

# 2011 Residential Water Heating Solutions



Introducing Bosch Therm, our most advanced line of residential tankless water heaters. Enjoy endless hot water, space saving design and up to 98% efficiency.



**BOSCH**

Invented for life



# About the Bosch Group



The Bosch Group has been a leading global supplier of technology and services in the areas of Automotive, Industrial Technology, Consumer Goods and Building Technology for over 100 years. The company was founded in Stuttgart, Germany, in 1886 and today has more than 300 subsidiaries in over 150 countries. Every Bosch product is built with one goal in mind; to enhance quality of life by providing innovative technological solutions. Bosch is highly regarded for its development of automotive braking and steering safety systems (ABS) which have been improving automotive performance for over 30 years, helping reduce the number of accidents on North America's roads and highways. Environmental stewardship inspires and drives Bosch product development. Bosch is a leader in the development of next-generation technologies that deliver improved performance and efficiency while conserving natural resources. In the area of sustainable mobility, we're helping reduce the fuel consumption and CO<sub>2</sub> emissions of new vehicles. Energy efficiency and environmental protection are also shaping our

Industrial Technology, Consumer Goods and Building Technology products. Green technologies, such as gas tankless water heaters, heat pump electric water heaters, solar thermal systems, photovoltaics, wind power and geothermal heat pumps are perhaps the best examples of smart technologies growing in demand and shaping the future of Bosch.

## **Bosch Thermotechnology in North America**

Bosch Thermotechnology is a leading source of high quality water heating and comfort heating systems. In particular, the company offers Bosch tankless, point-of-use water heaters, Bosch solar thermal systems, Buderus floor-standing and wall-hung boilers, FHP geothermal heat pumps as well as controls and accessories for every product line. As illustrated in this catalog and at [www.bosch-climate.us](http://www.bosch-climate.us), Bosch Thermotechnology is committed to reinventing energy efficiency by offering smart products that work together as integrated systems which enhance quality of life in an ultra-efficient and environmentally friendly manner.



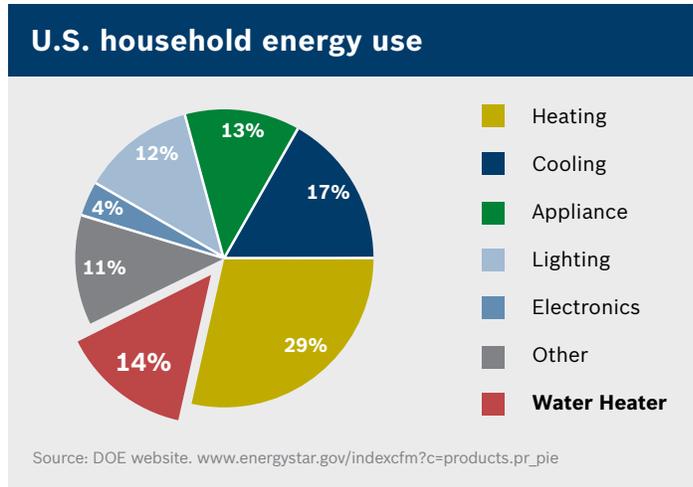


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# Why Bosch is your best choice

The US Department of Energy says that standard residential tank storage water heaters are the highest energy consuming appliances in the home only trailing heating and air conditioning systems. Think about it. Then ask yourself, how old is the water heater in your garage, attic or basement? If it's a traditional tank style water heater and more than eight years old, it's using more energy than your refrigerator, dishwasher, washing machine and dryer combined! It's time to upgrade. To help identify the Bosch water heating solution that's right for you, refer to the **Product Comparison Guide** in this catalog or visit [www.bosch-climate.us](http://www.bosch-climate.us) and put the **Bosch Sizing Calculator** to work for you!



## Bosch is a name you know and trust

Everyone knows and respects Bosch for its unsurpassed commitment to quality, innovation and value within a broad range of products including: automotive parts, power tools, home appliances and tankless water heaters. Bosch is highly recommended by professional contractors and is a brand that loyal customers refer to their friends and family.



## Your single source for hot water systems

Whether you are replacing a worn out water heater tank, renovating a master bath, or building a new home, you can trust Bosch has a high-quality water heating solution that's a perfect match for your needs. With over 100 years of engineering experience, you can buy with confidence knowing that Bosch products are designed to work together seamlessly which means you can easily integrate Bosch products to build a customized system.



## Bosch exclusive safety and precision controls

Bosch is the only major tankless water heater manufacturer to offer a built-in digital control panel with the ability to adjust water output temperatures in precise 2°F increments across the entire temperature range, an important safety feature for homes with children and elderly family members.



## Peace-of-mind warranties are best in industry

Bosch products are also renowned for their reliability and longevity. All products are built using top-grade materials and tested to meet the highest standards for performance and sustainability, which is why Bosch can back each product with the most generous warranties in the industry. Our 15-Year residential heat exchanger warranty for example, exceeds our competitors by at least three years.

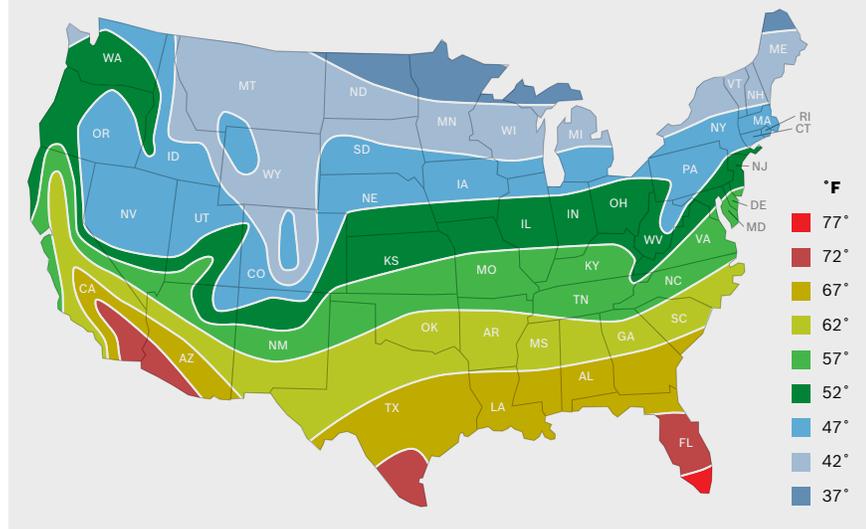
# Residential product guide



**Bosch has over 100 years of experience** in water heating systems, including 25 years with condensing technology. You can trust Bosch has the best water heating products for a variety of residential applications. From high-efficiency gas condensing tankless water heaters to various compact electric models and mini-tanks for point-of-use applications, rest assured we build something to handle every need. And best of all, Bosch products are designed to complement one another and work together seamlessly with solar thermal, cascading and recirculation systems, so you can easily expand your system as needs change.

