

# Model NC199 Series Commercial Water Heater Specification Sheet

Job Name \_\_\_\_\_  
 Location \_\_\_\_\_  
 Architect/Engineer \_\_\_\_\_  
 Wholesaler \_\_\_\_\_  
 Contractor \_\_\_\_\_  
 Model No. \_\_\_\_\_  
 Gas Type \_\_\_\_\_  
 No. of Units \_\_\_\_\_ Total BTU/hr Input \_\_\_\_\_  
 Flow Rate (GPH) \_\_\_\_\_  
 Notes \_\_\_\_\_

- **Standard Input** - gas consumption ranges from 11,000 BTU/h to 199,900 BTU/h
- **Compact Design** - ANSI Z21.10.3/CSA 4.3 certified design that can be wall-mounted indoors with a -DVC model or installed outdoors with an -OD model
- **Durable Steel Casing with Acryl Coating**
- **Heat Exchanger** - manufactured with commercial grade copper, 25% thicker piping than standard models
- **Venting Options** - available in Outdoor (-OD) or Concentric Direct Vent (-DVC) model that requires 5/3 in. Noritz concentric stainless steel pipe.
- **Direct Electronic Ignition**
- **Multi-System Capability** - units can be linked together by using either the optional 2-unit Quick Connect or multi-unit System Controller for up to 6 units.
- **Fully Modulating** - BTU input can range from 11,000 to 1.2 million BTU/h (for 6-unit Multi-System) with stable combustion provided by the industry's 1st Dual-Flame Burner
- **Thermal Efficiency** - 84% efficient for use with natural gas or propane
- **Temperature Controls** - includes remote thermostat that can precisely adjust the output temperature from 100°F to 180°F
- **Safety Devices** - Flame Sensor, Overheat Prevention Device, Lightning Protection Device, Freeze Protection
- **Five Year Limited Heat Exchanger Warranty for Commercial Use**
- **Five Year Limited Parts Warranty**
- **Approvals** - CSA, UPC, NSF, Low NOx Approved By SCAQMD (Rule 1146.2)



DVC Model

OD Model

## Model

NC199 - \_\_\_\_\_ (-CA)\*

☐ OD (Outdoor Vent)

☐ DVC (Concentric Direct Vent)

\* Canadian (-CA) model also available

## Accessories

☐ Isolator Valves (#IK-WV-7)

Pipe Cover

☐ for -OD Model (#PC-2S)

☐ for -DVC Model (#PC-5S-SUS)

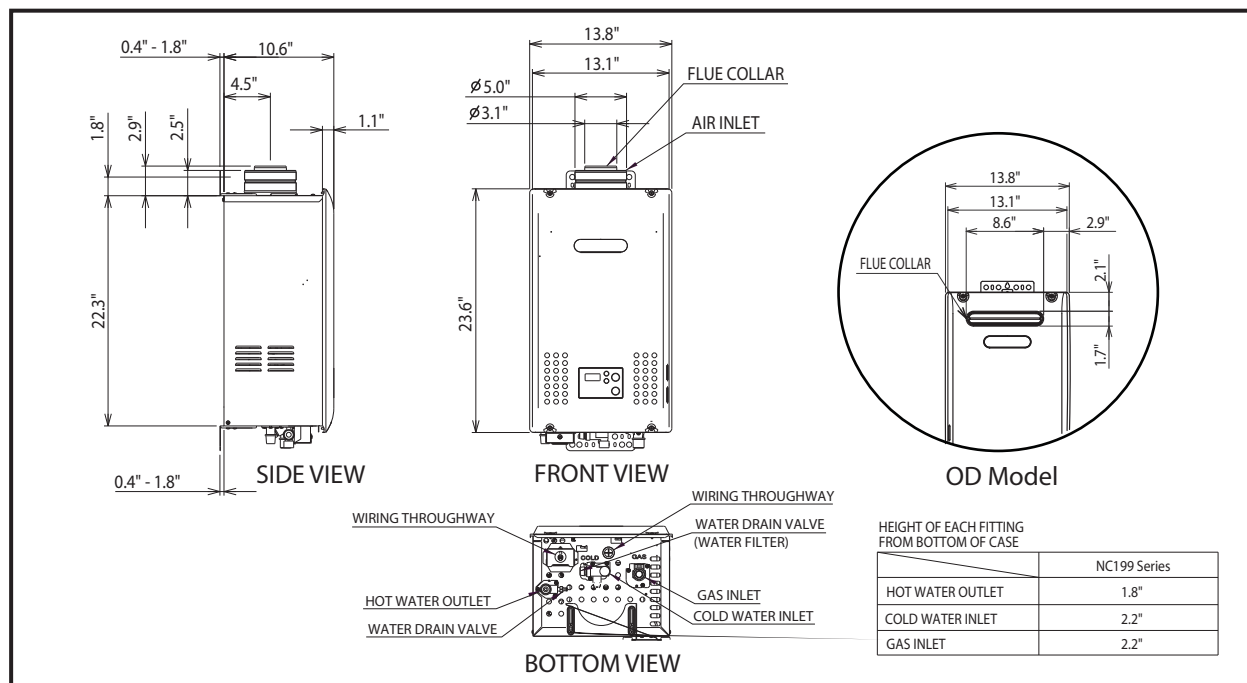
☐ Quick Connect Cord (#QC-1)

