



Technical Datasheet

FGL

Low and Medium
Temperature Island
Display Case with Lids
and Glass Walls

Applications

Medium Temp, Frozen Foods
and Ice Cream

P/N 0523821 Rev F
May 2026

Models Covered

F8GL, F12GL

Refrigerant(s)

A2L (R-454A or R-454C)
R-744 (CO₂)
Glycol
HFC/HCFC/HFO

Certifications



NSF/Sanitation Compliance

This merchandiser model is manufactured to meet NSF/ANSI Standard 7 requirements for construction, materials, and cleanability.

⚠ WARNING

Component parts shall be replaced with like components, and servicing shall be done by factory authorized service personnel only, so as to minimize the risk of possible ignition due to incorrect parts or improper service.

Table of Contents

Model Name	2
Performance Data	3
Refrigerant Data	4
Cross-section View	5
Plan View	6
Additional Dimensional Data	7
Estimated Shipping Weight	7
Electrical Specifications	8
Wiring Diagrams	9

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.

WARNING:

Read the entire installation, operation, and service manual before installing, servicing, or using this equipment in any way. Refer to the manual for detailed information about minimum room floor area and installation, maintenance, and service processes.

A2L Equipped Models

If the information in the instructions are not followed exactly, a fire or explosion may result, causing property damage, personal injury, or death. Installation and service must be performed by a qualified installer or service agency.



Mildly flammable A2L refrigerant used. Units that are configured to use A2L refrigerants require special attention. No open flames, cigarettes, or other possible sources of ignition should be used inside or in the vicinity of units containing flammable refrigerants.

If a refrigerant leak is present or even suspected, do not allow untrained personnel to attempt to find the cause. No open flames, cigarettes, or other possible sources of ignition should be used inside or in the vicinity of the unit(s). Intrinsically safe components are the only types that can be worked on while live in the presence of a flammable atmosphere.

Information on pre-installed A2L refrigerant sensors and detectors, safety shut-off and check valves, relay information, and additional parts replacement information can be found in the associated installation, operation, and service manual. All manual information must be reviewed in full prior to performing any work.

R-744 (CO₂) Equipped Models

This equipment uses carbon dioxide (R-744 [CO₂]) refrigerant for heat transfer. The system is sealed and pressure-tested with ASME-certified vessels, but leaks can occur in the event of a system failure. A CO₂ leak in an unventilated space can pose serious hazards. Therefore, units must be installed in areas with adequate ventilation and in accordance with local safety codes.

A leak of R-744 could result in a concentration exceeding the practical limit in an enclosed, occupied space such as a cold room. Precautions must be taken to prevent asphyxiation. These include the use of permanent leak detection, which activates an alarm in the event of a leak.



Observe all warnings and labels on the unit being installed or serviced such as the one below indicating high pressure.

All refrigeration servicing must be completed by a certified refrigeration installation professional, and all tubing and components **MUST** be qualified for CO₂ applications, with a minimum design pressure of 1,305 psig (90 bar).

Failure to abide by all warnings contained within the associated manual could result in an explosion, death, injury, and property damage.

Model Nomenclature

“F” is followed by a number representing the length of the case in feet (i.e., a 12-foot model would be “F12GL”).

Ordering Information

All options must be selected at time of ordering. Some lengths and/or applications require optional fan motor kits applied by the Hussmann Product Configurator (HPC).

Performance Data^A

Data Type	Medium Temperature NSF I Ambient	Frozen Food NSF I Ambient	Ice Cream ^B NSF I Ambient
Discharge Air Temperature	32° F (0.0° C)	-8° F (-22.2° C)	-16° F (-26.7° C)
Evaporator Temperature ^D	25° F (-3.9° C)	-15° F (-23.1° C)	-24° F (-31.1° C)
Unit Sizing	23° F (-5.0° C)	-18° F (-27.8° C)	-27° F (-32.8° C)
Parallel Capacity per Foot (meter)	130 BTUh (125 W)	210 BTUh (202 W)	230 BTUh (221 W)
Conventional Capacity per Foot (meter)	135 BTUh (130 W)	215 BTUh (207 W)	240 BTUh (231 W)
Low Pressure Backup Control (CI/CO) ^E	28° F (-2.2° C) / 16° F (-8.9° C)	-15° F (-26.1° C) / -27° F (-32.7° C)	-21° F (-29.4° C) / -33° F (-36.1° C)

Defrost Data^F

Data Type	Medium Temperature	Frozen Food	Ice Cream
Defrost Frequency	once every 24 hours		
Defrost Water ^G	0.25 lb/ft/day (0.1 kg)	0.29 lb/ft/day (0.1 kg)	0.3 lb/ft/day (.1 kg)

