



## **Technical Datasheet**

### **ID5NL**

Open Multideck Medium  
Temperature Display Case

### **Applications**

Beverage, Dairy, Deli,  
Produce, and Meat

**P/N 0541490 Rev L**  
April 2026

### **Models Covered**

ID5NL4, ID5NL6,  
ID5NL8, ID5NL12

### **Refrigerant(s)**

A2L (R-454A or R-454C)  
R-744 (CO<sub>2</sub>)  
Glycol  
HFC/HCFC/HFO

## **Certifications**



**Intertek**

### **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.

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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 (CO<sub>2</sub>) Equipped Models**

This equipment uses carbon dioxide (R-744 [CO<sub>2</sub>]) 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 CO<sub>2</sub> 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 CO<sub>2</sub> 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**

“ID5NL” is followed by a number representing the length of the case in feet (i.e., a 12-foot model would be “ID5NL12”).

**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).

### Refrigeration Data <sup>1</sup>

| ID5NL                  |                                                 | Optimal Shelf Life                  |                      |                                    |                   | Energy Comparison                      |
|------------------------|-------------------------------------------------|-------------------------------------|----------------------|------------------------------------|-------------------|----------------------------------------|
| Application            |                                                 | Dairy/Deli/<br>Beverage/<br>Produce | Convertible/<br>Meat | NSF Type 2<br>Ambient <sup>3</sup> | Pegs <sup>5</sup> | AHRI 1200<br>Rating Point <sup>6</sup> |
| Unlit<br>Shelves       | Discharge Air °F (°C)                           | 33 (0.55)                           | 31 (-0.55)           | 30 (-1.11)                         | 32 (0)            | 34 (1.11)                              |
|                        | Average Evaporator °F (°C) <sup>2</sup>         | 28 (-2.22)                          | 27 (-2.77)           | 26 (-3.33)                         | 26 (-3.33)        | 30 (-1.11)                             |
|                        | Parallel Btu/hr/ft (Watts/m) <sup>7</sup>       | 1060 (1019)                         | 1115 (1072)          | 1325 (1274)                        | 1380 (1327)       | 1025 (986)                             |
|                        | Conventional Btu/hr/ft (Watts/m) <sup>6</sup>   | 1155 (1111)                         | 1215 (1168)          | 1445 (1390)                        | 1505 (1447)       | 1115 (1072)                            |
| Lit<br>Shelves         | Discharge Air °F (°C)                           | 31 (-0.55)                          | 30 (-1.11)           | 29 (-1.66)                         | N/A               | 33 (0.55)                              |
|                        | Average Evaporator °F (°C) <sup>2</sup>         | 27 (-2.77)                          | 26 (-3.33)           | 25 (-3.88)                         | N/A               | 29 (-1.66)                             |
|                        | Parallel Btu/hr/ft (Watts/m) <sup>7,8</sup>     | 1075 (1034)                         | 1135 (1091)          | 1350 (1298)                        | N/A               | 1035 (995)                             |
|                        | Conventional Btu/hr/ft (Watts/m) <sup>7,8</sup> | 1170 (1125)                         | 1235 (1188)          | 1470 (1414)                        | N/A               | 1130 (1087)                            |
| Fan Speed <sup>9</sup> | ID5NL6 (8.25")                                  | 1400                                | 1600 <sup>9</sup>    | 1600 <sup>9</sup>                  | 1400              | 1400                                   |
|                        | ID5NL4, 8, 12 (8.25")                           | 1400                                | 1600 <sup>9</sup>    | 1600 <sup>9</sup>                  | 1400              | 1400                                   |

Notes:

1. All data based on store temperature and humidity that does not exceed NSF Type 1 ambient conditions of 75°F and 55% relative humidity except where noted.
2. 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.
3. For DX CO<sub>2</sub> applications the average evaporator temperature may be lowered by 2°F but not more than 5°F. An EPR valve should be used if the system suction temperature is more than 5 degrees below the published case evaporator temperature. A 31°F flash tank temperature with a 24°F evaporator temperature is used when sizing default EEV selections to provide a minimum pressure drop across the valve of approximately 50 psig. For operating conditions that provide a pressure drop across the valve above 65 psig or below 35 psig, the electronic expansion valve size should be determined using the valve vendor sizing program and selected from the pull down list in the Hussmann Product Configurator (HPC).
4. Data for operation in NSF Type 2 ambient of 80°F and 55% relative humidity.
5. Hussmann Peg Shelves for Dairy/Deli applications only.
6. AHRI 1200 Rating Point for energy consumption comparison only.
7. Subtract 60 Btu/hr/ft (57.7 Watts/m) for front glass (on applicable models).
8. Add 10 Btu/hr/ft (9.6 Watts/m) per shelf row for LED shelf light fixtures.
9. Some lengths and/or applications require optional fan motor kits applied by the Hussmann Product Configurator (HPC).

### Defrost Data

**Frequency** (hours between defrost) 4

**Defrost Water** <sup>10</sup> 8.2 lb/ft/day  
(12.2 kg/m)

<sup>10</sup> (± 15% based on case configuration and product loading).

**OFFTIME** ID5NL  
**Time (minutes)** 20

**ELECTRIC OR GAS** Not Available

### Conventional Controls

ID5NL

**Low Pressure Backup Control** CI/CO <sup>11</sup>

20°F /10°F  
-6.7°C / -12.2°C

**Indoor Unit Only, Pressure Defrost Termination** <sup>11</sup>

48°F (8.9°C)

<sup>11</sup> Use a Temperature Pressure Chart to determine PSIG conversions.

### Product Data

**Gross Refrigerated Volume** <sup>13</sup> (Cu Ft/Ft) 9.6 ft<sup>3</sup>/ft (0.89 m<sup>3</sup>/m)

**AHRI Total Display Area** <sup>14</sup> (Sq Ft/Ft) 4.56 ft<sup>2</sup>/ft (1.39 m<sup>2</sup>/m)

**Shelf Area** <sup>15</sup> (Sq Ft/Ft) 8.10 ft<sup>2</sup>/ft (2.47 m<sup>2</sup>/m)

<sup>12</sup> AHRI Gross Refrigerated Volume: Refrigerated Volume/Unit of Length, ft<sup>3</sup>/ft [m<sup>3</sup>/m]

<sup>13</sup> Computed using AHRI 1200 standard methodology: Total Display Area, ft<sup>2</sup> [m<sup>2</sup>]/Unit of Length, ft [m]

<sup>14</sup> Shelf surface area is composed of bottom deck plus standard shelf complement for this model: (4) rows of 16-in. shelves

**Refrigerant Data****Approximate HFC/HCFC/HFO Refrigerant Charge<sup>15</sup>**

| Case    | Estimated Charge  |
|---------|-------------------|
| ID5NL4  | 9.6 oz (272 g)    |
| ID5NL6  | 17.6 oz (499 g)   |
| ID5NL8  | 24 oz (680 g)     |
| ID5NL12 | 46.4 oz (1,315 g) |

