

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 #	Description	Wiring Item #
FAN ASSEMBLIES, AND THERMOSTATS				LAMPS, BALLASTS, LED FIXTURES AND POWER SUPPLY			
A.	12W Standard	Fan Assembly	(1)	D.	0489698	2 Lamp Ballast (BA.4481596)	
	0047000	Fan Motor, Evaporator (MO.4410103)			0489699	3 Lamp Ballast (BA.4481739)	
	0461805	Fan Blade (FB.4780446)			0424649	Export Ballast (BA.0424649)	
	12W Optional Energy Efficient	Fan Assembly	(1)	E.		Standard Fluorescent Lamp	<i>Replace with like fixtures</i>
	0477655	Fan Motor, Evaporator (MO.4410546)		F.	0499399	LED Power Supply (EP.4481668)	
	0461805	Fan Blade (FB.4780446)		G.		LED Fixture	<i>Replace with like fixtures</i>
B.		Optional Adjustable Refrigeration Thermostat	(2)	NOTE: For LED lighting parts contact your Hussmann service representative at 1-800-922-1919. Please have your model and serial number available.			
CONTROL (RMF ONLY)							
C.	Fan Control (RMF)		(3)	Refer to INNOVATOR REACH-IN GLASS DOOR INSTALLATION AND SERVICE manual, P/N 0425683, for Innovator II door and frame replacement parts			
	0125275	Fan Speed Control, 120V, 60hz (CT.4440734)					

NOTE: Revision J updates Btu note, page 3.



