

## GENERAL NOTES:

- Lighting Controls and Anti Sweat Heat Controls are Required

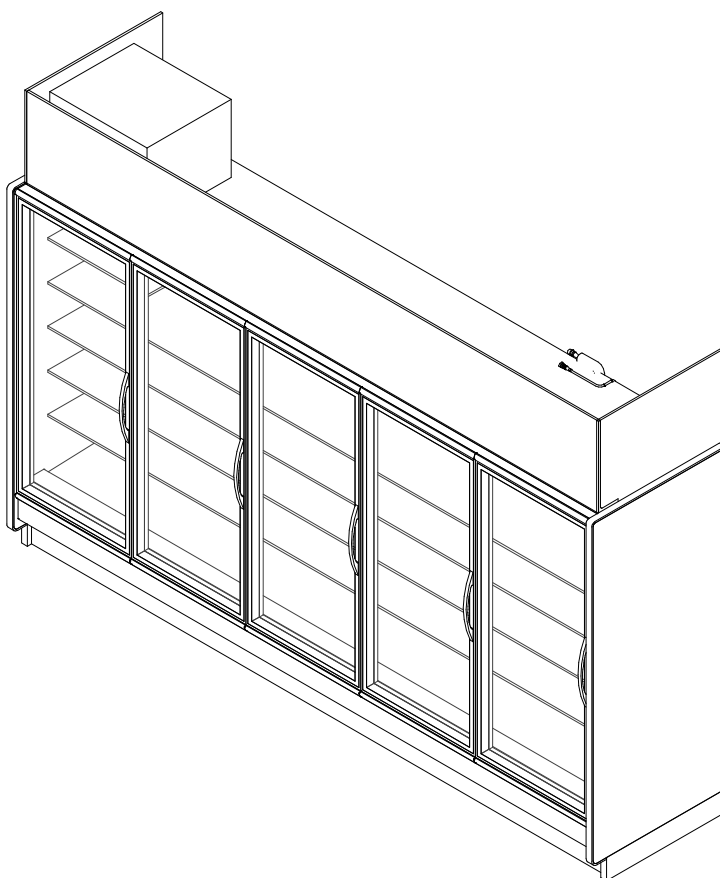
- Option 1: OEM Provided:

Occupancy Sensor Based Lighting Controls (On/Off) & Hillphoenix provided embedded Anti Sweat Controls are standard, unless otherwise specified

- Option 2: End User Provided:

Lighting Controls should be Occupancy Sensor Based or on a minimum 8 Hour Off Schedule. Customer provided A/S Heat Controls should be set to 30% minimum off time at 75°F/55%RH

- 1 Door & 4' case lengths available in 120V R448A condensing unit configuration.
- 2,3,4 & 5 door lengths available in 208V R404A/R448A condensing unit configuration.



SHIPPING WEIGHT	
Case	Weight
JNRBHSA	---



COMPONENT

ALL MEASUREMENTS ARE TAKEN PER ASHRAE-72-2005 SPECIFICATIONS. HILLPHOENIX REFRIGERATED DISPLAY CASES FOR SALE IN THE UNITED STATES MEET OR EXCEED DEPARTMENT OF ENERGY 2017 REQUIREMENTS.

## JNRBHSA

Rev. Date	Rev. #	Rev. Title
2-28-20	14	DATA UPDATE
12-18-19	13	DATA UPDATE

**Hillphoenix**  
A DOVER COMPANY

# JNRBHSA (R404A) <sup>1, 2, 3, 4, 5 Door & 4' High Narrow Reach-In Self Contained Merchandiser</sup> Dairy/Deli/Beverage

## SYSTEM REQUIREMENT (R-404A REFRIGERANT)

Case Length	Volts	Phase	Frequency	Minimum Circuit Ampacity (MCA)	Maximum Overcurrent Protection (MOP)	24hr Energy Usage (kWh)
2 Door	208	1	60	16.3	20	6.4
3 Door	208	1	60	16.5	20	9.0
4 Door	208	1	60	16.6	20	11.7
5 Door	208	1	60	18.4	20	15.3

## GUIDELINES AND CONTROL SETTINGS (R-404A REFRIGERANT)

Case Length	Application	Superheat Set Point @ Bulb (°F)	Discharge Air (°F)	Set Point Differential (°F)	Discharge Air Velocity (FPM)
2 - 5 Door	Beverage	6 - 8	35	6	230
2 - 5 Door	Dairy	6 - 8	30	6	230
2 - 5 Door	Deli	6 - 8	29	6	230

## CONDENSING UNIT DATA (R-404A REFRIGERANT)

Case Length	Volts	Phase	Frequency	Horsepower	Running Load Amps (RLA) (Amps)	Locked Rotor Amps (LRA) (Amps)	Refrigerant	Lbs. of Refrigerant
2 Door	208	1	60	1/3	4.2	16.8	R404A	2.2
3 Door	208	1	60	1/3	4.2	16.8	R404A	2.6
4 Door	208	1	60	1/3	4.2	16.8	R404A	3.0
5 Door	208	1	60	1/2	5.3	26.5	R404A	3.5

## DEFROST CONTROLS (R-404A REFRIGERANT)

Case Length	Defrosts Per Day	Run-Off Time (Min)	Fail-Safe (Min)	Termination Temp (F)
2 - 5 Door	2	0	46	44

## DEFROST SCHEDULE (R-404A REFRIGERANT)

Defrosts Per Day	Time
2	12 a.m. - 12 p.m.

