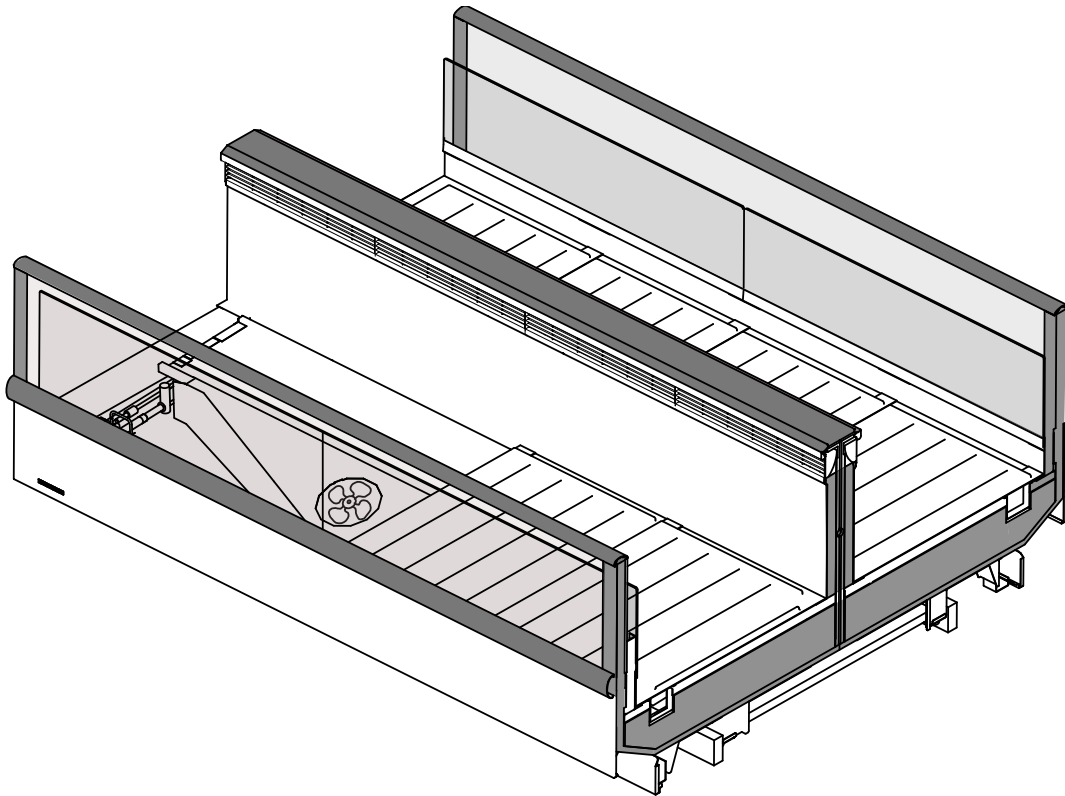


DOE 2017
Energy Efficiency
Compliant



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 10
Estimated Shipping Weights	Page 5	Revision History	Page 10

Data sheet-Excel FWGH

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

Frozen

Refrigeration Data ¹

	8 Ft Case			AHRI 1200 Rating Point ²
	MED	FF	IC	
Discharge Air °F (°C)	24 (-4.44)	-12 (-24.44)	-22 (-30.00)	-15 (-26.11)
Evaporator °F (°C)	19 (-7.22)	-20 (-28.88)	-30 (-34.44)	-24 (-31.11)
Unit Sizing °F (°C)	17 (-8.33)	-23 (-30.55)	-33 (-36.11)	-27 (-32.77)
Btu/hr per ft (Watts/m)				
Parallel	500 (481)	675 (649)	755 (726)	700 (673)
Conventional	520 (500)	705 (678)	785 (755)	730 (702)

