

ENCOM

ENC

INVERTER . PLC . Servos . New Energy



Shenzhen ENCOM Electric Technologies CO.,LTD.

📍 Floor 6, Building 2, Pingshan Minqi Science & Technology Park,
Taoyuan Str., Nanshan District, Shenzhen, China

📞 +86-755-26984485

📞 +86-755-26985120

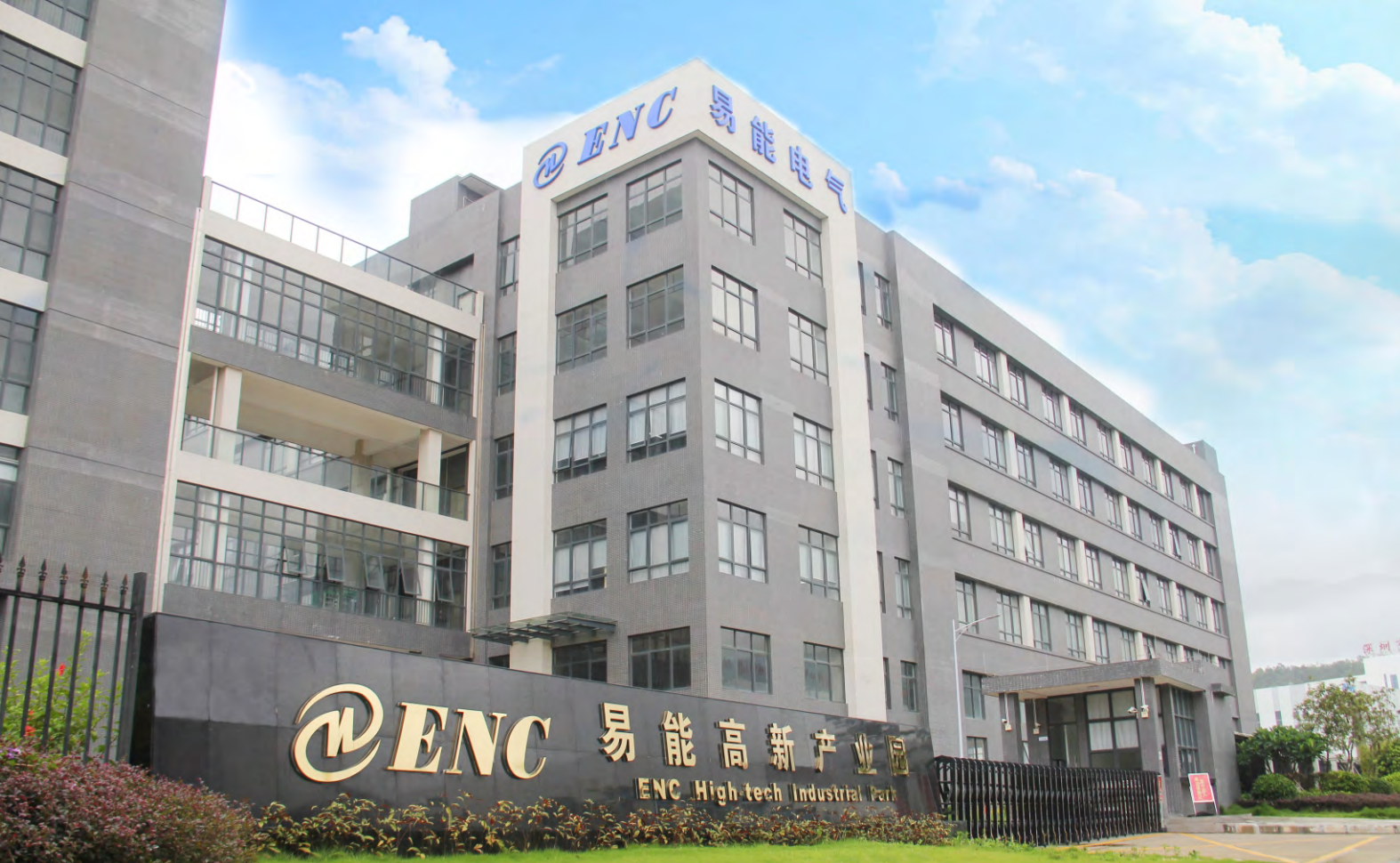
✉️ encvfd@encvfd.com

🌐 www.encvfd.com

⚠️ We have the copyright and prohibit any unauthorized copying
You can access and download all our ENC product brochures and manuals on our company website.



