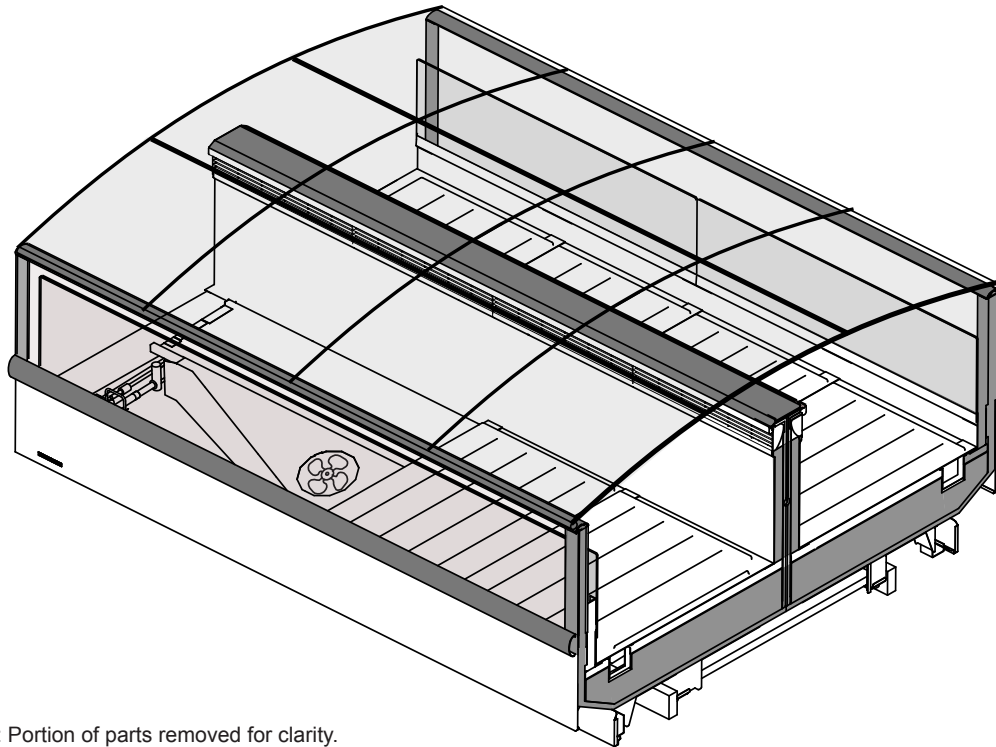


DOE 2017
Energy Efficiency
Compliant



Note: Portion of parts removed for clarity.

NSF Certification

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

Performance Data	Page 2	Electrical Loads	Page 6
Product Data (AHRI Statistics)	Page 2	Replacement Parts List	Page 7
Cross Section	Page 3	Wiring Diagrams	Page 8
Plan Views	Page 4	Computing Refrigeration and Electrical Load	Page 11
Estimated Shipping Weights	Page 5	Revision History	Page 11

Data sheet-Excel FWGH-L

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.

Excel FWGH-L

Frozen

Refrigeration Data ¹

	FF	IC ³	AHRI 1200 Rating Point ²
Discharge Air °F (°C)	-10 (-23.33)	-16 (-26.66)	-9 (-22.77)
Avg Evaporator °F (°C) ⁴	-18 (-27.77)	-24 (-31.11)	-15 (-26.11)
Unit Sizing °F (°C)	-21 (-29.44)	-27 (-32.77)	-18 (-27.77)
Btu/hr per ft (Watts/m)			
Parallel	290 (279)	295 (284)	295 (274)
Conventional	300 (289)	310 (298)	305 (284)

Notes:

1. All data based on store temperature and humidity that does not exceed 75 deg F and 55% relative humidity.
2. For energy consumption comparison only.
3. Dual temperature operation kits are not suitable for ice cream temperature applications.
4. 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.
5. Add 20 BTU/hr/ft for LED Lighting.

Defrost Data

Frequency (hours between defrost) 24

Defrost Water 0.5 lb/ft/day
(0.7 kg/m)

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

OFFTIME **FWGH**
Time (minutes) Not Recommended

ELECTRIC
Temp Term (°F) 48
Failsafe (minutes) 60

Gas
Duration (minutes)

FF 15
IC 18

Conventional Controls

FWEGH
Low Pressure Backup Control CI/CO ⁶

FF -15°F / -27°F
-26.1°C / -32.7°C

IC -21°F / -33°F
-29.4°C / -36.1°C

Indoor Unit Only, Pressure Defrost Termination ⁶
Not Recommended

⁶ Use a Temperature Pressure Chart to determine PSIG conversions.

