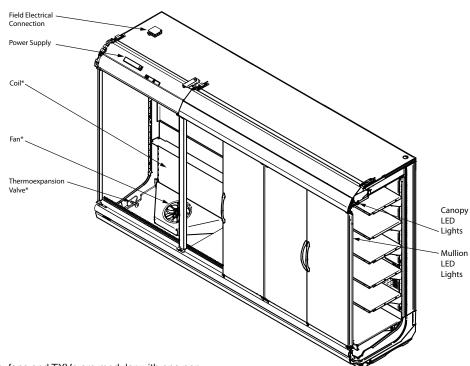
# HUSSMANN®

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



# Insight<sup>®</sup> IDD6NU

Dairy / Delicatessen / Beverage

with EcoVision Doors Merchandiser Data Sheet

## P/N 3068393\_C

**NSF**<sup>®</sup>Certified

January 2023





 $^{\ast}\text{Coils},$  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.

### **IMPORTANT**

DRAIN EXTENSION KIT REQUIRED TO PIPE MULTIPLE CASES TO ONE DRAIN, OR TO USE A RAISED HUB DRAIN. SEE PAGE 5 FOR DETAILS.

Performance Data	Page 2	Estimated Shipping Weights	Page 7
Product Data (AHRI Statistics)	Page 2	Shelf Options	Page 7
Cross Section	Page 3	Replacement Parts List	Page 8
Plan View	Page 4	Wiring Diagrams	Page 9
Electrical Loads	Page 6	Computing Refrigeration and Electrical Load	Page 12
Electrical Loads	Page 6	Computing Refrigeration and Electrical Load Revision History	Page 12 Page 12

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.

#### Data sheet-Insight IDD6NU

Refrigeration Data <sup>1</sup>								
IDD6NU C					Optimal Shelf Life			
Door Option EcoVision			EcoVision HA	EcoVision HA+	EcoVision			
	Application	Dairy/Deli/ Beverage/ Pegs <sup>4</sup> Convertible/ Produce Meat			NSF Type 2 Ambient⁵	Harsh Environment	AHRI 1200 Rating Point <sup>6</sup>	
	Discharge Air °F (°C)	37 (2.77)	35 (1.67)	35 (1.67)	35 (1.67)	34 (1.11)	37 (2.77)	
Unlit	Average Evaporator °F (°C) <sup>2,3</sup>	34 (1.11)	32 (0.00)	32 (0.00)	32 (0.00)	31 (-0.55)	34 (1.11)	
Mullions	Parallel Btu/hr/ft (Watts/m)	287 (276)	311 (299)	316 (304)	350 (337)	389 (374)	287 (276)	
	Conventional Btu/hr/ft (Watts/m)	295 (284)	320 (308)	325 (313)	360 (346)	400 (385)	295 (284)	
	Discharge Air °F (°C)	36 (2.22)	34 (1.11)	34 (1.11)	34 (1.11)	33 (0.55)	36 (2.22)	
Lit	Average Evaporator °F (°C) <sup>2,3</sup>	33 (0.55)	31 (-0.55)	31 (-0.55)	31 (-0.55)	30 (-1.11)	33 (0.55)	
Mullions	Parallel Btu/hr/ft (Watts/m)	301 (290)	326 (313)	331 (318)	335 (323)	403 (388)	301 (290)	
	Conventional Btu/hr/ft (Watts/m)	310 (298)	335 (322)	340 (327)	345 (332)	415 (399)	310 (298)	
Ean Speed <sup>7</sup>	IDD6NU6 (10.3")	12007	12007	1200 <sup>7</sup>	12007	1200 <sup>7</sup>	1200 <sup>7</sup>	
Fan Speed <sup>7</sup>	IDD6NU4, 8, 12 (10.3")	12007	12007	1200 <sup>7</sup>	1200 <sup>7</sup>	12007	1200 <sup>7</sup>	

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. For DX CO2 applications the average evaporator temperature may be lowered by 5°F but not more than 10°F. An EPR valve should be used if the system suction temperature is below 24°F. A 31°F flash tank temperature with a 24°F evaporator temperature is used when sizing default EEV selections to provide a minimum pressure drop across the valve of approximately 50 psig. For operating conditions that provide a pressure drop across the valve of approximately 50 psig. For operating conditions that provide a pressure drop across the valve of approximately 50 psig. For operating conditions that provide a pressure drop across the valve of approximately 50 psig. For operating conditions that provide a pressure drop across the valve above 65 psig or below 35 psig, the electronic expansion valve size should be determined using the valve vendor sizing program and selected from the pull down list in the Hussmann Product Configurator (HPC).

