

RMN with INNOVATOR Doors

Technical Data Sheet

P/N 0520870\_G

NSF® Certified

April 2017

**DOE 2017** 

Energy Efficiency Compliant

Warning: Terminal block NOT for case-to-case

E

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

wire connection!

A. 12W Standard Energy Efficient Fan Assembly (1)

0477655 Fan Motor, Evaporator

(MO.4410546)

0461805 Fan Blade (FB.4780446)

B. Optional Adjustable (2) Refrigeration Thermostat

CONTROL (RMF ONLY)

C. Fan Control (RMF) (3)

0534013 Optional Fan Speed Control,

120V, 60Hz (CT.4440734)

LED FIXTURES AND POWER SUPPLY

D. 0499399 LED Power Supply EP.4481668)

E. LED Fixture

Replace with like fixtures

Refer to Innovator Reach-In Glass Door Installation and Service manual, PIN 0425683, for Innovator, Innovator II, and Innovator III door and frame replacement parts

Data sheet-Reach-in RMN

Note: Revision G: April 2017. Updated LED energy values. Other changes marked with a bar, circle or underline.

# **Engineering** Plan Views

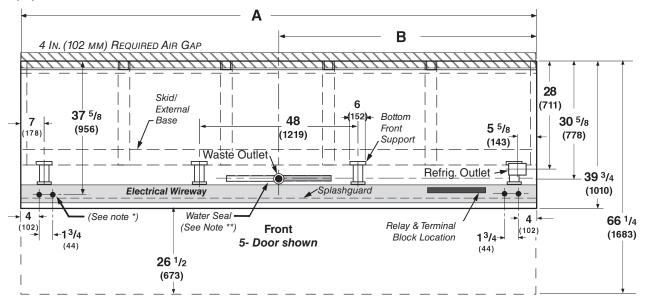
#### RLN - RMN Plan View

PHYSICAL DATA
Merchandiser Drip Pipe (in.)
Merchandiser Liquid Line (in.)
Merchandiser Suction Line (in.)

5/8

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

Dimensions shown as in. & (mm).



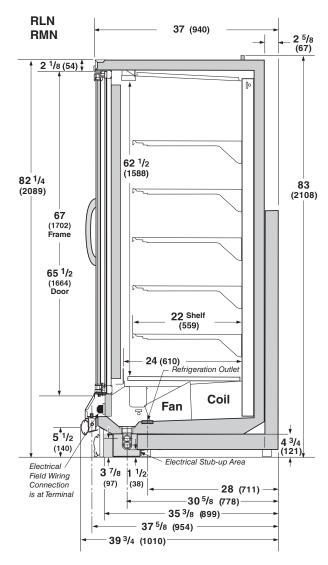
Gene	al	2 Dr	3 Dr	4 Dr	5 Dr
(A)	Case Length (without ends or partitions)	62 (1575)	92 1/2 (2350)	122 7/8 (3121)	153 3/8 (3896)
**NOT	E: Each solid end adds approximately 2 3/8 in (60 mm) to length of line up	; each partition add a	approximately 2 3/4 in (	(70 mm);	
case to	case joints can add approximately 1/8 in (3 mm) for gasket material.				
	Maximum O/S dimension of case back to front	39 <sup>3</sup> / <sub>4</sub> (1010)			
	(Includes bumper)				
	Back of case to rear of splashguard	35 <sup>3</sup> / <sub>8</sub> (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)
Elect	rical Service	4 (100)	4 (100)	4 (102)	4 (100)
(D)	RH end of case to the center of nearest knockout	4 (102)	4 (102)	4 (102)	4 (102)
<b>(B)</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)
* 1100	Back O/S of case to center of knockout	37 <sup>5</sup> / <sub>8</sub> (956)	37 <sup>5</sup> / <sub>8</sub> (956)	37 5/8 (956)	37 <sup>5</sup> / <sub>8</sub> (956)
* NO	TE: Electrical Field Wiring Connection Point is at terminal.				
Wast	e Outlet				
(C)	Right end of case to center of waste outlet	23 3/4 (603)	54 <sup>1</sup> / <sub>4</sub> (1378)	46 1/4 (1175)	76 <sup>5</sup> / <sub>8</sub> (1946)
	Back O/S of case to center of waste outlet	34 <sup>5</sup> / <sub>8</sub> (879)	34 <sup>5</sup> / <sub>8</sub> (879)	34 5/8 (879)	34 <sup>5</sup> / <sub>8</sub> (879)
		( )	( )		
Wate	r 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)
** NC	TE: Field installed water seal outlets, tees, and connectors	are shipped with	case		
Refri	geration 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 hettern from tourne outs from and of the	6 31. (170)	631, (170)	631, (170)	6.31, (170)
(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				

**Energy Efficiency** Compliant

All RL and RM models meet or surpass the requirements of the DOE 2017 energy efficiency standards.

