

# CERTIFICATE OF PRODUCT CONFORMITY

*Dubai Central Laboratory Department (DCLD) of Dubai Municipality,*

*hereby attests that the product(s)*

**THERMAL SOLAR SYSTEMS AND COMPONENTS – SOLAR COLLECTORS**

*(Details as per the attached Scope of Certification)*

*manufactured by:*

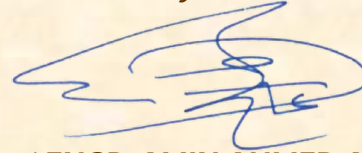
**DELPASO SOLAR SL**

**Parque Tecnológico de Andalucía, Avd. Juan Lopez de Penalver 3, C.P. 29590 Malaga, Spain**

*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 to the above-mentioned product(s).*



for / **ENGR. AMIN AHMED AMIN**

**Director, Dubai Central Laboratory Department**

**Dubai Municipality**

Verify:



**Certificate No: CL18020599**

**Valid Until: 17 June 2019**



**Current Issue Date: 18 June 2018**

**Original Issue Date: 18 June 2018**

DM-DCLD-F-IC-2031 REV 13

*The attached Scope of Certification bearing the same Certificate No. 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 –REVISION 02**  
**FOR CERTIFICATE NO. CL18020599**

**Certificate Issued To:** **DELPASO SOLAR SL**  
Parque Tecnológico de Andalucia, Avd. Juan Lopez de Penalver 3, C.P. 29590 Malaga, Spain

**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 DESCRIPTION	BRAND NAME(S) / MODEL(S)	PRODUCT DETAILS
1.	<p>FLAT PLATE TYPE SOLAR COLLECTOR</p> <p>Absorber materials: Alanod Mirotherm and Blue Tec Etaplus Aluminum with 0.4mm thickness, 0.95 solar absorptance and 0.05 emittance, laser welded with copper pipes; Copper absorber pipe with dimensions: Headers – Copper: 18mm x 0.8mm, Risers – Copper: 8mm x 0.4mm; Smooth and extra clear tempered low Iron Glass 3.2mm thickness with 91.1% solar transmittance top cover; Polyurethane foam thermal insulation with thickness of 20mm and glass wool thermal insulation with thickness of 20mm for back insulation. Casing: Aluminum side</p>	<p>“DELPASO” Brand</p> <p><b>DPS ECO 2000</b></p>	<p>Gross Area of 1.96m<sup>2</sup> Aperture Area of 1.88 m<sup>2</sup> Absorber Area of 1.83 m<sup>2</sup> Gross dimensions: 2056 x 957 x 70 mm Weight (empty) : 24.8 Kg Collector Fluid Volume : 1.09 litres water/Propylene Glycol Number of tubes : 8 risers Distance between risers: 110mm Maximum Stagnation Temperature: 222 °C Maximum Operating Pressure: 10 bar</p>

