

HUSSMANN[®] Excel



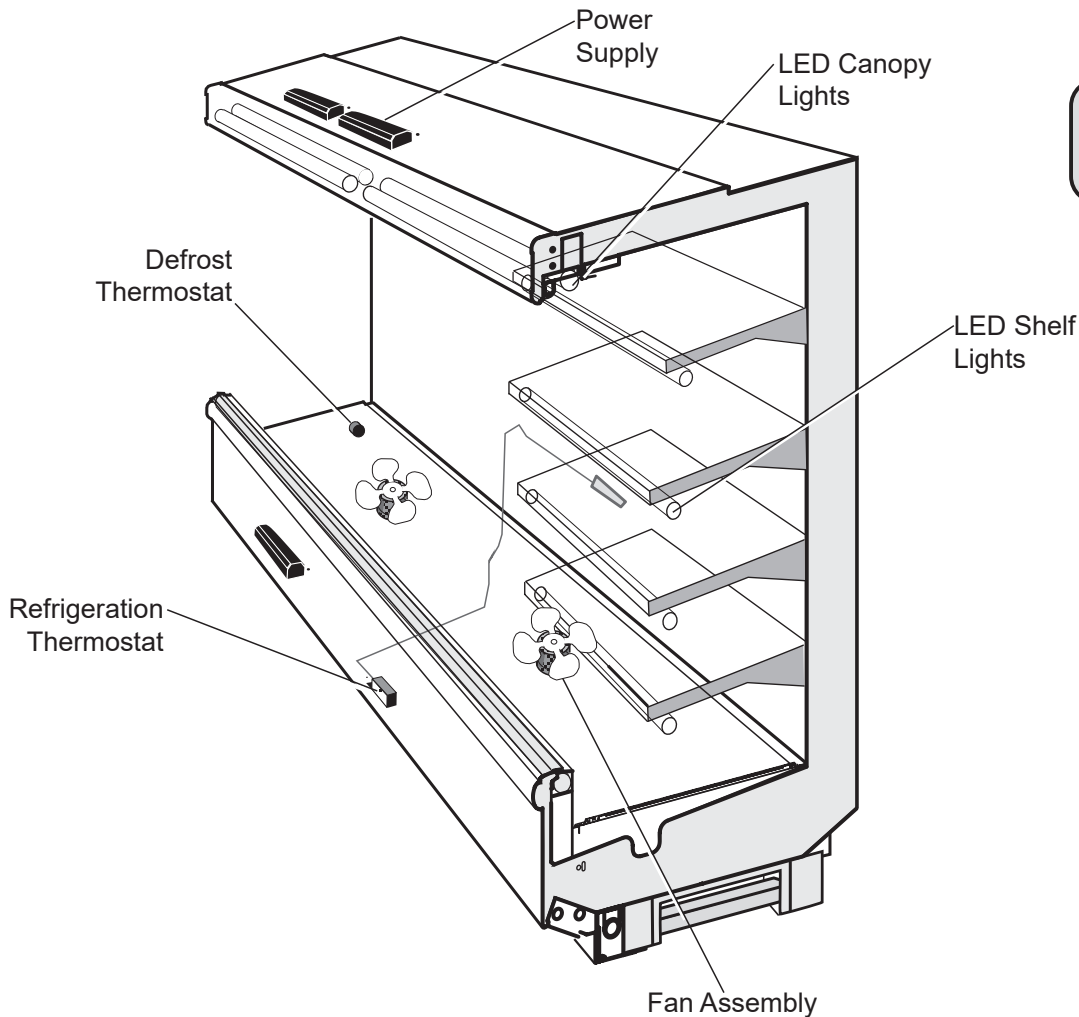
C5X-E

Technical Data Sheet
P/N 0473381_P

NSF[®] Certified

July 2019

DOE 2017
Energy Efficiency
Compliant



NSF Certification

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



Scan the QR code on your mobile device to access additional product information or order parts.

Parts may also be ordered at:

parts.hussmann.com

Call toll free: 1.855.487.7778

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.

Note: Revision P: July 2019. Updated Lighting and CaseShieldPTM.

