

Paloma

28c SERIES

- The Paloma Tankless Series for commercial solutions
- Standardize your design of hot water systems from 200,000 to 4.0 million BTUs on a single, common component
- Compact, and takes no floor space (wall-hung installation)
- Built-in diagnostics and usage record



Hot Water Performance

The 28c Series can be used by itself, or it can be configured into multi-unit systems of 2 to 20 units controlled with Paloma's Manifold Electronic Controller, the MIC-180.

| 28c SOLO Mode Performance | | | |
|---------------------------|------------------|-----|------|
| | Temperature Rise | | |
| | 40° | 70° | 100° |
| Gallons Per Minute | 8.5 | 4.8 | 3.3 |
| Gallons Per Hour | 510 | 288 | 200 |

Multi-Unit Systems

MIC-180 Manifold Controller is used to electronically control operations in a multi-unit system of 2 to 20 units. The MIC-180 Controller Kit includes the control logic for a base system with 2-6 units, a power cord, and an installation box suitable for outdoors.

For larger systems, add a MICS-180 Extended Communication Board, which will fit in the top half of the Installation Box. The controller connects to the individual units using Paloma communications cables in 16-foot, 32-foot and 65-foot lengths.

Safety Engineering

The 28c Series includes safety engineering you will not find on other brands:

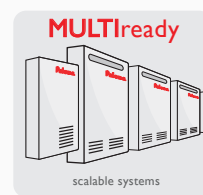
- ICAD™, our proprietary safety system that constantly monitors combustion for evidence of unsafe carbon monoxide. On the Indoor and Direct Vent models.
- Overheat Limiter Wrap, a resin film wrapped around the heat exchanger, for the earliest possible detection of unsafe overheating. On all models.
- Flame Failure Safety Monitor: Flame Rod Type
- Anti-boil protection

Energy Efficiency

- 84% Efficiency Rating
- Uses gas only when hot water is needed and never squanders energy when facility is not in operation.

Convenience

Digital controller lets user change temperature settings immediately and precisely.



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specifications

models and venting



Indoor

Nat. PH-28C IFSN
LP PH-28C IFSP



Outdoor

Nat. PH-28C OFN
LP PH-28C OFF



Direct Vent

Nat. PH-28C DVSN
LP PH-28C DVSP

| | |
|---|--|
| BTU Input Range | 19,000 ~ 199,900 (fully modulating) |
| Maximum Hot Water Output | 8.5 GPM (40 degree rise at 30 psi) |
| Minimum Flow for Ignition | 0.66 GPM |
| Dimensions (inches) | 14 7/8 (w) x 25 3/8 (h) x 11 1/8 (d) |
| Working Water Pressure | 14 ~ 150 psi |
| Temperature Range | 100 ~ 180 degrees F |
| Gas Connection | 3/4" NPT Female (with included gas shutoff valve) |
| Water Connection | 3/4" NPT Male |
| Efficiency Rating | 84% |
| DOE Energy Factor | 0.82 |
| Gas Inlet Pressure (Indoor and Outdoor Models) | Natural Gas: Min 4.0" W.C.; Max. 10.5" W.C. LP Gas: Min. 8.0" W.C.; Max 14.0" W.C. |
| Gas Inlet Pressure (Direct Vent Model) | Natural Gas: Min 4.5" W.C.; Max. 10.5" W.C. LP Gas: Min. 10.0" W.C.; Max 14.0" W.C. |
| Low NOx compliant (SCAQMD Rule 1146.2) | Yes |
| Electrical Requirement | 120 V/60 Hz AC, 2 Amps |
| Power Cord (Except Outdoor) | 10-foot, 3-pin indoor power cord (pre-installed) |
| Freeze Protection | Minus 30 degrees F (including windchill factor) |
| Controller/Diagnostic Display | UMC-117 |
| Electronic Manifold Ready? | Yes: 2 to 20 units (use MIC-180 Controller) |
| DUOnex™ Ready? | Yes: 2 units with DUOnex™ Cable |
| Gas Shutoff Valve | Included |
| Vent Requirement (Indoor/Direct Vent) | 4" Category III stainless steel venting required |
| Vent Maximum Length | 37.5 feet (with three 90-degree elbows) |
| Air Intake (Direct Vent) | 4" stainless steel, PVC or aluminum |
| Air Intake Maximum Length | 37.5 feet (with four 90-degree elbows) |
| Net Weight | 55 lbs. |

safety engineering

| | |
|------------------------------------|--|
| Carbon Monoxide Safety | ICAD™, our proprietary system to monitor and optimize combustion (Not on Outdoor version). |
| Heat Exchanger Overheat Protection | Overheat Limiter Wrap. Resin film that surrounds the heat exchanger. |
| Flame Failure | Three separate flame rods to monitor flame failure. |
| Anti-boil Protection | Temperature sensor |
| Anti-scald Protection | Bath Controller maximum temp 120 degrees F. When on, Bath Controller takes priority over others. While hot water running, Bath Controller max. temp. cannot be raised above 112 degrees F. |

features

- Continuous hot water on demand
- Energy-saving design
- Compact, and takes no floor space (wall-hung installation)
- Unmatched Safety Engineering
- Proprietary ICAD™ Safety System (on indoor model)
- Proprietary Film Wrap Overheat Limiter (on heat exchanger)
- Flame failure and anti-boil protection
- Freeze protection to minus 30 degrees F
- Built-in diagnostics and usage record
- Includes Digital Controller to set temperature and display diagnostics
- 180 degrees F maximum temperature
- Power Return: AUTO-ON at last setting after power interruption
- Low NOx emissions meet SCAQMD rule 1146 requirements
- Can be used in circulation systems up to 140 degrees F

accessories

- USC1-117 First Bath Controller
- USC2-117 Second Bath Controller
- DUOnex™ Cable for 2-unit system
- MIC-180 Controller for 2-to-6 unit systems
- MICS-180 expansion board allows 7-to-20 unit systems
- MIC Communication Cable in 16-foot, 32-foot and 65-foot lengths
- High Altitude Adjustment Chips
- Special vent terminations

in the box

- One Paloma Tankless unit
- One Digital Controller
- One gas shutoff valve
- Attached power cord (indoor models)
- Operating and Installation Manual

commercial warranty

- 3-Year Limited Warranty on Heat Exchanger
- 1-Year Limited Warranty on Parts

For more information, visit www.palomatankless.com

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