

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, AND THERMOSTATS</b>				<b>HEATERS (CONTINUED)</b>			
A.	4W	Standard Efficient Fan Assembly	(1)	F.	120V Drip Pan Defrost Heaters, Koolgas		(7)
	0477653	Fan Motor, Evaporator (MO.4410544)			0465906	6 ft case	
	0464847	Fan Blade (FB.4780649)			0465907	8 ft case (HE.4850622)	
B.		Optional Adjustable Refrigeration Thermostat	(2)		0505526	10 ft case	
C.	0398557	Defrost Termination Thermostat (Electric Defrost only) (CT.4440611)	(3)		0465908	12 ft case (HE.4850623)	
D.	0481370	Heater Switch (Koolgas Defrost only) (CT.4440738)	(4)	G.	Nosing Anti-sweat Heaters		(8)
<b>HEATERS</b>					0495006	6 ft case	
E.	208V	Evaporator Defrost Heaters	(5)		0495007	8 ft case (HE.4850685)	
	0444057	6 ft case			0497590	10 ft case (HE.4850712)	
	0462159	8 ft case (HE.4850603)			0495008	12 ft case (HE.4850686)	
	0497579	10 ft case (HE.4850710)		H.	Return Grille Anti-sweat Heaters		(9)
	0444058	12 ft case (HE.4850571)			0495011	6 ft case	
F.	208V	Drip Pan Defrost Heaters, Electric	(6)		0495011	8 ft case (HE.4850689)	
	0444300	6 ft case			0497582	10 ft case (HE.4850713)	
	0462160	8 ft case (HE.4850636)			0495012	12 ft case (HE.4850690)	
	0497581	10 ft case (HE.4850711)		I.	Return Glass Anti-sweat Heaters		(10)
	0444296	12 ft case (HE.4850572)			0489808	6 ft case	
					0474778	8 ft case (GL.4987838)	
					0497575	10 ft case (GL.4850714)	
					0474779	12 ft case (GL.4987839)	
				J.	Discharge Glass Anti-sweat Heaters		(11)
					0516069	6 ft case	
					0504300	8 ft case (GL.4978595)	
					0504341	10 ft case (GL.4850715)	
					0504342	12 ft case (GL.4978596)	

Data sheet-Excel-FNG

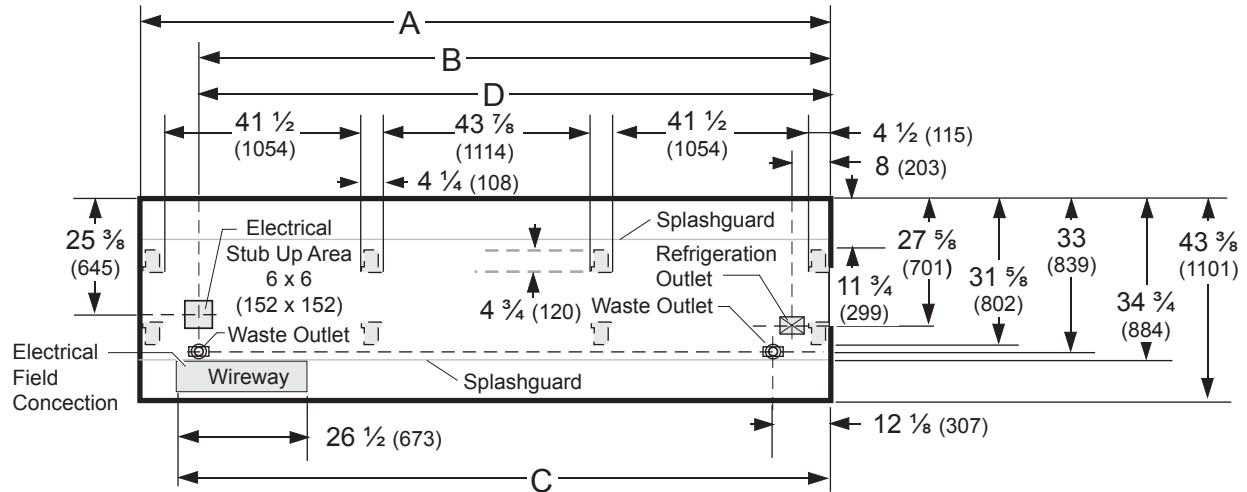
Note: Revision K: Added 6 foot data. Other changes marked by bar, underline or circle.

# Engineering Plan Views

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

## Narrow Island Frozen Food

Dimensions shown as inches & (mm).



