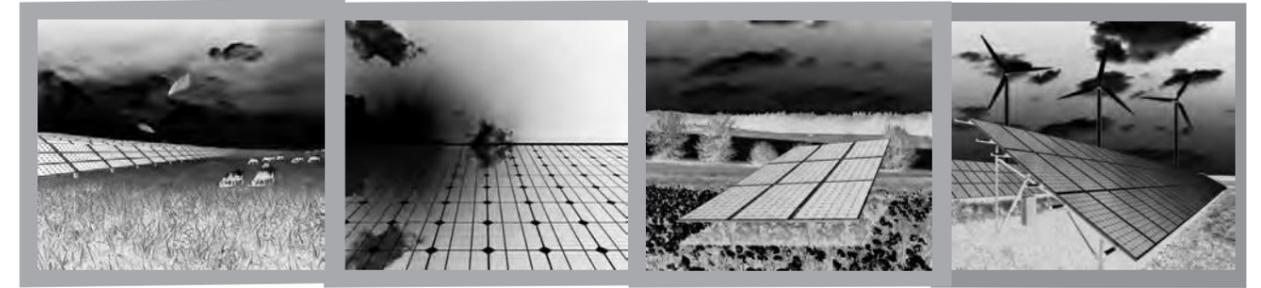


INNOVATION • CONCENTRATION • SERVICE • WIN-WIN



Solar Pumping Inverter

FRECON

FRECON ELECTRIC (SHENZHEN) CO.,LTD

Add: Floor3,Block C,F&D technology Park Baoan
Road Baoan District,Shenzhen,China

Tel: (+86)-0755-33067999

Fax: (+86)-0755-33067186

E-mail: frecon@frecon.com.cn

[Http://www.frecon.com.cn](http://www.frecon.com.cn)



For FRECON Website

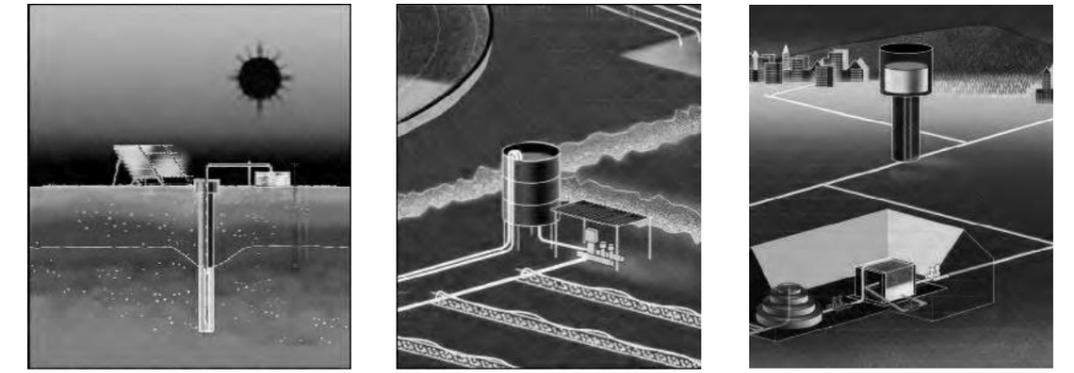
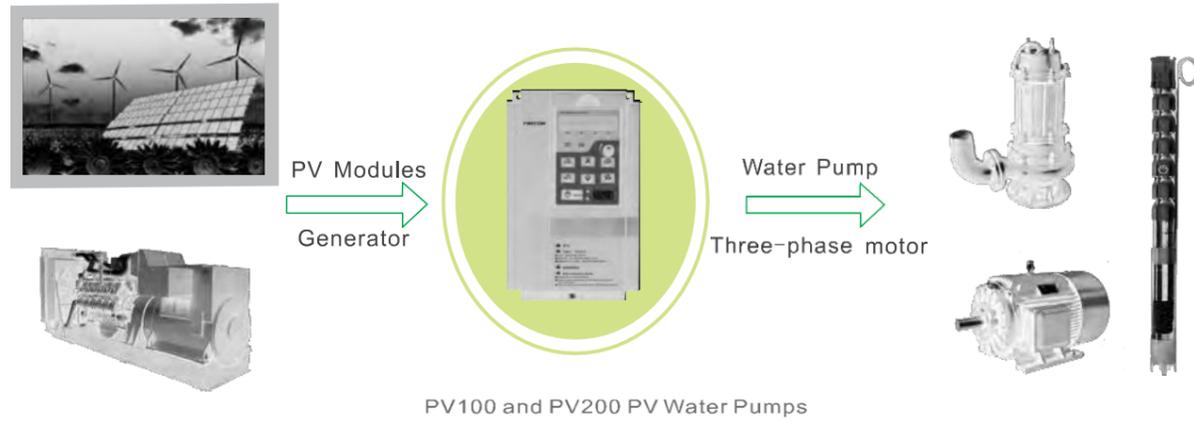
2016(V1.0)





