

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.

Item	Part #	Description	Wiring Item #	Item	Part #	Description	Wiring Item #
FAN ASSEMBLIES				LAMPS AND BALLASTS			
4 Ft, 8 Ft, 10 Ft† & 12 Ft				D.	Ballast, Electronic		(4)
A.	12W Standard Energy Efficient Fan Assembly	(1)	0480130	2 lamps (BA.4481676)			
	0477655	Fan Motor, Evaporator (MO.4410546)	0480131	3 lamps (BA.4481654)			
	0461805	Fan Blade (FB.4780446)	0480132	4 lamps (BA.4481677)			
6 Ft and 10 Ft† Only				E.	Fluorescent Lamp		(5)
A.	7W Standard Energy Efficient Fan Assembly	(1)		<i>Replace with like fixtures</i>			
	0477654	Fan Motor, Evaporator (MO.4410545)		LED FIXTURES AND POWER SUPPLY			
	0142780	Fan Blade (FB.0142780)		F.	0501213	Power Supply (EP.4481861)	(6)
THERMOSTATS				G.		LED Canopy Fixture	(7)
B.	0411744	Standard Non-adjustable Defrost Thermostat (CT.0411744)	(2)	<i>Replace with like fixtures.</i>			
C.		Optional Adjustable Refrigeration Thermostat	(3)	H.		LED Shelf Fixture	(8)
				<i>Replace with like fixtures.</i>			

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 WWW.HUSSMANN.COM/SERVICEANDPARTS.

†10 Ft uses both.

Note: Revision J adds optional EcoShine II LED rail light, pages 4 and 8; removes discontinued LED data; and revises optional LED shelf light wiring diagrams, pages 9 and 10. Other changes marked by bar, underline or circle.



Engineering Plan Views

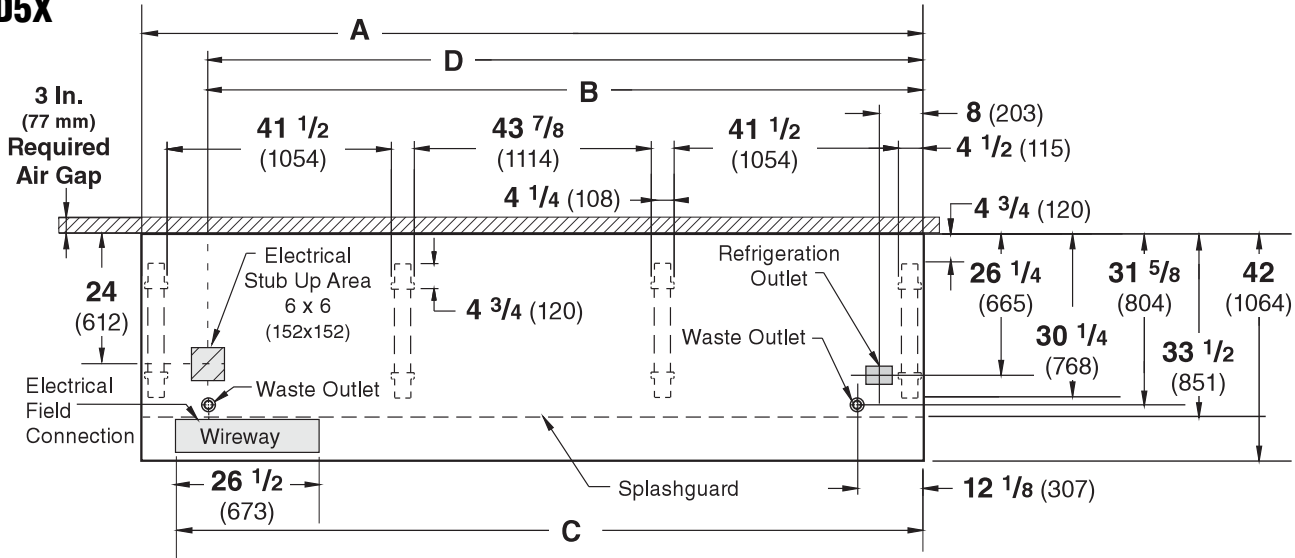
PHYSICAL DATA	
Merchandiser Drip Pipe (in.)	1 1/4
Merchandiser Liquid Line (in.)	3/8
Merchandiser Suction Line (in.)	7/8

Dairy & Delicatessen

09-2004

Dimensions shown as in. and (mm).

D5X



NOTE: Case-to-Case Electrical Connections are made IN FRONT OF SPLASHGUARD.

