

CERTIFICATE OF PRODUCT CONFORMITY

Dubai Central Laboratory Department (DCLD) of Dubai Municipality
hereby attests that the product(s)

Solar Collector

(Details as per the attached Scope of Certification)

manufactured by:

HELIOAKMI S.A.

NEA ZOI, 19300 Aspropyrgos, Athens, Greece

have been assessed in accordance with DCLD Document Ref. No. DM-DCLD-RD-DP21-2001 (IC) "General Rules for DM third party product certification system through factory assessment" and the relevant Specific Rules, and were found in conformity with the standard specification:

BS EN 12975-1:2006 +A1: 2010

Accordingly, DCLD hereby authorizes the above manufacturer
to affix the DCL Product Conformity Mark on the above-mentioned product(s).



for / ENGR. AMIN AHMED AMIN
Director, Dubai Central Laboratory Department
Dubai Municipality



إدارة الاعتمادات
Emirates International Accreditation Centre
CB-003-PRD

Certificate No: CL14020231
Valid Until: 14/01/2021



Current Issue Date: 15/01/2020
Original Issue Date: 15/01/2015

The attached Scope of Certification bearing the same Certificate Number forms an integral part of this Certificate.
This Certificate is an electronic document subject to the Terms and Conditions of the Product Certification System and shall not be reproduced except in full.

DUBAI CENTRAL LABORATORY DEPARTMENT DCL PRODUCT CONFORMITY CERTIFICATION SCHEME

SCOPE OF CERTIFICATION FOR CERTIFICATE NO. CL14020231

Certificate Issued To:	HELIOAKMI S.A. Nea Zoi, 19300 Aspropyrgos, Athens, Greece
Applicable Standard Specification:	BS EN 12975-1:2006 +A1: 2010 – Thermal solar systems and components – Solar Collectors – Part 1: General requirements
Applicable Specific Rules:	RD-DP21-2178 (IC) – Specific Rules Certification of Solar Collectors as per BS EN 12975-1 Through Factory Assessment RD-DP21-2084 (IC) – Guidelines for Factory Production control Plan for Solar Collector Manufacturers

S/N	PRODUCT DETAILS	BRAND NAME(S) / MODEL(S)	PRODUCT DESCRIPTION
1.	<p>FLAT PANEL SOLAR TYPE COLLECTOR</p> <p>ST FAMILY</p> <p>Absorber Materials: Aluminum Absorber Sheet with selective titanium blue treatment ultrasonic welded into copper tubes</p> <p>Rockwool thermal insulation of 35 kg/m³ ± 5% density with thermal conductivity of 0.039 w/(m- ° K)</p> <p>Solar tempered 4 mm glass cover</p> <p>Anodized aluminum profile frame</p> <p>EPDM elastic rubber silicone as sealing materials</p> <p>Use with anti-freeze thermal fluid (propylene glycol for solar system)</p>	<p>"HELIOAKMI, MEGASUN, NOVASUN, ASSOS BOILERS, VORMANN, CHALMERS, SOLITAIRE, SOLARNET, EVERHOT, SOLARTOP & ATLASOL, *RICHMOND " Brands</p> <p>ST 2500 SELECTIVE</p> <p>"PRECISION SOLAR" Brand PRECISION SOLAR 2500</p> <p>"RHEEM" Brand RHEEM 2500</p> <p>"RUUD" Brand RUUD 2500</p> <p>"AQUA MASTER" Brand AQUA MASTER 2500</p> <p>TIVOK ENERGY" Brand TM-FP-2500</p>	<p>Gross dimensions of 2050 x 1279 x 90 mm;</p> <p>Gross Area – 2.62 m²; Aperture area – 2.33 m²; Total Absorber Area – 2.36 m²;</p> <p>Headers – 2 horizontal copper tube of 22 mm diameter</p> <p>Risers – 10 vertical copper tubes of 10 mm diameter;</p> <p>Maximum operational pressure – 7 bars; Maximum Stagnation Temperature - 173°C</p> <p>Empty Collector Weight – 48 kg ± 10%</p>

