

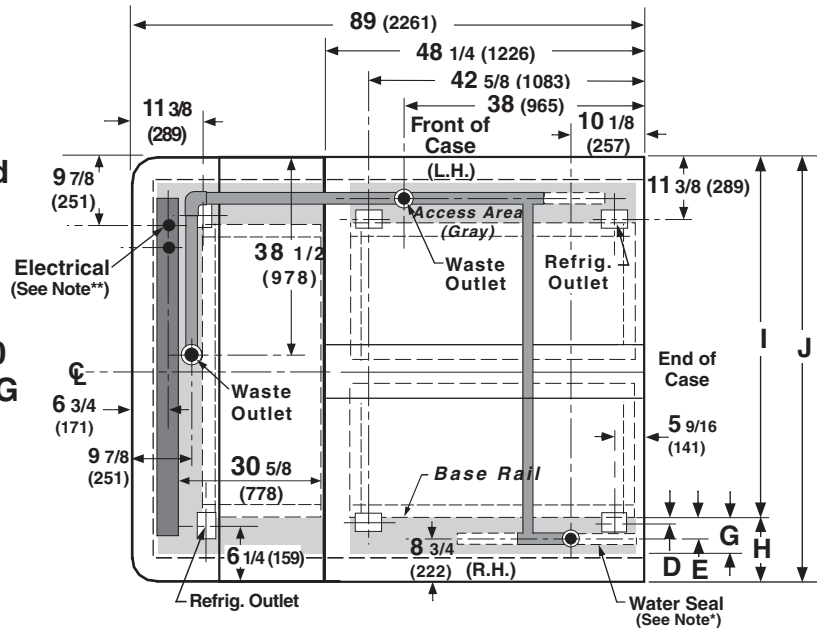
| Item | Part # | Description | Wiring Item # | Item | Part # | Description | Wiring Item # |
|---------------------------------------|---------------------------------------------------------------------|----------------------------------------------------|---------------|----------------------------|----------------------------------------|------------------------------|---------------|
| FAN ASSEMBLIES AND THERMOSTATS | | | | HEATERS (CONTINUED) | | | |
| A. | <u>4W Fan Assembly</u> | | (1) | F. | Modular Electric Defrost Heaters, 208V | | (6) |
| | 0392457 | Fan Motor, Standard | | | 0395709 | Parent | |
| | 0409511 | Front & Rear — Fan Blade embossing toward motor | | | 0406444 | End Compartment | |
| | 0409513 | End Compartment — Fan Blade embossing toward motor | | G. | Drip Pan Heaters, Electric 208V | | (7) |
| | | | | | 0392412 | 90 inch case | |
| | | | | | 0392413 | 138 inch case | |
| | | | | | 0392412 | End Compartment | |
| B. | Optional Adjustable Refrigeration Thermostat | | (2) | G. | Drip Pan Heaters, Koolgas 120V | | (8) |
| | 0144732 | White Rodgers | | | 0421237 | 90 inch case | |
| | 0253451 | Honeywell | | | 0421238 | 138 inch case | |
| | | | | | 0421237 | End Compartment | |
| C. | Defrost Termination Thermostat (Electric Defrost only) | | (3) | H. | Nosing Anti-sweat Heaters – Discharge | | (9) |
| | 0398557 | Front & End Compartment | | | 0401603 | 90 inch case (Front & Rear) | |
| | 0398558 | Rear | | | 0401605 | 138 inch case (Front & Rear) | |
| | | | | | 0401612 | End Compartment (90 & 138) | |
| D. | 0425304 | Heater Switch (Koolgas Defrost only) | (4) | I. | Multiglass - 2 Pane, w/heater | | (10) |
| HEATERS | | | | | 0420178 | 90 inch case (Front) | |
| E. | Control – Glass Anti-sweat Heaters (Export) Contour Ends 250V, 5amp | | (5) | | 0420179 | 90 inch case (Rear) | |
| | 0400543 | 90 & 138 inch cases | | | 0420180 | 138 inch case (Front) | |
| | | | | | 0420181 | 138 inch case (Rear) | |
| | | | | | 0420185 | End compartment (90 & 138) | |
| | | | | | 0420184 | Contour End | |

Note: Changed items have been underlined.