**A2L Refrigerant Charge**

| Model   | Minimum Room Floor Area<br>ft <sup>2</sup> (m <sup>2</sup> ) | Estimated Refrigerant Charge — lb (g) |             |
|---------|--------------------------------------------------------------|---------------------------------------|-------------|
|         |                                                              | Operating Charge                      |             |
|         |                                                              | R-454A                                | R-454C      |
| ID5NL4  | 106 (9.8)                                                    | 1.4 (657)                             | 1.4 (657)   |
| ID5NL6  | 106 (9.8)                                                    | 1.9 (877)                             | 2 (887)     |
| ID5NL8  | 196 (18.2)                                                   | 2.5 (1,125)                           | 2.5 (1,137) |
| ID5NL12 | 196 (18.2)                                                   | 3.6 (1,643)                           | 3.7 (1,660) |

**R-744 (CO<sub>2</sub>) Pressure Rating**

| Case Configuration                | Pressure Rating    |
|-----------------------------------|--------------------|
| standard pressure CO <sub>2</sub> | 652 psi (45 bar)   |
| high pressure CO <sub>2</sub>     | 1,305 psi (90 bar) |

**Glycol Heat Transfer Fluid Data (Dairy, Deli)**

| Model   | Coil Inlet Temperature<br>° F (° C) | Coil Temp. Rise<br>° F (° C) | Average Coil Temperature<br>° F (° C) | Flow Rate<br>GPM (LPM) | Pressure Drop<br>PSI (bar) |
|---------|-------------------------------------|------------------------------|---------------------------------------|------------------------|----------------------------|
| ID5NL4  | 25 (-3.9)                           | 4 (2.2)                      | 27 (-2.8)                             | 2.6 (9.8)              | 7.9 (0.5)                  |
|         | 20 (-6.7)                           | 14 (7.8)                     | 27 (-2.8)                             | 0.7 (2.6)              | 1.7 (0.1)                  |
| ID5NL6  | 25 (-3.9)                           | 4 (2.2)                      | 27 (-2.8)                             | 3.9 (14.8)             | 5.4 (0.4)                  |
|         | 20 (-6.7)                           | 14 (7.8)                     | 27 (-2.8)                             | 1.1 (4.2)              | 1.1 (0.1)                  |
| ID5NL8  | 25 (-3.9)                           | 4 (2.2)                      | 27 (-2.8)                             | 5.2 (19.7)             | 9.3 (0.6)                  |
|         | 20 (-6.7)                           | 14 (7.8)                     | 27 (-2.8)                             | 1.5 (5.7)              | 2.1 (0.1)                  |
| ID5NL12 | 25 (-3.9)                           | 4 (2.2)                      | 27 (-2.8)                             | 7.8 (29.5)             | 9.5 (0.7)                  |
|         | 20 (-6.7)                           | 14 (7.8)                     | 27 (-2.8)                             | 2.2 (8.3)              | 2.3 (0.2)                  |

**Glycol Heat Transfer Fluid Data (Meat)**

| Model   | Coil Inlet Temperature<br>° F (° C) | Coil Temp. Rise<br>° F (° C) | Average Coil Temperature<br>° F (° C) | Flow Rate<br>GPM (LPM) | Pressure Drop<br>PSI (bar) |
|---------|-------------------------------------|------------------------------|---------------------------------------|------------------------|----------------------------|
| ID5NL4  | 25 (-3.9)                           | 2 (1.1)                      | 26 (-3.3)                             | 5.5 (20.8)             | 20.9 (1.4)                 |
|         | 20 (-6.7)                           | 12 (6.7)                     | 26 (-3.3)                             | 0.9 (3.4)              | 2.2 (0.2)                  |
| ID5NL6  | 25 (-3.9)                           | 2 (1.1)                      | 26 (-3.3)                             | 8.3 (31.4)             | 14.1 (1.0)                 |
|         | 20 (-6.7)                           | 12 (6.7)                     | 26 (-3.3)                             | 1.4 (5.3)              | 1.5 (0.1)                  |
| ID5NL8  | 25 (-3.9)                           | 2 (1.1)                      | 26 (-3.3)                             | 11.0 (41.6)            | 23.9 (1.6)                 |
|         | 20 (-6.7)                           | 12 (6.7)                     | 26 (-3.3)                             | 1.8 (6.8)              | 2.7 (0.2)                  |
| ID5NL12 | 25 (-3.9)                           | 2 (1.1)                      | 26 (-3.3)                             | 16.5 (62.5)            | 24.3 (1.7)                 |
|         | 20 (-6.7)                           | 12 (6.7)                     | 26 (-3.3)                             | 2.8 (10.6)             | 2.9 (0.2)                  |

<sup>15</sup> This is an average for all refrigerant types. Actual refrigerant charge may vary by approximately half a pound.

# Open Multideck Medium Temperature Display Case Narrow Bottom, Low Height Front

**ID5NL**

**DOE 2017**  
Energy Efficiency  
Compliant

Husmann 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).

Other optional kits (top piping and vent fans) add to the overall case height.

A minimum 1 1/2-in. clearance required to remove raceway cover, 6 1/2-in. for full access. See the Installation manual for instructions.

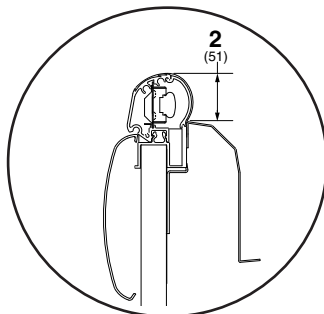
3-in. between back to back cases.

Shelf complement shown as tested:

Four rows of 16-in. shelves spaced equally between bottom display pan and interior top panel.

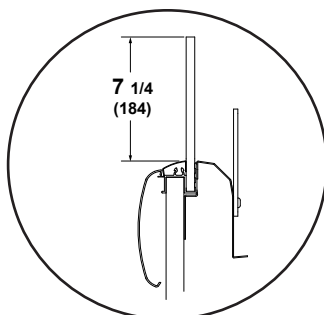
Shown with Ellipse Option Canopy and Bumper.

