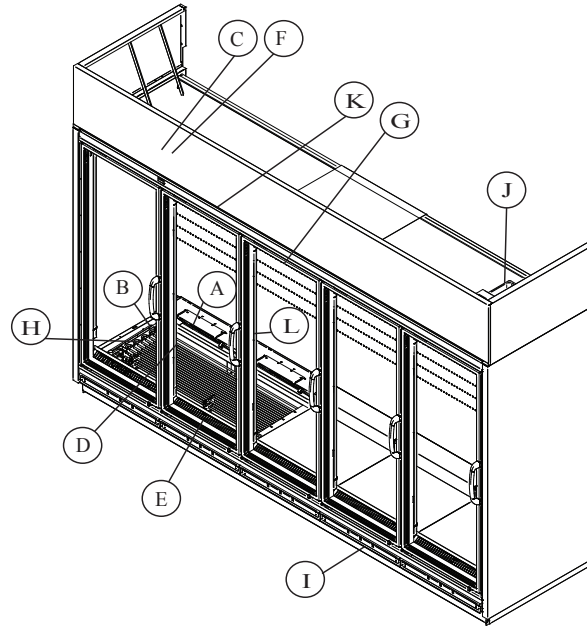


Refrigeration and electrical connections are on top. Overhead piping and electrical circuits are required.



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.

**DOE 2017**  
Energy Efficiency  
Compliant

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

Item	Part #	Description	Wiring Item #	Item	Part # (Qty)	Description	Wiring Item #
<b>FAN ASSEMBLIES AND THERMOSTATS</b>				<b>CONTROL PANEL</b>			
(A)	Fan Assembly		(1)	(F)	3007825	Dixell XR75 Control	(6)
	0527610	Standard Energy Efficient Motor		(G)	0334802	Dixell Discharge Air Sensor	(7)
	0461805	Fan Blade		(H)	0334802	Dixell Defrost Sensor	(8)
(B)	0440423	Defrost Limit Thermostat	(2)	<b>REFRIGERATION</b>			
<b>RELAYS</b>				(I)	0551016	Condensate Pump	(9)
(C)	1804291	Control Relay (208V)	(3)		0551018	Condensate Float Switch	
<b>HEATERS</b>				(J)	0538255	Condensate Pan with Heater	(10)
(D)	Electric Defrost Heaters (208V)		(4)	<b>LED FIXTURES AND POWER SUPPLY</b>			
	3015384	(1) 2 Door Models		(K)	0499399	LED Power Supply	
	3015385	(1) 3 Door Models		(L)		LED Fixture	
	3015386	(1) 4 Door Models				<i>Replace with like fixtures</i>	
	3015387	(1) 5 Door Models		<b>Refer to INNOVATOR REACH-IN GLASS DOOR INSTALLATION AND SERVICE manual, P/N 0425683, for Innovator, Innovator I LE, or Innovator III door and frame replacement parts.</b>			
(E)	Drain Pan Heater (120V)		(5)				
	0452974	(1) 2 Door Models					
	0452975	(1) 3 Door Models					
	0452976	(1) 4 Door Models					
	0452977	(1) 5 Door Models					

Data sheet-Reach-in RFLTM

Note: Revision D: Updated refrigerant charges.

