

Sunday, September 27, 2020

UNHCR Sudan, Kosti Sub Office

JOURI CAMP SOLAR & PUMP SIZING

Solar pumping project

Note: For efficient operation and future upgrading, its proposed to install new pump with and solar PV generator with associated accessories.

Parameter

Location:	Sudan, Kosti (13° North; 32° East)	Water temperature:	25 °C	Altitude	855 m
Required daily output:	240 m³; Sizing for July	Dirt loss:	5.0 %	Motor cable:	20 m
Pipe type (Discharge side):	steel, weldless, new comm. size galvanized: 0.160 mm	Pressure head:	17 m	Pipe length (Discharge side):	40 m
Pipe type (Suction side):	steel, weldless, new comm. size galvanized: 0.160 mm	Suction head:	3 m	Pipe length (Suction side):	5.0 m

Products

Quantity Details

PS2-4000 CS-F32-20-2	1 pc.	Surface pump system including controller with DataModule, motor and pump end
LC100-M36	30 pc.	3,000 Wp; 15 x 2 modules; 15 ° tilted
Motor cable	20 m	2.5 mm² 3-phase cable for power and 1-phase cable for ground
Pipeline (Discharge side)	40 m	100 mm (inner diameter) Pipeline
Pipeline (Suction side)	5.0 m	80 mm (inner diameter) Pipeline
Accessories	1 set	Water Sensor, Float Switch, PV Disconnect 440-40-3, Surge Protector2

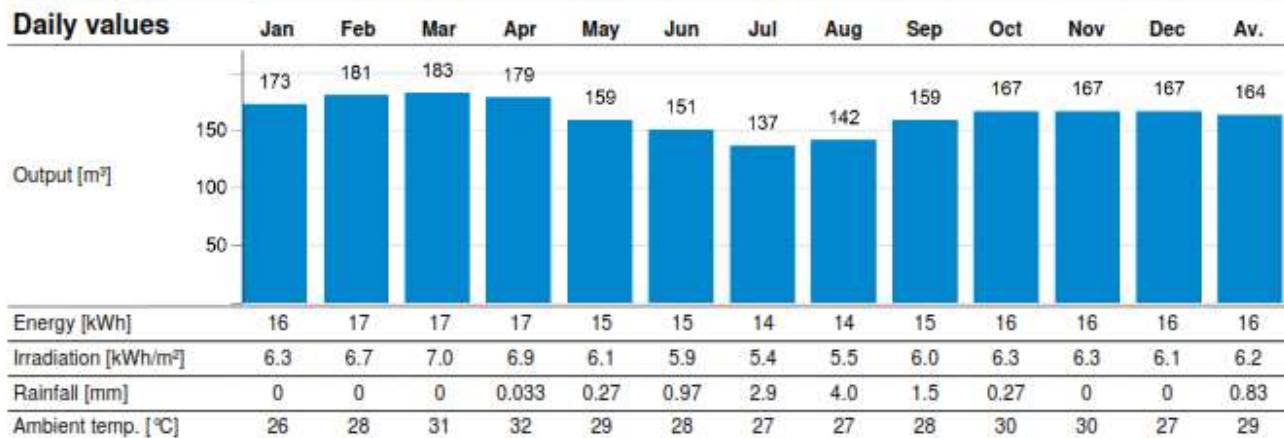
Sun Sensor setting in PumpScanner

min. 200 W/m²

Daily output in July

137 m³

Daily values



Hourly values

