

HUSSMANN[®]

microDS[™]

Insight[®] IDD5SL-W

Dairy / Deli / Beverage / Produce / Meat

with EcoVision Doors

Water-Cooled

Self-Contained

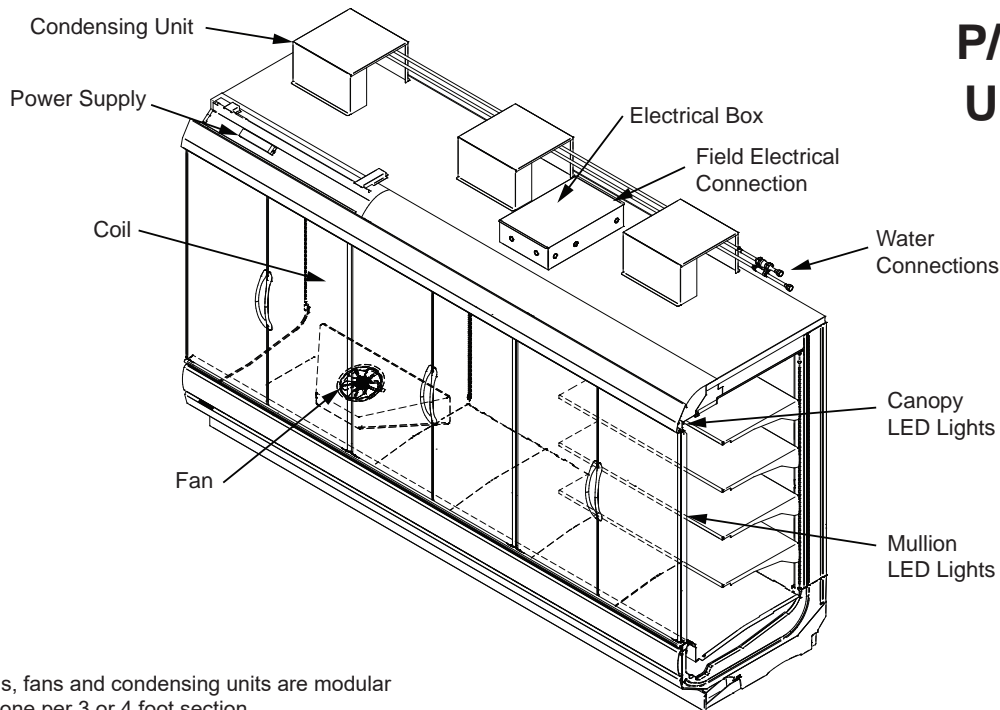
R-290

Merchandiser Data Sheet

P/N 3121062_C

UL EPH[®] Certified

April 2022



*Coils, fans and condensing units are modular with one per 3 or 4 foot section.

Portion of parts removed for clarity.

12 foot merchandiser shown.

UL EPH Certification

This merchandiser model is manufactured to meet ANSI/SCC Standards requirements for construction, materials, and cleanability.



Performance Data	Page 2	Estimated Shipping Weights	Page 8
Product Data (AHRI Statistics)	Page 2	Shelf Options	Page 8
Cross Section	Page 3	Wiring Diagrams	Page 9
Plan Views	Page 4	QR Code for Parts and Product Information	Page 14
Electrical Loads	Page 7	Revision History	Page 14

Data sheet-Insight IDD5SL-W

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.

Insight IDD5SL-W
Dairy / Deli / Beverage /
Produce / Meat

Refrigeration Data ^{1}**

IDD5SL-W		Optimal Shelf Life 4,8,12 ft		Optimal Shelf Life 6 ft	
Application		Dairy/Deli/ Beverage/ Produce	Convertible / Meat	Dairy/Deli/ Beverage/ Produce	Convertible / Meat
Unlit Shelves	Discharge Air °F (°C)	33 (0.56)	33 (0.56)	34 (1.11)	33 (0.56)
	Deadband	5	5	5	5
Lit Shelves	Discharge Air °F (°C)	33 (0.56)	33 (0.56)	34 (1.11)	33 (0.56)
	Deadband	5	5	5	5
Fan Speed ²	8.25 in. Energy Efficient	1300	1300	1300	1300

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. Some lengths and/or applications require optional fan speed control kits applied by the Hussmann Product Configurator.
3. Water supply design conditions are 50°F to 115°F (10°C to 46°C).

Compressor Data

Total Heat of Rejection⁴

	BTU/Hr
4 ft	1,750
6 ft	3,071
8 ft	3,501
12 ft	5,251

⁴ THR listed for maximum design conditions. Normal operating loads may be lower.

Cooling Water Pressure Drop⁶

	PSI
4 Ft	2.5
6 Ft	2.5
8 Ft	4.0
12 Ft	4.0

Cooling Water Design TD

10°F

⁶ Auto-Balancing Valve requires a minimum of 2 PSI to operate. Subtract 2 PSI if the Auto-Balancing Valve is not supplied.

Glycol/Water Flow Rate⁷

	GPM	LPM
4 ft	1.0	3.8
6 ft	1.0	3.8
8 ft	1.0	3.8
12 ft	1.5	5.7

⁷ Use a pre-mixed inhibited glycol solution. If the mixing is to be done on site, use only distilled or de-ionized water (do not use city water).

Defrost Data

Frequency (hours between defrost)	24
Defrost Water⁵	1.0 lb/ft/day (1.5 kg/m)

⁵ (± 15% based on case configuration and product loading).

OFFTIME

Time (minutes)	40
-----------------------	----

ELECTRIC OR GAS	Not Available
------------------------	---------------

Charge per unit⁸

4 ft	0.22 lb	3.5 oz	100 g
6 ft	0.18 lb	2.8 oz	80 g
8 ft	0.22 lb	3.5 oz	100 g
12 ft	0.22 lb	3.5 oz	100 g

⁸ Maximum R290 charge per condensing unit = 150 g.

