# HUSSMANN

# Insight® ID5SV

Dairy / Deli / Beverage / Produce / Meat

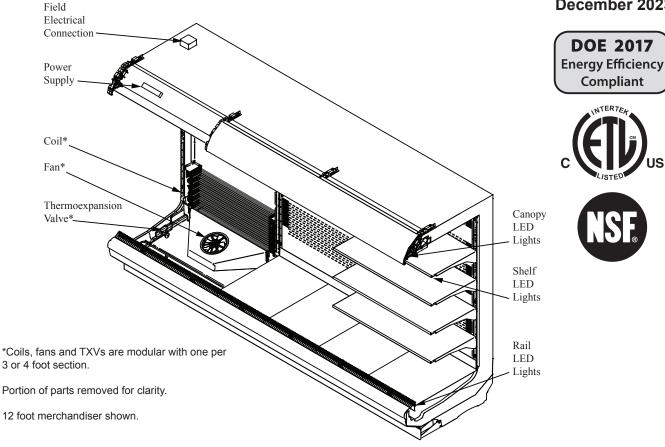
Merchandiser Data Sheet

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

P/N 3014829\_G

**NSF**® Certified

December 2023



### **NSF Certification**

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

Performance Data	Page 2	Estimated Shipping Weights	Page 6
Product Data (AHRI Statistics)	Page 2	Shelf Options	Page 6
Cross Section	Page 3	Wiring Diagrams	Page 7
Plan View	Page 4	Computing Refrigeration and Electrical Load	Page 10
Electrical Loads	Page 5	QR Code for Parts and Product Information	Page 10
		Revision History	Page 10

### Data sheet-Insight ID5SV

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 ID5SV Dairy / Deli / Beverage / Produce / Meat

### Refrigeration Data 1

	ID5SV		Energy Comparison			
Application		Dairy/Deli/ Beverage/ Produce	Convertible / Meat	NSF Type 2 Ambient <sup>3</sup>	Pegs⁴	AHRI 1200 Rating Point⁵
	Discharge Air °F (°C)	33 (0.55)	33 (0.55)	33 (0.55)	33 (0.55)	35 (1.66)
Unlit	Average Evaporator °F (°C) <sup>2</sup>	28 (-2.22)	26 (-3.33)	26 (-3.33)	26 (-3.33)	30 (-1.11)
Shelves	Parallel Btu/hr/ft (Watts/m) <sup>6</sup>	1285 (1236)	1416 (1362)	1714 (1648)	1659 (1595)	1200 (1154)
	Conventional Btu/hr/ft (Watts/m) <sup>6</sup>	1400 (1347)	1545 (1486)	1870 (1798)	1810 (1741)	1310 (1260)
	Discharge Air °F (°C)	32 (0)	33 (0.55)	33 (0.55)	N/A	34 (1.11)
Lit	Average Evaporator °F (°C) <sup>2</sup>	27 (-2.77)	25 (-3.88)	25 (-3.88)	N/A	29 (-1.66)
Shelves	Parallel Btu/hr/ft (Watts/m) <sup>6</sup>	1305 (1255)	1435 (1379)	1733 (1666)	N/A	1220 (1174)
	Conventional Btu/hr/ft (Watts/m) <sup>6</sup>	1420 (1366)	1565 (1505)	1890 (1817)	N/A	1330 (1279)
Fan Spood?	ID5SV6 (8.25")	1500 <sup>7</sup>	1700 <sup>7</sup>	1700 <sup>7</sup>	1700 <sup>7</sup>	1500 <sup>7</sup>
Fan Speed <sup>7</sup>	ID5SV4, 8, 12 (8.25")	1500 <sup>7</sup>	1700 <sup>7</sup>	1700 <sup>7</sup>	1700 <sup>7</sup>	1500 <sup>7</sup>

- 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. Data for operation in NSF Type 2 ambient of 80°F and 55% relative humidity.
- 4. Hussmann Peg Shelves for Dairy/Deli applications only.
- 5. AHRI 1200 Rating Point for energy consumption comparison only.
- 6. Add 10 Btu/hr/ft (9.6 Watts/m) per shelf row for LED shelf light fixtures.
- 7. Some lengths and/or applications require optional fan motor kits applied by the Hussmann Product Configurator (HPC).
- 8. Reduce refrigeration load by 15% if fitted with CaseShieldPTM.