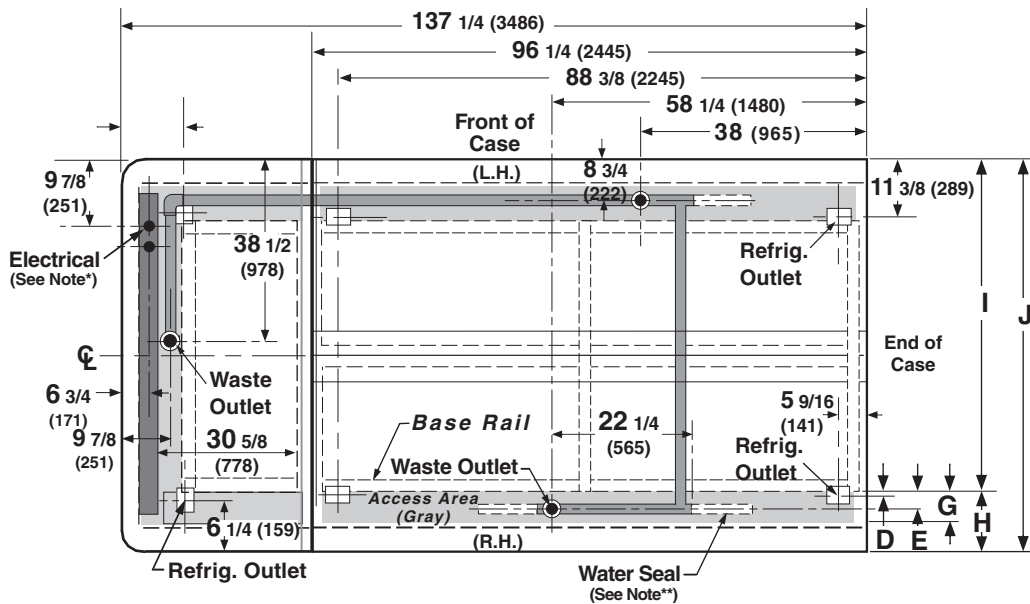
Engineering Plan Views

Single Deck Frozen Food Wide Island with Unitized End

LWU-90
LWU-90G



LWU-138
LWU-138G



Length of Case---U-90 - 89; U-138 - 137 1/4
End of case to end compartment ---U-90 - 48 1/4;
U-138 - 96 1/4

Maximum O/S dimensions of case front to rear
(includes bumper)---J = 81 1/2
Front of splashguard to O/S edge of base rail
---G = 8 1/2

Front edge of case to O/S edge of rear base rail---I = 69
Rear of case to O/S edge of rear base rail--- H = 12 1/2

Width of base rail---- 2 1/2

Stub-up area between front base rail
and splashguard---- 7 5/8

Electrical Service

Edge of case to center of knockouts---- 6 3/4
Front O/S edge of case to nearest knockout--- 9 7/8
Note *: Electrical Field Wiring Connection Point

Waste Outlet

End of case to center of rear waste outlet ---U-90-- 10 1/8;
U-138-- 58 1/4
Center of waste outlet to O/S edge of rear base rail---E = 3 3/4
End of case to center of front waste outlet--- U-90-- 38;
U-138-- 38
O/S edge of case to center of waste outlet--- 8 3/4

Water Seal

Edge of water seal to center of waste outlet---- 11
O/S diameter of drip pipe lines---- 1 1/2
Note***: Field installed water seal outlet, tees, and connectors,
are shipped with case.

