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Item	Part #	Description	Wiring Item #	Item	Part #	Description	Wiring Item #
<b>FAN ASSEMBLIES AND THERMOSTATS</b>				<b>HEATERS</b>			
<b>8 Ft, 10 Ft, 12 Ft, 14 Ft &amp; 16 Ft</b>				C. Anti-Sweat Heater (3)			
A.	<b>12W Standard</b>	Fan Assembly	(1)	0487118	8 ft, 10 ft (HE.4850668)		
	0047000	Fan Motor, Evaporator (MO.4410103)		0491966	12 ft (HE.4850834)		
	0407532	Fan Blade (8 ft, 10 ft, 12 ft and 14 ft only) (FB.4780619) embossing toward motor		0487120	14 ft (HE.4850835)		
	0506563	Fan Blade (16 ft only) (FB.4780811) embossing toward motor		0487121	16 ft (HE.4850836)		
<b>8 Ft, 10 Ft, 12 Ft Only</b>				<b>LAMPS AND BALLASTS</b>			
A.	<b>12W Energy Efficient</b>	Fan Assembly	(1)	D. Ballast, Electronic (4)			
	0477655	Fan Motor, Evaporator (MO.4410546)		0355398	3 Lamps (BA.4480118)		
	0407532	Fan Blade (FB.4780619) embossing toward motor		0355716	2 Lamps (BA.0355716)		
				0447740	(BA.4481278)		
B.	Optional Adjustable Refrigeration Thermostat	(2)		E. Fluorescent Lamp (5)			
	0448347	(CT.4481631)		<i>Replace with like fixtures</i>			

Note: Revision D adds energy efficient fan note on page 3.

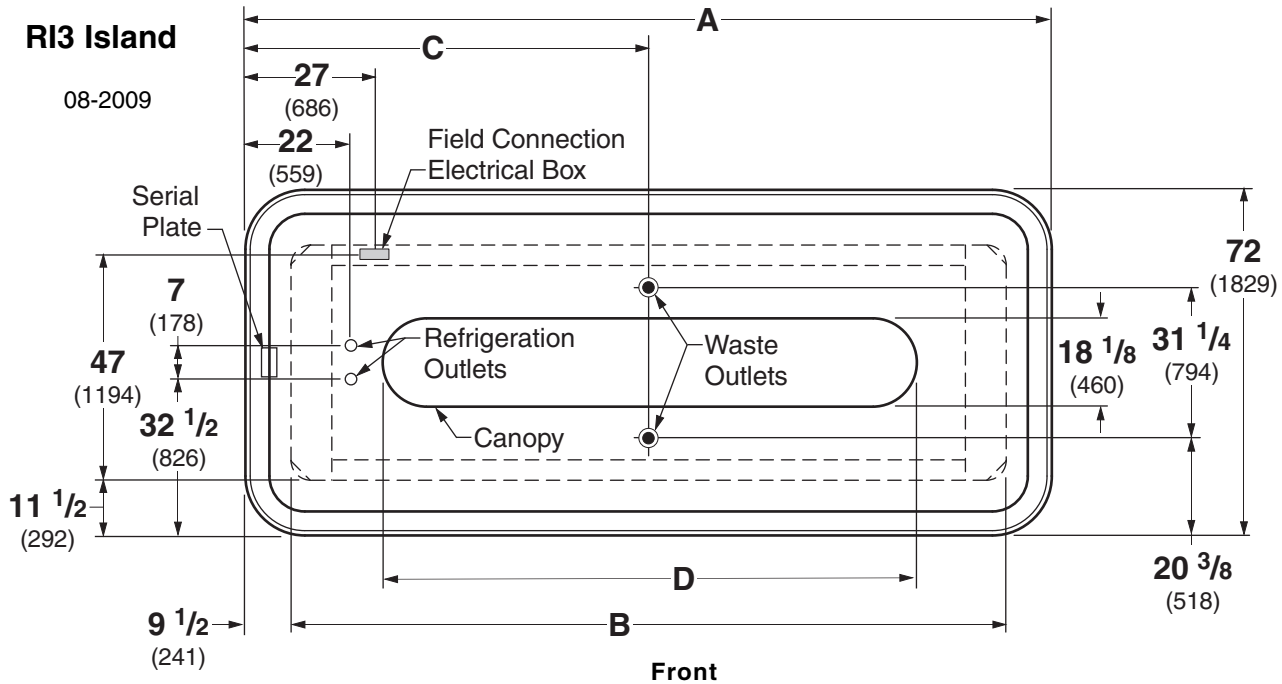


# Engineering Plan Views

Dimensions shown as inches and (mm).

