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Item	Part #	Description	Wiring Item #	Item	Part #	Description	Wiring Item #
FAN ASSEMBLIES				THERMOSTATS			
4 Ft, 8 Ft & 12 Ft				B. Optional Adjustable Refrigeration Thermostat (2)			
A.	12W Standard	Fan Assembly	(1)	LAMPS AND BALLASTS,			
	0047000	Fan Motor, Evaporator (MO.4410103)		C.	Ballast, Electronic		(3)
	0461805	Fan Blade (FB.4780446)			0480130	2 lamps (BA.4481676)	
	12W Energy Efficient	Fan Assembly	(1)		0480131	3 lamps (BA.4481654)	
	0477655	Fan Motor, Evaporator (MO.4410546)			0480132	4 lamps (BA.4481677)	
	0461805	Fan Blade (FB.4780446)		D.	Fluorescent Lamp		(4)
6 Ft Only						<i>Replace with like fixtures</i>	
A.	7W Standard	Fan Assembly	(1)	LED FIXTURES AND POWER SUPPLY			
	0058698	Fan Motor, Evaporator (MO.4410102)		E.	0501213	Power Supply (EP.4481861)	(5)
	0142780	Fan Blade (FB.0142780)		F.	LED Shelf Fixture		(6)
	7W Energy Efficient	Fan Assembly	(1)			<i>Replace with like fixtures — see page 5</i>	
	0477654	Fan Motor, Evaporator (MO.4410545)		G.	LED Canopy Fixture		(7)
	0142780	Fan Blade (FB.0142780)				<i>Replace with like fixtures — see page 5</i>	

Note: Revision A is original issue



Engineering Plan Views

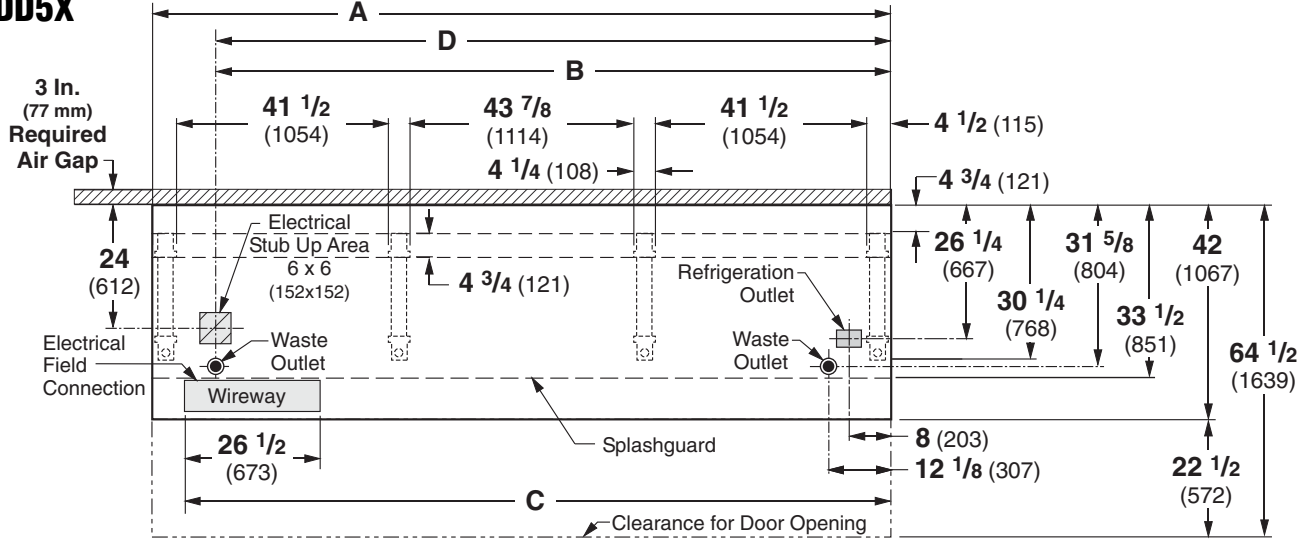
PHYSICAL DATA	
Merchandiser Drip Pipe (in.)	1 1/4
Merchandiser Liquid Line (in.)	3/8
Merchandiser Suction Line (in.)	7/8

Dairy & Delicatessen

07-2009

Dimensions shown as in. and (mm).

