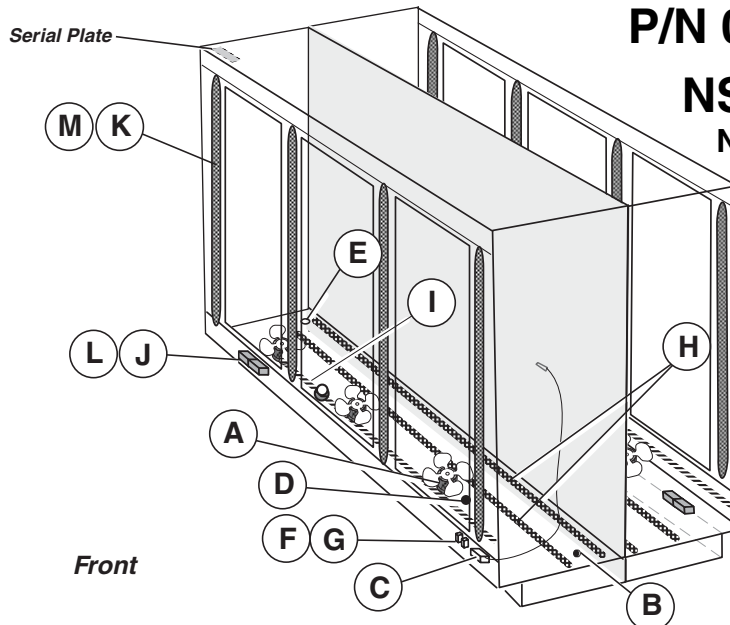


**Warning:**  
Terminal block **NOT** for  
case-to-case  
wire connection!

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.



Item	Part #	Description	Wiring Item #	Item	Part #	(Qty)	Description	Wiring Item #
<b>FAN ASSEMBLIES, AND THERMOSTATS</b>				<b>HEATERS</b>				
A.	<b>12W Standard</b>	Fan Assembly	(1)	H.	Electric Defrost Heaters – Front (208V)	(8)		
	0047000	Fan Motor, Evaporator (MO.4410103)			0441755 (1)		2 Door Models (HE.4850346)	
	0461805	Fan Blade (FB.4780446)			0441756 (1)		3 Door Models (HE.4850337)	
	<b>12W Optional Energy Efficient</b>	Fan Assembly	(1)		0441757 (1)		4 Door Models (HE.4850347)	
	0477655	Fan Motor, Evaporator (MO.4410546)			0441758 (1)		5 Door Models (HE.4850323)	
	0461805	Fan Blade (FB.4780446)					Electric Defrost Heaters — Rear (208V)	(8)
B.	0474033	Standard Non-adjustable Defrost Thermostat (CT.4440726)	(2)		0463891 (1)		2 Door Models (HE.4850358)	
C.		Optional Adjustable Refrigeration Thermostat	(3)		0463892 (1)		3 Door Models (HE.4850359)	
D.	0344662	Defrost Limit Thermostat (CT.4440261)	(4)		0463893 (1)		4 Door Models (HE.4850360)	
E.	0461814	Relay Control Thermostat or Fan and Anti-sweat Heater Thermostat (CT.4481296)	(5)		0463894 (1)		5 Door Models (HE.4850361)	
				I.	Drain Pan Heater (Electric & Kool Gas) (120V)	(9)		
					0387036 (1)		2 Door Models (HE.4850239)	
					0387037 (1)		3 Door Models (HE.4850240)	
					0387038 (1)		4 Door Models (HE.4850241)	
					0387039 (1)		5 Door Models (HE.4850242)	
<b>RELAYS</b>				<b>LAMPS, BALLASTS, LED FIXTURES AND POWER SUPPLY</b>				
F.	0342598	Anti-Sweat Control Relay (120V) (RL.4480238)	(6)	J.	0489698		2 Lamp Ballast (BA.4481596)	
G.	0342599	Fan Control Relay (208V) (RL.4480237)	(7)		0489699		3 Lamp Ballast (BA.4481739)	
					0424649		Export Ballast (BA.0424649)	
				K.			Standard Fluorescent Lamp	
							Replace with like fixtures	
				L.	0499399		LED Power Supply (EP.4481668)	
				M.			LED Fixture	
							Replace with like fixtures	

**Refer to INNOVATOR REACH-IN GLASS DOOR INSTALLATION AND SERVICE manual, P/N 0425683, for Innovator and Innovator II door and frame replacement parts.**

