



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**



Certificate No: CL15020277 Valid Until: 02/11/2021



Current Issue Date: 03/11/2020 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.









SCOPE OF CERTIFICATION FOR CERTIFICATE NO. CL15020277

Certificate Issued To: DIMAS S.A.

2nd km Argos - Nafplio road, 212 00 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: DM-DCLD-RD-DP21-2178 (IC) - Specific Rules

Certification of Solar Collectors as per BS EN

12975-1 through Factory Assessment

 $\label{eq:def-DM-DCLD-RD-DP21-2084} \mbox{(IC)} - \mbox{Guidelines for}$

Factory Production control Plan for Solar Collector

Manufacturers

S/N	PRODUCT DESCRIPTION	BRAND NAME(S) / MODEL(S)	PRODUCT DETAILS
1.	FLAT PANEL TYPE SOLAR COLLECTOR 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	"DIMAS" Brand "RADIANT" Brand "SUNDWARE" Brand "SIGMA" Brand "SOLATHERM" Brand "HELIOS 21" Brand* ENERGY + EVO 29 / PRO + V290 / RSV 29 "SPECTRUM" Brand ATLAS 29 "SOLAR PLUS" Brand GSS 290 "THERMICSOL" Brand TS- 3.0 "THERMOSOL" Brand SI 3.0 "SOLATHERM" Brand EFMTS-3,0 "HELIOS 21" Brand*	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





SCOPE OF CERTIFICATION FOR CERTIFICATE NO. CL15020277

ENERGY + EVO 27 / PRO + V270 / RSV 27

"SPECTRUM" Brand ATLAS 27

"SOLAR PLUS" Brand GSS 270

"THERMICSOL" Brand TS-2.7

"THERMOSOL" Brand SI 2.7

"SOLATHERM" Brand EFMTS-2,72 "HELIOS 18" Brand*

> ENERGY + EVO 25 / PRO + V250 / RSV 25

"SPECTRUM" Brand ATLAS 25

"SOLAR PLUS" Brand GSS 250

"THERMICSOL" Brand TS-2.5

"THERMOSOL" Brand SI 2.5

"SOLATHERM" Brand EFMTS-2,72 "HELIOS 17" Brand*

> ENERGY + EVO 25H / PRO + V250H / RSV 25H

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

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

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





SCOPE OF CERTIFICATION FOR CERTIFICATE NO. CL15020277

ENERGY + EVO 23 / PRO + V230 / RSV 23

"SPECTRUM" Brand ATLAS
23

"SOLAR PLUS" Brand GSS 230

"THERMICSOL" Brand TS-2.25

"THERMOSOL" Brand SI 2.25

"SOLATHERM" Brand EFMTS-2,25 "HELIOS 16" Brand*

> ENERGY + EVO 20 / PRO + V200B / RSV 20

"SPECTRUM" Brand ATLAS
20

"SOLAR PLUS" Brand GSS 200

"THERMICSOL" Brand TS-2.0

"THERMOSOL" Brand SI 2.0

"SOLATHERM" Brand EFMTS-2,0 "HELIOS 15" Brand*

> ENERGY + EVO 19 / PRO + V200A / RSV 19

"SPECTRUM" Brand ATLAS 19

"SOLAR PLUS" Brand GSS 190

"THERMICSOL" Brand TS-2.0LP

"THERMOSOL" Brand SI 1.9

"SOLATHERM" Brand EFMTS-2,0 LP "HELIOS 14" Brand* 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

