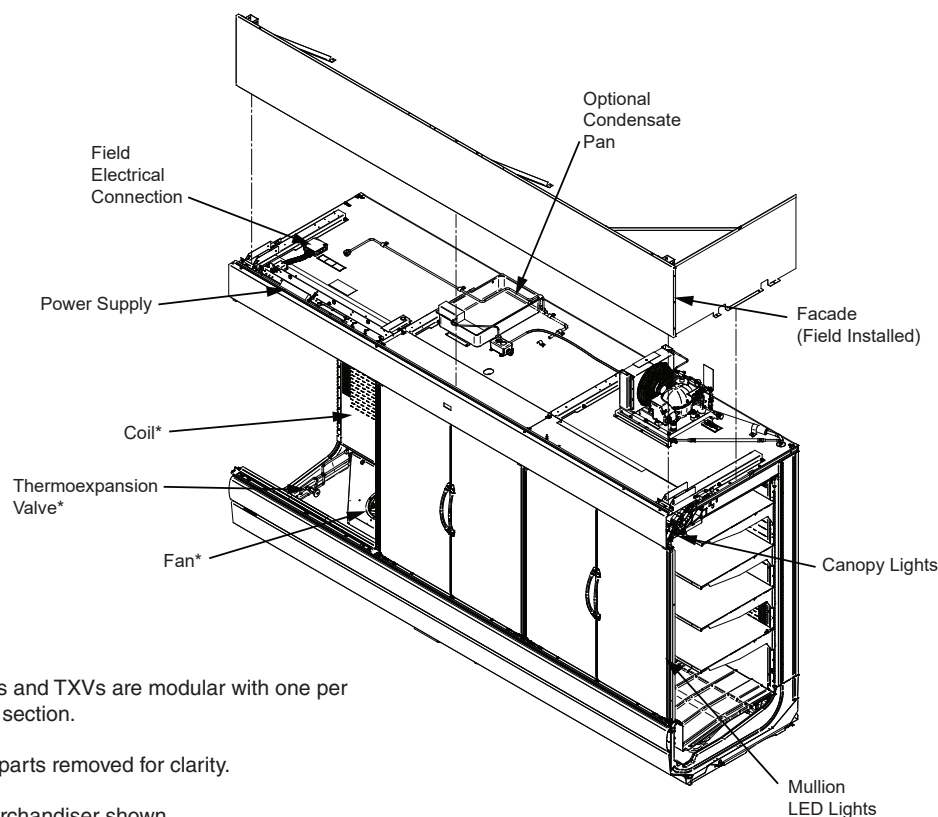


Insight standard electrical field connections are at the top left of the merchandiser



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

Portion of parts removed for clarity.

12 foot 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	Page 2	Estimated Shipping Weights	Page 7
Product Data (AHRI Statistics)	Page 2	Shelf Options	Page 7
Cross Section	Page 3	Wiring Diagrams	Page 8
Plan View	Page 4	Computing Refrigeration and Electrical Load	Page 10
Electrical Loads	Page 6	QR Code for Parts and Product Information	Page 10
		Revision History	Page 10

Data sheet-Insight IDDF5SM-TE

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.

