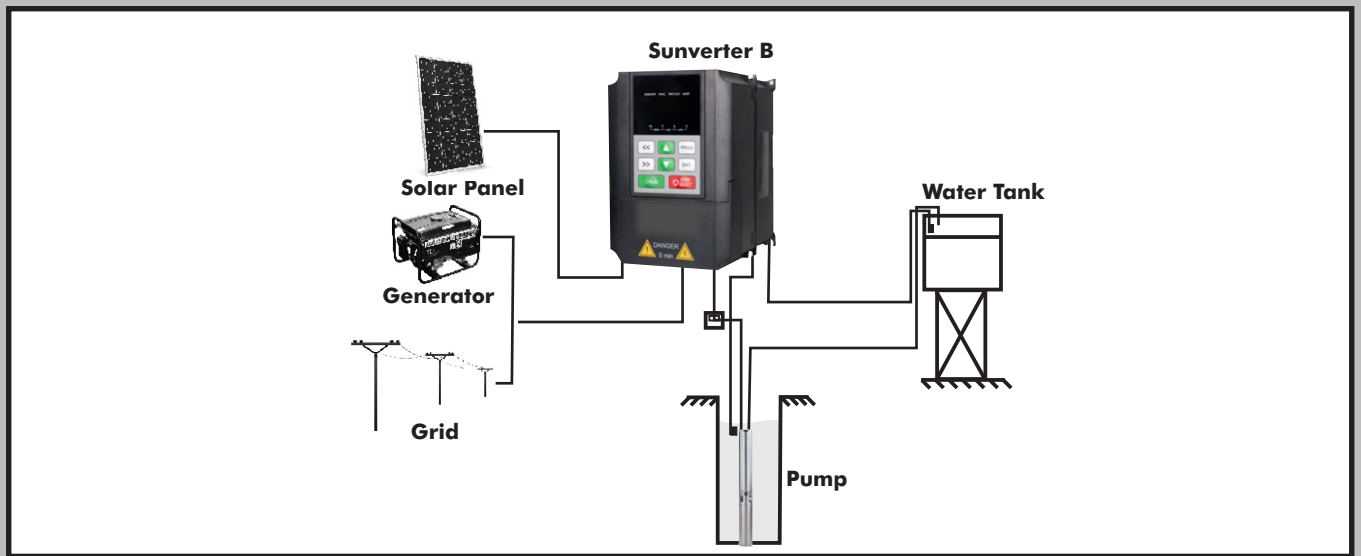
SUNVERTER B

AC Solar Pump Controllers



Dayliff SunVerter B is an AC/DC inverter specially designed for solar powering AC motors in various water pumping applications and is suitable for retro fitting to existing AC supply installations. It is enclosed in a plastic casing with IP20 protection grade suitable for indoor installations or can be supplied with an additional enclosure for outdoor applications. The unit is primarily designed for PV DC power input though it can be connected to an alternative AC supply and manually switched. Particular features include.

- Fully automatic operation, the inverter powers the pump to work from sunrise to sunset.
- Advanced MPPT (Maximum Power Point Tracking) capability providing fast response, good stability and up to 99% efficiency
- Provides for pump soft start and full motor protection.
- Connections provided for high water level control and dry running protection using float switches and well probes.
- User friendly LED display interface with comprehensive display information
- Optional automatic power supply switching function to support grid/generator back-up to enable 24-hour operation.
- Optional remote monitoring and control capability using the unique iDayliff Service.

CONTROLLER FUNCTIONALITY

- Settable minimum and maximum frequency and open circuit voltage.
- Display of operating parameters including frequency, voltage, amperage, input power and pump speed.
- Protection against over and under voltage, over current, system overload and module over temperature.
- Fault detection with error code display.

INSTALLATION

Dayliff SunVerter B controllers are surface mounted and should be provided with an enclosure for water and heat protection. Due to the high operating voltages proper earthing is essential, which must be carried out by a qualified electrician.

As a rule all PV powered solar pumping systems should be provided with a PV solar module array with a nominal output about 30% greater than the motor size. The arrays should be wired in a combination of series and parallel connections to ensure that the correct voltage is available into the inverter with appropriately sized PV Disconnect Circuit Breaker and a Surge protector if applicable. It is important that the connection arrangement is approved by the pump supplier.

OPERATING CONDITIONS

Enclosure Class: IP20
Relative Humidity: 0-95%
Ambient Temperature: -10^0 C to +50^0 C
Frequency: 0-60Hz

CONTROLLER DATA

Model	Motor Rated Power (kW)	Rated Voltage (V)	Max Input Power (kWp)	Output Current (A)	Max DC Input Voltage (VDC)	MP Voltage (VDC)	Dimensions (mm)			Weight (kg)
							H	W	D	
SVB/1.5M	1.1	1x240	2.2	7	440	310-360	186	126	155	1.7
SVB/2.2M	1.5		3.3	10						
SVB/4M	2.2		5	16			285	165	200	4.6
SVB/4T	4	3x415		9.5	780	500-600	230	140	172	2.7
SVB/5.5T	5.5		8	14						
SVB/7.5T	7.5		11	17.5			285	165	200	4.6