HUSSMANN®
Excel

SMGB

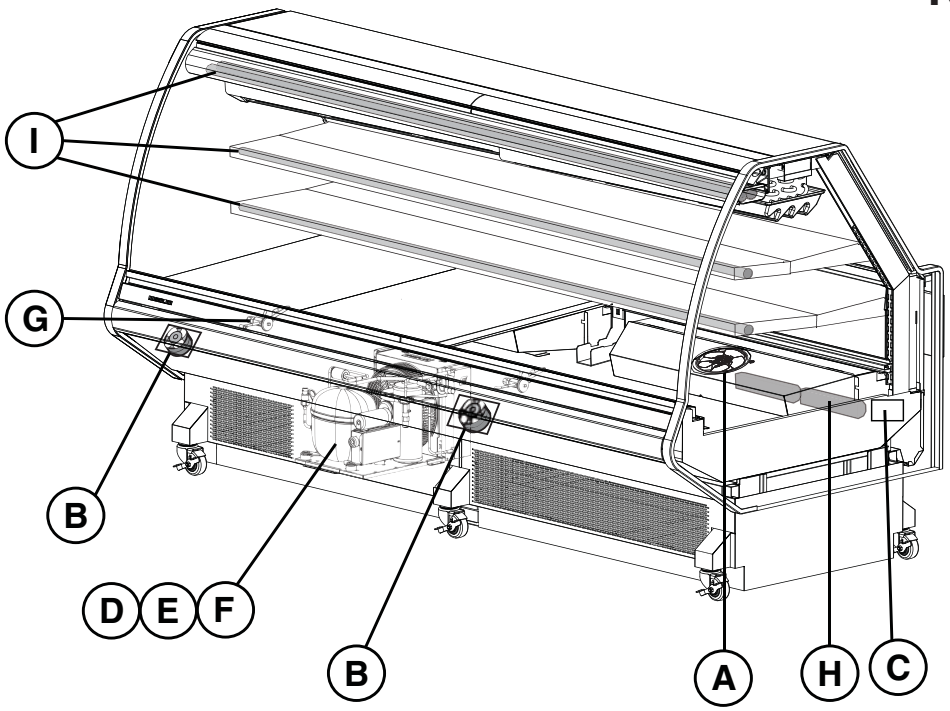
Technical Data Sheet

P/N 3009320_C

NSF® Certified

February 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 #
FAN ASSEMBLIES AND THERMOSTATS			
A.	0392457	Fan Motor, Evaporator (120V) (MO.4410101)	(1)
	0425336	Fan Blade (120V) (FB.0425336) embossing toward motor	
B.	0522287	High Efficiency Fan Motor, Ambient (120V) (MO.4411037)	(2)
RACEWAY			
C.	3009608	Assembly - SAFE NET III 65C SMG	

Item	Part #	Description	Wiring Item #
REFRIGERATION			
D.	3008655	Condensing Unit Assembly 115V	
E.	0331344	Sight Glass (GL.4974431)	
F.	0501739	Drier	
G.	0431353	TEV	
LAMPS AND BALLASTS			
H.		Ballast, Electronic	(4)
	0355716	**2 lamps** (120V) (BA.0355716)	
	0355398	**3 lamps** (120V) (BA.4480188)	
I.		Fluorescent Lamp *Replace with like fixtures*	(5)

Note: Revision C: Added note on page 6. Other changes marked with by bar, underline or circle.

