

HUSSMANN[®]

microDS[™]

Insight[®] IDD6SU-W

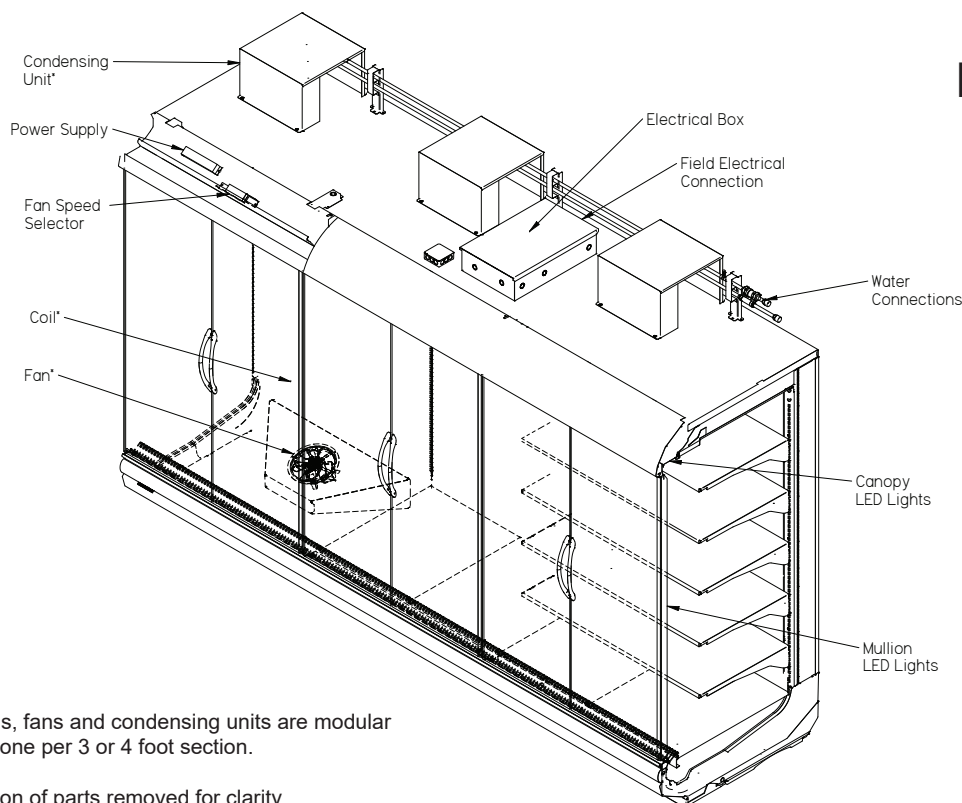
Dairy / Deli / Beverage / Produce / Meat
with EcoVision Doors
Water-cooled
Self-Contained
R290 (Propane)

Merchandise Data Sheet

P/N 3109479_D

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.

8 foot merchandiser shown.

UL EPH Certification

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

DOE 2017
Energy Efficiency
Compliant



IMPORTANT

**DRAIN EXTENSION KIT
REQUIRED TO PIPE MULTIPLE
CASES TO ONE DRAIN OR TO
USE A RAISED HUB DRAIN**

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Data sheet-Insight IDD6SU-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 **IDD6SU-W**
Dairy / Deli / Beverage /
Produce / Meat

Refrigeration Data ^{1**}

IDD6SU-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)	34 (1.11)	33 (0.56)	34 (1.11)	33 (0.56)
	Deadband	5	5	5	5
Lit Shelves	Discharge Air °F (°C)	34 (1.11)	33 (0.56)	34 (1.11)	33 (0.56)
	Deadband	5	5	5	5
Fan Speed ²	8.25 in. Energy Efficient	1300	1500	1300	1500

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	2,368
6 ft	4,036
8 ft	4,737
12 ft	7,105

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

Defrost Data

Frequency (hours between defrost)	24
Defrost Water ⁵	1.5 lb/ft/day (2.2 kg/m)

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

OFFTIME Time (minutes)	40
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ELECTRIC OR GAS	Not Available
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Cooling Water Pressure Drop ⁶

	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 Rate ⁷

	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).

Charge per unit ⁸

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 Volume ⁹ (Cu Ft/Ft)	13.2 ft ³ /ft (1.23 m ³ /m)
AHRI Total Display Area ¹⁰ (Sq Ft/Ft)	5.36 ft ² /ft (1.63 m ² /m)
Shelf Area ¹¹ (Sq Ft/Ft)	11.69 ft ² /ft (3.56 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: (5) rows of 22-in. shelves

Insight Multideck Merchandiser, EcoVision Doors, 6 Display Levels, Standard Bottom, Ultra Low Front, Water-cooled, Self-Contained R290 Propane

Insight IDD6SU-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.

