



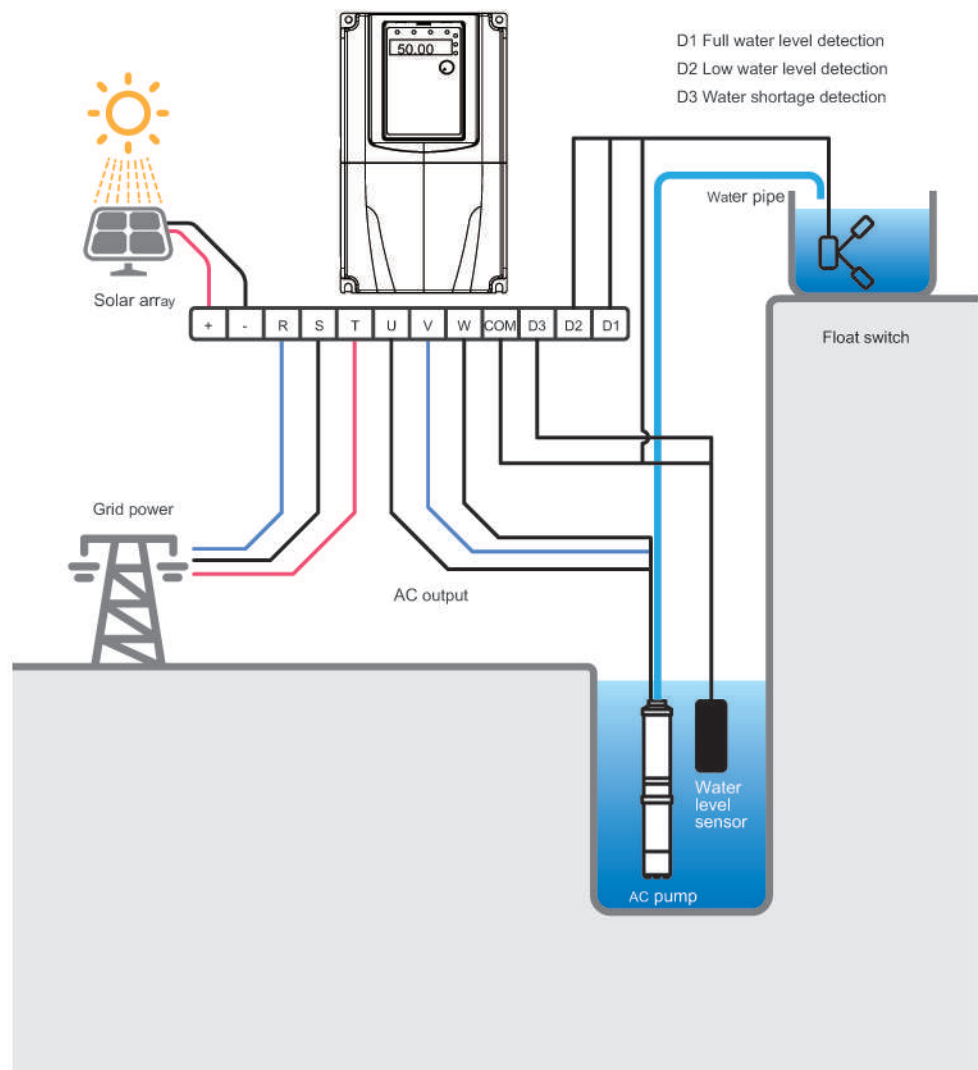
Product introduction

EvVFT series solar pump inverter adopts MPPT (Maximum Power Point Tracking) and excellent motor drive technology to maximize the power output from solar panels. EvVFT inverters are compatible with both AC and DC input, and the AC output can be used for various kinds of normal AC pumps. When the solar power is not available, or the sunshine is not strong enough to drive the pump, the inverter could be automatically switched to single phase or three phase AC input power, such as generator, grid power.

EvVFT inverters are equipped with overall protection function (self-checking functions for dry running, weak sunshine, full water level, etc.), motor soft start and speed control functions, with perfect function, easy operation and installation.

