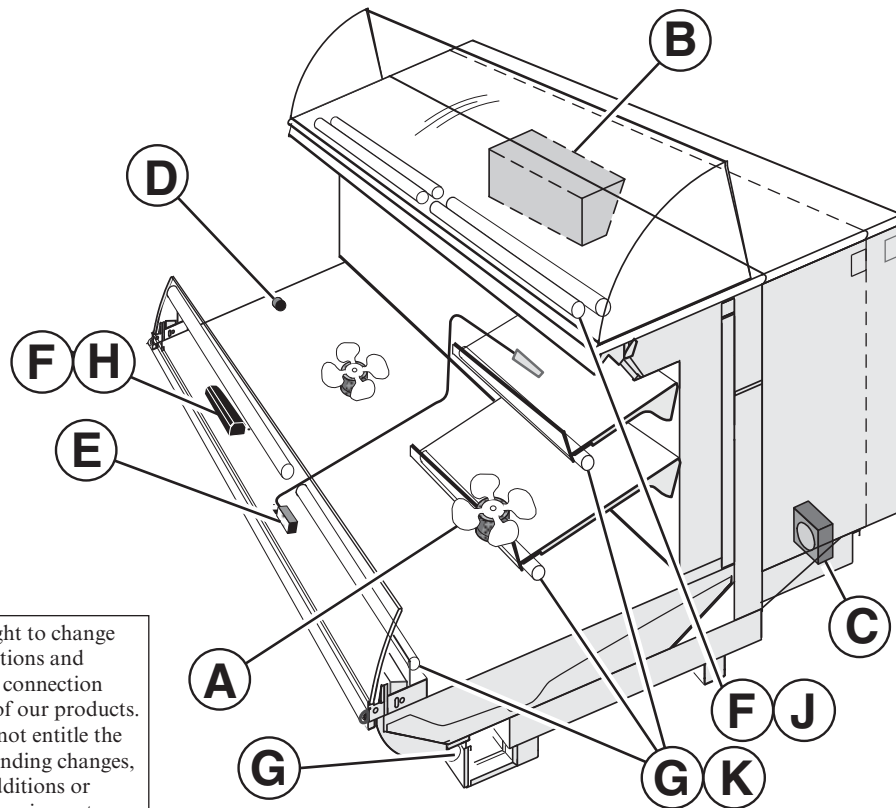


DOE 2017
Energy Efficiency
Compliant



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.

SHOWN WITH
OPTIONAL
REAR STORAGE

Item	Part #	Description	Wiring Item #	Item	Part #	Description	Wiring Item #
FAN ASSEMBLIES				LAMPS AND BALLASTS			
A.	12W Energy Efficient Fan Assembly	(1)	F.	Ballast, Electronic	(6)		
	0477655 Fan Motor, Evaporator			0466234 2 lamps			
	0124150 Fan Blade			0466235 3 lamps			
	embossing toward motor			0466236 4 lamps			
B.	0458883 Fan, Optional Refrigerated Rear Storage	(2)	G.	Fluorescent Lamp	(7)		
C.	0522287 Cavity Fan, Ambient	(3)		<i>Replace with like fixtures</i>			
THERMOSTATS				LED FIXTURES AND POWER SUPPLY			
D.	0411744 Standard Non-adjustable Defrost Thermostat	(4)	H.	0501213 Power Supply	(8)		
E.	0353949 Optional Adjustable Refrigeration Thermostat	(5)	J.	LED Canopy Fixture	(9)		
				<i>Replace with like fixtures</i>			
			K.	LED Shelf Fixture	(10)		
				<i>Replace with like fixtures</i>			

Data sheet-Elite-E2SP

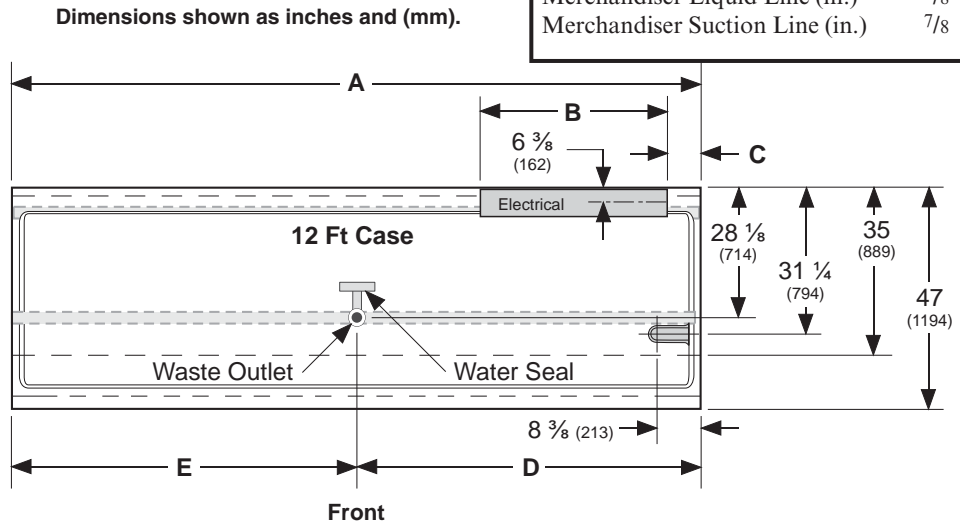
Note: Revision D: April 2017. Updated LED energy values. Other changes marked with a bar, circle or underline.