Product Data

Gross Refrigerated Volume⁹ (Cu Ft/Ft)	11.6 ft ³ /ft (1.08 m ³ /m)
AHRI Total Display Area¹⁰ (Sq Ft/Ft)	4.29 ft ² /ft (1.31 m ² /m)
Shelf Area¹¹ (Sq Ft/Ft)	9.85 ft ² /ft (3.00 m ² /m)

⁹ AHRI Gross Refrigerated Volume: Refrigerated Volume/Unit of Length, ft³/ft [m³/m]

¹⁰ Computed using AHRI 1200 standard methodology: Total Display Area, ft² [m²]/Unit of Length, ft [m]

¹¹ Shelf surface area is composed of bottom deck plus standard shelf complement for this model: (4) rows of 22-in. shelves

Insight Multideck Merchandiser, EcoVision Doors,
5 Display Levels, Standard Bottom, Low Front,
Water-cooled, Self-Contained, R-290

Insight IDD5SL-W
Dairy / Deli / Beverage /
Produce / Meat

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 may add to the overall case height.

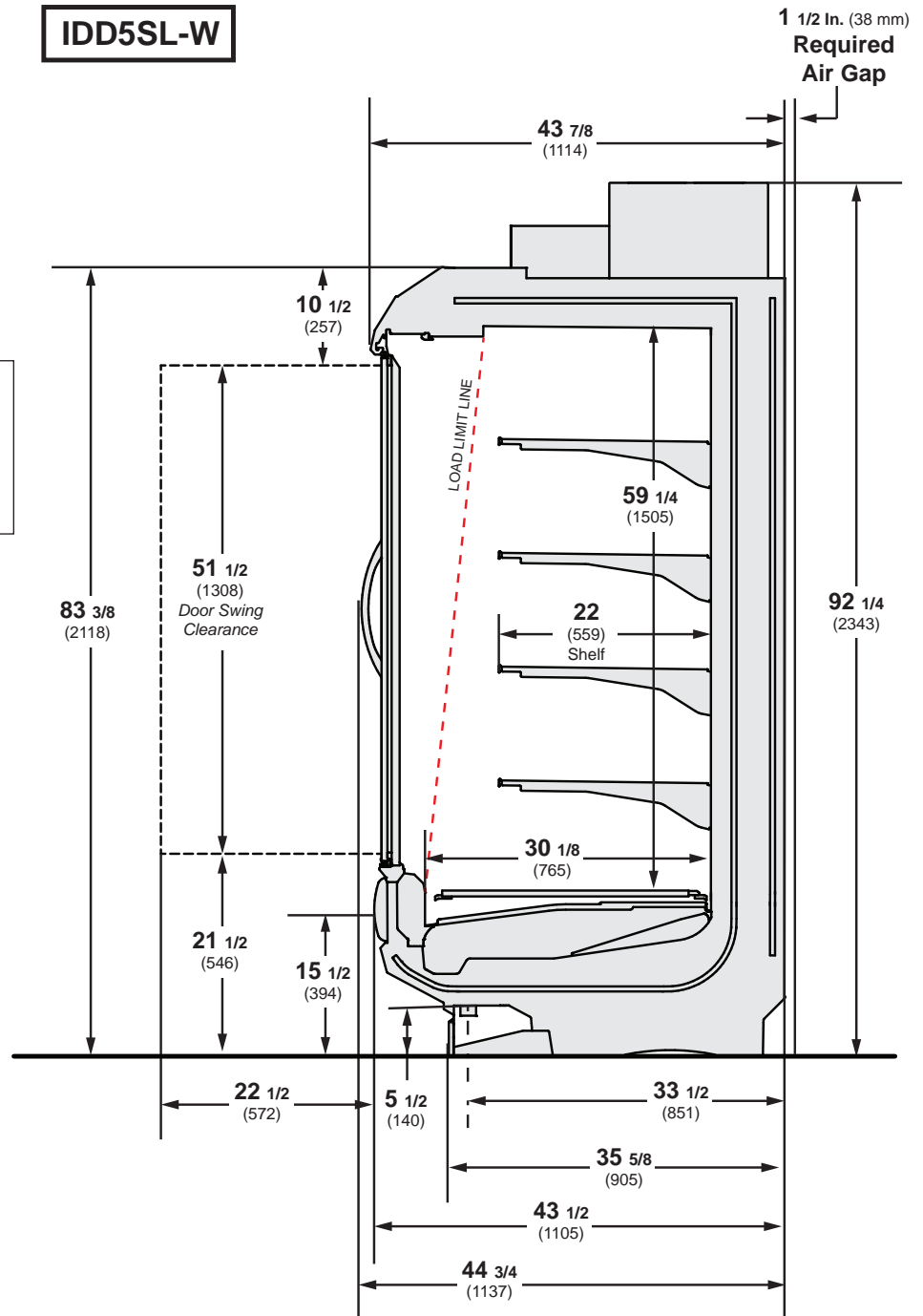
A minimum 1 1/2-in. clearance required to remove raceway cover, 6 1/2-in. for full access. See the Installation manual for instructions.

4-in. between back to back cases.