## OPTIONAL RAIL LIGHT



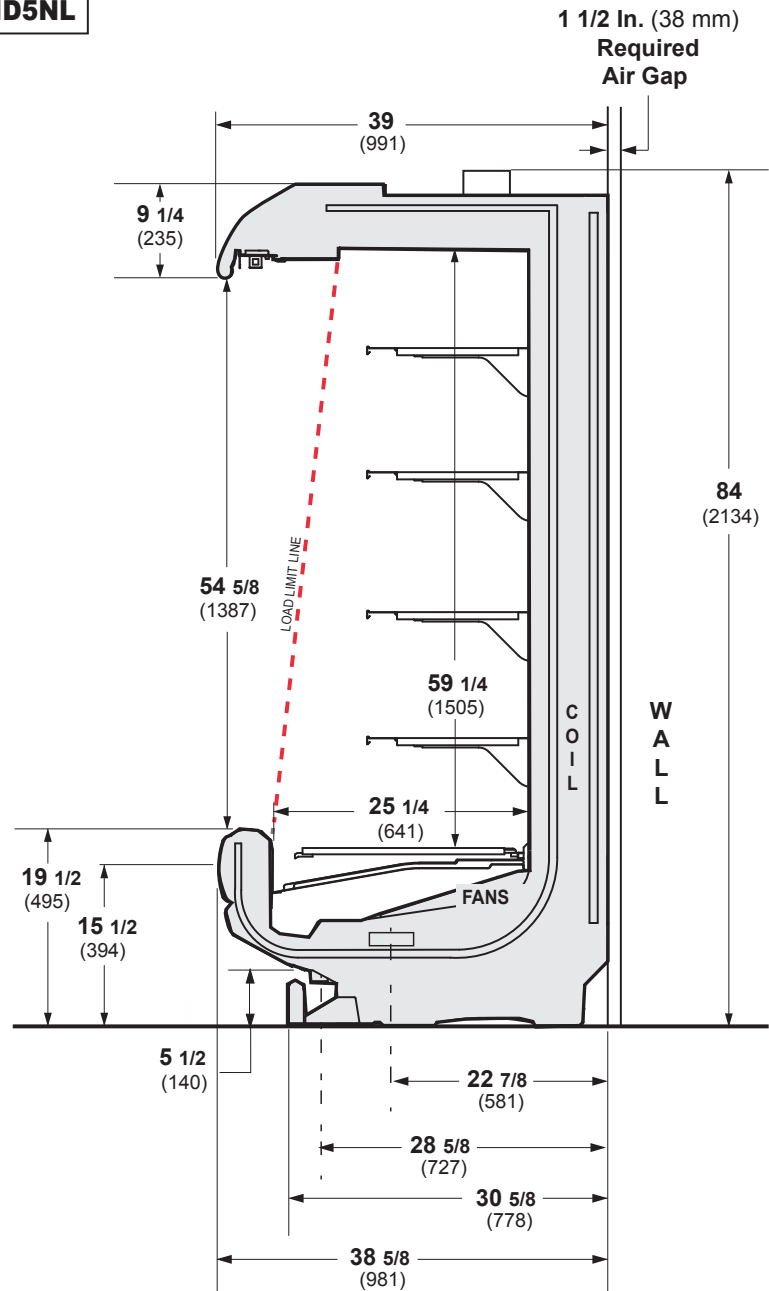
*Rail light cannot be used with glass front option.*

## OPTIONAL GLASS FRONT



*Glass front cannot be used with rail light option.*

**ID5NL**



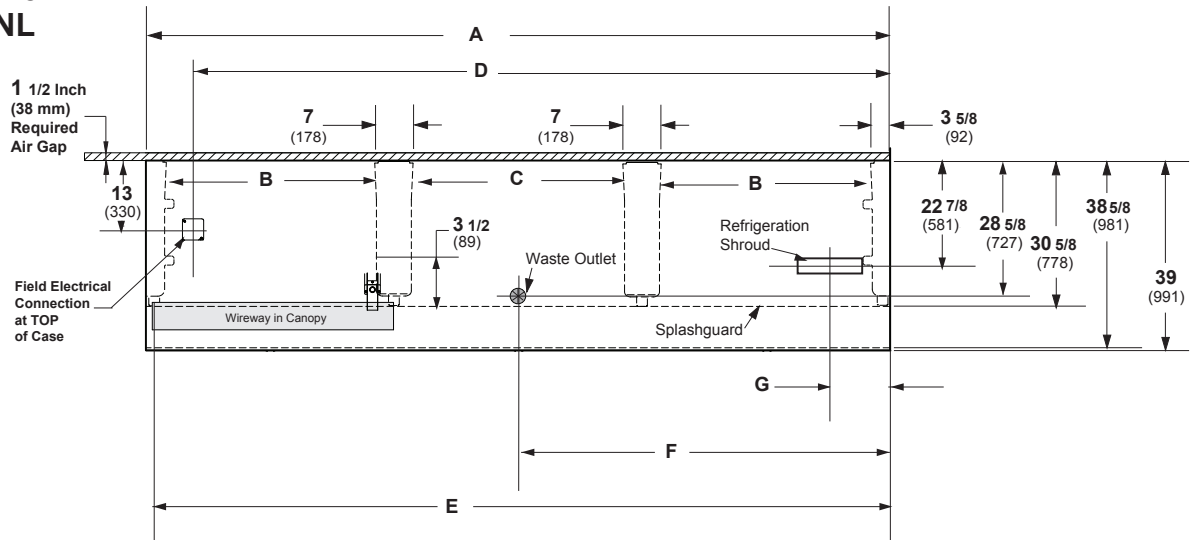
# ID5NL

## Open Multideck Medium Temperature Display Case Narrow Bottom, Low Height Front

### Plan View

#### ID5NL/ID5NM ID6NL

Dimensions shown as in. and (mm).



(12 Foot Model shown above)

|                                                                                                                         | 4 ft             | 6 ft             | 8 ft             | 12 ft             |
|-------------------------------------------------------------------------------------------------------------------------|------------------|------------------|------------------|-------------------|
| <b>General</b>                                                                                                          |                  |                  |                  |                   |
| (A) Case Length (without ends or partitions) (Each end and insulated partition adds 1 1/2 in. (38 mm) to case line up.) | 48 1/8<br>(1222) | 72 1/4<br>(1835) | 96 1/4<br>(2445) | 144 3/8<br>(3668) |
| Maximum O/S dimension of case back to front (includes bumper)                                                           | 38 5/8 (981)     | 38 5/8 (981)     | 38 5/8 (981)     | 38 5/8 (981)      |
| Back of case to front of splashguard                                                                                    | 30 5/8 (778)     | 30 5/8 (778)     | 30 5/8 (778)     | 30 5/8 (778)      |
| (B) Distance between edges of external legs and center legs                                                             | NA               | 29 (737)         | 41 (1041)        | 41 (1041)         |
| (C) Distance between edges of center legs                                                                               | 41 1/8<br>(1045) | NA               | NA               | 41 1/8 (1045)     |
| Distance between front legs and splashguard                                                                             | 3 1/4 (83)       | 3 1/4 (83)       | 3 1/4 (83)       | 3 1/4 (83)        |
| <b>Electrical Service (Field Electrical Wiring Connection)</b>                                                          |                  |                  |                  |                   |
| (D) RH End of case to center of Field Electrical Wiring Connection (top of case)                                        | 39 3/8<br>(1000) | 63 1/2<br>(1613) | 87 1/2<br>(2223) | 135 1/2<br>(3442) |
| Back of case to center of Field Electrical Wiring Connection                                                            | 13 (330)         | 13 (330)         | 13 (330)         | 13 (330)          |
| Length of electrical wireway                                                                                            | 44 5/8<br>(1133) | 33 1/2 (851)     | 45 7/8<br>(1165) | 45 7/8 (1165)     |
| (E) RH end of case to LH end of electrical wireway (top of case)                                                        | 46 1/2<br>(1181) | 70 1/2<br>(1791) | 94 1/2<br>(2400) | 142 5/8<br>(3630) |
| <b>Waste Outlets</b>                                                                                                    |                  |                  |                  |                   |
| (F) RH End of case to the center of waste outlet                                                                        | 24 1/8 (613)     | 24 1/8 (613)     | 24 1/8 (613)     | 72 1/4 (1835)     |
| Back O/S of case to center of waste outlet(s)                                                                           | 28 5/8 (727)     | 28 5/8 (727)     | 28 5/8 (727)     | 28 5/8 (727)      |
| Schedule 40 PVC drip pipe                                                                                               | 1 1/4 (32)       | 1 1/4 (32)       | 1 1/4 (32)       | 1 1/4 (32)        |
| <b>Refrigeration Shroud</b>                                                                                             |                  |                  |                  |                   |
| (G) Back of case to center of refrigeration shroud                                                                      | 22 7/8 (581)     | 21 1/8<br>(537)* | 22 7/8 (581)     | 22 7/8 (581)      |
| End of case to center of refrigeration shroud                                                                           | 9 1/2 (241)      | 7 5/8 (194)*     | 9 1/2 (241)      | 9 1/2 (241)       |
| *6 ft case at a 42° angle parallel to the plenum                                                                        |                  |                  |                  |                   |

