

SOLAR HOT WATER SPLIT SYSTEMS



OPEN-CIRCUIT SPLIT SYSTEMS SOLAR WATER HEATER

RMX SERIES



Solahart RMX series is an open-circuit split-system solar water heater with roof-mounted slimline collectors and a tank that can be installed discreetly on the ground.

This system has a solar controller that automatically operates a circulating pump when sufficient solar energy is available. Heat from the sun is transferred directly to the water as it moves through the collectors, and the heated water is then stored in the ground-mounted tank.

This system is available with two types of solar collectors: The L collector, with its polyester powder-coated aluminium absorber plate which provides economical service in medium to high solar gain areas, and the higher-efficiency CSA2007 Envelope collector, with its sputtered selective surface copper absorber plate, which is suitable for use in lower solar gain areas and higher altitude locations (recommended for over 400m).

These open-circuit systems have enhanced recirculating freeze protection(+), utilising an electronically controlled backup frost element for cold weather conditions. They can be installed at altitudes up to 600m in Australia. They are not suitable for harsh water areas.^

How you benefit:



OPTIMAL PERFORMANCE

L Collector provides optimal performance in medium to high solar gain areas.



HIGH PERFORMANCE

CSA2007 Collector provides higher performance in low to medium solar gain areas.



REDUCE ENERGY USE

Water heating energy use may be reduced by up to 65% to 75% and could save up to 1.0 to 2.6 tonnes of CO₂ emissions per annum when replacing an electric water heater.#



SOLAHART WARRANTY

10-year warranty* (supply only) applies to the tank and collectors, for peace of mind. See overleaf for details.

MODEL	RLX OPEN-CIRCUIT SYSTEMS				RCS07X OPEN-CIRCUIT SYSTEMS	
Systems	272RLX	273RLX	322RLX	323RLX	272RCS07X	322RCS07X
Tank model	270RMX	270RMX	320RMX	320RMX	270RMX	320RMX
Collector model	L	L	L	L	CSA2007	CSA2007
Collector number	2	3	2	3	2	2
Solar controller kit	PN 299316				PN 299316	
Solahart Warranty*	10/3/2				10/3/2	

Solar Storage Tank Model		270RMX	320RMX
Installation		Indoor / Outdoor	
Nominal storage capacity	litres	270	320
	US gal	71.3	84.5
Boost capacity	litres	140	170
	US gal	37	44.9
Weight empty	kg	82	97
	lbs	181	214
Weight full	kg	352	417
	lbs	776	919
Height	m	1.395	1.640
	in	54.9	64.6
Width	m	0.640	0.640
	in	25.2	25.2
Depth	m	0.680	0.680
	in	26.8	26.8

Electric Boost Specifications				
Heating unit type	Copper sheath immersion element			
Supply voltage	240 V 50 Hz			
Recovery rate @ 240 V temperature rise of:				
Rating kW	Current Amps	30°C litres/hour	40°C litres/hour	50°C litres/hour
3.6	15	103	77	62

Water Supply		
TPR valve setting	kPa / psi	1000 / 145
ECV ⁽²⁾ setting	kPa / psi	850 / 125
Max. supply pressure with ECV	kPa / psi	680 / 100
Max. supply pressure without ECV	kPa / psi	800 / 115
Min. supply pressure	kPa / psi	200 / 29
Water connections	cold	Rp 3/4
	hot	Rp 3/4
	solar	DN15 compression fittings (solar hot and solar cold inlets to tank Rp 3/4)

Collectors		L Collectors	CSA2007 Collectors
Aperture (heating) area	m ² / ft ²	1.87 / 20	1.87 / 20
Dimensions	length - mm / in	1943 / 76.5	1996 / 78.6
	width - mm / in	1027 / 40.5	1043 / 41.1
	height - mm / in	83 / 3.3	82 / 3.2
Working pressure	kPa / psi	1000 / 145	1000 / 145
Capacity	litres / US gal	1.5 / 0.4	1.5 / 0.4
Weight empty	kg / lbs	30 / 67	36 / 80
Weight full incl. fittings	kg / lbs	32 / 71	38 / 84
Absorber surface		Black polyester powder coat	Tinox sputtered selective
Absorber material		Aluminium	Copper
Riser material		Copper tube	Copper tube
Tray material		0.7 mm aluminium	N/A
Frame material		N/A	Extruded aluminium
Insulation material	Base	38 mm polyester blanket	38 mm glass wool blanket
Glass		3.2 mm tempered low iron	3.2 mm tempered low iron

Collector Installation		2	3
Roof area dimensions			
Length ⁽¹⁾	m	2.0	2.0
	in	78.8	78.8
Width ⁽¹⁾	m	2.3	3.4
	in	90.6	133.9
Kits - L collector			
Collector kit - 2 collectors	PN 12104297	1	1
Collector add on kit	PN 12104405	0	1
Kit - CSA2007 collector			
Collector kit - 2 collectors	PN 12103016	1	N/A

⁽¹⁾ An additional 0.9m (35.4in) should be left on all four sides of the installation for safe access and servicing.

⁽²⁾ Expansion Control Valve (ECV) is not supplied.

The Streamline RLX and RCS07X systems 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.

Specifications and designs included in this data sheet are subject to change without notice.

* Solahart Warranty Details: 10/3/2 warranty; 10 year cylinder and collector supply, 3 year cylinder and collector labour, 2 year parts supply including labour; applies to a single family domestic dwelling only. All other applications have a 3/1/1 warranty; 3 year cylinder and collector supply, 1 year parts supply, 1 year labour.

Energy savings of up to 65% to 75% shown are based on Australian Government approved TRNSYS simulation modelling of a Solahart 322RLX and 322RCS07X and using a medium load in Zone 3 and apply when replacing an electric water heater. Any savings 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.

(1) Enhanced Frost Protection - these systems have a level of enhanced recirculating freeze protection designed to guard against freeze conditions. These systems are suitable to be installed at an altitude not exceeding 600 m above sea level

A Harsh water regions - the Solahart warranty may not apply if the water heater 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 >2500mg/L.