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Spanish P/N 3013504

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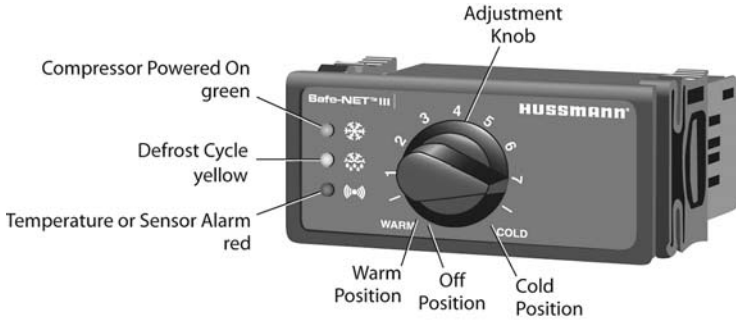
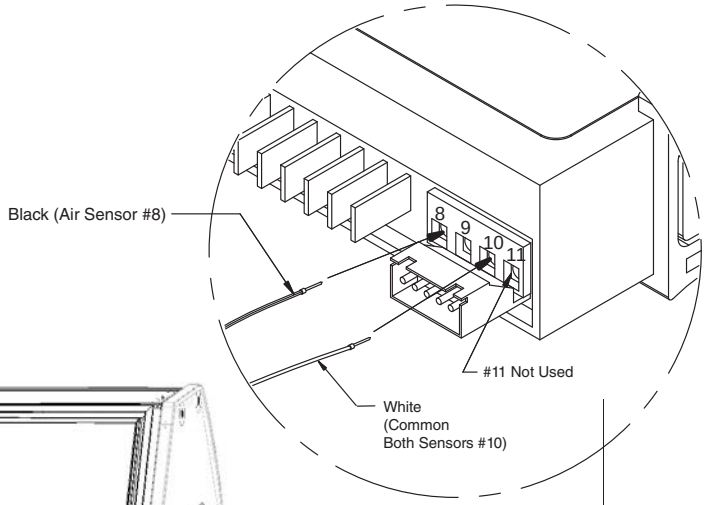
Start Up / Operation

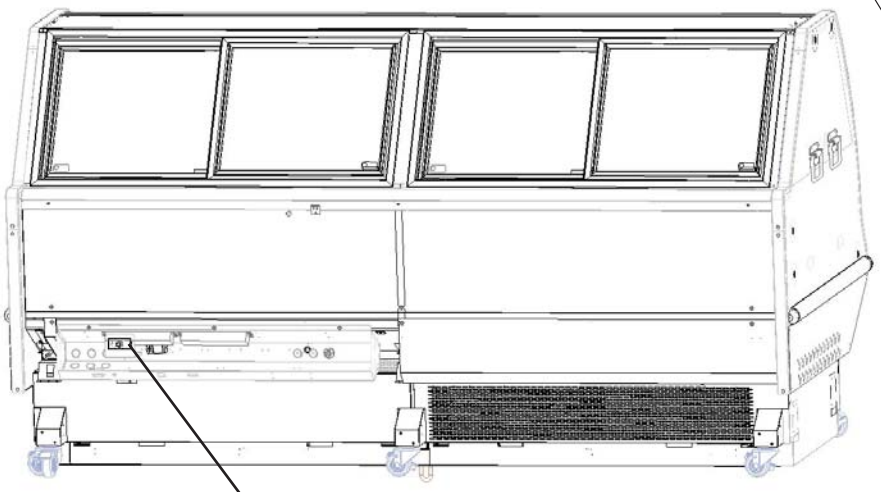
WARM	CUT-OUT	CUT-IN
0	*38*	*42*
1	*36*	*40*
2	*33*	*38*
3	*31*	*36*
4	*29*	*34*
5	*26*	*31*
6	*24*	*29*
7	*21*	*27*
8	*19*	*28*
COLD	CUT-OUT	CUT-IN



NOTE: This data is based on store temperature and humidity that does not exceed 75°F and 55% R.H., unless otherwise stated. Schedule defrost at night while lights are off.



Rear of Safe-NET



Safe-NET Location on Rear of Case
(Rear Panel Removed)

