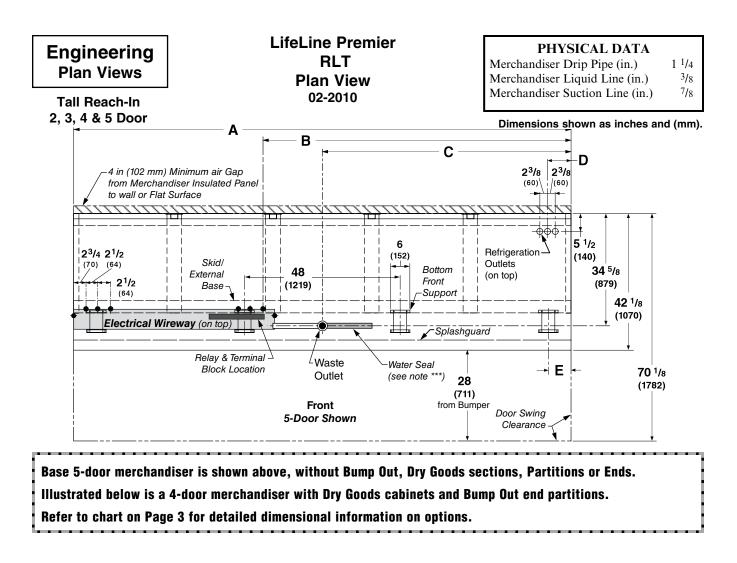


Item	Part #	Description	Wiring Item #	Item	Part #	(Qty)	Description W	Viring Item #
Fan A	SSEMBLIES,	and Thermostats		HEATE	ERS (CONTIN	UED)		
(A)	Fan Assen	ıbly	(1)	(J)	Koolgas S	Supplen	nental Heater – Plenum (12	20V) (10)
	0477658	Standard Energy Efficient	Motor		0452980	(1)	2 Door Models	
	0315470	Fan Blade			0452981	(1)	3 Door Models	
<b>(B)</b>	0331798	Standard Non-adjustable	(2)		0452982	(1)	4 Door Models	
		Defrost Thermostat			0452983	(1)	5 Door Models	
(C)		Optional Adjustable						
		Refrigeration Thermostat	(3)	LED I	FIXTURES AN	D POWE		
(D)	0440423	Defrost Limit Thermostat	(4)	Κ.	0499399		LED Power Supply	(11)
<b>(E)</b>	0446007	Relay Control Thermostat		L.			LED Fixture	(12)
		Fan and Anti-sweat Heate	r Thermostat				Replace with like fixtures	
RELAY	S			M. Facade Lamp, LED			(13)	
(F)	0342598	Control Relay (120V Ko	, , , , , , , , , , , , , , , , , , , ,		05091920		2900K 29.5 In. Length	
(G)	0342599	Control Relay (208V)	(7)		05091930		2900K 30.5 In. Length	
				N.	05091900	0	Dry Goods Lamp, LED 35	500K (14)
HEATE	ERS				KLU9600	)	Shelf, Lighted, Pearwood	
(H)		efrost Heaters (208V)	(8)					
	0461938	(1) 2 Door Models		NOTE	E: For LED	lighting	parts contact your Hussman	n service repre-
	0461939	(1) 3 Door Models		sentati	ive at 1-800-	922-191	9. Please have your model an	nd serial number
	0461940	(1) 4 Door Models		availal	ble. Descrip	tions inc	luding size and color are at w	WW.HUSSMANN.
	0461941	(1) 5 Door Models		сом/S	ERVICEAND	PARTS.		
<b>(I)</b>		Heater (Electric & Kool C	Gas) (120V) (9)					
	0508199	(1) 2 Door Models		Refe	er to Inn	OVATC	OR REACH-IN GLASS I	Door
	0508200	(1) 3 Door Models		INST	ALLATIO	N AND	SERVICE MANUAL, <b>P</b>	IN 0425683,
	0508201	(1) 4 Door Models		for 1	Innovator	r, Inno	vator II and Innovato	or III and
	0508202	(1) 5 Door Models		-	ie replac			
				<i>j</i>			<b>r</b>	

#### Data sheet-LifeLine RLT

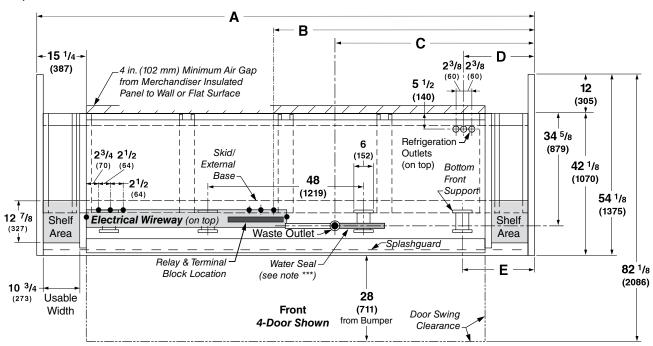
**NOTE:** Revision F adds NOTE on page 3 and removes dry good shelves dimensions. Other changes marked by bar, underline or circle.



