

# SOCON



## SC500-PV

### Hybrid Solar pump inverter



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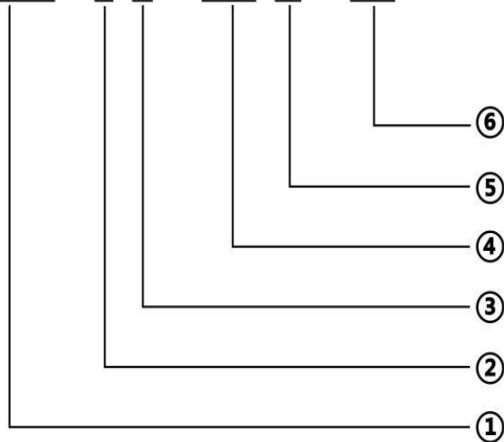


**WARNING**

- Risk of electric shock
- Do not connect AC power to output terminals U V W
- Wait 10 minutes for capacitor discharge after switching off the power supply

## Nameplate instruction

**SC500 - 4 T - 011 G - PV**



SN	Naming Rule	Description
①	Product series	SC500: SC500 series inverters
②	Output Voltage	2: 220V 4: 380V~480V
③	Input Phase Class	S: Single phase T: Three phase
④	Rated Output Power	P75: 0.75kw 2P2: 2.2kw 011: 11kw 110: 110kw
⑤	Applicable Load Type	G: General type S: Economic type
⑥	Product type	PV: Hybrid solar pump inverter

## Economic Type

Model	Maximum input DC current (A)	Rated Output Current (A)	Power of Pump/Motor (kW)	Horse power of Pump/Motor (HP)
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### Economic 220VAC Model:

Solar DC input range: 150~400VDC (150~450VDC)  
 Back-up on grid/generator input: single phase 220VAC  
 Rated output voltage: single phase and 3-phase 220VAC  
 Rated output frequency: 0~50/60Hz  
 MPPT voltage range: 260~375VDC

### Specification Single Phase 220~240VAC

SC500-2S-P75S-PV	8	4	0.75	1
SC500-2S-1P5S-PV	14	7	1.5	2
SC500-2S-2P2S-PV	19.2	9.6	2.2	3
SC500-2S-4P0S-PV	34	17	4.0	5.5

Model	Maximum input DC current (A)	Rated Output Current (A)	Power of Pump/Motor (kW)	Horse power of Pump/Motor (HP)
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### Economic 380VAC Model:

Solar DC input range: 250~800VDC (250~900VDC)  
 Back-up on grid/generator input: 3-phase 380VAC  
 Rated output voltage: 3-phase 380~480VAC  
 Rated output frequency: 0~50/60Hz  
 MPPT voltage range: 486~750VDC

### Specification 3-Phase 380~480VAC

SC500-4T-P75S-PV	5.6	2.8	0.75	1
SC500-4T-1P5S-PV	8.8	4.4	1.5	2
SC500-4T-2P2S-PV	11.6	5.8	2.2	3
SC500-4T-4P0S-PV	20	10	4.0	5.5
SC500-4T-5P5S-PV	26	13	5.5	7.5
SC500-4T-7P5S-PV	34	17	7.5	10

## General Type

Model	Maximum input DC current (A)	Rated Output Current (A)	Power of Pump/Motor (kW)	Horse power of Pump/Motor (HP)
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### General 220VAC Model:

Solar DC input range: 150~400VDC (150~450VDC)

Back-up on grid/generator input: single phase 220VAC

Rated output voltage: single phase and 3-phase 220VAC

Rated output frequency: 0~50/60Hz

MPPT voltage range: 260~375VDC

### Specification Single Phase 220~240VAC

SC500-2S-P75G-PV	8	4	0.75	1
SC500-2S-1P5G-PV	14	7	1.5	2
SC500-2S-2P2G-PV	19.2	9.6	2.2	3
SC500-2S-4P0G-PV	34	17	4.0	5.5
SC500-2S-5P5G-PV	50	25	5.5	7.5
SC500-2S-7P5G-PV	64	32	7.5	10
SC500-2S-011G-PV	90	45	11	15
SC500-2S-015G-PV	120	60	15	20
SC500-2S-018G-PV	150	75	18.5	25
SC500-2S-022G-PV	180	90	22	30
SC500-2S-030G-PV	220	110	30	40
SC500-2S-037G-PV	304	152	37	50
SC500-2S-045G-PV	352	176	45	60
SC500-2S-055G-PV	420	210	55	75
SC500-2S-075G-PV	608	304	75	100
SC500-2S-093G-PV	680	340	93	125
SC500-2S-110G-PV	852	426	110	150
SC500-2S-132G-PV	1040	520	132	200
SC500-2S-160G-PV	1170	585	160	250

