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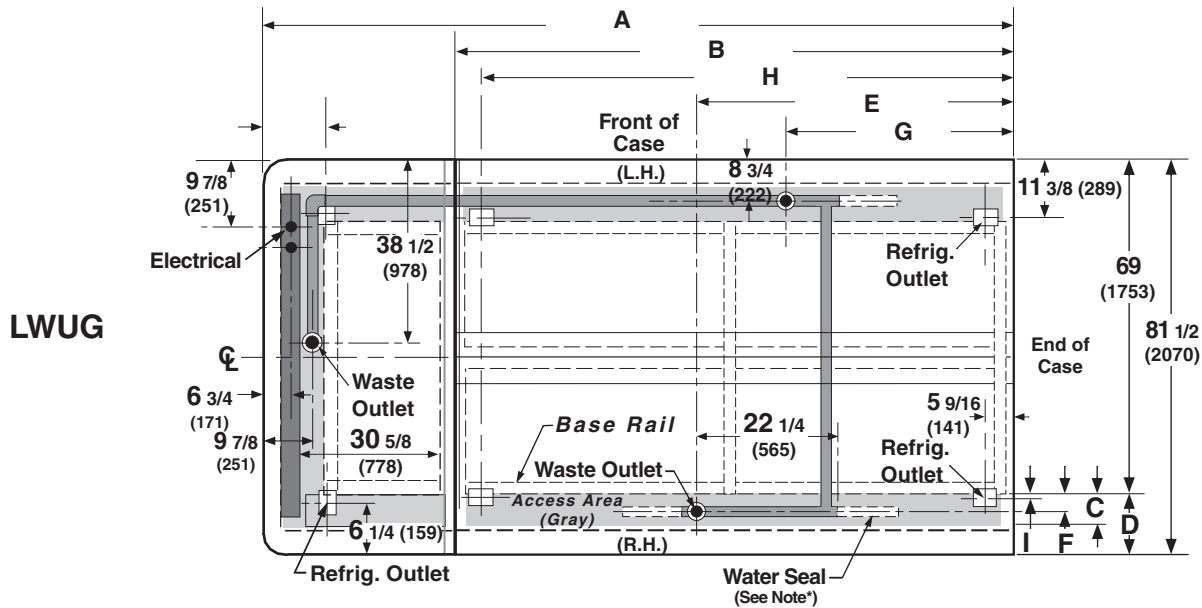
Item	Part #	Description	Wiring Item #	Item	Part #	Description	Wiring Item #
FAN ASSEMBLIES AND THERMOSTATS				HEATERS (CONTINUED)			
A.	4W Fan Assembly		(1)	G.	Drip Pan Heaters, Electric 208V		(7)
	0392457	Fan Motor, Standard (MO.4410101)			0392412	90 inch case (HE.4850461)	
	0409511	Front & Rear — Fan Blade embossing toward motor (FB.0409511)			0392413	138 inch case (HE.0392413)	
	0409513	End Compartment — Fan Blade embossing toward motor (FB.0409513)			0392412	End Compartment (HE.4850461)	
B.	Optional Adjustable Refrigeration Thermostat		(2)	G.	Drip Pan Heaters, Koolgas 120V		(8)
C.	Defrost Termination Thermostat (Electric Defrost only)		(3)		0421237	90 inch case (HE.4850495)	
	0398557	Front & End Compartment (CT.4440611)			0421238	138 inch case (HE.4850496)	
	0398558	Rear (CT.4481088)			0421237	End Compartment (HE.4850495)	
D.	0425304	Heater Switch (Koolgas Defrost only) (CT.0425304)	(4)	H.	Nosing Anti-sweat Heaters – Discharge		(9)
HEATERS					0401603	90 inch case (Front & Rear) (HE.4850470)	
E.	Control – Glass Anti-sweat Heaters (Export) Contour Ends 250V, 5amp		(5)		0401605	138 inch case (Front & Rear) (HE.0401605)	
	0400543	90 & 138 inch cases (CT.4480905)			0401612	End Compartment (90 & 138) (HE.0401612)	
F.	Modular Electric Defrost Heaters, 208V		(6)	I.	Multiglass - 2 Pane, w/heater		(10)
	0395709	Parent (HE.4850409)			0420174	90 inch case (Front) (GL.4985212)	
	0406444	End Compartment (HE.4850478)			0420175	90 inch case (Rear) (GL.4985213)	
					0420176	138 inch case (Front) (GL.4985214)	
					0420177	138 inch case (Rear) (GL.4985215)	
					0420183	End compartment (90 & 138) (GL.4980149)	
					0420182	Contour End (GL.4986385)	

