

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 #
<b>FAN ASSEMBLIES</b>				<b>LAMPS AND BALLASTS</b>			
<b>8 Ft &amp; 12 Ft</b>				D.		Ballast, Electronic	(4)
A.	<b>12W Standard</b>	Fan Assembly	(1)	0480130		2 lamps (BA.4481676)	
	0047000	Fan Motor, Evaporator (MO.4410103)		0480131		3 lamps (BA.4481654)	
	0461805	Fan Blade (FB.4780446)		0480132		4 lamps (BA.4481677)	
	<b>12W Energy Efficient</b>	Fan Assembly	(1)	E.		Fluorescent Lamp	(5)
	0477655	Fan Motor, Evaporator (MO.4410546)				<i>Replace with like fixtures</i>	
	0461805	Fan Blade (FB.4780446)		<b>LED FIXTURES AND POWER SUPPLY</b>			
<b>THERMOSTATS</b>				F.	0501213	Power Supply (EP.4481861)	(6)
B.	0411744	Standard Non-adjustable Defrost Thermostat (CT.0411744)	(2)	G.		LED Canopy Fixture	(7)
C.		Optional Adjustable Refrigeration Thermostat	(3)			<i>Replace with like fixtures — See Page 5.</i>	
				H.		LED Shelf Fixture	(8)
						<i>Replace with like fixtures — See Page 5.</i>	

Note: Revision C adds EcoShine LED (page 4) and parts (page 5), and revises canopy wiring diagram (page 6). Other changes marked by bar, underline or circle.



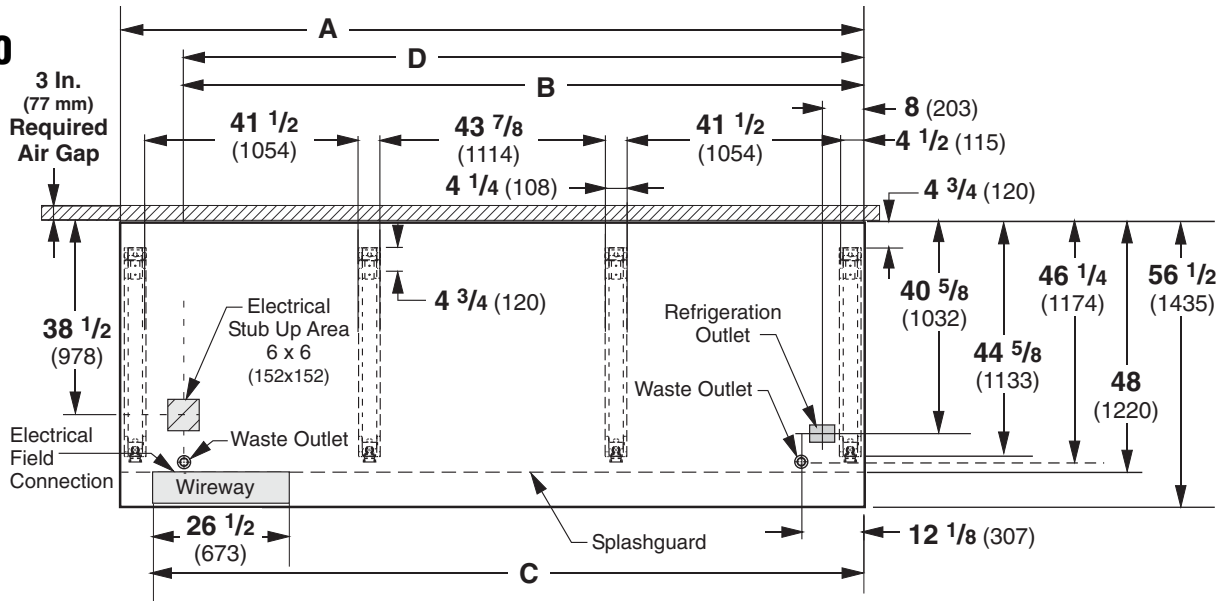
# Engineering Plan Views

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

Produce  
10-2005

Dimensions shown as inches and (mm).