	6 Ft & 12 Ft Case			AHRI 1200 Rating Point ²
	MED	FF	IC	
Discharge Air °F (°C)	24 (-4.44)	-12 (-24.44)	-22 (-30.00)	-15 (-26.11)
Evaporator °F (°C)	19 (-7.22)	-20 (-28.88)	-30 (-34.44)	-24 (-31.11)
Unit Sizing °F (°C)	17 (-8.33)	-23 (-30.55)	-33 (-36.11)	-27 (-32.77)
Btu/hr per ft (Watts/m)				
Parallel	465 (447)	670 (620)	720 (693)	670 (645)
Conventional	485 (467)	695 (645)	750 (722)	695 (669)

Notes:

- All data based on store temperature and humidity that does not exceed 75 deg F and 55% relative humidity.
- For energy consumption comparison only.
- Dual temperature operation kits are not suitable for ice cream temperature applications.
- 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.

Defrost Data

Frequency (hours between defrost) 24

Defrost Water 2.2 lb/ft/day (3.3 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
Time (minutes)
FF 15
IC 18

Conventional Controls

FWGH

Low Pressure Backup

Control CI/CO ⁵

FF -17°F / -29°F

-27.2°C / -33.8°C

IC -27°F / -39°F

-32.7°C / -39.4°C

**Indoor Unit Only,
Pressure Defrost
Termination ⁵**

Not Recommended

⁵ Use a Temperature Pressure Chart to determine PSIG conversions.

Estimated Charge ⁶ FWGH

6 ft 1.9 lb 29 oz .9 kg

8 ft 2.5 lb 40 oz 1.1 kg

12 ft 3.7 lb 59 oz 1.7 kg

⁶ This is an average for all refrigerant types. Actual refrigerant charge may vary by approximately half a pound.

Product Data

Recommended Usable Cube ⁷ (Cu Ft/Ft) 7.28 ft³/ft (0.68 m³/m)

AHRI Total Display Area ⁸ (Sq Ft/Ft) 6.97 ft²/ft (2.12 m²/m)

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

⁷ AHRI Refrigerated Volume less shelving and other unusable space: Refrigerated Volume/Unit of Length, ft³/ft [m³/m]

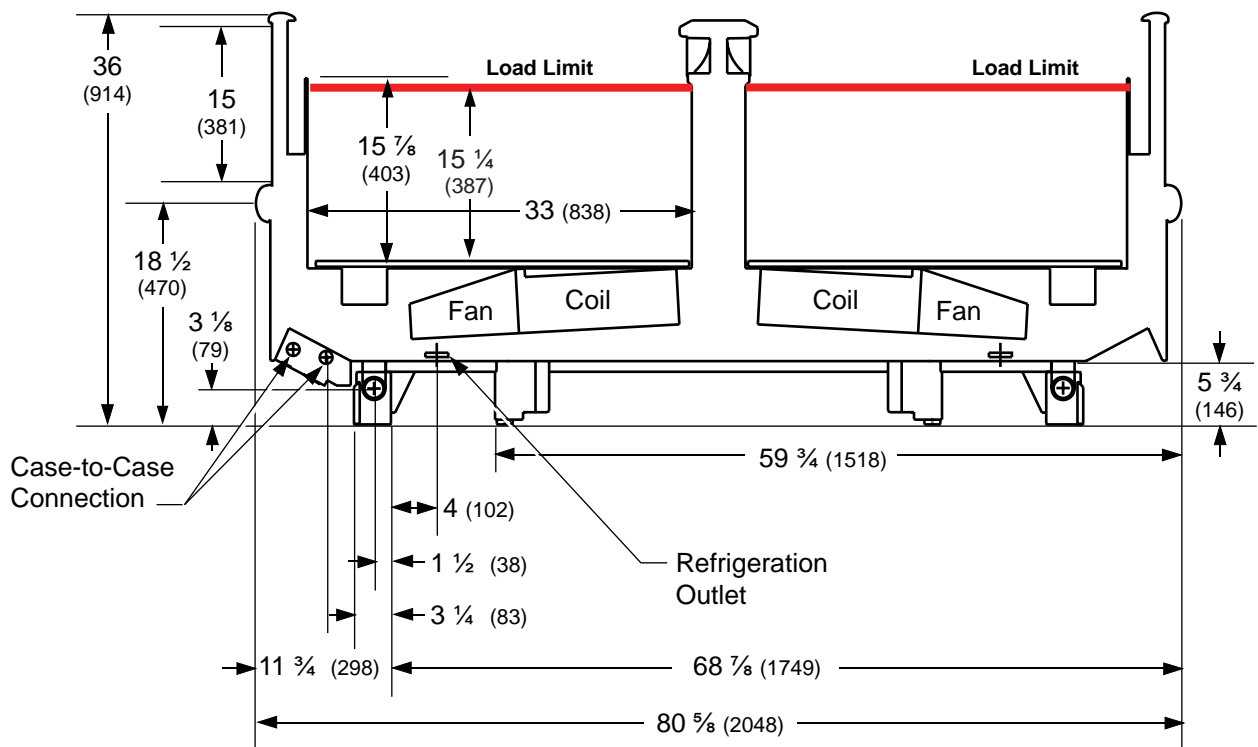
⁸ Computed using AHRI 1200 standard methodology: Total Display Area, ft² [m²]/Unit of Length, ft [m]



