Solar Pumping Controller



Efficient

Supprot driving single phase 220V motor and three phase 220V/380V motor .

Support multiple types of pumps.

Optional water level detection.

Wide operation voltage range, multi PV strings configuration, save PV module cost.

Smart

Digital intelligent control can flexibly adjust and set the pump speed range.

Reliable

IP65 and fanless design, with convenient installation, maintenance free.

Soft start function, over-voltage, over-current, over-load, lower-load protection, deceleration stop avoid water hammer effect etc.

ACT witness Lab certified by TÜV SÜD

INVT Official Website

Type Selection

BPD – 2K2 - TN - AC

① ② ③ ④

No.	Sign	Description	Remarks
①	BPD	Product series name	Name of the PV pumping controller series
②	2K2	AC output power	2K2: 2200W
③	TN	Technical type	TR: 3PH TN: 1PH/3PH
④	AC	Extension code	The default is a standard model; AC indicates that AC input is supported; ACS indicates that AC input is provided and a DC switch is configured.

Specification

Model	BPD0K7 TN(AC)	BPD1K5 TN(AC)	BPD2K2 TN(AC)	BPD004 TNAC	BPD2K2 TRAC(S)	BPD004 TRAC(S)	BPD5K5 TRAC(S)
DC Input							
Maximum input DC voltage (V)	450				800		
Starting voltage (V)	80	100			220		
Minimum working voltage (V)	60	80			180		
Recommended MPP voltage (V)	80-400	100-400			220-750		
Input channel	One MC4 connector	One MC4 connector	One MC4 connector	Two MC4 connectors	One MC4 connector	Two MC4 connectors	
Maximum input DC current (A)	9	12	12	20	9	20	20
Bypass AC input (model supporting mains input)							
Input voltage (Vac)	220/230/240(1PH) (-15%~+10%)				380(3PH) (-15%) ~440(+10%)		
Input frequency (Hz)	47-63						
AC input terminal	1P2L (L,N,PE)				3P4L (R,S,T,PE)		
AC OUTPUT							
Rated power (W)	750	1500	2200	4000	2200	4000	5500
Rated current (A)	5.1 (1PH) 4.2 (3PH)	10.2 (1PH) 7.5 (3PH)	14(1PH) 10(3PH)	25(1PH) 16(3PH)	5.5	9.5	14
Output voltage (Vac)	0–Input voltage						
Output wiring mode	1P2L: 1PH motor 1PH control 2P3L: 1PH motor 2PH control 3P3L: Connected to 3PH asynchronous motor				3P3L: Connected to 3PH asynchronous motor		
Output frequency (Hz)	1-400						
Control							
Control mode	V/F						
Motor type	Asynchronous motor (1PH/3PH)				Asynchronous motor (3PH)		
Others							
Dimensions (WxDxH) (mm)	255×300×137	280×300×137		410×360×160	337×360×160	460×360×160	
Net weight (kg)	6.4	7		13.5	10.8	14.4	14.5
Package weight (kg)	8.5	9		16	13.5	17.25	18.85
Protective degree	IP65						
Cooling	Natural cooling						
HMI	External LED keypad						
Communication terminal							
External communication	RS485/3 digital input						
Communication interface	Multi-core waterproof connector						
Certification							
Standards	CE; EMC meets the requirements of IEC61800-3 C3.						
Operating environment							
Environment temperature	-25–60°C (derating above 45°C)						
Altitude	3000 m (derating above 2000m)						
Recommended solar array configuration							
250~280Wp(Voc 37±1V)	5*1	8*1	10*1	10*2	10*1	10*2	14*2
300~330Wp(Voc 45±1V)	4*1	7*1	8*1	8*2	8*1	8*2	12*2

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