

Twister

Condensing Stainless Steel Water Heater

TWI 35-200/45-200

- Fully room-sealed condensing high-efficiency water heater (93% gross)
- Stainless steel tank; no anodes simplify maintenance
- Premix Low-NO_x burner saves the environment
- Whisper-quiet operating noise delivered by specially designed blower and burner
- Easy-to-use graphic LCD touchscreen display
- Plug-and-Play technology; connect air inlet, exhaust outlet, water, electricity, and gas, set the temperature and the system functions properly
- Quick and easy installation
- Full serviceability from the front

- Meets new emissions and efficiency requirements of 26/09/18

- Suitable for natural gas and propane
- Suitable for PP flue materials



Ecodesign specifications

| | | TWI 35-200 | TWI 45-200 |
|--------------------------------------|--------|------------|------------|
| Load Profil | - | XXL | XXL |
| Energy labeling | - | A | A |
| Efficiency | % | 93 | 91 |
| Annual Electricity Consumption (AEC) | kWh | 55 | 61 |
| Annual Fuel Consumption (AEC) | GJ GCV | 20 | 21 |
| Mixed Water of 40°C (according V40) | ltr. | ∞ | ∞ |
| Sound Power Level | dB | 63 | 69 |

Technical specifications

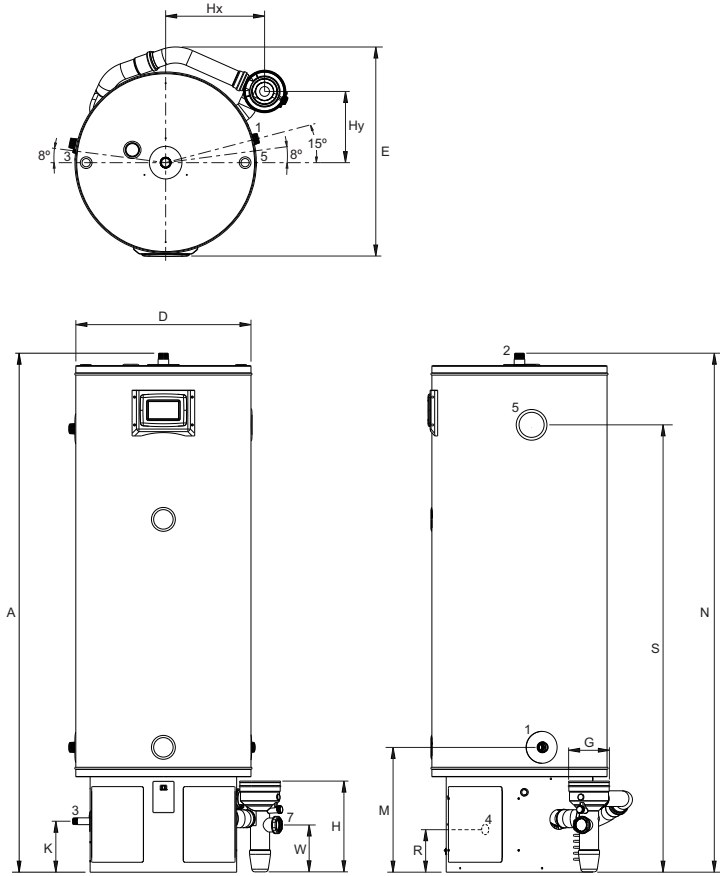
| | | TWI 35-200 | TWI 45-200 |
|--|-------------------|------------|------------|
| Gas data natural gas 2H (G20) | | | |
| Input* | kW | 37,8 | 48,9 |
| Output | kW | 34,9 | 45,1 |
| Inlet pressure | mbar | 20 | 20 |
| Gas consumption** | m ³ /h | 3,6 | 4,7 |
| Flue gas Temperature (nom) | °C | 65 | 75 |
| Nitrogen oxide emission (NO _x) | mg/kWh | 53 | 53 |
| Gas data propane 3P (G31) | | | |
| Input* | kW | 37,0 | 47,8 |
| Output | kW | 34,9 | 45,4 |
