

*ProTankless™*



# High Output Condensing Tankless Water Heaters

GWH C 920 ES • GWH C 920 ESC



**BOSCH**

Invented for life

Tankless Water Heaters for the Professional

# High Output Condensing Tankless Water Heaters

## GWH C 920 ES Residential

Our highest flow rate model, the GWH C 920 ES is an ultra-high efficiency modulating-condensing water heater with low NOx emissions. It is ASME approved and, like all our tankless water heaters, is built for serviceability and durability.



### Power and Efficiency

The Bosch GWH C 920 ES and GWH C 920 ESC are our newest ultra-high efficiency tankless water heaters. With outputs as high as 11.2 gallons per minute, these heaters can satisfy virtually any demand for hot water. Because these heaters have inputs greater than 200,000 BTU/hr, they are not eligible to participate in the Energy Star program, but with a thermal efficiency of 94%, they are extremely efficient.

Both heaters feature a reliable Ceramat burner and a modulating gas valve to maintain a constant gas-air ratio. For Bosch, though, reliability and efficiency are not enough. Both of these high-power and compact heaters are designed for low NOx emissions, so they're kind to the environment as well.

### Condensing Technology

One reason for the ultra-high efficiency of these heaters is their condensing technology. Though called the latest in energy efficiency by many, this is actually not new for Bosch. We have been using condensing technology for over 10 years, and were the first company to introduce a condensing tankless water heater in North America.

Condensing technology captures more of the heat value of fuel by condensing the water vapor in the flue gases. An additional benefit of condensing is a cooler flue gas, which means these heaters can vent with PVC. Concentric venting is available, which simplifies installation, as a single pipe needing only one exterior penetration to the outside, carries both intake and exhaust.

### Commercial and Residential Models

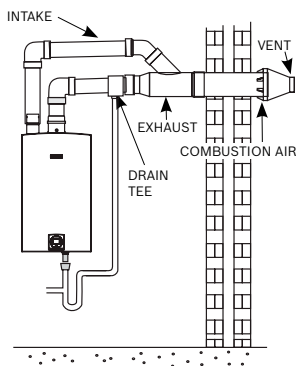
The 920 ES water heaters are factory set for an output temperature of 122°F. The residential model can be programmed for output temperatures up to 140°F. The GWH C 920 ESC commercial version is capable of outputting 180°F water. Since this is far above scalding temperatures, its use is recommended for commercial situations where water at this temperature is required.

### Ability to Cascade

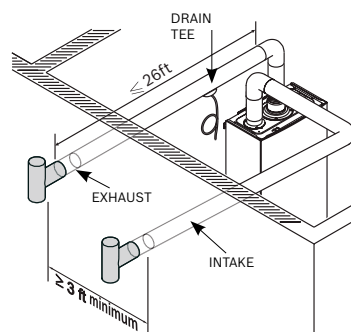
Both the residential and commercial model feature the ability to cascade. Installing multiple units together achieves higher flow rates than with a single unit. A four-unit cascade can deliver an incredible 36.4 gallons per minute, enough to satisfy an extremely high demand for hot water.

## Horizontal and Vertical Venting Configurations

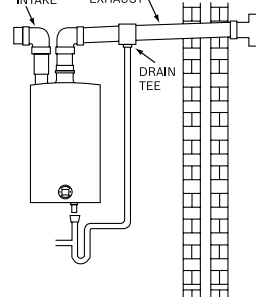
### Sealed Combustion (Concentric)



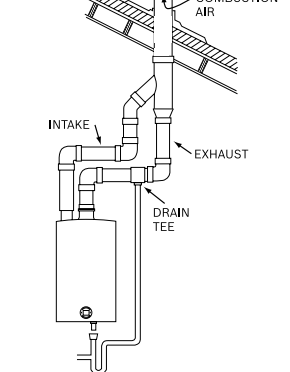
### Exterior Air Intake



### Room Air Intake



### Sealed Combustion (Concentric)



# GWH C 920 ESC Commercial

The commercial version of the GWH C 920 ES offers all the features of the residential model with the additional capability of outputting 180°F water to satisfy commercial temperature requirements.



## Features and Benefits

- ▶ 94% thermal efficiency
- ▶ Modulating/condensing for comfort and high efficiency
- ▶ 225,000 BTU/Hr maximum input, 25,000 BTU/Hr minimum input
- ▶ ASME certified
- ▶ Direct vent, vertically or horizontally with 3" PVC, CPVC or ABS-DWV
- ▶ Concentric and twin pipe venting options
- ▶ Electronic ignition
- ▶ Will deliver up to 36.8 gpm in a 4-unit cascade
- ▶ Solar application-ready
- ▶ Built for durability and serviceability
- ▶ Available for natural gas (NG) and liquid propane (LP)

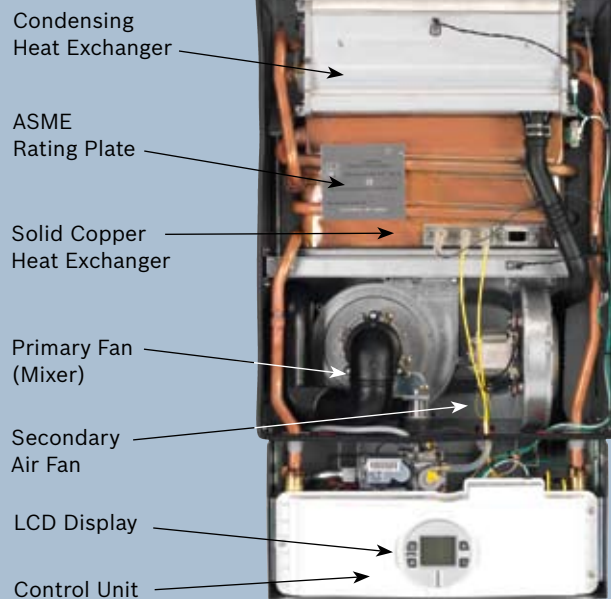
## The Benefits of Going Tankless

Most homes in North America use a storage tank water heater to provide domestic hot water. A storage tank water heater keeps water hot 24 hours a day, even while you're at work or sleeping. A tankless water heater, on the other hand, does not store hot water. It heats the water as needed, cutting out needless energy consumption and reducing household water heating bills up to 50%.

