

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

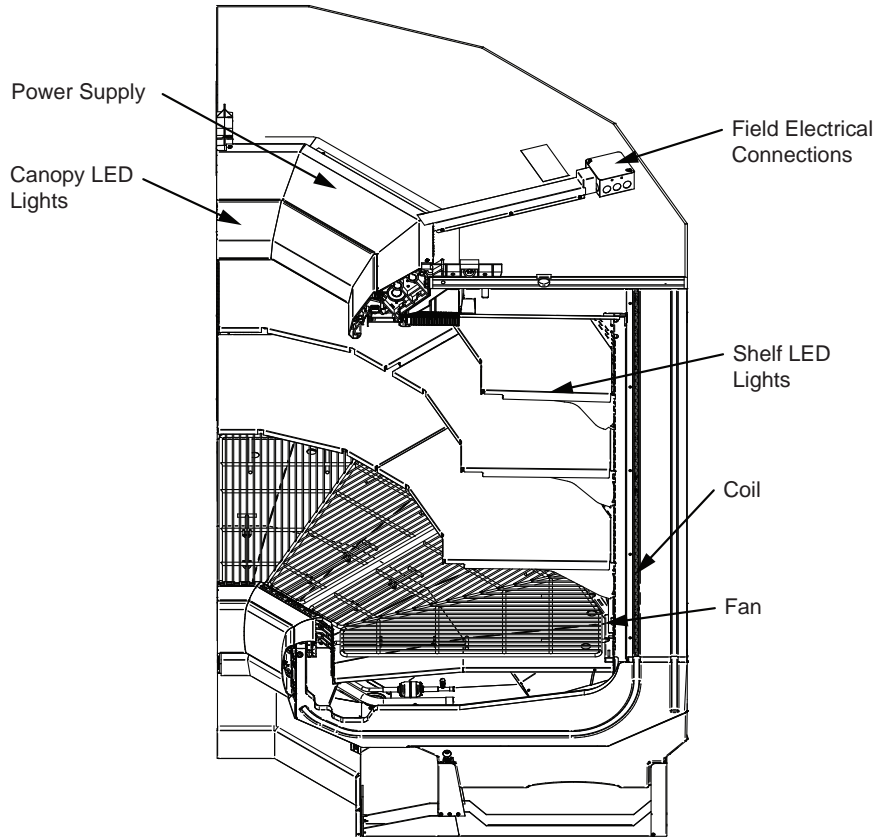
Merchandiser Data Sheet

P/N 3147009_C

NSF® Certified

December 2023

DOE 2017
Energy Efficiency
Compliant



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
Unlit Shelves	Discharge Air °F (°C)	32 (0)	32 (0)	35 (1.7)
	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)
Lit Shelves	Discharge Air °F (°C)	31 (-0.6)	31 (-0.6)	35 (1.7)
	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	1400 ⁴

Notes:

- 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.
- 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.
- AHRI 1200 Rating Point for energy consumption comparison only.
- Some lengths and/or applications require optional fan motor kits applied by the Hussmann Product Configurator (HPC).

Defrost Data

Frequency (hours between defrost) 4

OFFTIME
Time (minutes) **IM4SLI90X** 20

ELECTRIC OR GAS Not Available

Defrost Water ⁵ 15.8 lb/day
(7.2 kg/day)

⁵ (± 15% based on case configuration and product loading).

Conventional Controls

IM4SLI90X
Low Pressure Backup Control CI/CO ⁶
20°F / 10°F
-6.67°C / -12.2°C

Indoor Unit Only, Pressure Defrost Termination ⁶
48°F (8.89°C)

⁶ Use a Temperature Pressure Chart to determine PSIG conversions.

Estimated Charge ⁷ **IM4SLI90X**
I90X 0.8 lb 14 oz 0.4 kg

⁷ This is an average for all refrigerant types. Actual refrigerant charge may vary by approximately half a pound.

