

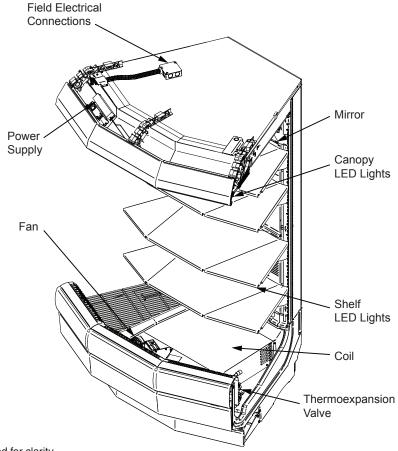
Insight[®] ID5SMO45

Dairy / Deli / Beverage / Produce / Meat

Merchandiser Data Sheet

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

P/N 3050591_D NSF®Certified





December 2023

DOE 2017 Energy Efficiency Compliant



Portion of parts removed for clarity.

Outside 45° 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 Estimated Shipping Weights Page 2 Shelf Options Page 6 Page 2 Wiring Diagrams Page 7 Page 3 Computing Refrigeration and Electrical Load Page 9 Page 4 QR Code for Parts and Product Information Page 9 Page 9 Page 5 Revision History Page 6

Data sheet-Insight ID5SMO45

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 1

ID5SMO45 Wedge		Optimal Shelf Life		Energy Comparison
Application		Dairy/Deli/ Beverage/ Produce	Convertible / Meat	AHRI 1200 Rating Point ³
Unlit Shelves	Discharge Air °F (°C)	33 (0.6)	32 (0.0)	35 (1.7)
	Average Evaporator °F (°C) ²	26 (-3.3)	24 (-4.4)	28 (-2.2)
	Parallel Btu/hr/case (Watts/case)	5702 (1671)	7764 (2275)	5500 (1612)
	Conventional Btu/hr/case (Watts/case)	6220 (1823)	8470 (2482)	6000 (1758)
Lit Shelves	Discharge Air °F (°C)	32 (0.0)	31 (-0.6)	34 (1.1)
	Average Evaporator °F (°C) ²	25 (-3.9)	23 (-5.0)	27 (-2.8)
	Parallel Btu/hr/case (Watts/case) ⁴	5757 (1687)	7819 (2292)	5555 (1628)
	Conventional Btu/hr/case (Watts/case) 4	6280 (1840)	8530 (2500)	6060 (1776)
Fan Speed⁵	ID5SMO45 (8.25")	1600 ⁵	1600 ⁵	1600 ⁵

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. Add 10 Btu/hr/case (2.9 Watts/case) per shelf row for LED shelf light fixtures.

5. Some lengths and/or applications require optional fan motor kits applied by the Hussmann Product Configurator (HPC).

Defrost Data		Conventional Controls	Estimated Charge ⁸ ID5SMO45	
Frequency (hours between defrost) 4		ID5SMO45	O45 0.6 lb 9.6 oz 0.3 kg	
<i>Огғтіме</i> Time (minutes)	ID5SMO45 20	Low Pressure Backup Control CI/CO ⁷ 20°F / 10°F -6.67°C / -12.2°C		
ELECTRIC OR GAS	Not Available 46.1 lb/day (20.9 kg/day)	Indoor Unit Only, Pressure Defrost Termination ⁷ 48°F (8.89°C)	⁸ This is an average for all refrigerant types. Actual refrigerant charge may vary by approximately half a pound.	
⁶ (± 15% based on case configuration and product loading).		⁷ Use a Temperature Pressure Chart to determine PSIG conversions.		
Product Data				
Gross Refrigerated Volume [®] (Cu Ft)		43.96 ft ³ (1.24 m ³)		
AHRI Total Display Area 10 (Sq Ft)		20.27 ft² (1.88 m²)		
Shelf Area ¹¹ (Sq Ft)		38.87 ft² (3.61 m²)		
¹⁰ Computed using AHRI	ed Volume: Refrigerated Volu 1200 standard methodology omposed of bottom deck plus	: Total Display Area, ft² [m²]	s model: (5) rows of 20-inch shelves	

Insight Multideck Merchandiser, 5 Display Levels, Standard Bottom, Medium Height Front, Outside Wedge