EvVFT inverters can also support remote monitoring and control function, which can monitor all operation data and fault information of the inverters.

Solar pump system



Single phase 220V 0.4, 0.75, 1.5 and 3 phase 220V 0.4, 0.75, 1.5 AC and DC couldnot be used together.

EvVFT Series

Solar Pump Inverter

System feature

Solar pump system, consisting of solar array, solar pump inverter, AC water pump and water tank, uses solar cell as power supply to directly take water from deep wells, rivers, lakes and other water sources through the water pump. Solar pump system, consisting of solar array, solar pump inverter, AC water pump and water tank, uses solar cell as power supply to directly take water from deep wells, rivers, lakes and other water sources through the water pump.

The solar array absorbs solar radiation and converts it into electric energy to provide power supply for the whole system. The solar pump inverter converts the DC output by the solar array into AC and drives the water pump; in addition, it adjusts the output voltage and frequency according to the sunshine intensity in real time to realize maximum power point tracking and to maximize the use of solar energy. When the sunshine intensity is low, the solar pump system can switch to grid power for complementary power supply.

- ◆ The system automatically starts in the morning and stops in the evening. It can run perfectly whenever there is sunshine, with no need of back-up battery.
- ◆ Applicable to and suits all applications requiring water pumps.
- ◆ Compatible with all types of solar panels and AC pumps (such as self-priming pump, submersible pump, deep-well pump and surface pump).
- ◆ Maximum operating ambient temperature 60°C.
- ◆ Remote monitoring for real time operation status and switching on/off by GPRS.
- ◆ Good performance even in cloudy weather.
- ◆ In the long run, the return on investment is much higher than diesel generators.
- ◆ Equipped with perfect protection, requires no man to be on duty, runs fully automatically.
- ◆ 18 months warranty for the whole system, 10 years warranty for solar panel.

The solar pump system is a presentation of low-carbon, energy-saving and environmental protection. It can obviously improve the living standard of people in areas lacking water and electricity. Therefore, it has broad market prospect and huge social value.

Application

Solar water pump system is mainly used for daily water supply, agricultural and forestry irrigation, desert control, livestock drinking water, sewage treatment, scenic fountain and swimming pool, etc.

Inverter technology data

Technical Index	Specification	
	220V inverter	380V inverter
Input/Output Ratings	200~450V	300~900V
Max input DC voltage	450V	900V
MPPT Voltage (V _{mp})	160~380V	260~750V
Recommended MPPT Voltage (V _{mp})	320	550
MPPT efficiency	99.9%	
Input AC voltage	1AC/3AC 220/230/240V	3AC 380/400/415/440V
Output AC voltage	1AC/3AC 0~220/230/240V	3AC 0~380/400/415/440V
Output frequency	0~300Hz	
IP level	IP20	
Fault protection function	Up to 30 general fault protections including overcurrent, overvoltage, undervoltage, overheating, default phase, overload, shortcut, etc., and also include water level sensor failure protection, full water, dry running, weak sunshine warning special protection functions for solar pump system. Could record the detailed running status during failure & has fault automatic reset function.	