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).

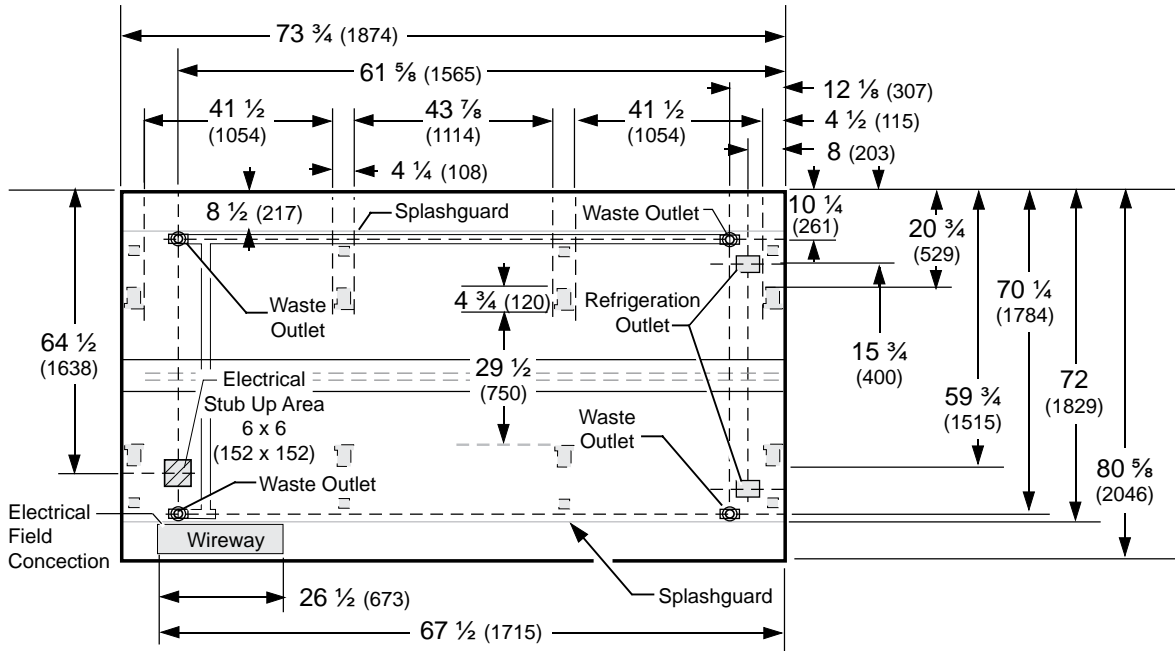
FWGH



NSF Certification

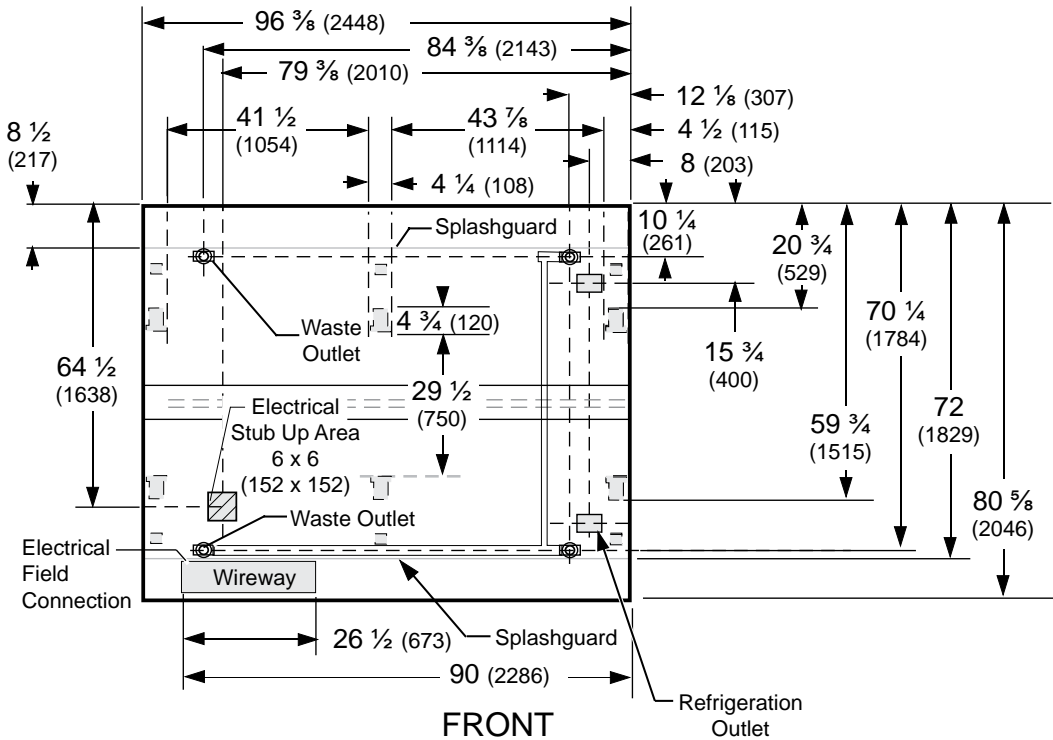
This merchandiser model is manufactured to meet NSF/ANSI (National Sanitation Foundation) Standard #7 requirements for construction, materials and cleanability.

