



### 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**

**ABCIAC** 001-CB-PRD

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



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



DM-DCLD-F-IC-2031 Rev 17

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. CL18020599

Certificate Issued To: DELPASO SOLAR SL

Parque Technologico 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: 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.	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	"DELPASO" and "ACCUSOLAR" * Brand  DPS ECO 2000	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

DM-DCLD-F-IC-2032 R9





# DUBAI CENTRAL LABORATORY DEPARTMENT DCL PRODUCT CONFORMITY CERTIFICATION SCHEME

### SCOPE OF CERTIFICATION FOR CERTIFICATE NO. CL18020599

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	thermal insulation with thickness of 20mm and glass wool thermal insulation with thickness of 20mm 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 roof, flat roof	DPS ECO 2500	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
	FLAT PLATE TYPE SOLAR	"DELPASO"	
	COLLECTOR	and	Gross Area of 2.23m <sup>2</sup>
		"ACCUSOLAR" *	Aperture Area of 2.00 m <sup>2</sup> Absorber Area of 2.00 m <sup>2</sup>
	Absorber materials:	Brand	Gross dimensions: 2089 x 1069 x 98 mm
	Alanod Mirotherm Aluminum with 0.4mm		Weight (empty) : 30 Kg
	thickness, 0.95 solar	DPS VSH 2200	Collector Fluid Volume : 1.19 litres
	absorptance and 0.05		water/Propylene Glycol
	emittance, laser welded		Number of tubes : 9 risers
	with copper pipes;		Distance between risers: 110mm
	Copper absorber pipe		Maximum Stagnation Temperature:
2	with dimensions: Headers		214.8°C
	– Copper: 18mm x 0.8mm,		Maximum Operating Pressure: 6 bar
	Risers – Copper: 8mm x		
	0.4mm; Smooth and extra clear		Gross Area of 2.23m <sup>2</sup>
	tempered low Iron Glass		Aperture Area of 2.00 m <sup>2</sup>
	3.2mm thickness with		Absorber Area of 2.00 m <sup>2</sup>
	91.1% solar transmittance	DPS HSH 2200	Gross dimensions: 1069 x 2089 x 98 mm
	top cover;		Weight (empty) : 30 Kg
	Glass wool thermal		Collector Fluid Volume : 1.19 litres
	insulation with thickness		water/Propylene Glycol
	of 60mm for back		Number of tubes : 18 risers
	insulation.		Distance between risers: 110mm  Maximum Stagnation Temperature:
	Casing: Aluminum side		214.8°C
	wall/frame and aluminum back sheet		Maximum Operating Pressure: 6 bar
	Sealing Material : Silicone		
	glued		
	Flow pattern: harp or		Gross Area of 2.58m <sup>2</sup>
	vertical tube-grid	DPS VSH 2600	Aperture Area of 2.33 m <sup>2</sup>
	Mounting: on sloping roof, flat		Absorber Area of 2.33 m <sup>2</sup>
	roof	DF3 V3H 2000	Gross dimensions: 2089 x 1234 x 98 mm
			Weight (empty) : 34 Kg Collector Fluid Volume : 1.34 litres
			Concetor Flata Volume : 1.54 littes





## DUBAI CENTRAL LABORATORY DEPARTMENT DCL PRODUCT CONFORMITY CERTIFICATION SCHEME

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





## DUBAI CENTRAL LABORATORY DEPARTMENT DCL PRODUCT CONFORMITY CERTIFICATION SCHEME

### SCOPE OF CERTIFICATION FOR CERTIFICATE NO. CL18020599

	roof		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
		PSH 2500* (NPS-21717)	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
		PSH 2500H* (NPS-21917)	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
4*	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	"DELPASO" and "ACCUSOLAR" * Brand SUPER ECO 1800*	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

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

#### SCOPE OF CERTIFICATION FOR CERTIFICATE NO. CL18020599

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

Flow pattern: harp or vertical tube-grid Mounting: on sloping roof, flat roof

SUPER ECO 2000\*

glued

SUPER ECO 2500\*

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

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

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

ARIF HUSAIN AL MARZOOQI

**Products Conformity Assessment Section Manager Dubai Central Laboratory Department**