

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				FLUORESCENT LAMPS AND BALLASTS			
A.	12W Standard Energy Efficient Fan Assembly (1)			D.	Ballast, Electronic		(4)
	0477655	Fan Motor, Evaporator (MO.4410546)			0480130	2 lamps (BA.4481676)	
	0461805	Fan Blade (FB.4780446)			0480131	3 lamps (BA.4481654)	
					0480132	4 lamps (BA.4481677)	
				E.	Fluorescent Lamp		(5)
						<i>Replace with like fixtures</i>	
THERMOSTATS				LED FIXTURES AND POWER SUPPLY			
B.	0411744	Standard Non-adjustable Defrost Thermostat (CT.0411744)	(2)	F.	0501213	Power Supply (EP.4481861)	(6)
C.	0137880	Optional Adjustable Refrigeration Thermostat (CT.4481084)	(3)	G.		LED Canopy Fixture	(7)
						<i>Replace with like fixtures</i>	
				H.		LED Shelf Fixture	(8)
						<i>Replace with like fixtures</i>	

Datasheet-Excel M4NX-E

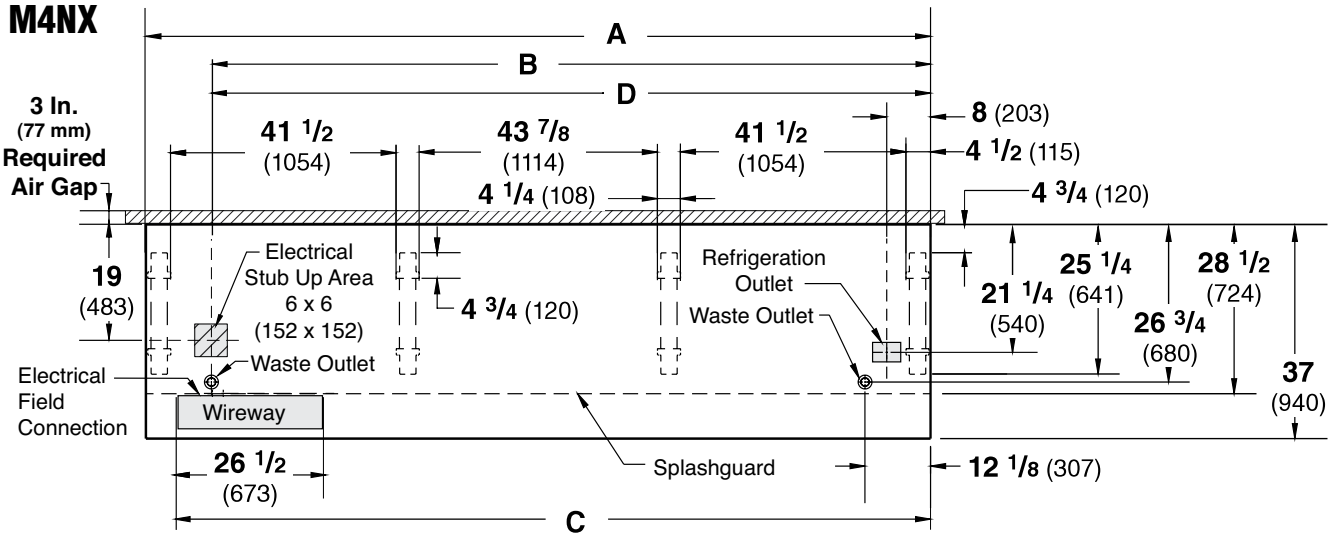
Note: Revision G: Added high glide refrigerant note. Other changes marked by bar, underline or circle.

Engineering Plan Views

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

Meat / Delicatessen
07-2009

Dimensions shown as inches and (mm).



