

SABS

Permit to Apply Certification Mark

Subject to the provisions of the Standards Act, 2008
(Act 8 of 2008), the relevant regulations made thereunder and the permit
conditions contained in the under mentioned schedules, this permit authorizes

**HELIOAKMI SA
ATTIKI, GREECE**

to apply the certification mark



in respect of the mark specification:

**SANS 1307:2009
TO: DOMESTIC SOLAR WATER HEATERS**

- This permit, including schedules 1 to 3 which form an integral part thereof;
- is issued without alteration;
 - is identified by the applicable permit number;
 - is subject to any condition or limitation contained therein;
 - is valid subject to ongoing compliance with permit conditions;
 - bears the embossed SABS Commercial seal. In the absence of the seal, the permit and the schedules shall be invalid; and
 - the permit may be authenticated by referring to the register of "Certified Clients" on the SABS Commercial website (www.sabs.co.za)

Permit Number 9814/15538

Effective Date 15 August 2012

Expiry Date 15 August 2015

Date of Original Registration 15 August 2012

Chief Executive Officer B. Mhlooma



SABS COMMERCIAL SOC Ltd.
1 Dr Lategan Rd, Groenkloof, Pretoria,
Republic of South Africa

A41K0000084



STANDARDSMARK LICENCE

SAI Global hereby grants:

Helioakmi S.A.

Nea Z01, Aspropyrgos, Greece

StandardsMark Licence

Manufactured to:

AS/NZS 2712:2007 - Solar and heat pump water heaters - Design and construction

"the StandardsMark Licensee" the right to use the STANDARDSMARK as shown below only in respect of the goods described and detailed in the Schedule which are produced by the Licensee or on behalf of the Licensee* and which comply with the appropriate Standard referred to above as from time to time amended. The Licence is granted subject to the rules governing the use of the STANDARDSMARK and the Terms and Conditions for certification and licence. The Licensee covenants to comply with all the Rules and Terms and Conditions.

Licence No: SMKP20267

Issued : 13 December 2012

Expires : 30 June 2016

Originally Certified : 23 July 2004

Current Certification : 13 December 2012

Paul Butcher
Global Head – Assurance Services

Samer Chaouk
Head of Policy, Risk and Certification



Australian
Standard

JAS-ANZ



WWW.JAS-ANZ.ORG/REGISTER

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The STANDARDSMARK is a registered certification trademark of SAI Global Limited (A.C.N. 050 644 642) and is issued under licence by SAI Global Certification Services Pty Limited (ACN 108 716 669) ("SAI Global") 286 Sussex Street, Sydney NSW 2000, GPO Box 5420 Sydney NSW 2001. This certificate remains the property of SAI Global and must be returned to SAI Global upon its request. Refer to www.saiglobal.com, for the list of product models.

 **SAI GLOBAL**
INFORM. INSPIRE. IMPROVE.

SCHEDULE TO STANDARDSMARK LICENCE

SAI Global hereby grants:

Helioakmi S.A.

Nea Z01, Aspropyrgos, Greece

StandardsMark Licence

Manufactured to:

AS/NZS 2712:2007 - Solar and heat pump water heaters - Design and construction

Model identification of the goods on which the STANDARDSMARK may be used:

Model Identification	Brand Name	Product Description	Product Type	Container Designation	Collector Designation	Number of Collectors	Additional Parts	Nominal Size (Litres)	Supplementary Energy Source	Date Endorsed
SP 160-B21	Megasun/Helioakmi	Thermosiphon instant gas boost	Solar Hot Water Heater	SP 160	ST 2500 Selective	1		160	Post Gas	3 Dec 2012
SP 160-E	Megasun/Helioakmi	Thermosiphon, Closed Loop, Flat plate collector	Solar Hot water heater	SP 160	ST 2500 Selective	1		160	Electric Continuous	7 Dec 2012
SP 160-M-B21	Megasun/Helioakmi	Thermosiphon instant gas boost	Solar Hot Water Heater	SP 160	ST 2500 Selective	1		160	Post Gas	3 Dec 2012
SP 160-M-E	Megasun/Helioakmi	Thermosiphon, Closed Loop, Flat plate collector	Solar Hot water heater	SP 160	ST 2000 Selective	1		160	Electric Continuous	7 Dec 2012
SP 160-M-R20	Megasun/Helioakmi	Thermosiphon instant gas boost	Solar Hot Water Heater	SP 160	ST 2000 Selective	1		160	Post Gas	3 Dec 2012
SP 160-R20	Megasun/Helioakmi	Thermosiphon instant gas boost	Solar Hot Water Heater	SP 160	ST 2000 Selective	1		160	Post Gas	3 Dec 2012
SP 200-B21	Megasun/Helioakmi	Thermosiphon instant gas boost	Solar Hot Water Heater	SP 200	ST 2500 Selective	1		200	Post Gas	3 Dec 2012
SP 200-B25	Megasun/Helioakmi	Thermosiphon instant gas boost	Solar Hot Water Heater	SP 200	ST 2500 Selective	1		200	Post Gas	3 Dec 2012
SP 200-E	Megasun/Helioakmi	Thermosiphon, Closed Loop, Flat plate collector	Solar Hot water heater	SP 200	ST 2000 Selective	2		200	Electric Continuous	7 Dec 2012
SP 200E-B21	Megasun/Helioakmi	Thermosiphon instant gas boost	Solar Hot Water Heater	SP 200	ST 2500 Selective	1		200	Post Gas	3 Dec 2012
SP 200E-B26	Megasun/Helioakmi	Thermosiphon instant gas boost	Solar Hot Water Heater	SP 200	ST 2500 Selective	1		200	Post Gas	3 Dec 2012

Licence No: SMKP20267

Issued Date: 13 December 2012

This schedule supersedes all previously issued schedules



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SCHEDULE TO STANDARDSMARK LICENCE