IDDF5SM-TEDairy / Delicatessen /
Beverage / Produce**Refrigeration Data ¹**

IDDF5SM-TE		Optimal Shelf Life		Energy Comparison	
Door Option		EcoVision		NSF Type 2 Ambient ⁴	AHRI 1200 Rating Point ⁵
Application		Dairy/Deli/ Beverage/ Produce	Pegs ³		
Unlit Mullions	Discharge Air °F (°C)	36 (2.22)	36 (2.22)	36 (2.22)	36 (2.22)
	Average Evaporator °F (°C) ²	32 (0)	33 (0.55)	28 (-2.22)	32 (0)
	Parallel Btu/hr/ft (Watts/m)	200 (192.3)	265 (255)	265 (254.8)	200 (192.3)
	Conventional Btu/hr/ft (Watts/m)	210 (201.9)	270 (260)	275 (264.4)	210 (201.9)
Lit Mullions	Discharge Air °F (°C)	36 (2.22)	35 (1.66)	32 (0)	36 (2.22)
	Average Evaporator °F (°C) ²	32 (0)	32 (0)	28 (-2.22)	32 (0)
	Parallel Btu/hr/ft (Watts/m) ⁶	230 (221.2)	292 (280)	265 (254.8)	230 (221.2)
	Conventional Btu/hr/ft (Watts/m) ⁶	240 (230.8)	300 (288)	275 (264.4)	240 (230.8)
Fan Speed⁶	IDDF5SM 4, 8, 12 - TE (8.25")	1500 ⁶	1500 ⁶	1500 ⁶	1500 ⁶
	IDDF5SM 6 - TE (8.25")	1300 ⁶	1300 ⁶	1300 ⁶	1300 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. Hussmann Peg Shelves for Dairy/Deli applications only.
4. Data for operation in NSF Type 2 ambient of 80°F and 55% relative humidity.
5. AHRI 1200 Rating Point for energy consumption comparison only.
6. Some lengths and/or applications require optional fan motors kits applied by the Hussmann Product Configurator (HPC).

Defrost Data

Type 1	
Frequency (hours between defrost)	12
OFFTIME	
Time (minutes)	30
ELECTRIC OR GAS	Not Available
Defrost Water ⁷	1.0 lb/ft/day (1.5 kg/m)

⁷ (± 15% based on case configuration and product loading).**Conventional Controls****Low Pressure Backup**Control CI/CO ⁸
26°F / 16°F
-3.3°C / -8.9°C**Indoor Unit Only,
Pressure Defrost
Termination ⁸**

46°F (7.7°C)

⁸ Use a Temperature Pressure Chart to determine PSIG conversions.**Charge ^{9, 10}**

4 ft	1 lb	11 oz	0.78 kg
6 ft	2 lb	10 oz	1.2 kg
8 ft	2 lb	7 oz	1.12 kg
12 ft	4 lb	5 oz	1.97 kg

⁹ Charge is for case and condensing unit¹⁰ 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)** 11.6 ft³/ft (1.08 m³/m)**AHRI Total Display Area ¹² (Sq Ft/Ft)** 4 ft²/ft (1.22 m²/m)**Shelf Area ¹³ (Sq Ft/Ft)** 9.85 ft²/ft (3 m²/m)¹¹ AHRI Gross Refrigerated Volume: Refrigerated Volume/Unit of Length, ft³/ft [m³/m]¹² Computed using AHRI 1200 standard methodology: Total Display Area, 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

Insight Multideck Merchandiser with EcoVision
Doors, Freedom, 5 Display Levels, Standard Bottom,
Medium Temperture, Tall Entrance

Insight

IDDF5SM-TE

Dairy / Delicatessen /
Beverage / Produce

DOE 2017
Energy Efficiency
Compliant

Husmann 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).

Shelf complement shown as tested:

