HUSSMANN

Field Electrical

Insight® ID5SL-RS

Dairy / Deli / Beverage / Produce

Merchandiser Data Sheet

P/N 3133471_C

NSF® Certified

December 2023

DOE 2017
Energy Efficiency
Compliant





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

Power Supply

Coil*

Fan*

Thermoexpansion
Valve

Canopy
LED Lights

Shelf
LED Lights

*Coils, fans and TXVs are modular with one per 3 or 4 foot section.

Portion of parts removed for clarity.

•

12 foot merchandiser shown.

The rear of this merchandiser must be exposed to a refrigerated cooler for proper performance.

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 ID5SL-RS

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 ID5SL-RS

Dairy / Deli /

Beverage / Produce

Refrigeration Data 1

ID5SL-RS		Optimal :	Energy Comparison	
Application		Dairy/Deli/ Beverage/ Produce	NSF Type 2 Ambient³	AHRI 1200 Rating Point ⁴
	Discharge Air °F (°C)	32 (0.0)	32 (0.0)	35 (1.7)
Unlit Average Evaporator °F (°C) ²		28 (-2.2)	27 (-2.8)	30 (-1.1)
Shelves	Parallel Btu/hr/ft (Watts/m)	1062 (1021)	1263 (1215)	1017 (978)
	Conventional Btu/hr/ft (Watts/m)	1185 (1139)	1410 (1356)	1135 (1091)
	Discharge Air °F (°C)	31 (-0.6)	31 (-0.6)	34 (1.1)
Lit	Average Evaporator °F (°C) ²	27 (-2.8)	26 (-3.3)	29 (-1.7)
Shelves	Parallel Btu/hr/ft (Watts/m) ⁵	1079 (1038)	1281 (1232)	1035 (995)
	Conventional Btu/hr/ft (Watts/m) 5	1205 (1159)	1430 (1375)	1155 (1111)
Fair Cross d6	ID5SL6RS (8.25" x 2)	1500 ⁶	1500 ⁶	1500 ⁶
Fan Speed ⁶	ID5SL4RS, 8RS, 12RS (8.25" x 2)	1500 ⁶	1600 ⁶	1500 ⁶

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. Data for operation in NSF Type 2 ambient of 80°F and 55% relative humidity.
- 4. AHRI 1200 Rating Point for energy consumption comparison only.
- 5. Add 10 Btu/hr/ft (9.6 Watts/m) per shelf row for LED shelf light fixtures.
- 6. Some lengths and/or applications require optional fan motor kits applied by the Hussmann Product Configurator (HPC).
- 7. This application data is based on testing with the rear of the case exposed to a 38°F cooler. A cooler is required for proper case performance.

Defrost Data

Frequency (hours between defrost) 4

Defrost Water 8 9.5 lb/ft/day

9.5 lb/ft/day (14.2 kg/m)

8 (± 15% based on case configuration and product

loading).

OFFTIME ID5SL-RS Time (minutes) 25

ELECTRIC OR GAS Not Available

Conventional Controls

ID5SL-RS Low Pressure Backup

> 18°F /8°F -7.8°C / -13.3°C

Indoor Unit Only, Pressure Defrost Termination ⁹

Control CI/CO 9

48°F (8.9°C)

⁹ Use a Temperature Pressure Chart to determine PSIG conversions.

0.3 kg
0.5 kg
0.7 kg
1.3 kg

¹⁰ This is an average for all refrigerant types. Actual refrigerant charge may vary by approximately half a pound.

Product Data

 Gross Refrigerated Volume 11 (Cu Ft/Ft)
 11.5 ft³/ft (1.07 m³/m)

 AHRI Total Display Area 12 (Sq Ft/Ft)
 4.56 ft²/ft (1.39 m²/m)

 Shelf Area 13 (Sq Ft/Ft)
 9.85 ft²/ft (3.00 m²/m)

¹¹ AHRI Gross Refrigerated Volume: Refrigerated Volume/Unit of Length, ft³/ft [m³/m]

¹² Computed using ÅHRI 1200 standard methodology: Total Display Årea, ft² [m²]/Unit of Length, ft [m]

¹³ 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).

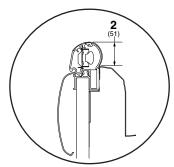
A minimum 1 ½-in clearance required to remove raceway cover, 6 ½-in for full access. See the Installation manual for instructions.

Shelf complement shown as tested:

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

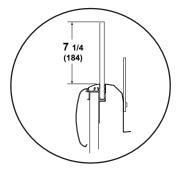
Shown with Ellipse Option Canopy and Bumper

OPTIONAL RAIL LIGHT



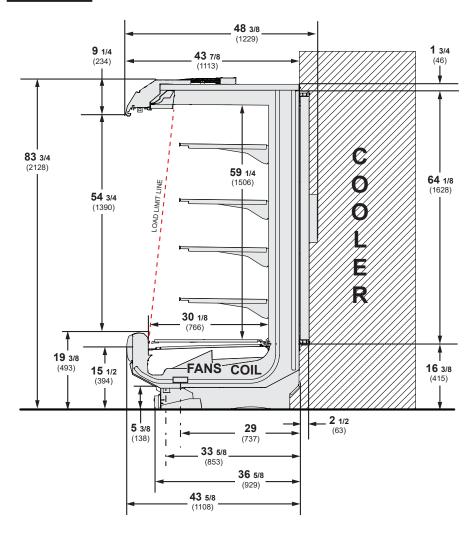
Rail light cannot be used with glass front option.