## PHYSICAL DATA

Merchandiser Drip Pipe (in.)	1 1/2
Merchandiser Liquid Line (in.)	3/8
Merchandiser Suction Line (in.)	5/8

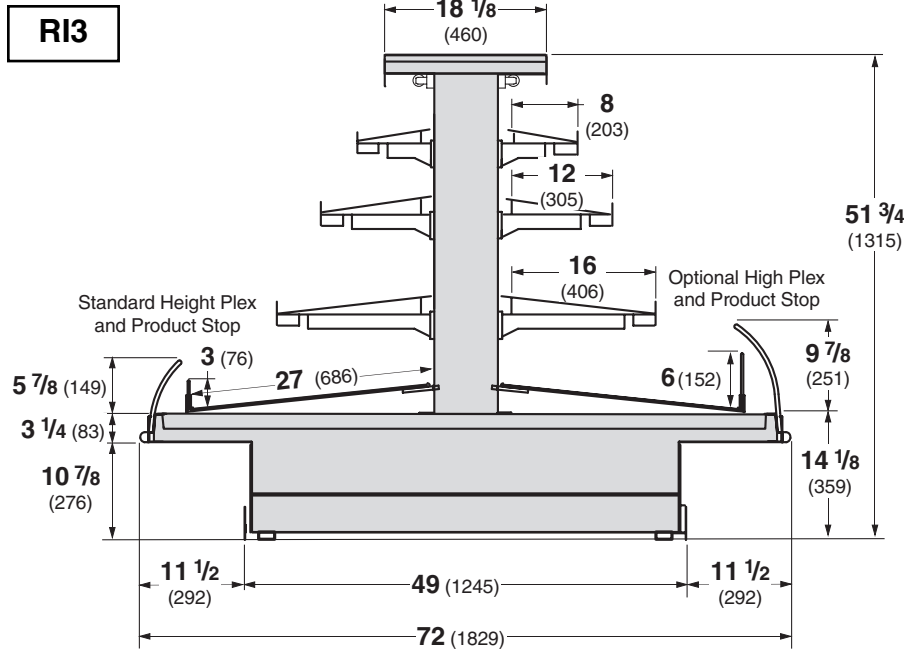


	8 ft	10 ft	12 ft	14 ft	16 ft
<b>General</b>					
(A) Overall Case Length	96 (2438)	120 (3048)	144 (3658)	168 (4267)	192 (4877)
(B) Base Length	77 (1956)	101 (2565)	125 (3175)	149 (3785)	173 (4394)
Maximum O/S dimension of case back to front (includes bumper)	72 (1829)	72 (1829)	72 (1829)	72 (1829)	72 (1829)
Front of splashguard to O/S edge of front base rail	1 5/8 (41)	1 5/8 (41)	1 5/8 (41)	1 5/8 (41)	1 5/8 (41)
Front of case to O/S edge of front base rail	13 1/8 (333)	13 1/8 (333)	13 1/8 (333)	13 1/8 (333)	13 1/8 (333)
Back of case to O/S edge of front base rail	58 7/8 (1495)	58 7/8 (1495)	58 7/8 (1495)	58 7/8 (1495)	58 7/8 (1495)
Width of base rail	1 7/8 (48)	1 7/8 (48)	1 7/8 (48)	1 7/8 (48)	1 7/8 (48)
(D) Length of Canopy	66 1/8 (1680)	66 1/8 (1680)	90 1/8 (2289)	114 1/8 (2899)	138 1/8 (3508)
Width of Canopy	18 1/8 (460)	18 1/8 (460)	18 1/8 (460)	18 1/8 (460)	18 1/8 (460)
<b>Electrical Service</b> (Electrical Field Wiring connection point)					
Center of Electrical service to O/S edge of front base rail	47 (1067)	47 (1067)	47 (1067)	47 (1067)	47 (1067)
Left end of case to center of Field Connection Box	27 (686)	27 (686)	27 (686)	27 (686)	27 (686)
Right end of case to center of Field Connection Box	69 (1753)	93 (2362)	117 (2972)	141 (3581)	165 (4191)
<b>Waste Outlets</b>					
(C) LH End of case to the center of waste outlet	48 (1219)	42 (1067)	42 (1067)	84 (2134)	96 (2438)
Center of front waste outlet to outside of front base rail	8 7/8 (225)	8 7/8 (225)	8 7/8 (225)	8 7/8 (225)	8 7/8 (225)
Center of back waste outlet to outside of front base rail	40 1/8 (1019)	40 1/8 (1019)	40 1/8 (1019)	40 1/8 (1019)	40 1/8 (1019)
Schedule 40 PVC drip pipe	1 1/2 (38)	1 1/2 (38)	1 1/2 (38)	1 1/2 (38)	1 1/2 (38)
<b>Refrigeration Outlet</b>					
LH end of case to center of refrigeration outlet	22 (559)	22 (559)	22 (559)	22 (559)	22 (559)
RH end of case to center of refrigeration outlet	74 (1880)	98 (2489)	122 (3099)	146 (3708)	170 (4318)