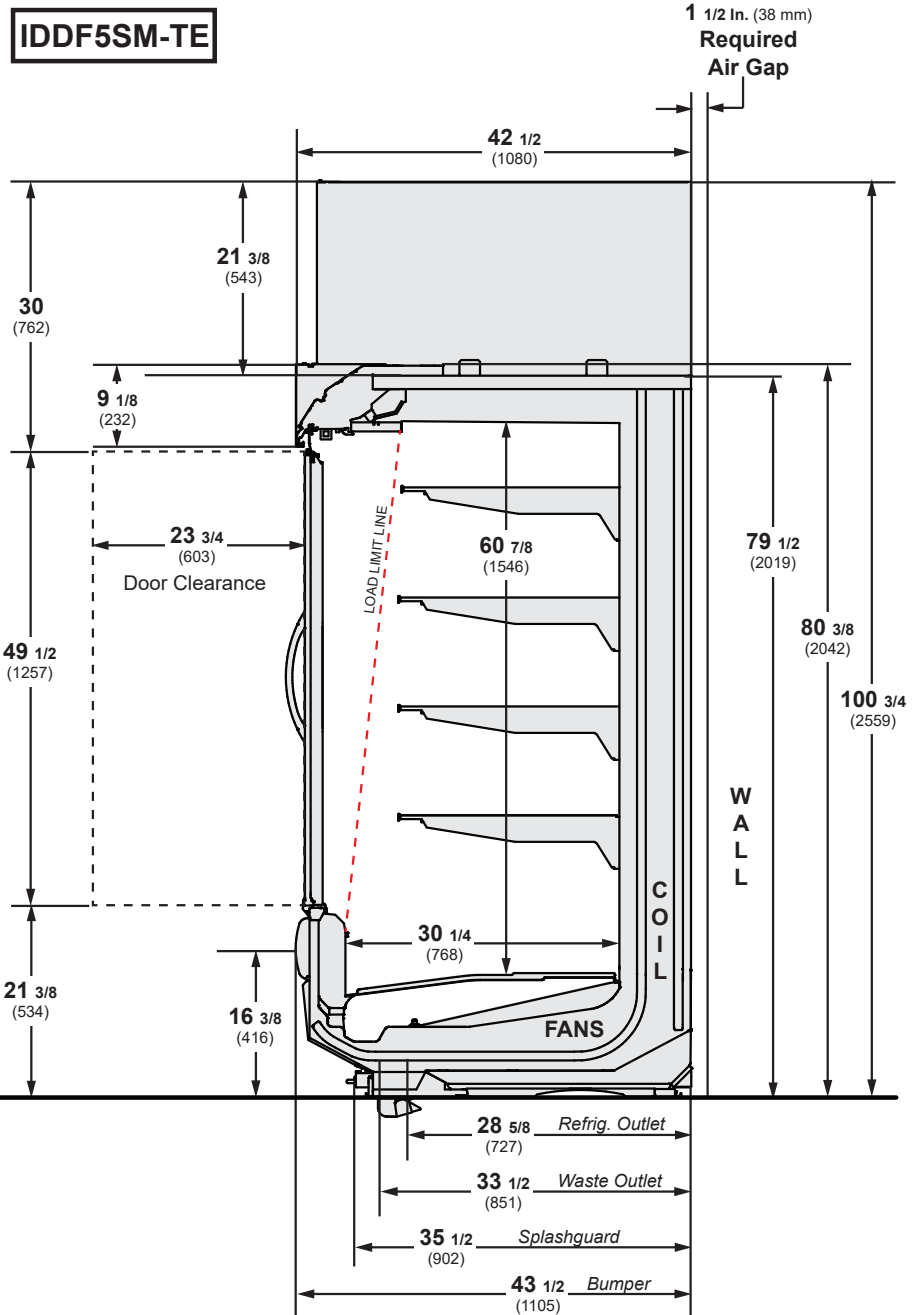
Four rows of 22-in. shelves spaced equally between bottom display pan and interior top panel.

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

A minimum 1 1/2-in. clearance required to remove raceway cover, 6 1/2-in. for full access. See the Installation manual for instructions.

3-in. between back to back cases.