Estimated Charge ⁷ FWGH

4 ft 1.25 lb 20 oz 0.6 kg

8 ft 2.5 lb 40 oz 1.1 kg

12 ft 3.7 lb 59 oz 1.7 kg

⁷ This is an average for all refrigerant types. Actual refrigerant charge may vary by approximately half a pound.

Product Data

Recommended Usable Cube ⁸ (Cu Ft/Ft) 7.28 ft³/ft (0.68 m³/m)

AHRI Total Display Area ⁹ (Sq Ft/Ft) 8.13 ft²/ft (2.48 m²/m)

Shelf Area (Sq Ft/Ft) 5.50 ft²/ft (1.68 m²/m)

⁸ AHRI Refrigerated Volume less shelving and other unusable space: Refrigerated Volume/Unit of Length, ft³/ft [m³/m]

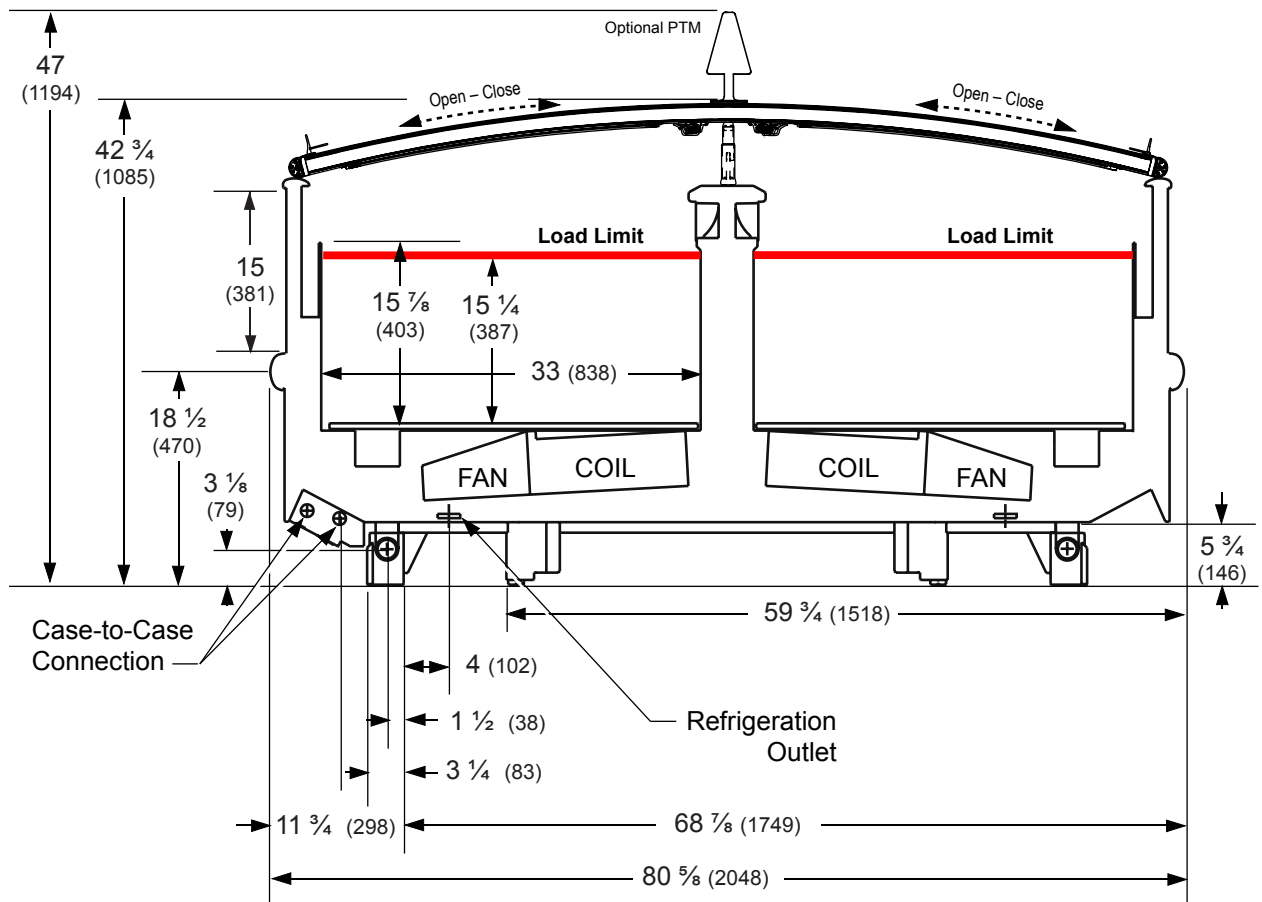
⁹ Computed using AHRI 1200 standard methodology: Total Display Area, ft² [m²]/Unit of Length, ft [m]



Hussmann 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).

