

# 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-NOx 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

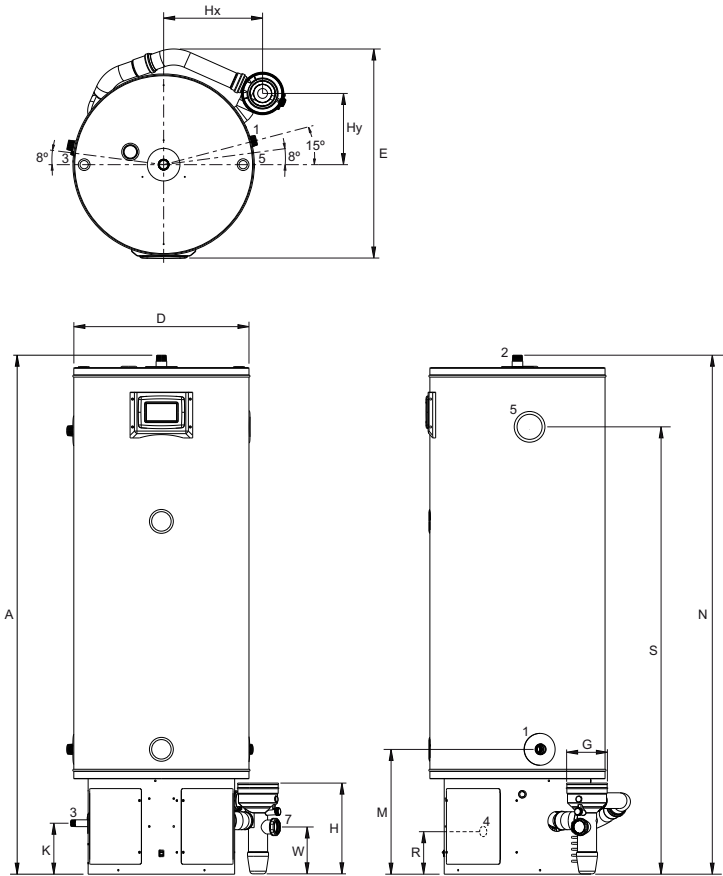
		TWI 35-200	TWI 45-200
Gas data natural gas 2H (G20)			
Input*	kW	38,9	50,0
Output	kW	35,9	46,2
Inlet pressure	mbar	20	20
Gas consumption**	m³/h	3,7	4,8
Flue gas Temperature (nom)	°C	65	75
Nitrogen oxide emission (NOx)	mg/kWh	53	53
Gas data propane 3P (G31)			
Input*	kW	38,0	48,9
Output	kW	35,9	46,4
Inlet pressure	mbar	37	37
Gas consumption**	m³/h	2,7	3,5
Flue gas Temperature (nom)	°C	65	75
Nitrogen oxide emission (NOx)	mg/kWh	61	61
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

