

EES

Electrical residential / light commercial water heater

EES - 6/15/20/30/40/52/66/80/120

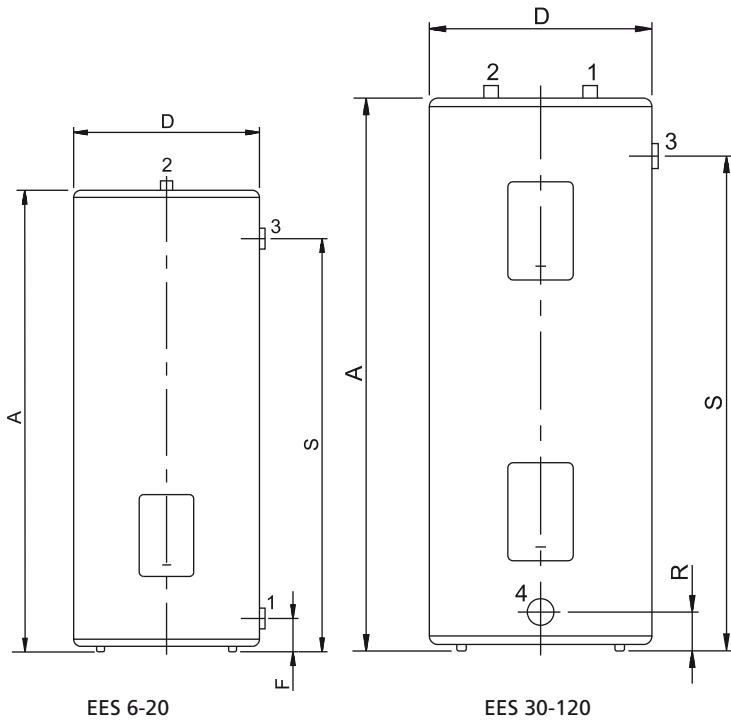


Vertical electric water heater for residential / light commercial applications • One or two replaceable Incoloy-sheathed elements (depending on the model) • Each element is provided with an independent control thermostat (adjustable: 43 - 77 °C) • Secondary protection is provided by a high-limit thermostat with manual reset • PermaGlas® Ultra Coat™ second-generation glass coating technology to prevent corrosion • Replaceable magnesium anode • Optional ancillaries: Unvented kits • Destratification pump kit • Powered anodes • Time controller • Alternate kW loadings

Technical specifications

		EES 6	EES 15	EES 20	EES 30	EES 40	EES 52	EES 66	EES 80	EES 120
Electrical data										
Input	kW	2.0	2.0	2.0	3.0	3.0	3.0	3.0	3.0	3.0
Current	A	8	8	8	8	8	8	8	8	8
Elements	-	1	1	1	2	2	2	2	2	2
Power supply	VAC/Hz	230 Vac (-15/+10%)/50 Hz (+/-1Hz)								
Draw-off capacity										
Storage capacity	l	25	55	75	115	155	190	250	300	450
Max. temperature setting	°C	77	77	77	77	77	77	77	77	77
30 min. $\Delta T=44^{\circ}\text{C}$	l	41	70	89	136	174	208	265	313	456
60 min. $\Delta T=44^{\circ}\text{C}$	l	61	90	109	165	204	237	294	342	485
90 min. $\Delta T=44^{\circ}\text{C}$	l	81	109	128	195	233	266	324	371	515
120 min. $\Delta T=44^{\circ}\text{C}$	l	100	129	148	224	262	296	353	401	544
Continuous $\Delta T=44^{\circ}\text{C}$	l/h	39	39	39	59	59	59	59	59	59
Heating-up time $\Delta T=44^{\circ}\text{C}$	min.	38	84	115	118	159	194	256	307	460
30 min. $\Delta T=50^{\circ}\text{C}$	l	36	62	78	120	153	183	233	275	401
60 min. $\Delta T=50^{\circ}\text{C}$	l	54	79	96	146	179	209	259	301	427
90 min. $\Delta T=50^{\circ}\text{C}$	l	71	96	113	171	205	234	285	327	453
120 min. $\Delta T=50^{\circ}\text{C}$	l	88	113	130	197	231	260	311	353	479
Continuous $\Delta T=50^{\circ}\text{C}$	l/h	34	34	34	52	52	52	52	52	52
Heating-up time $\Delta T=50^{\circ}\text{C}$	min.	44	96	131	134	180	221	291	349	523
30 min. $\Delta T=55^{\circ}\text{C}$	l	33	56	71	109	139	166	212	250	365
60 min. $\Delta T=55^{\circ}\text{C}$	l	49	72	87	132	163	190	235	274	388
90 min. $\Delta T=55^{\circ}\text{C}$	l	64	87	103	156	186	213	259	297	412
120 min. $\Delta T=55^{\circ}\text{C}$	l	80	103	118	179	210	237	282	321	435
Continuous $\Delta T=55^{\circ}\text{C}$	l/h	31	31	31	47	47	47	47	47	47
Heating-up time $\Delta T=55^{\circ}\text{C}$	min.	48	106	144	147	198	243	320	384	576
General										
Anodes	-	1								
Maximum working pressure	bar	8								
Maximum weight	kg	38	76	102	151	198	238	314	380	575
Shipping data										
Weight empty	kg	13	21	27	36	43	48	64	80	125
Weight incl. packaging	kg	14	23	30	42	49	55	72	90	137
Width packaging	mm	420	420	520	580	580	580	620	680	770
Height packaging	mm	430	870	870	1000	1190	1440	1600	1620	1710
Depth packaging	mm	420	420	520	650	650	650	680	740	840

