

HUSSMANN®

microDS™

RLT-W

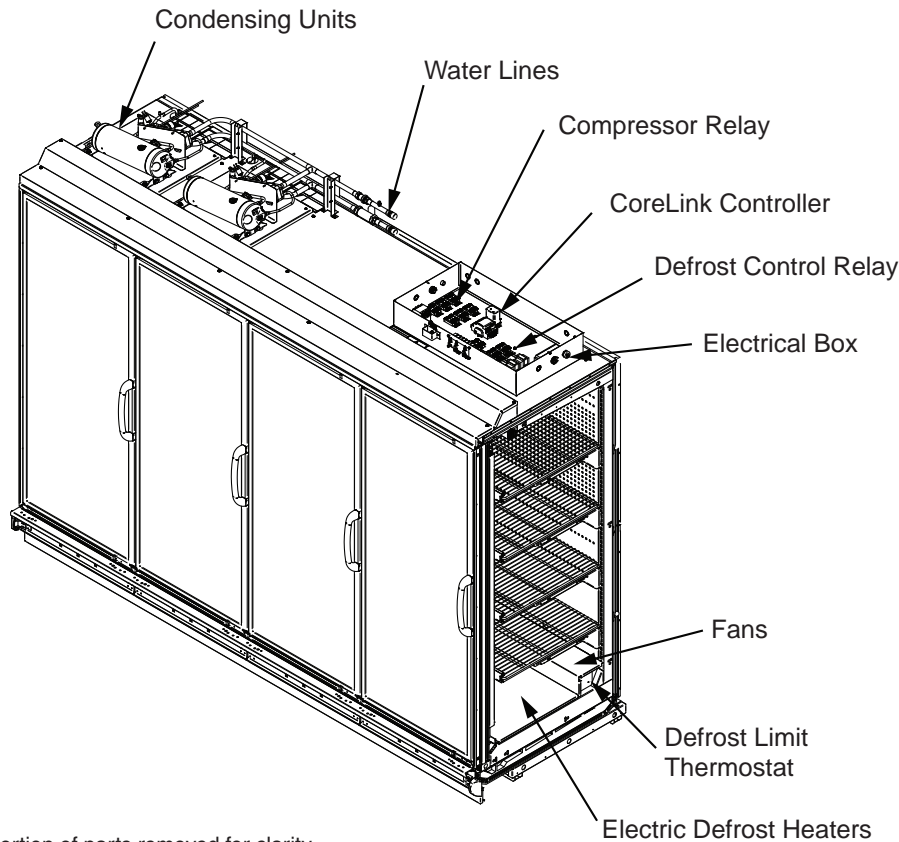
with INNOVATOR Doors
or INNOVATOR III Doors
Water-cooled
Self-Contained
R-290

Merchandise Data Sheet

P/N 3160745_A

UL EPH® Certified

April 2023



Portion of parts removed for clarity.

4 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.

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Data sheet-Reach-in-RLT-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.

RLT-W

Frozen Food / Ice Cream

Refrigeration Data ¹

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

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 are 50 to 115°F (10 to 40°C).

Compressor Data

Total Heat of Rejection	BTU/Hr
2 Dr	5,420
3 Dr	8,423
4 Dr	10,840
5 Dr	12,010

RLT-W

Cooling Water Pressure Drop ⁴

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

RLT-W

Glycol/Water Flow Rate ⁵

	GPM	LPM
2 Dr	2.0	7.6
3 Dr	3.0	11.4
4 Dr	3.0	11.4
5 Dr	4.0	15.2

Defrost Data

Frequency (hours between defrost)	24
	RLT-W
Time (minutes)	60
Temp Termination (°F)	48
ELECTRIC OR GAS	Electric
Defrost Water ³	1.3 lb/dr/day (0.5 kg/m)

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

2 Dr	0.33 lb	5.3 oz	150 g
3 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 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 - 2 units on 3, 4 and 5 Dr.

Water Connections Size

A 3/4" female NPT fitting is required to connect to the 3/4" 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 3/4" female NPSM fittings. Maximum working pressure of water side components: 100 psig

Product Data

Gross Refrigerated Volume⁷ (Cu Ft/Dr)	39.43 ft ³ /dr (1.12 m ³ /dr)
AHRI Total Display Area⁸ (Sq Ft/Dr)	14.26 ft ² /dr (1.32 m ² /dr)
Shelf Area⁹ (Sq Ft/Dr)	32.27 ft ² /dr (3.00 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) 26-inch shelves, evenly distributed vertically.

Self-Contained R290 Propane Reach-in Merchandiser,
2, 3, 4 & 5 Door Models, Tall, 6 Display Levels,
Water-cooled

RLT-W
Frozen Food / Ice Cream

DOE 2017
Energy Efficiency
Compliant

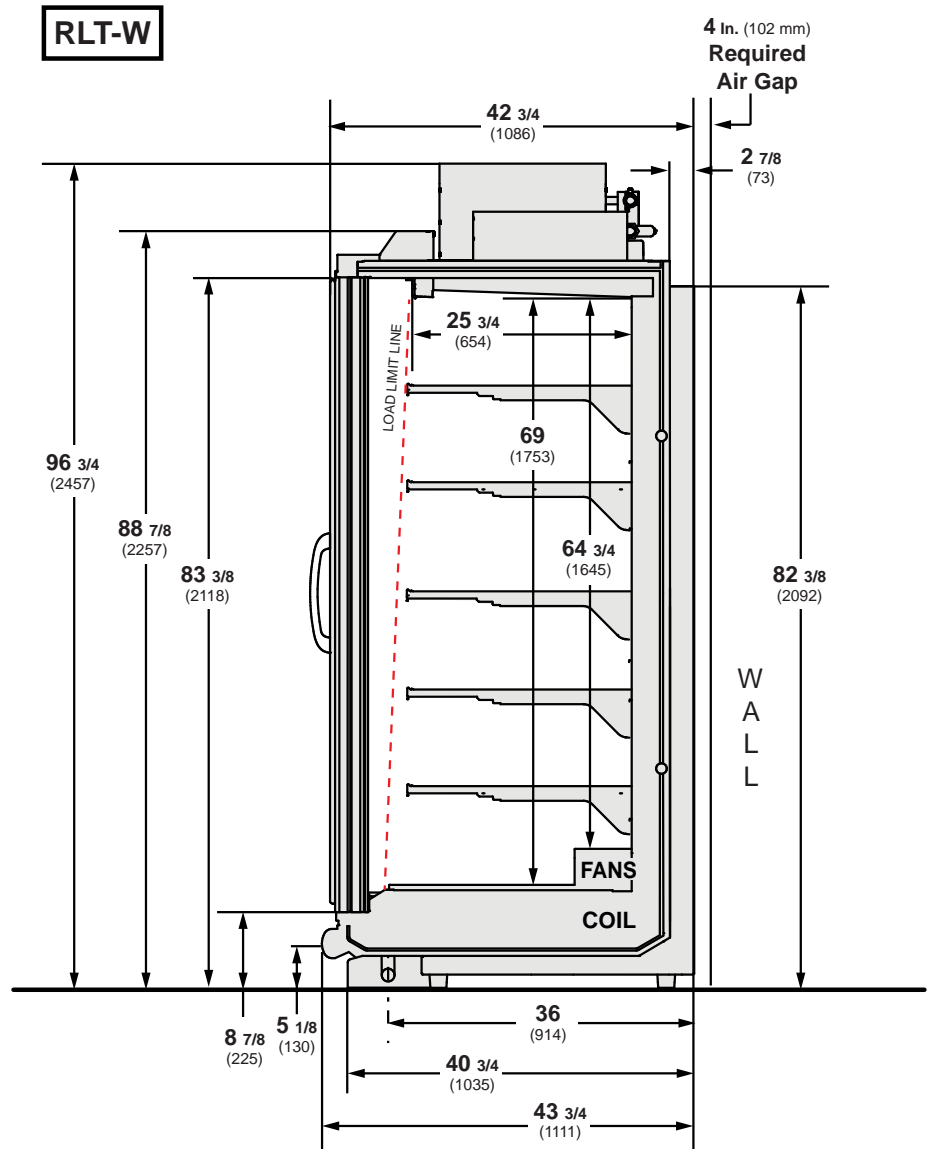
Husmann refrigerated merchandisers configured for sale for use in the United States meet or surpass the requirements of the DOE 2017 energy efficiency standards.

Shelf complement shown as tested:

Five rows of shelves (26-in) spaced equally between bottom display pan and interior top panel.

Dimensions shown as in. and (mm).

4-in. between back to back cases.



