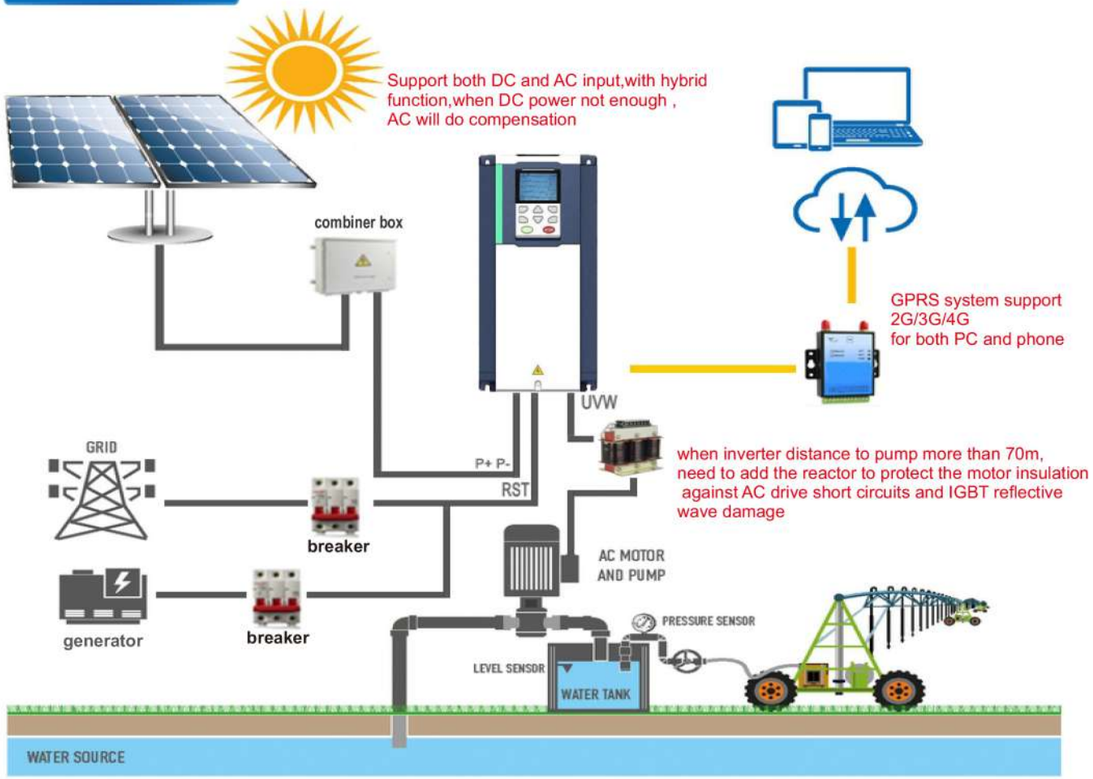
VFD500-PV Solar Pumping Inverter

Model reference



Electrical Specifications

Voltage	220V	380V
Max input DC voltage	450V	800V
Recommended MPPT voltage range	250~350VDC	400~600VDC
Recommended input voltage	305V	530V
MPPT efficiency	99%	
Input channel	2	
Rated output voltage	3-phase 220VAC	3-phase 380VAC
Output frequency range	0~60Hz	
Max efficiency of the machine	97%	
Ambient temperature range	-10 °C~50 °C, derating if the temperature is above 40 °C	
Cooling method	Air cooling	
Protection degree	IP20	
Altitude	Below 1000m; above 1% for every additional 100m.	
Standard	CE	

Model Range

Drive Model	Related Voltage	Max DC input voltage (V)	Rated output current (A)	Applicable water pump (KW)	SIZE	Inverter photo
VFD500M-20T00150-PV	220V	800	7	1.5	SIZE A	
VFD500M-20T00220-PV	220V	800	10.6	2.2	SIZE A	
VFD500M-40T00150-PV	380V	800	4.2	1.5	SIZE A	
VFD500M-40T00220-PV	380V	800	6	2.2	SIZE A	
VFD500-20T00150-PV	220V	800	7	1.5	SIZE A	
VFD500-20T00220-PV	220V	800	10.6	2.2	SIZE A	
VFD500-20T00400-PV	220V	800	17	4	SIZE A	
VFD500-40T00150-PV	380V	800	4.2	1.5	SIZE A	
VFD500-40T00220-PV	380V	800	6	2.2	SIZE A	
VFD500-40T00400-PV	380V	800	9.4	4	SIZE A	
VFD500-40T00550-PV	380V	800	13	5.5	SIZE B	
VFD500-40T00750-PV	380V	800	17	7.5	SIZE B	
VFD500-40T01100-PV	380V	800	25	11	SIZE C	
VFD500-40T01500-PV	380V	800	32	15	SIZE C	
VFD500-40T01850-PV	380V	800	38	18.5	SIZE D	
VFD500-40T02200-PV	380V	800	46	22	SIZE D	
VFD500-40T03000-PV	380V	800	60	30	SIZE E	
VFD500-40T03700-PV	380V	800	75	37	SIZE E	
VFD500-40T04500-PV	380V	800	96	45	SIZE F	
VFD500-40T05500-PV	380V	800	112	55	SIZE F	
VFD500-40T07500-PV	380V	800	150	75	SIZE G	
VFD500-40T09000-PV	380V	800	176	90	SIZE G	
VFD500-40T11000-PV	380V	800	210	110	SIZE H	
VFD500-40T13200-PV	380V	800	253	132	SIZE I	
VFD500-40T16000-PV	380V	800	304	160	SIZE I	
VFD500-40T18500-PV	380V	800	340	185	SIZE J	
VFD500-40T20000-PV	380V	800	377	200	SIZE J	