FRONT

	4 ft	6 ft	8 ft	10 ft	12 ft
General					
(A) Case Length (without ends or partitions) <i>(Each end and insulated partition adds 1 1/2 in. (38 mm) to case line up.)</i>	48 3/8 (1229)	72 3/8 (1838)	96 3/8 (2448)	120 1/2 (3061)	144 1/2 (3670)
Maximum O/S dimension of case back to front <i>(includes bumper)</i>	42 (1064)	42 (1064)	42 (1064)	42 (1064)	42 (1064)
Back of case to front of splashguard	33 1/2 (851)	33 1/2 (851)	33 1/2 (851)	33 1/2 (851)	33 1/2 (851)
Back of case to O/S edge of front leg	30 1/4 (768)	30 1/4 (768)	30 1/4 (768)	30 1/4 (768)	30 1/4 (768)
Distance between edges of external legs and center legs	NA	29 1/2 (750)	41 1/2 (1054)	29 1/2 (749)	41 1/2 (1054)
Distance between edges of center legs	NA	NA	NA	43 7/8 (1114)	43 7/8 (1114)
Distance between front legs and splashguard	2 3/4 (70)	2 3/4 (70)	2 3/4 (70)	2 3/4 (70)	2 3/4 (70)
Electrical Service <input checked="" type="checkbox"/> <i>(Electrical Field Wiring connection point)</i>					
(B) RH End of case to center of stub up area	36 1/4 (921)	60 1/4 (1530)	84 1/4 (2140)	108 1/4 (2750)	132 3/8 (3363)
Back of case to center of stub up area	24 (612)	24 (612)	24 (612)	24 (612)	24 (612)
Length of electrical wireway <input type="checkbox"/> Wireway	26 1/2 (673)	26 1/2 (673)	26 1/2 (673)	26 1/2 (673)	26 1/2 (673)
(C) RH End of case to LH end of wireway	42 1/8 (1070)	66 1/8 (1680)	90 1/8 (2289)	114 1/4 (2092)	138 1/4 (3511)
Waste Outlets (One each end) <input checked="" type="checkbox"/>					
(D) RH End of case to the center of LH waste outlet	36 1/4 (921)	60 1/4 (1530)	84 1/4 (2140)	108 1/4 (2750)	132 3/8 (3363)
RH End of case to the center of RH waste outlet	12 1/8 (307)	12 1/8 (307)	12 1/8 (307)	12 1/8 (307)	12 1/8 (307)
Back O/S of case to center of waste outlets	31 5/8 (804)	31 5/8 (804)	31 5/8 (804)	31 5/8 (804)	31 5/8 (804)
Schedule 40 PVC drip pipe	1 1/4 (32)	1 1/4 (32)	1 1/4 (32)	1 1/4 (32)	1 1/4 (32)
Refrigeration Outlet <input type="checkbox"/>					
Back of case to center of refrigeration outlet	26 1/4 (665)	26 1/4 (665)	26 1/4 (665)	26 1/4 (665)	26 1/4 (665)
RH end of case to center of refrigeration outlet	8 (203)	8 (203)	8 (203)	8 (203)	8 (203)

Multi-deck, 5 Display Levels, Low Front



Hussmann refrigerated merchandisers configured for sale for use in the United States meet or surpass the requirements of the DOE 2012 energy efficiency standards.

Excel D5X-LE
Dairy & Delicatessen

REFRIGERATION DATA

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

	D5X-LE
Discharge Air °F	32
Evaporator °F	24
Unit Sizing °F	22

Btu/hr/ft — Unlit Shelves†

	D5X-LE	Parallel	Conventional
UNLIT	1398		1488
PEG*	1518		1608

* Hussmann Peg Shelves (Deli only).

† Add 10 Btu/hr/ft per shelf row for LED fixtures.
Add 20 Btu/hr/ft per shelf row for fluorescent lamps.

DEFROST DATA

Frequency Hr	6
Defrost Water (lb/ft/day)	10.25
(± 15% based on case configuration and product loading).	

