>1 Row of Shelves</td>
<td>0.51</td>
<td>59</td>
</tr>
<tr>
<td>2 Rows of Shelves</td>
<td>1.02</td>
<td>118</td>
</tr>
<tr>
<td>3 Rows of Shelves</td>
<td>1.53</td>
<td>177</td>
</tr>
</tbody>
</table>

### Ecoshine II Canopy

<table>
<thead>
<tr>
<th>Model</th>
<th>Amperes</th>
<th>Watts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecoshine II</td>
<td>0.37</td>
<td>44.2</td>
</tr>
<tr>
<td>Ecoshine II Plus</td>
<td>0.35</td>
<td>41.4</td>
</tr>
<tr>
<td>Ecoshine II Plus HO</td>
<td>0.42</td>
<td>50.5</td>
</tr>
</tbody>
</table>

### Ecoshine II Plus Rail Light

<table>
<thead>
<tr>
<th>Model</th>
<th>Amperes</th>
<th>Watts</th>
</tr>
</thead>
<tbody>
<tr>
<td>— 1 Row</td>
<td>0.13</td>
<td>15.3</td>
</tr>
</tbody>
</table>

### Ecoshine II Plus Shelves

<table>
<thead>
<tr>
<th>Model</th>
<th>Amperes</th>
<th>Watts</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Row of Shelves</td>
<td>0.13</td>
<td>15.3</td>
</tr>
<tr>
<td>2 Rows of Shelves</td>
<td>0.26</td>
<td>30.7</td>
</tr>
<tr>
<td>3 Rows of Shelves</td>
<td>0.38</td>
<td>46.0</td>
</tr>
</tbody>
</table>

120V Lighting Circuit Total = Standard Lighting + Total Optional Lighting + Optional Shelf Lighting
120V LED Lighting Circuit Total = Canopy Lighting + Shelf Lighting + Optional Rail Lighting
230V Lighting Circuit Total = Multiply 120V Lighting Circuit Total by 0.52
Excel P2X-E
Bulk Produce

Product Data

Referred to Refrigerated Volume (Cu Ft/Ft) 6.69 ft³/ft (0.62 m³/m)
AHRI Total Display Area (Sq Ft/Ft) 3.06 ft²/ft (0.93 m²/m)
Shelf Area (Sq Ft/Ft) 3.87 ft²/ft (1.18 m²/m)

1 AHRI Refrigerated Volume less shelving and other unusable space: Refrigerated Volume/Unit of Length, ft³/ft [m³/m]
2 Computed using AHRI 1200 standard methodology: Total Display Area, ft² [m²]/Unit of Length, ft [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 (1) row of 16-inch shelf.

ESTIMATED SHIPPING WEIGHT

<table>
<thead>
<tr>
<th>Case</th>
<th>6 ft</th>
<th>8 ft</th>
<th>12 ft</th>
<th>Solid End (each)</th>
</tr>
</thead>
<tbody>
<tr>
<td>lb (kg)</td>
<td>800</td>
<td>1000</td>
<td>1200</td>
<td>75 (34)</td>
</tr>
</tbody>
</table>

4 Actual weights will vary according to optional kits included.
Fan Wiring
Offtime Defrost

1, 2 & 3 Fans
4 ft — 1 Fan
8 ft — 2 Fans
12 ft — 3 Fans

120V NEUTRAL

120V POWER

Brown Band

12 ft

Light Circuits — Fluorescent Fixtures

Field Connections

Orange or Tan Band

Connector

Ballast Plug for Optional Light Rail (if applied)

G
BK
W

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

6 ft or 8 ft

12 ft

Optional Two Row Canopy

Optional Two Row Canopy

Optional Lighting — 1 Row Rail

Connector

6 ft or 8 ft

12 ft

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

P2X-E Technical Data Sheet
Optional Shelf Lighting
Fluorescent Fixtures

Optional Shelf Harness and Light Circuits for Two Rows of Shelves

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  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.

R = Red    Y = Yellow    G = Green    BL = Blue    BK = Black    W = White
● = 120V Power    ○ = 120V Neutral    \( \uparrow \) = Field Ground    \( \downarrow \) = Case Ground
Optional Shelf Lighting

LED Fixtures

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
● = 80V POWER  ○ = 80V NEUTRAL  ↓ = FIELD GROUND  ↓••• = CASE GROUND