# Engineering Plan Views

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

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

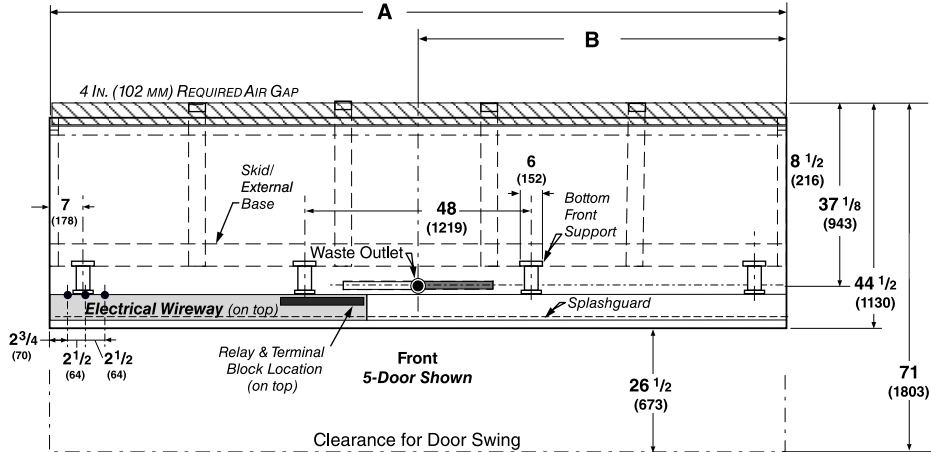
## PHYSICAL DATA

Merchandiser Drip Pipe (in.)	1
Merchandiser Liquid Line (in.)	3/8
Merchandiser Suction Line (in.)	5/8

Dimensions shown as inches & (mm).

### RFLTM - Plan View

2, 3, 4 & 5 Door



	2 Dr	3 Dr	4 Dr	5 Dr
<b>General</b>				
(A) Case Length (without ends or partitions)	62 (1575)	92 1/2 (2350)	122 7/8 (3121)	153 3/8 (3896)
**NOTE: Each solid end adds approximately 2 3/8 in (60 mm) to length of line up; each partition add approximately 2 3/4 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)	44 1/2 (1130)	44 1/2 (1130)	44 1/2 (1130)	44 1/2 (1130)
Back of case to front of splashguard	41 3/4 (1060)	41 3/4 (1060)	41 3/4 (1060)	41 3/4 (1060)
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 and splashguard	7 5/8 (194)	7 5/8 (194)	7 5/8 (194)	7 5/8 (194)
<b>Electrical Service</b>				
Left hand end of case to the center of nearest knockout	2 3/4 (70)	2 3/4 (70)	2 3/4 (70)	2 3/4 (70)
Right hand end of case to the center of center knockout	56 3/4 (1441)	87 1/4 (2216)	117 5/8 (2988)	148 1/8 (3762)
Back outside of case to center of knockout	32 (813)	32 (813)	32 (813)	32 (813)
Raceway Length	62 (1575)	62 (1575)	62 (1575)	62 (1575)
*NOTE: Electrical Field Wiring Connection Point is at terminal.				
<b>Waste Outlet</b>				
(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 center of waste outlet	37 1/8 (943)	37 1/8 (943)	37 1/8 (943)	37 1/8 (943)
<b>Water Seal</b>				
Edge of water seal to center of waste outlet	13 (330)	13 (330)	13 (330)	13 (330)
Schedule 40 drip piping	1 (25)	1 (25)	1 (25)	1 (25)
** NOTE: Field installed condensate removal system shipped with merchandiser.				
<b>Refrigeration Outlet</b> (TOP OF MERCHANDISER)				
RH end of merchandiser to center of refrigeration interface	5 3/8 (136)	5 3/8 (136)	5 3/8 (136)	5 3/8 (136)
NOTE: Refrigeration interface is at top of merchandiser.				
Outside bottom front supports from end of merchandiser	7 (178)	7 (178)	7 (178)	7 (178)
Center bottom front support from Centerline	24 (610)	24 (610)	24 (610)	24 (610)
Distance between Center and Outside supports will vary				

