

HUSSMANN®

microDS™

RL-SP

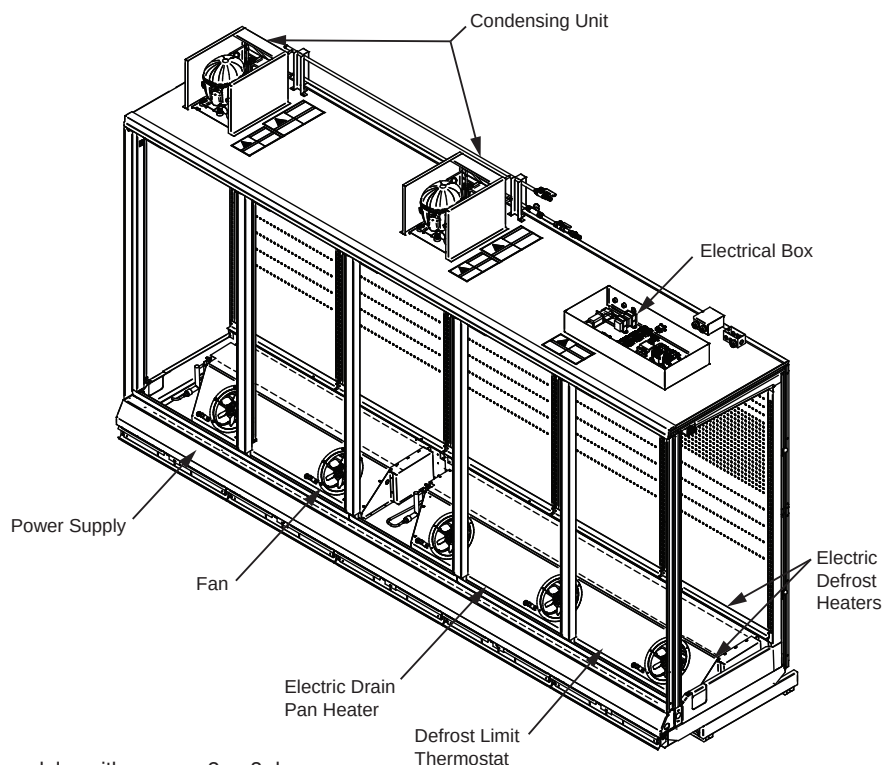
INNOVATOR Doors or
INNOVATOR III Doors
Self-Contained
R290 (Propane)

Merchandise Data Sheet

P/N 0530354_D

UL EPH® Certified

May 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.

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Data sheet-RL-SP

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.

RL-SP

With INNOVATOR or INNOVATOR III Doors
Low Temperature

Refrigeration Data ¹

RL-SP		Optimal Shelf Life	
Application		Frozen Food (FF)	Ice Cream (IC)
Temperature	Discharge Air °F (°C)	-3 (-19.5)	-10 (-23)

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 80°F (10 to 27°C).

Compressor Data

Total Heat of Rejection	BTU/Hr
2 Dr	4,686
3 Dr	5,771
4 Dr	9,372
5 Dr	10,457

Cooling Water Pressure Drop

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

	PSI
2 Dr	2.5
3 Dr	2.5
4 Dr	2.5
5 Dr	4

Glycol/Water Flow Rate ⁴

RL-SP

	GPM	LPM
2 Door	1.5	5.7
3 Door	2.0	7.6
4 Door	2.5	9.5
5 Door	3.0	11.4

⁴ 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

	RL-SP
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).

Charge ⁵

RL-SP

2 Door	0.27 lb	4.4 oz	125 g
3 Door	0.33 lb	5.3 oz	150 g
4 Door (LH)	0.27 lb	4.4 oz	125 g
4 Door (RH)	0.27 lb	4.4 oz	125 g
5 Door (LH)	0.27 lb	4.4 oz	125 g
5 Door (RH)	0.33 lb	5.3 oz	150 g

⁵ Maximum charge per condensing unit = 150 g.

Product Data

Gross Refrigerated Volume ⁷ (Cu Ft/Ft)	23.46 ft ³ /ft (0.66 m ³ /m)
AHRI Total Display Area ⁸ (Sq Ft/Ft)	13.31 ft ² /ft (1.24 m ² /m)
Shelf Area ⁹ (Sq Ft/Ft)	29.32 ft ² /ft (2.72 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) 22-inch shelves, evenly distributed vertically.

Reach-in Multideck Merchandiser, 6 Display Levels,
Low Bottom, Self-Contained R290 (Propane)

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With INNOVATOR or INNOVATOR III Doors
Low Temperature