Model Identification	Brand Name	Product Description	Product Type	Container Designation	Collector Designation	Number of Collectors	Additional Parts	Nominal Size (Litres)	Supplementary Energy Source	Date Endorsed
SP 200E-E	Megasun/Helioakmi	Thermosiphon, Closed Loop, Flat plate collector	Solar Hot water heater	SP 200	ST 2500 Selective	1		200	Electric Continuous	13 Dec 2012
SP 200E-R20	Megasun/Helioakmi	Thermosiphon instant gas boost	Solar Hot Water Heater	SP 200	ST 2000 Selective	1		200	Post Gas	3 Dec 2012
SP 200E-R26	Megasun/Helioakmi	Thermosiphon instant gas boost	Solar Hot Water Heater	SP 200	ST 2000 Selective	1		200	Post Gas	3 Dec 2012
SP 200M-B21	Megasun/Helioakmi	Thermosiphon instant gas boost	Solar Hot Water Heater	SP 200	ST 2000 Selective	1		200	Post Gas	3 Dec 2012
SP 200M-B25	Megasun/Helioakmi	Thermosiphon instant gas boost	Solar Hot Water Heater	SP 200	ST 2000 Selective	1		200	Post Gas	3 Dec 2012
SP 200-M-E	Megasun/Helioakmi	Thermosiphon, Closed Loop, Flat plate collector	Solar Hot water heater	SP 200	ST 2000 Selective	1		200	Electric Continuous	7 Dec 2012
SP 200M-R20	Megasun/Helioakmi	Thermosiphon instant gas boost	Solar Hot Water Heater	SP 200	ST 2000 Selective	2		200	Post Gas	3 Dec 2012
SP 200M-R26	Megasun/Helioakmi	Thermosiphon instant gas boost	Solar Hot Water Heater	SP 200	ST 2000 Selective	2		200	Post Gas	3 Dec 2012
SP 200-R20	Megasun/Helioakmi	Thermosiphon instant gas boost	Solar Hot Water Heater	SP 200	ST 2000 Selective	2		200	Post Gas	3 Dec 2012
SP 200-R26	Megasun/Helioakmi	Thermosiphon instant gas boost	Solar Hot Water Heater	SP 200	ST 2000 Selective	2		200	Post Gas	3 Dec 2012
SP 300-B21	Megasun/Helioakmi	Thermosiphon, Closed Loop, Flat plate collector	Solar Hot water heater	SP 200	ST 2000 Selective	2		274	Post Gas	7 Dec 2012
SP 300-B25	Megasun/Helioakmi	Thermosiphon, Closed Loop, Flat plate collector	Solar Hot water heater	SP 200	ST 2000 Selective	2		274	Post Gas	7 Dec 2012
SP 300E-B21	Megasun/Helioakmi	Thermosiphon, Closed Loop, Flat plate collector	Solar Hot water heater	SP 200	ST 2000 Selective	2		274	Post Gas	7 Dec 2012
SP 300E-B25	Megasun/Helioakmi	Thermosiphon, Closed Loop, Flat plate collector	Solar Hot water heater	SP 200	ST 2000 Selective	2		274	Post Gas	7 Dec 2012
SP 300E-E	Megasun/Helioakmi	Thermosiphon, Closed Loop, Flat plate collector	Solar Hot water heater	SP 300	ST 2500 Selective	1		300	Electric Continuous	13 Dec 2012
SP 300E-R20	Megasun/Helioakmi	Thermosiphon, Closed Loop, Flat plate collector	Solar Hot water heater	SP 200	ST 2000 Selective	2		274	Post Gas	7 Dec 2012
SP 300E-R26	Megasun/Helioakmi	Thermosiphon, Closed Loop, Flat plate collector	Solar Hot water heater	SP 200	ST 2000 Selective	2		274	Post Gas	7 Dec 2012
SP 300-R20	Megasun/Helioakmi	Thermosiphon, Closed Loop, Flat plate collector	Solar Hot water heater	SP 200	ST 2000 Selective	2		274	Post Gas	7 Dec 2012

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Model Identification	Brand Name	Product Description	Product Type	Container Designation	Collector Designation	Number of Collectors	Additional Parts	Nominal Size (Litres)	Supplementary Energy Source	Date Endorsed
SP 300-R26	Megasun/Helioakmi	Thermosiphon, Closed Loop, Flat plate collector	Solar Hot water heater	SP 200	ST 2000 Selective	2		274	Post Gas	7 Dec 2012
VS 150/BL2-E	Megasun/Helioakmi	Vertical Tank, Closed Loop, Forced Circulation Flat plate collecto	Solar Hot water heater	150/BL2	ST 2500 Selective	1		143.4	Electric Continuous	13 Dec 2012
VS 200/BL2-B21	Megasun/Helioakmi	Pumped circulation instant gas boost	Solar Hot Water Heater	200/BL2	ST 2000 Selective	2	Wilo ST20/6-3P and TCD1 Pluc Differential Thermostat	200	Post Gas	3 Dec 2012
VS 200/BL2-B25	Megasun/Helioakmi	Pumped circulation instant gas boost	Solar Hot Water Heater	200/BL2	ST 2000 Selective	2	Wilo ST20/6-3P and TCD1 Pluc Differential Thermostat	200	Post Gas	3 Dec 2012
VS 200/BL2-E	Megasun/Helioakmi	Vertical Tank, Closed Loop, Forced Circulation Flat plate collecto	Solar Hot water heater	200/BL2	ST 2000 Selective	2		201.8	Electric Continuous	13 Dec 2012
VS 200/BL2-M-B21	Megasun/Helioakmi	Pumped circulation instant gas boost	Solar Hot Water Heater	200/BL2	ST 2000 Selective	2	Wilo ST20/6-3P and TCD1 Pluc Differential Thermostat	200	Post Gas	3 Dec 2012
VS 200/BL2-M-B25	Megasun/Helioakmi	Pumped circulation instant gas boost	Solar Hot Water Heater	200/BL2	ST 2000 Selective	2	Wilo ST20/6-3P and TCD1 Pluc Differential Thermostat	200	Post Gas	3 Dec 2012
VS 200/BL2-M-E	Megasun/Helioakmi	Vertical Tank, Closed Loop, Forced Circulation Flat plate collecto	Solar Hot water heater	200/BL2	ST 2500 Selective	1		201.8	Electric Continuous	13 Dec 2012
VS 200/BL2-M-R20	Megasun/Helioakmi	Pumped circulation instant gas boost	Solar Hot Water Heater	200/BL2	ST 2500 Selective	1	Wilo ST20/6-3P and TCD1 Pluc Differential Thermostat	200	Post Gas	3 Dec 2012
VS 200/BL2-M-R26	Megasun/Helioakmi	Pumped circulation instant gas boost	Solar Hot Water Heater	200/BL2	ST 2500 Selective	1	Wilo ST20/6-3P and TCD1 Pluc Differential Thermostat	200	Post Gas	3 Dec 2012
VS 200/BL2-R20	Megasun/Helioakmi	Pumped circulation instant gas boost	Solar Hot Water Heater	200/BL2	ST 2500 Selective	1	Wilo ST20/6-3P and TCD1 Pluc Differential Thermostat	200	Post Gas	3 Dec 2012
VS 200/BL2-R26	Megasun/Helioakmi	Pumped circulation instant gas boost	Solar Hot Water Heater	200/BL2	ST 2500 Selective	1	Wilo ST20/6-3P and TCD1 Pluc Differential Thermostat	200	Post Gas	3 Dec 2012
VS 300/BL2-B21	Megasun/Helioakmi	Pumped circulation instant gas boost	Solar Hot Water Heater	300/BL2	ST 2500 Selective	2	Wilo ST20/6-3P and TCD1 Pluc Differential Thermostat	300	Post Gas	3 Dec 2012