Engineering Plan Views

E2SP
Meat, Delicatessen
Precut & Packaged
Produce
Standard
Configuration
(without Optional
Rear Storage)

10-2005

PHYSICAL DATA	
Merchandiser Drip Pipe (in.)	1 1/2
Merchandiser Liquid Line (in.)	3/8
Merchandiser Suction Line (in.)	7/8



Front to back dimensions do not include optional rear storage dimension.	4 ft	6 ft	8 ft	12 ft
General				
(A) Case Length (without ends or partitions)	48 1/8 (1222)	72 1/8 (1832)	96 1/4 (2445)	144 3/8 (3667)
<i>NOTE: Each end and insulated partition adds 1 inch to lineup.</i>				
Maximum O/S dimension back to front (with bumper)	47 (1194)	47 (1194)	47 (1194)	47 (1194)
Back of case to front of front panel	35 (889)	35 (889)	35 (889)	35 (889)
Back of case to O/S edge of front skid rail	29 3/4 (756)	29 3/4 (756)	29 3/4 (756)	29 3/4 (756)
Width of skid rail	4 1/2 (114)	4 1/2 (114)	4 1/2 (114)	4 1/2 (114)
RH end of case to outside edge of external support	1 3/8 (35)	1 3/8 (35)	1 3/8 (35)	1 3/8 (35)
Distance between edges of external support and center support	NA	28 1/2 (724)	40 1/2 (1029)	40 1/2 (1029)
Distance between edges of center supports	NA	NA	NA	44 (1118)
Distance between edges of external supports	37 (940)	NA	NA	NA
Stub-up area between front skid rail and front panel	5 3/4 (146)	5 3/4 (146)	5 3/4 (146)	5 3/4 (146)
Electrical Service (Electrical Field Wiring connection point)				
(B) Length of electrical raceway	36 1/8 (918)	26 5/8 (676)	36 1/8 (918)	36 1/8 (918)
RH End of case to center of farthest knockout	11 3/8 (289)	11 3/8 (289)	11 3/8 (289)	11 3/8 (289)
Back of case to center of end knockout	6 3/8 (162)	6 3/8 (162)	6 3/8 (162)	6 3/8 (162)
(C) RH End of case to RH end of raceway	6 1/8 (156)	6 1/8 (156)	6 1/8 (156)	6 1/8 (156)
Waste Outlet				
(D) RH End of case to the center of waste outlet	24 1/4 (616)	24 1/4 (616)	24 1/2 (622)	72 1/4 (1835)
(E) LH End of case to the center of waste outlet	23 7/8 (606)	47 7/8 (1216)	72 3/4 (1848)	72 1/8 (1832)
Back O/S of case to center of waste outlet	28 1/8 (714)	28 1/8 (714)	28 1/8 (714)	28 1/8 (714)
Water Seal				
Edge of water seal to center of waste outlet	4 (102)	4 (102)	4 (102)	4 (102)
Outside diameter of the drip pipe	1 1/2 (38)	1 1/2 (38)	1 1/2 (38)	1 1/2 (38)
<i>NOTE: Water seal outlet must clear front skid rail; water seal rotation in forward direction only due to low base.</i>				
Refrigeration Outlet				
Back of case to center of refrigeration outlet	31 1/4 (794)	31 1/4 (794)	31 1/4 (794)	31 1/4 (794)
RH end of case to center of refrigeration outlet	8 3/8 (213)	8 3/8 (213)	8 3/8 (213)	8 3/8 (213)



Husmann refrigerated merchandisers configured for sale for use in the United States meet or surpass the requirements of the DOE 2017 energy efficiency standards.



REFRIGERATION DATA

Note: This data is based on store temperature and humidity that does not exceed 75 (°F) and 55% R.H.

	E2SP	
	Meat	Deli
Discharge Air (°F)	25	28
Evaporator (°F)	18	21
Unit Sizing (°F)	16	19
Btu/hr/ft †	E2SP	
Parallel	879	869
Conventional	979	959

† with refrigerated rear storage, add 300 Btu/hr/ft

DEFROST DATA

	E2SP
Frequency (hr)	6
Defrost Water	8 lb/ft/day
(± 15% based on case configuration and product loading).	
OFFTIME	E2SP
Temp Term (°F)	48
Failsafe (minutes)	40
ELECTRIC OR GAS	Not Recommended