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

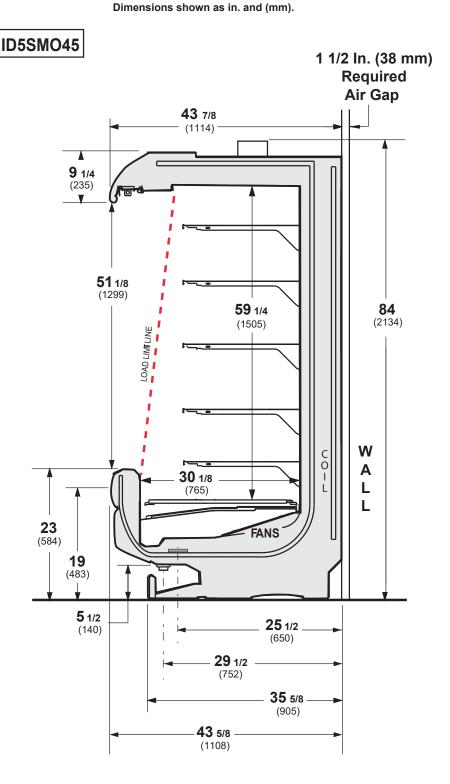
Five rows of 20-in. shelves spaced equally between bottom display pan and interior top panel.

Shelf complement shown as tested:

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

3-in. between back to back cases.

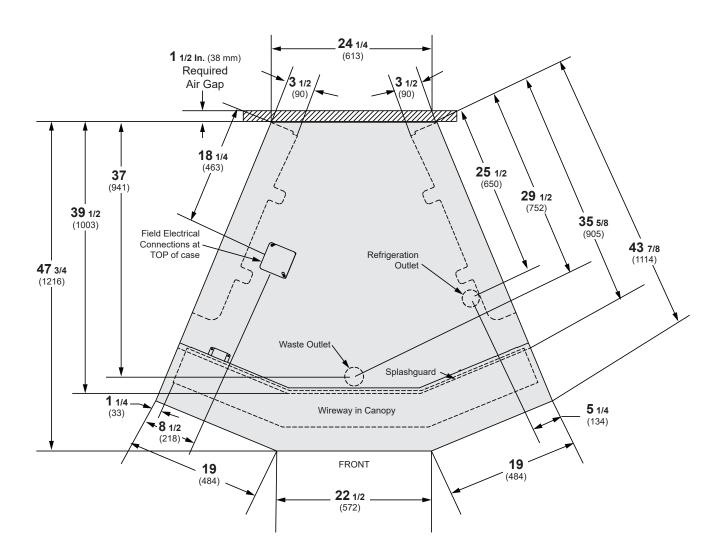
Shown with Ellipse Option Canopy and Bumper.





ID5SMO45

Dimensions shown as in. and (mm).



(ID5SMO45 Wedge shown above)

Electrical Data

Number of Fans		O45		
8.25-in	1.		2	
			Amnoroo	Watts
			Amperes	
Evapora	itor Fan		O45	O45
120V	60Hz	Energy Efficient	0.74	54
230V	50/60Hz	Energy Efficient	0.39	54
Minimur	n Circuit A	Ampacity		
120V	60Hz	Energy Efficient	0.94	
230V	50/60Hz	Energy Efficient	0.59	
Maximu	m Over Cւ	urrent 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.

Amperes	Watts
O45	O45
0.16	19.3
0.04	5
0.08	10
0.13	15
0.17	20
0.21	25
0.25	30
	045 0.16 0.04 0.08 0.13 0.17 0.21

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
Merchandiser Drip Pipe (in.) Schedule 40 PVC	
Merchandiser Liquid Line (in.)	³ /8
Merchandiser Liquid Line (in.) Merchandiser Suction Line (in.)	⁵ /8
、 <i>,</i>	

ESTIMATED SHIPPING WEIGHT †

Case 045 Ib (kg) 650 (295)

† Actual weights will vary according to optional kits included.

