

## REFERENCE NOTES FOR ENGINEERING DATA

- Listed BTUH/ft data represent unlighted shelves. For LED lighting, add 9 BTUH/ft per row of lighted shelving.
- BTUH load increases by 132 BTUH/ft when aftermarket merchandising accessories are utilized.
- Listed evaporator temperature represents unlighted shelves. For lighted shelves and/or aftermarket merchandising accessories, reduce the listed evaporator temperature by 2°F.
- Conventional Discharge Air Control – Recommended Settings: Cut-In Temp = Discharge Air + 2°F; Cut-Out Temp = Discharge Air - 2°F.
- 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 condition in which the case operates.
- "0.00" indicates that feature is not an option on this case model.

## REFERENCE NOTES FOR CROSS SECTIONS

\* : STUB-UP AREA

\*\* : RECOMMENDED STUP-UP CENTERLINE FOR ELECTRICAL AND HUB DRAINS

- Ends add approximately 1" to case height
- Wiring to the top adds approximately 4" to case height
- A 2" minimum air gap is required between the rear of the case and a wall
- Back panels add approximately 1" to the rear of the case
- Suction line 7/8".
- Liquid line with hot gas defrost 1/2"
- Available shelf sizes: 10", 12", 14", 16", 18", 20", 22" & 24"
- Dashed lines signify area inside the base rail behind the kick plate
- Casters add approximately 2 1/4" to case height
- 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 efficiency requirements.



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.

## 3NDML-NRG

Rev Date:	Rev #	Revision Description:
10-13-17	1	DOE APPROVED

**Hillphoenix**

A DOVER COMPANY

# 3NDML-NRG

Multi-Deck Merchandiser with Synerg-E™  
6', 8', 12' (Beverage / Dairy / Deli / Produce)

ELECTRICAL DATA			
Case Length	Fans Per Case	High Efficiency Fans	
		120 Volts	
		Amps	Watts
6'	3	0.57	65.0
8'	3	0.00	0.0

LIGHTING DATA						
Case Length	Lights Per Row	Light Length	Clearvoyant LED Lighting (per Light Row)			
			Standard Power (Cornice or Shelf)		High Power (Cornice)	
			120 Volts		120 Volts	
			Amps	Watts	Amps	Watts
6'	2	3'	0.14	16.6	0.25	29.8
8'	2	3'	0.14	16.6	0.25	29.8

GUIDELINES AND CONTROL SETTINGS						
Application	BTUH/ft		Superheat Set Point @ Bulb	Evaporator	Discharge Air	Discharge Air Velocity (FPM)
	Conventional	Parallel				
Dairy/Deli/Cut Produce	1396	1343	6-8 °F	28 °F	33 °F	210 FPM
Produce/Beverage	1239	1225	6-8 °F	32 °F	37 °F	210 FPM

DEFROST CONTROLS		
Defrosts Per Day	Timed-Off Defrost	
	Fail-Safe	Termination Temp
6	45 (Min)	42 °F



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## 3NDML-NRG

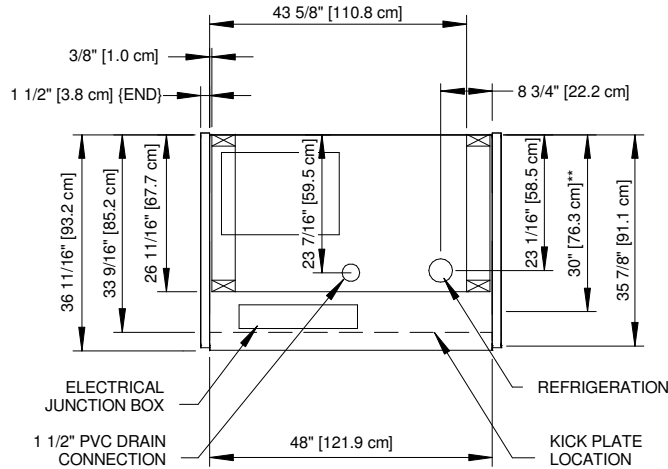
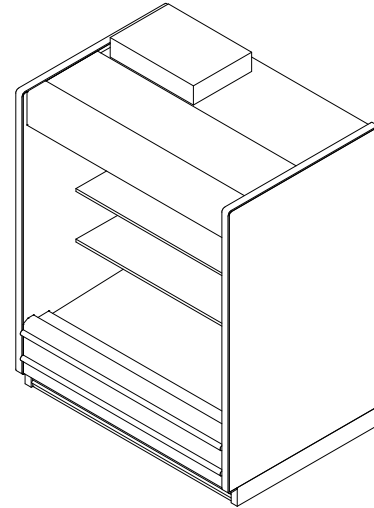
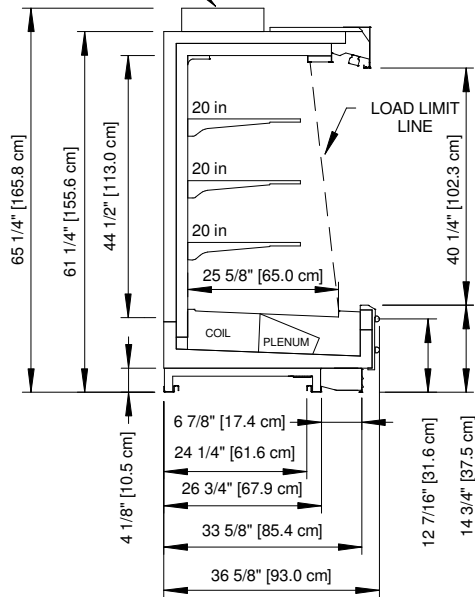
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# 3NDML-NRG