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Model Identification	Brand Name	Product Description	Product Type	Container Designation	Collector Designation	Number of Collectors	Additional Parts	Nominal Size (Litres)	Supplementary Energy Source	Date Endorsed
VS 300/BL2-B25	Megasun/Helioakmi	Pumped circulation instant gas boost	Solar Hot Water Heater	300/BL2	ST 2500 Selective	2	Wilo ST20/6-3P and TCD1 Pluc Differential Thermostat	300	Post Gas	3 Dec 2012
VS 300/BL2-E	Megasun/Helioakmi	Vertical Tank, Closed Loop, Forced Circulation Flat plate collecto	Solar Hot water heater	300/BL2	ST 2500 Selective	2		296.1	Electric Continuous	13 Dec 2012
VS 300/BL2-M-B21	Megasun/Helioakmi	Pumped circulation instant gas boost	Solar Hot Water Heater	300/BL2	ST 2500 Selective	2	Wilo ST20/6-3P and TCD1 Pluc Differential Thermostat	300	Post Gas	3 Dec 2012
VS 300/BL2-M-B25	Megasun/Helioakmi	Pumped circulation instant gas boost	Solar Hot Water Heater	300/BL2	ST 2500 Selective	2	Wilo ST20/6-3P and TCD1 Pluc Differential Thermostat	300	Post Gas	3 Dec 2012
VS 300/BL2-M-E	Megasun/Helioakmi	Vertical Tank, Closed Loop, Forced Circulation Flat plate collecto	Solar Hot water heater	300/BL2	ST 2000 Selective	2		296.1	Electric Continuous	13 Dec 2012
VS 300/BL2-M-R20	Megasun/Helioakmi	Pumped circulation instant gas boost	Solar Hot Water Heater	300/BL2	ST 2000 Selective	2	Wilo ST20/6-3P and TCD1 Pluc Differential Thermostat	300	Post Gas	3 Dec 2012
VS 300/BL2-M-R26	Megasun/Helioakmi	Pumped circulation instant gas boost	Solar Hot Water Heater	300/BL2	ST 2000 Selective	2	Wilo ST20/6-3P and TCD1 Pluc Differential Thermostat	300	Post Gas	3 Dec 2012
VS 300/BL2-R20	Megasun/Helioakmi	Pumped circulation instant gas boost	Solar Hot Water Heater	300/BL2	ST 2000 Selective	2	Wilo ST20/6-3P and TCD1 Pluc Differential Thermostat	300	Post Gas	3 Dec 2012
VS 300/BL2-R26	Megasun/Helioakmi	Pumped circulation instant gas boost	Solar Hot Water Heater	300/BL2	ST 2000 Selective	2	Wilo ST20/6-3P and TCD1 Pluc Differential Thermostat	300	Post Gas	3 Dec 2012
VS-150BL2-B21	Megasun/Helioakmi	Vertical Tank, Closed Loop, Forced Circulation Flat plate collector	Solar Hot water heater	150/BL2	ST 2000 Selective	1	Wilo ST20/6-3P and TCD1 Pluc Differential Thermostat	200	Post Gas	7 Dec 2012
VS-150BL2-B25	Megasun/Helioakmi	Vertical Tank, Closed Loop, Forced Circulation Flat plate collector	Solar Hot water heater	150/BL2	ST 2000 Selective	1	Wilo ST20/6-3P and TCD1 Pluc Differential Thermostat	200	Post Gas	7 Dec 2012
VS-150BL2-R20	Megasun/Helioakmi	Vertical Tank, Closed Loop, Forced Circulation Flat plate collector	Solar Hot water heater	150/BL2	ST 2000 Selective	1	Wilo ST20/6-3P and TCD1 Pluc Differential Thermostat	200	Post Gas	7 Dec 2012

Licence No: SMKP20267

Issued Date: 13 December 2012

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SCHEDULE TO STANDARDSMARK LICENCE

Model Identification	Brand Name	Product Description	Product Type	Container Designation	Collector Designation	Number of Collectors	Additional Parts	Nominal Size (Litres)	Supplementary Energy Source	Date Endorsed
VS-150BL2-R26	Megasun/Helioakmi	Vertical Tank, Closed Loop, Forced Circulation Flat plate collector	Solar Hot water heater	150/BL2	ST 2000 Selective	1	Wilo ST20/6-3P and TCD1 Plus Differential Thermostat	200	Post Gas	7 Dec 2012

End of Record

Licence No: SMKP20267

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HELLENIC ELECTRONICS EQUIPMENT QUALITY ASSURANCE CENTER
H.E.E.Q.A.C. S.A.

ACCREDITED BY ESXD FOR TESTING (07-2) & CERTIFICATION (125-2).
NOTIFIED BODY (0848) FOR THE 2006/95/EC & 90/396/EEC DIR.
103 KEFALLHNIAS STR, 112 51 ATHENS - GREECE
TEL.: +30-210-8670588 - FAX: +30-210-8647510
e-mail: info@heeqac.gr, site: www.heeqac.gr

CERTIFICATE OF CONFORMITY

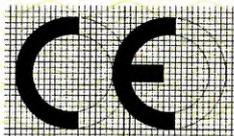
ORIGINAL

CERTIFICATE NUMBER : 400269
DATE OF ISSUE : MARCH 01, 2010
ISSUED TO : HELIOAKMI S.A
ADDRESS : NEA ZOI 19300, ASPROPIRGOS, GREECE
TEST ITEM : HOT WATER BOILER
TYPE/MODEL : MEGASUN ST-300/ MEGASUN ST-260,
MEGASUN ST-200, MEGASUN ST-160, MEGASUN ST-120
MANUFACTURER : HELIOAKMI S.A
APPLICABLE DIRECTIVES : LVD 2006/95/EC, EMC 2008/104/EC
APPLICABLE STANDARDS : EN 60335-1:2002+A11:2004+A12:2006+A1:4004
+A2:2006, EN 60335-2-21:2003+A2:2008,
EN 55014-1:2006, EN61000-3-2:2006,
EN61000-3-3:2008

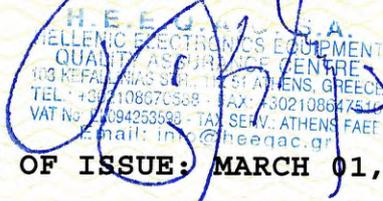
STATEMENT: THE TEST ITEM COMPLIES WITH THE ABOVE MENTIONED APPLICABLE STANDARDS.