Refrigeration Outlet

End of case to center of front and rear
refrigeration outlets-- 5 9/16
End of case to center of refrigeration outlets at other end
-- U-90- 42 5/8; U-138-- 88 3/8
O/S edges of case to center of refrigeration outlets---11 3/8
Center of refrigeration outlet to O/S edge of rear base rail---D = 1 1/4

Impact LWUGH
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 |

*For all refrigeration equipment other than Hussmann, use conventional Btu values.

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 |
| (\pm 15% based on case configuration and product loading). | | |
| ELECTRIC | | |
| Temp Term (°F) | 48° | 48° |
| Failsafe (minutes) | 60 | 60 |
| GAS | | |
| Duration (minutes) | 15 | 18 |
| OFFTIME | Not Recommended | |

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

CONVENTIONAL CONTROLS

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

Indoor Unit Only, Pressure Defrost Termination (Temp °F) Not Recommended

PHYSICAL DATA

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

Estimated Charge (lb)***

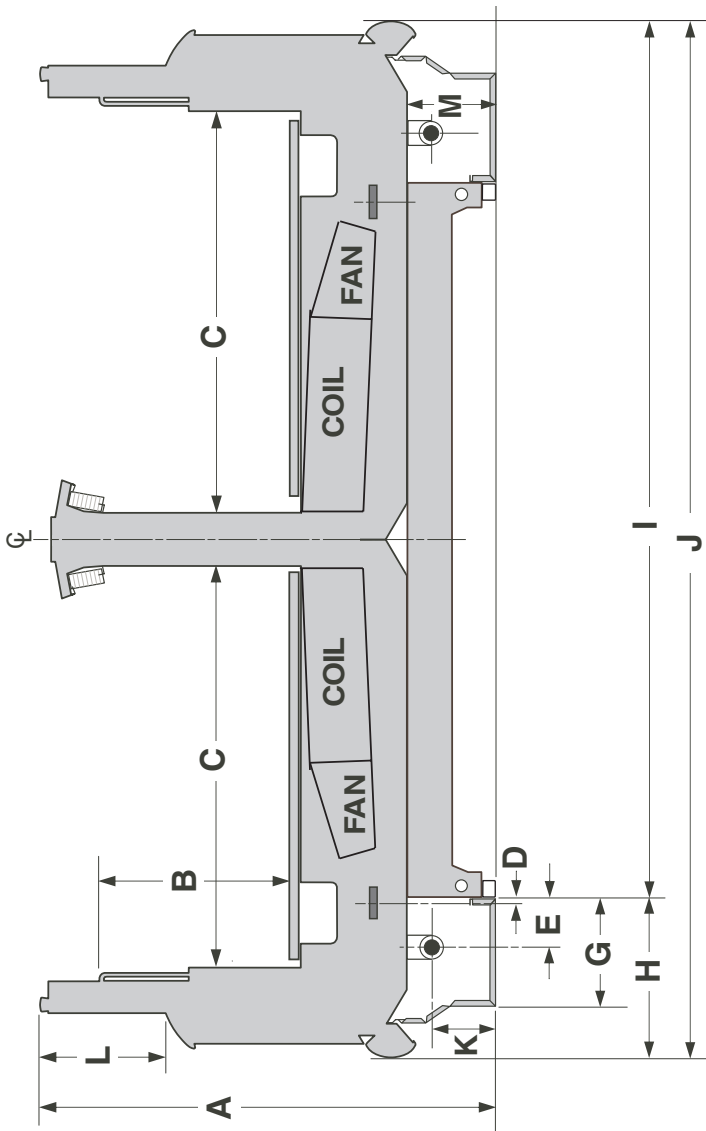
| | |
|----------------|-----|
| 90 in. | 2.8 |
| 138 in. | 4.6 |

***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).



Dimensions

| | A | B | C | D | E | F | G | H | I | J | K | L | M |
|--------------|-----|-----|-----|-------|-------|---|-------|--------|------|--------|-----|-----|-----|
| LWUGH | 36 | 15 | 32 | 1 1/4 | 3 3/4 | — | 8 1/2 | 12 1/2 | 69 | 81 1/2 | 5 | 10 | 7 |
| (MM) | 914 | 381 | 813 | 32 | 95 | — | 214 | 318 | 1753 | 2070 | 127 | 254 | 178 |

NOTE: The bumpers are 4 inches wide. The top of the front glass bumper rail is 26 inches from the floor, and the center of the bottom bumper is 8 1/4 inches from the floor.