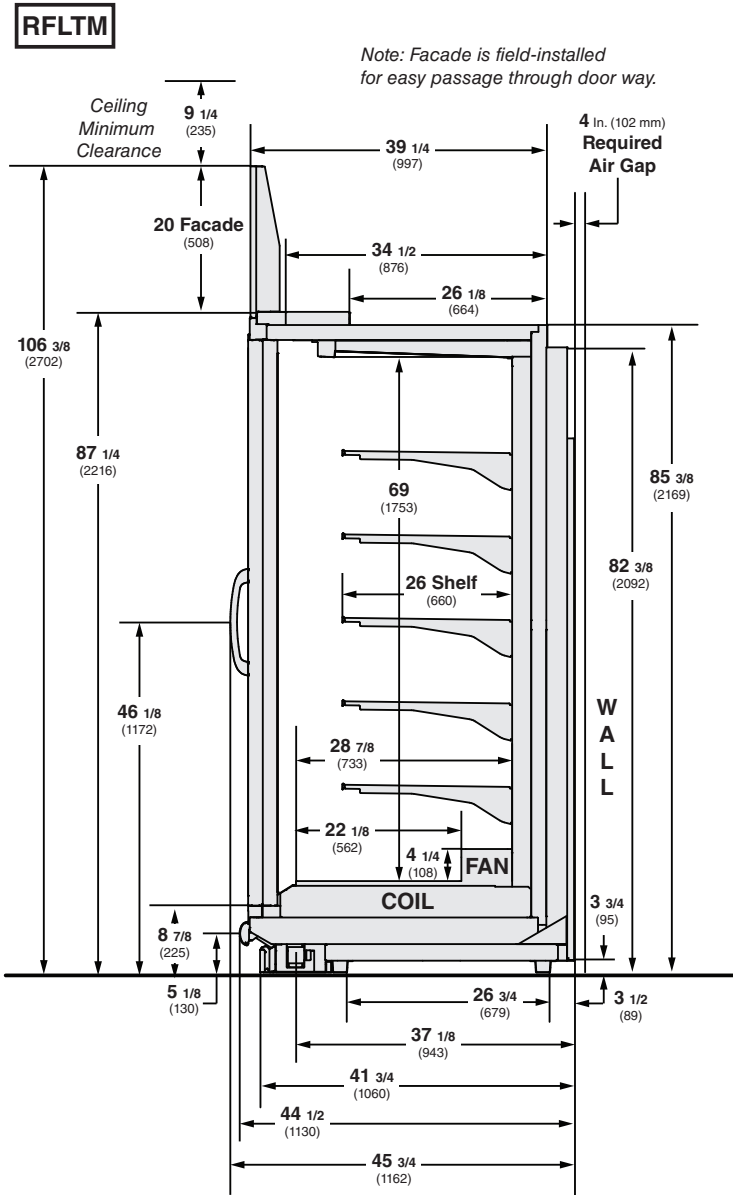
# Tall Reach-in 2, 3, 4 and 5 Door Models



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

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

Dimensions shown as inches & (mm).



Estimated Charge ***	RFLTM		
2 Dr	6.25 lb	100 oz	2.83 kg
3 Dr	6.7 lb	107.2 oz	3.04 kg
4 Dr	7.15 lb	114.4 oz	3.24 kg
5 Dr	10.2 lb	163.2 oz	4.63 kg

\*\*\*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.

# RFLTM

**With Innovator Doors  
Low Temperature**

### REFRIGERATION DATA§

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

**FF IC AHRI Rating**

#### Discharge Air

Set point (°F)	FF	IC	AHRI
Set point (°F)	-5	-12	-3
Differential	6	6	6

§ 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.

#### Btu/hr/Door\*

	FF	IC
<b>INNOVATOR &amp; INNOVATOR I LE</b>		
Parallel	1055	1150
Conventional	1070	1170
<b>INNOVATOR III</b>		
Parallel	1045	1140
Conventional	1060	1160

\* Optional 22 inch shelves add 30 Btu/hr/door.

### DEFROST DATA

	FF	IC
Frequency (hr)	24	24
Defrost Water (lb/Dr/day)	1.2	1.3

(± 15% based on case configuration and product loading.)

<b>ELECTRIC</b>	FF	IC
Temp Term (°F)	48°	48°
Failsafe (minutes)	45	45

**OFFTIME** Not Recommended

### CONVENTIONAL CONTROLS

#### Low Pressure Backup Control

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

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

	Cut In	Cut Out
HPC (psig)	320	395
LPC (psig)	15	5

#### Working charge with recommended Condensing Unit installed:

2Dr	5.1 lb	81.6 oz	2.3 kg
3Dr	5.6 lb	90 oz	2.5 kg
4Dr	6.7 lb	107 oz	3.0 kg
5Dr	7.0 lb	112 oz	3.2 kg

#### Recommended Hussmann Condensing Unit:

	Capacity	Model
2Dr	2200 Btu/hr	TCLSA
3Dr	3300 Btu/hr	TCLSB
4Dr	4400 Btu/hr	TCLSC
5Dr	5500 Btu/hr	TCLSD

based on -19°F (-28°C) Evaporator temperature for low temperature applications.