# LifeLine Premier RLT – Dry Goods \ Bump Out Plan View

2,3 & 4 Door

Dimensions shown as inches & (mm).



## Plan View Dimensions for *LifeLine Premier* Options

LifeLine Premier **RLT** 

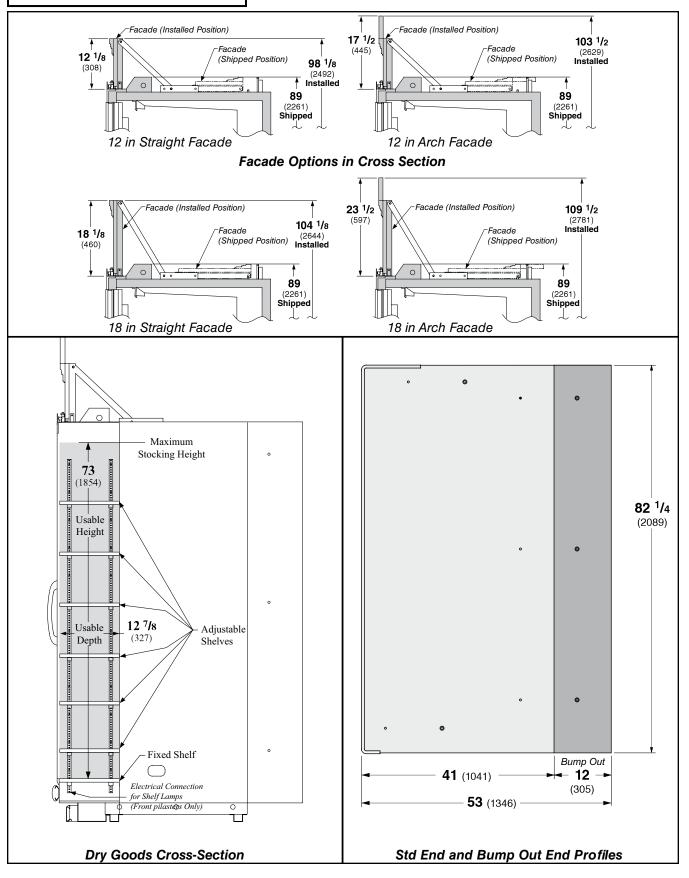
With Innovator Doors Low Temperature

				Low Te	mperature
Abb Gen	reviations: DG = Dry Goods section BO = Bump Out	2 Dr	3 Dr	4 Dr	5 Dr
	Merchandiser Length	62 (1575)	92 1/2 (2350)	122 7/8 (3121)	153 3/8 (3896)
	<b>OTE:</b> Each solid end adds approximately $2^{3/8}$ in (60 mm) to length of line up; each particular the solid end adds approximately $2^{3/8}$ in (60 mm) to length of line up; each particular the solid end adds approximately $2^{3/8}$ in (60 mm) to length of line up; each particular the solid end adds approximately $2^{3/8}$ in (60 mm) to length of line up; each particular the solid end adds approximately $2^{3/8}$ in (60 mm) to length of line up; each particular the solid end adds approximately $2^{3/8}$ in (60 mm) to length of line up; each particular the solid end adds approximately $2^{3/8}$ in (60 mm) to length of line up; each particular the solid end adds approximately $2^{3/8}$ in (60 mm) to length of line up; each particular the solid end adds approximately $2^{3/8}$ in (60 mm) to length of line up; each particular the solid end adds approximately $2^{3/8}$ in (60 mm) to length of line up; each particular the solid end adds approximately $2^{3/8}$ in (60 mm) to length of line up; each particular the solid end adds approximately $2^{3/8}$ in (60 mm) to length of line up; each particular the solid end adds approximately $2^{3/8}$ in (60 mm) to length of line up; each particular the solid end adds approximately $2^{3/8}$ in (60 mm) to length of line up; each particular the solid end adds approximately $2^{3/8}$ in (60 mm) to length of line up; each particular the solid end adds approximately $2^{3/8}$ in (60 mm) to length of line up; each particular the solid end adds approximately $2^{3/8}$ in (60 mm) to length of line up; each particular the solid end adds approximately $2^{3/8}$ in (60 mm) to length of line up; each particular the solid end adds approximately $2^{3/8}$ in (60 mm) to length of line up; each particular the solid end adds approximately $2^{3/8}$ in (60 mm) to length of line up; each particular the solid end adds approximately $2^{3/8}$ in (60 mm) to length of line up; each particular the solid end adds approximately $2^{3/8}$ in (60 mm) to length of line up; each particular the solid end	\ ` ´ ´		l í í	100 /0 (0000)
	to case joints can add approximately $\frac{1}{8}$ in (3 mm) for gasket material.			,	
	Merchandiser Length <b>BO</b> includes 2 bump-out ends	66 (1676)	96 1/2 (2451)	126 7/8 (3222)	157 3/8 (3997)
	Merchandiser Length <b>DG</b> includes 4 ends and dry goods cabinets	92 1/2 (2350)	123 (3124)	153 3/8 (3896)	NA
(A)	Maximum O/S dimension of merchandiser back to front *	42 1/8 (1070)	42 1/8 (1070)	42 1/8 (1070)	42 <sup>1</sup> / <sub>8</sub> (1070)
	Maximum O/S dimension of merchandiser back to front <b>BO</b> * †	54 <sup>1</sup> / <sub>8</sub> (1375)	42 <sup>1</sup> / <sub>8</sub> (1070) 54 <sup>1</sup> / <sub>8</sub> (1375)	54 1/8 (1375)	54 <sup>1</sup> / <sub>8</sub> (1375)
	* Includes bumper. Add 26 <sup>1</sup> / <sub>2</sub> in. (673 mm) for door swing.	54 /8 (15/5)	54 /8 (15/5)	54 18 (1575)	54 18 (1575)
	<ul> <li>Merchandiser dimension plus 12 inch bump out</li> </ul>				
	Interior width of dry goods cabinet	10 3/4 (273)	10 3/4 (273)	10 3/4 (273)	NA
	Interior depth of dry goods cabinet	12 7/8 (327)	12 7/8 (327)	12 7/8 (327)	NA