Products Application

Solar Water Pump System---Agro-forestry



- Pumping of ground-water
- Water-storage irrigation
- Residential Domestic Water
- Irrigation facilities
- Water-saving irrigation
- Water treatment
- Wells Pumping
- Irrigation Drip Irrigation
- Sunshine drought resisting
- Constant pressure micro jet

PV pumping system___City Life Applications



- Domestic Water
- Urban Landscape Micro landscape green ng
- Suburban Water Conservation
- Safety Drinking Water
- Community nvo vement Waterscapé ii | |
- Fountain Dese Power Shar ng i i
- Water Pur f cat on
- C v c Square Art f c a Lakes ii | |
- Hydrological mon tor ng power supply i | | i |
- Sea Water Desa nat on
- li i

Energy Input

- ◆ Solar PV Power Supply [Without Batteries]
- ◆ Diesel Generator Power Supply
- ◆ 380V mains supply

Dedicated Controller

- ◆ Solar Power Input
- ◆ No batteries, reduce costs, reduce pollution
- ◆ Generators or mains supply is also available
- ◆ Possess function of inverter

Loads can be used

- ◆ Three-phase asynchronous motor
- ◆ Three-phase water pumps



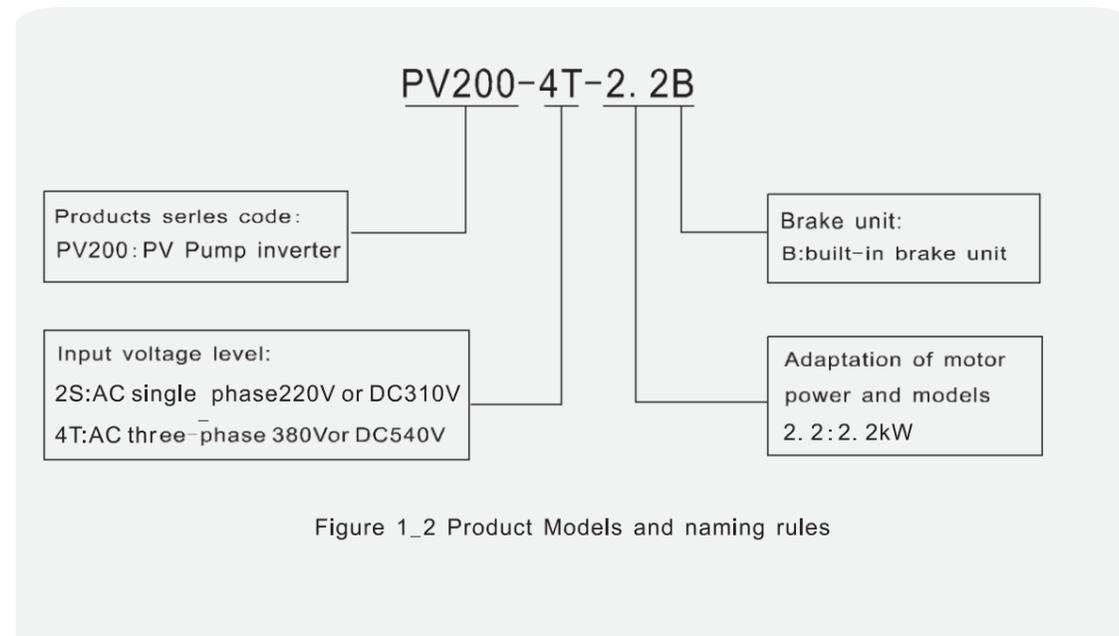
Product Features

- ◆ Built_in self_adaptive high_accuracy photovoltaic array MPPT algorithm, accuracy up to 99%
- ◆ The maximum water flow output in equal environment
- ◆ Compatible with AC/DC two inputs
- ◆ LED displays the real_time system status and parameters
- ◆ RS485_based real_time remote monitoring system
- ◆ Motor soft_start can avoid water hammer effect, improve the system life
- ◆ Quick installation design, no additional maintenance
- ◆ Built-In all-directional protection and diagnostic mechanisms

Product Selection

Model Description

Numbers, marks and letters combined on product_sticker expresses their belong series, suitable power supply kinds, power level and other informations.



