## HUSSMANN

Insight standard field electrical connections

are at the top left of the merchandiser

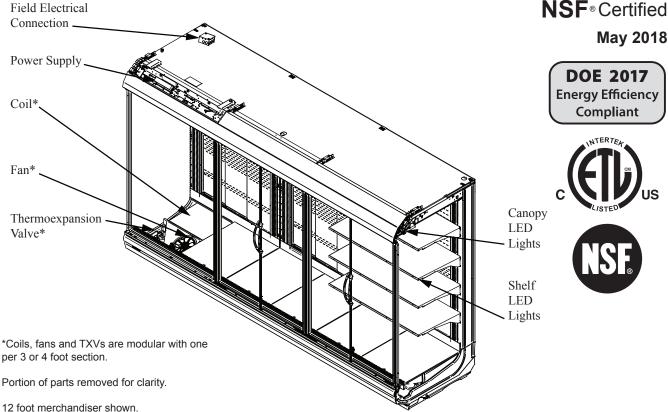
## Insight® IDD6SU-R

Dairy / Delicatessen / Beverage

with EcoVision Doors **Merchandiser Data Sheet** 

P/N 3013544 F

**NSF**® Certified



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.

## **IMPORTANT**

**ONE FLOOR DRAIN IS** REQUIRED FOR EACH CASE.

Performance Data	Page 2	Shelf Options	Page 7
Product Data (AHRI Statistics)	Page 2	Replacement Parts List	Page 8
Cross Section	Page 3	Wiring Diagrams	Page 9
Plan View	Page 4	Rear Views	Page 12
Electrical Loads	Page 6	Computing Refrigeration and Electrical Load	Page 13
Estimated Shipping Weights	Page 7	Revision History	Page 13

#### Data sheet-Insight IDD6SU-R

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.

### Refrigeration Data 1

	IDD6SU-R		Energy Comparison		
Application		Dairy/Deli/ Beverage/ Produce	NSF Type 2 Ambient³	Harsh Environment	AHRI 1200 Rating Point <sup>4</sup>
	Discharge Air °F (°C)	36 (2.22)	36 (2.22)	36 (2.22)	38 (3.33)
Unlit	Average Evaporator °F (°C) <sup>2</sup>	34 (1.11)	34 (1.11)	33 (0.55)	35 (1.66)
Mullions	Parallel Btu/hr/ft (Watts/m)	350 (337)	403 (388)	515 (495)	311 (299)
	Conventional Btu/hr/ft (Watts/m)	360 (346)	415 (399)	530 (510)	320 (308)
	Discharge Air °F (°C)	36 (2.22)	36 (2.22)	36 (2.22)	38 (3.33)
Lit	Average Evaporator °F (°C) <sup>2</sup>	33 (0.55)	33 (0.55)	33 (0.55)	35 (-1.66)
Mullions	Parallel Btu/hr/ft (Watts/m)	374 (360)	423 (407)	535 (514)	331 (318)
	Conventional Btu/hr/ft (Watts/m)	385 (370)	435 (418)	550 (529)	340 (327)
Fan Spood <sup>5</sup>	IDD6SU6R (2 x 8.25")	1600 <sup>5</sup>	1600 <sup>5</sup>	1600 <sup>5</sup>	1600 <sup>5</sup>
Fan Speed⁵	IDD6SU4R, 8R, 12R (2 x 8.25")	1600 <sup>5</sup>	1600⁵	1600⁵	1600⁵

#### 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. Some lengths and/or applications require optional fan speed control kits applied by the Hussmann Product Configurator.
- 6. 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) 24

**Defrost Water** <sup>7</sup> 1.5 lb/ft/day

(2.2 kg/m)
<sup>7</sup> (± 15% based on case configuration and product

(± 15% based on case configuration loading).

OFFTIME IDD6SU-R Time (minutes) 40

ELECTRIC OR GAS Not Available

#### **Conventional Controls**

IDD6SU-R Low Pressure Backup

Control CI/CO <sup>8</sup>
26°F /16°F
-3.3°C / -8.9°C

Indoor Unit Only, Pressure Defrost Termination <sup>8</sup>

48°F (8.9°C)

<sup>8</sup> Use a Temperature Pressure Chart to determine PSIG conversions.

Estima	ted Charg	e" IL	D6SU-R
4 ft	0.7 lb	11.2 oz	0.3 kg
6 ft	1.2 lb	19.2 oz	0.5 kg
8 ft	1.6 lb	25.6 oz	0.7 kg
12 ft	3.1 lb	49.6 oz	1.4 kg

<sup>&</sup>lt;sup>9</sup> This is an average for all refrigerant types. Actual refrigerant charge may vary by approximately half a pound.