# Product comparison guide

## Ground temperatures



## Choosing the right Bosch product

There are many factors that go into selecting the right Bosch water heater: the number of people in the home, type of showers and tubs, water pressure and geographic region. To make the process easier, we offer the map and flow-rate table below as well as a new **Bosch Sizing Calculator** at [www.bosch-climate.us](http://www.bosch-climate.us).

1. On the map, determine the ground water temperature in your area.
2. In the corresponding column select the Bosch water heater based on how many fixtures you'll be running at the same time.

**Example:** A homeowner in Miami, Florida is considering the C1210 ES. The ground water temperature in Miami is 77°F which means this family can run up to 5 showers at the same time.

Inlet Temp. (F)	Summer					Winter			
	77°	72°	67°	62°	57°	52°	47°	42°	37°
<b>Gas Tankless</b>									
<b>C 1210 ES</b>	9.8 GPM	8.8 GPM	8.0 GPM	7.3 GPM	6.7 GPM	6.2 GPM	5.8 GPM	5.4 GPM	5.1 GPM
<b>C 1050 ES</b>	8.5 GPM	7.6 GPM	6.9 GPM	6.3 GPM	5.8 GPM	5.4 GPM	5.0 GPM	4.7 GPM	4.4 GPM
<b>940 ES/ESO</b>	7.7 GPM	6.9 GPM	6.2 GPM	5.7 GPM	5.2 GPM	4.9 GPM	4.5 GPM	4.2 GPM	4.0 GPM
<b>830 ES</b>	6.7 GPM	6.0 GPM	5.4 GPM	5.0 GPM	4.6 GPM	4.2 GPM	4.0 GPM	3.7 GPM	3.5 GPM
<b>660 EF/EFO</b>	5.4 GPM	4.8 GPM	4.4 GPM	4.0 GPM	3.7 GPM	3.4 GPM	3.2 GPM	3.0 GPM	2.8 GPM
<b>520 HN/PN</b>	4.3 GPM	3.8 GPM	3.5 GPM	3.2 GPM	2.9 GPM	2.7 GPM	2.5 GPM	2.3 GPM	2.2 GPM
<b>330 PN</b>	2.7 GPM	2.4 GPM	2.2 GPM	2.0 GPM	1.9 GPM	1.7 GPM	1.6 GPM	1.5 GPM	1.4 GPM
<b>Electric Tankless</b>									
<b>RP 27 PT</b>	4.3 GPM	3.8 GPM	3.5 GPM	3.2 GPM	2.9 GPM	2.7 GPM	2.5 GPM	2.3 GPM	2.2 GPM
<b>RP 17 PT</b>	2.7 GPM	2.5 GPM	2.2 GPM	2.0 GPM	1.9 GPM	1.7 GPM	1.6 GPM	1.5 GPM	1.4 GPM

Simultaneous Showers
 Sink Faucet

Calculations based on 120°F Set Point temperature, 107°F shower temperature, 2.5 GPM showerhead flow rate, 1.5 GPM sink flow rate, adequate water pressure and gas supply. Variation from these parameters may alter actual performance. GPM shown is the hot water flow rate at 120°F Set Point temperature.

# New! Bosch Therm gas tankless water heaters

Introducing Bosch Therm. Our newest line of tankless water heaters. This expanded and advanced line includes efficient condensing and non-condensing tankless water heaters with more compact models and greater installation versatility - to satisfy every possible residential application.



Residential Series										
Model/Part Number	C 1210 ES NG / C 1210 ES LP	C 1050 ES NG / C 1050 ES LP	940 ES NG / 940 ES LP	940 ESO NG / 940 ESO LP	830 ES NG / 830 ES LP	660 EF NG / 660 EF LP	660 EFO NG / 660 EFO LP	520 HN NG / 520 HN LP	520 PN NG / 520 PN LP	330 PN NG / 330 PN LP
Applications	Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential
Condensing / Non	Condensing	Condensing	Non Condensing	Non Condensing	Non Condensing	Non Condensing	Non Condensing	Non Condensing	Non Condensing	Non Condensing
Max. Input	225,000	199,000	199,000	199,000	175,000	140,000	140,000	117,000	117,000	74,900
Min. Input	25,000	19,900	19,900	19,900	19,900	20,000	20,000	30,735	30,735	30,735
Thermal Efficiency	Up to 98%	92%	83%	83%	83%	83%	83%	80%	78%	78%
Capacity @ 35F Rise	12.1	10.5	9.4	9.4	8.3	6.6	6.6	5.2	5.2	3.3
Capacity @ 55F Rise	7.7	6.7	6.0	6.0	5.3	4.2	4.2	3.4	3.3	2.1
Energy Factor	N/A	.92	.83	.83	.83	.82	.82	N/A	N/A	N/A
Activation Flow Rate	0.5 GPM	0.5 GPM	0.5 GPM	0.5 GPM	0.5 GPM	0.5 GPM	0.5 GPM	0.6 GPM	0.5 GPM	0.5 GPM
Temp Range (F)	100-140	100-140	100-140	100-140	100-140	100 - 160	100 - 160	High to low	High to low	High to low
Installation Options	Indoor or Outdoor*	Indoor or Outdoor*	Indoor	Outdoor	Indoor or Outdoor*	Indoor	Outdoor	Indoor	Indoor	Indoor
Altitude Tested	8,000 ft.	8,000 ft.	8,000 ft.	8,000 ft.	8,000 ft.	4,500 ft.	4,500 ft.	4,500 ft.	4,500 ft.	4,500 ft.
Venting Options	PVC, CPVC, ABS, Cat III Stainless Steel	PVC, CPVC, ABS, Cat III Stainless Steel	Cat III Stainless Steel	N/A	Cat III Stainless Steel	Cat III Stainless Steel	N/A	Galvanized B-Vent	Galvanized B-Vent	Galvanized B-Vent
Vent Maximum Run	63'	63'	61.25'	N/A	61.25'	45'	N/A	N/A	N/A	N/A
Water Pressure Range	30 - 150 psi	30 - 150 psi	30 - 150 psi	30 - 150 psi	30 - 150 psi	30 - 150 psi	30 - 150 psi	30 - 150 psi	30 - 150 psi	30 - 150 psi
Water Connections	¾" NPT	¾" NPT	¾" NPT	¾" NPT	¾" NPT	¾" NPT	¾" NPT	½" NPT	½" NPT	½" NPT
Min. NG Pressure	3.5" WC	3.5" WC	3.5" WC	3.5" WC	3.5" WC	4" WC	4" WC	5.7" WC	5.7" WC	5.7" WC
Gas Connection	¾" NPT	¾" NPT	¾" NPT	¾" NPT	¾" NPT	¾" NPT	¾" NPT	¾" NPT	¾" NPT	½" NPT
Dimensions	17.875 x 30.5 x 11.25	17.875 x 30.5 x 11.25	17.875 x 30.5 x 11.25	17.875 x 35 x 11.25	17.875 x 30.5 x 11.25	13.8 x 20.5 x 6.7	13.8 x 20.5 x 6.7	18.11 x 25.75 x 8.66	18.11 x 25.75 x 8.66	12.20 x 22.83 x 8.66
Weight (Lbs)	88	74	67	72	67	36	36	35	35	26
Heat Exchanger Warranty	15 Years	15 Years	15 Years	15 Years	15 Years	15 Years	15 Years	15 Years	15 Years	15 Years
All Other Parts	5 Years	5 Years	5 Years	5 Years	5 Years	5 Years	5 Years	2 Years	2 Years	2 Years
ICON KEY:										