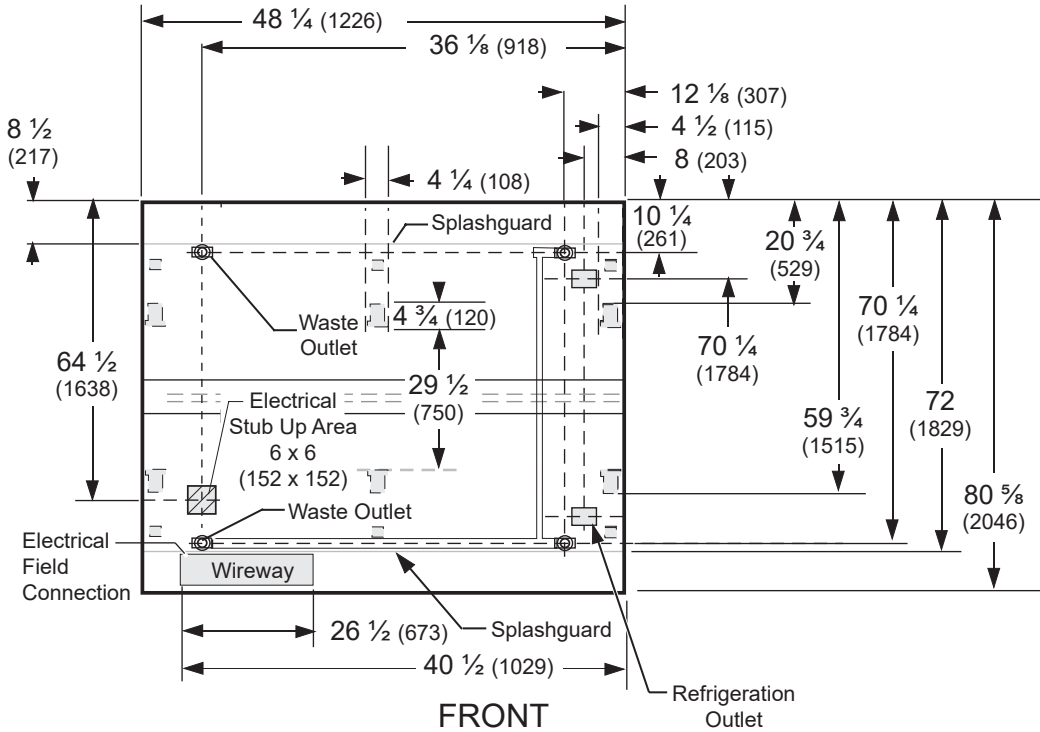
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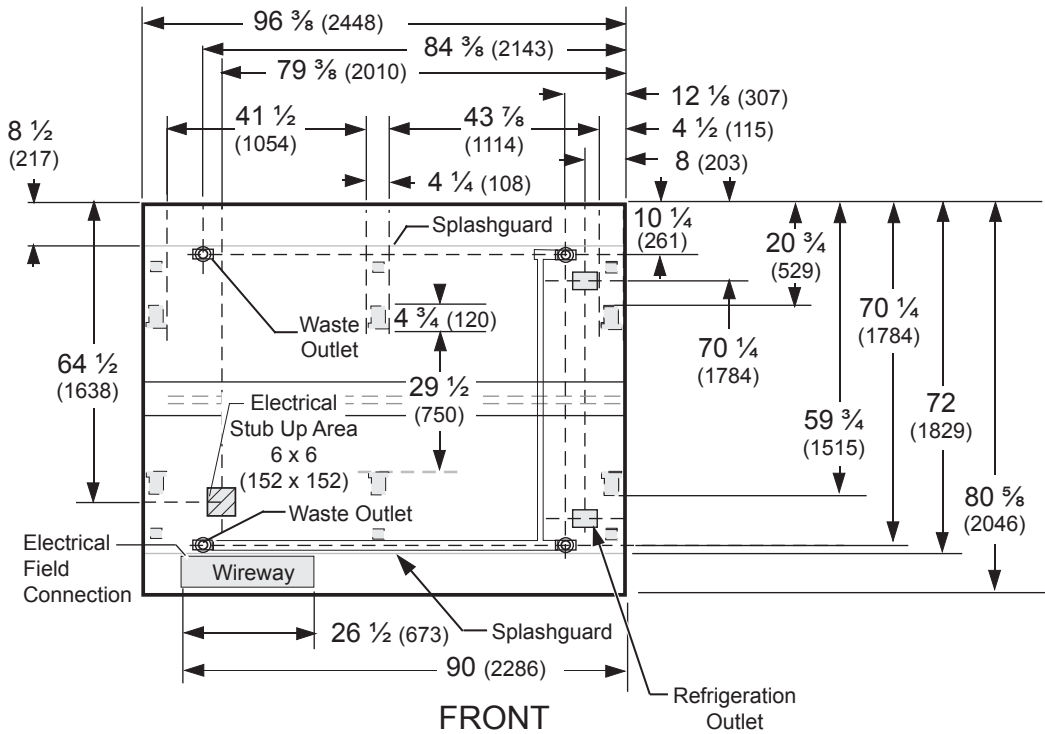
NSF Certification