Model	Maximum input DC current (A)	Rated Output Current (A)	Power of Pump/Motor (kW)	Horse power of Pump/Motor (HP)
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### General 380VAC Model:

Solar DC input range: 250~800VDC (250~900VDC)

Back-up on grid/generator input: 3-phase 380VAC

Rated output voltage: 3-phase 380~480VAC

Rated output frequency: 0~50/60Hz

MPPT voltage range: 486~750VDC

### Specification 3-Phase 380~480VAC

SC500-4T-P75G-PV	5.6	2.8	0.75	1
SC500-4T-1P5G-PV	8.8	4.4	1.5	2
SC500-4T-2P2G-PV	11.6	5.8	2.2	3
SC500-4T-4P0G-PV	20	10	4.0	5.5
SC500-4T-5P5G-PV	26	13	5.5	7.5
SC500-4T-7P5G-PV	34	17	7.5	10
SC500-4T-011G-PV	50	25	11	15

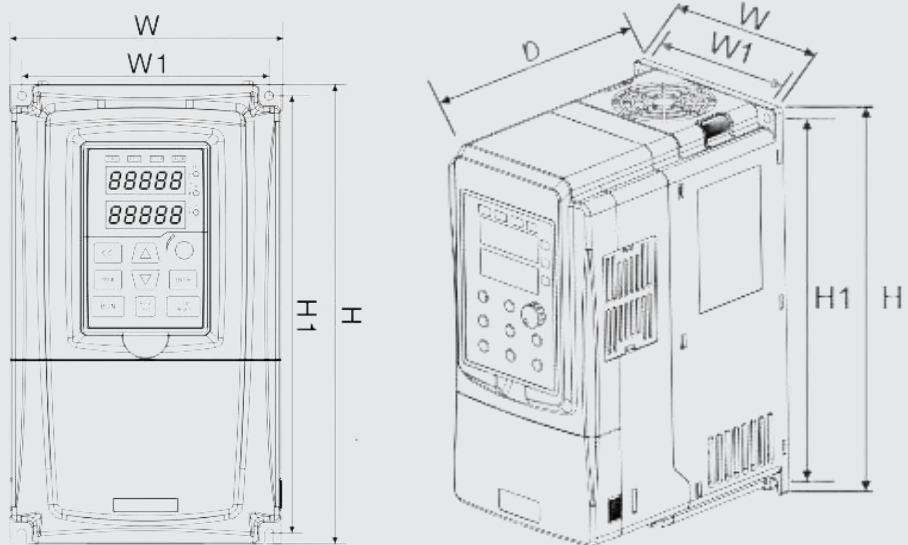
Model	Maximum input DC current (A)	Rated Output Current (A)	Power of Pump/Motor (kW)	Horse power of Pump/Motor (HP)
SC500-4T-015G-PV	64	32	15	20
SC500-4T-018G-PV	74	37	18.5	25
SC500-4T-022G-PV	90	45	22	30
SC500-4T-030G-PV	120	60	30	40
SC500-4T-037G-PV	150	75	37	50
SC500-4T-045G-PV	180	90	45	60
SC500-4T-055G-PV	220	110	55	75
SC500-4T-075G-PV	304	152	75	100
SC500-4T-093G-PV	352	176	93	125
SC500-4T-110G-PV	420	210	110	150
SC500-4T-132G-PV	506	253	132	200
SC500-4T-160G-PV	608	304	160	250
SC500-4T-185G-PV	700	350	185	275
SC500-4T-200G-PV	760	380	200	300
SC500-4T-220G-PV	852	426	220	300
SC500-4T-250G-PV	930	465	250	400
SC500-4T-280G-PV	1040	520	280	470
SC500-4T-315G-PV	1170	585	315	500

## Specification

Maximum input DC voltage	2S: 150~450VDC
	4T: 250~900VDC
MPPT voltage range	2S: 260~375VDC
	4T: 486~750VDC
Standard input DC voltage	2S: 310VDC
	4T: 540VDC
MPPT efficiency	99.99%
Rated output voltage	2S: 110~220~240VAC
	4T: 380~480VAC
Protection degree	IP20
Altitude	1000 meters and above higher than 1000 meters, please reduce the carrying capacity according to the ratio of 1% per 100 meters.
Certification	CE
Basic Functions	Automatic running unattended operation.
	Smart agriculture IOT platform.
	High-efficiency MPPT function.
	Available for AC&DC hybrid input.

