

DRE Plus

Electric industrial water heater

DRE Plus - 52/80

- Powerful electric water heater that produces large amounts of hot water in a short time
- DWH capacity from 339 to 1132 litres/hour at 50°C depending on the chosen appliance
- Capacity: 173 – 264 litres
- Because the unit has an external on/off function, you can control when to use external power supply. For example when you have supply from your PV panels
- 3 to 9 incoloy heating elements with a maximum output of 50.4 kW
- Cascade control of the heating elements allows a more even and responsive heating of the water
- All elements and thermostats are fuse-protected
- PermaGlas Ultra Coat second-generation glass coating technology helps to prevent corrosion
- The appliance can be adjusted according to DHW needs via the display, so that the appliance can function as energy-efficiently as possible
- Thanks to the enameled elements, the exchangeable magnesium anode is less stressed
- Targeted maintenance possible thanks to the display of the exact fault diagnosis on the elements



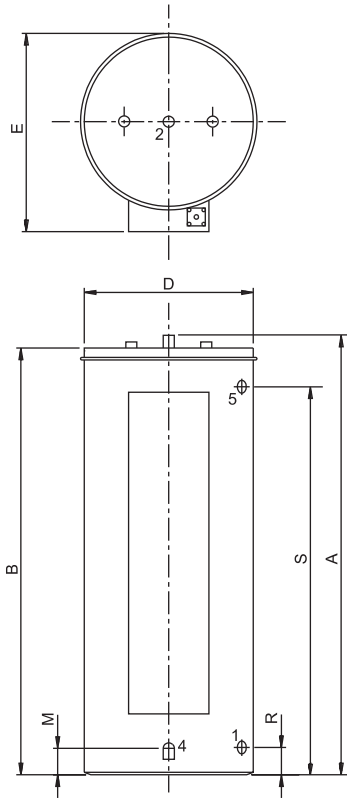
Technical specifications

		DRE Plus 52-9	DRE Plus 52-18	DRE Plus 52-36	DRE Plus 80-9	DRE Plus 80-18	DRE Plus 80-36	DRE Plus 80-54
Electrical data								
Input	kW	8,4	16,8	33,6	8,4	16,8	33,6	50,4
Current	A	12	24	49	12	24	49	73
Elements	-	3	3	6	3	3	6	9
Power supply	VAC/Hz	400(-15/+10%)/50 (± 1 Hz)						
General								
Weight empty	kg	78			110			
Maximum weight	kg	246			374			
Storage capacity	l	173			264			
Max. temperature setting	°C	83			83			
Maximum working pressure	kPa (bar)	800 (8)			800 (8)			
Draw-off capacity								
Tcold = 10°C / Tset = Tmax								
30 min. ΔT=44°C	l	310	380	530	430	500	650	800
60 min. ΔT=44°C	l	390	550	860	510	670	980	1300
90 min. ΔT=44°C	l	470	710	1200	590	830	1400	1800
120 min. ΔT=44°C	l	550	880	1600	680	1000	1700	2300
Continuous ΔT=44°C	l/h	170	330	660	170	330	660	990
Heating-up time ΔT=44°C	min.	63	32	16	96	48	24	16
30 min. ΔT=50°C	l	270	340	470	380	440	570	700
60 min. ΔT=50°C	l	340	480	760	450	590	860	1200
90 min. ΔT=50°C	l	420	630	1100	520	730	1200	1600
120 min. ΔT=50°C	l	490	770	1400	600	880	1500	2000
Continuous ΔT=50°C	l/h	150	290	580	150	290	580	870
Heating-up time ΔT=50°C	min.	72	36	18	110	55	27	18
30 min. ΔT=55°C	l	250	310	430	340	400	520	640
60 min. ΔT=55°C	l	310	440	690	410	530	780	1100
90 min. ΔT=55°C	l	380	570	950	480	670	1100	1500
120 min. ΔT=55°C	l	440	700	1300	540	800	1400	1900
Continuous ΔT=55°C	l/h	140	270	530	140	270	530	790
Heating-up time ΔT=55°C	min.	79	40	20	121	60	30	20
Shipping data								
Weight incl. packaging	kg	86			125			
Width packaging	mm	680			770			
Height packaging	mm	1570			1690			
Depth packaging	mm	810			920			

Ecodesign specifications

		DRE Plus 52-9	DRE Plus 52-18	DRE Plus 52-36	DRE Plus 80-9	DRE Plus 80-18	DRE Plus 80-36	DRE Plus 80-54
Load Profil	-	XL	XL	XL	XL	XL	XL	XL
Energy labeling	-	C	C	C	C	C	C	C
Efficiency	%	38,0	38,5	38,7	38,0	38,5	39,1	38,1
Annual Electricity Consumption (AEC)	kWh	4412	4352	4329	4403	4350	4290	4394
Daily Electricity Consumption	kWh	20.161	20.161	20.161	20.120	20.120	20.120	20.120
Annual Fuel Consumption (AEC)	GJ GCV	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Daily Fuel Consumption	kWh GCV	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nitrogen Dioxide Emission (NO2)	mg/kWh GCV	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mixed Water of 40°C (according V40)	ltr.	270	270	270	460	430	430	430
Sound Power Level	dB	15	15	15	15	15	15	15

