

Let the sunshine driving your pump



Altivar 312 Solar

Variable speed drives for three-phase asynchronous motors

Power range from 0,18 kW (0.25 HP) to 5,5 kW (7.5 HP)

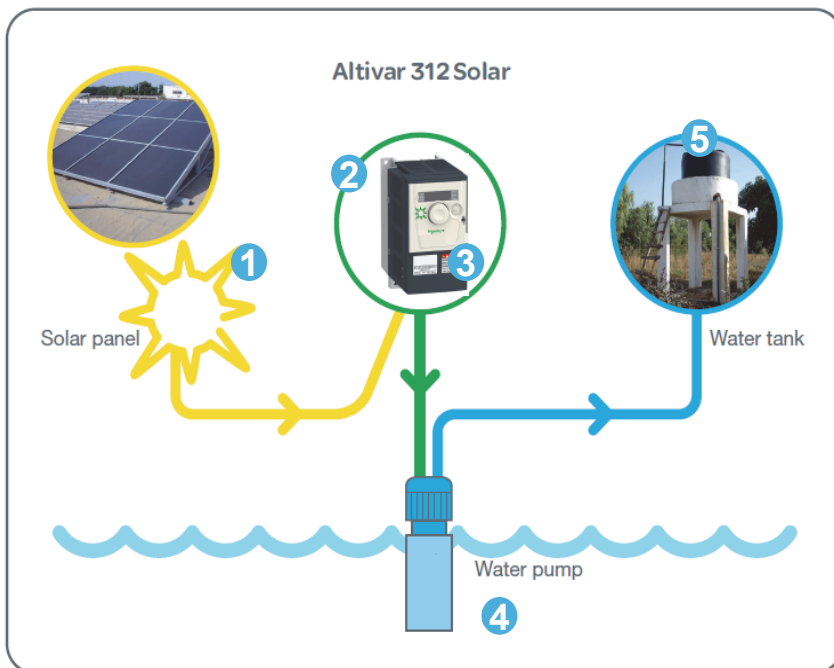
Altivar 312 Solar



Because in some isolated areas,
water is a limited resource



The Altivar 312 Solar can deliver drinking water for people without or with limited access to the electric network, for a cost much less than existing solutions.



> The principle

A very simple installation : no battery, no separated elements

- 1 Solar Panels
- 2 Electrical cabinet
- 3 Variable Speed Drive
- Altivar 312 Solar**
- 4 Pump immersed in a well or a drilling
- 5 Water tank

> The advantages of the system

The reliability of the system is increased because the number of elements is reduced.

This system will be able to:

- Regulate flow of the pump depending of the availability of energy.
- Increase the life time of the installation and facilitate its maintenance.
- Detect the dysfunctions of the system.

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It is the time spent by village inhabitants in Africa to get water at the well when they don't have access to energy.



Economical

- Best-in-class product based on compact drive range from Schneider-Electric.
- Worldwide availability



Ecological

- Design in line with Schneider-Electric eco-conception rules
- No use of batteries, no lead.

Dedicated features for Solar pumping unit

New embedded functionalities

- Solar power regulation algorithm (tracking point) for power optimization regarding available sunshine
- Level probe control for tank control
- Under-load control for pump protection
- Run-Stop-Restart mode management all day.
- Easy menu « Sun » for fast commissioning
- Diagnostics and self-protections

Advanced capabilities

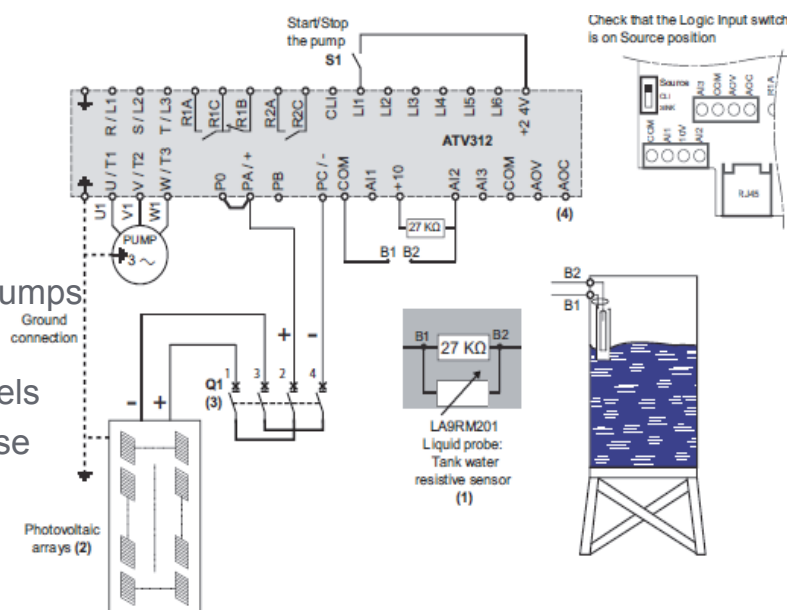
- Adjustment regarding the pipe length
- Adapted to any IEC three phases motors
- Full pump management and protections
- Advanced parameters access for optimized performance level.
- Dedicated output for power availability
- Compatible with photovoltaic arrays or grid main supply