DOE 2017
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Compliant

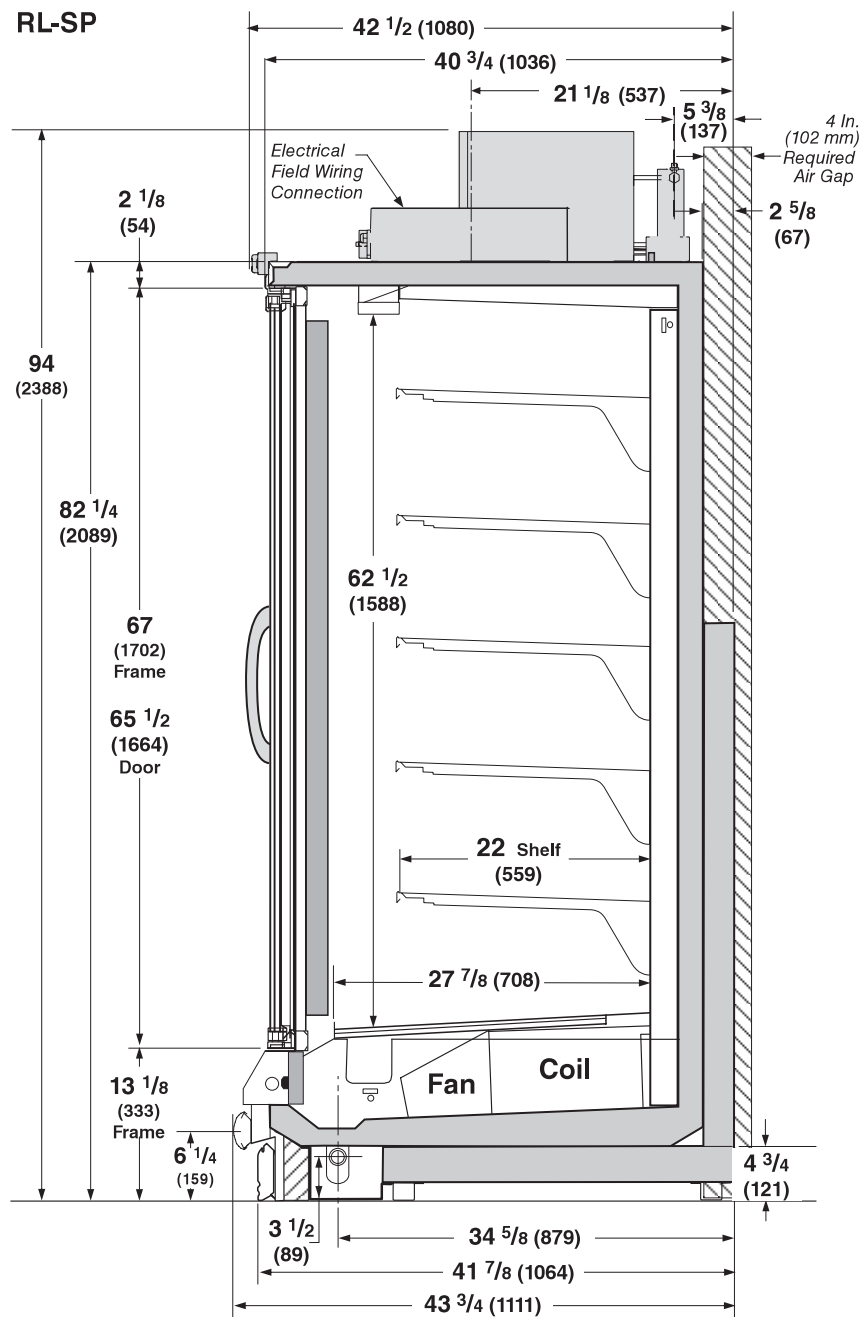
Husmann refrigerated merchandisers configured for sale for use in the United States meet or surpass the requirements of the DOE 2017 energy efficiency standards.

Dimensions shown as in. and (mm).

Shelf complement shown as tested:

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

4-in. between back to back cases.



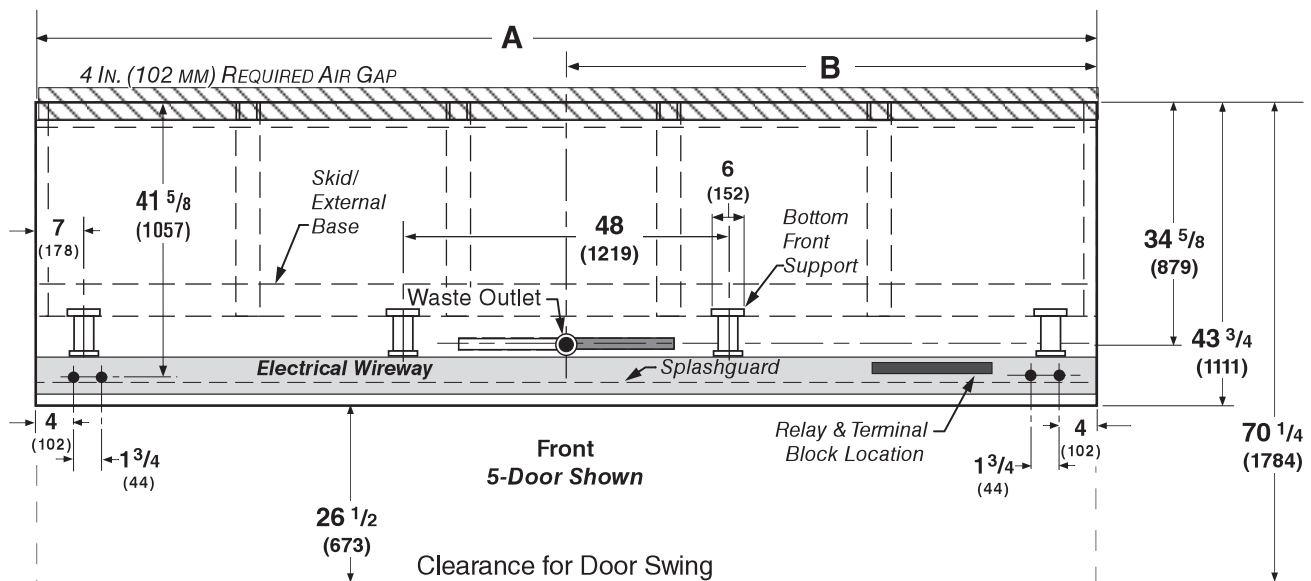
UL EPH Certification

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

Engineering Plan View

RL-SP
2, 3, 4 & 5 Door

Dimensions shown as in. and (mm).