RLT-W

Frozen Food / Ice Cream

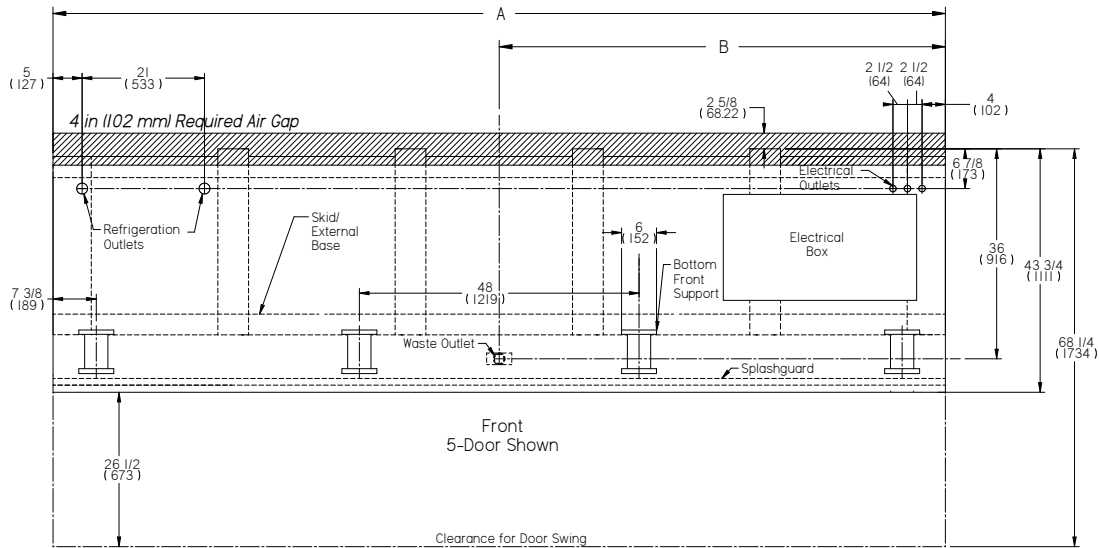
Water and electrical connections are on top. Over-head piping and electrical circuits are required.

Engineering

Plan Views


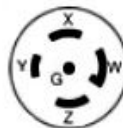
Dimensions shown as inches & (mm).

Tall Reach-In
2, 3, 4 & 5 Door



	2 Dr	3 Dr	4 Dr	5 Dr
General				
(A) Case Length (without ends or partitions)	62 (1575)	92 ³ / ₈ (2346)	123 (3124)	153 ¹ / ₄ (3892)
**NOTE: Each solid end adds approximately 2 ¹ / ₈ in (60 mm) to length of line up; each partition add approximately 2 ¹ / ₄ in (70 mm); case to case joints can add approximately ¹ / ₈ in (3 mm) for gasket material.				
Maximum outside dimension of case back to front (Includes bumper)	43 ³ / ₄ (1111)	43 ³ / ₄ (1111)	43 ³ / ₄ (1111)	43 ³ / ₄ (1111)
Back of case to front of Splashguard	40 ¹ / ₂ (1029)	40 ¹ / ₂ (1029)	40 ¹ / ₂ (1029)	40 ¹ / ₂ (1029)
Width of Skid Rail	3 ³ / ₈ (86)	3 ³ / ₈ (86)	3 ³ / ₈ (86)	3 ³ / ₈ (86)
Width of Bottom Front Support	6 (152)	6 (152)	6 (152)	6 (152)
Stub-up area between front Skid Rail & Splashguard	7 ⁵ / ₈ (194)	7 ⁵ / ₈ (194)	7 ⁵ / ₈ (194)	7 ⁵ / ₈ (194)
Electrical Service				
Left hand end of case to the center of nearest hole	52 ³ / ₄ (1340)	83 ¹ / ₄ (2115)	113 ³ / ₄ (2889)	144 ¹ / ₈ (3661)
Right hand end of case to the center of nearest hole	4 (102)	4 (102)	4 (102)	4 (102)
Back outside of case to center of electrical hole	6 ⁷ / ₈ (175)	6 ⁷ / ₈ (175)	6 ⁷ / ₈ (175)	6 ⁷ / ₈ (175)
Left hand end case to the Electrical Box	25 ³ / ₄ (654)	54 ¹ / ₄ (1378)	84 ⁵ / ₈ (2151)	115 ¹ / ₈ (2924)
Right hand end case to the Electrical Box	3 (76)	5 (127)	5 (127)	5 (127)
Back outside of the case to the Electrical Box	9 ⁷ / ₈ (251)	8 ⁷ / ₈ (225)	7 ⁷ / ₈ (200)	7 ⁷ / ₈ (200)
Waste Outlet				
(B) Right end of case to center of Waste Outlet	23 ⁷ / ₈ (606)	54 ¹ / ₄ (1378)	46 ¹ / ₄ (1175)	76 ⁵ / ₈ (1946)
Back outside of case to Waste Outlet	36 (914)	36 (914)	36 (914)	36 (914)
Water Seal				
Edge of Water Seal to center of Water outlet	31 (787)	31 (787)	31 (787)	31 (787)
Schedule 40 drip piping	1 (25)	1 (25)	1 (25)	1 (25)
** NOTE: Field installed water seal outlets, tees, and connectors are shipped with case.				
Refrigeration Outlets				
Left end of case to center of nearest refrigeration outlet	5 (127)	5 (127)	5 (127)	5 (127)
Left end of case to center of second refrigeration outlet	N/A	26 (660)	26 (660)	26 (660)
** NOTE: 2 Door case only has 1 refrigeration outlet.				
Outside Bottom Front Supports from end of case	7 ³ / ₈ (187)	7 ³ / ₈ (187)	7 ³ / ₈ (187)	7 ³ / ₈ (187)
Center Bottom Front Support from centerline	24 (610)	24 (610)	24 (610)	24 (610)
** NOTE: Distance between Center and Outside supports will vary.				

Electrical Data

Number of Fans 8.25-in.	2 dr	3 dr	4 dr	5 dr						
	2	3	4	5						
		Amperes					Watts			
Evaporator Fan 120V 50/60Hz	2 dr	3 dr	4 dr	5 dr	2 dr	3 dr	4 dr	5 dr		
	0.60	0.90	1.20	1.50	36	54	72	90		
Door Anti-sweat Heaters (on fan circuit) 120V 50/60Hz Innovator	0.8	1.2	1.6	2.0	94	140	187	234		
120V 50/60Hz Innovator III	1.4	2.0	2.7	3.4	162	244	325	406		
Frame Anti-sweat Heaters (on fan circuit) 120V 50/60Hz	0.96	1.43	1.92	2.4	115	172	230	288		
Condensing Unit (208V, 60 Hz) Standard NOTE: One compressor can start at a time.										
Compressor RLA	4.5	4.0	4.5	4.5						
Compressor LRA	32/unit	37/unit	32/unit	32/unit						
Merchandise Circuit Requirements (208V, 3 ph, 60 Hz)										
Total Amps	9.0	13.5	18.0	17.0						
Maximum Current Capacity (MCA)	11.3	16.9	21.6	21.1						
Maximum Over Current Protection (MOPD)	15	20	25	25						
					NEMA Plug					
										
					L21-20P	L21-30P				
Optional Electrical Plug - NEMA					L21-20P (2, 3 dr)	L21-30P (4, 5 dr)				

NOTE: MOPD is 15 amps for 2 door. Cord-connected cases use a 20 amp plug, and must be connected to a 20 amp receptacle. MOPD is 25 amps for 4 and 5 door. Cord-connected cases use a 30 amp plug, and must be connected to a 30 amp receptacle.

NOTE: MOPD is 20 amps for 3 door. Cord-connected cases use a 20 amp plug, and must be connected to a 20 amp receptacle.

Defrost

Drain Heaters (120V)	1	1.5	2	2.57	120	180	240	300
Electric Defrost (208V)	9	13.5	17.3	16.84	1870	2800	3600	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.