Solar Pumping Inverter



About ENCOM

Shenzhen ENCOM Electric Technology Co., Ltd. is a national high-tech enterprise with independent intellectual property rights. We focus on the R&D, Production and Sales of products in the field of industrial automation. Our main products include Frequency Inverter, Servos, PLC, and Solar Pumping Systems, etc. Founded in the year 2004, ENCOM has passed ISO9001:2015 quality management system certification, EU, CE certification, won national innovation fund, Shenzhen strategic emerging industry fund, product innovation award, the most investment value award and other honors, and won the title of "top 10 domestic brands of low-voltage frequency inverters" for many times. We invested more than RMB100 million to establish our own technology park, covering an area of 17,000 square meters and a total building area of 38,000 square meters. The park main business is R&D and manufacturing of high-tech industries such as electric drive, intelligent manufacturing and new energy. It has formed a smart manufacturing space integrating R&D, office, production and residence, built a unique green landscape, basketball court, leisure platform, multi-functional conference room, cultural activity center, public restaurant and necessary open space for supporting the park life, effectively meeting the work and life experience of high-end talents and enterprises in the Park.



TOP10 brand in China



ISO9001: 2015



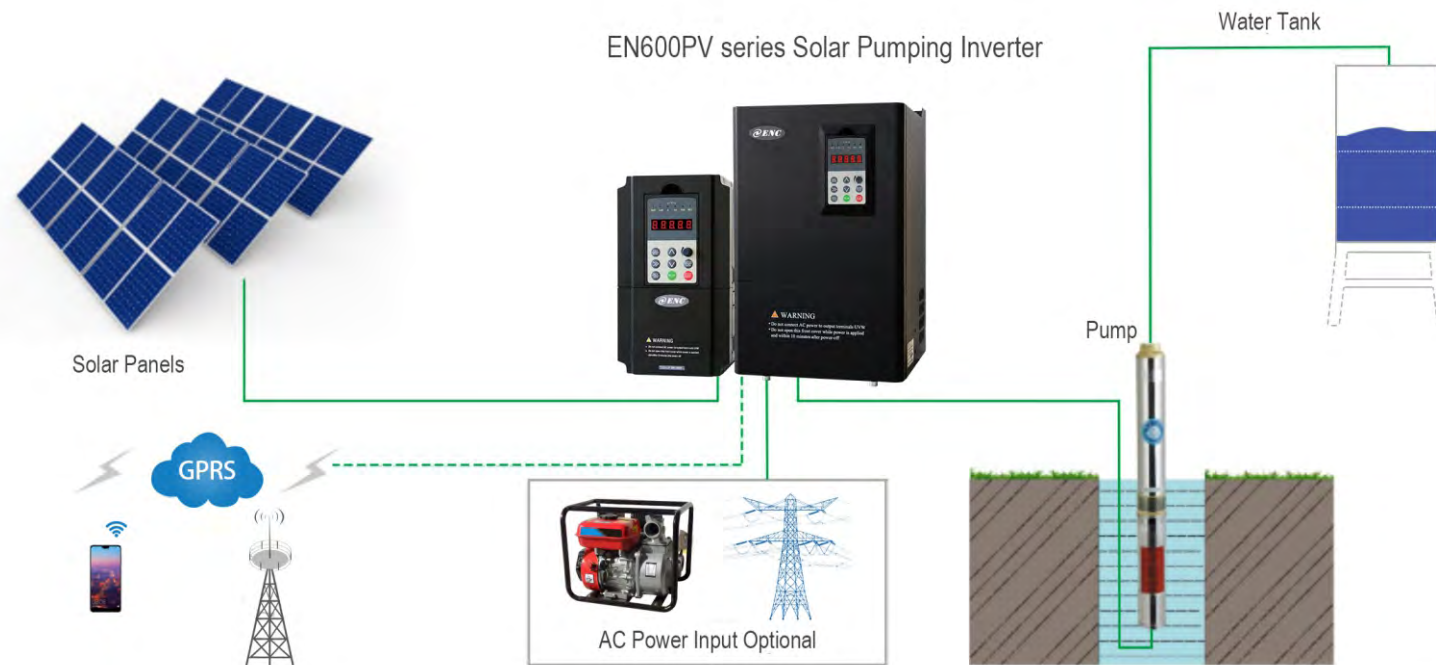
CE

EN600PV series Solar Pumping Inverter

EN600PV series solar pumping inverter specially designed for solar water pump use. Built-in maximum power tracking algorithm, which can improve the efficient use of solar energy. With special protection functions such as weak light sleep/ auto wake-up, low-frequency protection, water full protection, dry-run protection, etc. It is equipped with MODBUS as standard and supports communication functions such as CAN bus and PROFIBUS DP, etc. At the same time, EN600PV series built-in output phase loss, short circuit to ground and other hardware protection functions, effectively improve the reliability and safety of the system.

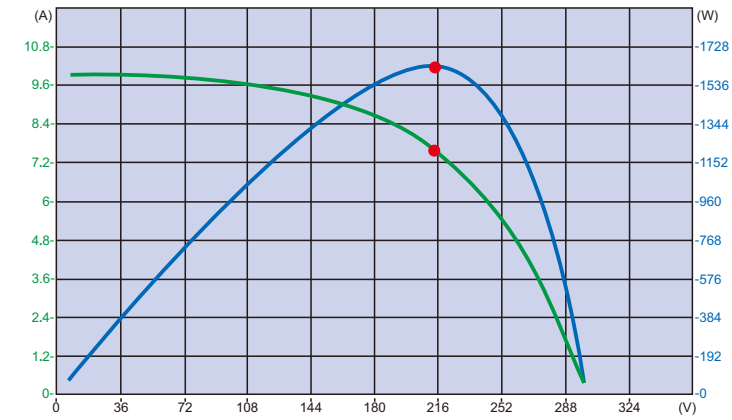
Elegant Appearance | Multiple Protocols | Higher Accuracy | Independent Air-duct |