	Back of merchandiser to front of splashguard	39 (991)	39 (991)	39 (991)	39 (991)
	Back of merchandiser to front of splashguard <b>BO</b>	51 (1295)	51 (1295)	51 (1295)	51 (1295)
	Width of Skid rail	3 3/4 (95)	3 3/4 (95)	3 3/4 (95)	3 <sup>3</sup> / <sub>4</sub> (95)
	Width of Bottom Front Support	6(152)	6(152)	6(152)	6(152)
	Stub-up area between front support and splashguard	$7\frac{1}{8}(181)$	$7 \frac{1}{8}(181)$	7 1/8 (181)	7 1/8 (181)
	blub up area between none support and spasniguard	/ ///	/ ///	, ,,,(101)	, ,,(101)
Elec	trical Service				
	RH end of merchandiser to the center of nearest knockout	2 3/4 (70)	33 1/4 (845)	63 5/8 (1616)	94 1/8 (2391)
(B)	RH end of merchandiser to the center of nearest knockout <b>BO</b>	4 3/4 (121)	35 1/4 (895)	65 5/8 (1667)	96 1/8 (2442)
(B)	RH end of merchandiser to the center of nearest knockout <b>DG</b>	18 (457)	48 1/2 (1232)	78 7/8 (2003)	NA
(2)	RH end of merchandiser to the center of LH knockout	59 1/4 (1505)	89 3/4 (2280)	120 1/8 (3051)	150 5/8 (3826)
	Back O/S of merchandiser to center of knockout	31 5/8 (803)	31 5/8 (803)	31 5/8 (803)	31 5/8 (803)
	Back O/S of merchandiser to center of knockout <b>BO</b> †	43 5/8 (1108)	43 5/8 (1108)	43 5/8 (1108)	43 5/8 (1108)
	Wireway Length	62 (1575)	62 (1575)	62 (1575)	62 (1575)
** N	OTE: Electrical Field Wiring Connection Point is at terminal.				
Was	te Outlet				
(C)	Right end of merchandiser to center of waste outlet	23 7/8 (606)	54 1/4 (1378)	46 1/4 (1175)	76 5/8 (1946)
(C)	Right end of merchandiser to center of waste outlet <b>BO</b>	25 7/8 (657)	56 1/4 (1429)	48 1/4 (1226)	78 5/8 (1997)
(C)	Right end of merchandiser to center of waste outlet DG	39 1/8 (994)	69 1/2 (1765)	61 1/2 (1562)	NA
	Back O/S of merchandiser to center of waste outlet	34 5/8 (879)	34 5/8 (879)	34 5/8 (879)	34 5/8 (879)
	Back O/S of merchandiser to center of waste outlet BO †	46 5/8 (1184)	46 5/8 (1184)	46 5/8 (1184)	46 5/8 (1184)
	20				
Wat	er Seal				
	Edge of water seal to center of waste outlet	13 (330)	13 (330)	13 (330)	13 (330)
	Schedule 40 PVC drip pipe	1 1/4 (32)	1 1/4 (32)	1 1/4 (32)	1 1/4 (32)
*** j	NOTE: Field installed water seal outlets, tees, and connectors are shipped with merchandiser.				
	111				
Refi	igeration Outlet				
(D)	RH end of merchandiser to center of middle RH refrigeration outlet	7 1/4 (184)	7 1/4 (184)	7 1/4 (184)	7 1/4 (184)
(D)	RH end of merchandiser to center of middle RH refrigeration outlet <b>BO</b>	9 1/4 (235)	9 1/4 (235)	9 1/4 (235)	9 1/4 (235)
(D)	RH end of merchandiser to center of middle RH refrigeration outlet DG	22 1/2 (572)	22 1/2 (572)	22 1/2 (572)	NA
	Back O/S of merchandiser to center of refrigeration outlets	5 1/2 (140)	5 1/2 (140)	5 1/2 (140)	5 1/2 (140)
	Back O/S of merchandiser to center of refrigeration outlets BO †	17 1/2 (445)	17 1/2 (445)	17 1/2 (445)	17 1/2 (445)
(E)	Outside bottom front supports from end of merchandiser	7 (178)	7 (178)	7 (178)	7 (178)
(E)	Outside bottom front supports from end of merchandiser BO	9 (229)	9 (229)	9 (229)	9 (229)
(E)	Outside bottom front supports from end of merchandiser DG ††	26 1/2 (673)	26 <sup>3</sup> / <sub>4</sub> (679) RH	26 1/4 (667)	NA
			37 1/2 (952) LH		
	Center bottom front support from Centerline	24 (610)	24 (610)	24 (610)	24 (610)
	Center bottom front support from Centerline BO	24 (610)	24 (610)	24 (610)	24 (610)
	Center bottom front support from Centerline DG ††	6 <sup>3</sup> / <sub>4</sub> (171) LH		24 (610)	NA
	<i>††Distance between Center and Outside supports will vary</i>				