## Dimension of Economic Type

Model (General Plastic)	H (mm)	W (mm)	D (mm)	H1 (mm)	H2 (mm)	W1 (mm)	Mounting Aperture (mm)
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### Specification Single Phase 220~240VAC

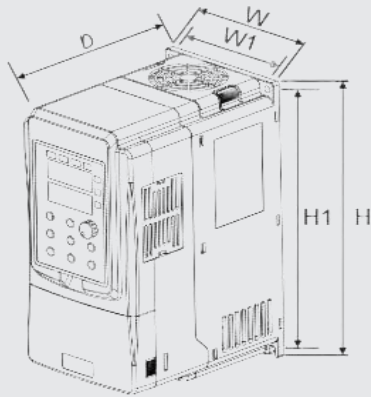
SC500-2S-P75S-PV	187	90	133	177	-	80	4.5
SC500-2S-1P5S-PV							
SC500-2S-2P2S-PV							
SC500-2S-4P0S-PV	247	130	162	236.5	-	115	5

### Specification 3-Phase 380~480VAC

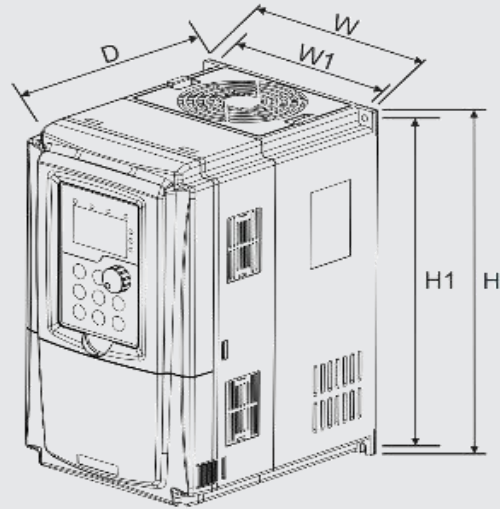
SC500-4T-P75S-PV	187	90	133	177	-	80	4.5
SC500-4T-1P5S-PV							
SC500-4T-2P2S-PV							
SC500-4T-4P0S-PV	207	100	142	197	-	90	4.5
SC500-4T-5P5S-PV	247	130	162	236.5	-	115	5
SC500-4T-7P5S-PV							

## Dimension of General Type

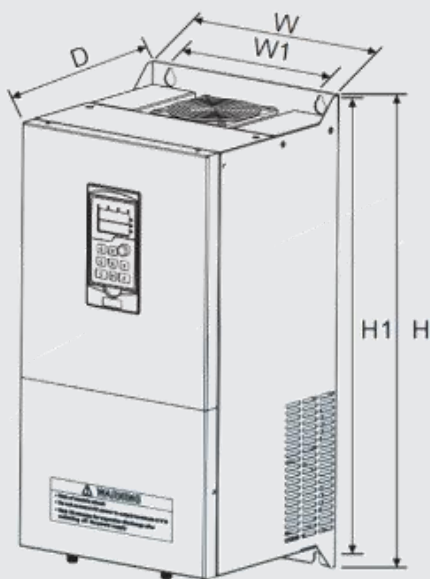
Model (General Plastic)	H (mm)	W (mm)	D (mm)	H1 (mm)	H2 (mm)	W1 (mm)	Mounting Aperture (mm)
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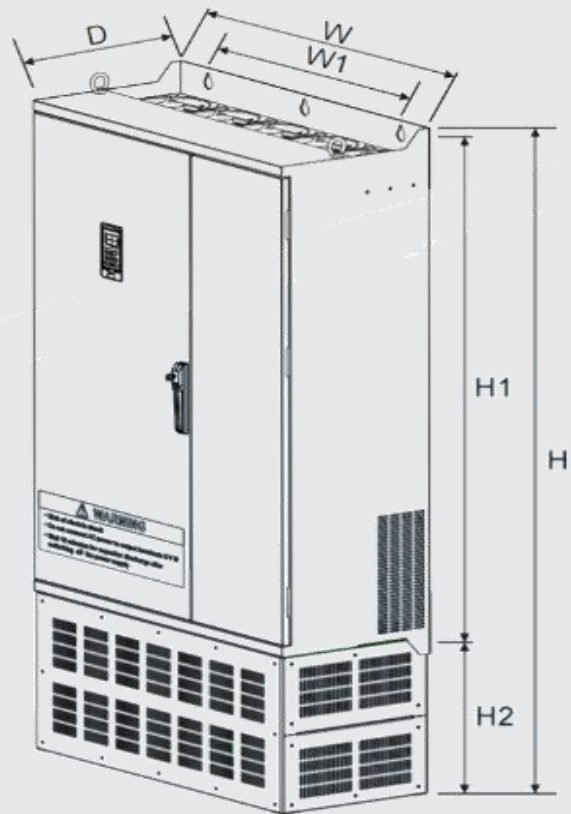
**0.75KW~7.5KW**