<i>OFFTIME</i>	D5X-LE
Temp Term °F	48
Failsafe Minutes	35

ELECTRIC OR GAS Not Recommended

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

CONVENTIONAL CONTROLS

Low Pressure Backup Control
C/CO** **D5X-LE**
17°F / 7°F

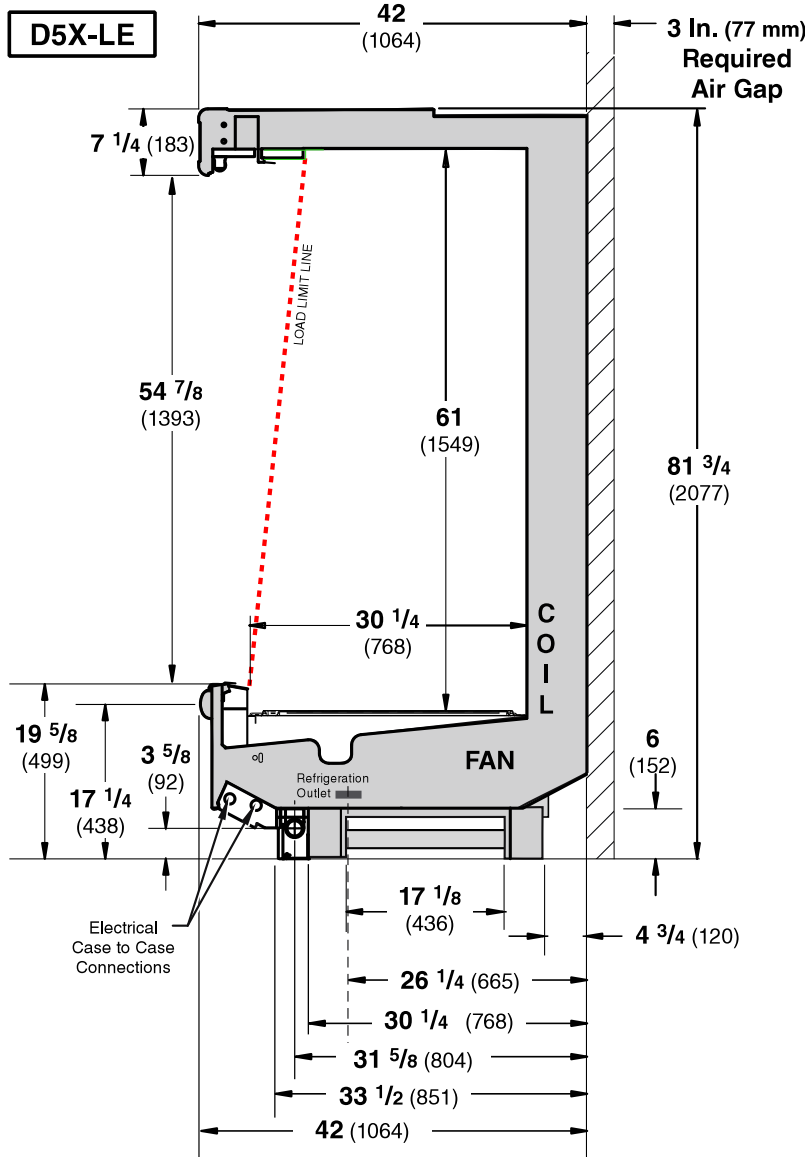
Indoor Unit Only, Pressure Defrost
Termination** 48°F

**Use a Temperature Pressure Chart to determine PSIG conversions.

Estimated Charge **		D5X-LE
4 ft	1.4 lb	22 oz 0.6 kg
6 ft	1.9 lb	30 oz 0.9 kg
8 ft	2.7 lb	43 oz 1.2 kg
10 ft	3.2 lb	51 oz 1.5 kg
12 ft	3.9 lb	62 oz 1.8 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. and (mm).



NSF Certification

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

Excel **D5X-LE**

Dairy & Delicatessen

Electrical Data

	4 ft	6 ft	8 ft	10 ft	12 ft					
Number of Fans – 12W	1	—	2	1	3					
Number of Fans – 7W	—	2	—	2	—					
	Amperes					Watts				
Evaporator Fans	4 ft	6 ft	8 ft	10 ft	12 ft	4 ft	6 ft	8 ft	10 ft	12 ft
120V 50/60Hz Energy Efficient	0.30	0.38	0.60	0.68	0.90	18	28	36	46	54
230V 50/60Hz Energy Efficient	0.15	0.20	0.30	0.35	0.45	18	28	36	46	54
230V 50/60Hz Export	0.33	0.50	0.66	0.83	0.99	50	78	100	128	150
230V 50/60Hz Export	0.38	0.56	0.76	0.94	1.14	57	84	114	141	171
Minimum Circuit Ampacity										
120V 50/60Hz Energy Efficient	0.50	0.58	0.80	0.88	1.10					
230V 50/60Hz Energy Efficient	0.35	0.40	0.50	0.55	0.65					
230V 50/60Hz Export	0.53	0.70	0.86	1.03	1.19					
230V 50/60Hz Export	0.58	0.76	0.96	1.14	1.34					
Maximum Over Current Protection 120V	20	20	20	20	20					
Maximum Over Current Protection 230V	15	15	15	15	15					
Standard Lighting (T-8 fluorescent)										
1 Row Canopy	0.26	0.51	0.51	0.77	0.77	30	59	59	85	85

Optional Lighting

ONLY LIGHTING CONFIGURATIONS THAT ARE COMPLIANT WITH THE U.S. DEPT. OF ENERGY (DOE) 2012 REGULATION ARE AVAILABLE FOR SALE FOR USE IN THE U.S.A.

T-8 fluorescent

Additional 1 Row Canopy	0.26	0.51	0.51	0.77	0.77	30	59	59	85	85
Additional 2 Row Canopy	0.51	1.02	1.02	1.54	1.54	59	118	118	170	170
Additional 3 Row Canopy	0.77	1.53	1.53	2.31	2.31	89	177	177	255	255
1 Row Rail Light	0.26	0.51	0.51	0.77	0.77	30	59	59	85	85
1 Row of Shelves	0.26	0.51	0.51	0.77	0.77	30	59	59	85	85
4 Rows of Shelves	1.02	2.04	2.04	3.08	3.08	118	236	236	340	340
5 Rows of Shelves	1.28	2.55	2.55	3.85	3.85	148	295	295	425	425
6 Rows of Shelves	1.53	3.06	3.06	4.62	4.62	177	354	354	510	510

Ecoshine II Canopy

1 Row Ecoshine II	0.26	0.37	0.51	—	0.77	30.8	44.2	61.6	—	92.4
1 Row Ecoshine II Plus	0.23	0.35	0.46	—	0.70	27.8	41.4	55.6	—	83.4
1 Row Ecoshine II Plus HO	0.28	0.42	0.56	—	0.84	34.0	50.5	67.2	—	100.8

