

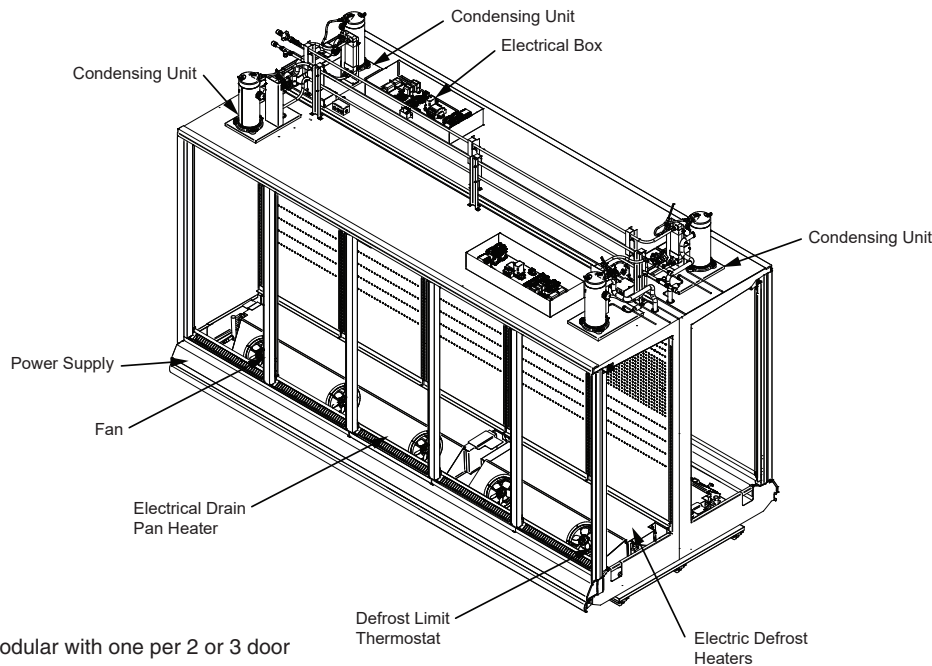
HUSSMANN®

microDS™

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

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

February 2019



*Coils are modular with one per 2 or 3 door section.

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.

Performance Data	Page 2	Estimated Shipping Weights	Page 7
Product Data (AHRI Statistics)	Page 2	Shelf Options	Page 7
Cross Section	Page 3	Replacement Parts List	Page 8
Plan View	Page 4	Wiring Diagrams	Page 9
Electrical Loads	Page 6	Revision History	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

With INNOVATOR or INNOVATOR II Doors
Low Temperature

Refrigeration Data ¹

RLNI-W		Optimal Shelf Life	
Application		Frozen Food (FF)	Ice Cream (IC)
Temperature	Discharge Air °F (°C)	-3 (-19.4)	-10 (-23.3)
Fan Speed	RLNI-W RPM	1550	1550

Notes:

- 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.
- Water supply design conditions 41 to 118°F (5 to 48°C).

Compressor Data (per side)

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

RLNI-W

Cooling Water Pressure Drop ⁴

	PSI
4 Dr	5.0
5 Dr	5.0

RLNI-W

Glycol/Water Flow Rate (per side) ⁵

	GPM	LPM
4 Dr	2.5	9.5
5 Dr	3.0	11.4

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.

Charge per unit ⁶

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

Defrost Data

Frequency (hours between defrost) 24

	RLNI-W
Time (minutes)	45
Failsafe 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).

Product Data (per side)

Gross Refrigerated Volume ⁷ (Cu Ft/Ft)	22.80 ft ³ /dr (0.65 m ³ /m)
AHRI Total Display Area ⁸ (Sq Ft/Ft)	13.04 ft ² /dr (1.21 m ² /m)
Shelf Area ⁹ (Sq Ft/Ft)	28.50 ft ² /dr (2.65 m ² /m)

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

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

⁹ Shelf surface area is composed of bottom deck plus standard shelf complement for this model: (5 per door) 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
With INNOVATOR or INNOVATOR II Doors
Low Temperature

