

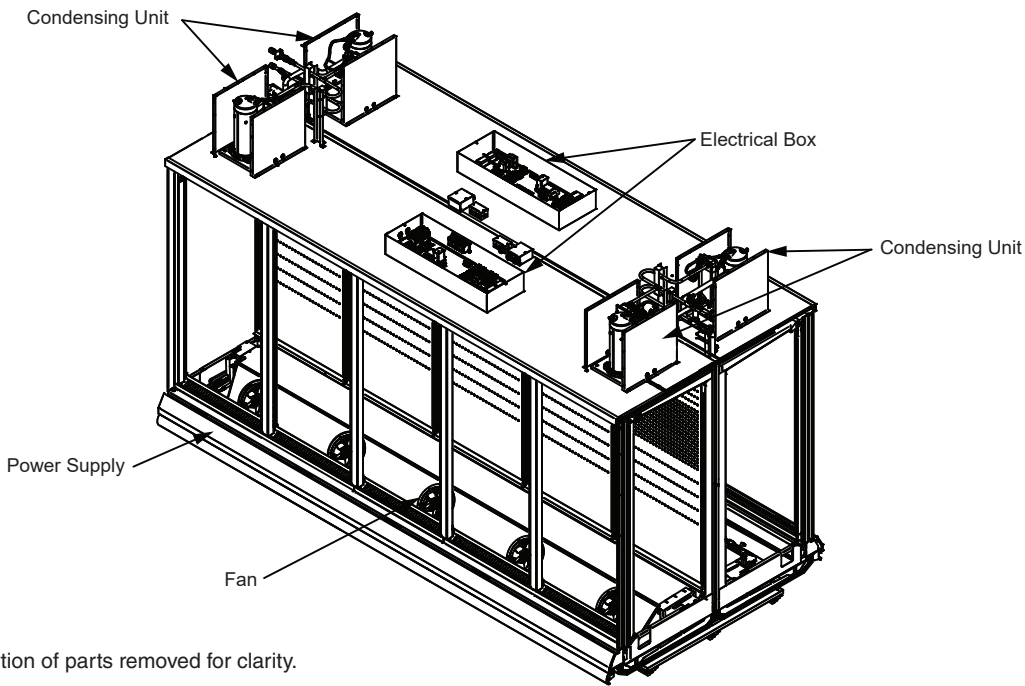
# HUSSMANN®

# microDS™

**RLNI-W**  
**INNOVATOR Doors or**  
**INNOVATOR II Doors**  
**Water-cooled**  
**Self-Contained**  
**R290 (Propane)**  
**Merchandise Data Sheet**  
**P/N 3086860\_B**  
**UL EPH® Certified**

January 2020

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



Portion of parts removed for clarity.  
5-door merchandiser shown.

**DOE 2017**  
**Energy Efficiency**  
**Compliant**



### UL EPH Certification

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

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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 <sup>1</sup>

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 <sup>3</sup>	1.2 lb/dr/day (0.5 kg/m)

<sup>3</sup> (± 15% based on case configuration and product loading).

### RLNI-W

#### Cooling Water Pressure Drop <sup>4</sup>

	PSI
4 Dr	5
5 Dr	5

#### Cooling Water Design TD

10°F

<sup>4</sup> 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) <sup>5</sup>

	GPM	LPM
4 Dr	2.5	9.5
5 Dr	3.0	11.4

#### Charge per unit <sup>6</sup>

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

<sup>5</sup> Separate water connections (inlet and outlet) are required for each side.

<sup>5</sup> 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).

<sup>6</sup> Maximum R290 charge per condensing unit = 150 g.

<sup>6</sup> 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 <sup>7</sup> (Cu Ft/Dr)	22.80 ft <sup>3</sup> /dr (0.65 m <sup>3</sup> /dr)
AHRI Total Display Area <sup>8</sup> (Sq Ft/Dr)	13.04 ft <sup>2</sup> /dr (1.21 m <sup>2</sup> /dr)
Shelf Area <sup>9</sup> (Sq Ft/Dr)	28.50 ft <sup>2</sup> /dr (2.65 m <sup>2</sup> /dr)

<sup>7</sup> AHRI Gross Refrigerated Volume: Refrigerated Volume/Unit of Length, ft<sup>3</sup>/dr [m<sup>3</sup>/dr]

<sup>8</sup> Computed using AHRI 1200 standard methodology: Total Display Area, ft<sup>2</sup> [m<sup>2</sup>]/Unit of Length, door

