

# 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:

**DELPASO SOLAR SL**

**Juan Lopez De Penalver 3, 29590, Malaga**

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



001-CB-PRD

Certificate No: CL18020599  
Valid Until: 17/06/2021



Current Issue Date: 18/06/2020  
Original Issue Date: 18/06/2018



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. CL18020599

**Certificate Issued To:**

**DELPASO SOLAR SL**

Parque Tecnológico de Andalucía, 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:**

DM-DCLD-RD-DP21-2178 (IC) – Specific Rules Certification of Solar Collectors as per BS EN 12975-1 Through Factory Assessment

DM-DCLD-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</p>	<p>“DELPASO” and “ACCUSOLAR” * 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>thermal insulation with thickness of 20mm and glass wool thermal insulation with thickness of 20mm for back insulation.</p> <p>Casing: Aluminum side wall/frame and aluminum back sheet</p> <p>Sealing Material : Silicone glued</p> <p>Flow pattern: harp or vertical tube-grid</p> <p>Mounting: on roof, flat roof</p>	<b>DPS ECO 2500</b>	<p>Gross Area of 2.48m<sup>2</sup></p> <p>Aperture Area of 2.39 m<sup>2</sup></p> <p>Absorber Area of 2.33 m<sup>2</sup></p> <p>Gross dimensions: 2055 x 1205 x 70 mm</p> <p>Weight (empty) : 32 Kg</p> <p>Collector Fluid Volume : 1.34 litres water/Propylene Glycol</p> <p>Number of tubes : 10 risers</p> <p>Distance between risers: 110mm</p> <p>Maximum Stagnation Temperature: 210.4 °C</p> <p>Maximum Operating Pressure: 10 bar</p>
2	<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;</p> <p>Copper absorber pipe with dimensions: Headers – Copper: 18mm x 0.8mm, Risers – Copper: 8mm x 0.4mm;</p> <p>Smooth and extra clear tempered low Iron Glass 3.2mm thickness with 91.1% solar transmittance top cover;</p> <p>Glass wool thermal insulation with thickness of 60mm for back insulation.</p> <p>Casing: Aluminum side wall/frame and aluminum back sheet</p> <p>Sealing Material : Silicone glued</p> <p>Flow pattern: harp or vertical tube-grid</p> <p>Mounting: on sloping roof, flat roof</p>	<p><b>“DELPASO”</b> and <b>“ACCUSOLAR” *</b> Brand</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></p> <p>Aperture Area of 2.00 m<sup>2</sup></p> <p>Absorber Area of 2.00 m<sup>2</sup></p> <p>Gross dimensions: 2089 x 1069 x 98 mm</p> <p>Weight (empty) : 30 Kg</p> <p>Collector Fluid Volume : 1.19 litres water/Propylene Glycol</p> <p>Number of tubes : 9 risers</p> <p>Distance between risers: 110mm</p> <p>Maximum Stagnation Temperature: 214.8 °C</p> <p>Maximum Operating Pressure: 6 bar</p> <p>Gross Area of 2.23m<sup>2</sup></p> <p>Aperture Area of 2.00 m<sup>2</sup></p> <p>Absorber Area of 2.00 m<sup>2</sup></p> <p>Gross dimensions: 1069 x 2089 x 98 mm</p> <p>Weight (empty) : 30 Kg</p> <p>Collector Fluid Volume : 1.19 litres water/Propylene Glycol</p> <p>Number of tubes : 18 risers</p> <p>Distance between risers: 110mm</p> <p>Maximum Stagnation Temperature: 214.8 °C</p> <p>Maximum Operating Pressure: 6 bar</p> <p>Gross Area of 2.58m<sup>2</sup></p> <p>Aperture Area of 2.33 m<sup>2</sup></p> <p>Absorber Area of 2.33 m<sup>2</sup></p> <p>Gross dimensions: 2089 x 1234 x 98 mm</p> <p>Weight (empty) : 34 Kg</p> <p>Collector Fluid Volume : 1.34 litres</p>

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			<p>water/Propylene Glycol Number of tubes : 10 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: 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: 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 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</p>	<p>“DELPASO” and “ACCUSOLAR” * Brand</p> <p>PSH 1700* (NPS-21517)</p> <p>PSH 2000* (NPS-21617)</p> <p>PSH 2000H* (NPS-21817)</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></p>

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	roof		<p>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> <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>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>
		<p><b>PSH 2500*</b> <b>(NPS-21717)</b></p> <p><b>PSH 2500H*</b> <b>(NPS-21917)</b></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</p>	<p><b>"DELPASO"</b> and <b>"ACCUSOLAR" *</b> Brand <b>SUPER ECO 1800*</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>

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<p>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          Flow pattern: harp or vertical tube-grid          Mounting: on sloping roof, flat roof</p>	<p><b>SUPER ECO 2000*</b></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>
	<p><b>SUPER ECO 2500*</b></p>	<p>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</p>

**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* : 18 June 2018

*Current Issue Date* : 18 June 2020

Valid Until : 17 June 2021

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ARIF HUSAIN AL MARZOOQI

Products Conformity Assessment Section Manager  
Dubai Central Laboratory Department