**P4XR0**



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

FRONT

	8 ft	12 ft
<b>General</b>		
<b>(A)</b> Case Length ( <i>without ends or partitions</i> ) (Each end and insulated partition adds 1 1/2 in. (38 mm) to case line up.) Maximum O/S dimension of case back to front (includes bumper)	96 3/8 (2448)	144 1/2 (3670)
Back of case to front of splashguard	56 1/2 (1435)	56 1/2 (1435)
Back of case to O/S edge of front leg	43 3/8 (1102)	43 3/8 (1102)
Distance between edges of external legs and center legs	40 (1016)	40 (1016)
Distance between edges of center legs	41 1/2 (1054)	41 1/2 (1054)
Distance between front legs and splashguard	NA	43 7/8 (1114)
	2 3/4 (70)	2 3/4 (70)
<b>Electrical Service</b> <input checked="" type="checkbox"/> ( <i>Electrical Field Wiring connection point</i> )		
<b>(B)</b> RH End of case to center of stub up area	84 1/4 (2140)	132 3/8 (3363)
Back of case to center of stub up area	38 1/2 (978)	38 1/2 (978)
Length of electrical wireway <input type="checkbox"/> Wireway	26 1/2 (673)	26 1/2 (673)
<b>(C)</b> RH End of case to LH end of wireway	90 1/8 (2289)	138 1/4 (3511)
<b>Waste Outlets</b> ( <i>One each end</i> ) <input checked="" type="checkbox"/>		
<b>(D)</b> RH End of case to the center of LH waste outlet	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)
Back O/S of case to center of waste outlets	41 1/2 (1054)	41 1/2 (1054)
Schedule 40 PVC drip pipe	1 1/4 (32)	1 1/4 (32)
<b>Refrigeration Outlet</b> <input type="checkbox"/>		
Back of case to center of refrigeration outlet	33 5/8 (854)	33 5/8 (854)
RH end of case to center of refrigeration outlet	8 (203)	8 (203)

**Impact Excel P4XRO-E**  
Produce

**REFRIGERATION DATA**

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

**P4XRO-E**

<b>Discharge Air (°F)</b>	31
<b>Evaporator (°F)</b>	24
<b>Unit Sizing (°F)</b>	22

*Btu/hr/ft<sup>‡</sup> — Unlit Shelves<sup>‡‡</sup>*

<b>P4XRO-E</b>	<b>Parallel</b>	<b>Conventional</b>
<b>UNLIT</b>	1455	1585

<sup>‡</sup>Optional energy efficient motors reduce the refrigeration load by 55 Btu/hr/ft.  
<sup>‡‡</sup> Add 10 Btu/hr/ft *per shelf row* for LED fixtures.  
 Add 20 Btu/hr/ft *per shelf row* for fluorescent lamps.

**DEFROST DATA**

	<b>P4XRO-E</b>
<b>Frequency Hr</b>	6
<b>Defrost Water (lb/ft/day)</b>	9
<i>(± 15% based on case configuration and product loading).</i>	
<b>OFFTIME</b>	<b>P4XRO-E</b>
<b>Temp Term °F</b>	48
<b>Failsafe Minutes</b>	30

**ELECTRIC OR GAS**    Not Recommended

**Standard Defrost Thermostat**

Close on rise: close 48°F — open 33°F

**CONVENTIONAL CONTROLS**

**Low Pressure Backup Control**

	<b>P4XRO-E</b>
<b>CI/CO*</b>	17°F / 7°F

**Indoor Unit Only,**

**Pressure Defrost Termination\***    48°F

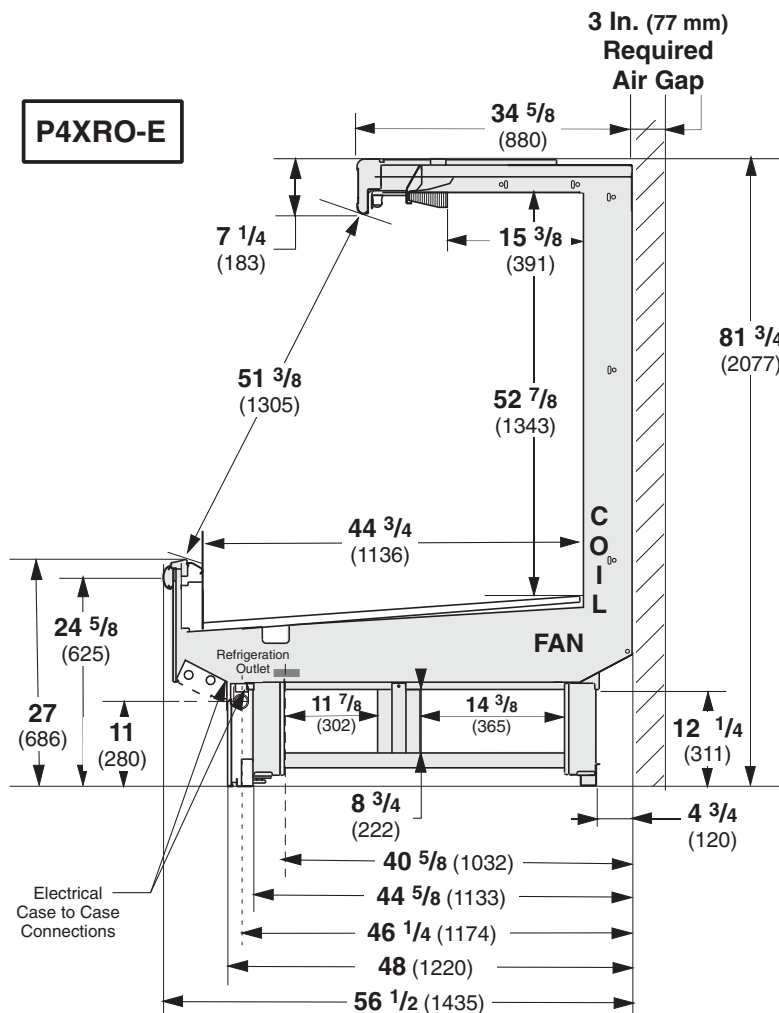
\*Use a Temperature Pressure Chart to determine PSIG conversions.