NOTE: Revision J corrects heater data on Page 4.

Engineering Plan Views

Single Deck Frozen Food Wide Island with Unitized End

Dimensions shown as inches & (mm).



General	U-90	U-138
(A) Case Length (without ends or partitions) <i>(Each end and insulated partition adds 2 in. (51 mm) to case line up.)</i>	89 (2261)	137 1/4 (3486)
(B) End of case to end compartment Maximum O/S dimension of case back to front <i>(includes bumper)</i>	48 1/4 (1226) 81 1/2 (2070)	96 1/4 (2445) 81 1/2 (2070)
(C) Front of splashguard to O/S edge of base rail Front edge of case to O/S edge of rear base rail	8 1/2 (216) 69 (1753)	8 1/2 (216) 69 (1753)
(D) Rear of case to O/S edge of rear base rail Width of base rail Stub-up area (gray) between front base rail and splashguard	12 1/2 (318) 2 1/2 (64) 7 5/8 (194)	12 1/2 (318) 2 1/2 (64) 7 5/8 (194)
Electrical Service <i>(Electrical Field Wiring connection point)</i> Edge of case to center of knockouts Front O/S edge of case to nearest knockouts	6 3/4 (172) 9 7/8 (251)	6 3/4 (172) 9 7/8 (251)
Waste Outlets (E) End of case to the center of rear waste outlet (F) Center of waste outlet to O/S edge of rear base rail (G) End of case to center of front waste outlet O/S edge of case to center of waste outlet	10 1/8 (257) 3 3/4 (95) 38 (965) 8 3/4 (222)	58 1/4 (1480) 3 3/4 (95) 38 (965) 8 3/4 (222)
Water Seal Edge of water seal to center of waste outlet O/S diameter of drip pipe lines Note*: Field installed water seal outlet, tees and connectors are shipped with case.	11 (279) 1 1/2 (38)	11 (279) 1 1/2 (38)
Refrigeration Outlet End of case to center of front and rear refrigeration outlets (H) End of case to center of refrigeration outlets at other end O/S edges of case to center of refrigeration outlets (I) Center of refrigeration outlet to O/S edge of rear base rail	5 9/16 (141) 42 5/8 (1083) 11 3/8 (289) 1 1/4 (32)	5 9/16 (141) 88 3/8 (2245) 11 3/8 (289) 1 1/4 (32)

Impact LWUG
Frozen Food & Ice Cream

REFRIGERATION DATA

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

	FF	IC
Discharge Air (°F)	-12	-22
Evaporator (°F)	-20	-30
Unit Sizing (°F)	-23	-33
Btu/hr/case		
Parallel		
90 in.	5425	5485
138 in.	8525	8620
Conventional		
90 in.	5600	5665
138 in.	8800	8900

DEFROST DATA

	FF	IC
Frequency (hr)	24	24
Defrost Water (lb/case/day)		
90 in.	12.5	10.0
138 in.	20.0	16.0
<i>(± 15% based on case configuration and product loading).</i>		

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

GAS	FF	IC
Duration (minutes)	15	18
OFFTIME	Not Recommended	

Standard Defrost Thermostat
Close on rise: close 48°F — open 33°F

CONVENTIONAL CONTROLS

Low Pressure Backup Control	FF	IC
CI/CO (Temp °F)*	-27/-39	-27/-39

Indoor Unit Only, Pressure Defrost Termination (Temp °F) Not Recommended
*Use a Temperature Pressure Chart to determine PSIG conversions.