Multi-Deck Merchandiser with Synerg-E™  
4', 6', 8' & 12' (Beverage / Dairy / Deli / Produce)

OPTIONAL WIRING  
TO THE TOP  
20 IN X 14 IN X 4 IN



Front of case

2017  
**DOE**  
COMPLIANT



COMPONENT

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## 3NDML-NRG 4'

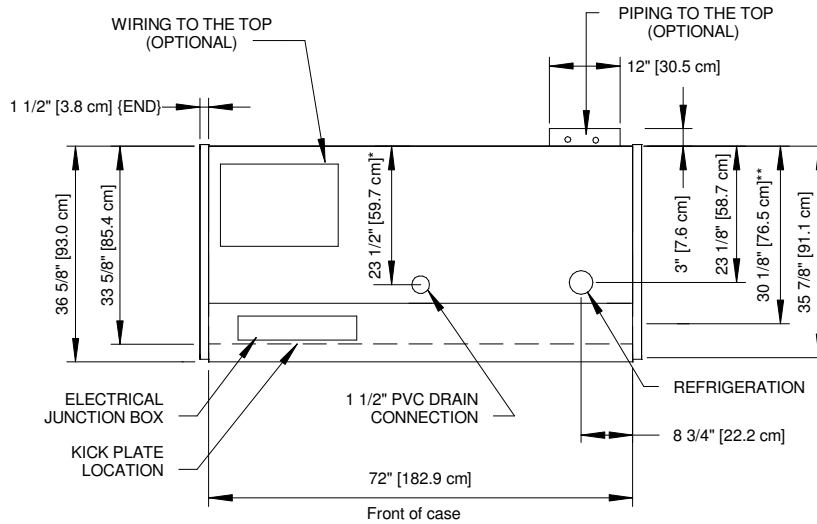
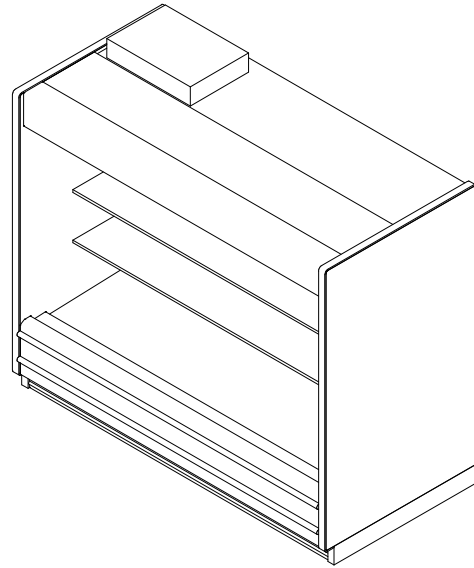
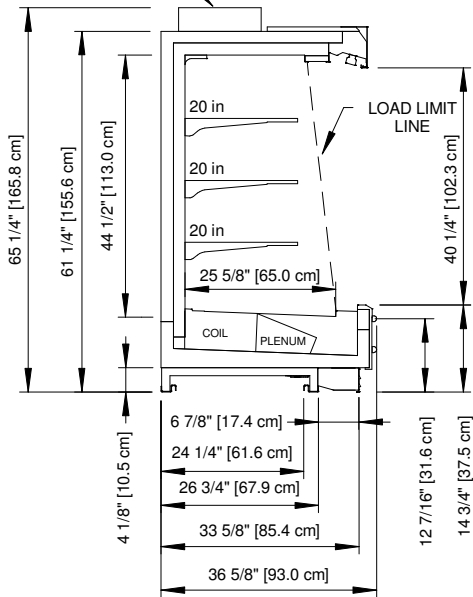
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Multi-Deck Merchandiser with Synerg-E™  
6', 8', 12' (Beverage / Dairy / Deli / Produce)