<sup>9</sup> 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 R290 Propane

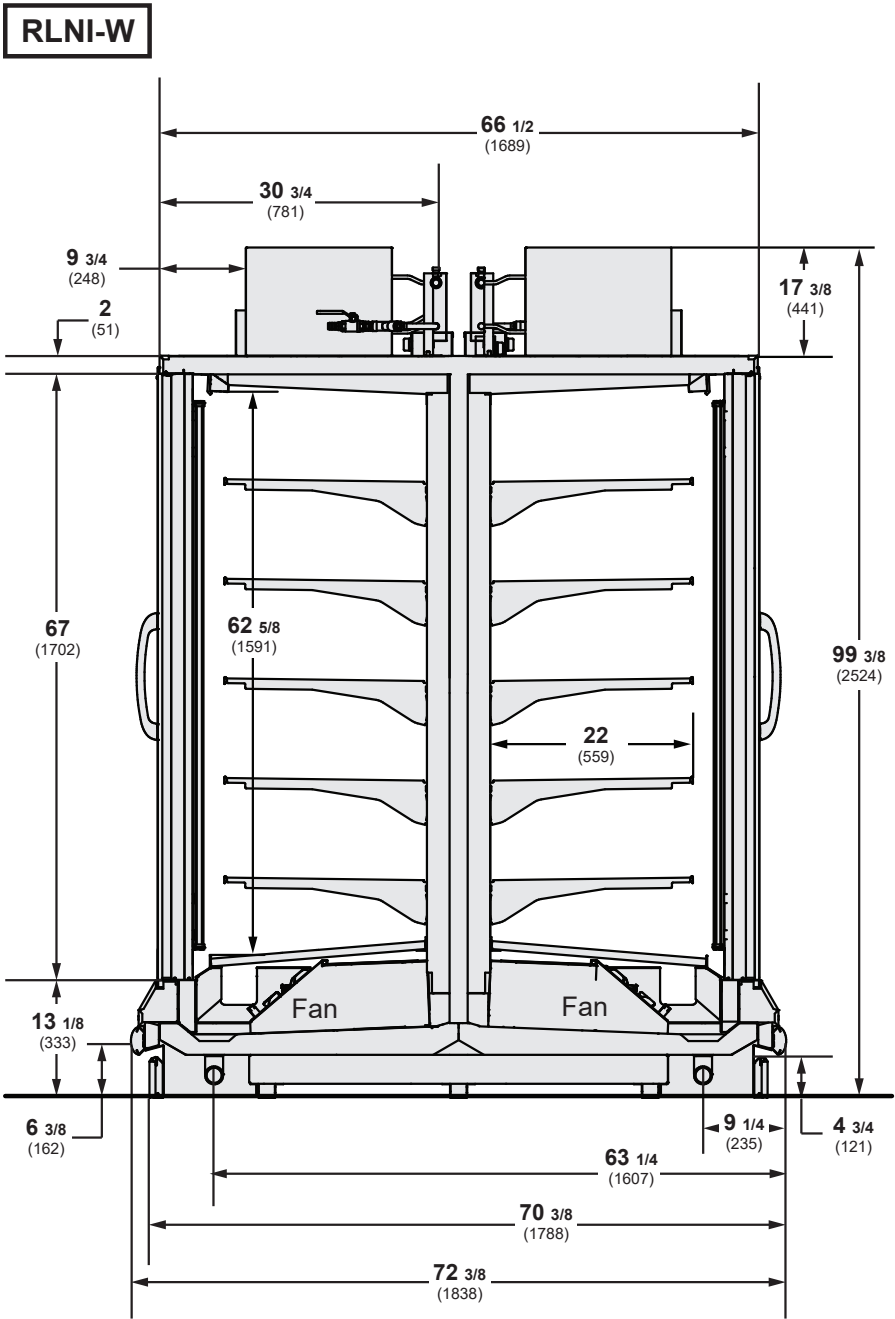
**RLNI-W**  
Frozen Food / Ice Cream

**DOE 2017**  
Energy Efficiency  
Compliant

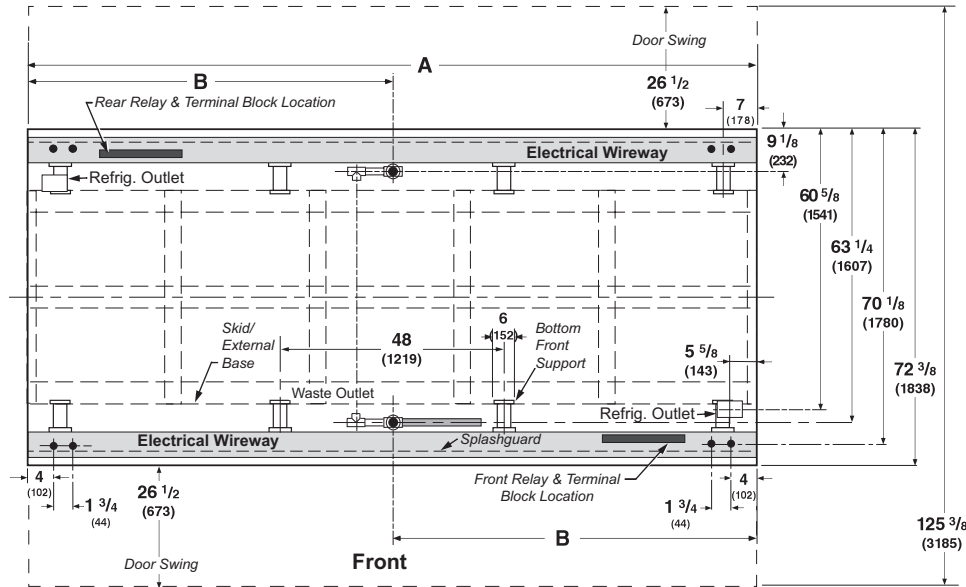
Husmann refrigerated merchandisers configured for sale for use in the United States meet or surpass the requirements of the DOE 2017 energy efficiency standards.

