WHHP

HYBRID HEAT PUMP WATER HEATER

Multi-Port Connections | I-Memory | Wi-Fi | LCD Display | EcoPort | 60Hz

RESIDENTIAL
PRODUCT SPECIFICATIONS (EHB)

40, 50, 65 and 80 Gallons
Up to 4.10 UEF
208/240V-1Ph



FEATURES

Split-Top Cap
- For easy access and maintenance

Removable Air Filter
- Washable filter for easy maintenance

Multi-Port Configuration
- Top and side water connections for easy installation

I-Memory
- Self-learning habit algorithm which will ensures hot water is available when needed
- Saves energy when not needed

FillSafe Protection™
- Protects tank and components if the tank is not properly filled

Integrated Wi-Fi And Comfort Link App
- Connect to a local internet network to remotely monitor and control the water heater through the free Comfort Link mobile app

Five Operating Modes
- Comfort (default), Green, Fast, Electric, Vacation

Boost Function
- A single heat-up cycle using the mechanical heat pump heating and an electric element to decrease recovery time

Built-In Leak Detection
- App notifications and optional shut-off valve at the inlet

EcoPort Certified
- Demand Response ready (CTA-2045/OpenADR)

User-Friendly LCD Display Screen
- Allows for easy view of current operational status, parameter changing and diagnostics

Dual Backup Incoloy Superalloy Heating Elements
- Superior resistance to high temperatures and corrosive environments

Full Flow Brass Drain Valve
- Allows easy and quick drainage

Temperature And Pressure Relief Valve
- Factory provided and installed

R-513A Refrigerant
- Low GWP (Global Warming Potential)

QUALITY

Heavy-Gauge Steel Tank
- Extra years of trouble-free service

Permaclad™ Glass-Lined Tank
- Lined and fired at 1600°F for optimum protection from the effects of corrosion

Dual Cathodic Protection
- Features a powered and magnesium anode for enhanced protection and extended tank life

WARRANTY

- Tank - Limited ten years in residential applications, one year in non-residential applications
- Components - Limited ten years in residential applications, one year in non-residential applications

NOTE - Refer to Lennox® Basic Limited Warranty at www.Lennox.com for additional details.

PERFORMANCE

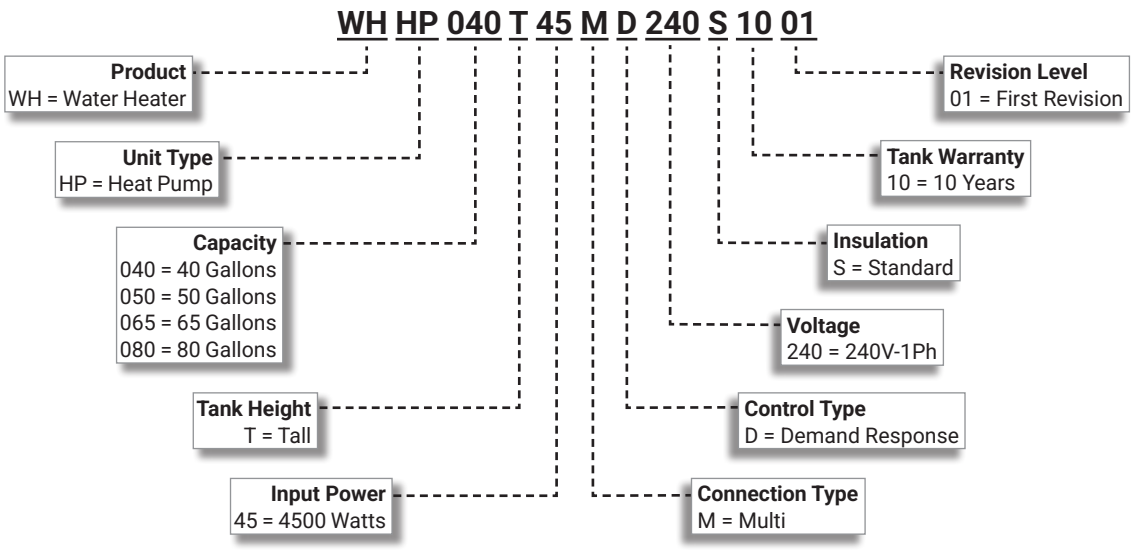
- Up to 4.10 UEF
- Up to 88 gallons First Hour Rating (FHR)
- Quiet operation with a sound rating of 45 dB.
- Exceeds DOE performance requirements
- Delivers hot water up to 149°F

APPROVALS

- ENERGY STAR® Certified
- AHRI Certified
- All models comply with NAECA requirements and are UL and CEC listed and meet or exceed ASHRAE 90.1B
- NEEA certified
- Title 24 compliant (JA-13 ToU)
- Can operate at temperatures as low as 36°F
- Heat Pump operation between 35°F and 120°F ambient temperature