PHYSICAL DATA

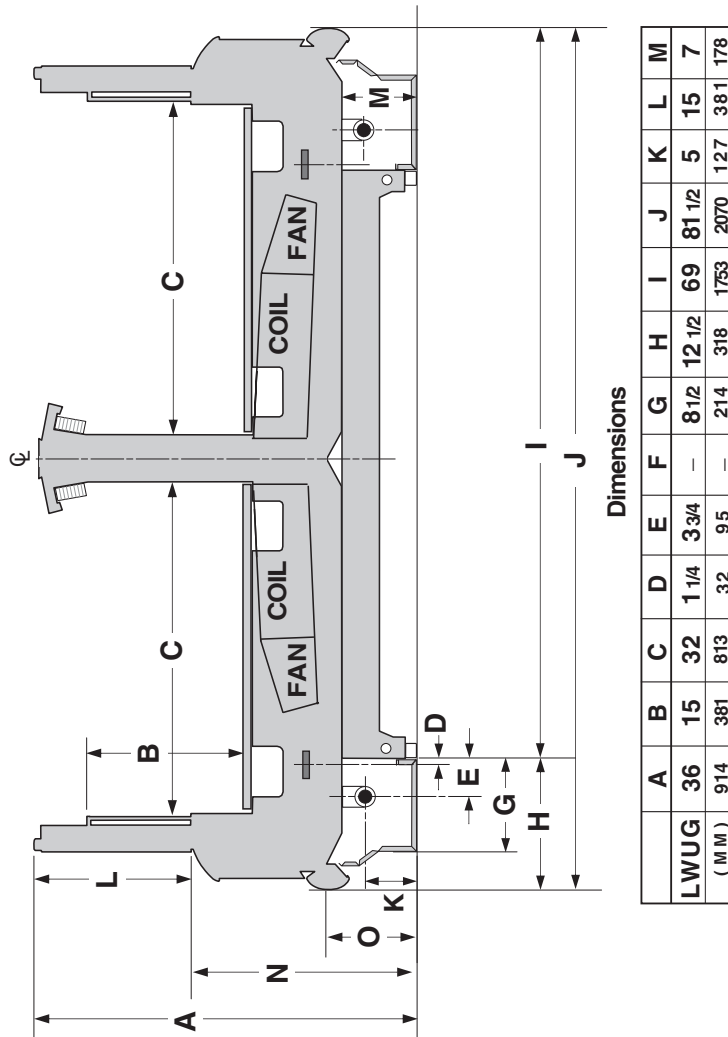
Merchandiser Drip Pipe (in.)	1 1/4
Merchandiser Liquid Line (in.)	3/8
Merchandiser Suction Line (in.)	7/8

Estimated Charge (lb)**	
90 in.	2.8
138 in.	4.6

**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/Partition (in.)	1 1/2
Each Contoured End	5

Dimensions shown in inches & (mm).



	A	B	C	D	E	F	G	H	I	J	K	L	M
LWUG	36	15	32	1 1/4	3 3/4	-	8 1/2	12 1/2	69	81 1/2	5	15	7
(MM)	914	381	813	32	95	-	214	318	1753	2070	127	381	178

	N	O
LWUG	21	8 1/4
(MM)	533	210

NSF Certification

These merchandisers are manufactured to meet ANSI /National Sanitation Foundation (NSF®) Standard #7 requirements.