Multi-deck Island, 4 Display Levels

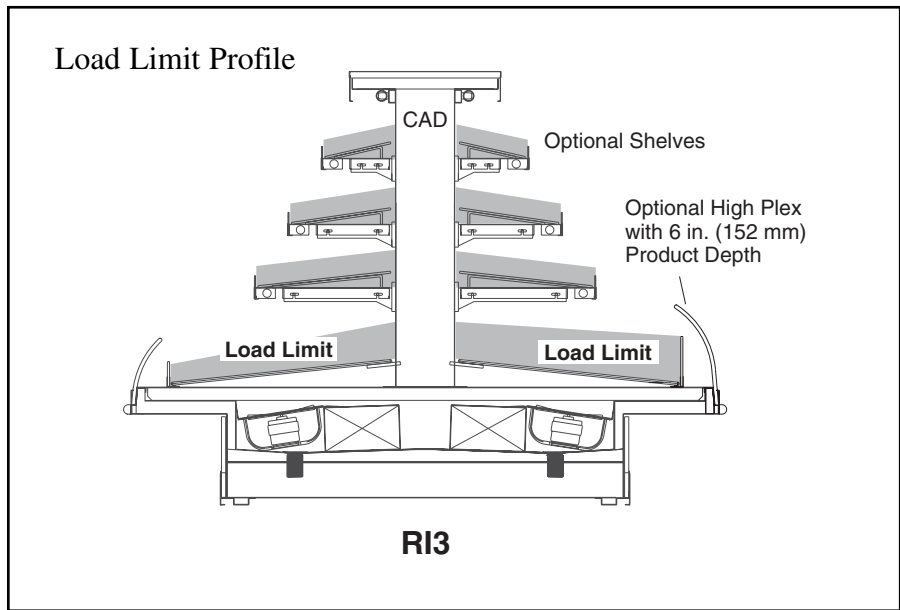
Dimensions shown as inches and (mm).

**RI3**  
**Delicatessen**



**NSF® Certification**

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



**Cases may not function properly if they are loaded above load limits.**

Air flow between the shelves, from the Center Air Discharge (CAD) to the return, must be maintained at all times for optimum operating efficiency and to prolong product shelf life. At no time should merchandisers be stocked beyond the load limits indicated.

**REFRIGERATION DATA**

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

	<b>RI3</b>
<b>Discharge Air (°F)</b>	27
<b>Evaporator (°F)</b>	20
<b>Unit Sizing (°F)</b>	18
<b>Btu/hr/ft<sup>±</sup></b>	
<b>LIT &amp; UNLIT SHELVES</b>	<b>RI3</b>
<b>Parallel</b>	1820
<b>Conventional</b>	1985

<sup>±</sup>Optional energy efficient motors reduce the refrigeration load by 87 Btu/hr/ft.