Electric Defrost	Medium Temperature	Frozen Food	Ice Cream
Temp. Termination	48° F (8.9° C)		
Standard Defrost Thermostat	Closes on rise 48° F (8.9° C), opens at 33° F (0.6° C)		
Time	30 minutes (failsafe)	50 minutes (failsafe)	60 minutes (failsafe)

Gas Defrost	Medium Temperature	Frozen Food	Ice Cream
Gas Defrost Duration	N/A	15 minutes	18 minutes

Product Data

AHRI Gross Refrigerated Volume ^H	3.69 ft³/ft of length (0.34 m³/m of length)
AHRI Total Display Area ^I	3.02 ft²/ft of length (0.92 m²/m of length)
Shelf Surface Area	2.79 ft²/ft of length (0.85 m²/m of length)

^A All data based on store temperature and humidity that does not exceed NSF Type I ambient conditions of 75° F (23.9° C) and 55% relative humidity, except where noted.

^B Dual temperature operation kits are not suitable for ice cream temperature applications.

^C For energy consumption comparison only

^D 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.

^E Use a temperature pressure chart to determine PSIG (bar) conversions.

^F Off-time defrost is not recommended.

^G ± 15% based on case configuration and product

^H AHRI Refrigerated Volume less shelving and other unusable space: Refrigerated Volume/Unit of Length, ft³/ft [m³/m]

^I Computed using AHRI 1200 standard methodology: Total Display Area, ft² [m²]/Unit of Length, ft [m]

Refrigerant Data**Approximate HFC/HCFC/HFO Refrigerant Charge^J**

Case	Estimated Charge
F8GL	32 oz (1,134 g)
F12GL	48 oz (1,672 g)

A2L Refrigerant Charge

Model	Minimum Room Floor Area ft ² (m ²)	Estimated Refrigerant Charge ^K — lb (g)	
		Operating Charge	
		R-454A	R-454C
F8GL	213 (19.8)	2.4 (1,105)	2.5 (1,118)
F12GL	213 (19.8)	3.7 (1,698)	3.7 (1,698)