**Estimated Charge\*\***

	<b>P4XRO-E</b>		
<b>8 ft</b>	3.2 lb	51 oz	1.5 kg
<b>12 ft</b>	4.5 lb	72 oz	2.0 kg

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

Dimensions shown as inches and (mm).



**NSF Certification**

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

# Impact *Excel* P4XRO-E Produce

## Electrical Data

			8 ft	12 ft		
<b>Number of Fans—12W</b>			<b>4</b>	<b>6</b>		
			Amperes		Watts	
			8 ft	12 ft	8 ft	12 ft
<b>Evaporator Fan</b>						
120V	60Hz	Standard	2.60	3.90	200	300
120V	50Hz	Standard	3.00	4.50	228	342
230V	60Hz	Export	1.32	1.98	200	300
230V	50Hz	Export	1.52	2.28	228	342
120V	60Hz	Energy Efficient	1.20	1.80	72	108
230V	60Hz	Energy Efficient	0.60	0.90	72	108
<b>Minimum Circuit Ampacity</b>						
120V	60Hz	Standard	2.80	4.10		
120V	50Hz	Standard	3.20	4.70		
230V	60Hz	Export	1.52	2.18		
230V	50Hz	Export	1.72	2.48		
120V	60Hz	Energy Efficient	1.40	2.00		
230V	60Hz	Energy Efficient	0.80	1.10		
<b>Maximum Over Current Protection 120V</b>			<b>20</b>	<b>20</b>		
Maximum Over Current Protection 230V			15	15		
<b>Standard Lighting (T-8 fluorescent)</b>						
1 Row Canopy			0.51	0.77	59	85
<b>Optional Lighting (T-8 fluorescent)</b>						
Additional 2 Row Canopy			1.02	1.54	118	170
Additional 3 Row Canopy			1.53	2.31	177	255
1 Row Rail Light			0.51	0.77	59	85
1 Row of Shelves			0.51	0.77	59	85
2 Rows of Shelves			1.02	1.54	118	170
3 Rows of Shelves			1.53	2.31	177	255
4 Rows of Shelves			2.04	3.08	236	340
<b>EcoShine Multi-deck — Normal CRI—120VAC, 50/60Hz</b>						
2 Row Canopy (Front & Rear)			0.55	0.82	66	98
2 Rows of Shelves			0.39	0.58	47	70
3 Rows of Shelves			0.58	0.88	70	105
4 Rows of Shelves			0.78	1.17	93	140
<b>EcoShine Multi-deck — High CRI —120VAC, 50/60Hz</b>						
2 Row Canopy (Front & Rear)			0.63	0.93	75	112
2 Rows of Shelves			0.47	0.70	56	84
3 Rows of Shelves			0.70	1.05	84	126
4 Rows of Shelves			0.93	1.40	112	168
<b>Always*Bright Multi-deck Lighting — 120VAC, 50/60Hz</b>						
2 Row Canopy (Front & Rear)			0.71	1.08	85	130
2 Rows of Shelves			0.47	0.67	56	80
3 Rows of Shelves			0.74	1.11	89	133
4 Rows of Shelves			0.93	1.40	112	168