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

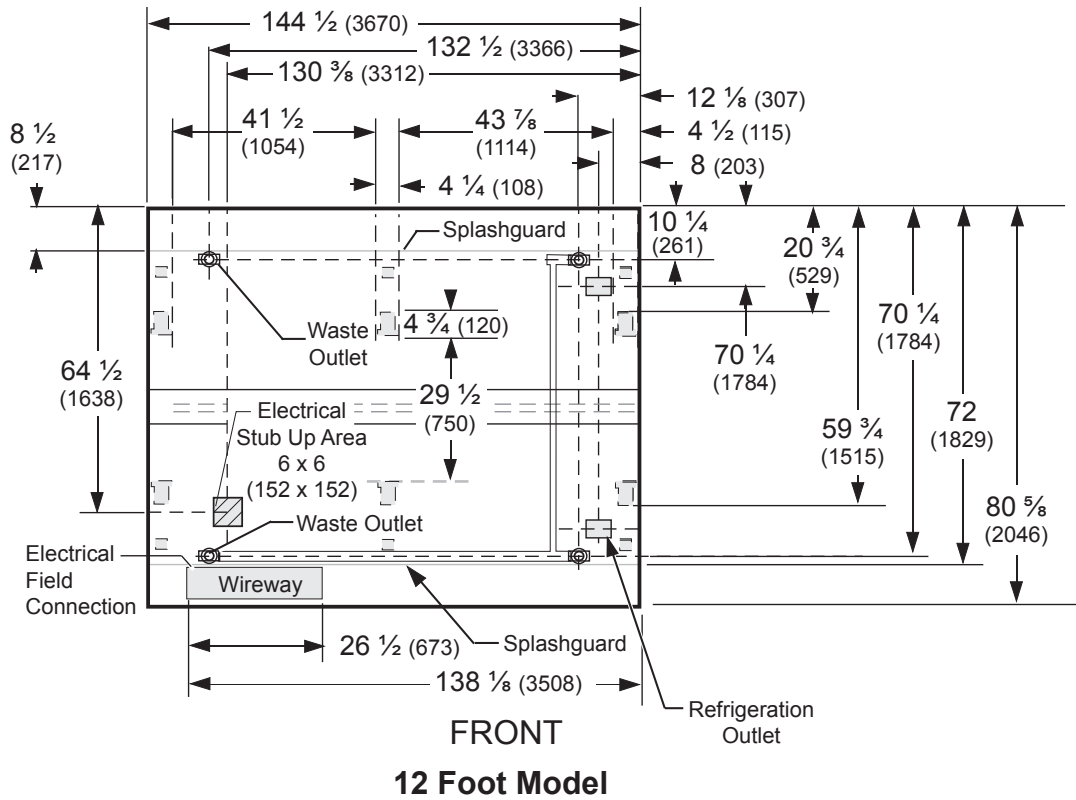
Plan Views



FRONT
4 Foot Model



FRONT
8 Foot Model



ENDS or PARTITIONS
Each standard end and each insulated partition adds 2 in. (38 mm) to case line up.

PHYSICAL DATA	
Merchandiser Drip Pipe (in.)	1 1/4
Schedule 40 PVC	
Merchandiser Liquid Line (in.)	3/8
Merchandiser Suction Line (in.)	5/8

ESTIMATED SHIPPING WEIGHT †				
Case	4 ft	8 ft	12 ft	Solid End (each)
lb (kg)	1300 (589)	1590 (722)	1880 (855)	75 (34)

† Actual weights will vary according to optional kits included.