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

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





SCOPE OF CERTIFICATION FOR CERTIFICATE NO. CL15020277

		FICATE NO. CLISUZO	
		ENERGY + EVO 17 / PRO + V175 / RSV 17.5	Overall area of 1.68 m²; absorber area of 1.51 m²; Gross dimensions: 1420 x 1183 x 85 mm;
		"SPECTRUM" Brand ATLAS	Weight (dry & packed): 23 kg; Absorber volume capacity: 1.4 Liters
		" SOLAR PLUS" Brand GSS 170	Absorber pipe dimensions: Header - 22 x 0.7mm and Risers – 8 x 0.4mm
		"THERMICSOL" Brand TS- 1.7	Number of risers in vertical position is 10;
		" THERMOSOL" Brand SI 1.7	Maximum operating pressure is 10 bars;
		"SOLATHERM" Brand EFMTS-1,7	Maximum stagnation temperature is 199 °C;
		"HELIOS 12" Brand*	Vertical position
		ENERGY + EVO 15 / PRO + V150 / RSV 15	Overall area of 1.51 m²; absorber area of 1.35 m²; Gross dimensions: 1503 x 1007 x 85 mm;
		" SPECTRUM" Brand ATLAS 15	Weight (dry & packed): 21 kg; Absorber volume capacity: 1.3 Liters
		" SOLAR PLUS " Brand GSS 150	Absorber pipe dimensions: Header - 22 x 0.7mm and Risers –
		"THERMICSOL" Brand TS- 1.5	8 x 0.4mm Number of risers in vertical
		" THERMOSOL " Brand SI 1.5	position is 8; Maximum operating pressure is 10 bars;
		" SOLATHERM" Brand EFMTS-1,5	Maximum stagnation temperature is 199 °C;
		"HELIOS 10" Brand*	Vertical position
2.	FLAT PANEL TYPE SOLAR COLLECTOR	"DIMAS" Brand	Overall area of 2.52 m ² ; aperture area of 2.38 m ² ; absorber area of
	Absorber Materials: Harp	"RADIANT" Brand	2.33 m²; Gross dimensions: 2006 x 1257 x
	Positioned-Copper Tubes-Black	"SUNDWARE" Brand	85 mm;
	Paint Full Plate Surface-Laser Welded;	"SIGMA" Brand	Weight (dry & packed): 34 kg; Absorber volume capacity: 1.9
	Tempered, Low Iron Glass with	J.C	Liters
	Solar Transmittance of 91.8 & Light Transmittance of 91.9, 4mm	ENERGY + ECO	Absorber pipe dimensions: Header - 22 x 0.7mm and Risers –
	thickness top cover; Glasswool thermal insulation with	25	8 x 0.4mm Number of risers in vertical
	density of 30 kg/m³, thermal	"SPECTRUM" Brand	position is 11;
	conductivity of 0.035 W/(m.K) and thickness of 30mm for back	ECHO 25	Maximum operating pressure is 10 bars;
	insulation; And		Maximum stagnation temperature is 130 °C;
	Glasswool thermal insulation with density of 30 kg/m³, thermal		Vertical position
	conductivity of 0.035 W/(m.K) and		
	thickness of 15mm for side insulation;		
	Frame structure made of		





SCOPE OF CERTIFICATION FOR CERTIFICATE NO. CL 15020277

FOR CERTIFICATE NO. CL15020277				
Anodized Aluminum with 1mm 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	ENERGY + ECO 23 "SPECTRUM" Brand ECHO 23	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		
	ENERGY + ECO 20 "SPECTRUM" Brand ECHO 20	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		
	ENERGY + ECO 19 "SPECTRUM" Brand ECHO 19	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		





SCOPE OF CERTIFICATION FOR CERTIFICATE NO. CL15020277

	1 OK CENTI	FICATE NO. CL1502	0211
		ENERGY + ECO 17 "SPECTRUM" Brand ECHO 17	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
		ENERGY + ECO 15	Overall area of 1.51 m²; absorber area of 1.35 m²; Gross dimensions: 1503 x 1007 x 85 mm;
		"SPECTRUM" Brand ECHO 15	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
3	FLAT PANEL TYPE SOLAR COLLECTOR Absorber Materials: Harp Positioned-Copper Tubes-	" DIMAS " Brand	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;
	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	NAVI+ 15	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





SCOPE OF CERTIFICATION FOR CERTIFICATE NO. CL15020277

	I
NAVI+ 20	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
NAVI+ 25	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

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 2020

Valid Until : 02 November 2021

ARIF HUSAIN AL MARZOOQI

Products Conformity Assessment Section Manager

Dubai Central Laboratory Department