\*Outdoor installations require optional outdoor kit. 35°F capacity on C 1210 and C 1050 models based on installation with a mixing valve to overcome typical pressure loss through the water heater and system. \*\* Energy Star icon does not apply to C 1210 ES models.

# Point-of-use solutions deliver hot water virtually anywhere

These electric compact tankless and mini-tank water heaters are perfect solutions for a variety of residential applications. Ideal for smaller homes, garage apartments, in-law suites and anywhere else you need hot water directly at the point-of-use. These products are also smart for use as a supplemental source for high-flow fixtures or recirculation systems.



Series	POWERSTREAM PRO Electric Tankless								ARISTON Electric Mini-Tank		
Model/ Part Number	RP27PT	RP17PT	RP12PT	RP9P	RP1P	RP7P	RP2P	RP3P	GL8Ti	GL4Ti	GL2.5Ti
<b>Applications</b>	Residential Whole House				Residential Point-of-Use						
<b>Output (kW) or Storage Volume (Gal)</b>	26.85 kW	17.25 kW	12 kW	9.5 kW	9.5 kW	7.2 kW	6.0 kW	3.4 kW	7.0 Gal	3.85 Gal	2.75 Gal
<b>Capacity @ 45°F Rise</b>	4.0	2.6	1.8	1.4	1.4	1.1	0.9	N/A	N/A	N/A	N/A
<b>Capacity @ 77°F Rise</b>	2.4	1.5	1.1	0.8	0.8	0.6	0.5	N/A	N/A	N/A	N/A
<b>Recovery Rate @ 90°F Rise (GPH)</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	6.8 GPH	6.8 GPH	6.8 GPH
<b>Activation Flow Rate</b>	0.8	0.6	0.5	0.75	0.75	0.5	0.5	0.5	0	0	0
<b>Water Pressure Range</b>	15 – 150 psi	15 – 150 psi	20 – 150 psi	10 – 150 psi	10 – 150 psi	10 – 150 psi	10 – 150 psi	10 – 150 psi	1 – 150 psi	1 – 150 psi	1 – 150 psi
<b>Default Temp (F)</b>	122	122	122	122	122	122	120	120	N/A	N/A	N/A
<b>Thermal Efficiency</b>	97%	97%	99%	99%	99%	99%	99%	99%	98%	98%	98%
<b>Electrical Requirements (Amps / Volts)</b>	3x40A 240V	2x40A 240V	50A 240V	35 / 277	40 / 240	30/ 240	25/ 277	30 /110	12.5 A / 120 V	12.5 A / 120 V	12.5 A / 120 V
<b>Dimensions</b>	15.5"x 15.25"x4.5"	15.5"x 15.25"x4.5"	12.25"x 6.5"x3"	12.25"x 6.5"x3"	12.25"x 6.5"x3"	12.25"x 6.5"x3"	12.25"x 6.5"x3"	12.25"x 6.5"x3"	17.5"x 17.5"x14.5"	14"x 14"x12.25"	14"x 14"x10.25"
<b>Weight (Lbs)</b>	22	20	5	5	5	5	5	5	29.5	17.3	15.5
<b>Water Fittings</b>	¾" Male NPT	¾" Male NPT	½" Male NPT	½" Male NPT	½" Male NPT	½" Male NPT	½" Male NPT	½" Male NPT	¾" Male NPT	½" Male NPT	½" Male NPT
<b>ICON KEY:</b>											

All models, except the Ariston GL4Ti and GL2.5Ti, require hard wiring.

# Application and feature icons



## RESIDENTIAL

Designed for single-family homes, townhomes and condominiums. You can also cascade the units for larger, multi-family dwellings.



## RECIRCULATION

Circulates warm water throughout the home for instant hot water. Bosch models maintain their 15-Year warranty when combined with an Ariston mini-tank, and offer a 3-year warranty when used as a direct source for recirculation.



## SPACE HEATING

Models marked with this icon can be used to provide both domestic hot water and space heating using radiant floor heating or a hydronic air handler system.



## SOLAR READY

Integrates with Bosch solar thermal systems for use as a back-up hot water source during inclement weather conditions.



## POINT-OF-USE

Compact tankless and mini-tank water heaters for smaller homes, garage apartments, break-rooms, public restrooms, janitor closets, salons, medical and veterinarian offices.



## LOW NOX 2012 SCAQMD COMPLIANT

Bosch condensing tankless models marked with this icon are ultra efficient and reduce NOx emissions ahead of the 2012 SCAQMD (14ng/j) regulations.



## ZERO EMISSIONS

Identifies our greenest products that produce no emissions.



## VENTS WITH PVC

These Bosch models can be vented with PVC for faster, easier and lower-cost installation.



## ENERGY STAR® RATED

These Bosch products are the most energy efficient and qualify for rebates.



## UP TO \$1500 FEDERAL TAX CREDIT

Currently eligible for a Federal Tax Credit up to 30% of the installed cost.



## 15 YEAR WARRANTY

Backed by our 15-Year residential tankless heat exchanger warranty.

# **New!** Bosch Therm residential gas tankless energy efficient water heaters



# The benefits of going tankless

## Endless hot water on-demand

Bosch tankless water heaters work “on-demand” to produce hot water when needed, for as long as needed. There is no storage tank, so you never have to worry about running out of hot water or waiting for the tank to recover, even during morning rush-hour or with extra family in town.



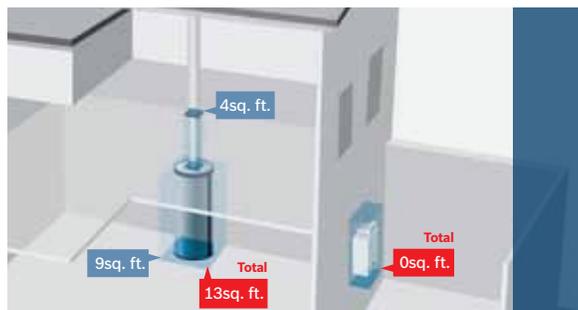
## Saves up to 50% on water heating costs

A tank style hot water heater keeps water hot 24 hours a day even while you are at work or sleeping. A tankless water heater does not store water like a tank. It produces hot water only when needed, cutting out needless energy consumption and therefore reducing water heating costs by up to 50%.