(5 Door Model shown above)

	2 Dr	3 Dr	4 Dr	5 Dr
General				
(A) Case Length (without ends or partitions) Each end and insulated partition adds 2 in. (51 mm) to case line up; each window end or insulated partition adds 1 1/2 in. (38 mm).	62 (1575)	92 1/2 (2350)	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.)	43 3/4 (1111)	43 3/4 (1111)	43 3/4 (1111)	43 3/4 (1111)
Back of case to rear of splashguard	39 7/8 (1013)	39 7/8 (1013)	39 7/8 (1013)	39 7/8 (1013)
Width of Skidrail	3 3/4 (95)	3 3/4 (95)	3 3/4 (95)	3 3/4 (95)
Width of Bottom Front Support	6 (152)	6 (152)	6 (152)	6 (152)
Stub-up area between front support and splashguard	3 1/8 (79)	3 1/8 (79)	3 1/8 (79)	3 1/8 (79)
Electrical Service (Field Electrical Wiring Connection)				
RH End of case to center of Electrical Wiring Connection (top of case)	13 3/4 (349)	13 3/4 (349)	13 3/4 (349)	13 3/4 (349)
Back outside of case to center of Electrical Wiring Connection	5 1/2 (140)	5 1/2 (140)	5 1/2 (140)	5 1/2 (140)
Waste Outlets (with required drain extension)				
(B) RH End of case to the center of waste outlet	23 7/8 (606)	54 1/4 (1378)	46 1/4 (1175)	76 5/8 (1946)
Back O/S of case to center of waste outlet	34 5/8 (879)	34 5/8 (879)	34 5/8 (879)	34 5/8 (879)
Schedule 40 PVC drip pipe	1 1/4 (32)	1 1/4 (32)	1 1/4 (32)	1 1/4 (32)
Water Seal				
Edge of water seal to center of waste outlet	13 (330)	13 (330)	13 (330)	13 (330)
**NOTE: Field installed water seal outlets, tees, and connectors are shipped with the case.				

Electrical Data

Number of Fans 8.25-in.			2 dr 2	3 dr 3	4 dr 4	5 dr 5				
			Amperes				Watts			
Evaporator Fan			2 dr	3 dr	4 dr	5 dr	2 dr	3 dr	4 dr	5 dr
120V	50/60Hz		0.60	0.90	1.20	1.50	36	54	72	90
Door Anti-sweat Heaters (on fan circuit)										
120V	50/60Hz	Innovator	1.50	2.30	3.00	3.80	182	273	364	455
120V	50/60Hz	Innovator III	0.90	1.30	1.70	2.20	104	156	208	260
Frame Anti-sweat Heaters (on fan circuit)										
120V	50/60Hz		0.78	1.18	1.57	1.97	94	141	188	236
Condensing Unit (208V/230V, 3 ph, 60 Hz) Standard										
NOTE: One compressor can start at a time.										
Compressor RLA			3.5		3.5		7.0		7.0	
Compressor LRA			25.5/unit		25.5/unit		25.5/unit		25.5/unit	
Merchandise Circuit Requirements (208V/230V, 3 Ph, 60 Hz)										
Total Amps			9.0	13.5	18.0	22.4				
MCA			11.3	16.9	22.5	28.1				
Maximum Over Current Protection			20	20	30	30				
Defrost										
Drain Heaters (120V)			0.63	1.25	2.00	2.57	75	150	240	300
Plenum Heaters (120V)			1.30	1.92	2.60	3.22	156	230	312	386
Electric Defrost (208V)			6.72	10.08	13.46	16.82	1400	2100	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.

STANDARD LIGHTING

EcoShine II	2 Dr	3 Dr	4 Dr	5 Dr	2 Dr	3Dr	4 Dr	5 Dr
120V	0.31	0.46	0.62	0.77	37.1	55.6	74.2	92.7
220V Export	0.17	0.25	0.34	0.42	37.1	55.6	74.2	92.7

OPTIONAL LIGHTING

EcoShine II	2 Dr	3 Dr	4 Dr	5 Dr	2 Dr	3Dr	4 Dr	5 Dr
[22 W] 120V	0.36	0.52	0.68	0.84	43.2	62	81	100
[22 W] 220V Export	0.20	0.28	0.37	0.46	43.2	62	81	100

GE Illumination	2 Dr	3 Dr	4 Dr	5 Dr	2 Dr	3Dr	4 Dr	5 Dr
120V	0.30	0.45	0.60	0.75	36	54	72	90
220V Export	0.16	0.25	0.33	0.41	36	54	72	90

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Low Temperature

ENDS or PARTITIONS

Each standard end and each insulated partition adds 2 in. (38 mm) to case line up.