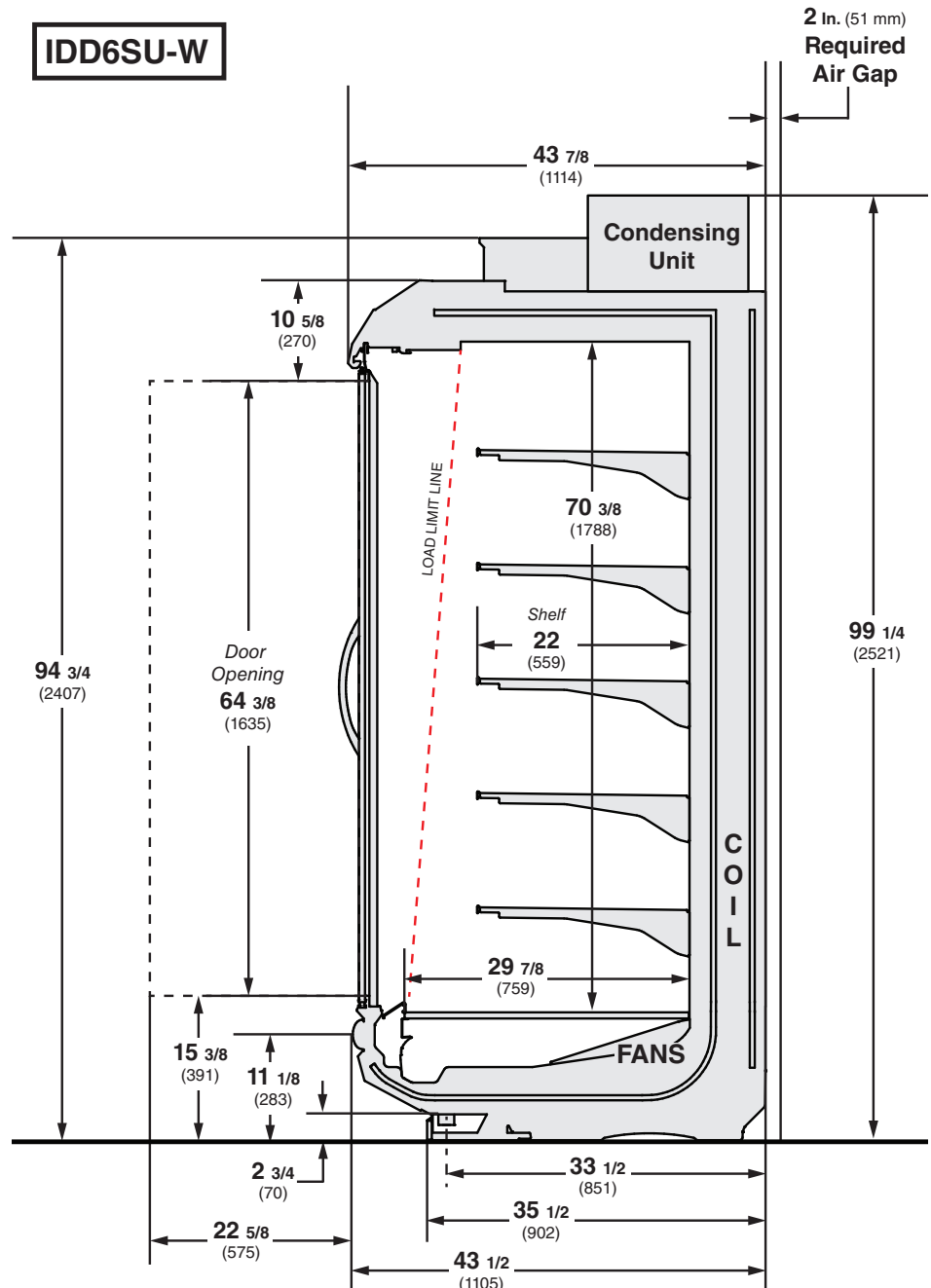
A minimum 1 1/2-in. clearance required to remove raceway cover, 6 1/2-in. for full access. See the Installation manual for instructions.

4-in. between back to back cases.

Shelf complement shown as tested:

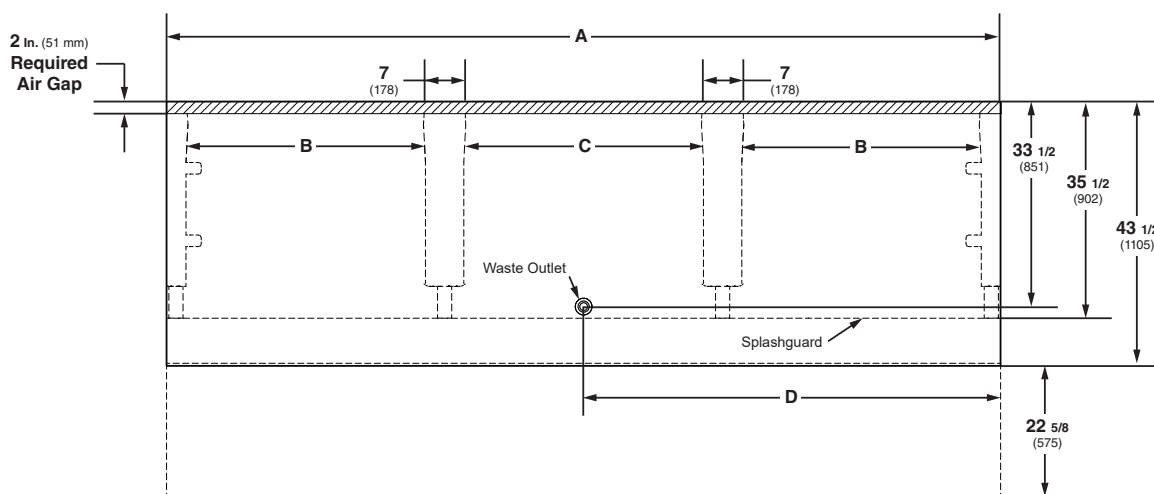
Five rows of 22-in. shelves spaced equally between bottom display pan and interior top panel.

Shown with Ellipse Option Canopy and Bumper.



WARNING: Floor Drain must be located within 24 inches of Waste Outlet. See page 5 for Drain Extension Option (must be used with hub-style floor drains).

Dimensions shown as in. and (mm).