Selection guide

Model	Motor		Rated output current (A)	Suggested open circuit voltage(V)
	kW	HP		
Single phase ouput 220V				
EvVFT02S0D4G	0.4	0.5	4	350~400
EvVFT02S0D75G	0.75	1	7	350~400
EvVFT02S1D5G	1.5	2	9.6	350~400
EvVFT02S2D2G	2.2	3	15	350~400
EvVFT02S04G	4.0	5	23	350~400
EvVFT02S5D5G	5.5	7.5	32	350~400
Three phase ouput 220V				
EvVFT02T0D4G	0.4	0.5	2.3	350~400
EvVFT02T0D75G	0.75	1	4	350~400
EvVFT02T1D5G	1.5	2	7	350~400
EvVFT02T2D2G	2.2	3	9	350~400
EvVFT02T04G	4.0	5	17	350~400
EvVFT02T5D5G	5.5	7.5	25	350~400
EvVFT02T7D5G	7.5	10	32	350~400
EvVFT02T11G	11	15	45	350~400
Three phase ouput 220V				
EvVFT04T0D75G	0.75	1	2.1	625~750
EvVFT04T1D5G	1.5	2	3.8	625~750
EvVFT04T2D2G	2.2	3	6	625~750
EvVFT04T04G	4.0	5	9	625~750
EvVFT04T5D5G	5.5	7.5	13	625~750
EvVFT04T7D5G	7.5	10	17	625~750
EvVFT04T11G	11	15	25	625~750
EvVFT04T15G	15	20	32	625~750
EvVFT04T18D5G	18.5	25	37	625~750
EvVFT04T22G	22	30	45	625~750
EvVFT04T30G	30	40	60	625~750
EvVFT04T37G	37	50	75	625~750
EvVFT04T45G	45	60	90	625~750
EvVFT04T55G	55	75	110	625~750
EvVFT04T75G	75	100	150	625~750
EvVFT04T90G	90	125	176	625~750
EvVFT04T110G	110	150	210	625~750

Notice:

1. According to the light condition of different areas, the required power of solar array is at least 1.3 times of the pump power.
2. When used for deep well pump, or the output power line of inverter is longer, the inverter should be derated to use, and need to install output reactor.

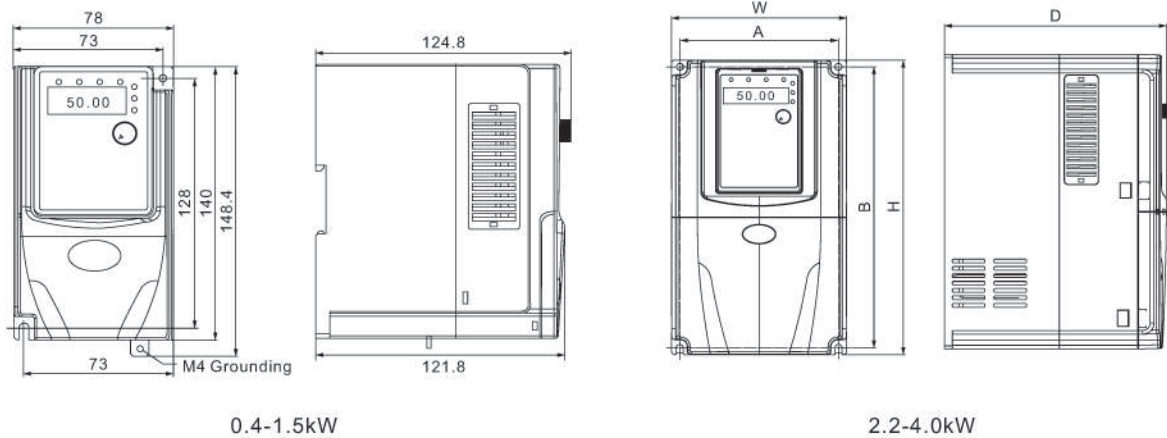
EvVFT Series

Solar Pump Inverter

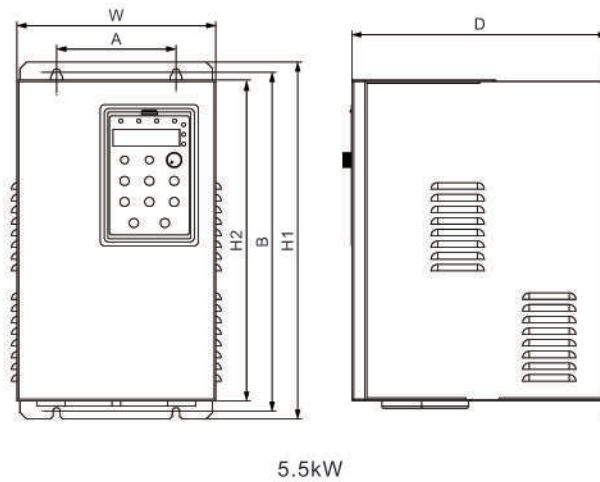
Dimensions

Single phase output 220V inverter

Power Range	External Dimension(mm)			Installation Dimension(mm)		Mounting Bolt Model
	W	H/H1	D/D1	A	B	
0.4~1.5kW	78	140/148.4	124.8/121.8	73	128	M4
2.2kW	135	240	173	122.6	229	M4
4.0kW	170	285	176	158	273.5	M4