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)

⁸ AHRI Gross Refrigerated Volume: Refrigerated Volume, ft³ [m³]

⁹ Computed using AHRI 1200 standard methodology: Total Display Area, ft² [m²]

¹⁰ 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

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

Insight IM4SLI90X
Meat

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Husmann 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:

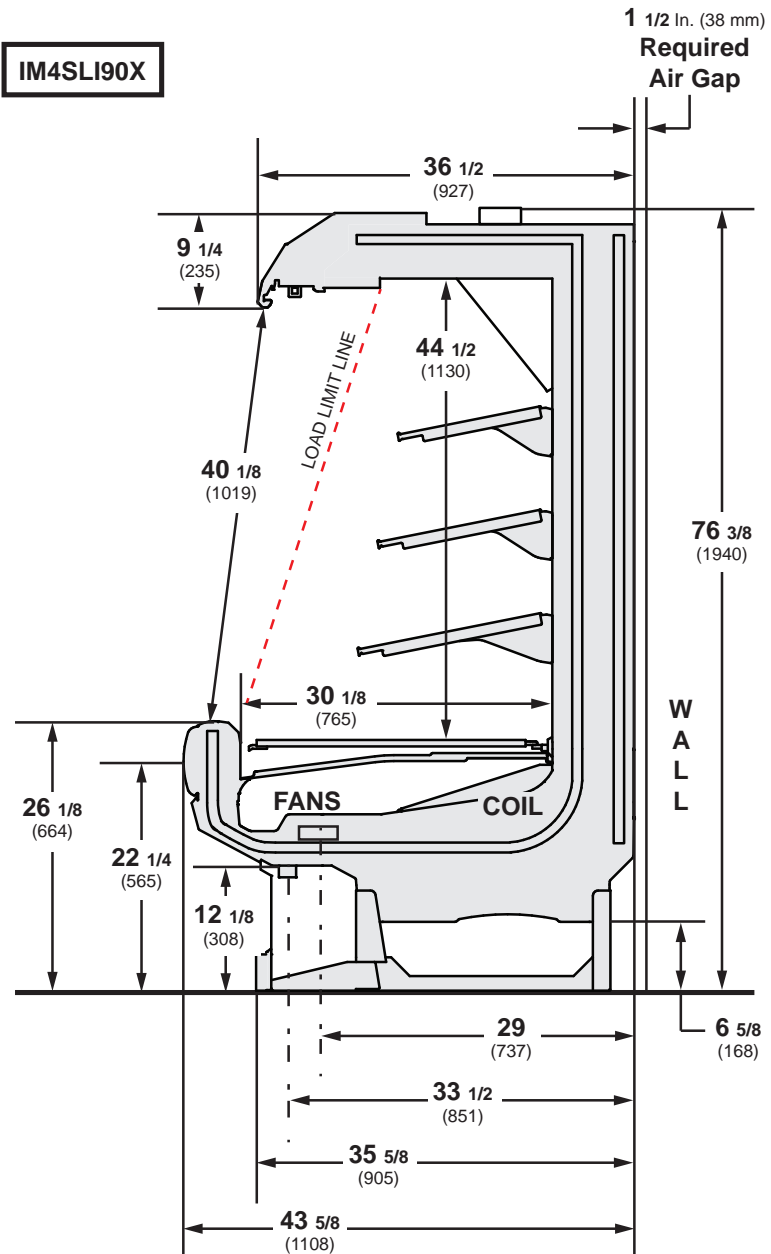
Three rows of 14-in., 16-in. and 18-in. shelves spaced equally between bottom display pan and interior top panel.

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).