Form Number 211258 | March 2026
Supersedes all previous versions

MODEL NUMBER IDENTIFICATION



MOBILE APP

Comfort Link

- Set your water temperature anytime, anywhere, with a simple touch
- Control your water heater in a simple and intuitive way through the app or your voice.
- Check energy reports, save up to 25% and get advice on how to optimize your consumption habits
- Turn unit on and off
- Select operating mode
- Set and View the tank temperature settings
- Create custom schedules for your water heater operation
- See energy usage patterns
- Troubleshoot product using the error code history

Download on the App Store

ANDROID APP ON Google play

SPECIFICATIONS

Model		WHHP040T45 MD240S10	WHHP050T45 MD240S10	WHHP065T45 MD240S10	WHHP080T45 MD240S10
Nominal Capacity	Gallons	40	50	65	80
DOE Rated Capacity	Gallons	37	45	61	74
First Hour Rating	Gallons	66	68	77	88
GPH Recovery @ 90°F Rise	Gallons	27	27	27	27
Uniform Energy Factor		3.55	3.83	4.05	4.10
Estimated Yearly Energy Cost		$127	$119	$171	$169
Line voltage data (Volts-Phase-Hz)		208/240-1-60	208/240-1-60	208/240-1-60	208/240-1-60
Electrical Breaker Size	Amps	30	30	30	30
Element Wattage		4500	4500	4500	4500
[1] Element Wattage Derate @ 208V		3380	3380	3380	3380
Compressor Watts		500	500	500	500
[2] Sound Level	dBA	45	45	45	45
Condensate Hose Size	in. (mm)	3/4 (19)	3/4 (19)	3/4 (19)	3/4 (19)
Recommended Drain Pan Diameter	in. (mm)	24 (610)	24 (610)	26 (660)	26 (660)
Shipping Weight	lbs.	190	238	271	337

NOTES - All models comply with NAECA requirements are UL and CEC listed and meet or exceed ASHRAE 90.1B.
Heaters are wired for non-simultaneous operation, single phase 240 Volts with dual 4500 Watt elements, unless otherwise specified.
All models are certified at 300 PSI test pressure and 150 PSI working pressure.

[1] Water heaters are manufactured to voltage and wattage specified. When less than design voltage is supplied to the unit, the element will still heat, but at less than the design value.

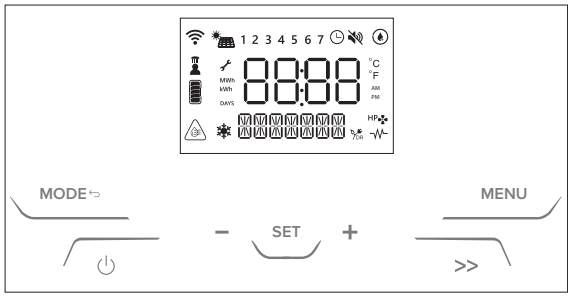
[2] Operation at 45 dBA measured at 6 feet using third-party certified testing procedures at 120°f temperature setpoint

OPTIONAL ACCESSORIES - ORDER SEPARATELY

Automatic Shut-off Valve + Cable	**31Y04**
Air Inlet Duct Adaptor Kit	**31Y05**
Vibration Isolation Kit	**31Y06**
8 inch UL Certified Termination Kit	**31Y07**

CONTROLS

CONTROL PANEL



- LCD Display with seven touch buttons:
  - ⏻ POWER - Turns the water heater on or off
  - − SET + - Use the plus and minus buttons to set desired hot water temperature or scroll through available parameter settings in the Menu settings
  - Use the SET button to confirm settings selected
  - MODE ⮌ - Five different modes to modify water heater operation to reach the set temperature:
    1. GREEN - Heat pump only, priority is given to energy saving

       NOTE - The heating element will only turn on for back-up or safety functions (errors, air temperature out of operating range, defrosting in progress, antibacterial)
    2. COMFORT (Hybrid Default Setting) - Water heater reaches set temperature with mechanical heat pump operation and if necessary, with the heating element

       NOTE - Priority is given to comfort. Performance tests are performed under Comfort operating mode.
    3. FAST - Water heater uses both the mechanical heat operation pump and heating element to reach set temperature quickly