Data sheet-Excel-C5X-E

Engineering Plan Views

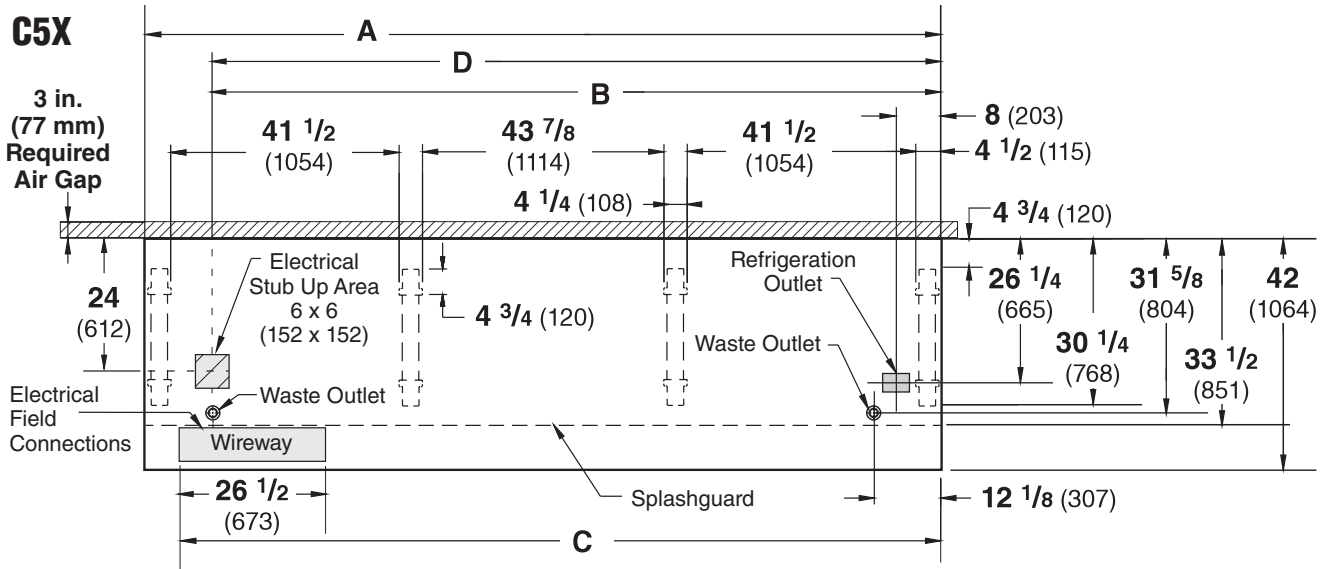
PHYSICAL DATA	
Merchandiser Drip Pipe (in.)	1 1/4
Merchandiser Liquid Line (in.)	3/8
Merchandiser Suction Line (in.)	7/8

Convertible

Dimensions shown as in. and (mm).

09-2005

C5X



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 (<i>without ends or partitions</i>)	48 3/8 (1229)	72 3/8 (1838)	96 3/8 (2448)	144 1/2 (3670)
<i>(Each end and insulated partition adds 1 1/2 in. (38 mm) to case line up.) Optional view end with bumper adds 3 3/4 in. [95 mm].</i>				
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)