Solar Pumping System

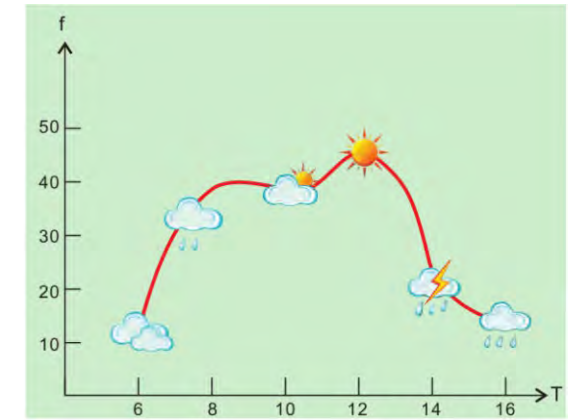


Performance & Features

Performance & Features



Maximum MPPT Efficiency: 99%



Auto-track All Daytime

High Performance/ Multiple Functions

High Overload Capacity

150% Rated Current 60s
180% Rated Current 10s
200% Rated Current 0.5s

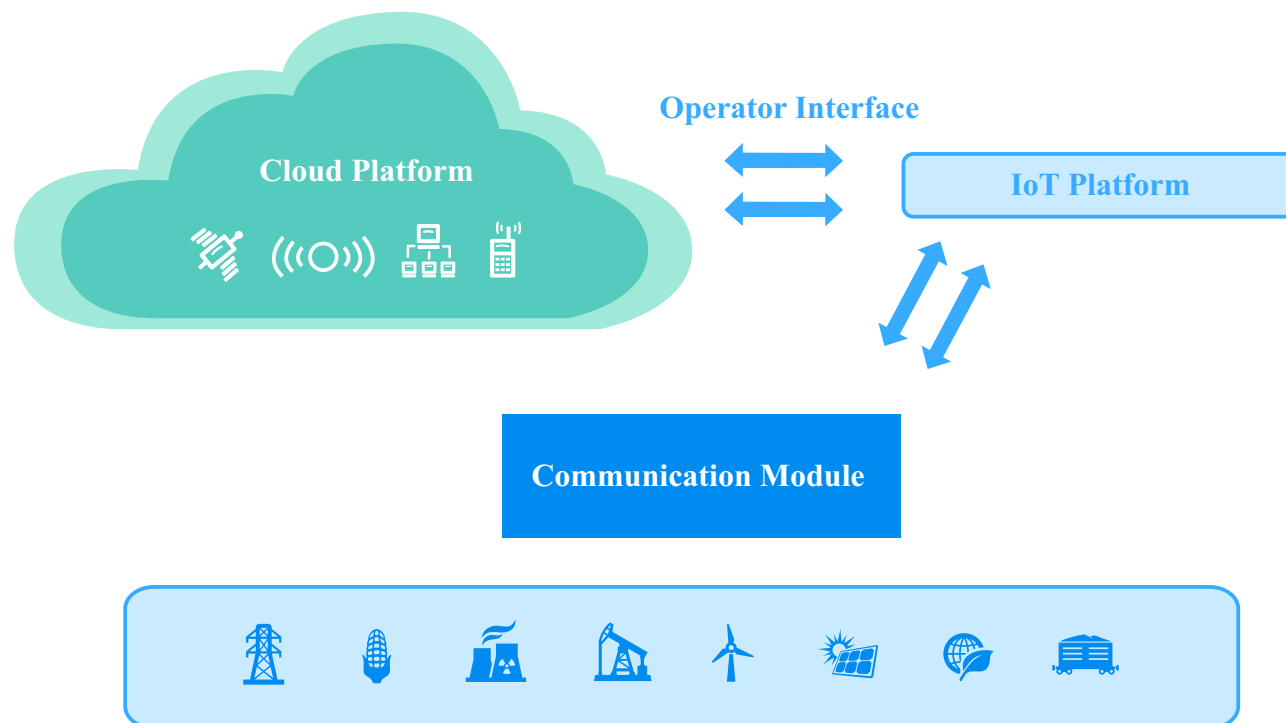
Excellent Control Performance

Make sure the system auto-running with unattended.

High Frequency

600Hz
VF
Maximum Output Frequency is 600hz under VF control

Intelligent IoT



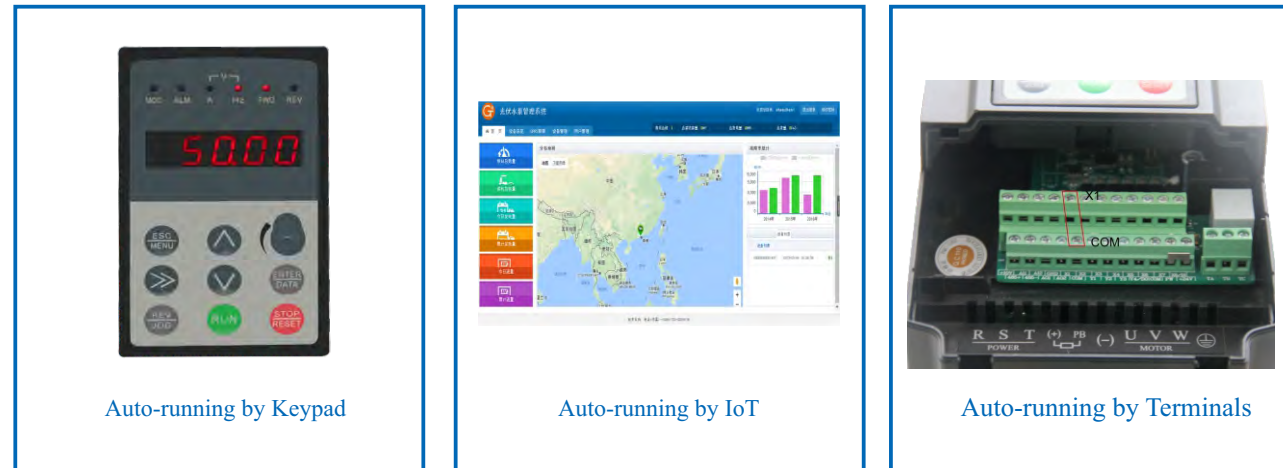
Features

Protection Functions

- ▶ support low frequency, dormancy, dry-run, over-current, minimum power and other protection functions.

