

CERTIFICATION LICENCE TO USE KEYMARK

Certificate No SKM 10078

DOS Hellas grants the present certificate to the enterprise:

SONNE AKTION LTD 39 Chalkidikis, 14451 Metamorfosi

for the product:

Flat plate Solar Collector type: ATLAS CA 160, ATLAS CA 200, ATLAS CA 230

which is produced in conformity with the normative document:

EN 12975-1: 2006 ISO 9806:2013

at the following location:

68 Km N.R. Athens - Lamia 32009 Schimatari Viotias





The present certificate is granted in accordance with:

- the DOS Hellas General Rules for the Certification of Products,
- the Specific Rule for Certification EKIIII.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 DOS Hellas and the enterprise.

Date of issue:

2019-04-20

Date of valid:

2022-08-29

Panagiotis Giannoutsos Director of Product Certification

Dr. Emmanuel Deliyannakis Managing Director

Notified Body: 4, Kalavriton Street, 14564 Kifisia - Athens, Greece

EEK.001-07 - 10/11/2011



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Power output per collector Gb = 850 W/m², 6d = 150 W/m² Down - Dow							000					Page 1/2		
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	Licence holder SONNE AKTION LTD							E-07		DQ3 Helias				
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Annex to Solar Keymark Certific	ate					Licenc	e Nun	nber		SKM 1	L0078	
Supplementary Information						Issued	ł			2019-	04-20	
Annual collector output in kWh/co	llector	at mea	n fluic	l tempe	erature	მ _m , ba	sed on	ISO 98	306:20	13 test	results	;
Standard Locations		Athens			Davos		St	tockhol	m	V	Vürzbur	g
Collector name ϑ_n	25°C	50°C	75°C	25°C	50°C	75°C	25°C	50°C	75°C	25°C	50°C	75°C
ATLAS CA 160		1,067	640	1,222	777	461	902	534	308	977	565	318
ATLAS CA 200 ATLAS CA 230	2,028	1,266 1,529	760	1,451	923	547	1,071	634	366	1,160	671	377
ATLAS CA 230	2,449	1,529	917	1,752	1,114	661	1,293	765	442	1,400	810	455
Annual output nor m² aross aros	1.007	CCC	400	700	405	200	F.C.2	222	100	C10	252	100
Annual output per m ² gross area Fixed or tracking collector	1,067	666	400	763 ked (slop	485	288 tudo - 1	563	ded to	192	610 5°\	353	198
Annual irradiation on collector plane	176	55 kWh,						56 kWh			14 kW/h/	m²
Mean annual ambient air temperature	170	18.5°C		1714 kWh/m² 3.2°C			110	7.5°C	,,,,,	1244 kWh/m² 9.0°C		
Collector orientation or tracking mode	S	outh, 2!		S	outh, 30	O°	South, 45°			South, 35°		
The collector is operated at constant te												
collector performance is performed wit												tailed
description of the calculations is available												
		Δd	dition	al Info	matio	n						
Collector heat transfer medium										Water-	Glycole	
Hybrid Thermal and Photo Voltaic colle	ctor										lo	
The collector is deemed to be suitable f		ntegrat	ion								lo	
The collector was tested successfully ac	cording	to EN IS	SO 9806	5:2013 u	nder th	e follow	ing con	ditions:				
Climate class (A, B or C)									1	4	-	-
Maximum tested positive load							24	100	Р	a		
Maximum tested negative load											D	a
Hail resistance using steel ball (maximu	m drop l	neight)									Г	
	•									2	n	1
			y Labe	lling In	forma	ition						<u> </u>
		Energ	•				R (EU) N	o 811/2		2	n	
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