Impact LWUG Frozen Food & Ice Cream
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Electrical Data

Number of Fans – 4W **90 in.** **138 in.**
3 **5**
(Energy Efficient fan motors are not available for End or End-compartment models)

			Amperes		Watts	
			90 in.	138 in.	90 in.	138 in.
Evaporator Fans						
120V	60Hz	Standard	0.93	1.55	72	120
120V	50Hz	Standard	NA			
230V	60Hz	Export	0.45	0.75	72	120
230V	50Hz	Export	0.74	1.10	111	165
120V	60Hz	Energy Efficient	0.42	0.70	30	50
230V	60Hz	Energy Efficient	NA			
Nosing Anti-sweat Heaters (on fan circuit)						
120V	50Hz / 60Hz		1.87	2.83	226	338
230V	50Hz / 60Hz		0.98	1.47	226	338
Glass Anti-sweat Heaters						
120V	60Hz	Standard	3.44	4.28	412	514
230V	50Hz	Export	1.97	2.46	454	566
Cycling Anti-sweat Heaters						
120V	50Hz / 60Hz		NA			
230V	50Hz / 60Hz		NA			
Minimum Circuit Ampacity						
120V	60Hz	Standard	6.44	8.86		
120V	50Hz	Standard	NA			
230V	60Hz	Export	3.60	4.88		
230V	50Hz	Export	3.89	5.23		
120V	60Hz	Energy Efficient	5.93	8.01		
230V	60Hz	Energy Efficient	NA			
Maximum Over Current Protection 120V			20	20		
Maximum Over Current Protection 230V			15	15		