DD5X



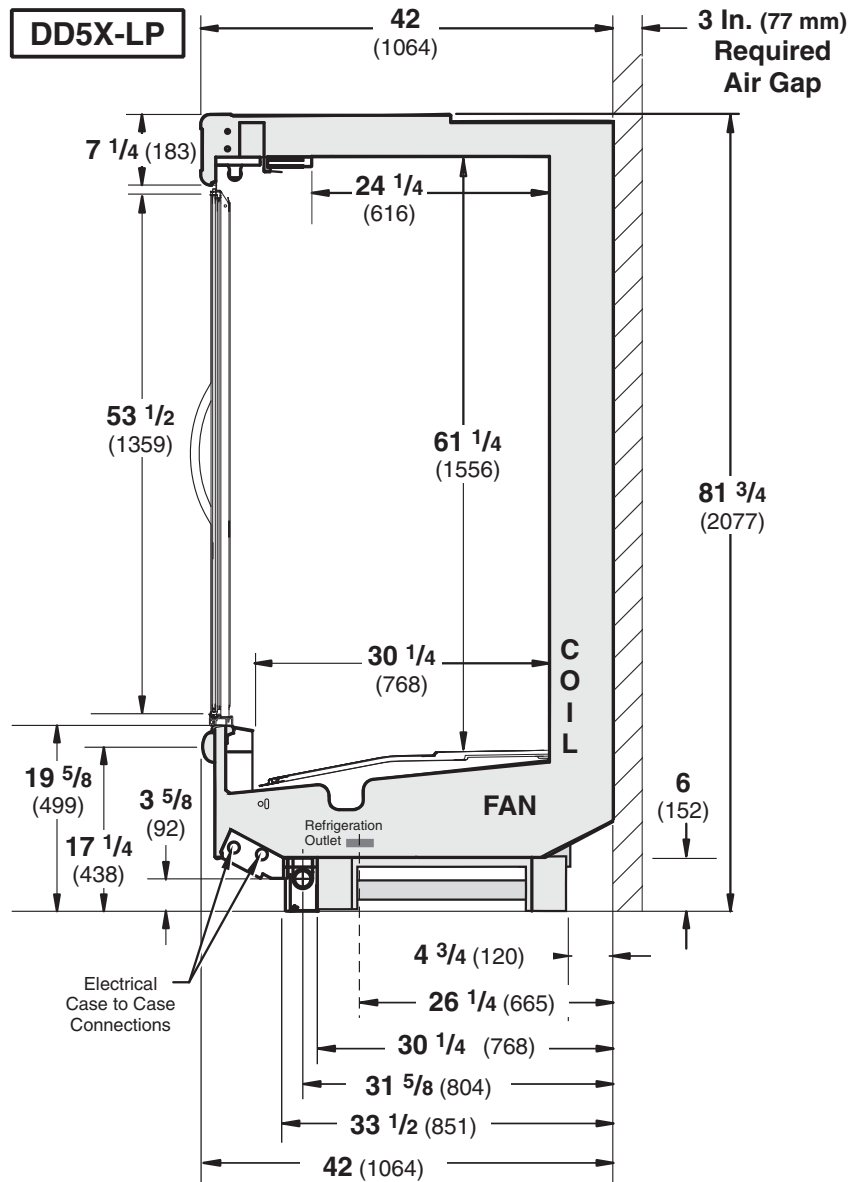
NOTE: Case-to-Case Electrical Connections are made IN FRONT OF SPLASHGUARD.

