

MAKE WATER AVAILABLE EVERYWHERE







s4sun

MAKE WATER AVAILABLE EVERYWHERE





S4SUN is the DAB system for pumping water using the most widely available renewable energy, the sun.

The system offers the possibility of lifting water from 4 "wells (up to a depth of 250 meters), using the energy produced by the

sun and allowing to feed small water networks and use water tanks at different times of the day.

Dab S4SUN consists of a submersible pump with a permanent magnet motor and integrated electronics, a VFD (Variable Frequency Drive, integrated in the motor) and a controller that allows the pump to be powered by photovoltaic panels (solar collectors) or an AC power supply, switching on one or the other automatically.

Thanks to these characteristics it is possible to use the pump in every part of the world, even in the most remote areas, or area not reached by the power grid or where it is not stable.



WATER EVERYWHERE even where there isn't electricity



WIDE RANGE OF HYDRAULICS to cover all requests



INTELLIGENT MOTOR thanks to the integrated inverter



thanks to the brushless motor

THE COMPLETE SYSTEM CONSIST OF :

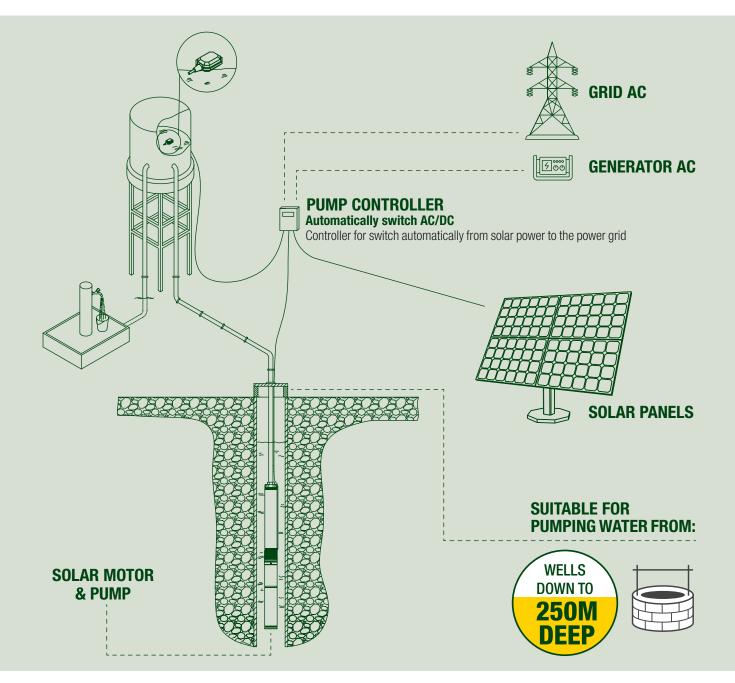


Two versions of the motor are available, both with a max power of 2,2 kW. With the installation of the flow sensor the system guarantees greater flexibility and reliability, allowing to set the restart time for wells with low flow and a better protection against the dry running.

*The system can work also without the controller, but it doesn't allow the automatic switching and the power reading.



OVERVIEW





APPLICATIONS

- Farms
- Livestock watering
- Tank/Cistern filling
- Wildlife refuge
- Rural water supply for villages and homesteads, school, small remote hospital



- Irrigation systems (fields and greenhouse)
- Fountains, ponds, lakes
- Vineyards

S4SUN

- Renewable energy projects
- Rain harvesting

TECHNICAL DATA

HEAD UP TO	250 m
TYPE OF PUMPED LIQUID	Clean water
PUMP MAXIMUM DIAMETER	99 mm
STANDARD FLANGES	NEMA 4"
POWER SUPPLY CABLE LENGTH	3 meters
MAXIMUM AMOUNT OF SAND	150 g/m3
IMPELLER/S MATERIAL	Technopolymer
LIQUID TEMPERATURE RANGE	From 0°C to +40°C
MAXIMUM IMMERSION DEPTH	250 m
MOTOR PROTECTION CLASS	IP X8
MOTOR INSULATION CLASS	class B
AC POWER INPUT	90 V -280 V AC
DC POWER INPUT	55 or 90 - 440 Voc
POSSIBLE TYPE OF INSTALLATION	Fixed in vertical position. Horizontal installation is possible, it is recommended to install a cooling sleeve.
SPECIAL VERSIONS ON REQUEST	AISI 316 stainless steel

THE MOTOR - M220SOL

The Brushless motor with a innovative design allows the motor to be powered by both AC and DC power sources. The motor is one size for all models with a maximum power output (P2) of 2200 W, they differ in the starting voltage. The speed range of the motor is 1800 rpm to 3000 rpm depending on the power input and load.

The motor uses rare earth permanent magnets, and has a built-in electronic unit including a frequency converter and motor controller.

Vector control and MPPT are used to select the best duty point for the pump.

