# HUSSMANN®

Insight standard field electrical connections are at the top of the merchandiser

# Insight<sup>®</sup> IP4SLI90X

## **Cut and Bulk Produce**

**Merchandiser Data Sheet** 

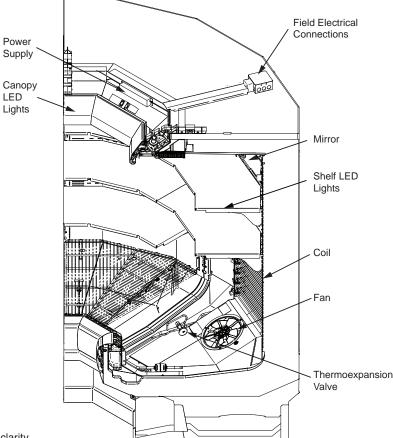
# P/N 3064214\_A

**NSF**<sup>®</sup>Certified

**DOE 2017** 

Energy Efficiency Compliant

August 2018





Inside 90° wedge merchandiser shown.

### **NSF** Certification

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

Performance Data	
Product Data (AHRI Statistics)	
Cross Section	
Plan View	
Electrical Loads	

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#### Data sheet-Insight IP4SLI90X

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.

#### **Refrigeration Data**<sup>1</sup>

IP4SLI90X Wedge		Optimal Sh	Energy Comparison	
	Application	Cut Produce Bulk Produce		AHRI 1200 Rating Point <sup>3</sup>
	Discharge Air °F (°C)	33 (0.6)	39 (3.9)	36 (2.2)
Unlit	Average Evaporator °F (°C) <sup>2</sup>	29 (-1.7)	36 (2.2)	25 (-3.9)
Shelves	Parallel Btu/hr/ft (Watts/m)	2228 (653)	1609 (471)	2580 (756)
	Conventional Btu/hr/ft (Watts/m)	2430 (712)	1755 (514)	2815 (825)
	Discharge Air °F (°C)	33 (0.6)	39 (3.9)	36 (2.2)
Lit	Average Evaporator °F (°C) <sup>2</sup>	28 (-2.2)	35 (1.7)	24 (-4.4)
Shelves	Parallel Btu/hr/ft (Watts/m)	2232 (654)	1613 (473)	2585 (758)
	Conventional Btu/hr/ft (Watts/m)	2435 (714)	1760 (516)	2820 (826)
Fan Speed⁴	IP4SLI90X (8.25")	1600 <sup>4</sup>	1600 <sup>4</sup>	1600 <sup>4</sup>

Notes:

1. All data based on store temperature and humidity that does not exceed NSF Type 1 ambient conditions of 75°F and 55% relative humidity except where noted.

2. Average evaporator temperature shown. Use dew point for high glide refrigerants for unit sizing. Care should be taken to use the dew point in PT tables for measuring and adjusting superheat. Adjust evaporator pressure as needed to maintain discharge air temperature shown.

3. AHRI 1200 Rating Point for energy consumption comparison only.

4. Some lengths and/or applications require optional fan speed control kits applied by the Hussmann Product Configurator.

Defrost D	Data
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Defrost Data		Conventional Controls	Estimated Charge <sup>7</sup> IP4SLI90X		
Frequency (hours between defrost) 4		IP4SLI90X Low Pressure Backup	<b>I90X</b> 0.8 lb 14 oz 0.4 kg		
<i>Огғтіме</i> Time (minutes)	<b>IP4SLI90X</b> 20	Control CI/CO <sup>7</sup> 20°F / 10°F -6.67°C / -12.2°C			
ELECTRIC OR GAS	Not Available <b>20.94</b> lb/day (9.50 kg/day)	Indoor Unit Only, Pressure Defrost Termination <sup>6</sup> 48°F (8.89°C)	<sup>7</sup> This is an average for all refrigerant types. Actual refrigerant charge may vary by approximately half a pound.		
<sup>5</sup> (± 15% based on case configuration and product loading).		<sup>6</sup> Use a Temperature Pressure Chart to determine PSIG conversions.			
Product Data					
Gross Refrigerated Vo	lume <sup>s</sup> (Cu Ft)	34.52 ft <sup>3</sup> (0.98 m <sup>3</sup> )			
AHRI Total Display Are	ea º (Sq Ft)	23.84 ft² (2.21 m²)			
Shelf Area <sup>10</sup> (Sq Ft)		28.43 ft <sup>2</sup> (2.64 m <sup>2</sup> )			
<ul> <li><sup>8</sup> AHRI Gross Refrigerated Volume: Refrigerated Volume, ft<sup>3</sup> [m<sup>3</sup>]</li> <li><sup>9</sup> Computed using AHRI 1200 standard methodology: Total Display Area, ft<sup>2</sup> [m<sup>2</sup>]</li> <li><sup>10</sup> Shelf surface area is composed of bottom deck plus standard shelf complement for this model: (3) rows of 16-in, 18-in. and 18-in. shelves</li> </ul>					

# Insight Multideck Merchandiser, 4 Display Levels, Standard Bottom, Standard Height Front, Wedge

Insight IP4SLI90X Cut & Bulk Produce

#### DOE 2017 Energy Efficiency Compliant

Hussmann refrigerated merchandisers configured for sale for use in the United States meet or surpass the requirements of the DOE 2017 energy efficiency standards.