FRONT

	4 ft	6 ft	8 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)	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)
Back of case to front of splashguard	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)
Distance between edges of external legs and center legs	NA	29 1/2 (750)	41 1/2 (1054)	41 1/2 (1054)
Distance between edges of center legs	NA	NA	NA	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)
Electrical Service <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)	132 3/8 (3363)
Back of case to center of stub up area	24 (612)	24 (612)	24 (612)	24 (612)
Length of electrical wireway	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)	138 1/4 (3511)
Waste Outlets <i>(One each end)</i>				
(D) RH End of case to the center of LH waste outlet	36 1/4 (921)	60 1/4 (1530)	84 1/4 (2140)	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)
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)
Schedule 40 PVC drip pipe	1 1/4 (32)	1 1/4 (32)	1 1/4 (32)	1 1/4 (32)
Refrigeration Outlet				
Back of case to center of refrigeration outlet	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)

Multi-deck with Doors, 5 Display Levels, Low Front

Dimensions shown as in. and (mm).



Impact *Excel* DD5X-LP
Dairy & Delicatessen

REFRIGERATION DATA

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

DD5X-LP	UNLIT	LIT	PEG*
Discharge Air °F	39	39	39
Evaporator °F	34	32	32
Unit Sizing °F	32	30	30

Btu/hr/ft[‡] — Unlit Shelves^{‡‡}

DD5X-LP	Parallel	Conventional
UNLIT	295	300
PEG*	330	336

* Hussmann Peg Shelves (Deli only).

[‡]Optional energy efficient motors reduce the refrigeration load by 27 Btu/hr/ft (4 ft, 8 ft, and 12 ft models) and 28 Btu/hr/ft (6 ft model).
^{‡‡} 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	24
Defrost Water (lb/ft/day)	1.0
(± 15% based on case configuration and product loading).	

OFFTIME	DD5X-LP
Time (minutes)	25

ELECTRIC OR GAS Not Recommended

CONVENTIONAL CONTROLS

Low Pressure Backup Control	
CI/CO**	DD5X-LP
	15°F / 15°F

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

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

Estimated Charge***	DD5X-LP		
4 ft	1.9 lb	30 oz	0.9 kg
6 ft	2.8 lb	45 oz	1.3 kg
8 ft	3.7 lb	59 oz	1.7 kg
12 ft	5.1 lb	82 oz	2.3 kg

