HUSSMANN

Power Supply

Canopy LED Lights

Insight® IM4SLI90X

Field Electrical

Connections

Meat

Merchandiser Data Sheet

P/N 3147009_B

NSF® Certified

May 2021







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

Shelf LED Lights

Coil

Portion of parts removed for clarity.

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.

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Data sheet-Insight IM4SLI90X

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.

Insight IM4SLI90X Meat

Refrigeration Data 1

IM4SLI90X Wedge		Optimal Shelf Life		Energy Comparison
Application		Meat	NSF Type 2 Ambient	AHRI 1200 Rating Point ³
	Discharge Air °F (°C)	32 (0)	32 (0)	35 (1.7)
Unlit Shelves	Average Evaporator °F (°C) ²	28 (-2.2)	27 (-2.8)	31 (-0.6)
	Parallel Btu/hr/ft (Watts/m)	2319 (680)	2525 (740)	2122 (622)
	Conventional Btu/hr/ft (Watts/m)	2530 (741)	2755 (807)	2315 (678)
	Discharge Air °F (°C)	31 (-0.6)	31 (-0.6)	35 (1.7)
Lit Shelves	Average Evaporator °F (°C) ²	27 (-2.8)	26 (-3.3)	30 (-1.1)
	Parallel Btu/hr/ft (Watts/m)	2328 (682)	2535 (743)	2131 (625)
	Conventional Btu/hr/ft (Watts/m)	2540 (744)	2765 (810)	2325 (681)
Fan Speed ⁴	IM4SLI90X (8.25")	1400 ⁴	1400 ⁴	14004

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 Data		Conventional Controls	Estimate	ed Charge	⁷ IM-	4SLI90X
Frequency (hours between	defrost) 4	IM4SLI90X Low Pressure Backup	190X	0.8 lb	14 oz	0.4 kg
OFFTIME Time (minutes)	IM4SLI90X 20	Control CI/CO ⁶ 20°F / 10°F -6.67°C / -12.2°C				
ELECTRIC OR GAS	Not Available	Indoor Unit Only,	⁷ This is a	n average fo	or all refriger	ant types.
Defrost Water ⁵	15.8 lb/day (7.2 kg/day)	Pressure Defrost Termination ⁶ 48°F (8.89°C)		rigerant char ately half a p	rge may var	y by
⁵ (± 15% based on case configuration and product loading).		⁶ Use a Temperature Pressure Chart to determine PSIG conversions.				

Product Data

 Gross Refrigerated Volume 8 (Cu Ft)
 29.35 ft³ (0.83 m³)

 AHRI Total Display Area 9 (Sq Ft)
 16.18 ft² (1.50 m²)

 Shelf Area 10 (Sq Ft)
 23.59 ft² (2.19 m²)

- ³ AHRI Gross Refrigerated Volume: Refrigerated Volume, ft³ [m³]
- ⁹ Computed using AHRI 1200 standard methodology: Total Display Area, ft² [m²]
- Shelf surface area is composed of bottom deck plus standard shelf complement for this model: (3) rows of 14-in, 16-in. and 18-in. shelves

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:

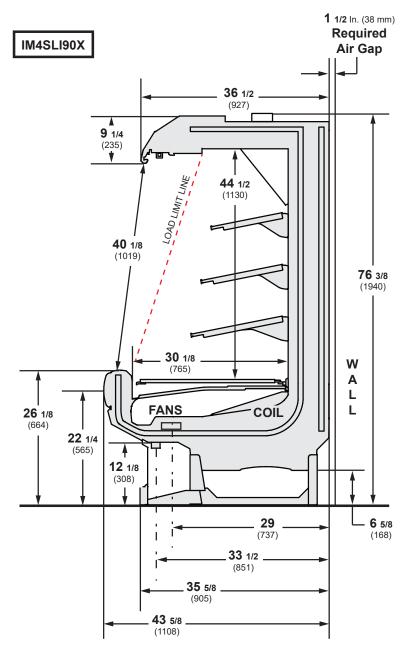
Three rows of 14-in., 16-in. and 18-in. shelves spaced equally between bottom display pan and interior top panel.

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).