Standard Defrost Thermostat
Close on rise: close 48°F – open 33°F

CONVENTIONAL CONTROLS

Low Pressure Backup Control CI/CO**	E2SP	Meat	Deli
Temp (°F)	11 / 6	14 / 4	

Indoor Unit Only, Pressure Defrost

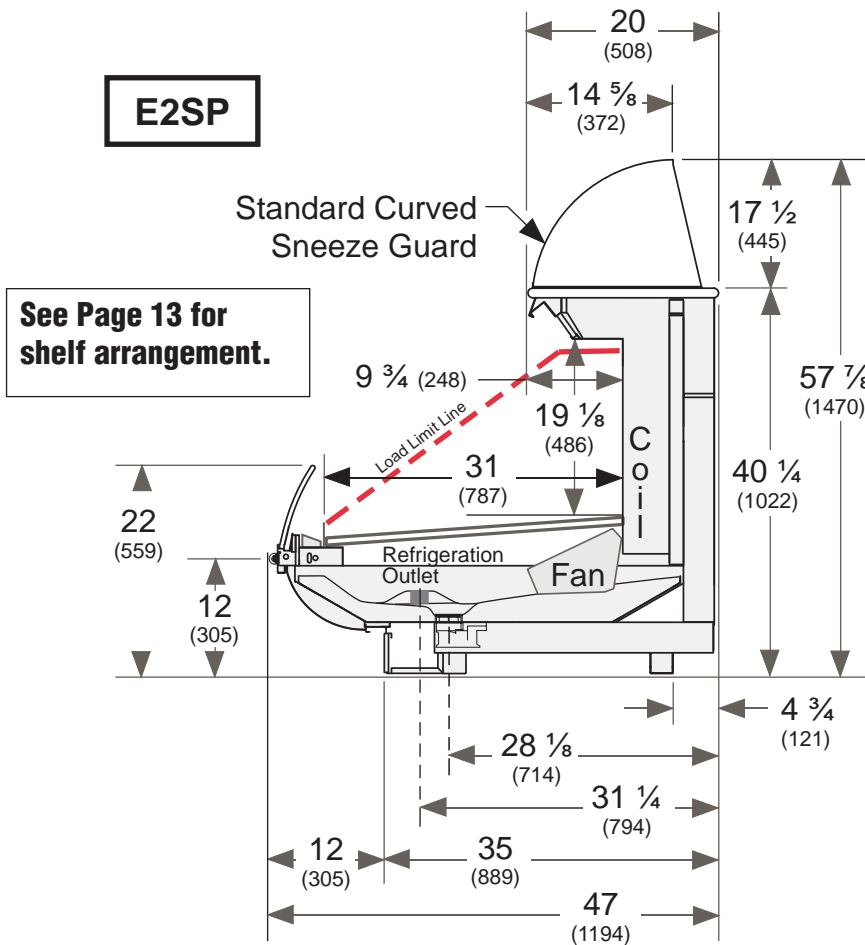
Termination (Temp °F)** 48°F

*Use a Temperature Pressure Chart to determine PSIG conversions.

Estimated Charge (lb)**	E2SP		
4 ft	0.9 lb	14 oz	0.4 kg
6 ft	1.8 lb	29 oz	0.8 kg
8 ft	1.9 lb	30 oz	0.9 kg
12 ft	2.9 lb	46 oz	1.3 kg

**This is an average for all refrigerant types. Actual refrigerant charge may vary by approximately half a pound (8 oz/0.2 kg).

Dimensions shown as in. & (mm).



NSF Certification

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

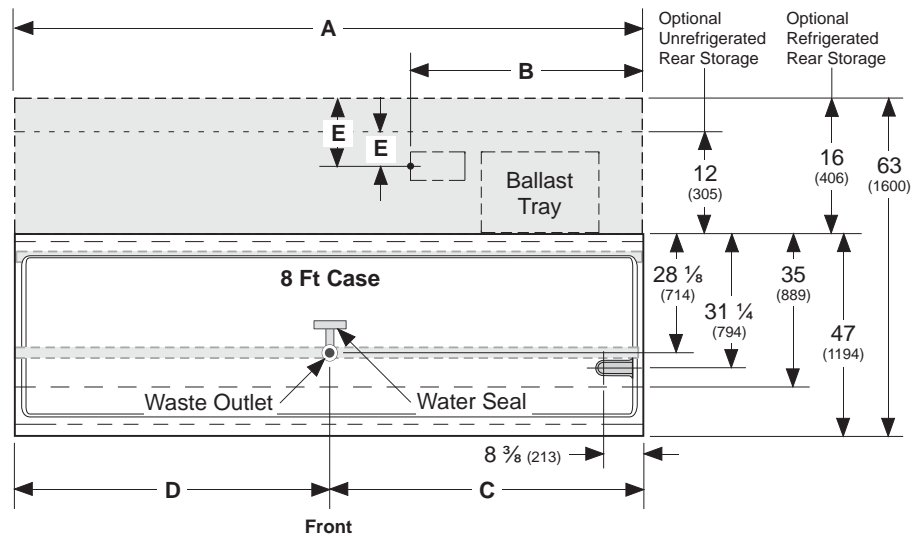
Engineering Plan Views

PHYSICAL DATA	
Merchandiser Drip Pipe (in.)	1 1/2
Merchandiser Liquid Line (in.)	3/8
Merchandiser Suction Line (in.)	7/8

Dimensions shown as inches and (mm).

E2SP
Meat, Delicatessen
Precut & Packaged
Produce
with Optional
Rear Storage —
Refrigerated or
Nonrefrigerated

10-2005



Front to back dimensions do not include optional rear storage dimension.	4 ft	6 ft	8 ft	12 ft
General				
(A) Case Length (<i>without ends or partitions</i>)	48 1/8 (1222)	72 1/8 (1832)	96 1/4 (2445)	144 3/8 3667)
<i>NOTE: Each end and insulated partition adds 1 inch to lineup.</i>				
Maximum O/S dimension back to front (<i>with bumper</i>)	47 (1194)	47 (1194)	47 (1194)	47 (1194)
Back of case to front of front panel	35 (889)	35 (889)	35 (889)	35 (889)
Back of case to O/S edge of front skid rail	29 3/4 (756)	29 3/4 (756)	29 3/4 (756)	29 3/4 (756)
Width of skid rail	4 1/2 (114)	4 1/2 (114)	4 1/2 (114)	4 1/2 (114)
RH end of case to outside edge of external support	1 3/8 (35)	1 3/8 (35)	1 3/8 (35)	1 3/8 (35)
Distance between edges of external support and center support	NA	28 1/2 (724)	40 1/2 (1029)	40 1/2 (1029)
Distance between edges of center supports	NA	NA	NA	44 (1118)
Distance between edges of external supports	37 (940)	NA	NA	NA
Stub-up area between front skid rail and front panel	5 3/4 (146)	5 3/4 (146)	5 3/4 (146)	5 3/4 (146)
Electrical Service (<i>Electrical Field Wiring connection point</i>)				
(B) RH End of case to LH end of connection box	42 1/8 (1070)	42 1/8 (1070)	42 1/8 (1070)	91 3/8 (2321)
(E) Back of storage to NONREFRIGERATED STORAGE CONNECTION BOX, center of knockout	7 (178)	7 (178)	7 (178)	7 (178)
(E) Back of storage to REFRIGERATED STORAGE CONNECTION BOX, center of knockout	11 (279)	11 (279)	11 (279)	11 (279)
Waste Outlet				
(C) RH End of case to the center of waste outlet	24 1/4 (616)	24 1/4 (616)	24 1/4 (616)	24 1/4 (616)
(D) LH End of case to the center of waste outlet	23 7/8 (606)	47 7/8 (1216)	72 3/4 (1848)	72 1/8 (1832)
Back O/S of case to center of waste outlet	28 1/8 (714)	28 1/8 (714)	28 1/8 (714)	28 1/8 (714)
Water Seal				
Edge of water seal to center of waste outlet	4 (102)	4 (102)	4 (102)	4 (102)
Outside diameter of the drip pipe	1 1/2 (38)	1 1/2 (38)	1 1/2 (38)	1 1/2 (38)
<i>NOTE: Water seal outlet must clear front skid rail; water seal rotation in forward direction only due to low base.</i>				
Refrigeration Outlet				
Back of case to center of refrigeration outlet	31 1/4 (794)	31 1/4 (794)	31 1/4 (794)	31 1/4 (794)
RH end of case to center of refrigeration outlet	8 3/8 (213)	8 3/8 (213)	8 3/8 (213)	8 3/8 (213)

