

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:

DIMAS SA

2nd km Argos – Nafplio road, 212 00 Argos, 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



eiaci
مركز الإمارات العالمي للاعتماد
Emirates International Accreditation Centre
CB-003-PRD

Certificate No: CL15020277
Valid Until: 02/11/2020



Current Issue Date: 03/11/2019
Original Issue Date: 03/11/2015

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. CL15020277**

Certificate Issued To:	DIMAS S.A. 2 nd Km., Argos-Napflion 21200, Argos, 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 DESCRIPTION	BRAND NAME(S) / MODEL(S)	PRODUCT DETAILS
1.	<p>FLAT PANEL TYPE SOLAR COLLECTOR</p> <p>Absorber Materials: Aluminium Absorber Fins (Blue absorber-selective) laser welded into copper tubes; Tempered, Mislite, Low Iron Glass 4mm & 3.2mm thickness top cover; Glasswool thermal insulation with density of 30 kg/m³, thermal conductivity of 0.035 W/(m.K) and thickness of 30mm for back insulation; And Glasswool thermal insulation with density of 30 kg/m³, thermal conductivity of 0.035 W/(m.K) and thickness of 15mm for side insulation; Frame structure made of Anodized Aluminium with 1mm thickness and 0.4 Aluminium back cover; Double sided tape, silicone, EPDM sealing materials; Anti-freeze (Propylene Glycol) & water mixture</p>	<p>“DIMAS” Brand “RADIANT” Brand “SUNDWARE” Brand “SIGMA” Brand “SOLATHERM” Brand “HELIOS 21” Brand*</p> <p>ENERGY + EVO 29 / PRO + V290 / RSV 29</p> <p>“SPECTRUM” Brand ATLAS 29</p> <p>“SOLAR PLUS” Brand GSS 290</p> <p>“THERMICSOL” Brand TS-3.0</p> <p>“THERMOSOL” Brand SI 3.0</p> <p>“SOLATHERM” Brand EFMTS-3,0</p> <p>“HELIOS 21” Brand*</p>	<p>Overall area of 2.92 m²; absorber area of 2.71 m²; Gross dimensions: 2006 x 1457 x 85 mm; Weight (dry & packed): 42 kg; Absorber volume capacity: 2.1 Liters Absorber pipe dimensions: Header - 22 x 0.7mm and Risers – 8 x 0.4mm Number of risers in vertical position is 12; Maximum operating pressure is 10 bars; Maximum stagnation temperature is 199 °C; Vertical position</p>

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	<p>ENERGY + EVO 27 / PRO + V270 / RSV 27</p> <p>"SPECTRUM" Brand ATLAS 27</p> <p>"SOLAR PLUS" Brand GSS 270</p> <p>"THERMICSOL" Brand TS- 2.7</p> <p>"THERMOSOL" Brand SI 2.7</p> <p>"SOLATHERM" Brand EFMTS-2,72</p> <p>"HELIOS 18" Brand*</p>	<p>Overall area of 2.66 m²; absorber area of 2.43 m²; Gross dimensions: 2261 x 1183 x 85 mm; Weight (dry & packed): 36 kg; Absorber volume capacity: 2.0 Liters Absorber pipe dimensions: Header - 22 x 0.7mm and Risers – 8 x 0.4mm Number of risers in vertical position is 10; Maximum operating pressure is 10 bars; Maximum stagnation temperature is 199 °C; Vertical position</p>
	<p>ENERGY + EVO 25 / PRO + V250 / RSV 25</p> <p>"SPECTRUM" Brand ATLAS 25</p> <p>"SOLAR PLUS" Brand GSS 250</p> <p>"THERMICSOL" Brand TS- 2.5</p> <p>"THERMOSOL" Brand SI 2.5</p> <p>"SOLATHERM" Brand EFMTS-2,72</p> <p>"HELIOS 17" Brand*</p>	<p>Overall area of 2.52 m²; absorber area of 2.33 m²; Gross dimensions: 2006 x 1257 x 85 mm; Weight (dry & packed): 34 kg; Absorber volume capacity: 1.9 Liters Absorber pipe dimensions: Header - 22 x 0.7mm and Risers – 8 x 0.4mm Number of risers in vertical position is 11 and in horizontal position is 17; Maximum operating pressure is 10 bars; Maximum stagnation temperature is 199 °C; Vertical position</p>
	<p>ENERGY + EVO 25H / PRO + V250H / RSV 25H</p>	<p>Overall area of 2.52 m²; absorber area of 2.33 m²; Gross dimensions: 2006 x 1257 x 85 mm; Weight (dry & packed): 34 kg; Absorber volume capacity: 1.9 Liters Absorber pipe dimensions: Header - 22 x 0.7mm and Risers – 8 x 0.4mm Number of risers in horizontal position is 17; Maximum operating pressure is 10 bars; Maximum stagnation temperature is 199 °C; Horizontal position</p>