	'OS		

Frequency (hours between defrost) Defrost Water 9 10.0 lb/ft/day (14.9 kg/m)

9 (± 15% based on case configuration and product

loading).

ID5SV **O**FFTIME Time (minutes) 20

ELECTRIC OR GAS Not Available

#### **Conventional Controls**

**ID5SV** 

Low Pressure Backup Control CI/CO 10

20°F /10°F -6.7°C / -12.2°C

Indoor Unit Only, **Pressure Defrost** Termination <sup>10</sup>

48°F (8.9°C)

<sup>10</sup> Use a Temperature Pressure Chart to determine PSIG conversions

Estima	ID5SV		
4 ft	0.6 lb	9.6 oz	0.3 kg
6 ft	1.1 lb	17.6 oz	0.5 kg
8 ft	1.5 lb	24 oz	0.7 kg
12 ft	2.9 lb	46.4 oz	1.3 kg

<sup>11</sup> This is an average for all refrigerant types. Actual refrigerant charge may vary by approximately half a pound.

### **Product Data**

Gross Refrigerated Volume 12 (Cu Ft/Ft) 12.1 ft<sup>3</sup>/ft (1.12 m<sup>3</sup>/m) AHRI Total Display Area 13 (Sq Ft/Ft) 5.05 ft<sup>2</sup>/ft (1.54 m<sup>2</sup>/m) Shelf Area 14 (Sq Ft/Ft) 9.82 ft<sup>2</sup>/ft (2.99 m<sup>2</sup>/m)

AHRI Gross Refrigerated Volume: Refrigerated Volume/Unit of Length, ft³/ft [m³/m]

<sup>13</sup> Computed using AHRI 1200 standard methodology: Total Display Area, ft² [m²]/Unit of Length, ft [m]

<sup>14</sup> Shelf surface area is composed of bottom deck plus standard shelf complement for this model: (4) rows of 22-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.

Dimensions shown as in. and (mm).

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

A minimum 1 ½-in. clearance required to remove raceway cover, 6 ½-in for full access. See the Installation manual for instructions.

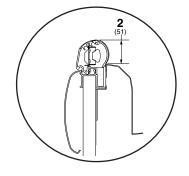
3-in. between back to back cases.

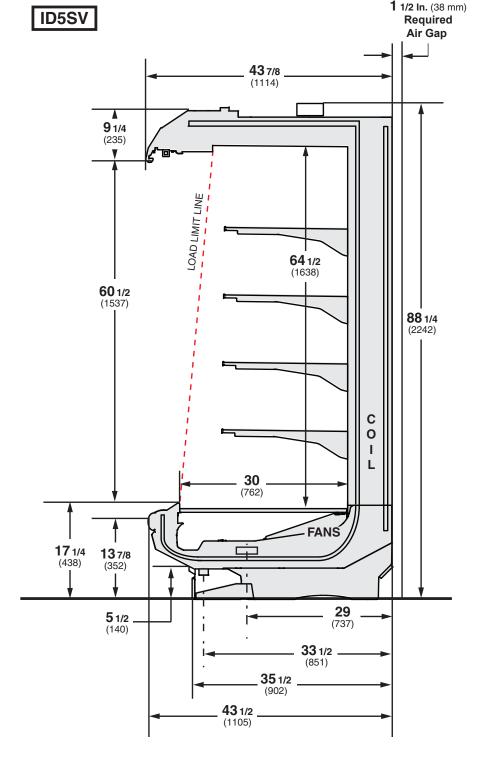
Shelf complement shown as tested:

Four rows of 22-in. shelves spaced equally between bottom display pan and interior top panel.