### **Product Data**

 Gross Refrigerated Volume 10 (Cu Ft/Ft)
 13.2 ft³/ft (1.23 m³/m)

 AHRI Total Display Area 11 (Sq Ft/Ft)
 5.36 ft²/ft (1.63 m²/m)

 Shelf Area 12 (Sq Ft/Ft)
 11.69 ft²/ft (3.56 m²/m)

<sup>&</sup>lt;sup>10</sup> AHRI Gross Refrigerated Volume: Refrigerated Volume/Unit of Length, ft³/ft [m³/m]

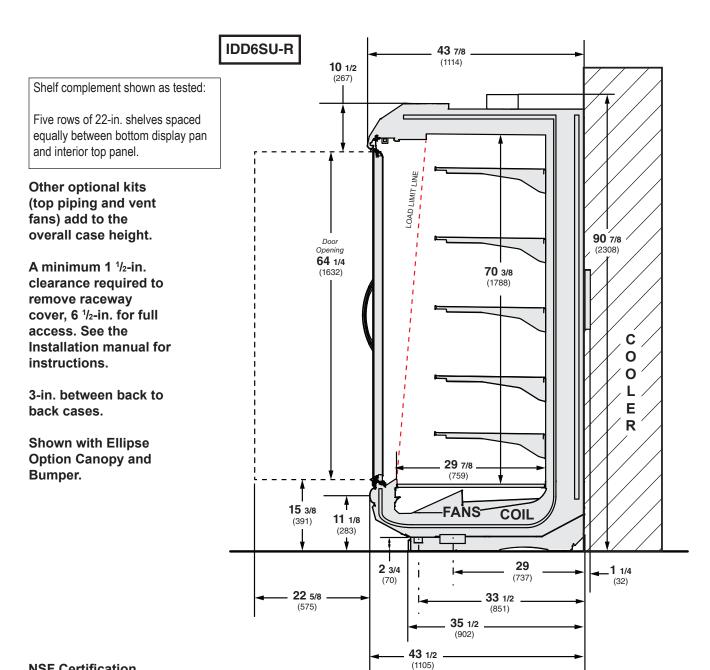
<sup>11</sup> Computed using AHRI 1200 standard methodology: Total Display Area, ft² [m²]/Unit of Length, ft [m]

<sup>12</sup> Shelf surface area is composed of bottom deck plus standard shelf complement for this model: (5) 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).



## **NSF Certification**

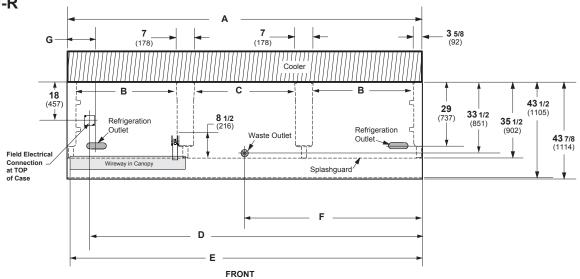
This merchandiser model is manufactured to meet NSF/ANSI (National Sanitation Foundation) Standard #7 requirements for construction, materials and cleanability.

# 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).

IDD5SU-R/
IDD6SU-R

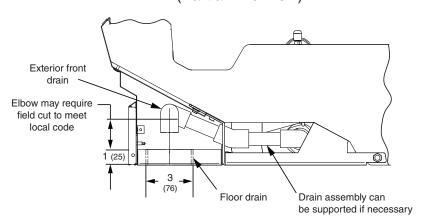


(12 Foot Model shown above)

		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 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)	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)	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	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)

## **Drain Extension Option**

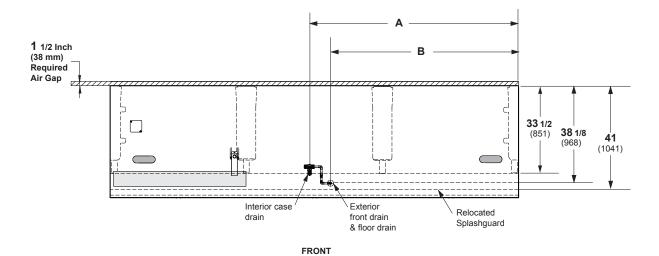
(Partial End View)



**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.

# Engineering Plan View

Dimensions shown as in. and (mm).



(12 Foot Model shown above)

		4 ft	6 ft	8 ft	12 ft
Wast	e 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 <sup>7</sup> /8 (1572)

## **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
Minimur	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				
Maximu	m Over Cเ	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				
	4 ft	6 ft	8 ft	12 ft	4 ft	6 ft	8 ft	12 ft
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	0.41	0.63	0.68	0.94	55.5	82.3	88.1	120.8
HA+ Door Option)								

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  $^{1}$ /<sub>2</sub> in. (38 mm) to case line up. Optional view end with end bumper adds 3  $^{3}$ /<sub>4</sub> 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					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:

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 22-in. shelves evenly distributed vertically.

