

DATA SHEET

## PremierPlus Solar Direct

### UNVENTED HOT WATER CYLINDER

The Heatrae Sadia PremierPlus Solar Direct is an environmentally friendly and efficient way of providing domestic hot water. Unlike some other 'twin coil' cylinders which simply use heating coils designed for traditional boiler heated cylinders, PremierPlus Solar Direct cylinders have a purpose designed solar heating coil at the base of the cylinder, which ensures maximum heat input and efficiency from the solar energy.

PremierPlus Solar Direct is available in a choice of capacities from 170 to 300 litres.

<b>50</b> mm	<b>170-300</b> Litres	Up to <b>6kW</b>	<b>24</b> Litre
INSULATION	NOMINAL CAPACITIES	IMMERSION HEATER	EXPANSION VESSEL



#### FEATURES

High performance solar coil

50mm insulation

Provided with high grade immersion heaters

High grade duplex stainless steel

#### BENEFITS

Maximises solar thermal energy capture

Low heat loss from the cylinder

Allows for auxiliary heat input

High corrosion resistance for long life

# PremierPlus Solar Direct

## UNVENTED HOT WATER CYLINDER

### TECHNICAL SPECIFICATION

Model	170SD	210SD	260SD	300SD
<b>Product code</b>	<b>94:050:818</b>	<b>94:050:819</b>	<b>94:050:820</b>	<b>94:050:821</b>
Nominal Capacity (litres)	170	210	260	300
Auxiliary volume	120	140	170	200
Expansion vessel (litres)	24	24	24	24
Insulation thickness (mm)	50	50	50	50
Immersion heater rating (kW)	1 x 3	2 x 3	2 x 3	2 x 3
Weight empty (kg)	35.5	42.5	58	61.5
Weight full (kg)	210	259	308	362
Solar coil surface area (m <sup>2</sup> )	1.1	1.1	1.1	1.1
Standing heat loss (kWh/24)	1.51	1.91	2.03	2.36
Heat up time lower (3kw) (mins)	126	147	178	210
T&P tapping	½"	½"	½"	½"
T&P pressure setting (bar)	10	10	10	10
T&P temperature sensor (°C)	90	90	90	90
Expansion relief setting (bar)	6	6	6	6
<b>Potable Water Expansion Vessel</b>				
Nominal Capacity (litres)	24	24	24	24
Pre-set pressure (bar)	3.5	3.5	3.5	3.5
Connection (mbsp)	¾"	¾"	¾"	¾"

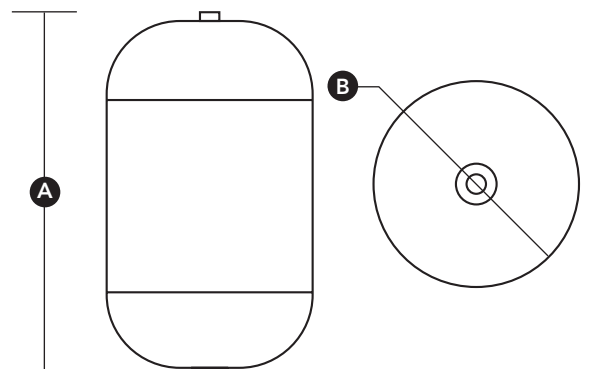
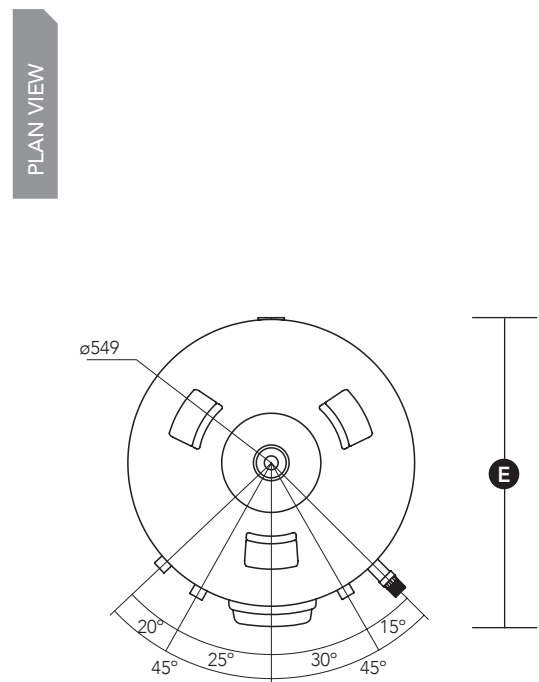
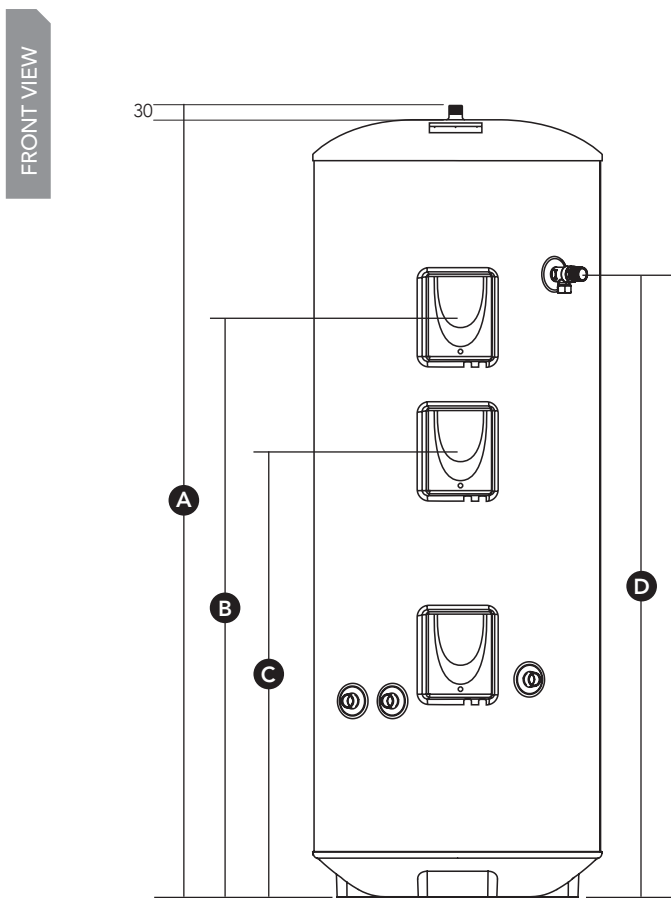
### ERP TECHNICAL DATA