Ecoshine II Plus Rail Light —1 Row

	0.09	0.13	0.17	—	0.26	10.2	15.3	20.5	—	30.7
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Ecoshine II Plus Shelf

1 Row of Shelves	0.09	0.13	0.17	—	0.26	10.2	15.3	20.5	—	30.7
4 Rows of Shelves	0.34	0.51	0.68	—	1.02	40.9	61.4	81.9	—	122.8
5 Rows of Shelves	0.43	0.64	0.85	—	1.28	51.2	76.7	102.3	—	153.5
6 Rows of Shelves	0.51	0.77	1.02	—	1.53	61.4	92.1	122.8	—	184.2

120V Lighting Circuit Total = Standard Lighting + Total Optional Lighting + Optional Shelf Lighting

120V EcoShine LED Lighting Circuit Total = Total Canopy Lighting + Optional Mullion Lighting

230V Lighting Circuit Total = Multiply 120V Lighting Circuit Total by 0.52

Product Data

<i>Recommended Usable Cube</i> ¹ (Cu Ft/Ft)	9.39 ft ³ /ft (0.87 m ³ /m)
<i>AHRI Total Display Area</i> ² (Sq Ft/Ft)	4.58 ft ² /ft (1.40 m ² /m)
<i>Shelf Area</i> ³ (Sq Ft/Ft)	9.89 ft ² /ft (3.02 m ² /m)

- 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 (4) rows of 22-inch shelves.

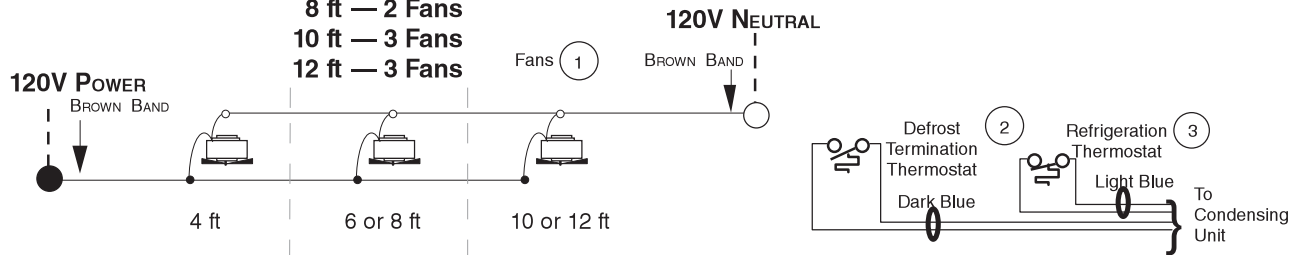
ESTIMATED SHIPPING WEIGHT ⁴						
Case	<i>4 ft</i>	<i>6 ft</i>	<i>8 ft</i>	<i>10 ft</i>	<i>12 ft</i>	Solid End
						<i>(each)</i>
lb (kg)	800 (363)	1000 (454)	1200 (544)	1300 (590)	1400 (635)	100 (45)

⁴ Actual weights will vary according to optional kits included.