**DEFROST DATA**

	<b>RI3</b>
<b>Frequency (hr)</b>	4
<b>Defrost Water (lb/ft/day)</b>	12
<i>(± 15% based on case configuration and product loading.)</i>	

<b>OFFTIME</b>	<b>RI3</b>
<b>Time Terminated (minutes)</b>	20

**ELECTRIC OR GAS** Not Recommended

**CONVENTIONAL CONTROLS**

<b>Low Pressure Backup Control</b>	<b>RI3</b>
<b>CI/CO*</b>	14°F / 4°F
<b>Indoor Unit Only, Pressure Defrost Termination*</b>	48°F

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

<b>Estimated Charge **</b>	<b>RI3</b>
<b>8 ft</b>	1.7 lb 27 oz 0.8 kg
<b>10 ft</b>	2.1 lb 34 oz 1.0 kg
<b>12 ft</b>	2.5 lb 40 oz 1.1 kg
<b>14 ft</b>	3.1 lb 50 oz 1.4 kg
<b>16 ft</b>	3.7 lb 59 oz 1.7 kg

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

# RI3

## Delicatessen

### Electrical Data

			8 ft	10 ft	12 ft	14 ft	16 ft					
Number of Fans – 12W			6	8	10	14	16					
			Amperes					Watts				
			8 ft	10 ft	12 ft	14 ft	16 ft	8 ft	10 ft	12 ft	14 ft	16 ft
<b>Evaporator Fan</b>												
120V	60Hz	Standard	3.90	5.20	6.50	9.10	10.40	300	400	500	700	800
120V	50Hz	Standard	4.50	6.00	7.50	10.50	12.00	342	456	570	798	912
230V	60Hz	Export	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
230V	50Hz	Export	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
120V	60Hz	Energy Efficient	1.80	2.40	3.00	4.20	4.80	108	144	180	252	288
230V	60Hz	Energy Efficient	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>Anti-sweat Heaters</b>												
120V	60Hz	Standard	0.70	0.70	0.90	1.10	1.30	84	84	108	132	156
230V	50Hz	Export	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>Minimum Circuit Ampacity (MCA)</b>												
120V	60Hz	Standard	5.27	6.57	8.20	11.13	12.77					
120V	50Hz	Standard	5.31	6.81	8.48	11.66	13.33					
230V	60Hz	Export	NA	NA	NA	NA	NA					
230V	50Hz	Export	NA	NA	NA	NA	NA					
120V	60Hz	Energy Efficient	2.61	3.21	3.98	5.36	6.13					
230V	60Hz	Energy Efficient	NA	NA	NA	NA	NA					
<b>Maximum Over Current Protection 120V</b>			<b>20</b>	<b>20</b>	<b>20</b>	<b>20</b>	<b>20</b>					
<b>Maximum Over Current Protection 230V</b>			NA	NA	NA	NA	NA					
<b>Standard Lighting</b>												
1 Row Canopy			0.53	0.53	0.83	1.07	1.37	64	64	100	128	164
<b>Optional Lighting</b>												
1 Row of Ledge			1.67	2.00	2.33	2.67	3.00	200	240	280	320	360
<b>Shelf Lighting</b>												
1 Row of Shelves			0.81	0.81	1.11	1.34	1.64	97	97	133	161	197
2 Rows of Shelves			1.62	1.62	2.22	2.68	3.28	194	194	266	322	394
3 Rows of Shelves			2.42	2.42	3.32	4.02	4.92	290	290	398	482	590

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

**Product Data**

**RI38**

<i>Recommended Usable Cube</i> <sup>1</sup> (Cu Ft/Case)	54.31 ft <sup>3</sup> /case (1.54 m <sup>3</sup> /case)
<i>AHRI Total Display Area</i> <sup>2</sup> (Sq Ft/Case)	51.86 ft <sup>2</sup> /case (4.82 m <sup>2</sup> /case)
<i>Shelf Area</i> <sup>3</sup> (Sq Ft/Case)	85.76 ft <sup>2</sup> /case (7.97 m <sup>2</sup> /case)

**RI310**

<i>Recommended Usable Cube</i> <sup>1</sup> (Cu Ft/Case)	67.89 ft <sup>3</sup> /case (1.92 m <sup>3</sup> /case)
<i>AHRI Total Display Area</i> <sup>2</sup> (Sq Ft/Case)	64.83 ft <sup>2</sup> /case (6.02 m <sup>2</sup> /case)
<i>Shelf Area</i> <sup>3</sup> (Sq Ft/Case)	107.20 ft <sup>2</sup> /case (9.96 m <sup>2</sup> /case)