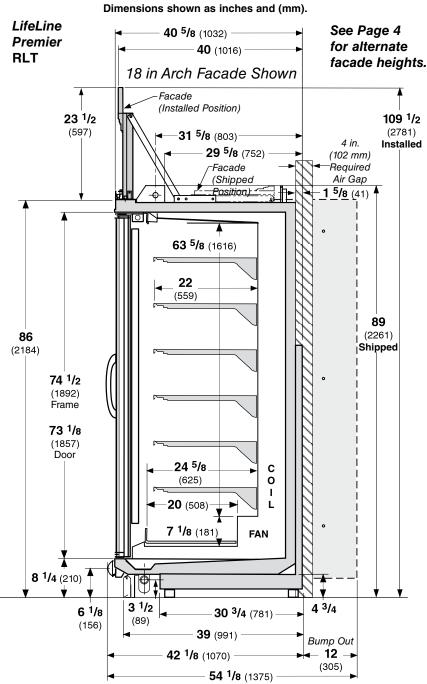
# LifeLine Premier **RLT**

### With Innovator Doors

Low Temperature



#### Refrigeration and electrical connections are on top. Overhead piping and electrical circuits are required.



#### NSF<sup>®</sup> Certification

This merchandiser model is manufactured to meetNSF/ANSI (National Sanitation Foundation) Standard #7 requirements for construction, materials & cleanability.

## LifeLine Premier RLT With Innovator Doors

Low Temperature

FF

IC

#### **REFRIGERATION DATA**

Note: This data is based on store temperature and humidity that does not exceed  $75^{\circ}$ F and 55% R.H.