**NOTE: For LED lighting parts contact your Hussmann service representative at 1-800-922-1919. Please have your model and serial number available.**

**NOTE:** Revision J updates electrical data, Page 4.



# Engineering Plan Views

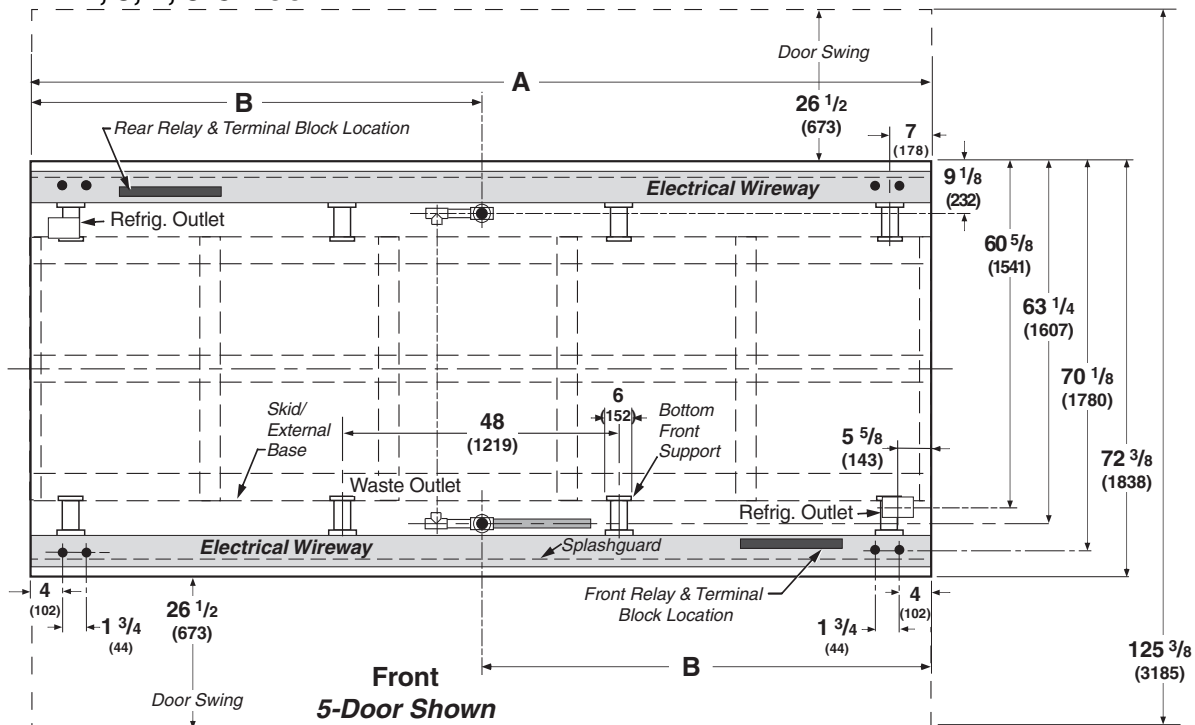
## RLNI Plan View 2, 3, 4, & 5 Door

Dimensions shown as in. & (mm).

### PHYSICAL DATA

Merchandiser Drip Pipe (in.)	1 1/4
Merchandiser Liquid Line (in.)	3/8
Merchandiser Suction Line (in.)	7/8

06-2009



**Serial Plate attached to top left front of each case.**

#### General

- (A) Case Length (without ends or partitions)  
 Maximum O/S dimension of case back to front  
*(Includes bumper)*  
 Back of case to rear of splashguard  
 Width of Skidrail  
 Width of Bottom Front Support  
 Stub-up area between front skidrail and splashguard

#### Electrical Service

- RH end of case to the center of nearest knockout  
 RH end of case to the center of LH knockout  
 Back O/S of case to center of knockout

\* NOTE: Electrical Field Wiring Connection Point is at terminal.