Bosch ProTankless™ is designed to last. Made from durable copper, steel and aluminum parts, with nothing to rust or collect sediment, these units have twice the average lifespan of traditional tank water heaters. This gives our landfills a break, and makes them the right choice for today's demanding "Green Building" practices.



## ProTankless™ GWH C 920 ES



(Control panel shown in its normal closed position. It pulls out and drops down for ease of servicing.)

## Tankless Can Make a Difference

If we all used tankless water heaters, we could

- ▶ Keep 91 million tons of carbon dioxide out of the atmosphere every year
- ▶ Reduce the number of tank water heaters (which cannot be recycled) going to landfills each year
- ▶ Decrease our country's overall dependence on non-renewable resources

*"Tankless water heaters are (a technology) that has significant energy savings potential compared to conventional products. If these products eventually achieve widespread market acceptance, tremendous gains in energy savings and associated pollution prevention could be achieved."*

U.S. Department of Energy, January 2004.



# High Output Condensing Tankless Water Heaters for the Professional

TECHNICAL SPECIFICATIONS		GWH C 920 ES	GWH C 920 ESC (Commercial)*
Power Input	Minimum Maximum	25,000 BTU/Hr 225,000 BTU/Hr	25,000 BTU/Hr 225,000 BTU/Hr
Max. Temp. of Output Water		140°F	180°F
Min. Flow to Activate		0.65 gallons per minute (gpm)	0.65 gallons per minute (gpm)
Flow Rates		35°F rise @ 11.2 gpm 45°F rise @ 9.2 gpm 55°F rise @ 7.5 gpm 65°F rise @ 6.4 gpm 77°F rise @ 5.4 gpm 90°F rise @ 4.6 gpm	35°F rise @ 11.2 gpm 45°F rise @ 9.2 gpm 55°F rise @ 7.5 gpm 65°F rise @ 6.4 gpm 77°F rise @ 5.4 gpm 90°F rise @ 4.6 gpm
Thermal Efficiency		94%	94%
Dimensions		30½" h x 17⅞" w x 11¼" d	30½" h x 17⅞" w x 11¼" d
Weight		88 lbs.	88 lbs.
Ignition		Electronic	Electronic
Modulating Gas Valve		Yes	Yes
Accessories		Concentric Termination Kit (#196016) Outdoor Kit (#PTOK) Wireless Remote (#TSTAT2) Tankless Link Cascading Kit (#TLINK) Freeze Protection Kit (7 709 003 574) External Water Filter (8 703 305 356) Isolation Valve Kit (9620LA)	Concentric Termination Kit (#196016) Outdoor Kit (#PTOK) Wireless Remote (#TSTAT2) Tankless Link Cascading Kit (#TLINK) Freeze Protection Kit (7 709 003 574) External Water Filter (8 703 305 356) Isolation Valve Kit (9620LA)
Warranty		15-year limited warranty on heat exchanger (3-year if used in recirculating applications) 2-year limited warranty on all other parts	2-year limited warranty on heat exchanger 2-year limited warranty on all other parts
INSTALLATION SPECIFICATIONS			
Gas Connection		¾" Male NPT	¾" Male NPT
Water Connections		¾" Male NPT	¾" Male NPT
NG Gas Pressure	Minimum: Maximum:	4" WC 14" WC	Minimum: Maximum: 4" WC 14" WC
LP Gas Pressure	Minimum: Maximum:	9" WC 14" WC	Minimum: Maximum: 9" WC 14" WC
Water Pressure	Minimum: (Well): Maximum:	30 PSI 40 PSI 150 PSI	Minimum: (Well): Maximum: 30 PSI 40 PSI 150 PSI
Electrical Supply		120V – (plugs in)	120V – (plugs in)
Venting		3" or 4" PVC, PVC-DWV, CPVC, ABS-DWV, or concentric pipe	3" or 4" PVC, PVC-DWV, CPVC, ABS-DWV, or concentric pipe
Installation Clearances	Top: Front: Back: Sides: Floor:	12" 1" 0" 1" 12"	Top: Front: Back: Sides: Floor: 12" 1" 0" 1" 12"
Part #			
Natural Gas		GWH C 920 ES NG	GWH C 920 ESC NG
Liquid Propane		GWH C 920 ES LP	GWH C 920 ESC LP

\*The GWH C 920 ESC is a commercial model and is capable of outputting 180°F water. Due to the risk of scalding, use is not recommended for residential applications and users should take precautions to prevent scalding.

All information in this table is for a single unit. See Technical Manual for cascading specifications.

Units ship complete with wall mounting bracket, pressure relief valve, built-in electronic temperature controls and are equipped with 120V plug-in power cord. Refer to manual for condensate drain tee and complete venting requirements.



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