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**

<b>Recommended Usable Cube</b> <sup>1</sup> (Cu Ft/Ft)	9.25 ft <sup>3</sup> /ft (0.86 m <sup>3</sup> /m)
<b>AHRI Total Display Area</b> <sup>2</sup> (Sq Ft/Ft)	4.88 ft <sup>2</sup> /ft (1.49 m <sup>2</sup> /m)
<b>Shelf Area</b> <sup>3</sup> (Sq Ft/Ft)	8.09 ft <sup>2</sup> /ft (2.47 m <sup>2</sup> /m)

<sup>1</sup> AHRI Refrigerated Volume less shelving and other unusable space: Refrigerated Volume/Unit of Length, ft<sup>3</sup>/ft [m<sup>3</sup>/m]

<sup>2</sup> Computed using AHRI 1200 standard methodology: Total Display Area, ft<sup>2</sup> [m<sup>2</sup>]/Unit of Length, ft [m]

<sup>3</sup> 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 16-inch shelf and (2) rows of 18-inch shelves.

**ESTIMATED SHIPPING WEIGHT <sup>4</sup>**

Case	8 ft		12 ft	Solid End
				(each)
<b>lb (kg)</b>	1100 (499)	1400 (635)		100 (45)

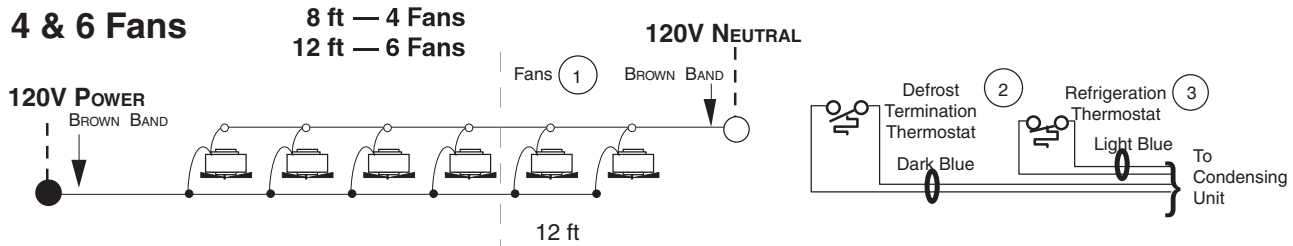
<sup>4</sup> Actual weights will vary according to optional kits included.

**PARTS LIST** (Continued from Page 1)

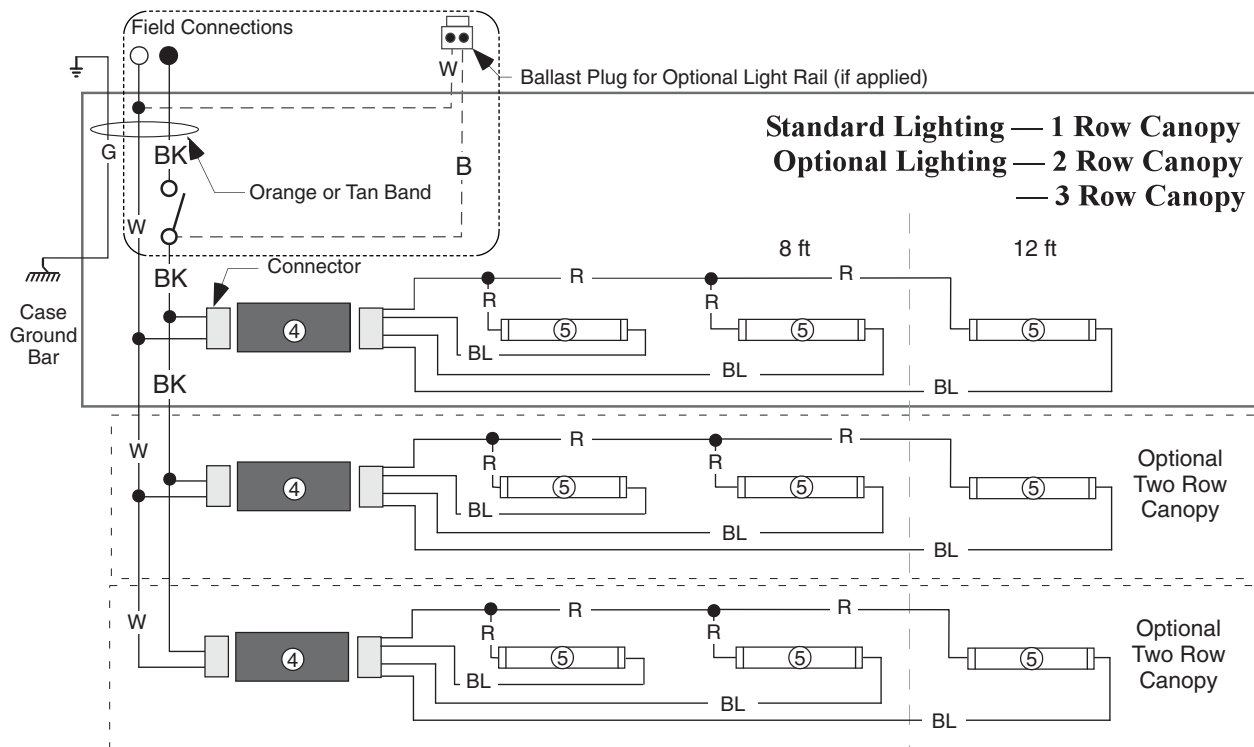
Item	Part #	Description	Item	Part #	Description
<b>LED FIXTURES AND POWER SUPPLY</b>					
F.	0501213	Power Supply (EP.4481861) (6)	H.	<b>EcoShine LED Shelf Fixture (8)</b>	
G.	<b>EcoShine LED Canopy Fixture (7)</b>		4441590	48-inch	<b>2900K</b> HCRI
	4441720	Front 48-inch	4441591	48-inch	<b>3500K</b> HCRI
	4441722	Front 48-inch	4441592	48-inch	<b>3500K</b>
	4441724	Front 48-inch	4441593	48-inch	<b>4100K</b>
	4441726	Front 48-inch			
	4441721	Rear 48-inch			
	4441723	Rear 48-inch			
	4441725	Rear 48-inch			
	4441727	Rear 48-inch			

