

Thermosiphon

SC/SP SERIES

Roof-mounted, closed-circuit systems with revolutionary Envelope solar collectors



The Solahart SC and SP Series, featuring Australian designed and manufactured Envelope solar collectors, offer the very latest in styling and all-weather durability.

The SC Series provides higher collector performance in low to medium solar gain areas while the SP Series provides efficient performance in medium to high solar gain areas. The collectors, with five patents pending, have been designed to meet or exceed Australian and International Standards in areas of strength, performance and durability.

The double ceramic lined tank has a protective sacrificial anode to improve the life of the tank and Free Heat models feature a larger anode for greater peace of mind.

Features

- **SC SERIES** - High Performance Black Chrome selective surface collector, for use in **low to medium** solar gain areas
- **SP SERIES** - Efficient black polyester powder coated collector, for **medium to high** solar gain areas
- Double coated ceramic lined tank with sacrificial anode
- Silicon adhesive used for glass and frame attachment
- Closed circuit operation
- HartStat Over Temperature Protection (OTP) standard inclusion SC series (in Australia), optional extra SP series
- Thermosiphon technology requires no mechanical pump
- 5 year comprehensive parts and labour warranty plus Free Heat 10 year warranty 300 litre models †
- Electric and gas boosted models available

Benefits

- Can save up to 55% to 90%* of water heating energy consumption
- Can save up to 50% to 85%* of water heating energy consumption
- Enhanced tank protection
- Collector design withstands extreme weather conditions
- Suitable for frost prone or harsh water quality areas
- Protects from over performance on hot days and when there is low water usage
- Reliable, low maintenance operation for years of worry free hot water
- Trusted Solahart warranties
- Hot water regardless of the weather

*Energy savings of up to 50% to 90% shown are based on Australian Government approved TRNSYS simulation modelling using a medium load. Savings and incentives will vary depending upon your location, type of Solahart system installed, orientation and inclination of the solar collectors, type of water heater being replaced, hot water consumption and fuel tariff. Maximum financial savings off your hot water bill are achievable when replacing an electric water heater on continuous tariff. Refer to solahart.com.au for more information. †Solahart Warranty Details: 10/5/5 warranty, 10 year cylinder and collectors supply, 5 year parts, 5 year labour; 5/5/5 warranty, 5 year cylinder and collectors supply, 5 year parts, 5 year labour; applies only when installed as a complete new system.

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These systems are suitable for multiple installations. They are suitable for frost and harsh water regions.

Thermosiphon SC and SP Closed Circuit Systems

System Model	Collector	181S	222SC	302SC	303SC	443SC
System Model	SCA2000	1	2	2	3	3
System Model	SPA2000	181SP	222SP	302SP	303SP	443SC
Collector		1	2	2	3	3
Tank Model	SC/SP SC/SP Free Heat	180J	220J	300J 300F	300J 300F	440J
HartStat OTP [^]		✓	✓‡	✓‡	✓‡	✓‡
Storage Capacity	litres US gal	180 48	220 58	300 80		400 106
Boost Capacity	litres US gal	90 24	110 29	150 40		200 53
Weight Empty Tank Only	kg lbs	66 146	78 172	99 218		148 326
Weight Full Tank Only	kg lbs	245 540	298 657	399 880		588 1296
A – Width* Tank Only	m in	1.62 63.8	1.88 74.0	2.43 95.7		3.41 134.3
Weight Empty System	kg lbs	117 258	180 397	197 435	244 540	305 673
Weight Full System	kg lbs	310 683	419 924	516 1138	567 1250	775 1709
A – Width* System	m in	1.62 63.8	2.42 95.3	2.43 95.7	3.38 133.1	3.49 137.4

*For safe access and servicing, a space equal to the tank length should be left on the water connection end of the system and 1m (40in) should be left on the three other sides of the installation. ‡HartStat OTP is mandatory on these models in Australia and New Zealand. Systems (if installed with a HartStat OTP system) can be installed as a solar preheater with an inline Solahart gas booster water heater. Refer to the Solahart gas booster specification sheet for further details on the gas booster. ^HartStat OTP is supplied as standard on SC systems in Australia and is available as an option on SP systems.

Collectors - SCA2000 & SPA2000

Aperture area	m ²	1.88	ft ²	20.2	
Dimensions	length	mm	1996	in	78.6
	width	mm	1043	in	41.1
	height	mm	82	in	3.2
Capacity	litres	3.8	US gal	1.0	
Weight	empty	kg	47	lbs	104
	full	kg	51	lbs	113
Working pressure	no OTP	kPa	80	psi	12
	with OTP	kPa	170	psi	24
Absorber surface	SCA2000 SPA2000	Chromonyx selective surface Black polyester powder coat			
Absorber/Riser material		steel			
Number of risers		35			
Frame material		extruded aluminium			
Insulation material (base)	SCA2000	38mm glass wool blanket			
	SPA2000	38mm polyester blanket			
Glass		3.2mm tempered low iron			

Water Supply

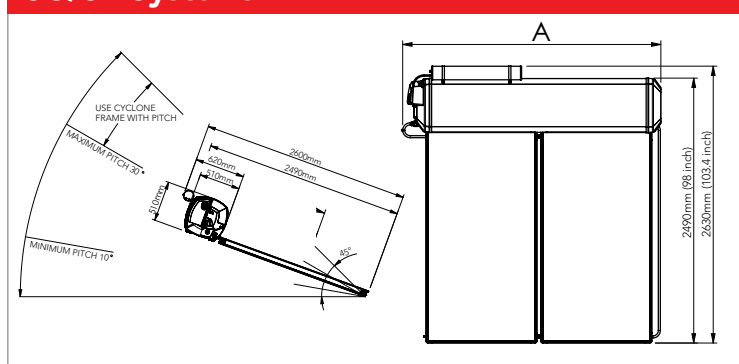
TPR valve setting	kPa	1000	psi	145	
ECV* setting	kPa	850	psi	125	
Max. supply pressure	with ECV	kPa	680	psi	100
	without ECV	kPa	800	psi	115
Water Connections	cold hot	Rp 3/4 R 1/2			

*Expansion Control Valve.

Technical data is subject to change.

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SC/SP Systems



Electric Boost Specifications

Heating unit type*	Copper sheath immersion element			
Supply voltage	220 V – 250 V			
Recovery rate @ 240 V and temperature rise of:				
Rating kW	Current Amps	30°C litres/hour	40°C litres/hour	50°C litres/hour
1.8	8	51	39	31
2.4	10	68	52	41
2.5*	10.5	71	54	43
3.6	15	103	77	62
4.8	20	137	103	83

*A bobbin element (2.5 kW) is available for hard or corrosive water areas.