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2017  
**DOE**  
COMPLIANT



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## 3NDML-NRG 6'

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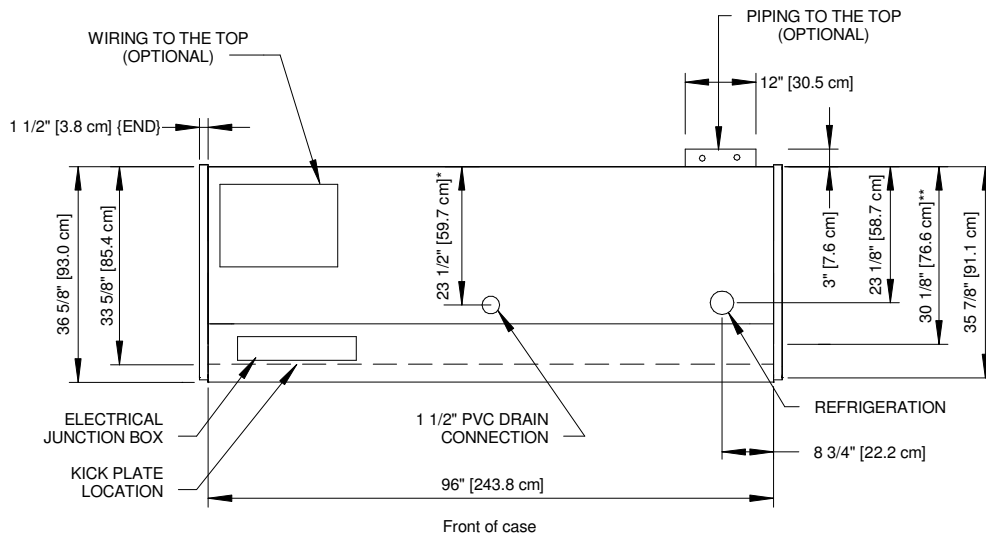
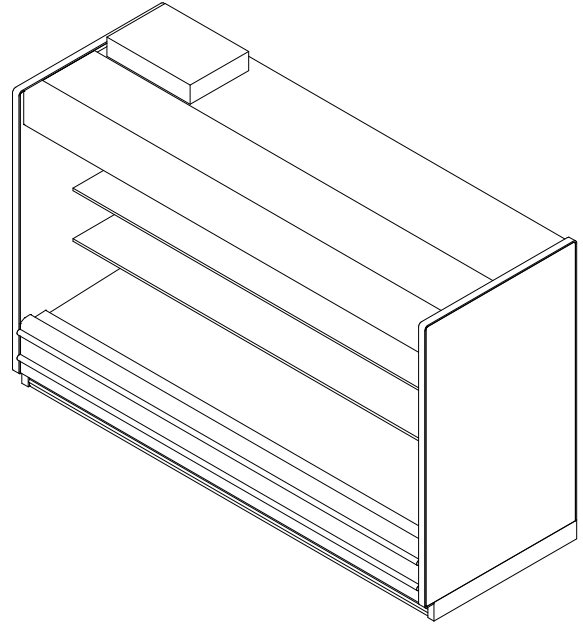
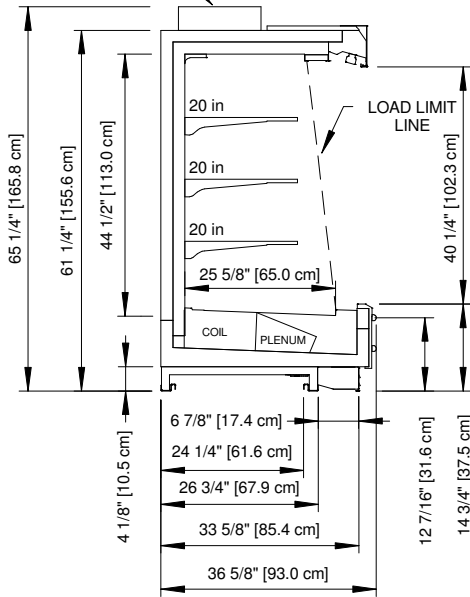