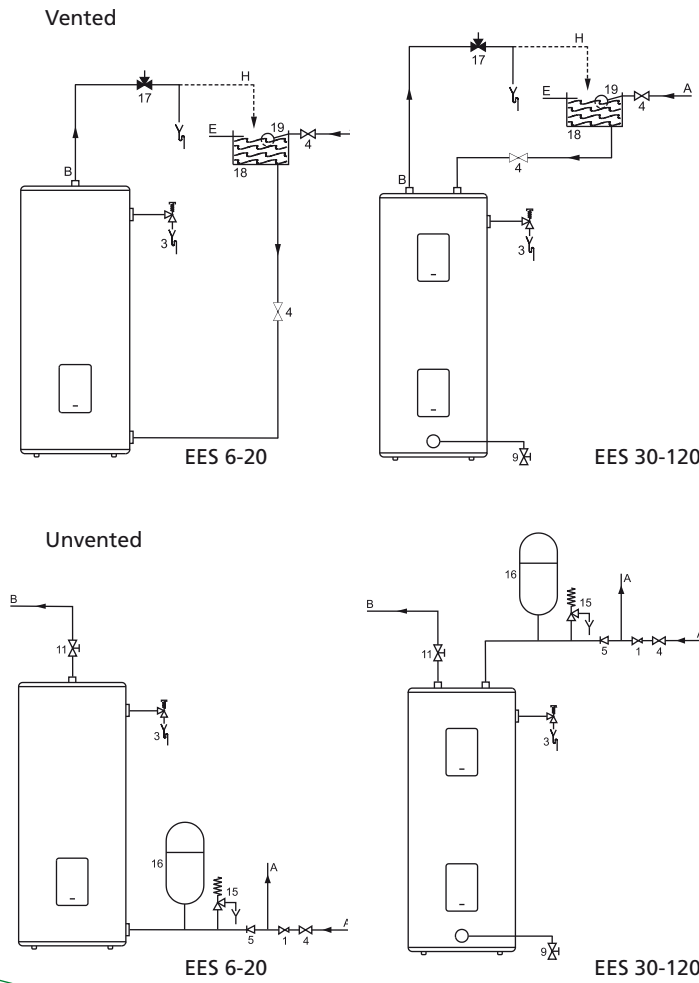
Dimensions



	EES 6	EES 15	EES 20	EES 30	EES 40	EES 52	EES 66	EES 80	EES 120
A	400	825	820	930	1110	1370	1530	1540	1620
D	360	360	460	520	520	520	560	610	710
F	75	75	75	930	1110	1370	1530	1540	1620
R	-	-	100	110	110	110	110	110	110
S	270	700	680	730	970	1210	1360	1330	1385
1	Cold water			3/4-14 NPT					
2	Hot water			3/4-14 NPT					
3	T&P valve			3/4-14 NPT					
4	Tank drain valve			3/4-14 NPT (n/a for EES 6/15/20)					

Dimensions in mm. All EES water heaters receive a five years warranty on the tank and one year on parts.

Installation diagrams



- 1 Pressure reducing valve
- 3 T&P valve
- 4 Stop valve
- 5 Non-return valve
- 9 Drain valve
- 11 Isolating valve
- 15 Expansion relief valve
- 16 Expansion vessel
- 17 Three way valve
- 18 Water tank
- 19 Float valve

- A Cold water
- B Hot water
- E Overflow pipe
- H Expansion vent pipe

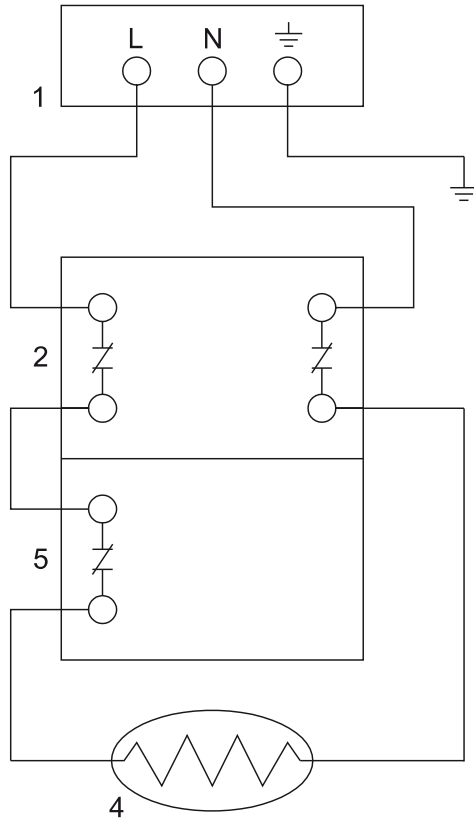
A.O. Smith unvented system kits utilise combination valves.

Further installation and connection details can be found in the Installation & Commissioning Manual.



Electrical diagrams

EES 6-20



- 1 Standard electrical supply
- 2 Safety thermostat
- 3 Control thermostat with selector switch
- 4 Heating elements
- 5 Control thermostat
- 6 Off peak electrical supply

For the parts numbers of components please refer to the "Maintenance and accessories" chapter.

EES 30-120