GENERAL REMARKS:

- The test results apply only to the particular sample for which the HEEQAC'S test reports S/N 503382-E dated January 22, 2010 and 503384-E dated February 26, 2010 was issued.
- The tests were performed in accordance with the above mentioned applicable standards in the period from December 07, 2009 up to February 22, 2010.
- This certificate must be read in conjunction with the above mentioned test report.
- After preparation of the necessary technical documentation as well as the declaration of conformity, the CE marking shown bellow can be affixed on this product.
- This certificate is based on a single evaluation of the above mentioned product. It is therefore essential for the manufacturer to ensure that the quality of his production is always in accordance with the applicable standards.
- Copy of this certificate is submitted to the Ministry of Development of Greece.



TEST LABORATORY
FOR H.E.E.Q.A.C. S.A.
G. CHRYSANTHAKOPOULOS
GENERAL MANAGER



DATE OF ISSUE: MARCH 01, 2010



ΠΙΣΤΟΠΟΙΗΤΙΚΟ ΣΥΜΜΟΡΦΩΣΗΣ

Αρ. Πιστοποιητικού SKM 9916/1

Η DQS HELLAS χορηγεί το παρόν Πιστοποιητικό στην επιχείρηση :

ΗΛΙΟΑΚΜΗ Α.Ε.

για το προϊόν :

Ηλιακό Σύστημα 200 BL2 X 4.20 m², 300 BL2 X 5.20 m², 500 BL2 X 6.30 m²

το οποίο παράγεται σύμφωνα με τα τυποποιητικά έγγραφα :

EN 12976-1:2006

EN 12976-2:2006

EN 12975-1:2006

EN 12975-2:2006

στην ακόλουθη θέση :

Θέση Νέα Ζωή - Ασπρόπυργος, Αττική



Το παρόν Πιστοποιητικό χορηγείται σύμφωνα με:

- το Γενικό Κανονισμό Πιστοποίησης Προϊόντων της DQS HELLAS,
- τον Ειδικό Κανονισμό Πιστοποίησης ΕΚΠΠ.001 «ΕΙΔΙΚΟΣ ΚΑΝΟΝΙΣΜΟΣ ΠΙΣΤΟΠΟΙΗΣΗΣ ΗΛΙΑΚΩΝ ΣΥΛΛΕΚΤΩΝ, ΚΑΙ ΟΙΚΙΑΚΩΝ ΗΛΙΑΚΩΝ ΣΥΣΤΗΜΑΤΩΝ ΘΕΡΜΑΝΣΗΣ ΝΕΡΟΥ»

και διέπεται από τους όρους της αντίστοιχης σύμβασης μεταξύ της DQS HELLAS και της επιχείρησης

Ημερομηνία Έκδοσης: **2011-12-01**

Ημερομηνία Λήξεως: **2014-11-30**

Παναγιώτης Γιαννούτσος
Διευθυντής ΔΠΠ

Dr. Εμμανουήλ Δεληγιαννάκης
Γενικός Διευθυντής





CERTIFICATE OF CONFORMITY

Certificate No SKM 9916/1

DQS HELLAS grants the present certificate to the enterprise:

HELIOAKMI S.A.

for the product:

Solar System 200 BL2 X 4.20 m², 300 BL2 X 5.20 m², 500 BL2 X 6.30 m²

which is produced in conformity with the normative document:

EN 12976-1:2006

EN 12976-2:2006

EN 12975-1:2006

EN 12975-2:2006



at the following location:

Thesi Nea Zoi - Aspropyrgos, Attiki

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»,*

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

Date of issue: 2011-12-01

Date of valid: 2014-11-30

Panagiotis Giannoutsos
Director of Product Certification

Dr. Emmanuel Deliyannakis
Managing Director



Accreditation No: 735

ΓΚIII.08 – 30/05/2010



ΑΔΕΙΑ ΧΡΗΣΕΩΣ KEYMARK

Αρ. Πιστοποιητικού SKM 9916/1

Η DQS HELLAS χορηγεί την παρούσα άδεια στην επιχείρηση :

ΗΛΙΟΑΚΜΗ Α.Ε.

για το προϊόν / τύπο:

Ηλιακό Σύστημα 200 BL2 X 4.20 m², 300 BL2 X 5.20 m², 500 BL2 X 6.30 m²

το οποίο παράγεται σύμφωνα με τα τυποποιητικά έγγραφα :

EN 12976-1 : 2006

EN 12976-2 : 2006

EN 12975-1 : 2006

EN 12975-2 : 2006

στην ακόλουθη θέση :



E 31



Θέση Νέα Ζωή - Ασπρόπυργος, Αττική

Η παρούσα Άδεια χορηγείται σύμφωνα με:

- το Γενικό Κανονισμό Πιστοποίησης Προϊόντων της DQS HELLAS,
- τον Ειδικό Κανονισμό Πιστοποίησης ΕΚΠΠ.001 «ΕΙΔΙΚΟΣ ΚΑΝΟΝΙΣΜΟΣ ΠΙΣΤΟΠΟΙΗΣΗΣ ΗΛΙΑΚΩΝ ΣΥΛΛΕΚΤΩΝ, ΚΑΙ ΟΙΚΙΑΚΩΝ ΗΛΙΑΚΩΝ ΣΥΣΤΗΜΑΤΩΝ ΘΕΡΜΑΝΣΗΣ ΝΕΡΟΥ,
- τον Ειδικό Κανονισμό της CEN Σχήματος SOLAR KEYMARK για ηλιακά θερμικά προϊόντα,

και διέπεται από τους όρους της αντίστοιχης σύμβασης μεταξύ της DQS HELLAS και της επιχείρησης.

