

**RESIDENTIAL HYDRONIC
HEAT PUMP**



41,000 BTU/HR HEATING | 34,800 BTU/HR COOLING

BACKUP BOILER CAPABILITY

COP UP TO 6.0 AT 95°F LWT

SELF CONTAINED MONO-BLOC DESIGN

DELIVERED WATER TEMPS UP TO 149°F

LOW GWP R32 REFRIGERANT



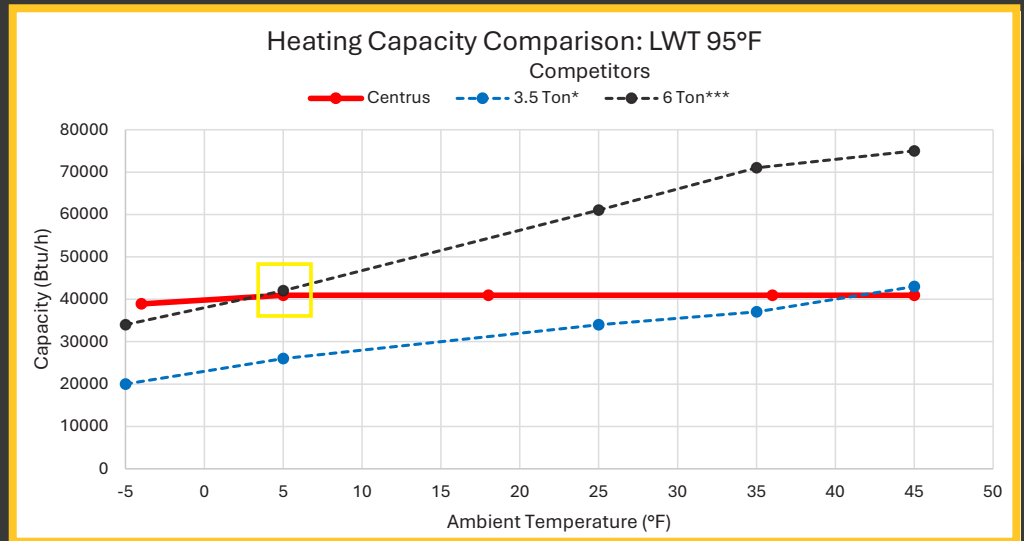
TECHNOLOGY MAINTAINS OUTPUT CAPACITY DOWN TO -4°F



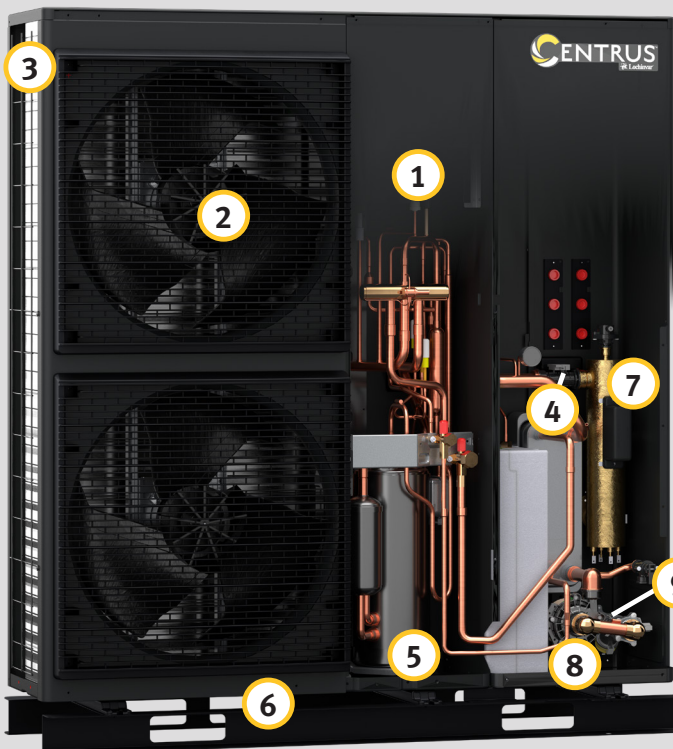
CENTRUS™ FEATURES

Lochinvar

Upholding our reputation for innovation in the commercial and residential hydronic spaces for decades, we are proud to LEAD THE CHARGE once again by bringing you CENTRUS™, Lochinvar's first air-to-water heat pump. ComfortLoch™ technology enables CENTRUS to maintain heating capacity to meet your space heating and domestic hot water needs - even when temps dip as low as -4°F. CENTRUS also features cooling capability to give you an entire system solution from space heating to space cooling to domestic hot water production.