Electric Defrost Heaters

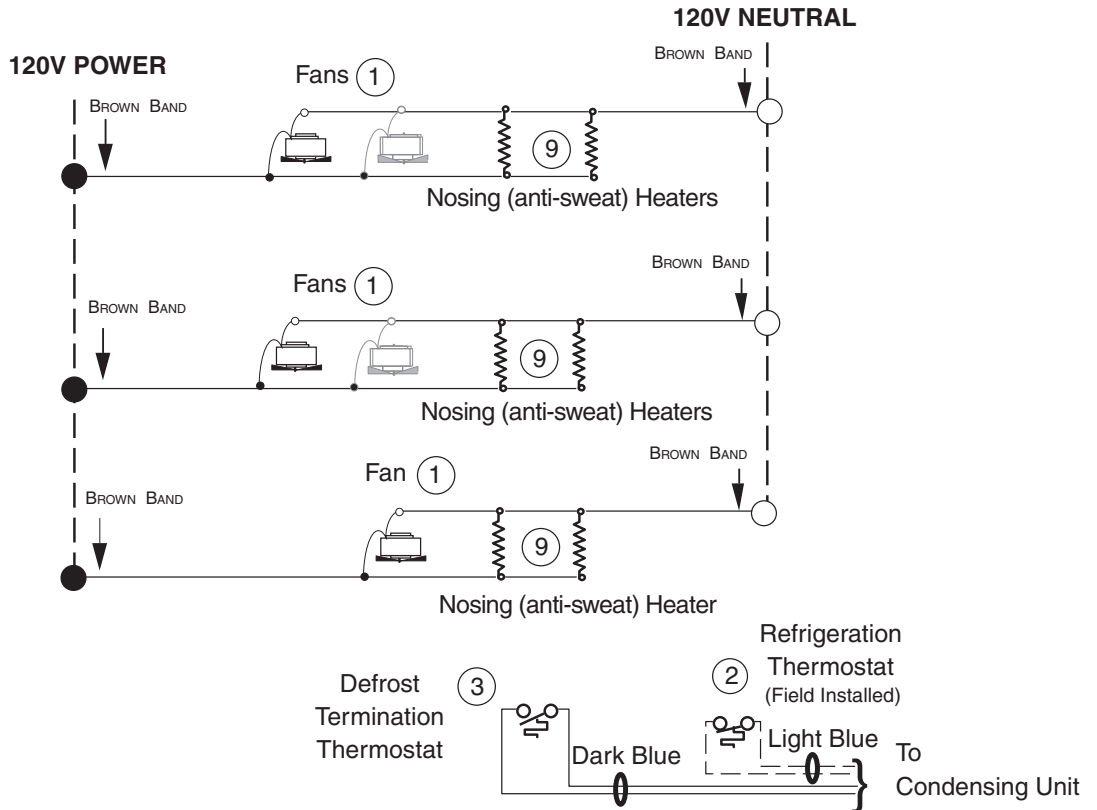
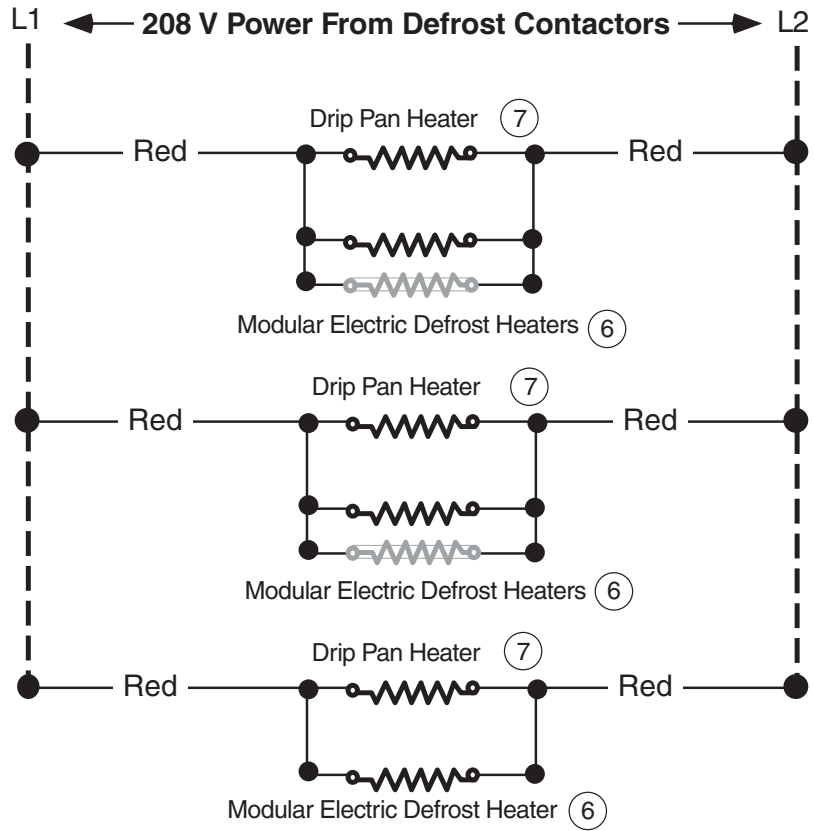
<u>208V</u>	60Hz	Standard	Front Compartment	4.00	8.00	835	1670
<u>208V</u>	60Hz	Standard	Rear Compartment	4.00	8.00	835	1670
<u>208V</u>	60Hz	Standard	End Compartment	5.50	5.50	1150	1150
230V	50Hz	Export	Front Compartment	4.40	8.90	1012	2047
230V	50Hz	Export	Rear Compartment	4.40	8.90	1012	2047
230V	50Hz	Export	End Compartment	6.10	6.10	1403	1403

