## HUSSMANN

## Insight® ID6SU-R

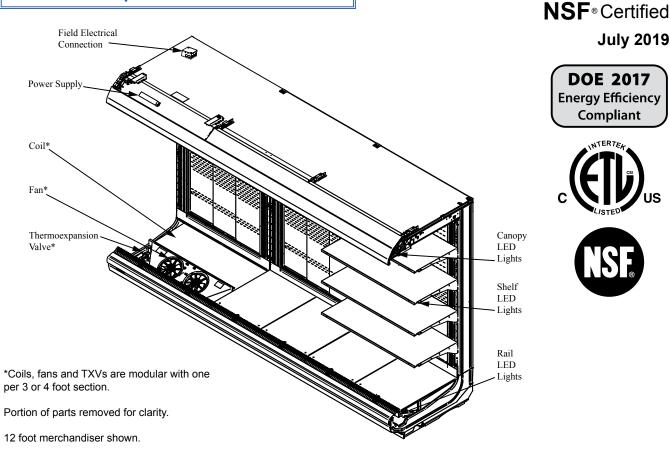
Dairy / Deli / Beverage / Produce

Merchandiser Data Sheet

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

P/N 0557598 H

**July 2019** 









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**

**DRAIN EXTENSION KIT** REQUIRED TO PIPE MULTIPLE CASES TO ONE DRAIN OR TO **USE A RAISED HUB DRAIN** 

Performance Data	Page 2	Shelf Options	Page 7
Product Data (AHRI Statistics)	Page 2	Wiring Diagrams	Page 8
Cross Section	Page 3	Rear Views	Page 11
Plan View	Page 4	Computing Refrigeration and Electrical Load	Page 12
Electrical Loads	Page 6	QR Code for Parts and Product Information	Page 12
Estimated Shipping Weights	Page 7	Revision History	Page 12

#### Data sheet-Insight ID6SU-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.

### Insight ID6SU-R

Dairy / Deli / Beverage / Produce

#### Refrigeration Data 1

	ID6SU-R	Optimal S	Energy Comparison	
Application		Dairy/Deli/ Beverage/ Produce	NSF Type 2 Ambient <sup>3</sup>	AHRI 1200 Rating Point <sup>4</sup>
	Discharge Air °F (°C)	31 (-0.55)	31 (-0.55)	35 (1.66)
Unlit	Average Evaporator °F (°C) <sup>2</sup>	26 (-3.33)	24 (-4.44)	31 (-0.55)
Shelves	Parallel Btu/hr/ft (Watts/m)	1510 (1452)	1810 (1741)	1360 (1308)
	Conventional Btu/hr/ft (Watts/m)	1645 (1582)	1965 (1890)	1480 (1423)
	Discharge Air °F (°C)	31 (-0.55)	31 (-0.55)	35 (1.66)
Lit	Average Evaporator °F (°C) <sup>2</sup>	25 (-3.88)	23 (-5.00)	30 (-1.11)
Shelves	Parallel Btu/hr/ft (Watts/m) <sup>5</sup>	1525 (1426)	1820 (1750)	1370 (1317)
	Conventional Btu/hr/ft (Watts/m) 5	1655 (1591)	1975 (1899)	1490 (1433)
Fan Chaade	ID6SU6R (2 x 8.25")	1600 <sup>6</sup>	1600 <sup>6</sup>	1600 <sup>6</sup>
Fan Speed <sup>6</sup>	ID6SU4R, 8R, 12R (2 x 8.25")	1600 <sup>6</sup>	1600 <sup>6</sup>	1600 <sup>6</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.
- 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 speed control kits applied by the Hussmann Product Configurator.
- 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.
- 8. Reduce refrigeration load by 15% if fitted with CaseShieldPTM.

#### **Defrost Data**

**Frequency** (hours between defrost) **Defrost Water** 9

9.5 lb/ft/dav

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

<sup>9</sup> (± 15% based on case configuration and product

loading).

OFFTIME ID6SU-R Time (minutes) 20

ELECTRIC OR GAS Not Available

#### **Conventional Controls**

ID6SU-R Low Pressure Backup

Control CI/CO <sup>10</sup> 18°F /8°F

–7.8°C / –13.3°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.

