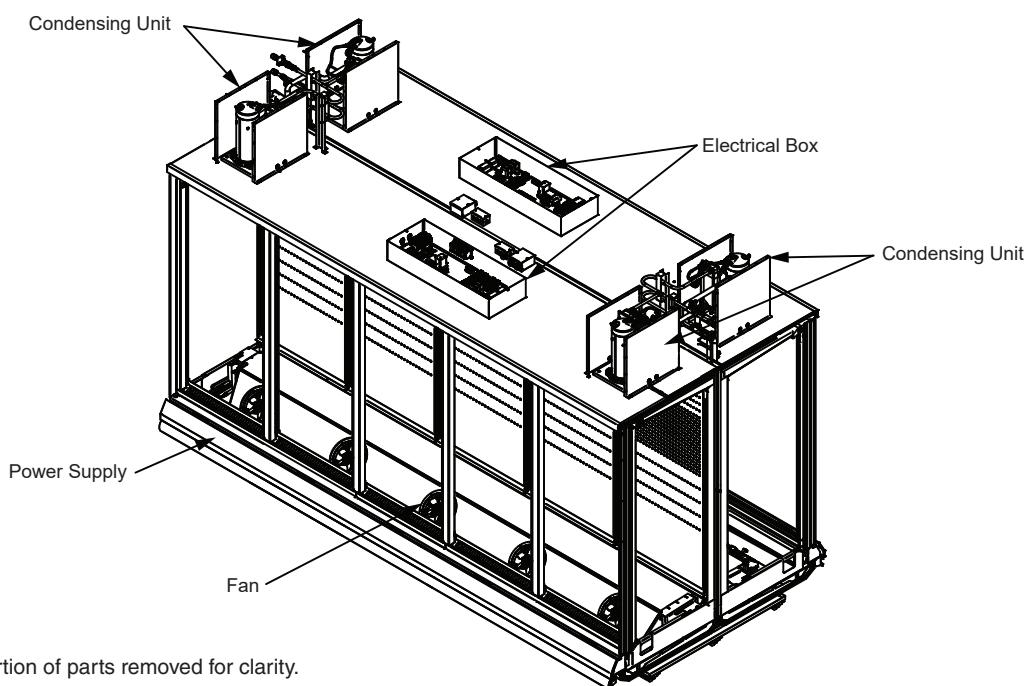


HUSSMANN®

microDS™

*Standard electrical connections
are at the top left of the merchandiser*



Portion of parts removed for clarity.

5-door merchandiser shown.

UL EPH Certification

This merchandiser model is manufactured to meet ANSI/SCC Standards 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.

RLNI-W
INNOVATOR Doors or
INNOVATOR III Doors
Water-cooled
Self-Contained
R-290

Merchandise Data Sheet

P/N 3086860_D

UL EPH® Certified

April 2022

DOE 2017
Energy Efficiency
Compliant



Performance Data
Product Data (AHRI Statistics)
Cross Section
Plan View
Electrical Loads
Estimated Shipping Weights

Page 2 Shelf Options
Page 2 Wiring Diagrams
Page 3 QR Code for Parts and Product Information
Page 4 Revision History
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Page 14

Data sheet-RLNI-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.

RLNI-W

Frozen Food / Ice Cream

Refrigeration Data ¹

RLNI-W		Optimal Shelf Life	
Application		Frozen Food (FF)	Ice Cream (IC)
Temperature	Discharge Air °F (°C)	-3 (-19.5)	-10 (-23)
Fan Speed	RLNI-W RPM	1550	1550

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. Water supply design conditions are 50 to 115°F (10 to 40°C).

Compressor Data (per side)

Total Heat of Rejection	BTU/Hr
4 Dr	11,244
5 Dr	12,234

Defrost Data

Frequency (hours between defrost) 24

	RLNI-W
Time (minutes)	45
Temp Termination (°F)	48

ELECTRIC OR GAS Electric

Defrost Water ³ 1.2 lb/dr/day
(0.5 kg/m)

³ (± 15% based on case configuration and product loading).

RLNI-W

Cooling Water Pressure Drop ⁴

	PSI
4 Dr	5
5 Dr	5

Cooling Water Design TD 10°F

⁴ Auto-Balancing Valve requires a minimum of 2 PSI to operate. Subtract 2 PSI if the Auto-Balancing Valve is not supplied.

RLNI-W Glycol/Water Flow Rate (per side) ⁵

	GPM	LPM
4 Dr	2.5	9.5
5 Dr	3.0	11.4

Charge per unit ⁶

4 Dr	0.33 lb	5.3 oz	150 g
5 Dr	0.33 lb	5.3 oz	150 g

⁵ Separate water connections (inlet and outlet) are required for each side.

⁵ 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).

⁶ Maximum R290 charge per condensing unit = 150 g.

⁶ Charge per unit per coil section.

Water Connections Size

A ¾" female NPT fitting is required to connect to the ¾" male NPT fitting that is provided on top of the case for inlet and outlet water connections. Optional hose kits are available that include two 6' hoses with ¾" female NPSM fittings. Maximum working pressure of water side components: 100 psig

Product Data (per side)

Gross Refrigerated Volume ⁷ (Cu Ft/Dr)	31.17 ft ³ /dr (0.88 m ³ /dr)
AHRI Total Display Area ⁸ (Sq Ft/Dr)	13.04 ft ² /dr (1.21 m ² /dr)
Shelf Area ⁹ (Sq Ft/Dr)	28.50 ft ² /dr (2.65 m ² /dr)

⁷ AHRI Gross Refrigerated Volume: Refrigerated Volume/Unit of Length, ft³/dr [m³/dr]

⁸ Computed using AHRI 1200 standard methodology: Total Display Area, ft² [m²]/Unit of Length, door

⁹ Shelf surface area is composed of bottom deck plus standard shelf complement for this model: (5) 22-inch shelves, evenly distributed vertically.