FRONT

(12 Foot Model shown above)

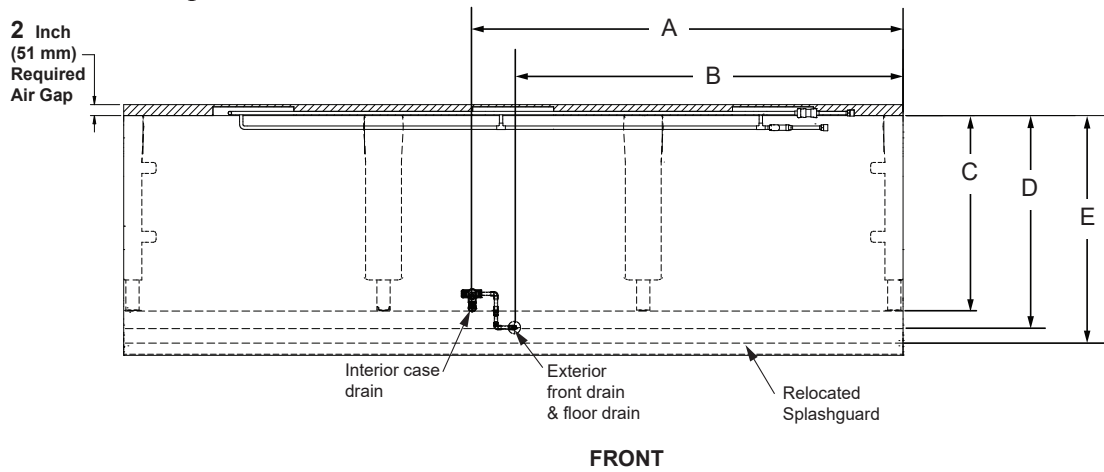
	4 ft	6 ft	8 ft	12 ft
General				
(A) Case Length (without ends or partitions) (Each end and insulated partition adds 1 1/2 in. (38 mm) to case line up.)	48 1/8 (1222)	72 1/4 (1835)	96 1/4 (2445)	144 3/8 (3668)
Maximum O/S dimension of case back to front (includes bumper)	43 1/2 (1105)	43 1/2 (1105)	43 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)
Floor Drain must be located within 24 inches of Waste Outlet.				

Engineering Plan View

Insight IDD6SU-W
Dairy / Deli / Beverage /
Produce / Meat

Waste Outlet Drain Extension Option

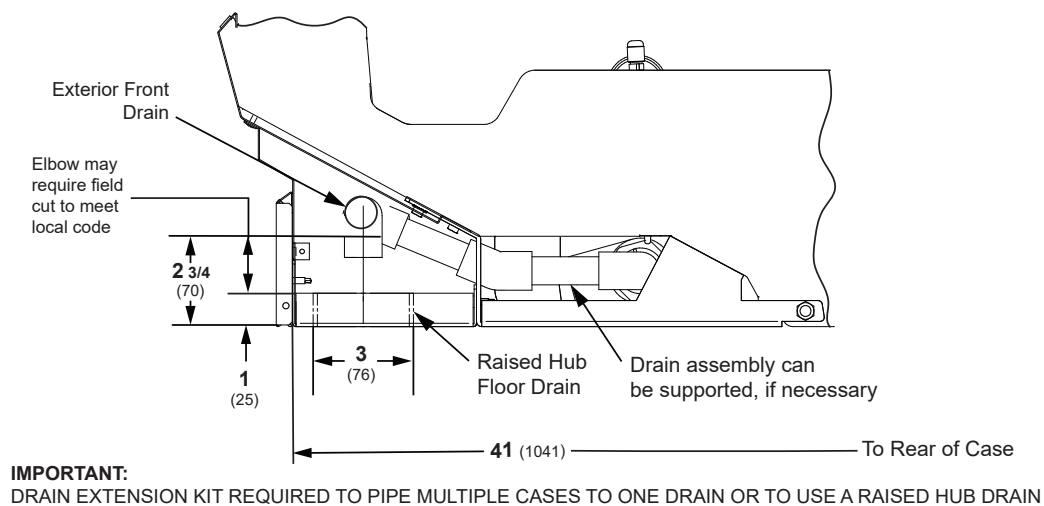
Dimensions shown as in. and (mm).



(12 Foot Model shown above)

	4 ft	6 ft	8 ft	12 ft
Waste Outlet Drain Option				
(A) RH of case to center of interior case drain	24 1/8 (613)	24 1/8 (613)	24 1/8 (613)	72 1/4 (1835)
(B) RH of case to center of exterior front drain and floor drain* *Drain extension shown piped to the right but may be either direction	13 3/4 (349)	13 3/4 (349)	13 3/4 (349)	61 7/8 (1572)
(C) Back of case to center of original waste outlet	33 1/2 (851)	33 1/2 (851)	33 1/2 (851)	33 1/2 (851)
(D) Back of case to center of relocated waste outlet (with drain extension kit)	38 1/4 (972)	38 1/4 (972)	38 1/4 (972)	38 1/4 (972)
(E) Back of case to the back of the relocated splashguard (with drain extension kit)	41 (1041)	41 (1041)	41 (1041)	41 (1041)

Partial End View

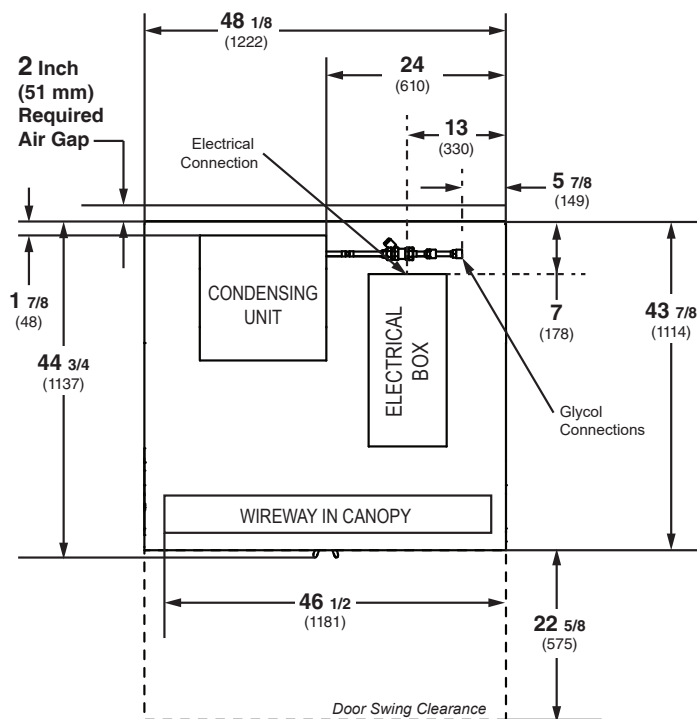


IMPORTANT: If the hub drain is used instead of a flush floor sink, a drain extension kit must be installed. Hub drains must be located in front of the waste outlet because of the required air gap.

