



CERTIFICATION LICENCE TO USE KEYMARK

Certificate No OEM 9999.1.17

DQS Hellas grants the present certificate to the enterprise:

DIANFLEX SRL

SS 19 KM 61, 84030 ATENA LUCANA (SA), Italy

for the product:

Flat plate Solar Collectors with type

ATON 415-KC1500, ATON 415-KC1500H, ATON 415-KC1800, ATON 415-KC1800H,
ATON 415-KC2000, ATON 415-KC2000H, ATON 415-KC2500, ATON 415-KC2500H,
ATON 415-KC2700, ATON 415-KC2700H

which is produced in conformity with the normative document:

EN 12975-1:2011

EN ISO 9806:2013

at the following location:

1o Km Inofyta – St. Thomas, Viotia



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The present certificate is granted in accordance with:

- the DQS Hellas General Rules for the Certification of Products,
- the Specific Rule for Certification EKIII.001 «Specific Rule for Certification of Solar Collectors, and Thermal Solar Heating Systems for Domestic Hot Water»,
- the Specific CEN Keymark Scheme Rules for Solar Thermal Products,

and is ruled by the terms of the relevant contract between DQS Hellas and the enterprise.

Date of issue: **2024-05-30**

Date of valid: **2025-05-30**

Ioannis Alexiou
Head of Products Certification

Panagiotis Giannoutsos
Director of Certification



Annex to Solar Keymark Certificate					Licence Number		OEM 9999.1.17				
					Date issued		2024-05-30				
					Issued by		DQS Hellas				
Licence holder		DIANFLEX SRL			Country		Italy				
Brand (optional)					Web						
Street, Number		SS 19 KM 61			E-mail		info@dianflex.com				
Postcode, City		84030 ATENA LUCANA (SA)			Tel		+39 0 9757793				
Collector Type					Flat plate collector						
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 & u = 1.3 m/s $\vartheta_m - \vartheta_a$						
					0 K	10 K	30 K	50 K	70 K	84 K	
					W	W	W	W	W	W	
ATON 415-KC1500	1,50	1.480	1.010	86	1.143	1.087	963	822	665	548	
ATON 415-KC1500H	1,50	1.010	1.480	86	1.143	1.087	963	822	665	548	
ATON 415-KC1800	1,82	1.480	1.230	86	1.387	1.319	1.168	997	807	664	
ATON 415-KC1800H	1,82	1.230	1.480	86	1.387	1.319	1.168	997	807	664	
ATON 415-KC2000	2,00	1.980	1.010	86	1.524	1.449	1.284	1.096	886	730	
ATON 415-KC2000H	2,00	1.010	1.980	86	1.524	1.449	1.284	1.096	886	730	
ATON 415-KC2500	2,37	1.930	1.230	86	1.806	1.718	1.521	1.299	1.050	865	
ATON 415-KC2500H	2,37	1.230	1.930	86	1.806	1.718	1.521	1.299	1.050	865	
ATON 415-KC2700	2,72	2.160	1.260	86	2.073	2 (13.01	1.746	1.491	1.205	993	
ATON 415-KC2700H	2,72	1.260	2.160	86	2.073	1.971	1.746	1.491	1.205	993	
Power output per m ² gross area					762	725	642	548	443	365	
Performance parameters test method		Steady state - outdoor									
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		0,771	3,59	0,014	0,000	0,00	10.827	0,000	0,00	0,0E+00	0,92
Incidence angle modifier test method		Steady state - outdoor									
Incidence angle modifier		Angle	10°	20°	30°	40°	50°	60°	70°	80°	90°
Transversal		$K_{\theta T, coll}$	1,00	1,00	1,00	0,99	0,96	0,90	0,78	0,52	0,00
Longitudinal		$K_{\theta L, coll}$	1,00	1,00	1,00	0,99	0,96	0,90	0,78	0,52	0,00
Heat transfer medium for testing		Water									
Flow rate for testing (per gross area, A_G)		dm/dt	0,022		kg/(sm ²)						
Maximum temperature difference during thermal performance test		$(\vartheta_m - \vartheta_a)_{max}$	53,7		K						
Standard stagnation temperature (G = 1000 W/m ² ; ϑ_a = 30 °C)		ϑ_{stg}	190,5		°C						
Maximum operating temperature		$\vartheta_{max, op}$	200		°C						
Maximum operating pressure		$p_{max, op}$	1000		kPa						
Testing laboratory		NCSR Demokritos / Solar & other Energy System					www.solar.demokritos.gr				
Test report(s)		4195DE2 4196DE2 4197DQ3					Dated		16/11/2016 16/11/2016 2/6/2017		
Comments of testing laboratory		Ver. 6.2 (13.01.2022)									
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