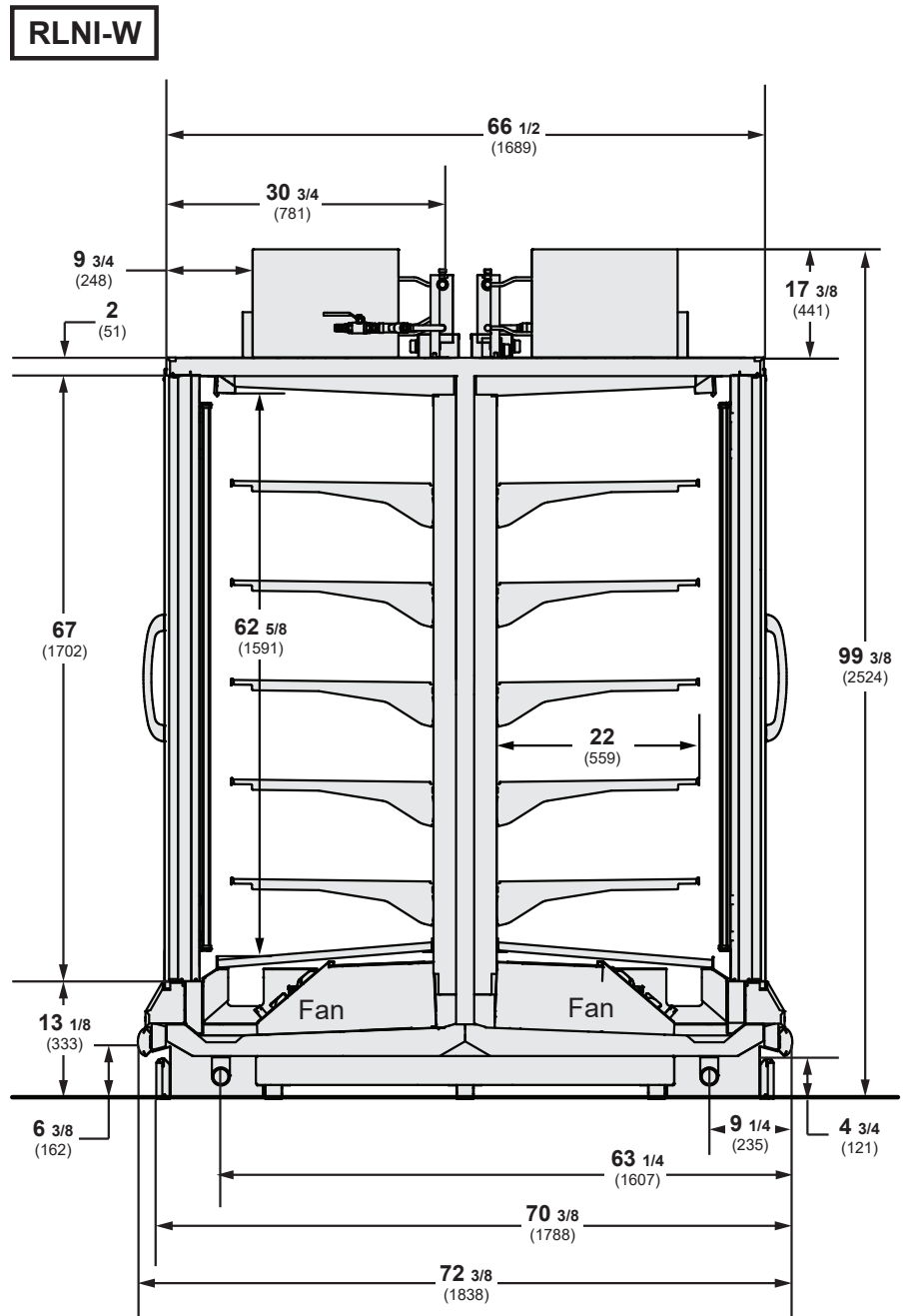
DOE 2017
Energy Efficiency
Compliant

Hussmann 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).



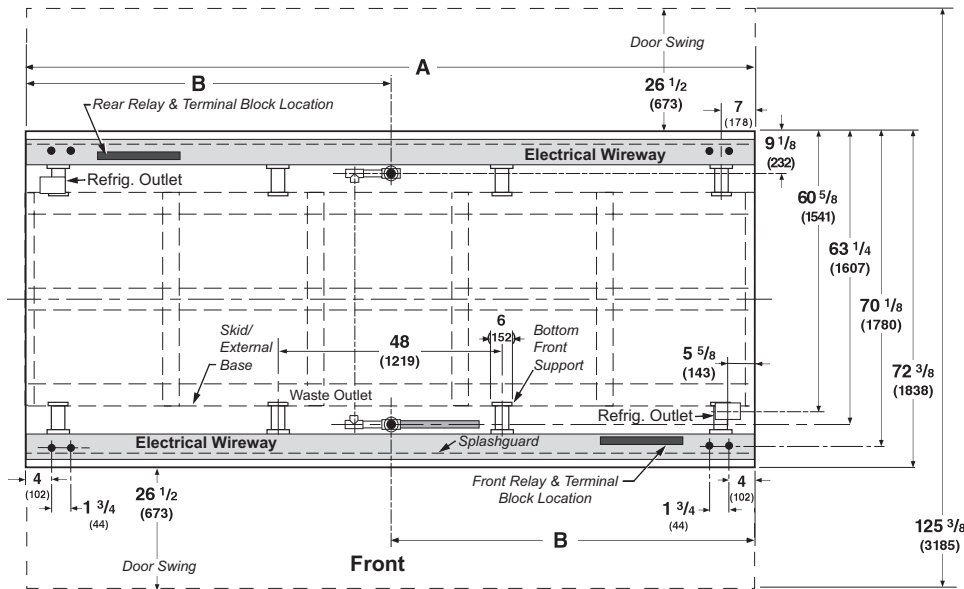
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Engineering Plan View

**RLNI-W
4 & 5 Door**

Dimensions shown as in. and (mm).



