

Item	Part #	Description	Wiring Item #	Item	Part #	Description	Wiring Item #
FAN A	SSEMBLIES AND	THERMOSTATS		LAMP	S AND BALLAST	s	
A.	4W Standard F	Fan Assembly	(1)	F.	0355716	Ballast, Electronic, 2	lamps (6)
	0392457	Fan Motor, Evaporate	or		0355398	Ballast, Electronic, 3	lamps
	0409513	Fan Blade					
		embossing toward mot	or	G.		Fluorescent Lamp	(7)
B.	0522287	High Efficiency Fan M	fotor, (2)			Replace with like fixtur	res
		Ambient (120V)					
C.	0411744	Standard Non-adjusta	ble (3)	LED 1	FIXTURES AND I	POWER SUPPLY	
		Defrost Thermostat		H.	0501213	Power Supply	(8)
D.	0137880	Optional Adjustable	(4)	J.		LED Canopy Fixture	(9)
		Refrigeration Thermo	stat			Replace with like fixtur	res
				K.		LED Rail Fixture	(10)
HEAT	ERS					Replace with like fixtur	res
E.	0496496	Heater, Anti-Sweat	(5)				

Data sheet-Elite ES1S

corresponding changes, improvements, additions or replacements for equipment previously sold or shipped.

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

Engineering

Plan Views

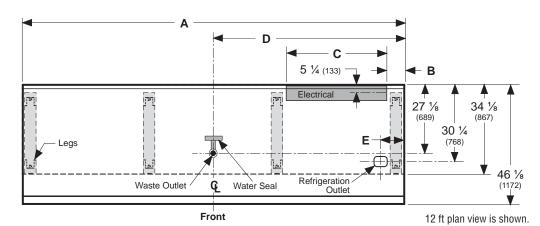
PHYSICAL DATA
Merchandiser Drip Pipe (in.)
Merchandiser Liquid Line (in.)
Merchandiser Suction Line (in.)

7/8

ES1S Delicatessen Precut & Packaged Produce

Dimensions shown as inches and (mm).

10-2005



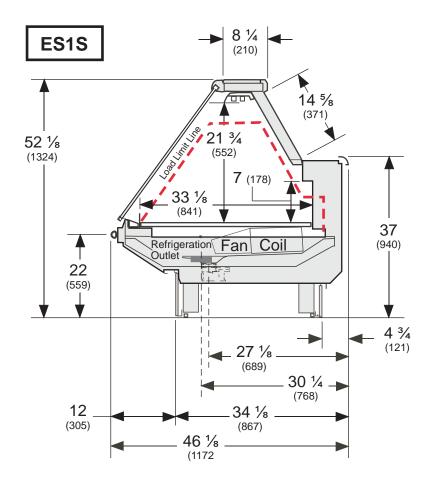
	6 ft	8 ft	12 ft
General			
(A) Case Length (without ends or partitions)	72 3/8 (1838)	96 3/8 (2448)	144 1/2 (3670)
(Each end and insulated partition adds 1 in. (25 mm) to case line up.)			
Maximum O/S dimension back to front (with bumper)	46 1/8 (1172)	46 1/8 (1172)	46 1/8 (1172)
Back of case to front of front panel	34 1/8 (867)	34 1/8 (867)	34 1/8 (867)
RH end of case to outside edge of external support	1 3/8 (35)	1 3/8 (35)	1 3/8 (35)
Distance between edges of			
external support and center support	28 1/2 (724)	40 1/2 (1029)	40 1/2 (1029)
Distance between edges of center supports	NA	NA	43 7/8 (1114)
Distance between edges of external supports	NA	NA	NA
Electrical Service (Electrical Field Wiring connection po	int)		
Electrical Service (Electrical Field Wiring connection pool) (C) Length of electrical raceway	26 (660)	38 (965)	38 (965)
RH End of case to center of farthest knockout	12 1/4 (311)	12 ¹ / ₄ (311)	12 1/4 (311)
Back of case to center of end knockout	5 1/4 (133)	5 ¹ / ₄ (133)	5 1/4 (133)
(B) RH End of case to RH end of raceway	6 7/8 (175)	6 ⁷ / ₈ (175)	6 7/8 (175)
(b) KIT End of case to KIT end of faceway	0 78 (173)	0 78 (173)	0 78 (173)
Waste Outlet ()			
(D) RH End of case to the center of waste outlet	24 1/8 (613)	24 1/8 (613)	72 1/4 (1835)
LH End of case to the center of waste outlet	48 1/4 (1226)	72 1/4 (1835)	72 1/4 (1835)
Back O/S of case to center of waste outlet	27 1/8 (689)	27 1/8 (689)	27 1/8 (689)
~			
Water Seal			
Edge of water seal to center of waste outlet	4 (102)	4 (102)	4 (102)
Outside diameter of the drip pipe	1 1/2 (38)	1 1/2 (38)	1 1/2 (38)
(Field installed water seal outlets, tees, and connectors			
are shipped with the merchandiser.)			
Refrigeration Outlet			
Back of case to center of refrigeration outlet	30 1/4 (768)	30 1/4 (768)	30 1/4 (768)
(E) RH end of case to center of refrigeration outlet	8 3/8 (213)	8 3/8 (213)	8 3/8 (213)
(-) refr end of case to conter of refrigeration outlet	0 70 (213)	0 70 (213)	0 70 (213)