Leading competitors have to practically double the heat pump size*** in order to meet the heating needs for a 5°F design day. CENTRUS with ComfortLoch saves the customers' money because they only buy what they need. A similarly sized* heat pump from the competition simply can't keep up when cold temperatures arrive.



1. DUAL-PIPED HEAT EXCHANGER

Allows the heat pump to maintain heating capacity in low temp conditions

2. EVAPORATOR FAN

ECM and variable speed. Fan changes speed as required to control outlet water temperature.

3. EVAPORATOR

Coated evaporator for enhanced corrosion resistance.

4. VORTEX WATER FLOW SENSOR

Allows for precision flow control.

5. INVERTER ROTARY COMPRESSOR

A quiet, energy-efficient means of accomplishing precise temperature control and provides a longer life span.

6. BASE PAN HEATER

Prevents freezing condensate in low ambient operating conditions.

7. BACKUP HEATING ELEMENT

3 or 6 kW selectable backup heating element.

8. WATER PUMP

ECM and variable speed. The speed of the pump changes to control delivery of water to the system at the required temperature.

9. MAGNETIC FILTER

Prevents metal particulate from circulating to the pump.

10. UNIT CONTROLLER

3.5 inch LCD display, Remote mountable up to 164ft.



NO ONE BRINGS IT ALL TOGETHER LIKE **LOCHINVAR**

From a single CENTRUS unit to an entire system package, Lochinvar has a solution to fit customer needs. CENTRUS offers North American standard voltages, making installation and service more streamlined than ever.



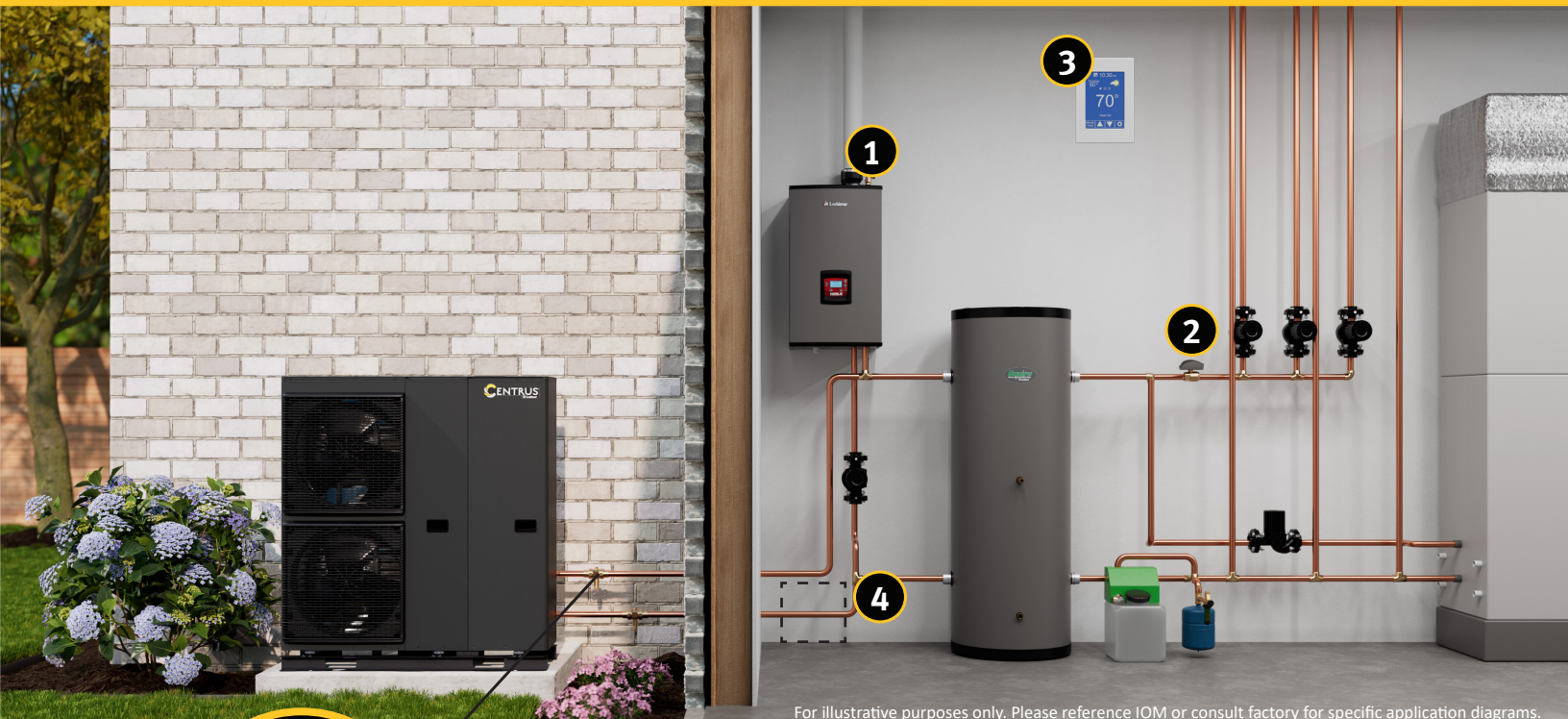
Lochinvar provides various backup boilers and tank options, giving customers the ability to create an entire system from a single manufacturer.