## Space saving technology

A typical tank water heater requires up to 13 sq. ft. of space. If the price per sq. ft. of real estate in your area is \$150, that’s almost \$2,000 worth of space to be re-purposed. Tankless water heaters are compact and can install virtually anywhere - even outdoors.



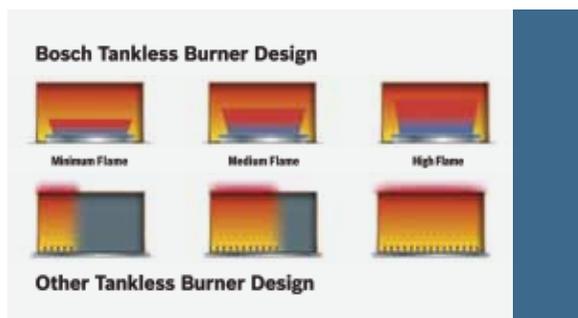
## Reduces greenhouse gasses

The EPA identified NOx as a main greenhouse gas contributing to acid rain, respiratory problems and global warming. Bosch’s condensing tankless models use an exclusive combustion process which achieves up to 98% thermal efficiency and reduces NOx emissions ahead of 2012 SCAQMD (14ng/j) regulations. This provides greater energy savings while contributing to cleaner air and better quality of life for all.



## Bosch exclusive: Patented burner design

Bosch’s patented heat exchanger, with dual-fan and fully modulating vertical burner design, achieves an “even” flame pattern that prevents the hot-spots and heat exchanger corrosion common with other tankless water heater burner designs. To prevent scale build up that can reduce operating efficiency, Bosch created proprietary built-in turbulators to make their tankless water heaters work better and last longer.



## Bosch Therm gas water heater



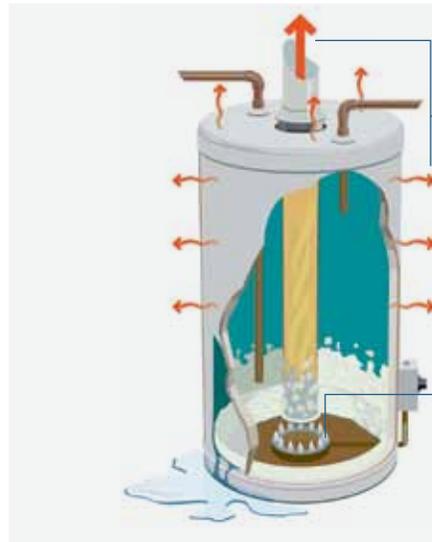
Compact design mounts on wall.

Copper and aluminum heat exchanger rapidly transfers the heat to the water.

Patented, fully modulating burner design generates endless hot water.

On-demand technology uses gas only when you produce hot water.

## Gas Storage tank water heaters



Stored water loses on average, 20% of its heat up the flue and through sidewalls.

Cycles on and off 24 hours a day, seven days a week.

Mineral build-up leads to tank leaks and greater inefficiency.

Small burner can't keep up when demand is high.

Key benefits	Bosch Therm tankless	Gas storage tank water heater
Provides endless hot water on-demand?	Yes	No
Compact, easy access and 100% serviceable parts?	Yes	No. Tanks are usually just replaced
Built-in digital control panel with precise 2°F temperature increments?	Yes	No. High to low setting
Maintains efficiency over the life of the product?	Yes	No. Sediment builds-up inside the tank with each use
Reduces opportunity for bacteria growth?	Yes. There is minimal standing water to grow bacteria	No. Stored warm water mixes with sediment and is a breeding ground for bacteria
Fully modulating “vertical” burner that works on demand only?	Yes. A Bosch exclusive	No. Uses a single burner that operates with or without hot water demand
How much heat and energy is wasted in the exhaust?	Bosch dual heat exchangers minimize waste and optimize efficiency - up to 98%	Heat rises and energy is wasted through the flue at around 78% efficiency
Estimated to last 20+ Years?	Yes	No. Replace every 6-12 years



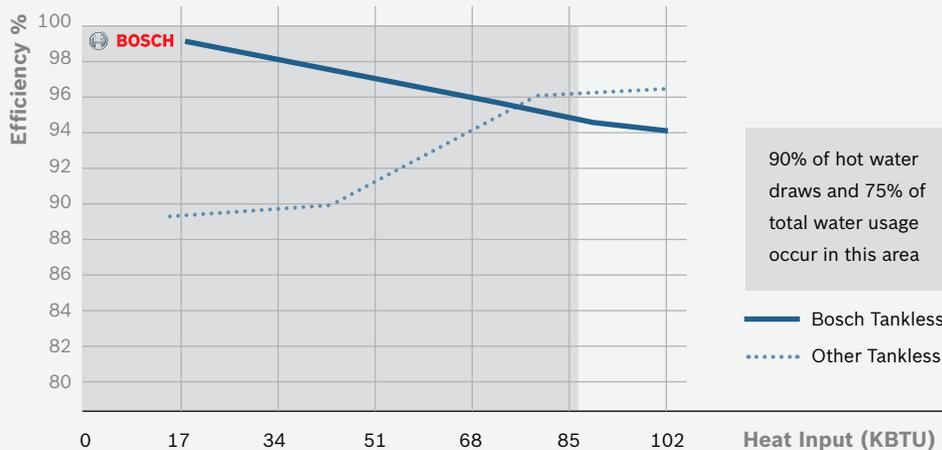
**Bosch condensing tankless water heaters are engineered to operate at up to 98% efficiency when North American hot water demands are most common**

The Bosch C 1210 ES and C 1050 ES gas tankless water heaters are ultra efficient fully condensing water heaters. Unlike traditional non-condensing water heaters, a condensing unit captures latent heat from condensation of the exhaust gas and uses it to preheat the incoming cold water, making Bosch condensing tankless water heaters 10% more efficient than a traditional tankless water heater.

As seen on the chart below, this smart technology ensures maximum performance and energy efficiency during normal usage. This is a critical difference in Bosch technology and something we think you should understand because some tankless products advertise high efficiencies based on less common flow situations. With Bosch you know exactly what you are buying.