		Amperes					Watts			
STANDARD LED LIGHTING	2 Dr	3 Dr	4 Dr	5 Dr	2 Dr	3 Dr	4 Dr	5 Dr		
GE	0.37	0.54	0.70	0.87	44.7	64.5	84.2	104		

RLT-W

Frozen Food / Ice Cream

ENDS or PARTITIONS

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

PHYSICAL DATA

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

ESTIMATED SHIPPING WEIGHT †

Case	2 Dr	3 Dr	4 Dr	5 Dr	Solid End (each)
lb (kg)	1052 (477)	1345 (610)	1692 (769)	2061 (767)	60 (27)

† 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) 26-inch shelves, evenly distributed vertically

CoreLink Propane Wiring - 2 Door

RLT-W Frozen Food / Ice Cream

WIRE MARKER COLORS/ABBREVIATIONS

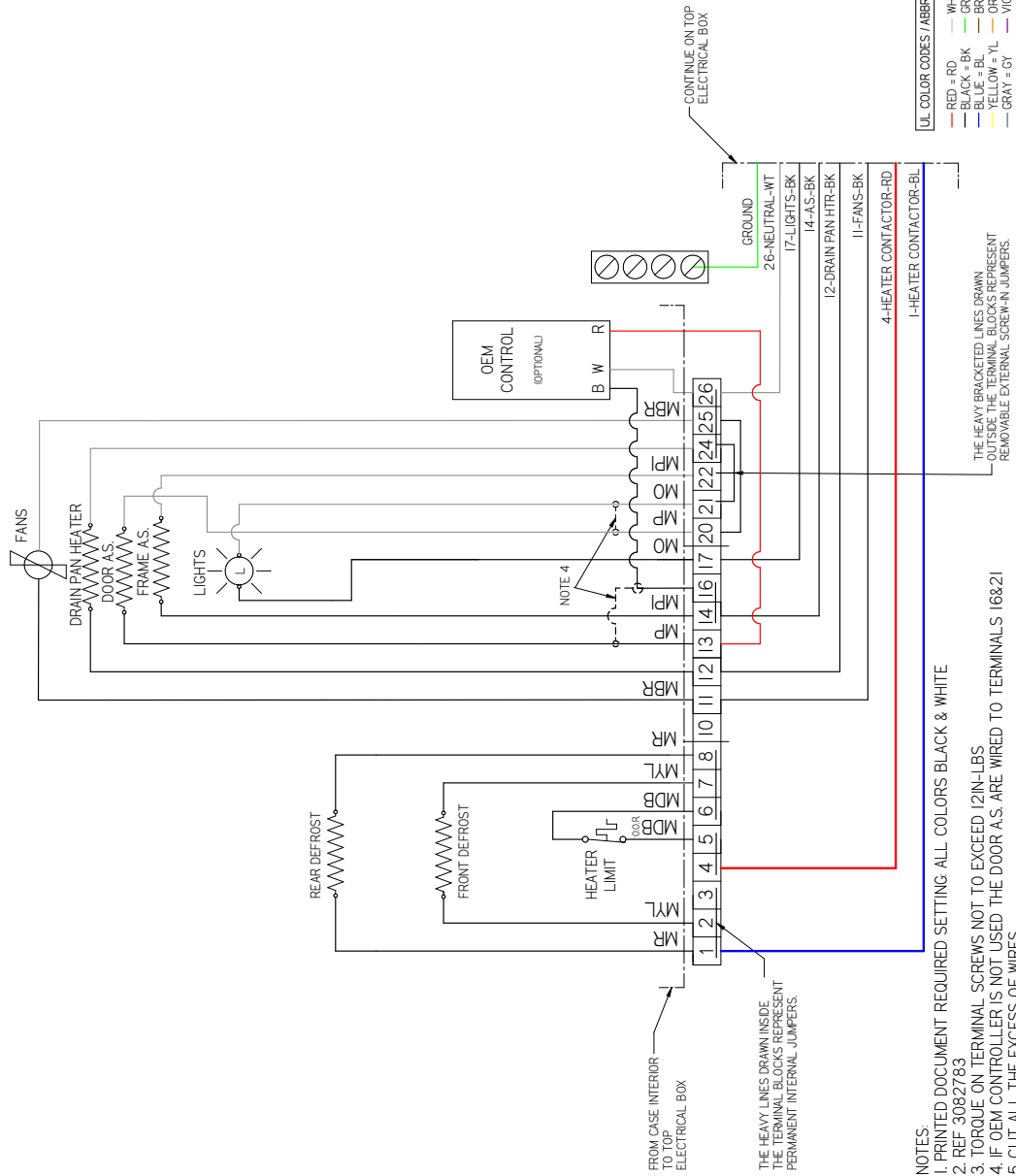
BLACK = MEB	MAROON = MMF
BLUE = MBL	ORANGE = MO
BROWN = MBR	PINK = MFI
DARK BLUE = MDB	PURPLE = MP
GRAY = MY	RED = MR
LIGHT BLUE = MLB	YELLOW = MYL

FACTORY 14GA WIRE
FACTORY 12GA WIRE
FIELD WIRE

3168522_C

UL COLOR CODES / ABBREVIATIONS

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



- NOTES:**
1. PRINTED DOCUMENT REQUIRED SETTING ALL COLORS BLACK & WHITE
 2. REF 3082783
 3. TORQUE ON TERMINAL SCREWS NOT TO EXCEED 12IN-LBS
 4. IF OEM CONTROLLER IS NOT USED THE DOOR A.S. ARE WIRED TO TERMINALS 16821
 5. CUT ALL THE EXCESS OF WIRES

RLT-W

Frozen Food / Ice Cream

CoreLink Propane

Wiring - 2 Door

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BLACK = MBK	MAROON = MMR
BLUE = MEL	ORANGE = MO
BROWN = MBR	PINK = MPI
BROWN = MCB	PURPLE = MP
GREEN = MGC	RED = MR
LIGHT BLUE = M.LB	YELLOW = MYL