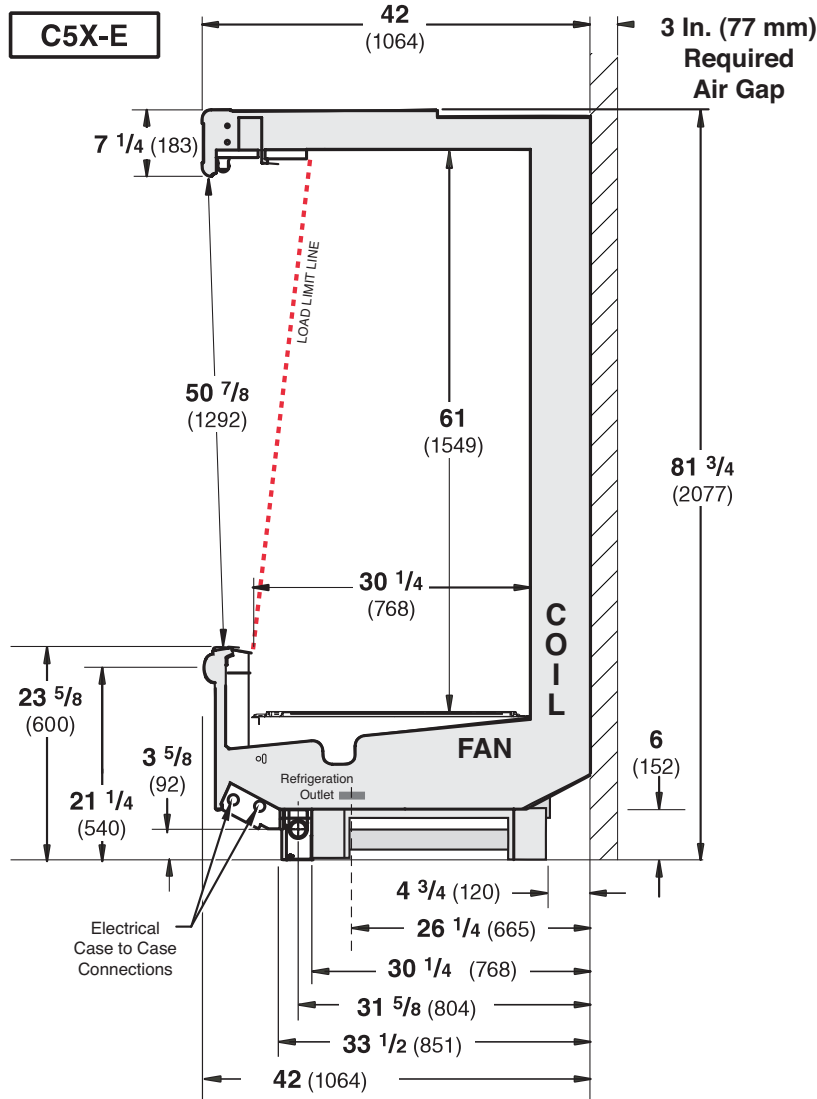
Multi-deck, 5 Display Levels



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

Excel C5X-E
Meat, Produce, Dairy & Delicatessen

Dimensions shown as in. and (mm).



Estimated Charge **		C5X-E	
4 ft	1.6 lb	26 oz	0.7 kg
6 ft	2.2 lb	35 oz	1.0 kg
8 ft	3.1 lb	50 oz	1.4 kg
12 ft	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 (8 oz/0.2 kg).

REFRIGERATION DATA

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

C5X-E§	Meat	Produce	Dairy
Discharge Air (°F)	29	31	31
Evaporator (°F)	21	24	24
Unit Sizing (°F)	19	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 ‡

C5X-E	Meat	Produce	Dairy
PARALLEL			
4 ft/8 ft/12 ft	1633	1573	1513
6 ft	1672	1612	1552
CONVENTIONAL			
4 ft/8 ft/12 ft	1738	1673	1613
6 ft	1552	1712	1652

‡ Add 10 Btu/hr/ft per shelf row for LED fixtures. Add 20 Btu/hr/ft per shelf row for fluorescent lamps. Reduce refrigeration load by 15% if fitted with CaseShieldPTM.

DEFROST DATA

	C5X-E
Frequency Hrs	6
Defrost Water (lb/ft/day)	10.50
(± 15% based on case configuration and product loading).	

OFFTIME	C5X-E
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*	C5X-E	
	Meat	Produce
	14°F / 4°F	17°F / 7°F
		Dairy
		17°F / 7°F

Indoor Unit Only, Pressure Defrost

Termination* 48°F

*Use a Temperature Pressure Chart to determine PSIG conversions.

Excel C5X-E Meat, Produce, Dairy & Delicatessen
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Electrical Data

	4 ft	6 ft	8 ft	12 ft					
Number of Fans—25W	1	—	2	3					
Number of Fans—7W	—	4	—	—					
		Amperes				Watts			
	4 ft	6 ft	8 ft	12 ft	4 ft	6 ft	8 ft	12 ft	
Evaporator Fan									
120V 50/60Hz Standard Energy Efficient	0.60	0.76	1.20	1.80	36	56	72	108	
230V 50/60Hz Standard Energy Efficient	0.30	0.40	0.60	0.90	36	56	72	108	
230V 60Hz Export	0.66	1.00	1.32	1.98	100	156	200	300	
230V 50Hz Export	0.76	1.12	1.52	2.28	114	168	228	342	
Minimum Circuit Ampacity									
120V 50/60Hz Standard Energy Efficient	0.80	0.96	1.40	2.00					
230V 50/60Hz Standard Energy Efficient	0.50	0.60	0.80	1.10					
230V 60Hz Export	0.86	1.20	1.52	2.18					
230V 50Hz Export	0.96	1.32	1.72	2.48					
Maximum Over Current Protection 120V	20	20	20	20					
Maximum Over Current Protection 230V	15	15	15	15					

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.