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	<p>wall/frame and aluminum back sheet Sealing Material : Silicone glued Flow pattern: harp or vertical tube-grid Mounting: on roof, flat roof</p>	<p><b>DPS ECO 2500</b></p>	<p>Gross Area of 2.48m<sup>2</sup> Aperture Area of 2.39 m<sup>2</sup> Absorber Area of 2.33 m<sup>2</sup> Gross dimensions: 2055 x 1205 x 70 mm Weight (empty) : 32 Kg Collector Fluid Volume : 1.34 litres water/Propylene Glycol Number of tubes : 10 risers Distance between risers: 110mm Maximum Stagnation Temperature: 210.4 °C Maximum Operating Pressure: 10 bar</p>
2	<p>FLAT PLATE TYPE SOLAR COLLECTOR</p> <p>Absorber materials: Aluminum Mirotherm Aluminum with 0.4mm thickness, 0.95 solar absorptance and 0.05 emittance, laser welded with copper pipes; Copper absorber pipe with dimensions: Headers – Copper: 18mm x 0.8mm, Risers – Copper: 8mm x 0.4mm; Smooth and extra clear tempered low Iron Glass 3.2mm thickness with 91.1% solar transmittance top cover; Glass wool thermal insulation with thickness of 60mm for back insulation. Casing: Aluminum side wall/frame and aluminum back sheet Sealing Material : Silicone glued Flow pattern: harp or vertical tube-grid Mounting: on sloping roof, flat roof</p>	<p><b>DPS VSH 2200</b></p> <p><b>DPS HSH 2200</b></p> <p><b>DPS VSH 2600</b></p>	<p>Gross Area of 2.23m<sup>2</sup> Aperture Area of 2.00 m<sup>2</sup> Absorber Area of 2.00 m<sup>2</sup> Gross dimensions: 2089 x 1069 x 98 mm Weight (empty) : 30 Kg Collector Fluid Volume : 1.19 litres water/Propylene Glycol Number of tubes : 9 risers Distance between risers: 110mm Maximum Stagnation Temperature: 214.8 °C Maximum Operating Pressure: 6 bar</p> <p>Gross Area of 2.23m<sup>2</sup> Aperture Area of 2.00 m<sup>2</sup> Absorber Area of 2.00 m<sup>2</sup> Gross dimensions: 1069 x 2089 x 98 mm Weight (empty) : 30 Kg Collector Fluid Volume : 1.19 litres water/Propylene Glycol Number of tubes : 18 risers Distance between risers: 110mm Maximum Stagnation Temperature: 214.8 °C Maximum Operating Pressure: 6 bar</p> <p>Gross Area of 2.58m<sup>2</sup> Aperture Area of 2.33 m<sup>2</sup> Absorber Area of 2.33 m<sup>2</sup> Gross dimensions: 2089 x 1234 x 98 mm Weight (empty) : 34 Kg Collector Fluid Volume : 1.34 litres water/Propylene Glycol Number of tubes : 10 risers Distance between risers: 110mm Maximum Stagnation Temperature: 214.8 °C Maximum Operating Pressure: 6 bar</p>

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		<b>DPS HSH 2600</b>	<p>Gross Area of 2.58m<sup>2</sup> Aperture Area of 2.33 m<sup>2</sup> Absorber Area of 2.33 m<sup>2</sup> Gross dimensions: 1234 x 2089 x 98 mm Weight (empty) : 34 Kg Collector Fluid Volume : 1.34 litres water/Propylene Glycol Number of tubes : 18 risers Distance between risers: 110mm Maximum Stagnation Temperature: 214.8 °C Maximum Operating Pressure: 6 bar</p>
3*	<p>FLAT PLATE TYPE SOLAR COLLECTOR</p> <p>Absorber materials: Alunod Mirotherm Aluminum with 0.4mm thickness, 0.95 solar absorptance and 0.05 emittance, laser welded with copper pipes; Copper absorber pipe with dimensions: Headers – Copper: 18mm x 0.8mm, Risers – Copper: 8mm x 0.4mm; Smooth and extra clear tempered low Iron Glass 3.2mm thickness with 91.1% solar transmittance top cover; Glass wool thermal insulation with thickness of 60mm for back insulation. Casing: Aluminum side wall/frame and aluminum back sheet Sealing Material : Silicone glued Flow pattern: harp or vertical tube-grid Mounting: on sloping roof, flat roof</p>	<p><b>PSH 1700* (NPS-21517)</b></p> <p><b>PSH 2000* (NPS-21617)</b></p> <p><b>PSH 2000H* (NPS-21817)</b></p>	<p>Gross Area of 1.72m<sup>2</sup> Aperture Area of 1.61 m<sup>2</sup> Absorber Area of 1.59 m<sup>2</sup> Gross dimensions: 2055 x 835 x 85 mm Weight (empty) : 23.76 Kg Collector Fluid Volume : 0.93 litres water/Propylene Glycol Number of tubes :7 risers Distance between risers: 110mm Maximum Stagnation Temperature: 214.8 °C Maximum Operating Pressure: 10 bar</p> <p>Gross Area of 1.97m<sup>2</sup> Aperture Area of 1.87 m<sup>2</sup> Absorber Area of 1.83 m<sup>2</sup> Gross dimensions: 2058 x 958 x 85 mm Weight (empty) : 27 Kg Collector Fluid Volume : 1.09 litres water/Propylene Glycol Number of tubes : 8 risers Distance between risers: 110mm Maximum Stagnation Temperature: 214.8 °C Maximum Operating Pressure: 10 bar</p> <p>Gross Area of 1.97m<sup>2</sup> Aperture Area of 1.87 m<sup>2</sup> Absorber Area of 1.83 m<sup>2</sup> Gross dimensions: 958 x 2058 x 85 mm Weight (empty) :28.3 Kg Collector Fluid Volume : 1.41 litres water/Propylene Glycol Number of tubes : 18 risers Distance between risers: 110mm Maximum Stagnation Temperature: 214.8 °C Maximum Operating Pressure: 10 bar</p>

