



### Instinct 155 Combi Features

- Light weight construction for wall mounting
- Approved for zero clearance to combustibles
- Secondary heat exchanger for endless hot water
- 2" PVC, CPVC, PP venting up to 28 equivalent feet
- 3" PVC, CPVC, PP, or AL29-4C venting up to 100 equivalent feet
- 10 year limited warranty on heat exchanger
- Up to 6 year limited warranty on parts, except igniter
- Up to 3 year limited labor allowance

### Approvals

- 95% AFUE Efficiency
- ENERGY STAR Qualified
- ANSI Z21.13 and CSA 4.9 Boiler Standards Compliance
- ASME Boiler Certification – ASME "H" Stamp
- SCAQMD 2012 Low NOx Certification

### Stainless Steel Fire Tube Heat Exchanger

- 439 Stainless Steel heat exchanger construction for corrosion resistance
- High water content provides stable temperature control
- Self cleaning flue ways reduce maintenance
- Suitable for use with propylene glycol up to 50% concentration

### CTRLMax Control System

- Graphical display with 5 navigation buttons
- EZ Setup allows quick and easy boiler settings adjustment
- Flexible configuration of 2 circulator outputs for custom applications
- Outdoor temperature reset to maximize efficiency
- Accepts two space heating call inputs with independent outdoor reset curves
- Domestic hot water priority with optional time-out
- 0-10 VDC Modulation input
- Modbus building management system (BMS) interface, LonWorks® and BACnet® interface optional
- Adjustable warm weather shutdown
- Adjustable boiler freeze protection
- Logging function records sensor readings for system optimization and troubleshooting
- Describes lockouts in plain English and suggests solutions while storing last 8 errors

### Standard Equipment

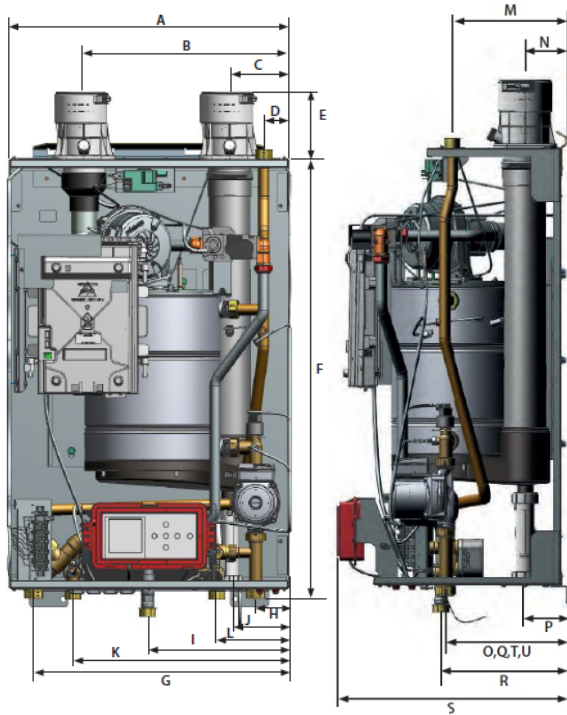
- Stainless steel premix burner
- Direct spark ignition with variable speed blower
- Full modulation with turndown ratio of 8:1
- Automatic air vent
- ASME 30 PSI pressure relief valve
- Temperature and Pressure gauge
- Outdoor temperature sensor
- 3-Way diverting valve prepiped and prewired
- 3 Speed circulator prepiped and prewired
- Automatic low water cutoff feature with early warning
- High temperature manual reset limit safety control
- Terminal block for circulator output
- Low voltage terminal strip with removable jumpers for manual or automatic reset limits
- Swing out control for easy access and servicing
- Polypropylene condensate pan and internal flue pipe
- 3 in 1 Universal vent adapter directly accepts PVC, Polypropylene, Stainless steel connections with test ports

Project / Location: \_\_\_\_\_ Date: \_\_\_\_\_

Consulting Engineer / Architect: \_\_\_\_\_

Mechanical Contractor: \_\_\_\_\_

## Boiler Dimensions



| Letter | Connection                                  | Dimension<br>in[mm] |
|--------|---|---------------------|
| A      | Boiler Width                                | 21 5/8" [550]       |
| B      | 3" Combustion Air Inlet                     | 15 3/4" [400]       |
| C      | 3" Vent Outlet                              | 4 3/4" [120]        |
| D      | 3/4" NPSC Relief Valve                      | 2 1/8" [55]         |
| E      | Vent / Combustion Air<br>Connection Height  | 5 1/8" [130]        |
| F      | Boiler Height                               | 32 5/8" [830]       |
| G      | 1" NPT Boiler Supply                        | 19 5/8" [500]       |
| H      | 1" NPT Boiler Return                        | 2 3/4" [70]         |
| I      | 3/4" NPT Gas Connection                     | 11" [280]           |
| J      | Condensate Drain                            | 8 1/2" [215]        |
| K      | 3/4" NPT DHW Supply                         | 16 5/8" [425]       |
| L      | 3/4" NPT DHW Inlet                          | 5 3/4" [145]        |
| M      | 3/4" NPSC Relief Valve                      | 8 5/8" [220]        |
| N      | 3" Combustion Air Inlet &<br>3" Vent Outlet | 3 1/8" [80]         |
| O      | 1" NPT Boiler Return                        | 9 1/8" [230]        |
| P      | Condensate Drain                            | 3 1/8" [80]         |
| Q      | 1" NPT Boiler Supply                        | 9 1/8" [230]        |
| R      | 3/4" NPT Gas Connection                     | 9 1/2" [240]        |
| S      | Boiler Depth                                | 17 1/8" [435]       |
| T      | 3/4" NPT DHW Inlet                          | 9 1/8" [230]        |
| U      | 3/4" NPT DHW Outlet                         | 9 1/8" [230]        |

## Boiler Performance

|                               |                      |
|-------------------------------|----------------------|
| Instinct Model                | Combi 155            |
| Fuel                          | Natural<br>Propane   |
| Input Modulation<br>(MBH)     | 19.375 - 155         |
| AFUE                          | 95%                  |
| DOE Heating<br>Capacity (MBH) | 143                  |
| Net AHRI (MBH)                | 124                  |
| Boiler Water<br>Volume (gal)  | 3                    |
| Power                         | 120/1/60<br>FLA: 10A |
| Shipping Weight<br>(Lbs)      | 138                  |

## Water Heater Performance

|                           |           |
|---------------------------|-----------|
| Instinct Model            | Combi 155 |
| DHW Output<br>(70°F Rise) | 4.0 gpm   |
| DHW Output<br>(75°F Rise) | 3.7 gpm   |
| DHW Output<br>(80°F Rise) | 3.5 gpm   |

