



ROOF-MOUNTED INDIRECT SYSTEMS

J SERIES - CLOSED CIRCUIT THERMOSIPHON

Solahart J Series is solar water heater specifically designed to provide efficient service in medium to high solar gain areas. They utilise Solahart's multi-flow collector which uses 35 risers to extract the maximum amount of energy from the sun, while the efficient black polyester powder coated absorber maximises the transfer of available solar energy.

The 302 and 303 J and the J Free Heat systems can be installed with the HartStat OTP (over-temperature protection) system to prevent over performance during periods of higher solar radiation and lower hot water draw off.

The tank features **Solahart Super-Shield[®]** enamel for enhanced protection, as well as a protective sacrificial anode to improve the life of the tank. Free Heat models also feature a larger anode for enhanced tank protection.

Frost Resistant: Indirect or closed-circuit systems circulate an anti-freeze fluid to heat water 'indirectly' via a heat exchanger which makes them suitable for frost or harsh water chemistry regions.⁽¹⁾



**ELECTRIC OR GAS
BOOSTING FOR HOT
WATER REGARDLESS
OF THE WEATHER**

HOW YOU BENEFIT



OPTIMUM PERFORMANCE

Designed for **medium** to **high** solar gain areas with 35 risers to extract maximum energy from the sun.



LOW MAINTENANCE

Elegant simplicity provides efficiency, reliability and low maintenance.



REDUCE ENERGY USE

Water heating energy use may be reduced by up to **65%** and could save up to 1.6 to 2.5 tonnes of CO₂ emissions per annum when replacing an electric water heater.⁽²⁾



SOLAHART WARRANTY

5-year and 10-year Free Heat warranty available, for peace of mind. See overleaf for details.⁽³⁾

Technical Data

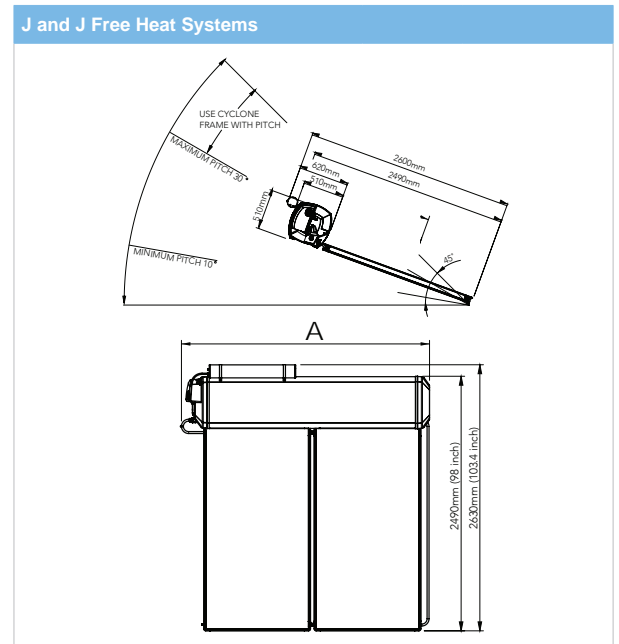
MODELS		J / J FREE HEAT - INDIRECT SYSTEMS (Free Heat systems are only available in 180 & 300 litres)			
Systems		151J	181J	302J	303J
Tank model	Standard	150J	180J	300J	300J
	Free Heat	-	180F	300F	300F
Collector	Model	J	J	J	J
	Number	1	1	2	3
HartStat over-temp. protection (OTP)	Optional	-	-	✓	✓
Storage capacity	litres / US gal	150 / 40	180 / 48	300 / 80	300 / 80
Boost capacity	litres / US gal	75 / 20	90 / 24	150 / 40	150 / 40
Tank Only: Weight empty (No OTP)	kg / lbs	61 / 135	69 / 153	107 / 236	107 / 236
Tank Only: Weight full (No OTP)	kg / lbs	211 / 465	249 / 549	407 / 898	407 / 898
System: Weight empty (No OTP)	kg / lbs	112 / 247	119 / 263	202 / 446	248 / 1186
System: Weight full (No OTP)	kg / lbs	274 / 604	312 / 688	521 / 1149	571 / 1259
System: A - Width ⁽⁴⁾	m / in	1.40 / 55.2	1.62 / 63.8	2.43 / 95.7	3.38 / 133.1

⁽⁴⁾ For servicing and safe access, 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. J & J Free Heat Systems can be installed as a solar pre-heater with an in-line Solahart gas booster water heater. Refer to the Solahart gas booster specification sheet for further details on the gas booster. 150J and 180J Free Heat models are not available in Australia.

Collectors		J
Aperture area	m ² / ft ²	1.87 / 20
Dimensions	length - mm / in	1943 / 76.5
	width - mm / in	1027 / 40.5
	height - mm / in	83 / 3.3
	Working pressure	kPa / psi
Capacity	litres / US gal	3.5 / 0.9
Weight empty including fittings	kg / lbs	45 / 99
Weight full including fittings	kg / lbs	49 / 108
Absorber surface	Black polyester powder coat	
Absorber material	Steel	
Riser material	Steel	
Number of risers	35	
Tray material	0.7 aluminium	
Insulation blanket material (base)	38 mm polyester blanket	
Glass	3.2 tempered low iron	

Water Supply		
TPR valve setting	kPa / psi	1000 / 145
Expansion Control Valve (ECV) setting	kPa / psi	850 / 125
Max. supply pressure with ECV	kPa / psi	680 / 100
Max. supply pressure without ECV	kPa / psi	800 / 115
Water connections	cold	Rp 3/4
	hot	R 1/2

Electric Boost Specifications				
Heating unit type	Copper sheath immersion element			
Supply voltage	220 V - 250 V			
Recovery rate @ 240 V 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
3.6	15	103	77	62



⁽¹⁾ Harsh water regions – the Solahart warranty may not apply if the water heater is connected to a water supply which has a Total Dissolved Solids content >2500mg/L. If the water supply is scaling with a saturation index >0.8 a low watts density heating unit must be used, or is corrosive with a saturation index <-1.0 a corrosion resistant heating unit must be used, for warranty to apply to the heating unit.

⁽²⁾ Energy savings of up to 65% shown is based on Australian Government approved TRNSYS simulation modelling of a Solahart 302J 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. Refer to solahart.com.au for more information.

⁽³⁾ Solahart Warranty Details: Free Heat 10/5/5 warranty, 10 year cylinder and collector supply, 5 year parts supply, 5 year labour; 5/5/5 warranty, 5 year cylinder and collector supply, 5 year parts supply, 5 year labour; applies only when installed as a complete new system.

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

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Reorder code: SHDS/SHW-J

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