# RFLTM

With Innovator Doors  
Low Temperature

Hussmann 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				
	2	3	4	5	Amperes		Watts	
Number of Fans	2Dr	3Dr	4Dr	5Dr	2Dr	3Dr	4Dr	5Dr
<b>Energy Efficient Evaporator Fan</b>								
120V 50/60Hz Innovator	0.6	0.9	1.2	1.5	36	54	72	90
<b>Door Anti-sweat Heaters (on fan circuit)</b>								
120V 50/60Hz Innovator*	1.4	2.0	2.7	3.4	162	244	325	406
120V 50/60Hz Innovator III	0.8	1.2	1.6	2.0	94	140	187	234
<b>Frame Anti-sweat Heaters (on fan circuit)</b>								
120V 50/60Hz Innovator	0.96	1.43	1.92	2.4	115	172	230	288
<b>Condensate Pan Heater 120V</b>	5.0	5.0	5.0	5.0	600	600	600	600
<b>Condensate Pump 120V</b>	0.19	0.19	0.19	0.19	8.7	8.7	8.7	8.7

## Defrost

### Drain Heaters

120V	50/60Hz	Standard	0.63	1.25	2.0	2.57	75	150	240	300
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### Electric Defrost Heater

208V	50/60Hz	Standard	6.72	10.08	13.46	16.82	1400	2100	2800	3500
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## 120V Circuit

(Fans, anti-sweat heaters, drain pan heater, condensate pan heater, condensate pump, and standard EcoShine 2 LED's)

With Innovator Doors (standard)	10.4	12.9	15.4	17.8	1117	1370	1637	1876
With Innovator III Doors	9.8	11.9	14.1	16.2	1039	1253	1481	1681
Maximum Overcurrent Protection Device (MOPD)	20	20	20	20				

Refer to condensing unit data sheet for additional condensing unit electrical requirements

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.

Standard Vertical LED Lighting	2Dr	3Dr	4Dr	5Dr	2Dr	3Dr	4Dr	5Dr
Hussmann EcoShine II™ - A (120V)	0.35	0.53	0.71	0.89	42.5	63.8	85.1	106.4

\* Maximum door watts without anti-sweat cycling controls shown.

### † Notes:

1. Electrical input for the RFLTM Freedom case requires two electrical connections at the top of the case: one 120V connection for the RFLTM case components and one 208/230V connections for the defrost heater and condensing unit. Defrost heater and condensing unit circuits are non-concurrent loads. To determine the circuit size, use the larger of the two loads - do not add the two loads together.
2. Without heated condensate pan and pump, subtract 6.9 Amps

A qualified electrician should perform all wiring in accordance with the NEC code and/or all local codes. Wire sizing must take into account the total distance from the electrical panel to the Freedom case.

**Product Data**

<i>Recommended Usable Cube</i> <sup>1</sup> (Cu Ft/Dr)	34.44 ft <sup>3</sup> /Dr (0.98 m <sup>3</sup> /Dr)
<i>AHRI Total Display Area</i> <sup>2</sup> (Sq Ft/Dr)	14.53 ft <sup>2</sup> /Dr (1.35 m <sup>2</sup> /Dr)
<i>Shelf Area</i> <sup>3</sup> (Sq Ft/Dr)	32.27 ft <sup>2</sup> /Dr (3.00 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.

ESTIMATED SHIPPING WEIGHT <sup>4</sup>						
Case	<i>1 Dr</i>	<i>2 Dr</i>	<i>3 Dr</i>	<i>4 Dr</i>	<i>5 Dr</i>	Solid End (each)
<b>lb</b> (kg)	NA (NA)	926 (420)	1290 (585)	1637 (743)	2006 (910)	60 (27)

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

# RFLTM

With Innovator Doors  
Low Temperature

# Fan and Heater Circuits

Electric Defrost (Standard)  
Low Temperature

Dixell Wiring Diagram — Low Temperature Reach-in