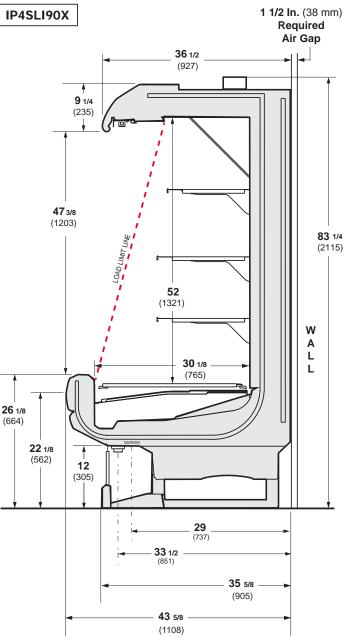
Shelf complement shown as tested:

Three rows of 16-in., 18-in. and 18-in. shelves spaced equally between bottom display pan and interior top panel.

Other optional kits (top piping and vent fans) add to the overall case height.

3-in. between back to back cases.

Shown with Ellipse Option Canopy and Bumper.



Dimensions shown as in. and (mm).

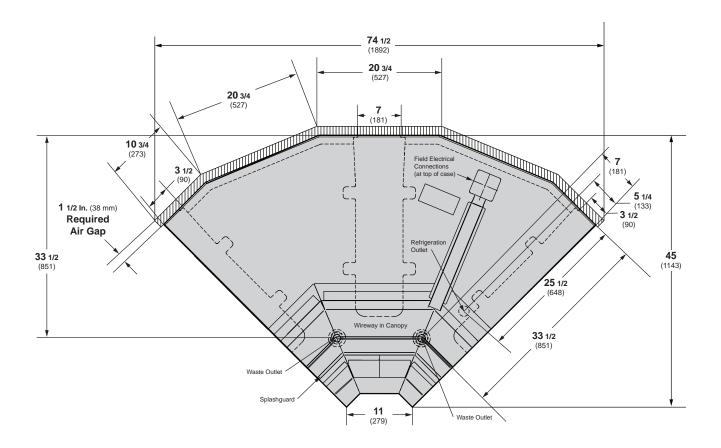
### **NSF** Certification

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

# Engineering Plan View

## IP4SLI90X

#### Dimensions shown as in. and (mm).



(IP4SLI90X Wedge shown above)

# **Electrical Data**

Number of Fan	S	190X	
8.25-in.		2	
		Amperes	Watts
Evaporator Fai	า	190X	I90X
120V 60Hz	Energy Efficient	0.72	46.8
230V 50/60	Hz Energy Efficient	0.38	46.8
Minimum Circu	iit Ampacity		
120V 60Hz	Energy Efficient	0.92	
230V 50/60	Hz Energy Efficient	0.58	
Maximum Ove	Current Protection 120V	20	
Maximum Over	Current Protection 230V	15	

ONLY LIGHTING CONFIGURATIONS THAT ARE COMPLIANT WITH THE U.S. DEPT. OF ENERGY (DOE) 2017 REGULATION ARE AVAILABLE FOR SALE FOR USE IN THE U.S.A.

STANDARD LIGHTING		
EcoShine II Canopy		
1 Row EcoShine II	0.13	15.8
OPTIONAL LIGHTING		
EcoShine II Canopy		
1 Row EcoShine II HO	0.17	19.8
EcoShine II Shelf		
1 Row of Shelves	0.08	8
2 Rows of Shelves	0.14	16
3 Rows of Shelves	0.20	24
4 Rows of Shelves	0.28	32
5 Rows of Shelves	0.34	40

120V Lighting Circuit Total = Standard Lighting + Total Optional Lighting + Optional Shelf Lighting 230V Lighting Circuit Total = Multiply 120V Lighting Circuit Total by 0.52 

 PHYSICAL DATA

 Merchandiser Drip Pipe (in.)
 1 1/4

 Schedule 40 PVC
 Merchandiser Liquid Line (in.)
 3/8

 Merchandiser Suction Line (in.)
 5/8

 ESTIMATED SHIPPING WEIGHT †

 Case

 IPOX

 Ib (kg)
 500 (228)

 † Actual weights will vary according to optional kits included.
 500

# **Shelf Options**

Approved shelf sizes for standard (horizontal, 2-3 position brackets) displays:

14-inch 16-inch 18-inch 20-inch 22-inch

Contact engineering for non-standard (4 position brackets or other) display recommendations.