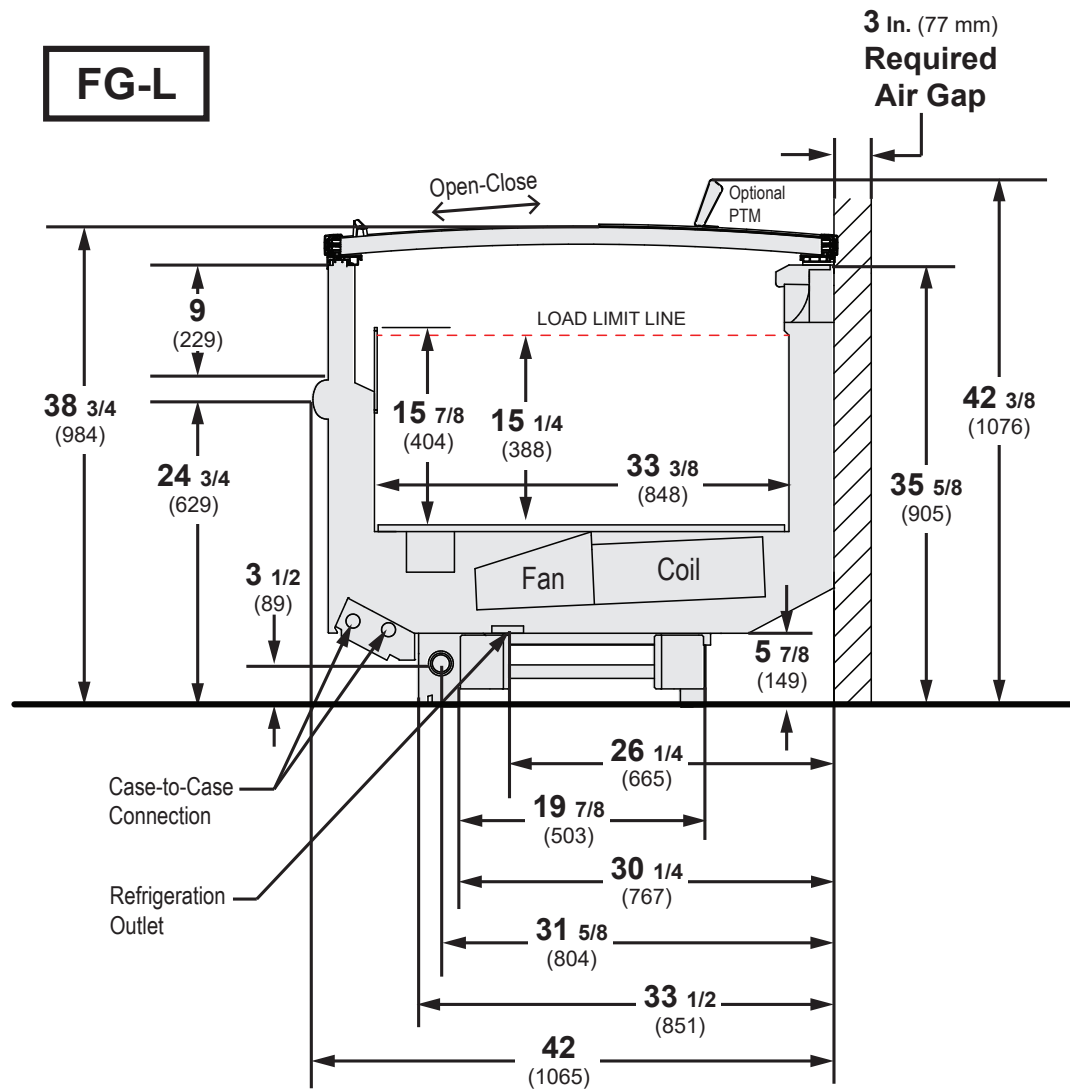
R-744 (CO₂) Pressure Rating

Case Configuration	Pressure Rating
standard pressure CO ₂	652 psi (45 bar)
high pressure CO ₂	1,305 psi (90 bar)

^J This is an average for all refrigerant types. Actual refrigerant charge may vary by approximately half a pound (8 oz/0.2 kg).^K Approximate charge based on normal operating conditions, contact Hussmann if releasable charge information is required.

Cross-Section View

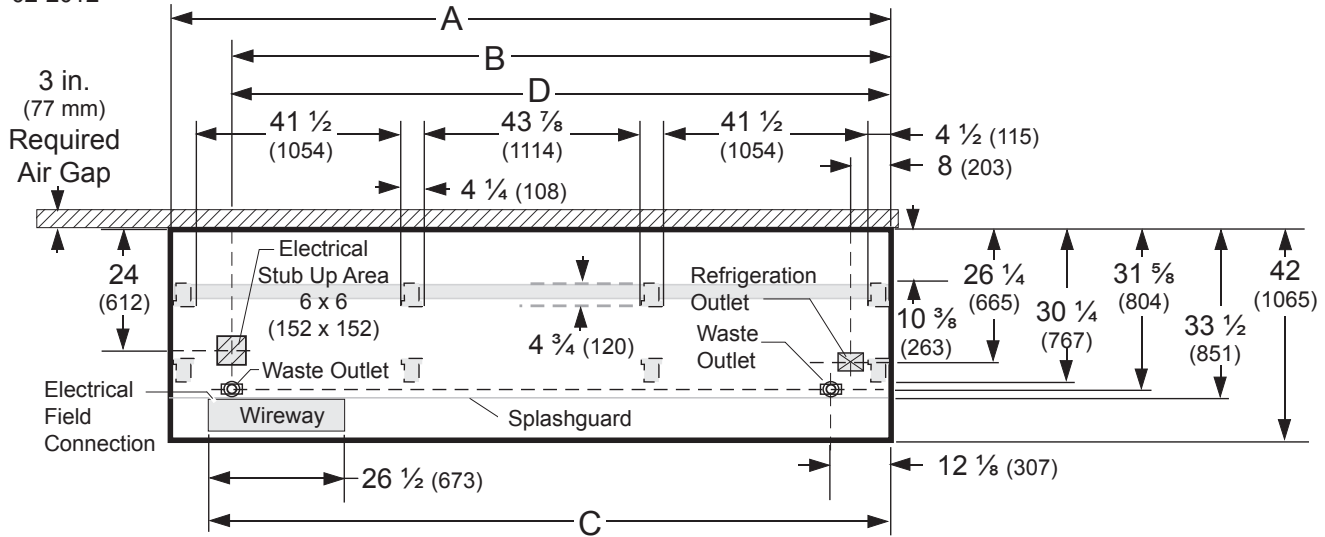
Dimensions shown as in. and (mm).



Plan Views

Dimensions shown as inches and (mm).

