

ECLIPSE

THE FIRST SMART SOLAR COLLECTOR



USER'S MANUAL – RUNNING INSTRUCTIONS

ENGLISH



Version 1.2 of 24/06/2015

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DESCRIPTION

ECLIPSE COVER SYSTEM by **PLEION** is the first solar collector in the world presenting a smart revolutionary automatic covering system able to control collector temperature and keep the highest level of efficiency of your Solar Thermal Plant **365 days a year**.

It's easy to create a covering system, but rather hard to make a go-it-alone smart system allowing the best safety of all.

When designing ECLIPSE, our new solar collector, we have considered all the elements defining vacuum solar collector and we targeted our energies towards creating something totally new, something completely different from what there was on the market since then.

A brilliant idea: ECLIPSE does not resemble any other solar collector in the world.

ECLIPSE is optimised for top level performances. For the first time, a solar collector has been made to maximise thermal efficiency.

Instead of using fans or other common solutions, in order to control over temperature, we have developed an innovative covering system with rotating layers, controlled by a control unit with microprocessor.



Smart Control

ECLIPSE cover system by Pleion is a smart and self-adjusting system depending on the collector and boiler temperatures, it has a function called "holiday" which enables a manual control of the functioning when you do not need the system working.



Efficient system 365 days a year

The solar system can be maximised throughout 365 days a year and protected in case of extreme irradiance or when the system has not been used (without emptying the entire system)



Collector and system last longer with ECLIPSE

Longer durability and lower servicing costs than any other collector in the market.



PLUG&PLAY INSTALLATION

ECLIPSE cover system by Pleion and its control module are easy to install and there's no need to call an electrician.



eclipse cover system by Pleion fulfils all duties deriving from Law by Decree No. 28/2011 and has a lower price compared to an energetic renewable source system fulfilling the same legal obligations.

Solar collector ECLIPSE is composed of the following elements:

- A. n.1 **vacuum solar collector X-AIR 14**;
- B. n.1 **covering system ECLIPSE**.

- A. Please go directly to Solar Collector X-AIR 14 installation and user's manual, for technical features, installation modes and its functioning.
- B. Covering system ECLIPSE:
 - It is a solar collector X-AIR 14 tool;
 - it can be fully replaced, by re-enabling collector X-AIR 14 technical features;
 - it can also modify solar collector X-AIR 14 performances.



PLEASE NOTE: solar collector X-AIR 14 is certified Solar Keymark (license number 011-7S2431). Covering system ECLIPSE is not subject to certification.

Solar collector ECLIPSE can be installed with a tilt angle between 10° and 60°, as opposed to the solar collector X-AIR 14.

RUNNING INSTRUCTIONS

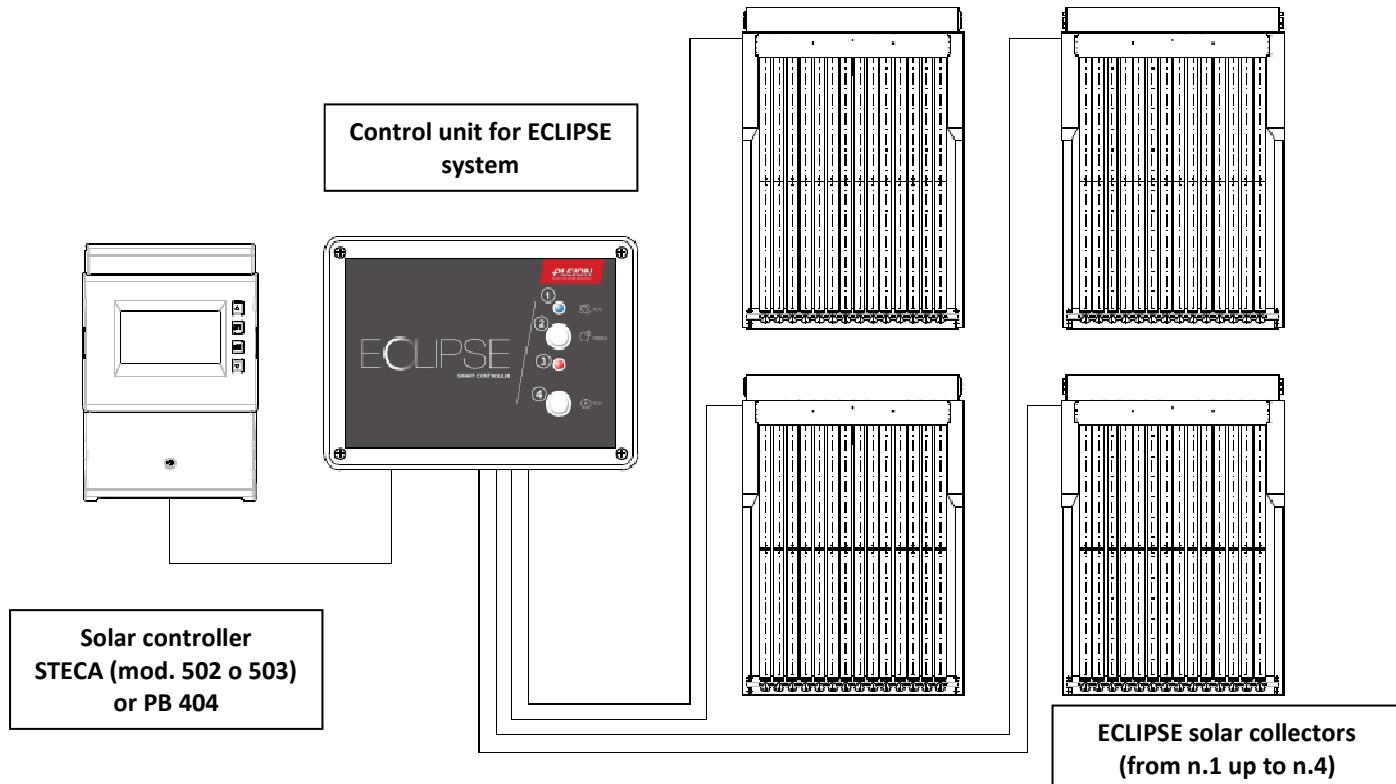
Solar collector ECLIPSE is supplied already assembled.