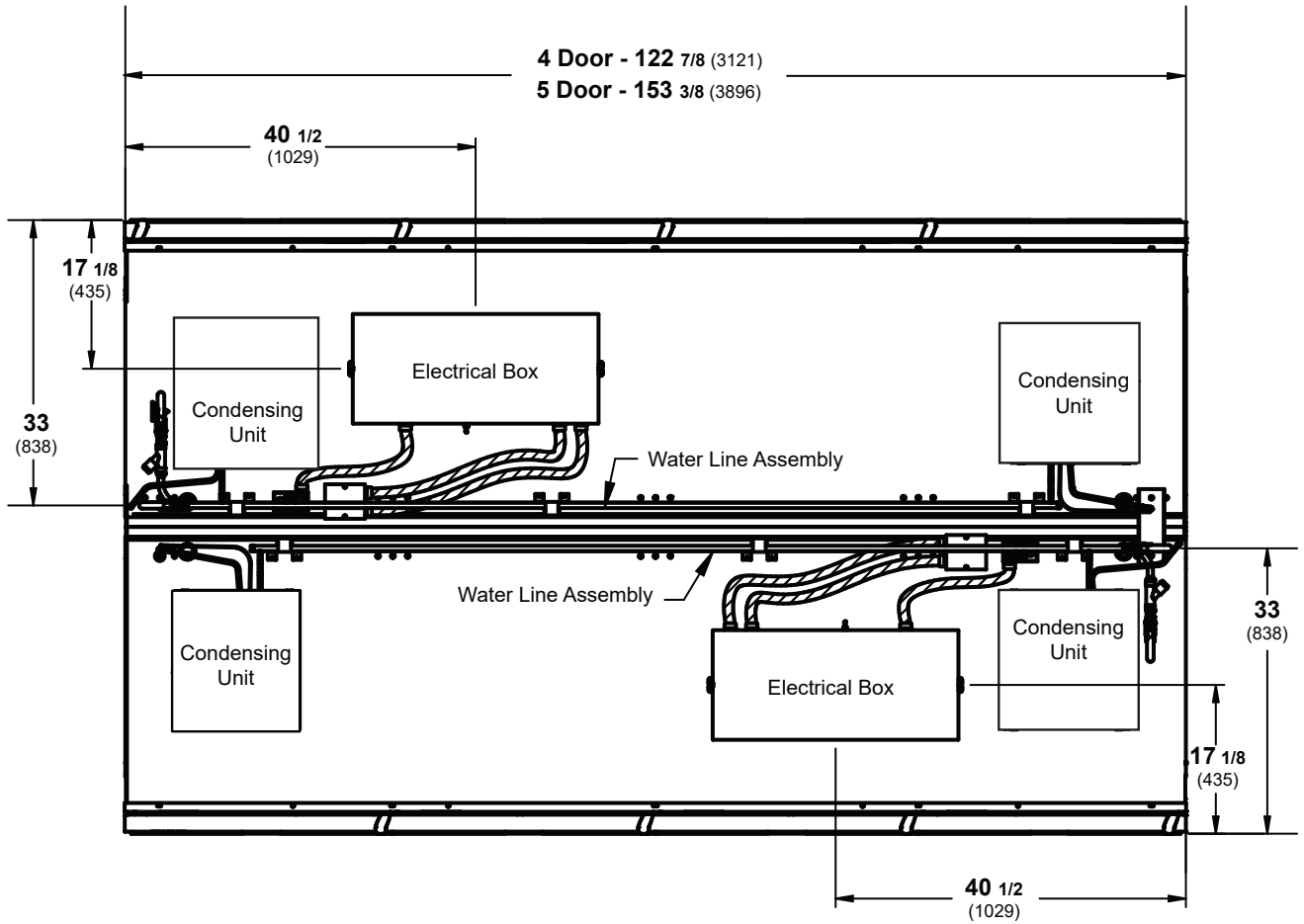
(5 Door Model shown above)

	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 <i>*NOTE: Electrical Wiring Connection point is at terminal.)</i>	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 <i>**NOTE: Field installed water seal outlets, tees, and connectors are shipped with case.</i>	13 (330)	13 (330)

Engineering Plan View

RLNI-W
With INNOVATOR or INNOVATOR II Doors
Low Temperature

RLNI-W Top Views



RLNI-W

RLNI-W

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Low Temperature

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
Energy Efficient Evaporator Fan						
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)						
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)						
120V 50/60Hz Innovator	1.57	1.97	188	236		
120V 50/60Hz Innovator III	1.57	1.97	188	236		
Defrost						
120V Drain Heaters	2.00	2.57	240	300		
208V Electric Defrost	13.46	16.82	2800	3500		

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

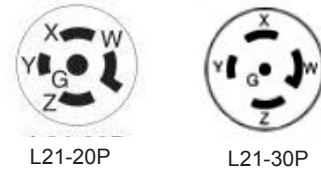
NOTE: One compressor can start at a time.