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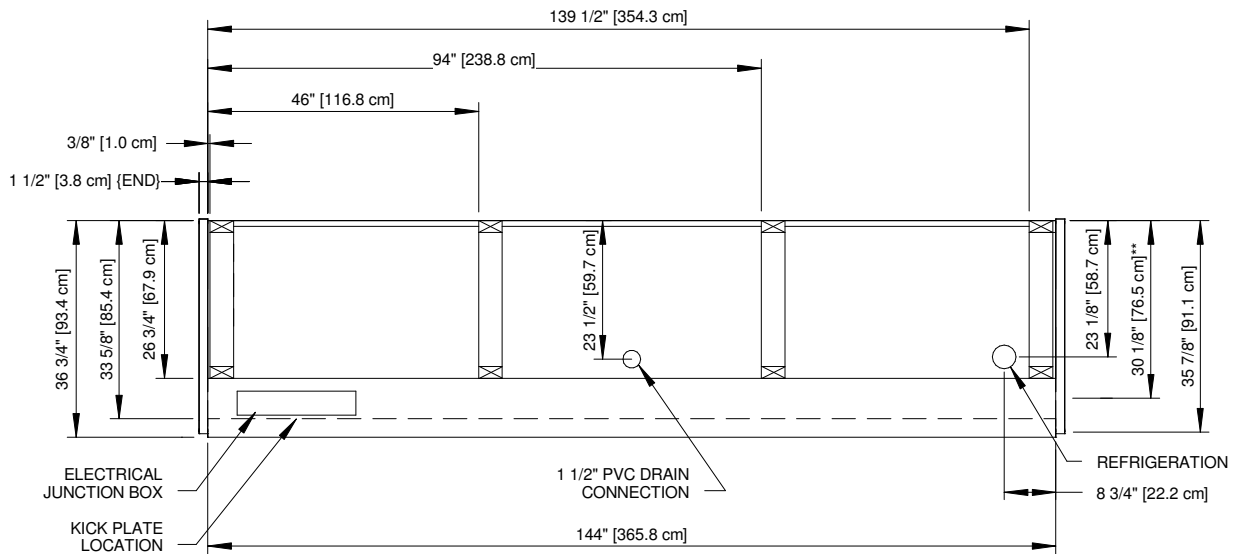
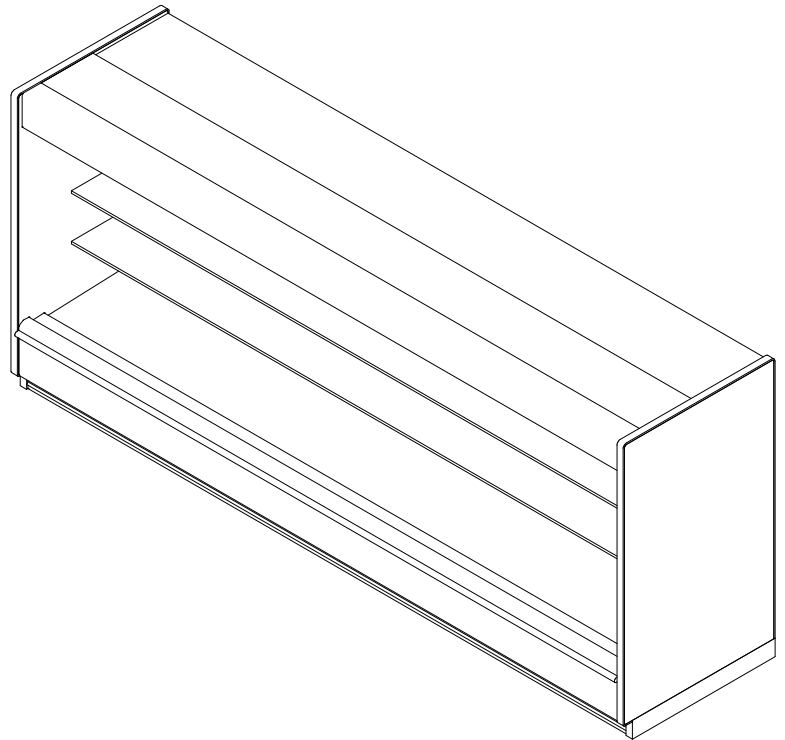
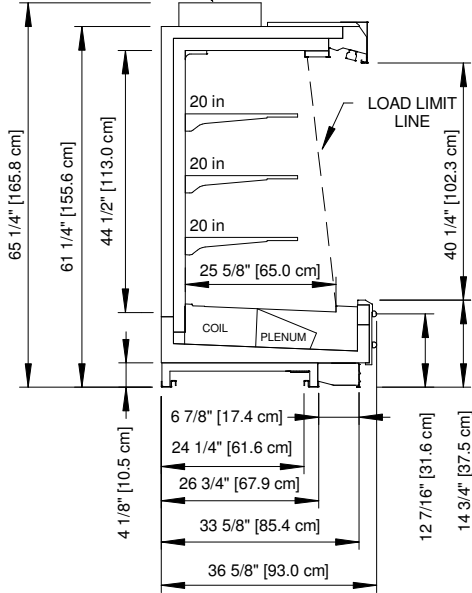
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Front of case

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