Standard Reach-in configuration consists of Innovator doors, energy efficient fan motors, and EcoShine II LED vertical lighting.

Dimensions shown as in. & (mm).



#### PHYSICAL DATA

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

2Dr	1.8 lb	29 oz	0.8 kg
3Dr	2.7 lb	43 oz	1.2 kg
4Dr	3.6 lb	57 oz	1.6 kg
5Dr	4.6 lb	73 oz	2.0 kg

<sup>\*\*\*</sup>This is an average for all refrigerant types. Actual refrigerant charge may vary by approximately half a pound (8 oz / 0.2 kg).

#### **NSF** Certification

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

With Innovator Doors or Innovator III 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		AHRI Rating		
Discharge Air °F	32	36		
Evaporator °F	27	32		
Unit Sizing °F	25	30		

#### **B**TUlHR|**D**oor

NSF TYPE I NSF TYPE II AHRI RATING

Temp (°F) /R.H. 75°/55% 80°/55%

INNOVATOR

Parallel	480	505	470
Conventional	500	525	490

§ Average evaporator temperature shown. Use dew point for high glide refrigerants for unit sizing. Care should be taken to use the dew point in PT tables for measuring and adjusting superheat. Adjust evaporator pressure as needed to maintain discharge air temperature shown.

#### **DEFROST DATA**

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

ELECTRIC	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.

### RMN

With Innovator Doors or Innovator III Doors Dairy, Delicatessen, Beverages

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

### **Electrical Data**

Number of Fans—12W	2Dr 2	3Dr 3	4Dr 4	5Dr 5					
		Amp	eres			Watts			
Merchandiser	2Dr	3Dr	4Dr	5Dr	2Dr	3Dr	4Dr	5Dr	
<b>Energy Efficient Evaporator Fan</b>									
120V 50/60Hz Innovator	0.60	0.90	1.20	1.50	36	54	72	90	
220V 50/60Hz Export Innovator	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	0.40	0.60	0.80	1.00	47	71	94	118	
220V 50/60Hz Export Innovator	0.20	0.30	0.40	0.50	47	71	94	118	
Minimum Circuit Ampacity									
120V 50/60Hz	1.20	1.70	2.20	2.70					
220V 50/60Hz Export	0.70	0.95	1.20	1.45					
Maximum Over Current Protection 120V	20	20	20	20					
Maximum Over Current Protection 220V	15	15	15	15					
Defrost	NA								
Standard Vertical LED Lighting	2Dr	3Dr	4Dr	5Dr	2Dr	3Dr	4Dr	5Dr	
Hussmann EcoShine II <sup>TM</sup> - A (120V)	0.31	0.46	0.62	0.77	37.1	55.6	74.2	92.7	
Hussmann EcoShine II <sup>TM</sup> - A (220V Export)	0.17	0.25	0.34	0.42	37.1	55.6	74.2	92.7	
Optional Vertical LED Lighting									
Hussmann EcoShine II <sup>™</sup> - B (120V)	0.36	0.52	0.68	0.84	43.2	62.3	81.4	100.5	
Hussmann EcoShine II <sup>TM</sup> - B (220V Export)	0.20	0.28	0.37	0.46	43.2	62.3	81.4	100.5	

#### **RMN**

With Innovator Doors or Innovator III Doors Dairy, Delicatessen, Beverages

#### **Product Data**

 Recommended Usable Cube ¹ (Cu FtlDr)
 22.80 ft³/Dr (0.65 m³/Dr)

 AHRI Total Display Area ² (Sq FtlDr)
 13.04 ft²/Dr (1.21 m²/Dr)

 Shelf Area ³ (Sq FtlDr)
 28.50 ft²/Dr (2.65 m²/Dr)

- <sup>1</sup> AHRI Refrigerated Volume less shelving and other unusable space: Refrigerated Volume/Unit of Length, ft³/ft [m³/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 (5) rows of 22-inch shelves.

ESTIMATED SHIPPING WEIGHT 4						
Case					Solid End	
	2 Dr	3 Dr	4 Dr	5 Dr	(each)	
<b>lb</b> ( <i>kg</i> )	895 (407)	1122 (510)	1518 (690)	1870 (850)	55 (25)	

## 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 BK = Black

LB = Light Blue Pink = Pink BR = Brown Y = Yellow OR = Orange W = White

THESE ARE MARKER COLORS (WIRE MAY VARY.)

