

SOLAR PUMPING SYSTEMS

Product Features

Based on many years of development and experiment, the self-developed pumping inverter by our company has the following features:

Adopting the proposed dynamic VI maximum power point tracking (MPPT) control method which has independent intellectual property; Fast response speed and stable operation; Better than the conventional methods which may lead to the problems including poor tracking performances, unstable operation or even damaging water hammer effects when the irradiation on the array changes rapidly.

- Digital control with fully automatic running, data storage and complete protective function
- Intelligent power module (IPM) for the main circuit with high reliability
- New design of aluminium alloy case, LED display operating panel, in-line blocks; user friendly; convenient for operating; perfect cooling and shielding
- Option of up and down water level detection and control circuit is available
- Protection level IP52 (machine types rated power less than 18.5kW); ambient temperature for using: -10 / +50°C

| Model | <u>Adapting pump motor</u> Rated power (kW) | <u>Adapting pump motor</u> Rated voltage (V) | Maximum solar input power (kW) | Maximum DC input voltage (V) | Recommended MPP voltage (V) | Rated AC output current (A) | Output frequency (Hz) |
|---------|--|---|--------------------------------|------------------------------|-----------------------------|-----------------------------|-----------------------|
| PB400L | 0.15-0.37 | 200-240 | 0.6 | 450 | 280-350 | 3 | 0-50/60 |
| PB750L | 0.37-0.75 | 200-240 | 1.1 | 450 | 280-350 | 5 | 0-50/60 |
| PB1500L | 0.75-1.5 | 200-240 | 2.2 | 450 | 280-350 | 7 | 0-50/60 |
| PB2200L | 1.5-2.2 | 200-240 | 3.3 | 450 | 280-350 | 11 | 0-50/60 |
| PB3700L | 2.2-3.7 | 200-240 | 5 | 450 | 280-350 | 17 | 0-50/60 |
| PB5500L | 3.7-5.5 | 200-240 | 8 | 450 | 280-350 | 25 | 0-50/60 |
| PB3700H | 2.2-3.7 | 380-440 | 5 | 750 | 500-600 | 9 | 0-50/60 |
| PB5500H | 4.-5.5 | 380-440 | 8 | 750 | 500-600 | 13 | 0-50/60 |
| PB7500H | 5.5-7.5 | 380-440 | 11 | 750 | 500-600 | 18 | 0-50/60 |
| PB11KH | 9.2-11 | 380-440 | 16 | 750 | 500-600 | 24 | 0-50/60 |
| PB15KH | 13-15 | 380-440 | 22 | 750 | 500-600 | 30 | 0-50/60 |
| PB18KH | 18.5 | 380-440 | 28 | 750 | 500-600 | 39 | 0-50/60 |

BRANCH CONTACT DETAILS

Johannesburg 010 202 3300
 Germiston 011 418 9600
 Cape Town 021 510 0710
 Pinetown 031 700 4215
 Riverhorse 031 492 4800