Reach-in Multideck Merchandiser, 6 Display
Levels, Low Bottom, Narrow Height Front, Island,
Water-cooled, Self-Contained R-290

RLNI-W
Frozen Food / Ice Cream

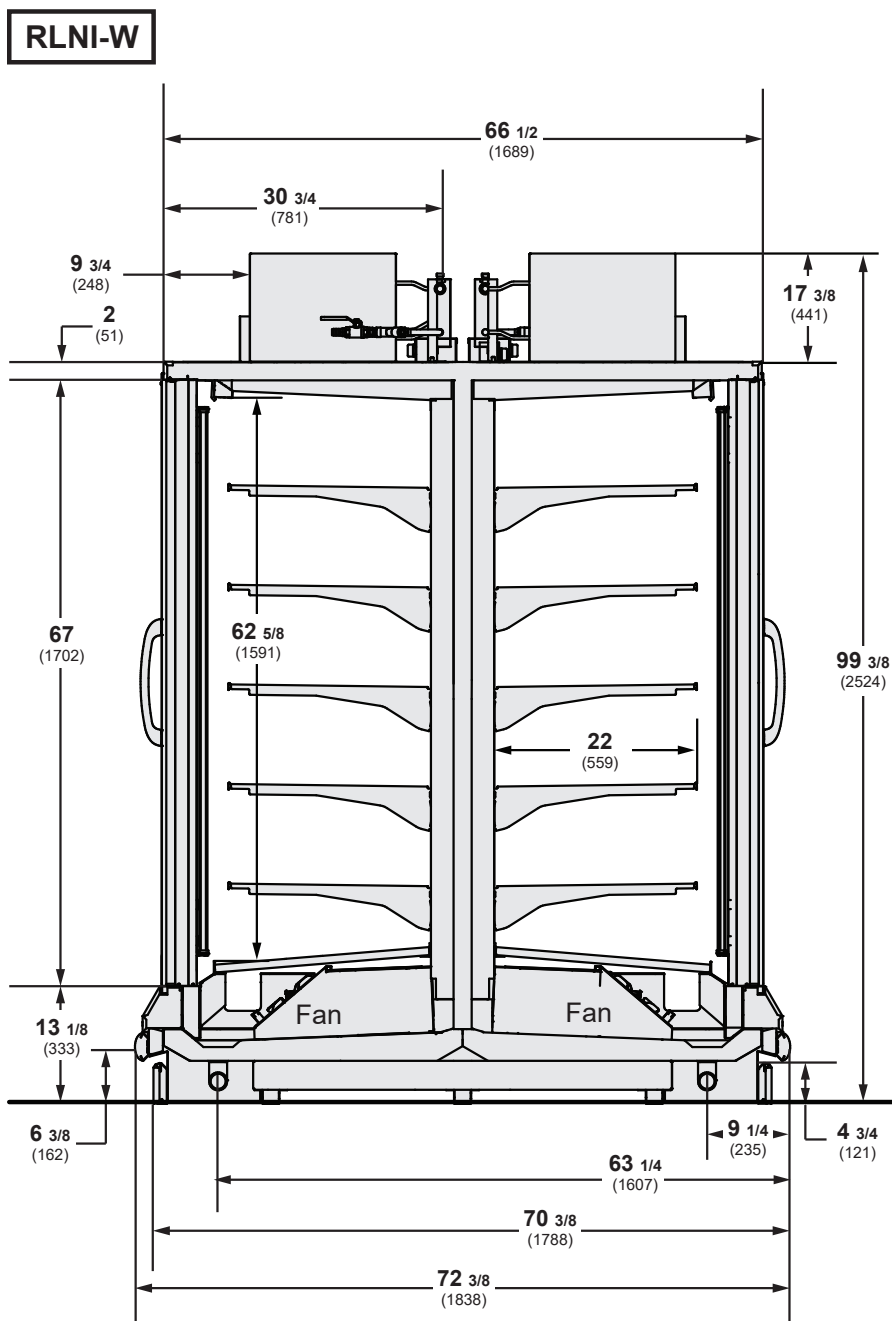
DOE 2017
Energy Efficiency
Compliant

Husmann refrigerated merchandisers configured for sale for use in the United States
meet or surpass the requirements of the DOE 2017 energy efficiency standards.

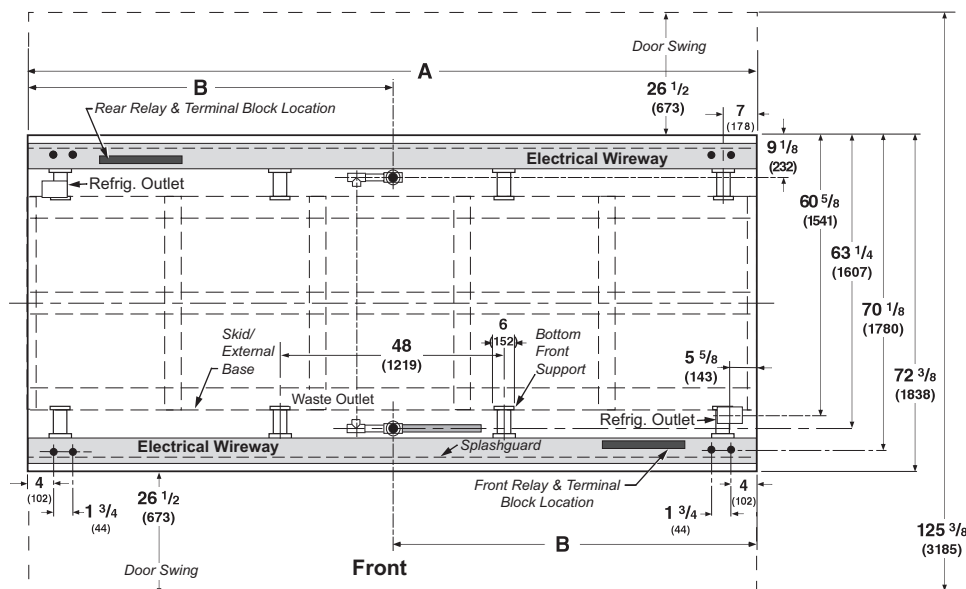
Dimensions shown as in. and (mm).