ErP rating	C	C	C	C
Mixed water at 40°C V40 (litres)	105.7	205.3	258.5	279.5
Declared load profile	M	L	L	L
Water heating energy efficiency class of the model	C	C	C	C
Water heating energy efficiency (%)	37.4	37.7	38.9	38.0
Annual electricity consumption (kWh)	1373	2716	2632	2697
Thermostat temperature settings of the water heater, as placed on the market by the supplier (°C)	60	60	60	60

A range of solar collectors and accessories are available through Heatrae Sadia, visit [heatraesadia.com](http://heatraesadia.com) for further details.

## DIMENSIONS

Model	170SD	210SD	260SD	300SD
A Height (mm)	1221	1473	1792	2038
B Auxiliary Element (mm)	n/a	1099	1384	1624
C Back Up Element (mm)	808	808	905	999
D T&P Valve (mm)	925	1183	1498	1749
<b>Potable Water Expansion Vessel</b>				
A Height (mm)	492	492	492	492
B Diameter (mm)	280	280	280	280



## CODES OF PRACTICE/LEGISLATION

### EU Directives:

- Pressure Equipment Directive 97/23/EC.
- Low Voltage Directive (LVD) 2014/30/EU.
- Electromagnetic Compatibility (EMC) Directive 2014/35/EU.
- RoHS (Restriction of use of certain Hazardous Substances) Directive 2011/65/EU.

### Legislation:

- Building Regulations Part G and Part L (England and Wales).
- Scottish Building Standards Section 4 and Section 6.
- Building Regulations (Northern Ireland) Parts F1 and F2 and Part P.
- Water Supply (Water Fittings) Regulations (England and Wales).
- The Water Byelaws 2004 (Scotland).
- Water Supply (Water Fittings) Regulations (Northern Ireland).

### Standards:

- Relevant clauses of the following standards are complied with:
- EN 12897 - Specification for indirectly heated unvented cylinders.
- EN 60335-1 Safety-Particular requirements for storage water heaters.
- EN 60335-2 Safety-Particular requirements for storage water heaters.

### The stainless steel materials used comply with the relevant clauses of:

- EN 10088 - Technical delivery conditions for sheet/plate and strip of corrosion resisting steels for general purposes.

### Components supplied comply with the following standards:

- BS EN 1490 Building Valves - Combined Temperature and Pressure Relief Valves.
- BS EN 1491 Building Valves - Expansion Valves.
- BS 6144 Specification for Expansion Vessels Using An Internal Diaphragm

### For Unvented Water Supply Systems.

- BS EN 1567 Building Valves - Water Pressure Reducing Valves and Combination

### Reducing Valves.

- BS EN 60730-1 Automatic Electrical Controls - For households and similar use.

### Part 1: General Requirements.

- BS EN 60730-2-8 Automatic Electrical Controls - Particular Requirements for Electrically Operated Water Valves.
- BS EN 13959 Anti-pollution Check Valves.

### The use of these water heaters will aid in compliance with:

- Health and Safety Executive Approved Code of Practice L8: The control of legionella bacteria in water systems.
- BS EN 806 Parts 1 to 5: Specification for installations inside buildings conveying water for human consumption.
- BS 8558 Guide to the design, installation, testing and maintenance of services supplying water for domestic use within buildings.
- Chartered Institute of Building Services Engineers Guide B and Guide F.

### Manufactured in a factory approved to:

- BS EN ISO 9001
- OHSAS 18001
- ISO 14001
- ISO 50001

### PremierPlus Solar Direct approvals:

- Kiwa Certification Number: 1207700
- Nemko Certification Number: P12215506



For more information  
01603 420220 | enquiries@heatraesadia.com  
[www.heatraesadia.com](http://www.heatraesadia.com)



Please recycle this product once you have finished with it

Issue 2  
© Heatrae Sadia 2017

Heatrae Sadia, Hurricane Way, Norfolk, NR6 6EA

HEATRAE SADIA may introduce modifications to their products from time to time. Consequentially the details given in this data sheet are subject to alteration without notice.