## Electrical Data

| Number of Fans | 4 ft | 6 ft | 8 ft | 12 ft |
|----------------|------|------|------|-------|
| 8.25-in.       | 1    | 2    | 2    | 3     |

| Evaporator Fan |         |                  | Amperes |      |      |       | Watts |      |      |       |
|----------------|---------|------------------|---------|------|------|-------|-------|------|------|-------|
|                |         |                  | 4 ft    | 6 ft | 8 ft | 12 ft | 4 ft  | 6 ft | 8 ft | 12 ft |
| 120V           | 60Hz    | Energy Efficient | 0.25    | 0.50 | 0.50 | 0.75  | 16    | 32   | 32   | 48    |
| 230V           | 50/60Hz | Energy Efficient | 0.13    | 0.26 | 0.26 | 0.39  | 16    | 32   | 32   | 48    |

## Minimum Circuit Ampacity

|      |         |                  |      |      |      |      |
|------|---------|------------------|------|------|------|------|
| 120V | 60Hz    | Energy Efficient | 0.45 | 0.70 | 0.70 | 0.95 |
| 230V | 50/60Hz | Energy Efficient | 0.33 | 0.46 | 0.46 | 0.59 |

## Maximum Over Current Protection

|      |    |    |    |    |
|------|----|----|----|----|
| 120V | 20 | 20 | 20 | 20 |
| 230V | 15 | 15 | 15 | 15 |

## Lighting

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 LED LIGHTING | Amperes |      |      |       | Watts |      |      |       |
|-----------------------|---------|------|------|-------|-------|------|------|-------|
|                       | 4 ft    | 6 ft | 8 ft | 12 ft | 4 ft  | 6 ft | 8 ft | 12 ft |
| LED Canopy Lights     |         |      |      |       |       |      |      |       |
| 1 Row                 | 0.16    | 0.22 | 0.31 | 0.47  | 19    | 27   | 38   | 57    |

## OPTIONAL LED LIGHTING

|                         |      |      |      |      |    |    |    |     |
|-------------------------|------|------|------|------|----|----|----|-----|
| 2 Rows of Canopy Lights | 0.32 | 0.44 | 0.62 | 0.94 | 38 | 54 | 76 | 114 |
|-------------------------|------|------|------|------|----|----|----|-----|

## LED SHELF LIGHTING

|                   |      |      |      |      |    |    |    |     |
|-------------------|------|------|------|------|----|----|----|-----|
| 1 Row of Shelves  | 0.06 | 0.07 | 0.11 | 0.17 | 7  | 9  | 13 | 20  |
| 2 Rows of Shelves | 0.11 | 0.15 | 0.22 | 0.33 | 13 | 18 | 27 | 40  |
| 3 Rows of Shelves | 0.17 | 0.22 | 0.33 | 0.50 | 20 | 27 | 40 | 60  |
| 4 Rows of Shelves | 0.22 | 0.30 | 0.44 | 0.67 | 27 | 36 | 53 | 80  |
| 5 Rows of Shelves | 0.28 | 0.37 | 0.56 | 0.83 | 33 | 44 | 67 | 100 |
| 6 Rows of Shelves | 0.33 | 0.44 | 0.67 | 1.00 | 40 | 53 | 80 | 120 |

## LED Rail Light

|       |      |      |      |      |   |   |    |    |
|-------|------|------|------|------|---|---|----|----|
| 1 Row | 0.06 | 0.07 | 0.11 | 0.17 | 7 | 9 | 13 | 20 |
|-------|------|------|------|------|---|---|----|----|

120V Lighting Circuit Total = Standard Lighting + Total Optional Lighting + Optional Shelf Lighting

230V Lighting Circuit Total = Multiply 120V Lighting Circuit Total by 0.52

**ENDS or PARTITIONS**

*Each standard end and each insulated partition adds 1 1/2 in. (38 mm) to case line up. Optional view end with end bumper adds 3 3/4 in. (95 mm).*

**PHYSICAL DATA**

|                                 |       |
|---------------------------------|-------|
| Merchandiser Drip Pipe (in.)    | 1 1/4 |
| Schedule 40 PVC                 |       |
| Merchandiser Liquid Line (in.)  | 3/8   |
| Merchandiser Suction Line (in.) | 5/8   |

**ESTIMATED SHIPPING WEIGHT †**

| <b>Case</b>    | <b>4 ft</b> | <b>6 ft</b> | <b>8 ft</b> | <b>12 ft</b> | <b>Solid End<br/>(each)</b> |
|----------------|-------------|-------------|-------------|--------------|-----------------------------|
| <b>lb (kg)</b> | 800 (363)   | 1000 (454)  | 1200 (544)  | 1600 (726)   | 100 (45)                    |

† Actual weights will vary according to optional kits included.

**Shelf Options**

Approved shelf sizes for standard (horizontal, 2-3 position brackets) displays:

14-inch  
16-inch  
18-inch

Contact engineering for non-standard (4 position brackets or other) display recommendations.