	4 Dr	5 Dr
Compressor RLA	9.2	9.2
Compressor LRA	58/unit	58/unit

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

	4 Dr	5 Dr
Total Amps	15.7	17.3
MCA	17.6	21.0
Maximum Over Current Protection	20	30

NEMA Plug



Optional Electrical Plug - NEMA

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

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 LIGHTING

	4 Dr	5 Dr	4 Dr	5 Dr
EcoShine II				
120V	0.72	0.90	86	108
220V Export	0.39	0.49	86	108

OPTIONAL LIGHTING

	4 Dr	5 Dr	4 Dr	5 Dr
GE Illumination				
120V	0.60	0.75	72	90
220V Export	0.33	0.41	72	90

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

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

ESTIMATED SHIPPING WEIGHT †

Case	<i>4 Dr</i>	<i>5 Dr</i>	Solid End <i>(each)</i>
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

With INNOVATOR or INNOVATOR II Doors
Low Temperature

Replacement Parts List

Part #	Description	Part #	Description
FAN ASSEMBLIES		CORELINK CONTROL	
4 Dr		0554376	CoreLink Controller
Standard HE Fan Assembly		3017903	XEV20D Expansion Board
0529672	Fan Assembly	3013759	Discharge Air Sensor
0527610	Fan Motor	3013760	Defrost Termination
0461805	Fan Blade	3047275	Fan / Light Relay
0344662	Defrost Limit Thermostat	0005226	Compressor Discharge Sensor
		3051962	Pressure Switch
LED FIXTURES AND POWER SUPPLY		REFRIGERATION SYSTEM	
0499399	Power Supply	3061753	Capillary Tube 4 & 5 Door
	LED Fixture	3036087	Compressor 4 & 5 Door
	<i>Replace with like fixtures.</i>	0530462	Filter/drier
		3026481	Heat Exchanger
COILS		WATER LINE	
0530400	4 Door	0527748	Strainer, Water
0530429	5 Door	0527742	Balancing Valve (Adjustable)
HONEYCOMB - WHITE		3065648	4 Door Auto-Balancing Valve 2.5 GPM (Optional)
0495287	4 Door	3081748	5 Door Auto-Balancing Valve 3.0 GPM (Optional)
0495262	5 Door	HEATERS	
RELAYS		3020841	Electric Defrost Heaters, 208V, (Front & Rear) 4 Door
3048148	Compressor Relay	3020842	Electric Defrost Heater, 208V, (Front & Rear) 5 Door
3047277	4 & 5 Door Defrost Relay	0387038	Drain Pan Heater, 4 Door
		0387039	Drain Pan Heater, 5 Door

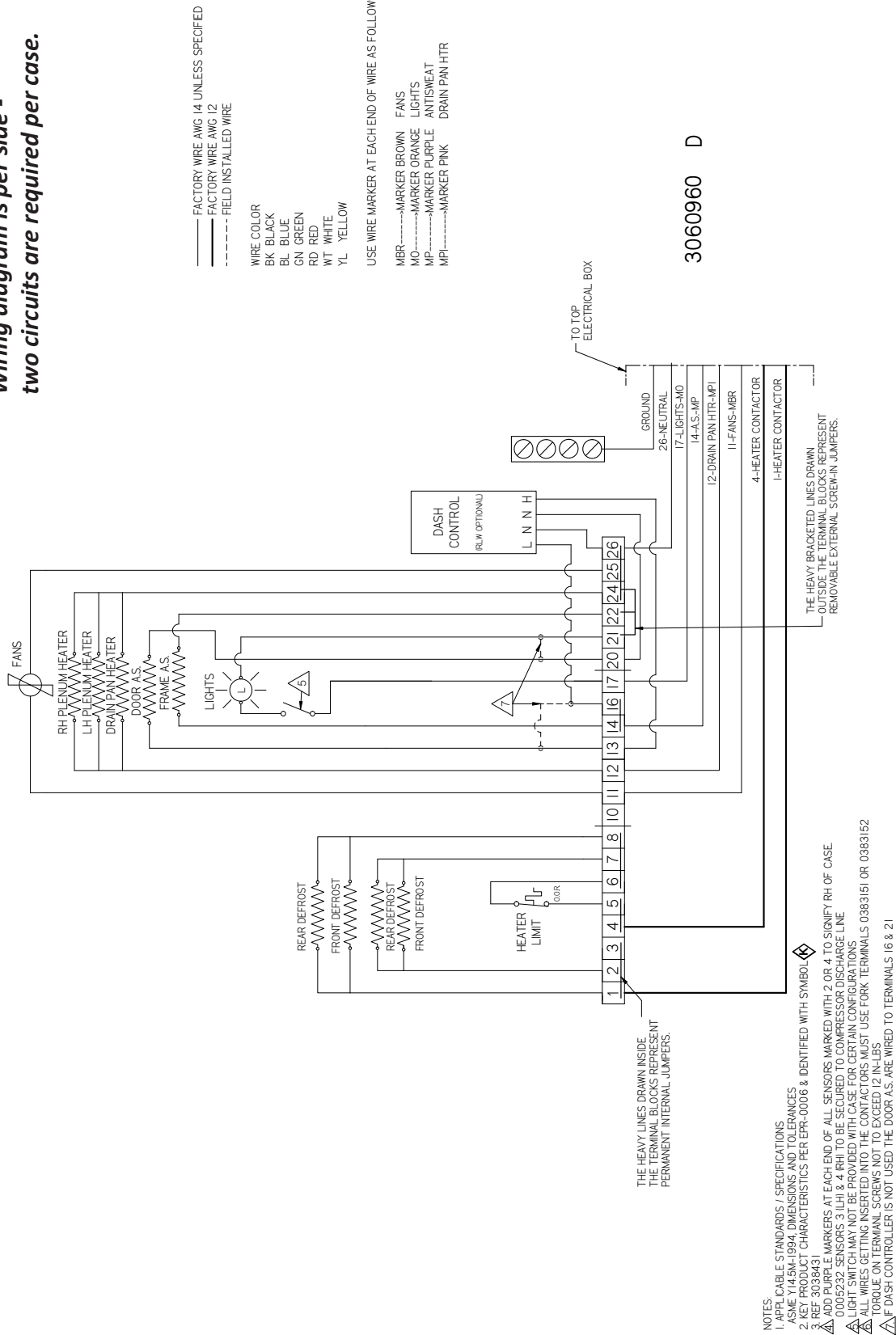
NOTE: For LED lighting parts contact your Hussmann service representative at 1-800-922-1919. Please have your model and serial number available. Descriptions including size and color are at [HTTP://WWW.HUSSMANN.COM/EN/PRODUCTS/LED-LIGHTING/PAGES/DEFAULT.ASPX](http://www.hussmann.com/en/products/led-lighting/pages/default.aspx).

