HUSSMANN

Insight® ID5SMO45

Dairy / Deli / Beverage / Produce / Meat

Merchandiser Data Sheet

P/N 3050591_C

NSF® Certified

October 2019

DOE 2017
Energy Efficiency
Compliant





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

Field Electrical
Connections

Mirror
Supply

Canopy
LED Lights

Shelf
LED Lights

Thermoexpansion
Valve

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.

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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.

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Refrigeration Data 1

ID5SMO45 Wedge		Optimal Shelf Life		Energy Comparison
Application		Dairy/Deli/ Beverage/ Produce	Convertible / Meat	AHRI 1200 Rating Point ³
	Discharge Air °F (°C)	33 (0.6)	32 (0.0)	35 (1.7)
Unlit Shelves	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)
	Discharge Air °F (°C)	32 (0.0)	31 (-0.6)	34 (1.1)
Lit	Average Evaporator °F (°C) ²	25 (-3.9)	23 (-5.0)	27 (-2.8)
Shelves	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 speed control kits applied by the Hussmann Product Configurator.

Defrost Data		Conventional Controls	Estima	ted Charge	e ⁸ ID	5SMO45
Frequency (hours betw	een defrost) 4	ID5SMO45 Low Pressure Backup	O45	0.6 lb	9.6 oz	0.3 kg
Огетиме Time (minutes)	ID5SMO45 20	Control CI/CO ⁷ 20°F / 10°F -6.67°C / -12.2°C				
ELECTRIC OR GAS	Not Available	Indoor Unit Only,	8 This is	an average f	for all refrige	rant types
Defrost Water ⁶	46.1 lb/day (20.9 kg/day)	Pressure Defrost Termination 7 48°F (8.89°C)	Actual re	efrigerant cha	arge may var	71
⁶ (± 15% based on cas loading).	e configuration and product	⁷ Use a Temperature Pressure Chart to determine PSIG conversions.				

Product Data

 Gross Refrigerated Volume 9 (Cu Ft)
 43.96 ft³ (1.24 m³)

 AHRI Total Display Area 10 (Sq Ft)
 20.27 ft² (1.88 m²)

 Shelf Area 11 (Sq Ft)
 38.87 ft² (3.61 m²)

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

¹⁰ Computed using AHRI 1200 standard methodology: Total Display Area, ft² [m²]

¹¹ Shelf surface area is composed of bottom deck plus standard shelf complement for this model: (5) rows of 20-inch 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:

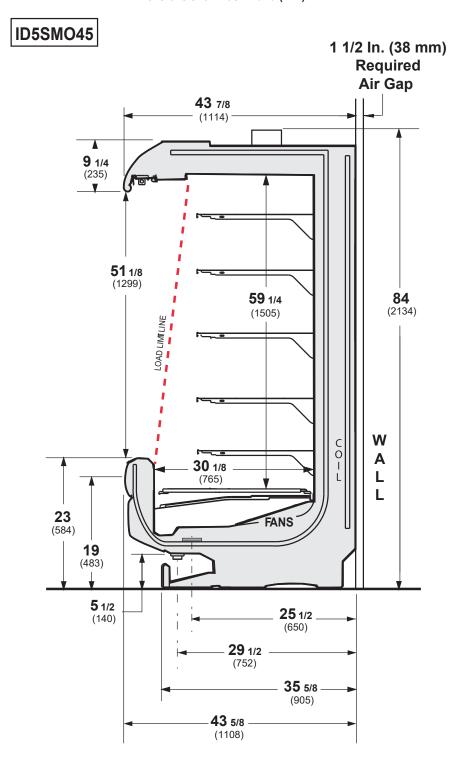
Five rows of 20-in. shelves spaced equally between bottom display pan and interior top panel.

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).



Insight ID5SMO45

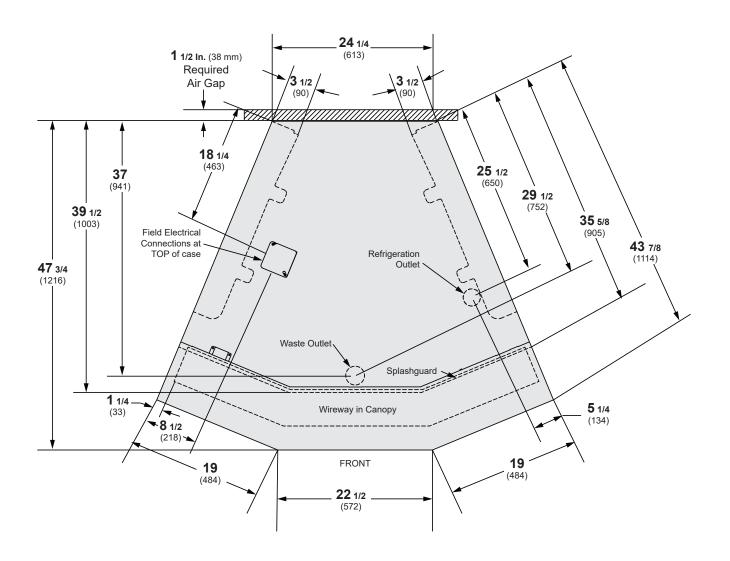
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Engineering Plan View

ID5SMO45

Dimensions shown as in. and (mm).