**RI312**

<i>Recommended Usable Cube</i> <sup>1</sup> (Cu Ft/Case)	81.47 ft <sup>3</sup> /case (2.31 m <sup>3</sup> /case)
<i>AHRI Total Display Area</i> <sup>2</sup> (Sq Ft/Case)	77.80 ft <sup>2</sup> /case (7.23 m <sup>2</sup> /case)
<i>Shelf Area</i> <sup>3</sup> (Sq Ft/Case)	128.64 ft <sup>2</sup> /case (11.95 m <sup>2</sup> /case)

**RI314**

<i>Recommended Usable Cube</i> <sup>1</sup> (Cu Ft/Case)	95.05 ft <sup>3</sup> /case (2.69 m <sup>3</sup> /case)
<i>AHRI Total Display Area</i> <sup>2</sup> (Sq Ft/Case)	90.76 ft <sup>2</sup> /case (8.43 m <sup>2</sup> /case)
<i>Shelf Area</i> <sup>3</sup> (Sq Ft/Case)	150.08 ft <sup>2</sup> /case (13.94 m <sup>2</sup> /case)

**RI316**

<i>Recommended Usable Cube</i> <sup>1</sup> (Cu Ft/Case)	108.62 ft <sup>3</sup> /case (3.08 m <sup>3</sup> /case)
<i>AHRI Total Display Area</i> <sup>2</sup> (Sq Ft/Case)	103.28 ft <sup>2</sup> /case (9.60 m <sup>2</sup> /case)
<i>Shelf Area</i> <sup>3</sup> (Sq Ft/Case)	171.52 ft <sup>2</sup> /case (15.93 m <sup>2</sup> /case)

<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 8-inch shelf, (1) row of 12-inch shelf, (1) row of 16-inch shelf.

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

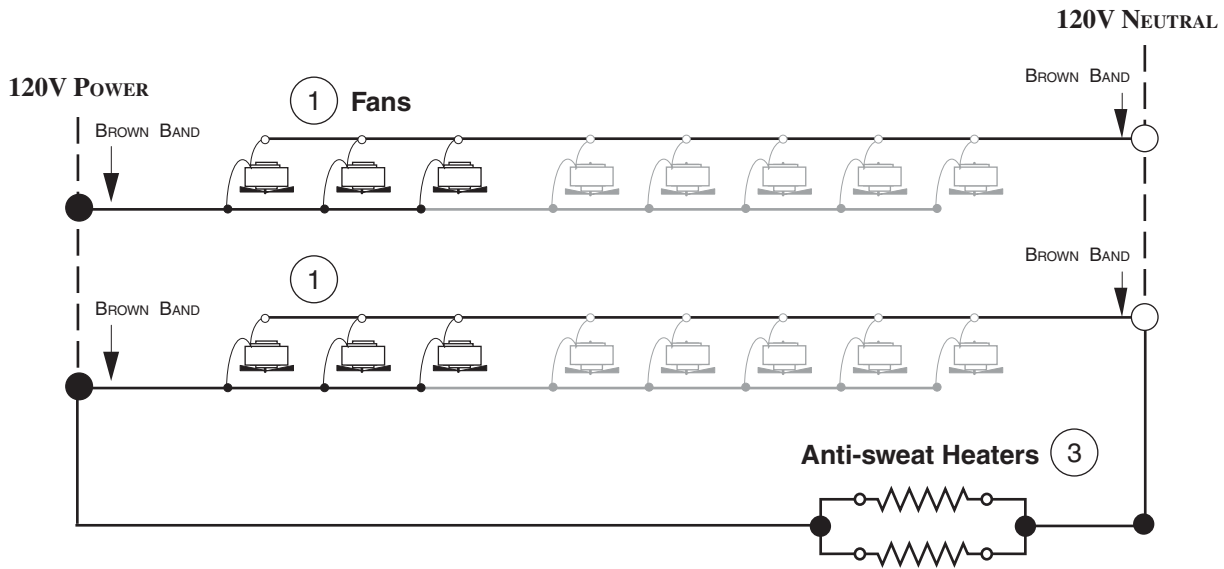
Case	8 ft	10 ft	12 ft	14 ft	16 ft	End
<b>lb (kg)</b>	1300 (590)	1500 (680)	1700 (771)	1900 (862)	2100 (953)	NA