ESTIMATED SHIPPING WEIGHT †

Case	2 Dr	3 Dr	4 Dr	5 Dr	Solid End (each)
lb (kg)	1047 (475)	1345 (610)	1595 (769)	1874 (895)	55 (25)

† Actual weights will vary according to optional kits included.

Shelf Options

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

22-inch

24-inch

26-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

Replacement Parts List

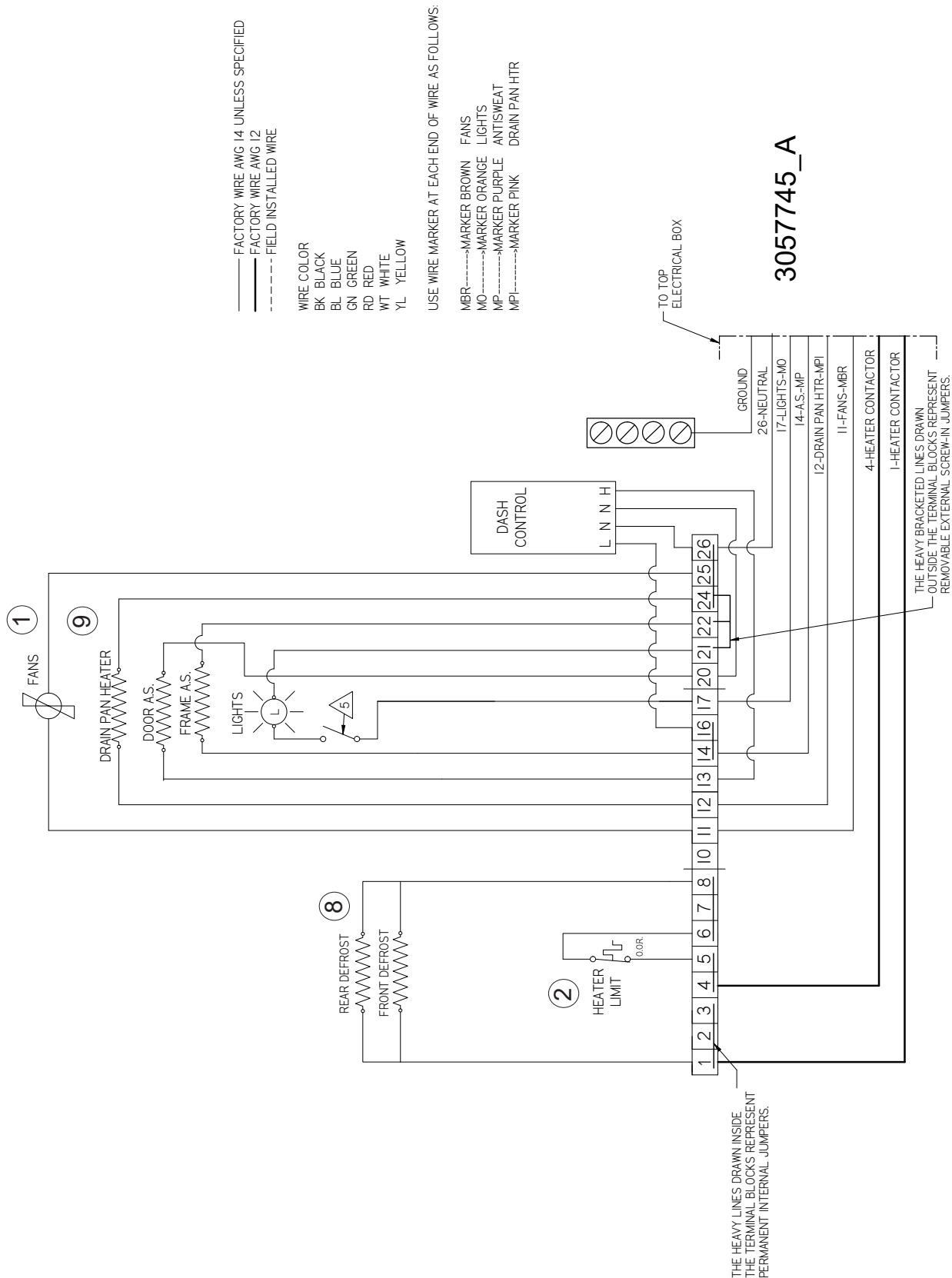
Part #	Description	Part #	Description
FAN ASSEMBLIES		CORELINK CONTROL	
2-Dr & 4 Dr		0554376	CoreLink Controller
Standard HE Fan Assembly		3013759	Discharge Air Sensor
0529672	Fan Assembly	3013760	Defrost Termination
0527610	Fan Motor	3047275	Fan / Light Relay
0461805	Fan Blade	3051962	Pressure Switch
0344662	Defrost Limit Thermostat	3047251	Circuit Breaker
LED FIXTURES AND POWER SUPPLY		REFRIGERATION SYSTEM	
0499399	Power Supply	0528947	Capillary Tube
	LED Fixture	0528933	Condensing Unit
	<i>Replace with like fixtures.</i>	0530462	Filter/drier
FAN ASSEMBLIES Coils		WATER LINE	
0530400	2 Door & 4 Door	0527748	Strainer, Water
0530429	3 Door & 5 Door	0527742	Balancing Valve (Adjustable)
HONEYCOMB - WHITE		3042623	2 Door Auto-Balancing Valve 1.5 GPM (Optional)
0495287	2 Door & 4 Door	3042965	3 Door Auto-Balancing Valve 2.0 GPM (Optional)
0495261	3 Door	3065648	4 Door Auto-Balancing Valve 2.5 GPM (Optional)
0495262	5 Door	3081748	5 Door Auto-Balancing Valve 3.0 GPM (Optional)
RELAYS		HEATERS	
3048148	Compressor Relay	3020841	Electric Defrost Heaters, 208V, (Front & Rear) 2 Door & 4 Door
3047276	2 & 3 Door Defrost Relay	3020842	Electric Defrost Heater, 208V, (Front & Rear) 3 Door & 5 Door
3047277	4 & 5 Door Defrost Relay	0387036	Drain Pan Heater, 2 Door
3049121	Fan Relay	0387037	Drain Pan Heater, 3 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.		0387038	Drain Pan Heater, 4 Door
		0387039	Drain Pan Heater, 5 Door
		3063723	Plenum Heater, 2 Door & 4 Door
		3063724	Plenum Heater, 3 Door & 5 Door