Ημερομηνία Έκδοσης: 2011-12-01

Ημερομηνία Λήξεως: 2014-11-30

Παναγιώτης Γιαννούτσος
Διευθυντής ΔΠΠ

Dr. Εμμανουήλ Δεληγιαννάκης
Γενικός Διευθυντής



LICENCE TO USE KEYMARK

Certificate No SKM 9916/1

DQS HELLAS grants the present certificate to the enterprise:

HELIOAKMI S.A.

for the product:

Solar System 200 BL2 X 4.20 m², 300 BL2 X 5.20 m², 500 BL2 X 6.30 m²

which is produced in conformity with the normative document:

EN 12976-1 : 2006

EN 12976-2 : 2006

EN 12975-1 : 2006

EN 12975-2 : 2006

at the following location:



Thesi Nea Zoi - Aspropyrgos, Attiki

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: **2011-12-01**

Date of valid: **2014-11-30**

Panagiotis Giannoutsos
Director of Product Certification

Dr. Emmanuel Deliyannakis
Managing Director

certif

Certificado

Certificate no. **PSK – 044/2010**
Certificado nº



Name and address of the certificate holder:
Nome e morada do titular do certificado:

Helioakmi, S.A.
Nea Zoi, 19300 Aspropyrgos, Attiki
Greece

Product:
Produto:

Thermal solar system and components - Factory made system
Instalação solar térmica prefabricada e seus componentes

Type references:
Referências:

ST - 120

Trademark(s):
Marca(s) comercial(is):

MEGASUN

Technical characteristics:
Características técnicas:

In annex / *Em anexo*

This product is in conformity with:
Este produto está em conformidade com:

EN 12976-1:2006, EN 12976-2:2006

and with the Specific Keymark Scheme Rules for Solar Thermal Products
e com as Regras Particulares do CEN Keymark Scheme para Produtos Solares Térmicos.

Test report(s) no. / issued by:
Relatório(s) de ensaios nº(s) / emitido(s) por:

Nº 7.V1/LES/2010 / INETI

Additional information (if any):
Informação adicional (se existir):

This certificate is valid until:
Este certificado é válido até:

2015-01-03

and supersedes the certificate no:
e substitui o certificado nº:

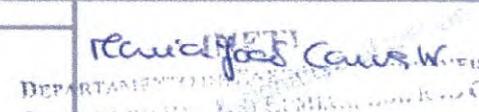
Date of issue:
Data de emissão:

2010-09-27

Francisco Barroca
General Manager / *Director Geral*



This Certificate includes one Annex with 2 (two) pages
Este Certificado é constituído por um Anexo com 2 (duas) páginas

Summary of EN 12976 Test Results, annex to Solar KEYMARK Certificate				Registration No.		PSK-044/2010				
Resumo dos resultados dos ensaios realizados segundo a norma EN 12976, anexo ao certificado Solar KEYMARK				Número						
				Date / Data		27.09.2010				
Company / Titular		Heliokmi, S.A.		Country / País		Greece				
Brand (optional) / Marca(s) Comercial(is) (opcional): MEGASUN										
Street / Rua		Nea Zoi		Website		www.heliokmi.com				
Postal Code, Place / Código Postal, Localidade		19300 Aspropyrgos, Attiki		E-mail		megasun@heliokmi.com				
				Tel. / Fax		+30 (210) 5595624 / 723				
System classification / Classificação do sistema										
Flow principle / Princípio de circulação				Thermosyphon / Temossifão						
Direct / Directo - Indirect / indirecto				Indirect / Indirecto						
Press. principle / Princípio de pressurização				Closed / fechado						
Drain back/down / Drenagem interior/exterior				No drain (always filled) / Sem drenagem (sempre cheio)						
Storage location / Localização do depósito				Outdoor / Exterior						
Storage position / Posição do depósito				Horizontal / Horizontal						
Internal back-up / Tipo de apoio interno				None / Nenhum						
If other / Outro										
EN12976 type / Tipo de instalação EN12976				Solar only / Apenas Solar						
Collector(s) / Coletor(s)				Storage(s) / Depósito(s)						
Company / Fabricante		Heliokmi, S.A.		Company / Fabricante		Heliokmi, S.A.				
Keymark reg. no. (optional)		PSK-001/2010								
Nº Certificado Keymark (opcional)										
Per module / Por módulo										
Model Modelo	Aperture area (A _{ap}) Área abertura	Gross length Comprimento total	Gross width Largura total	No. Modules Número de módulos	Model Modelo	Total volume Volume total	Gross diameter/width Diâmetro total/largura	Gross length Comprimento total	Back-up heated volume Volume do apoio	El. back-up power Potência eléctrica do apoio
	m ²	m	m			min - max	litres / litros	mm	mm	litres / litros
ST2000	1.81	2050	1010	1 - 1	ST120	110	530	1100	---	---
Controller / Controlador				Fluid / Fluido						
Company / Fabricante		---		Company / Fabricante		S.M.B.				
Model / Modelo		---		Model / Modelo		Neutraguard				
Functions Funções				Freezing point / Temperatura de congelamento		-60 °C				
System family overview / Identificação da família de sistemas										
Collector Coletor	No. collectors / Nº de colectores									
	Storage / Depósito									
	ST120	0	0	0	0	0	0			
ST2000	1									
0										
0										
0										
0										
Testing Laboratory / Laboratório de ensaio				INETI						
Website				www.ineti.pt						
Test report identification nr / Nº de identificação relatório de ensaio				nº7.V1/LES/2010						
Date of test report / Data do relatório de ensaio				07.09.2010						
Comments of test lab / Comentários do laboratório de ensaio										

Certificate no. **PSK – 045/2010**
Certificado nº



Name and address of the certificate holder:
Nome e morada do titular do certificado:

Helioakmi, S.A.
Nea Zoi, 19300 Aspropyrgos, Attiki
Greece

Product:
Produto:

Thermal solar system and components - Factory made system
Instalação solar térmica prefabricada e seus componentes

Type references:
Referências:

ST - 160

Trademark(s):
Marca(s) comercial(is):

MEGASUN

Technical characteristics:
Características técnicas:

In annex / *Em anexo*

This product is in conformity with:
Este produto está em conformidade com:

EN 12976-1:2006, EN 12976-2:2006

and with the Specific Keymark Scheme Rules for Solar Thermal Products
e com as Regras Particulares do CEN Keymark Scheme para Produtos Solares Térmicos.