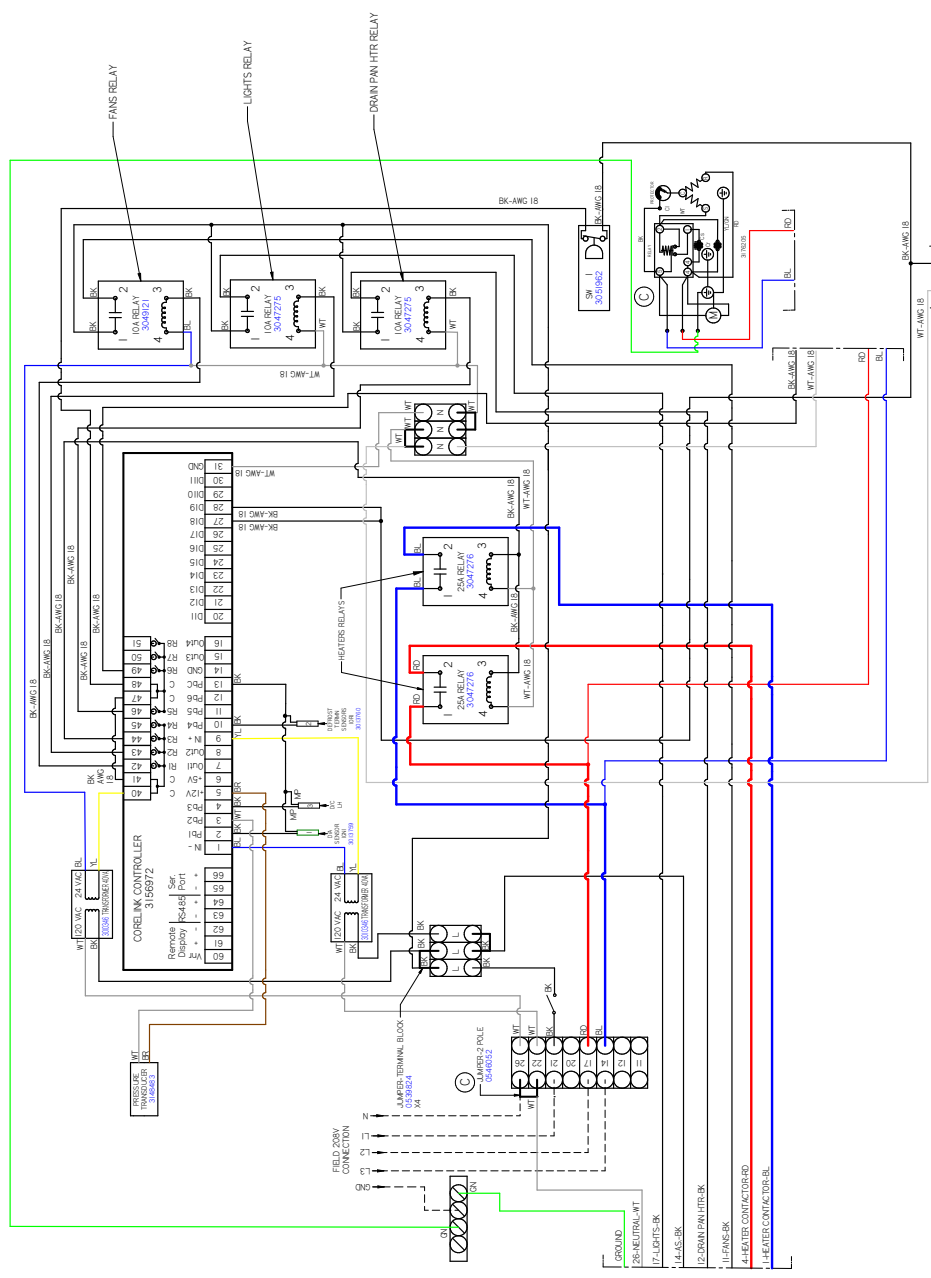
FACTORY 14GA WIRE

FACTORY 12GA WIRE

FIELD WIRE

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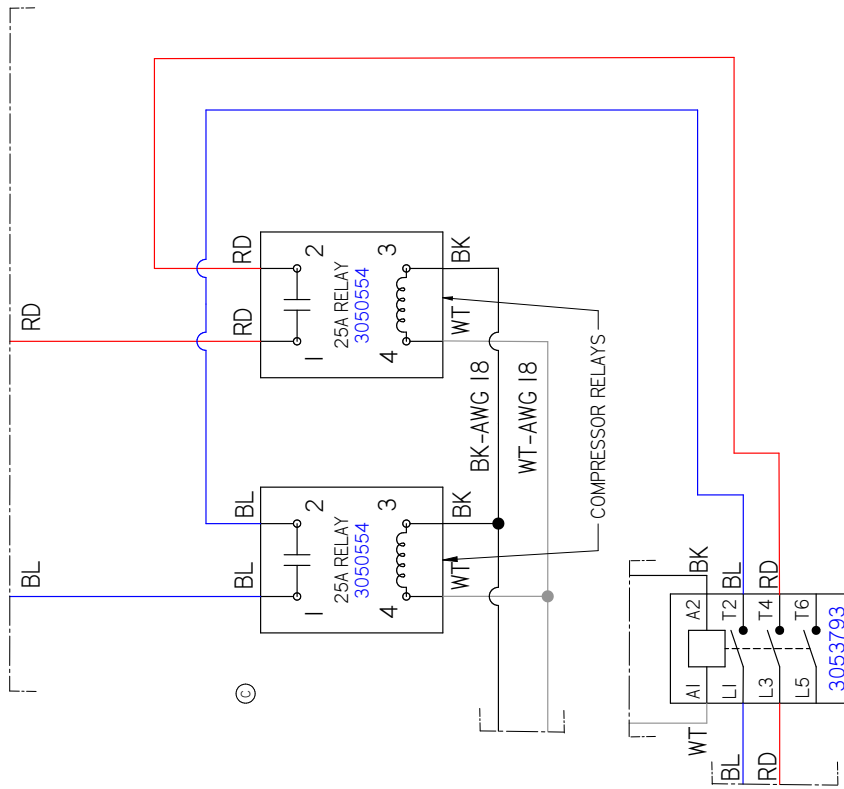
CoreLink Propane Wiring - 2 Door

RLT-W Frozen Food / Ice Cream

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BLACK = MBK	MAROON = MMAR
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GRAY = MGR	PURPLE = MP
GREEN = MGB	RED = MR
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3168522_C

FACTORY 14GA WIRE	
FACTORY 12GA WIRE	---
FIELD WIRE	- - - - -



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RLT-W

Frozen Food / Ice Cream

CoreLink Propane

Wiring - 3 Door

WIRE MARKER COLORS/ABBREVIATIONS

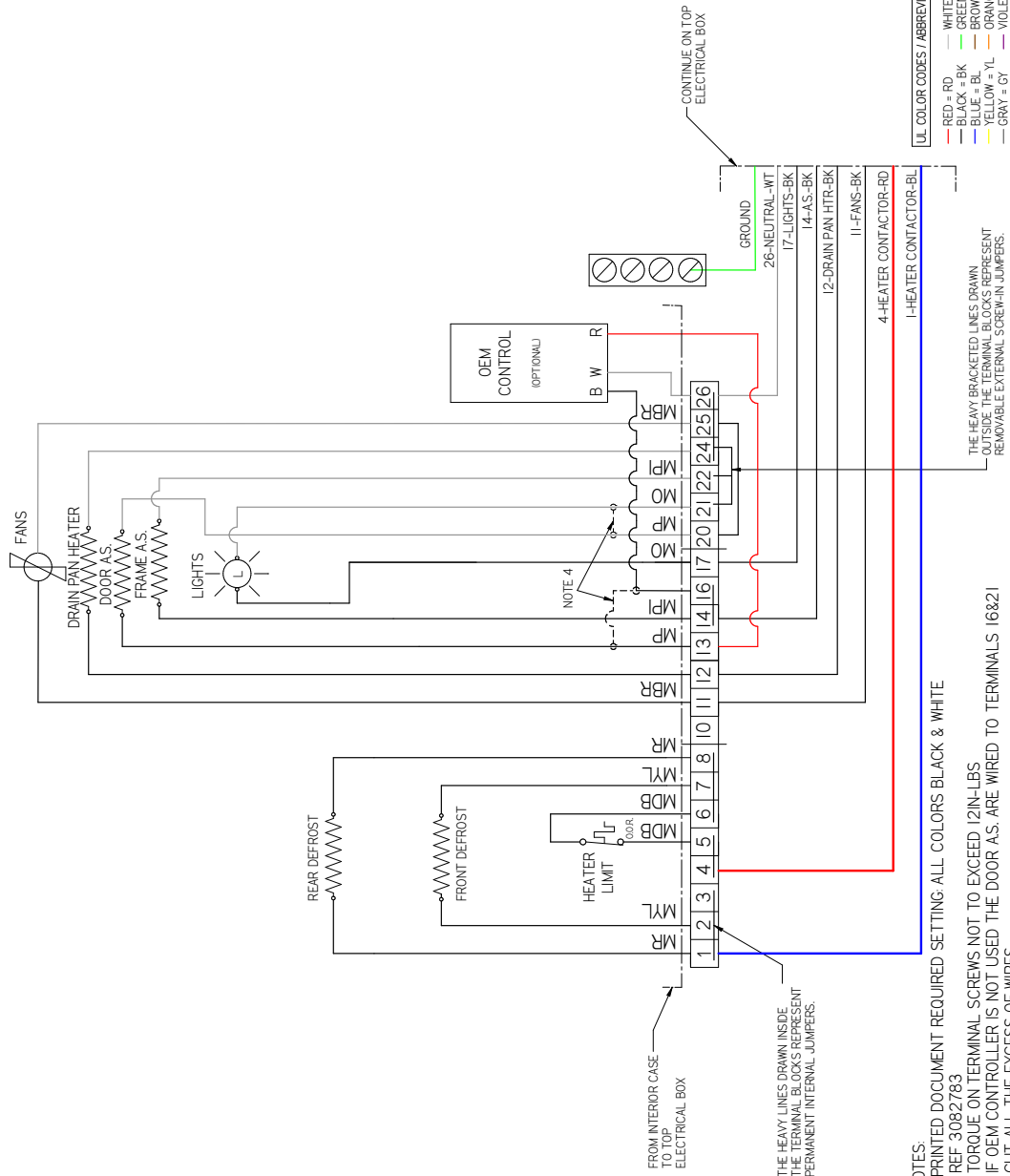
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3168523_C