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

FRONT

	6 ft	8 ft	10 ft	12 ft
<b>General</b>				
<b>(A)</b> Case Length ( <i>without ends or partitions</i> ) <i>(Each end and insulated partition adds 2 in. (51 mm) to case line up.)</i>	73 3/4 (1873)	96 3/8 (2448)	120 1/2 (3061)	144 1/2 (3670)
Maximum O/S dimension of case back to front <i>(includes bumper)</i>	43 3/8 (1101)	43 3/8 (1101)	43 3/8 (1101)	43 3/8 (1101)
Back of case to front of splashguard	34 3/4 (884)	34 3/4 (884)	34 3/4 (884)	34 3/4 (884)
Back of case to O/S edge of front leg	31 5/8 (802)	31 5/8 (802)	31 5/8 (802)	31 5/8 (802)
Distance between edges of external legs and center legs	30 1/4 (768)	41 1/2 (1054)	29 1/2 (749)	41 1/2 (1054)
Distance between edges of center legs	NA	NA	43 7/8 (1114)	43 7/8 (1114)
Distance between front legs and splashguard	3 1/8 (82)	3 1/8 (82)	3 1/8 (82)	3 1/8 (82)
<b>Electrical Service</b> <input checked="" type="checkbox"/> ( <i>Electrical Field Wiring connection point</i> )				
<b>(B)</b> RH End of case to center of stub up area	61 5/8 (1565)	84 1/4 (2141)	108 3/8 (2753)	132 3/8 (3363)
Back of case to center of stub up area	25 3/8 (645)	25 3/8 (645)	25 3/8 (645)	25 3/8 (645)
Length of electrical wireway <input type="checkbox"/> Wireway	26 1/2 (673)	26 1/2 (673)	26 1/2 (673)	26 1/2 (673)
<b>(C)</b> RH End of case to LH end of wireway	67 1/2 (1715)	90 1/8 (2289)	114 1/4 (2902)	138 1/4 (3511)
<b>Waste Outlets</b> ( <i>One each end</i> ) <input checked="" type="checkbox"/>				
<b>(D)</b> RH End of case to the center of LH waste outlet	61 5/8 (1565)	84 1/4 (2141)	108 3/8 (2753)	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	33 (839)	33 (839)	33 (839)	33 (839)
Schedule 40 PVC drip pipe	1 1/4 (32)	1 1/4 (32)	1 1/4 (32)	1 1/4 (32)
<b>Refrigeration Outlet</b> <input type="checkbox"/>				
Back of case to center of refrigeration outlet	27 5/8 (701)	27 5/8 (701)	27 5/8 (701)	27 5/8 (701)
RH end of case to center of refrigeration outlet	8 (203)	8 (203)	8 (203)	8 (203)

Narrow Island Display with Glass Walls



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 FNG**  
**Low / Medium Temperature**

**REFRIGERATION DATA§**

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

	MED	FF	IC
<b>Discharge Air (°F)</b>	+24	-12	-22
<b>Evaporator (°F)</b>	+19	-20	-30
<b>Unit Sizing (°F)</b>	+17	-23	-33

§ 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.

<i>Btu/hr/ft</i>	MED	FF	IC
<b>Parallel</b>	295	460	470
<b>Conventional</b>	305	480	490

**DEFROST DATA**

	MED	FF	IC
<b>Frequency (hr)</b>	24	24	24
<b>Defrost Water (lb/ft/day)</b>	1.1	1.05	0.9

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

<i>ELECTRIC</i>	MED	FF	IC
<b>Temp Term (°F)</b>	48	48	48
<b>Failsafe (minutes)</b>	60	60	60