	4 ft	6ft	Amperes		4 ft	Watts		
			8 ft	12 ft		6 ft	8 ft	12 ft
LED LIGHTING								
EcoShine ULTRA Canopy Lights								
1 Row EcoShine ULTRA	0.16	0.26	0.36	0.54	19	31	43	64
EcoShine II Canopy Lights								
1 Row EcoShine II	0.16	0.26	0.32	0.48	19	32	39	58
1 Row EcoShine II HO	0.22	0.33	0.44	0.66	27	40	53	79
EcoShine II Shelf Lights								
4 Rows of Shelves	0.33	0.47	0.66	0.99	40	56	79	119
5 Rows of Shelves	0.41	0.59	0.82	1.24	49	71	99	148
EcoShine II Rail Light — 1 Row	0.08	0.12	0.16	0.25	10	14	20	30
Standard Lighting (T-8 Fluorescent) 1 Row Canopy								
Each Row of Canopy, Shelf or Rail Lights	0.26	0.51	0.51	0.77	30	59	59	85

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

120V LED Lighting Circuit Total = Canopy Lighting + Shelf Lighting + Optional Rail 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> ¹ (Cu Ft/Ft)	9.39 ft ³ /ft (0.87 m ³ /m)
<i>AHRI Total Display Area</i> ² (Sq Ft/Ft)	4.24 ft ² /ft (1.29 m ² /m)
<i>Shelf Area</i> ³ (Sq Ft/Ft)	9.88 ft ² /ft (3.01 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

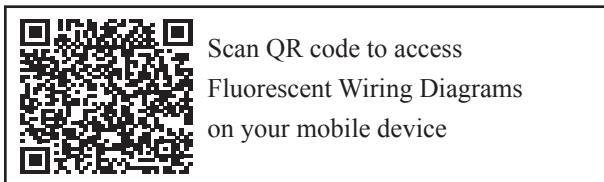
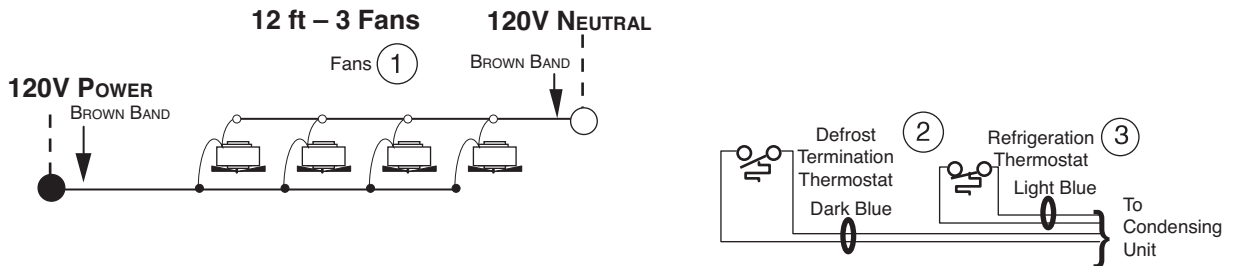
Case	4 ft	6 ft	8 ft	12 ft	Solid End (each)
lb (kg)	800 (363)	1000 (454)	1200 (544)	1400 (635)	100 (45)

⁴ Actual weights will vary according to optional kits included.