PARAMETER-SAFE NET III 65C SMG

Parameter	Description	Value	Min	Max
1	CopyCard Lock Out function	0	0=disabled or 1=enabled	
2	Controller Operation Temperature Units	1	0=Celsius or 1=Fahrenheit	
3	Defrost Method	2	1=Electric 2=Off-cycle 3=reverse cycle	
4	Evaporator Temp. Sensor	0	0=disable or 1=enable	
5	Defrost Termination Method	2	0=disable 1=Evap. Sensor 2=Control Sensor 3=Digital Switch (close)	
6	On-Off logical function	1	0=disable or 1=enable	
7	Potentiometer off position	10°	5°	57°
8	Potentiometer on position	15°	9°	61°
9	Freezer Cut-in warm	42°F	-40°C (-40°F)	40°C (104°F)
10	Freezer Cut-out warm	38°F	-40°C (-40°F)	40°C (104°F)
11	Freezer Cut-in cold	25°F	-40°C (-40°F)	40°C (104°F)
12	Freezer Cut-out cold	19°F	-40°C (-40°F)	40°C (104°F)
13	Compressor ON time delay at Controller Power Up	0 min 10 sec	0 sec	59 min 59 sec
14	Compressor Minimum (ON) time	0 min 0 sec	0 sec	30 min 59 sec
15	Compressor Minimum (OFF) time	2 min 0 sec	0 sec	59 min 59 sec
16	Maximum Compressor Run Function	0	0=disable or 1=enable	
17	Maximum Compressor Run Time	2 hour 0 min	0 min	17 hour 59 min
18	Defrost Display Lock (display indication during defrost)	2	0=display temperature read 1=lock the display on temp. 2=display DF	
19	Display Unlock Time	0 hour 5 min	0 min	1 hour 59 min
20	Display Temperature Offset	0°F	-40°C (-72°F)	40°C (72°F)
21	Show Parameter Code Number	1	0=disable or 1=enable	
22	Parameter Code Number	84	0	99
23	Evaporator Fan Operation during Compressor off-cycle	0	0=ON or 1=OFF	
24	Evaporator Fan Delay at Start of Compressor on-cycle	1	0=Evaporator temperature 1=Time delay 2=Both (evap. temp. + time delay)	
25	Fan Start Evaporator Temperature	41°F	-40°C (-40°F)	40°C (104°F)
26	Fan Start Time Delay	1 min 0 sec	0 sec	9 min 59 sec
27	Fan Shut Down Time Delay	0 min 0 sec	0 sec	9 min 59 sec
28	Evaporator Fan Cycle during Compressosr off-cycle	0	0=disable or 1=enable	
29	Fan On Time during Compressor Off	15 min 0 sec	10 min 0 sec	59 min 59 sec
30	Fan Off Time during Compressor Off	10 min 0 sec	10 min 0 sec	59 min 59 sec
31	Temperature Alarm Enable	1	0=disable or 1=enable	
32	High Temperature Alarm - Warm	60°F	-40°C (-40°F)	40°C (104°F)
33	Low Temperature Alarm - Warm	10°F	-40°C (-40°F)	40°C (104°F)
34	High Temperature Alarm - Cold	56°F	-40°C (-40°F)	40°C (104°F)
35	Low Temperature Alarm - Cold	10°F	-40°C (-40°F)	40°C (104°F)
36	Temperature Alarm Differential	4°F	1°C (2°F)	10°C (18°F)
37	Temperature Alarm Time delay	0 hour 30 min	0 min	4 hour 59 min
38	Temperature Alarm Disable Time after Start Up	2 hour 0 min	0 min	17 hour 59 min
39	Temperature Alarm Delay after Defrost	1 hour 0 min	0 min	17 hour 59 min
40	Buzzer Function	1	0=disable or 1=enable	
41	Buzzer Period	0.5 sec	0.2 sec	24.9 sec
42	Led Alarm Function	1	0=disable or 1=enable	
43	Led Alarm Period	0.4 sec	0.4 sec	24.8 sec
44	Sensor failure mode (compressor and fan relay failure mode)	0	0=Relays fail OPEN 2=Relays fail CLOSE 3=Duty cycle	
45	Compressor On Time if Sensor failed	0 hour 6 min	1 min	59 hour 59 min
46	Compressor Off Time if Sensor failed	0 hour 2 min	1 min	59 hour 59 min
47	Sensor Fault Monitoring Time	1 min 0 sec	5 sec	59 min 59 sec
48	Condenser Function	0	0=Disable or 1=Enable	
49	Condenser condition Sensor	0	0=Open Contact 1=Closed Contact	
50	Compressor Turn off by condenser	0	0=Disable or 1=Enable	
51	Compressor Turn off Time	0 min 0 sec	0 sec	59 min 59 sec
52	Compressor Turn on by Condenser	1	0=Disable or 1=Enable	
53	Compressor Turn on Time by Condenser	0 hour 0 min	0 sec	17 hour 59 min
54	Defrost Function	1	0=disable 1=System run time 2=Compressor run time	
55	Defrost Cycle at power on	0	0=disable or 1=enable	
56	Defrost Termination temperature	48°F	-40°C (-40°F)	40°C (104°F)
57	Time to first defrost(Initial frost build time)	2 hour 0 min	10 min	71 hour 59 min
58	Time to subsequent defrost	24 hour 0 min	10 min	71 hour 59 min
59	Defrost duration Time (failsafe)	1 hour 30 min	1 min	4 hour 59 min
60	Drip time	0 min 0 sec	0 sec	59 min 59 sec
61	Temperature Initiated Defrost Function	0	0=disable or 1=enable	
62	Temperature Initiated Defrost (T = Tspace-Tevap.)	6°F	0°C (0°F)	40°C (72°F)
63	Temperature Initiated Defrost Time Delay	15 min 0 sec	0 sec	59 min 59 sec
64	Temperature Initiated Defrost Time Delay After Defrost	50 min 0 sec	0 sec	59 min 59 sec
65	Defrost Heater Duty Cycle Function	0	0=disable or 1=enable	
66	Heater On Time	1 min 0 sec	5 sec	59 min 59 sec
67	Heater Off Time	0 min 30 sec	0 sec	59 min 59 sec