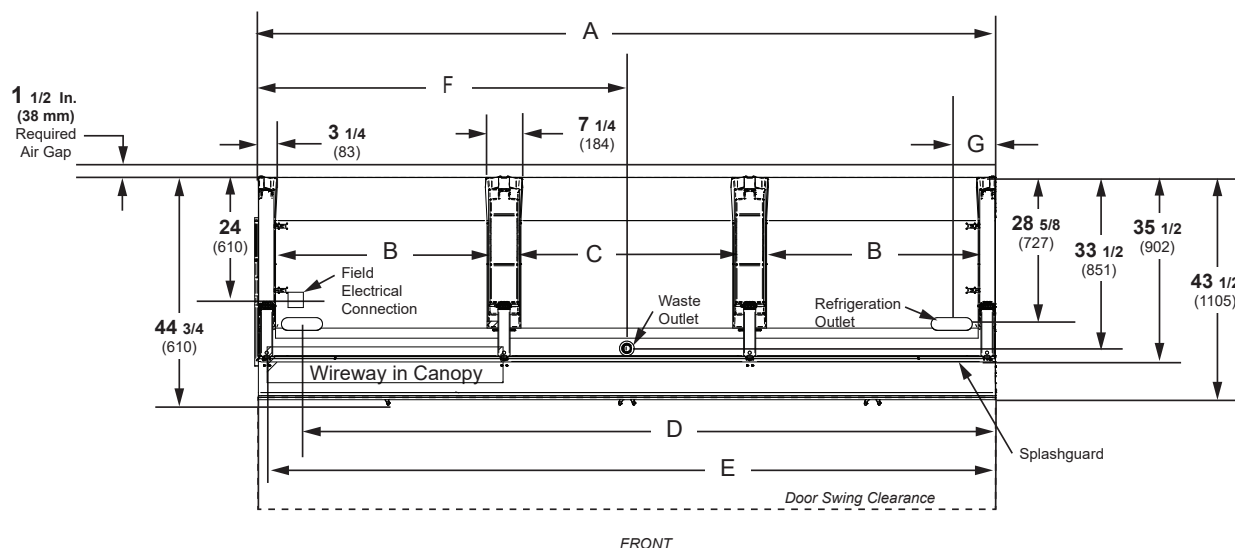
Shown with Flat Front Fascia Option Canopy and Bumper.



NSF Certification

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

Dimensions shown as in. and (mm).



(12 Foot Model shown above)

	4 ft	6 ft	8 ft	12 ft
General				
(A) Case Length <i>(without ends or partitions) (Each end and insulated partition adds 1 1/2 in. (38 mm) to case line up.)</i>	48 1/8 (1222)	72 1/4 (1835)	96 1/4 (2445)	144 3/8 (3667)
Maximum O/S dimension of case back to front <i>(includes bumper)</i>	44 3/8 (1127)	44 3/8 (1127)	44 3/8 (1127)	44 3/8 (1127)
Back of case to front of splashguard	36 3/4 (933)	36 3/4 (933)	36 3/4 (933)	36 3/4 (933)
(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)
Electrical Service <i>(Field Electrical Wiring Connection)</i>				
(D) RH End of case to center of Field Electrical Wiring Connection <i>(top of case)</i>	39 5/8 (1006)	63 5/8 (1616)	87 7/8 (2232)	135 3/8 (3451)
Back of case to center of Field Electrical Wiring Connection	20 1/4 (514)	20 1/4 (514)	20 1/4 (514)	20 1/4 (514)
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 <i>(top of case)</i>	46 1/2 (1181)	70 1/2 (1791)	94 1/2 (2400)	142 5/8 (3630)
Waste Outlets <i>(see page 5 for drain extension option)</i>				
(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)
<i>Floor Drain must be located within 24 inches of Waste Outlet.</i>				