- ▶ Auto dormancy/wake-up, Under-voltage restart
- ▶ The whole water pumping systems running not rely on grid power or battery
- ▶ Support both AC and DC power input
- ▶ Water Level Monitoring: dry run protection, overflow protection
- ▶ Record: generated power, pumped water, running time

 Default Auto-running



 Powerful Communication Functions



Profibus

CANLink

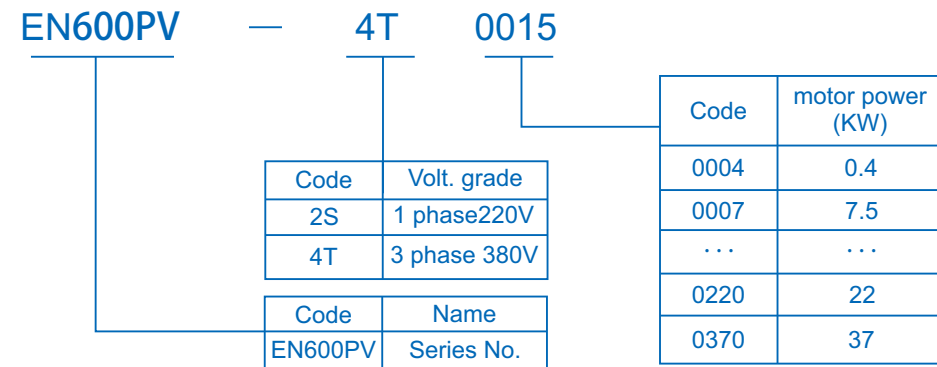
CANopen®

.....