DOE 2017
Energy Efficiency

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

Elite ES1S Delicatessen Precut & Packaged Produce

Dimensions shown as in. & (mm).



Estimated	l Charge **	,	ES1S
6 ft	1.2 lb	19 oz	0.5 kg
8 ft	1.5 lb	24 oz	0.7 kg
12 ft	2.0 lb	32 oz	1.9 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.

REFRIGERATION DATA

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

	ES1S§
Discharge Air (°F)	28
Evaporator (°F)	20
Unit Sizing (°F)	18

§ 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.

Btu/hr/ft	ES1S
Parallel	250
Conventional	270

DEFROST DATA

ES1S

Frequency (hr) 12
Defrost Water 0.8 lb/ft/day

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

ОFFTIME	ES1S
Temp Term (°F)	43
Failsafe (minutes)	90

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* ES1S Temp 13°F/3°F

Indoor Unit Only, Pressure Defrost Termination (Temp °F)* 43°F

*Use a Temperature Pressure Chart to determine PSIG conversions.

Elite ES1S

Delicatessen

Precut & Packaged Produce

Electrical Data

Number of Fans — 4W	2	2	3			
Number of Fans — 4W (Export)	2	2	3			
(Export: 230V 50 hz shown)						
Ambient Air Wipe — 4.5W	4	4	6			
		Amperes			Watts	
Merchandiser	6 ft	8 ft	12 ft	6 ft	8 ft	12 ft
Fans (Evaporator)						
120V 60Hz Standard	0.62	0.62	0.93	48	48	72
230V 50Hz Export	0.36	0.36	0.54	54	54	81
Fans (Ambient Air Wipe)						
120V 60Hz High Efficiency	0.2	0.2	0.3	9	9	13.5
230V 50Hz Export	0.3	0.3	0.45	50	50	75
Constant On Anti-sweat Heaters	0.26	0.26	0.39	32	32	48

6 ft

8 ft

12 ft

120V 50/60Hz Standard Fans 1.35 1.35 2.03 230V 50Hz Export Fans 0.83 0.83 1.24 20 20 20 **Maximum Over Current Protection**

230V 50Hz Export 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.

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Standard Lighting	(T-8 fluorescent)
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Minimum Circuit Ampacity

2 Rows Canopy	0.80	0.98	1.42	92	118	170
Optional Lighting (T-8 fluorescent)						
1 Row Ledge Lights	0.40	0.49	0.71	46	59	86
1 Row Rail Lights	0.40	0.49	0.71	46	59	86
EcoShine II IP67 LED						
Canopy 2 Row Front	0.23	0.33	0.49	28.2	39.5	59.3
Canopy 1 Row Front	0.12	0.16	0.25	14.1	19.8	29.7
1 Row Rail	0.12	0.16	0.25	14.1	19.8	29.7

115V Lighting Circuit Total = Standard Lighting + Total Optional Lighting + Optional Shelf Lighting

120V LED Lighting Circuit Total = Canopy Lighting + Shelf Lighting + Rail Lighting

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.

²³⁰V Lighting Circuit Total = Multiply 115V Lighting Circuit Total by 0.52

Elite ES1S

Delicatessen

Precut & Packaged Produce

Product Data

Recommended Usable Cube ¹ (Cu Ft/Ft)

AHRI Total Display Area ² (Sq Ft/Ft)

Shelf Area ³ (Sq Ft/Ft)

1.61 ft³/ft (0.15 m³/m) 3.51 ft²/ft (1.07 m²/m) 2.76 ft²/ft (0.84 m²/m)

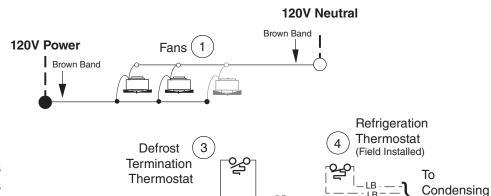
³ Shelf surface area is composed of bottom deck plus standard shelf complement, as shown in the Hussmann *Product Reference Guide*. The standard shelf complement for this model is NONE.