Engineering Plan View

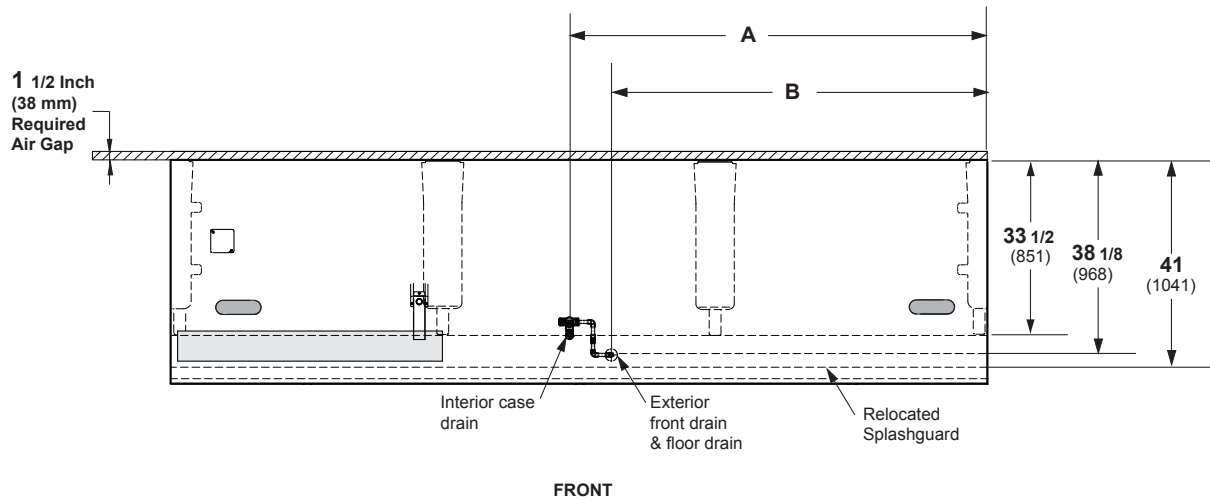
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IDDF5SM-TE

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Beverage / Produce

Waste Outlet Drain Extension Option

Dimensions shown as in. and (mm).



(12 Foot Model shown above)

	4 ft	6 ft	8 ft	12 ft
Waste Outlet Drain Option				
(A) RH of case to center of interior case drain	24 ¹ / ₈ (613)	24 ¹ / ₈ (613)	24 ¹ / ₈ (613)	72 ¹ / ₄ (1835)
(B) RH of case to center of exterior front drain and floor drain	13 ³ / ₄ (349)	13 ³ / ₄ (349)	13 ³ / ₄ (349)	61 ⁷ / ₈ (1572)

Electrical Data

Number of Fans 8.25-in.	4 ft	6 ft	8 ft	12 ft				
	1	2	2	3				
					Amperes		Watts	
Evaporator Fan 120V 60Hz Energy Efficient	4 ft	6 ft	8 ft	12 ft	4 ft	6 ft	8 ft	12 ft
	0.25	0.50	0.50	0.75	16	32	32	48
Condensate Pump 120V 60Hz	1.9	1.9	1.9	1.9				
Minimum Circuit Ampacity 120V 60Hz Energy Efficient	2.8	3.1	3.1	3.3				
Maximum Over Current Protection 120V	20	20	20	20				

STANDARD 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
LED Lighting								
Standard LED Canopy Lights 1 Row	0.16	0.22	0.31	0.47	19	27	38	57
Shelf None								
Mullion 48-in. Mullion	0.22	0.39	0.39	0.56	27	47	47	67

120V Lighting Circuit Total = Standard Lighting + Total Optional Lighting

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.)	1 1/4
Schedule 40 PVC	
Merchandiser Liquid Line (in.)	3/8
Merchandiser Suction Line (in.)	5/8

ESTIMATED SHIPPING WEIGHT †					
Case	4 ft	6 ft	8 ft	12 ft	Solid End (each)
lb (kg)	843 (383)	1032 (468)	1308 (593)	1367 (620)	80 (36)
† 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: 0

