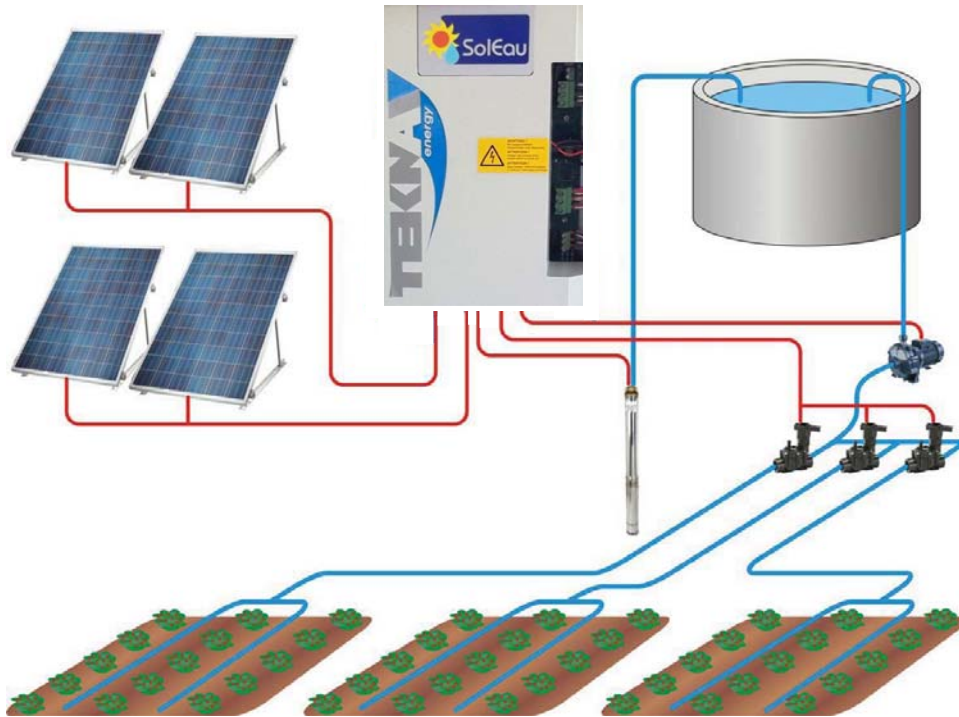


Inverter SolEau

Pumping water with solar panels



The inverter family SolEau, has been specially designed for the management of water supply systems, from deep wells, for the use in agriculture for irrigation.

The inverter draws its power from solar panels soleau (energy from the sun) and manages and controls, both in submerged pump that any irrigation pump, than, sensors and actuators necessary for a complete automation system.

SolEau is designed and constructed to be installed in the external, in harsh environments and unattended.

The inverter is equipped with an LCD display panel and keyboard, for both directions of state machine, that for the configuration according to the type of pump that the requirements of the application.

Soleau is provided with a communication interface (RS485) with external systems, that, of optional modules, such as GSM / GPRS modem for remote transmission of the state machine.

Particular care and attention has been paid to the problems of installation, maintenance and support, in order to make them fast and simple. For this purpose have also been developed special software packages support.

Soleau can be supplied in different designs and sizes of power in order to better meet the various needs in the field and adapt to different types of pumps.

Through the use of solar energy, vengono praticamente azzerati i costi di pompaggio rispetto all'uso di diesel o altre fonti energetiche.
The production of CO2 is reduced to a minimum.