Electrical Data

Number of Fans	4 ft	8 ft	12 ft			
4W Evaporator	2	4	4			
	Amperes			Watts		
Evaporator Fan	4 ft	8 ft	12 ft	4 ft	8 ft	12 ft
120V 50/60Hz Energy Efficient	0.24	0.48	0.48	16	32	32
Anti-sweat Heaters (on fan circuit)						
120V 50/60Hz Standard	0.7	1.22	1.84	84	144	218
Minimum Circuit Ampacity						
120V 50/60Hz Standard Energy Efficient	0.9	1.90	2.52			
Maximum Over Current Protection 120V	20	20	20			
Return Glass Anti-sweat Heaters						
120V 50/60Hz Standard	0.05	0.18	0.24	6.3	20	28
208V Electric Defrost	4.37	15.38	23.07	910	3200	4800
120V Koolgas Defrost	0.92	3.33	6.66	110	400	800

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.

Standard Lighting

None

Optional Lighting

LED (2' lid opening) 120V 50/60Hz	0.42	0.70	0.98	50	84	118
LED (4' lid opening) 120V 50/60Hz	0.42	0.83	1.25	50	100	150

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.

Replacement Parts List

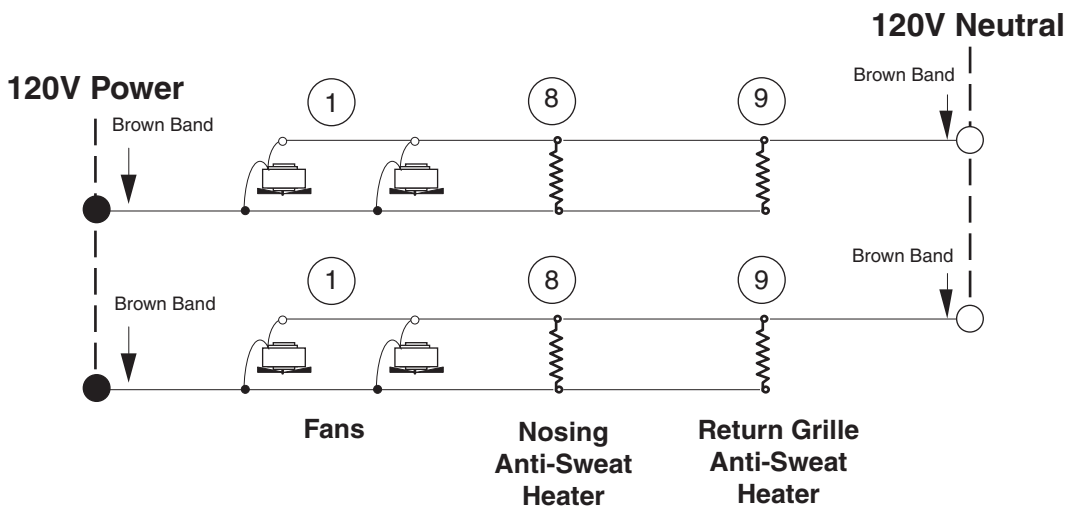
Part #	Description	Part #	Description
FAN ASSEMBLIES		HEATERS (CONT.)	
4W Standard Fan Assembly		120V Drip Pan Defrost Heaters, Koolgas	
4 Ft, 8 Ft & 12 Ft		0488967	4 ft case
0477653	7.0-in. Fan Assembly	0465907	8 ft case
0521166	Fan Blade	0465908	12 ft case
THERMOSTATS		Nosing Anti-sweat Heaters	
0398557	Defrost Termination Thermostat (Front/Electric Defrost only)	0495009	4 ft case
0398558	Defrost Termination Thermostat (Rear/Electric Defrost only)	0495007	8 ft case
HEATERS		0495008	12 ft case
0481370	Heater Switch (Koolgas Defrost only)	Return Grille Anti-sweat Heaters	
208V Evaporator Defrost Heaters		0524425	4 ft case, Inside
0481864	4ft case	0464785	8 ft case, Inside
03016524	8 ft case	0464786	8 ft case, Outside
03016527	12 ft case	0464787	12 ft case, Inside
208V Drip Pan Defrost Heaters, Electric		0464788	12 ft case, Outside
0481865	4 ft case	Return Glass Anti-sweat Heaters	
0462160	8 ft case	3062351	4 ft case
0444296	12 ft case	0474785	8 ft case
		0474786	12 ft case
		OPTIONAL LED FIXTURES AND POWER SUPPLY	
		0554964	Power Supply

NOTE: For LED lighting parts contact your Hussmann service representative at 1-800-922-1919. Please have your model and serial number available.