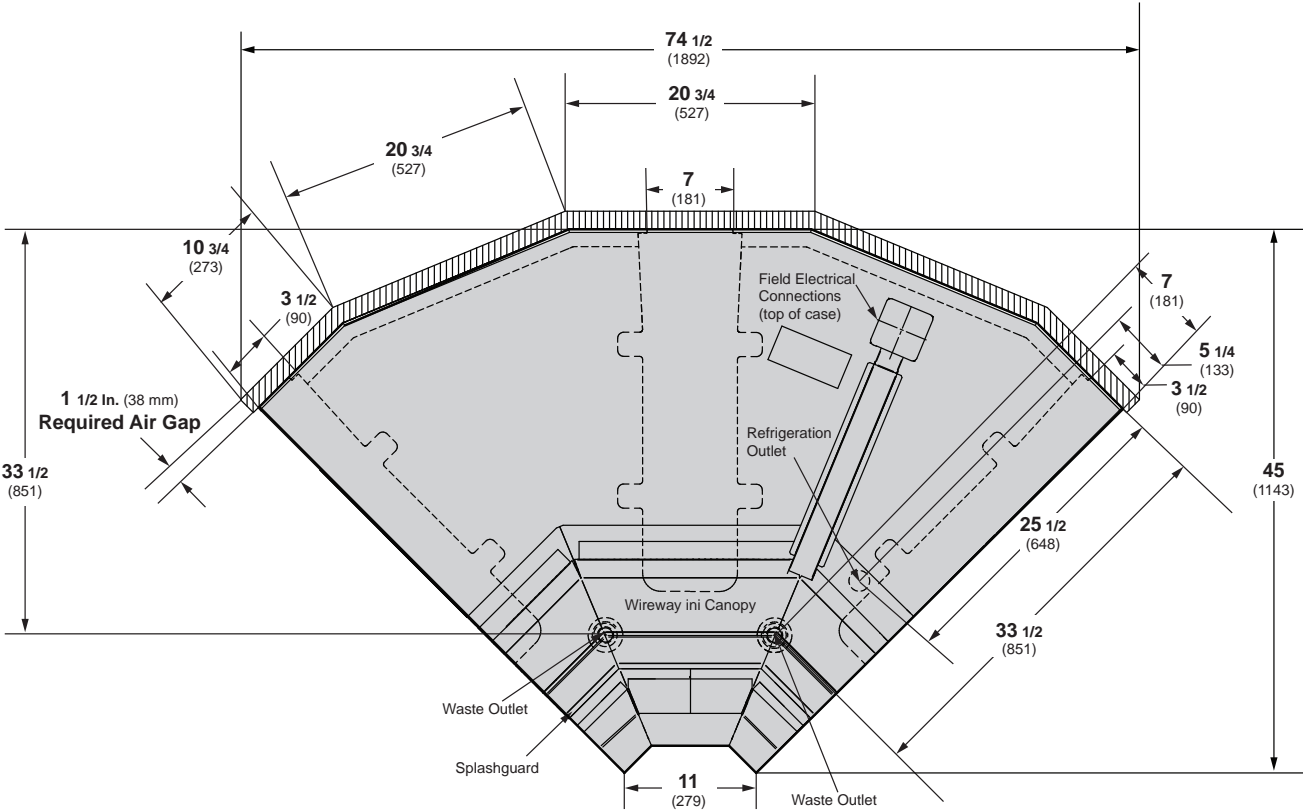
NSF Certification

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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
Evaporator Fan	IM4SLI90X	IM4SLI90X
120V 60Hz Energy Efficient	0.55	36
230V 50/60Hz Energy Efficient	0.29	36

Minimum Circuit Ampacity	
120V 60Hz Energy Efficient	0.75
230V 50/60Hz Energy Efficient	0.49

Maximum Over 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.**

LED Lighting

Standard LED Canopy Lights

1 Row	0.13	15.8
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Optional LED Shelf Lights

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

Insight **IM4SLI90X**
Meat

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

IM4SLI90X

lb (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

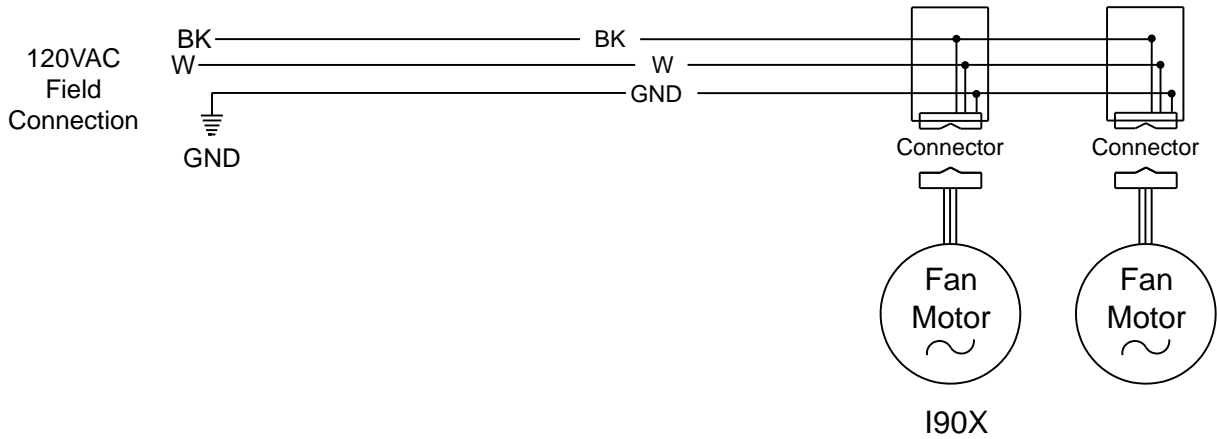
Maximum number of Shelves: 5

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.

Fan Wiring Offtime Defrost

Insight **IM4SLI90X**
Meat



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 ⊥ = FIELD GROUND *m* = CASE GROUND

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.

Revision C: December 2023: Updated fan and lighting information. Updated wiring diagrams.