4. Hussmann Peg Shelves for Dairy/Deli applications only

5. Data for operation in NSF Type 2 ambient of 80°F and 55% relative humidity.

A HRI 1200 Rating Point for energy consumption comparison only.
Some lengths and/or applications require optional fan speed control kits applied by the Hussmann Product Configurator.

Defrost Data			Conventional Controls	Estima	ated Charge	e <sup>10</sup> ID	D6NU
	Type 1	Harsh Environment	IDD6NU Low Pressure Backup	4 ft 6 ft	0.6 lb 1.1 lb	10 oz 18 oz	0.3 kg 0.5 kg
Frequency (hours b	etween defrost) 24	12	Control CI/CO <sup>9</sup> 26°F / 16°F -3.3°C / -8.9°C	8 ft 12 ft	1.5 lb 2.9 lb	24 oz 46 oz	0.7 kg 1.3 kg
Time (minutes)	40 Not A	30 vailable	Indoor Unit Only, Pressure Defrost Termination <sup>9</sup>	types. A	s an average actual refriger mately half a	ant charge n	
<b>Defrost Water</b> <sup>8</sup> <sup>8</sup> (± 15% based on case co	1.5 lb/ft/day (2.2 kg/m) nfiguration and produ	2.3 lb/ft/day (3.4 kg/m) Ict loading).	48°F (8.89°C) <sup>9</sup> Use a Temperature Pressure Chart to determine PSIG conversions.				

#### **Product Data**

Gross Refrigerated Volume <sup>11</sup> (Cu Ft/Ft) AHRI Total Display Area 12 (Sq Ft/Ft) Shelf Area 13 (Sq Ft/Ft)

10.8 ft<sup>3</sup>/ft (1.00 m<sup>3</sup>/m) 5.36 ft<sup>2</sup>/ft (1.63 m<sup>2</sup>/m) 9.58 ft²/ft (2.92 m²/m)

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

<sup>12</sup> Computed using AHRI 1200 standard methodology: Total Display Area, ft<sup>2</sup> [m<sup>2</sup>]/Unit of Length, ft [m]

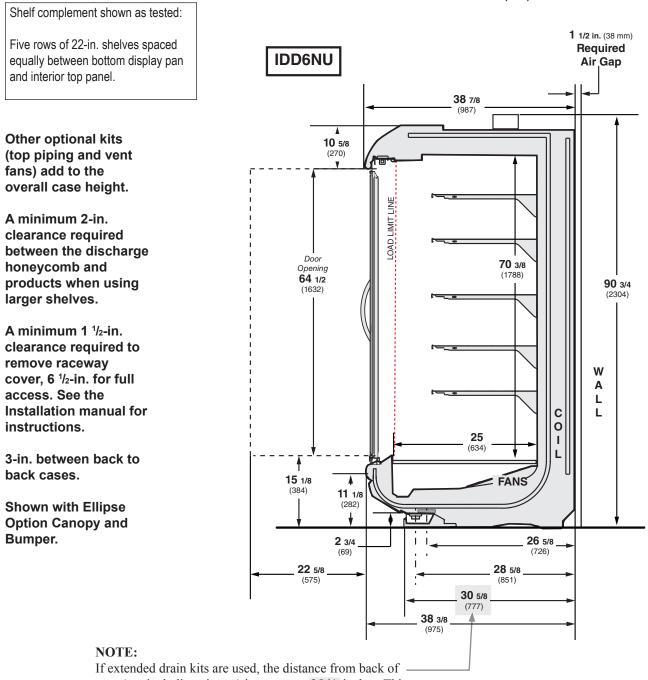
<sup>13</sup> Shelf surface area is composed of bottom deck plus standard shelf complement for this model: (5) rows of shelves

Insight Multideck Merchandiser, EcoVision Doors, 6 Display Levels, Narrow Bottom, Ultra Low Height Front



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).



