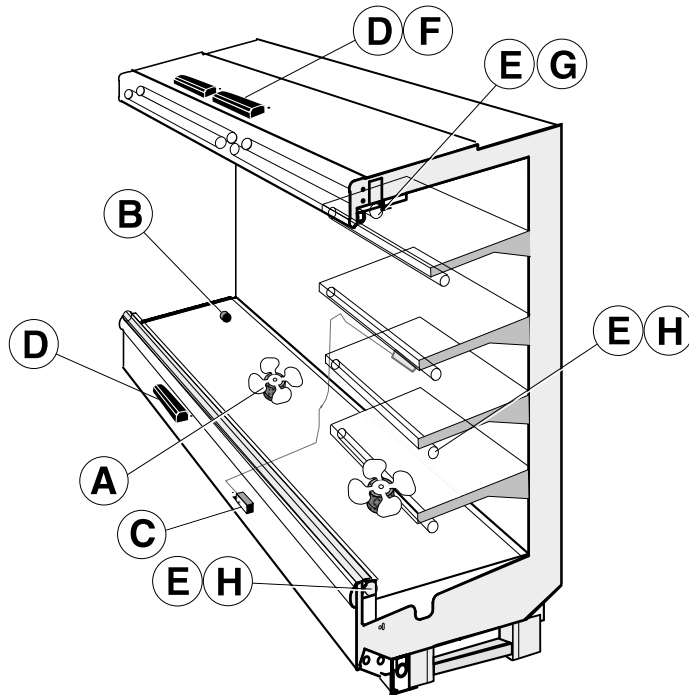


**DOE 2017**  
Energy Efficiency  
Compliant



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>4 Ft, 8 Ft, &amp; 12 Ft</b>				D.	Ballast, Electronic		(4)
A.	<b>12W Standard Energy Efficient Fan Assembly</b> (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)		
<b>6 Ft Only</b>				E.	Fluorescent Lamp		(5)
A.	<b>7W Standard Energy Efficient Fan Assembly</b> (1)			<i>Replace with like fixtures</i>			
	0477654	Fan Motor, Evaporator (MO.4410545)		<b>LED FIXTURES AND POWER SUPPLY</b>			
	0142780	Fan Blade (FB.0142780)		F.	0501213	Power Supply (EP.4481861)	(6)
<b>THERMOSTATS</b>				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>			

Data sheet-Excel-D5NX-LE

Note: Revision P, removed 10 foot data. Other changes marked with a bar, circle or underline.