OPTIONAL GLASS FRONT



Glass front cannot be used with rail light option.

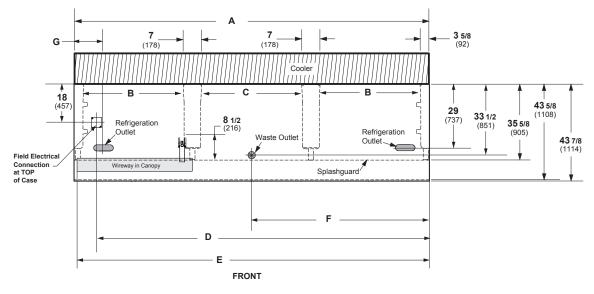
ID5SL-RS



Engineering Plan View

ID5SL-RS

Dimensions shown as in. and (mm).



(12 Foot Model shown above)

		4 ft	6 ft	8 ft	12 ft
General					
(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 5/8 (1108)	43 5/8 (1108)	43 5/8 (1108)	43 5/8 (1108)
	Back of case to front of splashguard	35 5/8 (905)	35 5/8 (905)	35 5/8 (905)	35 5/8 (905)
(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)
Electi	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)	RH end of case to LH end of electrical wireway (top of case)	46 1/2 (1181)	70 1/2 (1791)	94 1/2 (2400)	142 5/8 (3630)
Waste	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)
Refri	Refrigeration 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			2	4	4	6				
				Amp	eres			Wa	itts	
Evapora	tor Fan		4 ft	6 ft	8 ft	12 ft	4 ft	6 ft	8 ft	12 ft
120V	60Hz	Energy Efficient	0.64	1.28	1.28	1.92	34	68	68	102
230V	50/60Hz	Energy Efficient	0.33	0.67	0.67	1.00	34	68	68	102
Minimun	n Circuit A	ampacity								
120V	60Hz	Energy Efficient	0.84	1.48	1.48	2.12				
230V	50/60Hz	Energy Efficient	0.53	0.87	0.87	1.20				
Maximui	m Over Cu	irrent 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			
LED LIGHTING	4 ft	6 ft	8 ft	12 ft	4 ft	6 ft	8 ft	12 ft
Standard LED Canopy Lights 1 Row	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
LED 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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ENDS or PARTITIONS

Each standard end and each insulated partition adds 1 $^{1}/_{2}$ in. (38 mm) to case line up. Optional view end with end bumper adds 3 $^{3}/_{4}$ in. (95 mm).

PHYSICAL DATA

Merchandiser Drip Pipe (in.)
Schedule 40 PVC

Merchandiser Liquid Line (in.)
Merchandiser Suction Line (in.)

³/₈
₋) ⁵/₈

1 1/4

ESTIMATED SHIPPING WEIGHT †

 Case
 Solid End

 4 ft
 6 ft
 8 ft
 12 ft
 (each)

 Ib (kg)
 650 (295)
 1050 (476)
 1300 (590)
 1750 (794)
 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: 3

