

## 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:*

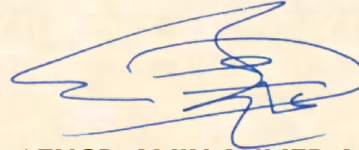
**ATLANTIC ENGINEERING COMPANY for ENERGY TECHNOLOGY (ECET)**

**Industrial Zone A1 West, Block 11, 10<sup>th</sup> Ramadan City, Sharkeya, Egypt**

*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: CL18020573**

**Valid Until: 26 May 2019**



**Current Issue Date: 27 May 2018**

**Original Issue Date: 27 May 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.*

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**DUBAI CENTRAL LABORATORY DEPARTMENT**  
**DCL PRODUCT CONFORMITY CERTIFICATION SCHEME**  
**SCOPE OF CERTIFICATION**  
**FOR CERTIFICATE NO. CL18020573**

**Certificate Issued To:** ATLANTIC ENGINEERING COMPANY for ENERGY TECHNOLOGY (ECET)  
Industrial Zone A1 West, Block 11, 10th Ramadan City, Sharkeya, Egypt

**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 for 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	PRODUCT DETAILS
1	<p style="text-align: center;">FLAT PLATE TYPE SOLAR COLLECTOR</p> <p>Absorber Materials: Copper of 0.18 mm Selective Absorber Sheet; Ultrasonic welded into copper tubes. Glass wool thermal insulation of 40 Kg/<math>m^3</math> density with thermal conductivity of 0.036 w/(m- ° K); 40 mm thickness for back insulation; 3.2 mm Tempered Glass Cover</p>	<p style="text-align: center;">ATLANTIC  SP 20H SC SL</p>	<p>Gross dimensions of 973 x 2130 x 84.5 mm; Gross Area – 2 <math>m^2</math>; Aperture area – 1.88 <math>m^2</math>; Total Absorber Area – 1.86 <math>m^2</math>; Headers – 2 horizontal copper tube of 18 mm diameter ; Risers – 18 vertical copper tubes of 8 mm diameter;</p>

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	<p>1.3 mm (Average) thickness Aluminum Extruded material with 0.4 mm thickness back cover material; (Polyurethane, Silicon and Rubber) sealant and/or sealing materials; Use with anti-freeze thermal fluid (propylene glycol for solar system)</p>		<p>Maximum operational pressure – 8 bars; Maximum Stagnation Temperature – 198.7°C Empty Collector Weight – 35 kg</p>
2.	<p>FLAT PLATE TYPE SOLAR COLLECTOR</p> <p>Absorber Materials: Copper; 0.18 mm Selective Absorber Sheet; Ultrasonic welded into copper tubes. Glass wool thermal insulation of 40 Kg/m<sup>3</sup> density with thermal conductivity of 0.036 w/(m- ° K); 40 mm thickness for back insulation; 3.2 mm Tempered Glass Cover 1.3 mm (Average) thickness Aluminum Extruded material with 0.4 mm thickness back cover material; (Polyurethane, Silicon and Rubber) sealant and/or sealing materials; Use with anti-freeze thermal fluid (propylene glycol for solar system)</p>	<p>ATLANTIC SP 20V SC SL</p>	<p>Gross dimensions of 2130 x 973 x 84.5 mm; Gross Area – 2 m<sup>2</sup>; Aperture area – 1.88 m<sup>2</sup>; Total Absorber Area – 1.86 m<sup>2</sup>; Headers – 2 horizontal copper tube of 18 mm diameter; Risers – 8 vertical copper tubes of 8 mm diameter; Maximum operational pressure – 8 bars; Maximum Stagnation Temperature – 198.7°C Empty Collector Weight – 35 kg</p>