Test report(s) no. / issued by:
Relatório(s) de ensaios nº(s) / emitido(s) por:

Nº 8.V1/LES/2010 / INETI

Additional information (if any):
Informação adicional (se existir):

This certificate is valid until:
Este certificado é válido até:

2015-01-03

and supersedes the certificate no:
e substitui o certificado nº:

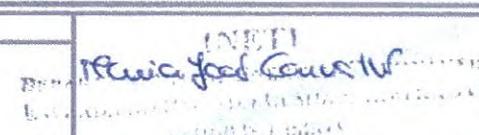
Date of issue:
Data de emissão:

2010-09-27

Francisco Barroca
General Manager / *Director Geral*



This Certificate includes one Annex with 2 (two) pages
Este Certificado é constituído por um Anexo com 2 (duas) páginas

Summary of EN 12976 Test Results, annex to Solar KEYMARK Certificate		Registration No.		PSK-045/2010						
Resumo dos resultados dos ensaios realizados segundo a norma EN 12976, anexo ao certificado Solar KEYMARK		Número								
Date / Data		27.09.2010								
Company / Titular		Heliokmi, S.A.		Country / País						
Brand (optional) / Marca(s) Comercial(is) (opcional): MEGASUN				Greece						
Street / Rua		Nea Zoi		Website						
Postal Code, Place / Código Postal, Localidade		19300 Aspropyrgos, Attiki		www.heliokmi.com						
				E-mail						
				megasun@heliokmi.com						
				Tel. / Fax						
				+30 (210) 5595624 / 723						
System classification / Classificação do sistema										
Flow principle / Princípio de circulação			Thermosyphon / Termossifão							
Direct / Directo - Indirect / Indirecto			Indirect / Indirecto							
Press. principle / Princípio de pressurização			Closed / fechado							
Drain back/down / Drenagem interior/exterior			No drain (always filled) / Sem drenagem (sempre cheio)							
Storage location / Localização do depósito			Outdoor / Exterior							
Storage position / Posição do depósito			Horizontal / Horizontal							
Internal back-up / Tipo de apoio interno			None / Nenhum							
If other / Outro										
EN12976 type / Tipo de instalação EN12976			Solar only / Apenas Solar							
Collector(s) / Colector(s)			Storage(s) / Depósito(s)							
Company / Fabricante		Heliokmi, S.A.		Company / Fabricante						
Keymark reg. no. (optional)		PSK-001/2010		Heliokmi, S.A.						
Nº Certificado Keymark (opcional)										
Model Modelo	Per module / Por módulo				Model Modelo	Total volume Volume total	Gross diameter/width Diâmetro total/largura	Gross length Comprimento total	Back-up heated volume Volume do apoio	El. back-up power Potência eléctrica do apoio
	Aperture area (A _e) Área abertura	Gross length Comprimento total	Gross width Largura total	No. Modules Número de módulos						
ST2500	2.33	2052	1275	1 - 1	ST160	150	530	1320	---	---
Controller / Controlador			Fluid / Fluido							
Company / Fabricante		---		Company / Fabricante						
Model / Modelo		---		S.M.B.						
Functions / Funções		---		Model / Modelo						
				Neutraguard						
				Freezing point / Temperatura de congelamento						
				-60 °C						
System family overview / Identificação da família de sistemas										
Collector Colector	No. collectors / Nº de colectores									
	Storage / Depósito									
ST2500	1	ST160								
Testing Laboratory / Laboratório de ensaio			INETI							
Website			www.ineti.pt							
Test report identification nr / Nº de identificação relatório de ensaio			nº8.V1/LES/2010							
Date of test report / Data do relatório de ensaio			07.09.2010							
Comments of test lab / Comentários do laboratório de ensaio										
										



Certificate no. PSK – 075/2009
Certificado nº

Name and address of the certificate holder: Heliokmi, S.A.
Nome e morada do titular do certificado: Nea Zoi, 19300 Aspropyrgos, Attiki
Greece

Product: Thermal solar system and components - Factory made
Produto: system
Instalação solar térmica prefabricada e seus componentes

Type references: ST - 200
Referências:

Trademark(s): MEGASUN
Marca(s) comercial(is):

Technical characteristics: In annex / *Em anexo*
Características técnicas:

This product is in conformity with: EN 12976-1:2006, EN 12976-2:2006
Este produto está em conformidade com:

and with the Specific Keymark Scheme Rules for Solar Thermal Products
e com as Regras Particulares do CEN Keymark Scheme para Produtos Solares Térmicos.

Test report(s) no. / issued by: Nº 7/DER-LECS/2006 and/e Nº 1/AD/DER-LECS/2009 / INETI-LECS
Relatório(s) de ensaios nº(s) / emitido(s) por:

Additional information (if any): Collector / *Colector* ST 2500 Selective
Informação adicional (se existir):

This certificate is valid until: 2014-01-22
Este certificado é válido até:

and supersedes the certificate no: PSK – 001/2009
e substitui o certificado nº:

Date of issue: 2009-11-27
Data de emissão:

Francisco Barroca
General Manager / *Director Geral*



This Certificate includes one Annex with 1 (one) page
Este Certificado é constituído por um Anexo com 1 (uma) página

Annex to certificate no.
Anexo ao certificado nº.

PSK – 075/2009



Type reference / Referência – ST - 200

Technical characteristics / Características técnicas	
1 Flat plate with selective coating collector / 1 coletor plano com cobertura selectiva – 2,61 m ² gross area / área total	
Horizontal tank of polyurethane foam of 195 liters / Depósito horizontal de poliuretano de 195 litros	
Absorber area / Área do absorvador (m ²)	2,35
Collector aperture area / Área de Abertura do coletor (m ²)	2,30
Collector dimensions / Dimensões do coletor	2049 x 1273 x 89 (mm x mm x mm)
Collector weight / Peso do coletor (kg)	42,5
System classification / Classificação do sistema	Thermosyphon / termossifão; Filled / cheio; Indirect / indirecto; Close coupled collector storage / depósito acoplado; Closed / fechado
Heat transfer fluid / Fluido de transferência de calor	Water and glycol mixture / Mistura de água e glicol
Heat exchanger type / Permutador de calor	Jacket / Camisa
Maximum operation pressure of primary circuit Pressão máxima de funcionamento do circuito primário (kPa)	300 (3 bar)
Maximum operation pressure (storage tank) Pressão máxima de funcionamento (depósito) (kPa)	700 (7 bar)
Linear fit to data of daily output energy of the system (diagram / diagrama "Input-Output") Ajuste linear da energia diária extraída do sistema	a ₁ = 1,16 (m ²) a ₂ = 0,12 (MJK ⁻¹) a ₃ = -1,2 (MJ)
Linear fit to data of temperature increase / Ajuste linear do aumento de temperatura	b ₁ = 1,48 (m ² K/MJ) b ₂ = 0,03 (-) b ₃ = -0,75 (K)

Performance indicators of the system, for Athens / Indicadores de rendimento do sistema para Atenas				
l/day / l/dia	Q _d (MJ)	Q _L (MJ)	f _{sol} (%)	Q _{par} (MJ)
110	3204,7	4569,8	70,1	---
140	3828,9	5818,1	65,8	---
170	4259,6	7062,8	60,3	---
200	4620,9	8311,1	55,6	---
250	4905,6	10387,9	47,2	---

$$f_{sol} = (Q_L / Q_d);$$

Q_L – Heat delivered by the solar heating system / Energia fornecida pela instalação solar;

Q_d – Heat demand / Energia necessária;

Q_{par} – Parasitic energy (electricity) for pump and controls / Energia parasita (electricidade) para a bomba e aparelhos de controlo.