Dimensions

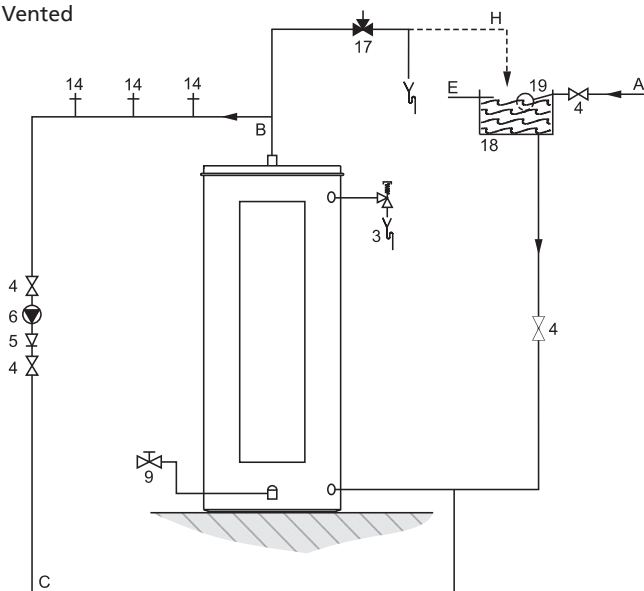


	DRE Plus 52	DRE Plus 80
A	1460	1580
B	1420	1540
D	560	640
E	690	790
M	125	125
R	125	125
S	1230	1335
1	1.25 - 14 NPT	
2	1.25 - 14 NPT	
4	0.75 - 14 NPT	
5	0.75 - 14 NPT	
6	RP 0.75	

Dimensions in mm.

Installation diagram

Vented

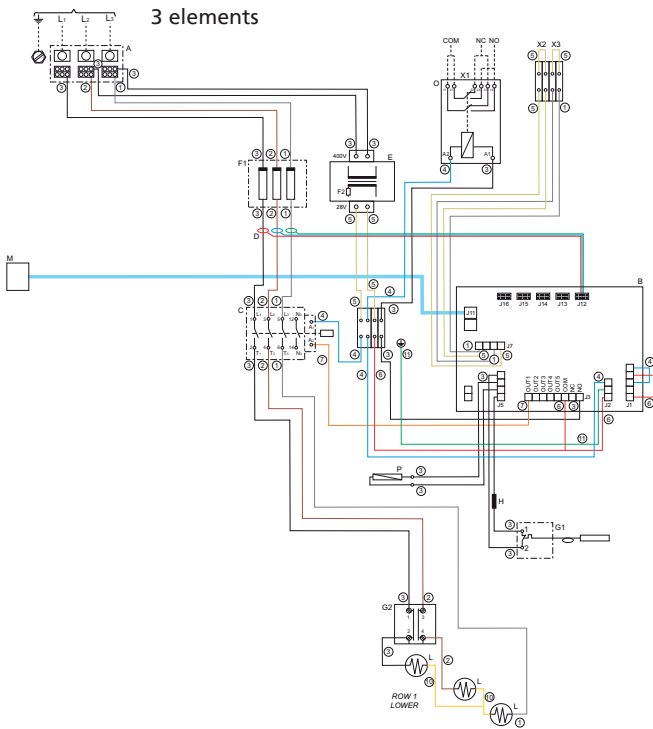


- 1 Pressure reducing valve
- 2 Inlet security group
- 3 T&P valve
- 4 Stop valve
- 5 Non-return valve
- 6 Circulation pump
- 9 Drain valve
- 14 Hot water tap

- A Cold water supply
B Hot water outlet
C Circulation pipe

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

Electrical diagrams



- | | | | |
|----|--------------------------------------|----|-------------------------|
| A | Mains connection | 1 | Brown |
| B | Control | 2 | Black |
| C | Relays | 3 | Gray |
| D | Element current sensors | 4 | Blue |
| E | Transformer 400-28VAC | 5 | White |
| F1 | Element fuse (gG 400VAC/32A) | 6 | Red |
| F2 | Transformer fuse (T1AL250) | 7 | Orange |
| G1 | Main safety thermostat | 8 | Pink |
| G2 | Bank safety thermostat | 9 | Purple |
| H | Thermal fuse | 10 | Yellow |
| L | Electric heating element | 11 | Yellow/Green |
| M | Display | | |
| O | Alarm relay (SPDT - 250VAC/10A max.) | | |
| P | Temperature sensor | | |
| ⊥ | Earth | X1 | Alarm relay output |
| L1 | Phase 1 input | X2 | External on/off input 1 |
| L2 | Phase 2 input | X3 | External on/off input 2 |
| L3 | Phase 3 input | | |

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.aosmithinternational.com.