02-2012



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

FRONT

	8 ft	12 ft
General		
(A) Case Length <i>(without ends or partitions)</i> <i>(Each end and insulated partition adds 2 in. (51 mm) to case line up.)</i> Maximum O/S dimension of case back to front <i>(includes bumper)</i> Back of case to front of splashguard Back of case to O/S edge of front leg Distance between edges of external legs and center legs Distance between edges of center legs Distance between front legs and splashguard	96 3/8 (2,448) 42 (1,065) 33 1/2 (851) 30 1/4 (767) 41 1/2 (1,054) NA 3 1/8 (82)	144 1/2 (3,670) 42 (1,065) 33 1/2 (851) 30 1/4 (767) 41 1/2 (1,054) 43 7/8 (1,114) 3 1/8 (82)
Electrical Service <i>(Electrical Field Wiring connection point)</i> (B) RH End of case to center of stub up area Back of case to center of stub up area Length of electrical wireway	84 1/4 (2,140) 24 (612) 26 1/2 (673)	132 3/8 (3,363) 24 (612) 26 1/2 (673)
(C) RH End of case to LH end of wireway	90 1/8 (2,289)	138 1/4 (3,511)
Waste Outlets <i>(One each end)</i>		
(D) RH End of case to the center of LH waste outlet RH End of case to the center of RH waste outlet Back O/S of case to center of waste outlets Schedule 40 PVC drip pipe	84 1/4 (2,140) 12 1/8 (307) 31 5/8 (804) 1 1/4 (32)	132 3/8 (3,363) 12 1/8 (307) 31 5/8 (804) 1 1/4 (32)
Refrigeration Outlet		
Back of case to center of refrigeration outlet RH end of case to center of refrigeration outlet	26 1/4 (665) 8 (203)	26 1/4 (665) 8 (203)

Additional Dimensional Data

Ends and Partitions

Each standard end and each insulated partition adds 2 in. (38 mm) to case lineup.

Drip Pipe, Liquid Line, and Suction Line

The below values represent only a sample of the most common connection sizes. Consult a Hussmann representative for additional data related to specific case size and refrigerant variations. Each standard end and each insulated partition adds 2 in. (38 mm) to case lineup.

Merchandise Drip Line	1 1/4 in.
Merchandise Liquid Line	3/8 in.
Merchandise Suction Line	5/8 in.

Estimated Shipping Weight^L

FG8L	FG12L	Solid End (each)
1,120 lb (508 kg)	1,370 lb (623 kg)	50 lb (23 kg)

^L Actual weights will vary according to optional kits included.

Electrical Data

			8 ft	12 ft		
Number of Fans – 4W Evaporator			2	2		
			Amperes		Watts	
			8 ft	12 ft	8 ft	12 ft
Evaporator Fans						
120V	50/60Hz	Standard Energy Efficient	0.24	0.24	16	16
230V	50/60Hz	Standard Energy Efficient	0.12	0.12	16	16
230V	60Hz	Export	0.30	0.30	48	48
230V	50Hz	Export	0.36	0.36	54	54
Anti-sweat Heaters (on fan circuit)						
120V	50/60Hz	Standard	0.34	0.52	41	62
230V	50/60Hz	Export	0.18	0.27	41	62
Minimum Circuit Ampacity						
120V	50/60Hz	Standard Energy Efficient	0.78	0.96		
230V	50/60Hz	Standard Energy Efficient	0.50	0.59		
230V	60Hz	Export	0.68	0.77		
230V	50Hz	Export	0.74	0.83		
Maximum Over Current Protection 120V			20	20		
Maximum Over Current Protection 230V			15	15		
Return Glass Anti-sweat Heaters						
120V	50/60Hz	Standard	0.08	0.11	9	13
230V	50/60Hz	Export	0.04	0.06	9	13
208V Electric Defrost			7.69	11.54	1600	2400
230V Export Electric Defrost			6.96	10.43	1600	2400
120V Koolgas Defrost			1.67	3.33	200	400

ONLY LIGHTING CONFIGURATIONS THAT ARE COMPLIANT WITH THE U.S. DEPT. OF ENERGY (DOE) 2017 REGULATION ARE AVAILABLE FOR SALE FOR USE IN THE U.S.A.