FOR ADDITIONAL PARTS INFORMATION, VISIT [HTTP://WWW.HUSSMANN.COM/EN/PAGES/AFTERMARKET-PARTS.ASPX](http://www.hussmann.com/en/pages/aftermarket-parts.aspx)

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.**

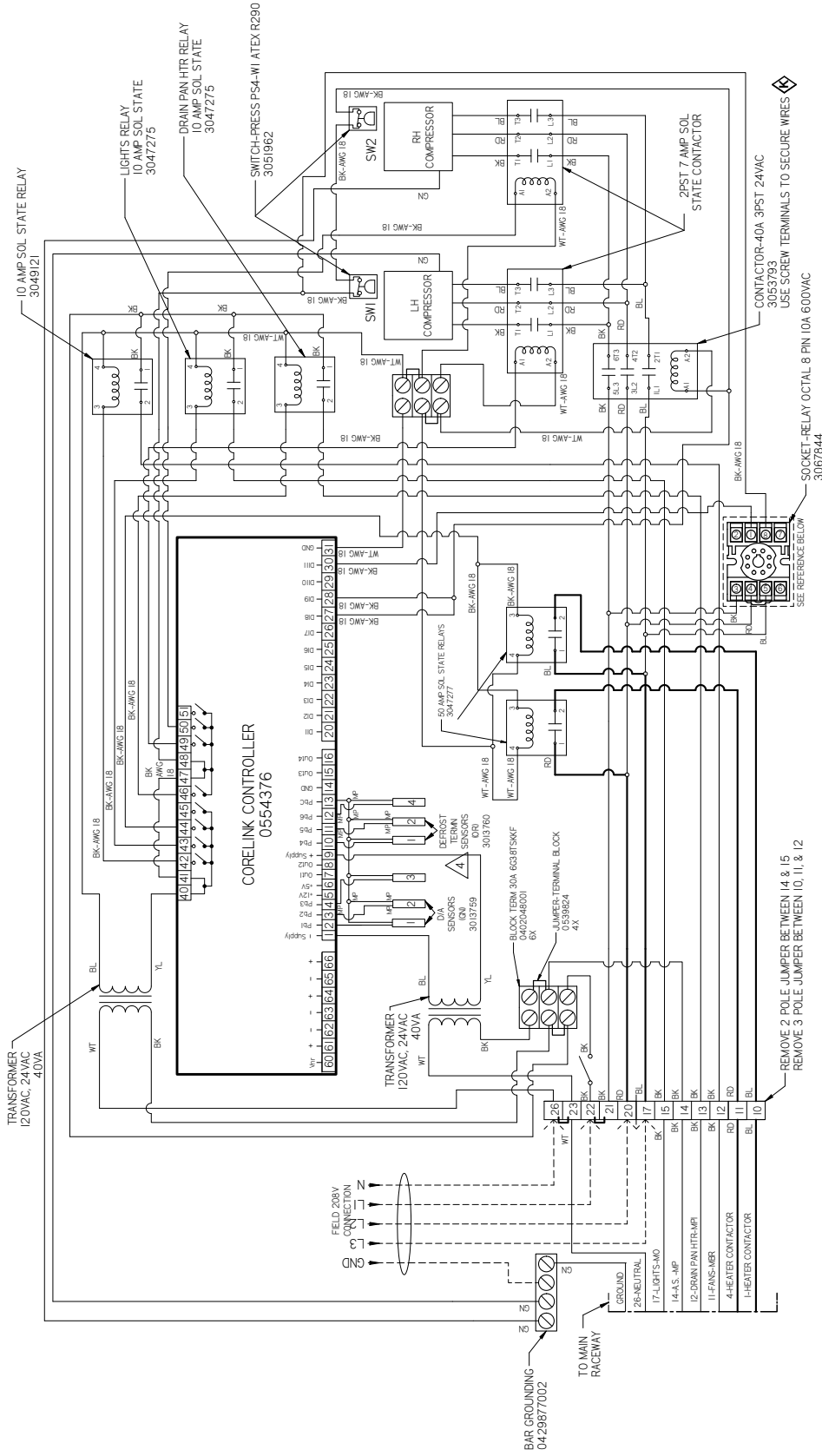


RLNI-W

With INNOVATOR or INNOVATOR II Doors
Low Temperature

CoreLink Propane Wiring - 4 Door

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



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

APPLICABLE STANDARDS / SPECIFICATIONS
ASME Y14.5M-1994, DIMENSIONS AND TOLERANCES
2. KEY PRODUCT CHARACTERISTICS PER EPR-0006 & IDENTIFIED WITH SYMBOL
3. REF 3038431
ADD PURPLE MARKERS AT EACH END OF ALL SENSORS MARKED WITH 2 OR 4 TO SIGNIFY RH OF CASE
0005232 SENSORS 3 LH & 4 RH TO BE SECURED TO COMPRESSOR DISCHARGE LINE
LIGHT SWITCH MAY BE PROVIDED WITH CASE FOR CERTAIN CONFIGURATIONS
ALL TERMINALS MUST BE PROPERLY IDENTIFIED WITH PURPLE MARKERS
TORQUE ON TERMINAL SCREWS NOT TO EXCEED 12 IN. LBS.
F DASH CONTROLLER IS NOT USED THE DOOR A.S. ARE WIRED TO TERMINALS 16 & 21