Shelf Options

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

18-inch 20-inch 22-inch 24-inch

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

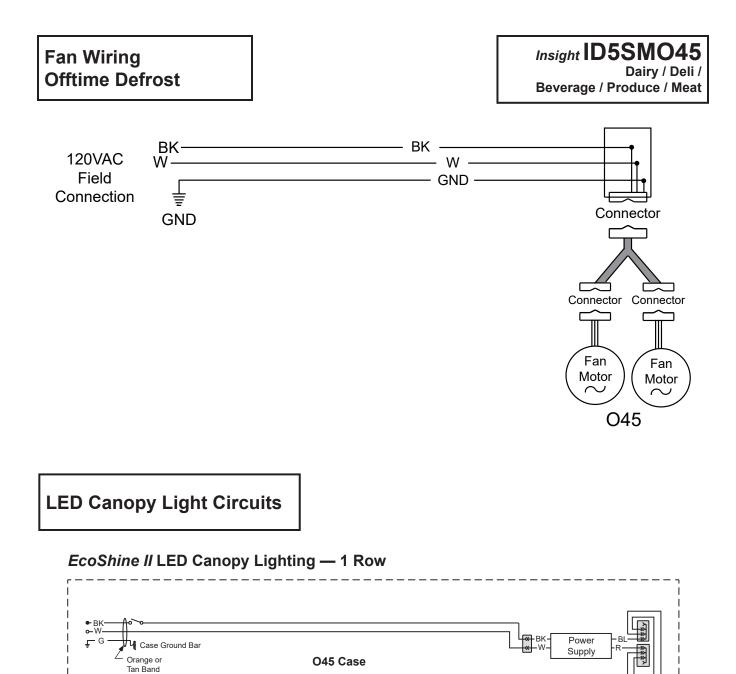
Minimum number of Shelves: 3

Optimal number of Shelves: 4

Maximum number of Shelves: 8

Maximum number of Lighted Shelves: 6

Standard shelf complement for test purposes: (5) 20-in. shelves, evenly distributed vertically



WARNING

LED Canopy Fixture

BL

W BL -

LED Canopy Fixture

BI -

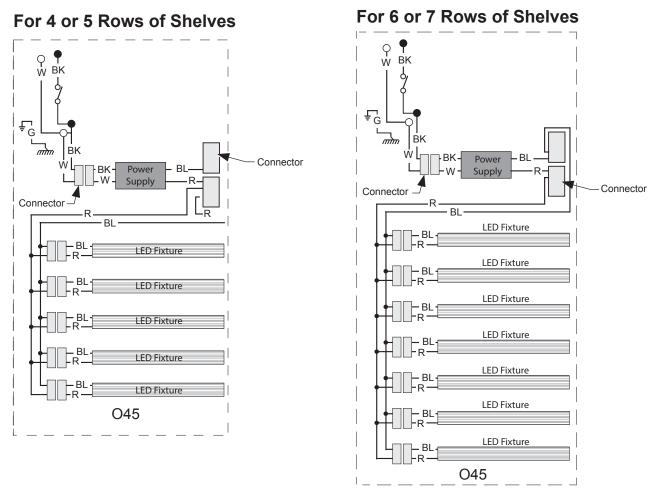
₩_BL_

R-BL

LED Canopy Fixture

«H−BL− «HR−

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



Optional Shelf Harness and LED Light Circuits

WARNING

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

R = RedY = YellowG = GreenBL = BlueBK = BlackW = White● = 120V Power○ = 120V Neutral⊥ = FIELD GROUNDmm = 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/case. Add 10 BTU/HR/FT 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 case length and fan voltage on page 5. The store legend specifies fans on a 230V circuit. In this instance, fans use 0.39 Amps and the MCA is 0.59. 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 canopy lighting [standard or optional] (here 0.16 for standard), and shelf lighting [maximum for which case is wired] (0.21 for EcoShine II for 5 rows of shelves); then add together [0.16 + 0.21 = 0.37 amps for 120V] (for 230V, multiply 0.37 * 0.52 = 0.19).

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: December 2017: Original Issue

Revision B: August 2018: Updated cover image, cross section and plan view. Other changes marked with a bar, circle or underline.

Revision C: October 2019: Updated Refrigeration Data, removed Replacement Parts page.

Revision D: December 2023: Updated fan and lighting information.