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		<p><b>PSH 2500*</b> <b>(NPS-21717)</b></p>	<p>Gross Area of 2.49m<sup>2</sup> Aperture Area of 2.37 m<sup>2</sup> Absorber Area of 2.33 m<sup>2</sup> Gross dimensions: 2056 x 1210 x 85 mm Weight (empty) : 33.2 Kg Collector Fluid Volume : 1.34 litres water/Propylene Glycol Number of tubes : 10 risers Distance between risers: 110mm Maximum Stagnation Temperature: 214.8 °C Maximum Operating Pressure: 10 bar</p>
		<p><b>PSH 2500H*</b> <b>(NPS-21917)</b></p>	<p>Gross Area of 2.49m<sup>2</sup> Aperture Area of 2.37 m<sup>2</sup> Absorber Area of 2.33 m<sup>2</sup> Gross dimensions: 1208 x 2058 x 85 mm Weight (empty) : 34.5Kg Collector Fluid Volume : 1.66 litres water/Propylene Glycol Number of tubes : 18 risers Distance between risers: 110mm Maximum Stagnation Temperature: 214.8 °C Maximum Operating Pressure: 10 bar</p>
4*	<p>FLAT PLATE TYPE SOLAR COLLECTOR</p> <p>Absorber materials: Alanod Mirotherm Aluminum with 0.4mm thickness, 0.95 solar absorptance and 0.05 emittance, laser welded with copper pipes; Copper absorber pipe with dimensions: Headers – Copper: 18mm x 0.8mm, Risers – Copper: 8mm x 0.4mm; Smooth and extra clear tempered low Iron Glass 3.2mm thickness with 91.1% solar transmittance top cover; Glass wool thermal insulation with thickness of 40mm for back insulation. Casing: Aluminum side wall/frame and aluminum back sheet Sealing Material : Silicone glued</p>	<p><b>SUPER ECO 1800*</b></p> <p><b>SUPER ECO 2000*</b></p>	<p>Gross Area of 1.72m<sup>2</sup> Aperture Area of 1.63 m<sup>2</sup> Absorber Area of 1.59 m<sup>2</sup> Gross dimensions: 2055 x 836 x 49 mm Weight (empty) :23 Kg Collector Fluid Volume : 0.93 litres water/Propylene Glycol Number of tubes : 7 risers Distance between risers: 110mm Maximum Stagnation Temperature: 214.8 °C Maximum Operating Pressure: 10 bar</p> <p>Gross Area of 1.97m<sup>2</sup> Aperture Area of 1.88 m<sup>2</sup> Absorber Area of 1.83m<sup>2</sup> Gross dimensions: 2056 x 956 x 49 mm Weight (empty) : 27Kg Collector Fluid Volume : 1.34 litres water/Propylene Glycol Number of tubes : 8 risers Distance between risers: 110mm Maximum Stagnation Temperature: 214.8 °C Maximum Operating Pressure: 10 bar</p>



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	Flow pattern: harp or vertical tube-grid Mounting: on sloping roof, flat roof	<b>SUPER ECO 2500*</b>	Gross Area of 2.48m <sup>2</sup> Aperture Area of 2.38 m <sup>2</sup> Absorber Area of 2.33 m <sup>2</sup> Gross dimensions: 2056 x 1206 x 49 mm Weight (empty) : 31.2Kg Collector Fluid Volume : 1.34 litres water/Propylene Glycol Number of tubes : 10 risers Distance between risers: 110mm Maximum Stagnation Temperature: 214.8 °C Maximum Operating Pressure: 10 bar
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\*newly added products

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: This supersedes the Scope of Certification issued 02 July 2018.

Original Issue Date : 18 June 2018

Current Issue Date : 20 November 2018

Valid Until : 17 June 2019

ARIF HUSAIN AL MARZOOQI

Products Conformity Assessment Section Manager  
Dubai Central Laboratory Department