Power Range	External Dimension(mm)				Installation Dimension(mm)		Mounting Bolt Model
	W	H1	H2	D	A	B	
5.5kW	200	329.1	300	177.2	90	316.6	M4



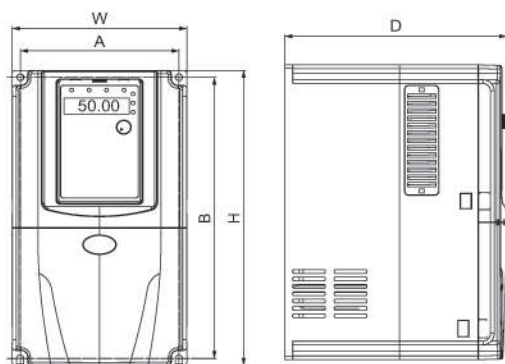
Power Range	External Dimension(mm)			Installation Dimension(mm)		Mounting Bolt Model
	W	H/H1	D/D1	A	B	
0.4~1.5kW	78	140/148.4	124.8/121.8	73	128	M4
2.2kW	110	185	153	98	174	M4
4.0kW	135	240	173	122.6	229	M4
4.0kW	170	285	176	158	273.5	M4

Power Range	External Dimension(mm)				Installation Dimension(mm)		Mounting Bolt Model
	W	H1	H2	D	A	B	
7.5kW	200	329.1	300	177.2	90	316.6	M4
11kW	225	397.6	365	185.2	120	384.1	M5

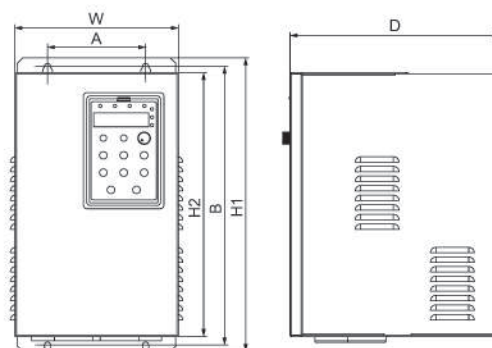
Dimensions

Three phase output 380V inverter

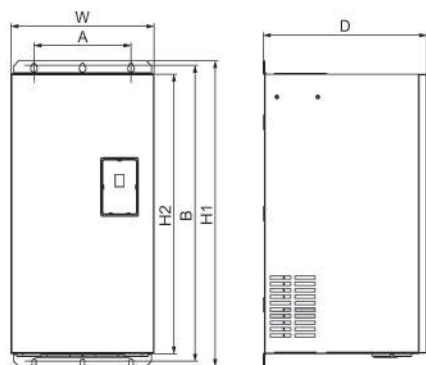
Power Range	External Dimension(mm)				Installation Dimension(mm)		Mounting Bolt Model
	W	H1	H2	D	A	B	
0.75~2.2kW	110	185		153	98	174	M4
4.0~5.5kW	135	240		173	122.6	229	M4
7.5~11kW	170	285		176	158	273.5	M4
15kW	200	329.1	300	177.2	90	316.6	M4
18.5~22kW	225	397.6	365	185.2	120	384.1	M5
30kW	255	439.6	402.4	209.6	140	423.6	M5
37~45kW	280	570	521.2	258	190	552	M6
55~75kW	320	600	552	330	230	582	M8
90~110kW	320	715	662	330	230	695.5	M8



0.75~11kW



15~30kW



37~110kW