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

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Low Temperature

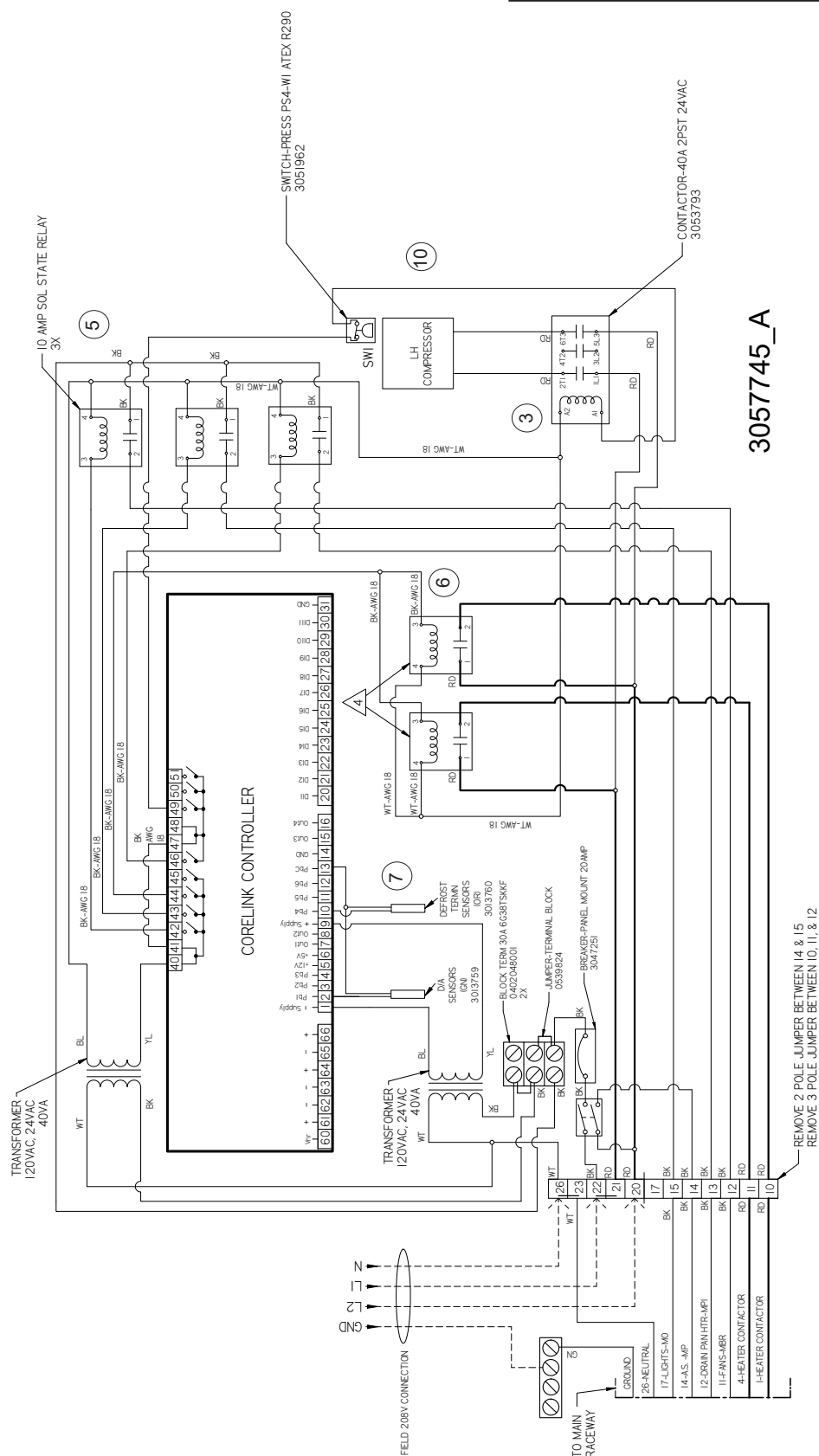
2,3 Door Wiring Diagram



2-3 Door Corelink Wiring Diagram

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**With INNOVATOR or INNOVATOR III Doors
Low Temperature**