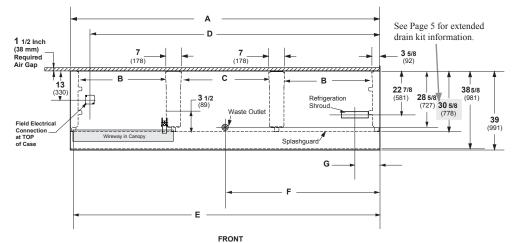
case (not including air gap) increases to  $35 \frac{1}{8}$  inches. This may affect floor drain layout. See Page 5 for more details.

## Engineering Plan View

#### WARNING: Floor Drain must be located within 24 inches of Waste Outlet. See page 5 for Drain Extension Option (must be used with hub-style floor drains).

### IDD5NU/IDD6NU

#### Dimensions shown as in. and (mm).

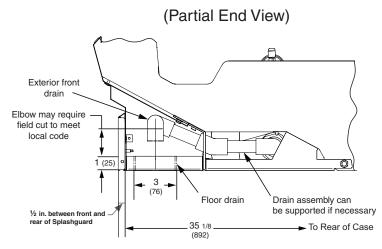


(12 Foot Model shown above)

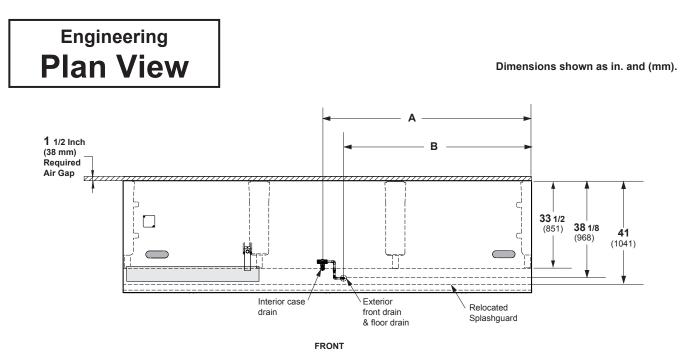
		4 ft	6 ft	8 ft	12 ft
Gene	ral				
(A)	Case Length (without ends or partitions) (Each end and insulated partition adds $1^{1/2}$ in. (38 mm) to case line up.)	48 1/8 (1222)	72 1/4 (1835)	96 <sup>1</sup> /4(2445)	144 3/8 (3668)
	Maximum O/S dimension of case back to front (includes bumper)	38 5/8 (981)	38 5/8 (981)	38 5/8 (981)	38 5/8 (981)
	Back of case to front of splashguard	30 5/8 (778)	30 5/8 (778)	30 5/8(778)	30 5/8 (778)
(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		3 1/4 (83)	3 1/4 (83)	3 1/4 (83)
Elect	rical Service (Field Electrical Wiring Connection)				
(D)	RH End of case to center of Field Electrical Wiring Connection <i>(top of case)</i>	39 <sup>3</sup> /8 (1000)	63 <sup>1</sup> /2 (1613)	87 1/2 (2223)	135 1/2 (3442)
	Back of case to center of Field Electrical Wiring Connection	13 (330)	13 (330)	13 (330)	13 (330)
	Length of electrical wireway	44 5/8 (1133)	33 <sup>1</sup> / <sub>2</sub> (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)
Wast	e Outlets (see page 5 for drain extension option)				
(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)	28 5/8 (727)	28 5/8(727)	28 5/8 (727)	28 5/8 (727)
	Schedule 40 PVC drip pipe	1 1/4 (32)	1 1/4 (32)	1 1/4 (32)	1 1/4 (32)
Floor	Drain must be located within 24 inches of Waste Outlet.				
Refri	geration Shroud				
(G)	Back of case to center of refrigeration shroud	22 7/8 (581)	21 1/8 (537)*	22 7/8 (581)	22 7/8 (581)
	End of case to center of refrigeration shroud	9 <sup>1</sup> /2(241)	7 5/8 (194)*	9 <sup>1</sup> /2(241)	9 <sup>1</sup> / <sub>2</sub> (241)
	*6 foot case at 12° angle parallel to the planum	1	1	1	1

\*6 foot case at 42° angle, parallel to the plenum.

