HUSSMANN[®] Excel

FWG Technical Data Sheet P/N 0465901_N

NSF® Certified
March 2017

DOE 2017
Energy Efficiency
Compliant

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 AS	SSEMBLIES, AN	D THERMOSTATS		НЕАТЕ	RS (CONTINU	(ED)	
A.	4W Standar	d Energy Efficient Fan Asse	mbly (1)	G.	208V Drip	Pan Defrost Heaters, Electric	(6)
	0477653	Fan Motor, Evaporator			0481865	4 ft case (HE.4850638)	
		(MO.4410544)			0444300	6 ft case (HE.4850609)	
	0464847	Fan Blade (FB.4780649)			0462160	8 ft case (HE.4850636)	
					0444296	12 ft case (HE.4850572)	
В.	Optional Ad	justable Refrigeration Thern	nostat (2)				
					120V Drip	Pan Defrost Heaters, Koolgas	s (7)
C.	0398557	Defrost Termination There	mostat (3)		0488967	4 ft case (HE.4850641)	
		(Front/Electric Defrost on	ly)		0465906	6 ft case (HE.4850628)	
		(CT.4440611)			0465907	8 ft case (HE.4850622)	
					0465908	12 ft case (HE.4850623)	
D.	0398558	Defrost Termination There	mostat (3)				
		(Rear/Electric Defrost only	y)	Н.	Nosing An	ti-sweat Heaters	(8)
		(CT.4481088)			0495009	4 ft case (HE.4850687)	
					0495006	6 ft case (HE.4850684)	
E.	0481370	Heater Switch	(4)		0495007	8 ft case (HE.4850685)	
		(Koolgas Defrost only)			0495008	12 ft case (HE.4850686)	
		(CT.4440738)					
				I.	Return Gr	ille Anti-sweat Heaters	(9)
HEATE	RS				0495013	4 ft case (HE.4850691)	
F.	208V Evapo	rator Defrost Heaters	(5)		0495010	6 ft case (HE.4850688)	
	3016520	4 ft case (HE.4850637)			0495011	8 ft case (HE.4850689)	
	3016522	6 ft case (HE.4850620)			0495012	12 ft case (HE.4850690)	
	3016524	8 ft case (HE.4850603)					
	3016527	12 ft case (HE.4850571)		J.	Return Gla	ass Anti-sweat Heaters	(10)
		,			0481867	4 ft case (GL.4978594)	
					0474775	6 ft case (GL.4977903)	
D.(.	.l (Pl	FMC			0474778	8 ft case (GL.4987838)	
Data	sheet-Exce	TWG			0474779	12 ft case (GL.4987839)	

Note: Revision N: 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

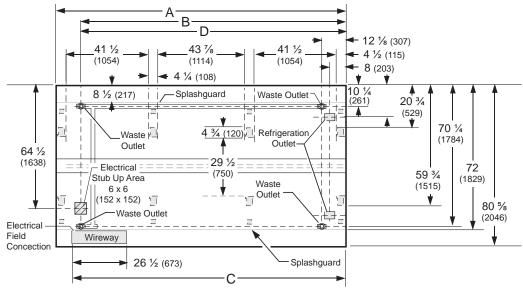
Merchandiser Liquid Line (in.) 3/8

Merchandiser Suction Line (in.) 5/8

Low / Medium Temperature Wide Island

Dimensions shown as inches & (mm).

10-2004



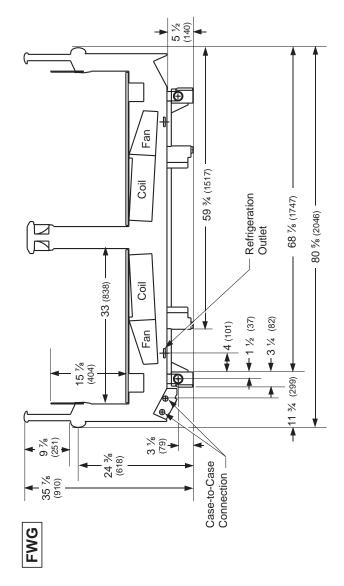
FRONT (12 Ft shown)