NSF Certification

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

| |
|-----------------------------------------------------------|
| Impact LWUGH Frozen Food & Ice Cream |
|-----------------------------------------------------------|

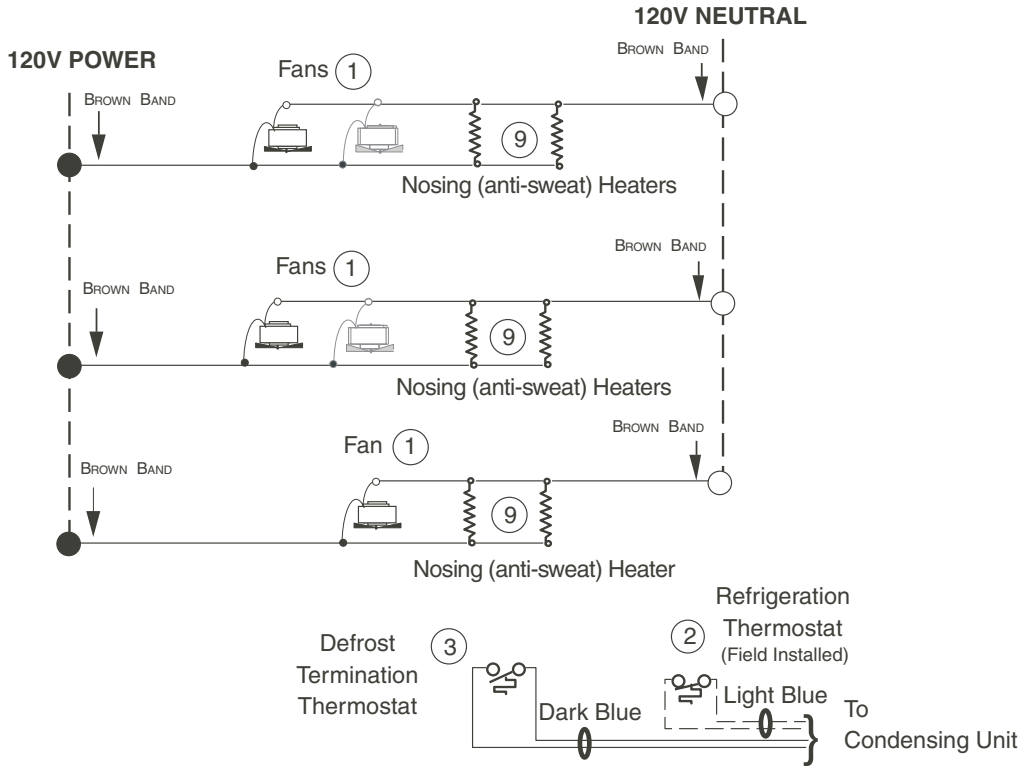
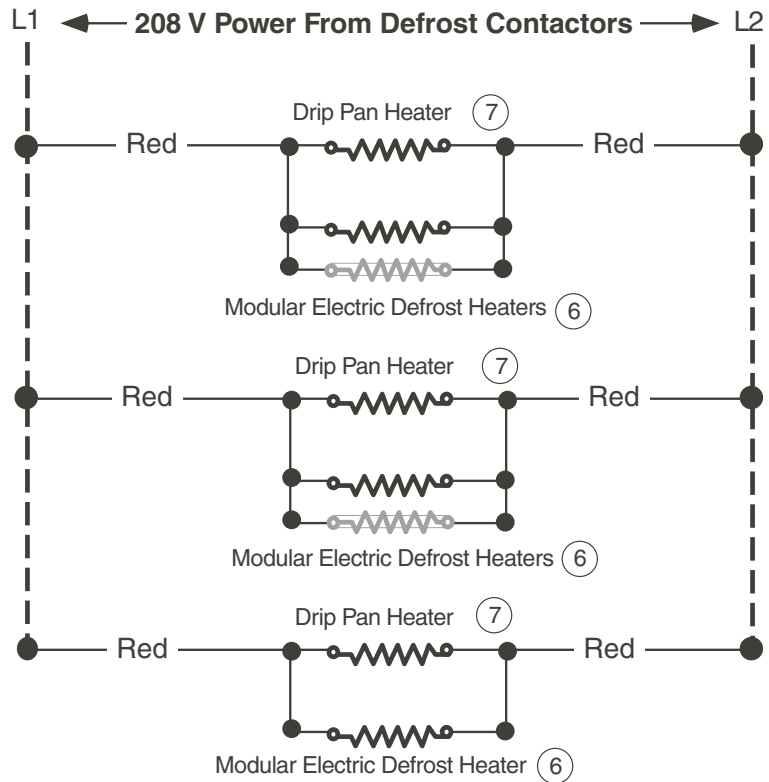
Electrical Data