ESTIMATED SHIPPING WEIGHT 4						
Case				Solid End		
	6 ft	8 ft	12 ft	(each)		
$\mathbf{lb}\;(kg)$	700 (318)	1100 (499)	1200 (545)	100 (45)		
⁴ Actual weights will vary according to optional kits included.						

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]

Fan Wiring Offtime Defrost

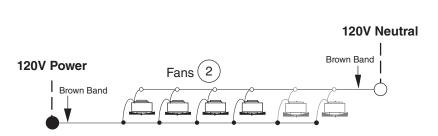


DB

6 Ft Case Has 2 Fans 8 Ft Case Has 2 Fans 12 Ft Case Has 3 Fans

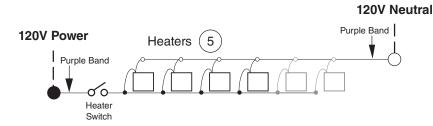
Ambient Fan Wiring Glass Air Wipe

6 Ft Case Has 4 Fans 8 Ft Case Has 4 Fans 12 Ft Case Has 6 Fans

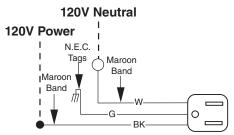


Ambient Heater Wiring

6 Ft Case Has 4 Heaters 8 Ft Case Has 4 Heaters 12 Ft Case Has 6 Heaters



Receptacles



Electric Service Receptacle

Unit

Fans

Heaters

WARNING

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

Circled Numbers = Parts List Item Numbers

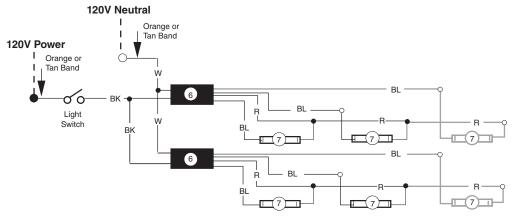
Grayed components in 12 foot models only.

R = Red G = Green BL = Blue LB = Light Blue DB = Dark Blue BK = Black W = White

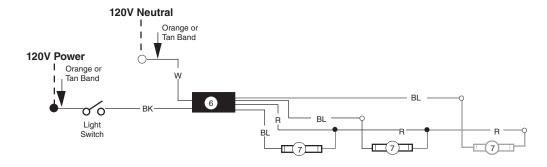
• = 120V Power \bigcirc = 120V Neutral \perp = Field Ground

// = Case Ground

Standard Lighting 2 Rows Canopy



Optional Lighting: 1 Row Ledge or 1 Row Rail



WARNING

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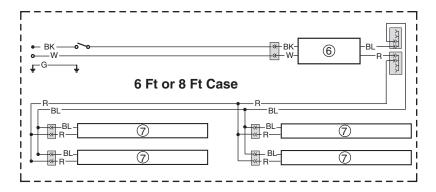
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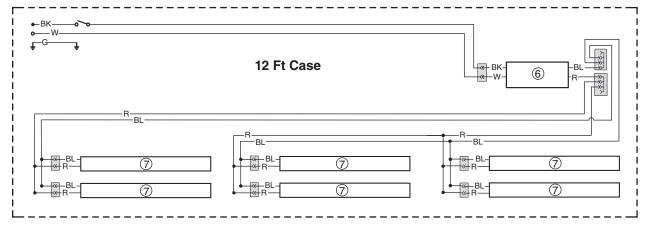
Grayed components in 12 foot models only.

• = 120V Power
$$\bigcirc$$
 = 120V Neutral \perp = Field Ground \rightarrow = Case Ground

Optional Lighting LED Fixtures

EcoShine II LED Canopy Lighting – 2 Row





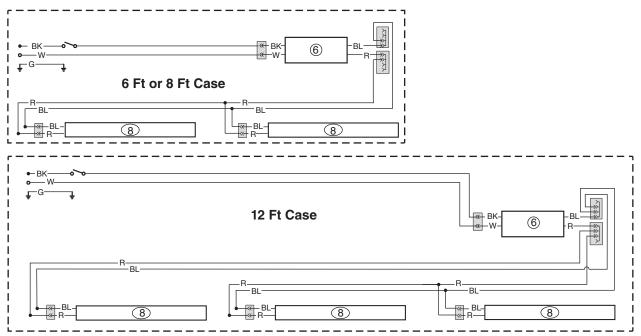
WARNING

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

Circled Numbers = Parts List Item Numbers

• = 120V Power
$$\bigcirc$$
 = 120V Neutral $\stackrel{\perp}{=}$ = Field Ground $\stackrel{\perp}{=}$ = Case Ground

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

• = 120V Power
$$\bigcirc$$
 = 120V Neutral \perp = Field Ground \perp = Case Ground