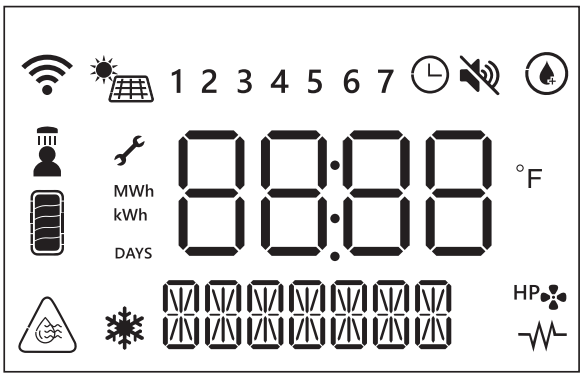
       NOTE - Priority is given to heating time.
    4. ELECTRICAL - Water heater uses heating element operation only
       - Mechanical heat pump operation is disabled
    5. VACATION - When hot water will not be needed for an extended period of time (vacation, etc.)
       - Vacation mode is set in the User Menu
       - In Vacation mode, no heating operation is performed
       - When Vacation mode time has expired water heater will return to the previous setting

       NOTE - Freezing protection and anti-bacterial cycle are enabled at all times
  - >> BOOST - Both mechanical heat pump operation and heating element are used to reach the set temperature in the shortest possible time
  - Once set temperature is reached water heater will return to the previous setting
  - I-MEMORY - Uses a proprietary algorithm to reduce energy consumption and maximize comfort by monitoring the hot water needs of the user to optimize the use of the heat pump/ heating element
  - Control meets daily needs by averaging use profiles over every four weeks
    - First week monitoring - The setpoint temperature entered by the user remains constant
    - Second through fourth week monitoring - The control automatically adjusts the setpoint temperature to meet daily needs
  - MENU - Press the MENU button to access and view different parameter setting available

SCHEDULES

NOTE - Schedules are set in the MENU settings

- Four different time periods per day of the week
- Four different modes per time period
- All Days - Time periods follow the same schedule for all seven days
- Separate time periods for Monday through Saturday
- Separate time periods for Sunday

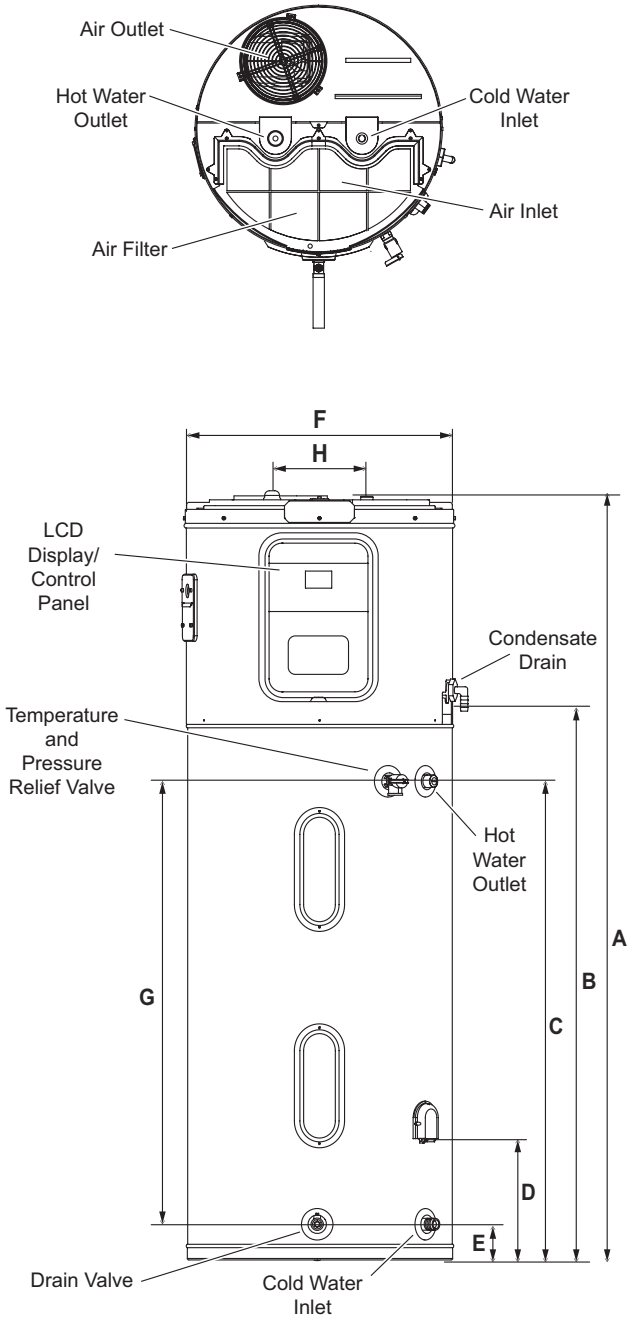


	Error has occured
	Wi-Fi enabled
	Schedule programming enabled
1....7	Day of the week (1 = Sunday)
HP	Heat pump active
	Heating element active
	Antibacterial (Antilegionella) function is enabled
DR	Demand Response enabled
	ANTIFREEZE function is enabled
	Scald Warning - Tset > 125°F
	Hot water shower available
	Estimated available hot water (based on the set temperature)