**Fan Wiring
Offtime Defrost**

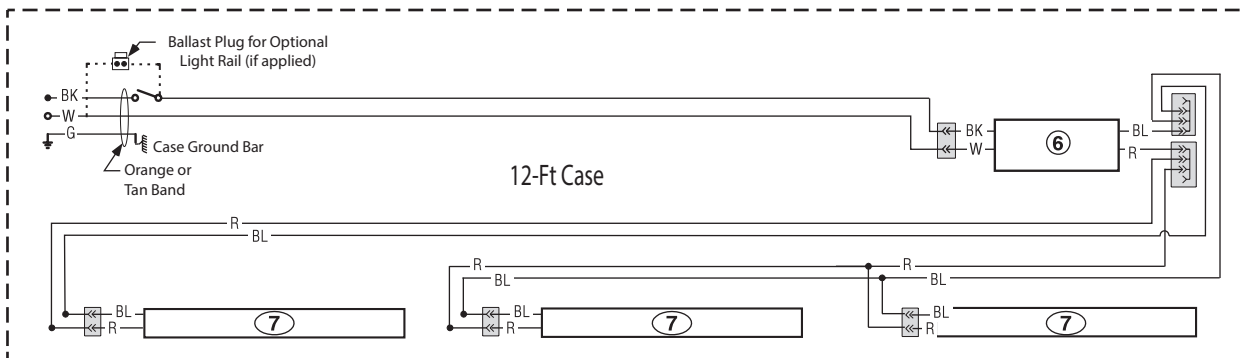
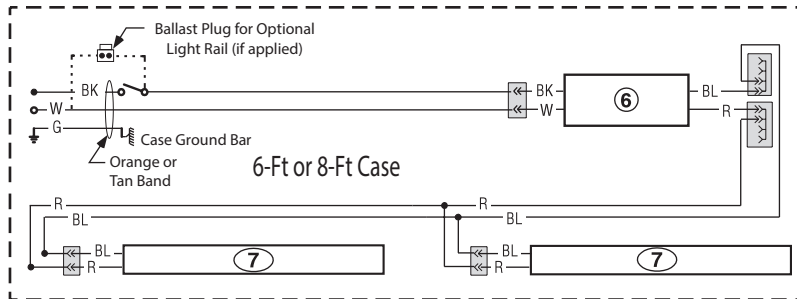
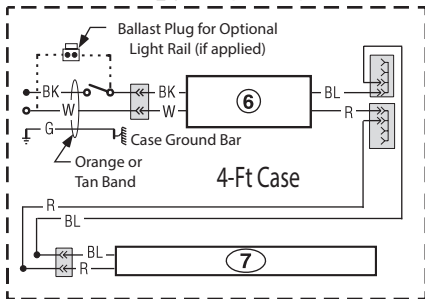
1, 2, 3 & 4 Fans

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

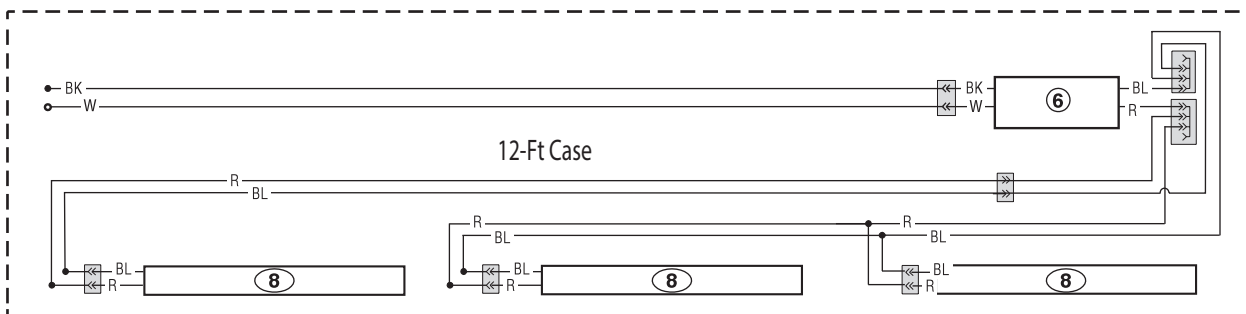
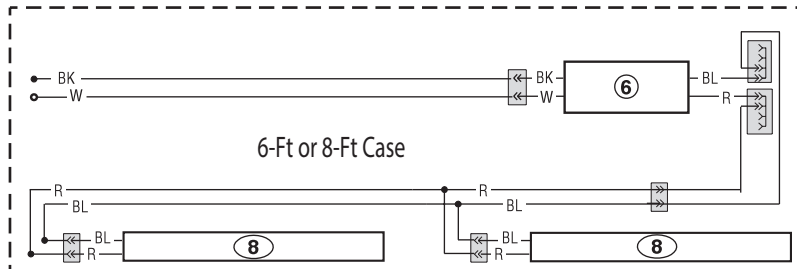
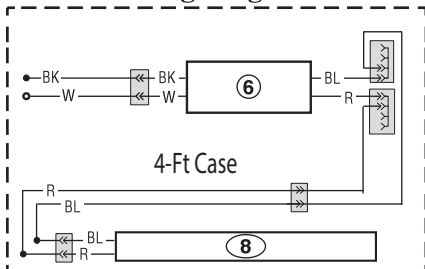


