

PCU

ATEX Solar Controller



The PCU ATEX Solar Controller of Mediterráneo Señales Marítimas is the ideal complement to the correct charge of a battery, intended for use in potentially hazardous areas with presence of flammable liquids, gases or vapours (Zone 1 and Zone 2).

This controller, of advanced design incorporates the latest loading technology and represents the maximum category in its class.

It consist on specific gauges that show the battery voltage and charging current. It has been designed to withstand the harshest marine conditions.

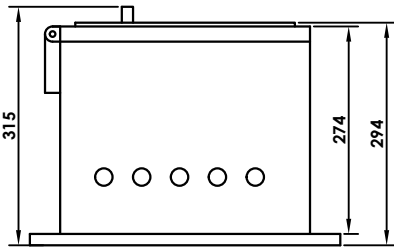
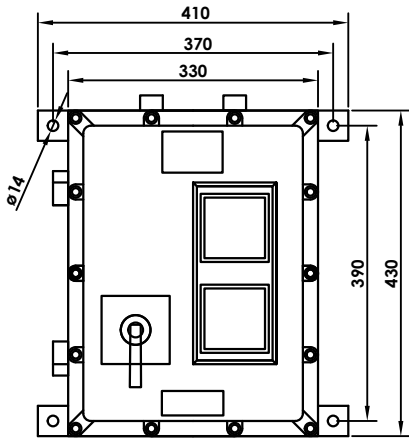
Features:

- ATEX Classification:
GROUP II: Equipment on surface (no mining).
ZONE 1: Category 2. ATMOSPHERE: GAS, DUST.
ZONE 2: Category 3. ATMOSPHERE: GAS, DUST.
- Maximum solar current charging: 30 A.
- Battery voltage and charging current indicators.
- Battery charging by shunt PWM.
- Regulation based on the battery charging status (SOC).
- Compensation charging.
- Automatic charge reconnection.
- IP 66 watertightness degree.
- Cable input through anti-vibration ATEX glands.
- Stainless-steel housing.



II 2G D Ex d IIB T6

Specifications subject to change without previous notice.



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Electronic Protections

- Overcharge.
- Deep discharge.
- Cut-off voltage against discharge.
- Reverse polarity of solar modules.
- Reverse polarity of charging output and battery.
- Short-circuit in solar modules.
- Short-circuit in charging output.
- Over-temperature.
- Overvoltage.
- Varistor against electromagnetic discharges.
- Open-circuit.
- Night reverse current.

Electrical Specifications

System voltage:	12V (24V).
Maximum solar current input:	30 A.
Maximum rated load output:	6 A.
Maximum consumption:	< 12 mA.
Final charging voltage (float):	Liquid 13.9 (27.8V) Gel 14.1V (28.2V).
Reinforced charging voltage:	14.4V (28.8 V).
Compensation charging (disabled for gel batteries):	14.7V (29.4V).
Reconnection voltage (SOC/ LVR):	> 50% SOC/12.6V (25.2V).
Deep discharge protection (SOC):	> 30% SOC/11.1V (22.2).
Temperature range:	From -10° to +50°C.
Terminal size (one/thin wire):	16 mm ² / 25 mm ² AWG 6/4.

Mechanical Specifications

Housing material:	Stainless-steel of 6mm thickness.
Locking bolts:	14 nos. in stainless-steel.
Housing finishing:	Polyester powder.
Watertightness degree:	IP 66.

Standards and Methods of Protection

- General requirements: EN 60079-0 Standard.
- Equipment protection by Flameproof Enclosures: "d", EN 60079-1 Standard.
- Temperature Class: T6. 85°C.
- Protection against Gas: (G).
- Protection against Dust: (D).