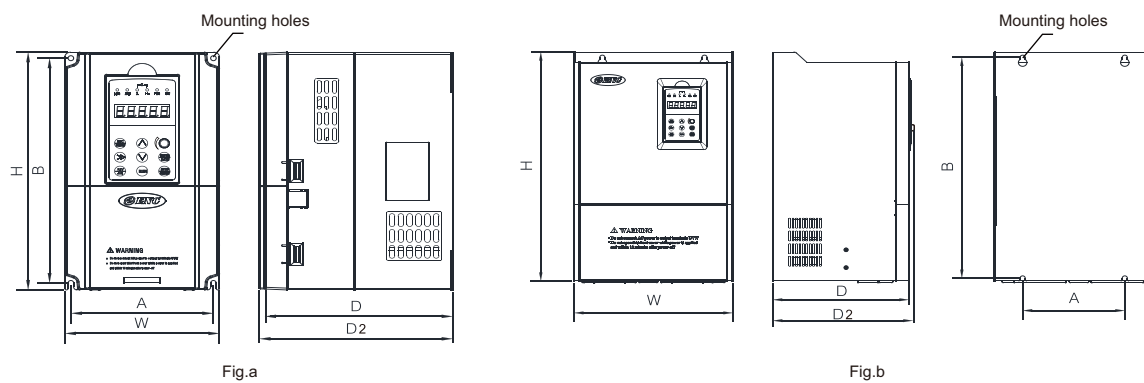
 Technical Specification

| Item | Item description |
|-----------------------------|--|
| Output (Ac) | Rating volt., frequency 1 phase 220 Volt class: 1 phase 220V, 50Hz/60Hz; 3 phase 380 Volt class: 3 phase 380V, 50Hz/60Hz. |
| | Allowed volt. range 1 phase 220 Volt class: 200~260V; 3 phase 380 Volt class: 320~460V. |
| Output (Dc) | Recommended MPPT operating voltage 1 phase 220 Volt class: 330VDC 3 phase 380 Volt class: 550VDC |
| | Recommended operating voltage range 1 phase 220 Volt class: 330~400VDC 3 phase 380 Volt class: 600~750VDC |
| Output | Voltage 0~380V |
| | Frequency 0~600Hz |
| | Over loading capacity 150% of rated current for 1 minute |
| Running function | running command specified channel Keypad specified, control terminal specified, communicationspecified can switch through various means |
| | Binding function Run command channel and frequency specified channel can bind together randomly and switch synchronously |
| Input output characteristic | Digital input channel Channel 8 for universal digital input, max. Frequency 1KHz,channel 1 can be used as pulse input channel, max. Input 50KHz,which can be expanded to channel 14 . |
| | Analog input channel Channel 2 for analog input channel, AI1 can choose 4 ~ 20mA or 0 ~ 10V output, AI2 is differential input channel, 4 ~ 20mA or -10 ~ 10V for option, which can be expanded to channel 4 analog input. |
| | Pulse output channel 0.1 ~ 20KHz pulse square signal output to achieve setting frequency, output frequency and other physical quantity output |
| | Analog output channel Channel 2 for analog signal output, AO1 can choose 4 ~ 20mA or 0 ~ 10V, AO2 can choose 4 ~ 20mA or 0 ~ 10Vto achieve setting frequency, output frequency and other physical quantity output,which can be expanded to channel 4 analog output.. |
| Keypad | Keypad display The parameters as setting frequency, output frequency, output voltage, output current can be displayed. |
| | Button Locked Lock all or part of the buttons. |