<i>GAS</i>	MED	FF	IC
<b>Duration (minutes)</b>	NA	15	18

**OFFTIME** Not Recommended

**Standard Defrost Thermostat**

Close on rise: close 48°F — open 33°F

**CONVENTIONAL CONTROLS**

**Low Pressure Backup Control — CI/CO \***

MED	+12°F / +2°F
FF	-17°F / -29°F
IC	-27°F / -39°F

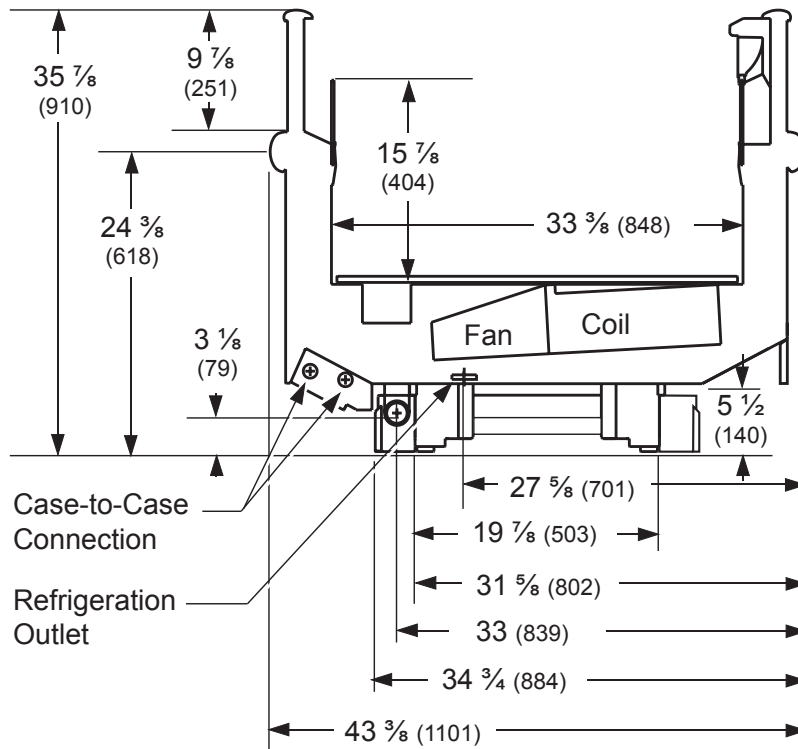
**Indoor Unit Only, Pressure Defrost Termination\***

Not Recommended

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



Dimensions shown as inches & (mm).



**Estimated Charge (lb)\*\***

<b>6 ft</b>	1.5
<b>8 ft</b>	2.0
<b>10 ft</b>	2.5
<b>12 ft</b>	3.0

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

**Length Added to Lineup by Each**

**End or Partition (in.)** 2

**NSF Certification**

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

**Electrical Data**

			6 ft	8 ft	10 ft	12 ft				
<b>Number of Fans – 4W Evaporator</b>			<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>				
			<b>Amperes</b>				<b>Watts</b>			
			6 ft	8 ft	10 ft	12 ft	6 ft	8 ft	10 ft	12 ft
<b>Evaporator Fans</b>										
120V	50/60Hz	Standard Energy Efficient	0.12	0.24	0.24	0.24	8	16	16	16
230V	50/60Hz	Standard Energy Efficient	0.06	0.12	0.12	0.12	8	16	16	16
230V	60Hz	Export	0.15	0.30	0.30	0.30	24	48	48	48
230V	50Hz	Export	0.18	0.36	0.36	0.36	27	54	54	54
<b>Anti-sweat Heaters (on fan circuit)</b>										
120V	50/60Hz	Standard	0.65	0.87	1.07	1.30	78	104	128	156
230V	50/60Hz	Export	0.34	0.45	0.56	0.68	78	104	128	156
<b>Minimum Circuit Ampacity</b>										
120V	50/60Hz	Standard Energy Efficient	0.97	1.31	1.51	1.74				
230V	50/60Hz	Standard Energy Efficient	0.60	0.77	0.88	1.00				
230V	60Hz	Export	0.69	0.95	1.06	1.18				
230V	50Hz	Export	0.72	1.01	1.12	1.24				
<b>Maximum Over Current Protection 120V</b>			<b>20</b>	<b>20</b>	<b>20</b>	<b>20</b>				
<b>Maximum Over Current Protection 230V</b>			<b>15</b>	<b>15</b>	<b>15</b>	<b>15</b>				
<b>Return Glass Anti-sweat Heaters</b>										
120V	50/60Hz	Standard	0.06	0.08	0.11	0.11	7	9	13	13
230V	50/60Hz	Export	0.03	0.04	0.06	0.06	7	9	13	13
<b>Discharge Glass Anti-sweat Heaters</b>										
120V	50/60Hz	Standard	0.35	0.46	0.66	0.66	42	55	79	79
230V	50/60Hz	Export	0.18	0.24	0.34	0.34	42	55	79	79
<b>208V Electric Defrost</b>			6.54	7.69	9.61	11.54	1360	1600	2000	2400
<b>230V Export Electric Defrost</b>			5.91	6.96	8.70	10.43	1360	1600	2000	2400
<b>120V Koolgas Defrost</b>			1.33	1.67	2.50	3.33	160	200	300	400
<b>208V Koolgas Defrost</b>			0.77	0.96	1.44	1.92	160	200	300	400
<b>230V Koolgas Defrost</b>			0.85	1.06	1.59	2.12	196	244	366	488
<b>Standard Lighting</b>										
None										