Koolgas Drip Pan Heaters

120V	60Hz	Standard	3.75	6.25	450	750
<u>230V</u>	50Hz	Export	NA			

Standard Lighting: None

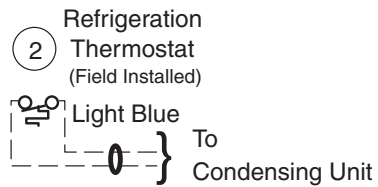
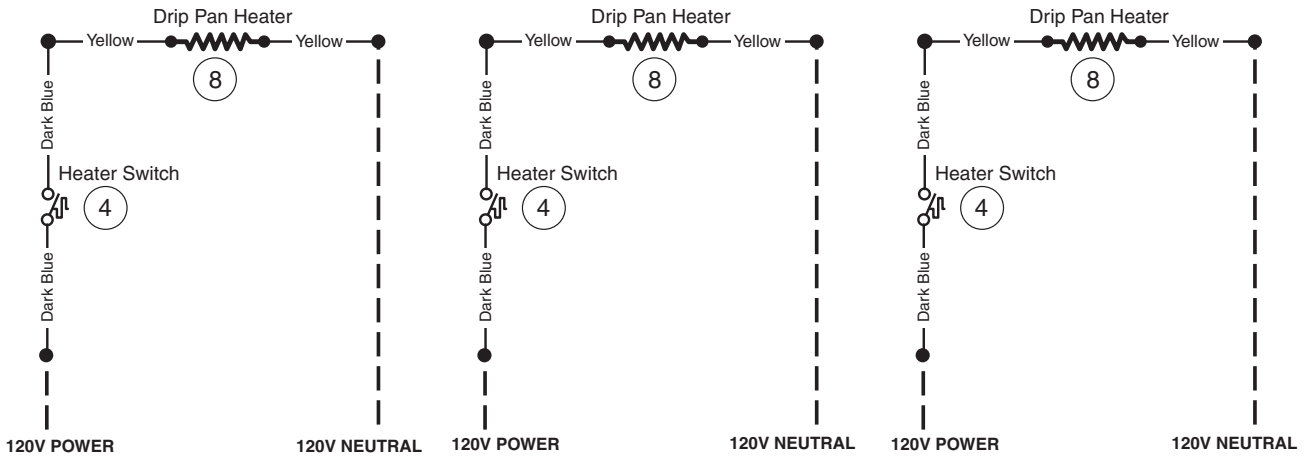
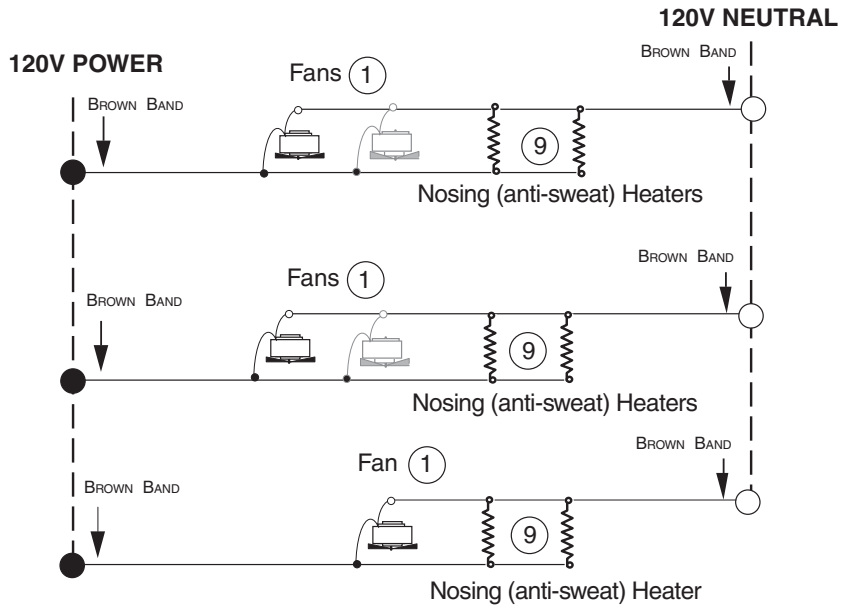
Electric Defrost – Standard



WARNING

All components must have mechanical ground, and the merchandiser must be grounded.
 Circled Numbers = Parts List Item Numbers
 Grayed components in 138 inch models only.