Estimated Charge 11			
b 9.6 oz	0.3 kg		
b 17.6 oz	0.5 kg		
b 24 oz	0.7 kg		
b 46.4 oz	1.3 kg		
	b 9.6 oz b 17.6 oz b 24 oz		

<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)
 13.2 ft³/ft (1.23 m³/m)

 AHRI Total Display Area 13. (Sq Ft/Ft)
 5.55 ft²/ft (1.69 m²/m)

 Shelf Area 14 (Sq Ft/Ft)
 11.66 ft²/ft (3.55 m²/m)

<sup>&</sup>lt;sup>12</sup> AHRI Gross Refrigerated Volume: Refrigerated Volume/Unit of Length, ft³/ft [m³/m]

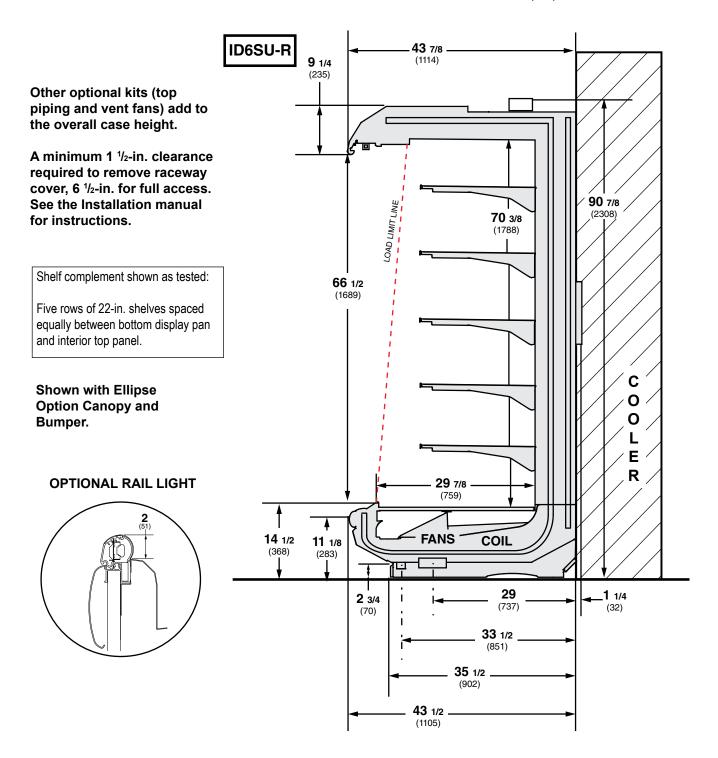
<sup>13</sup> Computed using AHRI 1200 standard methodology: Total Display Area, ft² [m²]/Unit of Length, ft [m]

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



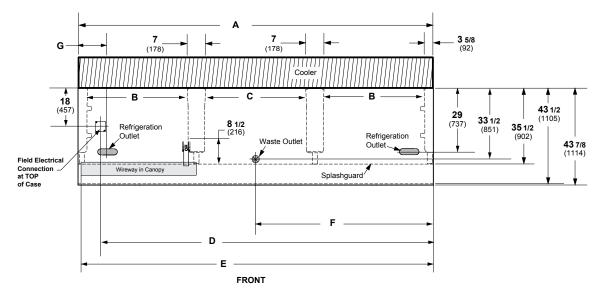
# Engineering Plan View

**ID6SU-R** 

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).

Dimensions shown as in. and (mm).



(12 Foot Model shown above)

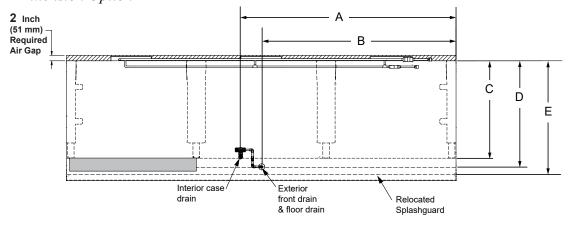
		4 ft	6 ft	8 ft	12 ft
General					
(A)	) Case Length (without ends or partitions) (Each end and insulated partition adds 1 ½ in. (38 mm) to case line up.)		72 1/4 (1835)	96 1/4 (2445)	144 3/8 (3668)
	Maximum O/S dimension of case back to front (includes bumper)	43 1/2 (1105)	43 1/2 (1105)	43 1/2 (1105)	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	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 (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)

## Engineering Plan View

Insight ID6SU-R
Dairy / Deli /
Beverage / Produce

Waste Outlet Drain Extension Option

Dimensions shown as in. and (mm).