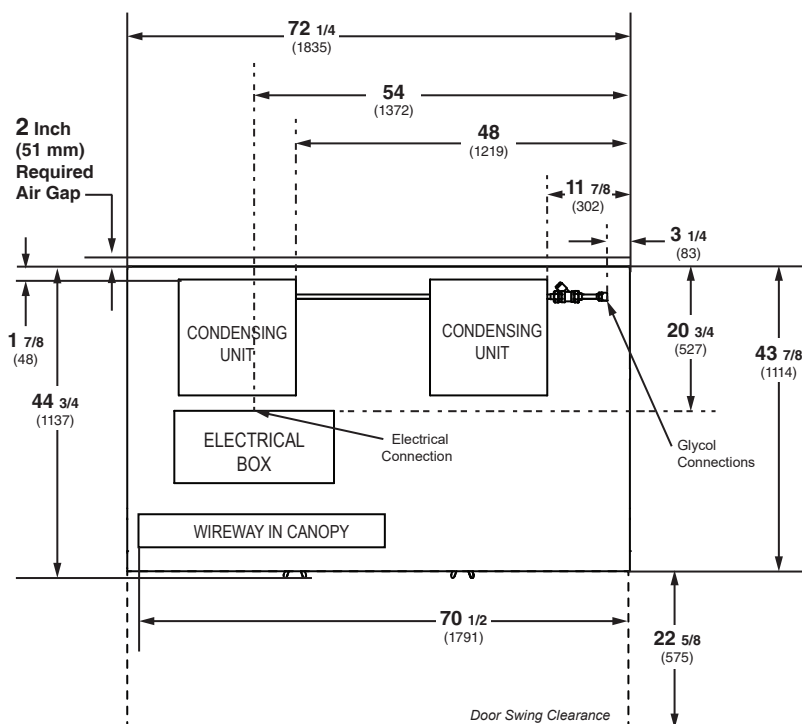
Dimensions shown as in. and (mm).

