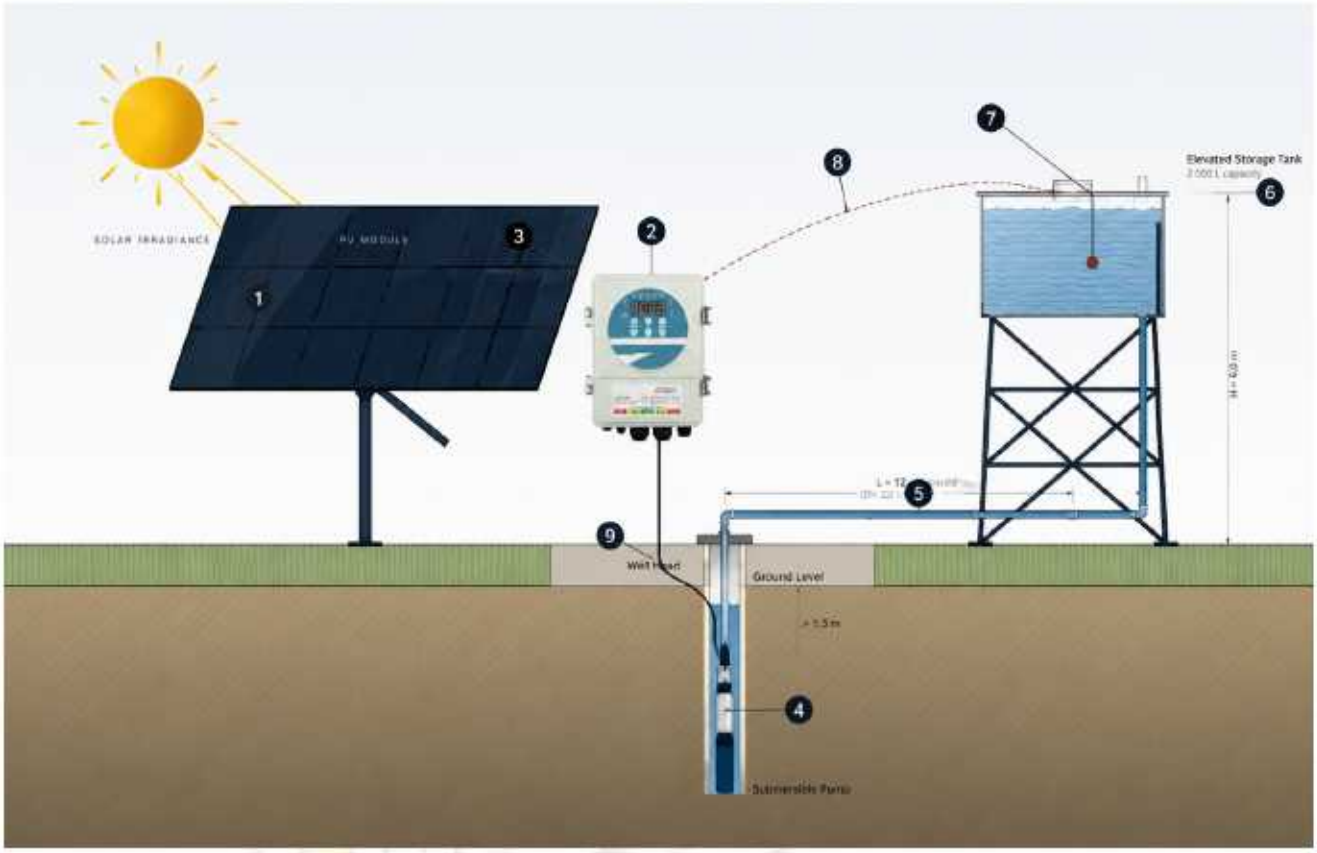
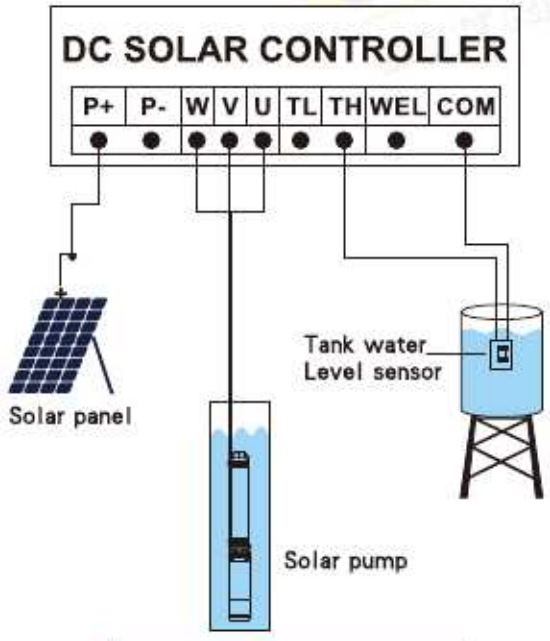
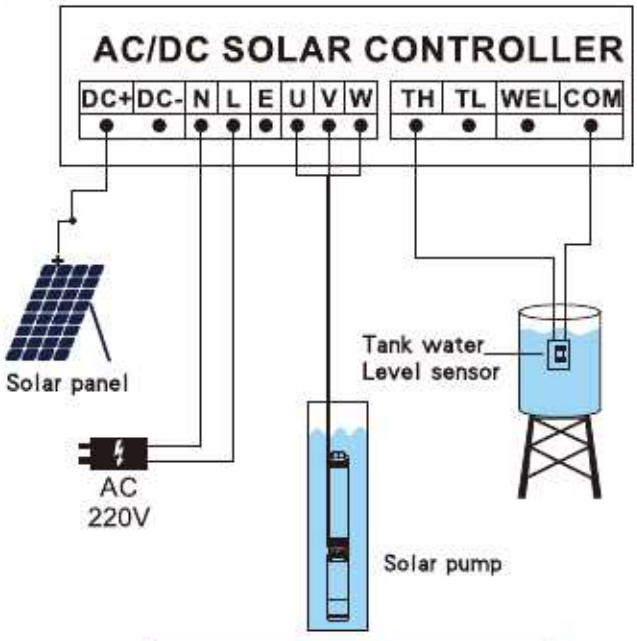


