



EXCELLENCE IN HEATING
AND HOT WATER SYSTEMS

an ACV company

CHALLENGER SERIES

HIGH EFFICIENCY CONDENSING
BOILERS & COMBINATION UNITS



EXCELLENCE OF THE CHALLENGER

Did you know? Our heat exchanger has a proven track record of over 20 years in customer satisfaction with over 1.5 million boilers installed and counting.



BEST POSSIBLE INSTALLATION FOR OPTIMAL PERFORMANCE

The Timesaver Primary-Secondary Manifold is included with all Challenger boilers. This pre-assembled manifold not only simplifies the installation, saving you time and money, but also ensures the best possible installation for peak performance and efficiency.



SAVE UP TO 15% BY BUNDLING A CHALLENGER SOLO WITH A COMFORT STAINLESS STEEL INDIRECT FIRED WATER HEATER.

Low Maintenance

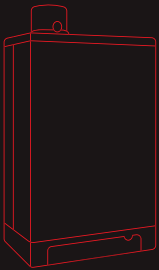
Comfort boasts a self cleaning and self descaling design, requiring lower maintenance than most instantaneous water heaters.

Better Performance

No wait for hot water!
Your domestic hot water is hot and ready with very little standby loss.

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CHALLENGER

- Up to 95% AFUE
- Low Maintenance Heat Exchanger
- Primary-Secondary Manifold with Pump Included
- Unique Copper Waterways
- High Efficiency in DHW Mode (combi)
- Anti-scald Mixing Valve Included (combi)
- Reliability Through Simplicity

2-IN-1 HEAT EXCHANGER

A reliable coppertube/aluminum block heat exchanger paired with an advanced control that automatically regulates the capacity of the boiler to maximize efficiency without compromising comfort.

EASY SERVICE AND MAINTENANCE

Unparalleled reliability through simplicity. Since the Challenger contains fewer internal parts, the unit is much easier to install, maintain and service.

FULLY CONDENSING (COMBI)

Our combi unit condenses in both space heating and domestic hot water modes, resulting in higher efficiency.

SMALLER FOOTPRINT

The Challenger was designed to fit into the smallest of spaces. Taking up less than 3ft, the Challenger can fit in a small storage area or utility closet. But with an attractive enclosure and whisper quiet operation, why hide it at all?



SPECIFICATIONS & FEATURES

Challenger

MODEL	CC 50S	CC 85S	CC 105S	CC 125HS	CC 150S	CC 105	CC 125H
Input Modulation (MBH)	13.5 to 51	23 to 84	29 to 106	20 to 125	33 to 145	29 to 106	20 to 125
AFUE	95%	94%	94%	95%	92.3%	94%	95%
DOE Heating Capacity (MBH)	46	75	94	111	129	94	111
Net AHRI Rating (MBH)	40	65	82	97	112	82	97
Fuel	NG & LP	NG & LP	NG & LP	NG & LP	NG & LP	NG & LP	NG & LP
DHW flow rate at 70 F Temp. Rise (GPM)						2.5	3.0
DHW minimum flow rate (GPM)						0.5	0.5
DHW maximum temp. (F[C])						149 (65)	149 (65)
Maximum CH output temp. (F[C])						194 (90)	194 (90)
Cabinet Height (Inch)	23 1/4	23 1/4	25 1/2	28	28	25 1/2	28
Cabinet Width (Inch)	17 3/4	17 3/4	17 3/4	17 3/4	17 3/4	17 3/4	17 3/4
Cabinet Depth (Inch)	9 1/2	9 1/2	9 1/2	9 1/2	9 1/2	9 1/2	9 1/2
Weight (Lbs)	66	66	73	80	80	73	80

Heat Exchanger

- Cast aluminum heat exchanger with vertical flueways
- Compatible with Standard Glycol
- 10 year limited warranty
- Separate boiler & DHW copper waterways cast directly into the heat exchanger (combi)

Control

- Digital control displays in US customary or metric units
- Advanced modulating temperature control
- Outdoor reset
- Boiler low water & freeze protection
- High limit protection
- 3 DHW modes (Self learning ECO, standby, and on-demand)
- DHW priority
- DHW thermostatic mixing anti-scald valve

Sensors

- Outdoor temperature
- Boiler supply & return temperature
- Flue & DHW temperature
- DHW flow
- Boiler system pressure

Intake and Venting

- 2" & 3" Parallel venting (standard)
- Concentric venting (optional)
- PVC, CPVC, PP, SS material options

Burner

- Stainless steel burner with woven fiber mesh
- Direct spark ignition
- Variable speed blower assembly
- Negative pressure regulated gas valve
- Propane conversion kit included

Electrical Connections

- 120V/60Hz Power supply
- Primary pump
- Thermostat
- Outdoor sensor
- Indirect water heater aquastat & pump

Piping Connections

- EZ Install piping mounting bracket
- 3/4" NPT DHW inlet and outlet
- 1" NPT boiler supply and return
- 3/4" Condensate drain
- Simple primary/secondary connections with included Timesaver manifold

Certification

- Combi is certified both as a boiler & water heater.
- Boiler Certified to ANSI Z21.13 / CSA 4.9
- Water Heater Certified to ANSI Z21.10.3 / CSA 4.3
- Water Heater Certified Low Lead Content Per NSF/ANSI 372.

CONTACT

If you have any questions or comments regarding our products and services, we'd love to hear from you! Please contact us through one of the options listed below.

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