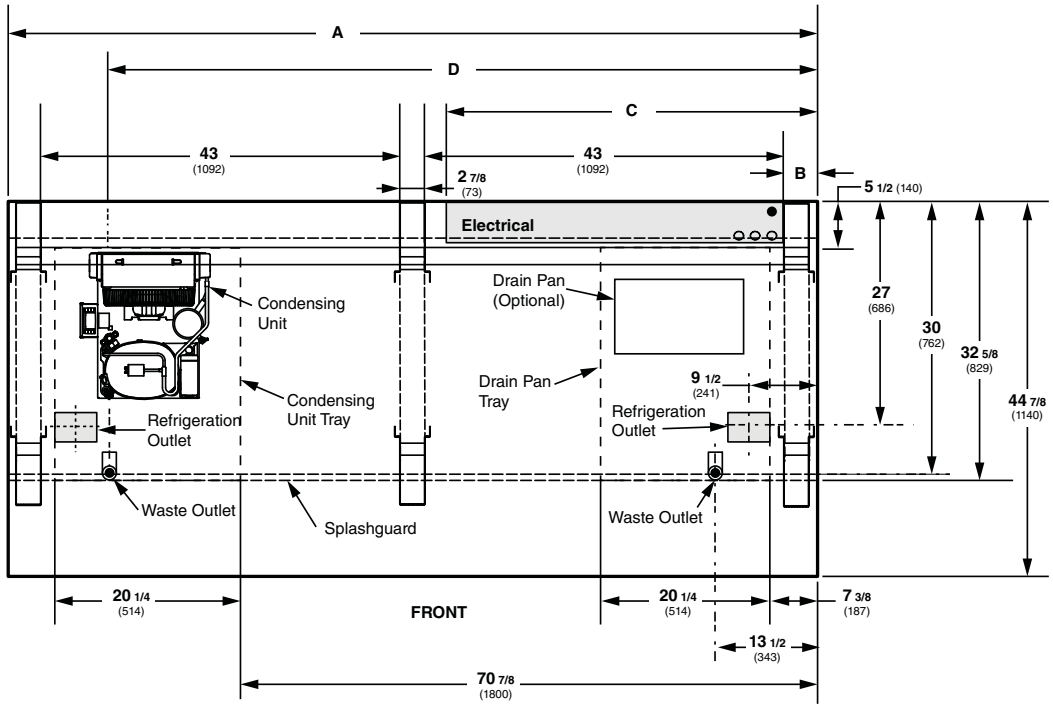
Engineering
Plan Views

Meat & Delicatessen
Double Curved
Hinged Glass Models

PHYSICAL DATA	
Merchandiser Drip Pipe (in.)	1 1/2
Merchandiser Liquid Line (in.)	3/8
Merchandiser Suction Line (in.)	5/8

Dimensions shown as in. and (mm).