**Benchmark - efficiency results**



**Smart Bosch technology delivers up to 98% efficiency when you need it most**

Hot water usage source; Center for Energy and Environment

# Bosch Therm condensing gas tankless water heaters



## Bosch Therm C 1210 ES

- ▶ 225,000 BTU/Hr Max  
25,000 BTU/Hr Min
- ▶ Up to 98% Thermal efficiency
- ▶ 12.1 gallons per minute capacity
- ▶ Available in NG and LP models
- ▶ 100°F - 140°F temperature range
- ▶ Altitude tested to 8,000 ft.
- ▶ Vents with PVC
- ▶ 15-Year warranty and  
20+ year life expectancy



## Bosch Therm C 1050 ES

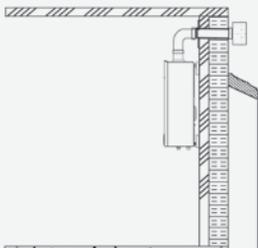
- ▶ 199,000 BTU/Hr Max  
19,900 BTU/Hr Min
- ▶ 92% Thermal efficiency
- ▶ 10.5 gallons per minute capacity
- ▶ Available in NG and LP models
- ▶ Energy Factor: 0.92
- ▶ 100°F - 140°F temperature range
- ▶ Altitude tested to 8,000 ft.
- ▶ Vents with PVC
- ▶ 15-Year warranty and  
20+ year life expectancy



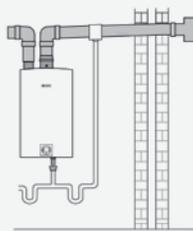
Bosch makes outdoor installations simple and attractive with optional Outdoor Vent Kit, Pipe Cover and Recess Box accessories.

**\*CONDENSING MODELS install indoors with PVC venting up to 63 feet or outdoor with optional accessory kit**

**Minimum Vent Set-Up Side View**



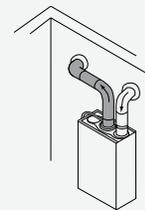
**Room Air Intake: Horizontal**



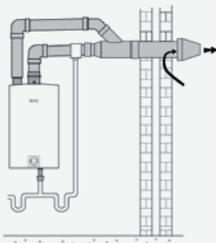
**Room Air Intake: Vertical**



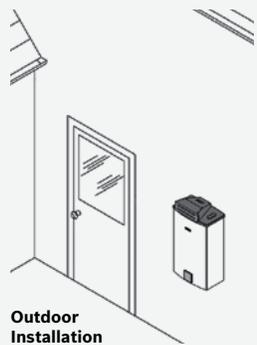
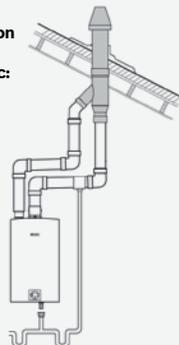
**Exterior Air Intake: Sealed Combustion**



**Sealed Combustion: Horizontal Concentric**



**Sealed Combustion Vertical Concentric:**



**Attention Bosch Contractors:**  
\*For more venting options and installation diagrams, download individual Product Manuals and Applications Manual at [www.bosch-climate.us](http://www.bosch-climate.us)

# Bosch Therm non condensing gas tankless water heaters



## Bosch Therm 940 ES

- ▶ 199,000 BTU/Hr Max  
19,900 BTU/Hr Min
- ▶ 83% Thermal efficiency
- ▶ 9.4 gallons per minute capacity
- ▶ Available in NG and LP models
- ▶ Energy Factor: 0.83
- ▶ 100°F - 140°F temperature range
- ▶ Altitude tested to 8,000 ft.
- ▶ Vents with 3" or 4" stainless steel
- ▶ 15-Year warranty and 20+ year life expectancy



## Bosch Therm 660 EF

- ▶ 140,000 BTU/Hr Max  
20,000 BTU/Hr Min
- ▶ 83% Thermal efficiency
- ▶ 6.6 gallons per minute capacity
- ▶ Available in NG and LP models
- ▶ Energy Factor: 0.82
- ▶ 100°F - 160°F temperature range
- ▶ Altitude tested to 4,500 ft.
- ▶ Vents with 3" stainless steel
- ▶ 15-Year warranty and 20+ year life expectancy



## Bosch Therm 940 ESO

This outdoor version of the 940ES ships with everything needed for outdoor installation.



## Bosch Therm 660 EFO

This outdoor version of the 660EF ships with everything needed for outdoor installation.



## Bosch Therm 830 ES

- ▶ 175,000 BTU/Hr Max  
19,900 BTU/Hr Min
- ▶ 83% Thermal efficiency
- ▶ 8.3 gallons per minute capacity
- ▶ Available in NG and LP models
- ▶ Energy Factor: 0.83
- ▶ 100°F - 140°F temperature range
- ▶ Altitude tested to 8,000 ft.
- ▶ Vents with 3" or 4" stainless steel
- ▶ 15-Year warranty and 20+ year life expectancy

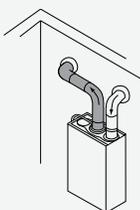


## Bosch Therm 520 PN

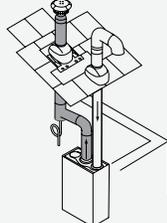
- ▶ 117,000 BTU/Hr Max  
30,735 BTU/Hr Min
- ▶ 78% Thermal efficiency
- ▶ 5.2 gallons per minute capacity
- ▶ Available in NG and LP models
- ▶ Altitude tested to 4,500 ft.
- ▶ Vents with galvanized B-Vent
- ▶ 15-Year warranty and 20+ year life expectancy
- ▶ Piezo ignition
- ▶ Requires no electricity

### \*NON-CONDENSING vent configurations

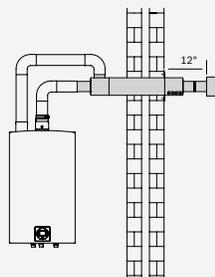
Horizontal twin pipe termination



Vertical twin pipe termination



Concentric venting through the wall



## Bosch Therm 330 PN

- ▶ 74,900 BTU/Hr Max  
30,735 BTU/Hr Min
- ▶ 78% Thermal efficiency
- ▶ 3.3 gallons per minute capacity
- ▶ Available in NG and LP models
- ▶ Altitude tested to 4,500 ft.
- ▶ Vents with galvanized B-Vent
- ▶ 15-Year warranty and 20+ year life expectancy
- ▶ Piezo ignition
- ▶ Requires no electricity

# Exclusive! Bosch Therm 520 HN

## hydro-power gas tankless

### Patented Bosch technology saves electricity and gas

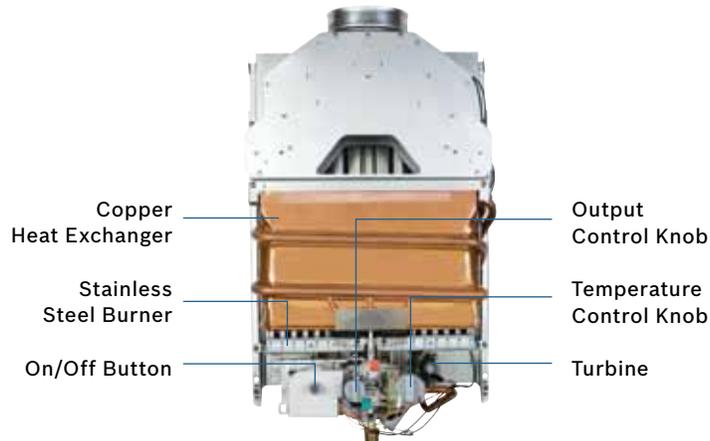
The Bosch 520 HN incorporates a revolutionary hydro-power generated ignition system allowing the water heater to operate without a standing pilot, an electric connection or a battery. A small turbine in the water heater uses the energy from the flowing water to ignite the 520 HN burner. This innovative technology, patented by Bosch, makes this an ideal product for installations without access to electricity or regions prone to inclement weather and power outages. The modulating gas valve maintains a constant temperature at varying flow rates and a high 80% efficiency.