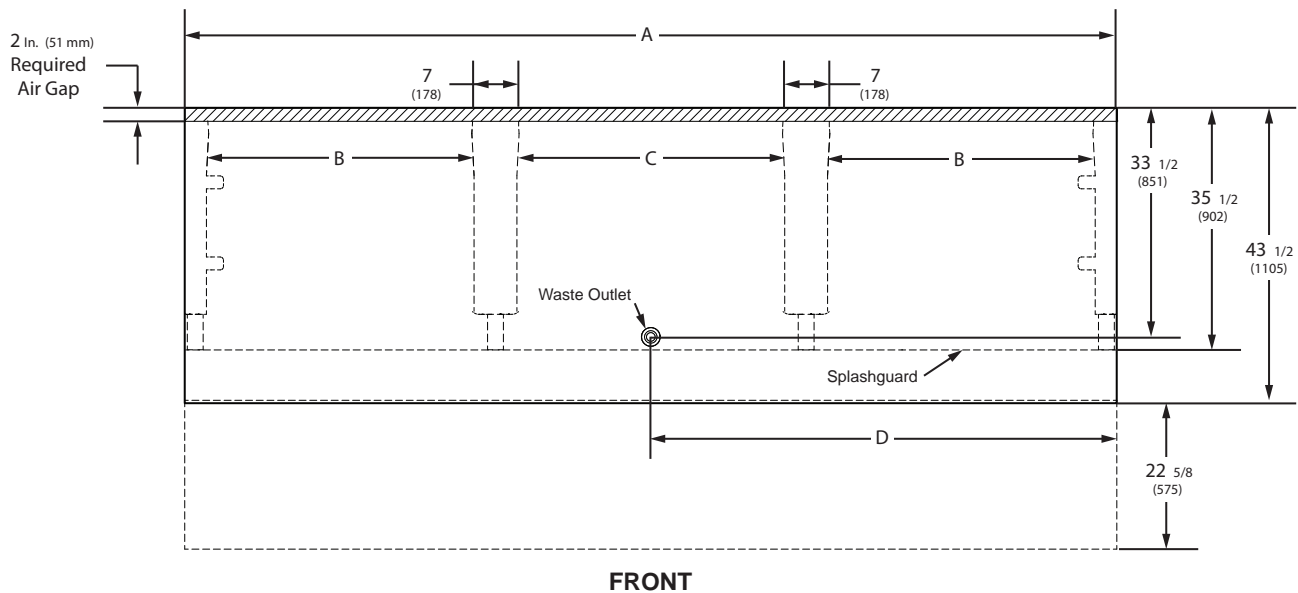
Shelf complement shown as tested:
Four rows of 22-in. shelves spaced equally between bottom display pan and interior top panel.

Shown with Ellipse Option Canopy and Bumper.

IDD5SL-W



Dimensions shown as in. and (mm).



FRONT

(12 Foot Model shown above)

	4 ft	6 ft	8 ft	12 ft
General				
(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 (1222)	72 1/4 (1835)	96 1/4 (2445)	144 3/8 (3668)
Maximum O/S dimension of case back to front (includes bumper)	43 1/2 (1105)	43 1/2 (1105)	43 1/2 (1105)	43 1/2 (1105)
Back of case to front of splashguard	35 1/2 (902)	35 1/2 (902)	35 1/2 (902)	35 1/2 (902)
(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 (1045)	NA	NA	41 1/8 (1045)
Distance between front legs and splashguard	8 (203)	8 (203)	8 (203)	8 (203)
Waste Outlets (see page 5 for drain extension option)				
(D) 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)	33 1/2 (851)	33 1/2 (851)	33 1/2 (851)	33 1/2 (851)
Schedule 40 PVC drip pipe	1 1/4 (32)	1 1/4 (32)	1 1/4 (32)	1 1/4 (32)
<i>Floor Drain must be located within 24 inches of Waste Outlet.</i>				

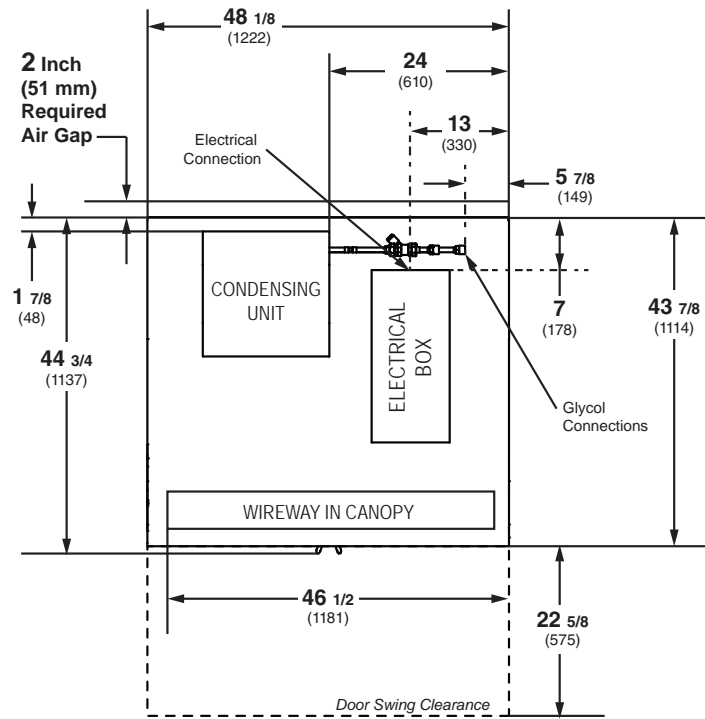
Engineering Plan View

Insight IDD5SL-W
Dairy / Deli / Beverage /
Produce / Meat

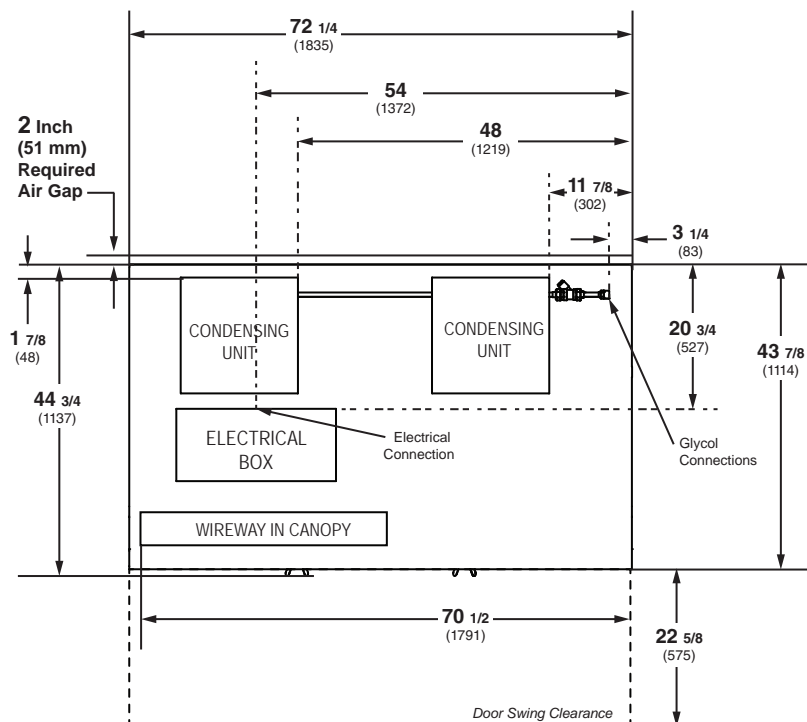
Top Views

Dimensions shown as in. and (mm).