NATIONAL CALL CENTRE

Sales 010 202 3400
 Technical 010 202 3500

www.acdc.co.za

Product SPECIFICATION SHEET

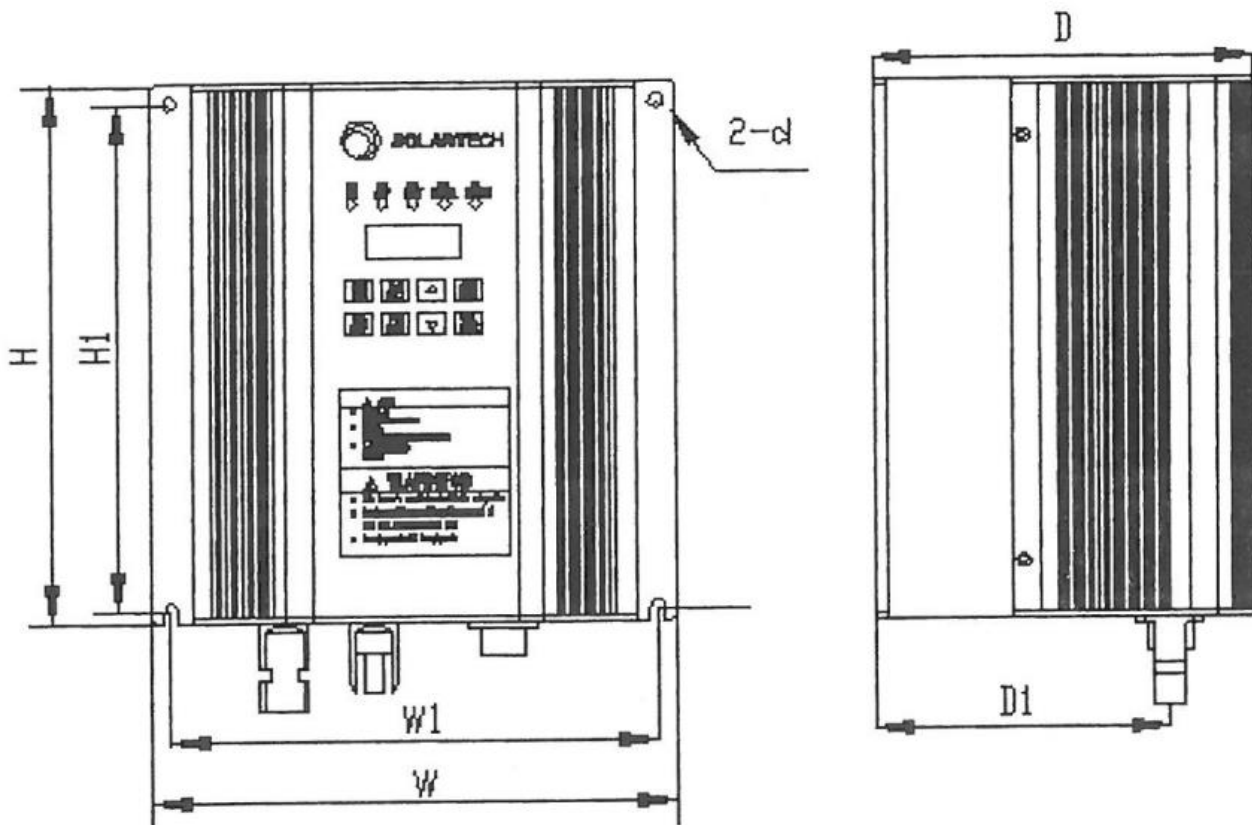


Figure 1: Dimensions

BRANCH CONTACT DETAILS

| | |
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Dimension and Weight

Refer to Figure 1

| Machine Model | W (mm) | H (mm) | D (mm) | W1 (mm) | H1 (mm) | D1 (mm) | d (mm) | Weight (kg) |
|------------------------|--------|--------|--------|---------|---------|---------|--------|-----------------|
| PB400L PB750L | 202.0 | 209.0 | 146.0 | 187.0 | 197.0 | 113.0 | 6.0 | 3.5 |
| PB1500L PB2200L | 202.0 | 244.0 | 146.0 | 187.0 | 232.0 | 113.0 | 6.0 | 4.0 - 4.3 |
| PB3700L PB5500L | 250.0 | 310.0 | 200.0 | 235.0 | 295.0 | 167.0 | 7.0 | 8.0 - 8.5 |
| PB3700H - PB18KH | 250.0 | 310.0 | 200.0 | 235.0 | 295.0 | 167.0 | 7.0 | 8.0 - 8.5 |

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Recommended wire size

| Machine Model | Connecting wire of the PV module (P, N) (mm ²) | Earth wire (PE) (mm ²) | Connecting wire of the motor (U, V, W) (mm ²) | Water level sensor (S) (mm ²) |
|---------------|--|------------------------------------|---|---|
| PB400L | 2.5 | 2.5 | 2.5 | 1.5 |
| PB750L | 2.5 | 2.5 | 2.5 | 1.5 |
| PB1500L | 2.5 | 2.5 | 2.5 | 1.5 |
| PB2200L | 2.5 | 2.5 | 2.5 | 1.5 |
| PB3700L | 2.5 | 2.5 | 2.5 | 1.5 |
| PB5500L | 2.5 | 2.5 | 2.5 | 1.5 |
| PB3700H | 2.5 | 2.5 | 2.5 | 1.5 |
| PB5500H | 2.5 | 2.5 | 2.5 | 1.5 |
| PB7500H | 2.5 | 2.5 | 2.5 | 1.5 |
| PB11KH | 2.5 | 2.5 | 2.5 | 1.5 |
| PB15KH | 2.5 | 4 | 4 | 1.5 |
| PB18KH | 2.5 | 6 | 6 | 1.5 |

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