



# CHALLENGER Combi

## High Efficiency Combination Boiler and Domestic Water Heater

**HEAT .... and Hot Water .... TOGETHER in One Appliance**



- Up to 95% AFUE
- Whisper Quiet
- Compact for Closet Applications
- ASME Stamped Heat Exchanger
- Compatible with Standard Glycol
- Direct Vent Sealed Combustion
- 2" & 3" PVC, CPVC, PP, SS Venting Options
- Concentric Venting Option
- Low NOx - 2012 SCAQMD Certified
- DHW - Low Lead Content Certified
- Multiple DHW Modes Allows User to Select Balance between Speed and Efficiency
- Unparalleled Reliability through Simplicity
- Simplified Design Eliminates Domestic Heat Exchanger, Circulator & Diverter Valve
- 1 Year Limited Parts Warranty
- 10 Year Limited Heat Exchanger Warranty
- 5 & 10 Year Extended Warranty Options



**CONDENSES IN BOTH SPACE HEATING AND DOMESTIC HOT WATER MODES**



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## Technical Specifications

| Model                                  | CC 105    | CC 125 H  |
|--|-----------|-----------|
| Input Modulation (MBH)                 | 29 to 106 | 20 to 125 |
| AFUE                                   | 94%       | 95%       |
| DOE Heating Capacity (MBH)             | 94        | 111       |
| Net AHRI Rating (MBH)                  | 82        | 97        |
| Fuel                                   | NG and LP | NG and 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 temperature (F [C])        | 149 (65)  | 149 (65)  |
| Maximum CH output temperature (F [C])  | 194 (90)  | 194 (90)  |
| Cabinet Height (Inch)                  | 25 1/2    | 28        |
| Cabinet Width (Inch)                   | 17 3/4    | 17 3/4    |
| Cabinet Depth (Inch)                   | 9 1/2     | 9 1/2     |
| Weight (Lbs)                           | 73        | 80        |

- The Challenger is certified both as a boiler and a 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.

## Standard Features

### Heat Exchanger

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

### Burner

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

### Sensors

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

### Intake and Venting

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

### Control

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

### Electrical Connections

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

Triangle Tube reserves the right to make product changes or improvements at any time without notice.



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