Shelf complement shown as tested:

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



Dimensions shown as in. and (mm).



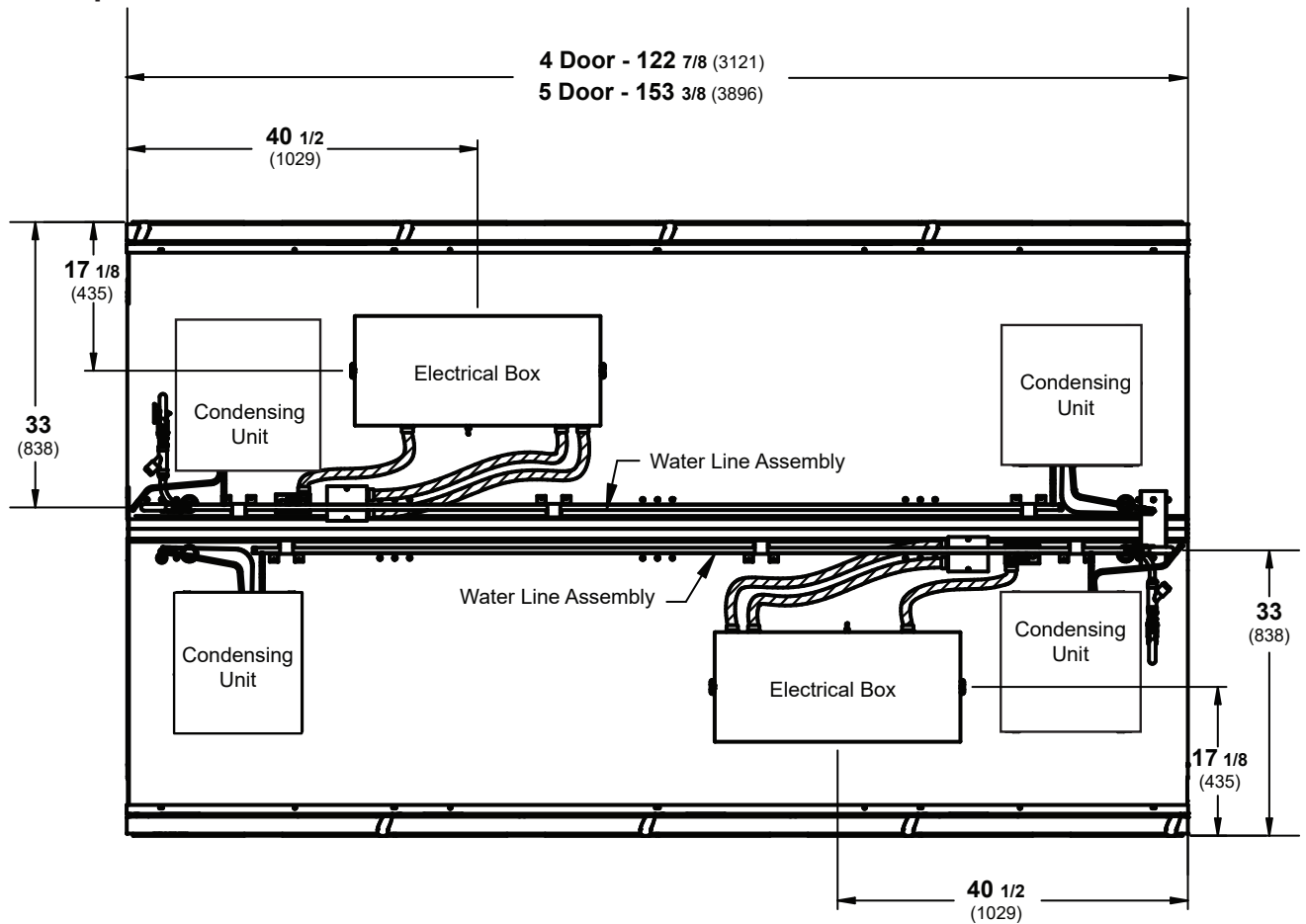
(5 Door Model shown above)

	4 Dr	5 Dr
General		
(A) Case Length (without ends or partitions) (Each solid end adds approximately 2 3/8 in. (60 ⁺ mm) to length of line up; each partition add approximately 2 3/4 in. (70 mm); case to case joints can add approximately 1/8 in. (3 mm) for gasket material.)	122 7/8 (3121)	153 3/8 (3896)
Maximum O/S dimension of case back to front (includes bumper) (Add 26 1/2 in. (673 mm) for door swing.)	72 3/8 (1837)	72 3/8 (1837)
Back of case to rear of splashguard	68 1/2 (1740)	68 1/2 (1740)
Width of Skidrail	3 3/4 (95)	3 3/4 (95)
Width of bottom front support	6 (152)	6 (152)
Stub-up area between front skidrail and splashguard	9 (229)	9 (229)
Electrical Service (Field Electrical Wiring Connection)		
RH End of case to center of Electrical Wiring Connection (top of case)	26 1/2 (673)	26 1/2 (673)
Back O/S of case to center of Electrical Wiring Connection *NOTE: Electrical Wiring Connection point is at terminal.)	47 1/2 (1207)	47 1/2 (1207)
Waste Outlets (with required drain extension)		
(B) RH End of case to the center of waste outlet	46 1/4 (1175)	76 5/8 (1946)
Back O/S of case to center of waste outlet(s)	63 1/4 (1607)	63 1/4 (1607)
Schedule 40 PVC drip pipe	1 1/4 (32)	1 1/4 (32)
Water Seal		
Edge of water seal to center of waste outlet **NOTE: Field installed water seal outlets, tees, and connectors are shipped with case.	13 (330)	13 (330)

Engineering Plan View

RLNI-W
Frozen Food / Ice Cream

RLNI-W Top Views



RLNI-W

RLNI-W

Frozen Food / Ice Cream

Hussmann recommends against frame heater cycling with *Innovator* doors or *Innovator III* doors to prevent door seals from freezing to the frames and tearing.