***This is an average for all refrigerant types. Actual refrigerant charge may vary by approximately half a pound.

NSF Certification

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

Impact *Excel* DD5X-LP

Dairy & Delicatessen

Electrical Data

	4 ft	6 ft	8 ft	12 ft				
Number of Fans – 12W	1	—	2	3				
Number of Fans – 7W	—	2	—	—				
	Amperes				Watts			
	4 ft	6 ft	8 ft	12 ft	4 ft	6 ft	8 ft	12 ft
Evaporator Fans								
120V 60Hz Standard	0.65	1.00	1.30	1.95	50	78	100	150
120V 50Hz Standard	0.75	1.10	1.50	2.25	57	84	114	171
230V 60Hz Export	0.33	0.50	0.66	0.99	50	78	100	150
230V 50Hz Export	0.38	0.56	0.76	1.14	57	84	114	171
120V 60Hz Energy Efficient	0.30	0.38	0.60	0.90	18	28	36	54
230V 60Hz Energy Efficient	0.15	0.20	0.30	0.45	18	28	36	54
Minimum Circuit Ampacity								
120V 60Hz Standard	0.85	1.20	1.50	2.15				
120V 50Hz Standard	0.95	1.30	1.70	2.45				
230V 60Hz Export	0.53	0.70	0.86	1.19				
230V 50Hz Export	0.58	0.76	0.96	1.34				
120V 60Hz Energy Efficient	0.50	0.58	0.80	1.10				
230V 60Hz Energy Efficient	0.35	0.40	0.50	0.65				
Maximum Over Current Protection 120V								
Maximum Over Current Protection 120V	20	20	20	20				
Maximum Over Current Protection 230V								
Maximum Over Current Protection 230V	15	15	15	15				
Standard Lighting (T-8 fluorescent)								
1 Row Canopy	0.26	0.51	0.51	0.77	30	59	59	85
Optional Lighting (T-8 fluorescent)								
Additional 1 Row Canopy	0.26	0.51	0.51	0.77	30	59	59	85
Additional 2 Row Canopy	0.51	1.02	1.02	1.54	59	118	118	170
Additional 3 Row Canopy	0.77	1.53	1.53	2.31	89	177	177	255
1 Row of Shelves	0.26	0.51	0.51	0.77	30	59	59	85
4 Rows of Shelves	1.02	2.04	2.04	3.08	118	236	236	340
5 Rows of Shelves	1.28	2.55	2.55	3.85	148	295	295	425
6 Rows of Shelves	1.53	3.06	3.06	4.62	177	354	354	510
Optional LED Lighting — EcoShine CRI — 120VAC, 50/60Hz								
2 Row Canopy	0.28	0.41	0.55	0.82	33	49	66	98
1 Rows of Shelves	0.10	0.15	0.20	0.29	12	18	24	35