	4 ft	6 ft	8 ft	12 ft
General				
(A) Case Length (without ends or partitions)	48 1/4 (1226)	73 3/4 (1874)	96 3/8 (2448)	144 1/2 (3670)
(Each end and insulated partition adds 2 in. (51 mm) to	case line up.)			
Maximum O/S dimension of case back to front (in	icludes bumper)			
	80 5/8 (2046)	80 5/8 (2046)	80 5/8 (2046)	80 5/8 (2046)
Back of case to front of splashguard	72 (1829)	72 (1829)	72 (1829)	72 (1829)
Back of case to O/S edge of front leg	59 3/4 (1515)	59 3/4 (1515)	59 3/4 (1515)	59 3/4 (1515)
Distance between edges of external legs and center	r legs NA	30 1/4 (768)	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	12 3/8 (312)	12 3/8 (312)	12 3/8 (312)	12 3/8 (312)
Electrical Service [] (Electrical Field Wiring conne	ction point)			
(B) RH End of case to center of stub up area	36 1/8 (918)	61 5/8 (1565)	84 1/4 (2140)	132 3/8 (3363)
Back of case to center of stub up area	64 1/2 (1638)	64 1/2 (1638)	64 1/2 (1638)	64 1/2 (1638)
Length of electrical wireway 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	40 1/2 (1029)	67 1/2 (1715)	90 1/8 (2289)	138 1/4 (3511)
Waste Outlets (One each end)				
(D) RH End of case to the center of LH waste outlet	36 1/8 (918)	61 5/8 (1565)	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	70 1/4 (1784)	70 1/4 (1784)	70 1/4 (1784)	70 1/4 (1784)
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 front refrigeration outlet	64 7/8 (1646)	64 7/8 (1646)	64 7/8 (1646)	64 7/8 (1646)
Back of case to center of rear refrigeration outlet	15 3/4 (400)	15 3/4 (400)	15 3/4 (400)	15 3/4 (400)
RH end of case to center of refrigeration outlet	8 (203)	8 (203)	8 (203)	8 (203)

DOE 2017 Energy Efficiency Compliant

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 inches & (mm).



Estimated Charge ****

4 ft	1.7 lb	27 oz	0.8 kg
6 ft	2.1 lb	34 oz	1.0 kg
8 ft	2.5 lb	40 oz	1.1 kg
12 ft	3.7 lb	59 oz	1.7 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.

$\textit{Excel} \, \textbf{FWG} \\ \textbf{Low / Medium Temperature}$

REFRIGERATION DATA*§

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

	MED	\mathbf{FF}	IC
Discharge Air (°F)	+24	-12	-22
Avg Evporator (°F)	+19	-20	-30
Unit Sizing (°F)	+17	-23	-33
Btulhrlft	MED	FF	IC
PARALLEL			
4 ft/8 ft	413	598	643
6 ft/12 ft	422	607	652
CONVENTIONAL			
4 ft/8 ft	433	623	673
6 ft/12 ft	442	632	682

^{*}Dual temperature operation kits are not suitable for ice cream temperature applications.

DEFROST DATA

	MED	FF	IC
Frequency (hr)	24	24	24
Defrost Water (lb/ft/day)	2.2	2.1	1.8
(± 15% based on case confi	guration	and pro	duct
loading)			

ELECTRIC	MED	FF	IC
Temp Term (°F)	48	48	48
Failsafe (minutes)	60	60	60
GAS			
Duration (minutes)	NA	15	18
OFFTIME	Not Recon	nmended	1

Standard Defrost Thermostat

Close on rise: close 48°F — open 33°F

CONVENTIONAL CONTROLS

Low Pressure Backup Control — CI/CO **

MED +22°F /+10°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.

[§] 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.

Excel FWG

Low / Medium Temperature

Electrical	Data		

Electric	ai Data									
			4 ft	6 ft	8 ft	12 ft				
Number of	of Fans – 4V	W Evaporator	2	2	4	4				
				A				W	.44~	
			4 ft	Amp 6 ft	eres 8 ft	12 ft	4 ft	Wa 6ft	nus 8 ft	12 ft
Evaporat	or Fans		710	011	010	1210	410	ort	on	12 10
120V	50/60Hz	Standard Energy Efficient	0.24	0.24	0.48	0.48	16	16	32	32
230V	50/60Hz	Standard Energy Efficient		0.12	0.24	0.24	16	16	32	32
230V	60Hz	Export	0.30	0.30	0.60	0.60	48	48	96	96
230V	50Hz	Export	0.36	0.36	0.72	0.72	54	54	108	108
Anti-swea	at Heaters ((on fan circuit)								
120V	50/60Hz	Standard	0.87	1.30	1.74	2.60	104	156	208	312
230V	50/60Hz	Export	0.45	0.68	0.90	1.36	104	156	208	312
Minimun	ı Circuit Ar	npacity								
120V	50/60Hz	Standard Energy Efficient	1.31	1.74	2.42	3.28				
230V	50/60Hz	Standard Energy Efficient	0.77	1.00	1.34	1.80				
230V	60Hz	Export	0.95	1.18	1.70	2.16				
230V	50Hz	Export	1.01	1.24	1.82	2.28				
Maximu	n Over Cur	rent Protection 120V	20	20	20	20				
		rrent Protection 230V	15	15	15	15				
Return G	lass Anti-sv	weat Heaters								
120V	50/60Hz	Standard	0.08	0.13	0.16	0.22	10	15	18	26
230V	50/60Hz	Export	0.04	0.07	0.08	0.12	10	15	18	26
208V Ele	ctric Defro	st	8.75	13.07	15.38	23.07	1820	2720	3200	4800
230V Ex	port Electri	c Defrost	7.91	11.83	13.91	20.87	1820	2720	3200	4800
120V Ko	olgas Defro	st	2.50	2.67	3.33	6.66	300	320	400	800
208V Ko	olgas Defro	st	1.06	1.54	1.92	3.84	220	320	400	800
230V Ko	olgas Defro	st	1.17	1.70	2.12	4.25	270	400	488	977