4 Foot

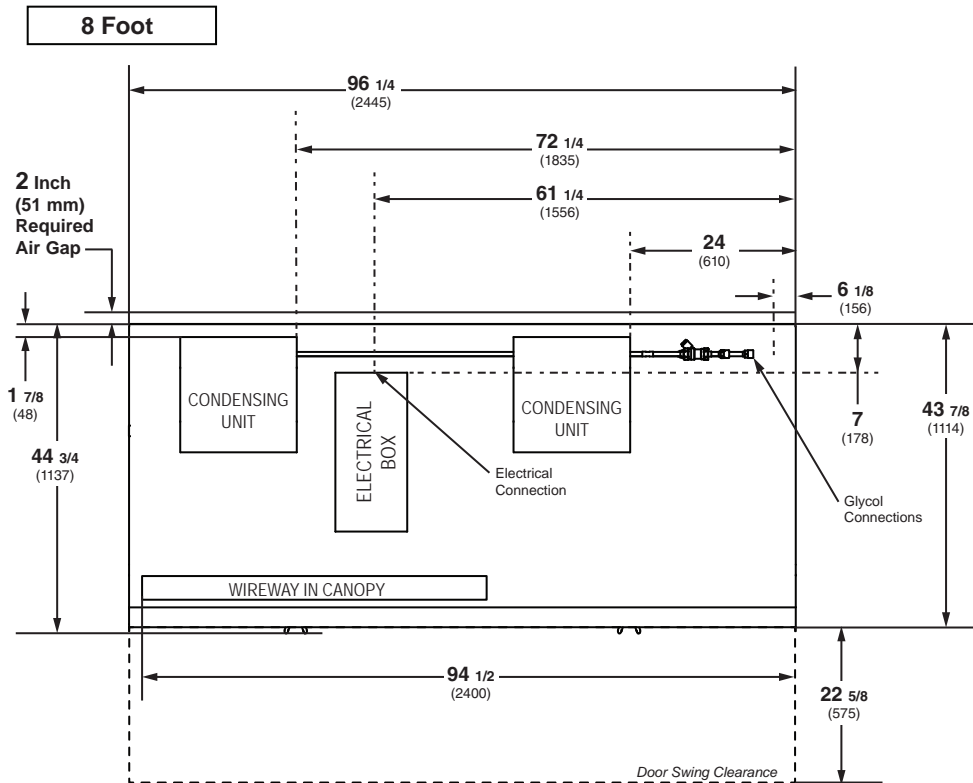


6 Foot

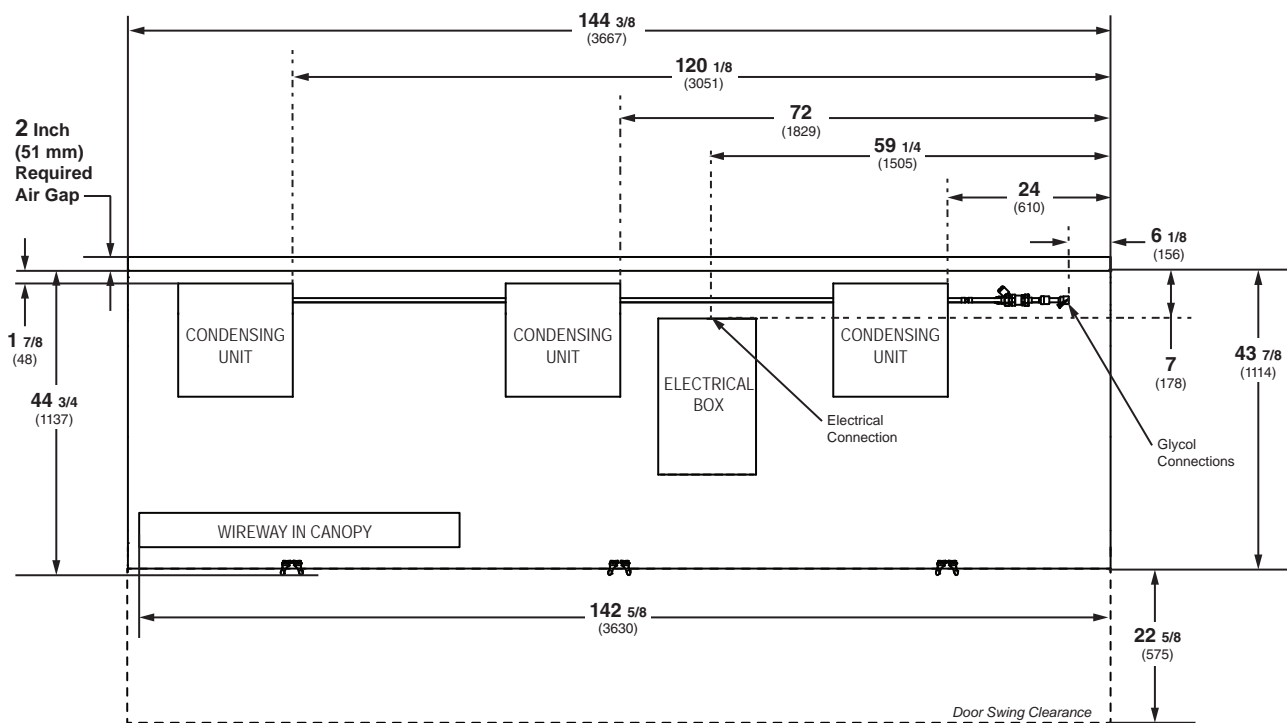


Top Views

Dimensions shown as in. and (mm).



