



# PDS33

## SOLAR PUMP CONTROLLER

Let the "SUNSHINE" be the Porter of Water



# PDS33

## SOLAR PUMP CONTROLLER

2.2kW-110kW



Self-adaptive MPPT algorithm with efficiency up to 99%



Compatible with IEC standard 3 phase asynchronous motor and common PV module



Plug-and-play design, built-in pump protection functions



Built-in smart IGBT module, integrated overvoltage, overload, overheat and dry run protection



Compatible with DC and AC power supply modes, switchable between DC and AC for using



Battery-free design for various application scenarios, easy maintenance

# PDS33 Datasheet

## PDS33 2.2kW - 18.5kW

Model	PDS33-2S2R2B-E	PDS33-4T2R2B-E	PDS33-4T004B-E	PDS33-4T5R5B-E	PDS33-4T7R5B-E	PDS33-4T011B-E	PDS33-4T015B-E	PDS33-4T18R5B-E
<b>INPUT DATA</b>								
Max Input Voltage (Voc) [V]	400V DC	800V DC						
Recommended voltage, at MPPT (Vmp)	275~380V DC	500V DC~750V DC						
Recommended PV array power [kW]	2.7~3.5	2.7~3.5	4.8~6.4	6.6~8.8	9~12	13.2~17.6	18~24	22.2~29.6
AC Input Voltage	AC 220V (±15%)	3 phase AC 380V(±15%)						
Max AC Current (RMS) [A]	23	5.8	10.5	14.6	20.5	26	35	38.5
<b>OUTPUT DATA</b>								
Rated Output Power [kW]	2.2	2.2	4	5.5	7.5	11	15	18.5
Rated Output Voltage	3 phase 220V (±15%)	3 phase AC 380V(±15%)						
Max Output Current (RMS) [A]	9.6	5.1	9	13	17	25	32	37
Output Frequency	0-50Hz/60Hz							
<b>GENERAL DATA</b>								
Dimensions (H*W*D) [mm]	187*88*138	207*100*147	247*130*167		360*182*197		385*219*197	
Gross Weight [kg]	1.4	1.7	2.6	2.7	7.05	7.15	10.35	
Ambient Temperature Range	-20°C ~ 60°C; > 45°C, Derating as required							
Cooling Method	Fan Cooling							
Ambient Humidity	≤ 95%RH							
<b>PROTECTION FUNCTION</b>								
Surge Protection	Integrated							
Undervoltage Protection	Integrated							
Open Circuit Protection	Integrated							
Overheated Protection	Integrated							
Locked Pump Protection	Integrated							
Short Circuit Protection	Integrated							
Overvoltage Protection	Integrated							
Dry Run Protection	Integrated							
<b>WARRANTY STANDARD</b>								
Standard Warranty [month]	18							
Certificates	IEC/EN 61800-5-1, IEC/EN 61800-2:2004, IEC/EN 61800-3:2004, CE							

Note1: Total power of PV array can be 1.2~1.6 times of power of water pump.

# PDS33 Datasheet

## PDS33 22kW - 110kW

Model	PDS33-4T022B-E	PDS33-4T030B-E	PDS33-4T037B-E	PDS33-4T045B-E	PDS33-4T055B-E	PDS33-4T075B-E	PDS33-4T093B-E	PDS33-4T110B-E
<b>INPUT DATA</b>								
Max Input Voltage (Voc) [V]	800V DC							
Recommended voltage, at MPPT (Vmp)	500V DC~750V DC							
Recommended PV array power [kW]	26.4~35.2	36~48	44~59.2	54~72	66~88	90~120	112~149	132~176
AC Input Voltage	3 phase AC 380V(±15%)							
Max AC Current (RMS) [A]	46.5	62	76	92	113	157	180	214
<b>OUTPUT DATA</b>								
Rated Output Power [kW]	22	30	37	45	55	75	93	110
Rated Output Voltage	3 phase AC 380V(±15%)							
Max Output Current (RMS) [A]	45	60	75	91	112	150	176	210
Output Frequency	0-50Hz/60Hz							
<b>GENERAL DATA</b>								
Dimensions (H*W*D) [mm]	385*219*197	442*256*228		543*310*280		580*358*328		
Gross Weight [kg]	10.45	13.5	13.8	22.3	22.7	38.93	39.45	40.07
Ambient Temperature Range	-20°C ~ 60°C; > 45°C, Derating as required							
Cooling Method	Fan Cooling							
Ambient Humidity	≤ 95%RH							
<b>PROTECTION FUNCTION</b>								
Surge Protection	Integrated							
Undervoltage Protection	Integrated							
Open Circuit Protection	Integrated							
Overheated Protection	Integrated							
Locked Pump Protection	Integrated							
Short Circuit Protection	Integrated							
Overvoltage Protection	Integrated							
Dry Run Protection	Integrated							
<b>WARRANTY STANDARD</b>								
Standard Warranty [month]	18							
Certificates	IEC/EN 61800-5-1,IEC/EN 61800-2:2004,IEC/EN61800-3:2004,CE							