#### Waste Outlet

- (B) Right end of case to center of waste outlet  
 Back O/S of case to center of waste outlet

#### Water Seal

- Edge of water seal to center of waste outlet  
 Schedule 40 drip piping

\*\* NOTE: Field installed water seal outlets, tees, and connectors are shipped with case

#### Refrigeration Outlet

- RH end of case to center of RH refrigeration outlet  
 Back O/S of case to center of refrigeration outlet

- Outside bottom front supports from end of case  
 Center bottom front support from Centerline

Distance between Center and Outside supports will vary

	2 Dr	3 Dr	4 Dr	5 Dr
(A) Case Length (without ends or partitions)	62 (1575)	92 1/2 (2350)	122 7/8 (3121)	153 3/8 (3896)
Maximum O/S dimension of case back to front <i>(Includes bumper)</i>	72 3/8 (1837)	72 3/8 (1837)	72 3/8 (1837)	72 3/8 (1837)
Back of case to rear of splashguard	68 1/2 (1740)	68 1/2 (1740)	68 1/2 (1740)	68 1/2 (1740)
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 skidrail and splashguard	9 (229)	9 (229)	9 (229)	9 (229)
Electrical Service				
RH end of case to the center of nearest knockout	4 (102)	4 (102)	4 (102)	4 (102)
RH end of case to the center of LH knockout	58 (1473)	88 1/2 (2248)	118 7/8 (3019)	149 3/8 (3794)
Back O/S of case to center of knockout	70 1/8 (1781)	70 1/8 (1781)	70 1/8 (1781)	70 1/8 (1781)
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 O/S of case to center of waste outlet	63 1/4 (1607)	63 1/4 (1607)	63 1/4 (1607)	63 1/4 (1607)
Water Seal				
Edge of water seal to center of waste outlet	13 (330)	13 (330)	13 (330)	13 (330)
Schedule 40 drip piping	1 1/4 (32)	1 1/4 (32)	1 1/4 (32)	1 1/4 (32)
Refrigeration Outlet				
RH end of case to center of RH refrigeration outlet	5 5/8 (143)	5 5/8 (143)	5 5/8 (143)	5 5/8 (143)
Back O/S of case to center of refrigeration outlet	60 5/8 (1541)	60 5/8 (1541)	60 5/8 (1541)	60 5/8 (1541)
Outside bottom front supports from end of case	7 (178)	7 (178)	7 (178)	7 (178)
Center bottom front support from Centerline	24 (610)	24 (610)	24 (610)	24 (610)

**Impact RLNI**  
 With INNOVATOR Doors  
 Frozen Food & Ice Cream

**Refrigeration data is PER SIDE.**

**REFRIGERATION DATA**

**Note:** This data is based on store temperature and humidity that does not exceed 75°F and 55% R.H.

	FF	IC
<b>Discharge Air (°F)</b>	-5	-12
<b>Evaporator(°F)</b>	-11	-19
<b>Unit Sizing (°F)</b>	-14	-22
<b>Btu/hr/door/side*</b>	<b>FF</b>	<b>IC</b>
<b>Parallel</b>	1180	1244
<b>Conventional</b>	1200	1270

\*Optional LED lighting reduces the refrigeration load by 100 Btu/hr/Door. Optional Energy Efficient Fan motors reduce refrigeration load by 109 Btu/hr/door/side.

**DEFROST DATA**

	FF	IC
<b>Frequency (hr)</b>	24	24
<b>Defrost Water (lb/Dr/side/day)</b>	1.2	1.2
<i>(± 15% based on case configuration and product loading).</i>		
<b>ELECTRIC</b>	<b>FF</b>	<b>IC</b>
<b>Temp Term (°F)</b>	48°	48°
<b>Failsafe (minutes)</b>	45	45
<b>GAS</b>		
<b>Duration (minutes)</b>	20	20
<b>OFFTIME</b>	Not Recommended	

**CONVENTIONAL CONTROLS**

**Low Pressure Backup Control**

	FF	IC
<b>CI/CO (Temp °F)**</b>	-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 per Side (lb)\*\*\***