### **Drain Extension Option**



**IMPORTANT:** If hub drain is used in lieu of flush floor sink, a drain extension kit must be installed. Hub drains must be located in front of the waste outlet to achieve adequate air gap.



(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 <sup>3</sup> / <sub>4</sub> (349)	13 3/4 (349)	13 <sup>3</sup> / <sub>4</sub> (349)	61 <sup>7</sup> /8(1572)

Insight IDD6NU Dairy / Delicatessen / Beverage

### **Electrical Data**

Number	of Fans		4 ft	6 ft	8 ft	12 ft				
10.3-in			1	2	2	3				
				Amj	peres		Watts			
Evapora	tor Fan		4 ft	6 ft	8 ft	12 ft	4 ft	6 ft	8 ft	12 ft
120V	60Hz	Energy Efficient	0.40	0.80	0.80	1.20	24	48	48	72
230V	50/60Hz	Energy Efficient	0.21	0.42	0.42	0.62	24	48	48	72
Minimun	n Circuit A	mpacity								
120V	60Hz	Energy Efficient	0.60	1.00	1.00	1.40				
230V	50/60Hz	Energy Efficient	0.41	0.62	0.62	0.82				
Maximu	n Over Cı	Irrent Protection 120V	20	20	20	20				
Maximun	n Over Cur	rrent Protection 230V	15	15	15	15				

#### **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**.

STANDARD LIGHTING EcoShine II Canopy 1 Row EcoShine II	0.16	0.26	0.32	0.48	19.3	31.6	38.6	58.0
OPTIONAL LIGHTING EcoShine II Canopy 1 Row EcoShine II HO	0.22	0.33	0.44	0.66	26.5	39.5	53.0	79.4
Shelf None								
Mullion EcoShine II 60-in.	0.28	0.51	0.51	0.74	34.1	61.4	61.4	88.6
Frame Anti-Condensate Heaters (Only with EcoVision HA+ Door Option)	0.41	0.63	0.68	0.94	55.5	82.3	88.1	120.8

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

#### ENDS or PARTITIONS

Each standard end and each insulated partition adds 1 <sup>1</sup>/2 in. (38 mm) to case line up. Optional view end with end bumper adds 3 <sup>3</sup>/4 in. (95 mm). PHYSICAL DATAMerchandiser Drip Pipe (in.)1 1/4Schedule 40 PVCSchedule 40 PVCMerchandiser Liquid Line (in.)3/8

Merchandiser Suction Line (in.)  $$^{5}\!/_{8}$$ 

#### **ESTIMATED SHIPPING WEIGHT †**

Case					Solid End			
	4 ft	6 ft	8 ft	12 ft	(each)			
lb (kg)	1030 (467)	1260 (572)	1490 (676)	1950 (885)	90 (41)			
+ Actual weights will vary according to optional kits included.								

#### **Shelf Options**

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

14-inch 16-inch 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: 5

Maximum number of Shelves: 8

Maximum number of Lighted Shelves: 0

Standard shelf complement for test purposes: (5) rows of 18-in. shelves evenly distributed vertically.