## **Replacement Parts List**

Part #	Description	Part #	Description			
FAN ASSEMBLIES		Coils				
Standard HE Fan A	Assembly	0534331	4 ft, 8 ft, 12 ft			
4 Ft, 6 Ft, 8 Ft & 12	? Ft	0534330	6 ft only			
0535563	8.25-in. Fan Assembly					
0534013	Fan Speed Controller	HONEYCOMB - WHITE				
		0536831	4 ft, 8 ft, 12 ft			
FAN SPEED KEY		0536829	6 ft only			
1600 RPM						
0534363	4 ft, 6 ft, 8 ft, 12 ft	THERMO-EXPANSION V	ALVE			
		Pre-set Adjus	stable			
THERMOSTATS		Varies with Refrigerant and Size				
<b>O</b> PTIONAL						
		EcoVision HA+ Fra	ME HEATERS (OPTIONAL)			
LED FIXTURES AND P	OWER SUPPLY	4 Ft, 8 Ft & 12 Ft				
0501213	Power Supply	0549867	Heater - Mullion End LH			
	LED Canopy Fixture	0549870	Heater - Mullion Center			
	Replace with like fixtures.	0548655	Heater - Retainer Bottom			
	LED Mullion Fixture	0549868	Heater - Mullion End RH			
	Replace with like fixtures.					
		6 Ft				
		0549867	Heater - Mullion End LH			
		0549869	Heater - Mullion Center			
		0548656	Heater - Retainer Bottom			
		0549868	Heater - Mullion End RH			

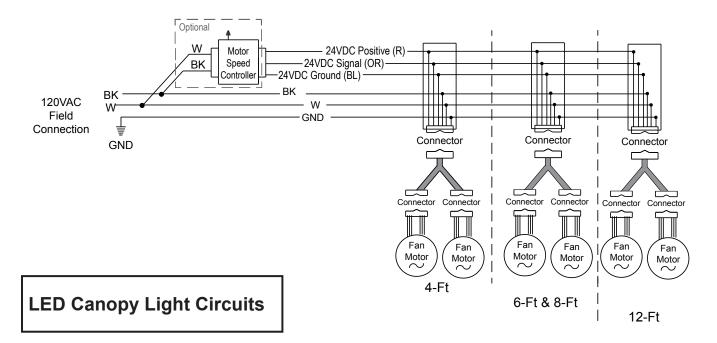
NOTE: For LED lighting parts contact your Hussmann service representative at 1-800-922-1919. Please have your model and serial number available. Descriptions including size and color are at http://www.hussmann.com/en/Products/LED-Lighting/Pages/Default.aspx.

FOR ADDITIONAL PARTS INFORMATION, VISIT

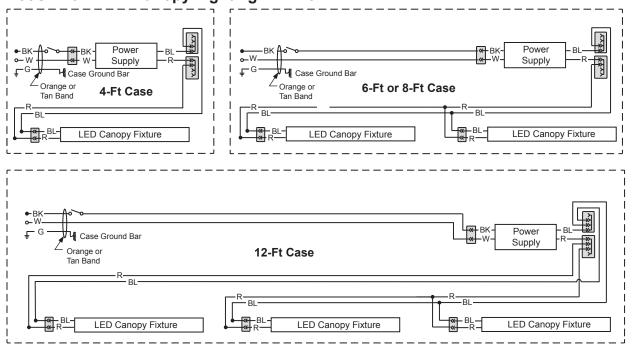
http://www.hussmann.com/en/Pages/Aftermarket-Parts.aspx

## Fan Wiring Offtime Defrost

## Insight IDD6SU-R Dairy / Delicatessen / Beverage



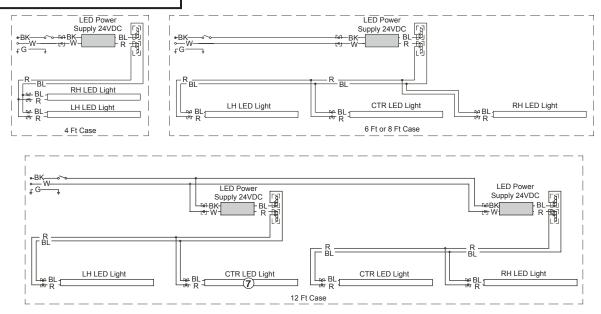
## EcoShine II LED Canopy Lighting — 1 Row