Optimal number of Shelves: 4

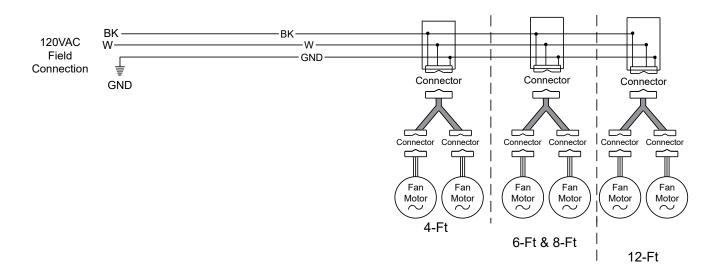
Maximum number of Shelves: 8

Maximum number of Lighted Shelves: 6

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

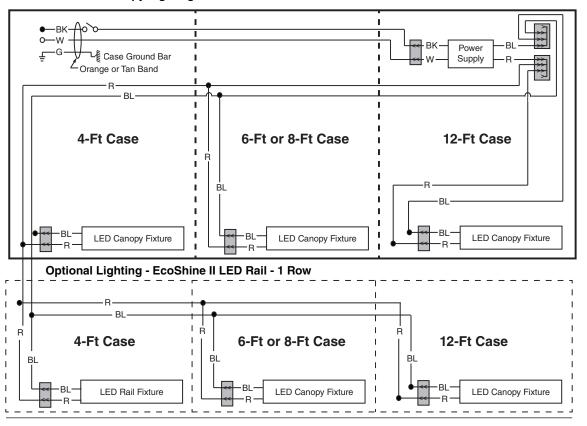
Fan Wiring Offtime Defrost

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LED Canopy Light Circuits

EcoShine II LED Canopy Lighting - 1 Row

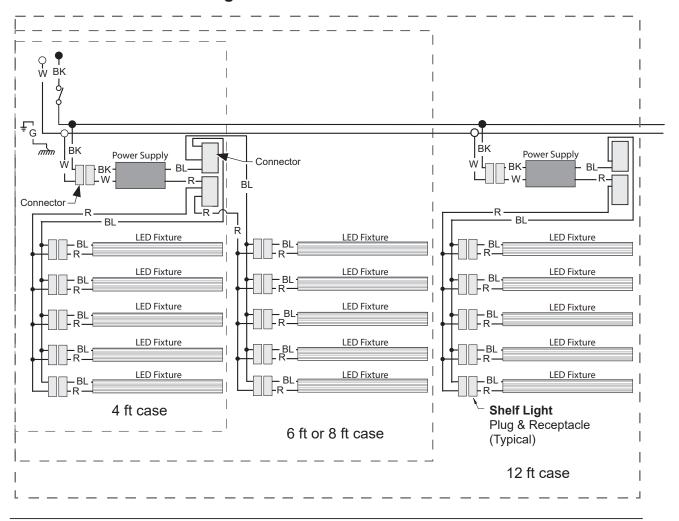


WARNING

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

R = Red Y = Yellow G = Green BL = Blue BK = Black W = White = 120V Power = 120V Neutral = FIELD GROUND $\xrightarrow{mim} = Case GROUND$

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

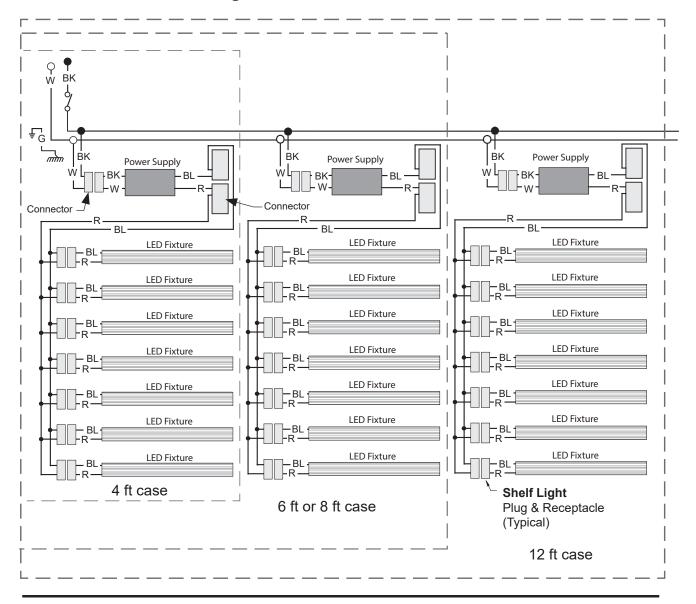


WARNING

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 $\frac{1}{2}$ = Field Ground $\stackrel{min}{m}$ = Case Ground

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



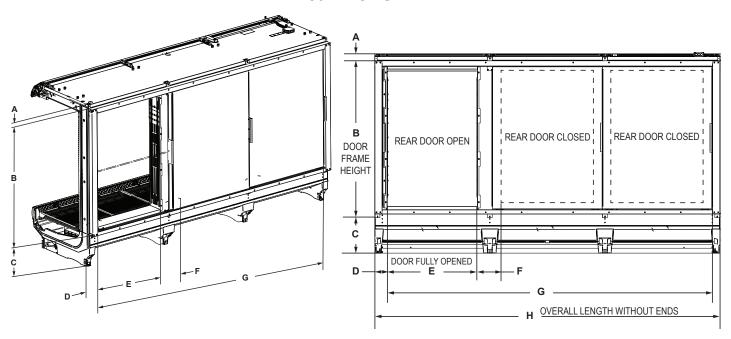
WARNING

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

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

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Rear Views



Dimensions shown as in. and (mm).

Itom	Merchandisers							
Item	4 Ft	6 Ft	6 Ft 8 Ft					
Α	A 2 7/8 (74)							
В		64 ¹ / ₈ (1628)						
С	16 ³ / ₈ (415)							
D	5 1/2 (139)							
E	17 ³ / ₄ (451) 25 ¹ / ₈ (636) 37 ¹ / ₈ (943) 37 ¹ / ₈ (943)							
F	11 (279)							
G	37 ¹ / ₈ (943)	61 1/4 (1556) 85 1/4 (2165) 133 3/8 (3						
Н	48 ¹ / ₈ (1222)	72 1/4 (1835) 96 1/4 (2445) 144 3/8 (3668)						

Note: Consult Cooler Close-off Kit for instructions on connecting the merchandiser to the cooler.

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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 1.00 Amps and the MCA is 1.20. 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: November 2020: Original Issue

Revision B: January 2021: Updated application data and rear view dimensions.

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