### Bosch Therm 520 HN



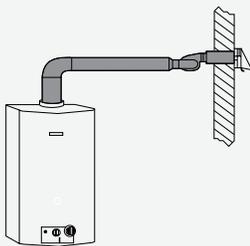
### Features

- ▶ 117,000 BTU/Hr Max  
30,735 BTU/Hr Min
- ▶ 80% Thermal efficiency
- ▶ 5.2 gallons per minute capacity
- ▶ Available in NG and LP models
- ▶ Vents with galvanized B-Vent
- ▶ 15-Year warranty and 20+ year life expectancy
- ▶ Requires no electricity

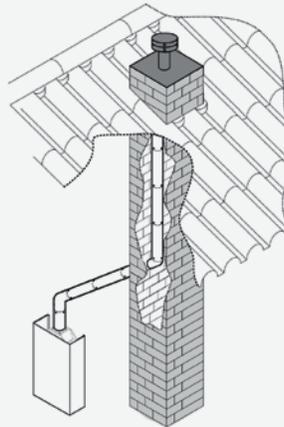
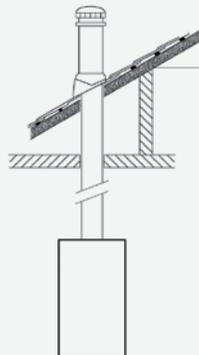


### Venting configurations for Bosch Therm 520 HN, 520 PN and 330 PN models

Horizontal through the wall power vent option



Vertical configuration for unlined interior masonry chimney



Venting into a masonry chimney with approved liner, ceramic tile, clay or metal is permissible. For complete venting options and requirements, download the Product Manual at [www.bosch-climate.us](http://www.bosch-climate.us)

# Tankless water heater

## available accessories

Wireless Remote



Outdoor Kit



Concentric Termination Kit



Horizontal Vent Kit



### Available Accessories

Part #	Description	C 1210 ES	C 1050 ES	940 ES	940 ESO	830 ES	660 EF	660 EFO	520 HN / 520 PN	330 PN
ESHCK	Concentric vent/air intake kit stainless steel			✓		✓				
196016	Concentric termination kit - PVC*	✓	✓							
L2594	Exhaust/intake bird screen - PVC	✓	✓							
ES VVT	Vertical vent kit			✓		✓				
4TWHVK3SII	Horizontal vent kit			✓		✓				
BTOK	Outdoor kit for Therm	✓	✓	✓		✓				
TSTAT2	Wireless remote control	✓	✓	✓	✓	✓				
7709003962	Intelligent cascading kit	✓	✓	✓	✓	✓				
7709003775	Freeze prevention kit								✓	✓
8703305356	External water filter	✓	✓	✓	✓	✓				
7736500074	High temperature kit		✓	✓	✓	✓				
196061	PVC Condensing drain tee†	✓	✓							
JM-2KIT	Condensate neutralization cartridge kit	✓	✓	✓	✓	✓	✓	✓		
ES ISO KIT	Isolation valve kit with PRV	✓	✓	✓	✓	✓	✓	✓	✓	✓
AQ4	Power vent w/back draft flapper								✓	✓
7709003956	Pipe cover						✓	✓		
PTPCES	Pipe cover	✓	✓	✓	✓	✓				
7709003957	Recess box						✓	✓		
7736500043	Recess box	✓	✓	✓	✓	✓				
7709003958	Remote controller (US)						✓	✓		
7709003959	Remote controller (CAN)						✓	✓		
7709003960	10' Length RC cord						✓	✓		
7709003961	26' Length RC cord						✓	✓		
7709003963	Junction box (unit cover for outdoor)							✓		
2SVSWB03	3" Vent adaptor for 660 EF						✓			

\* Meets ULC S636 Standard

† Also included in the Concentric termination kit (196016)

## Electric tankless and point-of-use solutions deliver hot water virtually anywhere



With these compact tankless and mini-tank products from Bosch, there is no limit to where you can have hot water. These heaters are an ideal solution for isolated locations and when you need hot water at a dedicated fixture:

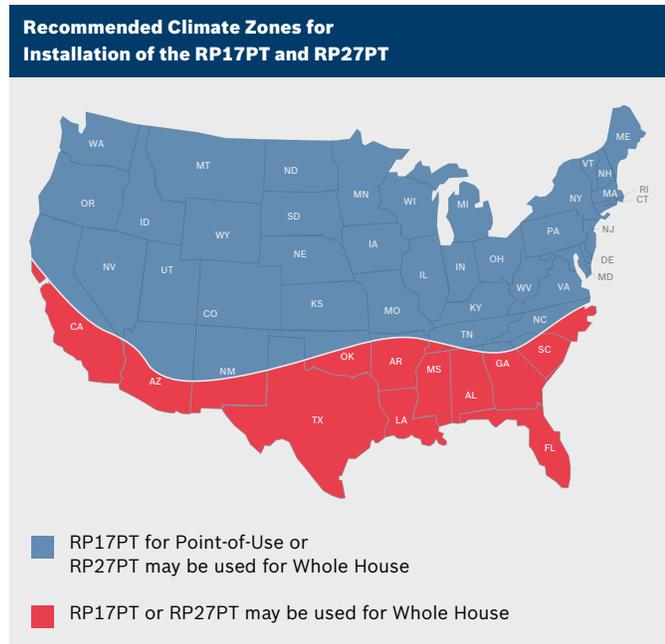
- ▶ Garage apartment, pool house, in-law suites
- ▶ Supplemental hot water for high-flow fixtures
- ▶ Hard to reach locations that need extra hot water
- ▶ Smaller properties and second homes

# Powerstream Pro 17 & 27 series

## Whole house electric tankless water heaters

The compact and powerful RP17PT & RP27PT electric whole house tankless water heaters can be installed virtually anywhere inside the home. They are 97% efficient with minimal stand-by loss and have a built-in flow sensor that ensures a constant output temperature.