FACTORY 14GA WIRE
FACTORY 12GA WIRE
FIELD WIRE

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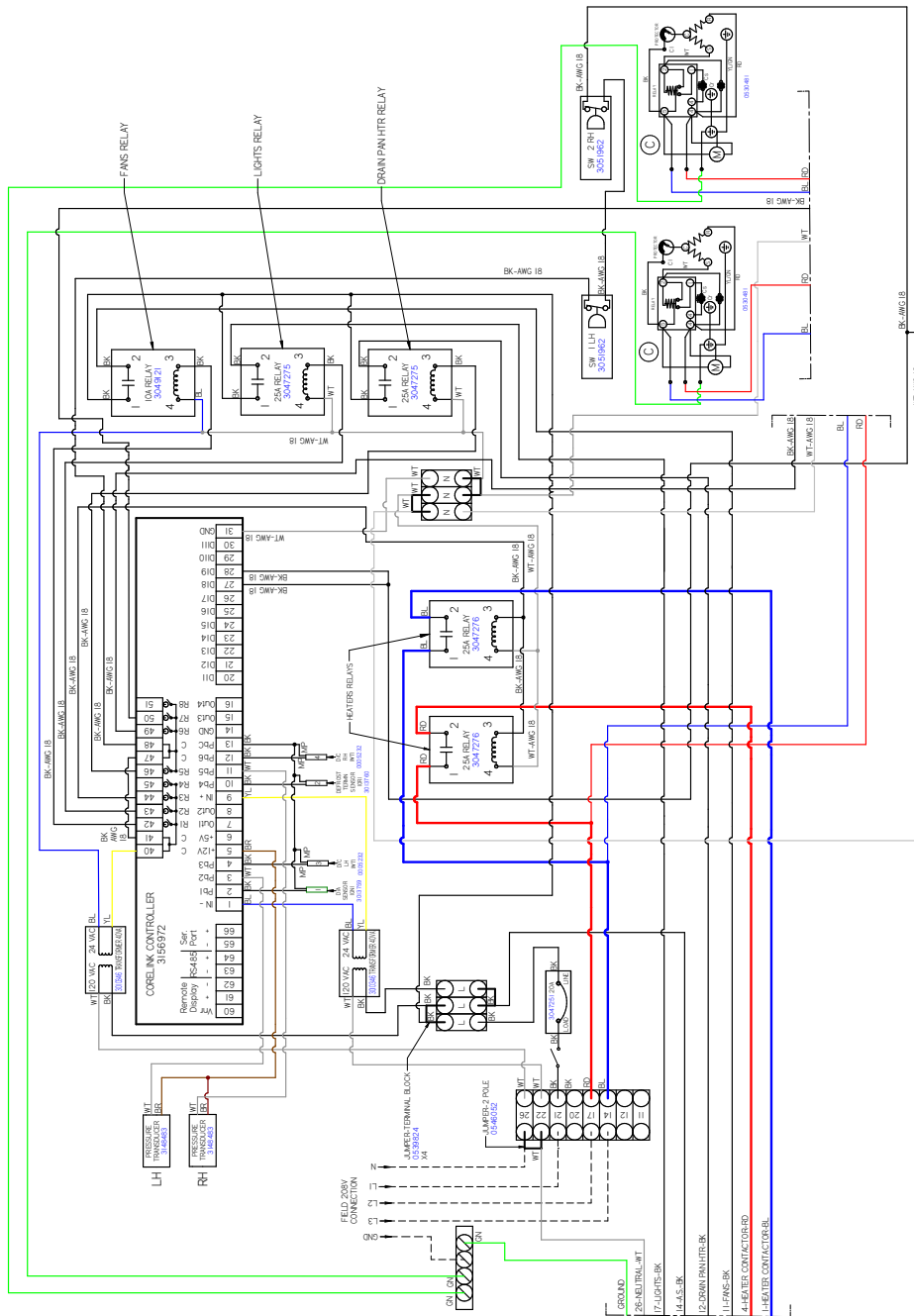
CoreLink Propane Wiring - 3 Door

RLT-W Frozen Food / Ice Cream

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LIGHT BLUE = MLB	YELLOW = MFL

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FACTORY 14GA WIRE
FACTORY 12GA WIRE
FIELD WIRE

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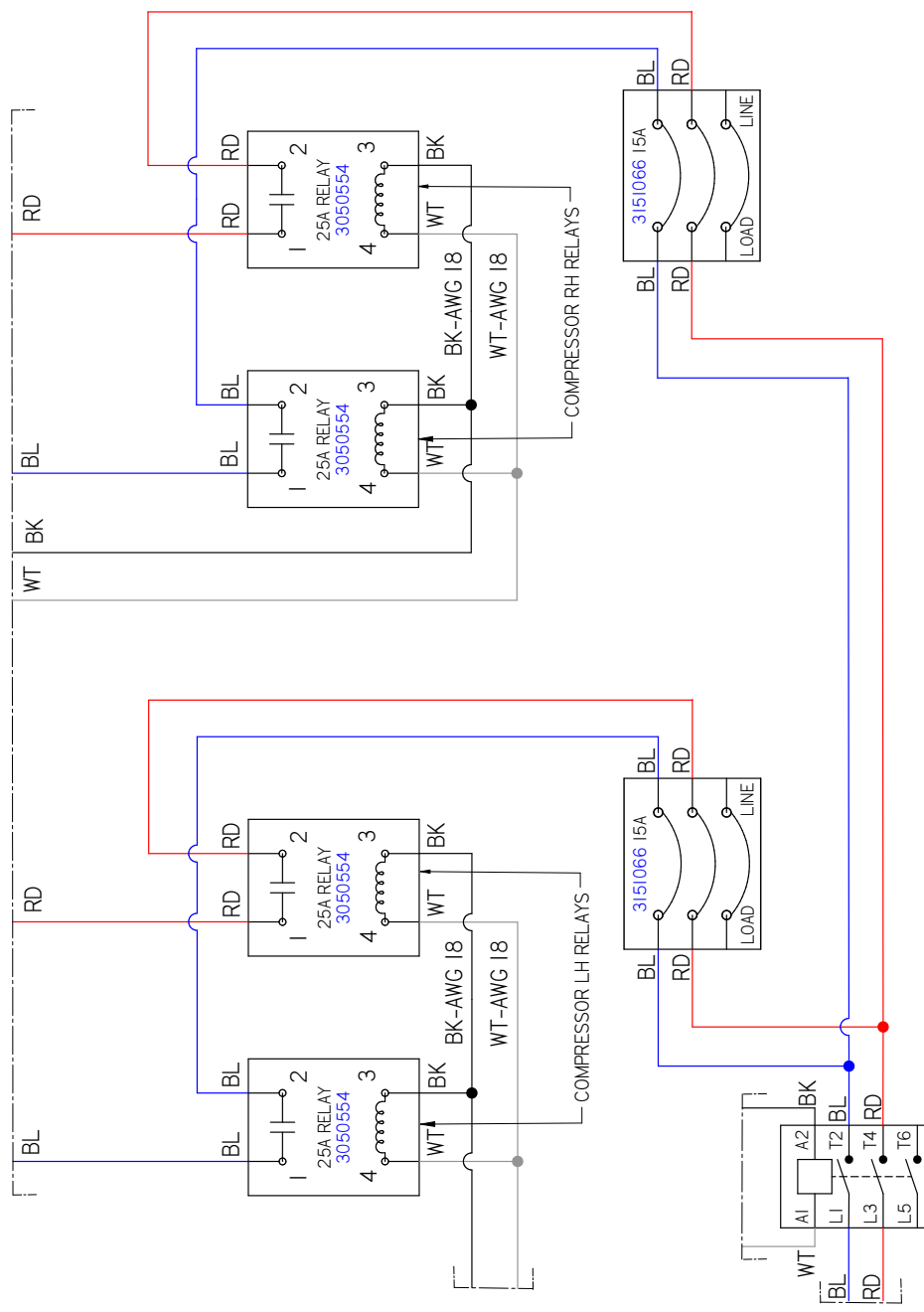
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RLT-W

Frozen Food / Ice Cream

CoreLink Propane

Wiring - 3 Door



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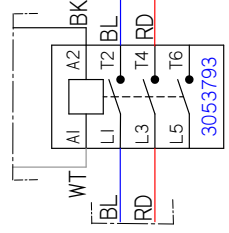
FACTORY 14GA WIRE
 FACTORY 12GA WIRE
 FIELD WIRE

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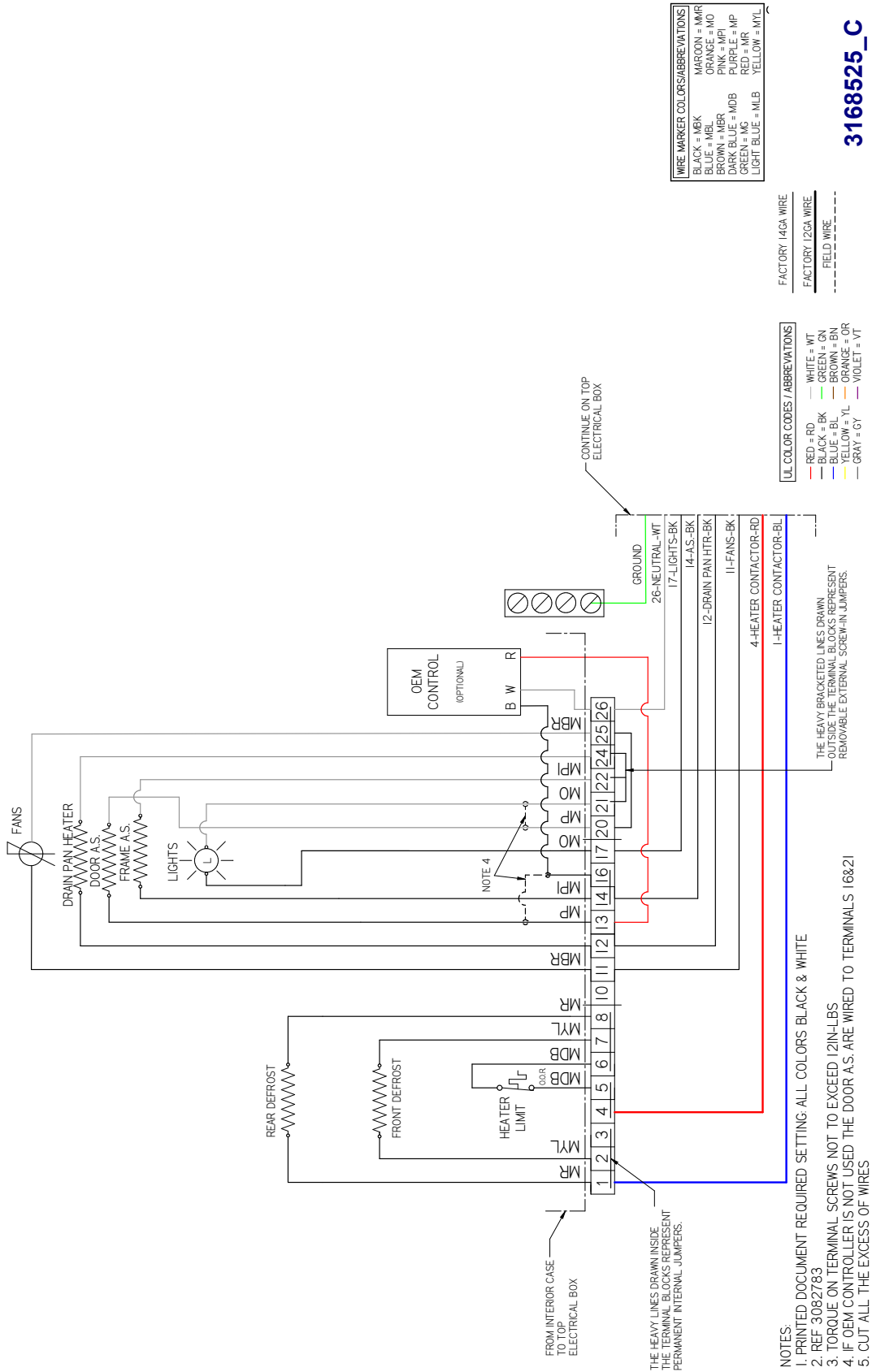
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CoreLink Propane Wiring - 4 & 5 Door