Insight IDD6NU Dairy / Delicatessen / Beverage

### **Replacement Parts List**

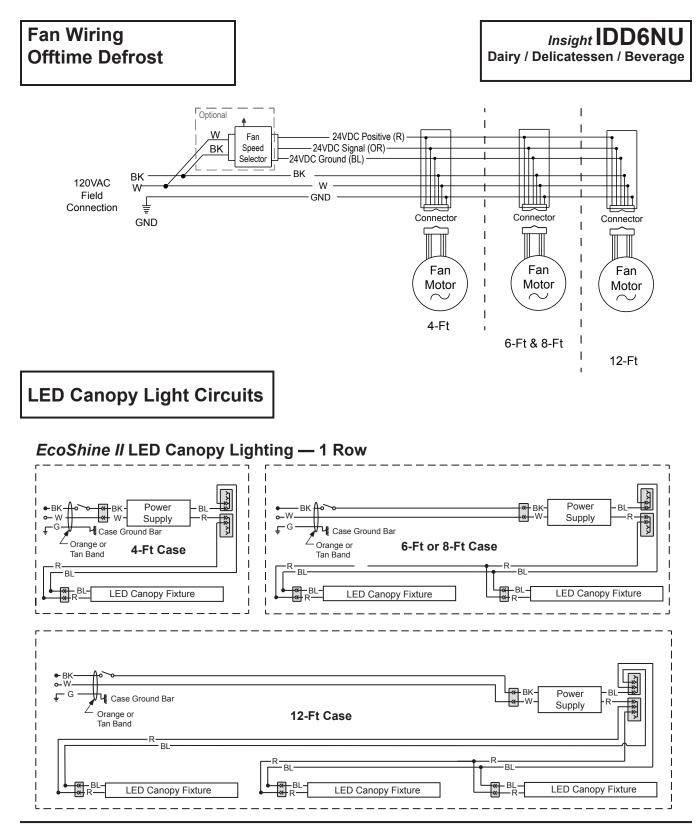
Part #	Description	Part #	Description
FAN ASSEMBLIES		Нолеусомв - Шніт	E
4 Ft, 6 Ft, 8 Ft & 1	2 Ft	0536831	4 ft, 8 ft, 12 ft
Standard HE Fan	Assembly	0536829	6 ft only
0535564	10.3-in. Fan Assembly		
	,	OTHER	
THERMOSTATS		0534013	Fan Speed Selector
OPTIONAL			(Standard)
		0534355	Fan Speed Key 1200 RPM
LED FIXTURES AND	Power Supply	Varies	Thermo-expansion Valve
0501213	Power Supply		
	LED Canopy Fixture	EcoVision HA+ Fr	AME HEATERS (OPTIONAL)
	Replace with like fixtures.	4 Ft, 8 Ft & 12 Ft	
	LED Mullion Fixture	0549867	Heater - Mullion End LH
	Replace with like fixtures.	0549870	Heater - Mullion Center
		0548655	Heater - Retainer Bottom
Coils		0549868	Heater - Mullion End RH
0534331	4 ft, 8 ft, 12 ft (84 pass)		
0534330	6 ft only (84 pass)	6 Ft	
		0549867	Heater - Mullion End LH
		0549869	Heater - Mullion Center
		0548656	Heater - Retainer Bottom
		2310000	

0549868

Heater - Mullion End RH

NOTE: For LED lighting parts contact your Hussmann service representative at 1-800-922-1919. Please have your model and serial number available. Descriptions including size and color are at HTTP://www.HUSSMANN.COM/ EN/PRODUCTS/LED-LIGHTING/PAGES/DEFAULT.ASPX.

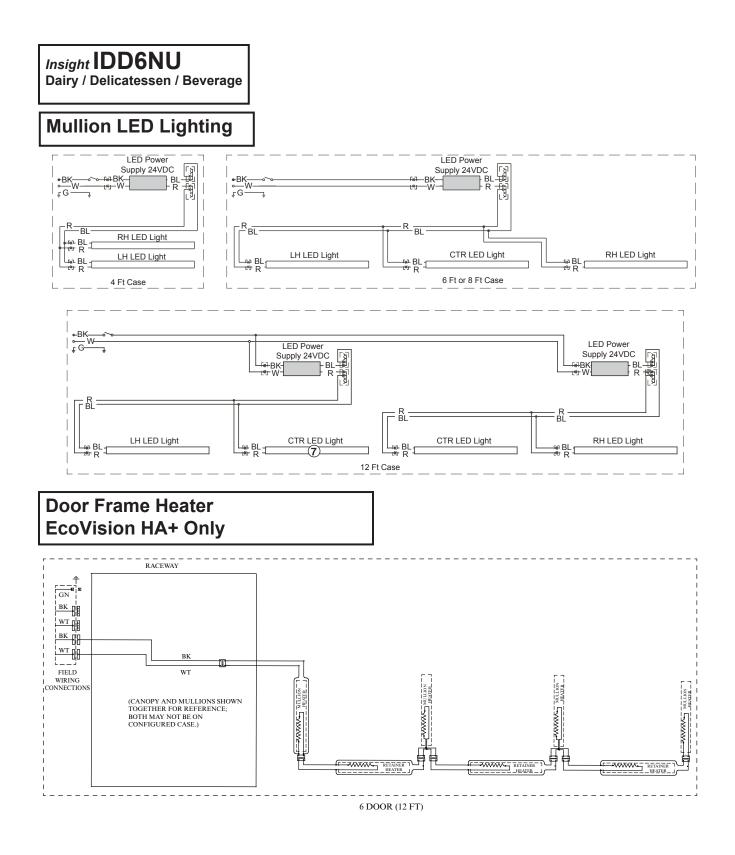
FOR ADDITIONAL PARTS INFORMATION, VISIT HTTP://www.hussmann.com/en/Pages/Aftermarket-Parts.aspx