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3.	<p>FLAT PLATE TYPE SOLAR COLLECTOR</p> <p>Absorber Materials: Copper; 0.18 mm Selective Absorber Sheet; Ultrasonic welded into copper tubes. Glass wool thermal insulation of 40 Kg/<math>m^3</math> density with thermal conductivity of 0.036 w/(m- ° K); 40 mm thickness for back insulation; 3.2 mm Tempered Glass Cover 1.3 mm (Average) thickness Aluminum Extruded material with 0.4 mm thickness back cover material; (Polyurethane, Silicon and Rubber) sealant and/or sealing materials; Use with anti-freeze thermal fluid (propylene glycol for solar system)</p>	<p>ATLANTIC  SP 25H SC SL</p>	<p>Gross dimensions of 1203 x 2130 x 84.5 mm; Gross Area – 2.5 <math>m^2</math>; Aperture area – 2.4 <math>m^2</math>; Total Absorber Area – 2.26 <math>m^2</math>; Headers – 2 horizontal copper tube of 18 mm diameter; Risers – 18 vertical copper tubes of 8 mm diameter; Maximum operational pressure – 8 bars; Maximum Stagnation Temperature – 198.7°C Empty Collector Weight – 40 kg</p>
4.	<p>FLAT PLATE TYPE SOLAR COLLECTOR</p> <p>Absorber Materials: Copper; 0.18 mm Selective Absorber Sheet; Ultrasonic welded into copper tubes. Glass wool thermal insulation of 40 Kg/<math>m^3</math> density with thermal conductivity of 0.036 w/(m- ° K); 40 mm thickness for back insulation;</p>	<p>ATLANTIC  SP 25V SC SL</p>	<p>Gross dimensions of 2130 x 1203 x 84.5 mm; Gross Area – 2.5 <math>m^2</math>; Aperture area – 2.4 <math>m^2</math>; Total Absorber Area – 2.26 <math>m^2</math>; Headers – 2 horizontal copper tube of 18 mm diameter; Risers – 10 vertical copper tubes of 8 mm diameter;</p>

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	<p>3.2 mm Tempered Glass Cover 1.3 mm (Average) thickness Aluminum Extruded material with 0.4 mm thickness back cover material; (Polyurethane, Silicon and Rubber) sealant and/or sealing materials; Use with anti-freeze thermal fluid (propylene glycol for solar system)</p>		<p>Maximum operational pressure – 8 bars; Maximum Stagnation Temperature – 198.7°C Empty Collector Weight – 40 kg</p>
5.	<p>FLAT PLATE TYPE SOLAR COLLECTOR</p> <p>Absorber Materials: Copper; 0.12 mm Black paint Absorber Sheet; Ultrasonic welded into copper tubes. Glass wool thermal insulation of 40 Kg/<math>m^3</math> density with thermal conductivity of 0.036 w/(m- ° K); 40 mm thickness for back insulation; 3.2 mm Tempered Glass Cover 1.3 mm (Average) thickness Aluminum Extruded material with 0.4 mm thickness back cover material; (Polyurethane, Silicon and Rubber) sealant and/or sealing materials; Use with anti-freeze thermal fluid (propylene glycol for solar system)</p>	<p>ATLANTIC SP 20H SC BP</p>	<p>Gross dimensions of 973 x 2130 x 84.5 mm; Gross Area – 2 <math>m^2</math>; Aperture area – 1.88 <math>m^2</math>; Total Absorber Area – 1.86 <math>m^2</math>; Headers – 2 horizontal copper tube of 18 mm diameter ; Risers – 18 vertical copper tubes of 8 mm diameter; Maximum operational pressure – 8 bars; Maximum Stagnation Temperature – 147.8°C Empty Collector Weight – 35 kg</p>