DC EXTERNAL CONTROLLER TYPE



DC WIRING DIAGRAM



AC/DC WIRING DIAGRAM

4SDS

APPLICATIONS

- For water supply from wells or reservoirs
- For domestic use, for civil and industrial applications
- For garden use and irrigation

OPERATING CONDITIONS

- Maximum fluid temperature up to +35°C
- Maximum sand content: 0.25%
- Minimum well diameter: 5”
- Maximum Submersion: 150m

WARRANTY: 1 YEAR

(according to our general sales conditions)

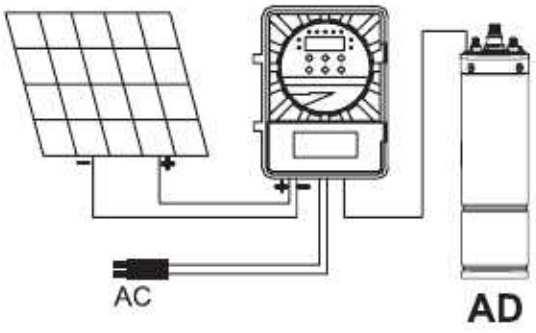


4 SD S 5-235-240-2200 (AD)

- AD — AC - DC automatic switching not labeled as DC
- 2200 — Power(w)
- 240 — Voltage(v)
- 235 — Max Head(m)
- 5 — Capacity (m^3/h)
- S — Solar pump
- SD — Model
- 4 — WellØ4"

COMPONENTS	MATERIAL
Pump external casing	AISI 304 SS
Delivery casing	(1)Cast-iron (2)Cast-Cu ASTM C8850 (3)AISI 304 SS
Suction lantern	(1)Cast-iron (2)Cast-Cu ASTM C8850 (3)AISI 304 SS
Diffuser	Plastic.PC
Impeller	Plastic.POM
Shaft	AISI 304 SS
Shaft coupling	AISI 304 SS
Wear ring	AISI 304 SS
Motor external casing	AISI 304 SS
Top chock	(1)Cast-iron (2)Cast-Cu ASTM C8850 (3)AISI 304 SS
Bottom support	AISI 304 SS
Mechanical seal	Special seal for deep well (Graphite-Ceramic)
Shaft	AISI 304 SS-ASTM 5140
Seal lubricant oil	Oil for food machinery and pharmaceutic use.