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).



Dimensions shown as in. and (mm).



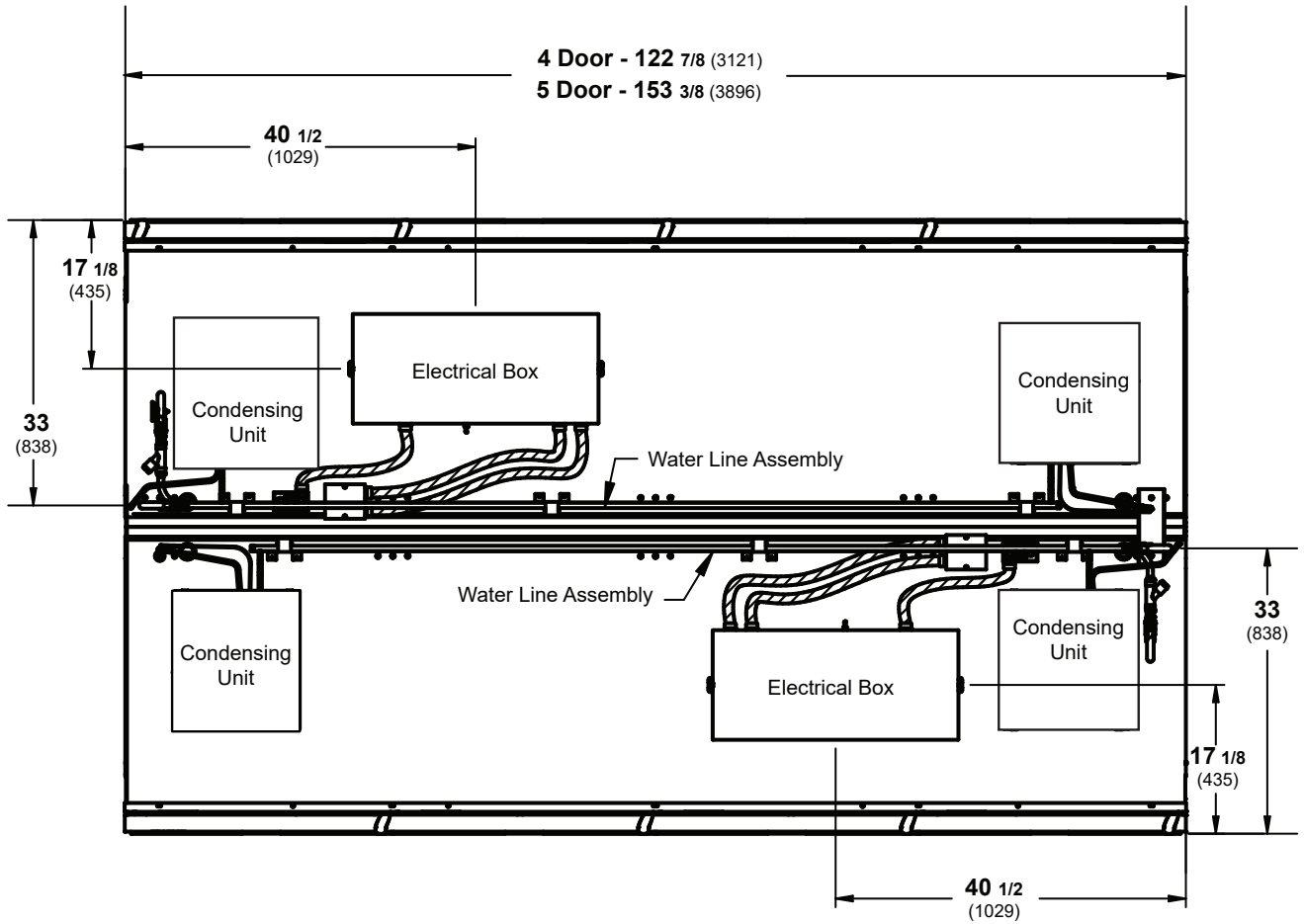
(5 Door Model shown above)

	4 Dr	5 Dr
<b>General</b>		
(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)
<b>Electrical Service</b> (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)
<b>Waste Outlets</b> (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)
<b>Water Seal</b>		
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 IS PER SIDE — TWO CIRCUITS REQUIRED PER CASE

## Electrical Data

### Number of Fans

8.25-in.