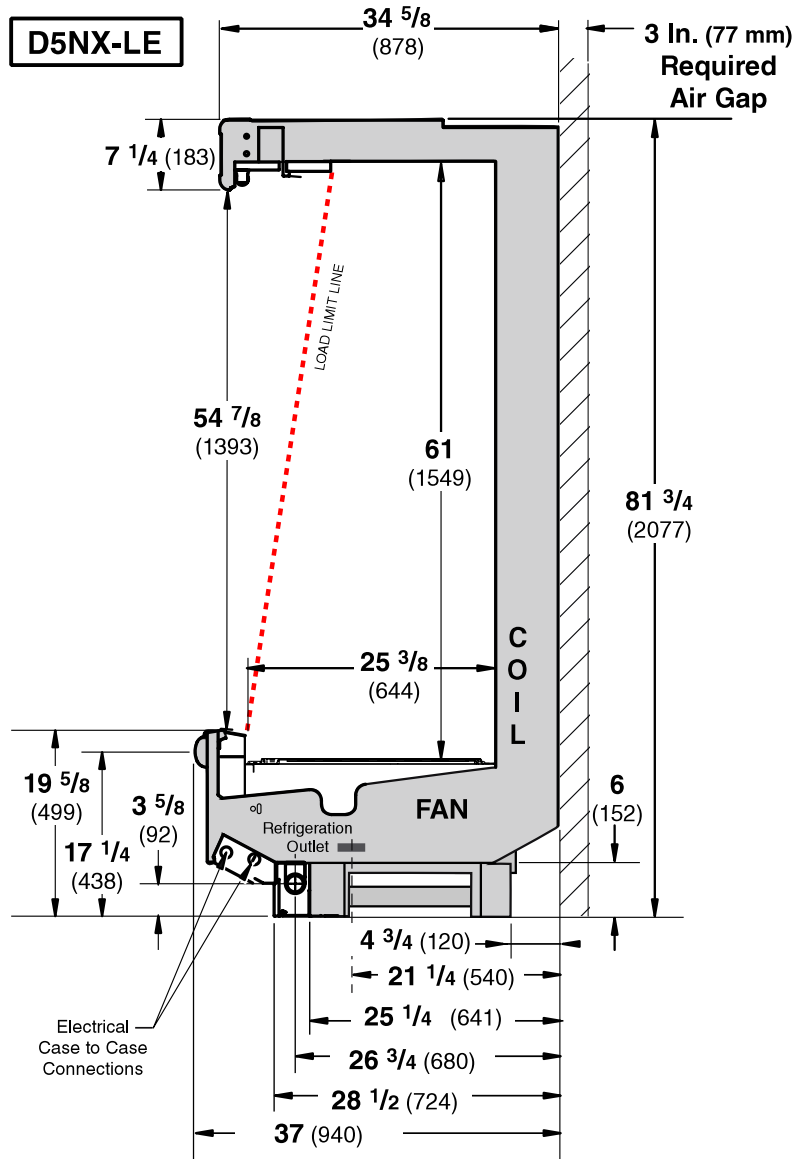


Multi-deck, 5 Display Levels, Low Front, Narrow Footprint



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

Dimensions shown as in. and (mm).



Estimated Charge ***		D5NX-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
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).

**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.

D5NX-LE§	UNLIT	LIT	PEG*
Discharge Air °F	32	32	32
Evaporator °F	24	24	24
Unit Sizing °F	22	22	22

§ 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‡ — Unlit Shelves‡‡**

D5NX-LE	Parallel	Conventional
UNLIT	1503	1598
PEG*	1538	1633

\* Husmann 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)	10.5
(± 15% based on case configuration and product loading).	
OFFTIME	D5NX-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	
CI/CO**	D5NX-LE
	17°F / 7°F

**Indoor Unit Only, Pressure Defrost**

Termination\*\* 48°F

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

# Excel D5NX-LE

## 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
<b>Evaporator Fans</b>								
120V 50/60Hz Standard Energy Efficient	0.30	0.38	0.60	0.90	18	28	36	54
230V 50/60Hz Standard Energy Efficient	0.15	0.20	0.30	0.45	18	28	36	54
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
<b>Minimum Circuit Ampacity</b>								
120V 50/60Hz Standard Energy Efficient	0.50	0.58	0.80	1.10				
230V 50/60Hz Standard Energy Efficient	0.35	0.40	0.50	0.65				
230V 60Hz Export	0.53	0.70	0.86	1.19				
230V 50Hz Export	0.58	0.76	0.96	1.34				
<b>Maximum Over Current Protection 120V</b>	<b>20</b>	<b>20</b>	<b>20</b>	<b>20</b>				
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
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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.

### 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 Rail Light	0.26	0.51	0.51	0.77	30	59	59	85
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

### EcoShine II Canopy

EcoShine II	0.16	0.26	0.32	0.48	19.3	31.6	38.6	58.0
EcoShine II HO	0.22	0.33	0.44	0.66	26.5	39.5	53.0	79.4

### EcoShine II Rail Light —1 Row

	0.08	0.12	0.16	0.25	9.9	14.1	19.8	29.7
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### EcoShine II Shelf

1 Row of Shelves	0.08	0.12	0.16	0.25	9.9	14.1	19.8	29.7
4 Rows of Shelves	0.33	0.47	0.66	0.99	39.5	56.4	79.1	118.6
5 Rows of Shelves	0.41	0.59	0.82	1.24	49.4	70.5	98.9	148.3
6 Rows of Shelves	0.49	0.70	0.99	1.48	59.3	84.5	118.6	178.0

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

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

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

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.