LED Canopy and Rail Light Circuits

LED Canopy Lighting — 1 Row



LED Rail Lighting — 1 Row



WARNING

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

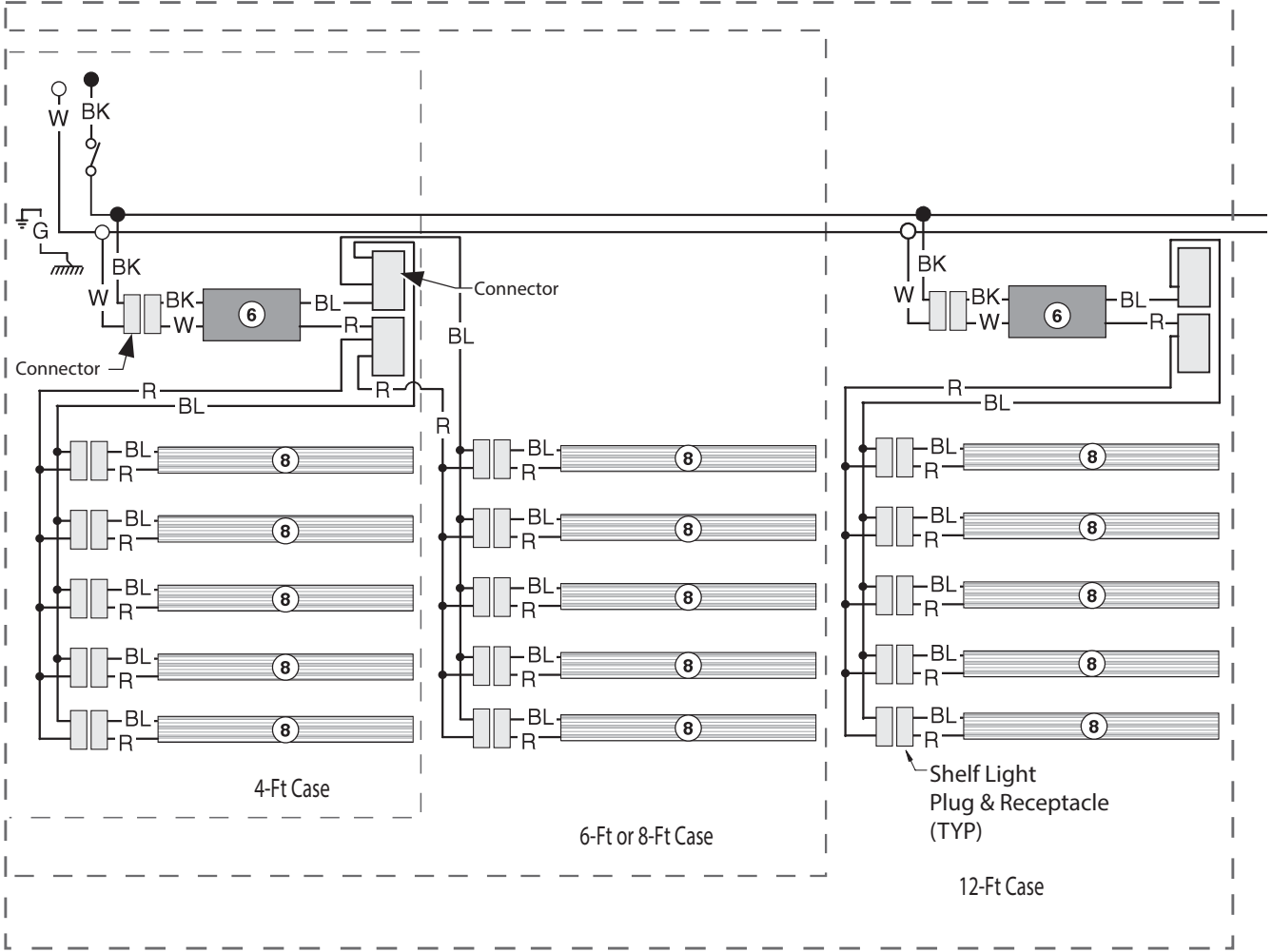
CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS

