


Annex to Solar Keymark Certificate - Summary of EN ISO 9806:2013 Test Results						Licence Number		PSK-003/2018			
						Date issued		2018-04-06			
						Issued by		CERTIF			
Licence holder	AQUAFER, lda					Country	Portugal				
Brand (optional)						Web	www.aquafer.pt				
Street, Number	Rua Monte Lobar, N°436					E-mail	geral@aquafer.pt				
Postcode, City	4775-263 Viatodos					Tel	+351 252,963,543				
Collector Type	Flat plate collector, glazed										
Collector name	Gross area (A _G) m ²	Gross length mm	Gross width mm	Gross height mm	Power output per collector G _b = 850 W/m ² ; G _d = 150 W/m ² ϑ _m - ϑ _a						
					0 K W	10 K W	30 K W	50 K W	70 K W	50 K W	
AQR-2.2	2.13	2,055	1,037	68	1,564	1,464	1,255	1,031	794	1,029	
AQR-2.4	2.40	2,058	1,165	68	1,760	1,648	1,412	1,161	894	1,157	
AQR-2.6	2.65	2,057	1,290	68	1,947	1,823	1,562	1,284	989	1,280	
AQR-2	2.01	1,930	1,040	68	1,475	1,381	1,183	973	749	970	
Power output per m ² gross area					734	687	589	484	373	483	
Performance parameters test method		Steady state - indoor									
Performance parameters (related to AG)		η _{0,hem}	a ₁	a ₂							
Units		-	W/(m ² K)	W/(m ² K ²)							
Test results		0.734	4.600	0.008							
Incidence angle modifier test method		Steady state - indoor									
Bi-directional incidence angle modifiers		No									
Incidence angle modifier		Angle	10°	20°	30°	40°	50°	60°	70°	80°	90°
Transversal		K _{θT, coll}					0.91				0.00
Longitudinal		K _{θL, coll}					0.91				0.00
Heat transfer medium for testing		Water									
Flow rate for testing (per gross area, A _G)		dm/dt	0.020	kg/(sm ²)							
Maximum temperature difference for thermal performance calculations		(ϑ _m -ϑ _a) _{max}	50.25	K							
Standard stagnation temperature (G = 1000 W/m ² ; ϑ _a = 30 °C)		ϑ _{stg}	162.9	°C							
Effective thermal capacity, incl. fluid (per gross area, A _G)		C/m ²	8.3	kJ/(Km ²)							
Maximum operating temperature		ϑ _{max, op}	-	°C							
Maximum operating pressure		p _{max, op}	600	kPa							
Testing laboratory	CTCV					www.ctcv.pt					
Test report(s)	001/15					Dated	10-7-2015				
Comments of testing laboratory		Datashet version: 5.01, 2016-03-01									
<p><i>The performance test of AQR-2 was done under the EN ISO 9806 by CTCV.</i></p> <p><i>The test for the collectors AQR-2.2, AQR-2.4 and AQR-2.6 were performed by LNEG</i></p>		 <p>CTCV - LSE CENTRO TECNOLÓGICO DA CERÂMICA E DO VIDRO LSE - Laboratório de Sistemas de Energia</p>									
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