



Solar Thermal. An informed choice



Solar Hot Water Heating

The Ariston SOLARcomfort system has three main components: solar panels, pump station and solar controller. In addition the system requires a hot water storage cylinder. Ariston supplies a stainless steel, twin coil unvented cylinder (Primo Twin), giving a complete solar package from a single source.

The solar panels absorb the heat from the sun's rays and use this to heat the heat transfer medium (a mixture of water and glycol). The fluid is circulated by a pump, the operation of which is controlled by the solar controller.

The heated fluid circulates around a heat exchanger in the hot water storage cylinder. The Ariston Primo Twin has two heat exchangers (coils). The lower coil is heated by the solar circuit and the upper coil by an auxiliary heat source (typically a gas, oil or electric system boiler).



Ariston is offering SOLARcomfort in a range of 4 distinct packages: 'On-tile' – 2 panel or 3 panel systems and 'Flat Roof/Ground' – 2 panel or 3 panel systems. Each system can be connected to an Ariston Primo Twin Coil Cylinder (200l for 2 panels and 300l for 3 panels); giving a complete solution from a single source.

Solar Panels

The solar panels (collectors) can be mounted on either a sloping or flat roof or the ground.

The roof mounting system has been specifically designed for UK roofs. The inherently flexible fixing kit is supplied as standard with the panels. It removes the need to select and purchase additional roof fixings.

The flat roof/ground frame is easy to assemble and extremely rigid.

Whichever option is selected, you can be assured of a system which will last for many, many years.



Solar Controller

The differential temperature solar controller is simple to install and operate, with pleasing aesthetics. It is the 'brains' of the system and ensures effective operation and control of the pump. The illuminated digital display shows the current status of the system and the current temperatures in both the solar panels and the hot water store.

The householder can easily see how the system is operating and with an optional, additional sensor see how much energy has been saved.

Renewable energy for domestic hot water



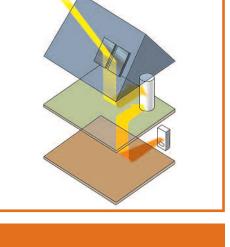
Pump Station

The pump station circulates the water/glycol fluid around the solar circuit. The pump will only operate when there is sufficient heat in the panels to raise the temperature of the water in the cylinder. The pump will not operate when the cylinder is at its preset temperature, or when to do so would result in the cylinder being cooled.

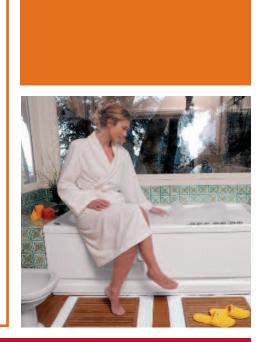
The compact design of the pump station allows it to be easily and quickly fitted in small spaces.

Primo Twin

The Primo Twin stainless steel, unvented cylinders are designed to complement SOLARcomfort. The cylinders are unique to the UK in that they have not only two coils but also two immersion heaters, making them suitable for all types of auxiliary heating. The 200l cylinder and 2 panel system is designed for 3-4 person households and the 300l and 3 panel system is designed for larger households.







SOLAR*COMfort* Benefits

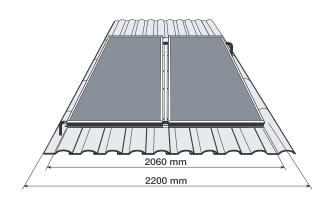
- A complete, fully integrated solar thermal package from the world's leading manufacturer of hot water heating systems
- High quality, high efficiency panels
- Flexible and easily installed roof mounting system
- Optional flat roof/ground fixing frame
- Easy to install and commission solar controller
- On-site, nationwide guarantee support