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		<p>"HELIOAKMI, MEGASUN, NOVASUN, ASSOS BOILERS, VORMANN, CHALMERS, SOLITAIRE, SOLARNET, EVERHOT, SOLARTOP, "RICHMOND , & ATASSOL" Brands</p> <p>ST 2000 SELECTIVE TIVOK ENERGY BRAND TM-FP-2000</p> <p>"PRECISION SOLAR" Brand PRECISION SOLAR 2000</p> <p>"RHEEM" Brand RHEEM 2000</p> <p>"RUUD" Brand RUUD 2000</p> <p>"AQUA MASTER" Brand AQUA MASTER 2000</p>	<p>Gross dimensions of 2050 x 1012 x 90 mm; Gross Area – 2.08 m²; Aperture area – 1.80 m²; Total Absorber Area – 1.84 m²; Headers – 2 horizontal copper tube of 22 mm diameter Risers – 8 vertical copper tubes of 10 mm diameter; Maximum operational pressure – 7 bars; Maximum Stagnation Temperature - 173°C Empty Collector Weight – 39 kg ± 10%</p>
2.	<p>FLAT PANEL SOLAR TYPE COLLECTOR</p> <p>SOL FAMILY</p> <p>Absorber Materials: Aluminum Absorber Sheet with selective titanium blue treatment ultrasonic welded into aluminum tubes Rockwool thermal insulation of 35 kg/m³ ± 5% density with thermal conductivity of 0.039 w/(m- ° K) Solar tempered 4 mm glass cover Anodized aluminum profile frame Silicone as sealing materials</p> <p>Use with anti-freeze thermal fluid (propylene glycol for solar system)</p>	<p>"HELIOAKMI, CHALMERS, SOLITAIRE, SOLARNET, EVERHOT, NOVASUN, VORMANN, ATASSOL, SOLARTOP, PRECISION SOLAR, ASSOS BOILERS, RHEEM , "RICHMOND & RUUD" Brands</p> <p>SOL 2500</p>	<p>Gross dimensions of 2099 x 1236 x 70 mm; Gross Area – 2.48 m²; Aperture area – 2.32 m²; Total Absorber Area – 2.35 m²; Headers – 2 horizontal aluminum tube of 22 mm diameter Risers – 10 vertical aluminum tubes of 10 mm diameter; Maximum operational pressure – 7 bars; Maximum Stagnation Temperature - 173°C Empty Collector Weight – 40kg ± 10%</p>
		<p>"HELIOAKMI, CHALMERS, SOLITAIRE, SOLARNET, EVERHOT, NOVASUN, VORMANN, ATASSOL, SOLARTOP, PRECISION SOLAR, ASSOS BOILERS, RHEEM , "RICHMOND & RUUD" Brands</p> <p>SOL 2000</p>	<p>Gross dimensions of 2007 x 975 x 70 mm; Gross Area – 1.96 m²; Aperture area – 1.82 m²; Total Absorber Area – 1.84 m²; Headers – 2 horizontal aluminum tube of 22 mm diameter Risers – 8 vertical aluminum tubes of 10 mm diameter; Maximum operational pressure – 7 bars; Maximum Stagnation Temperature - 173°C Empty Collector Weight – 33 kg ± 10%</p>

**DUBAI CENTRAL LABORATORY DEPARTMENT
DCL PRODUCT CONFORMITY CERTIFICATION SCHEME**

**SCOPE OF CERTIFICATION
FOR CERTIFICATE NO. CL14020231**

NOTE 1: The above products shall bear the DCL Conformity Mark applied on each individual product.

NOTE 2: This document forms part of the Certificate of Product Conformity bearing the same certificate number.

NOTE 3: *Newly added products

Original Issue Date : 15 January 2015

Current Issue Date : 15 January 2020

Valid Until : 14 January 2021

ARIF HUSAIN AL MARZOOQI
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Dubai Central Laboratory Department