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 | 2.86 | 3.56 | 329 | 413 | |
| 230V | 50Hz | Export | 1.58 | 1.98 | 363 | 455 | |
| Cycling Anti-sweat Heaters | | | | | | | |
| 120V | 50Hz / 60Hz | | NA | | | | |
| 230V | 50Hz / 60Hz | | NA | | | | |
| Minimum Circuit Ampacity | | | | | | | |
| 120V | 60Hz | Standard | 5.86 | 8.14 | | | |
| 120V | 50Hz | Standard | NA | | | | |
| 230V | 60Hz | Export | 3.21 | 4.40 | | | |
| 230V | 50Hz | Export | 3.50 | 4.75 | | | |
| 120V | 60Hz | Energy Efficient | 5.35 | 7.29 | | | |
| 230V | 60Hz | Energy Efficient | NA | | | | |
| Maximum Over Current Protection 120V | | | 20 | 20 | | | |
| Maximum Over Current Protection 230V | | | 15 | 15 | | | |
| 208V 1F Electric Defrost Heaters | | | | | | | |
| 120V | 60Hz | Standard | Front Compartment | 4.00 | 8.00 | 835 | 1670 |
| 120V | 60Hz | Standard | Rear Compartment | 4.00 | 8.00 | 835 | 1670 |
| 120V | 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 |
| 120V 1F Koolgas Drip Pan | | | | | | | |
| 120V | 60Hz | Standard | | 3.75 | 6.25 | 450 | 750 |
| 120v | 50Hz | Export | | NA | | | |

