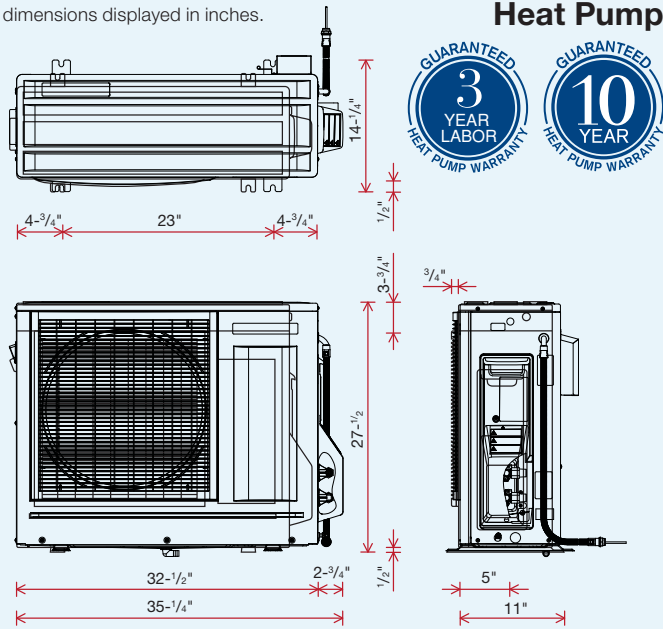


All dimensions displayed in inches.



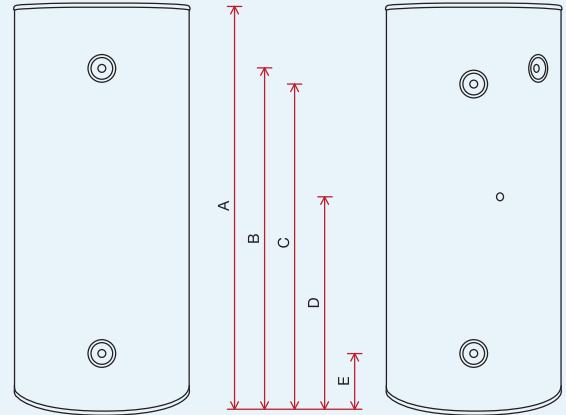
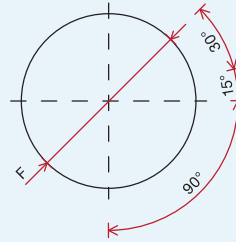
## Heat Pump



### Outdoor Unit (Heat Pump) Model No. GUS-A45HPA

Performance	43-gal. system	83-gal. system
Energy Factor	3.09	3.84
First Hour Rating	71 gallons	101 gallons
Specifications		
Water Temperature Setting	130°F to 175°F	
Ambient Air Operating Temperature	-20°F to +110°F	
Heat Pump Capacity	15,400 Btu/h	
Heat Pump Capacity	4.5 kW	
Heat Pump COP	5.0	
Refrigerant Type	R744 (CO <sub>2</sub> )	
Compressor Type	Inverter	
Power Voltage	208/230v -1Ph - 60Hz	
Breaker Size	15 Amps	
MCA	13 Amps	
Outdoor Operating Noise Level	37 dB	
Weight	106 lbs	
Pipe Size (Tank to Heat Pump)	1/2" (Hot & Cold)	
Max Length Inc Vertical	50 ft	
Max Vertical Separation	16 ft	
Max Water Pressure	95 Psig	

## Stainless Steel Storage Tank



Tank Model No:	GAUS-160QTA	GAUS-315EQTD	SAN-43SSAQA	SAN-83SSAQA
A Height	47-1/4"	58-5/8"	38-1/8"	68-7/8"
B Hot Water Outlet & PR Valve	37-3/8"	49-5/8"	29-1/2"	60-1/4"
C Heat Pump Return	37-3/8"	49-5/8"	29-1/2"	60-1/4"
D Sensor Port	17-1/8"	37"	9-3/4"	40 3/8"
E Cold Water Inlet / Cold Water to HP	8-1/4"	7-7/8"	8-3/4"	8-3/4"
F Diameter	22-1/2"	26-3/4"	24-1/2"	24-1/2"
Weight (lbs)	88 lbs	154 lbs	88 lbs	115 lbs
Tank Capacity (gallons)	43 gallons	83 gallons	43 gallons	83 gallons

Connection Sizes	
Cold Water Inlet	3/4" NPT
Hot Water Outlet	3/4" NPT
Cold Water to Heat Pump	3/4" NPT
Hot Water Return from Heat Pump	3/4" NPT
Pressure Relief Valve Setting (Psig)	125 Psig

Note: Materials and specifications are subject to change without notice.

REV 1216



For more information, please call **1-844-SANDCO2** or email **info@sandenwaterheater.com**.