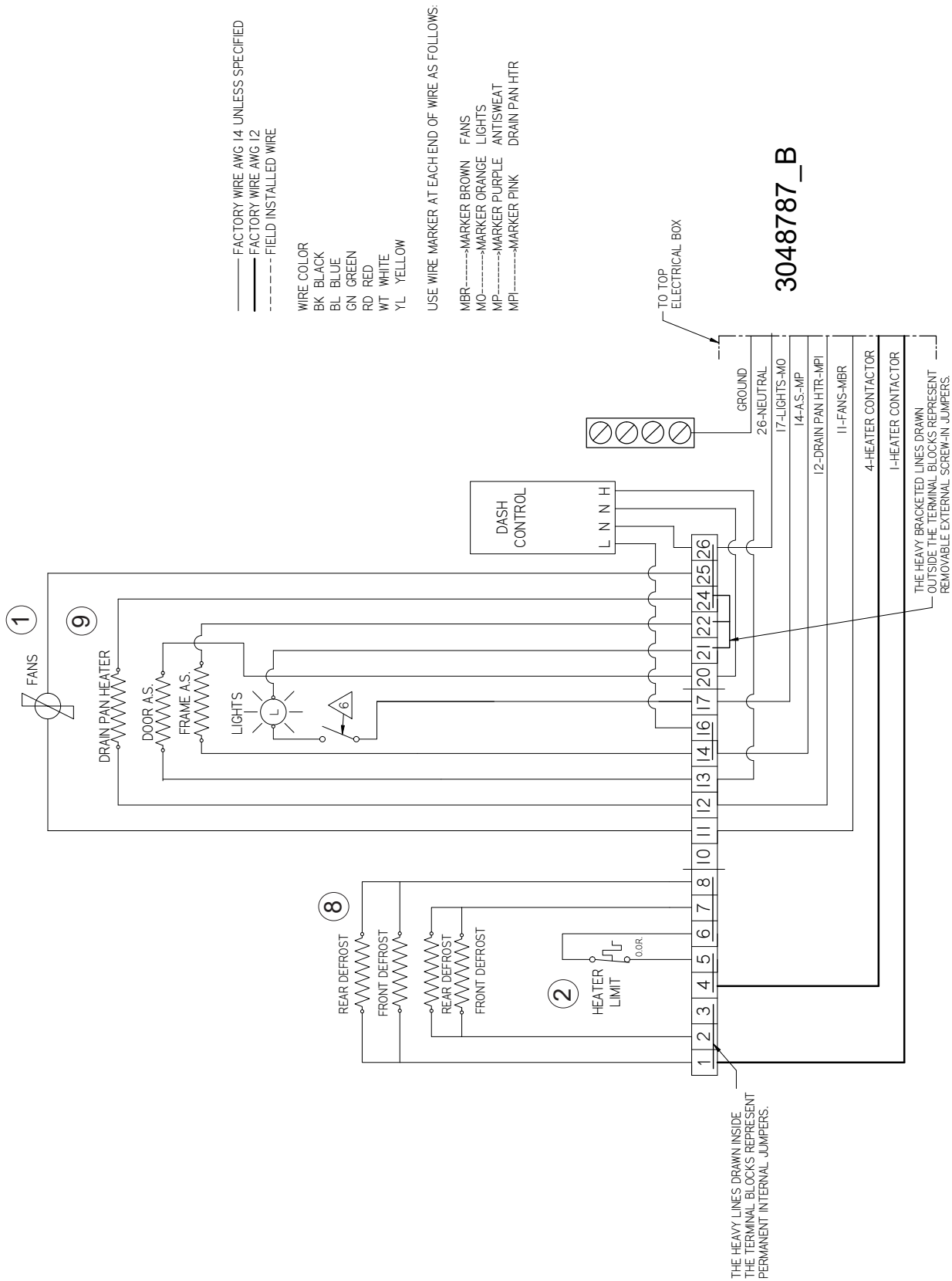


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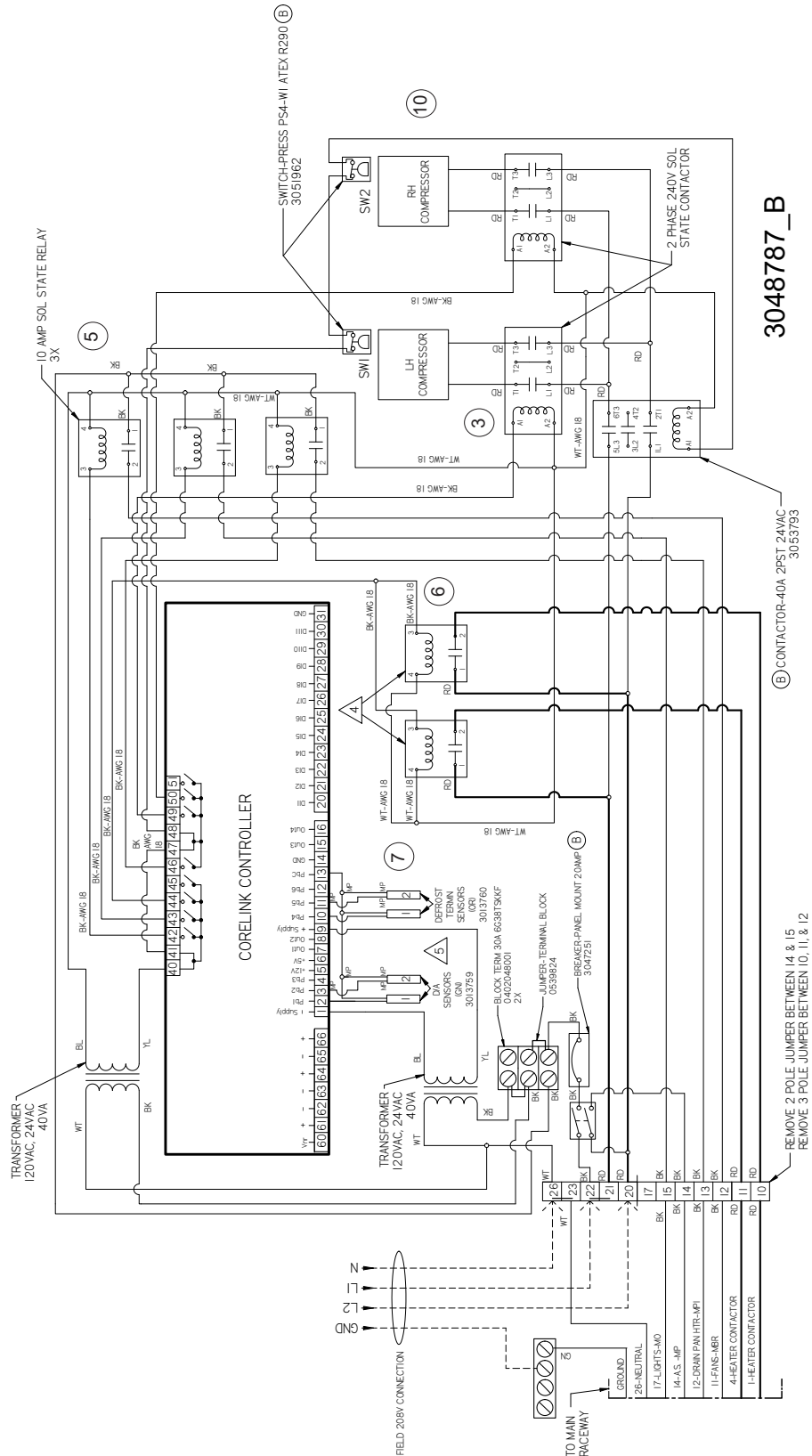
With INNOVATOR or INNOVATOR III Doors
Low Temperature