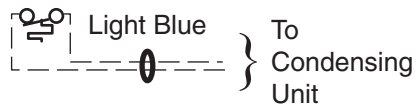
FOR ADDITIONAL PARTS INFORMATION, VISIT
[HTTP://WWW.HUSSMANN.COM/EN/PAGES/AFTERMARKET-PARTS.ASPX](http://www.hussmann.com/en/pages/aftermarket-parts.aspx)

Fan Wiring Electrical Defrost - Standard

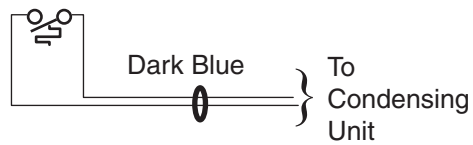
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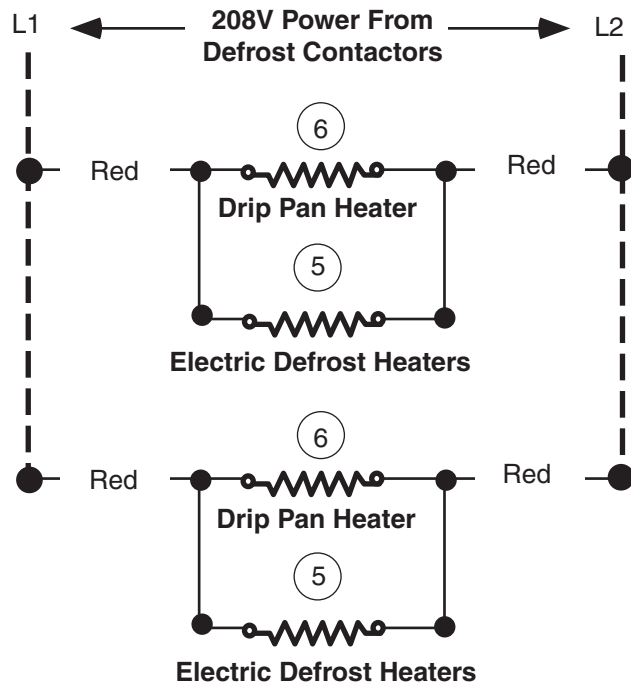
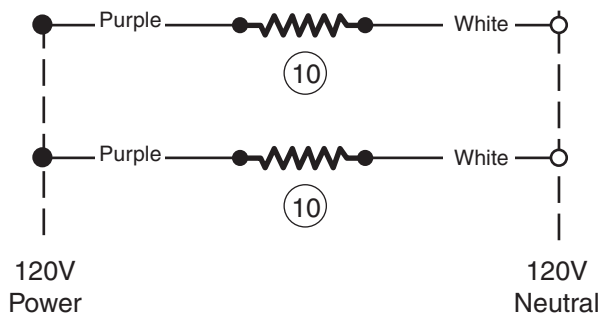
2 Refrigeration Thermostat (Optional)