4 Dr	5 Dr
4	5

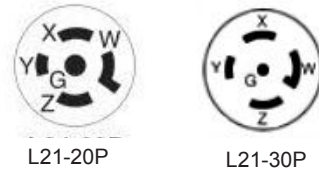
	Amperes		Watts	
	4 Dr	5 Dr	4 Dr	5 Dr
<b>Energy Efficient Evaporator Fan</b>				
120V 50/60Hz Innovator	1.20	1.50	72	90
120V 50/60Hz Innovator III	1.20	1.50	72	90
<b>Door Anti-Sweat Heaters (on fan circuit)</b>				
120V 50/60Hz Innovator	3.00	3.80	364	455
120V 50/60Hz Innovator III	1.70	2.20	208	260
<b>Frame Anti-Sweat Heaters (on fan circuit)</b>				
120V 50/60Hz Innovator	1.57	1.97	188	236
120V 50/60Hz Innovator III	1.57	1.97	188	236

### Condensing Unit (120V, 1 ph, 60 Hz) Standard

NOTE: One compressor can start at a time.

	4 Dr	5 Dr
Compressor RLA	11.2	11.9
Compressor LRA	58/unit	58/unit

### NEMA Plug



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

	4 Dr	5 Dr
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.

### Defrost

	4 Dr	5 Dr	4 Dr	5 Dr
120V Drain Heaters	2.00	2.57	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.

### STANDARD LIGHTING

#### EcoShine II

	4 Dr	5 Dr	4 Dr	5 Dr
120V	0.72	0.90	86	108

### OPTIONAL LIGHTING

#### GE Illumination

	4 Dr	5 Dr	4 Dr	5 Dr
120V	0.60	0.75	72	90

**ENDS or PARTITIONS**  
Each standard end, each insulated partition, view end adds 2 <sup>3</sup>/<sub>8</sub> in. (60 mm) to case line up.

**PHYSICAL DATA**  
Merchandiser Drip Pipe (in.) 1 <sup>1</sup>/<sub>4</sub>  
Schedule 40 PVC

**ESTIMATED SHIPPING WEIGHT †**

Case	<i>4 Dr</i>	<i>5 Dr</i>	Solid End (each)
<b>lb (kg)</b>	3190 (1538)	3748 (1790)	110 (50)

† Actual weights will vary according to optional kits included.  
\*\*NOTE: Case joint add approximately <sup>1</sup>/<sub>8</sub> 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

With INNOVATOR or INNOVATOR II Doors  
Low Temperature

# CoreLink Propane Wiring - 4 Door

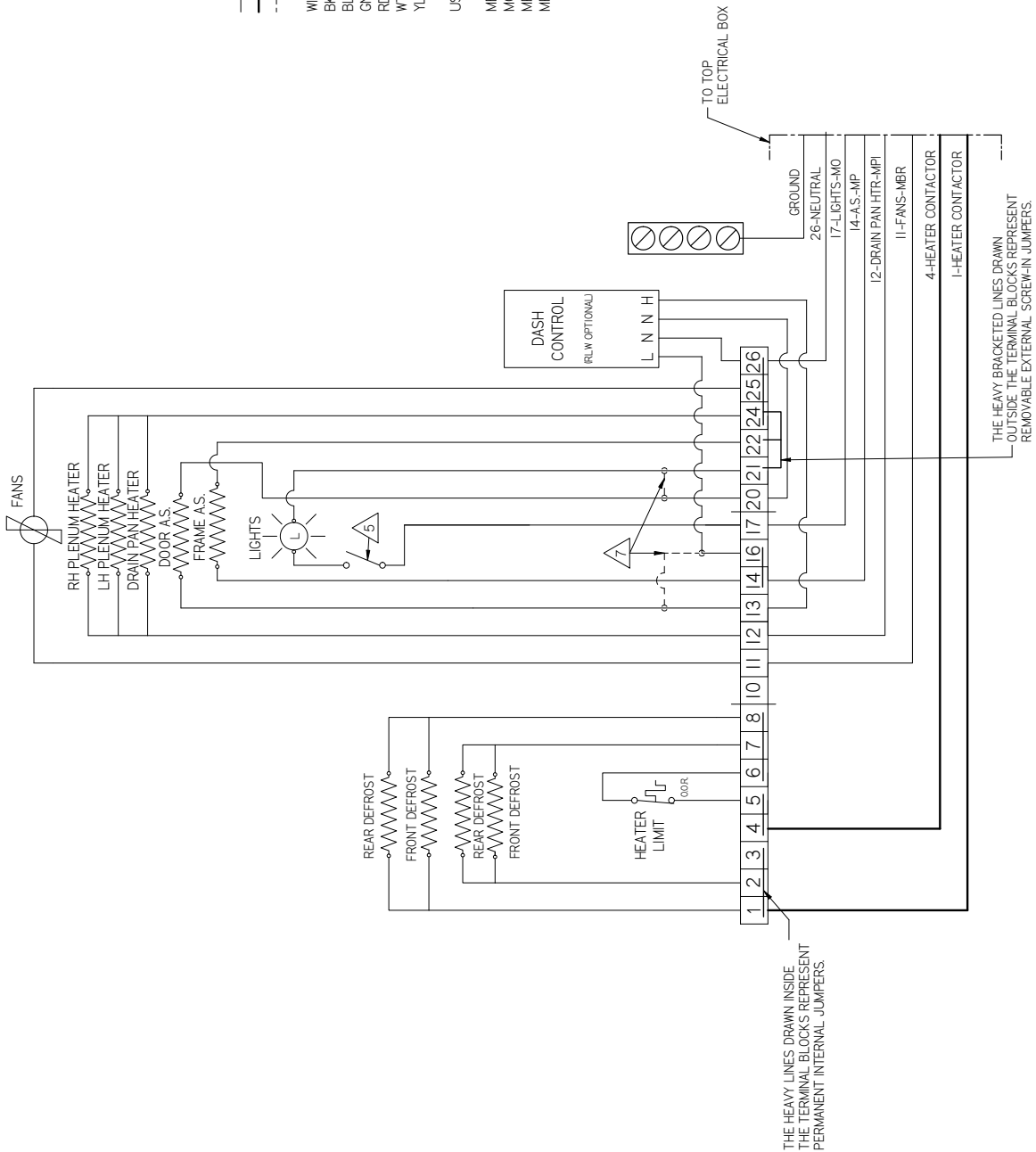
— FACTORY WIRE AWG 14 UNLESS SPECIFIED  
 — FACTORY WIRE AWG 12  
 - - - FIELD INSTALLED WIRE