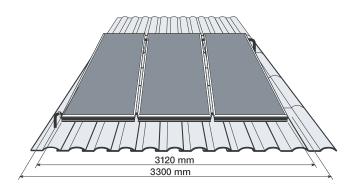
SOLARCOMFORT 2 & 3 PANEL



System Components

		2 PANEL ON-TILE	3 PANEL ON-TILE	
Solar Collectors	Qty	2	3	
Roof Fixing Kit	Qty	1	1	
Pump Station	Qty	1	1	
Automatic Air Vent	Qty	1	1	
Isolating Valve	Qty	1	1	
Flow Limiting Valve	Qty	1	1	
20 Litres of Glycol	Qty	1	1	
Solar Controller (plus 3 sensors)	Qty	1	1	
Solar Panel connection kit	Qty	1	1	
Expansion Vessel (25L)	Qty	1	1	
Flexible pipe connections	Qty	2	2	
PRODUCT CODE		3820009	3820010	

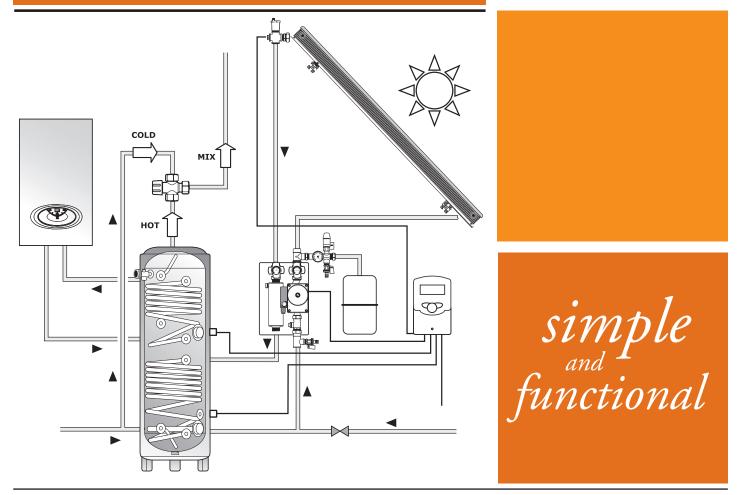




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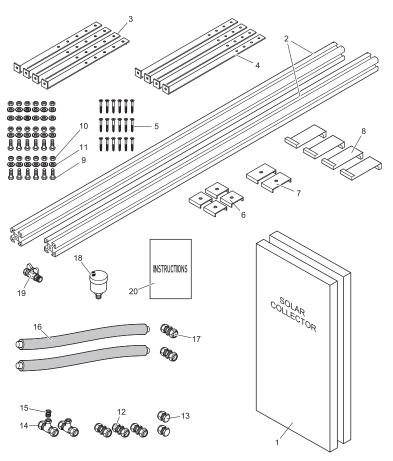
INSTALLATION SCHEME

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Component List

		2 PANEL ON-TILE	3 PANEL ON-TILE
1.	Solar Collector 1000 x 2000	2	2
2.	Support Rails	2	2
3.	Short Fixing Straps	4	6
4.	Long Fixing Straps	4	6
5.	Strap Fixing Screws Ø6 x 50 (No.12 x	2") 12	18
6.	Outer Clamps (short)	4	4
7.	Inner Clamps (long)	2	4
8.	Collector Bottom Brackets	4	6
9.	M8 x 25 Hex Stainless Steel Bolts	12	16
10.	M8 Hex Stainless Steel Nuts	18	24
11.	M8 Stainless Steel Washers	24	34
12.	Compression Coupling 22mm	3	5
13.	Compression Stop End 22mm	2	2
14.	Compression T 22mm x ½" x 22mm	2	2
15.	½" to ¾" Reducer Brush	1	1
16.	Insulated Flexible Pipe 22mm x 1m	2	2
17.	Compression Coupling 22mm	2	2
18.	Automatic Air Vent	1	1
19.	Isolating Valve %"F x %"M	1	1
20.	Instructions	1	1