Engineering Plan Views

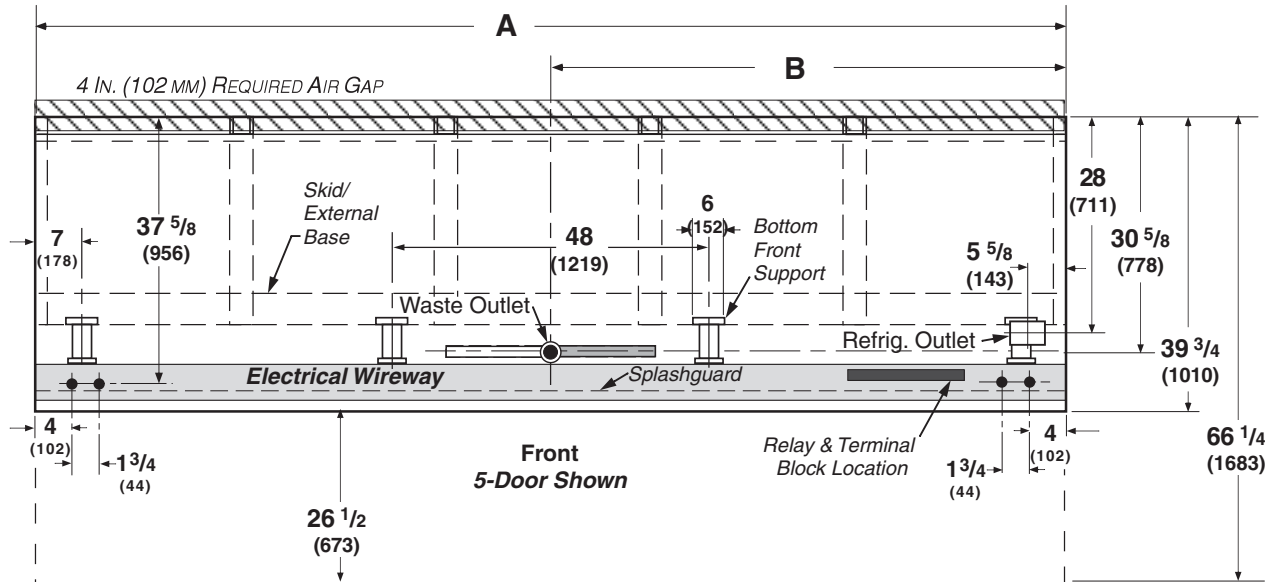
**Narrow Reach-In
2, 3, 4 & 5 Door**

**RLN - RMN
Plan View
06-2009**

PHYSICAL DATA

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

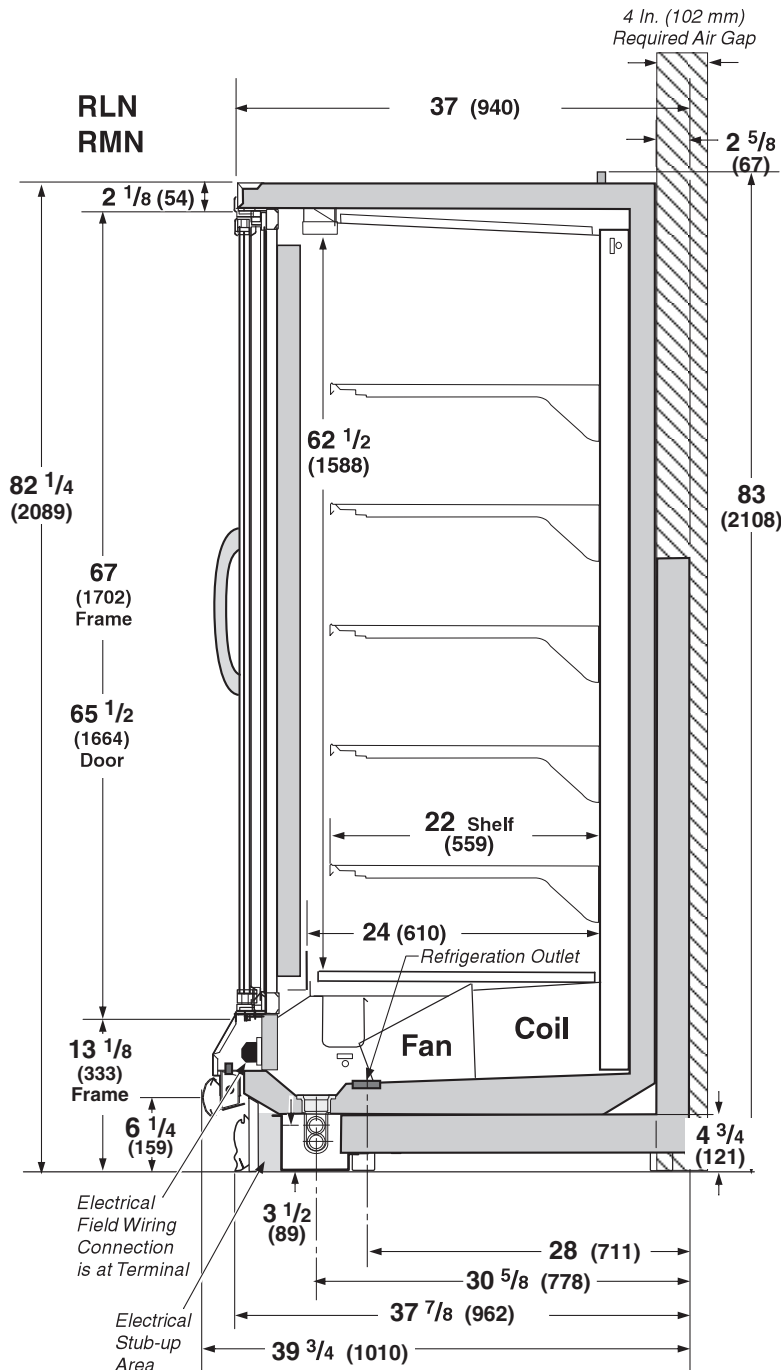
Dimensions shown as in. & (mm).