Minimum number of Shelves: 3

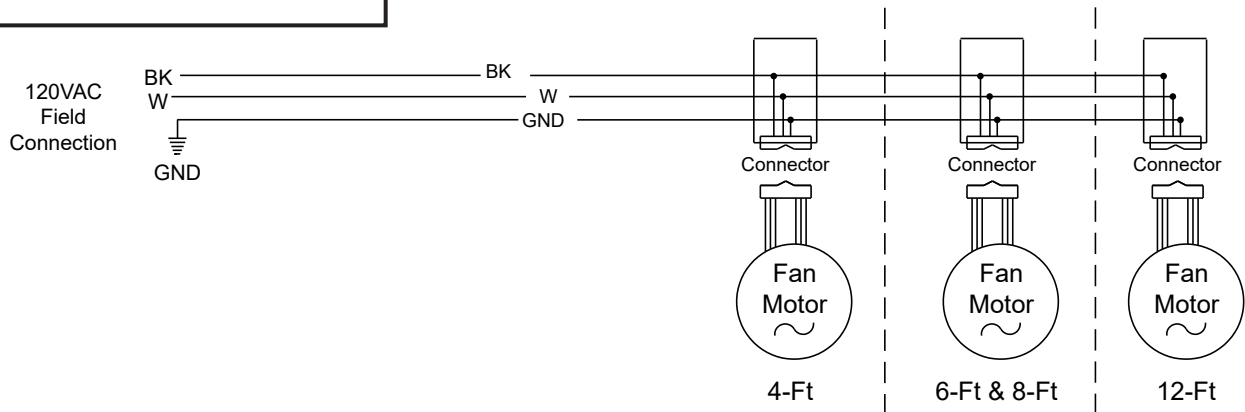
Optimal number of Shelves: 4

Maximum number of Shelves: 8

Maximum number of Lighted Shelves: 6

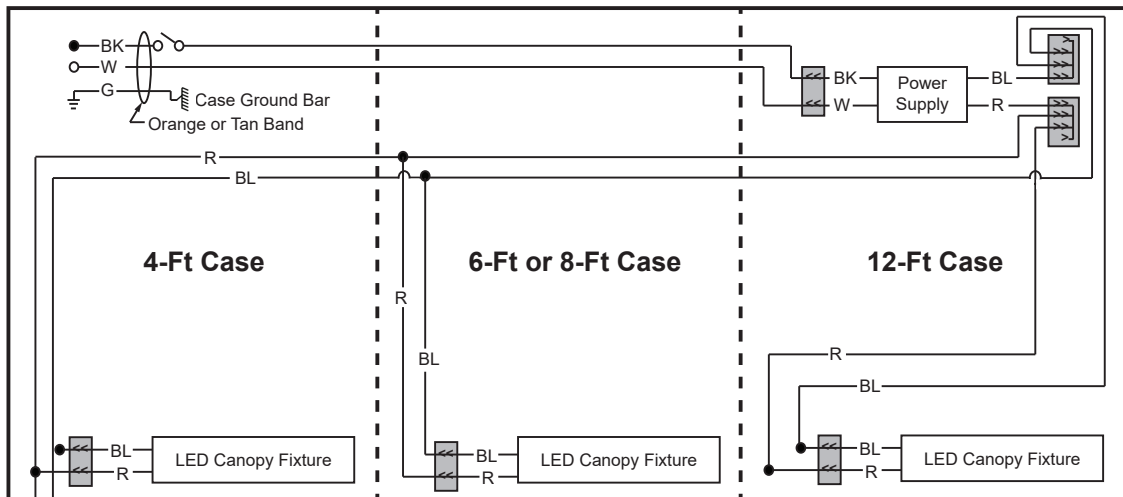
Standard shelf complement for test purposes: (4) rows of 16-in. shelves evenly distributed vertically.