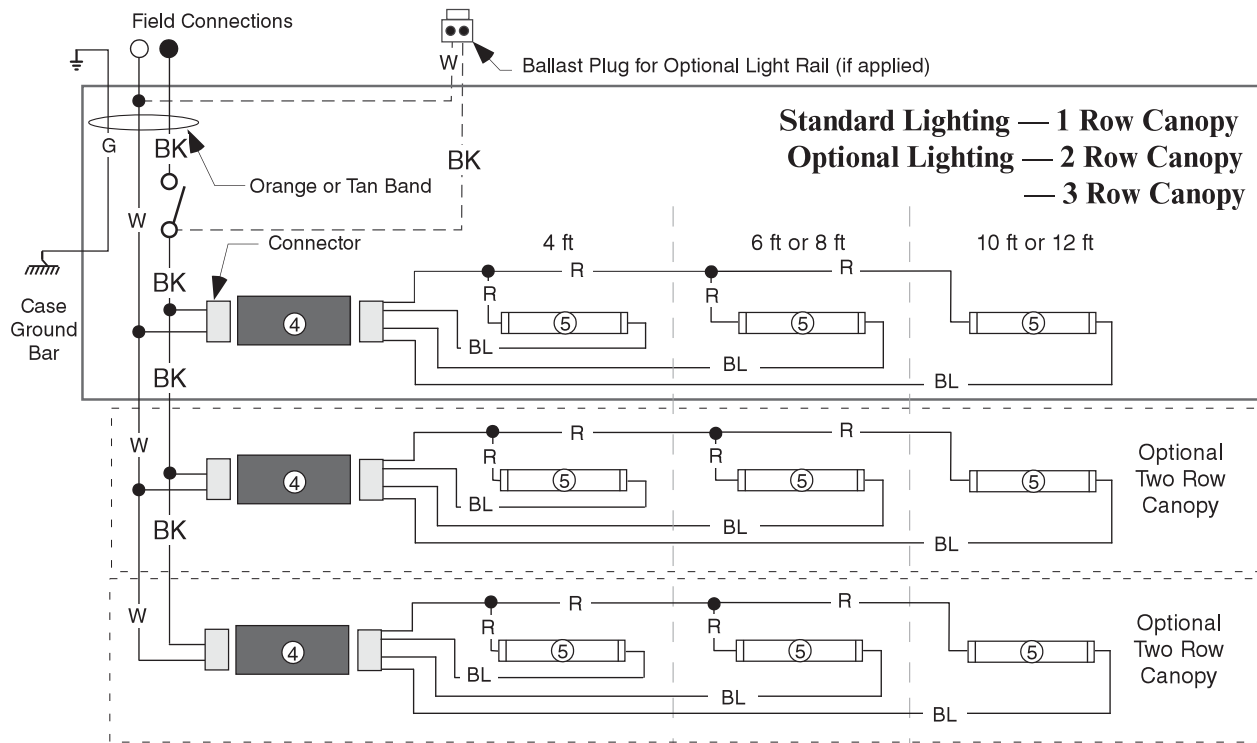
Fan Wiring Offtime Defrost

1, 2 & 3 Fans

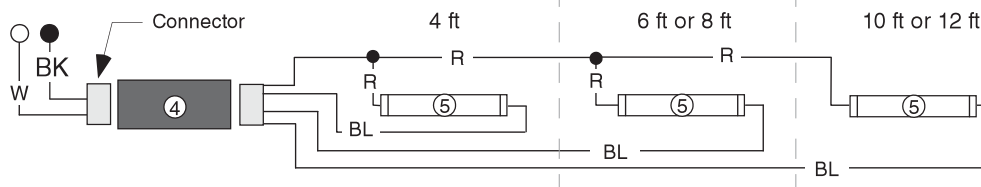
4 ft — 1 Fan
6 ft — 2 Fans
8 ft — 2 Fans
10 ft — 3 Fans
12 ft — 3 Fans



Canopy Light Circuits — Fluorescent Fixtures



Optional Lighting — 1 Row Rail



WARNING

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

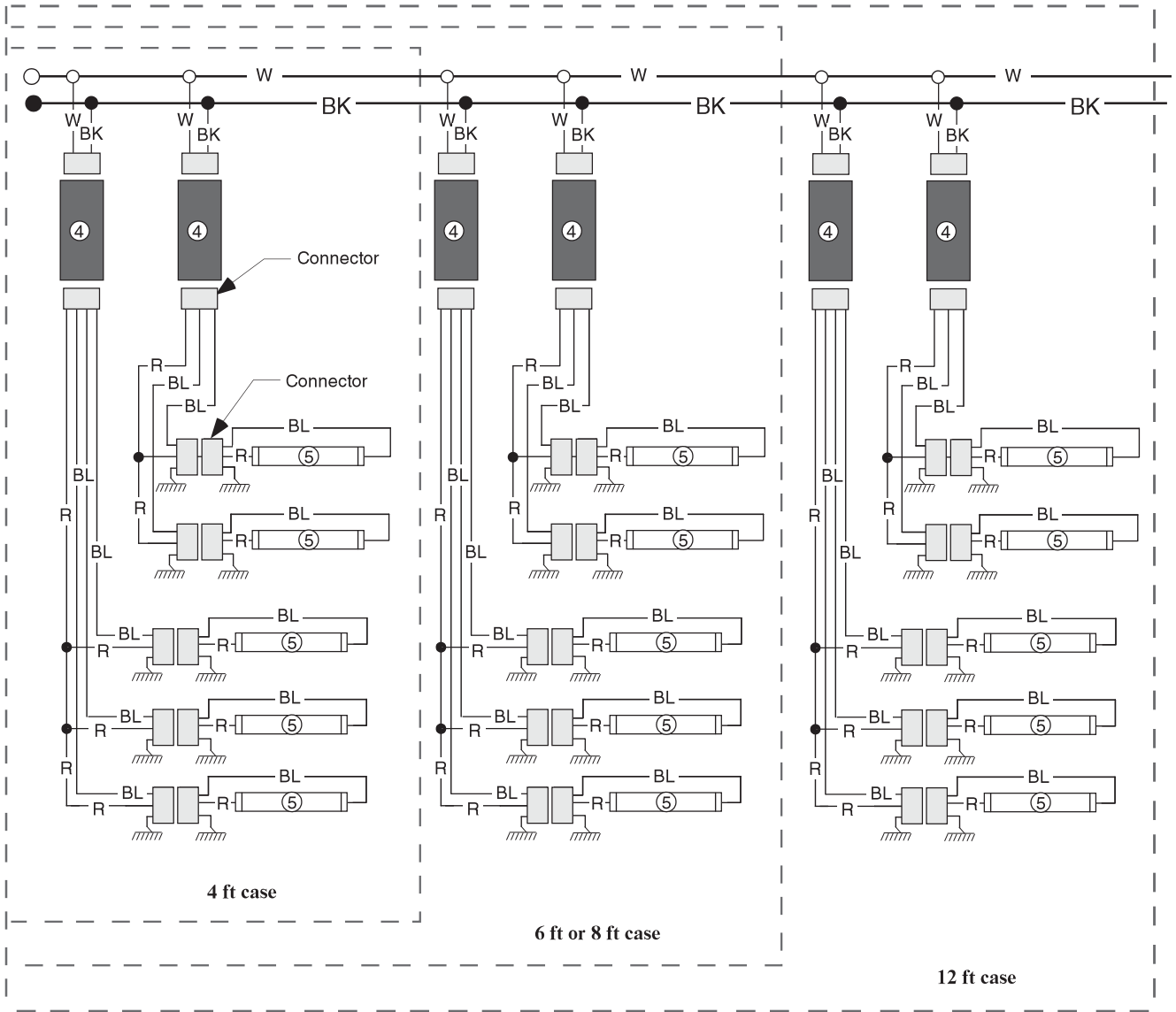
CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS

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

● = 120V POWER ○ = 120V NEUTRAL ⊥ = FIELD GROUND ⏏ = CASE GROUND

Optional Shelf Lighting Fluorescent Fixtures

Optional Shelf Harness and Light Circuits for Five Rows of Shelves



WARNING

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

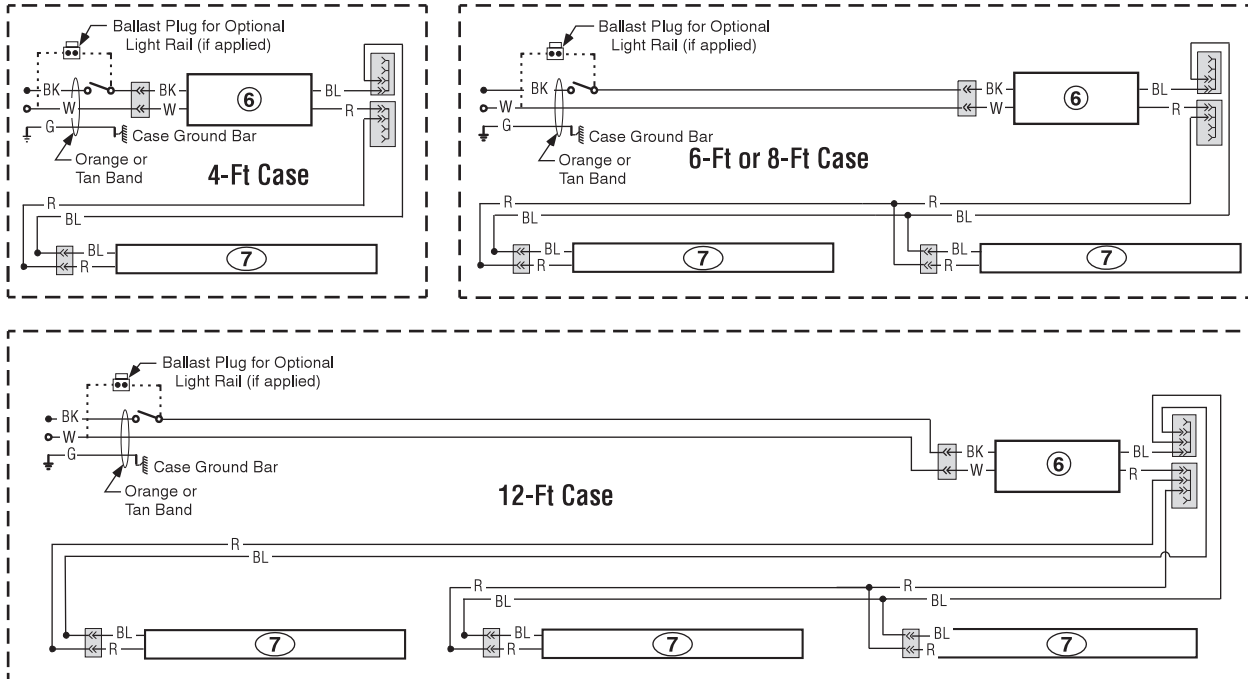
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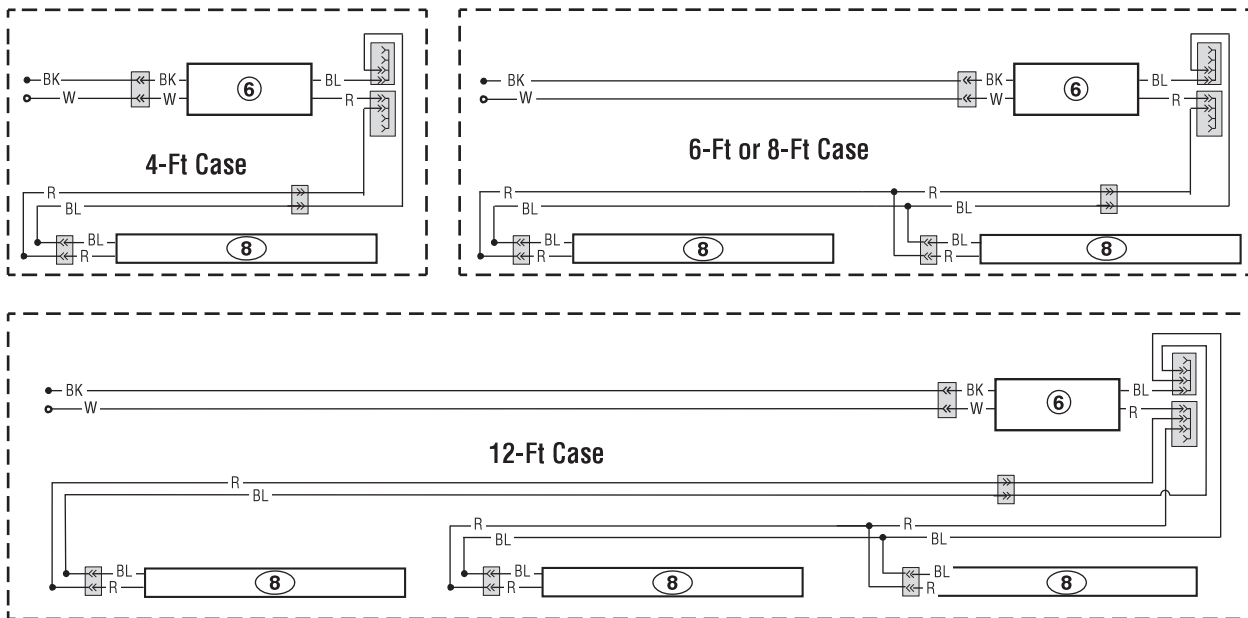
● = 120V POWER ○ = 120V NEUTRAL ⊥ = FIELD GROUND ≡ = CASE GROUND