| | Protection function Motor power on Shot circuit test, input & output phase loss protection, over-current protection, over voltage protection, under voltage protection, over heat protection, overload protection, under load protection, relay absorption protection, terminal protection and no stop protection under power off |
| Environment | Application site Indoor, not bare to sunlight, no dust, no corrosive gas, no flammable gas, no vapor, no water drop or salt etc |
| | Altitude Under 1000 meter. (above 1000 meter require to reduce volume to use, output current reduce about 10% of rated currenvolt per 1000 meter high) |
| | Environment temperature -10°C~+40 (environment temperature between 40 °C~50°C ,Need to reduce volume or strengthen heat sink) |
| | Environment humidity Smaller than 95%RH, no drop condenses |
| | Vibration Smaller than 5.9 M/S²(0.6g) |
| | Storage temperature -40°C ~ +70°C |
| Structure | Protection grade Ip20 |
| | Cooling mode Forced air cooling |
| | Installation Wall hanging |

Naming Rules



Appearance Structure



Installation Dimensions

| Inverter model | W (mm) | H (mm) | D (mm) | D2 (mm) | A (mm) | A1 (mm) | B (mm) | W1 (mm) | D1 (mm) | Fix Hole (mm) | Fig.No |
|----------------|--------|--------|--------|---------|--------|---------|--------|---------|---------|---------------|--------|
| EN600PV-2S0004 | 115 | 200 | 151 | 164 | 104 | - | 186 | - | - | 5 | Fig. a |
| EN600PV-2S0007 | | | | | | | | | | | |
| EN600PV-2S0015 | | | | | | | | | | | |
| EN600PV-2S0022 | | | | | | | | | | | |
| EN600PV-2S0037 | | | | | | | | | | | |
| EN600PV-4T0007 | | | | | | | | | | | |
| EN600PV-4T0015 | | | | | | | | | | | |
| EN600PV-4T0022 | | | | | | | | | | | |
| EN600PV-4T0037 | | | | | | | | | | | |
| EN600PV-4T0055 | 140 | 240 | 175 | 188 | 129 | - | 227 | - | - | 5 | Fig. a |
| EN600PV-4T0075 | | | | | | | | | | | |
| EN600PV-4T0110 | | | | | | | | | | | |
| EN600PV-4T0150 | 180 | 304 | 189 | 202 | 165 | - | 281 | - | - | 6 | Fig. a |
| EN600PV-4T0185 | | | | | | | | | | | |
| EN600PV-4T0220 | | | | | | | | | | | |
| EN600PV-4T0300 | 250 | 398 | 210 | 223 | 180 | - | 382 | - | - | 9 | Fig. b |
| EN600PV-4T0370 | | | | | | | | | | | |
| EN600PV-4T0370 | 280 | 450 | 240 | 253 | 180 | - | 434 | - | - | 9 | Fig. b |