## Fan Wiring Offtime Defrost

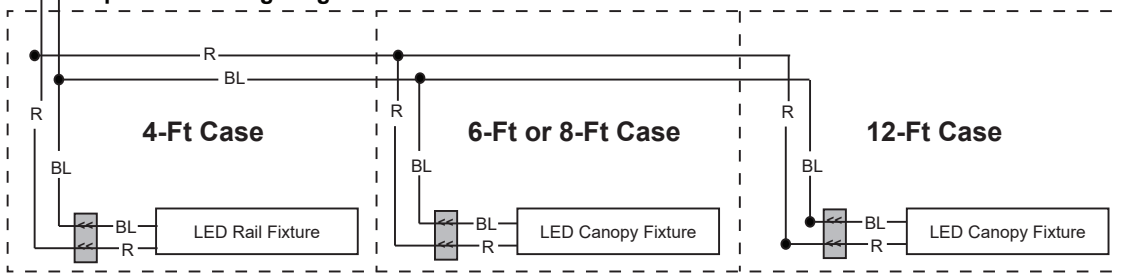


## LED Canopy Light Circuits

### LED Canopy Lighting - 2 Rows



### Optional LED Lighting - LED Rail - 1 Row



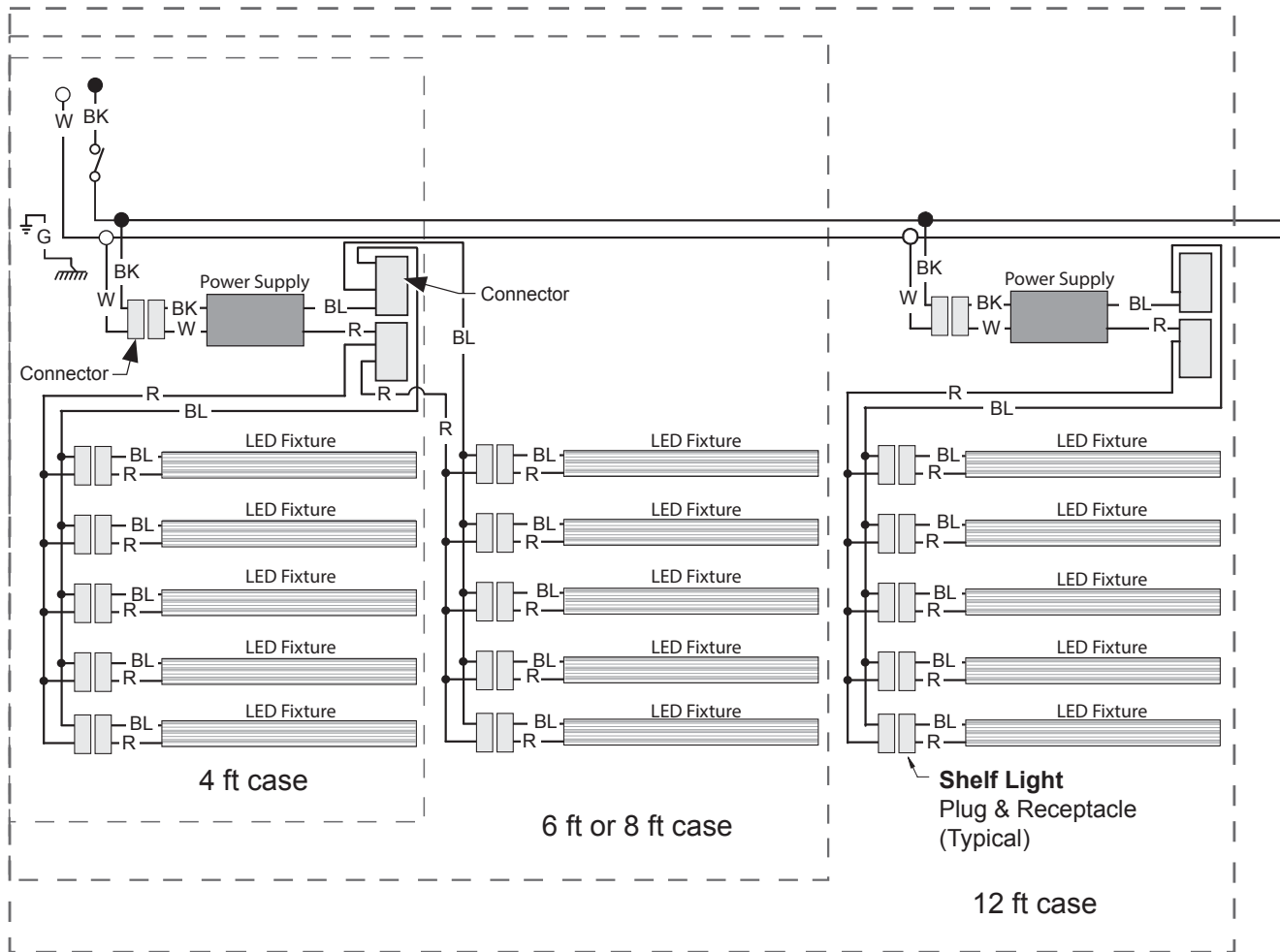
### WARNING

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

R = Red   Y = Yellow   G = Green   BL = Blue   BK = Black   W = White  
● = 120V POWER   ○ = 120V NEUTRAL   ⚡ = FIELD GROUND   ⚡ = CASE GROUND

## Optional Shelf Lighting—LED Fixtures

## Optional Shelf Harness and LED Light Circuits for 4 or 5 Rows of Shelves

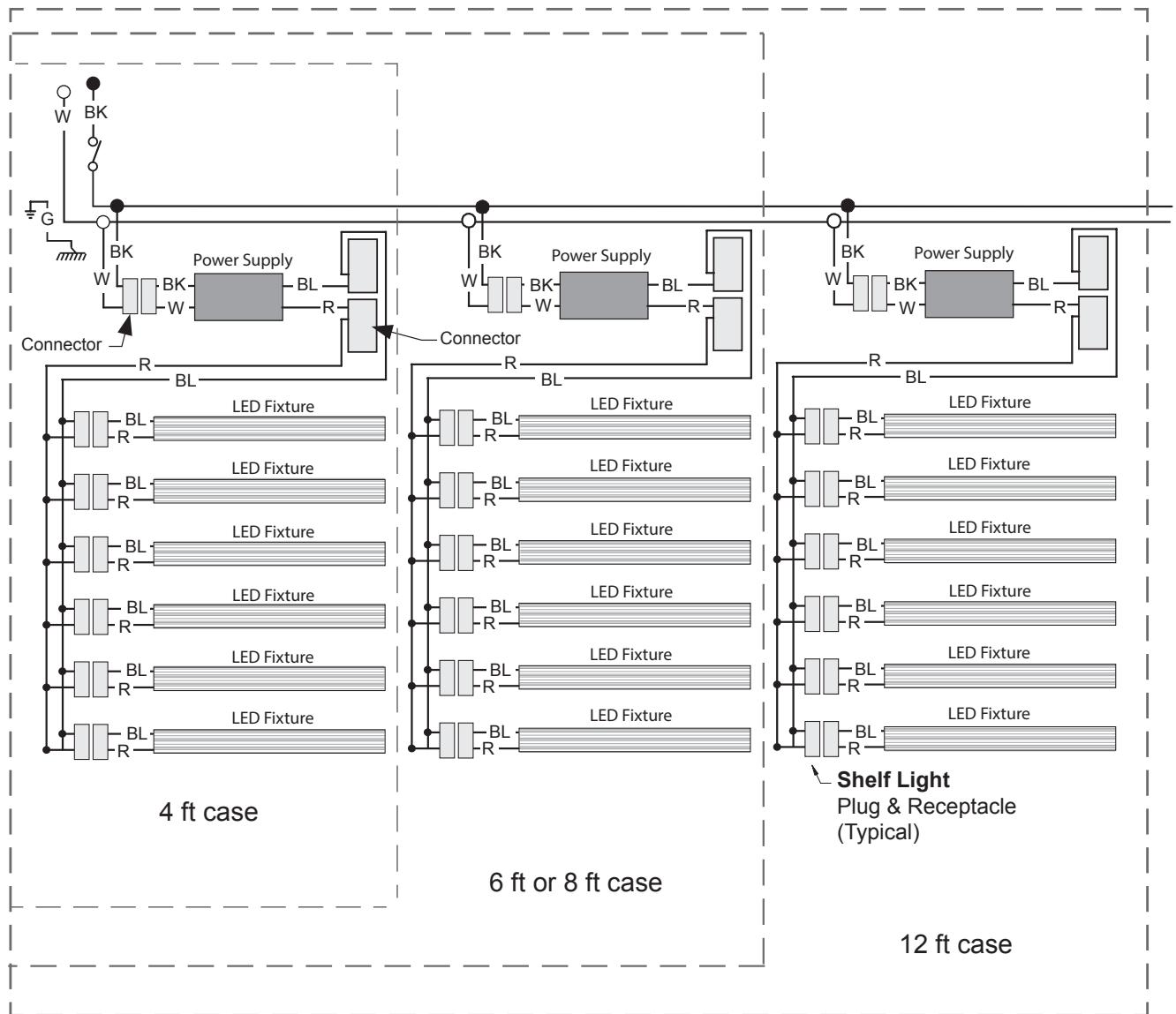
**WARNING**

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

R = Red    Y = Yellow    G = Green    BL = Blue    BK = Black    W = White  
 ● = 120V POWER    ○ = 120V NEUTRAL     $\frac{1}{\text{ground symbol}}$  = FIELD GROUND     $\text{mmmm}$  = CASE GROUND