Three-phase 220V output product models and the technical parameters

Models	kWP Solar Array Power Recommended	A Max Input DC Current A	A Output current A	Adaptive Motor kW
PV100-2S-0.2B	0.35	2.5	1.6	0.18、0.2、0.25
PV100-2S-0.4B	0.6	4.5	2.5	0.37、0.4
PV100-2S-0.7B	1.1	7.5	4.2	0.75
PV100-2S-1.5B	2.25	10	7.5	1.5
PV100-2S-2.2B	3.3	18	9.5	2.2

Input Parameters	
PV Input	
Max Input DC Voltage	400VDC
MPPT Voltage Range Recommended	250~350VDC
Input Operation Voltage Recommended	310VDC
Power Grid or Back-up Generator Input	
Input Voltage	Single-phase 220V(-15%~30%)
Output Parameters	
Rated Output Voltage	3PH 220V
Output Frequency	0~600.00Hz(OFF 0~50.00Hz)
Protection	
Built-In Protection	Lightning-proof, over-current, overvoltage, output phase protection, underrun, under-voltage, short circuit, overheat, pumps run dry, etc.
General Parameters	
Application Site	No direct sunshine, no dust, corrosive gas, combustible gas, oil mist, steam, dripping or salinity etc.
Altitude	0~2000 m Derated use above 1000m, per 100m, the rated output current decrease 1%.
Environment Temperature	-10°C ~ 40°C (Environment Temperature be 40°C ~ 50°C, please keep derated use.
Humidity	5~95%, non-condensation
Vibration	less than 5.9 m/s ² (0.6g)
Storage Temperature	-20°C ~ +70°C
Efficiency	Rated Power Run ≥ 93%
Installation	Wall or rail mounting
Protection Grade	IP20
Cooling	Forced Air Cooling

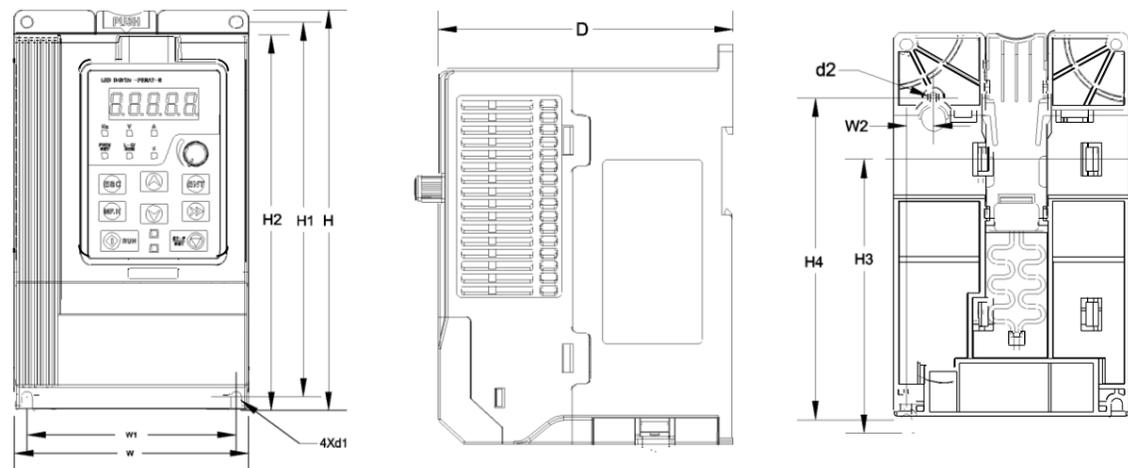
Three-phase 380V output products model and the technical parameter

Models	kWP Solar Array Power Recommended	A Max Input DC Current A	A Output current A	Adaptive Motor kW
PV100-4T-0.7B	1.1	4.5	2.5	0.75
PV100-4T-1.5B	2.25	7.5	4.2	1.5
PV100-4T-2.2B	3.3	10	5.5	2.2
PV100-4T-4.0B	6	18	9.5	3.7、4
PV200-4T-0.7B	1.1	4.5	2.5	0.75
PV200-4T-1.5B	2.25	7.5	4.2	1.5
PV200-4T-2.2B	3.3	10	5.5	2.2
PV200-4T-4.0B	6	18	9.5	3.7、4
PV200-4T-5.5B	8.3 45	20 100	13	5.5
PV200-4T-7.5B	11	30	17	7.5
PV200-4T-011B	16	40	25	11
PV200-4T-015B	22	50	32	15
PV200-4T-018B	25.9	60	37	18.5
PV200-4T-022B	33	80	45	22
PV200-4T-030B			60	30