1. BACKUP BOILER CAPABILITY: Advanced settings allow the homeowner to determine exact temperatures for when a backup heat source is needed and also to determine if the backup boiler should run by itself or in parallel with CENTRUS.

2. 24V 2-WAY AND 3-WAY VALVE CONTROL: For systems with space cooling and/or domestic hot water, CENTRUS provides 24V control, enabling installers to use off the shelf accessories.

3. 24V EXTERNAL THERMOSTAT: Use common external thermostats found on North American shelves with 24V external thermostat control.

4. 120V EXTRA PUMP OUTPUT: For installations with extended pipe lengths between CENTRUS and the system or buffer tank, CENTRUS provides 120V output for an extra pump.



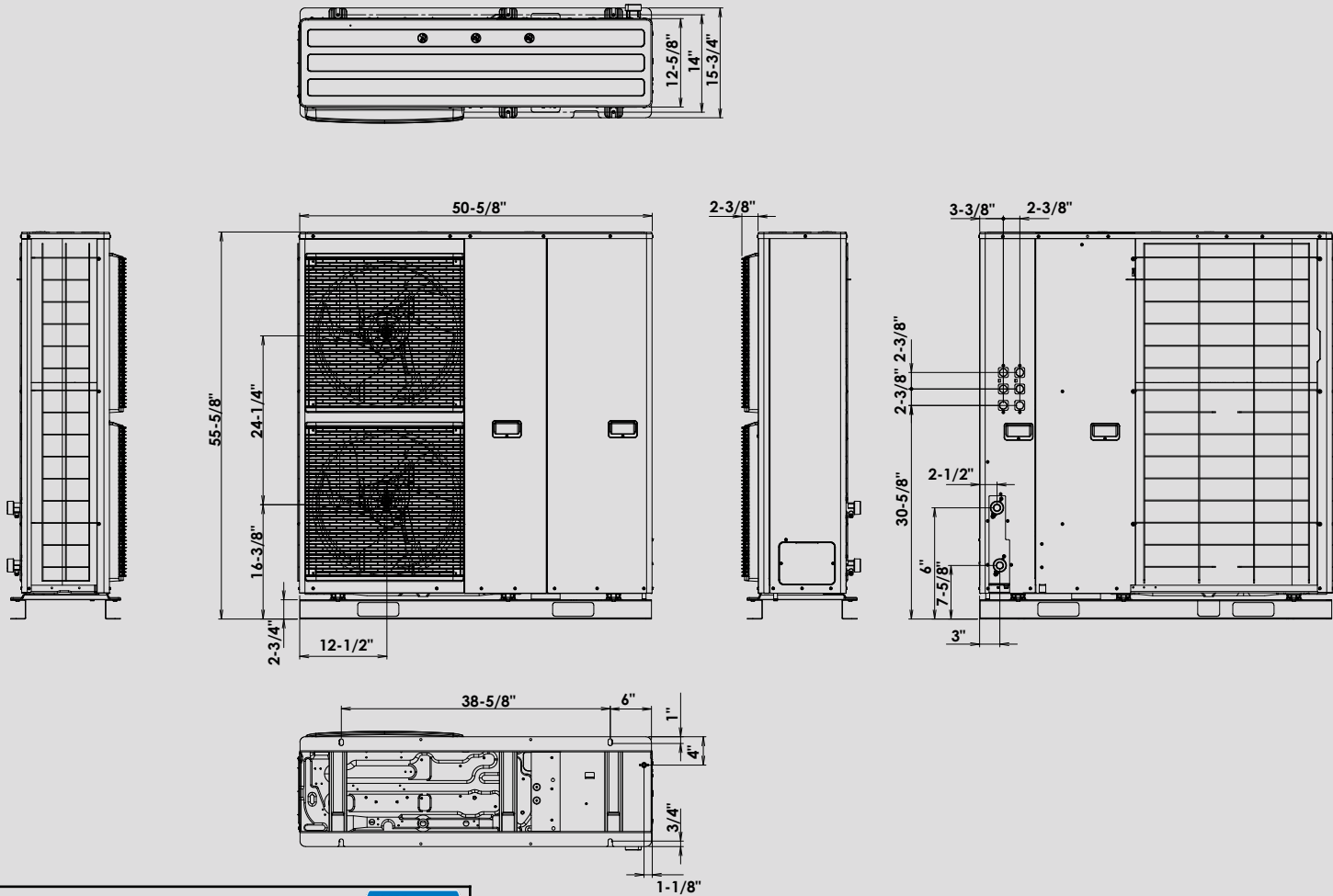
For illustrative purposes only. Please reference IOM or consult factory for specific application diagrams.



AVAILABLE ACCESSORY

Anti-Freeze Valve - helps protect water circuit in case of power outages.

DIMENSIONS AND SPECIFICATIONS



CENTRUS HEAT PUMP										
Model Number	Cooling			Heating (-4°F - 95°F)*		Water Connections		Power Supply		Ship Wt. (lbs)
	Capacity Btu/hr (Tons)	EER/SEER	IPLV (kW/kW)	Capacity Btu/hr (Tons)	COP Range	Inlet	Outlet	Voltage	Phase	
RAH040	34,800 (2.95)	9.6 /10.9	4.52	41,000 (3.42)	1.23-6.0	1-1/4" NPT	1-1/4" NPT	208/240V	Single	347