Top Views

4 Foot



6 Foot

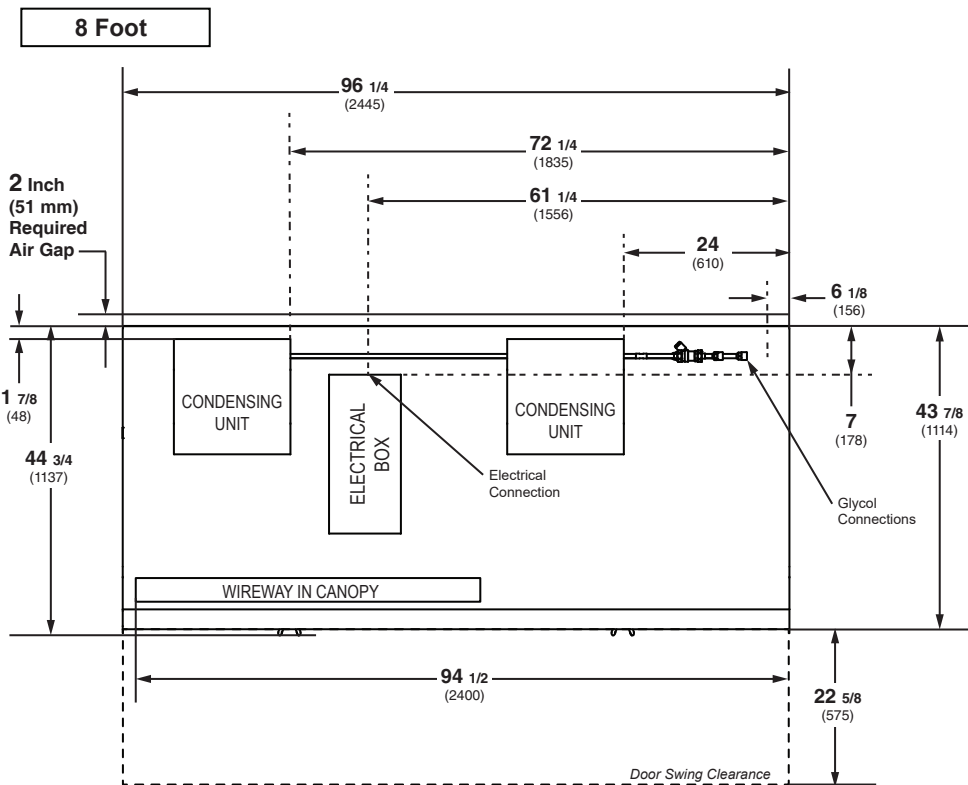


Engineering Plan View

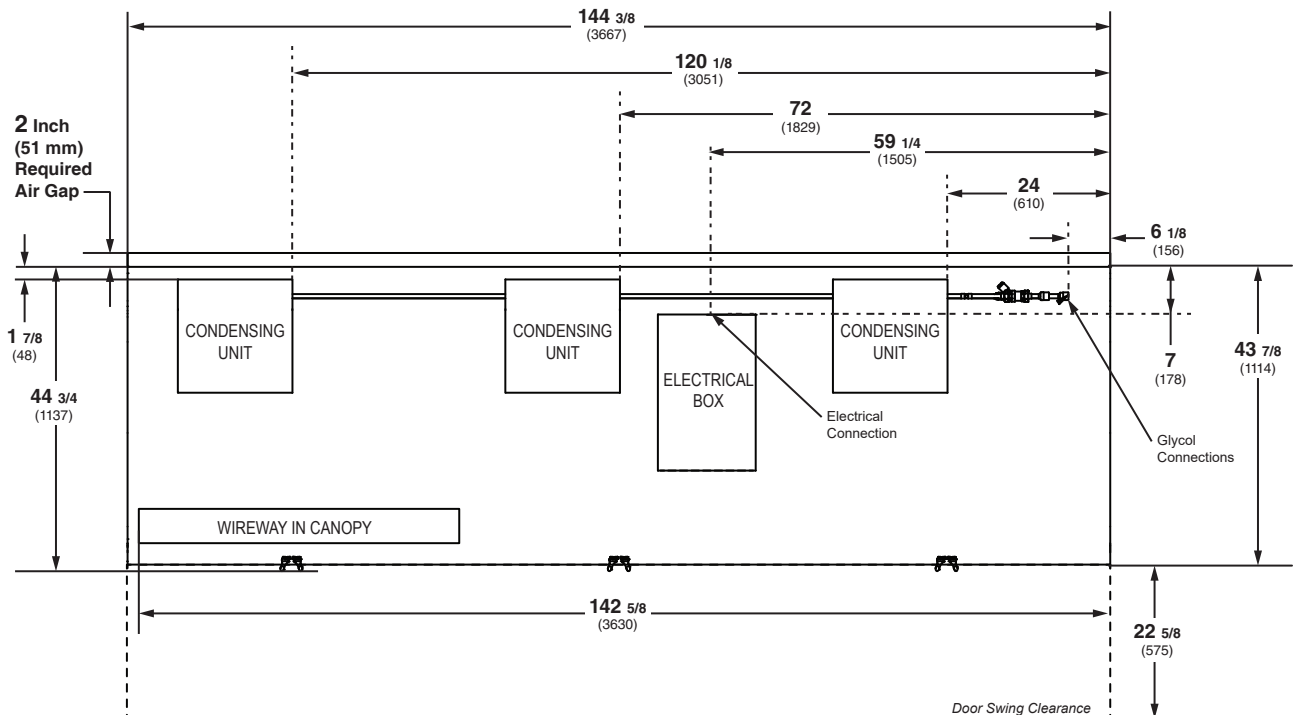
Insight IDD6SU-W
Dairy / Deli / Beverage /
Produce / Meat

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

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

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)			

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

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 REGULATIONS 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
LED LIGHTING								
EcoShine ULTRA Canopy Lights								
1 Row EcoShine ULTRA	0.16	0.26	0.36	0.54	19	31	43	64
EcoShine II Canopy Lights								
1 Row EcoShine II	0.16	0.26	0.32	0.48	19	32	39	58
1 Row EcoShine II HO	0.22	0.33	0.44	0.66	27	40	53	79
EcoShine II Shelf Lights								
No lighted shelves								
Mullion								
EcoShine II 60-in.	0.28	0.51	0.51	0.74	34.1	61.4	61.4	88.6

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

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)	1050 (476)	1300 (590)	1530 (694)	2010 (912)	100 (45)