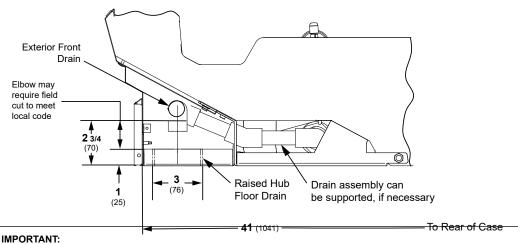


**FRONT** 

(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* *Drain extension shown piped to the right but may be either direction	13 3/4 (349)	13 <sup>3</sup> / <sub>4</sub> (349)	13 3/4 (349)	61 <sup>7</sup> / <sub>8</sub> (1572)
(C)	Back of case to center of original waste outlet	33 1/2 (851)	33 1/2 (851)	33 1/2 (851)	33 1/2 (851)
(D)	Back of case to center of relocated waste outlet (with drain extension kit)	38 1/4 (972)	38 1/4 (972)	38 1/4 (972)	38 1/4 (972)
(E)	Back of case to the back of the relocated splashguard (with drain extension kit)	41 (1041)	41 (1041)	41 (1041)	41 (1041)

#### Partial End View



DRAIN EXTENSION KIT REQUIRED TO PIPE MULTIPLE CASES TO ONE DRAIN OR TO USE A RAISED HUB DRAIN

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

#### **Electrical Data**

Number			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	mpacity								
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				
Maximur	m 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 EcoShine ULTRA Canopy Lights 1 Row EcoShine ULTRA	0.16	0.26	0.36	0.54	19	31	43	64
1 ROW ECOSTILLE OF TRA	0.10	0.20	0.30	0.54	19	31	43	04
EcoShine II Canopy Lights								
1 Row EcoShine II	0.16	0.26	0.32	0.48	19	32	39	58
1 Row EcoShine II HO	0.22	0.33	0.44	0.66	27	40	53	79
EcoShine II Shelf Lights								
1 Row of Shelves	0.08	0.12	0.16	0.25	10	14	20	30
2 Rows of Shelves	0.16	0.23	0.33	0.49	20	28	40	59
3 Rows of Shelves	0.25	0.35	0.49	0.74	30	42	59	89
4 Rows of Shelves	0.33	0.47	0.66	0.99	40	56	79	119
5 Rows of Shelves	0.41	0.59	0.82	1.24	49	71	99	148
6 Rows of Shelves	0.49	0.70	0.99	1.48	59	85	119	178
7 Rows of Shelves	0.58	0.82	1.15	1.73	69	99	138	208
EcoShine II Rail Light-1 Row	0.08	0.12	0.16	0.25	10	14	20	30

120V Lighting Circuit Total = Standard Lighting + Total Optional Lighting + Optional Shelf 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 ½ in. (38 mm) to case line up. Optional view end with end bumper adds 3 ¾ in. (95 mm).

#### PHYSICAL DATA

Merchandiser Drip Pipe (in.) 1 <sup>1</sup>/<sub>4</sub>
Schedule 40 PVC
Merchandiser Liquid Line (in.) <sup>3</sup>/<sub>8</sub>

Merchandiser Suction Line (iii.) 7/8

#### **ESTIMATED SHIPPING WEIGHT †**

 Case
 Solid End

 4 ft
 6 ft
 8 ft
 12 ft
 (each)

 lb (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

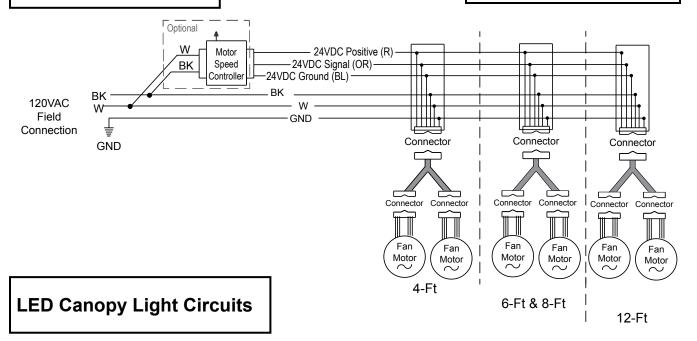
Optimal number of Shelves: 5

Maximum number of Shelves: 8

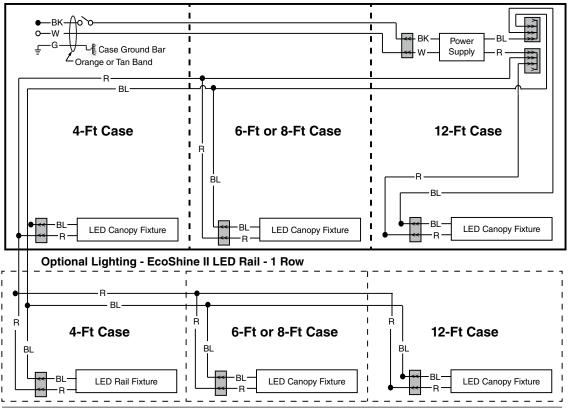
Maximum number of Lighted Shelves: 7

Standard shelf complement for test purposes: (5) rows of 22-in. shelves evenly distributed vertically.