| Inlet pressure | mbar | 37 | 37 |
| Gas consumption** | m ³ /h | 2,6 | 3,4 |
| Flue gas Temperature (nom) | °C | 65 | 75 |
| Nitrogen oxide emission (NO _x) | mg/kWh | 61 | 61 |
| Gas data propane 3B/P (G30) | | | |
| Input* | kW | 41,7 | 53,9 |
| Output | kW | 39,5 | 51,3 |
| Inlet pressure | mbar | 30 | 30 |
| Gas consumption** | m ³ /h | 3,0 | 3,9 |
| Flue gas Temperature (nom) | °C | 65 | 75 |
| Nitrogen oxide emission (NO _x) | mg/kWh | 195 | 195 |
| General | | | |
| Net combustion efficiency | % | 93 | 93 |
| Weight (empty) | kg | 79 | 79 |
| Weight (full) | kg | 261 | 261 |
| Storage Capacity | ltr. | 182 | 182 |
| Max. thermostat setting | °C | 85 | 85 |
| Maximale werkdruk | kPa (bar) | 800 (8) | 800 (8) |
| Draw Off Capacity *** | | | |
| Tcold = 10°C / Tset=85°C | | | |
| 30 min. ΔT=28°C | l | 1200 | 1300 |
| 60 min. ΔT=28°C | l | 1700 | 2000 |
| 90 min. ΔT=28°C | l | 2300 | 2700 |
| 120 min. ΔT=28°C | l | 2800 | 3400 |
| Continuous ΔT=28°C | l/h | 1200 | 1500 |
| Heating-up time ΔT=28°C | min. | 12 | 9 |
| 30 min. ΔT=50°C | l | 560 | 620 |
| 60 min. ΔT=50°C | l | 870 | 1100 |
| 90 min. ΔT=50°C | l | 1200 | 1500 |
| 120 min. ΔT=50°C | l | 1500 | 1900 |
| Continuous ΔT=50°C | l/h | 620 | 800 |
| Heating-up time ΔT=50°C | min. | 18 | 14 |
| 30 min. ΔT=70°C | l | 320 | 370 |
| 60 min. ΔT=70°C | l | 540 | 660 |
| 90 min. ΔT=70°C | l | 760 | 940 |
| 120 min. ΔT=70°C | l | 980 | 1300 |
| Continuous ΔT=70°C | l/h | 450 | 570 |
| Heating-up time ΔT=70°C | min. | 23 | 18 |
| Shipping data | | | |
| Weight incl. packaging | kg | 97 | 97 |
| Height packaging | mm | 1750 | 1750 |
| Width packaging | mm | 780 | 780 |
| Depth packaging | mm | 870 | 870 |