For commissioning, you just have to do these following operations:

1. **FIXING OF PLASTIC CARTER.** For installations in windy areas or exposed sites, fix the plastic protection carter to the solar collector X-AIR 14 frame by further using hammer head screws as included equipment.
2. **ELECTRIC MOTOR WIRING.** Connect the electric motor of ECLIPSE system to the control unit. For the wiring modes to control unit, please go to the wiring diagram on page 8 of this manual and the specific use and installation supplied with the control unit equipment.

FUNCTIONING

THE FUNCTIONING OF COLLECTOR ECLIPSE IS SUBJECT TO ITS CONNECTION TO A SOLAR JUNCTION BOX (STECA MOD. 502 OR 503) AND CONTROL UNIT (CODE 1040812310).



INSTRUCTIONS FOR SAFETY

ATTENTION: PLEASE CAREFULLY READ THE FOLLOWING SAFETY INSTRUCTIONS BEFORE STARTING THE INSTALLATION OF THIS APPLIANCE; THESE DATA ARE USEFUL TO PREVENT ELECTRICAL CONTACTS, INJURIES AND OTHER ISSUES.

- After removing the packing, be sure that the appliance is intact.
- This machine has to be used only for its original designed purposes and the manufacturer cannot be responsible for any of the damages caused by an improper use.
- Appliance installation must be carried out according to constructor's instructions.
- A failure to observe those recommendations may compromise safety.
- All installation and service must be performed only by expert and qualified Personnel of a service centre authorised by the Manufacturer.
- Before cleaning or making any other maintenance operation, you must disconnect the unit from the mains grid. For maximum safety, it is recommended to remove all electrical connections.
- We highly recommend you to use only original spare parts.
- Failure to comply with the existing measures is likely to undermine safety and clear all benefits coming from the equipment warranty.
- In case of troubles or errors during the installation or functioning, please address to your dealer or directly to the manufacturer.

MOTOR TECHNICAL DATA

PARAMETER	VALUE
Supply voltage	24 Vdc
Electrical connection type	three prong power cord – length 20 m
Control unit consumption in stand-by mode	5 W
Consumption of each single motor connected in motion (for 3 seconds)	120 W
Power	30 Nm
Speed	12 r.p.m.
Protection level against external agents (protection motor bowl not included)	IP44
External tubular diameter	50 mm
Total length (support panel not included)	486 mm