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		<p>ENERGY + EVO 23 / PRO + V230 / RSV 23</p> <p>"SPECTRUM" Brand ATLAS 23</p> <p>"SOLAR PLUS" Brand GSS 230</p> <p>"THERMICSOL" Brand TS- 2.25</p> <p>"THERMOSOL" Brand SI 2.25</p> <p>"SOLATHERM" Brand EFMTS-2,25</p> <p>"HELIOS 16" Brand*</p>	<p>Overall area of 2.25 m²; absorber area of 2.03 m²; Gross dimensions: 1893 x 1183 x 85 mm; Weight (dry & packed): 29 kg; Absorber volume capacity: 1.8 Liters Absorber pipe dimensions: Header - 22 x 0.7mm and Risers – 8 x 0.4mm Number of risers in vertical position is 10; Maximum operating pressure is 10 bars; Maximum stagnation temperature is 199 °C; Vertical position</p>
		<p>ENERGY + EVO 20 / PRO + V200B / RSV 20</p> <p>"SPECTRUM" Brand ATLAS 20</p> <p>"SOLAR PLUS" Brand GSS 200</p> <p>"THERMICSOL" Brand TS- 2.0</p> <p>"THERMOSOL" Brand SI 2.0</p> <p>"SOLATHERM" Brand EFMTS-2,0</p> <p>"HELIOS 15" Brand*</p>	<p>Overall area of 2.02 m²; absorber area of 1.83 m²; Gross dimensions: 2006 x 1007 x 85 mm; Weight (dry & packed): 27 kg; Absorber volume capacity: 1.6 Liters Absorber pipe dimensions: Header - 22 x 0.7mm and Risers – 8 x 0.4mm Number of risers in vertical position is 8; Maximum operating pressure is 10 bars; Maximum stagnation temperature is 199 °C; Vertical position</p>
		<p>ENERGY + EVO 19 / PRO + V200A / RSV 19</p> <p>"SPECTRUM" Brand ATLAS 19</p> <p>"SOLAR PLUS" Brand GSS 190</p> <p>"THERMICSOL" Brand TS- 2.0LP</p> <p>"THERMOSOL" Brand SI 1.9</p> <p>"SOLATHERM" Brand EFMTS-2,0 LP</p> <p>"HELIOS 14" Brand*</p>	<p>Overall area of 1.96 m²; absorber area of 1.79 m²; Gross dimensions: 1503 x 1305 x 85 mm; Weight (dry & packed): 26 kg; Absorber volume capacity: 1.5 Liters Absorber pipe dimensions: Header - 22 x 0.7mm and Risers – 8 x 0.4mm Number of risers in vertical position is 11; Maximum operating pressure is 10 bars; Maximum stagnation temperature is 199 °C; Vertical position</p>