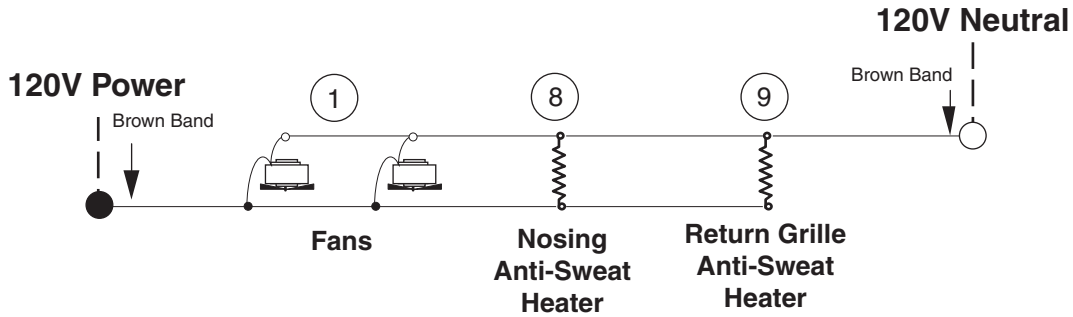
**Product Data**

<i>Recommended Usable Cube</i> <sup>1</sup> (Cu Ft/Ft)	3.69 ft <sup>3</sup> /ft (0.34 m <sup>3</sup> /m)
<i>AHRI Total Display Area</i> <sup>2</sup> (Sq Ft/Ft)	3.35 ft <sup>2</sup> /ft (1.02 m <sup>2</sup> /m)
<i>Shelf Area</i> <sup>3</sup> (Sq Ft/Ft)	2.79 ft <sup>2</sup> /ft (0.85 m <sup>2</sup> /m)

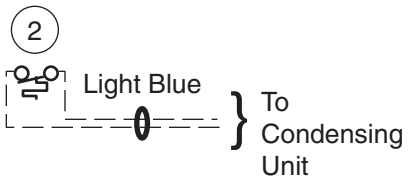
- <sup>1</sup> AHRI Refrigerated Volume less shelving and other unusable space: Refrigerated Volume/Unit of Length, ft<sup>3</sup>/ft [m<sup>3</sup>/m]
- <sup>2</sup> Computed using AHRI 1200 standard methodology: Total Display Area, ft<sup>2</sup> [m<sup>2</sup>]/Unit of Length, ft [m]
- <sup>3</sup> 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 NONE.

<b>ESTIMATED SHIPPING WEIGHT <sup>4</sup></b>				
<b>Case</b>	<i>6 ft</i>	<i>8 ft</i>	<i>12 ft</i>	<b>Solid End</b>
				<i>(each)</i>
<b>lb (kg)</b>	800 (363)	1000 (454)	1200 (544)	50 (23)
<sup>4</sup> Actual weights will vary according to optional kits included.				

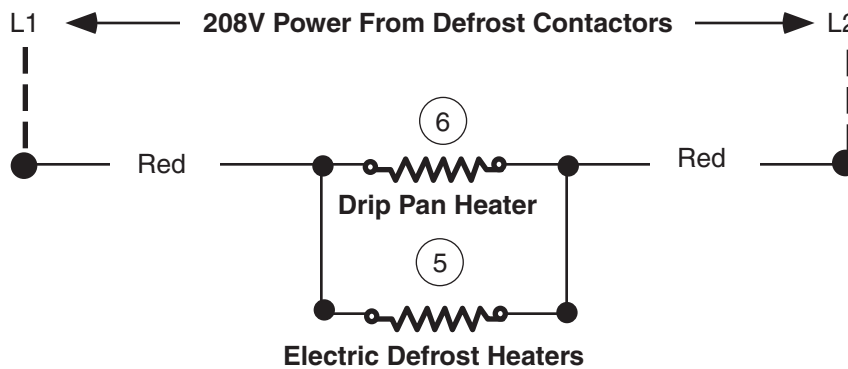
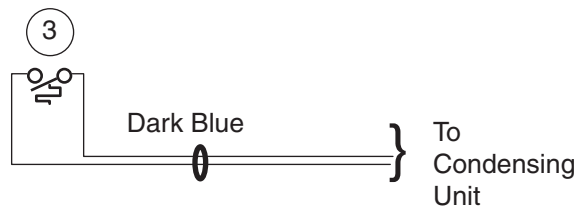
# Electric Defrost – Standard



