## **Bosch Greenstar**

High-Efficiency, Gas Condensing Boilers



2011 New Product Introduction





# **Space heating only and Combi models for space heating and domestic hot water**

- ► High efficiency up to 96.1% AFUE
- ▶ Up to 98.7% low temperature application efficiency
- ▶ 57.2 to 151.6 MBH inputs
- 5-Year parts & labor warranty
- ► Limited lifetime heat exchanger warranty



### New for 2011! Bosch Greenstar

## High-Efficiency, Gas Condensing Boilers



The Bosch Greenstar series delivers energy efficient space and water heating comfort solutions for residential applications.

These low-operating cost units are available in 6 compact, wall-mounted models from 57.2 to 151.6 MBH. The Bosch Greenstar series is Energy Star® rated and uses ultra-efficient condensing technology to deliver reliable performance with low emissions.

These units are built with a removable front panel, direct access to the heat cell and plug-in diagnostics module for ease of serviceability. Special insulation ensures ultra quiet operation, while a passcode protected temperature control panel offers peace-of-mind, especially important for homes with children or elderly family members.

The new Bosch Greenstar series can also be integrated with other Bosch energy efficient products for a complete and environmentally friendly modern home.

#### Efficiency with unsurpassed performance and control

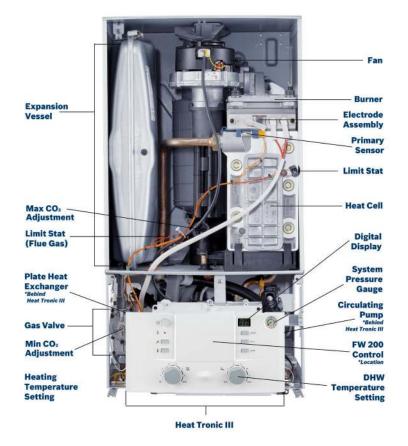
- Ideal for detached & terraced houses, also suitable for apartments
- Available as a space heating boiler for connection to a hot water tank
- Available as a combi unit with integrated water heating
- Solar compatible with new control options

#### **Competetive selling features:**

- High efficiency up to 96.1% AFUE
- Low NOx less than 40 mg / kWh (ppm), meeting 2012 SCAQMD standards
- 5-year limited parts and labor warranty
- Al-Si heat exchanger with coating on flue side for increased corrosion resistance
- Robust water side PH operating levels of 4.0 - 8.5
- Hydronic manifold allows for complete boiler piping to simplify installation
- High altitude flexibility 7,000 no de-rate
- Keypad lock for child protection

#### Additional product advantages:

- Stainless steel plate heat exchanger inside Greenstar Combi models for continuous DHW delivery
- Stainless steel premix burner for low emission combustion
- Integrated Grundfos 3-speed UPS 15-58 heating system circulator (120 only)
- Electronic speed control of modulating fan
- Sophisticated outdoor reset control
- Automatic air vent
- 30 psi pressure relief valve
- Condensate drain assembly
- Negative temperature coefficient sensors to maintain high efficiency
- 120V power switch



Application	lication Space Heating + DHW		Space Heating Only				
Models	Greenstar Combi 151	Greenstar Combi 100	Greenstar 151	Greenstar 131	Greenstar 100	Greenstar 57	
Description	ZWB42-3	ZWB28-3	ZBR42-3	ZBR35-3	ZBR28-3	ZBR16-3	
Part #	7-713-331-041	7-738-100-002	7-712-231-413	7-712-231-414	7-712-231-415	7-712-231-416	
Performance Specifications							
Fuel	NG / LP	NG / LP	NG / LP	NG / LP	NG / LP	NG / LP	
Input Maximum (MBH)	151.6	100.8	151.6	131.9	100.8	57.2	
Input Minimum (MBH)	36	34.6	36	36	24.6	12.9	
DOE Heating Capacity (MBH)	134.4	89.4	134.4	116.7	89.4	50.8	
Net I=B=R (MBH)	117	79	117	103	79	45	
AFUE	94.3%	95.9%	94.3%	95.0%	95.9%	96.1%	
Low Temp Application Efficiencies	96.8%	98.5%	96.8%	97.5%	98.5%	98.7%	
DHW Flow Max (ΔT at 72F)	4.0 GPM	2.65 GPM	-	-	-	-	
Water Volume	0.952 Gal. (3.5)	0.952 Gal. (3.5)	0.952 Gal. (3.5)	0.952 Gal. (3.5)	0.952 Gal. (3.5)	0.952 Gal. (3.5)	
Technical Data		, ,					
Weight (Without Packaging)	110.2 Lbs. (50)	110.2 Lbs. (50)	103.6 Lbs. (47)	103.6 Lbs. (47)	103.6 Lbs. (47)	103.6 Lbs. (47)	
Dimensions W x H x D	17.4" x 33.5" x 13.9"	17.4" x 33.5" x 13.9"	17.4" x 33.5" x 13.9"	17.4" x 33.5" x 13.9"	17.4" x 33.5" x 13.9"	17.4" x 33.5" x 13.9"	
Minimum Recommended Pipe Size	1"	1"	1"	1"	1"	1"	
Supply Tappings	1"	1"	1"	1"	1"	1"	
Return Tappings	1"	1"	1"	1"	1"	1"	
Domestic Cold Water Supply	3/4"	3/4"	-	-	-	-	
Domestic Hot Water Supply	3/4"	3/4"	-	-	-	-	
Gas Connection Size	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	
Vent Size	3"	2" - 3"	2" - 3"	2" - 3"	2" - 3"	3"	
Vent Material	PVC / CPVC	PVC / CPVC	PVC / CPVC	PVC / CPVC	PVC / CPVC	PVC / CPVC	
Combustion Air Size	3"	2" - 3"	2" - 3"	2" - 3"	2" - 3"	3"	
Expansion Vessel Integrated	3.17 Gal. (12)	3.17 Gal. (12)	-	-	-	-	
Included Package Contents							
FW 200 Control	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	
Heat Tronic III - Control PCB	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$		
Hydronics Bracket	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	
Twin Pipe Flue Adapter	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	
Tank Sensor	-	-	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$		
System Supply Sensor	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	
NG / LP Conversion Kit	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	
Condensate Trap Drain Hose	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	

<b>Optional Accessories</b> Not Included	FB 100 Control	ISM2 Control	IPM2 Control	Cleaning Tool 1060	Cleaning Tool 1061
Description	Room Sensor	Solar Control Module	Pump Control Module	Cleaning Tool Kit	Cleaning Tool
Part #	7-719-003-525	7-719-003-527	7-719-003-526	7-719-002-502	7-719-002-503
Product Image	49 soos	© coco			

#### **Bosch Thermotechnology Corp.**

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