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

	8 ft
General	
(A) Case Length (without ends or partitions) (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)
Back of case to front of splashguard	37 (940)
Back of case to O/S edge of front leg	28 1/2 (724)
Distance between edges of external legs and center legs	25 1/4 (641)
Distance between edges of center legs	41 1/2 (1054)
Distance between front legs and splashguard	NA
	2 3/4 (70)
Electrical Service (Electrical Field Wiring connection point)	
(B) RH End of case to center of stub up area	84 1/4 (2140)
Back of case to center of stub up area	19 (483)
Length of electrical wireway	26 1/2 (673)
(C) RH End of case to LH end of wireway	90 1/8 (2289)
Waste Outlets (One each end)	
(D) RH End of case to the center of LH waste outlet	84 1/4 (2140)
RH End of case to the center of RH waste outlet	12 1/8 (307)
Back O/S of case to center of waste outlets	26 3/4 (680)
Schedule 40 PVC drip pipe	1 1/4 (32)
Refrigeration Outlet	
Back of case to center of refrigeration outlet	21 1/4 (540)
RH end of case to center of refrigeration outlet	8 (203)

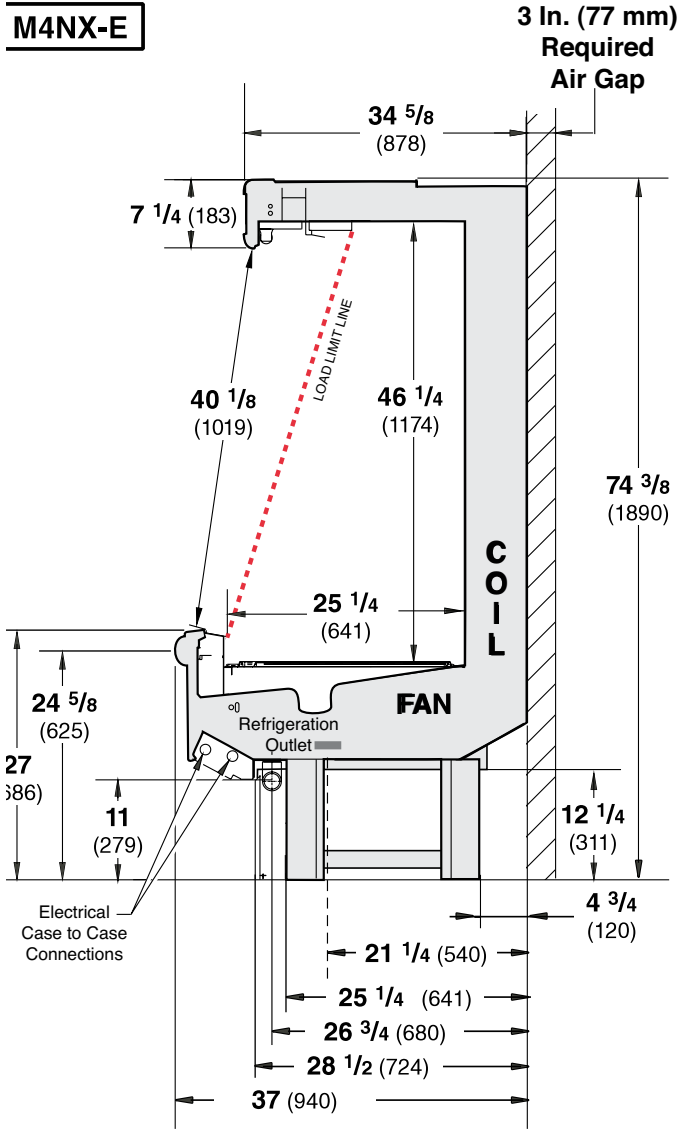
Narrow Footprint, Multi-deck, 4 Display Levels



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 M4NX-E
Meat & Delicatessen

Dimensions shown as inches and (mm).



Estimated Charge ** **M4NX-E**
8 ft 2.7 lb 43 oz 1.2 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.

	M4NX-E§
Discharge Air °F	29
Evaporator °F	21
Unit Sizing °F	19
§ 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‡	
M4X-E	Parallel Conventional
UNLIT	1498 1603

‡ 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)	8
(± 15% based on case configuration and product loading).	

OFFTIME	M4NX-E
Temp Term °F	48
Failsafe Minutes	30

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*	M4NX-E
	14°F / 4°F

Indoor Unit Only, Pressure Defrost

Termination*	48°F
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*Use a Temperature Pressure Chart to determine PSIG conversions.