**Note:** These Powerstream Pro models require hard wiring.



Model RP17PT is not recommended for whole house use in climates where average ground water temperature is less than 60°F.



**RP17PT**  
**RP27PT**

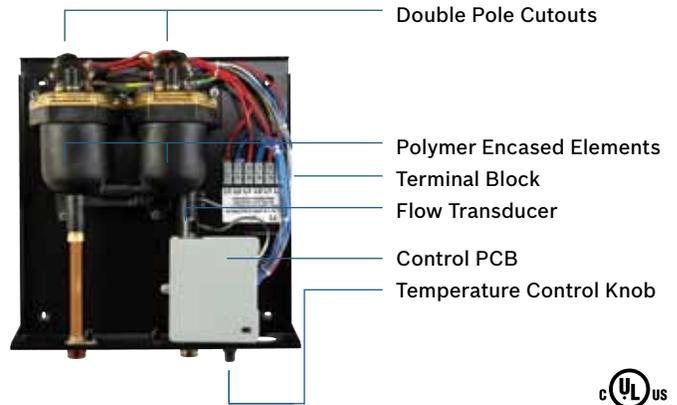


10-YEAR WARRANTY

**Part #**  
RP17PT  
RP17PTK (Canada)  
  
RP27PT  
RP27PTK (Canada)

### Features

- ▶ Over 97% efficiency rating
- ▶ Compact and lightweight
- ▶ Electronic flow switch
- ▶ Flow sensor provides a constant output temperature
- ▶ Filter screen on inlet
- ▶ External temperature control



Inlet Temp. (F)	Summer						Winter			
	77°	72°	67°	62°	57°	52°	47°	42°	37°	
<b>Electric Tankless</b>										
<b>RP 17 PT</b>	2.7 GPM	2.5 GPM	2.2 GPM	2.0 GPM	1.9 GPM	1.7 GPM	1.6 GPM	1.5 GPM	1.4 GPM	
<b>RP 27 PT</b>	4.3 GPM	3.8 GPM	3.5 GPM	3.2 GPM	2.9 GPM	2.7 GPM	2.5 GPM	2.3 GPM	2.2 GPM	

Simultaneous Showers    
 Sink Faucet

Calculations based on 120°F Set Point temperature, 107°F shower temperature, 2.5 GPM showerhead flow rate, 1.5 GPM sink flow rate, adequate water pressure and rated voltage. Variation from these parameters may alter actual performance. GPM shown is the hot water flow rate at 120°F Set Point temperature. **For additional information refer to the groundwater temperature map on page 5.**

# Powerstream Pro

## RP1 - RP12 compact series

### Point-of-Use electric tankless water heaters

Six compact, point-of-use tankless water heaters, designed to provide an endless supply of hot water for kitchen and bathroom sinks. These units provide 99% efficiency with minimal stand-by loss and most models are equipped with high/low kW settings. Common applications include: garage apartments, in-law suites and smaller homes.



### RP1 - RP12 compact series

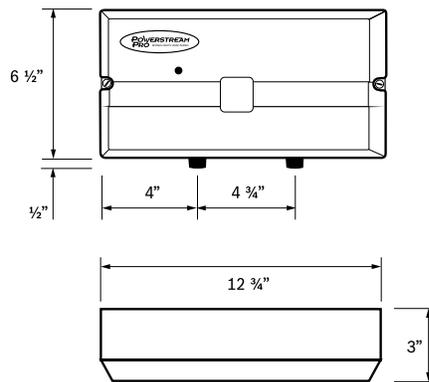
5-YEAR WARRANTY



All PowerStream Pro models require hard wiring.

### Features

- ▶ Compact, point-of-use tankless water heaters
- ▶ 99% efficient with minimal stand-by loss
- ▶ Copper heat exchanger and copper-sheathed heating elements
- ▶ Most models are equipped with high/low kW settings
- ▶ Units can be mounted in any direction (except RP12PT)
- ▶ All units require hard wiring
- ▶ **Available in 6 models to accommodate a wide range of applications**



### Dimensions



### Technical Specifications Powerstream Pro RP1-RP12

Model #	Wire Size	Voltage	Amps	High kW <sup>3</sup>	Low kW <sup>3</sup>	Degree rise at flow rates (gpm) <sup>1, 2</sup>				Activation Rate (gpm)
						0.5	1.0	1.5	2.0	
RP1P	8GA	240 <sup>4</sup>	40	9.50	-	N/A	64°F	42°F	32°F	0.75
			20	-	4.75	N/A	32°F	21°F	16°F	
RP2P	10GA	277	22	6.00	-	81°F	42°F	27°F	N/A	0.50
			11	-	3.00	41°F	21°F	14°F	N/A	
RP3P	10GA	120	29	3.40	-	41°F	20°F	N/A	N/A	0.50
RP7P	10GA	240 <sup>4</sup>	30	7.20	-	N/A	48°F	32°F	24°F	0.75
			15	-	3.60	N/A	24°F	16°F	12°F	
RP9P	8GA	277	35	9.50	-	N/A	64°F	42°F	32°F	0.75
			18	-	4.75	N/A	32°F	21°F	16°F	
<b>Thermostatic Model</b>										
RP12PT	6GA	240 <sup>5</sup>	50	12.00	-	N/A	72°F	52°F	42°F	0.75

<sup>1</sup> gpm = Gallons Per Minute

<sup>2</sup> RP3P includes a 0.5 gpm faucet aerator for optimal performance

<sup>3</sup> High/Low kW settings possible within some settings

<sup>4</sup> These units will operate on 220V at 84% of capacity and on 208V at 75% of capacity

<sup>5</sup> This unit is designed to operate on 240V only

# Ariston Pro

## Point-of-use electric mini-tank water heaters

### Easy installation and energy efficiency

The Ariston point-of-use electric mini-tank is available in three sizes. The units can be wall-hung (bracket included) or floor-mounted and come with a temperature/pressure relief valve. Simply tap into the cold water line and install the water heater directly at the sink to provide hot water. They may also be installed in-line with a larger hot water source to eliminate the wait for hot water. The two smaller units have a simple 120V AC plug-in connection.