4,5 Door Wiring Diagram



4,5 Door Corelink Wiring Diagram

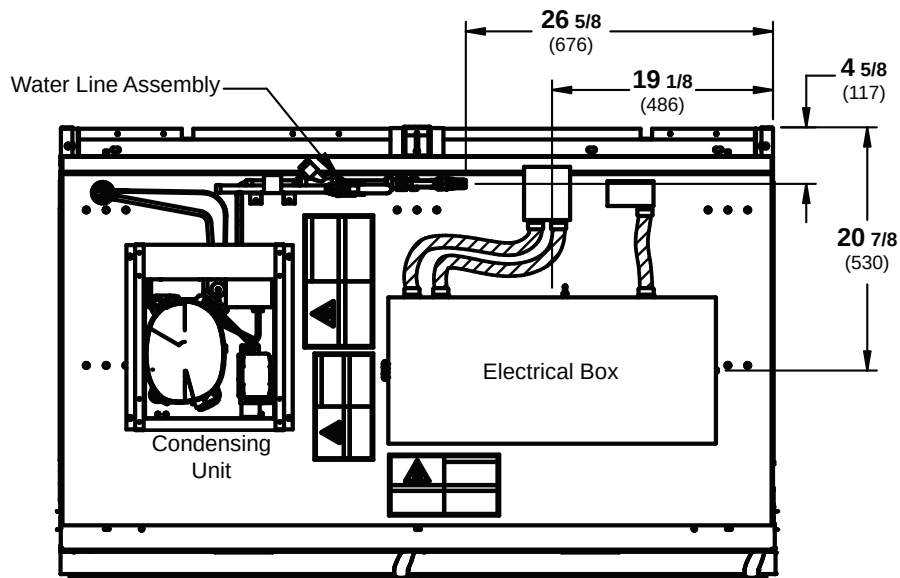
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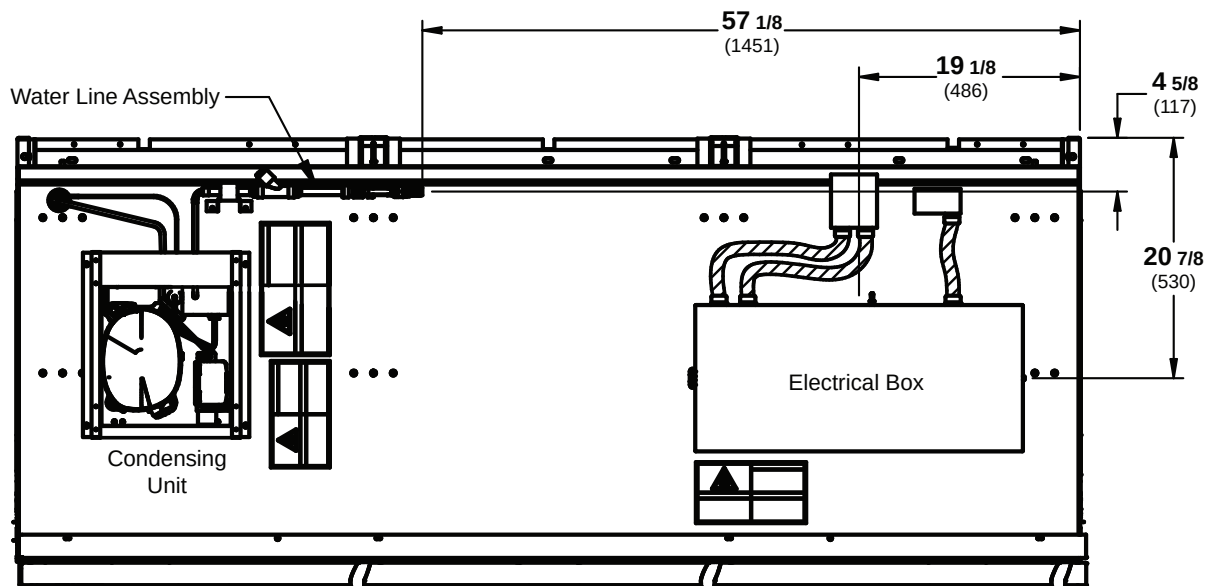
RL-SP