	Discharge Air (°F)	-5	12
	Evaporator (°F)	-11	-19
-	Unit Sizing (°F)	-14	-22
	BtulhrlDoor*		
	INNOVATOR		
	Parallel	1105	1295
	Conventional	1130	1320
	DEFROST	DATA	
		FF	IC
	Frequency (hr)	24	24
	Defrost Water (lb/Dr/day)	1.2	1.3
	(± 15% based on merchan and product loading.)	diser co	nfiguration
	Electric	FF	IC
	Temp Term (°F)	54°	54°
	Failsafe (minutes)	48	48
	GAS		
	Duration (minutes)	22	22

**OFFTIME** Not Recommended

#### **CONVENTIONAL CONTROLS**

#### Low Pressure Backup Control

FF IC CI/CO (Temp °F)\* -18°/-34° -26°/-45°

Indoor Unit Only, Pressure Defrost Termination (Temp °F)\*

Not Recommended

\*Use a Temperature Pressure Chart to determine PSIG conversions.

#### Estimated Charge \*\*\*

2 Dr	2.3 lb	37 oz	1.0 kg
3 Dr	3.2 lb	51 oz	1.4 kg
4 Dr	4.1 lb	66 oz	1.8 kg
5 Dr	5.1 lb	82 oz	2.3 kg

\*\*\*This is an average for all refrigerant types. Actual refrigerant charge may vary by approximately half a pound.

# LifeLine Premier **RLT**

With Innovator Doors Low Temperature

#### **Electrical Data**

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

				2Dr	3Dr	4Dr	5Dr				
Number of	Fans	IS		2	3	4	5				
				Amp	eres		Watts				
				2Dr	3Dr	4Dr	5Dr	2Dr	3Dr	4Dr	5Dr
Energy Effi	icient Evap	orator Fan									
	/60Hz Inn			1.65	2.5	3.3	4.1	125	188	250	313
	-	port Innovato		0.9	1.4	1.8	2.3	125	188	250	313
Door Anti-s	sweat Heat	ers (on fan ci	rcuit)								
	/60Hz Inn			1.1	1.7	2.2	2.8	184	200	267	334
	-	port Innovato		0.7	1.1	1.5	1.8	153	230	306	382
		aters (on fan c	ircuit)								
120V 50	/60Hz Inn	ovator		0.96	1.43	1.92	2.4	115	172	230	288
	-	port Innovato	or	0.5	0.8	1.1	1.3	115	172	230	288
Minimum C	-	pacity									
120V	50/60Hz	Innovator Ele	ctric Defrost	5.7	7.2	9.3	11.6				
120V	50/60Hz	Innovator Ko	-	5.5	8.7	11.7	14.8				
220V	50/60Hz	Exp Innovato	r Electric Defrost	3.2	4.2	5.5	6.8				
220V	50/60Hz	Exp. Innovato	or Koolgas Defrost	3.8	6.0	8.1	10.1				
Maximum	Over Curr	ent Protection	n 120V	20	20	20	20				
Maximum	Over Curr	ent Protection	n 220V	20	20	20	20				
Defrost											
Drain He	eaters (Ko	ol-Gas or Ele	ctric)								
	120V	50/60Hz	Standard	2.5	2.6	3.1	3.5	297	317	366	419
	220V	50/60Hz	Export	1.35	1.44	1.66	1.9	297	317	366	419
Kool-Ga	s Supplem	ental Heaters									
	120V	50/60Hzz	Standard	2.3	3.8	5.2	6.6	276	456	624	790
	220V	550/60Hz	Export	1.8	2.9	3.9	5.0	404	633	861	1090
Electric I	Defrost He	ater									
	208V	50/60Hzz	Standard	7.7	11.5	15.4	19.2	1600	2400	3200	4000
	220V	50/60Hz	Export	7.0	10.4	13.9	17.4	1600	2400	3200	4000

Standard Vertical LED Lighting 4100K	2Dr	3Dr	4Dr	5Dr	2Dr	3Dr	4Dr	5Dr
Hussmann EcoShine II ™ [22 W] (120V)	0.36	0.54	0.72	0.90	43	65	86	108
Hussmann EcoShine II ™ [22 W] (220V Export)	0.20	0.29	0.39	0.49	43	65	86	108
Optional Vertical LED Lighting								
EcoShine II Plus [24 W] (120V)	0.36	0.52	0.68	0.84	43	62	81	100
EcoShine II Plus [24 W] (220V) Export	0.18	0.26	0.34	0.42	43	62	81	100
Facade LED Lamps	0.79	1.17	1.54	1.92	19	28	37	46
Dry Goods LED Lamps (both sides, 10 per side)	1.50	1.50	1.50	NA*	36	36	36	NA*

\* Dry Goods sections are not available on 5-Door models.