Electrical Data

ELECTRICAL DATA IS PER SIDE — TWO CIRCUITS REQUIRED PER CASE

Number of Fans

	4 Dr	5 Dr
8.25-in.	4	5

			Amperes		Watts	
Energy Efficient Evaporator Fan			4 Dr	5 Dr	4 Dr	5 Dr
120V	50/60Hz	Innovator	1.20	1.50	72	90
120V	50/60Hz	Innovator III	1.20	1.50	72	90

Door Anti-Sweat Heaters (on fan circuit)			4 Dr	5 Dr	4 Dr	5 Dr
120V	50/60Hz	Innovator	3.00	3.80	364	455
120V	50/60Hz	Innovator III	1.70	2.20	208	260

Frame Anti-Sweat Heaters (on fan circuit)			4 Dr	5 Dr	4 Dr	5 Dr
120V	50/60Hz	Innovator	1.57	1.97	188	236
120V	50/60Hz	Innovator III	1.57	1.97	188	236

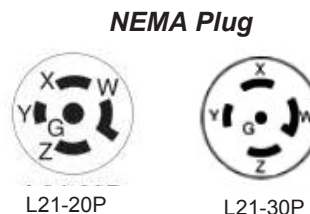
Condensing Unit (208V, 3 ph, 60 Hz) Standard

NOTE: One compressor can start at a time.

Compressor RLA	11.2	11.9
Compressor LRA	58/unit	58/unit

Merchandise Circuit Requirements (208V, 3 Ph, 60 Hz)

Total Amps	15.7	17.3
Maximum Current Capacity (MCA)	18.0	21.0
Maximum Over Current Protection (MOPD)	20	25



Optional Electrical Plug - NEMA

L21-20P (4 dr) L21-30P (5 dr)

NOTE: MOPD for RLNI5W is 25 amps for hard-wired cases. Cord-connected cases use a 30 amp plug, and must be connected to a 30 amp receptacle.

			Amperes		Watts	
Defrost			4 Dr	5 Dr	4 Dr	5 Dr
120V	Drain Heaters		2.00	2.5	240	300
208V	Electric Defrost		13.46	16.82	2800	3500

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. FOR SALE FOR USE IN THE U.S.A.

			Amperes		Watts	
STANDARD LED LIGHTING			4 Dr	5 Dr	4 Dr	5 Dr
Ultra (120V)			0.65	0.80	78	96
Ultra (220V Export)			0.35	0.43	78	96

ENDS or PARTITIONS

Each standard end, each insulated partition, view end adds 2 ³/₈ in. (60[^]smm) to case line up.

PHYSICAL DATA

Merchandiser Drip Pipe (in.) 1 ¹/₄
Schedule 40 PVC

ESTIMATED SHIPPING WEIGHT †

Case	4 Dr	5 Dr	Solid End (each)
lb (kg)	3190 (1538)	3748 (1790)	110 (50)

† Actual weights will vary according to optional kits included.

**NOTE: Case joint add approximately ¹/₈ to length of lineup for gasket material.

Shelf Options

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

20-inch, 22-inch

Contact engineering for non-standard display recommendations.

Optimal number of Shelves: 5 per door

Maximum number of Shelves: 5 per door

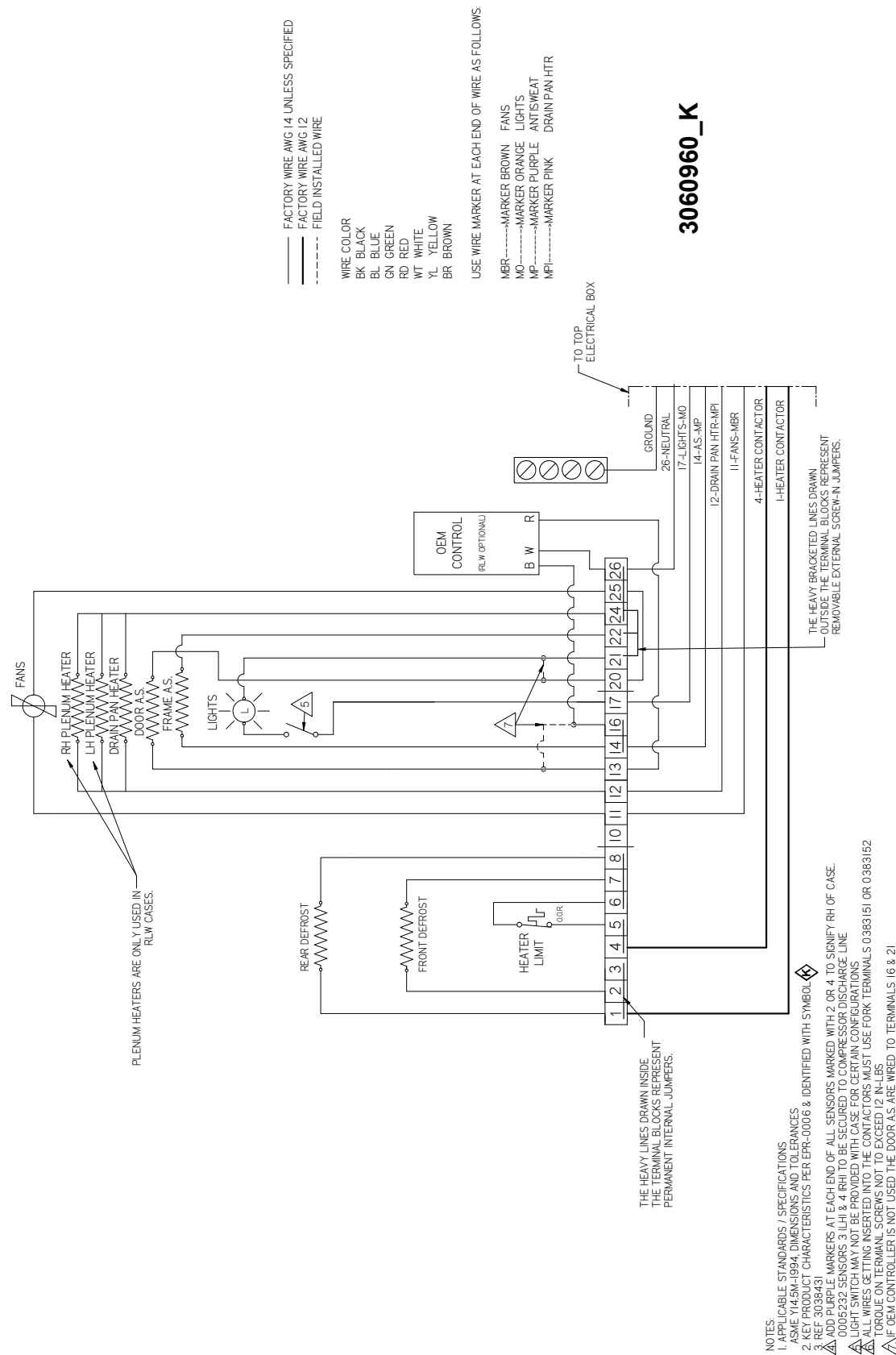
Standard shelf complement for test purposes: (5 per door) 22-inch shelves, evenly distributed vertically