Standard Lighting: None

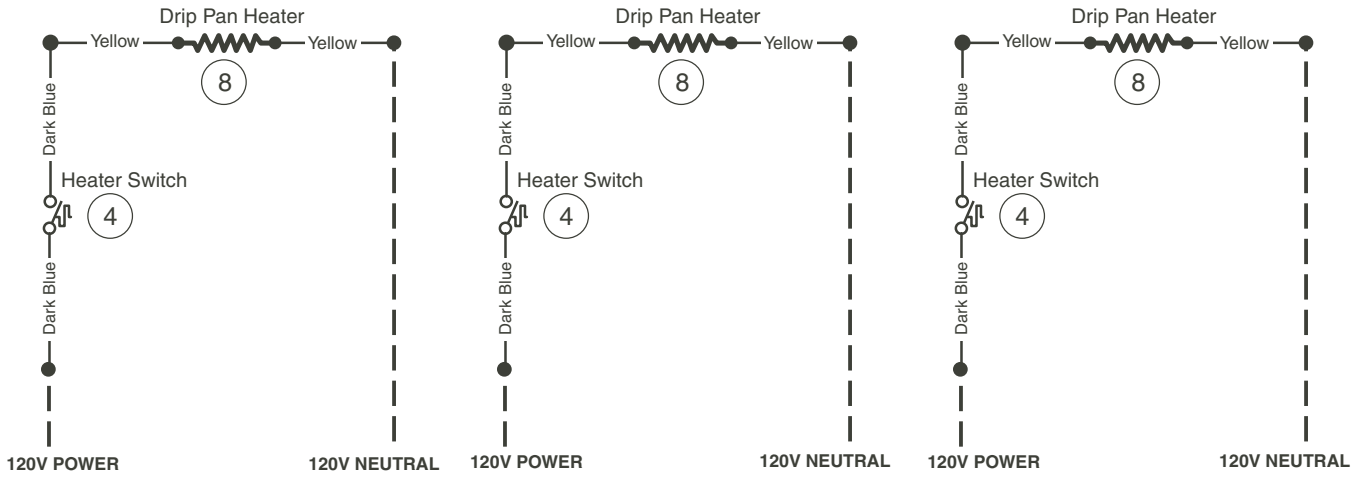
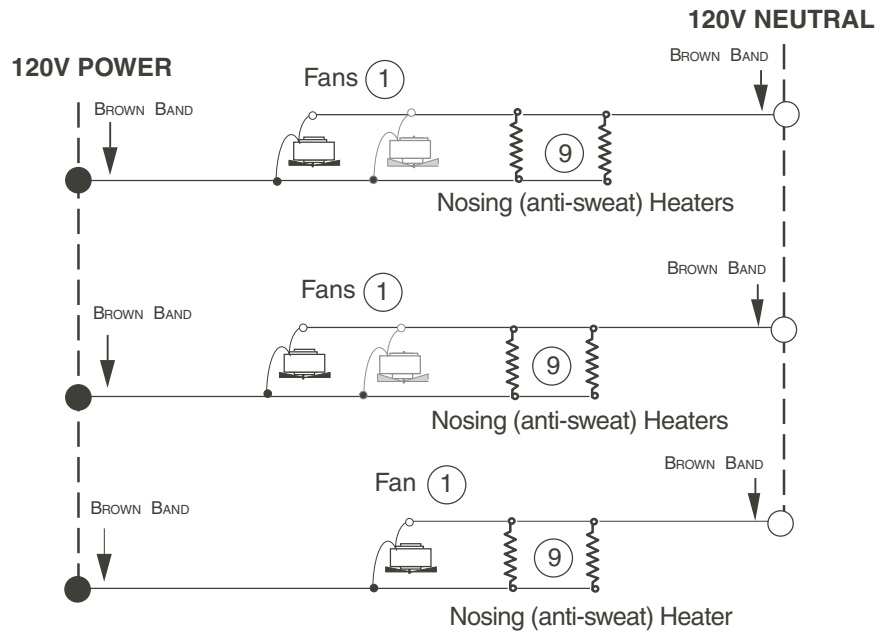
Electric Defrost – Standard