Standard Lighting

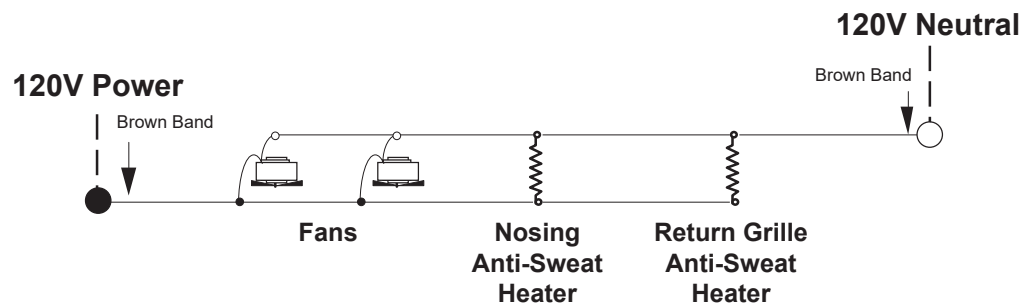
None

Optional Lighting

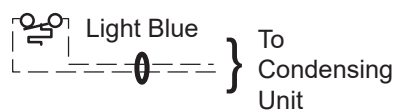
LED	120V	0.35	0.49	42	60
LED	230V	0.18	0.26	42	60

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.

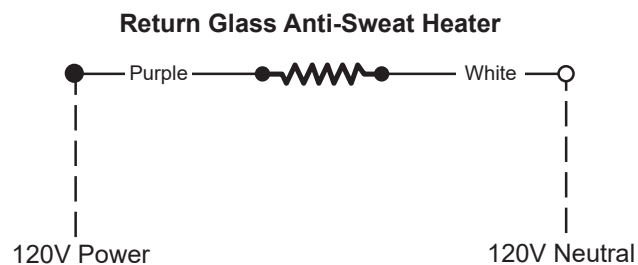
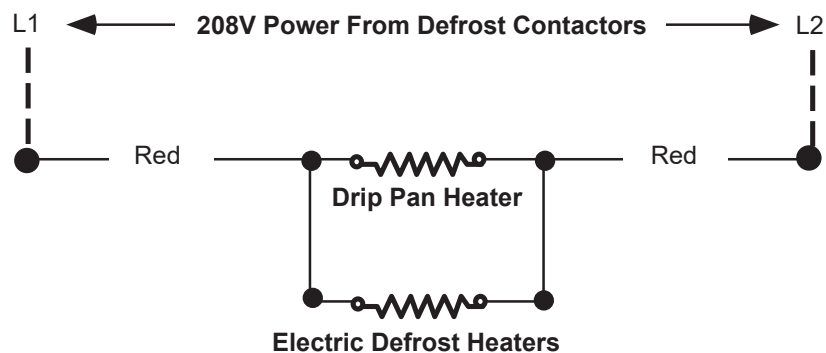
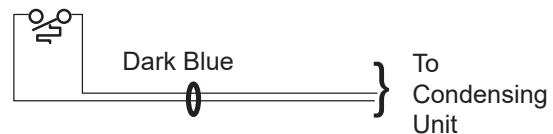
Fan Wiring Electrical Defrost - Standard



Refrigeration Thermostat (Optional)