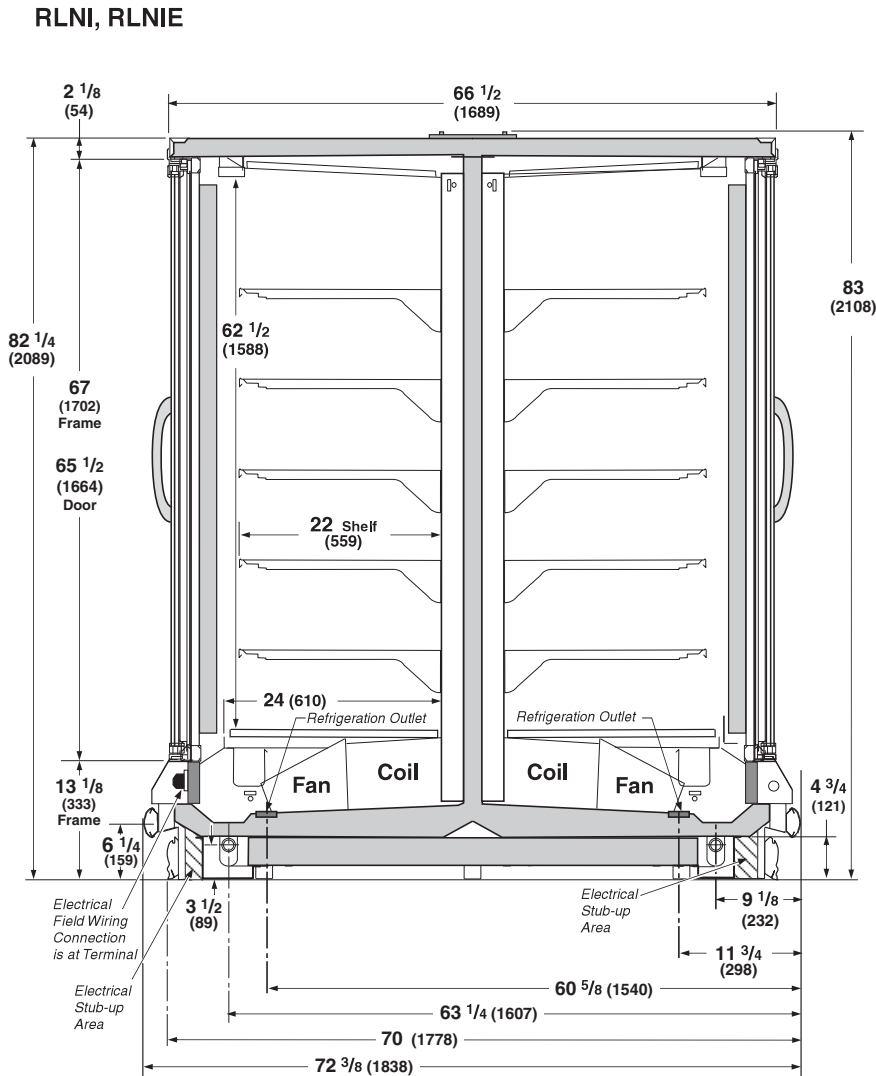
<b>2Dr</b>	1.8
<b>3Dr</b>	2.7
<b>4Dr</b>	3.6
<b>5Dr</b>	4.6

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

**Length Added to Lineup by each**

<b>Standard End (in.)</b>	2
<b>Optional End with Window (in.)</b>	1 1/2
<b>Optional Partition (in.)</b>	1 1/2

Dimensions shown as in. & (mm).