2 PANEL COMPONENTS SHOWN HERE

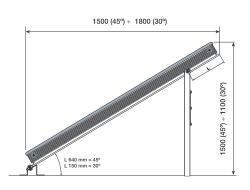
SOLARCOMFORT 2 & 3 PANEL

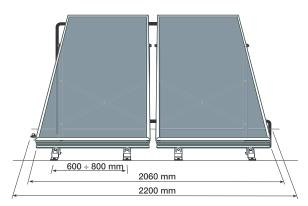


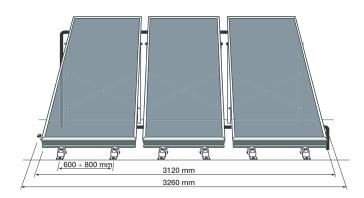


System Components

		2 PANEL FLAT ROOF/ GROUND	3 PANEL FLAT ROOF/ GROUND
Solar Collectors	Qty	2	3
Flat Roof/Ground Frame	Qty	2	3
Frame Connection Kit	Qty	1	2
Pump Station	Qty	1	1
Automatic Air Vent	Qty	1	1
Isolating Valve	Qty	1	1
Flow Limiting Valve	Qty	1	1
20 Litres of Glycol	Qty	1	1
Solar Controller (plus 3 sensors)	Qty	1	1
Solar Panel connection kit	Qty	1	1
Expansion Vessel (25L)	Qty	1	1
Flexible pipe connections	Qty	2	2
PRODUCT CODE		3820011	3820012

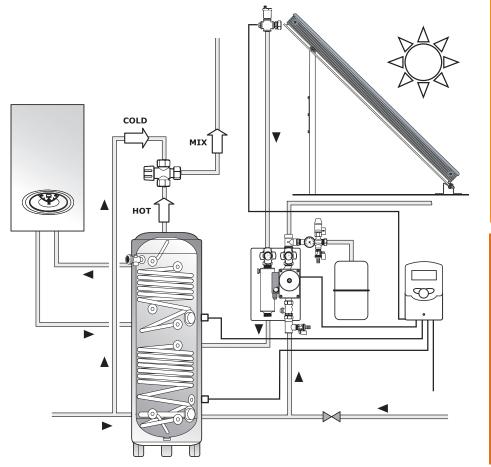






INSTALLATION SCHEME

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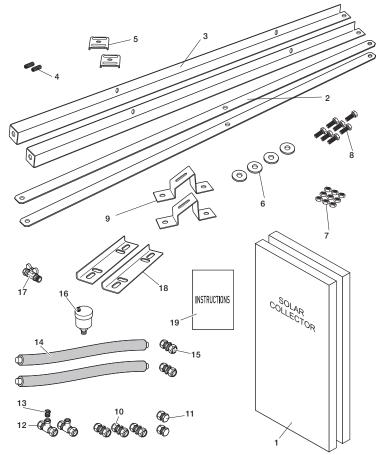






Component List

		2 PANEL FLAT ROOF/ GROUND	3 PANEL FLAT ROOF/ GROUND
1.	Solar Collector (1000mm x 2000m	m) 2	3
2.	Frame Support	4	6
3.	Cross-bracing Bars	4	6
4.	Stainless Steel Fitting Bolts	4	6
5.	Fixing Clamps	4	6
6.	M8 Stainless Steel Washers	8	12
7.	M8 Hex Stainless Steel Nuts	18	27
8.	M8 x25 Hex Stainless Steel Bolts	14	21
9.	Feet	4	6
10.	Compression Coupling 22mm	3	5
11.	Compression Stop End 22mm	2	2
12.	Compression T 22mm x ½" x 22mr	n 2	2
13.	½" to ¾" Reducer Brush	1	1
14.	Insulated Flexible Pipe 22mm x 1n	n 2	2
15.	Compression Coupling 22mm	2	2
16.	Automatic Air Vent	1	1
17.	Isolating Valve ¾"F x ¾"M	1	1
18.	Joining Bars	2	4
19.	Instructions	1	1