**Product Data**

<i>Recommended Usable Cube</i> <sup>1</sup> (Cu Ft/Ft)	7.10 ft <sup>3</sup> /ft (0.66 m <sup>3</sup> /m)
<i>AHRI Total Display Area</i> <sup>2</sup> (Sq Ft/Ft)	4.58 ft <sup>2</sup> /ft (1.40 m <sup>2</sup> /m)
<i>Shelf Area</i> <sup>3</sup> (Sq Ft/Ft)	7.47 ft <sup>2</sup> /ft (2.28 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 (4) rows of 16-inch shelves.

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

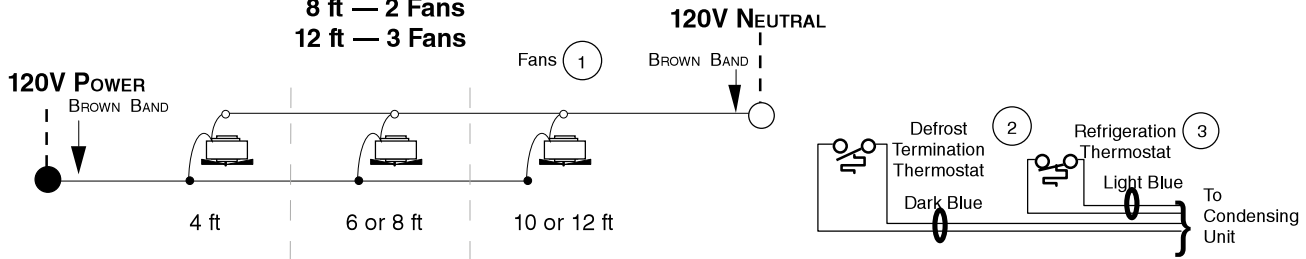
<b>Case</b>	<b>4 ft</b>	<b>6 ft</b>	<b>8 ft</b>	<b>12 ft</b>	<b>Solid End (each)</b>
<b>lb (kg)</b>	800 (363)	1000 (454)	1200 (544)	1400 (635)	100 (45)