MOTOR TECHNICAL SPECIFICATIONS

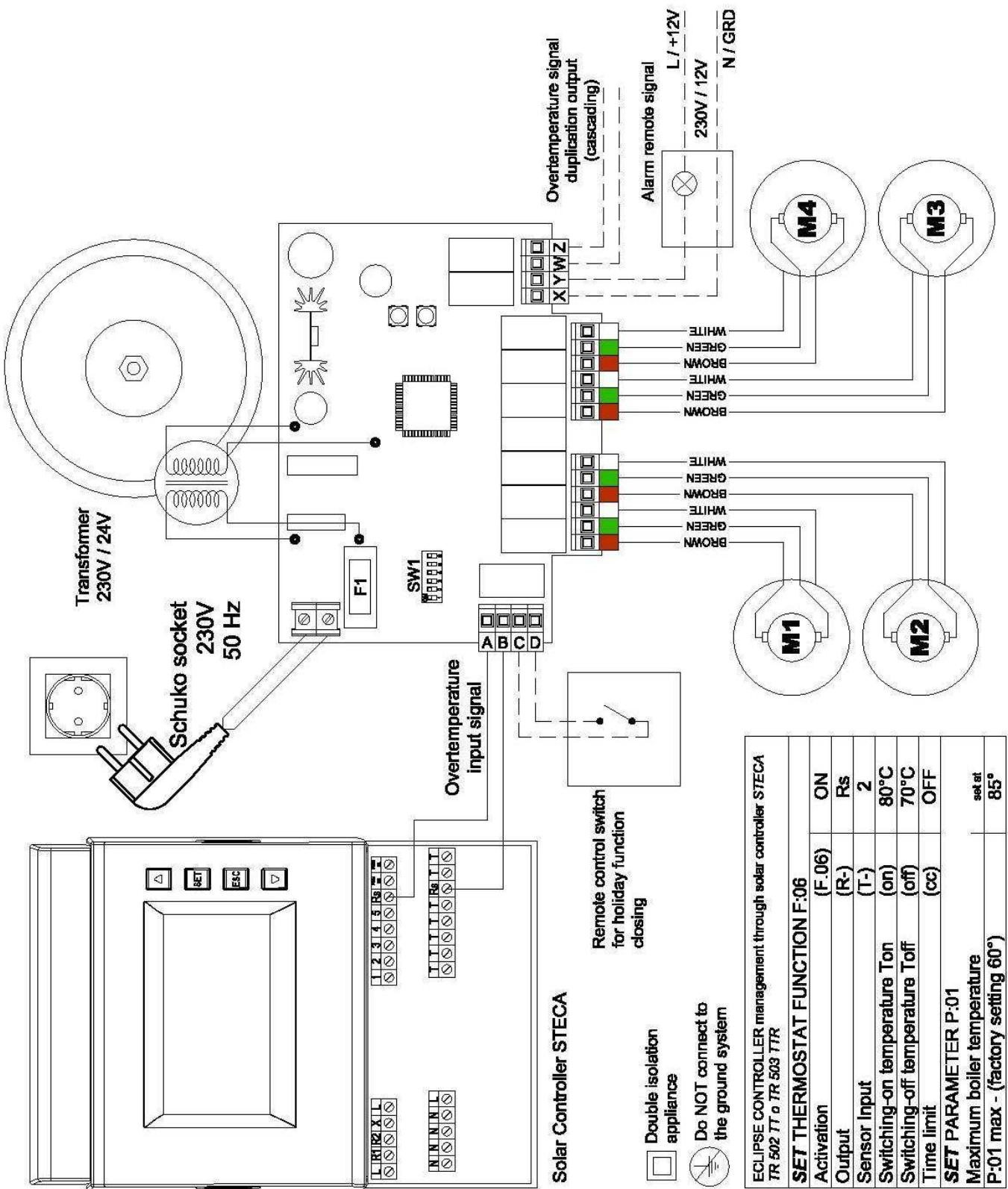
EACH MOTOR IS SUPPLIED WITH A 20 MT POWER CABLE AND CONNECTION TO CONTROL UNIT; SUCH LENGTH IS DIMENSIONED FOR A PROPER SYSTEM FUNCTIONING.

CE mark of control unit includes motor connections by using electric cable provided as standard equipment.

ATTENTION. In case of modifications to the electric cables (for motors):

- Control unit **CE** mark ceases;
- Electrical connections must be redesigned according to new lengths;
- Lifeline protection level and system phase displacement must be checked again;
- a new certificate of compliance concerning the electric system must be issued by a qualified and authorised electrotechnical installer (Italian Ministerial Decree 37/2008).

WIRING DIAGRAM TO CONTROL UNIT



DECLARATION OF CONFORMITY

S.G. Elettronica s.r.l. - Via Ferrari, 28
30037 Scorzè Venezia – ITALY
P.IVA 02272310273
Tel. 041.5841973 / Fax 041.5841979
www.almot.it – info@almot.it

The company **S.G. Elettronica s.r.l.** declares that the items are in conformity with all technical regulations related to products within the scope of application of the Community Directives **2006/95/CE, 2004/108/CE and 99/5/CEE**,

that is:

ETSI EN 301 489-3 V1.4.1:2002
ETSI EN 301 489-1 V1.8.1:2008
EN 300 220-1 V2.1.1:2006
ETSI EN 300 220 - 2 V2.1.2:2007-06
EN 50371 (2002)
EN 60950-1:2006 EN 60950-1/A11:2009

The declaration of incorporation for partly completed machinery (Directive 2006/42/CE, Annex II- B)

The Manufacturer, **S.G. Elettronica srl**, declares that gearmotor for roller blinds and sun awnings of **HAD101 151 201 251 351 501 Classic model**:

- it is intended for incorporation into a covering system for making a machine according to **Directive 2006/42/CE**. Such machine cannot be put into service before being declared in conformity with the provisions of Directive 2006/42/CE (Annex II-A).
- It is in compliance with the essential requirements applicable to the following regulations:
 - machines directive 2006/42/CE (Annex I, Chap. 1);
 - low voltage directive 2006/95/CE;
 - Electromagnetic Compatibility Directive 2004/108/CE.