INSTALLATION DIAGRAM

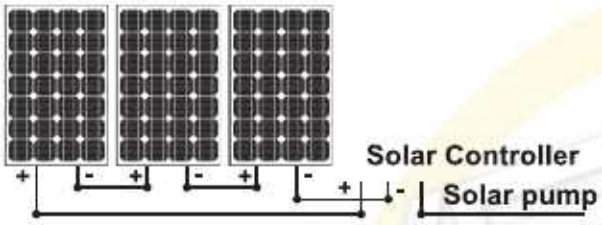


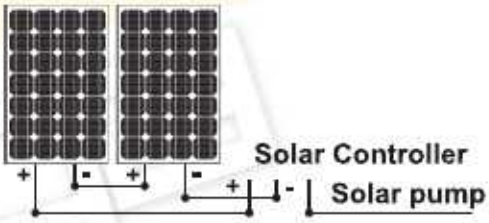
CONTROLLER PARAMETERS

Controller Type	Adaptable Pump	Max.Input Current(A)	Max.Open Circuit Voltage(V)	AC Voltage(V)	Optimum Input Voltage(V)	Working Temperature (°C)
DYS-90AD	Rated 90V	DC:18,AC:15	<400	80~265	90-350	-15~60
DYS-120AD	Rated 120V	DC:18,AC:15	<400	80~265	130-350	-15~60
DYS-170AD	Rated 170V	DC:18,AC:15	<450	80~285	160-400	-15~60
DYS-240AD	Rated 240V	DC:18,AC:18	<450	80~285	220-400	-15~60
DYS-280AD	Rated 280V	DC:18,AC:20	<450	80~285	280-400	-15~60