RLT-W Frozen Food / Ice Cream

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RLT-W

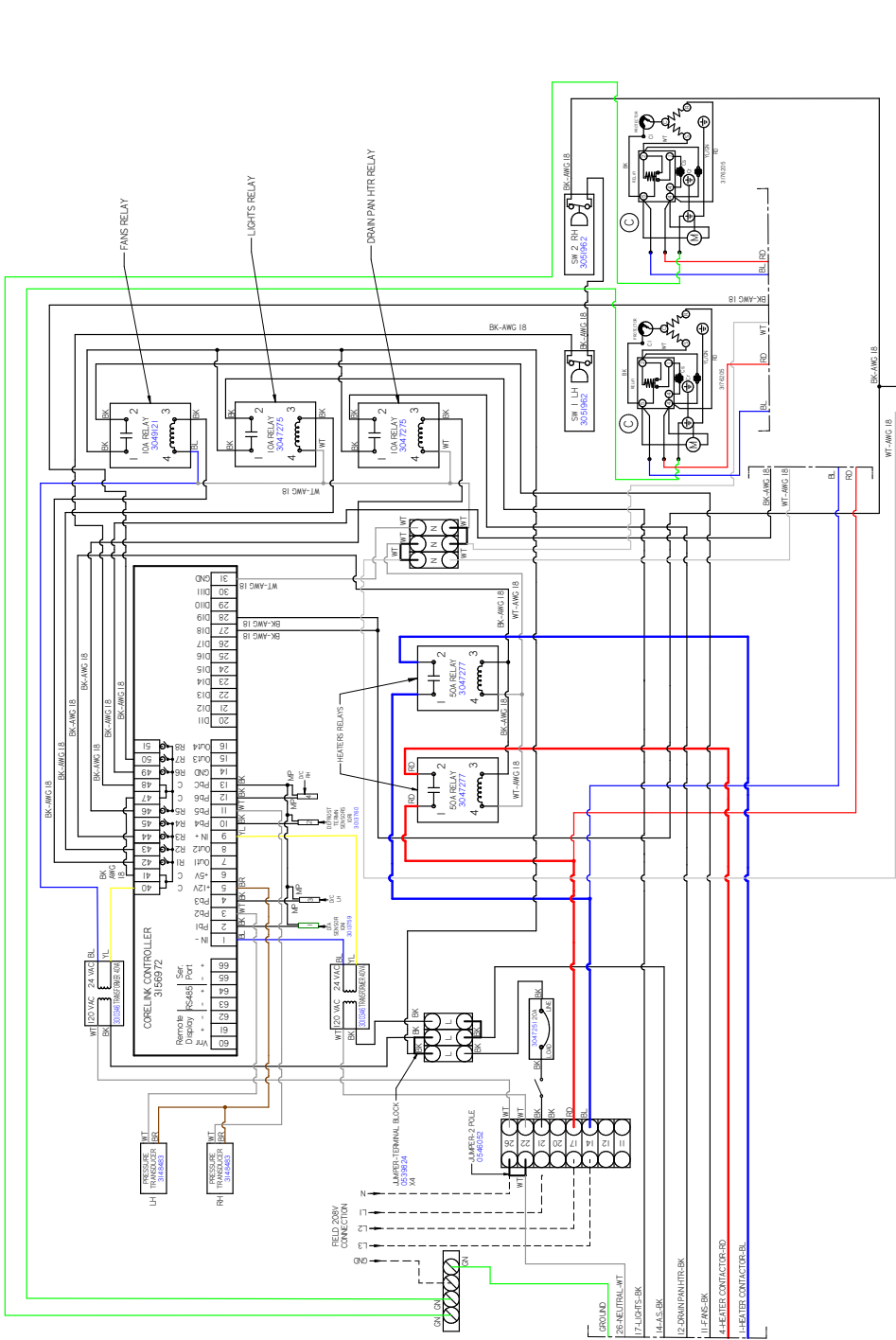
Frozen Food / Ice Cream

CoreLink Propane

Wiring - 4 & 5 Door

3168525_C

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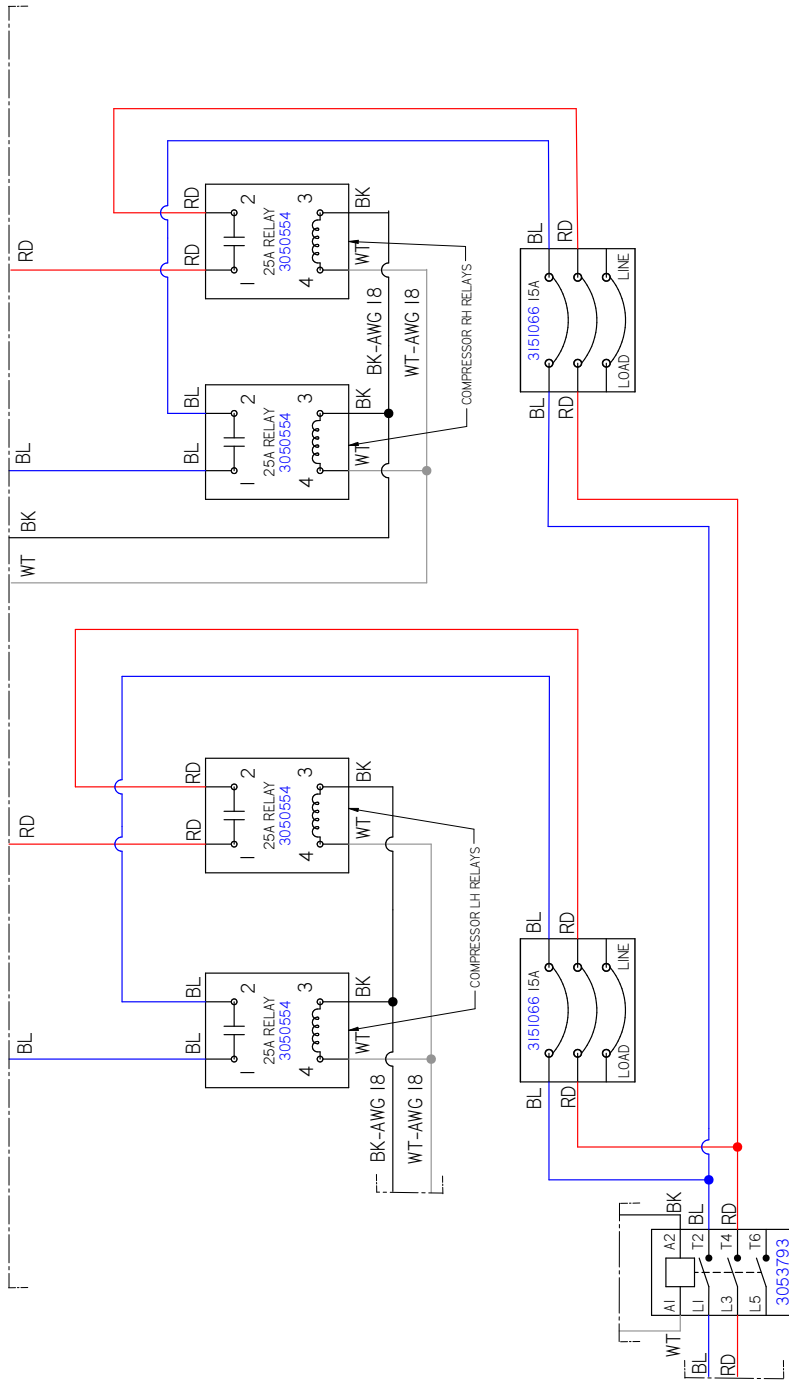
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FACTORY 14GA WIRE	
SOLID LINE	FACTORY 12GA WIRE
DASHED LINE	FIELD WIRE