4 Rows of Shelves	0.39	0.58	0.78	1.17	47	70	93	140
5 Rows of Shelves	0.48	0.73	0.97	1.45	58	87	116	174
6 Rows of Shelves	0.58	0.88	1.17	1.74	70	105	140	209
Optional LED Lighting — EcoShine High CRI — 120VAC, 50/60Hz								
2 Row Canopy	0.31	0.47	0.62	0.93	37	56	74	112
1 Rows of Shelves	0.12	0.18	0.23	0.35	14	21	28	42
4 Rows of Shelves	0.47	0.70	0.93	1.40	56	84	112	168
5 Rows of Shelves	0.58	0.88	1.17	1.75	70	105	140	210
6 Rows of Shelves	0.70	1.05	1.40	2.10	84	126	168	252

120V Lighting Circuit Total = Standard Lighting + Total Optional Lighting + Optional Shelf 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)	4.40 ft ² /ft (1.34 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>12 ft</i>	Solid End
					<i>(each)</i>
lb (kg)	860 (390)	1070 (485)	1310 (594)	1560 (708)	100 (45)

⁴ Actual weights will vary according to optional kits included.

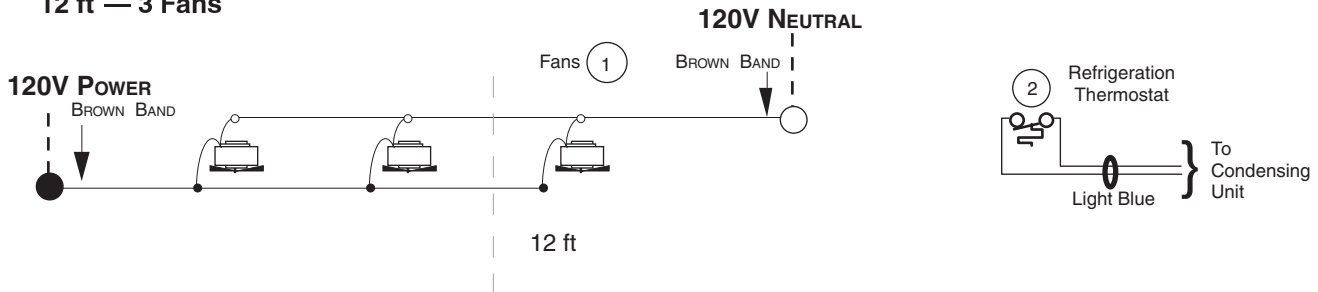
PARTS LIST (Continued from Page 1)								
Item	Part #	Description			Item	Part #	Description	
LED FIXTURES AND POWER SUPPLY								
E.	0501213	Power Supply (EP.4481861)		(5)	F.	(CONTINUED) EcoShine LED Canopy Fixture		
F.	EcoShine LED Canopy Fixture			(6)	4441713	Rear	36-inch	2900K HCRI
	4441720	Front	48-inch	2900K HCRI	4441715	Rear	36-inch	3500K HCRI
	4441722	Front	48-inch	3500K HCRI	4441717	Rear	36-inch	3500K
	4441724	Front	48-inch	3500K	4441719	Rear	36-inch	4100K
	4441726	Front	48-inch	4100K	G.	EcoShine LED Shelf Fixture		
	4441721	Rear	48-inch	2900K HCRI	4441590	48-inch	2900K HCRI	(7)
	4441723	Rear	48-inch	3500K HCRI	4441591	48-inch	3500K HCRI	
	4441725	Rear	48-inch	3500K	4441592	48-inch	3500K	
	4441727	Rear	48-inch	4100K	4441593	48-inch	4100K	
	4441712	Front	36-inch	2900K HCRI	4441586	36-inch	2900K HCRI	
	4441714	Front	36-inch	3500K HCRI	4441587	36-inch	3500K HCRI	
	4441716	Front	36-inch	3500K	4441588	36-inch	3500K	
	4441718	Front	36-inch	4100K	4441589	36-inch	4100K	