12 Foot



Electrical Data

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

	Amperes				Watts			
	4 ft	6 ft	8 ft	12 ft	4 ft	6 ft	8 ft	12 ft
Evaporator Fan								
120V 60Hz Energy Efficient	0.25	0.50	0.50	0.75	16	32	32	48

Condensing Unit (120V, 1 Ph, 60Hz) Standard

NOTE: One compressor can start at a time.

Compressor RLA	2.8	5.3	5.3	8.4
Compressor LRA	14.9/unit (all lengths)			

Merchandiser Circuit Requirements (120V, 1 Ph, 60 Hz)

Total Amps	3.6	7.1	7.2	10.7
MCA	4.5	8.8	9.0	13.4
Maximum Over Current Protection	15	15	15	15



NEMA Plug 5-15 (all case lengths)

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.

	Amperes				Watts			
	4 ft	6 ft	8 ft	12 ft	4 ft	6 ft	8 ft	12 ft
Standard Lighting								
ULTRA Canopy Lights								
1 Row ULTRA	0.16	0.26	0.36	0.54	19	31	43	64
Canopy Lights								
1 Row	0.16	0.26	0.32	0.48	19	32	39	58
1 Row HO	0.22	0.33	0.44	0.66	27	40	53	79
Shelf Lights								
No lighted shelves								
Mullion								
51-in.	0.29	0.54	0.54	0.79	35.0	65.1	65.1	95.2

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

Insight IDD5SL-W
 Dairy / Deli / Beverage /
 Produce / Meat

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

ESTIMATED SHIPPING WEIGHT †

Case	4 ft	6 ft	8 ft	12 ft	Solid End (each)
lb (kg)	810 (368)	1020 (464)	1210 (550)	1410 (641)	80 (36)

† Actual weights will vary according to optional kits included.