#### **Product Data (Refrigerated Area Only)**

Recommended Usable Cube 1 (Cu FtlDr)	24.95 ft <sup>3</sup> /Dr (0.71 m <sup>3</sup> /Dr)
AHRI Total Display Area <sup>2</sup> (Sq FtlDr)	13.59 ft <sup>2</sup> /Dr (1.26 m <sup>2</sup> /Dr)
Shelf Area <sup>3</sup> (Sq FtlDr)	32.38 ft <sup>2</sup> /Dr (3.01 m <sup>2</sup> /Dr)

<sup>1</sup> AHRI Refrigerated Volume less shelving and other unusable space: Refrigerated Volume/Unit of Length, ft<sup>3</sup>/ft [m<sup>3</sup>/m]

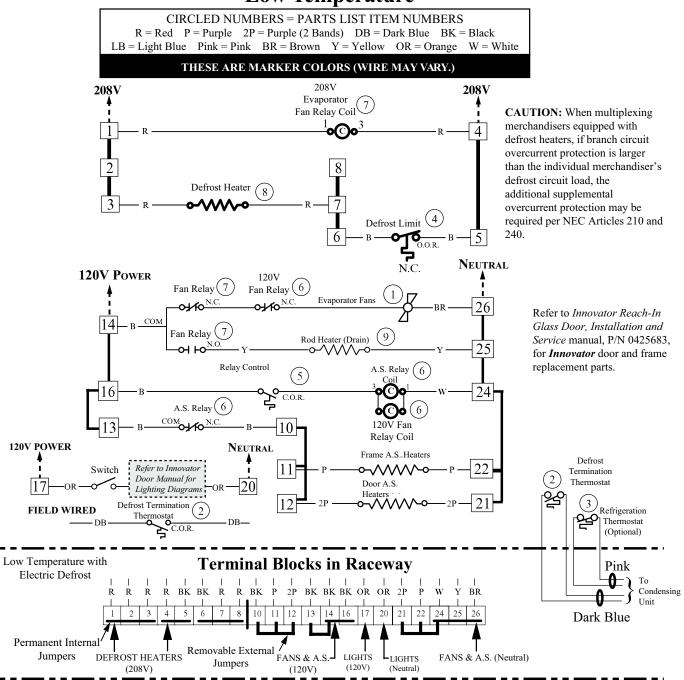
<sup>2</sup> Computed using AHRI 1200 standard methodology: Total Display Area, ft<sup>2</sup> [m<sup>2</sup>]/Unit of Length, ft [m]

<sup>3</sup> Shelf surface area is composed of bottom deck plus standard shelf complement, as shown in the Hussmann *Product Reference Guide*. The standard shelf complement for this model is (6) rows of 22-inch shelves.

#### **Product Data (Dry Goods Area Only)**

TOTAL Gross Usabl	le Cube (Volume for	2 DG per merch	andiser)		11.69 ft <sup>3</sup> / (0.33 m <sup>3</sup> )					
ESTIMATED SHIPPING WEIGHT <sup>4</sup>										
	2 Dr	3 Dr	4 Dr	5 Dr	Solid End (each)					
Standard LifeLine Prem	ier Merchandiser (12-In	ich Facade, no Arcl	h)							
<b>lb</b> ( <i>kg</i> )	1057 (479)	1385 (628)	1715 (778)	2024 (918)	85 (39)					
Standard <i>LifeLine Prem</i>	ier Merchandiser (18-I	nch Facade, no Arc	ch)							
<b>lb</b> ( <i>kg</i> )	1067 (484)	1400 (635)	1735 (787)	2049 (929)	80 (36)					
LifeLine Premier Merch	handiser with Two (2) B	Sump Out Partition	s (12-Inch Facade,	no Arch)						
<b>lb</b> ( <i>kg</i> )	1236 (561)	1564 (709)	1894 (859)	2203 (999)	N/A					
LifeLine Premier Merch	handiser with Two (2) B	Sump Out Partition	s (18-Inch Facade,	no Arch)						
<b>lb</b> ( <i>kg</i> )	1259 (571)	1592 (722)	1927 (874)	2241 (1017)	N/A					
LifeLine Premier Merch	handiser with Two (2) D	Dry Goods Sections	, Two (2) Partitions	(12-Inch Facade, no	o Arch)					
<b>lb</b> ( <i>kg</i> )	1537 (697)	1865 (846)	2195 (996)	NA	NA					
LifeLine Premier Merch	handiser with Two (2) D	Dry Goods Sections	, Two (2) Partitions	(18-Inch Facade, n	o Arch)					
<b>lb</b> ( <i>kg</i> )	1567 (711)	1900 (862)	2235 (1014)	NA	NA					
LifeLine Premier Merch	handiser with									
Two	(2) Bump Out Partition	s, Two (2) Dry Go	ods Sections, Two (2	2) Partitions (12-Inc	h Facade, no Arch)					
<b>lb</b> ( <i>kg</i> )	1576 (715)	1904 (864)	2234 (1013)	NA	N/A					
LifeLine Premier Merch	handiser with									
Two	(2) Bump Out Partition	s, Two (2) Dry Goo	ods Sections, Two (2	2) Partitions (18-Ind	ch Facade, no Arch)					
<b>lb</b> ( <i>kg</i> )	1609 (730)	1942 (881)	2277 (1033)	NA	N/A					
Add 10 lb (5 kg) for Ar	ch									
<sup>4</sup> Actual weights will var	y according to optional	kits included.								