6-Unit System Controller

☐ for -OD Model (#SC-201-6M-EXT-OD)

☐ for -DVC Model (#SC-201-6M-EXT-DVC)

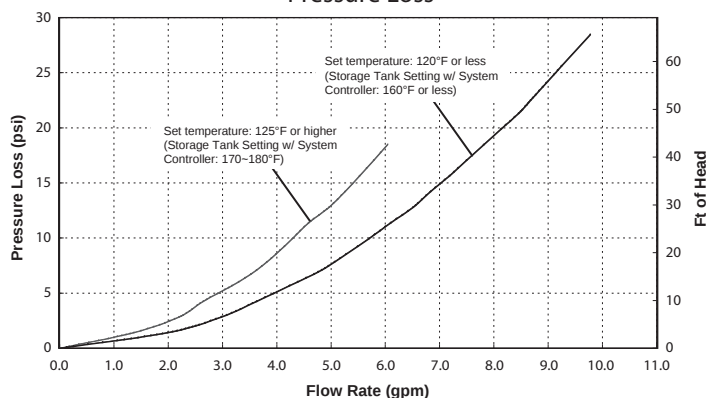
## Dimensions



## Flow Rates

| Temperature Rise (°F) |        | 70   | 100  |
|-----------------------|--------|------|------|
| Flow Rate (GPM)       | 1-unit | 4.8  | 3.4  |
|                       | 2-unit | 9.6  | 6.8  |
|                       | 3-unit | 14.4 | 10.2 |
|                       | 6-unit | 28.8 | 20.4 |
| Flow Rate (GPH)       | 1-unit | 288  | 204  |
|                       | 2-unit | 576  | 408  |
|                       | 3-unit | 864  | 612  |
|                       | 6-unit | 1728 | 1224 |

## Pressure Loss



## Power Supply and Consumption

| Model Name | Supply                           | Consumption                                 |
|------------|----------------------------------|---------------------------------------------|
| NC199-OD   | 120VAC (60 Hz), less than 2 amps | NG: 64W Freeze<br>LP: 77W Prevention: 145W  |
| NC199-DVC  |                                  | NG: 85W Freeze<br>LP: 100W Prevention: 161W |

**NOTE:** For Quick-Connect and Multi-System installations, pressure loss remains constant throughout the system regardless of the number of units installed. Multiply the total number of units in the system by the required flow rate from each unit to determine the total pressure loss from the chart above.

## Temperature Settings and Options

|                             |                                                             |
|-----------------------------|-------------------------------------------------------------|
| Temperature Settings        | 100-150°F (In 5°F intervals), 160, 170, *180°F (14 Options) |
| Default Temperature Options | 120, 130, 140, *180°F (Default is 120°F)                    |

\*181.4°F actual output temperature

## Specification

Commercial, gas-fired, wall-mounted water heater(s) shall be outdoor/concentric direct vent Model NC199 Series as manufactured by Noritz America Corporation. The water heater(s) shall have a 5-year limited Heat Exchanger warranty and a 5-year limited Parts warranty per Noritz Limited Warranty. Unit(s) shall be designed to burn natural/propane gas and certified by CSA International to the latest edition of ANSI standard Z21.10.3/CSA 4.3. Water heater(s) shall have a nominal flow rate capacity of \_\_\_\_\_ GPH @ 100°F rise with rated input of \_\_\_\_\_ BTU/hr. Water heater(s) shall be vented with 3/5" Noritz concentric stainless steel pipe (-DVC model only) at a distance not to exceed 29' (or equivalent) with 3 elbows terminating vertically or horizontally. Water heater(s) is rated for 150 PSI working water pressure and 300 PSI test pressure. Gas supply pressure shall be 4.0" to 10.5" WC for natural gas and 8.0" to 14.0" WC for propane. Unit(s) shall have a coated steel case, copper heat exchanger, stainless steel dual-flame burner, aluminum gas control valves, 3/4" inlet gas connection, 3/4" brass inlet/outlet water connections, and water holding capacity of 0.2 gallons. The outdoor (-OD) model weighs 47 lbs. and the concentric direct vent (-DVC) model weighs 55 lbs. Unit(s) shall include features such as an adjustment for high elevation installations, temperature lockout, and 14 temperature options from 100-150°F in 5°F intervals and 160-180°F in 10°F intervals. The heater(s) shall be controlled by an internal circuit board that monitors the inlet and outlet temperatures with installed thermistors, sensing and controlling flow rate to set point temperature with air-fuel ratio controls in order to maintain thermal combustion efficiency. Unit(s) shall include safety features such as flame sensor system, thermal cut-off fuses, lightning protection device, overheat prevention device, freeze protection device, and fan rotator detector. Multi-system applications that require 2 units shall be installed by connecting the units using a single cable-only connection (Quick-Connect). Applications that require 3 to 6 units shall use a multi-unit central controller (System Controller). The water heater(s) exceeds the energy efficiency requirements of ASHRAE 90.1b-1992 and listed by SCAQMD rule 1146.2 Low NOx.

**Noritz America reserves the right to discontinue, or change at any time, the designs and/or specifications of its products without notice.**