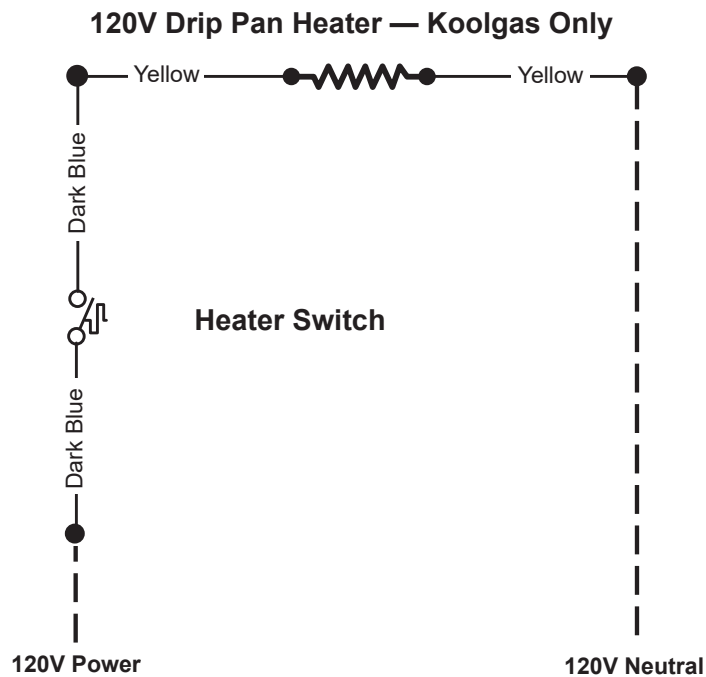


Defrost Termination Thermostat



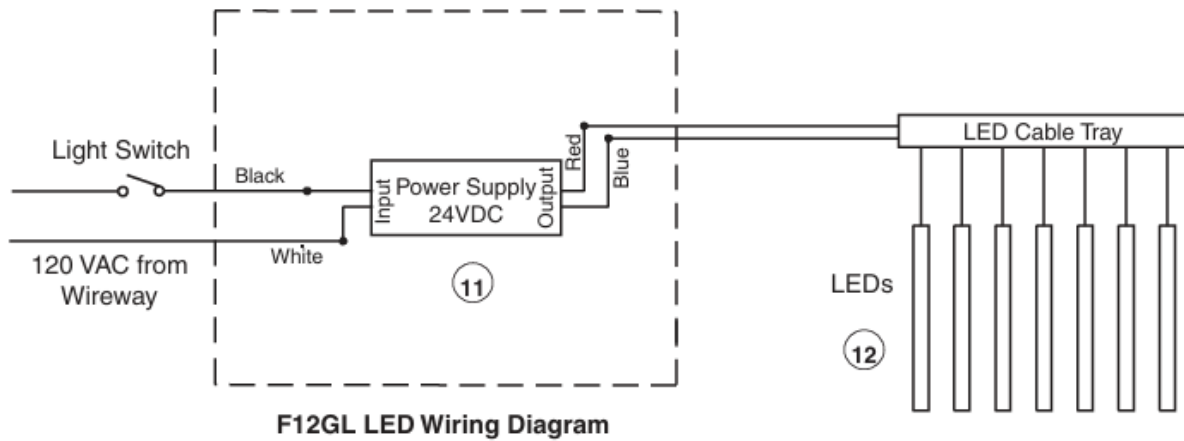
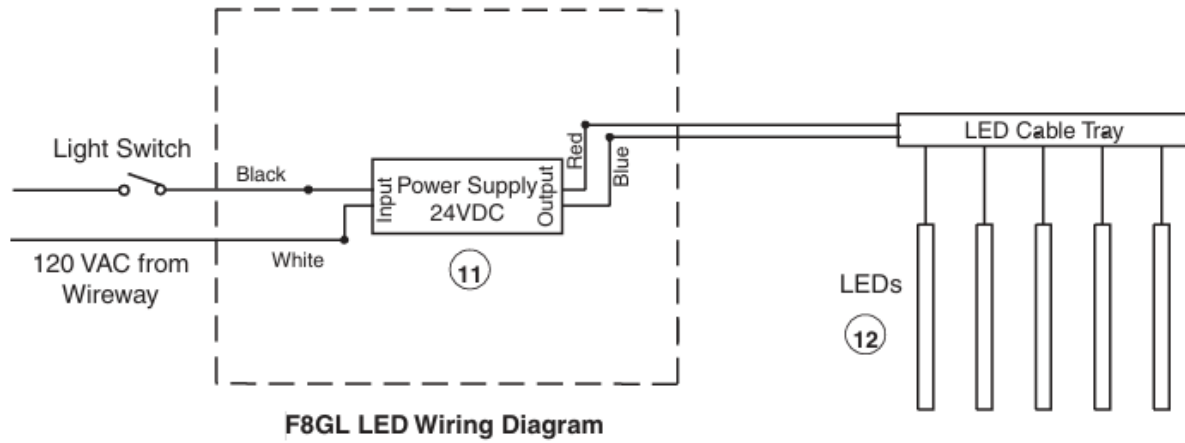
WARNING