**Optional Shelf Lighting—LED Fixtures**

**Optional Shelf Harness and LED Light Circuits for 6 Rows of Shelves**

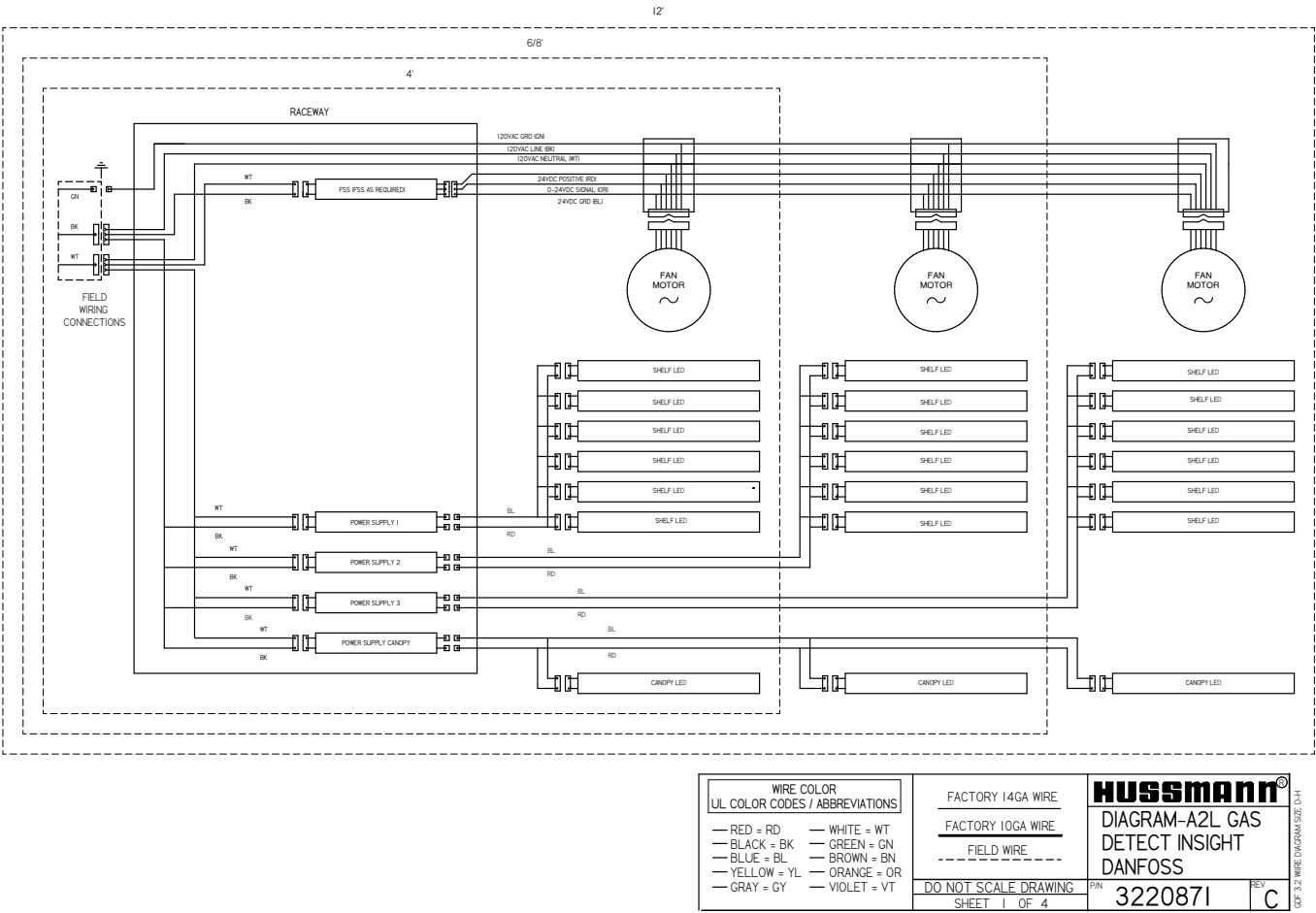


**WARNING**

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

R = Red    Y = Yellow    G = Green    BL = Blue    BK = Black    W = White  
 ● = 120V POWER    ○ = 120V NEUTRAL    ⚡ = FIELD GROUND    ⏏ = CASE GROUND

Wiring Diagram (A2L detection and mitigation system)



ELECTRICAL ENCLOSURE

TO MAIN RACEWAY

GN GROUND  
BK LINE  
WT NEUTRAL

10A RELAY  
SOLID STATE

3165622  
24VDC 60W

RESET SWITCH

RD AWG 14

TO CASE INTERIOR

SENSOR HARNESS

A2L GAS SENSOR

SENSOR SAFETY SHUT OFF

CAP UNUSED WIRES W/ MOLEX CONNECTOR BK

SENSOR POSITIONED CLOSE TO SAFETY SHUT OFF VALVE THAT IS LOCATED ON TOP OF THE CASE

TO INSIDE OF CASE

WT  
BK  
GN

VALVE

| Pin Number | Function                      | Harness Wire Color (at sensor connection) |
|------------|-------------------------------|-------------------------------------------|
| Pin 1      | Supply Voltage                | red                                       |
| Pin 2      | Earth/Ground                  | black                                     |
| Pin 3      | Mod A (Data +) (not used)     | white                                     |
| Pin 4      | Mod B (Data -) (not used)     | blue                                      |
| Pin 5      | Input Relay                   | yellow                                    |
| Pin 6      | Normally Open Contacts Output | orange                                    |

**Relay Operation**

- Relay is energized on power up when not in alarm state
- Relay is de-energized in alarm or no power state