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

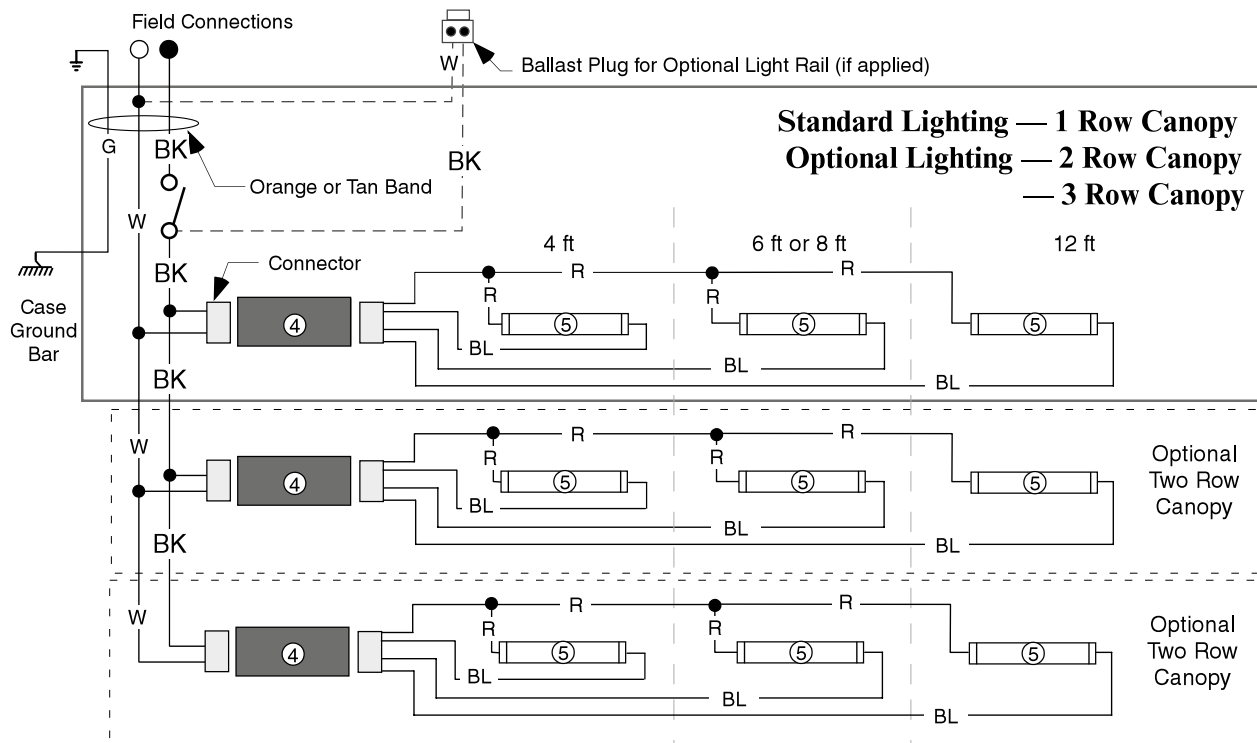
# Fan Wiring Offtime Defrost

1, 2 & 3 Fans

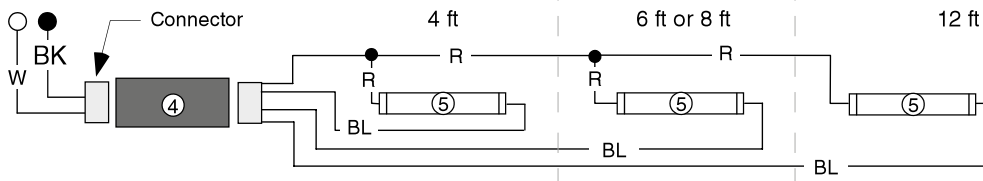
4 ft — 1 Fan  
6 ft — 2 Fans  
8 ft — 2 Fans  
12 ft — 3 Fans