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

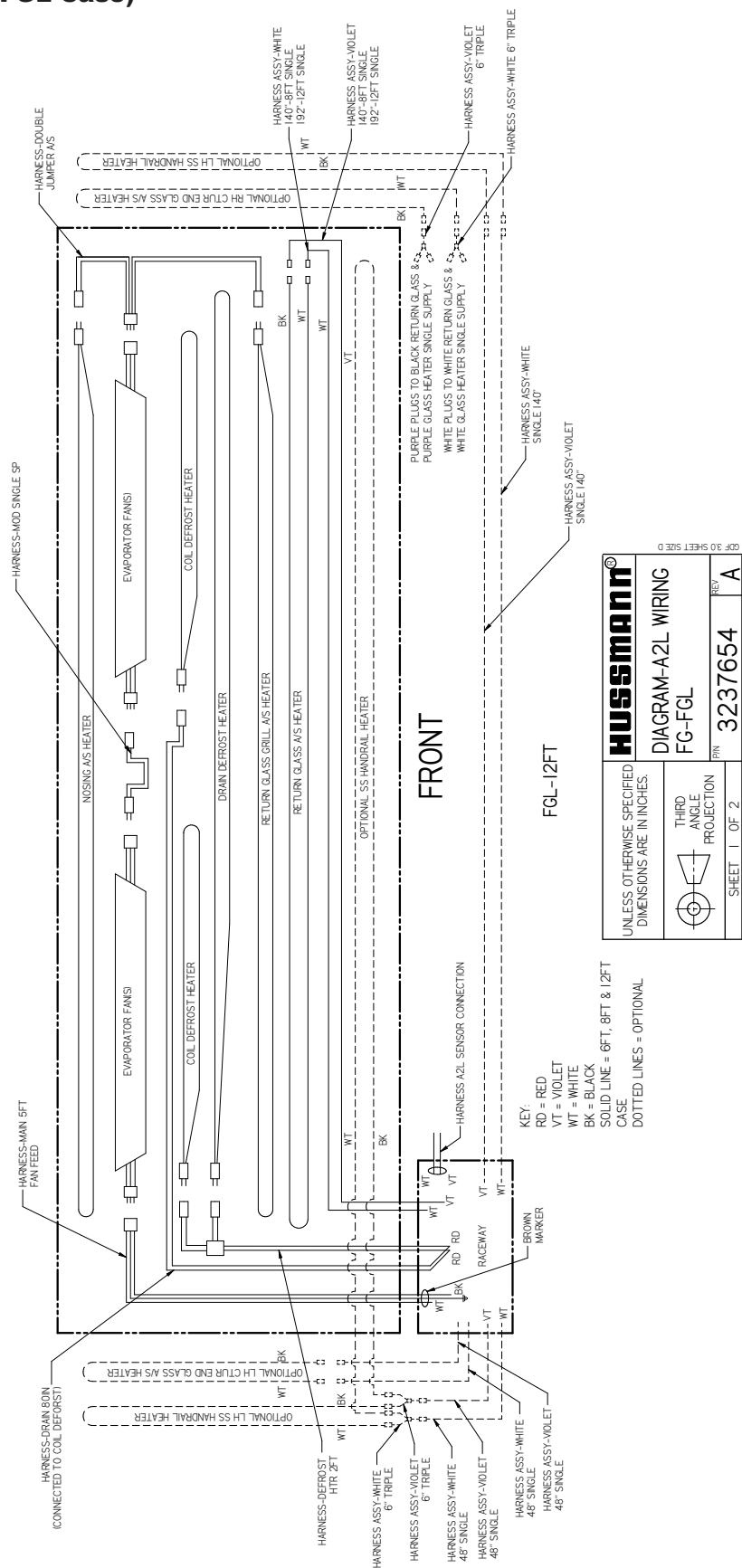
Gas Defrost – Optional**WARNING**

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

Optional LED Lighting Wiring Diagrams



Wiring Diagram (FGL Case)



[illegible]

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES.		THIRD ANGLE PROJECTION	DIAGRAM-A2L WIRING FG-FGL		3237654	REV. A
			HUSSMANN®			