## NOTES:

- "----" indicates that this feature is not an option on this case model.
- Listed discharge air velocity represents the average velocity at the peak of defrost.
- Temperature and defrost settings listed below are recommended start-up settings. Final operational settings may need to be adjusted for the store conditions in which the case operates.
- The recommended evaporator temperatures may need to be adjusted based on system setup, store conditions, etc. The minimum recommended evaporator temperature is 4°F below the listed evaporator temperature.
- The 24 Hour Energy Value is based upon AHRI 1200 test conditions with Hillphoenix provided evaporator fans, condensing unit, LED lights, occupancy sensor based (on/off) lighting control, dew point based anti-sweat heat controller, condensate pump, evaporator pan, heated door frame, and un heated glass doors/off cycle defrost on medium temp cases.



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# JNRBHSA (R448A) <sup>1, 2, 3, 4, 5 Door & 4' High Narrow Reach-In Self Contained Merchandiser</sup> Dairy/Deli/Beverage

## SYSTEM REQUIREMENT (R-448A REFRIGERANT)

Case Length	Volts	Phase	Frequency	Minimum Circuit Ampacity (MCA)	Maximum Overcurrent Protection (MOP)	24hr Energy Usage (kWh)
1 Door	120	1	60	7.8	15.0	2.9
4'	120	1	60	11.8	15.0	5.4
2 Door	208	1	60	15.8	20.0	6.4
3 Door	208	1	60	16.0	20.0	7.2
4 Door	208	1	60	16.1	20.0	11.6
5 Door	208	1	60	17.6	20.0	13.7

## GUIDELINES AND CONTROL SETTINGS (R-448A REFRIGERANT)

Case Length	Application	Superheat Set Point @ Bulb (°F)	Discharge Air (°F)	Set Point Differential (°F)	Discharge Air Velocity (FPM)
1 Door	Beverage	6 - 8	40	6	100
1 Door	Dairy	6 - 8	36	6	100
2 - 5 Door	Beverage	6 - 8	35	6	230
2 - 5 Door	Dairy	6 - 8	30	6	230
2 - 5 Door	Deli	6 - 8	29	6	230
4'	Beverage	6 - 8	32	4	183
4'	Dairy	6 - 8	31	4	183
4'	Deli	6 - 8	30	4	183

## CONDENSING UNIT DATA (R-448A REFRIGERANT)

Case Length	Volts	Phase	Frequency	Horsepower	Running Load Amps (RLA) (Amps)	Locked Rotor Amps (LRA) (Amps)	Refrigerant	Lbs. of Refrigerant
1 Door	120	1	60	1/4	4	26	R448A	2.0
4'	120	1	60	1/4	4.0	26.0	R448A	2.5
2 Door	208	1	60	1/3	3.6	17.5	R448A	2.5
3 Door	208	1	60	1/3	3.6	17.5	R448A	2.5
4 Door	208	1	60	1/3	3.6	17.5	R448A	2.5
5 Door	208	1	60	1/2	4.6	22.0	R448A	3.5

## DEFROST CONTROLS (R-448A REFRIGERANT)

Case Length	Defrosts Per Day	Run-Off Time (Min)	Fail-Safe (Min)	Termination Temp (F)
1 Door	2	0	60	40
4'	2	0	60	40
2 - 5 Door	2	0	46	44

## DEFROST SCHEDULE (R-448A REFRIGERANT)

Defrosts Per Day	Time
2	12 a.m. - 12 p.m.

## NOTES:

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- The 24 Hour Energy Value is based upon AHRI 1200 test conditions with Hillphoenix provided evaporator fans, condensing unit, LED lights, occupancy sensor based (on/off) lighting control, dew point based anti-sweat heat controller, condensate pump, evaporator pan, heated door frame, and un heated glass doors/off cycle defrost on medium temp cases.