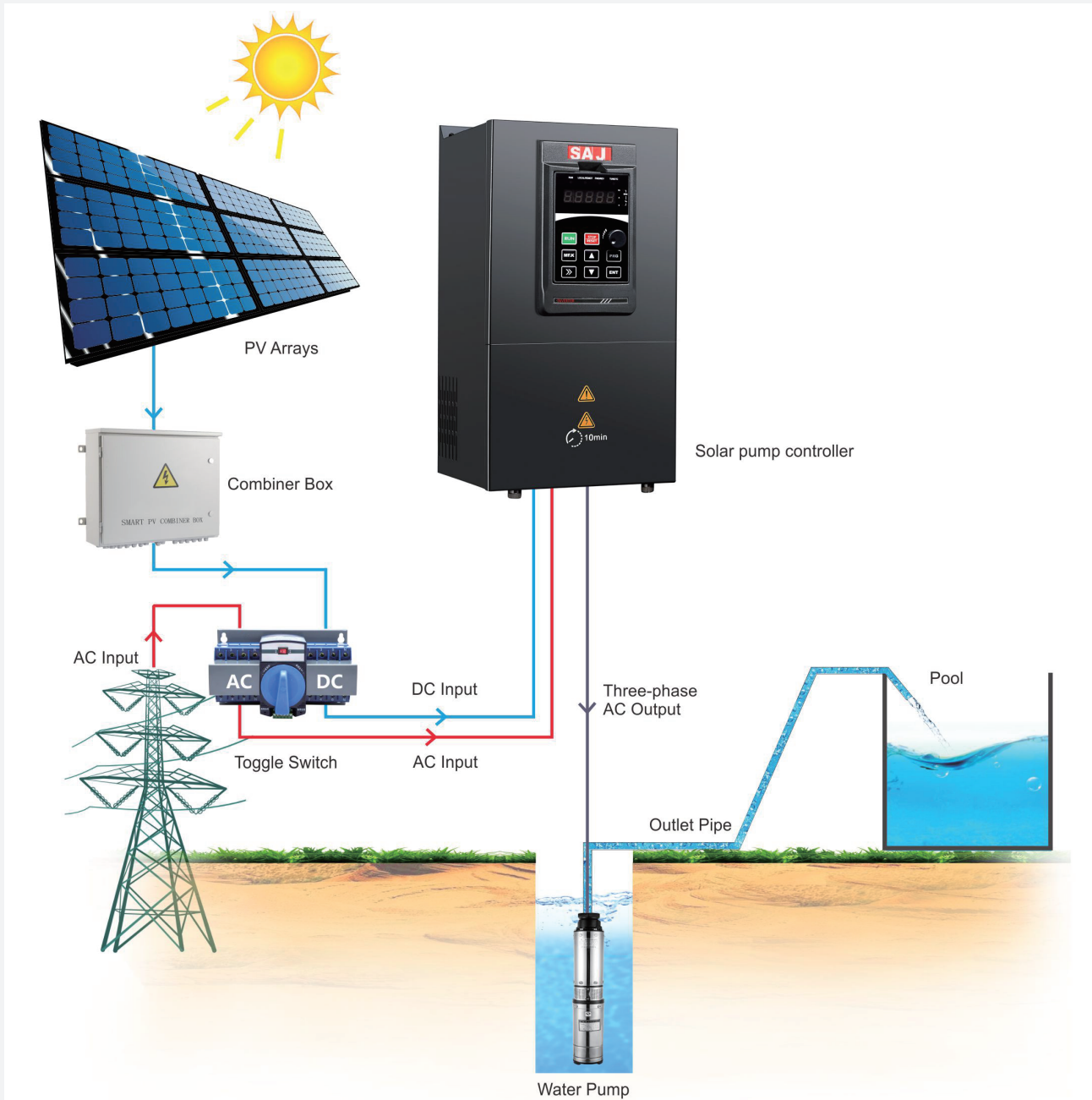
Note2: Inductor is suggested to be added when the connection distance between solar pump controller and water pump is over 50m.





# PDS33 APPLICATION





## Solar Pumping System



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