(ID5SMO45 Wedge shown above)

Electrical Data

Number of Fans	O45
8.25-in.	2

			Amperes	Watts
Evapora	tor Fan		O45	O45
120V	60Hz	Energy Efficient	0.74	54
230V	50/60Hz	Energy Efficient	0.39	54
Minimo	a Cimaviit A			
	n Circuit A	. ,		
120V	60Hz	Energy Efficient	0.94	
230V	50/60Hz	Energy Efficient	0.59	
Mavimu	n Over Cu	rrent Protection 120V	20	
Maximun	n Over Cur	rent 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	Amperes	Watts
EcoShine II Canopy	O45	O45
1 Row EcoShine II	0.16	19.3
OPTIONAL LIGHTING		
EcoShine II Canopy		
1 Row of EcoShine II HO	0.22	26.5
OPTIONAL LIGHTING		
EcoShine II Shelf		
1 Row of Shelves	0.04	5
2 Rows of Shelves	0.08	10
3 Rows of Shelves	0.13	15
4 Rows of Shelves	0.17	20
5 Rows of Shelves	0.21	25
6 Rows of Shelves	0.25	30

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

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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

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

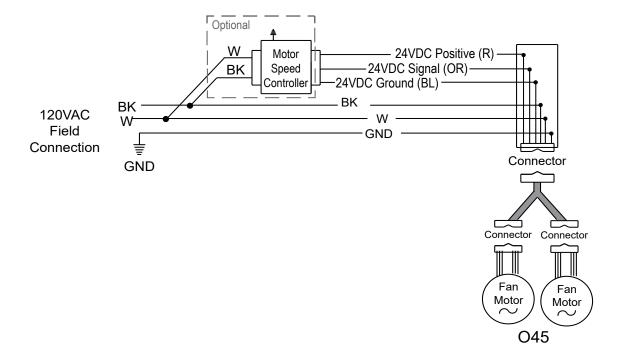
Maximum number of Lighted Shelves: 6

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

Fan Wiring Offtime Defrost

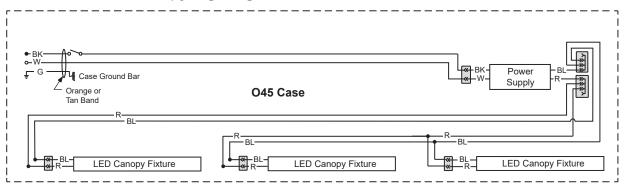
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LED Canopy Light Circuits

EcoShine II LED Canopy 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
$$\bullet$$
 = 120V Power \circ = 120V Neutral $\frac{1}{2}$ = Field Ground $\frac{1}{2}$ = Case Ground

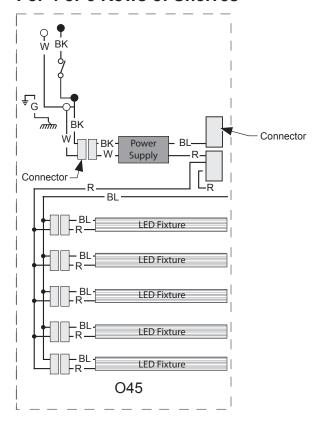
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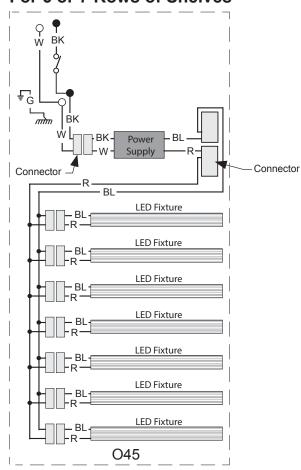
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Optional Shelf Harness and LED Light Circuits

For 4 or 5 Rows of Shelves



For 6 or 7 Rows of Shelves



WARNING

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$$\bullet$$
 = 120V Power \circ = 120V Neutral $\stackrel{\perp}{=}$ = Field Ground $\stackrel{\text{min}}{=}$ = 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 QR code to access product information on your mobile device.

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.