SMGB



	8 ft
General	
(A) Case Length (**NOTE:** Includes one pair ends)	99 1/4 (2521)
Maximum O/S dimension of case back to front	44 7/8 (1140)
(Note: Includes bumper)	
Back of case to front of splashguard	32 5/8 (829)
Center of rear legs to center of front legs	23 1/2 (598)
Each End and Partition adds 1 1/2 in. (38 mm) to the length of the lineup.	
Electrical Service	
(B) RH end of case to Electrical raceway right edge	4 5/8 (117)
(C) RH end of case to Electrical raceway left edge	44 5/8 (1133)
Back of case to center of knockout	1 7/8 (47)
* Electrical Field Wiring Connection Point	
Waste Outlet	
(D) RH End of case to the center of LH waste outlet	85 3/8 (2169)
RH End of case to the center of RH waste outlet	13 1/2 (343)
Back O/S of case to center of waste outlets	32 1/2 (826)
Schedule 40 PVC drip pipe	1 1/4 (32)
** Field installed water seal outlets, tees, and connectors are shipped with the merchandiser.	
Refrigeration Outlet	
Back of case to center of refrigeration outlet	27 (686)
RH end of case to center of refrigeration outlet	9 1/2 (241)
Outside diameter of the liquid line	3/8 (9.5)
Outside diameter of the suction line	5/8 (16)

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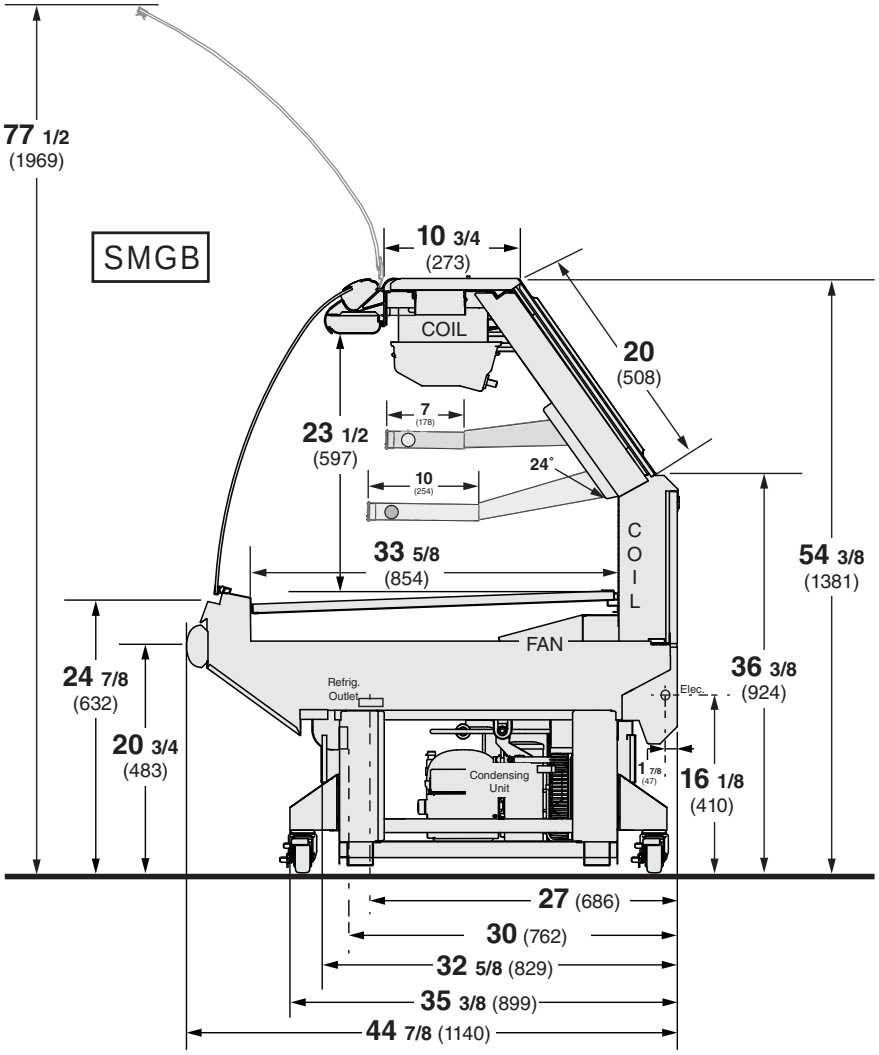
Meat / Delicatessen

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 in. and (mm).