**A2L SENSOR CIRCUIT
8 FT CASE FRONT SIDE**

4 PIN MOLEX CONNECTOR
TO FAN VENT SPLASHGUARD

24V VENTILATION
FAN CIRCUIT
LOCATED IN SPLASHGUARD

WT
BK
GN

SSOV

TO BOTTOM OF CASE
FRONT SIDE

RD RD
1 2
7A RELAY NC
3247564
4 3
BK BK

BK BK
1 2
10A RELAY
3212774
4 3
BK BK

GN GN

RD OR
RD AWG 14
SWITCH
3074549
RD AWG 14
RD

3165622
24VDC 60W

TO MAIN RACEWAY
GROUND GN
BK LINE
WT NEUTRAL

BK BK BK BN
BK BK WT
BK BK WT
WT WT

RD BK BK BK
RD BK BK BK
RD BK YL OR
RD BK YL OR

BL WT
BL WT

CAP UNUSED WIRES W/
MOLEX CONNECTOR
0430513
4X

HARNESS
2X

SENSOR #1 LOCATED
IN CASE INTERIOR
ON THE FRONT SIDE

A2L GAS SENSOR
AS PER CASE

SENSOR #1

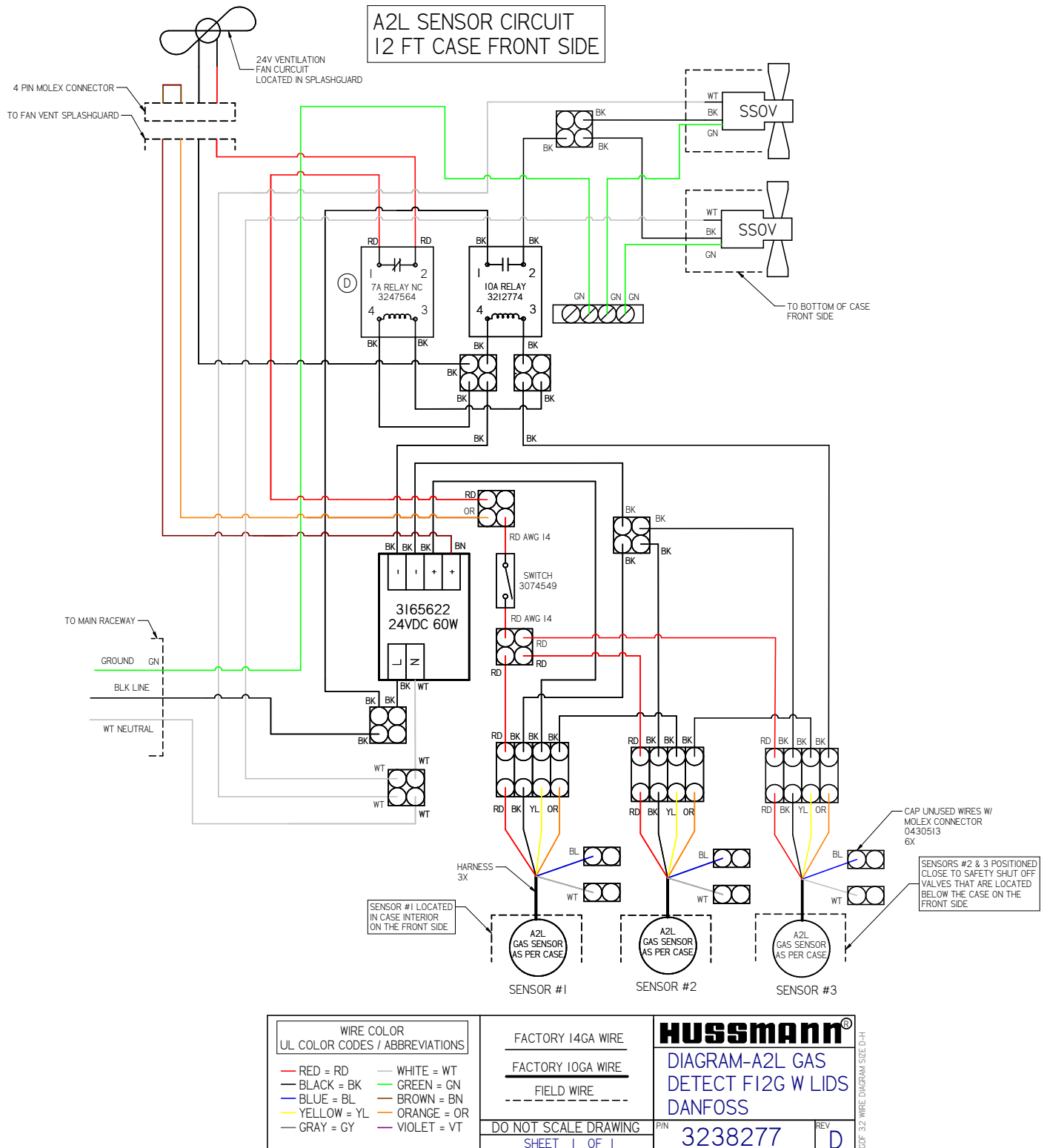
SENSOR #2

A2L GAS SENSOR
AS PER CASE

SENSOR #2 POSITIONED
CLOSE TO SAFETY SHUT OFF
VALVE THAT IS LOCATED
BELOW THE CASE ON THE
FRONT SIDE

WIRE COLOR UL COLOR CODES / ABBREVIATIONS — RED = RD — WHITE = WT — BLACK = BK — GREEN = GN — BLUE = BL — BROWN = BN — YELLOW = YL — ORANGE = OR — GRAY = GY — VIOLET = VT		FACTORY 14GA WIRE FACTORY 10GA WIRE --- FIELD WIRE ---		HUSSmann® DIAGRAM-A2L GAS DETECT FN DANFOSS	
DO NOT SCALE DRAWING SHEET 1 OF 1		P/N 3234295		REV C	

Wiring Diagram (F12GL, A2L detection and mitigation system rear side)





DS_FGL_0523821_F_EN

Revision History

Revision E: Updated lids information

Revision F: (May 2026) Updated format and added A2L, and CO₂ information.



Scan the QR code on your mobile device to access additional product information or order parts.

Parts may also be ordered at:

parts.husmann.com

Call toll free: 1.855.487.7778

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.