WIRE COLOR  
 BK BLACK  
 BL BLUE  
 GN GREEN  
 RD RED  
 WT WHITE  
 YL YELLOW

USE WIRE MARKER AT EACH END OF WIRE AS FOLLOWS.

MBR-----MARKER BROWN FANS  
 MO-----MARKER ORANGE LIGHTS  
 MP-----MARKER PURPLE ANTISWEAT  
 MPI-----MARKER PINK DRAIN PAN HTR

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THE HEAVY LINES DRAWN INSIDE  
 THE TERMINAL BLOCKS REPRESENT  
 PERMANENT INTERNAL JUMPERS.

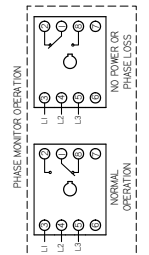
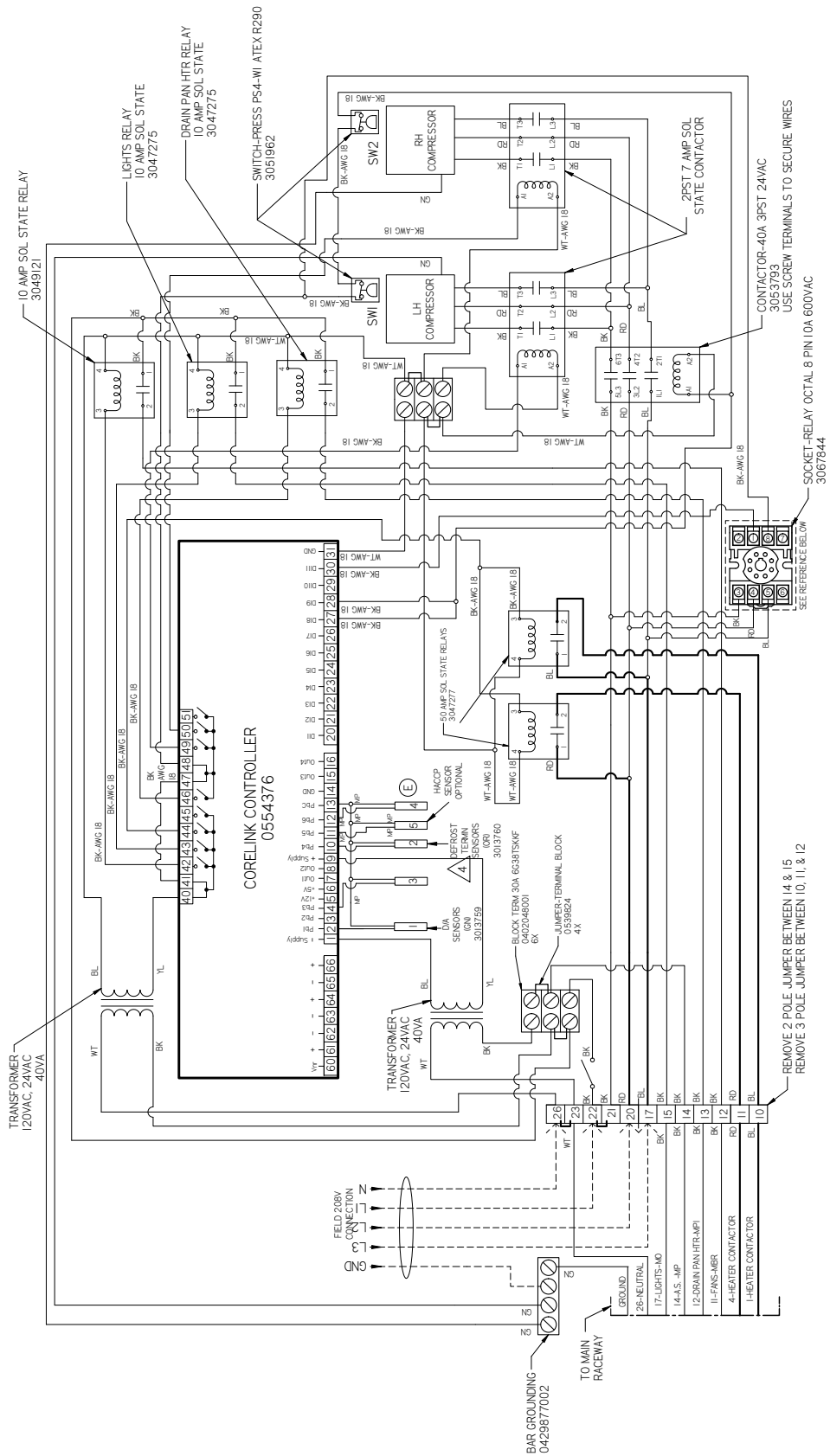
THE HEAVY BRACKETED LINES DRAWN  
 OUTSIDE THE TERMINAL BLOCKS REPRESENT  
 REMOVABLE EXTERNAL SCREW-IN JUMPERS.