RLNI-W

Frozen Food / Ice Cream

CoreLink Propane

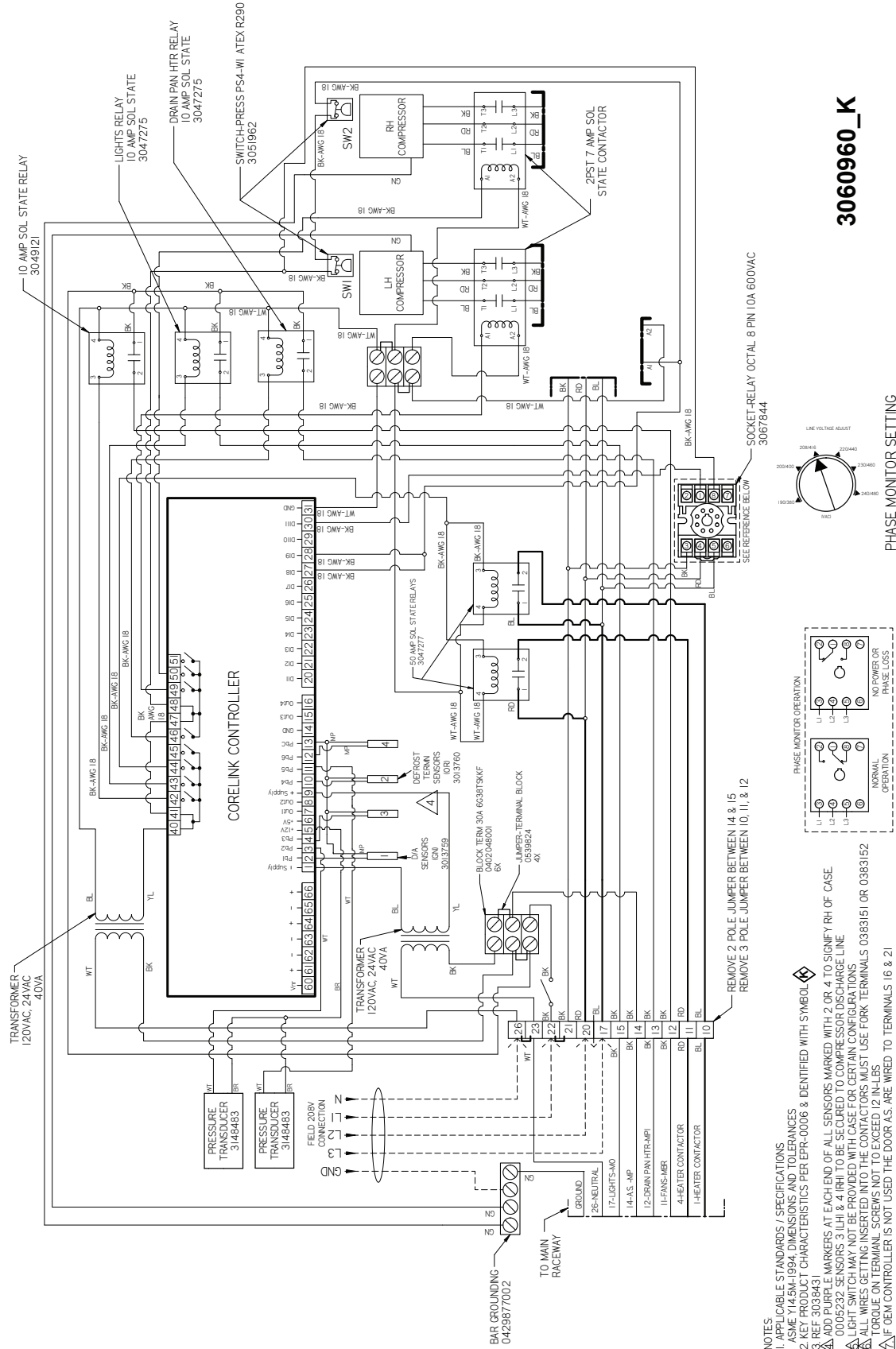
Wiring - 4 Door



CoreLink Propane Wiring - 4 Door

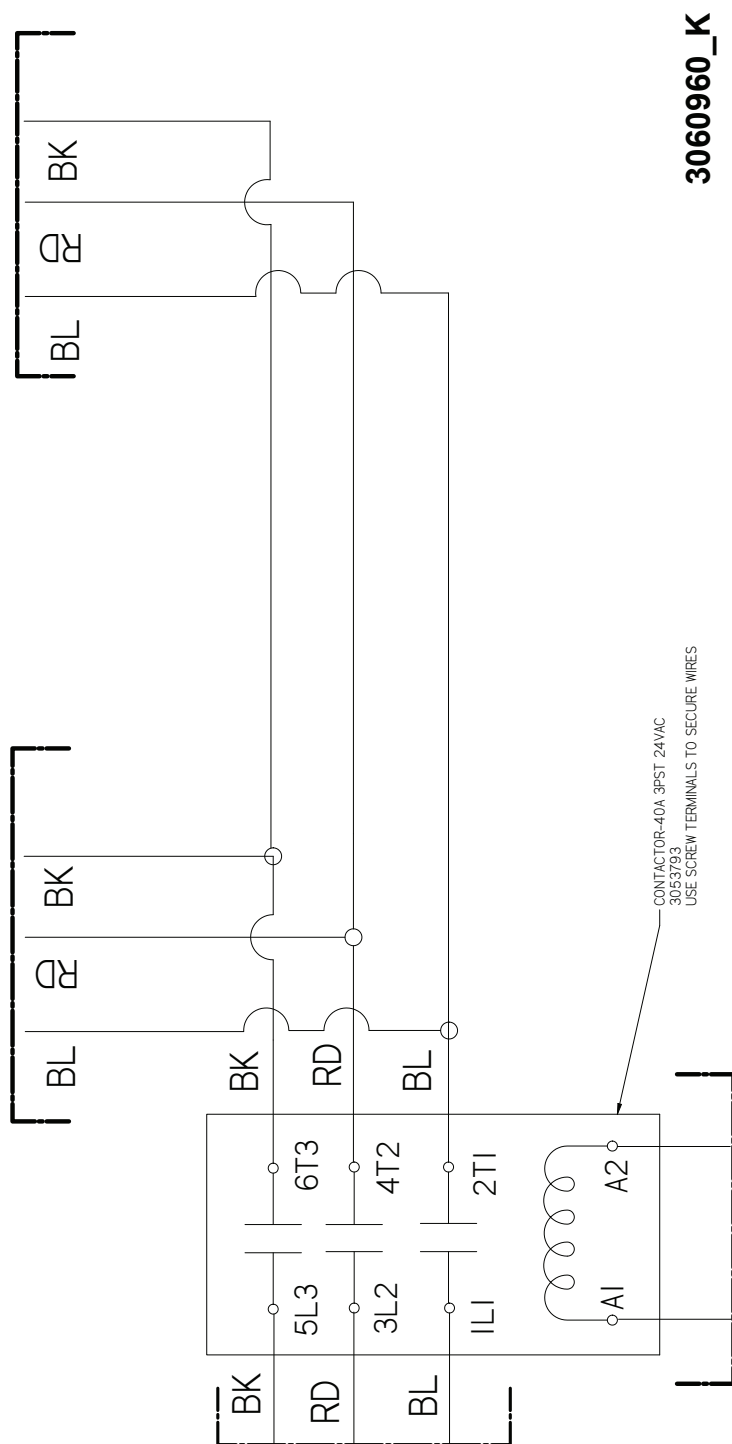
RLNI-W
Frozen Food / Ice Cream

*Wiring diagram is per side -
two circuits are required per case.*



Frozen Food / Ice Cream

CoreLink Propane Wiring - 4 Door



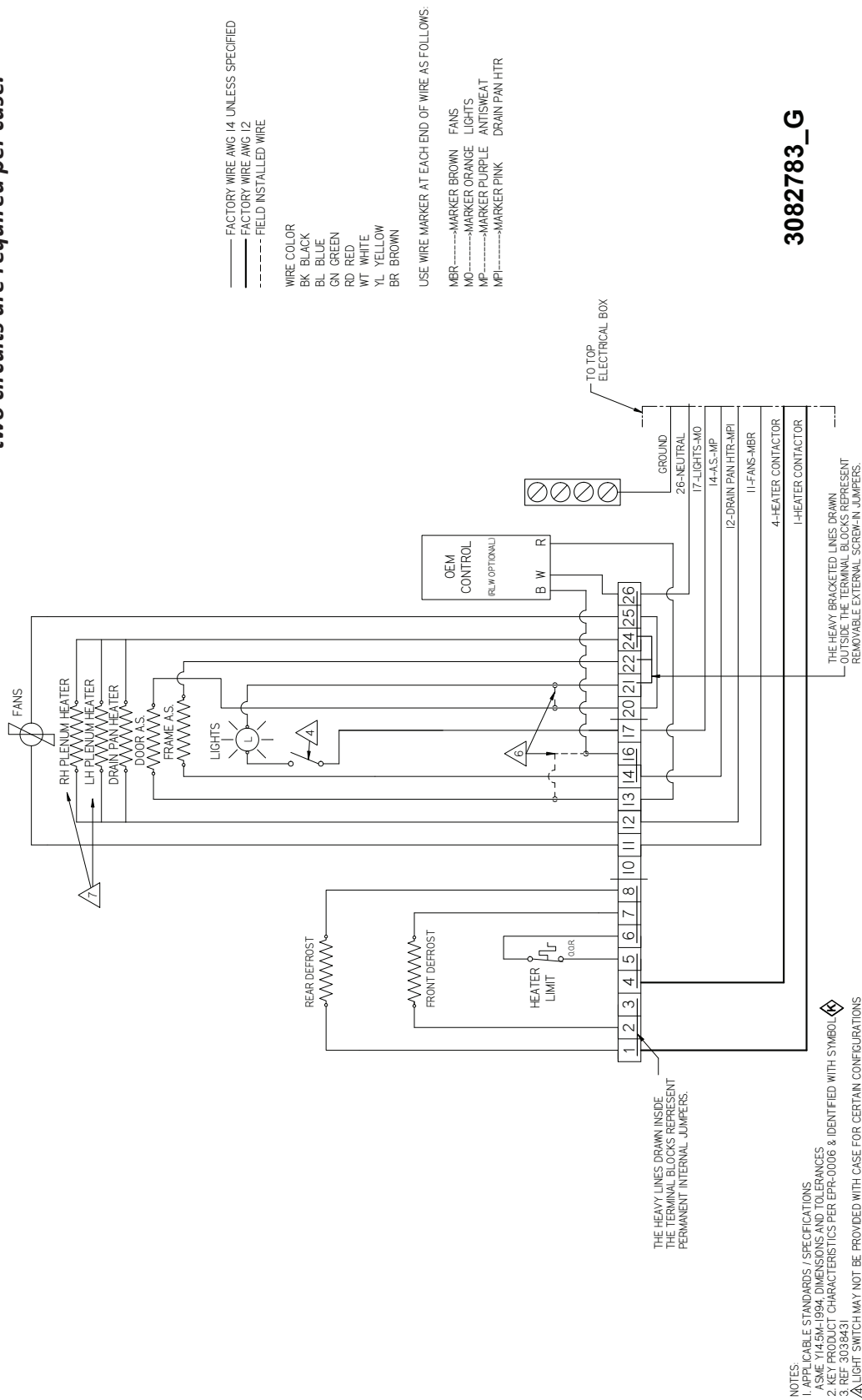
3060960_K

- NOTES
1. APPLICABLE STANDARDS / SPECIFICATIONS