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100% made in Italy



| SPECIFICATIONS THREE-PHASE SOLEAU INVERTER | | SolEau.03 | SolEau.10 | SolEau.20 | SolEau.35 | SolEau.50 |
|--|-----------|---|-------------|-------------|-----------|-----------|
| Recommended for pumps for maximum power | kW | 2,5 | 7,5 | 15 | 25 | 35 |
| INPUT FROM THE ELECTRIC GENERATOR SOLAR | | | | | | |
| Maximum power of the PV generator | Wp | 4.500 | 12.000 | 24.000 | 41.000 | 55.000 |
| Number of entries MPPT | | 1 | 1 | 2 | 3 | 4 |
| Electrical voltage maximum | V | 420 | 720 | | | |
| Operating range DC | V | 100-350 | 300+650 | | | |
| Maximum dc current for each input | A | 18 | 25 | 25 | 25 | 25 |
| AC OUTPUT (MOTOR) | | | | | | |
| Power | VA | 3.000 | 10.000 | 20.000 | 35.000 | 50.000 |
| Nominal Output Voltage (three phase) | Vac | 230 | 400 | | | |
| Frequency (setting range) | Hz | 20 + 60 | | | | |
| Output waveform | | sinusoidal pattern | | | | |
| Maximum output current (400V AC) | A | 9 | 16 | 32 | 56 | 80 |
| Interference filter (dV/dt) feed pumps | FCAdvt | Oui | | | | |
| Harmonic distortion | | <3% | | | | |
| SAFE AND SECURE | | | | | | |
| Check the insulation fault / land on the DC | | | | | | Yes |
| Protecting the input side of the DC (varistor) overvoltage | | | | | | Yes |
| Motor protection against overload / short circuit / charge | | | | | | Yes |
| Motor protection against voltage surges / undervoltage | | | | | | Yes |
| Check insulation resistance before starting the engine | | | | | | Yes |
| Control phases missing | | | | | | Yes |
| Power Factor Control | | | | | | Yes |
| Control energy consumption | | | | | | Yes |
| Thermal Protection | | | | | | Yes |
| Loss of engine power in case of overheating | | | | | | Yes |
| PERFORMANCE | | | | | | |
| Inverter efficiency | % | >96 | | | | |
| PHYSICAL CHARACTERISTICS | | | | | | |
| Carter inverter / Class Environmental Protection | | metallic / IP54 | | | | |
| Inverters size (LxPxH) | mm | 130x250x500 | 300x300x500 | 300x300x600 | | |
| Weight | kg | 15 | 25 | 30 | 35 | 40 |
| Cooling system | | natural | air | to water | | |
| Connections | | Gland Ex / Coupling clamp | | | | |
| ENVIRONMENTAL CONDITIONS | | | | | | |
| Range of operating temperature (inverter) | C° | -20 / +50°C | | | | |
| Maximum relative humidity (non-condensing) | % | 95 | | | | |
| Maximum operating attitude | m | 2000 | | | | |
| Acoustic emissions (noise) | db | <100 | | | | |
| INTERFACES | | | | | | |
| Interface panel | | screen + keys | | | | |
| Communication interface | | RS485 | | | | |
| Inverter monitoring (SFW "STING") | | Yes | | | | |
| Remote control (via Internet) | | "Yes" (With accessories: CpuSol, Usb485, ModSol) | | | | |
| SERVICES INPUT/OUTPUT | | | | | | |
| Opto-isolated digital inputs | | n.6 entry (PNP 24Vdc) | | | | |
| Digital outputs | | n.3 exit relay NO (230Vac / 1A) | | | | |
| Analog inputs | | n.1 entry (4...20mA) | | | | |
| VARIOUS | | | | | | |
| Monitoring Software on a PC (STING) | | Yes | | | | |
| RULES | | | | | | |
| Compliance CE | | Yes | | | | |
| ACCESSORIES | | | | | | |
| USB-RS485 Converter module | Usb485 | Accessory | | | | |
| CPU register module and supervision | CpuSol | Accessory | | | | |
| Modem web interface | ModSol | Accessory | | | | |
| Extensions input / output | ExpES | Accessory | | | | |
| AC output sinusoidal filter to control the motor | FCAsin | Accessory | | | | |
| SPECIAL FEATURES | | | | | | |
| Setting the pump power as a function of the available energy | | Yes | | | | |
| Management double pump | | Yes | | | | |
| Management of the constant output pressure (irrigation and drip) | | Yes | | | | |
| Caliber management | | Yes | | | | |
| Management flowmeter | | Yes | | | | |
| PLUS | | | | | | |
| Switch for double pump activation | TelP.. | Accessory | | | | |
| Manometer | Pres.. | Accessory | | | | |
| Level Probe | SonN.. | Accessory | | | | |
| Pressure probe | SonP.. | Accessory | | | | |
| Measurement sensor | SonD.. | Accessory | | | | |