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

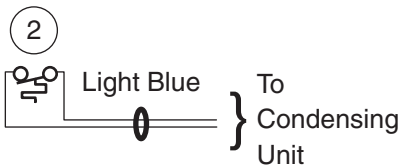
# Fan Wiring Offtime Defrost

## 6, 8, 10, 14 & 16 Fans

- 8 ft — 6 Fans
- 10 ft — 8 Fans
- 12 ft — 10 Fans
- 14 ft — 14 Fans
- 16 ft — 16 Fans



## Refrigeration Thermostat



### WARNING

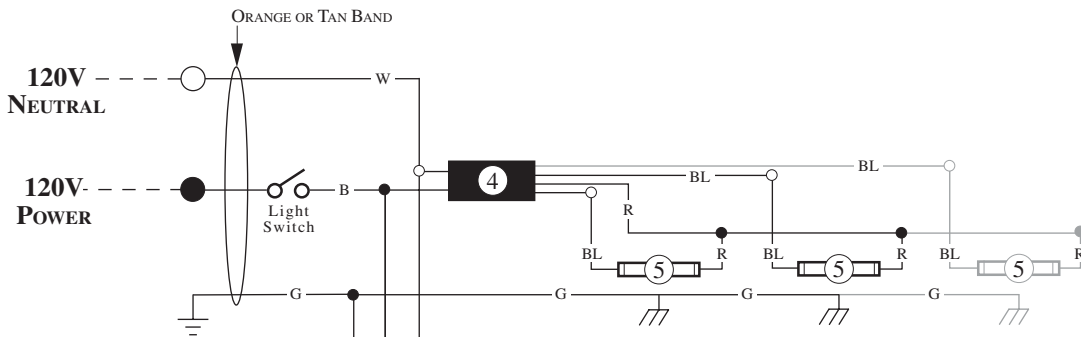
All components must have mechanical ground, and the merchandiser must be grounded.

CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS

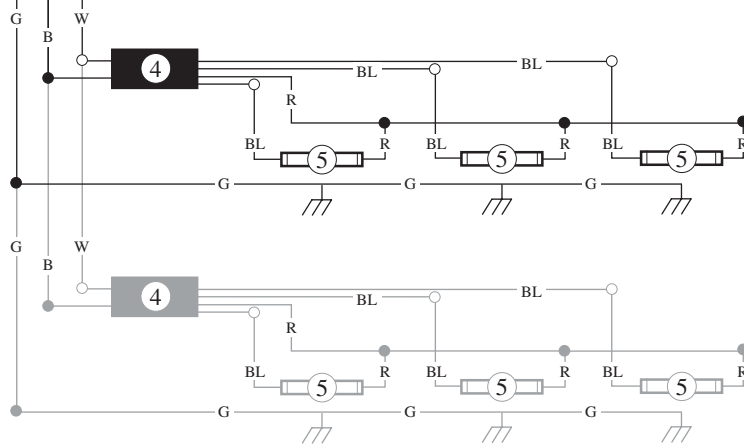
R = Red Y = Yellow G = Green BL = Blue B = Black W = White

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

### Standard Lighting — 1 Row Canopy



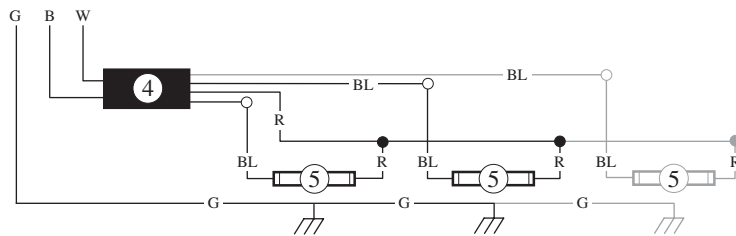
### Lighted Shelf Wiring



### Typical Shelf Ballast Wiring

Maximum lamps per ballast is three (3).  
 Different shelf configurations and different case lengths will have more shelf ballasts.

### Optional Ledge Light Circuit



### 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 B = Black W = White

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