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

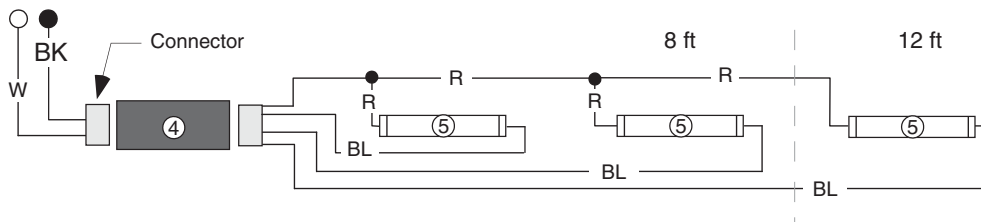
# Fan Wiring Offtime Defrost



# Light Circuits — Fluorescent Fixtures



## Optional Lighting — 1 Row Rail



## WARNING

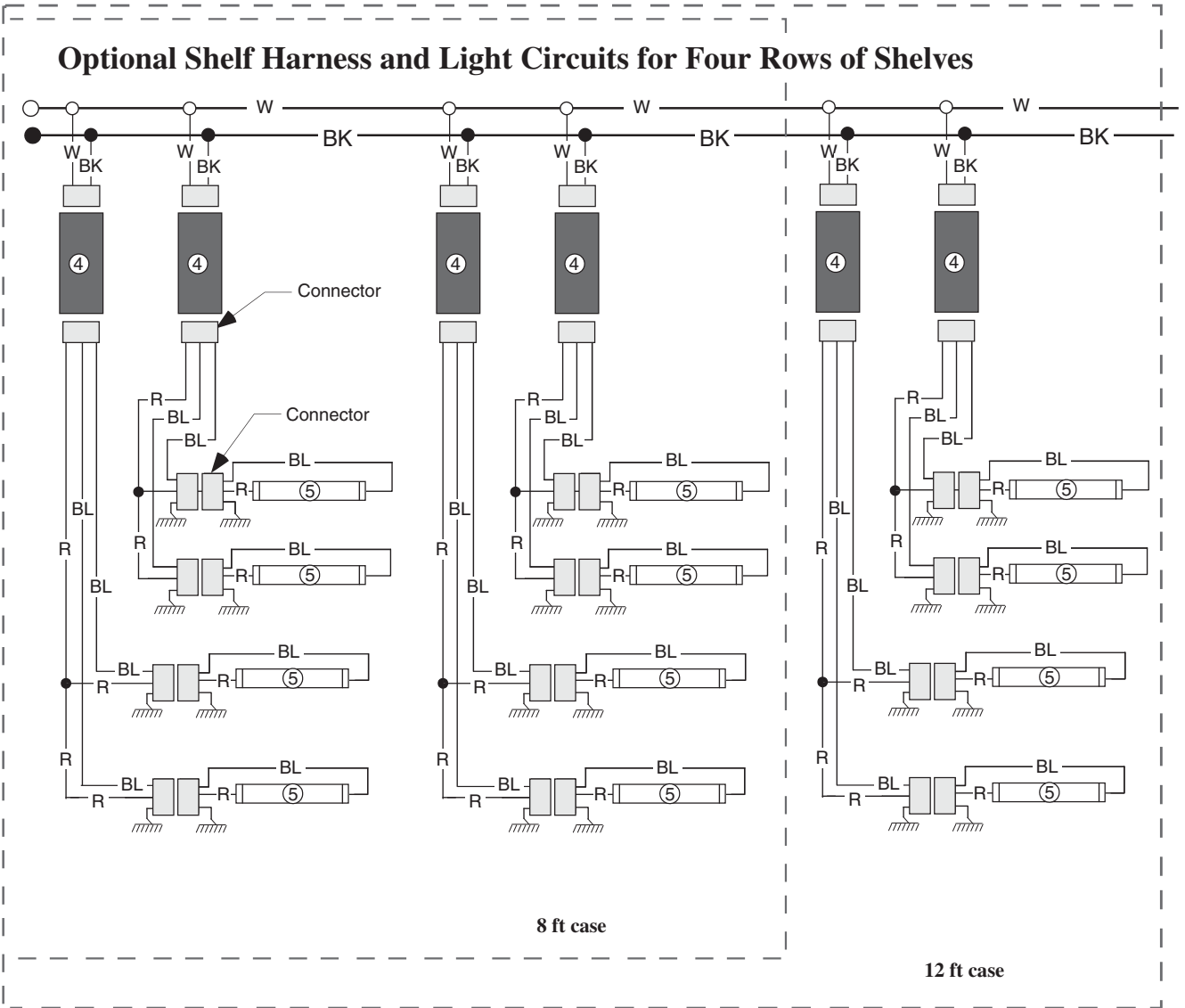
All components must have mechanical ground, and the merchandiser must be grounded.

CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS

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

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

# Optional Shelf Lighting Fluorescent Fixtures



### WARNING

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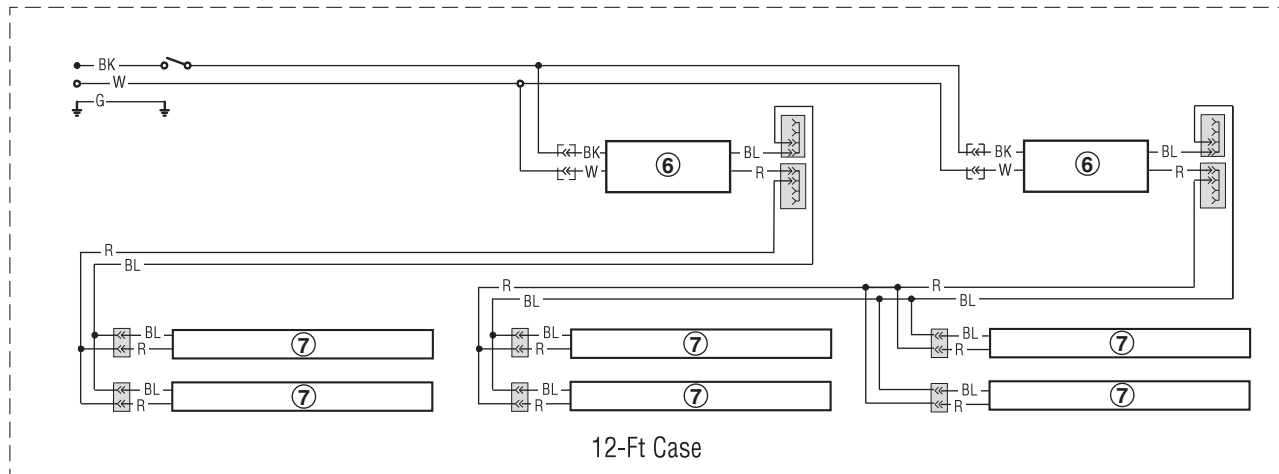
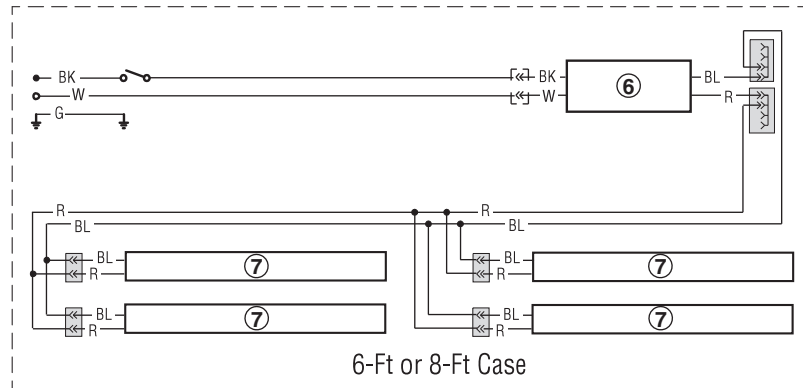
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# Optional Canopy Lighting LED Fixtures