Shown with Ellipse Option Canopy and Bumper.

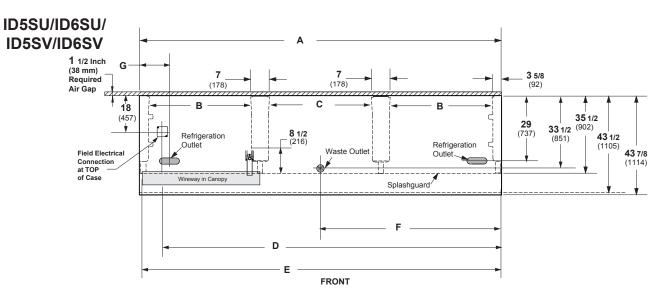
### **OPTIONAL RAIL LIGHT**





# Engineering Plan View

Dimensions shown as in. and (mm).



(12 Foot Model shown above)

		4 ft	6 ft	8 ft	12 ft
Gene	ral				
(A)	Case Length (without ends or partitions) (Each end and insulated partition adds $1^{-1/2}$ in. (38 mm) to case line up.)	48 1/8 (1222)	72 1/4 (1835)	96 1/4 (2445)	144 3/8 (3668)
	Maximum O/S dimension of case back to front (includes bumper)	43 1/2 (1105)	43 1/2 (1105)	43 1/2 (1105)	43 1/2 (1105)
	Back of case to front of splashguard	35 1/2 (902)	35 1/2 (902)	35 1/2 (902)	35 1/2 (902)
(B)	Distance between edges of external legs and center legs	NA	29 (737)	41 (1041)	41 (1041)
(C)	Distance between edges of center legs	41 1/8 (1045)	NA	NA	41 1/8 (1045)
	Distance between front legs and splashguard	8 (203)	8 (203)	8 (203)	8 (203)
Elect	rical Service (Field Electrical Wiring Connection)				
(D)	RH End of case to center of Field Electrical Wiring Connection (top of case)	39 3/8 (1000)	63 1/2 (1613)	87 1/2 (2223)	135 1/2 (3442)
	Back of case to center of Field Electrical Wiring Connection	18 (457)	18 (457)	18 (457)	18 (457)
Length of electrical wireway		44 5/8 (1133)	33 1/2 (851)	45 7/8 (1165)	45 7/8 (1165)
(E)	(E) RH end of case to LH end of electrical wireway (top of case)		70 1/2 (1791)	94 1/2 (2400)	142 5/8 (3630)
Wast	e Outlets				
(F)	RH End of case to the center of waste outlet	24 1/8 (613)	24 1/8 (613)	24 1/8 (613)	72 1/4 (1835)
	Back O/S of case to center of waste outlet(s)	33 1/2 (851)	33 1/2 (851)	33 1/2 (851)	33 1/2 (851)
·	Schedule 40 PVC drip pipe	1 1/4 (32)	1 1/4 (32)	1 1/4 (32)	1 1/4 (32)
Floor	Floor Drain must be located within 24 inches of Waste Outlet.				
Refri	geration Outlet				
(G)	Back of case to center of refrigeration outlet	29 (737)	29 (737)	29 (737)	29 (737)
	End of case to center of refrigeration outlet	8 1/2 (216)	8 1/2 (216)	8 1/2 (216)	8 1/2 (216)

## **Electrical Data**

Number	of Fans		4 ft	6 ft	8 ft	12 ft				
8.25-in			1	2	2	3				
				Amp	oeres			Wa	ıtts	
Evapora	tor Fan		4 ft	6 ft	8 ft	12 ft	4 ft	6 ft	8 ft	12 ft
120V	60Hz	Energy Efficient	0.32	0.64	0.64	0.96	17	34	34	51
230V	50/60Hz	Energy Efficient	0.17	0.33	0.33	0.50	17	34	34	51
Minimun	n Circuit A	Ampacity								
120V	60Hz	Energy Efficient	0.52	0.84	0.84	1.16				
230V	50/60Hz	Energy Efficient	0.37	0.53	0.53	0.70				
Maximur	n Over Cu	rrent Protection								
120V			20	20	20	20				
230V			15	15	15	15				