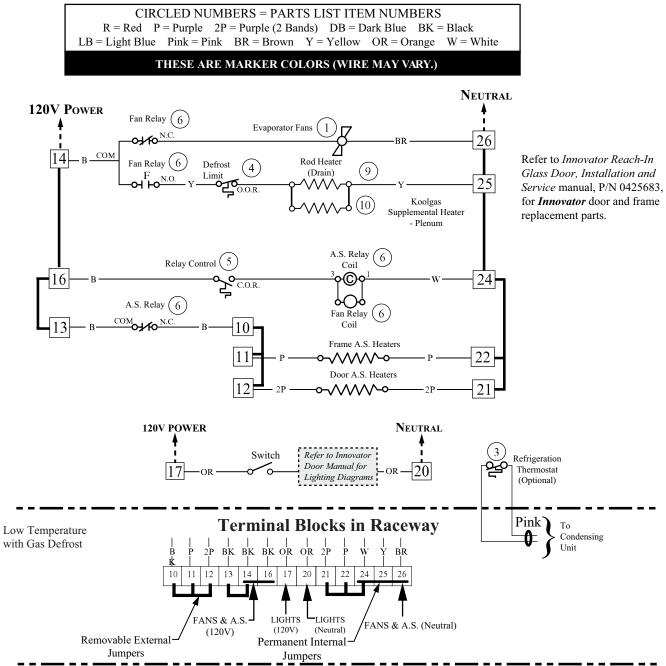
# Fan and Heater Circuits - Electric Defrost (standard) Low Temperature



#### **Electric Defrost Sequence - Low Temperature**

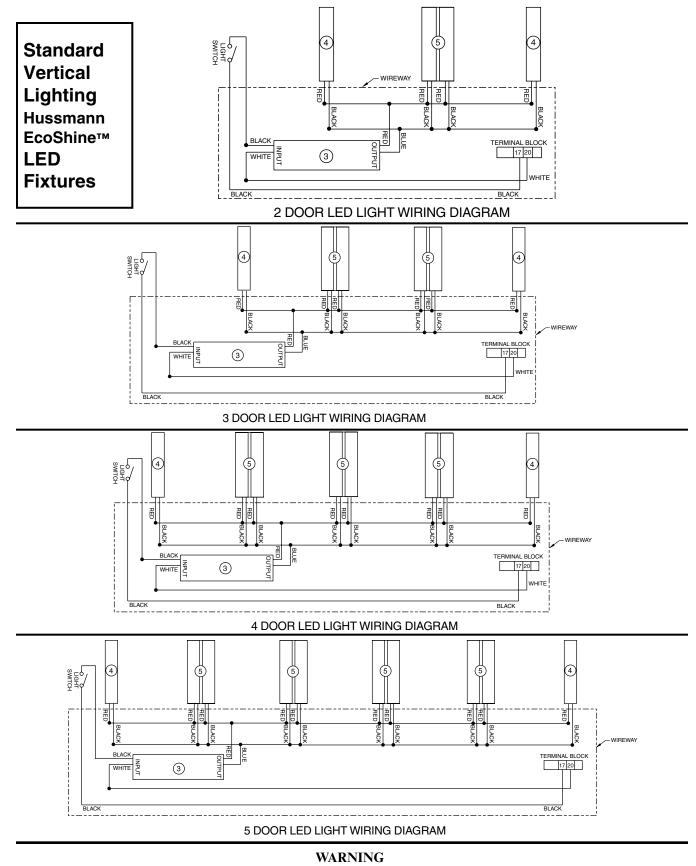
- 1. Power from the defrost contactor energizes Defrost Heaters and 208V Evaporator Fan Relay Coil (7). Relay Contacts open the fan circuit and energizes the Drain Pan Heater.
- 2. If the Defrost Heater raises internal air temperature above 90°F, the Defrost Limit Thermostat (4) will open.
- 3. Temperature rise of the evaporator closes the Relay Control Thermostat (5) at about 35°F, energizing the 120V A.S. and Fan Relay Coils (6). These relays' contacts open the Frame and Door Heater Circuits, and prevent the Fan Circuit from energizing upon defrost termination.
- 4. When Defrost Termination Thermostat ends defrost period, the defrost contactor opens the Defrost Heater and Evaporator Fan Relay Coil Circuits. The Drain Pan Heater goes off.
- 5. Temperature fall of the evaporator opens the Relay Control Thermostat (5) at about 20°F, de-energizing the A.S. and Fan Relay Coils (6). A.S. Relay Contacts close the Frame and Door Heater Circuits, and Fan Circuit.