PHASE MONITOR OPERATION

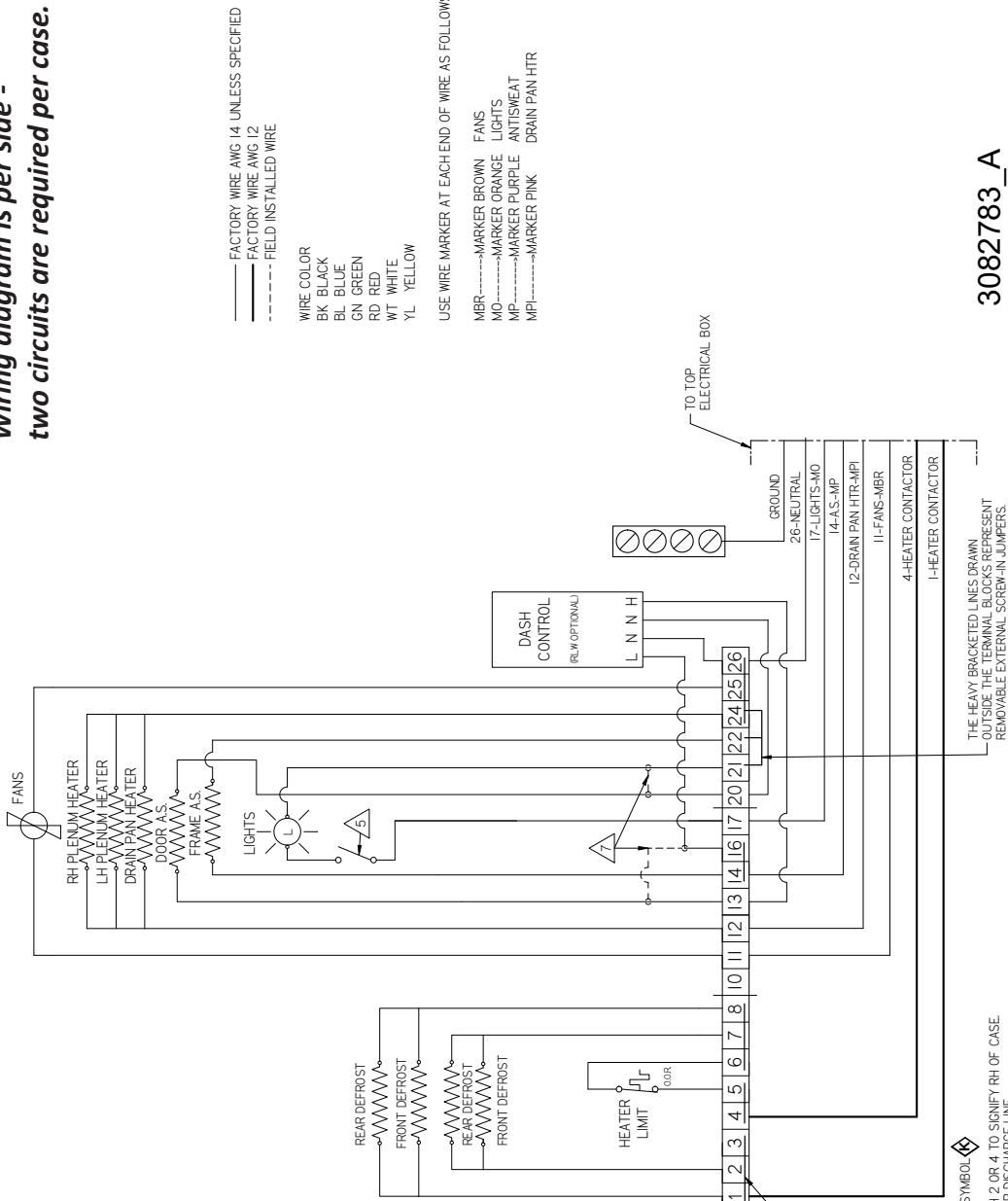
NO POWER OR
PHASE LOSS

NORMAL
OPERATION

CoreLink Propane Wiring - 5 Door

RLNI-W With INNOVATOR or INNOVATOR II Doors Low Temperature

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



- 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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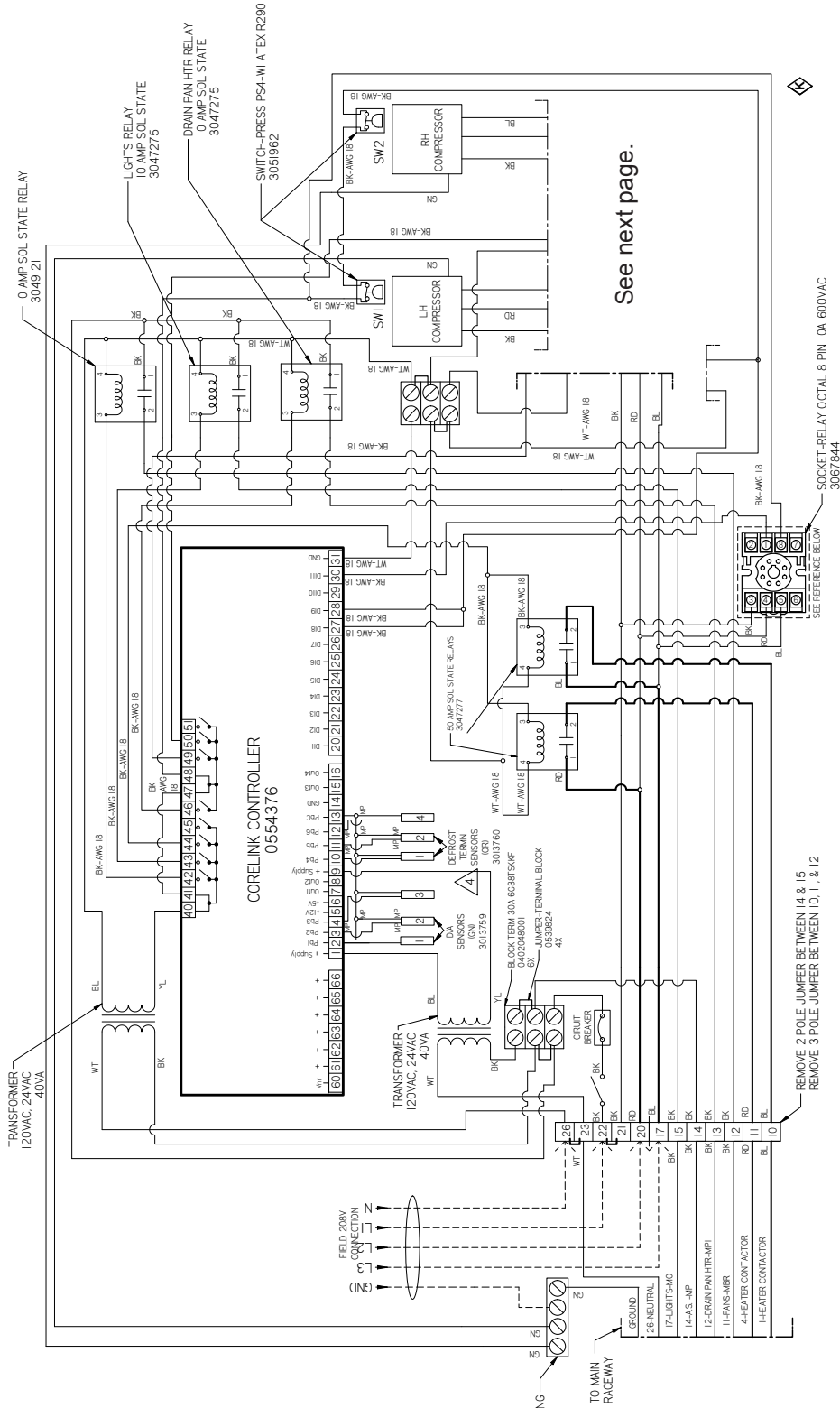
- NOTES
1. APPLY CABLE STANDARDS / SPECIFICATIONS
 2. ASME Y14.5M-1994 DIMENSIONS AND TOLERANCES
 3. KEY PRODUCT CHARACTERISTICS PER EPR-0006 & IDENTIFIED WITH SYMBOL
 4. REF. 30384.31
 5. ADD PURPLE MARKERS AT EACH END OF ALL SENSORS MARKED WITH 2 OR 4 TO SIGNIFY RH OF CASE
 6. 0005232 SENSORS 3 LHI & 4 IRIH TO BE SECURED TO COMPRESSOR DISCHARGE LINE
 7. LIGHT SWITCH MAY NOT BE PROVIDED WITH CASE FOR CERTAIN CONFIGURATIONS
 8. ALL WIRES GETTING INSERTED INTO THE CONTACTORS MUST USE FORK TERMINALS 03883151 OR 03883152
 9. TORQUE ON TERMINAL SCREWS NOT TO EXCEED 12 IN.-LBS
 10. IF DASH CONTROLLER IS NOT USED THE DOOR AS ARE WIRED TO TERMINALS 16 & 21

RLNI-W

With INNOVATOR or INNOVATOR II Doors
Low Temperature

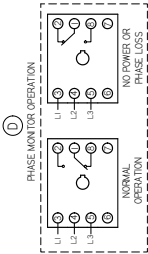
CoreLink Propane Wiring - 5 Door

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



See next page.