† 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: 4

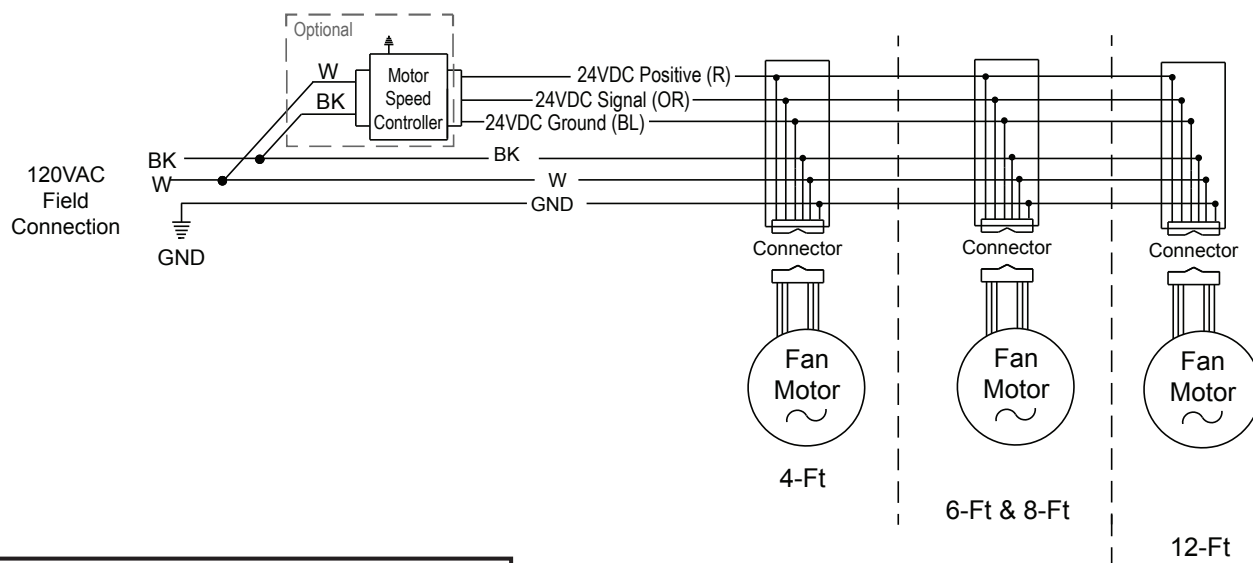
Optimal number of Shelves: 5

Maximum number of Shelves: 7

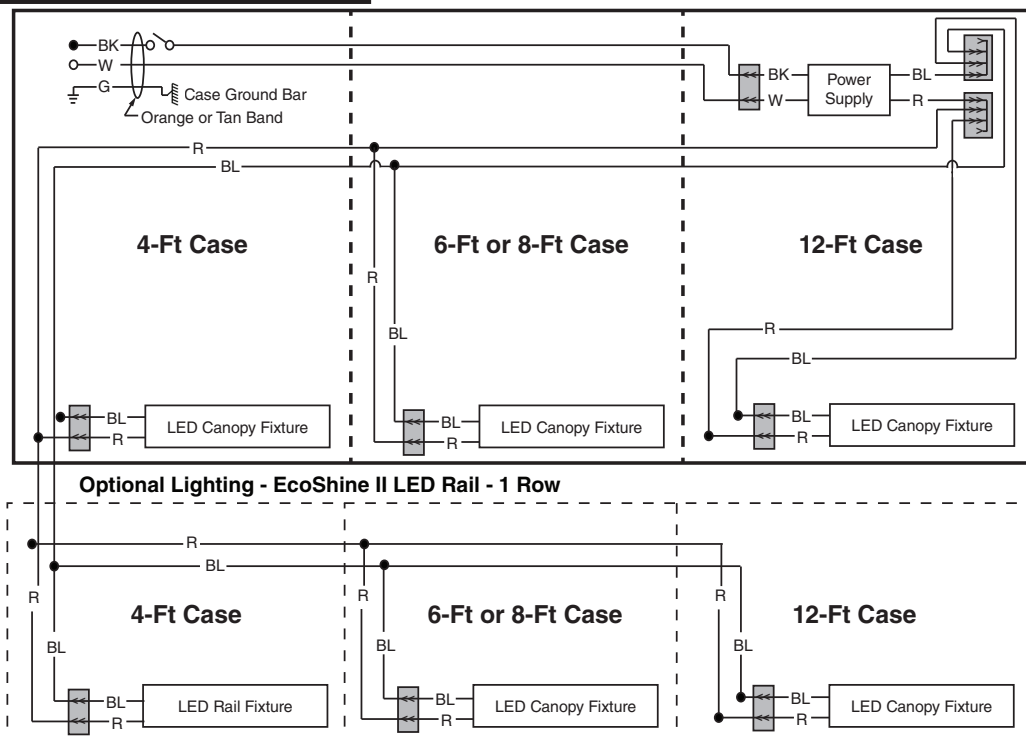
Maximum number of Lighted Shelves: 0

Standard shelf complement for test purposes: (5) rows of 22-in. shelves evenly distributed vertically.

Fan Wiring Offtime Defrost



LED Canopy Light Circuits



WARNING

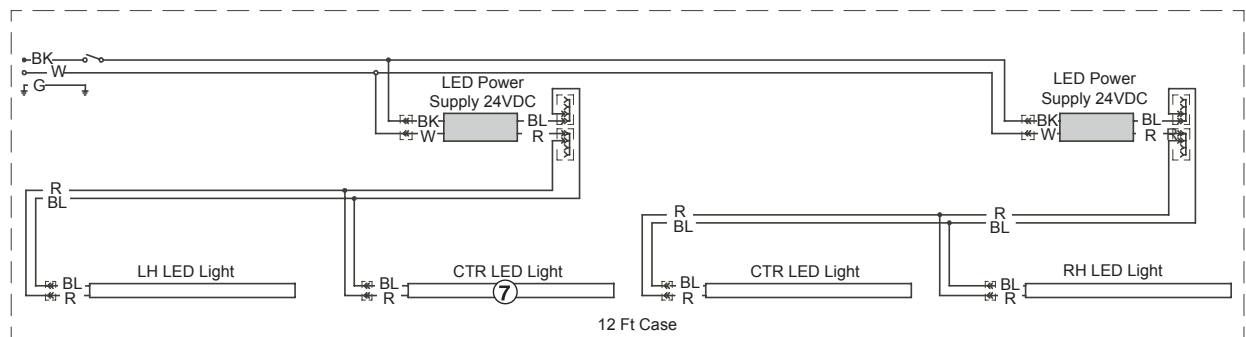
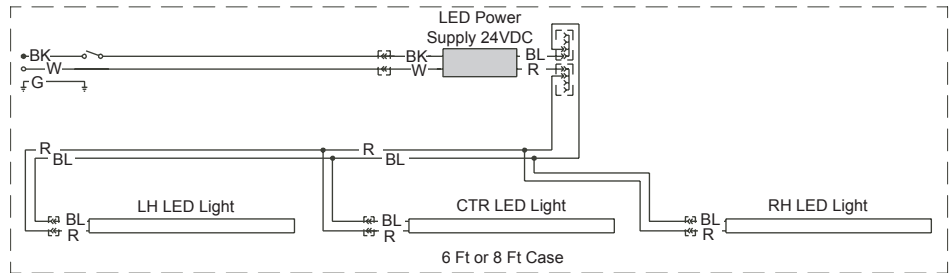
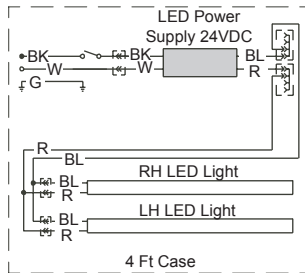
All components must have mechanical ground, and the merchandiser must be grounded.