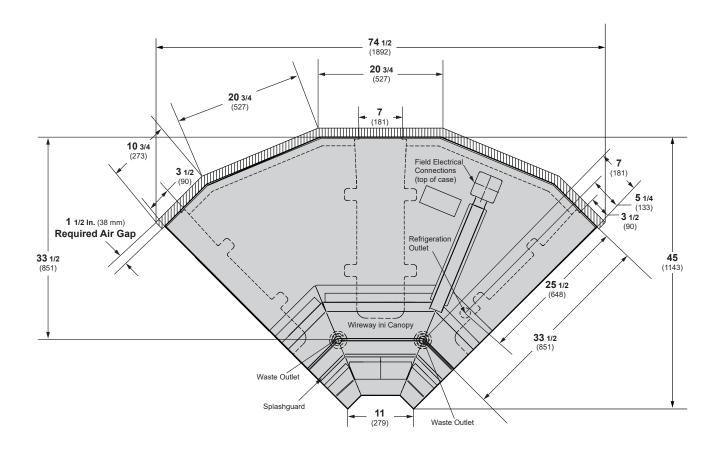
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Engineering Plan View

IM4SLI90X

Dimensions shown as in. and (mm).



(IM4SLI90X Wedge shown above)



Electrical Data

Number of Fans IM4SLI90X 8.25-in. 2

			Amperes	Watts
Evapora	tor Fan		IM4SLI90X	IM4SLI90X
120V	60Hz	Energy Efficient	0.55	36
230V	50/60Hz	Energy Efficient	0.29	36
Minimum	n Circuit A	mpacity		
120V	60Hz	Energy Efficient	0.75	
230V	50/60Hz	Energy Efficient	0.49	
Maximur	n Over Cu	rrent 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

Can	ору
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1 Row	0.13	15.8
OPTIONAL LIGHTING Canopy		
1 Row HO	0.17	19.8
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

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

1 1/4

Merchandiser Drip Pipe (in.)
Schedule 40 PVC

Merchandiser Liquid Line (in.) 3/8 Merchandiser Suction Line (in.) 5/8

ESTIMATED SHIPPING WEIGHT †

Case

IM4SLI90X

Ib (*kg*) 500 (228)

† Actual weights will vary according to optional kits included.

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.

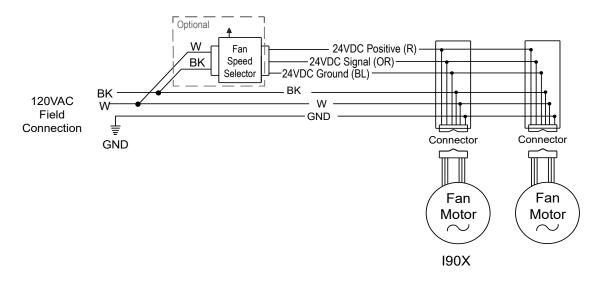
Minimum number of Shelves: 2

Optimal number of Shelves: 3

Maximum number of Shelves: 5

Maximum number of Lighted Shelves: 4

Standard shelf complement for test purposes: 3 rows of shelves (14-in., 16-in. and 18-in.), evenly distributed vertically, all vertical with a 16-in. mirror, spacing between each row of shelves is 12-in.

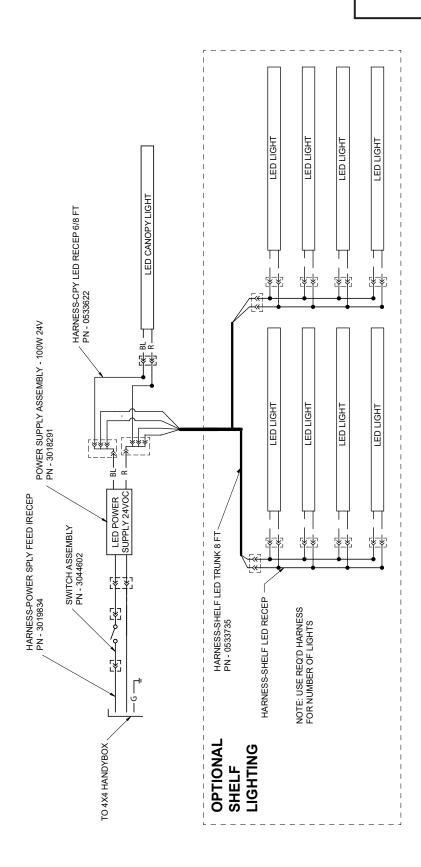


WARNING

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

R = Red Y = Yellow G = Green BL = Blue BK = Black W = White
$$\bullet$$
 = 120V Power \circ = 120V Neutral $\stackrel{\perp}{\bot}$ = Field Ground $\stackrel{\textit{min}}{\longrightarrow}$ = Case Ground

LED Canopy Lighting With Optional Shelf Lighting



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.

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 0.29 Amps and the MCA is 0.49. 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] (0.28 for four shelves); (for 230V, multiply 0.28 * 0.52 = 0.15).

Line Sizing — Refer to store legend.

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



Scan the QR code with your mobile device to access additional product information or order parts.

Parts may also be ordered at:

parts.hussmann.com
Call toll free: 1.855.487.7778

Revision History

Revision A: May 2021: Original Issue.

Revision B: May 2021: Updated cross section.