* Gas data on gross value

** Gas consumption at 15°C and 1013.25 mbar

*** Based on NAT-gas

Dimensions

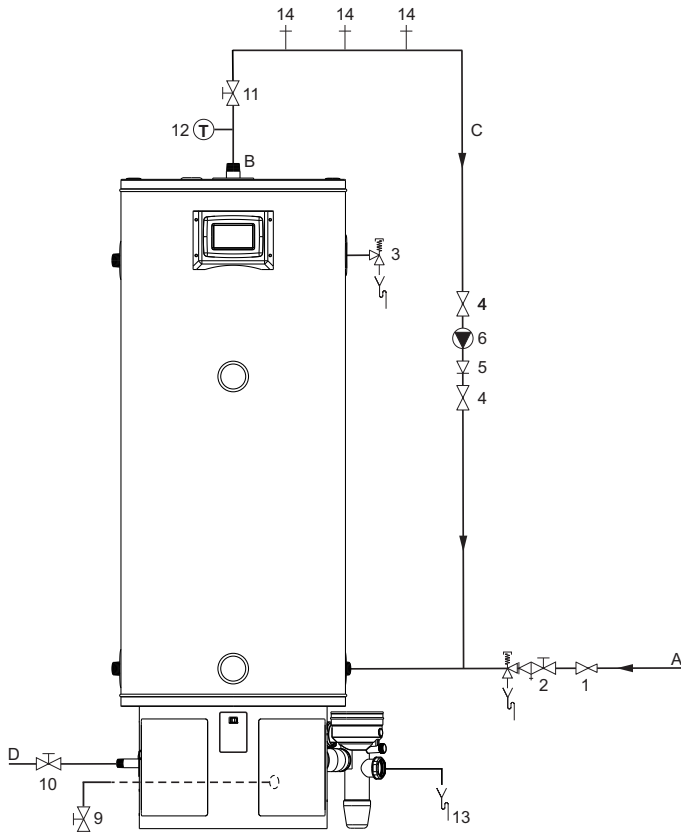


IMD-1349a R0

| | | TWI 35-200 | TWI 45-200 |
|--------------------------|--|------------|------------|
| A | Device height (total height) | 1655 | 1655 |
| D | Device diameter | 560 | 560 |
| E | Device depth | 660 | 660 |
| G | Air intake/Flue gas outlet \varnothing | 125/80 | 125/80 |
| H | Height air intake / Flue gas outlet | 300 | 300 |
| K | Height gas connection | 170 | 170 |
| M | Height cold water supply connection | 400 | 400 |
| N | Height hot water outlet connection | 1655 | 1655 |
| R | Height drain valve connection | 200 | 200 |
| S | Height T&P-valve connection | 1420 | 1420 |
| W | Height condensate outlet connection / siphon | 160 | 160 |
| 1 | Cold water supply connection (male) | 1" | 1" |
| 2 | Hot water outlet connection (male) | 1" | 1" |
| 3 | Gas control valve connection (male) | 3/4" | 3/4" |
| 4 | Drain valve connection (male) | 3/4" | 3/4" |
| 5 | T&P-valve connection (female) | 3/4" | 3/4" |
| 7 | Condensate outlet connection (female) | 40 | 40 |
| <i>Dimensions in mm.</i> | | | |



Installation diagram



IMD-1351 R0

- 1 Pressure reduction valve
- 2 Inlet security group
- 3 T&P-valve
- 4 Isolation valve
- 5 1 way Valve
- 6 Circulation pump
- 9 Drain valve
- 10 Gas valve
- 11 Service valve
- 12 Temperature gauge
- 13 Condensate drain
- 14 Hot water taps

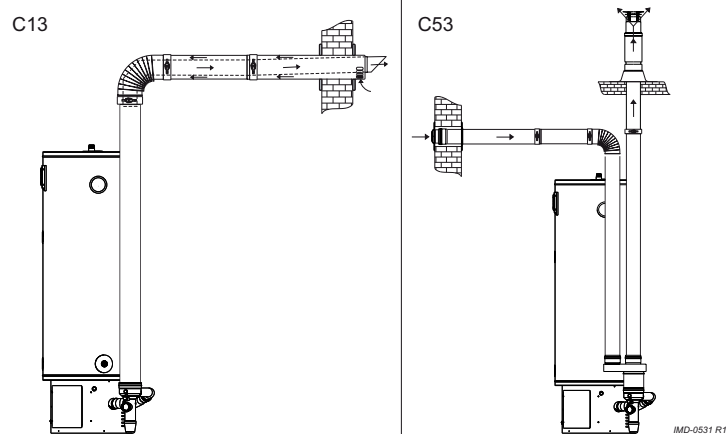
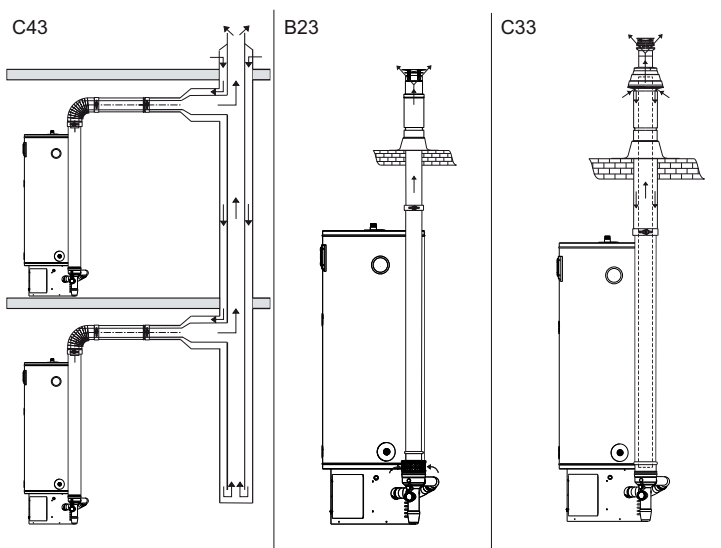
- A Cold water connection
 B Hot water connection
 C Circulation connection
 D Gas connection

