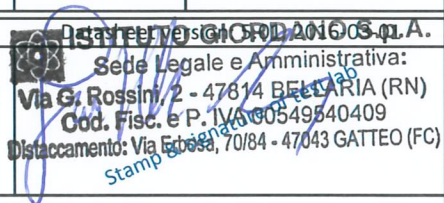




ICIM S.p.A. a socio unico
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 Capitale Soc EUR. 260.000,00 int. versato ed esistente
 C.F./P. IVA e Iscriz. Reg. Imprese di Milano n. 12908230159 - R.E.A. n. 1596292

Annex to Solar Keymark Certificate - Summary of EN ISO 9806:2013 Test Results						Licence Number		138BN/0							
						Date issued		2016-04-01							
						Issued by		ICIM S.p.A.							
Licence holder		SFERASOL S.r.l.				Country		Italy							
Brand (optional)						Web		http://www.sferasol.com							
Street, Number		Via Pinerolo, 119				E-mail		info@sferasol.com							
Postcode, City		10060 Candiolo (TO)				Tel		+39 011 05 61 510							
Collector Type						Flat plate collector, glazed									
Collector name						Power output per collector									
						G _b = 850 W/m ² ; G _d = 150 W/m ² θ _m - θ _a									
						0 K	10 K	30 K	50 K	70 K	30 K				
						W	W	W	W	W	W				
SFERASOL SF-A						1,08	1.200	1.200	1.600	939	728	308	0	0	308
Power output per m ² gross area						866	672	284	0	0	284				
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						0,866	19,400	0,000							
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}	0,98	1,03	1,11	1,26	1,50	1,93	2,82	5,55	6,43
Longitudinal						K _{θL, coll}	0,98	1,03	1,11	1,26	1,50	1,93	2,82	5,55	6,43
Heat transfer medium for testing						Water-Glycole									
Flow rate for testing (per gross area, A _G)						dm/dt	0,022	kg/(sm ²)							
Maximum temperature difference for thermal performance calculations						(θ _m -θ _a) _{max}	30	K							
Standard stagnation temperature (G = 1000 W/m ² ; θ _a = 30 °C)						θ _{stg}	90	°C							
Effective thermal capacity, incl. fluid (per gross area, A _G)						C/m ²	41,24	kJ/(Km ²)							
Maximum operating temperature						θ _{max, op}	180	°C							
Maximum operating pressure						p _{max, op}	50	kPa							
Testing laboratory		Istituto Giordano S.p.A.				www.giordano.it									
Test report(s)						327258		Dated		31/08/2015					
Comments of testing laboratory						 <p>Spherical solar collector, the A_G considered is the projected Area. The IAM has been measured at 50° and 0°. On all other angles, the IAM has been estimated by considering the cosin function and a constant diffused irradiation of 150 W/m².</p>									