## Fan Wiring Offtime Defrost



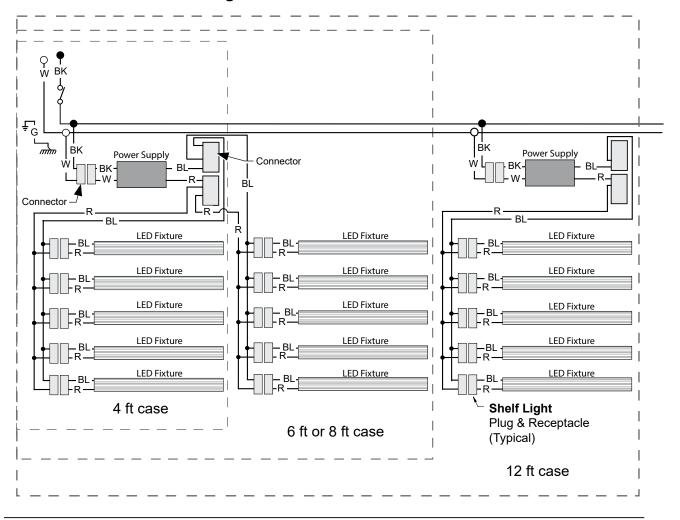
#### **EcoShine II LED Canopy Lighting - 1 Row**



#### WARNING

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

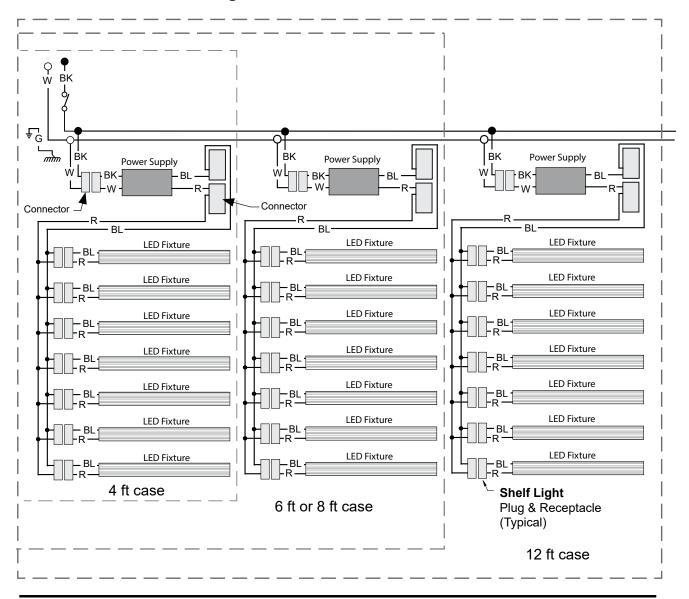
#### Shelf Harness and LED Light Circuits for 4 or 5 Rows of Shelves



#### WARNING

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

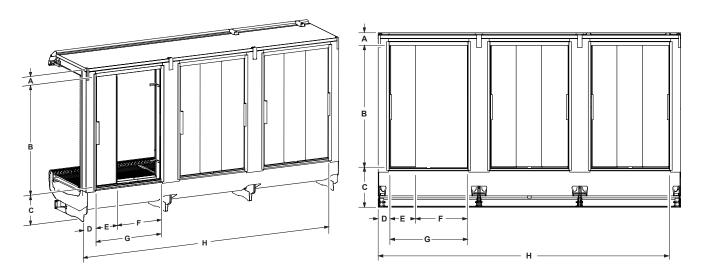
#### Shelf Harness and LED Light Circuits for 6 or 7 Rows of Shelves



#### **WARNING**

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

#### **Rear Views**



Dimensions shown as in. and (mm).

Item	Merchandisers									
nem	4 Ft	6 Ft	8 Ft	12 Ft						
Α	6 ¹/s (155)									
В		67 1/4	(1708)							
С	16 <sup>5</sup> / <sub>8</sub> (422)									
D	5 <sup>5</sup> / <sub>8</sub> (142)									
E	12 <sup>1</sup> / <sub>4</sub> (309)	2 1/4 (309) 8 1/8 (206) 12 1/4 (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 shelf or rail lighting [maximum for which case is wired] (1.73 for seven shelves); then add together [0.48 + 1.73 = 2.21 amps for 120V] (for 230V, multiply 2.21 \* 0.52 = 1.15).

#### 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: June 2016: Original Issue.

Revision B: July 2016: Updated cross section and plan view.

Revision C: August 2016: Updated cross section and plan view.

Revision D: January 2017: Added rail light updates.

Revision E: April 2017. Updated LED energy values.

Revision F: April 2017. Updated LED energy values.

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

Revision H: July 2019. Updated parts list, lighting, CaseShieldPTM and drain information.