3 Defrost Termination Thermostat



Return Glass Anti-Sweat Heater



WARNING

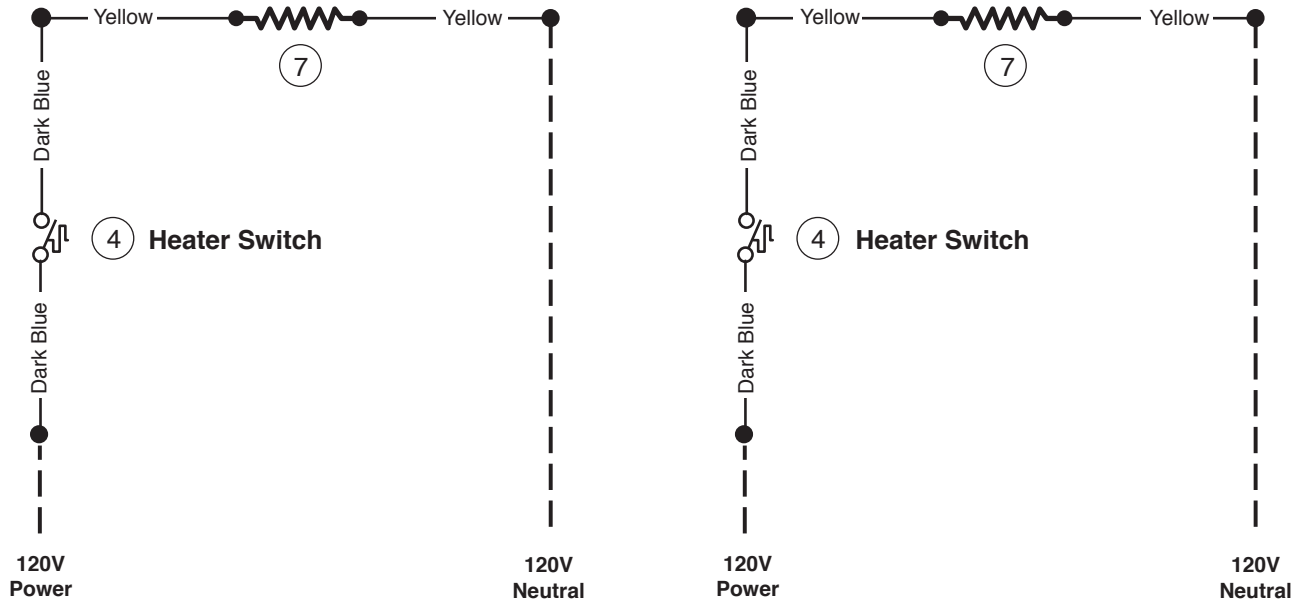
All components must have mechanical ground, and the merchandiser must be grounded.

Circled Number = Parts List Item Numbers

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Optional Gas Defrost

120V Drip Pan Heater — Koolgas Only



WARNING

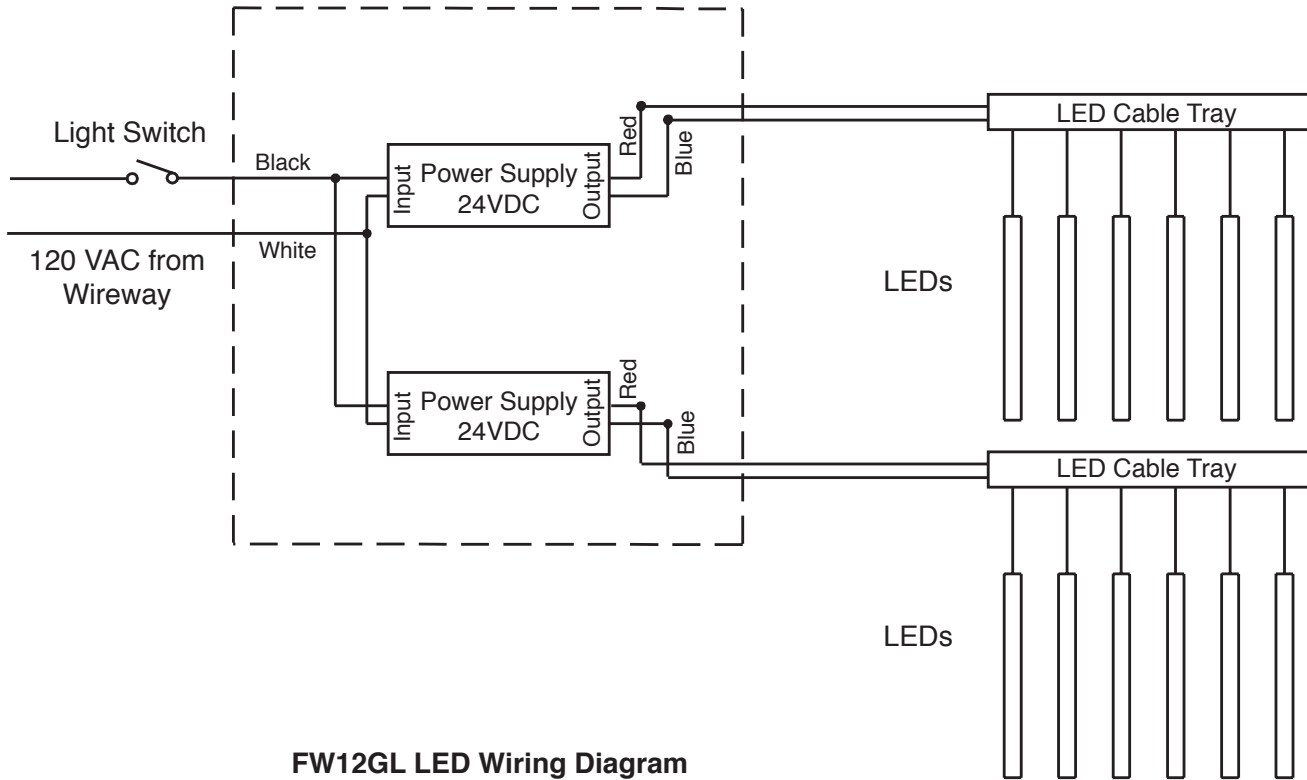
All components must have mechanical ground, and the merchandiser must be grounded.