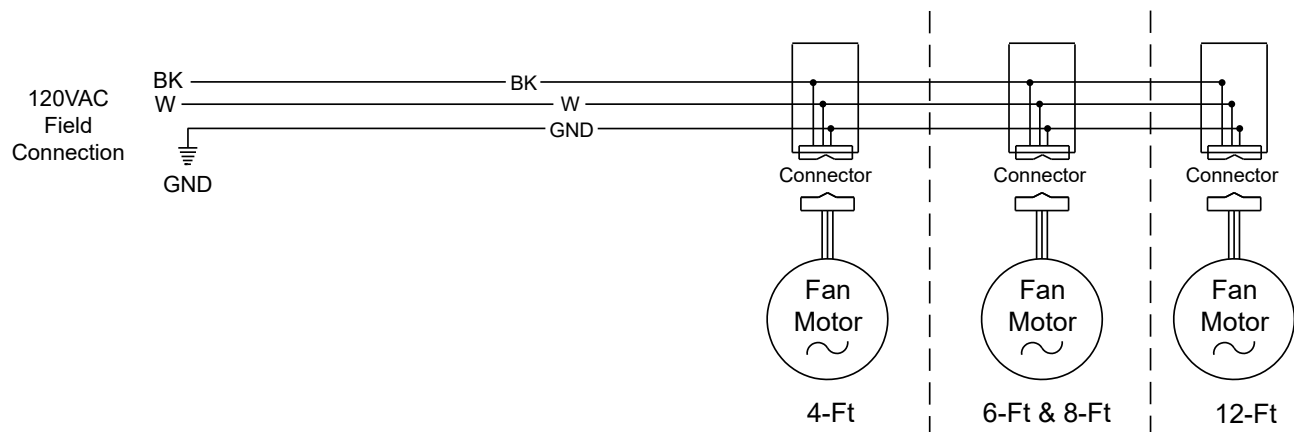
Standard shelf complement for test purposes: (4) rows of 22-in. shelves evenly distributed vertically.

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IDDF5SM-TE

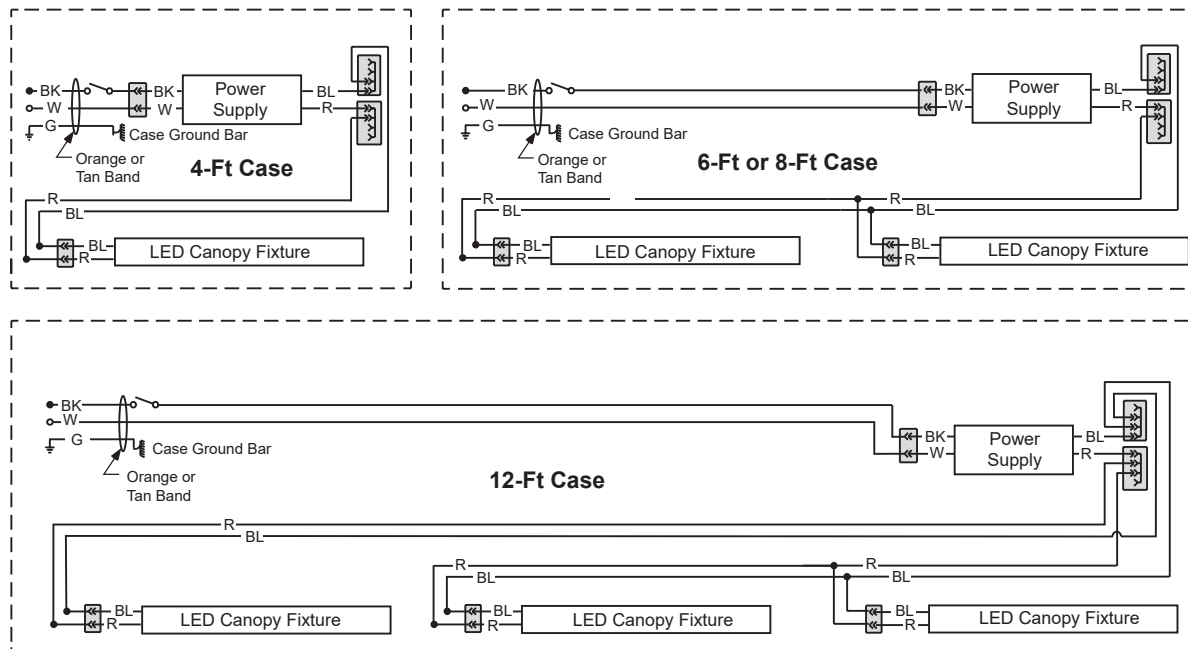
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Fan Wiring Offtime Defrost