Minimum number of Shelves: 3

Optimal number of Shelves: 4

Maximum number of Shelves: 6

Maximum number of Lighted Shelves: 5

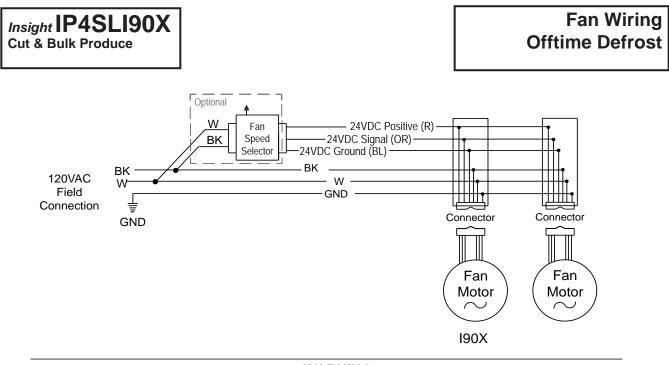
Standard shelf complement for test purposes: 3 rows of shelves (16-in., 18-in. and 18-in.), evenly distributed vertically, all vertical with a 16-in. mirror, spacing between each row of shelves is 12-in.

# **Replacement Parts List**

Part #	Description	Part #	Description
FAN ASSEMBLIES		Coils	
190X		0547192	190X
Standard HE Fan	Assembly		
0535563	8.25-in. Fan Assembly	Нолеусомв - Шніте	i
		3021546	Left
THERMOSTATS		3021547	Right
OPTIONAL		3029956	Center
		OTHER	
LED FIXTURES AND	Power Supply	0534013	Fan Speed Selector
0501213	Power Supply	0534363	Fan Speed Key 1600 RPM
	LED Canopy Fixture	Varies	Thermo-expansion Valve
	Replace with like fixtures.		
	LED Shelf Fixture		
	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 http://www.hussmann.com/ EN/PRODUCTS/LED-LIGHTING/PAGES/DEFAULT.ASPX.

For additional parts information, visit http://www.hussmann.com/en/Pages/Aftermarket-Parts.aspx



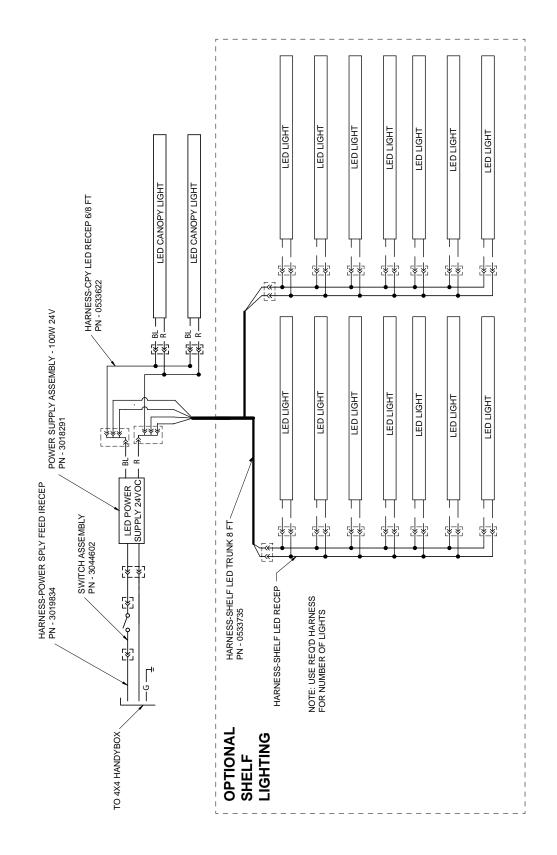
#### WARNING

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

R = Red	Y = Yellow	G = Green	BL = Blue	BK = Bla	ck W = White
• = 120V Power	ר	V NEUTRAL	∔ = Field G	ROUND	mm = Case Ground

# LED Canopy Lighting With Optional Shelf Lighting





Insight IP4SLI90X Cut & Bulk Produce

#### Estimating Refrigeration and Electrical Load (for comparison purposes only)

#### Case Btu

To determine Btu for a case, refer to the performance data chart on page 2. Select lit or unlit shelves, then select the type of remote refrigeration system (parallel or conventional), which will give Btu/hr. Add 10 BTU/HR for each row of LED shelf lights.

#### **Case Electrical**

Refer to store legend to determine number of circuits. Lighting should be specified in store legend.

Fan electrical load for a case is computed by selecting the fan voltage on page 5. For example, the store legend specifies fans on a 230V circuit. In this instance, fans use 0.38 Amps and the MCA is 0.58. When applied, ambient fans, anti-sweat heaters, controllers, etc. must be included in the MCA. Include lights in the MCA if lights are on same circuit.

Lights may be on a separate circuit. To estimate lighting load: select shelf lighting [maximum for which case is wired] (0.20 for three shelves); then add together [0.20 amps for 120V] (for 230V, multiply 0.20 \* 0.52 = 0.11).

#### Line Sizing — Refer to store legend.

Hussmann Line Sizing Charts are engineered for use with Hussmann refrigeration equipment.



Scan QR code to access product information on your mobile device.

### **Revision History**

Revision A: August 2018: Original Issue