Date of issue: 2009-11-27
Data de emissão:

Francisco Barroca
General Manager / Director Geral





Certificate no. PSK – 074/2009
Certificado nº

Name and address of the certificate holder: Heliokmi, S.A.
Nome e morada do titular do certificado: Nea Zoi, 19300 Aspropyrgos, Attiki
Greece

Product: Thermal solar system and components - Factory made
Produto: system
Instalação solar térmica prefabricada e seus componentes

Type references: ST - 300
Referências:

Trademark(s): MEGASUN
Marca(s) comercial(is):

Technical characteristics: In annex / *Em anexo*
Características técnicas:

This product is in conformity with: EN 12976-1:2006, EN 12976-2:2006
Este produto está em conformidade com:

and with the Specific Keymark Scheme Rules for Solar Thermal Products
e com as Regras Particulares do CEN Keymark Scheme para Produtos Solares Térmicos.

Test report(s) no. / issued by: Nº 8/DER-LECS/2006 and/e Nº 1/AD/DER-LECS/2009 / INETI-LECS
Relatório(s) de ensaios nº(s) / emitido(s) por:

Additional information (if any): Collector / *Colector* ST-2000 Selective
Informação adicional (se existir):

This certificate is valid until: 2014-01-22
Este certificado é válido até:

and supersedes the certificate no: PSK – 002/2009
e substitui o certificado nº:

Date of issue: 2009-11-27
Data de emissão:

Francisco Barroca
General Manager / *Director Geral*



This Certificate includes one Annex with 1 (one) page
Este Certificado é constituído por um Anexo com 1 (uma) página

Annex to certificate no.
Anexo ao certificado n.º

PSK – 074/2009



Type reference / Referência – ST - 300

Technical characteristics / Características técnicas	
2 Flat plate with selective coating collectors / 2 colectores planos com cobertura selectiva – 4,2 m ² gross area / área total	
Horizontal tank of polyurethane foam of 295 liters / Depósito horizontal de poliuretano de 295 litros	
Absorber area / Área do absorvador (m ²)	1,78
Collector aperture area / Área de Abertura do colector (m ²)	1,78
Collector dimensions / Dimensões do colector	2050 x 1010 x 89 (mm x mm x mm)
Collector weight / Peso do colector (kg)	42,5
System classification / Classificação do sistema	Thermosyphon / termosifão; Filled / cheio; Indirect / indirecto; Close coupled collector storage / depósito acoplado; Closed / fechado
Heat transfer fluid / Fluido de transferência de calor	Water and glycol mixture / Mistura de água e glicol
Heat exchanger type / Permutador de calor	Jacket / Camisa
Maximum operation pressure of primary circuit Pressão máxima de funcionamento do circuito primário (kPa)	300 (3 bar)
Maximum operation pressure (storage tank) Pressão máxima de funcionamento (depósito) (kPa)	700 (7 bar)
Linear fit to data of daily output energy of the system (diagram / diagrama "Input-Output") Ajuste linear da energia diária extraída do sistema	a ₁ = 1,80 (m ²) a ₂ = 0,21 (MJK ⁻¹) a ₃ = -1,4 (MJ)
Linear fit to data of temperature increase / Ajuste linear do aumento de temperatura	b ₁ = 1,58 (m ² K/MJ) b ₂ = 0,21 (-) b ₃ = 0,60 (K)

Performance indicators of the system, for Athens / Indicadores de rendimento do sistema para Atenas				
l/day / l/dia	Q _d (MJ)	Q _L (MJ)	f _{sol} (%)	Q _{par} (MJ)
170	5058,9	7062,8	71,6	---
200	5672,1	8311,1	68,3	---
250	6533,5	10387,9	62,9	---
300	7165,0	12464,8	57,5	---
400	7781,8	16622,1	46,8	---

f_{sol} = (Q_L / Q_d);

Q_L – Heat delivered by the solar heating system / Energia fornecida pela instalação solar;

Q_d – Heat demand / Energia necessária;

Q_{par} – Parasitic energy (electricity) for pump and controls / Energia parasita (electricidade) para a bomba e aparelhos de controlo.

Date of issue: 2009-11-27
Data de emissão:

Francisco Barroca
General Manager / Director Geral



Certificate no. **PSK – 001/2010**
Certificado nº



Name and address of the certificate holder:
Nome e morada do titular do certificado:

Helioakmi, S.A.
Nea Zoi, 19300 Aspropyrgos, Attiki
Greece

Product:
Produto:

Thermal solar collector
Colector solar térmico

Type references:
Referências:

ST 2000, ST 2500

Trademark(s):
Marca(s) comercial(is):

MEGASUN

Technical characteristics:
Características técnicas:

In annex / *Em anexo*

This product is in conformity with:
Este produto está em conformidade com:

EN 12975-1:2006, EN 12975-2:2006

and with the Specific Keymark Scheme Rules for Solar Thermal Products
e com as Regras Particulares do CEN Keymark Scheme para Produtos Solares Térmicos.

Test report(s) no. / issued by:
Relatório(s) de ensaios nº(s) / emitido(s) por:

31.v1/DER-LECS/2009 /INETI-LECS

Additional information (if any):
Informação adicional (se existir):

This certificate is valid until:
Este certificado é válido até:

2015-01-03

and supersedes the certificate no:
e substitui o certificado nº:

Date of issue:
Data de emissão:

2010-01-04

Francisco Barroca
General Manager / *Director Geral*



This Certificate includes one Annex with 1 (one) page
Este Certificado é constituído por um Anexo com 1 (uma) página

Annex to certificate no.
Anexo ao certificado n.º.

