



Thermosiphon LCSD Series

Description

The Solahart LCSD Series is a roof mounted, open circuit system, designed to provide higher efficiency for use in low to medium solar gain areas.

The LCS collector features an aluminium absorber plate with all copper header and risers. The LCS collector's absorber plate is coated with the Mirotherm[®] sputtered selective surface, widely used throughout the growing solar hot water markets in Europe. The Mirotherm absorption and anti-reflection layers provide high solar absorption and an infrared reflecting layer ensures low thermal emission, making the most of the available solar radiation.



The double ceramic lined tank has a protective sacrificial anode and the Free Heat models feature additional anode protection. The tank is equipped with an electric booster, alternatively an inline gas booster is available.

These systems are installed with the TRV (thermosiphon restrictor valve) OTP (over temperature protection) system to prevent over performance during periods of higher solar radiation and lower hot water draw off.

Key Features

- Efficient Mirotherm[®] Sputtered Selective Surface collector for high heat absorption
- Toughened, impact resistant collector glass
- Thermosiphon operation minimises maintenance
- Double coated ceramic lined tank
- Stylish slimline design
- Gas booster or electric booster models available
- Enhanced protection on Free Heat models

Key Benefits

- Can save up to 55% to 90% of water heating energy consumption*
- Reliable, low maintenance operation
- Hot water regardless of the weather
- Qualifies for valuable environmental incentives*
- Reduced energy use can save up to 2.1 to 3.3 tonnes of CO₂ per annum*
- Peace of mind with 10/5/5 (Free Heat) and 5/5/5 year warranties†

* Energy savings of up to 55% 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 further information.

† Solahart Warranty Details: 10/5/5 warranty, 10 years cylinder and collectors supply, 5 years parts, 5 years labour; 5/5/5 warranty, 5 years cylinder and collectors supply, 5 years parts, 5 years labour.

Thermosiphon LCSD and LCSD Free Heat Open Circuit Systems

These systems are suitable for multiple installations. They are not suitable for frost and harsh water regions[^].

LCSD and LCSD Free Heat Systems			
Model		300 tank	302 system
Tank Model			
LCSD Series		300L	✓
LCSD Free Heat		300LF	✓
Collector model			LCS
No. of collectors	–	–	2
TRV OTP			✓**
Storage capacity	litres	300	300
Boost capacity	litres	150	150
Weight	empty	kg	81
	full	kg	381
A - Width*	m	2.43	2.48

* An additional 0.9m should be left on all four sides of the installation for safe access and servicing.

**TRV OTP is mandatory on these models in Australia and New Zealand.

LCS Collector			
Aperture area		m ²	1.87
Dimensions	length	mm	1937
	width	mm	1022
	height	mm	77
Capacity		litres	2.0
Weight	empty	kg	30
	full	kg	32
Working pressure		kPa	1000
Absorber surface	Mirotherm sputtered selective surface		
Absorber material	Aluminium		
Riser material	Copper		
Number of risers	6		
Tray material	0.7mm aluminium		
Insulation material	base	38mm glasswool blanket	
	sides	Polyester blanket	
Glass	3.2mm tempered low iron		

Water Supply		
TPR valve setting	kPa	1000
ECV* setting	kPa	850
Max. supply pressure with ECV without ECV	kPa	680
	kPa	800
Water Connections	cold	RP3/4/20
	hot	RP1/2/15

*Expansion Control Valve (ECV).

Electric Boost Specifications				
Heating unit type*		Copper sheath immersion element		
Supply voltage		220 - 240 Volts (50 Hz)		
Recovery rate @ 240V and temperature rise of:				
Rating kW	Current amps	30°C litres/hour	40°C litres/hour	50°C litres/hour
1.8	7	51	38	31
2.4	10	68	52	41
3.6	15	103	77	62

Energy Tip: When installing your solar water heater, install minimum 3 star rated shower roses and flow restrictors to your taps if you don't already have them. This will not only save water but make your solar savings go further.

These systems, combined with the TRV OTP system, can be installed with a Solahart inline gas booster water heater. Refer to the gas booster specification sheet for further details on the gas booster.

Technical data is subject to change.

Mirotherm® is a registered trademark of Alanod Solar GmbH & Co. KG

[^]Harsh water regions – the Solahart warranty may not apply to the water heater if it is connected to a water supply which: is scaling with a Saturation Index >+0.8, or: is corrosive with a Saturation Index <-1.0, or: has a Total Dissolved Solids content >2500 mg/L.

Dimensions