**ARISTON PRO**

**GL2.5Ti**  
**GL4Ti**  
**GL8Ti**

8-YEAR WARRANTY

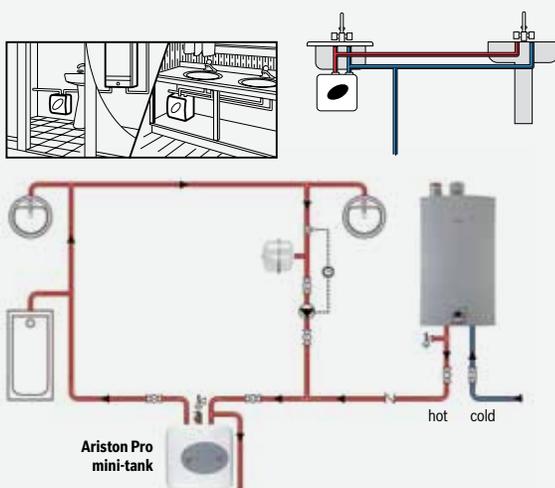


### Features

- ▶ Saves space
- ▶ Provides hot water quickly at the point-of-use
- ▶ Stand-alone or in-line application
- ▶ Temperature/pressure relief valve included



No more waiting for hot water. Ideal for stand-alone use or recirculation systems



### Technical Specifications

Model #	GL2.5Ti	GL4Ti	GL8Ti
Tank Volume	2.75 gallons	3.85 gallons	7 gallons
Dimensions	14"x14"x10¼"	14"x14"x12¼"	17½"x17½"x14½"
Voltage	120V AC	120V AC	120V AC
Amperage	12.5 amps	12.5 amps	12.5 amps
Wire Size	Plug-in	Plug-in	Hard-wired
Heating Capacity	1500 watts	1500 watts	1500 watts
Recovery at 90° F Rise	6.8 gph	6.8 gph	6.8 gph
Temperature Range	65°-145°F	65°-145°F	65°-145°F
Water Connections	½" NPT	½" NPT	¾" NPT
Operating Pressure	150 psi	150 psi	150 psi
Relief Valve	Installed	Installed	Included

gph = gallons per hour

# New for 2011! **Bosch Compress** heat pump electric water heater

The Bosch heat pump water heater is ultra efficient and shares similar technology as an ENERGY STAR® qualified refrigerator. How does this work? Instead of the cooling effect created in a refrigerator, Bosch utilizes this technology in reverse mode to heat water. By using a specially designed pump, compressor and heat exchanger system, the heat is transferred from the surrounding air to the water stored in a well insulated storage tank. The result is efficient hot water and zero emissions!

## **Bosch Compress** heat pump electric water heater



### **Features**

- ▶ Ultra efficient with proven technology
- ▶ Zero emissions
- ▶ Designed to be Energy Star® qualified
- ▶ Simple installation requires standard plumbing and electrical connections same as for traditional electric water heaters
- ▶ Easy to read LCD display allows for easy operation for ideal temperature, efficiency and demand settings
- ▶ Ducting option increases efficiency and makes Bosch Compress the quietest unit in the market
- ▶ Visit [www.bosch-climate.us](http://www.bosch-climate.us) for updated information about this new product

Final product design and specifications are subject to change without notice.

# Customer testimonials



## Bosch would like to hear about your tankless water heating success stories.

We love our new tankless hot water heater. I did about a month of research to be sure that it would supply us with “all” our hot water needs. This past weekend, we had four extra adults in our home and we took showers one right after the other and never ran out of hot water! Also, once I set the shower, I never have to move the hot water dial!

*EJ Downing, Ypsilanti, MI*

After visiting a friend in Europe who has a tankless water heater, I purchased one for my home. Along with the 50% savings on hot water heating bills, I can also take a shower for, well, as long as I want. I love it!

*K. Drewiske, Thiensville, WI*

I replaced two 50 gallon electric water heaters with a Bosch tankless and my energy bill dropped by 30%. And it wasn't even in a full month. I researched a few different brands and this was the best buy and the best guarantee. We are very pleased and would recommend Bosch to everybody.

*E. Arrand, Elgin, OR*

I purchased our first Bosch unit to use in conjunction with our solar unit. It worked perfectly for 17 years. I purchased a new unit with upgraded solar compatibility, and I am looking forward to years and years of trouble free service.

*L. Vinquist, Arvada, CO*

Submit your stories online at [www.bosch-climate.us](http://www.bosch-climate.us).

# Bosch system integration reinventing energy efficiency



## Bosch Tankless Water Heaters

If you are building your dream home or simply remodeling your current home, there's a Bosch tankless water heater designed for your needs. Every unit delivers the highest efficiency in the market and is built to stringent Bosch quality standards. With a Bosch tankless water heater you will get an endless supply of hot water and can cut your current water heating bill in half.



## Bosch Solar Thermal Systems

Bosch solar hot water solutions bring the first-class technology, innovation, reliability, quality and environmental sustainability that Bosch is known for world-wide, to the next level. These systems are designed for superior energy efficiency. This is especially true when combined with a Bosch high efficiency tankless water heater as a back-up system. There is no better choice for your home than a solar thermal system from Bosch to reduce your energy expenses and your carbon foot print.



## Bosch Controls

We supply a wide selection of advanced controls to ensure that your heating and domestic hot water system delivers high efficiency and reliable heating year after year. Bosch controls give the heating engineer quick and easy access to all functions of the heating system and also allows the integration of multiple heating products.



## Buderus Boilers

Our extensive boiler line includes energy efficient cast iron boilers, as well as the very latest aluminum condensing boilers and multiple boiler cascade systems for maximum energy efficiency.



## FHP Geothermal Heat Pumps

Our high efficiency water source heat pump systems provide the most flexible and lowest installation costs of virtually any HVAC system. These systems are the most energy and cost efficient systems on the market making them the greenest technology and the smartest investment for residential heating and cooling applications.



### Tankless, solar, geothermal and boiler solutions from Bosch

Bosch is committed to reinventing energy efficiency by offering smart tankless, solar, geothermal and boiler products that produce domestic hot water and indoor comfort solutions. Bosch products work alone or together as an integrated system to provide contractors, mechanical engineers and architects the opportunity to customize unique energy efficient systems.

To learn more about these products and Bosch systems visit the Energy Efficiency Home at [www.bosch-climate.us](http://www.bosch-climate.us)

# Programs & incentives

## **Federal Tax Credit up to 30% of the installed cost\***

Now is the time to take advantage of this special opportunity to go tankless and save up to \$1500. These incentives, along with state & local utility company rebates, help lower your initial investment and provide ongoing energy savings of up to 50% on water heating costs. \*Visit [www.dsireusa.org](http://www.dsireusa.org) or ask your tax professional about the latest tax credit and rebate opportunities for your state & region.



## **Bosch Green Initiative “Same-as-Cash” Program**

The Bosch Green Initiative program offers homeowners a no interest, no payment financing option to make the move to tankless even easier. Ask your participating contractor which payment terms are available and how you can qualify in an easy 10-minute telephone call.



### **Bosch Contractor Exclusive!**

Join the Bosch Loyalty Program  
and start earning valuable rewards  
at [www.boschhvacloyalty.com](http://www.boschhvacloyalty.com)

**Bosch Thermotechnology Corp.**

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