

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:

SOLE S.A.

Lefktron & Laikon Agonon, Acharnai-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: 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



Certificate No: CL16020330
Valid Until: 22/02/2020



Current Issue Date: 23/02/2019
Original Issue Date: 23/02/2016

The attached Scope of Certification bearing the same Certificate Number forms an integral part of this Certificate.
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**DUBAI CENTRAL LABORATORY DEPARTMENT
DCL PRODUCT CONFORMITY CERTIFICATION SCHEME**

**SCOPE OF CERTIFICATION
FOR CERTIFICATE NO. CL16020330**

Certificate Issued To:	SOLE S.A. Lefktron and Laikon Agonon, Acharnai-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 PLATE SOLAR COLLECTORS</p> <p>CLIMASOL FAMILY</p> <p>Absorber Materials: Copper full face sheet 0.20 mm thickness welded to copper pipes with ultrasonic or laser welding</p> <p>Absorber Coating: Sputtering blue selective surface</p> <p>Insulation Materials: 40 mm Rockwool with Density of 50 kg/m3 for back and 20 mm Glasswool with density of 30 kg/m3 for sides</p> <p>Cover: Tempered low iron prismatic glass 4 mm glass cover</p> <p>Frame: Aluminum profile epoxy coated & free of screws and rivets</p> <p>Sealing materials: EPDM rubber - silicone</p> <p>Use with anti-freeze thermal fluid</p> <p>Maximum operational pressure: 1000 kPa</p> <p>Maximum Working temperature: 150°C</p>	<p>“SOLE, EUROSTAR, AQUASOL, OLYMPUS, SUNLIT, HRSFUNKE, SOLARIZE, JRJ” BRANDS</p>	<p>CLIMASOL 175</p> <p>Gross dimensions: 1760 x 1000 x 86 mm; Collector Area: 1.76 m²; Aperture Area: 1.59 m²; Absorber Area: 1.57 m²; Collector Weight: 38 kg; Fluid content: 1.30 liters</p> <p>CLIMASOL 200</p> <p>Gross dimensions: 1970 x 970 x 86 mm; Collector Area: 1.91 m²; Aperture Area: 1.73 m²; Absorber Area: 1.71 m²; Collector Weight: 41 kg; Fluid content: 1.36 liters</p> <p>CLIMASOL 250</p> <p>Gross dimensions: 1970 x 1175 x 86 mm; Collector Area: 2.31 m²; Aperture Area: 2.12 m²; Absorber Area: 2.09 m²; Collector Weight: 49 kg; Fluid content: 1.64 liters</p> <p>CLIMASOL 270</p> <p>Gross dimensions: 2145 x 1248 x 86 mm; Collector Area: 2.68 m²; Aperture Area: 2.46 m²; Absorber Area: 2.42 m²; Collector Weight: 55 kg; Fluid content: 1.86 liters</p>