Plan Views



FRONT

6 Foot Model

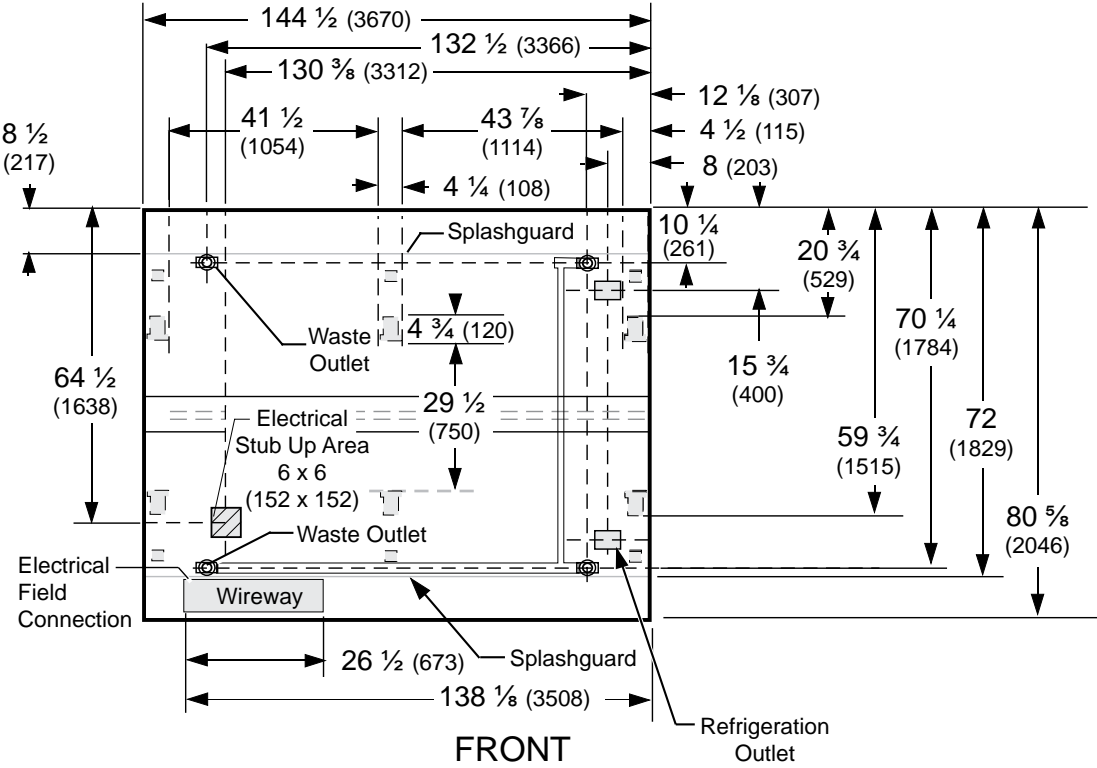


FRONT

8 Foot Model

Dimensions shown as in. and (mm).

Plan Views



12 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	6 ft	8 ft	12 ft	Solid End (each)
lb (kg)	800 (363)	1400 (635)	1600 (726)	75 (34)

† Actual weights will vary according to optional kits included.

Electrical Data

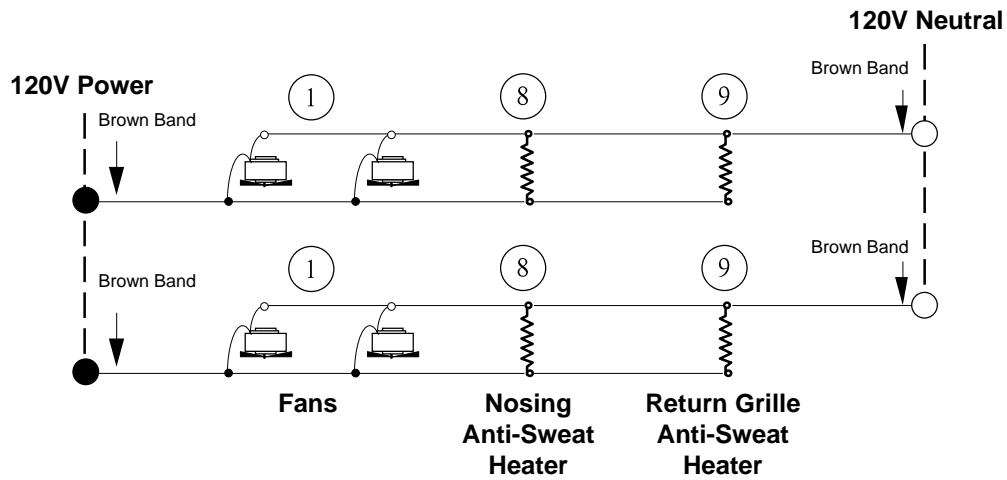
Number of Fans	6 ft	8 ft	12 ft			
4W Evaporator	4	4	4			
	Amperes			Watts		
Evaporator Fan	6 ft	8 ft	12 ft	6 ft	8 ft	12 ft
120V 50/60Hz Energy Efficient	0.24	0.48	0.48	16	32	32
Anti-sweat Heaters (on fan circuit)						
120V 50/60Hz Standard	1.3	4	5	156	480	600
Minimum Circuit Ampacity						
120V 50/60Hz Standard Energy Efficient	2.74	4.68	5.68			
Maximum Over Current Protection 120V	20	20	20			
Return Glass Anti-sweat Heaters						
120V 50/60Hz Standard	0.16	0.18	0.24	18	20	28
208V Electric Defrost	13.1	15.38	23.07	2720	3200	4800
120V Koolgas Defrost	2.7	3.33	6.66	320	400	800
Standard Lighting						
None						