COMPONENT

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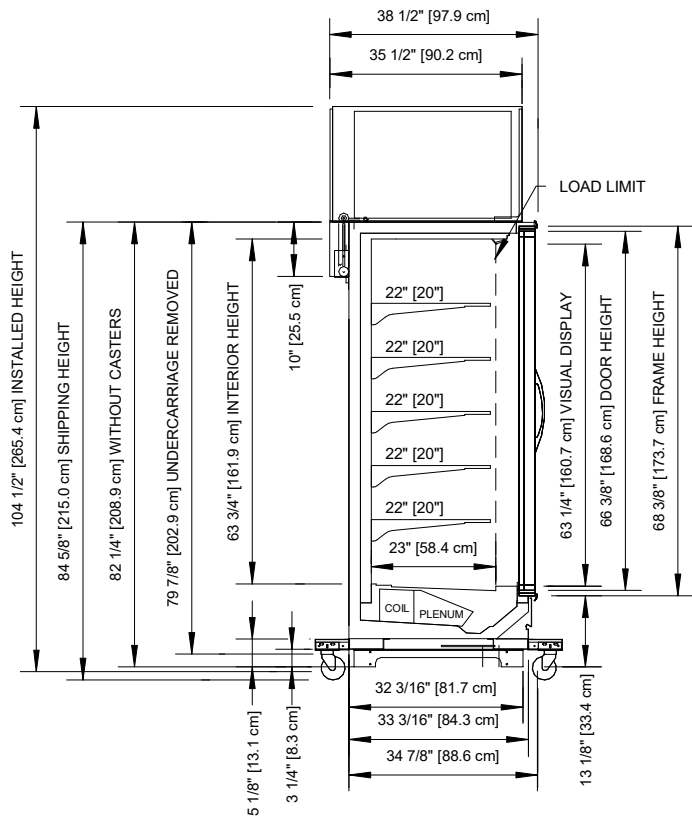
DOOR OPTIONS	FRONT OPTIONS
<p>STANDARD SWING DOOR 2, 3, 4 &amp; 5 - DOOR CASES</p> <p>30" [76.2 cm]</p>	<p><u>FLAT FRONT</u></p> <p>FRONT PANEL</p> <p>19.4 cm</p> <p>7 5/8"</p> <p>KICKPLATE</p>
<p>STANDARD SWING DOOR 1 - DOOR CASES</p> <p>31" [78.7 cm]</p>	
<p>BI- SWING DOOR 4' CASES</p> <p>24" [61.0 cm]</p> <p>24" [61.0 cm]</p>	



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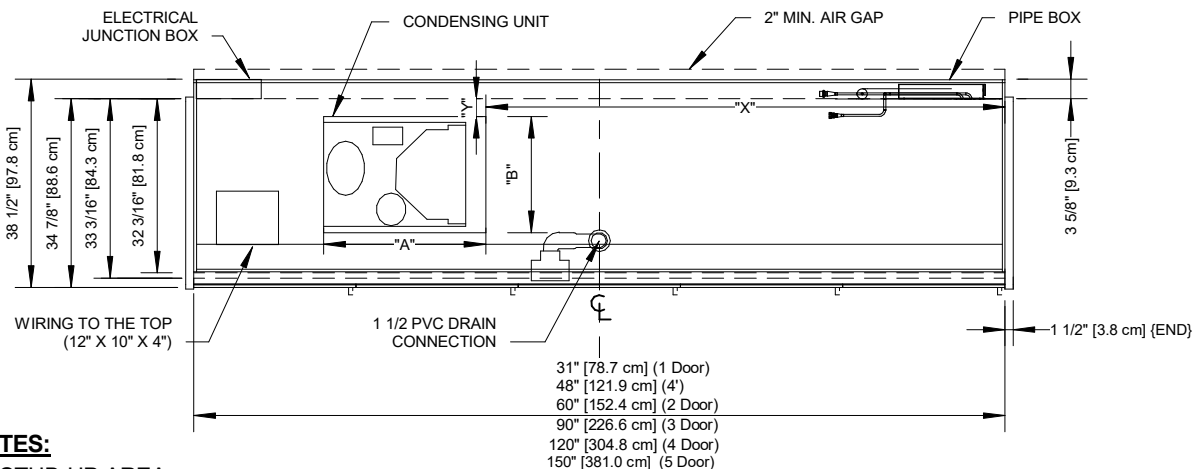
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CONDENSING UNIT SIZE AND POSITION R404A				
REFRIGERANT	R404 A			
CASE LENGTH	2DR	3DR	4DR	5DR
"X"	19.5"	33.4"	48.3"	33"
"Y"	4.5"	4.5"	4.5"	4.5"
"A"	16.6"	16.6"	16.6"	16.1"
"B"	13.1"	13.1"	13.1"	13.7"

CONDENSING UNIT SIZE AND POSITION R448A						
REFRIGERANT	R448 A					
CASE LENGTH	1DR	2DR	3DR	4DR	5DR	4'
"X"	5"	14"	37"	37"	41"	5"
"Y"	2.5"	2"	2"	2"	2"	2.5"
"A"	14.1"	18.3"	18.3"	18.3"	18.3"	14.1"
"B"	12.1"	13.4"	13.4"	13.4"	13.4"	12.1"



### NOTES:

- \* : STUB-UP AREA.
- \*\* : RECOMMENDED STUB-UP CENTERLINE FOR ELECTRICAL AND HUB DRAINS.

- Specialized Base Frame:
- Case fits through 80" doorway with shipping undercarriage removed.
- 2" lifting brackets (installed) & 3.25" ship loose risers combine for 5" baseframe once installed.
- Drain traps ship loose.
- Ends add approximately 1" to case height, 1/2" to the back & 1" to the front.



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