Elite Specialty Merchandiser Multi-deck, Prep Top, 2 Display Levels
Optional Rear Storage, Refrigerated or Non refrigerated

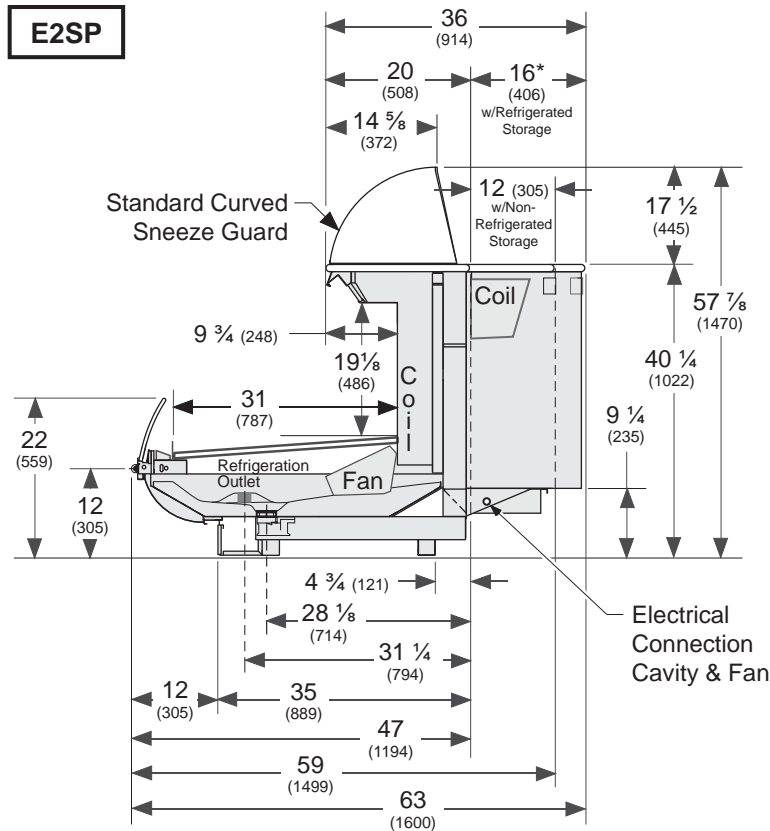
DOE 2017
Energy Efficiency
Compliant

Hussmann refrigerated merchandisers configured for sale for use in the United States meet or surpass the requirements of the DOE 2017 energy efficiency standards.

Shown with curved sneeze guard and optional refrigerated and non-refrigerated rear storage.

See Page 10 for shelf arrangement.

Dimensions shown as in. & (mm).



Estimated Charge (lb)**		E2SP	
4 ft	0.9 lb	14 oz	0.4 kg
6 ft	1.8 lb	29 oz	0.8 kg
8 ft	1.9 lb	30 oz	0.9 kg
12 ft	2.9 lb	46 oz	1.3 kg

**This is an average for all refrigerant types. Actual refrigerant charge may vary by approximately half a pound (8 oz/0.2 kg).

NSF Certification

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

Elite E2SP
Meat, Delicatessen
Precut & Packaged Produce

REFRIGERATION DATA

Note: This data is based on store temperature and humidity that does not exceed 75 (°F) and 55% R.H.

	E2SP§	
	Meat	Deli
Discharge Air (°F)	25	28
Evaporator (°F)	18	21
Unit Sizing (°F)	16	19

§ 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.

	E2SP	
Btu/hr/ft † ‡		
Parallel	879	869
Conventional	979	959

† with refrigerated rear storage, add 300 Btu/hr/ft

DEFROST DATA

E2SP	
Frequency (hr)	6
Defrost Water	8 lb/ft/day

(± 15% based on case configuration and product loading).

OFFTIME	E2SP
Temp Term (°F)	48
Failsafe (minutes)	40

ELECTRIC OR GAS Not Recommended

Standard Defrost Thermostat

Close on rise: close 48°F – open 33°F

CONVENTIONAL CONTROLS

Low Pressure Backup Control CI/CO*

E2SP	Meat	Deli
Temp (°F)	11 / 6	14 / 4

Indoor Unit Only, Pressure Defrost

Termination (Temp °F)* 48°F

*Use a Temperature Pressure Chart to determine PSIG conversions.