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

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

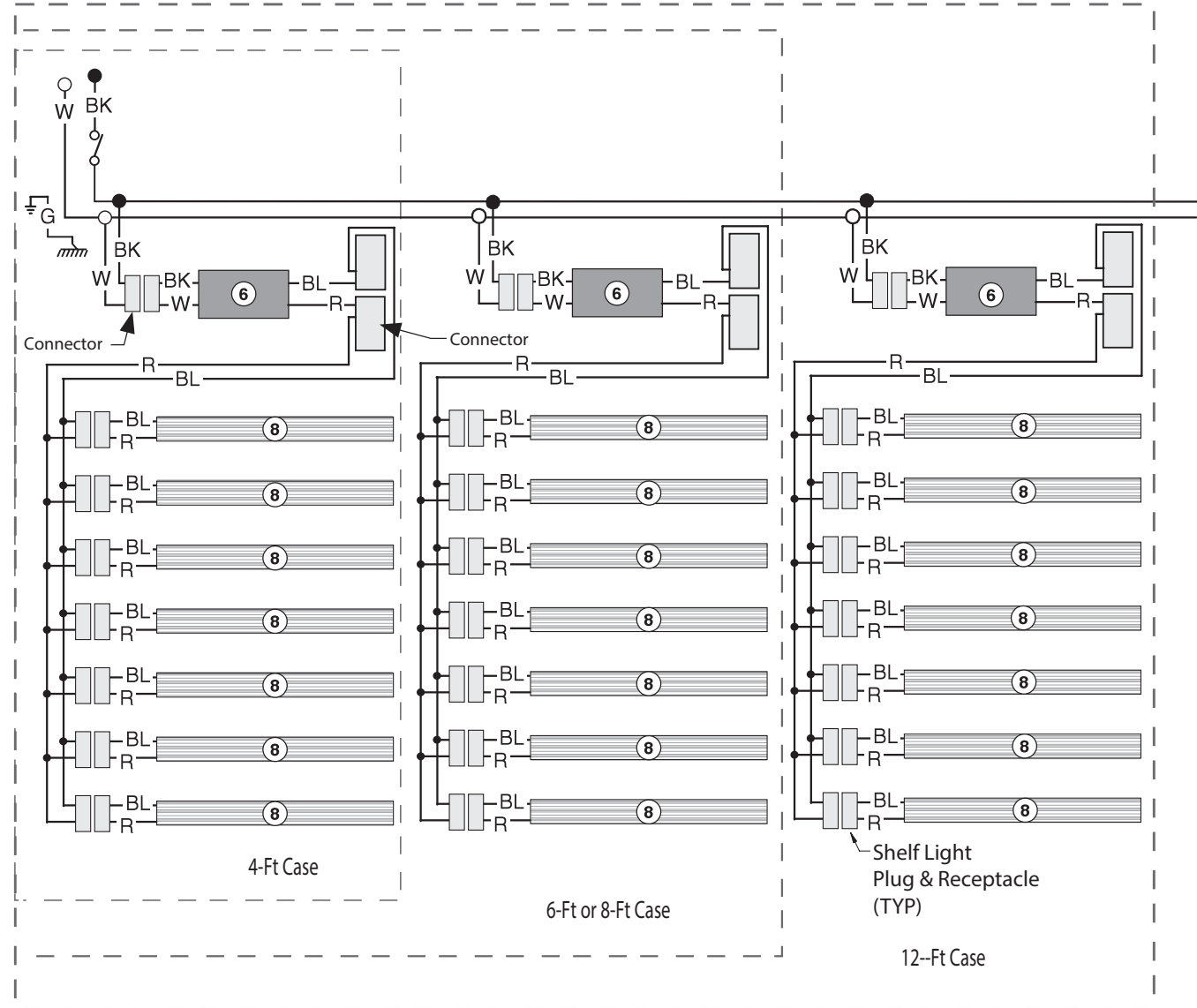
○ = 80V NEUTRAL

⊥ = FIELD GROUND

⏏ = CASE GROUND

Optional Shelf Lighting LED Fixtures

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

mmm = CASE GROUND