Technical Specification

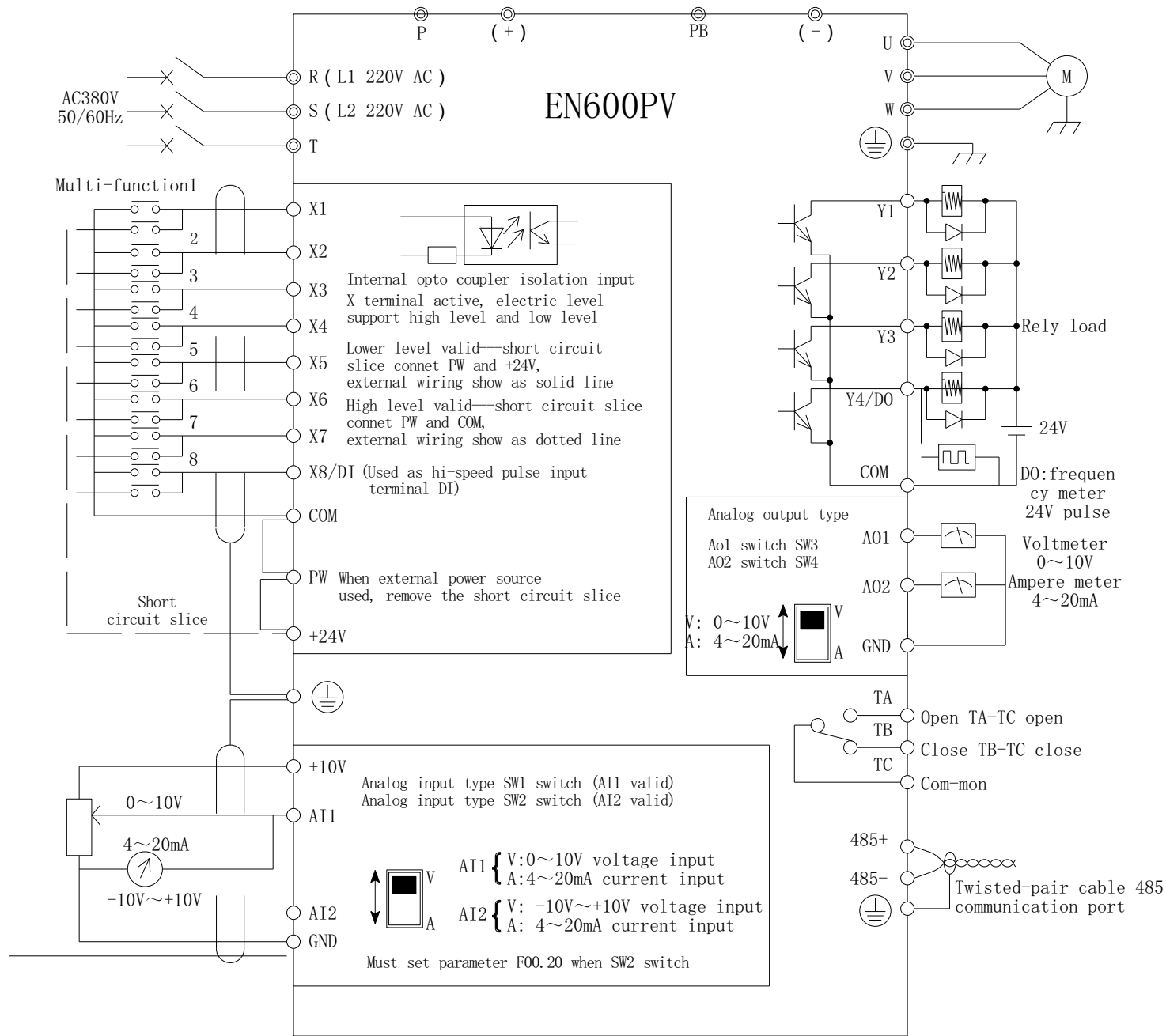
| Input Voltage | Inverter type | Rated output Current (A) | Adaptable motor (KW) | Recommended Battery Board Input Power (KW) | Maximum DC Input Voltage (V) | Recommended battery panels Voltage (V) |
|---------------|----------------|--------------------------|----------------------|--|------------------------------|--|
| 1 phase 220V | EN600PV-2S0004 | 2.5 | 0.4 | 0.55 | 410 | 330~400 |
| | EN600PV-2S0007 | 4 | 0.75 | 1.0 | 410 | 330~400 |
| | EN600PV-2S0015 | 7 | 1.5 | 1.95 | 410 | 330~400 |
| | EN600PV-2S0022 | 10 | 2.2 | 2.86 | 410 | 330~400 |
| | EN600PV-2S0037 | 15 | 3.7 | 4.8 | 410 | 330~400 |
| 3 phase 380V | EN600PV-4T0007 | 2.3 | 0.75 | 1.0 | 780 | 600~750 |
| | EN600PV-4T0015 | 3.7 | 1.5 | 1.95 | 780 | 600~750 |
| | EN600PV-4T0022 | 5 | 2.2 | 2.86 | 780 | 600~750 |
| | EN600PV-4T0037 | 8.5 | 3.7 | 4.8 | 780 | 600~750 |
| | EN600PV-4T0055 | 13 | 5.5 | 7.2 | 780 | 600~750 |
| | EN600PV-4T0075 | 17 | 7.5 | 9.75 | 780 | 600~750 |
| | EN600PV-4T0110 | 25 | 11 | 14.3 | 780 | 600~750 |
| | EN600PV-4T0150 | 33 | 15 | 19.5 | 780 | 600~750 |
| | EN600PV-4T0185 | 39 | 18.5 | 24 | 780 | 600~750 |
| | EN600PV-4T0220 | 45 | 22 | 28.6 | 780 | 600~750 |
| | EN600PV-4T0300 | 60 | 30 | 39 | 780 | 600~750 |
| | EN600PV-4T0370 | 75 | 37 | 48 | 780 | 600~750 |