#### WARNING

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

R = RedY = YellowG = GreenBL = BlueBK = BlackW = White• = 120V Power• = 120V Neutral $\frac{1}{2}$  = FIELD GROUNDmm = CASE GROUND



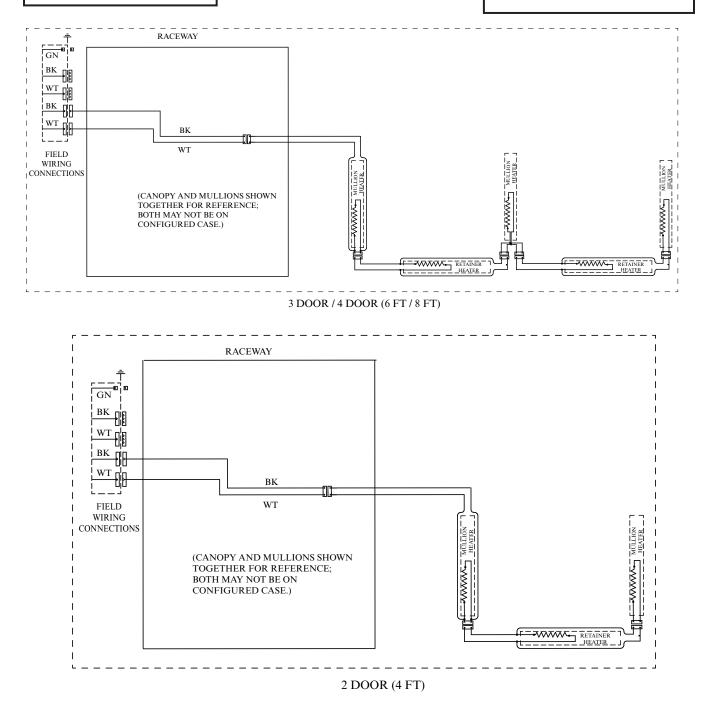
#### WARNING

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

R = RedY = YellowG = GreenBL = BlueBK = BlackW = White● = 120VPower○ = 120VNeutral↓ = FieldGroundmm = CaseGround

### Door Frame Heater EcoVision HA+ Only





#### 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  $\circ$  = 120V Neutral  $\frac{1}{2}$  = Field Ground mm = Case Ground

P/N 3068393\_C HUSSMANN CORPORATION • BRIDGETON, MO 63044-2483 U.S.A. • WWW.HUSSMANN.COM 11 of 12

### Insight IDD6NU

Dairy / Delicatessen / Beverage

#### 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 230V circuit. In this instance, fans use 0.62 Amps and the MCA is 0.82. 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 mullion lighting [maximum for which case is wired] (0.74 for EcoShine II 60 mullion lights); then add together [0.48 + 0.74 = 1.22 amps for 120V] (for 230V, multiply  $1.22 \times 0.52 = 0.63$ ).

#### 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: September 2018: Original Issue

Revision B: July 2022. Added notes for Extended Drain Kit Option.

Revision C: January 2023. Added CO2 note, Page 2.