

KEYMARK CERTIFICATE

SK08055371501/R01

TUV CYPRUS LTD Certifies that the organization

THERMOSIFONES KAFSON LTD

Address: Arch. Makariou III 125,
8310 Koloni, (Paphos), CYPRUS

Supplies: Solar thermal collectors

In compliance with: EN 12975-1:2006+A1:2010 & EN 12975-2:2006

Certified Product: Solar Collector

Trade Mark: KCSA/D 1.5 SKM, KCSA/D 2.0 SKM

Test Results: Annex to certificate

Certification scheme: The initial Certificate with number 081BN/0 of Solar Keymark Certification Body CEN025 was issued on 27/09/2011. In order to grant this certificate, TUV CYPRUS has visited the manufacturing site and verified the implementation of the quality management system. TUV CYPRUS performs these tasks periodically while the certificate has not been cancelled, in accordance with the Product Certification Regulations and the Rules for Authorization to use Conformity Mark for Solar Collectors.

TUV CYPRUS (TUV NORD) LTD
Certification Body



Nicosia, **05/06/2015**
Initial Certification : **27/09/2011**
Valid until : **15/03/2020**



SOLAR KEYMARK
CERTIFICATION BODY
CEN 033

Accredited by

Certificate No. 885





CEN 033

**Summary of EN 12975 Test Results,
annex to Solar KEYMARK Certificate**

Licence Number **SK08055371501/R01**
Issued **2015-05-06**

Company holding the Brand (optional) **THERMOS-FONES KAFSON LTD**
Country **CYPRUS**
Website **www.kafson.com**
Street, street number **Archiepiskopou Makariou III 125, KICLONI**
E-mail **info@kafson.com**
Postal Code / City, province **8310 PAPHOS**
Tel/Fax **357 79008182**

Collector Type **(flat plate glazed/un-glazed, evacuated tubular)**
Flat plate collector - glazed
Thermal / photo voltaic hybrid collector? (PVT collector)
No
Integration in the roof possible? (manufacturers declaration)
No

Collector name	Aperture area (Aa) m ²	Gross length mm	Gross width mm	Gross height mm	Gross area (Ag) m ²	Power output per collector module G = 1000 W/m ²													
						T _m -T _a		0 K		10 K		20 K		30 K		40 K		50 K	
						W	W	W	W	W	W	W	W	W	W	W	W	W	W
KCSA/D 2.0 SKM	1.83	2.000.00	1.000.00	85	2.00	1.363	1.269	1.084	807	456									
KCSA/D 1.5 SKM	1.35	1.500.00	1.000.00	85	1.50	1.006	951	800	595	337									

Performance test method **Glazed liquid heating collector - steady state - indoor**

Performance parameters related to aperture
Units η_c a_1 a_2
- $W/(m^2K)$ $W/(m^2K^2)$

Test results - Flow rate and fluid see note 1 η_c a_1 a_2
0.745 3.580 0.050

Bi-directional incidence angle modifiers? **No**
Incidence angle modifiers $K_B(\theta)$ K_D values are obligatory for 50°
Angle 10° 20° 30° 40° 50° 60° 70° 80° 90°
 $K_B(\theta)$ * 0.95 0.00

Incidence angle modifier not bi-directional - leave fields blank

Stagnation temperature - Weather conditions see note 2 T_{stag} 132.9 °C

Effective thermal capacity
ceff = C/Ag 16.3 $kJ/(m^2K)$

Max. intake temperature - see note 3 $T_{max,op}$ 133 °C

Max. operation pressure - see note 3 $p_{max,op}$ 600 kPa

Pressure drop table - for a collector family, the values shall be for the module with highest ΔP per m² aperture area

Flow rate	$kg/(s m^2)$	ΔP
0	40	70
90	110	130

Optional weather data Location **Link**

Testing Laboratory **ISTITUTO GIORDANO**
Website **www.giordano.it**
Test report id. number **283543_283544** Date of test report **2011/06/16**

During the test GDF/GTOT was always between - and -

Comments of testing laboratory:

Note 1 Flow rate 0.037 $kg/(s m^2)$ Fluid **Water**

Note 2 Irradiance, G = 1000 W/m^2 ; Ambient temperature, T_a=30 °C

Note 3 Given by manufacturer



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