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

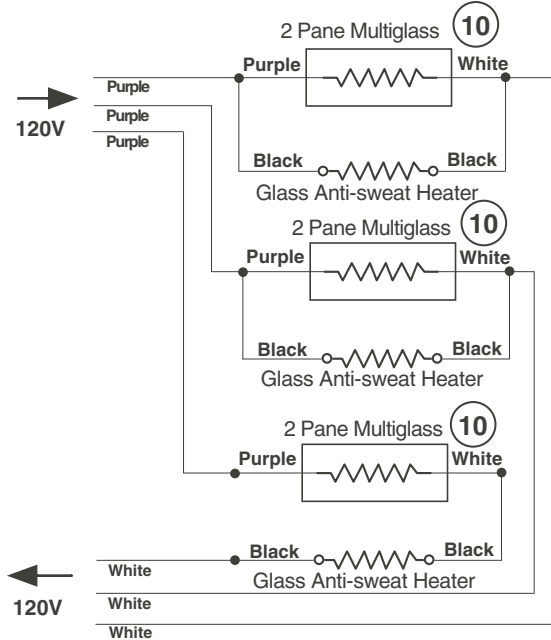


WARNING

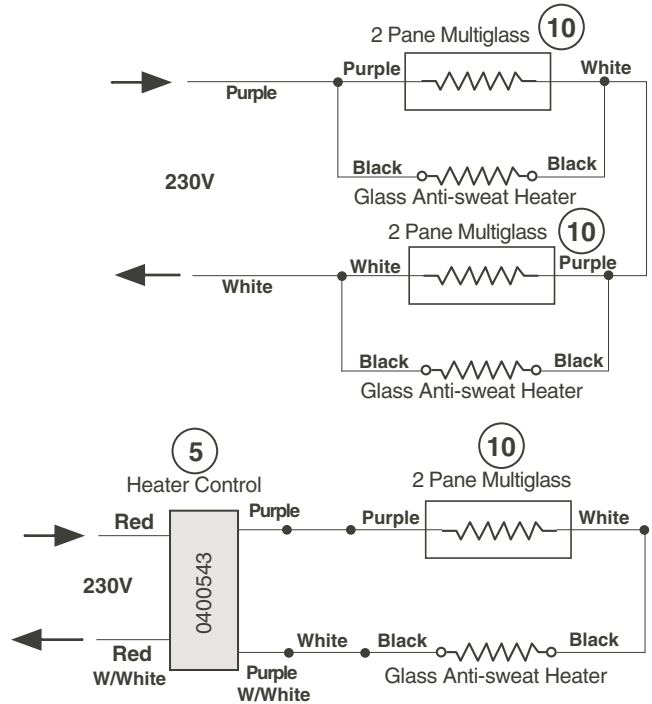
All components must have mechanical ground, and the merchandiser must be grounded.
 Circled Numbers = Parts List Item Numbers
 Grayed components in 12 foot models only.

Glass Anti-sweat Heaters — Domestic & Export

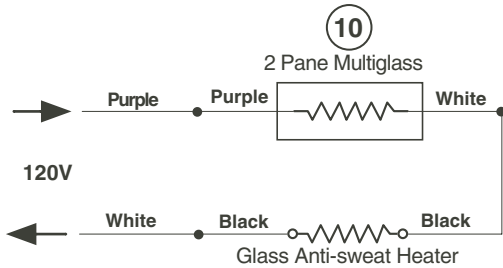
Glass Anti-sweat Heater (Domestic)
LWUGH-90 & LWUGH-138 (Unitized)



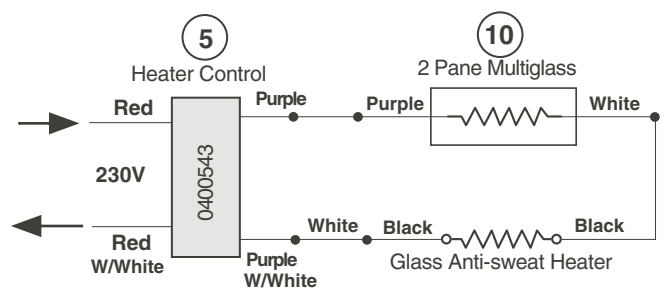
Glass Anti-sweat Heater (Export Only)
LWUGH-90 & LWUGH-138 (Unitized)



Anti-sweat Heater (Domestic)
LWUGH Contour Ends



Anti-sweat Heater (Export Only)
LWUGH Contour Ends



WARNING

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