# CoreLink Propane Wiring - 4 Door

# RLNI-W With INNOVATOR or INNOVATOR II Doors Low Temperature

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



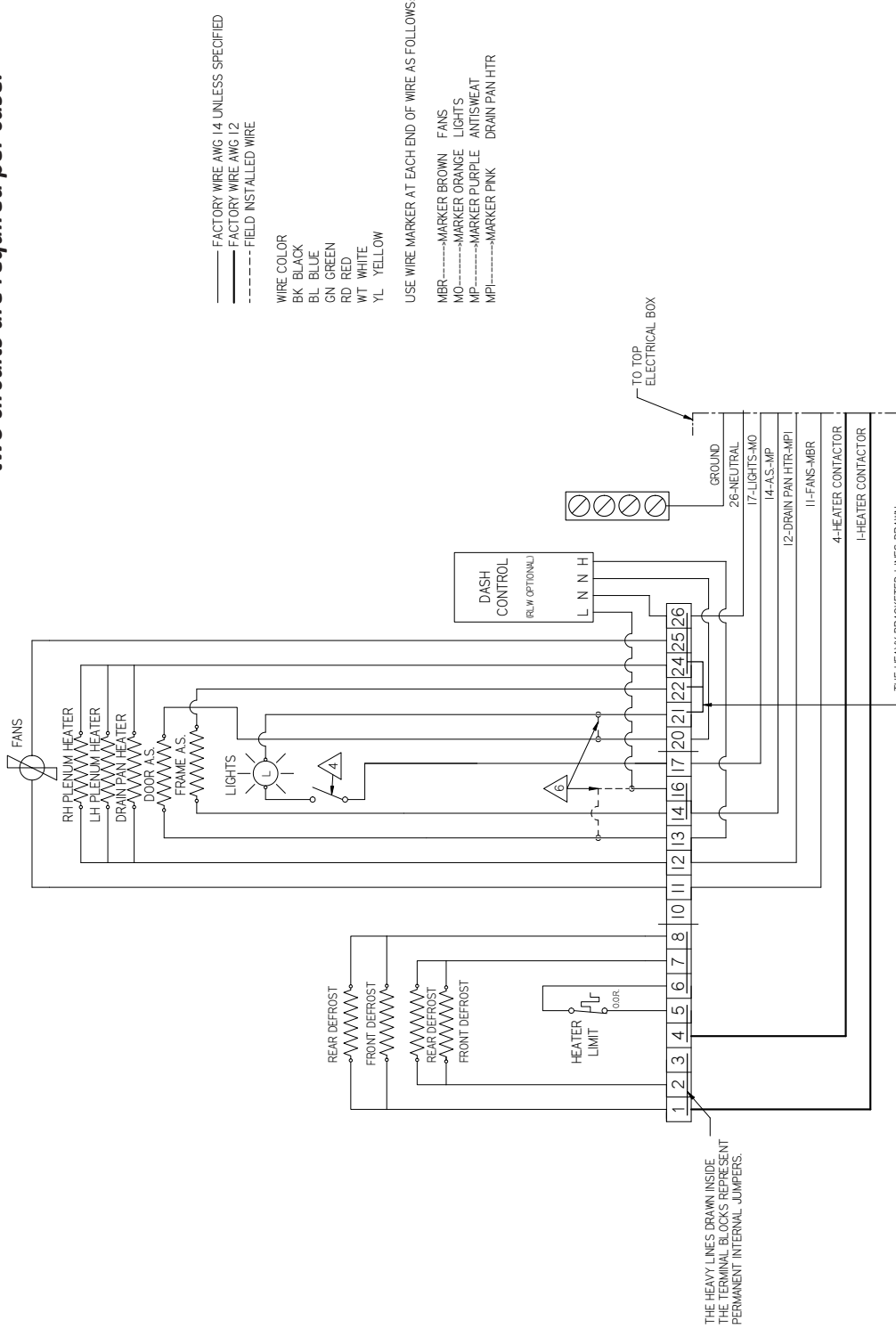
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# RLNI-W