Note: Always*Bright lamps will be replaced with the latest generation of EcoShine lamps.

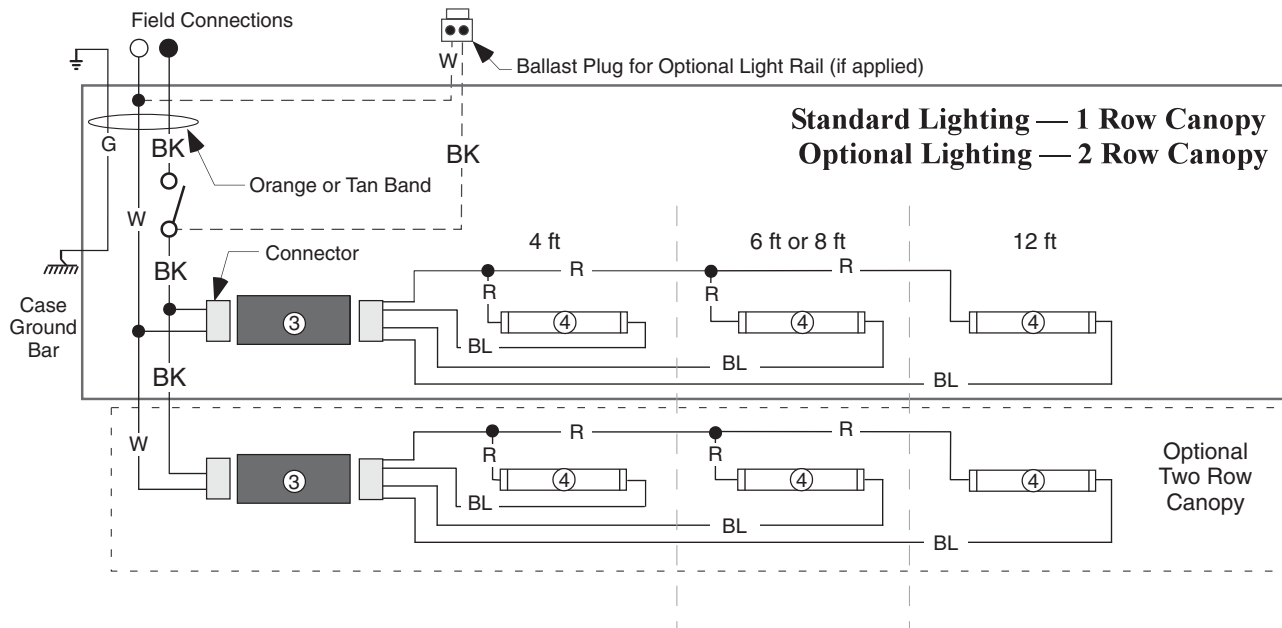
Fan Wiring Offtime Defrost

1, 2 & 3 Fans

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



Fluorescent Canopy Light Circuits



WARNING

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

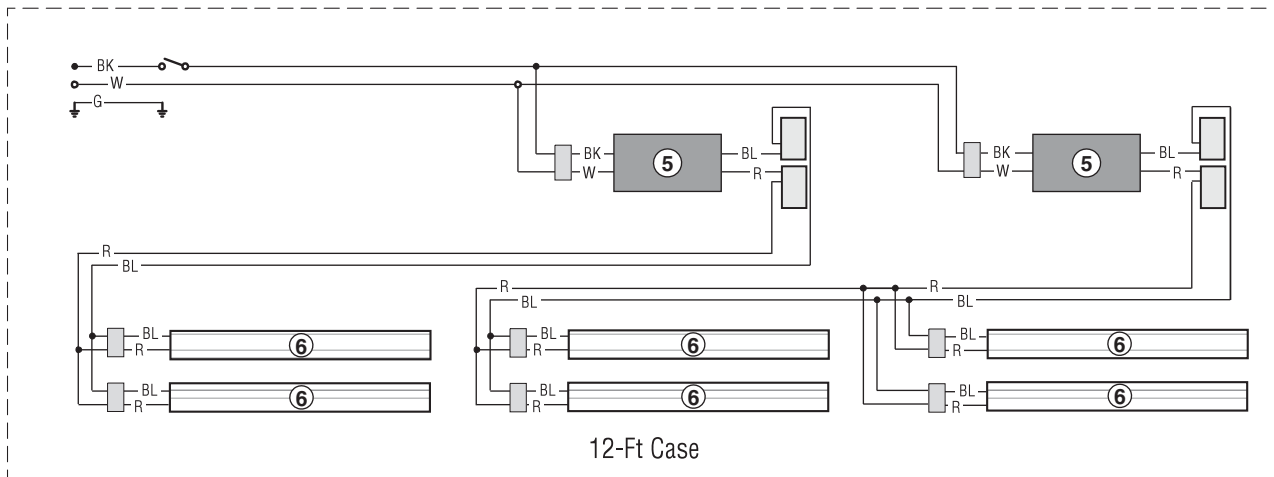
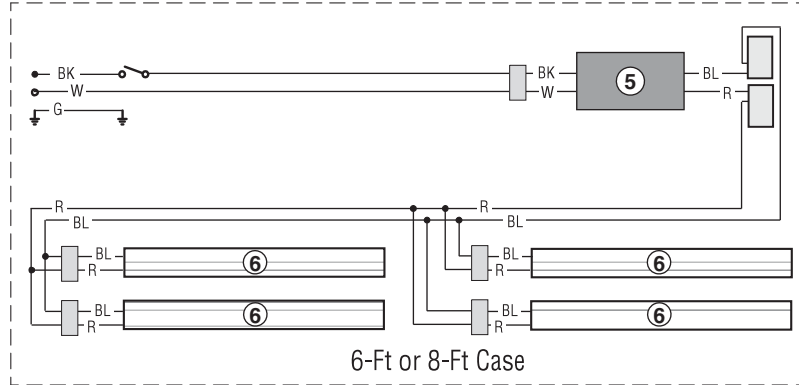
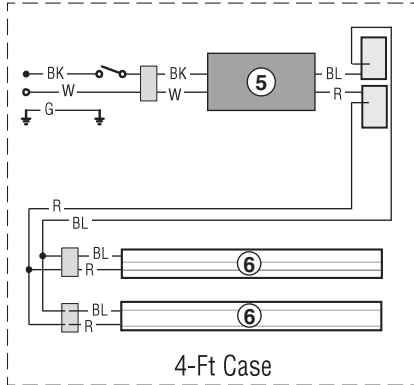
CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS

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

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

Optional Canopy Lighting LED Fixtures

Standard LED Canopy Lighting — 2 Row Canopy



WARNING

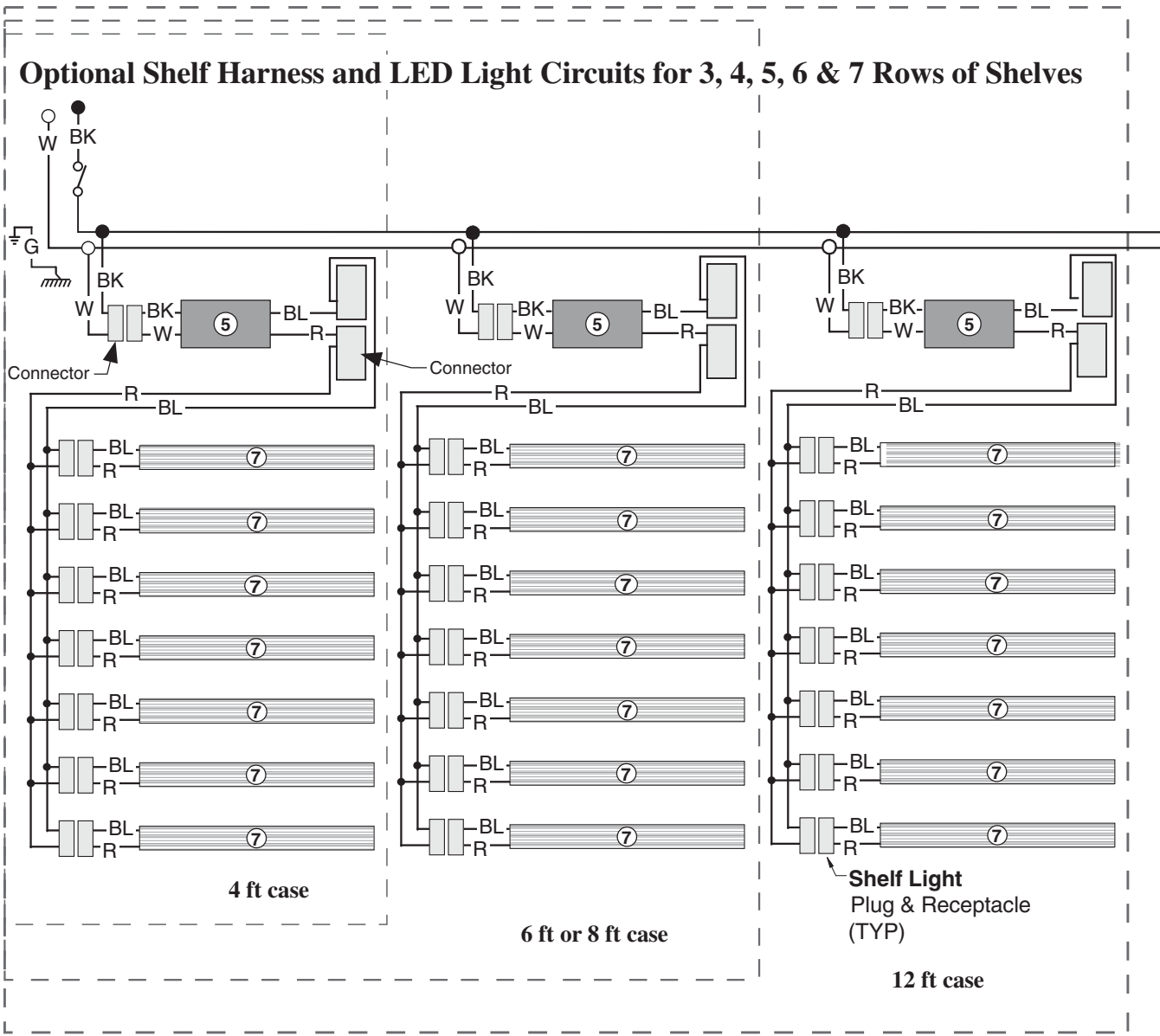
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**Optional Shelf Lighting
LED Fixtures**



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

● = 120V POWER ○ = 120V NEUTRAL ⊥ = FIELD GROUND *mm* = CASE GROUND