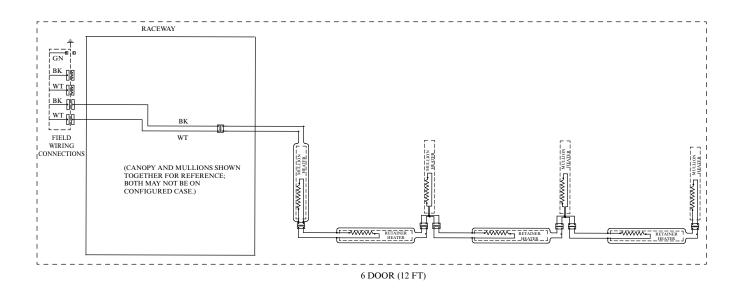
### **WARNING**

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

## **Mullion LED Lighting**



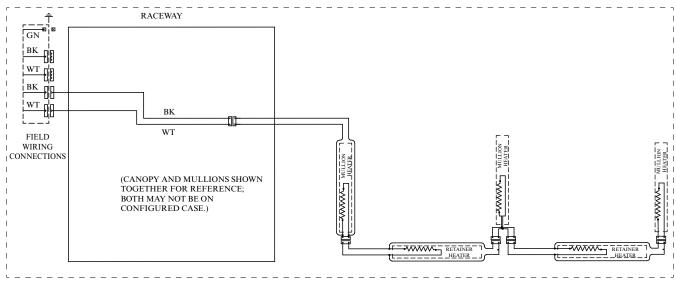
## Door Frame Heater EcoVision HA+ Only



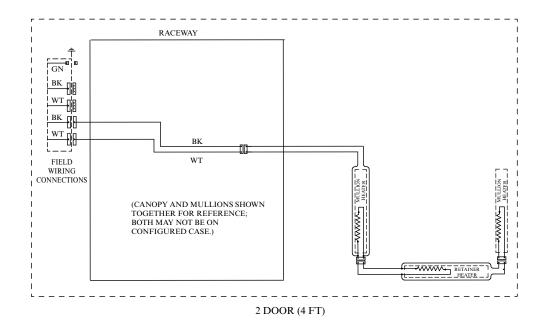
### **WARNING**

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

R = Red Y = Yellow G = Green BL = Blue BK = Black W = White 
$$\bullet$$
 = 120V Power  $\circ$  = 120V Neutral  $\frac{1}{2}$  = Field Ground  $\frac{1}{2}$  = Case Ground



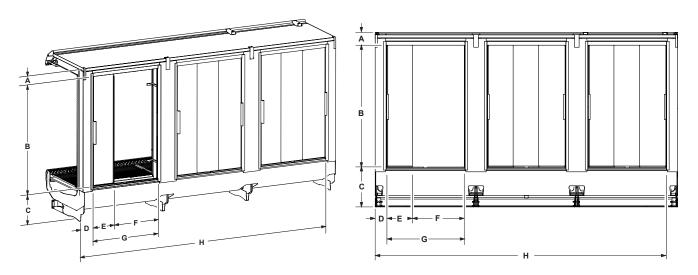
3 DOOR / 4 DOOR (6 FT / 8 FT)



### **WARNING**

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

## **Rear Views**



Dimensions shown as in. and (mm).

Item	Merchandisers							
lleili	4 Ft	6 Ft	8 Ft	12 Ft				
Α	6 1/8 (155)							
В		67 1/4 (1708)						
С	16 <sup>5</sup> / <sub>8</sub> (422)							
D	5 <sup>5</sup> / <sub>8</sub> (142)							
Е	12 <sup>1</sup> / <sub>4</sub> (309)	12 <sup>1</sup> / <sub>4</sub> (309)	12 <sup>1</sup> / <sub>4</sub> (309)					
F	24 <sup>7</sup> / <sub>8</sub> (631)	17 (430)	24 <sup>7</sup> / <sub>8</sub> (631)	24 <sup>7</sup> / <sub>8</sub> (631)				
G	37 <sup>1</sup> / <sub>8</sub> (941)	25 <sup>1</sup> / <sub>8</sub> (636)	37 <sup>1</sup> / <sub>8</sub> (941)	37 <sup>1</sup> / <sub>8</sub> (941)				
Н	42 5/8 (1082)	66 <sup>3</sup> / <sub>4</sub> (1694)	90 3/4 (2305)	138 <sup>7</sup> / <sub>8</sub> (3526)				

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

#### 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 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 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 \* 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 2016: Original Issue.

Revision B: January 2017: Removed EcoShine "Plus" references.

Revision C: April 2017: Updated LED energy values.

Revision D: April 2017: Updated LED energy values.

Revision E: September 2017: Updated notes page.

Revision F: May 2018: Updated lighting information.