# Canopy Light Circuits — Fluorescent Fixtures



## Optional Lighting — 1 Row Rail



### WARNING

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

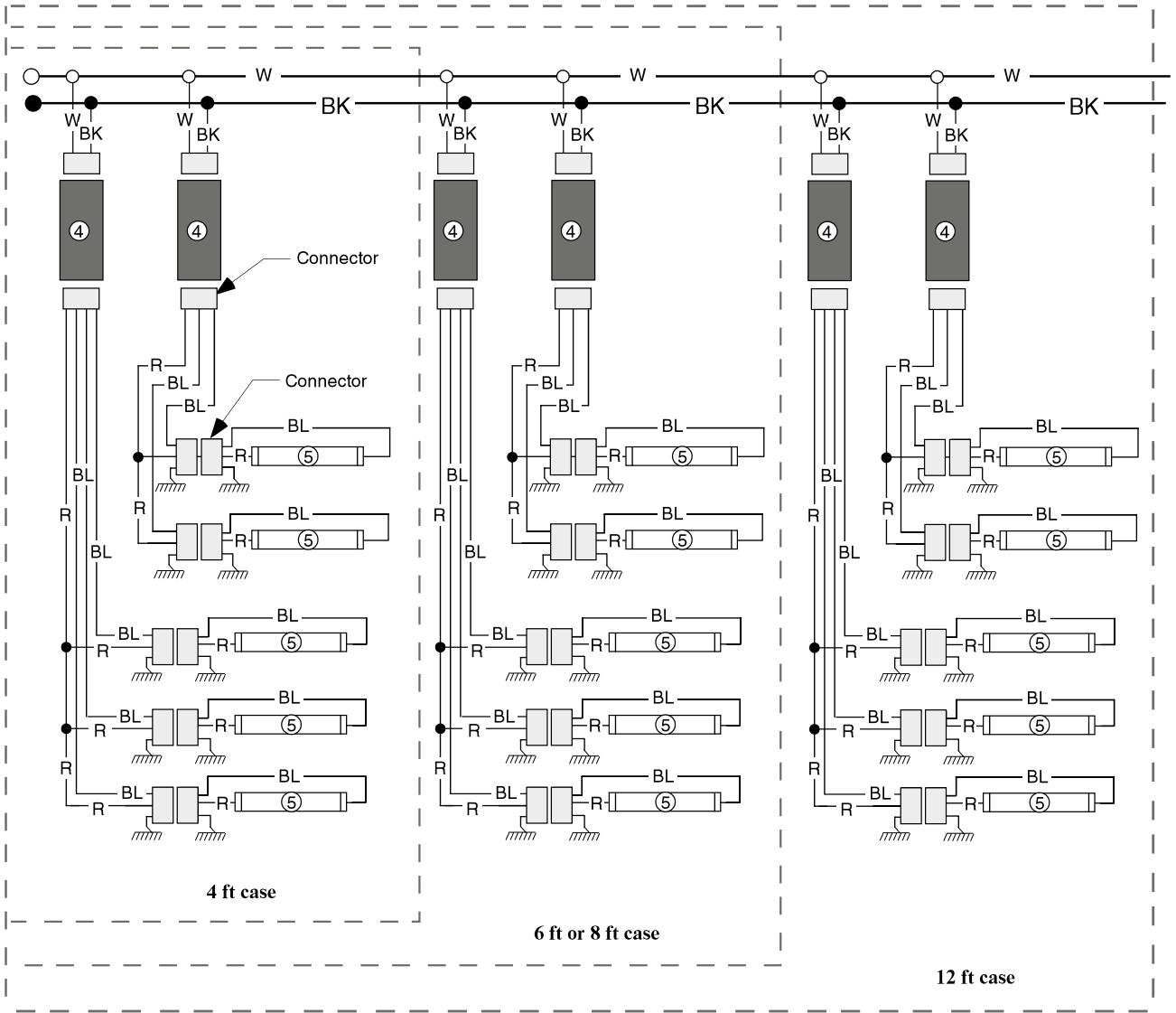
CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS

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.

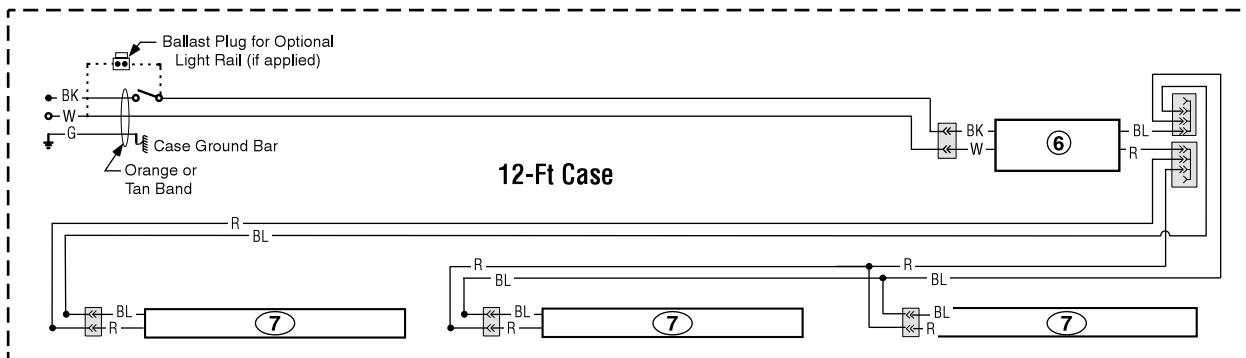
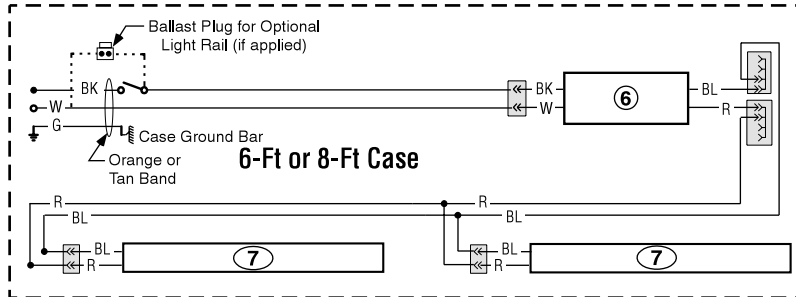
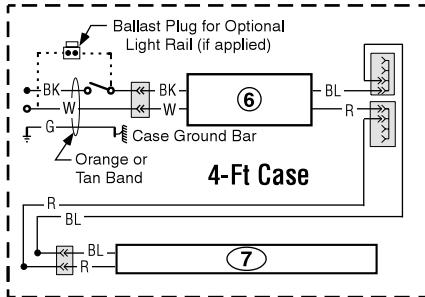
CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS

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

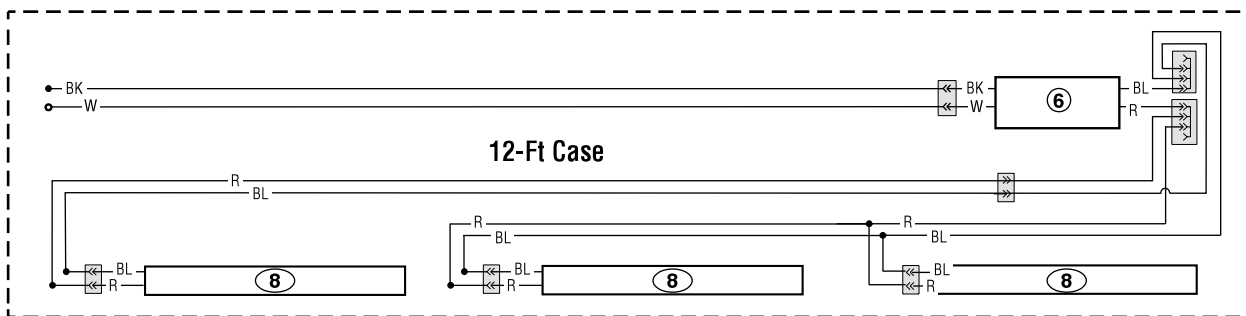
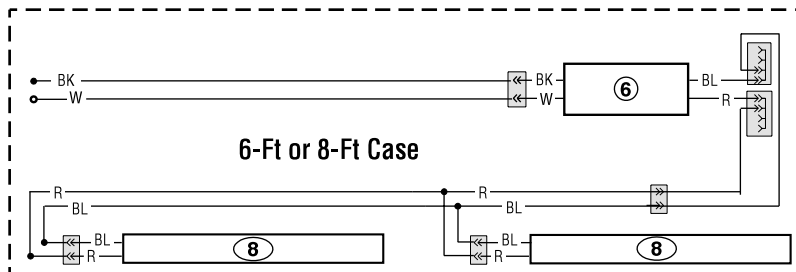
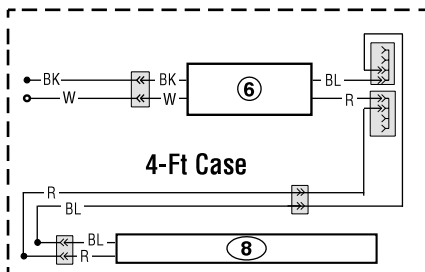
● = 120V POWER   ○ = 120V NEUTRAL   ⊥ = FIELD GROUND   ≡ = CASE GROUND