Shelf Options

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

- 18-inch
- 20-inch
- 22-inch
- 24-inch

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

Minimum number of Shelves: 3

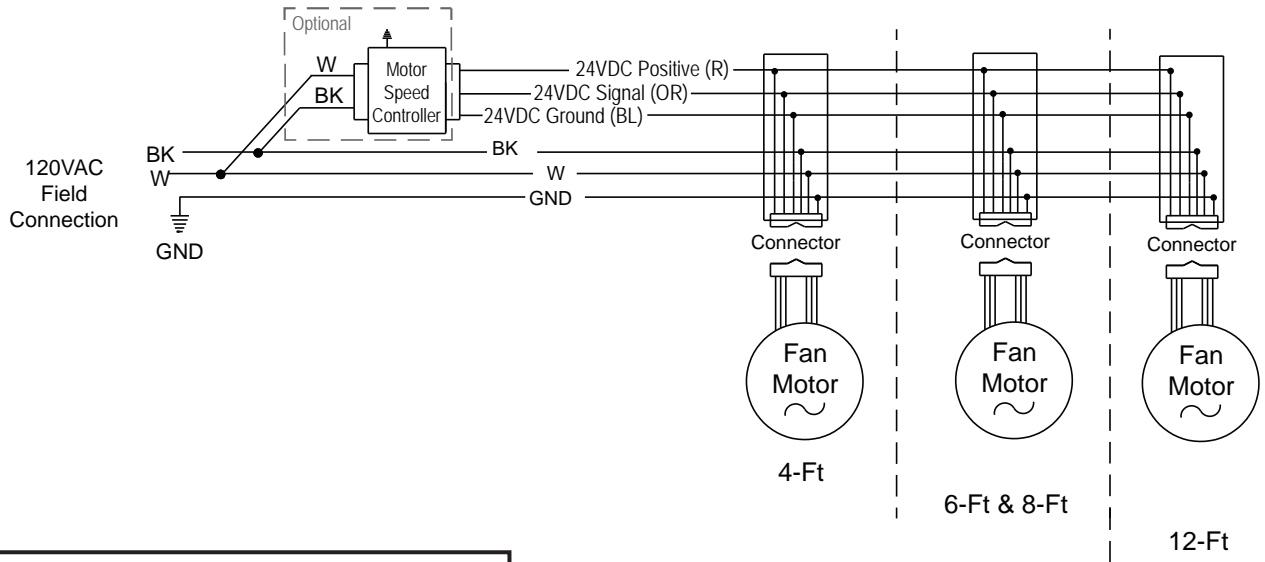
Optimal number of Shelves: 4

Maximum number of Shelves: 7

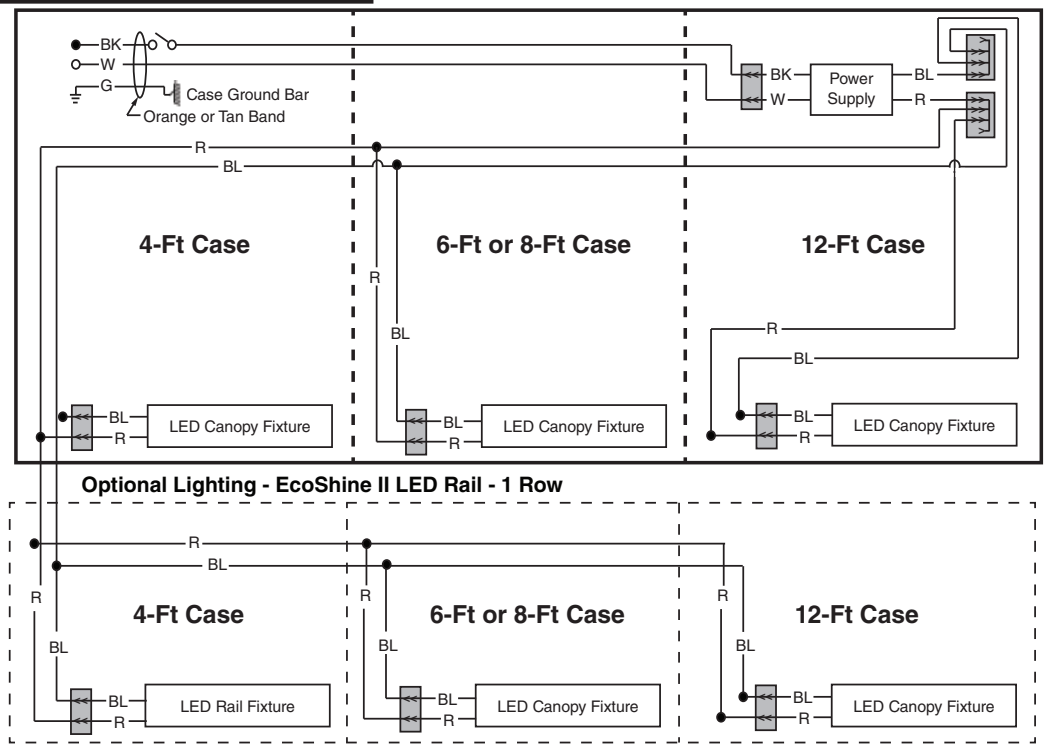
Maximum number of Lighted Shelves: 0

Standard shelf complement for test purposes: (4) rows of 22-in. shelves evenly distributed vertically.

Fan Wiring Offtime Defrost



LED Canopy Light Circuits

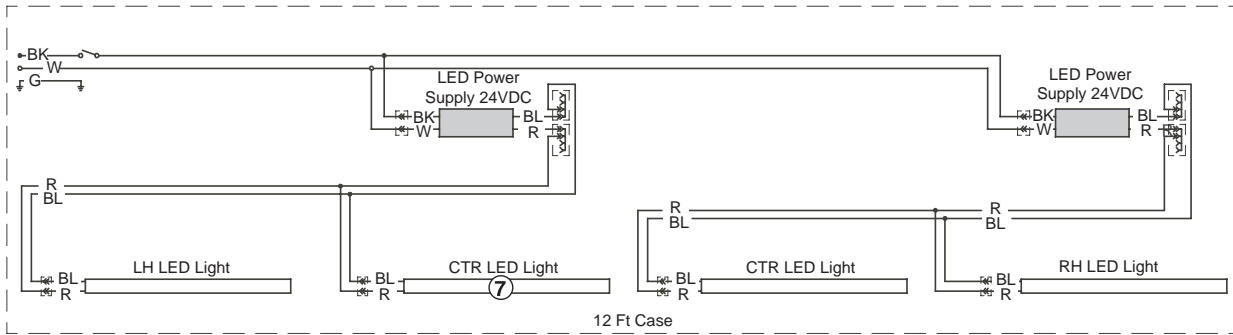
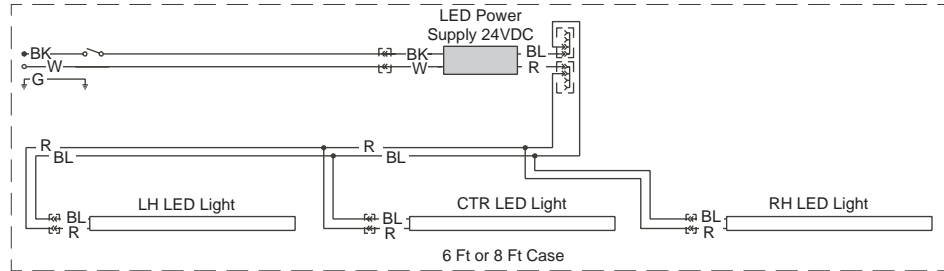
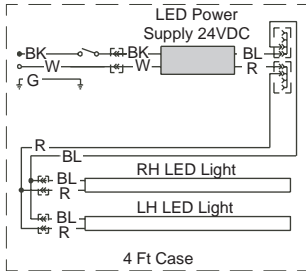