**NSF Certification**

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

**Impact RLNI**  
With INNOVATOR Doors  
Frozen Food & Ice Cream

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

## Electrical Data

**ELECTRICAL DATA IS PER SIDE — TWO CIRCUITS REQUIRED PER CASE.**

			2Dr	3Dr	4Dr	5Dr				
Number of Fans—12W			2	3	4	5				
			Amperes				Watts			
Merchandise			2Dr	3Dr	4Dr	5Dr	2Dr	3Dr	4Dr	5Dr
<b>Evaporator Fan</b>										
120V	60Hz	Standard	1.30	1.95	2.60	3.25	100	150	200	250
120V	50Hz	Standard	1.50	2.25	3.00	3.75	114	171	228	285
220V	60Hz	Export	0.66	0.99	1.32	1.65	100	150	200	250
220V	50Hz	Export	0.76	1.14	1.52	1.90	114	171	228	285
120V	60Hz	Energy Efficient	0.60	0.90	1.20	1.50	36	54	72	90
220V	60Hz	Energy Efficient	0.30	0.45	0.60	0.75	36	54	72	90
<b>Door Anti-sweat Heaters (on fan circuit)</b>										
120V	50/60Hz	Standard	1.54	2.31	3.08	3.86	185	278	370	463
220V	50/60Hz	Export	0.84	1.26	1.68	2.10	185	278	370	463
<b>Frame Anti-sweat Heaters (on fan circuit)</b>										
120V	50/60Hz	Standard	0.78	1.18	1.57	1.97	94	141	188	236
220V	50/60Hz	Export	0.43	0.64	0.85	1.07	94	141	188	236
<b>Minimum Circuit Ampacity</b>										
120V	60Hz	Standard	3.82	5.64	7.45	9.28				
120V	50Hz	Standard	4.02	5.94	7.85	9.78				
220V	60Hz	Export	2.13	3.09	4.05	5.02				
220V	50Hz	Export	2.23	3.24	4.25	5.27				
120V	60Hz	Energy Efficient	3.12	4.59	6.05	7.53				
220V	60Hz	Energy Efficient	1.77	2.55	3.33	4.12				
<b>Maximum Over Current Protection 120V</b>			<b>20</b>	<b>20</b>	<b>20</b>	<b>20</b>				
<b>Maximum Over Current Protection 220V</b>			<b>15</b>	<b>15</b>	<b>15</b>	<b>15</b>				
<b>Defrost</b>										
Drain Heaters (120V)			0.63	1.25	2.00	2.57	75	150	240	300
(Export: 220V 50 Hz)			0.34	0.76	1.22	1.53	84	168	269	336
<b>208V Electric Defrost</b>			6.72	10.08	13.46	16.82	1400	2100	2800	3500
(Export: 220V 50 Hz)			7.11	10.66	14.24	17.79	1564	2345	3133	3914
<b>Standard Vertical Lighting</b>										
<b>Innovator* Doors (120V)</b>			<b>2Dr</b>	<b>3Dr</b>	<b>4Dr</b>	<b>5Dr</b>	<b>2Dr</b>	<b>3Dr</b>	<b>4Dr</b>	<b>5Dr</b>
Innovator* Doors (120V)			1.50	2.00	2.50	3.00	180	240	300	360
(Export: 220V 50 Hz)			0.84	1.12	1.40	1.68	185	246	308	370
<b>Optional LED Lighting</b>										
<b>Hussmann EcoShine™ [27 W] (120V)</b>			0.45	0.68	0.90	1.13	54	81	108	135
<b>Hussmann EcoShine™ [27 W] [220V (Export)]</b>			0.25	0.37	0.49	0.61	54	81	108	135
<b>Hussmann EcoShine™ EP [16 W] (120V)</b>			0.27	0.40	0.53	0.67	32	48	64	80
<b>Hussmann EcoShine™ EP [16 W] [220V (Export)]</b>			0.15	0.22	0.29	0.36	32	48	64	80
<b>Hussmann EcoShine™ [20 W] (120V)</b>			0.33	0.50	0.67	0.83	40	60	80	100
<b>Hussmann EcoShine™ [20 W] [220V (Export)]</b>			0.17	0.25	0.33	0.42	40	60	80	100
<b>Gelcore (120V)</b>			0.48	0.73	0.97	1.21	58	87	116	145
<b>Gelcore (120V) [220V (Export)]</b>			0.26	0.40	0.53	0.66	58	87	116	145

\* Innovator or Innovator II

**Product data is PER SIDE.**

**Product Data**

<i>Recommended Usable Cube</i> <sup>1</sup> (Cu Ft/Dr)	22.80 ft <sup>3</sup> /Dr (0.65 m <sup>3</sup> /Dr)
<i>ARI Total Display Area</i> <sup>2</sup> (Sq Ft/Dr)	13.31 ft <sup>2</sup> /Dr (1.24 m <sup>2</sup> /Dr)
<i>Shelf Area</i> <sup>3</sup> (Sq Ft/Dr)	28.50 ft <sup>2</sup> /Dr (2.65 m <sup>2</sup> /Dr)

<sup>1</sup> ARI 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 ARI 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 (5) rows of 22-inch shelves.

**ESTIMATED SHIPPING WEIGHT <sup>4</sup>**

<b>Case</b>	<i>1 Dr</i>	<i>2 Dr</i>	<i>3 Dr</i>	<i>4 Dr</i>	<i>5 Dr</i>	<b>Solid End</b>
						<i>(each)</i>
<b>lb (kg)</b>	NA (NA)	1144 (520)	2230 (1014)	2974 (1352)	3718 (1690)	110 (50)