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

Wiring Diagrams

Insight IDD6SU-W
Dairy / Deli / Beverage /
Produce / Meat

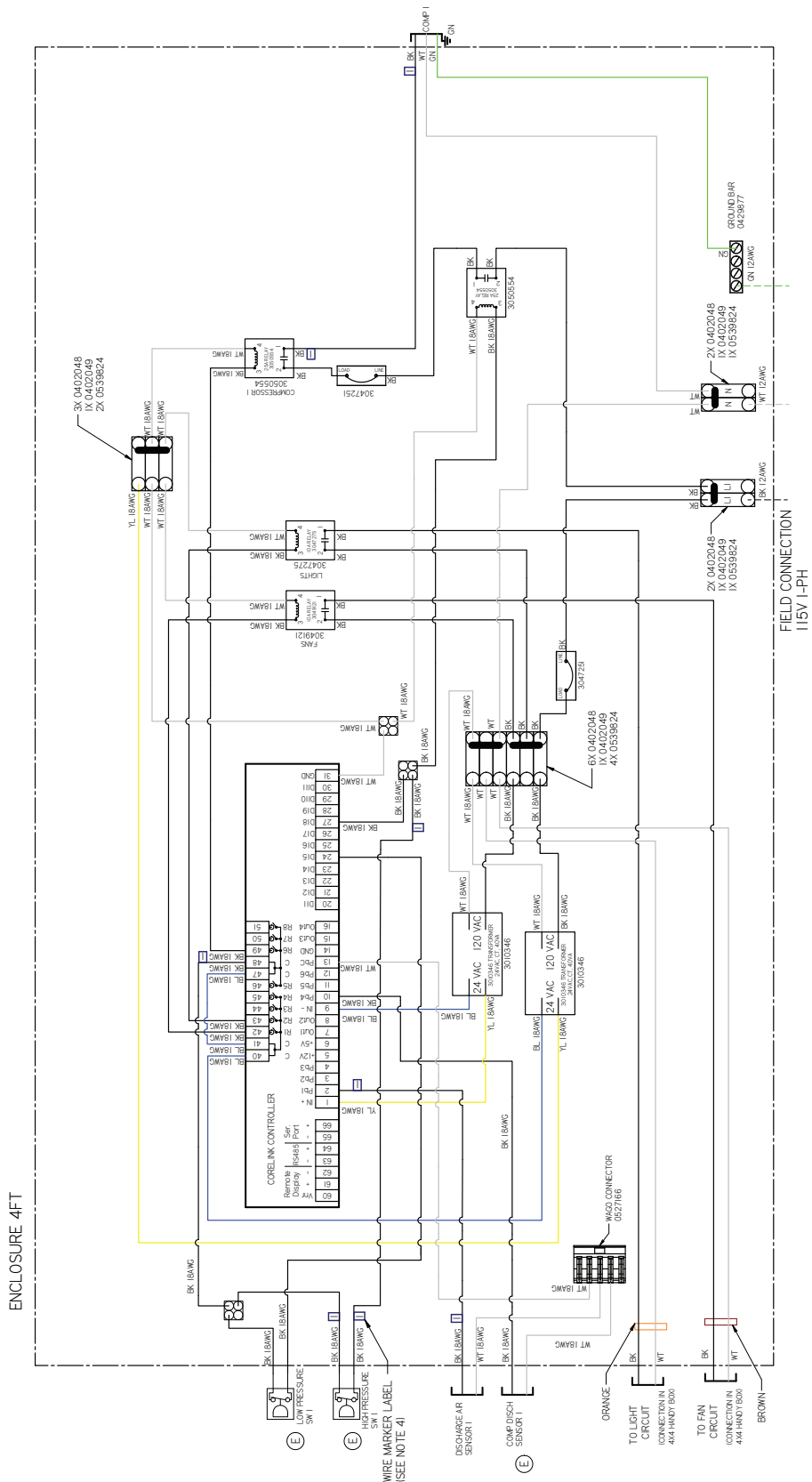
Mullion LED Lighting



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
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UL COLOR CODES / ABBREVIATIONS