# Optional Canopy and Rail Light Circuits — LED Fixtures

## EcoShine II LED Canopy Lighting — 1 Row



## 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

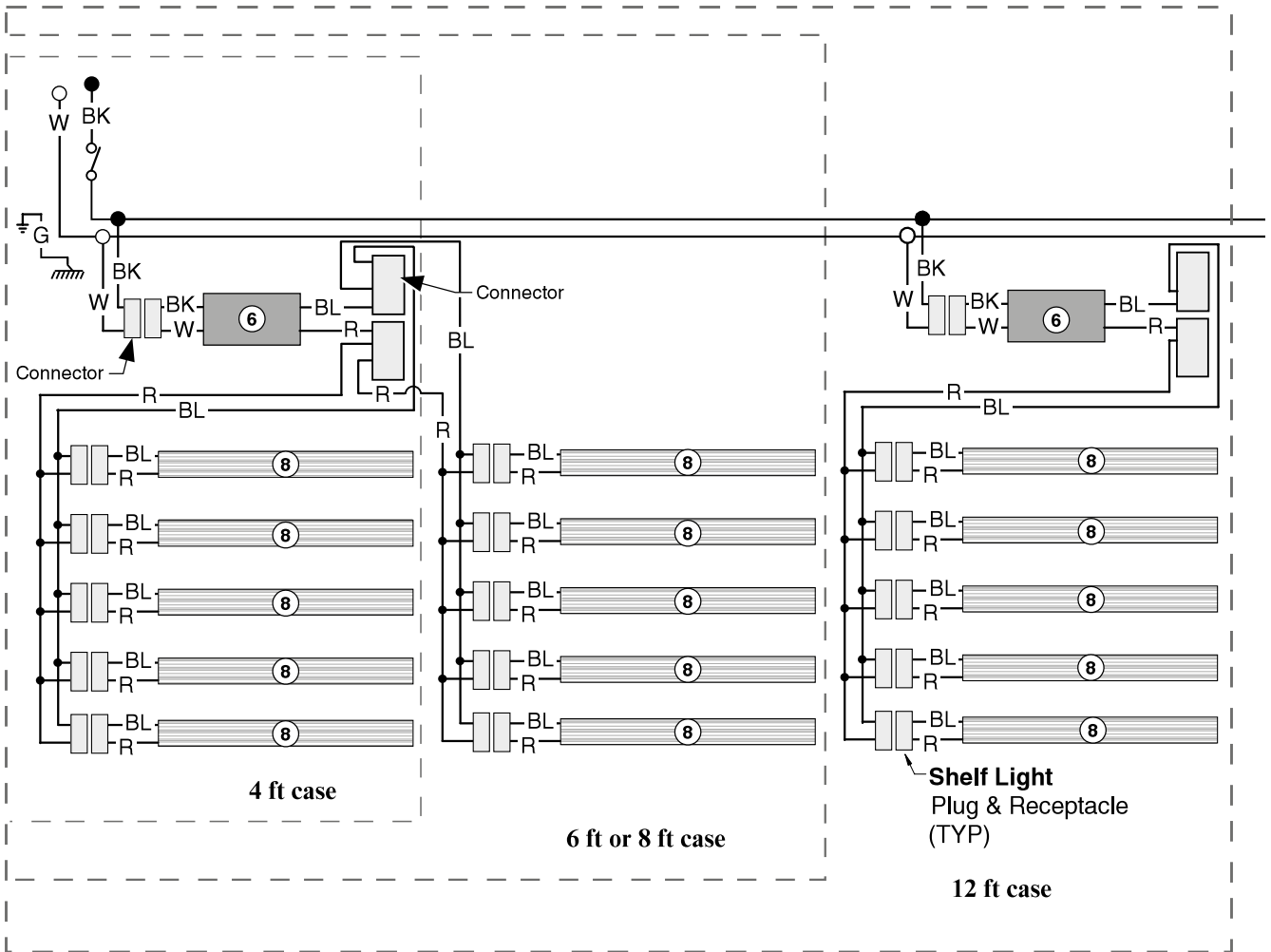
R = Red Y = Yellow G = Green BL = Blue BK = Black W = White

● = 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.