REFRIGERATION DATA

Note: This data is based on store temperature and humidity that does not exceed 75°F and 55% R.H. Schedule defrost at night while lights are off.

		SMGB
Discharge Air (°F)		24
SAFENET Setting CI/CO (°F) *		
0 (Warmest)	**C/I**	42
	C/O	38
8 (Coldest)	**C/I**	25
	C/O	19

*See table on page 2 for additional settings.

Condensing Unit (hp)	0.50
Condensing Unit Capacity (Btu/hr at std. rating conditions)	4414

DEFROST DATA

	SMGB
Frequency (hr)	24
Defrost Water (lb/ft/day)	0.71

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

	SMGB
OFFTIME	
Failsafe (minutes)	90

PHYSICAL DATA

Refrigerant Charge (R404A)

8 ft	3.63 lb	58 oz	1.64 kg

NSF Certification

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

Electrical Data

Number of Fans	**8 ft**
Refrigeration (120V 60Hz) **– 4W**	**2**
Ambient Air Wipe – 15W	**2**

	Amperes	Watts
Merchandiser	**8 ft**	**8 ft**
Refrigeration Fans		
Standard **(**120V 60Hz)	0.62	48
Ambient Air Wipe Fans		
High Efficiency **(**120V 60Hz)	0.4	30
Constant On Anti-sweat Heaters	NA	NA
Cycling Anti-sweat Heaters	NA	NA
Condensing Unit (120V, 1ph, 60Hz)		
Minimum Circuit Ampacity	14.8	
Compressor LRA	54.5	
Compressor RLA	10.5	
Minimum Circuit Ampacity		
With Standard Fans **(**120V 60Hz)	15.82	
Maximum Over Circuit Protection 120V	**20**	
Electric Defrost Heaters (208V)	NA	
Gas Defrost Heaters (208V)	NA	
Standard Lighting* (120V 60Hz)	**8 ft**	**8 ft**
2 Row Canopy	0.98	116

ONLY LIGHTING CONFIGURATIONS THAT ARE COMPLIANT WITH THE U.S. DEPT. OF ENERGY (DOE) 2012 REGULATION ARE AVAILABLE FOR SALE FOR USE IN THE U.S.A.

Optional Lighting		
2 Row Shelves Canopy	0.98	116
1 Row Rear Canopy	0.49	58

115V Lighting Circuit Total = Standard Lighting + Total Optional Lighting + Optional Shelf Lighting
230V Lighting Circuit Total = Multiply 115V Lighting Circuit Total by 0.52 P

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

Gross Refrigerated Volume [1] ***(Cu Ft/Ft)***	3.03 ft^3/ft (0.28 m^3/m)
AHRI Total Display Area [2] **(*Sq Ft/Ft*)**	3.50 ft^2/ft (1.07 m^2/m)
Shelf Area [3] ***(Sq Ft/Ft)***	4.22 ft^2/ft (1.29 m^2/m)

[1] AHRI Refrigerated Volume less shelving and other unusable space: Refrigerated Volume/Unit of Length, ft^3/ft [m^3/m]
[2] Computed using AHRI 1200 standard methodology: Total Display Area, ft^2 [m^2]/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 one 7-inch shelf and one 10-inch shelf.