Gas Defrost – Optional



WARNING

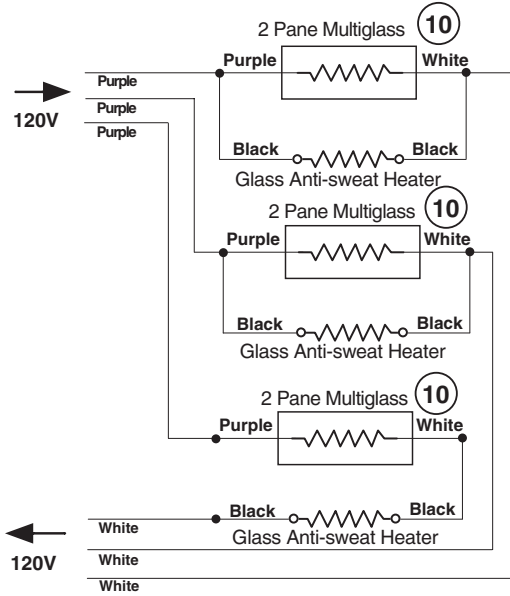
All components must have mechanical ground, and the merchandiser must be grounded.

Circled Numbers = Parts List Item Numbers

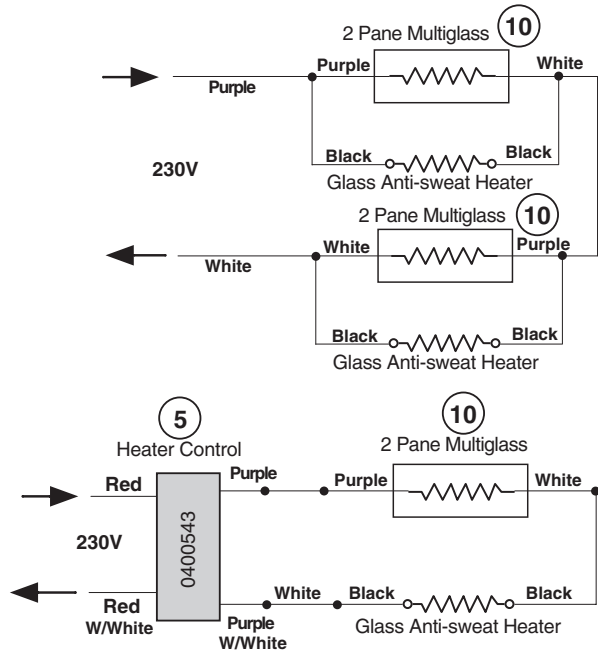
Grayed components in 12 foot models only.

Glass Anti-sweat Heaters — Domestic & Export

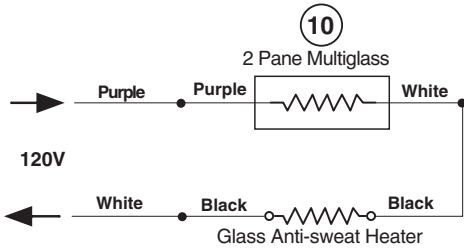
Glass Anti-sweat Heater (Domestic)
LWUG-90 & LWUG-138 (Unitized)



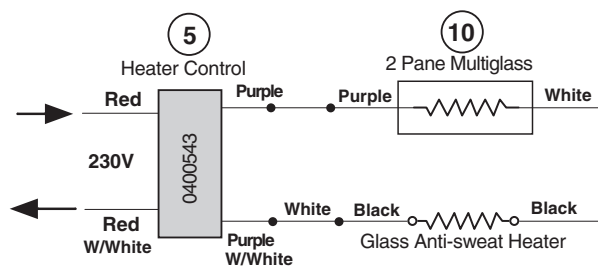
Glass Anti-sweat Heater (Export Only)
LWUG-90 & LWUG-138 (Unitized)



Anti-sweat Heater (Domestic)
LWUG Contour Ends



Anti-sweat Heater (Export Only)
LWUG Contour Ends



WARNING

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