WARNING

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

Mullion LED Lighting



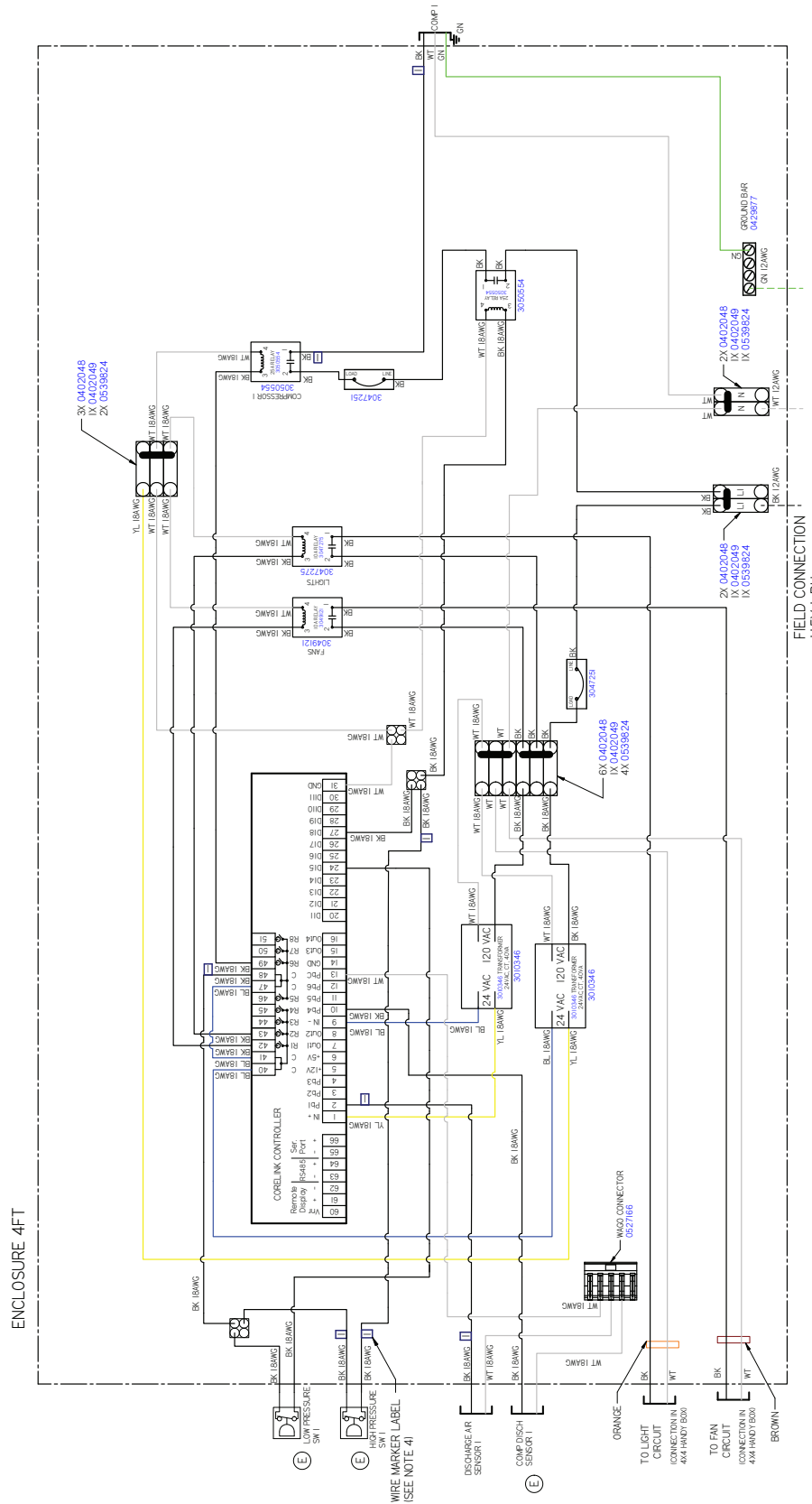
WARNING

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 mmm = CASE GROUND

Wiring Diagrams 4 Foot

Insight **IDD5SL-W**
Dairy / Deli / Beverage /
Produce / Meat



3084157_E

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 / HGA WIRE

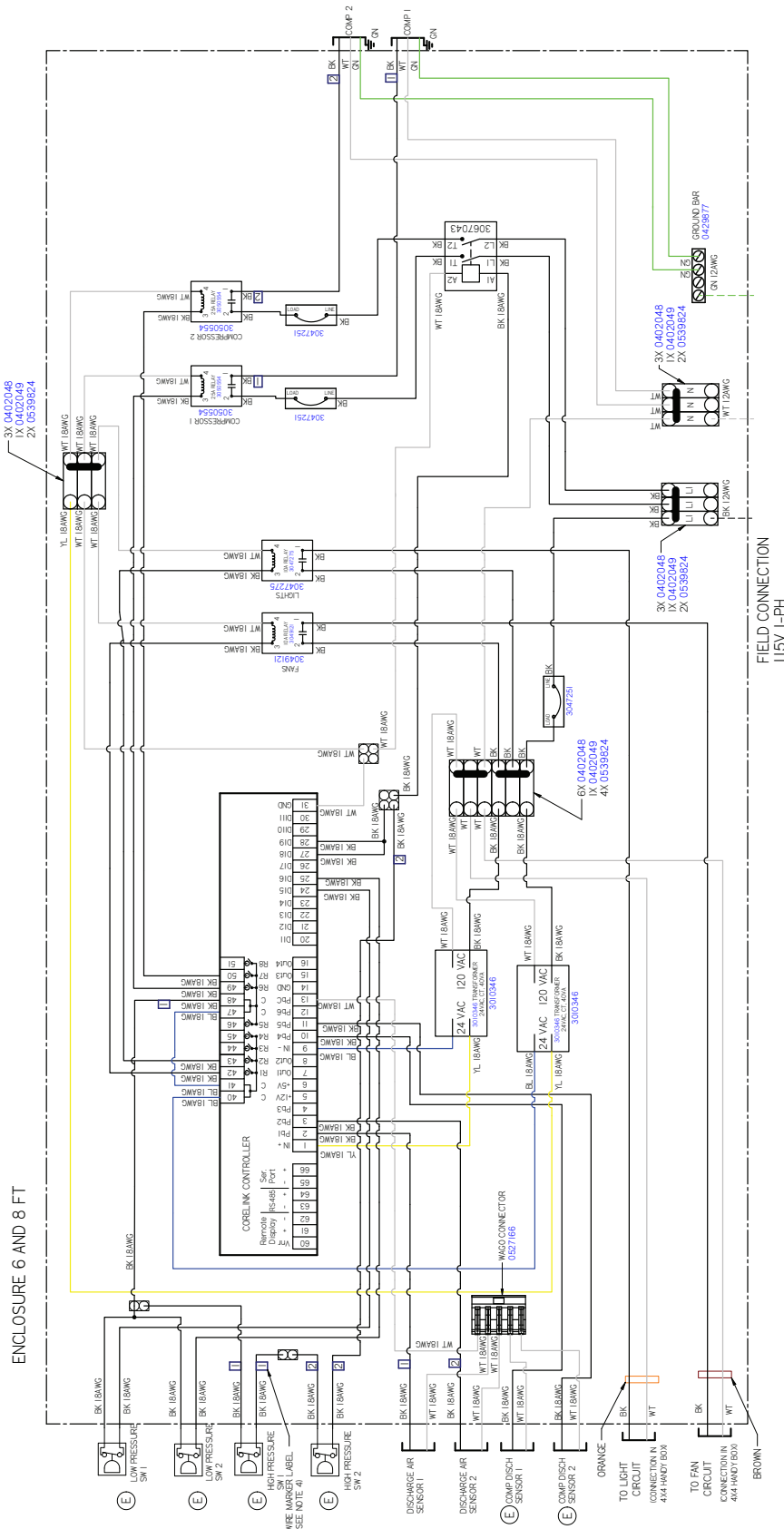
FACTORY / IDGA WIRE

FIELD WIRE

- NOTES:**
1. APPLICABLE STANDARDS (SPECIFICATIONS ASME Y14.5M-1994 DIMENSIONS AND TOLERANCES
 2. FAN AND LIGHT CIRCUITS TO BE FACTORY MADE CONNECTIONS
 3. ALL WIRE 14AWG UNLESS OTHERWISE NOTED
 4. APPLY WIRE MARKER LABELS TO BOTH ENDS OF SENSOR AND COMPRESSOR WIRES PRIOR TO ROUTING WIRES.