ASME Y14.5M-1994, DIMENSIONS AND TOLERANCES
2. KEY PRODUCT CHARACTERISTICS PER EPR-0006 & IDENTIFIED WITH SYMBOL 
3. REF. 3038431
4. ADD PURPLE MARKERS AT EACH END OF ALL SENSORS MARKED WITH 2 OR 4 TO SIGNIFY RH OF CASE.
5. LIGHT SWITCH MAY NOT BE PROVIDED WITH CASE FOR CERTAIN CONFIGURATIONS.
6. ALL WIRES GETTING INSERTED INTO THE CONTACTORS MUST USE FORK TERMINALS 0383151 OR 0383152 TORQUE ON TERMINAL SCREWS NOT TO EXCEED 12 IN-LBS.
7. IF OEM CONTROLLER IS NOT USED THE DOR A.S. ARE USED FOR TERMINALS 16 & 21.

CoreLink Propane Wiring - 5 Door

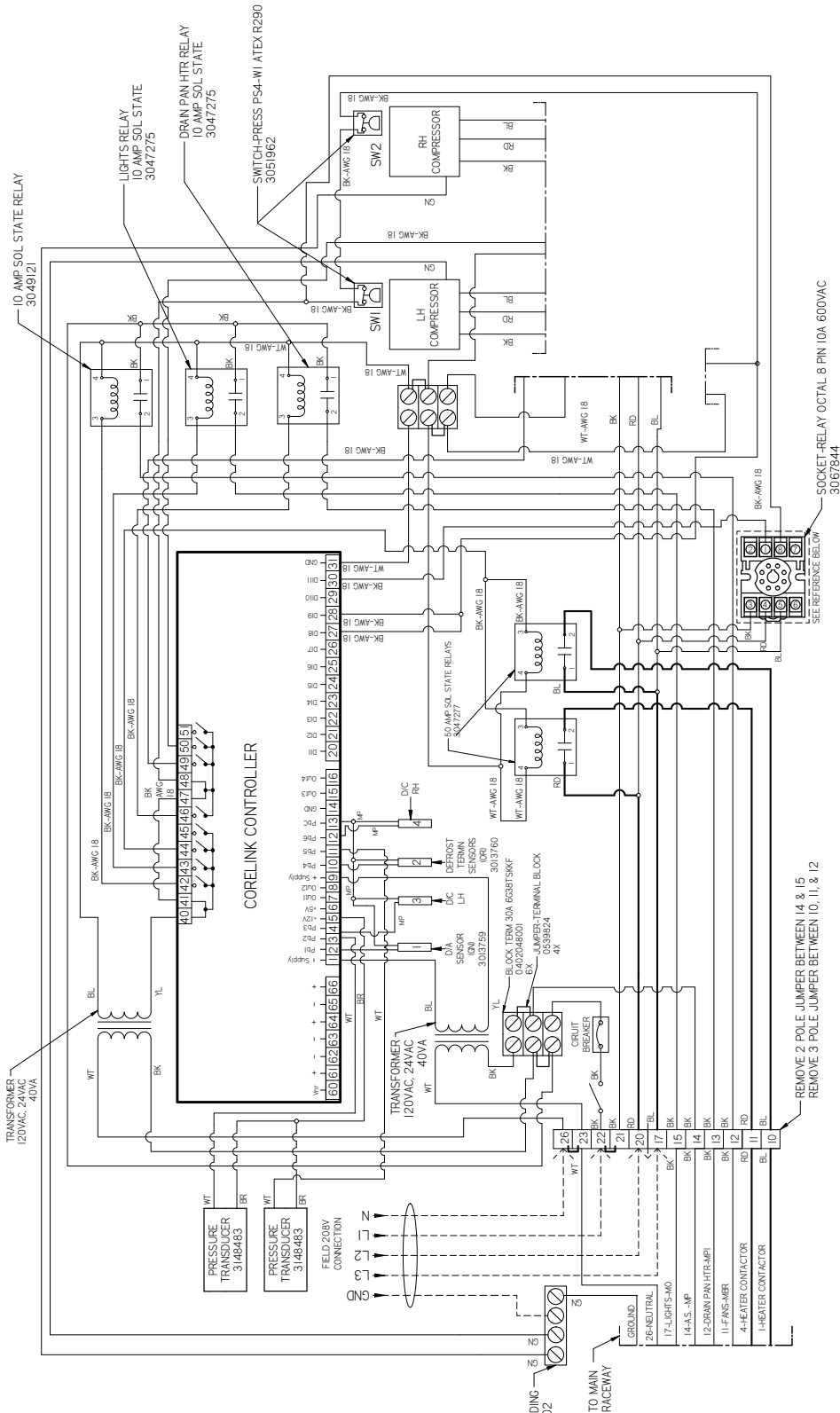
RLNI-W
Frozen Food / Ice Cream

*Wiring diagram is per side -
two circuits are required per case.*

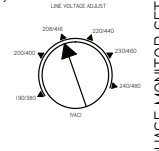


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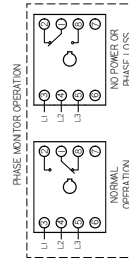
*Wiring diagram is per side -
two circuits are required per case.*