Excel M4NX-E

Meat & Delicatessen

Electrical Data

		8 ft	
Number of Fans—12W		2	
		Amperes	Watts
		8 ft	8 ft
Evaporator Fan			
120V	50/60Hz Standard Energy Efficient	0.60	36
230V	50/60Hz Standard Energy Efficient	0.30	36
230V	50/60Hz Export	0.66	100
230V	50/60Hz Export	0.76	114
Minimum Circuit Ampacity			
120V	50/60Hz Standard Energy Efficient	0.80	
230V	50/60Hz Standard Energy Efficient	0.50	
230V	50/60Hz Export	0.86	
230V	50/60Hz Export	0.96	
Maximum Over Current Protection 120V			
		20	
Maximum Over Current Protection 230V			
		15	
Standard Lighting (T-8 fluorescent)			
	1 Row Canopy	0.51	59
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.			
Optional Lighting (T-8 fluorescent)			
	Additional 1 Row Canopy	0.51	59
	Additional 2 Row Canopy	1.02	118
	Additional 3 Row Canopy	1.53	177
	1 Row of Shelves	0.51	59
	2 Rows of Shelves	1.02	118
	3 Rows of Shelves	1.53	177
	4 Rows of Shelves	2.04	236
EcoShine II Canopy			
	EcoShine II	0.51	61.6
	EcoShine II HO	0.56	67.2
EcoShine II Rail Light —1 Row			
		0.17	20.5
EcoShine II Shelves			
	3 Rows of Shelves	0.51	61.4
	4 Rows of Shelves	0.68	81.9

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

Product Data

<i>Recommended Usable Cube</i> ¹ (Cu Ft/Ft)	5.05 ft ³ /ft (0.47 m ³ /m)
<i>AHRI Total Display Area</i> ² (Sq Ft/Ft)	3.34 ft ² /ft (1.02 m ² /m)
<i>Shelf Area</i> ³ (Sq Ft/Ft)	5.60 ft ² /ft (1.70 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]

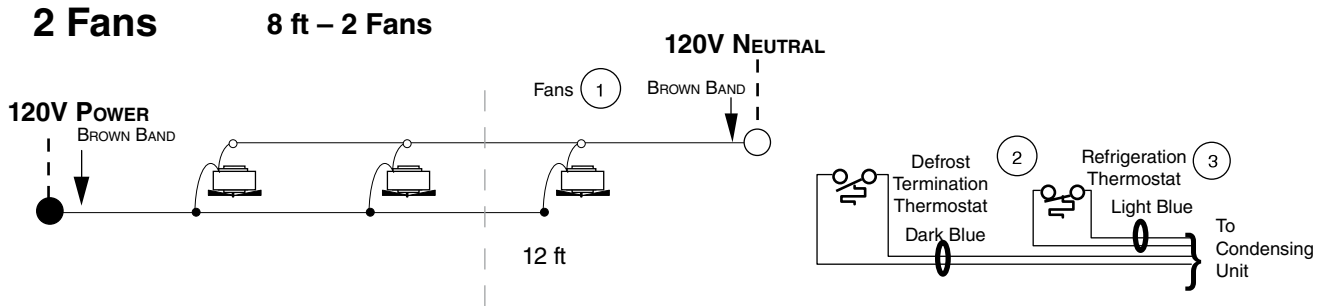
³ Shelf surface area is composed of bottom deck plus standard shelf complement, as shown in the Hussmann *Product Reference Guide*. The standard shelf complement for this model is (1) row of 12-inch shelf, (1) row of 14-inch shelf and (1) row of 16-inch shelf.

