

Solar pumping with variable frequency drives



H100

SOLAR POWERED BY VECTOR

0.75 ~ 18.5 kW Three phase 230V

0.75 ~ 500 kW Three phase 400V

Pumping functions

- Pipe filling
- PID pressure control

Supply types

- OFF-grid (DC)

OFF-grid and ON-grid:

- Switched (AC or DC)
- Hybrid (AC + DC)



Advanced
LCD Keypad

Solar start test

- Avoid unnecessary starts when there is not enough power.

Automatic control of the generator

- Intelligent system that starts/stops the generating set, depending on the available solar energy

Integrated time clock

- It is possible to configure start/stop of the drive by time clock.

Easy commissioning thanks to macro programming: *

- Macro for raft filling (MPPT)
- Macro for pressure control (MPPT + PID)

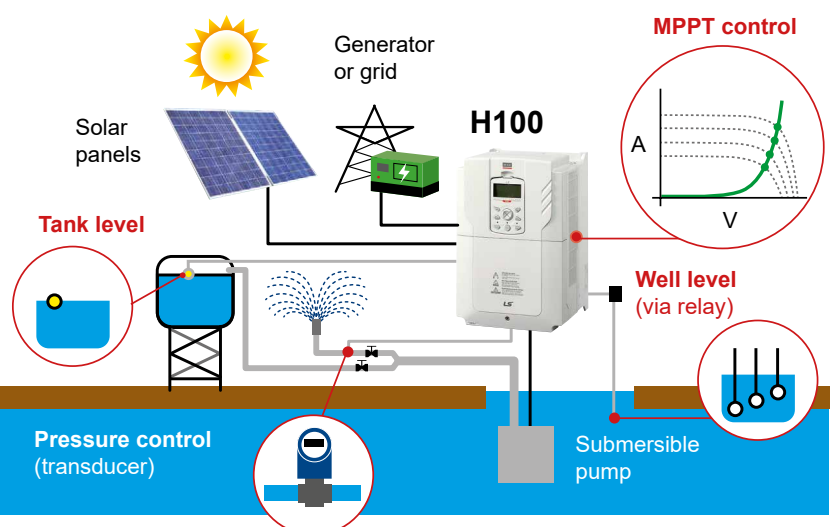
* Using only 1 parameter, the entire drive is preconfigured.

Protections:

- Preload resistance in DC:
It allows you to connect the photovoltaic field safely to the drive without the need to use external systems.
- Automatic dry well
Test on the hydraulic system to improve dry well detection.
- Special starter for submerged pump
- Sleep/wake up
- Tank level

H100 example with MPPT control for solar pumping

MPPT function to find the maximum power point in the voltage-current relationship of the panels. With inputs to detect radiation sensors, tank levels, well level (with relay) and irrigation pressure (transducer)



Full solar pumping
macro setup