Frozen Food / Ice Cream

# CoreLink Propane Wiring - 5 Door

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



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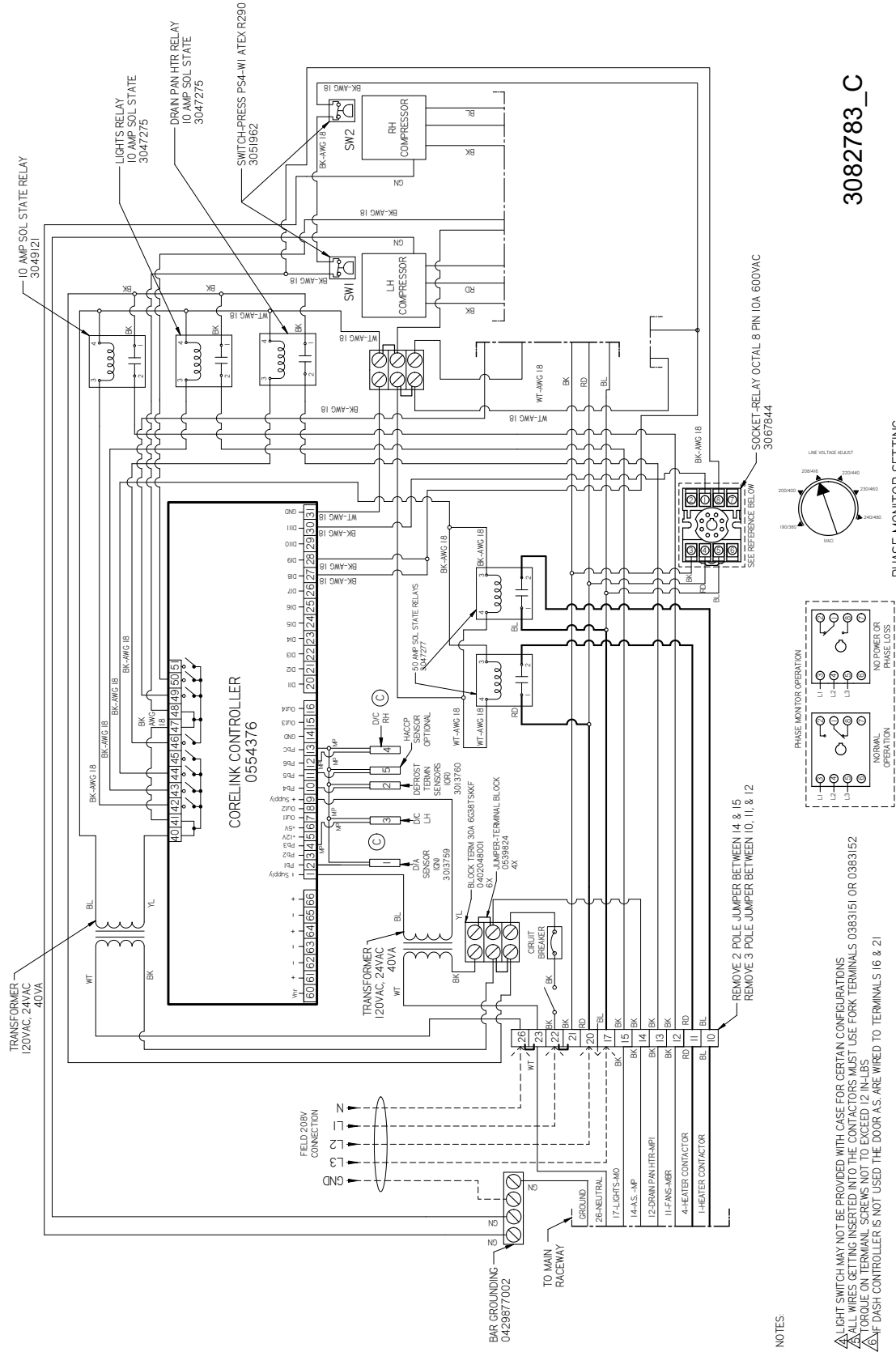
**NOTES:**