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CoreLink Propane Wiring - 4 & 5 Door

RLT-W Frozen Food / Ice Cream



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BLUE = BL	ORANGE = MO
BROWN = MBR	PINK = MPI
DARK BLUE = MDB	PURPLE = MP
GREEN = MG	RED = MR
LIGHT BLUE = MLB	YELLOW = MTL

FACTORY 1/4GA WIRE

FACTORY 1/2GA WIRE

FIELD WIRE

UL COLOR CODES / ABBREVIATIONS

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WHITE = WT

BLACK = BK

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BLUE = BL

BROWN = BN

YELLOW = YL

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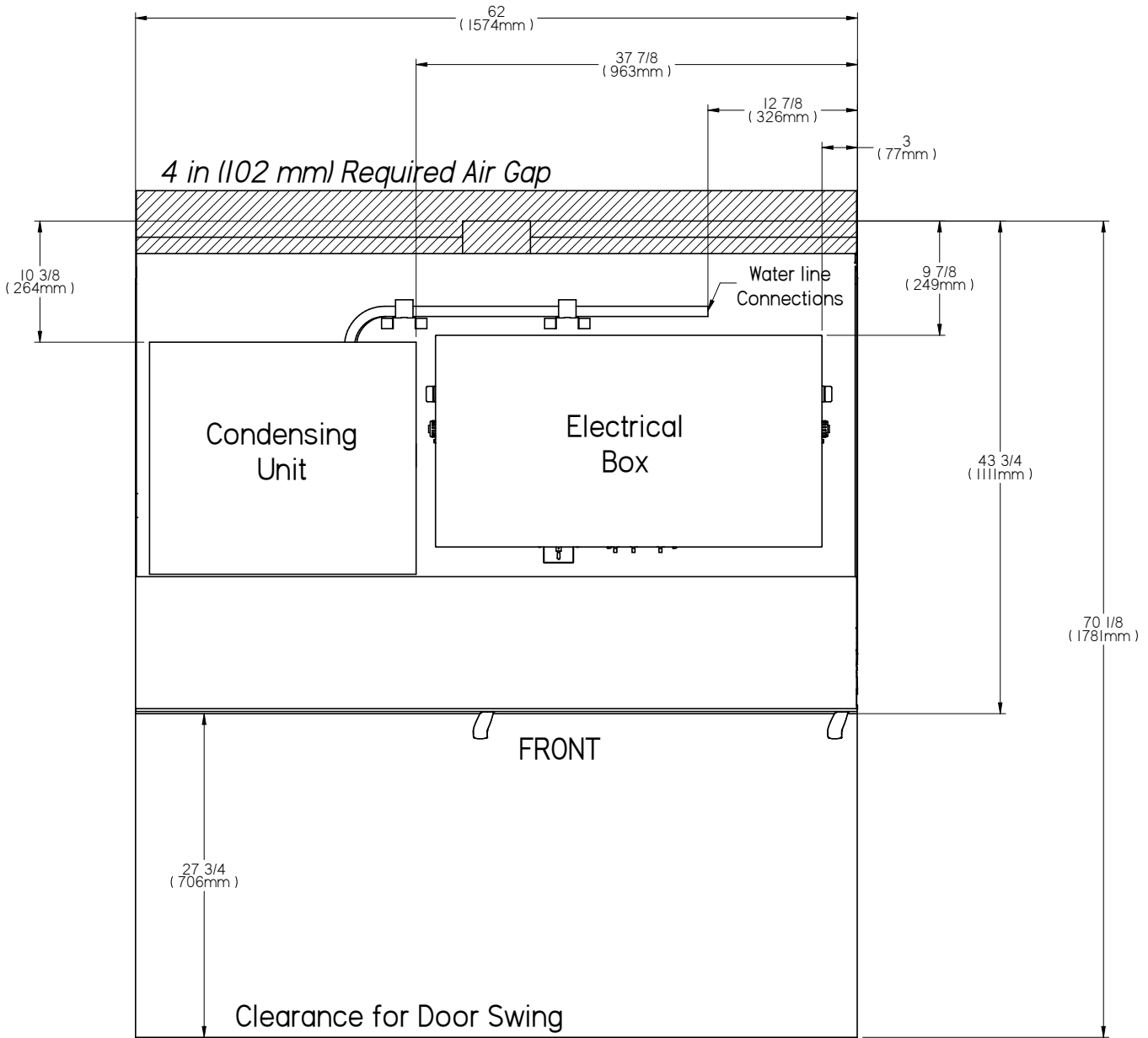
VIOLET = VT

3168525_C

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RLT-W
Frozen Food / Ice Cream