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		<p>ENERGY + EVO 17 / PRO + V175 / RSV 17.5</p> <p>"SPECTRUM" Brand ATLAS 17</p> <p>"SOLAR PLUS" Brand GSS 170</p> <p>"THERMICSOL" Brand TS- 1.7</p> <p>"THERMOSOL" Brand SI 1.7</p> <p>"SOLATHERM" Brand EFMTS-1,7</p> <p>"HELIOS 12" Brand*</p>	<p>Overall area of 1.68 m²; absorber area of 1.51 m²; Gross dimensions: 1420 x 1183 x 85 mm; Weight (dry & packed): 23 kg; Absorber volume capacity: 1.4 Liters Absorber pipe dimensions: Header - 22 x 0.7mm and Risers – 8 x 0.4mm Number of risers in vertical position is 10; Maximum operating pressure is 10 bars; Maximum stagnation temperature is 199 °C; Vertical position</p>
		<p>ENERGY + EVO 15 / PRO + V150 / RSV 15</p> <p>"SPECTRUM" Brand ATLAS 15</p> <p>"SOLAR PLUS" Brand GSS 150</p> <p>"THERMICSOL" Brand TS- 1.5</p> <p>"THERMOSOL" Brand SI 1.5</p> <p>"SOLATHERM" Brand EFMTS-1,5</p> <p>"HELIOS 10" Brand*</p>	<p>Overall area of 1.51 m²; absorber area of 1.35 m²; Gross dimensions: 1503 x 1007 x 85 mm; Weight (dry & packed): 21 kg; Absorber volume capacity: 1.3 Liters Absorber pipe dimensions: Header - 22 x 0.7mm and Risers – 8 x 0.4mm Number of risers in vertical position is 8; Maximum operating pressure is 10 bars; Maximum stagnation temperature is 199 °C; Vertical position</p>
2.	<p>FLAT PANEL TYPE SOLAR COLLECTOR</p> <p>Absorber Materials: Harp Positioned-Copper Tubes-Black Paint Full Plate Surface-Laser Welded; Tempered, Low Iron Glass with Solar Transmittance of 91.8 & Light Transmittance of 91.9, 4mm thickness top cover; Glasswool thermal insulation with density of 30 kg/m³, thermal conductivity of 0.035 W/(m.K) and thickness of 30mm for back insulation; And Glasswool thermal insulation with density of 30 kg/m³, thermal conductivity of 0.035 W/(m.K) and thickness of 15mm for side insulation; Frame structure made of Anodized Aluminum with 1mm</p>	<p>"DIMAS" Brand</p> <p>"RADIANT" Brand</p> <p>"SUNDWARE" Brand</p> <p>"SIGMA" Brand</p> <p>ENERGY + ECO 25</p> <p>"SPECTRUM" Brand ECHO 25</p>	<p>Overall area of 2.52 m²; aperture area of 2.38 m²; absorber area of 2.33 m²; Gross dimensions: 2006 x 1257 x 85 mm; Weight (dry & packed): 34 kg; Absorber volume capacity: 1.9 Liters Absorber pipe dimensions: Header - 22 x 0.7mm and Risers – 8 x 0.4mm Number of risers in vertical position is 11; Maximum operating pressure is 10 bars; Maximum stagnation temperature is 130 °C; Vertical position</p>

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<p>thickness and 0.4 (ECO 15, 17, 20, 23 & 27) or 0.5 (ECO 19, 25 & 29) Aluminum Plate back cover; Double sided tape, silicone, EPDM sealing materials; Anti-freeze (Propylene Glycol) & water mixture</p>	<p>ENERGY + ECO 23</p> <p>“SPECTRUM” Brand</p> <p>ECHO 23</p>	<p>Overall area of 2.25 m²; aperture area of 2.11 m²; absorber area of 2.03 m²; Gross dimensions: 1893 x 1183 x 85 mm; Weight (dry & packed): 29 kg; Absorber volume capacity: 1.8 Liters Absorber pipe dimensions: Header - 22 x 0.7mm and Risers – 8 x 0.4mm Number of risers in vertical position is 11; Maximum operating pressure is 10 bars; Maximum stagnation temperature is 130 °C; Vertical position</p>
	<p>ENERGY + ECO 20</p> <p>“SPECTRUM” Brand</p> <p>ECHO 20</p>	<p>Overall area of 2.02 m²; aperture area of 1.89 m²; absorber area of 1.83 m²; Gross dimensions: 2006 x 1007 x 85 mm; Weight (dry & packed): 27 kg; Absorber volume capacity: 1.6 Liters Absorber pipe dimensions: Header - 22 x 0.7mm and Risers – 8 x 0.4mm Number of risers in vertical position is 9; Maximum operating pressure is 10 bars; Maximum stagnation temperature is 130 °C; Vertical position</p>
	<p>ENERGY + ECO 19</p> <p>“SPECTRUM” Brand</p> <p>ECHO 19</p>	<p>Overall area of 1.96 m²; aperture area of 1.86 m²; absorber area of 1.79 m²; Gross dimensions: 1503 x 1305 x 85 mm; Weight (dry & packed): 26 kg; Absorber volume capacity: 1.5 Liters Absorber pipe dimensions: Header - 22 x 0.7mm and Risers – 8 x 0.4mm Number of risers in vertical position is 12; Maximum operating pressure is 10 bars; Maximum stagnation temperature is 130 °C; Vertical position</p>