ESTIMATED SHIPPING WEIGHT⁴

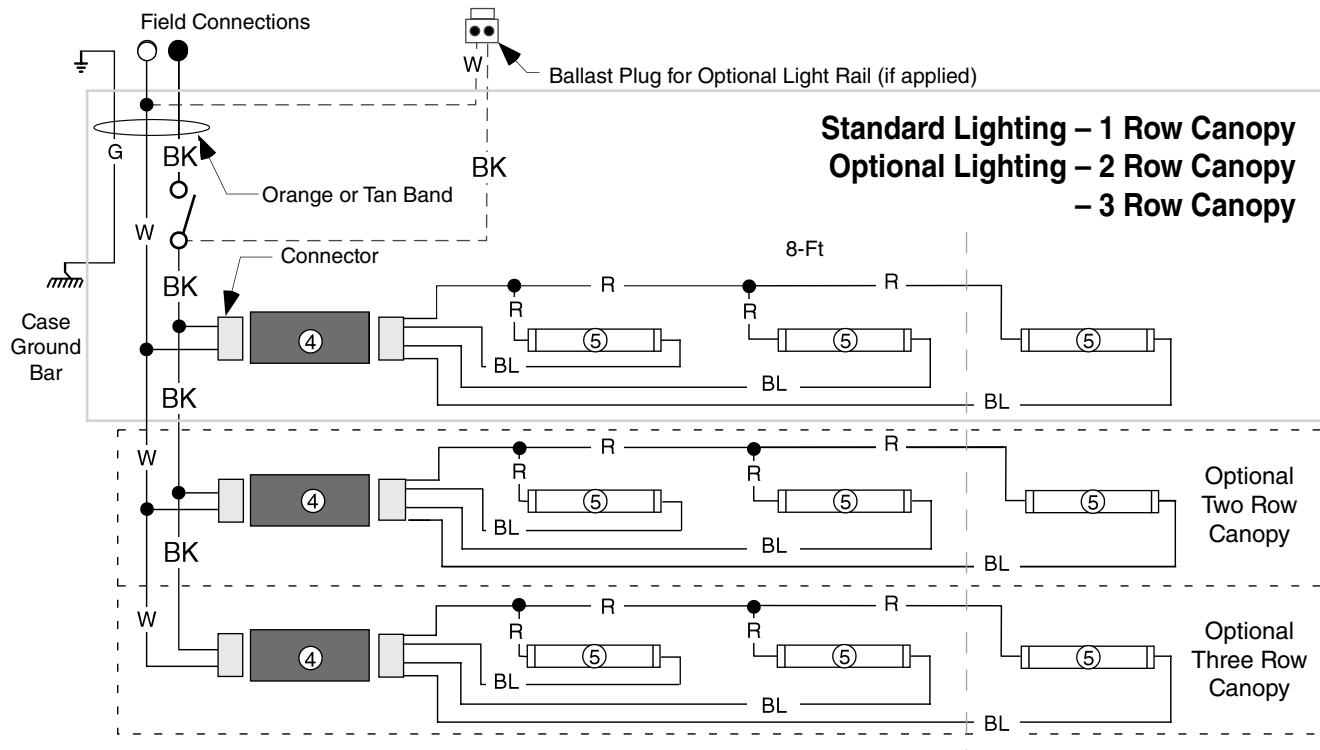
Case	8 ft	Solid End
		(each)
lb (kg)	1000 (454)	100 (45)

⁴ Actual weights will vary according to optional kits included.