Note - 44°F LWT 54°F EWT @7 GPM & 95°F DB Ambient.
*Data is tested in accordance with AHRI 550/590.
Information subject to change without notice. Dimensions shown are approximate and should **NOT** be used for construction purposes.

STANDARD FEATURES

- High Efficiency up to COP of 6.0
 - ComfortLoch - Capacity Maintaining Technology
 - ZERO On-site Emissions
 - Space Heating and Cooling
 - Low GWP R32 Refrigerant
 - Mono-bloc Design
 - Inverter Rotary Compressor
 - ECM Water Pump
 - North American Accessories Functionality
 - 24V Thermostat
 - 24V 2-way Valve
 - 24V 3-way Valve
 - 120V Extra Pump
- Operating range: -4°F to 109°F
- 3- Temperature Sensors
- Buffer Tank Sensor
 - DHW Tank Sensor
 - Outdoor Air Sensor
- Magnetic Filter
- Backup Heating Element

- Base Pan Heater
- 2.6 Gallon Expansion Tank
- 50 PSI Relief Valve

STANDARD CONTROL FEATURES

- 3.5" LCD Display
- Included Temperature Sensor
- Remote Mountable up to 164 feet
- Password Security
- Alternate, Parallel or Advanced Parallel Boiler Operation
- Floor Heating Concrete Dry Mode
- Energy Consumption Statistics
- Holiday Mode with Programmable Resume

OPTIONAL ACCESSORIES

- Anti-Freeze Valve



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