ESTIMATED SHIPPING WEIGHT [4]

Case		**Solid End**	**Glass / Plastic End**
	8 ft		***(each)***
lb *(kg)*	900 (408)	70 (32)	100 (45)

4 Actual weights will vary according to optional kits included.

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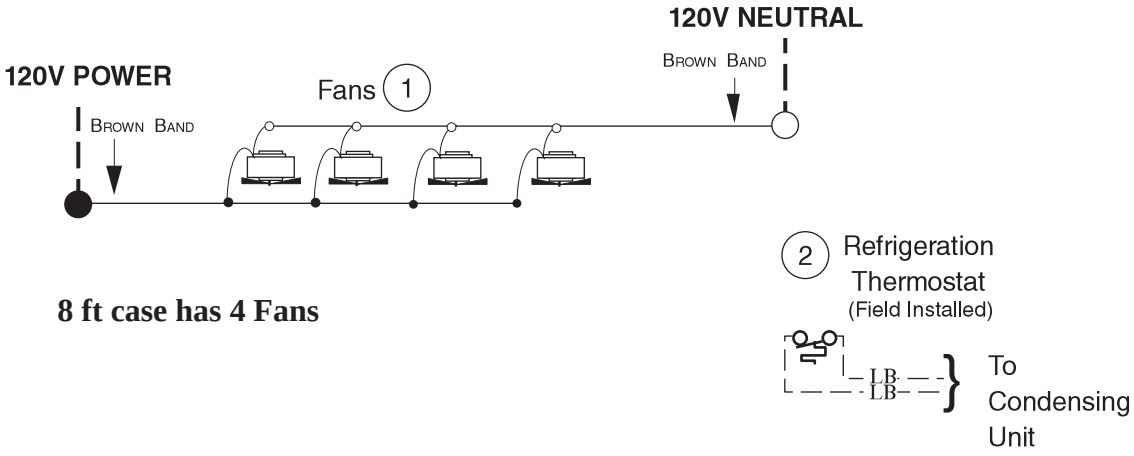
Fan Wiring
Offtime Defrost

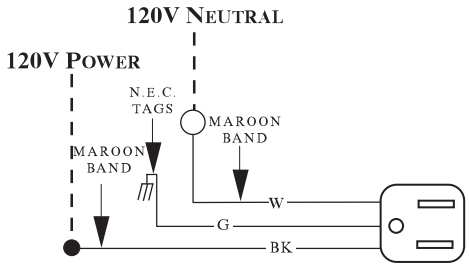
Fans



8 ft case has 4 Fans

Receptacles

Electric Service Receptacle



WARNING

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

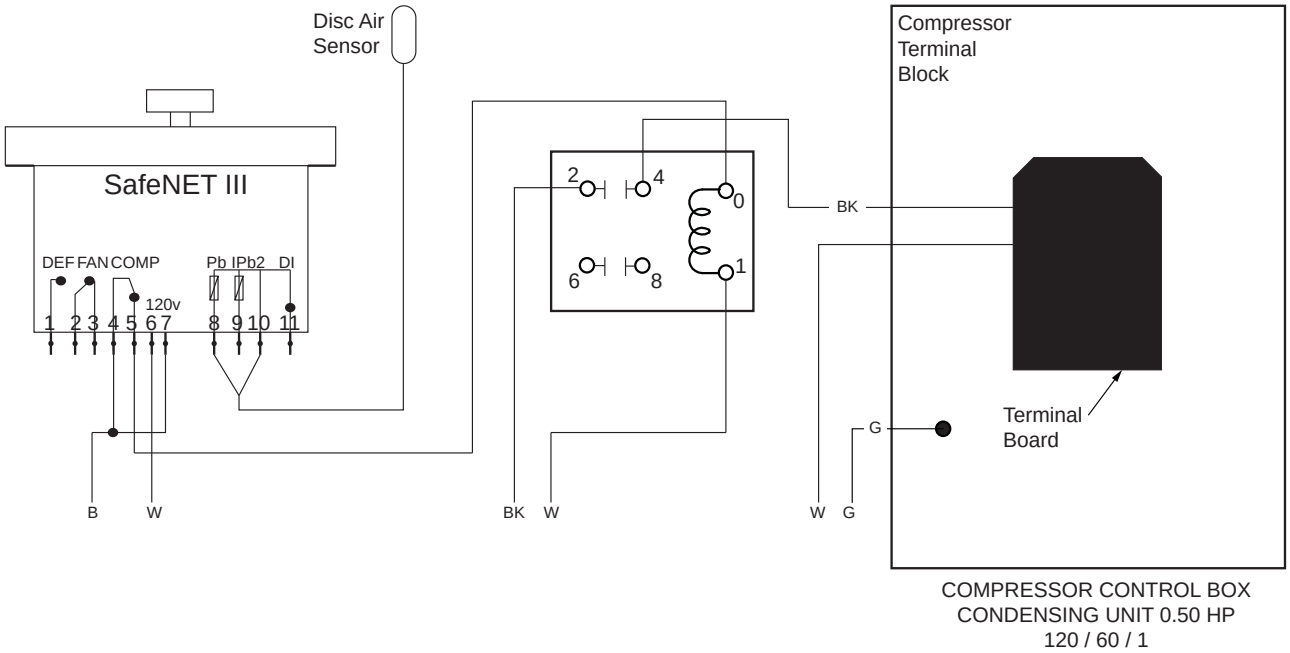
Circled Numbers = Parts List Item Numbers