# Lighting

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				
	4 ft	6 ft	8 ft	12 ft	4 ft	6 ft	8 ft	12 ft
LED LIGHTING								
Standard LED Canopy Lights								
1 Row LED Canopy (Standard)	0.16	0.22	0.31	0.47	19	27	38	57
Optional LED Shelf Lights								
1 Row of Shelves	0.06	0.07	0.11	0.17	7	9	13	20
2 Rows of Shelves	0.11	0.15	0.22	0.33	13	18	27	40
3 Rows of Shelves	0.17	0.22	0.33	0.50	20	27	40	60
4 Rows of Shelves	0.22	0.30	0.44	0.67	27	36	53	80
5 Rows of Shelves	0.28	0.37	0.56	0.83	33	44	67	100
6 Rows of Shelves	0.33	0.44	0.67	1.00	40	53	80	120
Rail Light-1 Row	0.06	0.07	0.11	0.17	7	9	13	20

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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Each standard en adds 1 1/2 in. (38 n	OS or PARTITIONS  d and each insulated p  nm) to case line up. Op  I bumper adds 3 3/4 in. (	otional		Merchandiser Drip Schedule 4 Merchandiser Liqui Merchandiser Sucti	0 PVC d Line (in.)	1 <sup>1</sup> / <sub>4</sub> 3/ <sub>8</sub> 7/ <sub>8</sub>
Case	<b>4 ft</b> 800 (363)	<b>6 ft</b> 1000 (454)	<b>8 ft</b> 1200 (544)	<b>12 ft</b> 1600 (726)	<b>Solid End</b> <i>(each)</i> 100 (45)	
† 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: 4

Optimal number of Shelves: 4

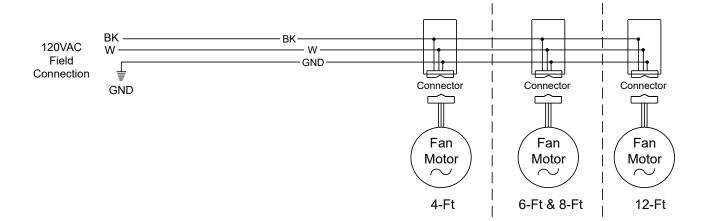
Maximum number of Shelves: 8

Maximum number of Lighted Shelves: 6

Standard shelf complement for test purposes: (4) 22-in. shelves, evenly distributed vertically