Elite E2SP Meat, Delicatessen Precut & Packaged Produce
--

Electrical Data

	4 ft	6 ft	8 ft	12 ft				
Number of Fans — 12W	1	2	2	3				
Number of Fans — 12W (Export) (Export: 230V 50 hz shown)	1	2	2	3				
Number of Fans — Constant-on Cavity Ambient	1	1	1	1				
	Amperes				Watts			
Merchandiser	4 ft	6 ft	8 ft	12 ft	4 ft	6 ft	8 ft	12 ft
Fans								
Standard Energy Efficient Fans (120V 50/60 Hz)	0.30	0.60	0.60	0.90	18	36	36	54
Export (230V 50Hz)	0.38	0.76	0.76	1.14	57	114	114	171
Optional Rear Refrigerated Storage	0.8	1.6	1.6	3.2	96	192	192	384
Constant-on Cavity Ambient Air Fan (Standard on Optional Refrigerated Rear Storage)	0.1	0.1	0.1	0.1	4.5	4.5	4.5	4.5
Cycling Anti-sweat Heaters	NA							
Minimum Circuit Ampacity								
Standard Energy Efficient Fans (120V 50/60Hz)	0.38	0.75	0.75	1.13				
Export Fans (230V 50Hz)	0.48	0.95	0.95	1.43				
With Rear Refrigerated Storage	1.5	2.88	2.88	5.25				
Maximum Over Current Protection								
Export (230V 50Hz)	20	20	20	20				
	15	15	15	15				
Electric Defrost Heaters (208V 1Ph)	NA							
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 (T8 Fluorescent)								
1 Row Canopy	0.26	0.40	0.49	0.71	30	46	59	85
Optional Lighting (T8 Fluorescent)								
1 Row Rail Lights	0.26	0.40	0.49	0.71	30	46	59	85
1 Row Ledge Lights	0.26	0.40	0.49	0.71	30	46	59	85
Optional Shelf Lighting (T8 Fluorescent)								
1 Row of Shelves	0.26	0.40	0.49	0.71	30	46	59	85
2 Rows of Shelves	0.52	0.80	0.98	1.42	60	92	118	170

Please note: some combinations of fluorescent lights on this case model may not be compliant with DOE 2017 and may not be available to order in the US and Canada. More lighting options are available with LED lights. The Hussmann Product Configurator will not allow lighting options that do not comply with the DOE 2017 standards.

(CONTINUED)

Product Data

<i>Recommended Usable Cube</i> ¹ (Cu Ft/Ft)	1.46 ft ³ /ft (0.14 m ³ /m)
<i>AHRI Total Display Area</i> ² (Sq Ft/Ft)	2.66 ft ² /ft (0.81 m ² /m)
<i>Shelf Area</i> ³ (Sq Ft/Ft)	5.26 ft ² /ft (1.60 m ² /m)
<i>Optional Rear Storage</i> (Cu Ft/Ft)	

- ¹ AHRI Refrigerated Volume less shelving and other unusable space: Refrigerated Volume/Unit of Length, ft³/ft [m³/m]
- ² Computed using AHRI 1200 standard methodology: Total Display Area, ft² [m²]/Unit of Length, ft [m]
- ³ Shelf surface area is composed of bottom deck plus standard shelf complement, as shown in the Hussmann *Product Reference Guide*. The standard shelf complement for this model is (1) row of 12-inch shelves and (1) row of 18-inch shelves.

ESTIMATED SHIPPING WEIGHT ⁴					
Case					Solid End (each)
	<i>4 ft</i>	<i>6 ft</i>	<i>8 ft</i>	<i>12 ft</i>	
lb (kg)	380 (172)	560 (254)	750 (340)	1120 (508)	50 (23)
Case with Optional Rear Storage					
lb (kg)	480 (218)	710 (332)	950 (431)	1425 (646)	50 (23)

⁴ Actual weights will vary according to optional kits included.

Electrical Data (Continued)

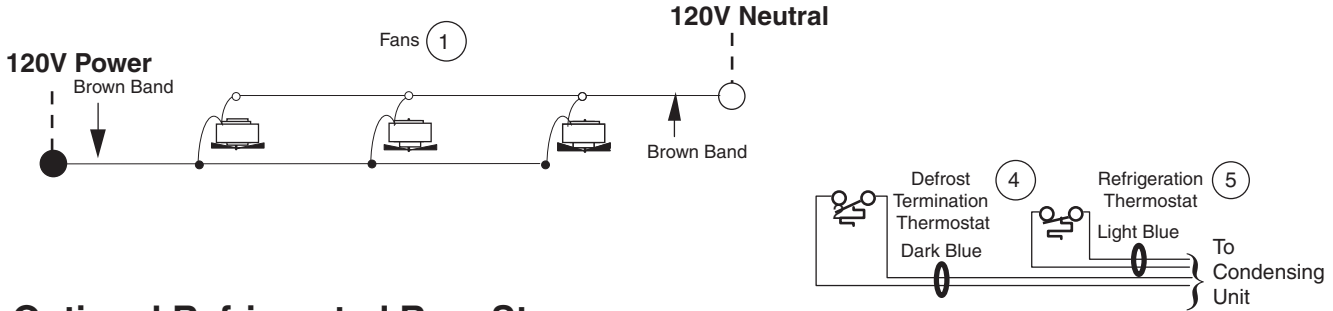
	Amperes				Watts			
	4 ft	6 ft	8 ft	12 ft	4 ft	6 ft	8 ft	12 ft
EcoShine II Canopy								
1 Row EcoShine II	0.16	0.26	0.32	0.48	19.3	31.6	38.6	58.0
1 Row EcoShine II HO	0.22	0.33	0.44	0.66	26.5	39.5	53.0	79.4
EcoShine II Rail Light —1 Row	0.08	0.12	0.16	0.25	9.9	14.1	19.8	29.7
EcoShine II Shelves								
1 Row of Shelves	0.08	0.12	0.16	0.25	9.9	14.1	19.8	29.7
2 Rows of Shelves	0.16	0.23	0.33	0.49	19.8	28.2	39.5	59.3