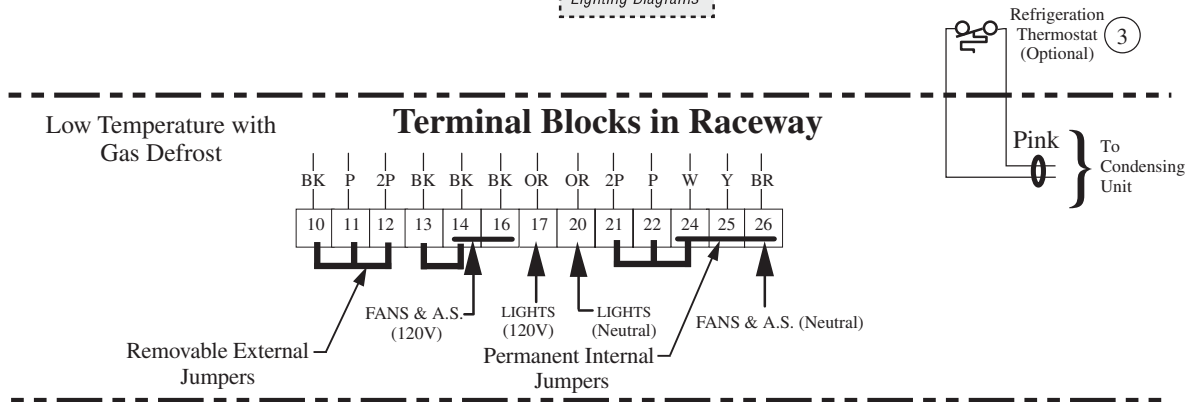
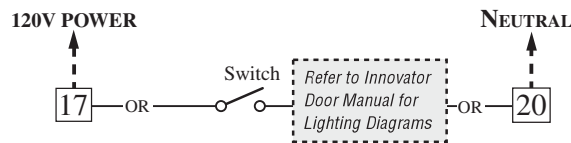
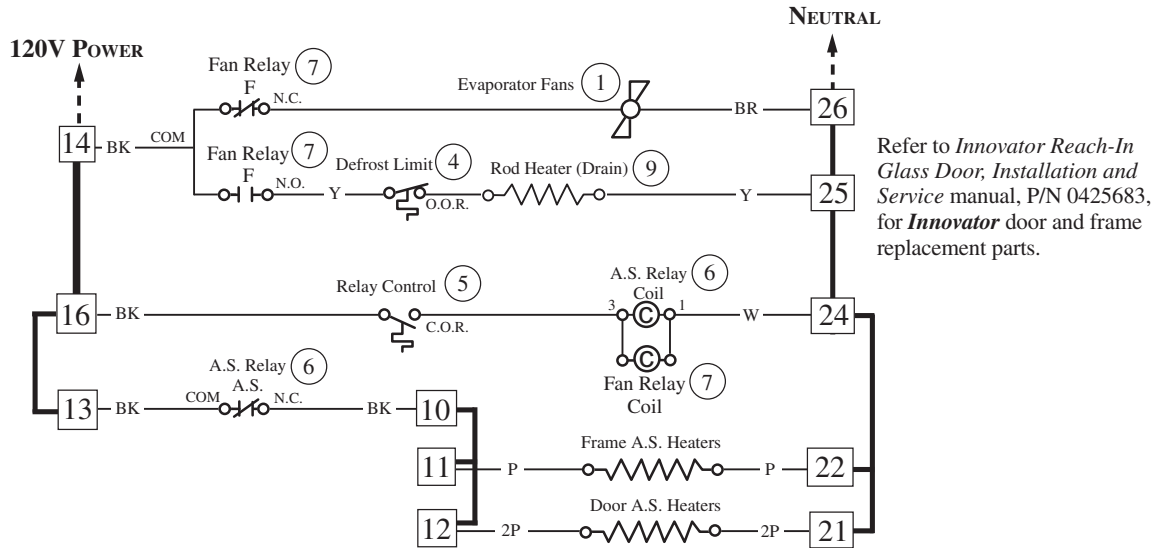
<sup>4</sup> Actual weights will vary according to optional kits included.



# Fan and Heater Circuits — Gas Defrost (optional) Low Temperature

**Wiring Diagram is per side — two circuits required per case.**

CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS  
 R = Red P = Purple 2P = Purple (2 Bands) DB = Dark Blue BL = Black  
 LB = Light Blue BR = Brown Y = Yellow OR = Orange W = White  
**THESE ARE MARKER COLORS (WIRE MAY VARY.)**



## Gas Defrost Sequence - Low Temperature

1. Defrost vapor enters evaporator causing a rise in temperature. At about 35°F the Control Relay Thermostat (5) closes the Fan Relay Coil (7) and Control Relay Coil (6) circuit. The Coil opens the Fan, Door Heater, and Frame Heater circuits, while energizing the Drain Pan Heater (9).
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 Control Relay Thermostat will open, de-energizing the Control Relay Coil and Fan Relay Coil (7). Control and Fan Relay's will open the Drain Pan Heater circuits, and will close the Fan, Door Heater, and Frame Heater circuits.

**Wiring Diagram is per side — two circuits required per case.**