- 1 LIGHT SWITCH MAY NOT BE PROVIDED WITH CASE FOR CERTAIN CONFIGURATIONS
- 2 ALL WIRES GETTING INSERTED INTO THE CONTACTORS MUST USE FORK TERMINALS 0383151 OR 0383152
- 3 TORQUE ON TERMINAL SCREWS NOT TO EXCEED 12 IN-LBS
- 4 DASH CONTROLLER IS NOT USED THE DOOR AS ARE WIRED TO 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.*

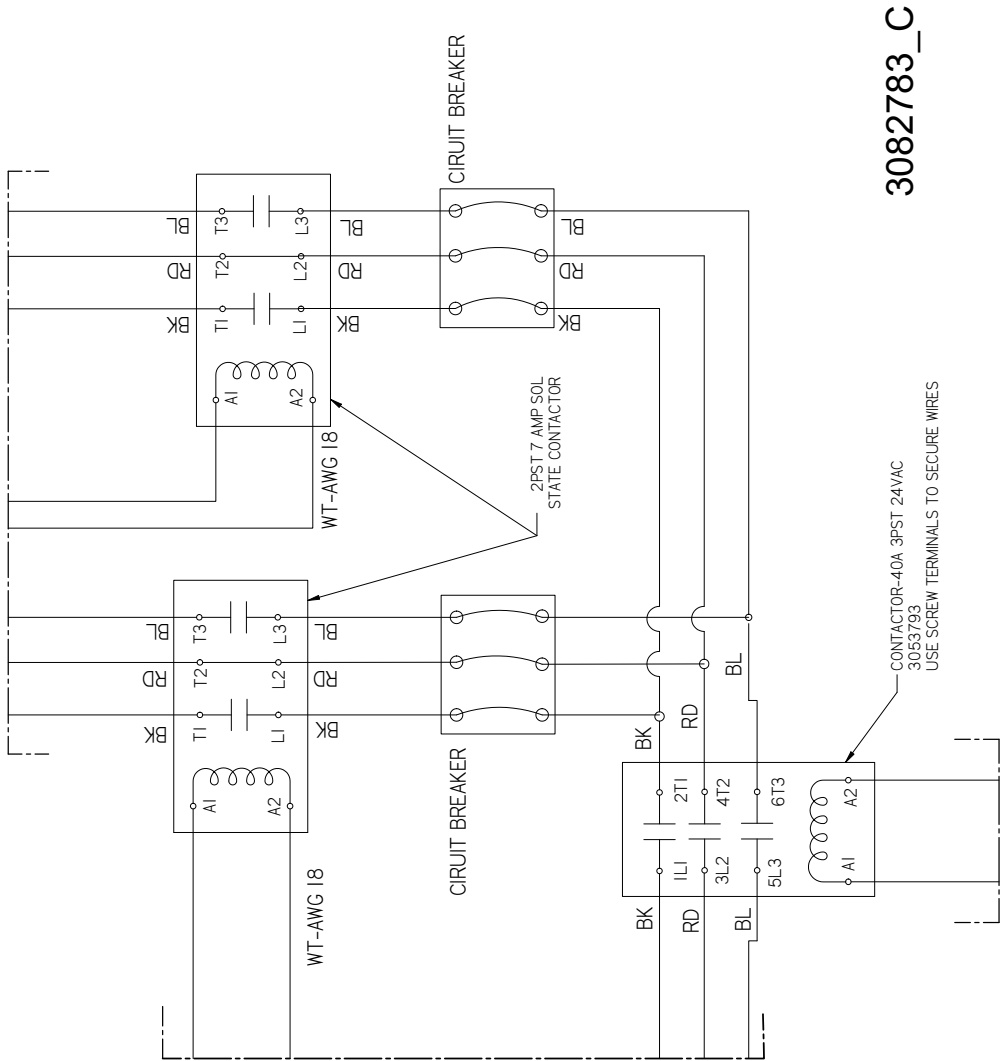


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**RLNI-W**  
Frozen Food / Ice Cream

**CoreLink Propane**  
Wiring - 5 Door

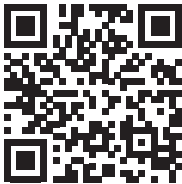
*Wiring diagram is per side -  
two circuits are required per case.*



3082783\_C

CONTACTOR-40A 3PST 24VAC  
3053793  
USE SCREW TERMINALS TO SECURE WIRES

- NOTES:
- ▲ LIGHT SWITCH MAY NOT BE PROVIDED WITH CASE FOR CERTAIN CONFIGURATIONS
  - ▲ ALL WIRES GETTING INSERTED INTO THE CONTACTORS MUST USE FORK TERMINALS 0383151 OR 0383152
  - ▲ TORQUE ON TERMINAL SCREWS NOT TO EXCEED 12 IN-LBS
  - ▲ IF DASH CONTROLLER IS NOT USED THE DOOR AS ARE WIRED TO TERMINALS 16 & 21



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**

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## Revision History

Revision A: February 2019: Original Issue

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