120V Lighting Circuit Total = Standard Lighting + Total Optional Lighting + Optional Shelf Lighting
 120V LED Lighting Circuit Total = Canopy Lighting + Shelf Lighting + Optional Rail Lighting
 230V Lighting Circuit Total = Multiply 120V Lighting Circuit Total by 0.52

Fan Wiring Offtime Defrost

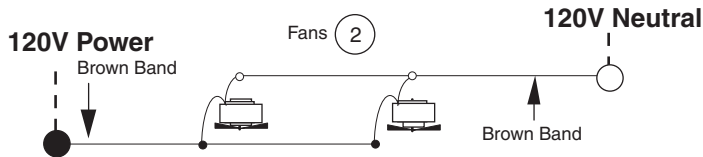
1, 2 or 3 Fans

- 4 Ft Case Has 1 Fan
- 6 Ft Case Has 2 Fans
- 8 Ft Case Has 2 Fans
- 12 Ft Case Has 3 Fans



Optional Refrigerated Rear Storage 1 or 2 Fans

- 4 Ft Case Has 1 Fan
- 6 Ft Case Has 1 Fan
- 8 Ft Case Has 2 Fans
- 12 Ft Case Has 2 Fans



Cavity Fan, Ambient

- 4 Ft Case Has 1 Fan
- 6 Ft Case Has 1 Fan
- 8 Ft Case Has 1 Fan
- 12 Ft Case Has 1 Fan



WARNING

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

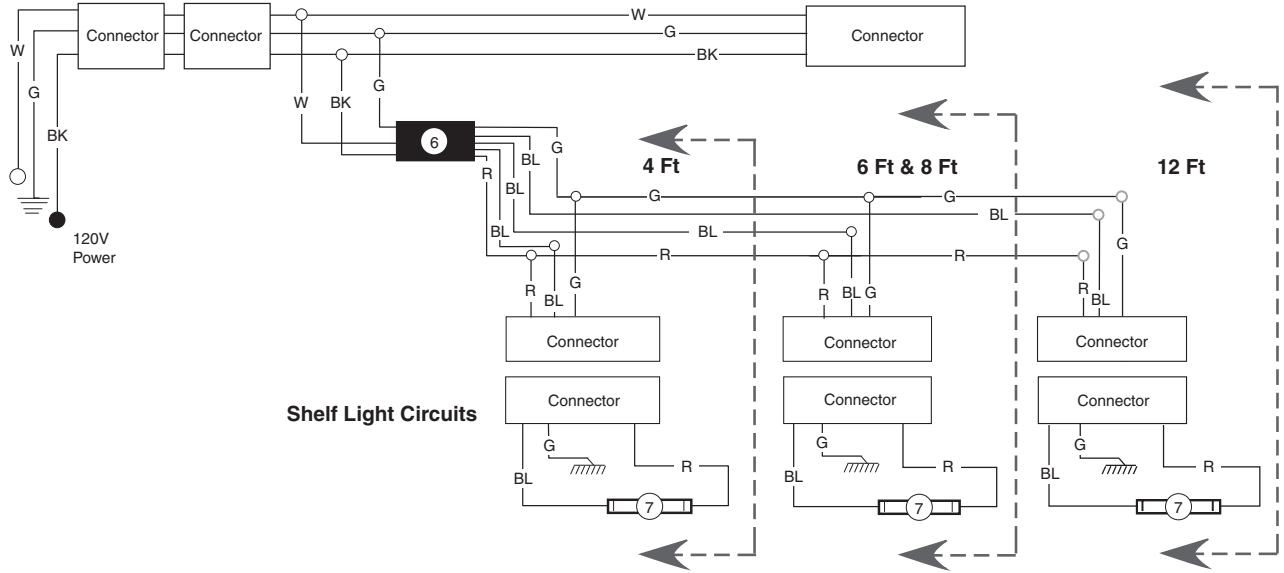
Circled Numbers = Parts List Item Numbers

● = 120V Power ○ = 120V Neutral

Shelf Lighting

Optional Shelf Harness and Light Circuits for One Row of Shelves

Shelf Harness



WARNING

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

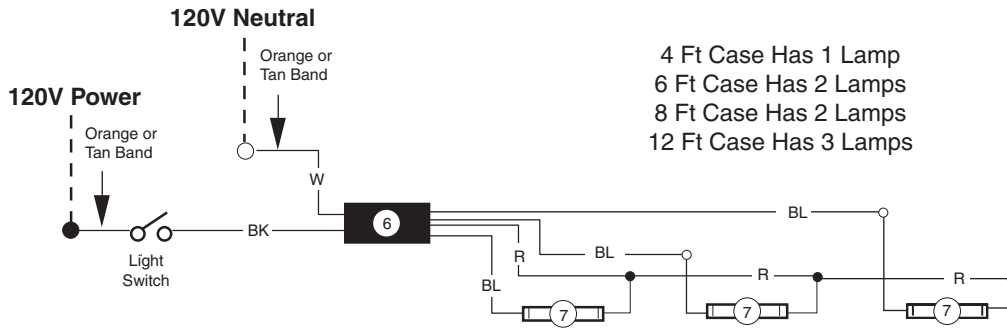
Circled Numbers = Parts List Item Numbers

