

# Model NCC199 Series Commercial Condensing 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 or installed outdoors with an -SV model using the optional Vent Cap
- **Durable Stainless Steel Casing**
- **Heat Exchanger** - manufactured with commercial grade copper, 25% thicker piping than standard models
- **Venting Options** - available in Standard (-SV) or Direct Vent (-DV) model that can use either Schedule 40 PVC/CPVC or Category III 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 24 units.
- **Fully Modulating** - BTU input can range from 11,000 to 4.8 million BTU/h (for 24-unit Multi-System) with stable combustion provided by the industry's 1st Dual-Flame Burner
- **Thermal Efficiency** - fully condensing, 93% efficient for use with natural gas and 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, Neutralizer Overfill
- **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)



SV Model

DV Model

**Model**  
 NCC199 - \_\_\_\_\_  
 SV (Standard Vent)  
 DV (Direct Vent)

**Accessories**

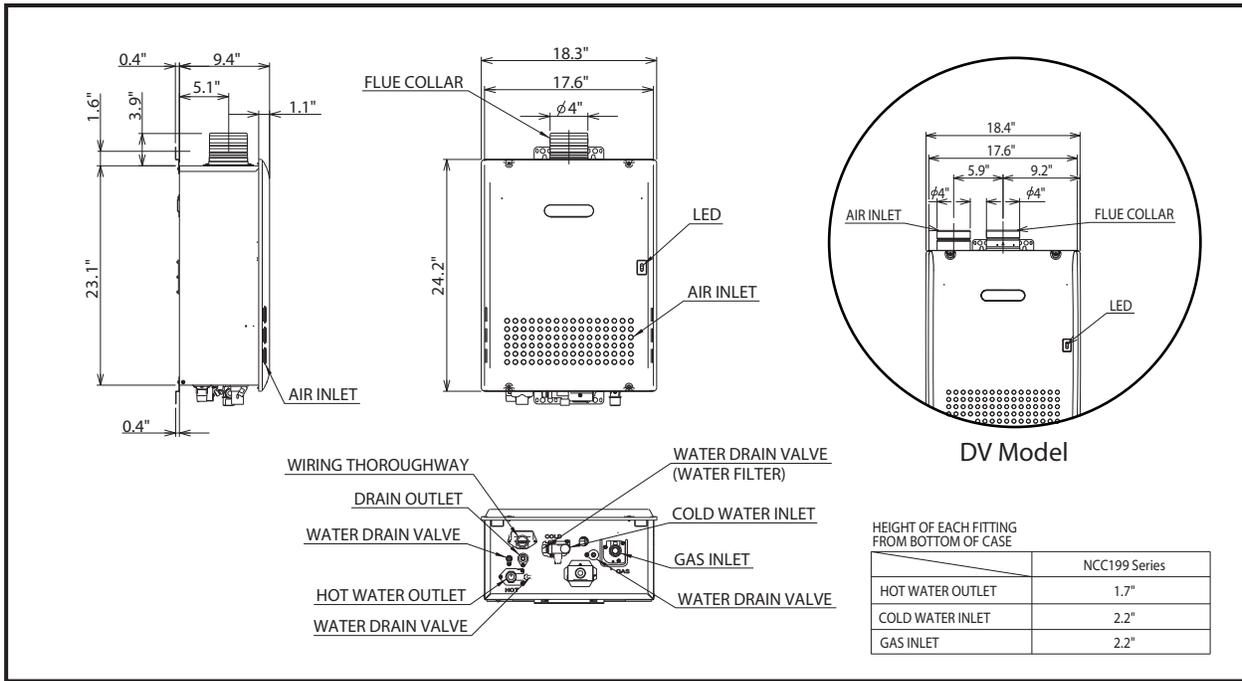
PVC Adapter (#VP\_\_-PVC-ADAPT)  
 Birdscreen (#VP\_-PVCS)  
 Outdoor Vent Cap for Condensing -SV Model (#VC-4C)  
 Isolator Valves (#IK-WV-7)  
 Pipe Cover (#PC-3S-SUS)  
 Quick Connect Cord (#QC-1)

**System Controller**

6-unit (#SC-201-6M)  
 12-unit (#SC-201-12M)  
 24-unit (#SC-201-24M)



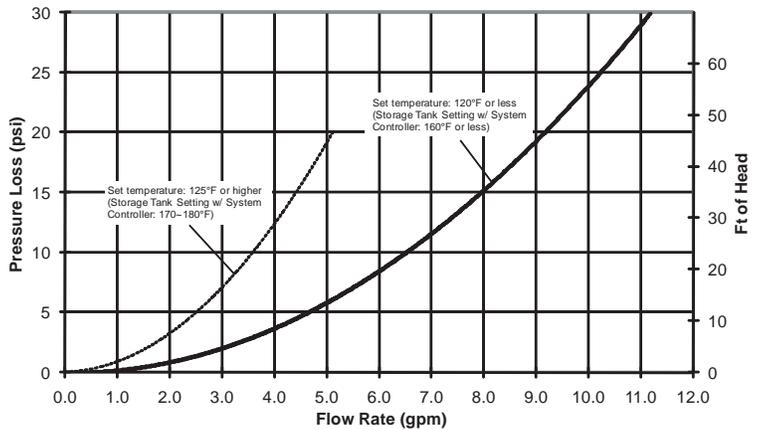
## Dimensions



## Flow Rates

Temperature Rise (°F)		70	100
Flow Rate (GPM)	1-unit	5.3	3.7
	2-unit	10.6	7.4
	3-unit	15.9	11.1
	6-unit	31.8	22.2
	9-unit	47.7	33.3
	12-unit	63.6	44.4
	24-unit	127.2	88.8
Flow Rate (GPH)	1-unit	318	222
	2-unit	636	444
	3-unit	954	666
	6-unit	1908	1332
	9-unit	2862	1998
	12-unit	3816	2664
	24-unit	7632	5328

## Pressure Loss



**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.

## Power Supply and Consumption

Model Name	Supply	Consumption
NCC199-SV	120VAC (60 Hz), less than 4 amps	NG: 106W Freeze LP: 109W Prevention: 213W
NCC199-DV		NG: 115W Freeze LP: 120W Prevention: 213W

## 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, condensing, wall-mounted water heater(s) shall be direct/power 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" or 4" Schedule 40 PVC/CPVC (PVC Adapter and Birdscreen required) or 4" Category III stainless steel vent pipe at a distance not to exceed 15' (or equivalent) with 3 elbows for SV models using 4" pipe and 3' (or equivalent) with 3 elbows using 3" pipe terminating vertically or horizontally. Length of pipe shall not exceed 45' (or equivalent) with 3 elbows for DV models using 4" pipe and 10' (or equivalent) with 3 elbows using 3" pipe 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 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, water holding capacity of 0.5 gallons, and a condensate collector. The power vent (-SV) and direct vent (-DV) models each weigh 73 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 24 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.**