Optional Canopy and Rail Light Circuits — LED Fixtures

EcoShine II LED Canopy Lighting — 1 Row



EcoShine II LED Rail Lighting — 1 Row



WARNING

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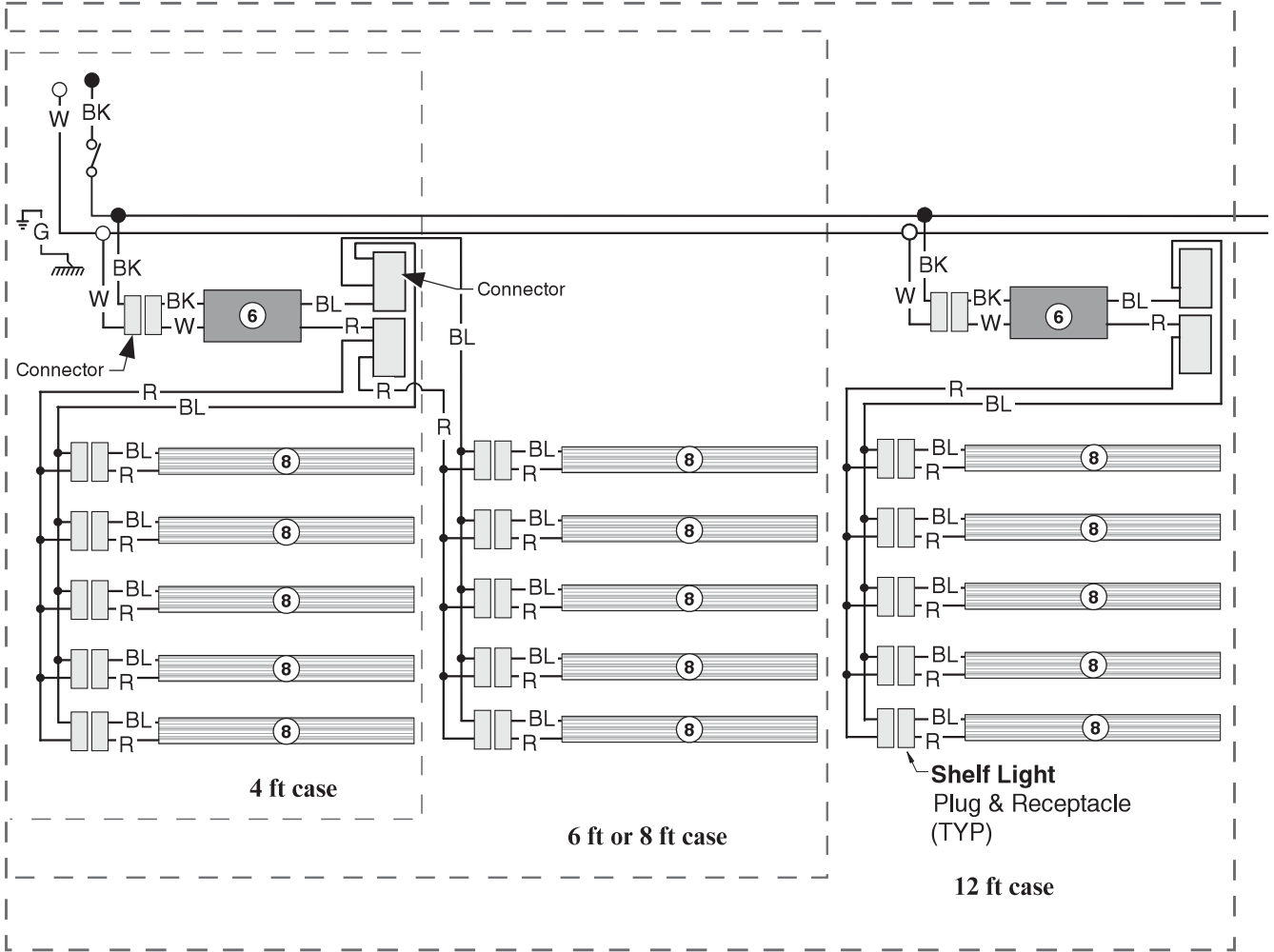
CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS

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

● = 120V POWER ○ = 120V NEUTRAL ⊥ = FIELD GROUND ≡ = CASE GROUND

Optional Shelf Lighting LED Fixtures

Optional 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.

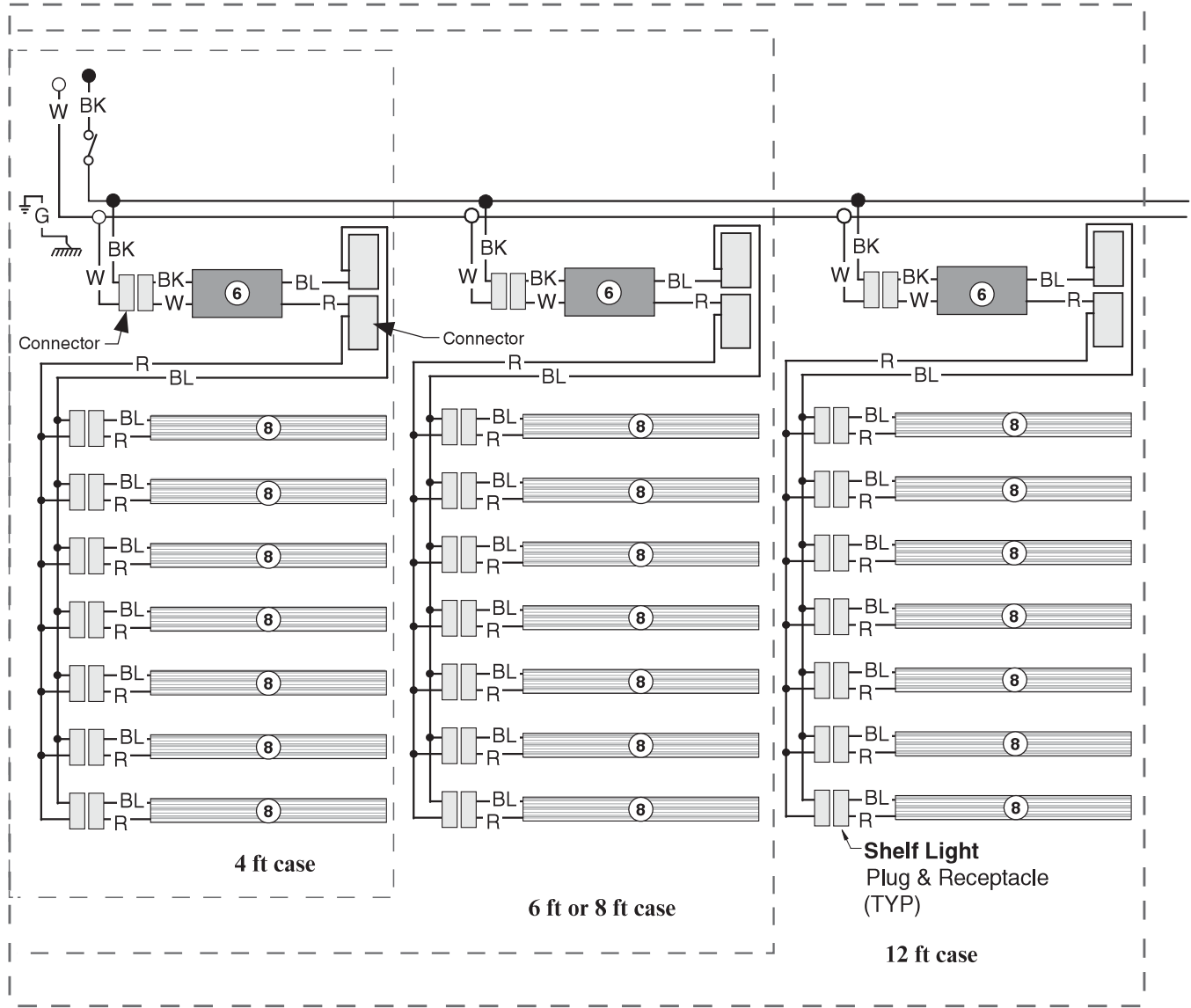
CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS

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

● = 80V POWER ○ = 80V NEUTRAL ⚡ = FIELD GROUND ⏏ = CASE GROUND

Optional Shelf Lighting LED Fixtures

Optional 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.

CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS

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

● = 80V POWER ○ = 80V NEUTRAL ⚡ = FIELD GROUND $\overline{\text{mm}}$ = CASE GROUND