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Website: www.sandenwaterheater.com

Sanden Dealer





# SANDEN

Delivering Excellence



## Heat Pump Water Heater



**SAN** CO<sub>2</sub>   
Hot water, *naturally.*





The Sanden SANCO<sub>2</sub> Heat Pump Water Heater is a highly energy efficient alternative to traditional electric or gas water heaters. It absorbs heat from the outside air to heat water – saving energy, saving money and reducing greenhouse gas emissions.



## Superior Features



### ENERGY EFFICIENT

- 4x more efficient than traditional electric water heaters
- Allows use of off-peak power

### HIGH PERFORMANCE

- Greater first hour rating than all heat pump water heaters
- Faster recovery after hot water draw

### SUPERIOR QUALITY

- Corrosion-resistant stainless steel tank
- 3-year labor, 10-year parts heat pump warranty;  
15-year tank warranty

### EXTENDED OPERATING RANGE

- Hot water production down to -20°F & below
- Up to 175°F delivered hot water temperature
- No need for a back up electric element in the storage tank

### LOW-PROFILE DESIGN

- Whisper-quiet noise level (37dB)
- Slimline heat pump design for a reduced footprint

### TANK SIZE OPTIONS

- Two sizes to best fit your hot water needs

**43 Gallon Tank**  
71-Gallon  
first hour delivery



2 to 4 People

**83 Gallon Tank**  
101-Gallon  
first hour delivery



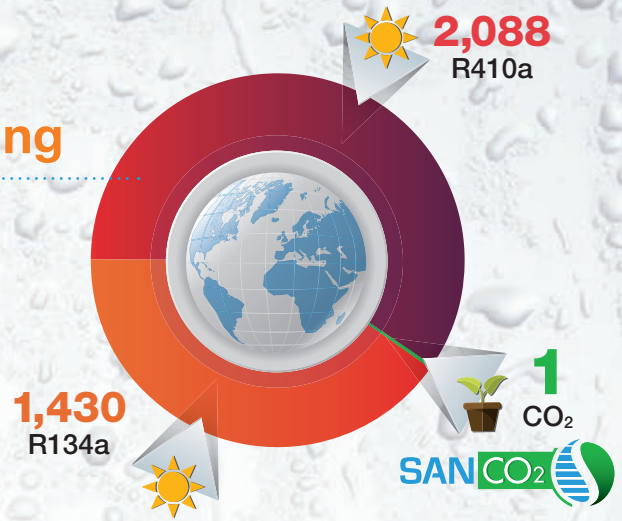
5+ People



# Minimal Impact on Global Warming

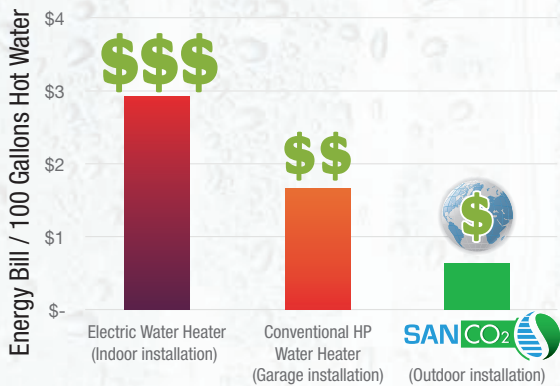
## UNIQUE OZONE-FRIENDLY CO<sub>2</sub> REFRIGERANT

Heat pump water heaters commonly use synthetic refrigerants, such as R410A or R134A. Although these refrigerants do not deplete the ozone layer, they can have a significant impact on global warming. The CO<sub>2</sub> refrigerant uniquely used in the SANCO<sub>2</sub> system has an extremely low Global Warming Potential\*, and CO<sub>2</sub>, a natural refrigerant, does not deplete the ozone layer.



**Global Warming Potential\***  
by refrigerant type per 100 years

\*Global Warming Potential (GWP) is a measure of how much a given mass of greenhouse gas is estimated to contribute to global warming. It is a relative scale which compares the gas in question to that of the same mass of carbon dioxide (whose GWP is equal to 1).



**Energy Bill Comparison**  
with traditional water heaters

# Ultra High Efficiency Reduces Energy Bills

## USES OVER 70% LESS ELECTRICITY

The SANCO<sub>2</sub> system uses an inverter-type compressor, DC fan motor and pump. Our design minimizes energy consumption, maximizes water-heating capacity, and allows for faster recovery, resulting in significantly lower operating costs than electric-resistance storage water heaters or conventional heat pump water heaters.

- Field testing data in cold climate (Northwest)
- Reference: Washington State University presentation by Ken Eklund available at [www.sandenwaterheater.com](http://www.sandenwaterheater.com)
- Electricity price: 12.73 cents per kwh (EIA Residential October 2015)

# Easy Installation

## FLEXIBLE 2-PIECE SYSTEM

The tank is installed indoors and the heat pump outdoors (up to 50 feet away) with only water piping connections required between the two. This flexible SANCO<sub>2</sub> design offers several advantages including maintaining comfortable indoor air temperatures (unlike conventional heat pump water heaters that 'scavenge' heat from the indoor air), along with reducing in-home noise.



**SANDEN**  
Delivering Excellence