A.O. Smith unvented system kits utilise combination valves. In the instruction manual you will find all the necessary information regarding connection, installation and maintenance of the product; including information on the electrical connections.

Information regarding the recycling or disposal of the product can also be found in the manual. This manual is delivered with the appliance and can also be found on our website; www.aosmith.it.

Installation options

| | TWI 35-200 | TWI 45-200 |
|-------------------------------------|------------|------------|
| Concentric | | |
| Diameter (mm) | 80/125 | 80/125 |
| Max. length (m) | 20 | 20 |
| Max. 45/90° bends | 5 | 5 |
| Parallel (standard diameter) | | |
| Diameter (mm) | 80 | 80 |
| Max. length (m) | 50 | 50 |
| Lequivalent/bend 90° (m) | 3.9 | 3.9 |
| Lequivalent/bend 45° (m) | 1.1 | 1.1 |



Further information on the flue gas discharge materials can be found in the Installation & Commissioning Manual.

| CONCENTRIC SYSTEM (80/125MM) | | |
|--|-------------------------|-----------------|
| | PP | ALU |
| Roof Duct Set (Incl. roof flue terminal, 1000mm tube, mounting flange) | 0310755 | 0305042 |
| Roof Duct | 0310753 | 0304983 |
| Wall Duct Set (Incl. wall flue terminal, 500mm tube, bend 90°) | 0310759 | 0302515 |
| Wall Duct | 0310757 | 0302516 |
| Wall Flue Terminal Plate | 0310761 | - |
| Pipe concentric | L = 250 mm | 0310740 - |
| | L = 500 mm | - 0302510 |
| | L = 1000 mm | 0310742 0311448 |
| | L = 1500 mm | - 0311449 |
| | L = 2000 mm | 0310743 - |
| | Telescopic (280-395mm)* | 0310744 - |
| Bend | Cut to length | 0310745 - |
| | Angle = 45° | 0310734 0302514 |
| | Angle = 90° | 0310735 0302513 |

| PARALLEL SYSTEM (80/80MM) | | |
|--|-------------------------|-----------------|
| | PP | ALU |
| Adapter PP/Alu 80/125 --> 2x 80 mm | 0312209 | 0312209 |
| Roof Duct Set (Incl. roof flue terminal, 1000mm tube, mounting flange) | 0310712 | - |
| Roof duct (incl. adapter - par. to conc.) | 0310708 | 0305041 |
| Wall Duct Set (Incl. wall flue terminal, 500mm tube, bend 90°) | 0310730 | - |
| Wall duct (incl. adapter - par. to conc.) | 0310728 | 0305016 |
| Pipe | L = 250 mm | 0310718 - |
| | L = 500 mm | 0310719 0307179 |
| | L = 1000 mm | 0310720 0307180 |
| | L = 1500 mm | - 0307181 |
| | L = 2000 mm | 0310721 - |
| | Telescopic (240-360mm)* | 0310722 - |
| Bend | Angle = 45° | 0310701 0307182 |
| | Angle = 90° | 0310702 0307183 |
| Bend with support | 0310703 | - |
| Strip for bend with support | 0310690 | - |

| B23 SYSTEM | |
|---------------------------|---------|
| Air inlet basket 80/125mm | 0305030 |

* Use this component to connect the air intake and the flue to the boiler.