ATV312 Solar :

Totally flexible and Easy to connect

- ATV312 Solar controls any three phases pumps and motors
- Compatible with most of existing solar panels
- The Solar sizer wizard assists you to choose the best configuration for your installation, whatever the configuration :
 - Tank volume, Drill, Bore, Pipe length



Autonomous

- Designed for harsh environment
- Installation everywhere
- Ready to use cabinet IP54



Open

- Can perform with any local motors and solar panels.
- Ready for Solar or Grid connection

Selection guide

> Drive with heat sink - IP20 - Single phase 200V
up to 2,2 kW for motors 200 volts - 283VDC-373VDC (tolerance -15%/+0%)

Part Number	kW	HP	Dimensions		
			Width	Height	Depth
ATV312H018 M2 412	0.18	0.25	72	145	132
ATV312H037 M2 412	0.37	0.50	72	145	132
ATV312H055 M2 412	0.55	0.75	72	145	142
ATV312H075 M2 412	0.75	1	72	145	142
ATV312HU11 M2 412	1.1	1.5	107	143	152
ATV312HU15 M2 412	1.5	2	107	143	152
ATV312HU22 M2 412	2.2	3	142	184	152

> Drive with heat sink - IP20 - Three phases 200V
up to 5,5 kW for motors 200 volts. 283VDC-373VDC (tolerance -15%/+0%)

Part Number	kW	HP	Dimensions		
			Width	Height	Depth
ATV312H018 M3 412	0.18	0.25	72	145	122
ATV312H037 M3 412	0.37	0.50	72	145	122
ATV312H055 M3 412	0.55	0.75	72	145	132
ATV312H075 M3 412	0.75	1	72	145	132
ATV312HU11 M3 412	1.1	1.5	105	143	132
ATV312HU15 M3 412	1.5	2	105	143	132
ATV312HU22 M3 412	2.2	3	107	143	152
ATV312HU30 M3 412	3	-	142	184	152
ATV312HU40 M3 412	4	5	142	184	152
ATV312HU55 M3 412	5.5	7.5	180	232	172

> Drive with heat sink - IP20 - Three phases 400V
Up to 5,5 kW for motors 400 volts. 537VDC-777VDC (tolerance -15%/+0%) - 792VDC

Part Number	kW	HP	Dimensions		
			Width	Height	Depth
ATV312H037 N4 412	0.37	0.5	107	143	152
ATV312H055 N4 412	0.55	0.75	107	143	152
ATV312H075 N4 412	0.75	1	107	143	152
ATV312HU11 N4 412	1.1	1.5	107	143	152
ATV312HU15 N4 412	1.5	2	107	143	152
ATV312HU22 N4 412	2.2	3	142	184	152
ATV312HU30 N4 412	3	-	142	184	152
ATV312HU40 N4 412	4	5	142	184	152
ATV312HU55 N4 412	5.5	7.5	180	232	172



Easiness

- Easy to choose, install & maintain
- Intuitive menu « SUN » for basic needs
- On-board commands



Free Tools

- Dedicated software for application consistency - ATV Solar Sizer
- Solar panels sizing related to the pump

Altivar 312 Solar

Solar energy + Off roads
Autonomous Reliable

ATV312 SOLAR is a suitable, economic and flexible solution for water pumping station.

Governmental program or non governmental organization, local entrepreneurship or local association may use the solar pumping solution for autonomous application.

ATV312 SOLAR is the unique solar drive compatible with most of local suppliers for motors and solar panels.

Easy to connect and reliable, ATV312 will fit non specialist expectations.

So , let the sunshine driving your pump with Schneider Electric !



As the global specialist in energy management, we embrace our responsibility to promote access to Energy for all, without endangering the climate.

Make the most of your energy

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