THE RECOMMENDED SOLAR PANEL SPECIFICATIONS AND CONNECTION WIRING DIAGRAM

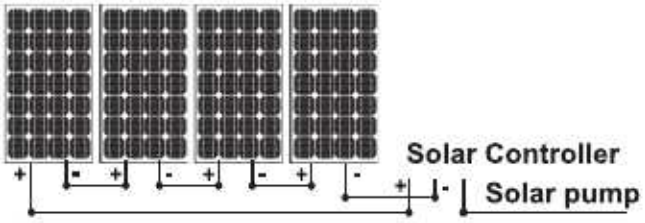
POWER 90V-800W

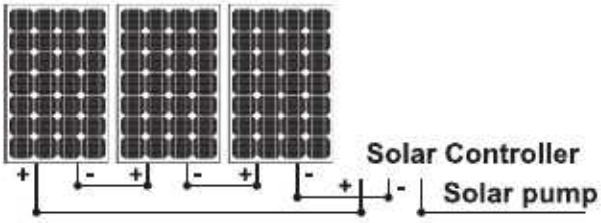




Solar panel: 350W-400W*3PCS
Solar panel: 540W-600W*2PCS

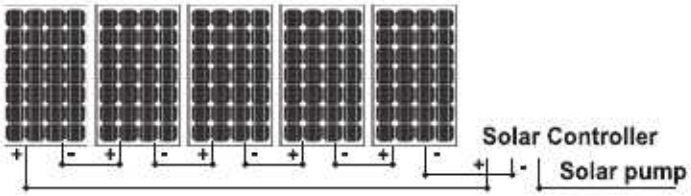
POWER 120V-1100W

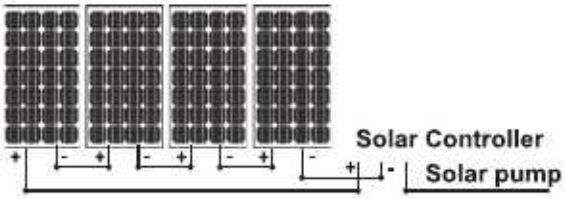




Solar panel: 370W-425W*4PCS
Solar panel: 500W-580W*3PCS

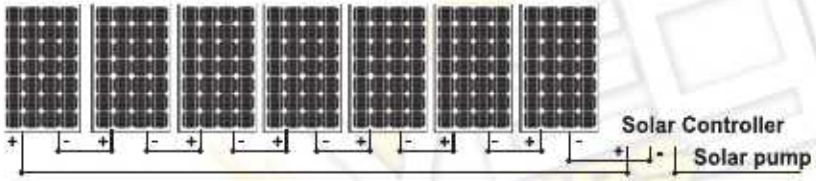
POWER 170V-1500W

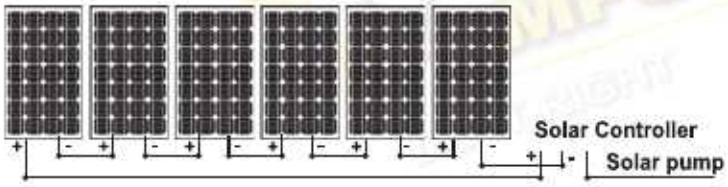


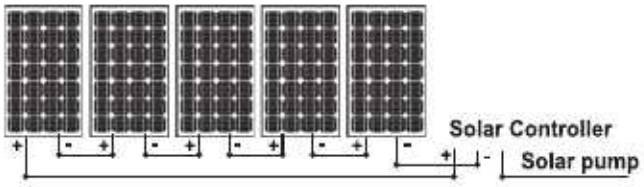


Solar panel: 400W-460W*5PCS
Solar panel: 500W-580W*4PCS

POWER 240V-2200W

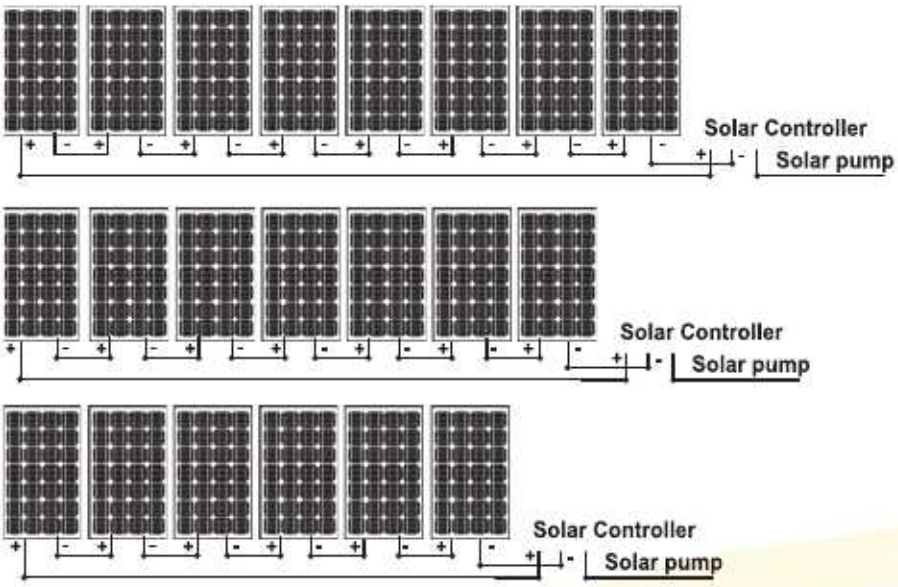






Solar panel: 370W-425W*7PCS
Solar panel: 430W-500W*6PCS
Solar panel: 520W-600W*5PCS

POWER 280V-3000W



Solar panel: 370W-425W*8PCS
Solar panel: 430W-500W*7PCS
Solar panel: 500W-580W*6PCS

BLDC Solar Pump Cable Sizing

3- Phase, PF= 1.0, Copper, 5%VD

SOLAR MOTOR		MOTOR POWER & CORRESPONDING CABLE LENGTH SPECIFICATION CONFIGURATION (mm^2)						
VOLTAGE (V)	POWER (kW)	20m	30m	50m	75m	100m	150m	200m
90V	0.8	1.5mm^2	1.5mm^2	2.5mm^2	4.0mm^2	4.0mm^2	6mm^2	10mm^2
120V	1.1	1.5mm^2	1.5mm^2	1.5mm^2	4.0mm^2	4.0mm^2	6mm^2	6mm^2
170V	1.5	1.5mm^2	1.5mm^2	1.5mm^2	2.5mm^2	2.5mm^2	4.0mm^2	4.0mm^2
240V	2.2	1.5mm^2	1.5mm^2	1.5mm^2	1.5mm^2	1.5mm^2	2.5mm^2	4.0mm^2
280V	3.0	1.5mm^2	1.5mm^2	1.5mm^2	1.5mm^2	1.5mm^2	2.5mm^2	4.0mm^2