PSK – 001/2010



Technical characteristics / Características técnicas:

Type reference / Referência	ST 2000	ST 2500
Type / Tipo	Flat plate collector / Colector Plano	
Absorber area / Área do absorsor (m ²)	1,82	2,33
Aperture area / Área de abertura (m ²)	1,81	2,33
Gross area / Área total (m ²)	2,07	2,62
Dimensions / Dimensões (mm x mm x mm)	2050 x 1010 x 90	2052 x 1275 x 90
Transference fluid / Fluido de transferência	Water and glycol / Água e glicol	
Weight / Peso (kg)	38,5	42,5
Maximum operating pressure / Pressão máxima de funcionamento (kPa)	700 (7 bar)	
Stagnation temperature / Temperatura de estagnação (°C)	122	
Time constant / Constante de tempo (s)	70	64
Effective thermal capacity / Capacidade térmica efectiva (kJ / (m ² K))	15,6	
Incidance angle modifier (incidence angle) Modificador de ângulo (ângulo de incidência)	K _L (θ= 50°) = 0,84	
Instantaneous efficiency based on aperture area Rendimento instantâneo baseado na área de abertura		
		0,682
η_0		7,2
a_1 (W m ⁻² K ⁻¹)		0,011
a_2 (W m ⁻² K ⁻²)		
Peak power / Pico de potência (W)	1234	1540

Note 1 / Nota 1: The manufacturer declares that the certified solar collectors can be used in frost exposed areas, only in combination with an appropriate frost protection mixture. The freeze resistance test (clause 5.8 of EN 12975-2) was not carried out. / O fabricante declara que os coletores solares térmicos certificados, quando utilizados com mistura de fluido anti-congelante podem ser utilizados em ambientes com gelo. O ensaio de resistência ao congelamento (secção 5.8 da EN 12975-2) não foi efectuado.

Note 2 / Nota 2: The impact resistance test (clause 5.10 of EN 12975-2) was not carried out. Optional test. / O ensaio de resistência ao impacto (secção 5.10 da EN 12975-2) não foi efectuado. Ensaio Opcional.

Date of issue: 2010-01-04
Data de emissão:

Francisco Barroca
General Manager / Director Geral





Certificate no. **PSK – 073/2009**
Certificado nº

Name and address of the certificate holder:
Nome e morada do titular do certificado:

Helioakmi, S.A.
Nea Zoi, 19300 Aspropyrgos, Attiki
Greece

Product:
Produto:

Thermal solar collector
Colector solar térmico

Type references:
Referências:

ST 2000 Selective, ST 2500 Selective

Trademark(s):
Marca(s) comercial(is):

Megasun

Technical characteristics:
Características técnicas:

In annex / *Em anexo*

This product is in conformity with:
Este produto está em conformidade com:

EN 12975-1:2006, EN 12975-2:2006

and with the Specific Keymark Scheme Rules for Solar Thermal Products
e com as Regras Particulares do CEN Keymark Scheme para Produtos Solares Térmicos.

Test report(s) no. / issued by:
Relatório(s) de ensaios nº(s) / emitido(s) por:

18.v1/DER-LECS/2009, 19.v1/DER-LECS/2009, 1/R/DER-LECS/2006,
5/AD/DER-LECS/2007 /INETI-LECS

Additional information (if any):
Informação adicional (se existir):

This certificate is valid until:
Este certificado é válido até:

2012-06-12

and supersedes the certificate no:
e substitui o certificado nº:

PSK-031/2008

Date of issue:
Data de emissão:

2009-11-27

Francisco Barroca
General Manager / *Director Geral*



This Certificate includes one Annex with 1 (one) page
Este Certificado é constituído por um Anexo com 1 (uma) página

Annex to certificate no.
Anexo ao certificado nº.

PSK – 073/2009



Technical characteristics / Características técnicas:

Type reference / Referência	ST 2000 Selective	ST 2500 Selective
Type / Tipo	Flat plate with selective coating / Plano com cobertura selectiva	
Absorber area / Área do absorsor (m ²)	1,78	2,35
Aperture area / Área de abertura (m ²)	1,78	2,30
Gross area / Área total (m ²)	2,07	2,61
Dimensions / Dimensões (mm x mm x mm)	2049 x 1010 x 89	2049 x 1273 x 89
Maximum operating pressure / Pressão máxima de funcionamento (kPa)	700 (7 bar)	
Drop pressure / Mass flow rate (kg/h – Pa) Perda de carga / Caudal	Measured values / Valores medidos 0 – 0 39 – 20 89 – 60 139 – 120 190 – 200 242 – 290	
Stagnation temperature / Temperatura de estagnação (°C)	173	
Time constant / Constante de tempo (s)	62	37
Thermal capacity / Capacidade térmica (kJ / K)	16,4	17,2
Incidence angle modifier (incidence angle) Modificador de ângulo (ângulo de incidência)	K _L (θ= 50°) = 0,83	
Instantaneous efficiency / Rendimento instantâneo	0,740	
η_0 a ₁ (W m ⁻² K ⁻¹) a ₂ (W m ⁻² K ⁻²)	3,9 0,013	
Peak power / Pico de potência (W)	1317	1707

Note 1 / Nota 1: The manufacturer declares that the certified solar collectors can be used in frost exposed areas, only in combination with an appropriate frost protection mixture. The freeze resistance test (clause 5.8 of EN 12975-2) was not carried out. / O fabricante declara que os colectores solares térmicos certificados, quando utilizados com mistura de fluido anti-congelante podem ser utilizados em ambientes com gelo. O ensaio de resistência ao congelamento (secção 5.8 da EN 12975-2) não foi efectuado.

Note 2 / Nota 2: The impact resistance test (clause 5.10 of EN 12975-2) was not carried out. Optional test. / O ensaio de resistência ao impacto (secção 5.10 da EN 12975-2) não foi efectuado. Ensaio Opcional.

Date of issue: 2009-11-27
Data de emissão:



Francisco Barroca
General Manager / Director Geral



CERTIFICATE

Management system as per
EN ISO 9001 : 2008

In accordance with TÜV NORD CERT procedures, it is hereby certified that

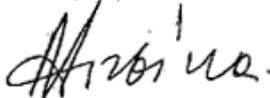
HELIOAKMI S.A.
Nea Zoi, Aspropyrgos
193 00 Aspropyrgos
Attiki / Hellas

applies a Management System in line with the above standard for the following scope

Production of Solar Water Heaters and Solar Collectors

Certificate Registration No. 04 100 041559
Audit Report No. GR-1482/2010

Valid until 2013-10-23
Initial certification-2004



Certification Body
at TÜV NORD CERT GmbH

Athens, 2010-10-24

This certification was conducted in accordance with the TÜV NORD CERT auditing and certification procedures and is subject to regular surveillance audits.

TÜV NORD CERT GmbH

Langemarckstrasse 20.

45141 Essen

www.tuev-nord-cert.com



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