Solar Panel Configuration Reference

| Inverter model | 20V | | 30V | | 36V | |
|----------------|-----------|----------------------------|-----------|----------------------------|-----------|----------------------------|
| | Power (W) | Moudles per string*strings | Power (W) | Moudles per string*strings | Power (W) | Moudles per string*strings |
| EN600PV-2S0004 | 30 | 17*1 | | | | |
| EN600PV-2S0007 | 30 | 17*2 | | | | |
| EN600PV-2S0015 | 30 | 17*3 | | | | |
| EN600PV-2S0022 | | | 250 | 12*1 | 300 | 10*1 |
| EN600PV-2S0037 | | | 250 | 12*2 | 300 | 10*2 |
| EN600PV-4T0007 | 30 | 33*1 | | | | |
| EN600PV-4T0015 | 30 | 33*2 | | | | |
| EN600PV-4T0022 | 30 | 33*3 | | | | |
| EN600PV-4T0037 | | | 250 | 20*1 | 300 | 18*1 |
| EN600PV-4T0055 | | | 250 | 20*2 | 300 | 18*2 |
| EN600PV-4T0075 | | | 250 | 20*2 | 300 | 18*2 |
| EN600PV-4T0110 | | | 250 | 20*3 | 300 | 18*3 |
| EN600PV-4T0150 | | | 250 | 20*4 | 300 | 18*4 |
| EN600PV-4T0185 | | | 250 | 20*5 | 300 | 18*5 |
| EN600PV-4T0220 | | | 250 | 20*6 | 300 | 18*6 |
| EN600PV-4T0300 | | | 250 | 20*8 | 300 | 18*8 |
| EN600PV-4T0370 | | | 250 | 20*10 | 300 | 18*10 |

Note: 17 * 3 represents 51 pieces of panels in total, every 17 pieces are connected in series first, and then 3 groups are connected in parallel.

Wiring Diagram



Domestic



International