Input Parameters	
PV Input	
Max Input DC Voltage	800VDC
MPPT Voltage Range Recommended	450~600VDC
Input Operation Voltage Recommended	540VDC
Power Grid or Back-up Generator Input	
Input Voltage	Three-phase 220V(-15%~30%)
Output Parameters	
Rated Output Voltage	3PH 380V
Output Frequency	0~600.00Hz(OFF 0~50.00Hz)
Protection	
Built-In Protection	Lightning-proof, over-current, overvoltage, output phase protection, underrun, under-voltage, short circuit, overheat, pumps run dry, etc.
General Parameters	
Application Site	No direct sunshine, no dust, corrosive gas, combustible gas, oil mist, steam, dripping or salinity etc.
Altitude	0~2000m
Environment Temperature	Derated use above 1000m, per 100m, the rated output current decrease 1%. -10°C~40°C (Environment Temperature be 40°C~50°C, please keep derated use.
Humidity	5~95%, non-condensation
Vibration	less than 5.9 m/s ² (0.6g)
Storage Temperature	-20°C~+70°C
Efficiency	Rated Power Run ≥ 93%
Installation	Wall-mounted or flange (wall) installation
Protection Grade	IP20
Cooling	Forced Air Cooling

Mounting Dimensions

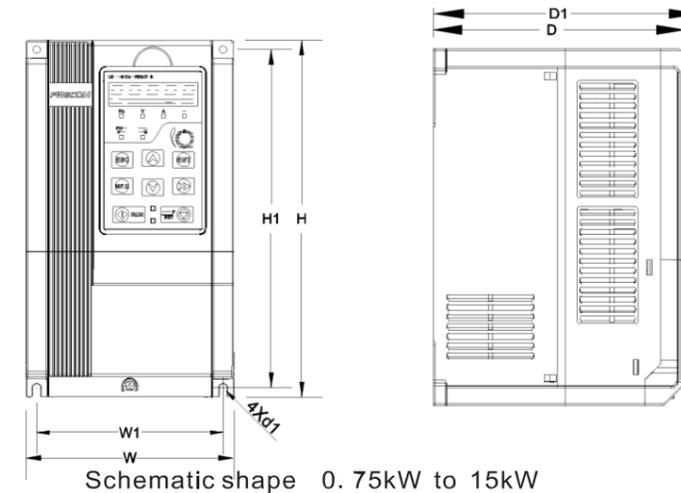
PV100 overall and installation dimensions



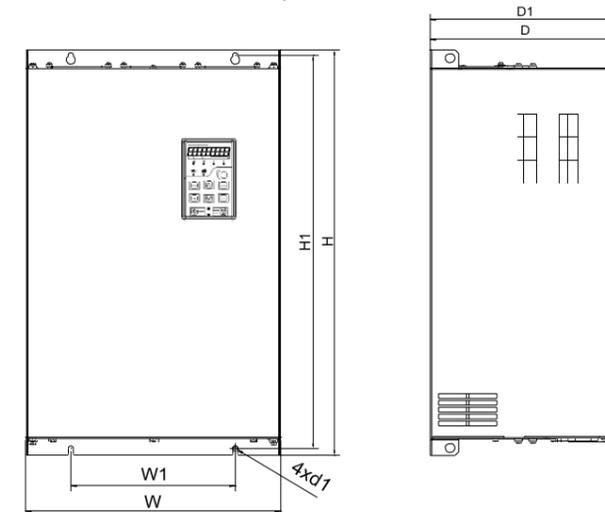
Appearance and mounting dimensions (mm)

Model	W	H	D	W1	W2	H1	H2	H3	H4	Mounting Aperture		Weight (Kg)
										d1	d2	
Single-phase power : 220V 50/60Hz												
PV100 2S 0.2B												
PV100 2S 0.4B	95	162	120	85	11	151.5	152	110	130	4.5	4.5	1.1
PV100 2S 0.7B												
PV100 2S 1.5B												
PV100 2S 2.2B	110	173	135	100	11	163	163	121.8	140.5	4.5	5	1.5
Three-phase power : 380V 50/60Hz												
PV100 4T 0.7B												
PV100 4T 1.5B	110	173	135	100	11	163	163	121.8	140.5	4.5	5	1.5
PV100 4T 2.2B												
PV100 4T 4.0B												

PV200 overall and installation dimensions



Schematic shape 0.75kW to 15kW



Schematic shape 18.5kW to 30kW

Appearance and mounting dimensions (mm)

Model	W	W1	H	H1	D	Mounting Aperture	Weight (Kg)
PV200-4T-0.7B							
PV200-4T-1.5B	117	106.6	187	176.6	160	4.5	2.2
PV200-4T-2.2B							
PV200-4T-4.0B							
PV200-4T-5.5B	146	131	249	236	177	5.5	3.2
PV200-4T-7.5B							
PV200-4T-011B	198	183	300	287	185	5.5	5.4
PV200-4T-015B							
PV200-4T-018B							
PV200-4T-022B	255	176	459	443	220	7	15.5
PV200-4T-030B							