	2 Dr	3 Dr	4 Dr	5 Dr
General				
(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 (Includes bumper)	39 3/4 (1010)	39 3/4 (1010)	39 3/4 (1010)	39 3/4 (1010)
Back of case to rear of splashguard	35 3/8 (899)	35 3/8 (899)	35 3/8 (899)	35 3/8 (899)
Width of Skid rail	4 1/2 (114)	4 1/2 (114)	4 1/2 (114)	4 1/2 (114)
Width of Bottom Front Support	6 (152)	6 (152)	6 (152)	6 (152)
Stub-up area between front Skid rail and splashguard	6 3/8 (1000)	6 3/8 (1000)	6 3/8 (1000)	6 3/8 (1000)
Electrical Service				
RH end of case to the center of nearest knockout	4 (102)	4 (102)	4 (102)	4 (102)
(B) 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	37 5/8 (956)	37 5/8 (956)	37 5/8 (956)	37 5/8 (956)
* NOTE: Electrical Field Wiring Connection Point is at terminal.				
Waste Outlet				
(C) Right end of case to center of waste outlet	23 3/4 (603)	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)
Water Seal				
Edge of water seal to center of waste outlet	13 (330)	13 (330)	13 (330)	13 (330)
Outside diameter of drip piping	1 1/4 (32)	1 1/4 (32)	1 1/4 (32)	1 1/4 (32)
** 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	5 3/8 (137)	5 3/8 (137)	5 3/8 (137)	5 3/8 (137)
Back O/S of case to center of refrigeration outlet	28 (711)	28 (711)	28 (711)	28 (711)
(D) Outside bottom front supports from end of case	6 3/4 (170)	6 3/4 (170)	6 3/4 (170)	6 3/4 (170)
Center bottom front support from Centerline	24 (610)	24 (610)	24 (610)	24 (610)
Distance between Center and Outside supports will vary				

Narrow Reach-in 2, 3, 4 and 5 Door Models
 INNOVATOR Doors Standard

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 RMN
 With INNOVATOR Doors
 Dairy, Delicatessen, Beverages

REFRIGERATION DATA

Note: This data is based on store temperature and humidity levels that do not exceed NSF guidelines.

MEDIUM TEMP	
Discharge Air °F	32
Evaporator °F	27
Unit Sizing °F	25

BTU/HR/DOOR	NSF	NSF
	TYPE I	TYPE II
Temp (°F) /R.H.	75°/55%	80°/55%
Parallel	850	890
Conventional	890	930

*Optional LED lighting reduces refrigeration load by 100 Btu/hr/Door.

Optional Energy Efficient Fan motors reduce refrigeration load by 109 Btu/hr/Door.

DEFROST DATA

Frequency (hr)	24
Defrost Water (lb/Dr/day)	0.36
(± 15% based on case configuration and product loading.)	

<i>ELECTRIC</i>	NA
Temp Term (°F)	NA
Failsafe (minutes)	NA

GAS Not Recommended

OFFTIME 60 minutes

CONVENTIONAL CONTROLS

Low Pressure Backup Control
 CI/CO (Temp °F)* +20°/+10°

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

Not Recommended

*Use a Temperature Pressure Chart to determine PSIG conversions.

Estimated Charge (lb)**

2Dr	1.8
3Dr	2.7
4Dr	3.6
5Dr	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

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

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

Electrical Data

			2Dr	3Dr	4Dr	5Dr				
Number of Fans—12W			2	3	4	5				
			Amperes				Watts			
Merchandiser			2Dr	3Dr	4Dr	5Dr	2Dr	3Dr	4Dr	5Dr
Evaporator Fan										
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
Door Anti-sweat Heaters (on fan circuit)			NA							
Frame Anti-sweat Heaters (on fan circuit)										
120V	50/60Hz	Standard	0.89	1.34	1.79	2.24	107	161	215	269
220V	50/60Hz	Export	0.49	0.73	0.98	1.22	107	161	215	269
Minimum Circuit Ampacity										
120V	60Hz	Standard	2.39	3.49	4.59	5.69				
120V	50Hz	Standard	2.59	3.79	4.99	6.19				
220V	60Hz	Export	1.35	1.92	2.50	3.07				
220V	50Hz	Export	1.45	2.07	2.70	3.32				
120V	60Hz	Energy Efficient	1.69	2.44	3.19	3.94				
220V	60Hz	Energy Efficient	0.99	1.38	1.78	2.17				
Maximum Over Current Protection 120V			20	20	20	20				
Maximum Over Current Protection 220V			15	15	15	15				
Defrost			NA							
Standard Vertical Lighting			2Dr	3Dr	4Dr	5Dr	2Dr	3Dr	4Dr	5Dr
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
Optional LED Lighting										
Husmann EcoShine™ [27 W] (120V)			0.45	0.68	0.90	1.13	54	81	108	135
Husmann EcoShine™ [27 W] [220V (Export)]			0.25	0.37	0.49	0.61	54	81	108	135
Husmann EcoShine™ EP [16 W] (120V)			0.27	0.40	0.53	0.67	32	48	64	80
Husmann EcoShine™ EP [16 W] [220V (Export)]			0.15	0.22	0.29	0.36	32	48	64	80
Husmann EcoShine™ [20 W] (120V)			0.33	0.50	0.67	0.83	40	60	80	100
Husmann EcoShine™ [20 W] [220V (Export)]			0.17	0.25	0.33	0.42	40	60	80	100
Gelcore (120V)			0.48	0.73	0.97	1.21	58	87	116	145
Gelcore (120V) [220V (Export)]			0.26	0.40	0.53	0.66	58	87	116	145