R = Red Y = Yellow G = Green BL = Blue BK = Black W = White

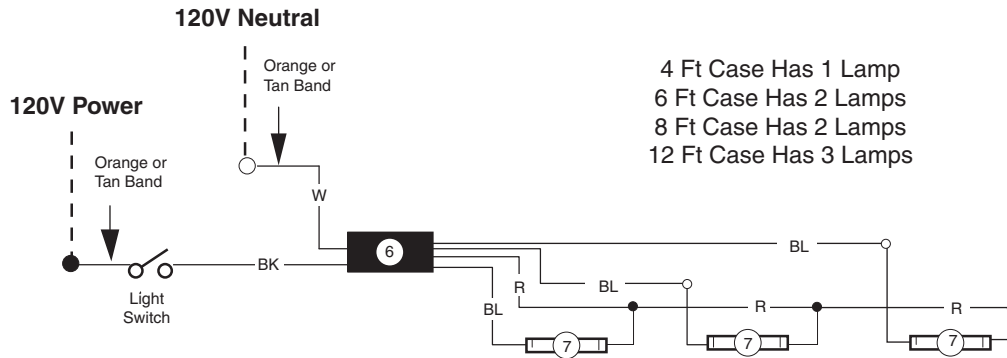
● = 120V Power ○ = 120V Neutral ⊥ = Field Ground ≡ = Case Ground

Light Circuits

Standard Lighting – 1 Row Canopy



Optional Lighting: 1 Row Ledge or 1 Row Rail



WARNING

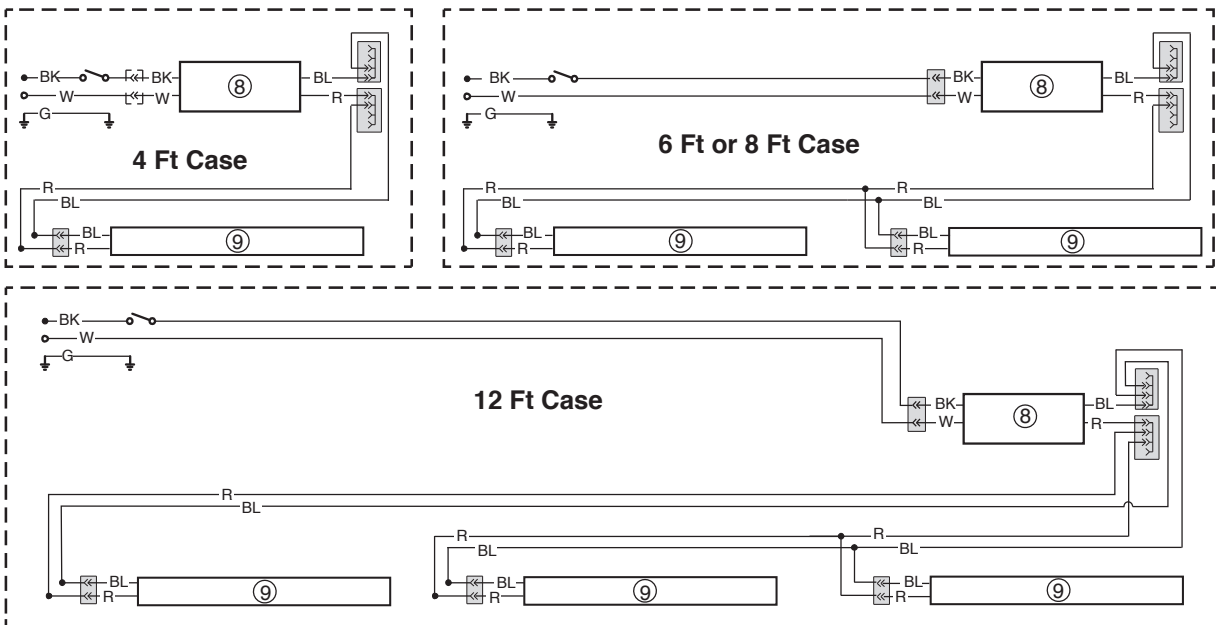
All components must have mechanical ground, and the merchandiser must be grounded.

Circled Numbers = Parts List Item Numbers

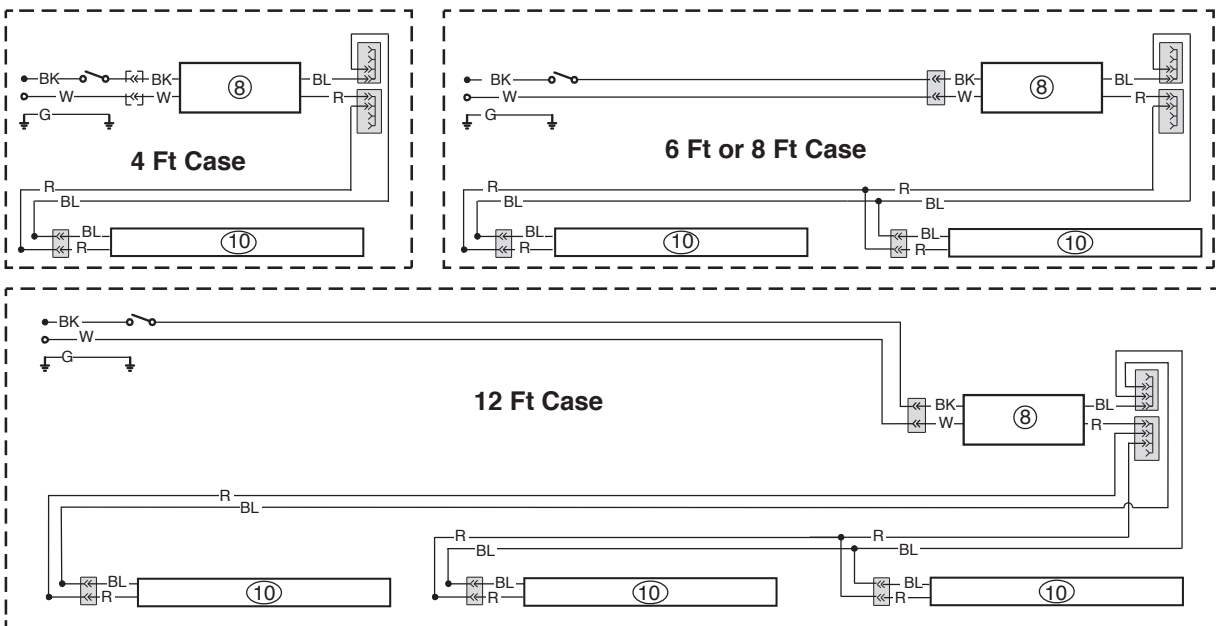
R = Red Y = Yellow G = Green BL = Blue BK = Black W = White