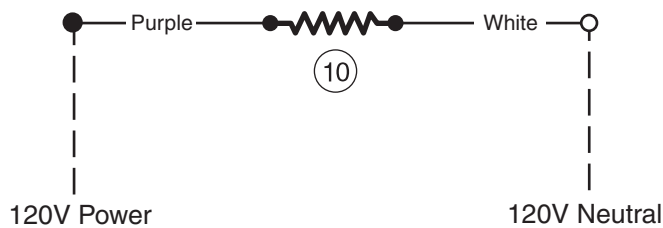
## Refrigeration Thermostat (Optional)



## Defrost Termination Thermostat



## Return Glass Anti-Sweat Heater

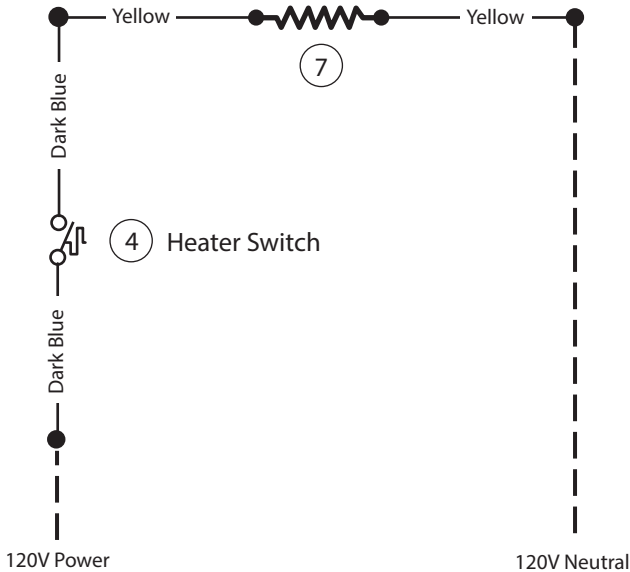


### WARNING

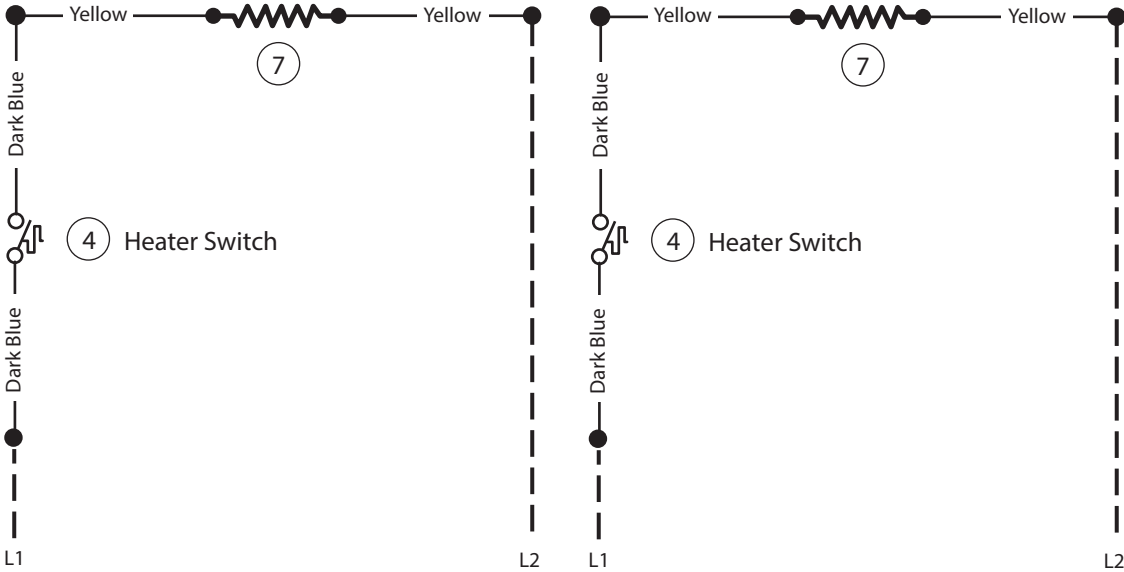
All components must have mechanical ground, and the merchandiser must be grounded.  
 Circled Number = Parts List Item Numbers

# Gas Defrost – Optional

## 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