With INNOVATOR or INNOVATOR III Doors
Low Temperature

RL-SP Top Views



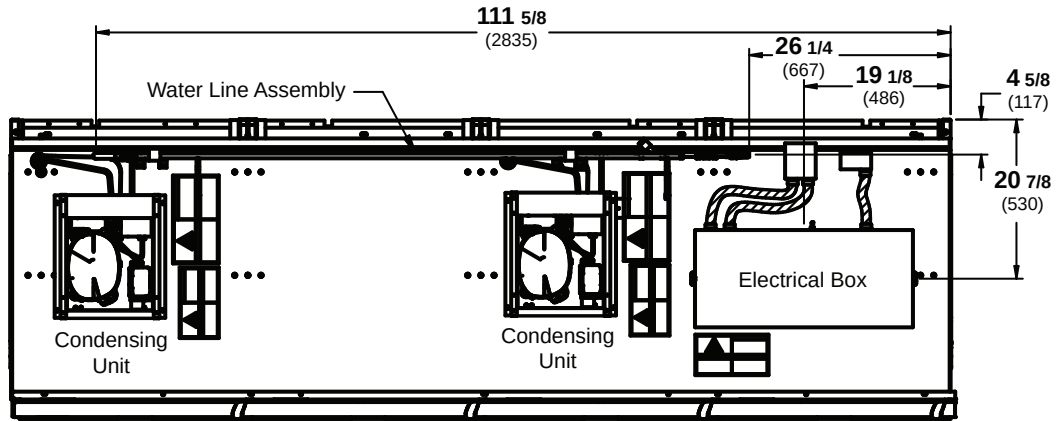
RL2SP Top View



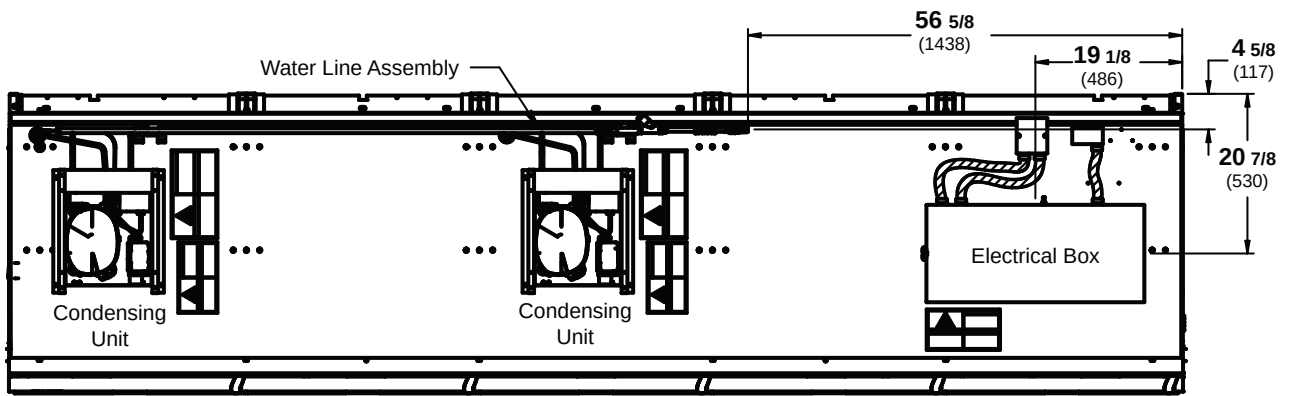
RL3SP Top View

RL-SP Top Views

RL-SP With INNOVATOR or INNOVATOR III Doors Low Temperature



RL4SP Top View



RL5SP Top View

RL-SP

With INNOVATOR or INNOVATOR III Doors
Low Temperature



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Revision History

Revision D: April 2019: Reformatted and data revision