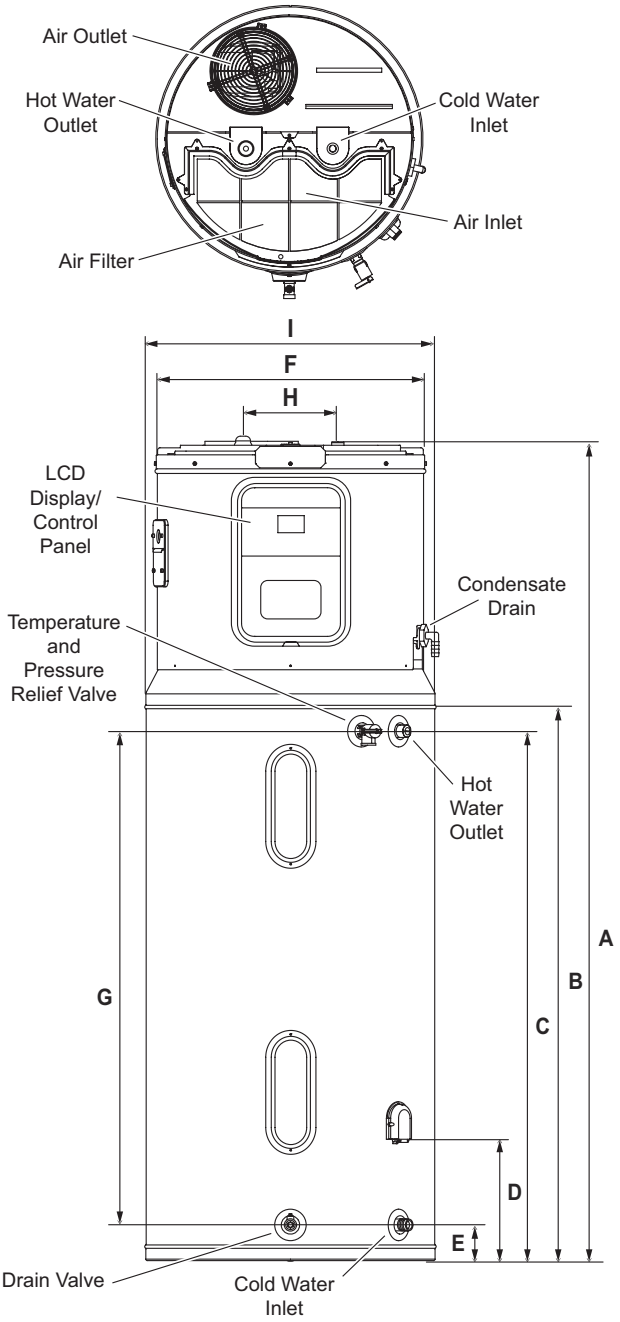
NOTE - Refer to the Installation Instructions for a more detailed list of available features.

DIMENSIONS

40 - 50 GALLON



65 - 80 GALLON



Model	A		B		C		D		E	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
WHHP040T45MD240S10	56-5/8	1438	37-3/8	948	32-1/2	826	10-1/4	260	3	76
WHHP050T45MD240S10	64-1/4	1632	45	1143	40-1/8	1019	10-1/4	260	3	76
WHHP065T45MD240S10	69-1/8	1756	46-7/8	1191	44-3/4	1137	10-1/4	260	3	76
WHHP080T45MD240S10	78-3/4	2000	56-3/4	1441	53-1/4	1353	10-1/4	260	3	76

Model	F		G		H		I	
	in.	mm	in.	mm	in.	mm	in.	mm
WHHP040T45MD240S10	22-5/8	575	29-1/2	749	8	203	- - -	- - -
WHHP050T45MD240S10	22-5/8	575	37-1/8	943	8	203	- - -	- - -
WHHP065T45MD240S10	22-5/8	575	41-3/4	1060	8	203	24-3/8	619
WHHP080T45MD240S10	22-5/8	575	50-1/8	1273	8	203	24-3/8	619







LENNOX®

Visit us at www.Lennox.com
For the latest technical information, www.LennoxPros.com
Contact us at 1-800-9-LENNOX

NOTE - Due to Lennox' ongoing commitment to quality, Specifications, Ratings and Dimensions subject to change without notice and without incurring liability.
Improper installation, adjustment, alteration, service or maintenance can cause property damage or personal injury.
Installation and service must be performed by a qualified installer and servicing agency.

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