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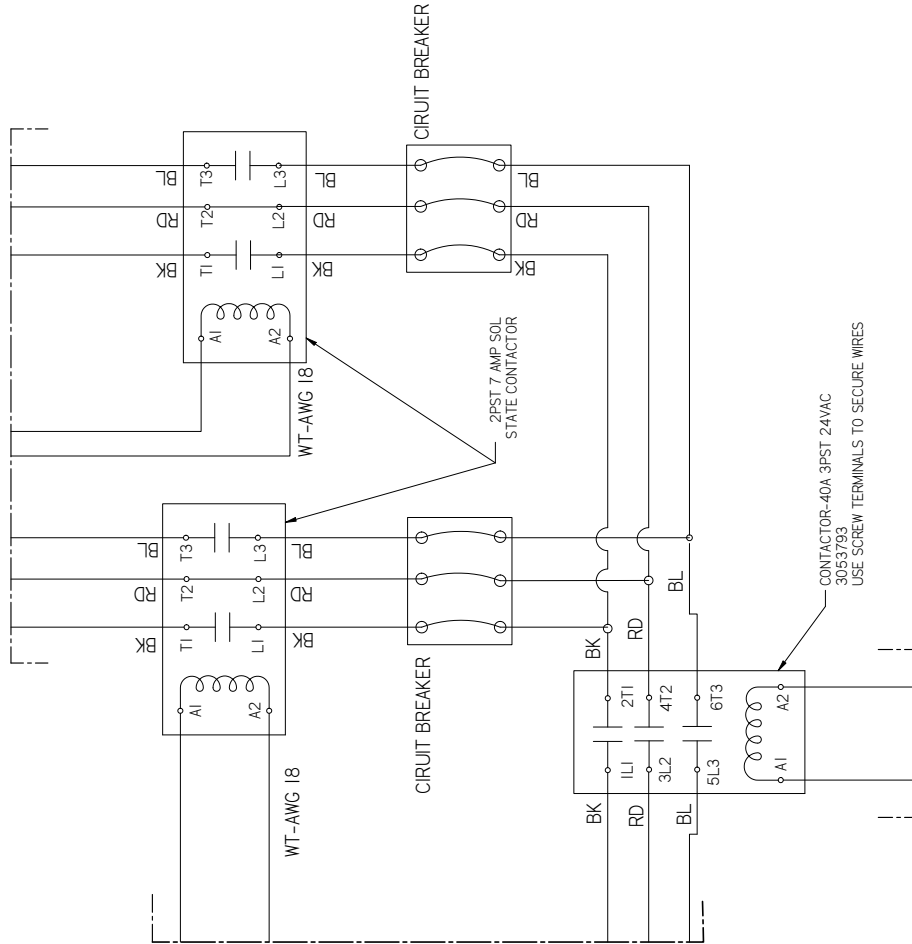
NOTES:
1. APPLICABLE STANDARDS / SPECIFICATIONS
2. ASME Y14.5M-1994, DIMENSIONS AND TOLERANCES
3. KEY PRODUCT CHARACTERISTICS PER EPR-0008 & IDENTIFIED WITH SYMBOL
4. REF. 3038431
5. ADD PURPLE MARKERS AT EACH END OF ALL SENSORS MARKED WITH 2, OR 4, TO SIGNIFY RH OF CASE
6. LIGHT SENSORS SHOULD BE USED WITH CASE FOR CERTAIN APPLICATIONS
7. LIGHT SWITCHES SHOULD BE PROVIDED WITH CASE FOR CERTAIN APPLICATIONS
8. ALL WIRES GETTING INSERTED INTO THE CONTACTORS MUST USE FORK TERMINALS 0383151 OR 0383152
9. TORQUE ON TERMINAL SCREWS NOT TO EXCEED 12 IN.-LBS.
10. IF DASH CONTROLLER IS NOT USED THE DOOR AS ARE WIRED TO TERMINALS 16 & 21

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

CoreLink Propane Wiring - 5 Door

RLNI-W
With INNOVATOR or INNOVATOR II Doors
Low Temperature

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



- 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
 - ▲ ADD PURPLE MARKERS AT EACH END OF ALL SENSORS MARKED WITH 2 OR 4 TO SIGNIFY RH OF CASE
 - ▲ 0005232 SENSORS 3 (LH) & 4 (RH) TO BE SECURED TO COMPRESSOR DISCHARGE LINE
 - ▲ 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 A.S. ARE WIRED TO TERMINALS 16 & 21

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RLNI-W
With INNOVATOR or INNOVATOR II Doors
Low Temperature



Scan QR code to
access product
information on your
mobile device.

Revision History

Revision A: February 2019: Original Issue