LED & LCD keypad

1,Standard inverter are with LED keypad,LCD keypad is optional.

2,LCD keypad can monitor 4 parameters at the same time. LED keypad show one parameter only.

3,LCD keypad with detailed parameter explain,no need use user manual ,more user friendly.

4,LCD keypad with copy and update and download function.widely used for government projects and big farms.

customized solar pump control panel

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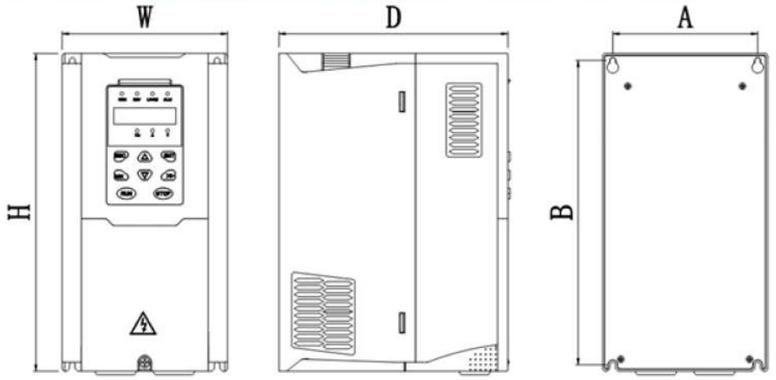
Appearance and Mounting Hole Dimension



SIZE	Appearance and installation dimension mm							
	A	B	H	H1	W	D	Φd	Mounting screws
SIZE A	87	206.5	215	/	100	170	ø5.0	M4X16
SIZE B	114	239.5	250	/	130	180	ø5.0	M4X16
SIZE C	159	298	310	/	180	193	Ø6.0	M5X20
SIZE D	165	350	365		210	205	Ø6.0	M5X20
SIZE E	170	437	452.5		260	230	Ø7.0	M6X16
SIZE F	250	535	555		310	275	Ø10.0	M8X20
SIZE G	280	620	640		350	290	Ø10.0	M8X20

Electrical Specifications

Commercial/Agricultural irrigation system

Agricultural and animal husbandry water supply system

Barren hills governance system

Agricultural greenhouse water supply system

Landscape fountain system

Solve water short problem

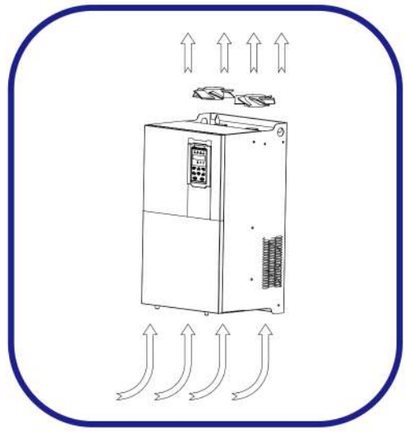
Key features

- Maximizing power generation efficiency of solar modules with the use of advanced MPPT control technology and automatic MPPT voltage tracking
- Adjust water outflow of pumps quickly on basis of sunlight intensity change
- Automatic hibernation and wake up

  (1) Hibernate at high water level and wake up at low water lever
  (2) Hibernate at sunrise and sunset and wake up at strong sunlight
- Built-in C3 EMC filter and DSP technology and Infineon PIM design,with functions of light weak protection,dry run and low voltage,full water warning, overvoltage and overtemperature protection
- Advanced calculation for Pump flow and LCD monitoring display
- Automatic running without any commisioning in keypad control and GPRS monitoring option(as option)
- Dual supply capability with change over switch - solar and grid compatible

Independent duct design

- Independent air duct design, effectively preventing dust entering inverter, causing short-circuit and other faults and improving reliability
- Use bigger air volume and long life cooling fan effectively reduces the internal temperature rise of the inverter and ensures reliable and stable operation of inverter.



Perfect protection system

- Designed for 10 years of maintenance-free operation.
- Cooling fan, capacitors, relays, and IGBTs have been carefully selected and designed for a life expectancy up to ten years.

* Assumes the drive is running continuously for 24 hours a day at 80% load with an ambient temperature of 40