The motor can be supplied with either AC or DC voltage.

MOTOR TYPE	AC VOLT.	DC Volt.	M/T	P2 kW	P2 HP	L Motor	Weight	In AC	In DC	Cs/ Cn	P1MAX AC [W]	P1MAX DC [W]	rpm	Ø	LC
MOTOR M220SOL	80-280	55-440	М	2,2	3	655	18	10	12	NA	2200	3000	3000	4x1,5	3
MOTOR M220SOL-H	80-280	90-440	Μ	2,2	3	695	18	10	12	NA	2200	3000	3000	4x1,5	3
MOTOR M220SOL-N	80-280	55-440	Μ	2,2	3	655	18	10	12	NA	2200	3000	3000	4x1,5	3
MOTOR M220SOL-H-N	80-280	90-440	М	2,2	3	695	18	10	12	NA	2200	3000	3000	4x1,5	3



TECHNICAL DATA

SOLAR MOTOR CONTROLLER

- Multiple power source controller to allow for Auto and Manual control of AC and DC power sources
- Multiple input type to allow for wider use as complete pressure or float based system
- Integrate output contact for generator start control
- Flow meter capable to ensure long term system life
- The Solar controller is a microcontroller designed, developed and manufactured for the DAB Solar pumps
- Manually or automatically switchable between two power supplies depending on DC/Solar power availability
- IP65 weatherproof enclosure
- Suitable for up to 2.2kw pumps
- AC voltage input range 80 280 VAC
- DC voltage input range 50 440 VOC



PUMP TESTED FOR SOLAR APPLICATION

PUMP MODEL											
S4 1	S4 2	S4 3	S4 4	S4 6	S4 8	S4 12	S4 16				
Q= 5 - 30 [l/m]	Q= 10 - 65 [l/m]	Q= 15 - 95 [l/m]	Q= 20 - 115 [l/m]	Q= 25 - 175 [l/m]	Q= 40 - 235 [l/m]	Q= 60 - 285 [l/m]	Q=100 - 415 [l/m]				
H= 10 - 260 [m]	H= 5 - 280 [m]	H= 5 - 220 [m]	H= 5 - 180 [m]	H= 5 - 110 [m]	H= 5 - 80 [m]	H=5 - 70 [m]	H=5 - 35 [m]				
S4 - 1/13	S4 - 2/5	S4 - 3/6	S4 - 4/4	S4 - 6/5	S4 - 8/4	S4 - 12/5	S4 - 16/5				
S4 - 1/19	S4 - 2/7	S4 - 3/9	S4 - 4/7	S4 - 6/7	S4 - 8/6	S4 - 12/8	S4 - 16/8				
S4 - 1/26	S4 - 2/10	S4 - 3/13	S4 - 4/9	S4 - 6/10	S4 - 8/8	S4 - 12/11					
S4 - 1/37	S4 - 2/14	S4 - 3/19	S4 - 4/14	S4 - 6/14	S4 - 8/13						
	S4 - 2/20	S4 - 3/25	S4 - 4/19	S4 - 6/21							
	S4 - 2/28	S4 - 3/32	S4 - 4/27								
	S4 - 2/40	S4 - 3/39									





MAKE WATER AVAILABLE **EVERYWHERE**





DAB PUMPS LTD. 6 Gilberd Court Newcomen Way Severalls Business Park Colchester Essex CO4 9WN - UK salesuk@dwtgroup.com

Tel. +44 0333 777 5010



DAB PUMPS BV

'tHofveld 6 C1 1702 Groot Bijgaarden - Belgium info.belgium@dwtgroup.com Tel. +32 2 4668353



DAB PUMPS B.V. Albert Einsteinweg, 4

5151 DL Drunen - Nederland info.netherlands@dwtgroup.com Tel. +31 416 387280 Fax +31 416 387299



DAB PUMPEN DEUTSCHLAND GmbH Tackweg 11 D - 47918 Tönisvorst - Germany info.germany@dwtgroup.com Tel. +49 2151 82136-0 Fax +49 2151 82136-36





Info.spain@dwtgroup.com Tel. +34 91 6569545 Fax: + 34 91 6569676





DAB PUMPS POLAND Sp. z o.o. UI. Janka Muzykanta 60 02-188 Warszawa - Poland polska@dabpumps.com.pl



000 DAB PUMPS Novgorodskaya str. 1, block G office 308, 127247, Moscow - Russia info.russia@dwtgroup.com Tel. +7 495 122 0035 Fax +7 495 122 0036



DAB PUMPS INC. 3226 Benchmark Drive Ladson, SC 29456 - USA info.usa@dwtgroup.com Tel. 1- 843-797-5002 Fax 1-843-797-3366



DAB PUMPS SOUTH AFRICA

Twenty One industrial Estate,

16 Purlin Street, Unit B, Warehouse 4