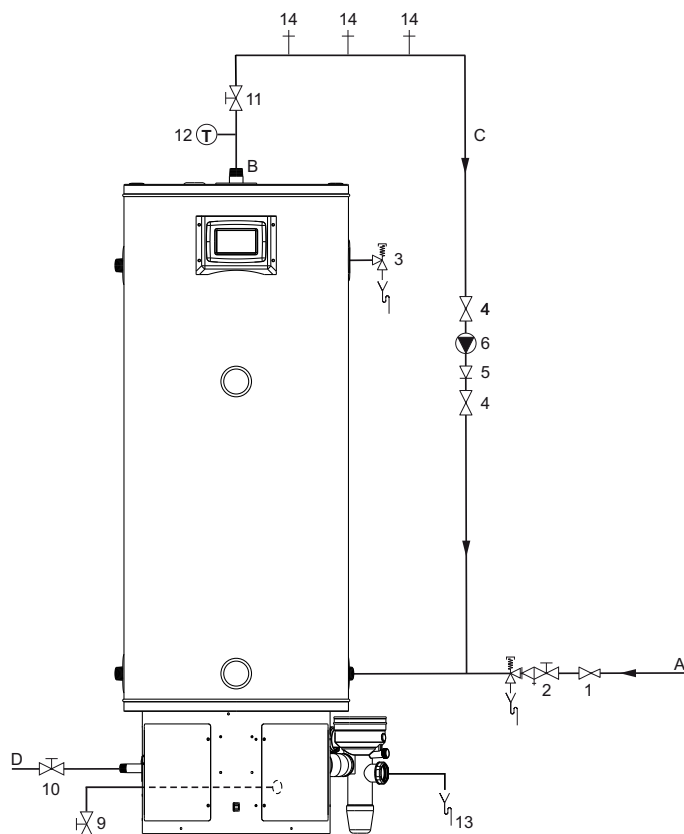


IMD-1349a R0

		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 Ø	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 (male)	3/4"	3/4"
7	Condensate outlet connection (female)	40	40
Dimensions in mm.			



# 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

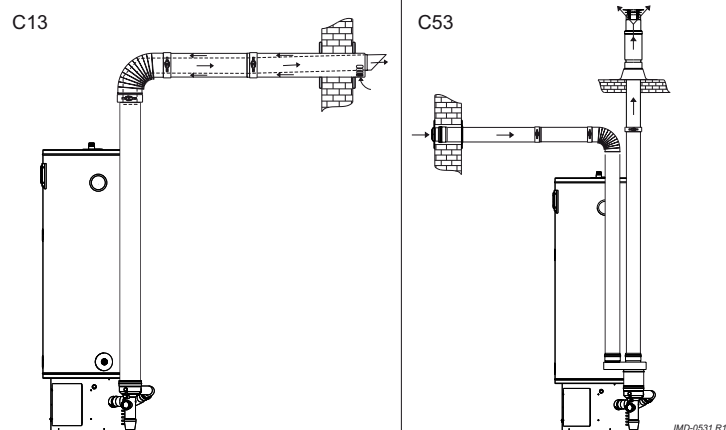
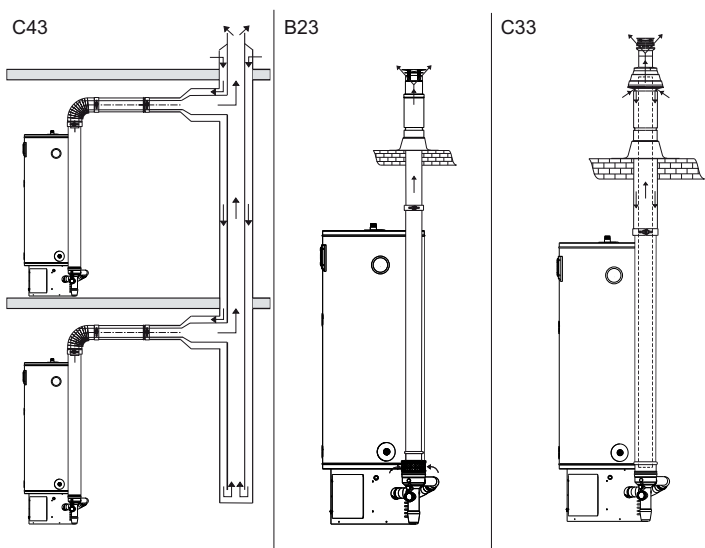
- A Cold water connection
- B Hot water connection
- C Circulation connection
- D Gas connection

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.pt](http://www.aosmith.pt).

# Installation options

	TWI 35-200	TWI 45-200
<b>Concentric</b>		
Diameter (mm)	80/125	80/125
Max. length (m)	20	20
Max. 45/90° bends	5	5
<b>Parallel (standard diameter)</b>		
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	-
	L = 1000 mm	0310742
	L = 1500 mm	-
	L = 2000 mm	0310743
	Telescopic (280-395mm)*	0310744
Bend	Cut to length	0310745
	Angle = 45°	0310734
	Angle = 90°	0310735

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
	L = 1000 mm	0310720
	L = 1500 mm	-
	L = 2000 mm	0310721
	Telescopic (240-360mm)*	0310722
Bend	Angle = 45°	0310701
	Angle = 90°	0310702
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.