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6.	<p>FLAT PLATE TYPE SOLAR COLLECTOR</p> <p>Absorber Materials: Copper; 0.12 mm Black paint Absorber Sheet; Ultrasonic welded into copper tubes. Glass wool thermal insulation of 40 Kg/<math>m^3</math> density with thermal conductivity of 0.036 w/(m- ° K); 40 mm thickness for back insulation; 3.2 mm Tempered Glass Cover 1.3 mm (Average) thickness Aluminum Extruded material with 0.4 mm thickness back cover material; (Polyurethane, Silicon and Rubber) sealant and/or sealing materials; Use with anti-freeze thermal fluid (propylene glycol for solar system)</p>	<p>ATLANTIC</p> <p>SP 20V SC BP</p>	<p>Gross dimensions of 2130 x 973 x 84.5 mm; Gross Area – 2 <math>m^2</math>; Aperture area – 1.88 <math>m^2</math>; Total Absorber Area – 1.86 <math>m^2</math>; Headers – 2 horizontal copper tube of 18 mm diameter; Risers –8 vertical copper tubes of 8 mm diameter; Maximum operational pressure – 8 bars; Maximum Stagnation Temperature – 147.8°C Empty Collector Weight – 35 kg</p>
7.	<p>FLAT PLATE TYPE SOLAR COLLECTOR</p> <p>Absorber Materials: Copper; 0.12 mm Black paint Absorber Sheet; Ultrasonic welded into copper tubes. Glass wool thermal insulation of 40 Kg/<math>m^3</math> density with thermal conductivity of 0.036 w/(m- ° K);</p>	<p>ATLANTIC</p> <p>SP 25H SC BP</p>	<p>Gross dimensions of 1203 x 2130 x 84.5 mm; Gross Area – 2.5 <math>m^2</math>; Aperture area – 2.4 <math>m^2</math>; Total Absorber Area – 2.26 <math>m^2</math>; Headers – 2 horizontal copper tube of 18 mm diameter;</p>

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	<p>40 mm thickness for back insulation; 3.2 mm Tempered Glass Cover 1.3 mm (Average) thickness Aluminum Extruded material with 0.4 mm thickness back cover material; (Polyurethane, Silicon and Rubber) sealant and/or sealing materials; Use with anti-freeze thermal fluid (propylene glycol for solar system)</p>		<p>Risers – 18 vertical copper tubes of 8 mm diameter; Maximum operational pressure – 8 bars; Maximum Stagnation Temperature – 147.8°C Empty Collector Weight – 40 kg</p>
8.	<p>FLAT PLATE TYPE SOLAR COLLECTOR</p> <p>Absorber Materials: Copper; 0.12 mm Black paint Absorber Sheet; Ultrasonic welded into copper tubes. Glass wool thermal insulation of 40 Kg/<math>m^3</math> density with thermal conductivity of 0.036 w/(m- ° K); 40 mm thickness for back insulation; 3.2 mm Tempered Glass Cover 1.3 mm (Average) thickness Aluminum Extruded material with 0.4 mm thickness back cover material; (Polyurethane, Silicon and Rubber) sealant and/or sealing materials; Use with anti-freeze thermal fluid (propylene glycol for solar system)</p>	<p>ATLANTIC</p> <p>SP 25V SC BP</p>	<p>Gross dimensions of 2130 x 1203 x 84.5 mm; Gross Area – 2.5 <math>m^2</math>; Aperture area – 2.4 <math>m^2</math>; Total Absorber Area – 2.26 <math>m^2</math>; Headers – 2 horizontal copper tube of 18 mm diameter; Risers – 10 vertical copper tubes of 8 mm diameter; Maximum operational pressure – 8 bars; Maximum Stagnation Temperature – 147.8°C Empty Collector Weight – 40 kg</p>

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*NOTE1: This document forms part of the Certificate of Product Conformity bearing the same certificate number.*

*NOTE2: The above products shall bear the DCL Conformity Mark.*

Original Issue Date : 27 May 2018

Current Issue Date : 27 May 2018

Valid Until : 26 May 2019



ARIF HUSAIN AL MARZOOQI

Head of Products Conformity Assessment Section  
Dubai Central Laboratory Department