Fan Wiring Offtime Defrost



Light Circuits — Fluorescent Fixtures



WARNING

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

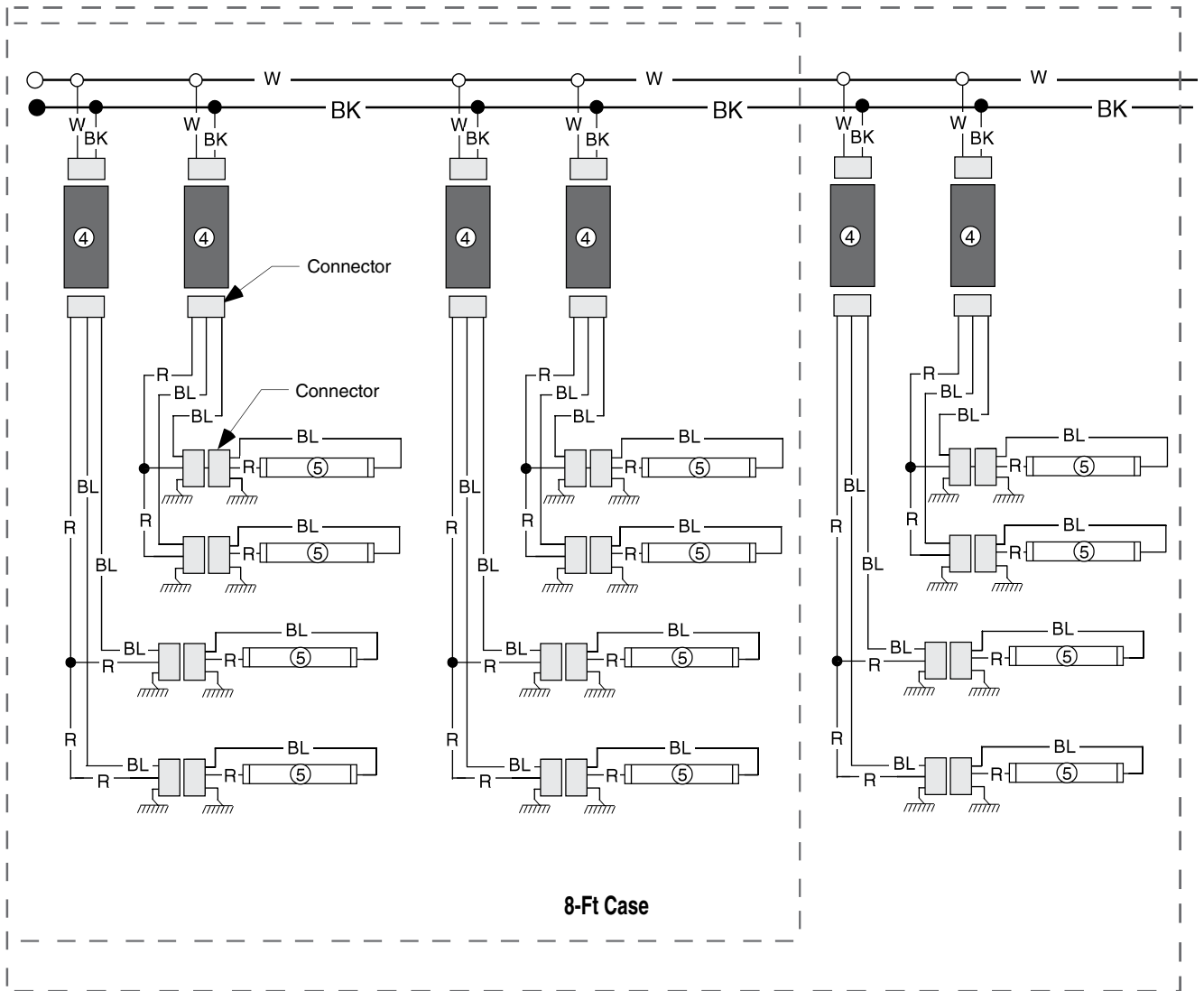
CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS

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 Four Rows of Shelves



WARNING

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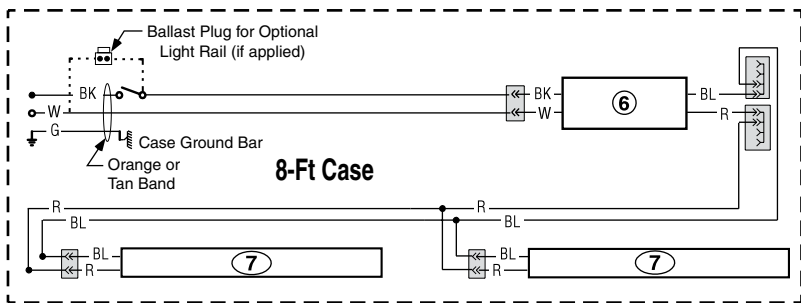
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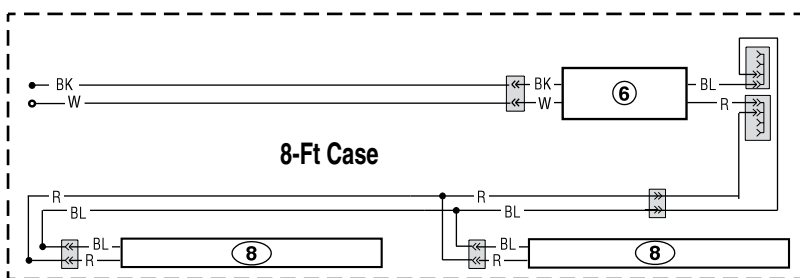
● = 120V POWER ○ = 120V NEUTRAL ⚭ = FIELD GROUND ≡ = CASE GROUND

