### **GENERAL NOTES:**

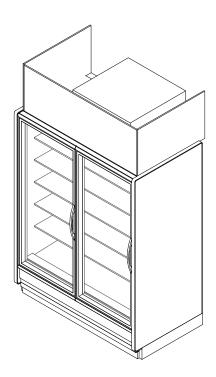
- · Lighting Controls and Anti Sweat Heat Controls are Required
- Option 1: OEM Provided:

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

- 4' case lengths available in 120V R448A condensing unit configuration.
- 2 door lengths available in 208V R404A/R448A condensing unit configuration.



SHIPPING WEIG	GHT
Case	Weight
JNRBHSAK	







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.

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# **JNRBHSAK (R404A)**

SYSTEM RE	SYSTEM REQUIREMENT (R-404A)										
Case Length	Volts	Phase	Frequency	Minimum Circuit Ampacity (MCA)	Maximum Overcurrent Protection (MOP)	24hr Energy Usage (kWh)					
2 Door	208	1	60	16.3	20.0	6.4					

GUIDELINES AND CONTROL SETTINGS (R404A)									
Case Length	Application	Superheat Set Point @ Bulb (°F)	Discharge Air (°F)	Set Point Differential (°F)	Discharge Air Velocity (FPM)				
2 Door	Meal Kit	6 - 8	29	6	230				

CONDENSING I	CONDENSING UNIT DATA (R404A)										
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			

DEFROST CONTROLS (R404A)									
Case Length	Application	Defrosts Per Day	Run-Off Time (Min)	Fail-Safe (Min)	Termination Temp (F)				
2 Door	Meal Kit	2	0	46	44				

DEFROST SCHEDULE (R404A)						
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.





# JNRBHSAK (R404A)

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# JNRBHSAK(R448A)

SYSTEM REQUIREMENT (R448A)										
				Minimum Circuit	Maximum Overcurrent					
Case				Ampacity	Protection	24hr Energy				
Length	Volts	Phase	Frequency	(MCA)	(MOP)	Usage (kWh)				
2 Door	208	1	60	15.8	20.0	6.4				
4'	120	1	60	11.8	15.0	5.4				

<b>GUIDELII</b>	GUIDELINES AND CONTROL SETTINGS (R448A)										
		Superheat Set		Set Point	Discharge Air						
Case		Point @ Bulb	Discharge Air	Differential	Velocity						
Length	Application	(°F)	(°F)	(°F)	(FPM)						
2 Door	Meal Kit	6 - 8	29	6	230						
4'	Meal Kit	6 - 8	30	4	183						

CONDENSI	CONDENSING UNIT DATA (R448A)											
					Running Load	Locked Rotor						
Case					Amps (RLA)	Amps (LRA)		Lbs. of				
Length	Volts	Phase	Frequency	Horsepower	(Amps)	(Amps)	Refrigerant	Refrigerant				
2 Door	208	1	60	1/3	3.6	17.5	R448A	2.25				
4'	120	1	60	1/4	4.0	26	R448A	2.5				

DEFROST CONTROLS (R448A)										
Case Length	Application	Defrosts Per Day	Run-Off Time (Min)	Fail-Safe (Min)	Termination Temp (F)					
2 Door	Meal Kit	2	0	46	44					
4'	Meal Kit	2	0	60	40					

DEFROST SCHEDULE (R448A)		
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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# **JNRBHSAK**