3082783_G



PHASE MONITOR SETTING



- NOTES**
1. APPL CABLE STANDARDS / SPECIFICATIONS
 2. USE 12-3 AWG THHN WIRE FOR ALL WIRING
 3. KEY PRODUCT CHARACTERISTICS PER EPR-0008 & IDENTIFIED WITH SYMBOL
 4. REF 3038431
 5. LIGHT SWITCH MAY NOT BE PROVIDED WITH CASE FOR CERTAIN CONFIGURATIONS
 6. ALL WIRES GETTING INSERTED INTO THE CONTACTORS MUST USE FORK TERMINALS 0383151 OR 0383152
 7. TORQUE ON TERMINAL SCREWS NOT TO EXCEED 12 IN-LBS
 8. IF DEM CONTROLLER IS NOT USED THE DOOR A.S. ARE WIRED TO TERMINALS 16 & 21
 9. PLENUM HEATERS ARE ONLY USED IN RLW CASES

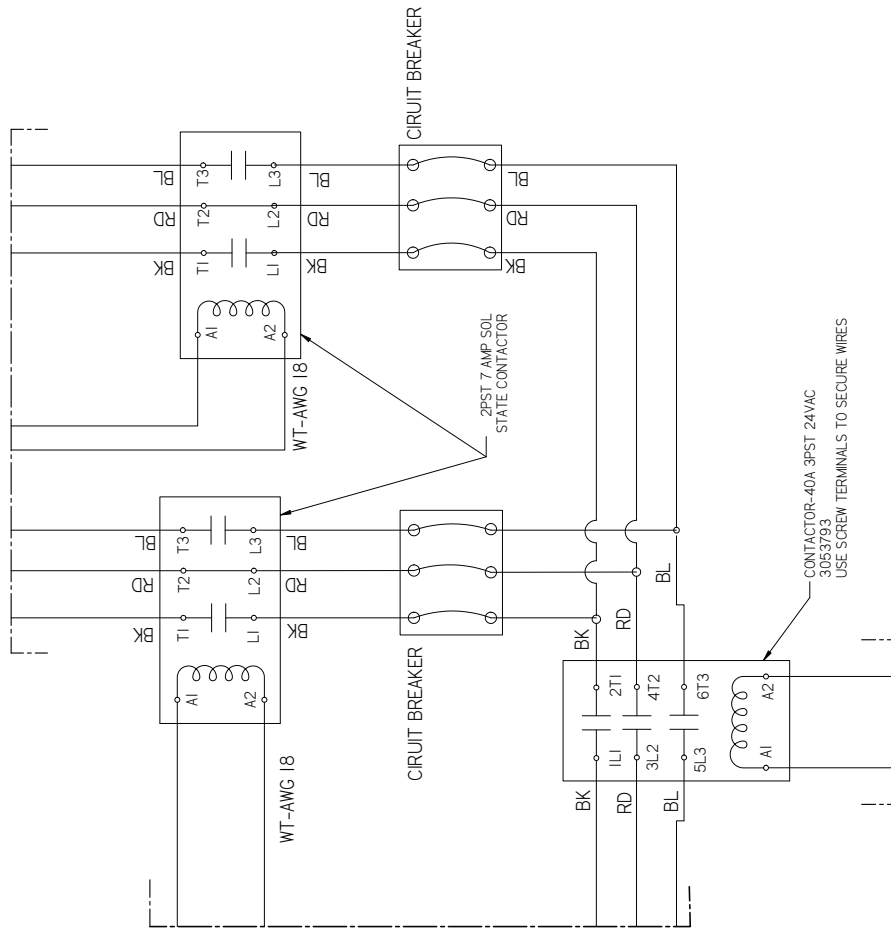
REMOVE 2 POLE JUMPER BETWEEN 14 & 15
REMOVE 3 POLE JUMPER BETWEEN 10, 11 & 12

CoreLink Propane Wiring - 5 Door

RLNI-W
Frozen Food / Ice Cream

3082783_G

*Wiring diagram is per side -
two circuits are required per case.*



- NOTES:
1. APPLICABLE STANDARDS / SPECIFICATIONS
 2. ASME Y14.5M-1994 DIMENSIONS AND TOLERANCES
 3. KEY PRODUCT CHARACTERISTICS PER EPR-0006 & IDENTIFIED WITH SYMBOL
 4. REF 3038431
 5. ALL LIGHT SWITCHES MAY NOT BE PROVIDED WITH CASE FOR CERTAIN CONFIGURATIONS
 6. ALL WIRES GETTING INSERTED INTO THE CONTACTORS MUST USE FORK TERMINALS 0383152
 7. TORQUE ON TERMINAL SCREWS NOT TO EXCEED 12 IN.-LBS.
 8. IF OEM CONTROLLER IS NOT USED THE DOOR A.S. ARE WIRED TO TERMINALS 16 & 21
 9. ALUMINUM HEATERS ARE ONLY USED IN RLW CASES

RLNI-W

Frozen Food / Ice Cream



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

Call toll free: 1.855.487.7778

Revision History

Revision A: February 2019: Original Issue

Revision B: February 2020: Updated ISO, refrigeration data, electrical data, wiring diagrams and top views, and removed replace parts page.

Revision C: June 2020: Updated electrical data on page 6.

Revision D: April 2022: Updated wiring diagrams.