**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

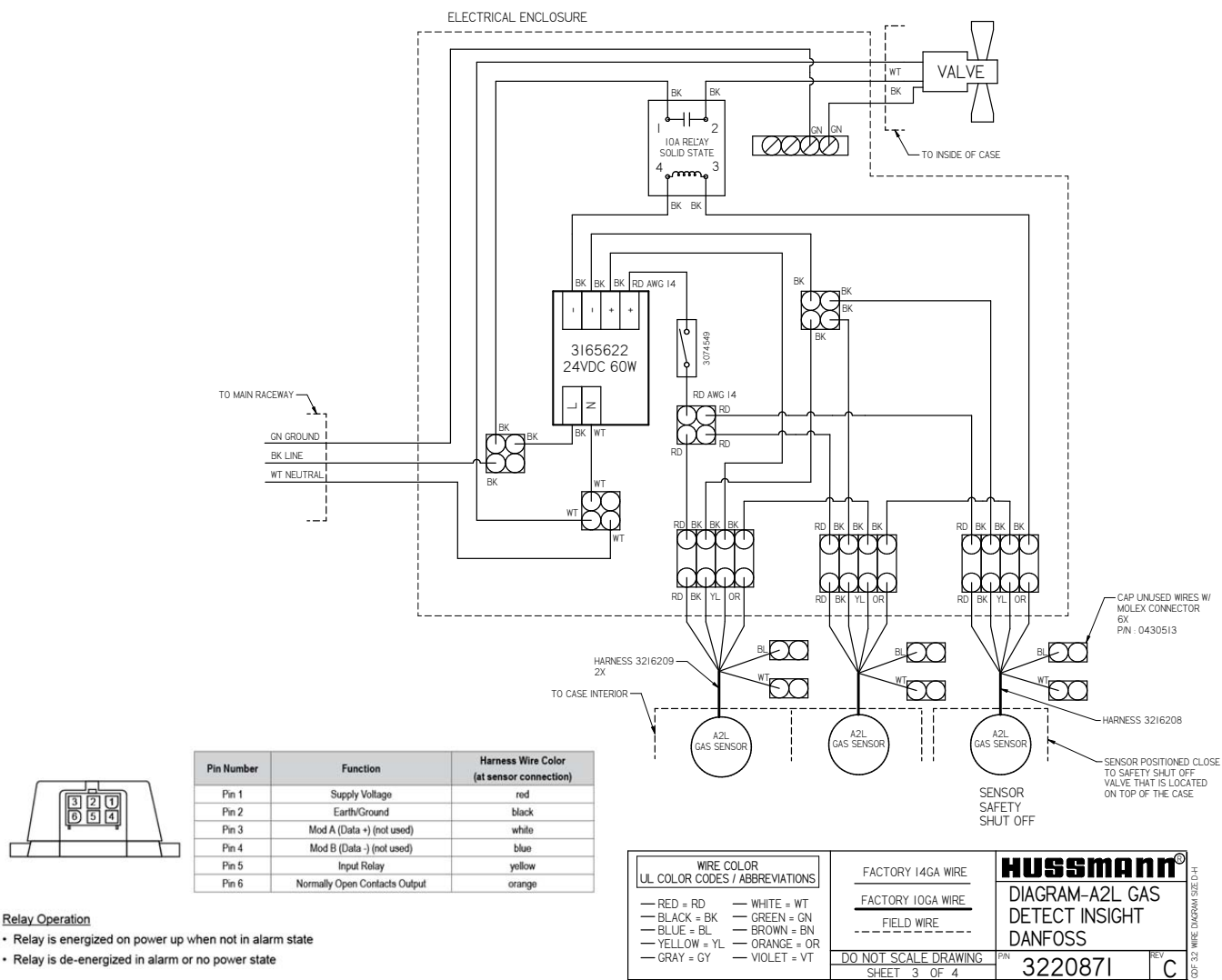
DO NOT SCALE DRAWING  
SHEET 2 OF 4

**HUSSMANN®**  
DANFOSS  
A2L GAS DETECT INSIGHT

3220871

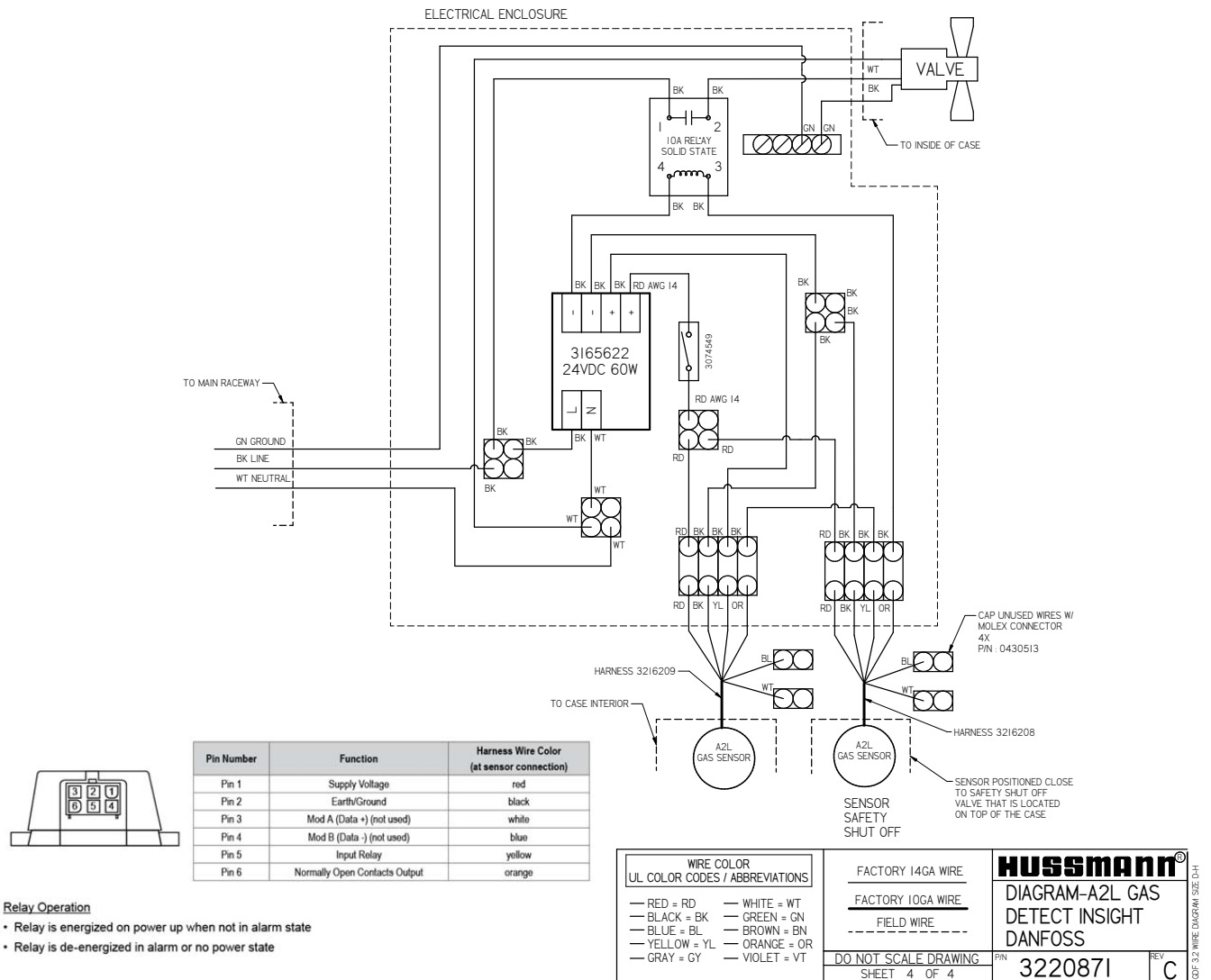
REV C

QCP 3.2 WIRE DIAGRAM SIZE D-H

**Wiring Diagram (ID5NL6 / ID5NL8, A2L detection and mitigation system)****Relay Operation**

- Relay is energized on power up when not in alarm state
- Relay is de-energized in alarm or no power state

**Wiring Diagram (ID5NL4, A2L detection and mitigation system)**



**Relay Operation**

- Relay is energized on power up when not in alarm state
- Relay is de-energized in alarm or no power state

## Estimating Refrigeration and Electrical Load (for comparison purposes only)

### Case Btu

To determine Btu for a case, refer to the performance data chart on page 2. Select lit or unlit shelves, then select the type of remote refrigeration system (parallel or conventional), which will give Btu/hr/ft. Multiply this number by the length of the case to determine Btu per hour.

### Case Electrical

Refer to store legend to determine number of circuits. Lighting should be specified in store legend.

Fan electrical load for a case is computed by selecting the case length and fan voltage on page 6. For example, a 12 ft case uses 3 fans. The store legend specifies fans on a 230V circuit. In this instance, fans use 0.39 Amps and the MCA is 0.59. When applied, ambient fans, anti-sweat heaters, controllers, etc. must be included in the MCA. Include lights in the MCA if lights are on same circuit.

Lights may be on a separate circuit. To estimate lighting load: select case length (12 ft), canopy lighting [standard or optional] (here 0.70 for standard), and shelf or rail lighting [maximum for which case is wired] (1.48 for six shelves); then add together  $[0.48 + 1.48 = 1.96 \text{ amps for 120V}]$  (for 230V, multiply  $1.96 * 0.52 = 1.02$ ).

### Line Sizing — Refer to store legend.

Hussmann Line Sizing Charts are engineered for use with Hussmann refrigeration equipment.

## DS\_ID5NL\_0541490\_L\_EN

### Revision History

Revision H: (September 2017) Updated notes page. Other changes marked with a bar, circle or underline.  
Revision J: (January 2023) Added CO<sub>2</sub> note, Page 2.  
Revision K: November 2023: Updated fan and lighting information.

Revision L: (March 2026) Updated format and added A2L, CO<sub>2</sub>, and glycol information.



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

Parts may also be ordered at:

[parts.hussmann.com](https://parts.hussmann.com)

Call toll free: 1.855.487.7778

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