LED Canopy Light Circuits

LED Canopy Lighting — 1 Row



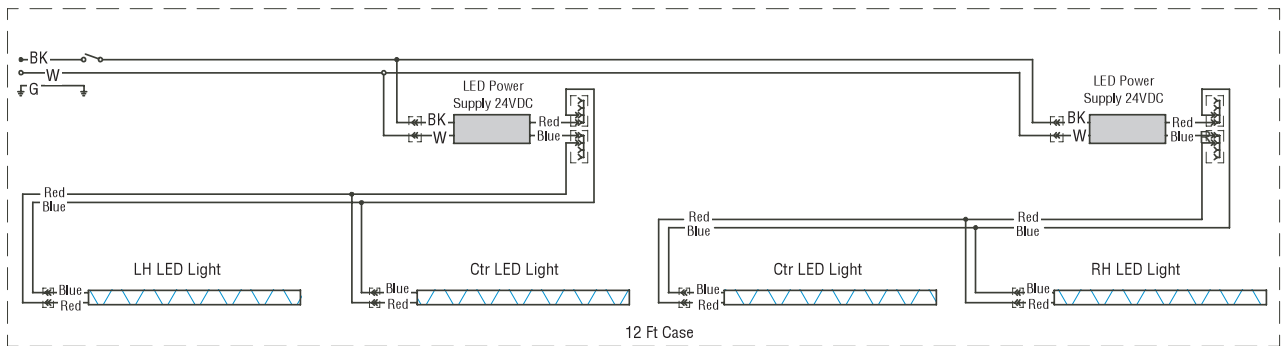
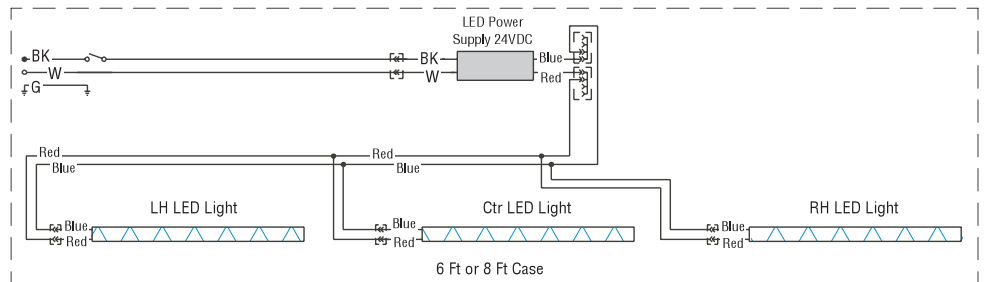
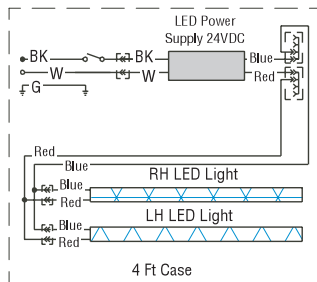
WARNING

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 ≡ = CASE GROUND

Mullion LED Lighting

Insight
IDDF5SM-TE
 Dairy / Delicatessen /
 Beverage / Produce



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 ≡ = 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/ft. Multiply this number by the length of the case to determine Btu per hour.

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 120V circuit. In this instance, fans use 0.75 Amps and the MCA is 1.95. 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] (here 0.54 for standard), and mullion lighting [maximum for which case is wired] (0.57 for EcoShine II 48 mullion lights); then add together $[0.54 + 0.57 = 1.11 \text{ amps for } 120V]$.

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: August 2021: Original Issue.

Revision B: August 2021: Updated refrigeration data.

Revision C: December 2021: Updated cross section.

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