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

FAN WIRE

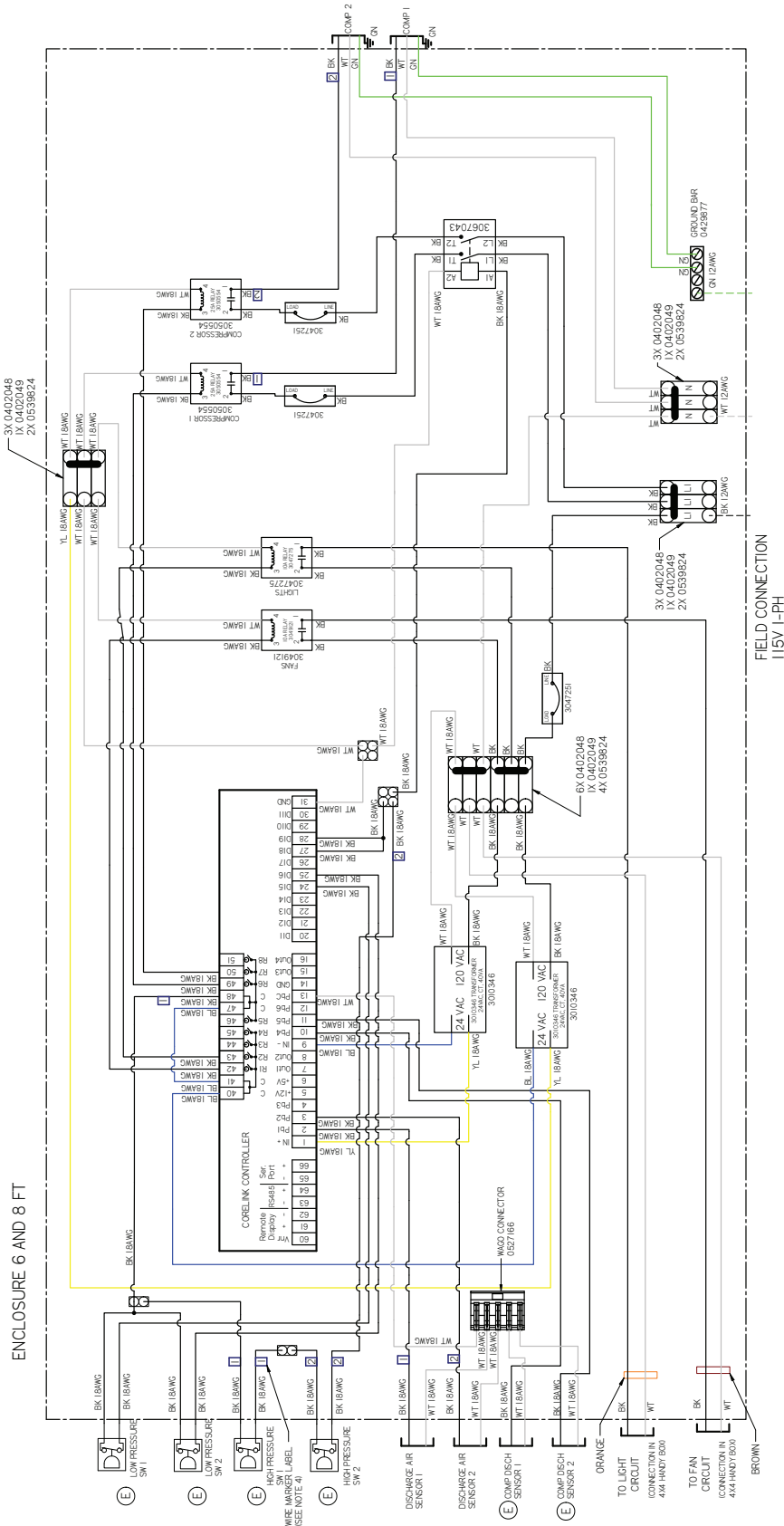
10GA WIRE

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 6 & 8 Foot

Insight **IDD6SU-W**
Dairy / Deli / Beverage /
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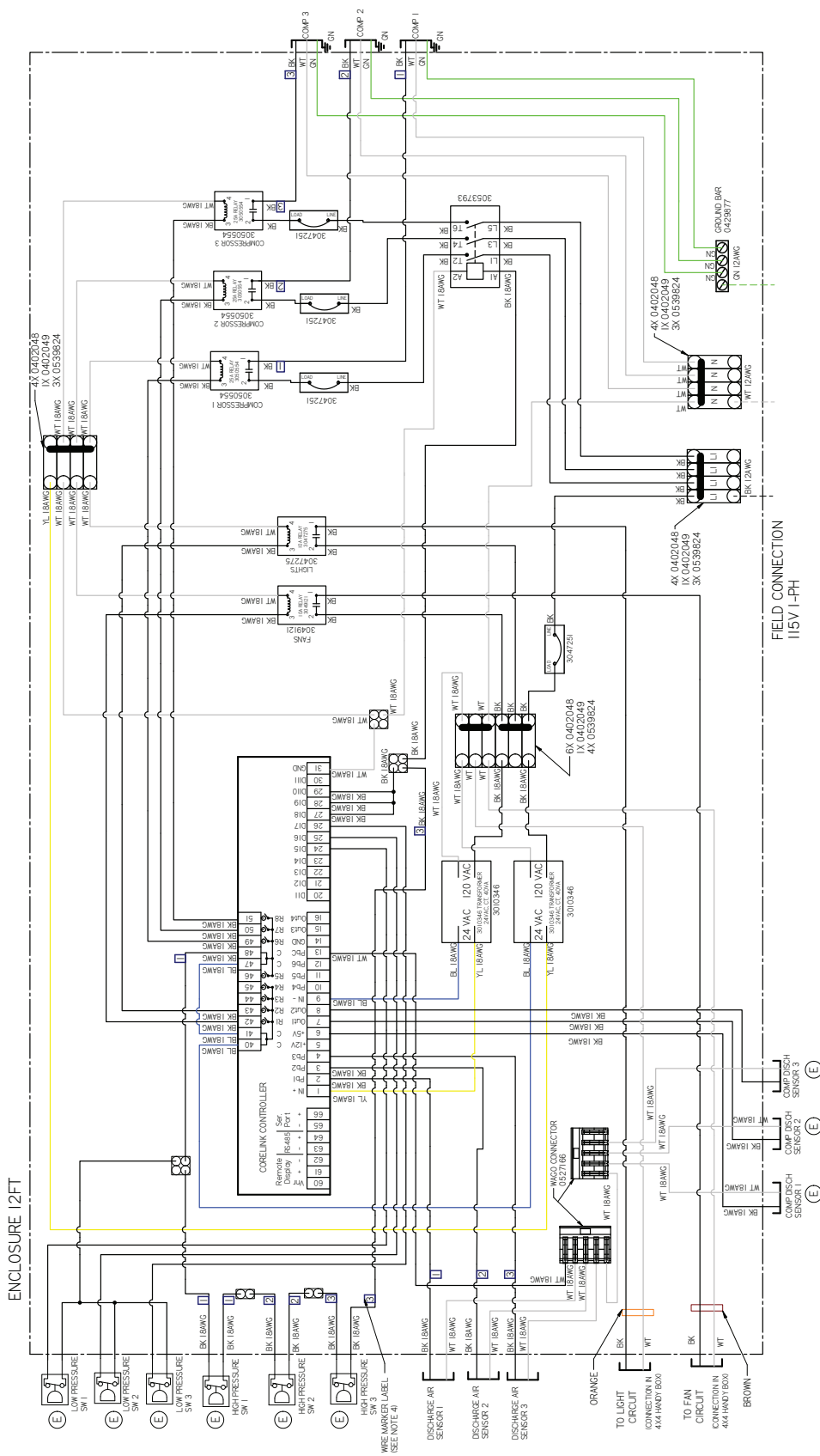
UL COLOR CODES / ABBREVIATIONS	
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FACILITY 14GA WIRE

FACILITY 10GA WIRE

FIELD WIRE

NOTES:
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3084157_E



Scan the QR code with 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

Revision History

Revision A: November 2019: Original Issue

Revision B: April 2020: Updated electrical data on page 8.

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

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