JNRBHSAK (Me	eal Kit) Case Configuration	
Case Moadel	JNRBHSAK (Meal Kit) Base Model	JNRBHSAK (Meal Kit) Configured Options
Length	2 Door, Single Swing 4', French Swing	
Case Use	Beverage, Dairy, Deli, Meat	
Base Frame	Optional: Split Base Frame (2" +3.25) for 80" Doorway Restriction	Std 5"
Exterior Color	Black	Optional: Custom Color
Interior Color	White	Optional: Custom, Bright Stainless SA
LH End Type	Square	Optional: Square ends with unheated glass thermopane window
RH End Type	Square	Optional: Square ends with unheated glass thermopane window
End Skins	Interior: CC or WH Exterior: CC	Optional: Interior: SA Exterior: S3
End Trim Type/Color	Black PVC	Optional: Stainless Steel Metal Trim
Door Type (Std, Elim, Etc.)	ELMD (2 Door, Single Swing) Vista C (4', French Swing)	Optional: I90 (2 Door, Single Swing), I60 (4', French Swing)
Door Frame Style	101 (2 Door, Single Swing) Vista (4', French Swing)	
Door Lighting	LED-Optimax Radiant	
Door Handle (Full, Short)	Short (ELMD), Arch (Vista C)	Optional: Arch or Full I90
Door Color	Black	
Anti Fog	No	With Anti Fog Coating
Door Gasket Type	LifePlus	
Master Bumper	None	
Nose Bumper	Boston Bumper with End Caps/ Black	
Rack Type	White, 22" with 4" lip	
Shelf Arrangement	(5) 22" Shelves	
PTM Type	Aluminum	
Wiring	Top; 208V 4 Wire Single Point Connection, Carel Controller (2 Door, Single Swing) Top; 120V 3 Wire Single Point Connection, Carel Controller (4', French Swing)	
Refrigerant	DX R404A (2 Door, Single Swing), DX R448A (4', French Swing)	
Piping	Тор	
Defrost	Off Cycle	
Heat Exchanger	None	
Fans (HE, STD)	ECM	
Refrigeration Accessories	None	
Thermometer	Std - Dial	
Probe Special Instructions	None Ship Loose Condensing Unit + Drain Pump + Pan	Optional: Fully Installed Condensing Unit + Pump + Pan







# COMPONENT

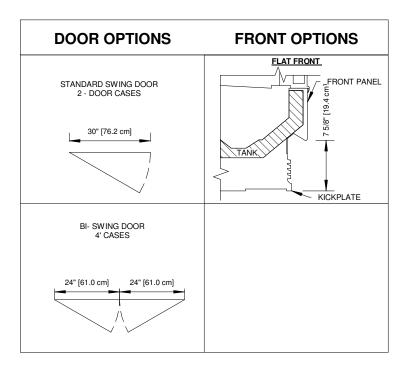
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# **JNRBHSAK**









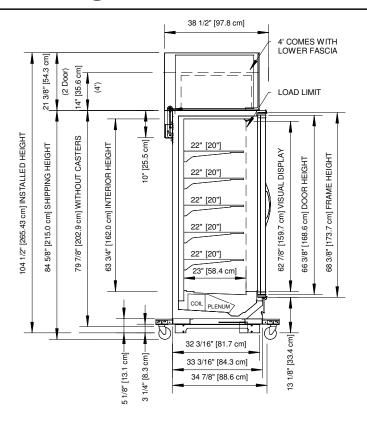
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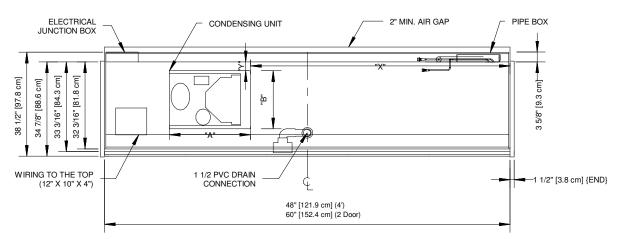


# **JNRBHSAK**



CONDENSING UNIT SIZE AND POSITION R404A		
REFRIGERANT	R404 A	
CASE LENGTH	2DR	
"X"	19.5"	
"Y"	4.5"	
"A"	16.6"	
"B"	13.1"	

CONDENSING UNIT SIZE AND POSITION R448A		
REFRIGERANT	R44	18 A
CASE LENGTH	2DR	4'
"X"	14"	5"
"Y"	2"	2.5"
"A"	18.3"	14.1"
"B"	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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