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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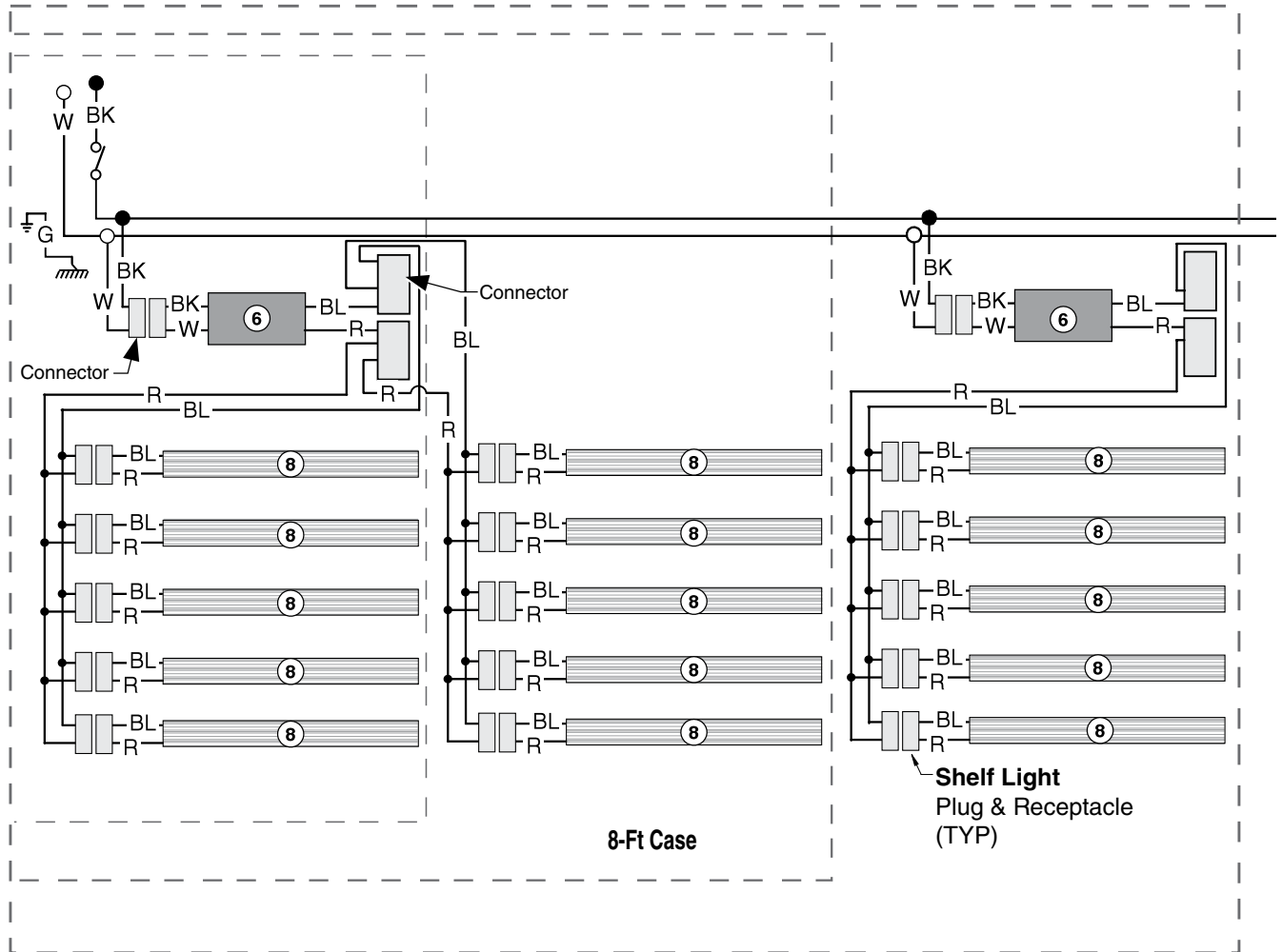
CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS

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● = 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

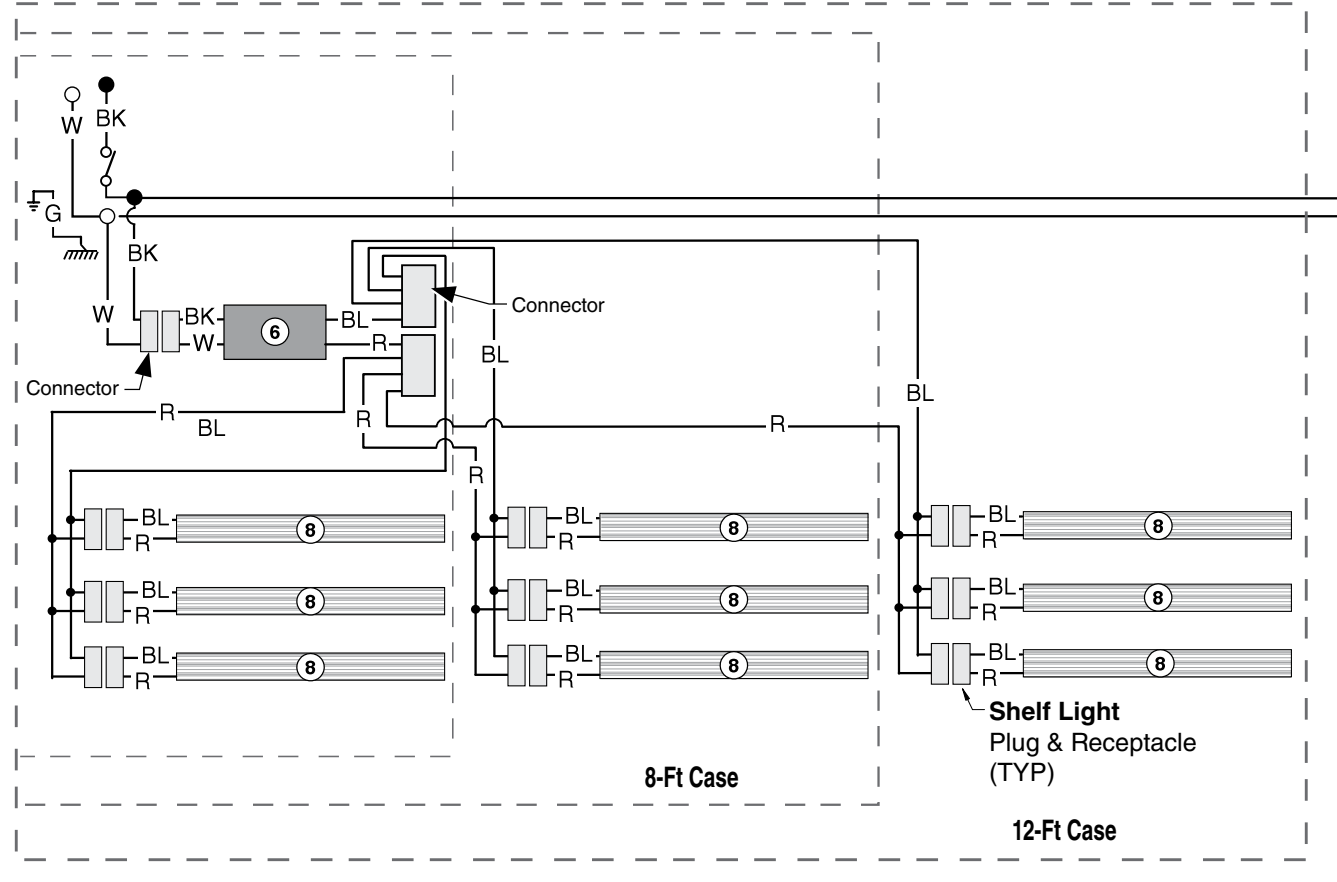
All components must have mechanical ground, and the merchandiser must be grounded.

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 2 or 3 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 mmm = CASE GROUND