Standard Lighting

None

Excel **FWG**Low / Medium Temperature

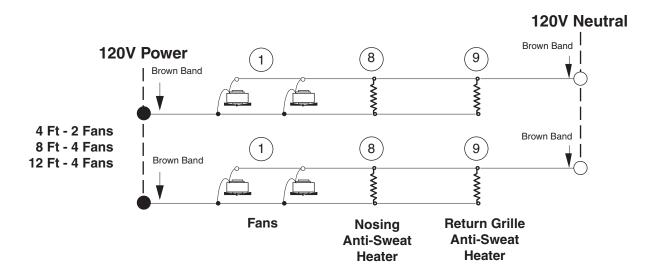
Product Data

Recommended Usable Cube ¹ (Cu Ft|Ft) AHRI Total Display Area ² (Sq Ft|Ft) Shelf Area ³ (Sq Ft|Ft) 7.28 ft³/ft (0.68 m³/m) 5.98 ft²/ft (1.82 m²/m) 5.50 ft²/ft (1.68 m²/m)

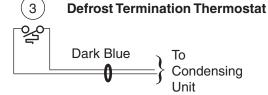
- 1 AHRI Refrigerated Volume less shelving and other unusable space: Refrigerated Volume/Unit of Length, ft³/ft [m³/m]
- ² Computed using AHRI 1200 standard methodology: Total Display Area, ft² [m²]/Unit of Length, ft [m]
- ³ Shelf surface area is composed of bottom deck plus standard shelf complement, as shown in the Hussmann *Product Reference Guide*. The standard shelf complement for this model is NONE.

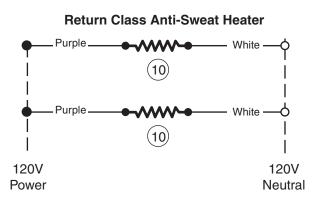
		ES	TIMATED SHIP	PING WEIGHT 5	
Case					Solid End
	4 ft	6 ft	8 ft	12 ft	(each)
lb (<i>kg</i>)	1000 (454)	1200 (544)	1400 (635)	1600 (726)	75 (34)

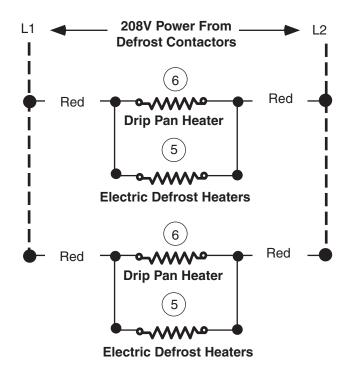
Electric Defrost – Standard



2 Refrigeration Thermostat (Optional) Light Blue To Condensing





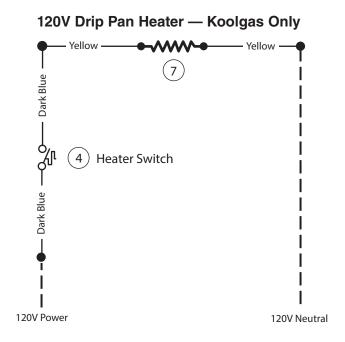


WARNING

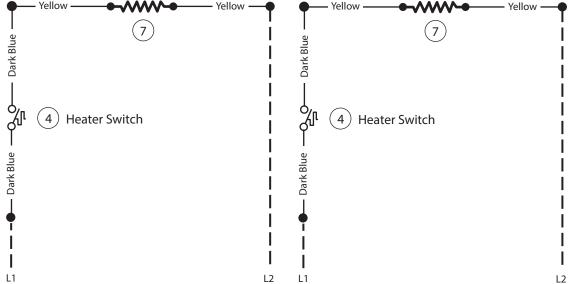
All components must have mechanical ground, and the merchandiser must be grounded.

Circled Number = Parts List Item Numbers

Gas Defrost – Optional



208V/230V Drip Pan Heater — Koolgas Only Yellow — Yellow



WARNING

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

Circled Number = Parts List Item Numbers