Insight IDD5SL-W
 Dairy / Deli / Beverage /
 Produce / Meat

Wiring Diagram
 6 & 8 Foot



3084157_E

UL COLOR CODES / ABBREVIATIONS

- RED = RD
- BLACK = BK
- BLUE = BL
- YELLOW = YL
- GRAY = GT
- WHITE = WT
- GREEN = GN
- BROWN = BN
- ORANGE = OR
- VIOLET = VT

FACTORY 14GA WIRE

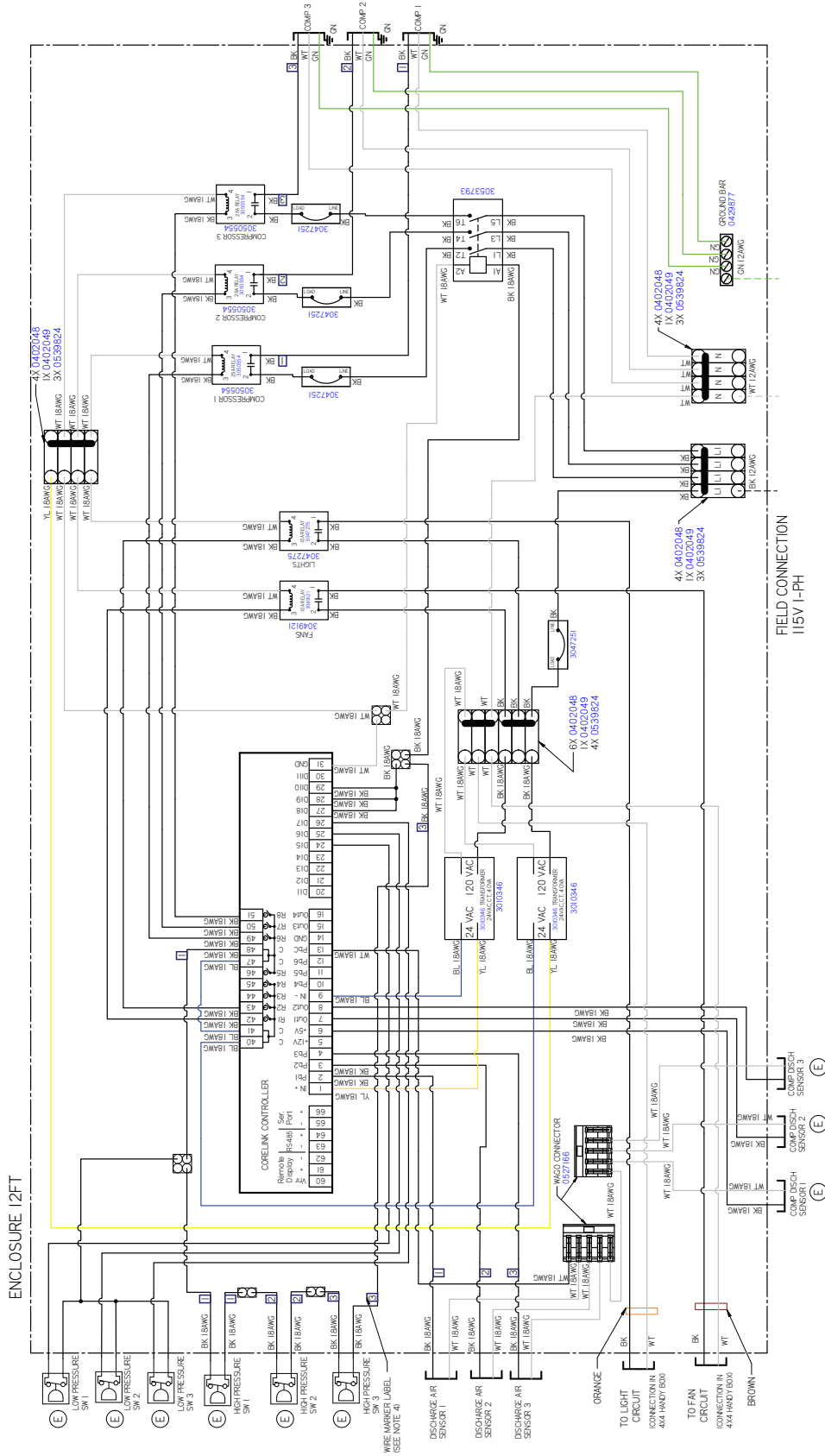
FACTORY 10GA WIRE

FIELD WIRE

- NOTES:**
1. APPLICABLE STANDARDS/SPECIFICATIONS ASME Y14.5M-1994, DIMENSIONS AND TOLERANCES
 2. FAN AND LIGHT CIRCUITS TO BE FACTORY MADE CONNECTIONS
 3. ALL WIRE 14AWG UNLESS OTHERWISE NOTED
 4. APPLY WIRE MARKER LABELS TO BOTH ENDS OF SENSOR AND COMPRESSOR WIRES PRIOR TO ROUTING WIRES.

Wiring Diagram 12 Foot

Insight **IDD5SL-W**
Dairy / Deli / Beverage /
Produce / Meat



3084157_E

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

- NOTES:**
1. APPLICABLE STANDARDS / SPECIFICATIONS ASME Y14.5M-1994, DIMENSIONS AND TOLERANCES
 2. FAN AND LIGHT CIRCUITS TO BE FACTORY MADE CONNECTIONS
 3. ALL WIRE 14AWG UNLESS OTHERWISE NOTED
 4. APPLY WIRE MARKER LABELS TO BOTH ENDS OF SENSOR AND COMPRESSOR WIRES PRIOR TO ROUTING WIRES.

Insight **IDD5SL-W**
Dairy / Deli / Beverage /
Produce / Meat



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

Parts may also be ordered at:

parts.hussmann.com

Call toll free: 1.855.487.7778

Revision History

Revision A: March 2020: Original Issue

Revision B: July 2021: Updated charge data and wiring diagrams.

Revision C: April 2022: Updated performance data, electrical data and wiring diagrams.