## Standard LED Canopy Lighting — 2 Row Canopy



### WARNING

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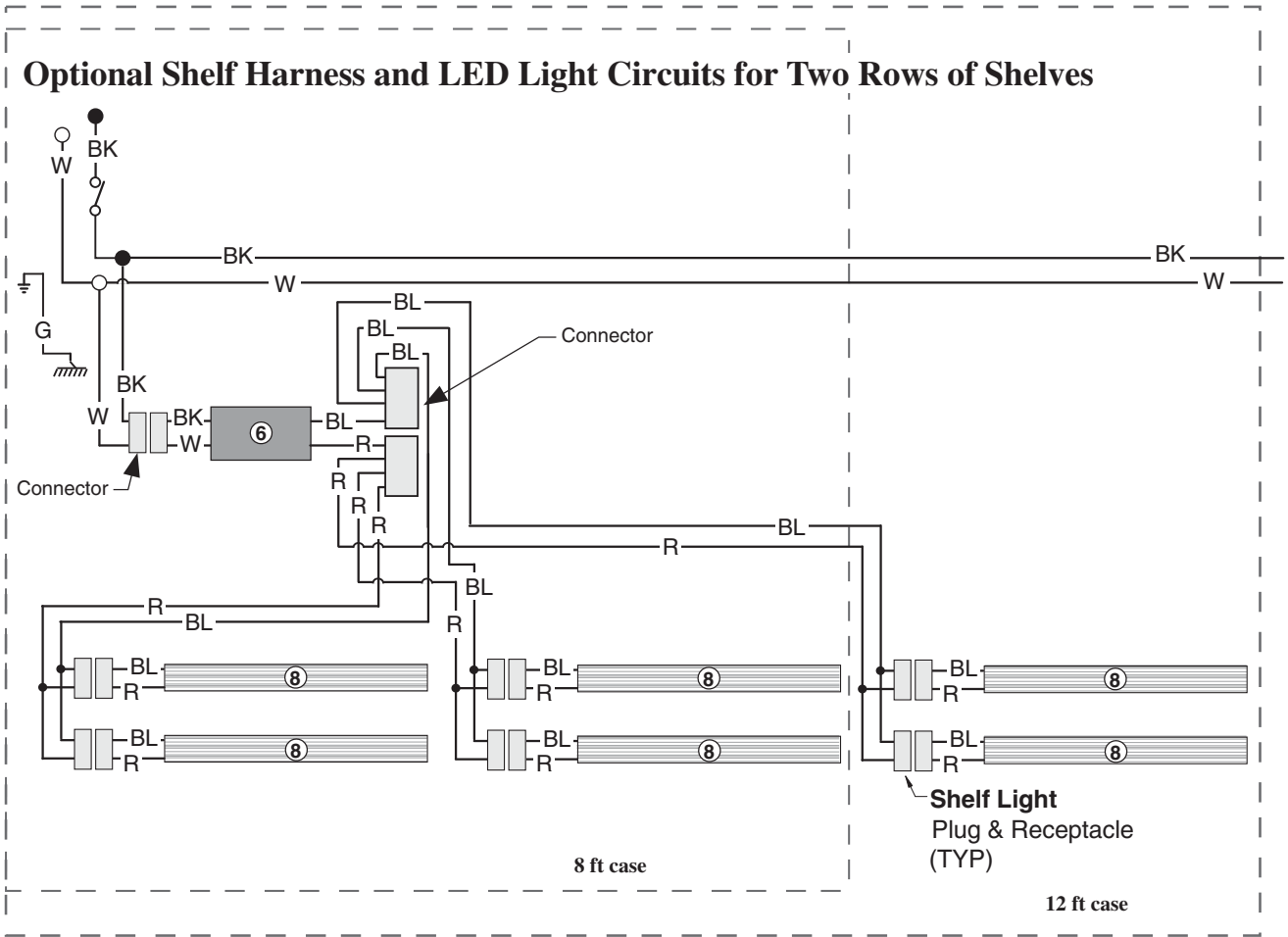
CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS

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



## WARNING

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

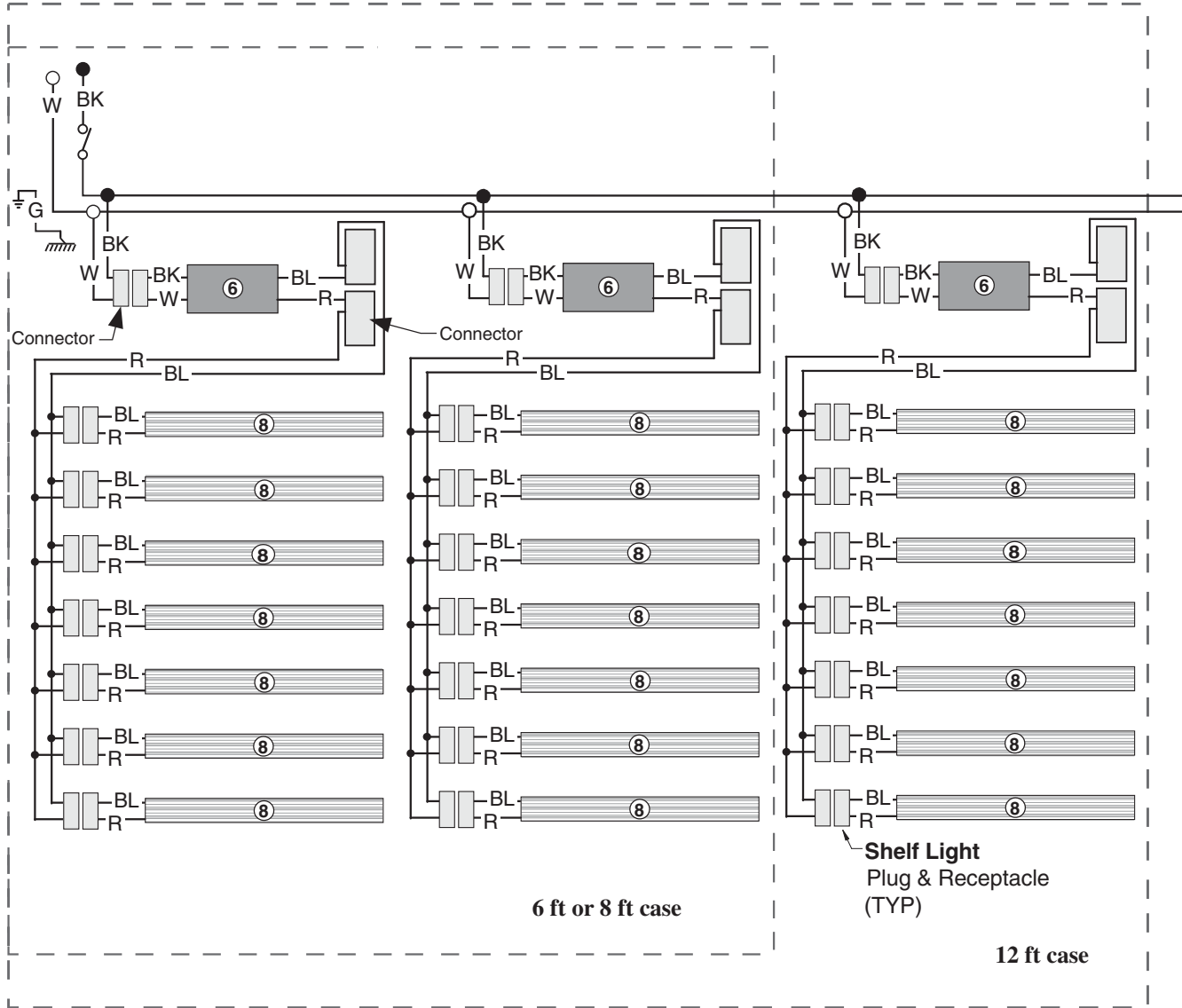
CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS

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

● = 120V POWER      ○ = 120V NEUTRAL      ⚡ = FIELD GROUND       $\overline{mm}$  = CASE GROUND

# Optional Shelf Lighting LED Fixtures

## Optional Shelf Harness and LED Light Circuits for 3, 4, 5, 6 & 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

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