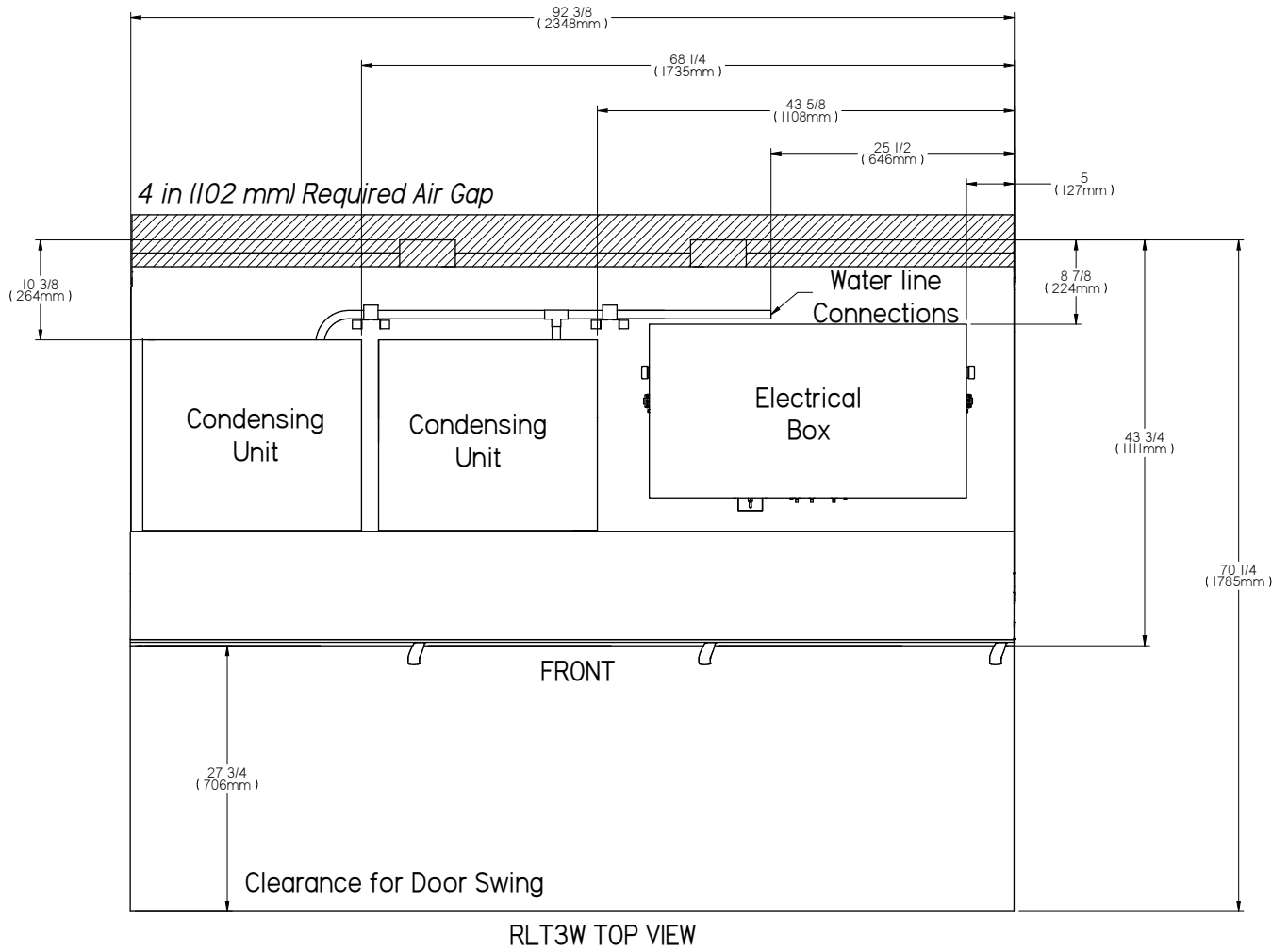
RLT-W
Top Views



RLT2W TOP VIEW

**RLT-W
Top Views**

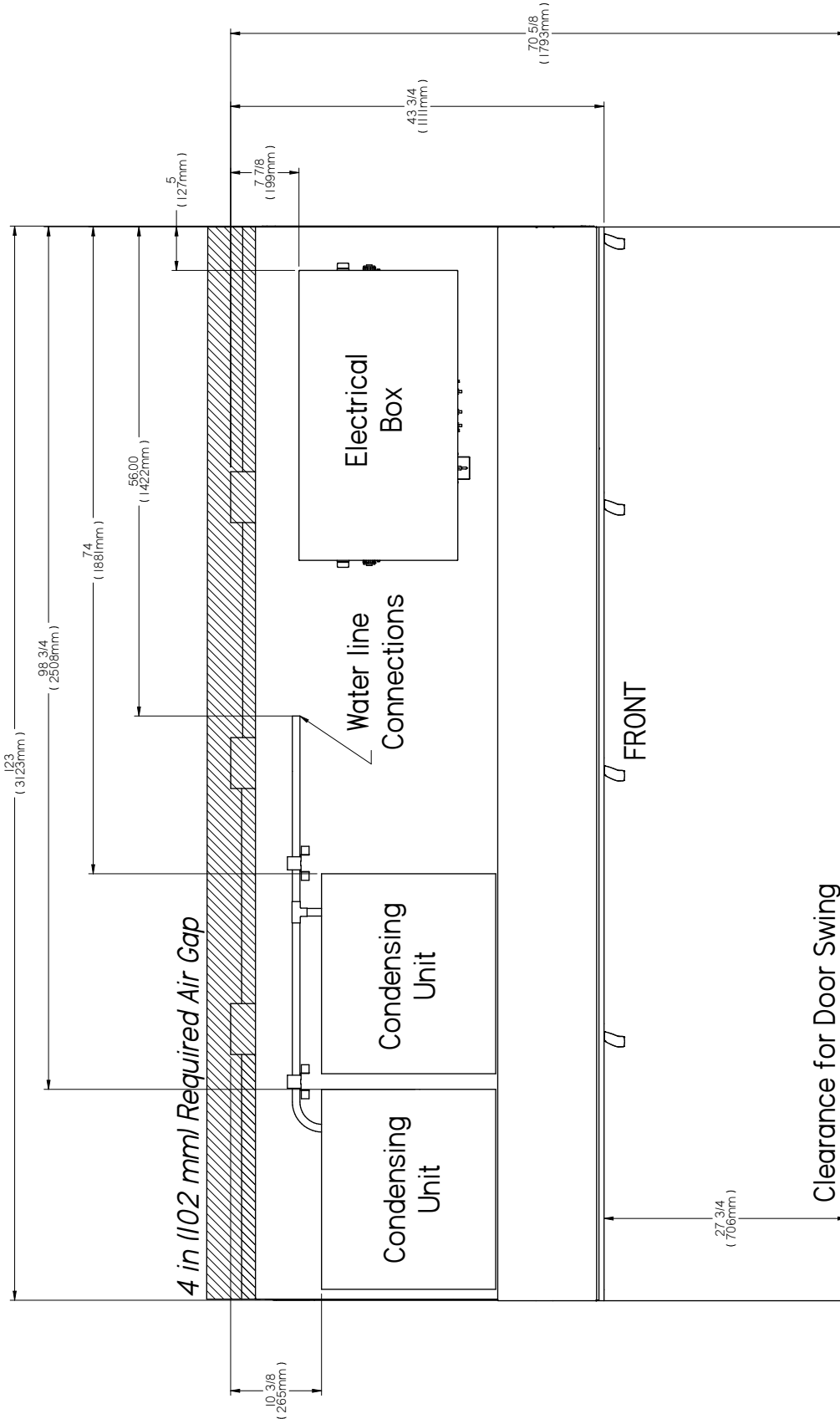
**RLT-W
Frozen Food / Ice Cream**



RLT-W

Frozen Food / Ice Cream

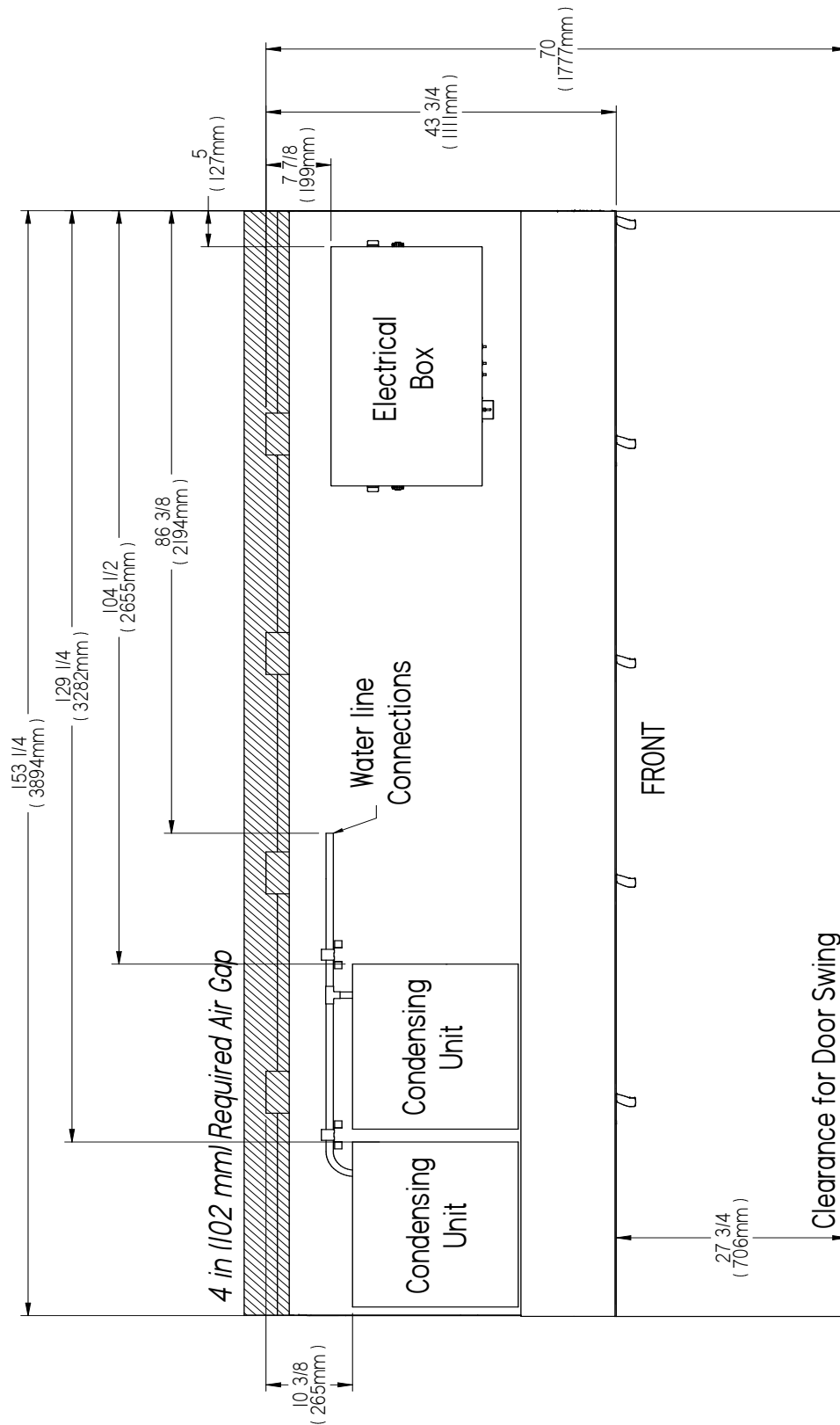
RLT-W Top Views



RLT4W TOP VIEW

**RLT-W
Top Views**

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



RLT5W TOP VIEW

RLT-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.husmann.com

Call toll free: 1.855.487.7778

Revision History

Revision A: April 2023: Original issue.