Grayed components in 12 foot models only.

R = Red G = Green BL = Blue LB = Light Blue DB = Dark Blue BK = Black W = White

● = 120V POWER ○ = 120V NEUTRAL ⏚ = FIELD GROUND ⫽ = CASE GROUND

SafeNet & Condensing Unit Wiring



COMPRESSOR CONTROL BOX
CONDENSING UNIT 0.50 HP
120 / 60 / 1

WARNING

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

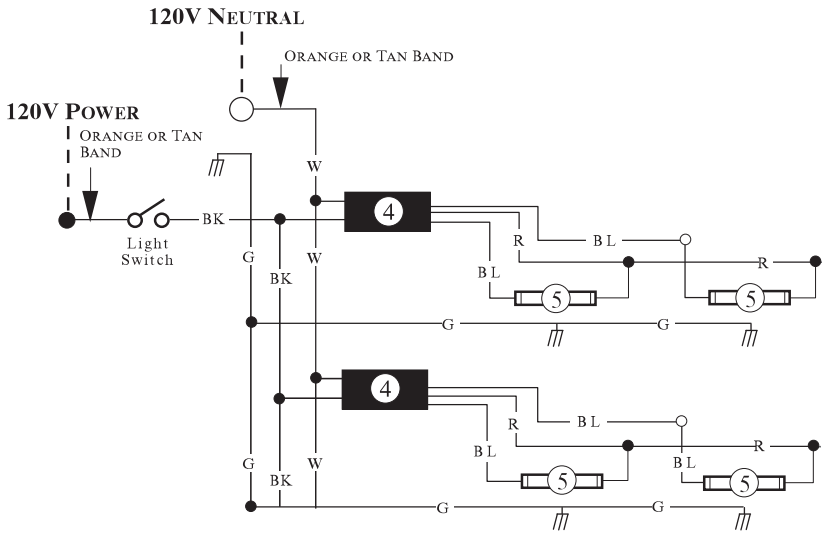
CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS

R = Red Y = Yellow G = Green BL = Blue BK = Black W = White

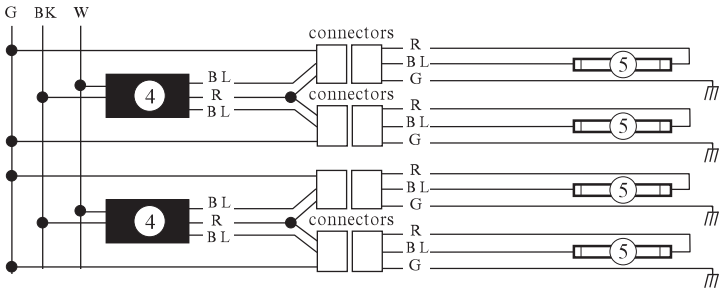
● = 120V POWER ○ = 120V NEUTRAL ⏚ = FIELD GROUND ⏚ = CASE GROUND

Light Circuits

Standard Lighting 2 Row Canopy



Optional Shelf Harness and Light Circuits



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