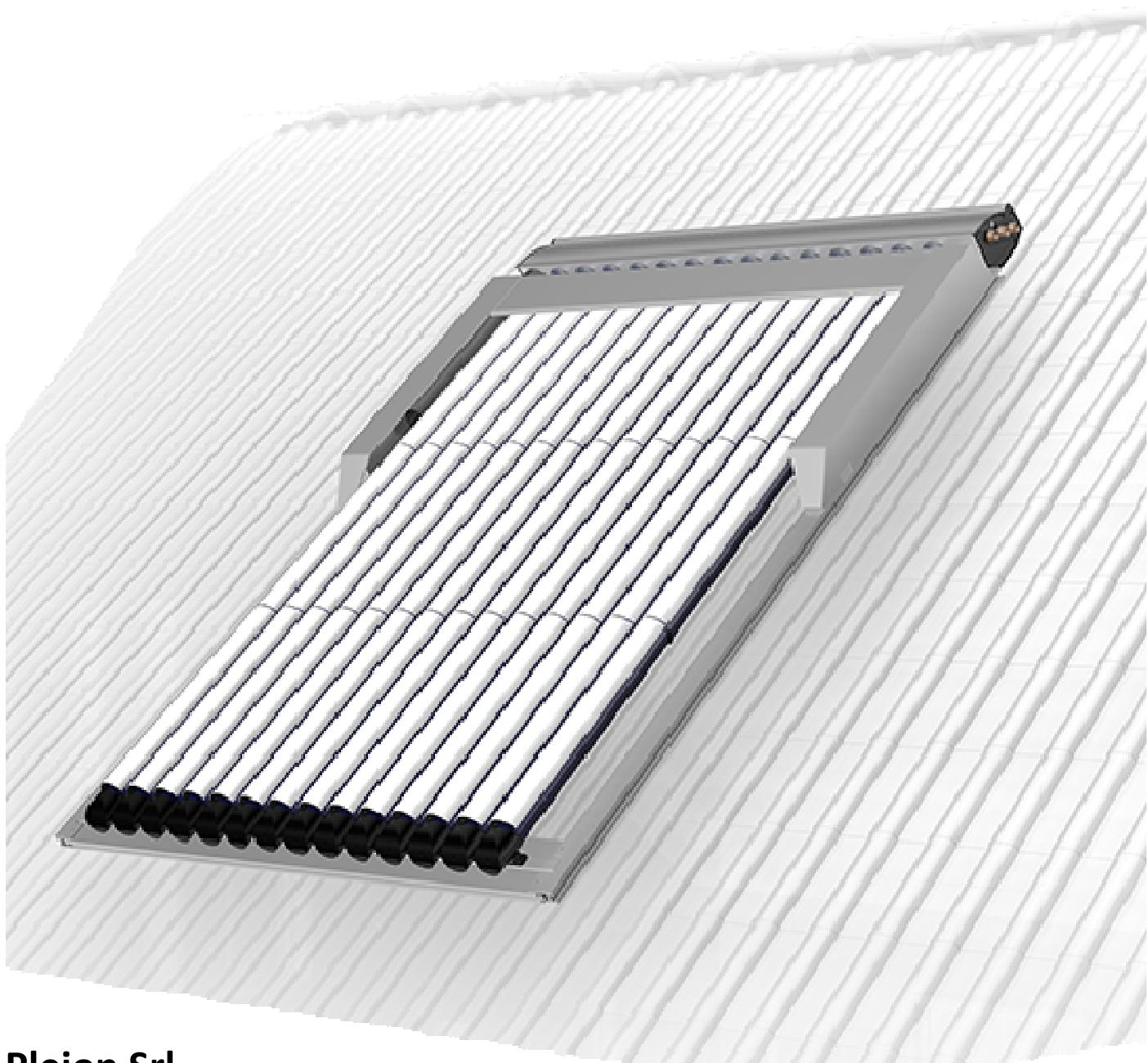
Year of manufacture: **2014**

Scorzè, **10/10/2009**

Signature of the legal representative:

Sandro Zottino





Pleion Srl

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Pleion Srl reserves the right to make modifications regarding technical, aesthetic and commercial details without any prior notice.

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