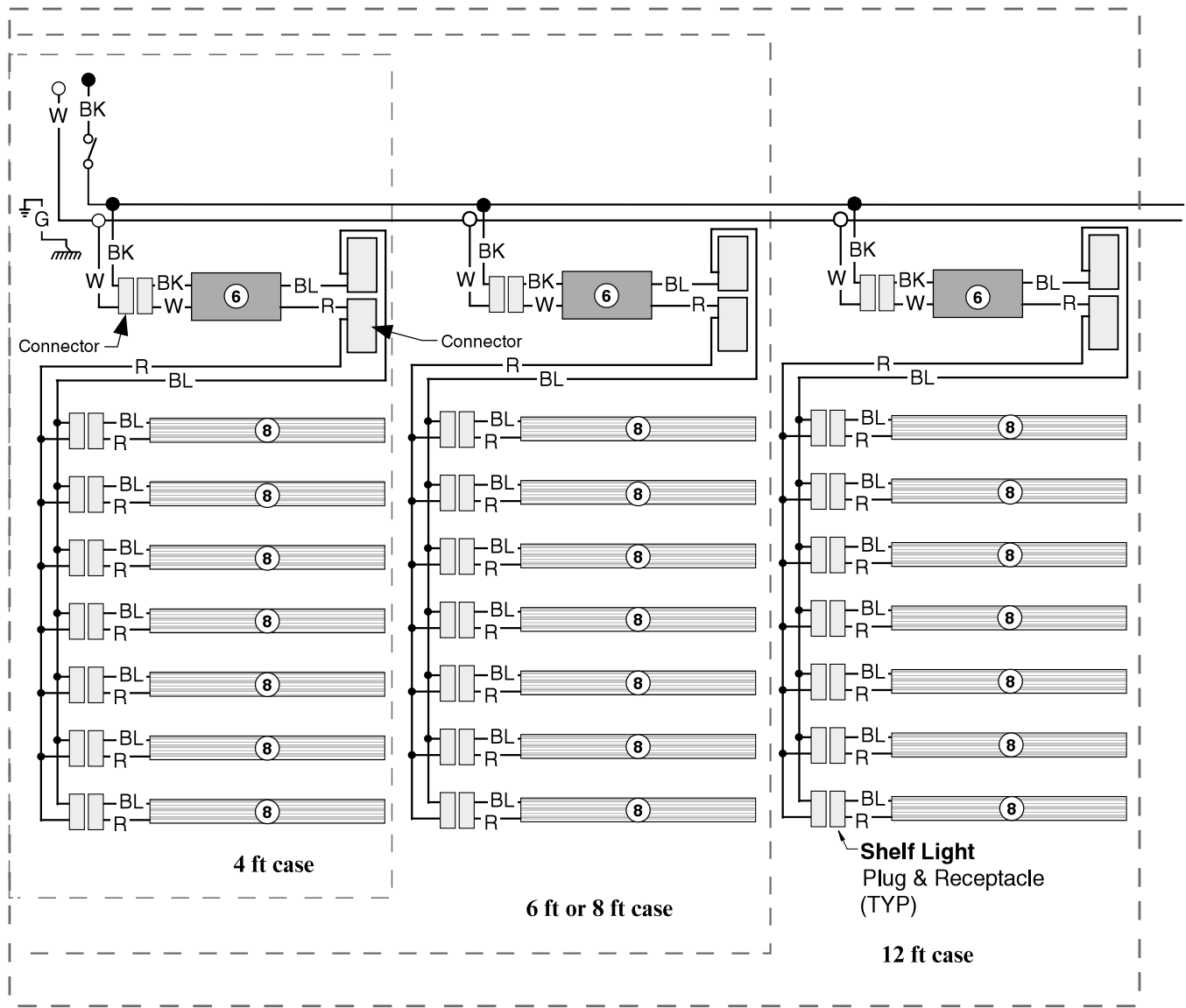
CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS

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

● = 80V POWER      ○ = 80V NEUTRAL      ⚡ = FIELD GROUND      *mm* = 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

mm = CASE GROUND