Circled Number = Parts List Item Numbers

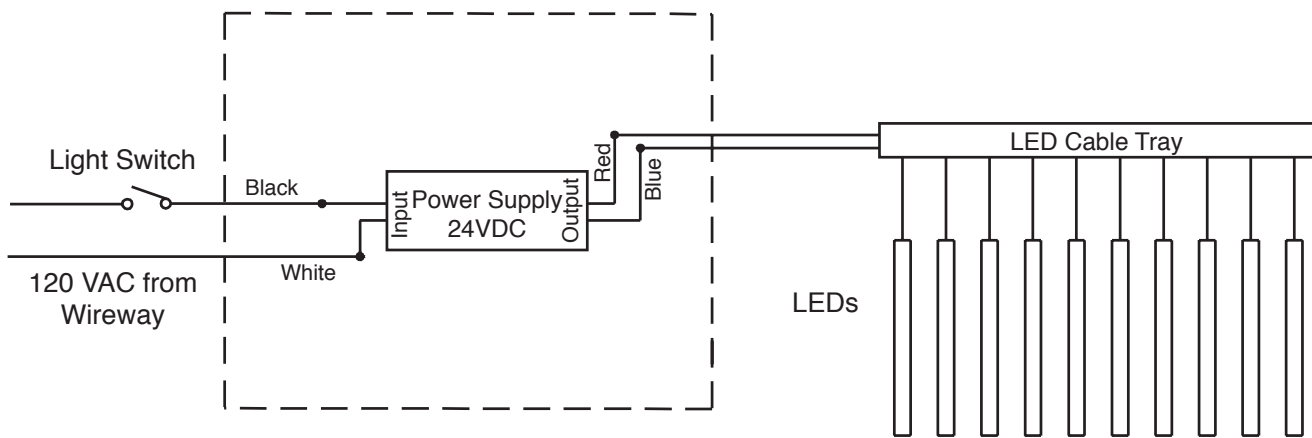
Grayed components in 12 foot models only.

**Optional LED Lighting
Wiring Diagrams**

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Frozen



FW12GL LED Wiring Diagram



**FW8GL
LED Wiring Diagram**

Estimating Refrigeration and Electrical Load (for comparison purposes only)

Case Btu

To determine Btu for a case, refer to the performance data chart on Page 2. Select lit or unlit shelves, then select the type of remote refrigeration system (parallel or conventional), which will give Btu/hr/ft. Multiply this number by the length of the case to determine Btu per hour.

Case Electrical

Refer to store legend to determine number of circuits. Lighting should be specified in store legend.

Fan electrical load for a case is computed by selecting the case length and fan voltage on Page 6. For example, a 12 ft case uses 3 fans. The store legend specifies fans on a 230V circuit. In this instance, fans use 0.39 Amps and the MCA is 0.59. When applied, ambient fans, anti-sweat heaters, controllers, etc. must be included in the MCA. Include lights in the MCA if lights are on same circuit.

Lights may be on a separate circuit. To estimate lighting load: select case length (12 ft), canopy lighting [standard or optional] (here 0.70 for standard), and shelf lighting [maximum for which case is wired] (1.53 for six shelves); then add together [0.70 + 1.53 = 2.23 amps for 120V] (for 230V, multiply 2.23 * 0.52 = 1.16).

Line Sizing — Refer to store legend.

Hussmann Line Sizing Charts are engineered for use with Hussmann refrigeration equipment.

Revision History

Revision A: June 2014: Original Issue.

Revision B: August 2015: Added Optional Lighting Electrical Data on Page 6 and updated Power Supply part number on Page 7.

Revision C: January 2016: Updated fan assembly part numbers Page 7.

Revision D: May 2016: Added note on page 2.

Revision E: June 2016: Updated refrigeration data and updated AHRI Total Display Area on page 2.

Revision F: March 2017: Added high glide refrigerant note.

Revision G: August 2018: Added 4 foot data.