Replacement Parts List

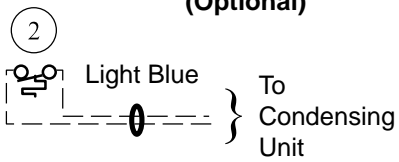
Part #	Description	Part #	Description
FAN ASSEMBLIES		HEATERS (CONT.)	
4W Standard Fan Assembly		208V Evaporator Defrost Heaters	
0477653	Fan Motor/Evaporator	0444057	6 ft case
0546175	Fan Blade (8 ft only)	3016524	8 ft case
0464847	Fan Blade (6 & 12 ft only)	3016527	12 ft case
THERMOSTATS		208V Drip Pan Defrost Heaters, Electric	
0398557	Defrost Termination Thermostat (Front/Electric Defrost only)	0444300	6 ft case
0398558	Defrost Termination Thermostat (Rear/Electric Defrost only)	0462160	8 ft case
		0444296	12 ft case
HEATERS		120V Drip Pan Defrost Heaters, Koolgas	
0481370	Heater Switch (Koolgas Defrost only)	0465906	6 ft case
		0465907	8 ft case
		0465908	12 ft case
		Nosing Anti-sweat Heaters	
		0495006	6 ft case
		0495007	8 ft case
		0495008	12 ft case
		Return Grille Anti-sweat Heaters	
		0495010	6 ft case, Outside
		0545637	8 ft case, Inside
		0545574	8 ft case, Outside
		0545638	12 ft case, Inside
		0545575	12 ft case, Outside
		Return Glass Anti-sweat Heaters	
		3020071	6 ft case
		0474785	8 ft case
		0474786	12 ft case

Fan Wiring Electrical Defrost - Standard

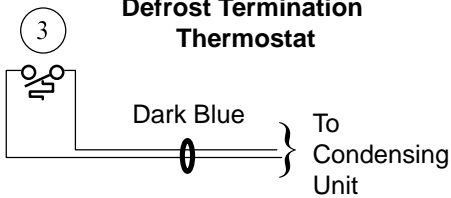
Excel **FWGH**
Frozen



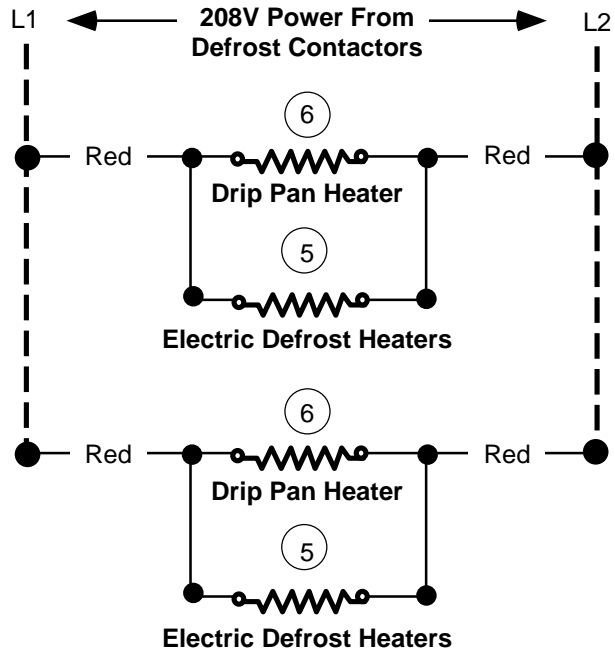
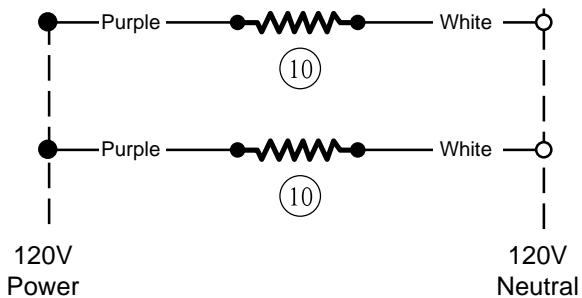
Refrigeration Thermostat (Optional)