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2.	<p>FLAT PLATE SOLAR COLLECTORS</p> <p>WASCO FAMILY</p> <p>Absorber Materials: Aluminum full face sheet 0.50 mm thickness welded to copper pipes with laser welding Absorber Coating: Sputtering blue selective surface</p> <p>Insulation Materials: 40 mm Rockwool with Density of 50 kg/m³ for back and 20 mm Glasswool with density of 30 kg/m³ for sides Cover: Tempered low iron prismatic glass 4 mm glass cover Frame: Aluminum profile epoxy coated & free of screws and rivets Sealing materials: EPDM rubber - silicone Use with anti-freeze thermal fluid Maximum operational pressure: 600 kPa Maximum Working temperature: 160°C</p>	<p>“SOLE, EUROSTAR, AQUASOL, OLYMPUS, SUNLIT, HRSFUNKE, SPECTRUM, SOLARIZE, JRJ” BRANDS</p>	<p>WASCO 175</p> <p>Gross dimensions: 1760 x 1000 x 86 mm; Collector Area: 1.76 m²; Aperture Area: 1.59 m²; Absorber Area: 1.57 m²; Collector Weight: 38 kg; Fluid content: 1.30 liters</p> <p>WASCO 200</p> <p>Gross dimensions: 1970 x 970 x 86 mm; Collector Area: 1.91 m²; Aperture Area: 1.73 m²; Absorber Area: 1.71 m²; Collector Weight: 41 kg; Fluid content: 1.36 liters</p> <p>WASCO 250</p> <p>Gross dimensions: 1970 x 1175 x 86 mm; Collector Area: 2.31 m²; Aperture Area: 2.12 m²; Absorber Area: 2.09 m²; Collector Weight: 49 kg; Fluid content: 1.64 liters</p> <p>WASCO 270</p> <p>Gross dimensions: 2145 x 1248 x 86 mm; Collector Area: 2.68 m²; Aperture Area: 2.46 m²; Absorber Area: 2.42 m²; Collector Weight: 55 kg; Fluid content: 1.86 liters</p>
3.	<p>FLAT PLATE SOLAR COLLECTORS</p> <p>NON SELECTIVE (NS) FAMILY</p> <p>Absorber Materials: Aluminum full face sheet 0.40 mm thickness welded to copper pipes with laser welding Absorber Coating: Black paint non-selective surface</p> <p>Insulation Materials: 40 mm Rockwool with Density of 50 kg.m³ for back and 20 mm Glasswool with density of 30 kg/m³ for sides Cover: Tempered low iron prismatic glass 4 mm glass cover Frame: Aluminum profile powder coated & free of screws and rivets Sealing materials: EPDM rubber - silicone Use with anti-freeze thermal fluid Maximum operational pressure: 600 kPa Maximum Working temperature: 150°C</p>	<p>“SOLE, EUROSTAR, AQUASOL, OLYMPUS, SUNLIT, HRSFUNKE, SOLARIZE, JRJ” BRANDS</p>	<p>NS 175</p> <p>Gross dimensions: 1760 x 1000 x 86 mm; Collector Area: 1.76 m²; Aperture Area: 1.59 m²; Absorber Area: 1.57 m²; Collector Weight: 38 kg; Fluid content: 1.30 liters</p> <p>NS 200</p> <p>Gross dimensions: 1970 x 970 x 86 mm; Collector Area: 1.91 m²; Aperture Area: 1.73 m²; Absorber Area: 1.71 m²; Collector Weight: 41 kg; Fluid content: 1.36 liters</p> <p>NS 250</p> <p>Gross dimensions: 1970 x 1175 x 86 mm; Collector Area: 2.31 m²; Aperture Area: 2.12 m²; Absorber Area: 2.09 m²; Collector Weight: 49 kg; Fluid content: 1.64 liters</p> <p>NS 270</p> <p>Gross dimensions: 2145 x 1248 x 86 mm; Collector Area: 2.68 m²; Aperture Area: 2.46 m²; Absorber Area: 2.42 m²; Collector Weight: 55 kg; Fluid content: 1.86 liters</p>



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4.	<p>FLAT PLATE SOLAR COLLECTORS</p> <p>ECO FAMILY</p> <p>Absorber Materials: Aluminum fins 0.50 mm thickness welded to copper pipes with laser welding</p> <p>Absorber Coating: Sputtering blue selective surface</p> <p>Insulation Materials: 40 mm Rockwool with Density of 50 kg.m3 for back and 20 mm Glasswool with density of 30 kg/m3 for sides</p> <p>Cover: Tempered low iron prismatic glass 3.2 mm glass cover</p> <p>Frame: Aluminum profile & free of screws and rivets</p> <p>Sealing materials: Acrylic foam - silicone Use with anti-freeze thermal fluid</p> <p>Maximum operational pressure: 1000 kPa Maximum Working temperature: 150°C</p>	<p>“ECO, HRSFUNKE, SPECTRUM, SOLARIZE, JRJ ” AQUASOL, SUNLIT, OLYMPUS BRANDS</p>	<p>ECO S150</p> <p>Gross dimensions: 1540 x 960 x 81 mm; Collector Area: 1.48 m²; Aperture Area: 1.39 m²; Absorber Area: 1.33 m²; Collector Weight: 27.30 kg; Fluid content: 0.85 liter</p> <p>ECO S200</p> <p>Gross dimensions: 1960 x 960 x 81 mm; Collector Area: 1.88 m²; Aperture Area: 1.78 m²; Absorber Area: 1.70 m²; Collector Weight: 32.0 kg; Fluid content: 0.95 liter</p> <p>ECO S230</p> <p>Gross dimensions: 1960 x 1165 x 81 mm; Collector Area: 2.28 m²; Aperture Area: 2.17 m²; Absorber Area: 2.09 m²; Collector Weight: 38.80 kg; Fluid content: 1.20 liters</p> <p>ECO S260</p> <p>Gross dimensions: 2135 x 1238 x 81 mm; Collector Area: 2.64 m²; Aperture Area: 2.52 m²; Absorber Area: 2.44 m²; Collector Weight: 44 kg; Fluid content: 1.30 liters</p>
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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.

Original Issue Date : 23 February 2016
Current Issue Date : 23 February 2019
Valid Until : 22 February 2020

ARIF HUSAIN AL MARZOOQI
Products Conformity Assessment Section Manager
Dubai Central Laboratory Department