* Innovator or Innovator II

Product Data

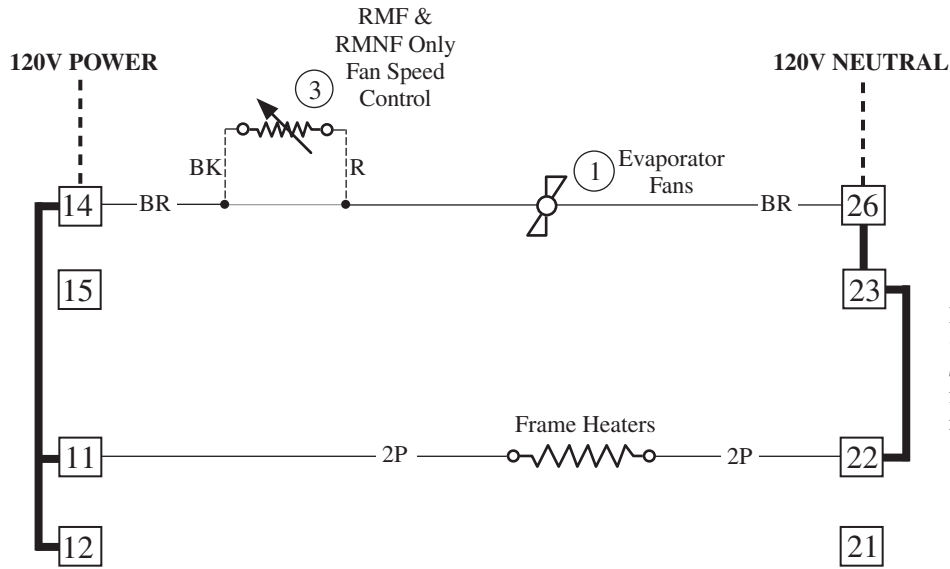
<i>Recommended Usable Cube</i> ¹ (Cu Ft/Dr)	22.80 ft ³ /Dr (0.65 m ³ /Dr)
<i>ARI Total Display Area</i> ² (Sq Ft/Dr)	13.31 ft ² /Dr (1.24 m ² /Dr)
<i>Shelf Area</i> ³ (Sq Ft/Dr)	28.50 ft ² /Dr (2.65 m ² /Dr)

¹ ARI Refrigerated Volume less shelving and other unusable space: Refrigerated Volume/Unit of Length, ft³/ft [m³/m]
² Computed using ARI 1200 standard methodology: Total Display Area, ft² [m²]/Unit of Length, ft [m]
³ 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.

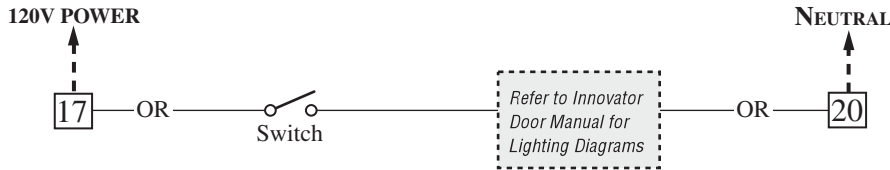
ESTIMATED SHIPPING WEIGHT ⁴					
Case	<i>2 Dr</i>	<i>3 Dr</i>	<i>4 Dr</i>	<i>5 Dr</i>	Solid End
					<i>(each)</i>
lb (kg)	895 (407)	1122 (510)	1518 (690)	1870 (850)	55 (25)
⁴ Actual weights will vary according to optional kits included.					

Fan and Heater Circuits - Offtime Defrost (standard) Medium Temperature

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



Refer to *Innovator Reach-Glass Door, Installation a Service manual, P/N 0425* for *Innovator* door and fra replacement parts.



Refer to *Innovator Door Manual for Lighting Diagrams*