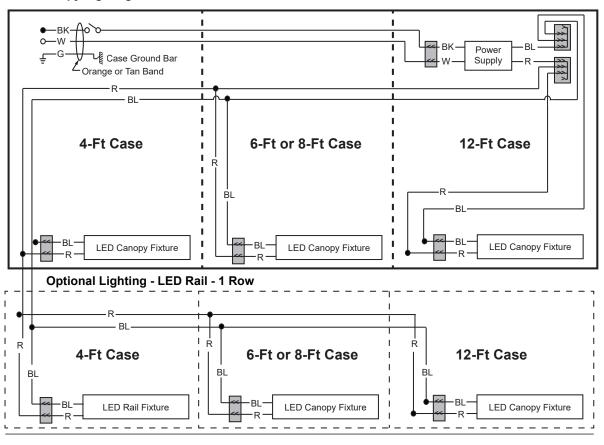
# Fan Wiring Offtime Defrost

# Insight ID5SV Dairy / Deli / Beverage / Produce / Meat



# **LED Canopy Light Circuits**

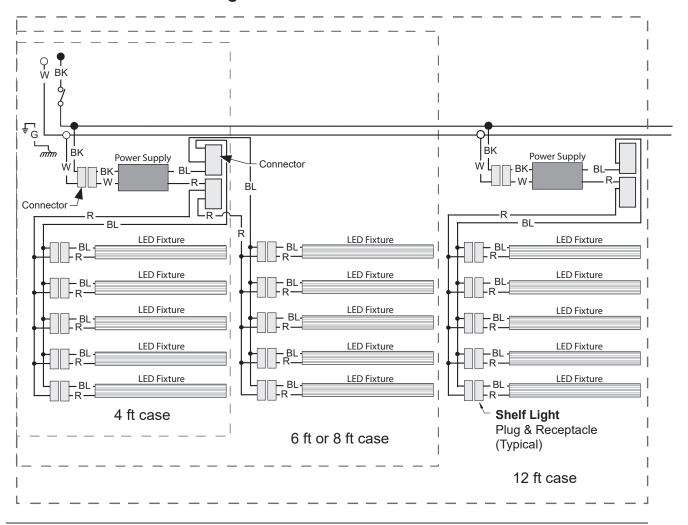
### **LED Canopy Lighting - 1 Row**



### WARNING

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

## Shelf Harness and LED Light Circuits for 4 or 5 Rows of Shelves

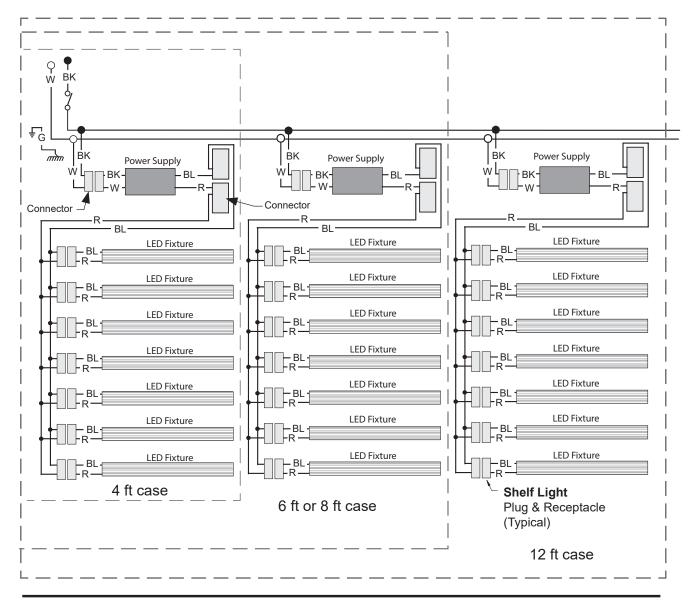


### WARNING

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  $\frac{1}{+}$  = Field Ground  $\stackrel{\text{rim}}{\longrightarrow}$  = Case Ground

## Shelf Harness and LED Light Circuits for 6 or 7 Rows of Shelves



### **WARNING**

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

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### 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/ft. Multiply this number by the length of the case to determine Btu per hour. Add 10 BTU per foot per hour 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 6. For example, a 12 ft case uses 3 fans. The store legend specifies fans on a 230V circuit. In this instance, fans use 0.50 Amps and the MCA is 0.70. 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 case length (12 ft), canopy lighting [standard or optional] (here 0.70 for standard), and shelf or rail lighting [maximum for which case is wired] (1.48 for six shelves); then add together [0.48 + 1.48 = 1.96 amps for 120V] (for 230V, multiply 1.96 \* 0.52 = 1.02).

### 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 2016: Original Issue

Revision B: January 2017: Updated cross section.

Revision C: April 2017: Updated LED energy values.

Revision D: April 2017: Updated LED energy values.

Revision E: September 2017: Updated notes page. Other changes marked with a bar, circle or

underline.

Revision F: July 2019: Updated parts list, lighting and CaseShieldPTM.

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