#### Gas Defrost Sequence - Low Temperature

- 1. Defrost vapor enters evaporator causing a rise in temperature. At about 35°F the Relay Control Thermostat (5) closes the Fan Relay Coil (6) and A.S. Relay Coil (6) circuit. The Relay opens the Fan, Door Heater, and Frame Heater circuits, while energizing the Drain Pan, Bottom, and Plenum Heaters (9), (11) and (10).
- 2. If the Drain Pan Heater (9) raises internal air temperature above 90°F, the Heater Limit Thermostat (4) will open.
- 3. When the defrost timer ends a defrost period, the evaporator temperature will start to fall. At about 20°F, the Relay Control Thermostat will open, de-energizing the A.S. Relay Coil (6) and Fan Relay Coil (6). The A.S. and Fan Relays will open the Drain Pan Heater circuits, and will close the Fan, Door Heater, and Frame Heater circuits.



- All components must have mechanical ground, and the merchandiser must be grounded.
  - Circled numbers = Parts List Item Numbers

Y = YellowG = GreenBL = BlueBK = BlackR = RedW = White

Ŧ

• = 120V Power ○ = 120V Neutral = Field Ground

mm = Case Ground

## LifeLine Premier RLT

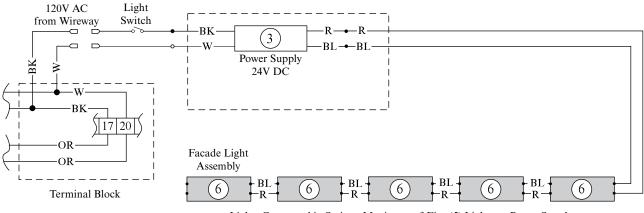
With Innovator Doors

Low Temperature

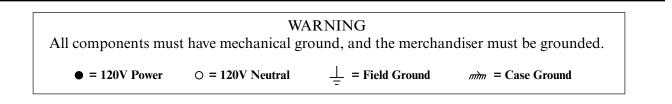
# **Optional Lighting Circuits**

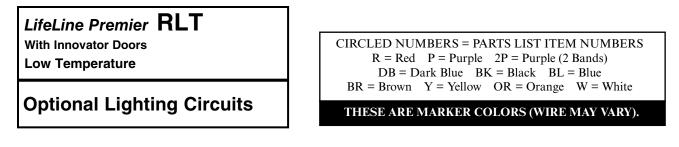


## **Optional External Facade LED Wiring**

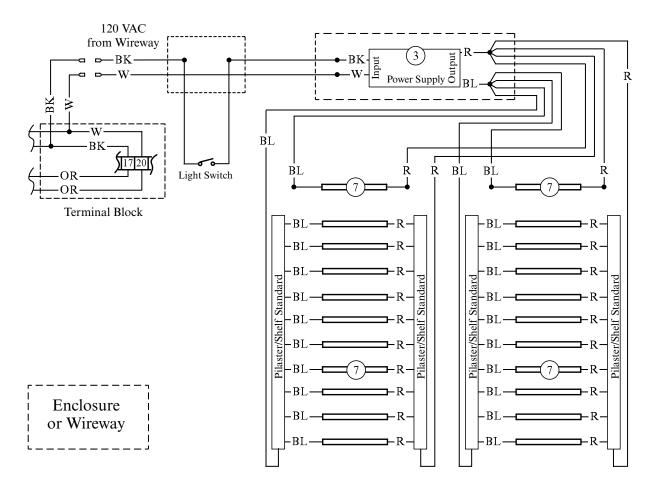


Lights Connected in Series - Maximum of Five (5) Light per Power Supply





## **Optional External Dry Goods LED Wiring**



Shelf Lamps (up to 10 per end)