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		<p>ENERGY + ECO 17</p> <p>“SPECTRUM” Brand</p> <p>ECHO 17</p>	<p>Overall area of 1.68 m²; aperture area of 1.57 m²; absorber area of 1.51 m²; Gross dimensions: 1420 x 1183 x 85 mm; Weight (dry & packed): 23 kg; Absorber volume capacity: 1.4 Liters Absorber pipe dimensions: Header - 22 x 0.7mm and Risers – 8 x 0.4mm Number of risers in vertical position is 11; Maximum operating pressure is 10 bars; Maximum stagnation temperature is 130 °C; Vertical position</p> <p>Overall area of 1.51 m²; absorber area of 1.35 m²; Gross dimensions: 1503 x 1007 x 85 mm; Weight (dry & packed): 21 kg; Absorber volume capacity: 1.3 Liters Absorber pipe dimensions: Header - 22 x 0.7mm and Risers – 8 x 0.4mm Number of risers in vertical position is 8; Maximum operating pressure is 10 bars; Maximum stagnation temperature is 199 °C; Vertical position</p>
3	<p>FLAT PANEL TYPE SOLAR COLLECTOR</p> <p>Absorber Materials: Harp Positioned-Copper Tubes-aluminum sheet Mirotherm treated surface of Selective Aluminum Full Plate with 95 ±2 solar absorptance and 5±2 emittance-Laser Welded; Tempered, Low Iron clear glass with Transmittance Solar/Light of 91.8/91.9, 3.2mm thickness top cover; Mineral wool thermal insulation with density of 50 kg/m³, thermal conductivity of 0.035 W/(m.K) and thickness of 50mm for back insulation; Frame structure and back cover made of 0.8mm deep-drawn aluminum trough/sheet; Silicone, EPDM sealing materials; Anti-freeze (Propylene Glycol) & water mixture</p>	<p>“DIMAS” Brand</p> <p>NAVI+ 15</p>	<p>Overall area of 1.67 m²; aperture area of 1.53 m²; absorber area of 1.48 m²; Gross dimensions: 1651 x 1011 x 95 mm; Weight (dry & packed): 28 kg; Absorber volume capacity: 1.3 Liters Absorber pipe dimensions: Header – 22mm x 0.7mm and Risers – 8 x 0.4mm Number of risers in vertical position is 9 with 4 connections; Maximum operating pressure is 10 bar; Maximum stagnation temperature is 187 °C; Vertical position</p>



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		NAVI+ 20	<p>Overall area of 2.05 m²; aperture area of 1.89 m²; absorber area of 1.83 m²; Gross dimensions: 2031 x 1011 x 95 mm; Weight (dry & packed): 34 kg; Absorber volume capacity: 1.6 Liters Absorber pipe dimensions: Header - 22 x 0.7mm and Risers – 8 x 0.4mm Number of risers in vertical position is 9 with 4 connections; Maximum operating pressure is 10 bar; Maximum stagnation temperature is 187 °C; Vertical position</p>
		NAVI+ 25	<p>Overall area of 2.52 m²; aperture area of 2.34 m²; absorber area of 2.28 m²; Gross dimensions: 2031 x 1241 x 95 mm; Weight (dry & packed): 39 kg; Absorber volume capacity: 1.9 Liters Absorber pipe dimensions: Header - 22 x 0.7mm and Risers – 8 x 0.4mm Number of risers in vertical position is 11 with 4 connections; Maximum operating pressure is 10 bar; Maximum stagnation temperature is 187 °C; Vertical position</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 : 03 November 2015

Current Issue Date : 03 November 2019

Valid Until : 02 November 2020

ARIF HUSAIN AL MARZOOQI

Products Conformity Assessment Section Manager

Dubai Central Laboratory Department