SINGLE FRAME SHOWN HERE

SOLAR COMPONENTS

SOLAR COLLECTOR



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- TOTAL SURFACE AREA 2M²
- CAPTIVE SURFACE AREA 1.8M
- SPECIAL SOLAR GLASS HIGH TRANSPARENCY, TEMPERED, ANTI REFLECTIVE AND PRISMATIC
- ABSORBER PLATE: HIGH GRADE COPPER WITH TINOX TITANIUM COATING
- FRAME: GREY ANODISED ALUMINIUM

SOLAR COLLECTOR

2000

1885

1000

100

INSULATION: 50MM ROCKWOOL

a mm

b mm

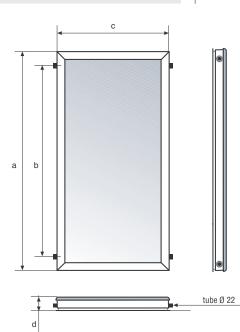
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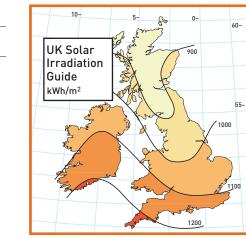
d mm

- LOW MOUNTING PROFILE
- EN12975 APPROVED
- 5 YEAR GUARANTEE

Technical Information

		SOLAR COLLECTOR
Weight	kg	38
Pressure	bar	6
Collector connection diameter	mm	22
Collector liquid capacity	lt	1.5
Absorption	%	95
Reflection	%	5
PRODUCT CODE		800201

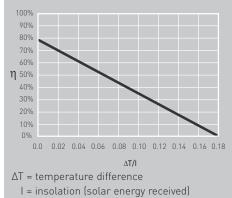




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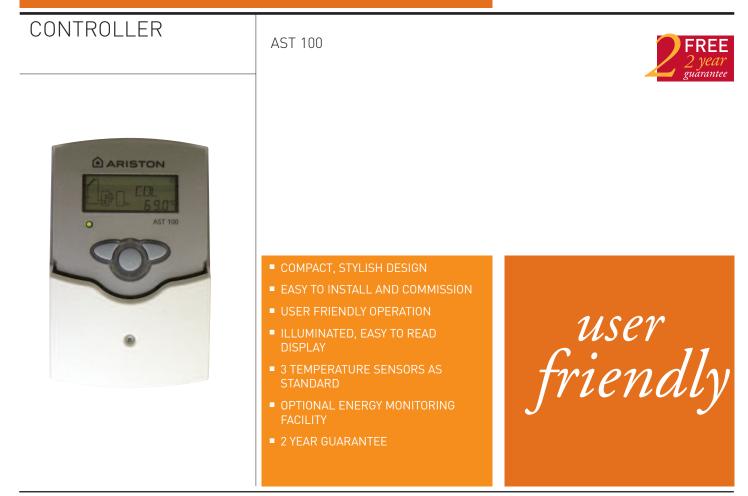
environment

SOLAR COLLECTOR EFFICIENCY CURVE



SOLAR COMPONENTS

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Technical Information

		SOLAR CONTROLLER	
Height Width Depth Input Output Power Supply	a mm b mm c mm	172 110 49 Up to 4 temperature sensors Two standard relays 210-240V AC	
PRODUCT CODE		3820000	
		C C	b b

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SOLAR COMPONENTS

PUMP STATION



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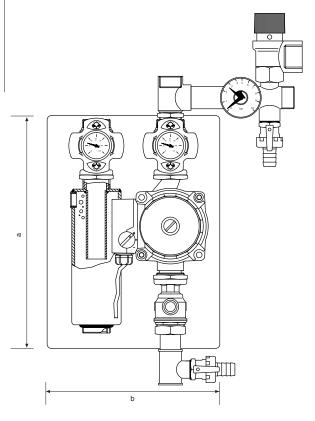
COMPACT DESIGN

- SIMPLE WALL MOUNTING BRACKET
- EXPANDED PROPYLENE INSULATION
- SYSTEM FLOW AND RETURN GAUG
- VALVES
- INTEGRATED DEAERATOR
- 2 YEAR GUARANTEE