● = 120V Power ○ = 120V Neutral

EcoShine II LED Canopy Lighting – 1 Row



EcoShine II LED Rail Lighting – 1 Row



WARNING

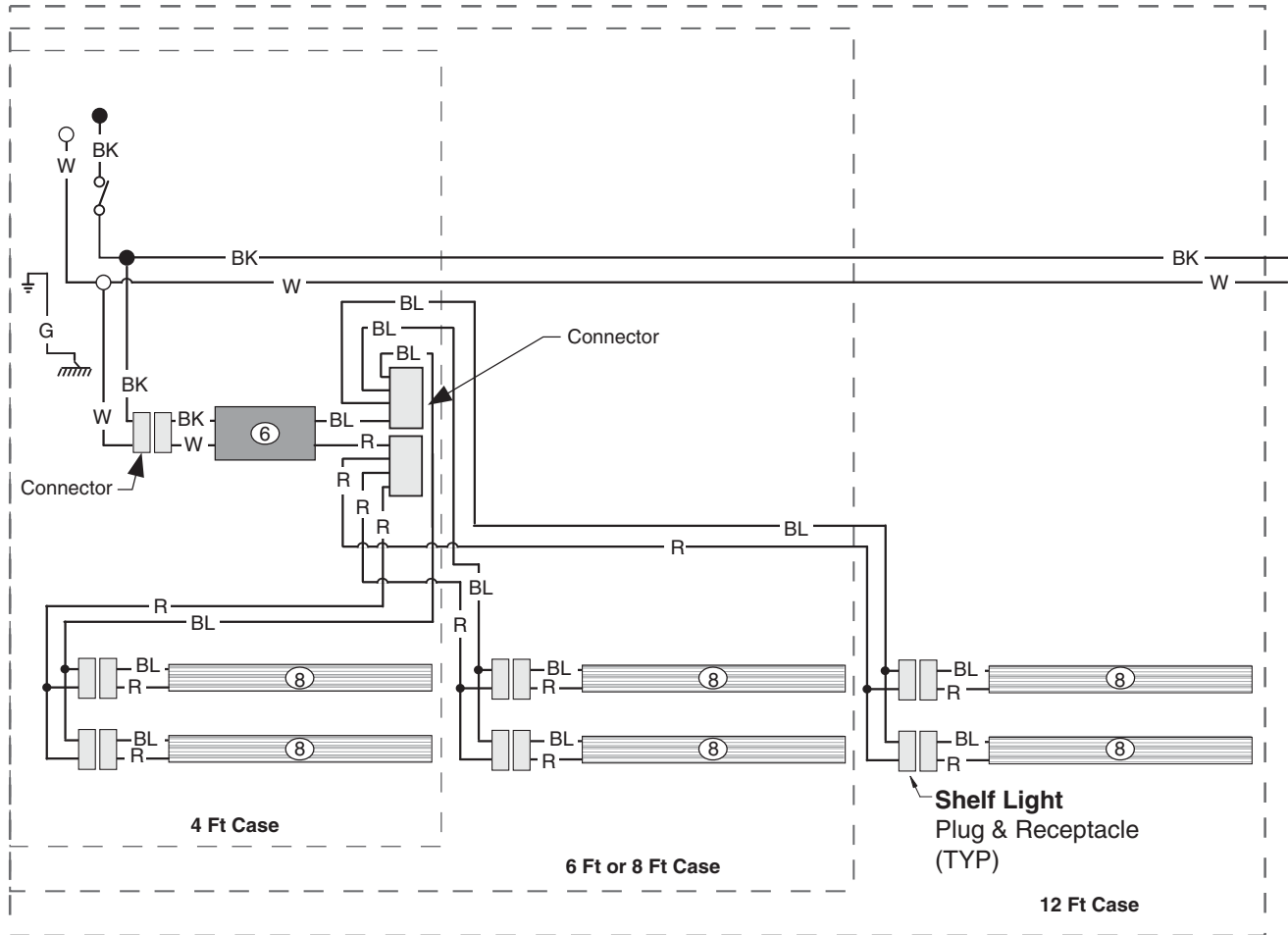
All components must have mechanical ground, and the merchandiser must be grounded.

Circled Numbers = Parts List Item Numbers

R = Red Y = Yellow G = Green BL = Blue BK = Black W = White

● = 120V Power ○ = 120V Neutral ⊥ = Field Ground ≡ = Case Ground

Optional Shelf Harness and LED Light Circuits for Two Rows of Shelves



WARNING

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

Circled Numbers = Parts List Item Numbers

R = Red Y = Yellow G = Green BL = Blue BK = Black W = White

● = 120V Power ○ = 120V Neutral ⊥ = Field Ground ≡ = Case Ground

SHELF CONFIGURATION

This merchandiser is designed for two shelves.

This illustration shows recommended shelf depth and shelf angle for the two locations.

It is critical to case performance that no product, shelf or stop extend beyond the load limit, as shown in this illustration. This configuration supports the air curtain and provides optimal case performance.

Check with Hussmann engineering before using a different configuration.

