

Solar water pump induction





Overview

How a solar water pump works?

In this project the water pump is run by solar energy as well single phase grid. The induction motor drive is used to run the water pump. Solar photovoltaic is used whenever proper solar energy is available otherwise the water pump is run by single phase grid. The power flows from solar photovoltaic to induction motor drive by using inverter.

What types of motors are used for solar fed water pumping system?

Different types of motors are utilized for solar fed water pumping system with water pump. In , the authors use the synchronous reluctance motor. In , the authors introduce the induction motors . Other researchers employ the permanent magnet synchronous motor to drive the pump .

What is the difference between solar photovoltaic and induction motor drive?

The induction motor drive is used to run the water pump. Solar photovoltaic is used whenever proper solar energy is available otherwise the water pump is run by single phase grid. The power flows from solar photovoltaic to induction motor drive by using inverter. The dc voltage is boost up by chopper to fulfill the required demand.

What is Inc in solar water pumping system?

Incremental conductance (INC) techniques provide good performance for most of the solar tracking applications . The proposed PV water pumping system utilizes INC algorithm based on variable step size for better PV power optimization under fast changing atmospheric conditions .



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