Defrost Termination Thermostat



Return Glass Anti-Sweat Heater



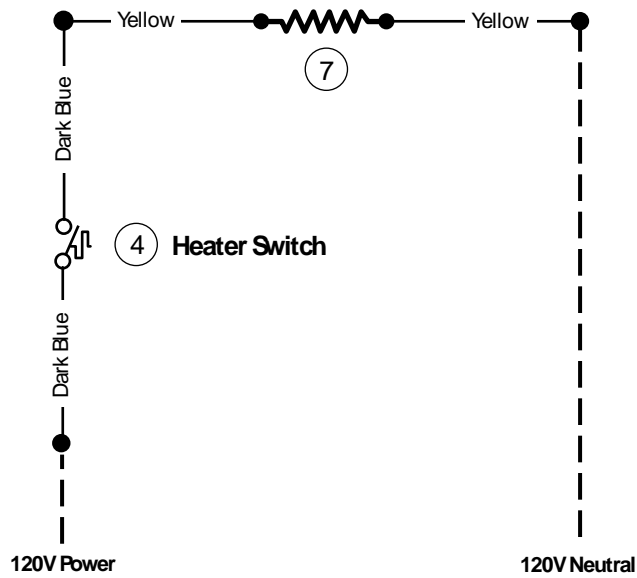
WARNING

All components must have mechanical ground, and the merchandiser must be grounded.
Circled Number = Parts List Item Numbers

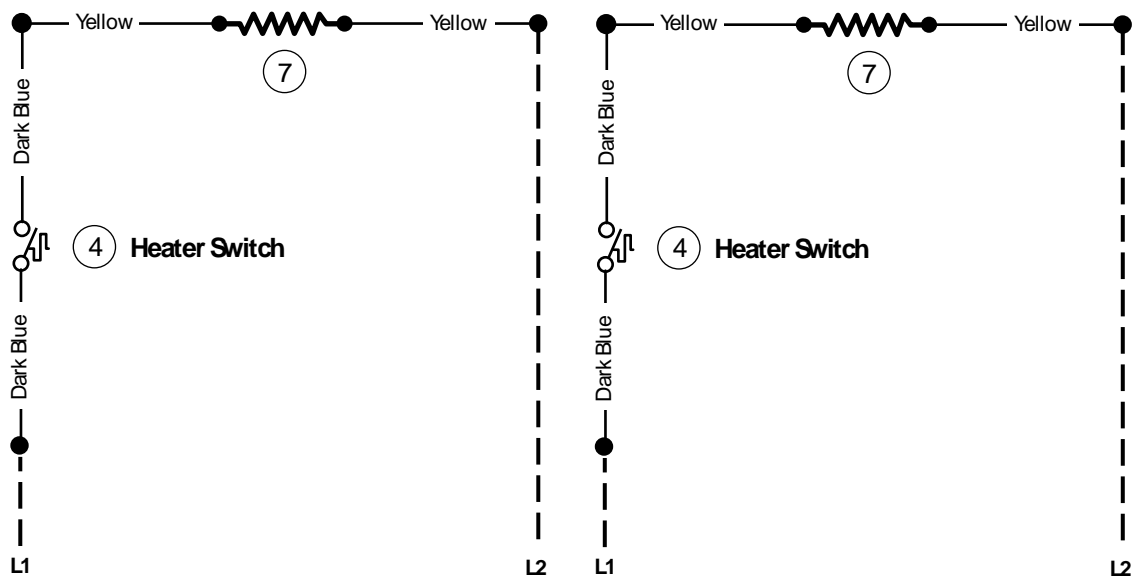
Excel FWGH
Frozen

Optional Gas Defrost

120V Drip Pan Heater — Koolgas Only



208V/230V Drip Pan Heater — Koolgas Only



WARNING

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

Circled Number = Parts List Item Numbers

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.

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 gas defrost data on page 2.

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

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

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

Revision F: January 2018: Added 6 foot data. Other changes marked with bar, underline or circle.