


Annex to Solar Keymark Certificate					Licence Number		011-7S084 F							
					Date issued		2020-11-23							
					Issued by		DIN CERTCO							
Licence holder		Solahart Australia Pty Ltd			Country		Australia							
Brand (optional)					Web		www.solahart.com.au							
Street, Number		55 Brodie Street			E-mail		solahart@solahart.com							
Postcode, City		2116, Rydalmere			Tel		+61 296 849 100							
Collector Type					Flat plate collector									
Collector name					Power output per collector									
					$G_b = 850 \text{ W/m}^2, G_d = 150 \text{ W/m}^2 \text{ \& } u = 1.3 \text{ m/s}$ $\vartheta_m - \vartheta_a$									
					0 K	10 K	30 K	50 K	70 K	105 K				
					m ²	mm	mm	mm	mm	mm				
LCS Collector					1.98	1 940	1 023	80	1 403	1 326	1 159	973	767	363
Power output per m² gross area					708	670	585	491	388	183				
Performance parameters test method		Quasi dynamic												
Performance parameters (related to A_G)		η_0, b	a1	a2	a3	a4	a5	a6	a7	a8	Kd			
Units		-	W/(m ² K)	W/(m ² K ²)	J/(m ³ K)	-	J/(m ² K)	s/m	W/(m ² K ⁴)	W/(m ² K ⁴)	-			
Test results		0.711	3.74	0.012	0.000	0.00	13 930	0.000	0.00	0.0	0.98			
Incidence angle modifier test method		Quasi dynamic - outdoor												
Incidence angle modifier		Angle	10°	20°	30°	40°	50°	60°	70°	80°	90°			
Transversal		$K_{\theta T, coll}$	1.00	0.99	0.97	0.94	0.89	0.81	0.63	0.08	0.00			
Longitudinal		$K_{\theta L, coll}$	1.00	0.99	0.97	0.94	0.89	0.81	0.63	0.08	0.00			
Heat transfer medium for testing		Water-Glycole												
Flow rate for testing (per gross area, A_G)		dm/dt		0.020		kg/(sm ²)								
Maximum temperature difference during thermal performance test		$(\vartheta_m - \vartheta_a)_{max}$		75		K								
Standard stagnation temperature (G = 1000 W/m²; $\vartheta_a = 30 \text{ }^\circ\text{C}$)		ϑ_{stg}		183		°C								
Maximum operating temperature		$\vartheta_{max, op}$		120		°C								
Maximum operating pressure		$p_{max, op}$		1400		kPa								
Testing laboratory		Institut für Gebäudeenergetik, Thermotechnik und Energiespeicherung (IGTE)					http://www.igte.uni-stuttgart.de							
Test report(s)		16COL1342 16COL1342Q					Dated		27.04.2017 27.04.2017					
Comments of testing laboratory		Datasheet version: 6.1, 2019-09-26												
Update of the data sheet to current version. This data sheet replaces the data sheet issued on 27.04.2017		 <p>Forschungs- und Testzentrum für Solaranlagen Institut für Thermodynamik und Wärmetechnik Universität Stuttgart Plattenwaldring 8, 70560 Stuttgart (Vaihingen)</p>												
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