Technical Information

		PUMP STATION
Height	a mm	290
Width	b mm	210
Depth	c mm	175
Max. Pressure	bar	8
Max. Temperature	°C	120
Insulation		Black EPP
Connection		3/4"BSP (F)
PRODUCT CODE		800237



PRIMO TWIN





Technical data - Overall dimensions

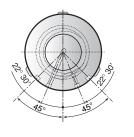
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		ITSI 210	ITSI 300		ITSI 210	ITSI 300
Nominal capacity	ι	200	300	a mm	940	1215
Weight empty	kg	44	60	h mm	225	260
Weight full	kg	244	360	bmm	223	200
Indirect coil rating (top)	kW	20.5	20.5	c mm	1475	1790
Indirect coil rating (bottom)	kW	20.5	26.7	4	/ 25	000
Coil surface area (top)	m ²	0.75	0.75	d mm	625	800
Coil surface area (bottom)	m ²	0.75	0.90	e mm	505	560
Indirect reheat time* (∆T= 50°C)	min.	34	40	6	2/5	075
Voltage	V	240	240	f mm	265	275
Power	kW	3+3	3+3	g mm	806	1116
Immersion reheat time ** (\Delta T= 50°C)	min.	240	350		1207	151/
Max. temperature.	°C	70	70	h mm	1206	1516
Heat loss (kWh/24h) 60°C		2.40	2.85	imm	1220	1556

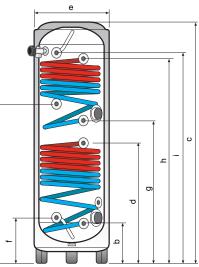
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PRODUCT CODE

* Based on bottom coil only ** Based on single heating element



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CLAS HE & GENUS HE SYSTEM



LEGEND

- A: Central heating flow 22mm compression
- C: Gas inlet 15mm compression
- E: Central heating return 22mm compression
- F: Flue (Ø mm)
 - F1: 60/100 80/125 F2: 80



Solar Accessories

Description	Product Code	
Solar Panel For use with dedicated fixing systems	800201	
Roof Fixing Kit - 2 Panel Complete on-tile roof fixing kit for 2 solar panels	3107024	
Roof Fixing Kit - 3 Panel Complete on-tile roof fixing kit for 3 solar panels	3107025	
Pump Station For use with forced circulation systems	800237	
Solar Controller & 3 Temperature Sensors Differential temperature solar controller	3820000	
2 Solar Panel Connection Kit Inter-panel connection kit for use with 2 panels	3820004	
3 Solar Panel Connection Kit Inter-panel connection kit for use with 3 panels	3820005	
Flat Roof/Ground Fixing Frame - 1 Panel Mounting frame for 1 solar panel	800220	
Ground Frame - Fitting Connections Connection kit for multiple panels/frames	800223	
3/8" Solar Automatic Air Vent High temperature and glycol resistant valve	3820006	
Isolation Valve for Air Vent High temperature and glycol resistant valve	3820007	
Flow Limiting Valve 0.5-7 l/min For use with solar pump station	12061068	
201 Glycol Pre-mixed anti-freeze for use with solar panels	3820001	
10l Glycol Pre-mixed anti-freeze for use with solar panels	3820002	
Expansion Vessel & Bracket 25l (Wall Hung) For use with 2 and 3 panel standard systems	4448666451	
Expansion Vessel & Bracket 35l (Floor Standing) For use with 2 and 3 panel extended pipework systems	12002737	
Expansion Vessel Hose For use with expansion vessel	12061959	
Solar Temperature Probe & Pocket Additional sensor for use with solar controller energy monitoring function	3820003	
Flexible Pipe Connections Connections between panels and system pipework	3087014	
Carrying Handles For easy transportation of solar panels	3107023	
Manual Filling Pump For manual filling of system pipework	800235	







ARISTON THERMO GROUP

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