**11KW~22KW**



**30KW~110KW**



**132KW~630KW**

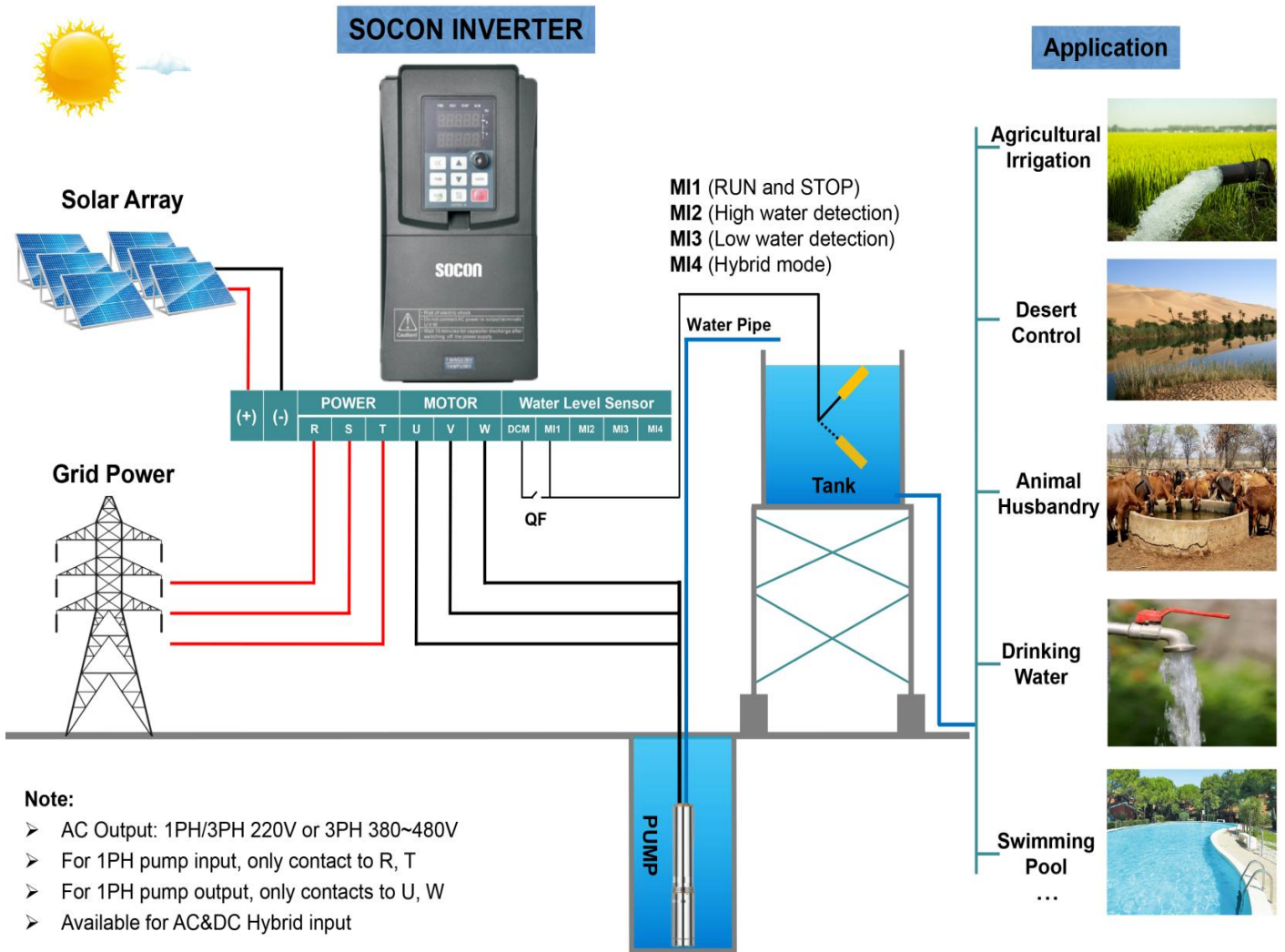
Model (General Plastic)	H (mm)	W (mm)	D (mm)	H1 (mm)	H2 (mm)	W1 (mm)	Mounting Aperture (mm)
<b>Specification Single Phase 220~240VAC</b>							
SC500-2S-P75G-PV	187	90	133	177	-	80	4.5
SC500-2S-1P5G-PV							
SC500-2S-2P2G-PV							
SC500-2S-4P0G-PV	247	130	162	236.5	-	115	5
SC500-2S-5P5G-PV	272	160	201	259	-	146	5.2
SC500-2S-7P5G-PV							
SC500-2S-011G-PV	313	211	205	299	-	196	6.5
SC500-2S-015G-PV	418	252	206.9	399	-	201	9
SC500-2S-018G-PV							
SC500-2S-022G-PV	603	299	276.7	581	-	240	9
SC500-2S-030G-PV							
SC500-2S-037G-PV	643	338	312	619	-	280	11
SC500-2S-045G-PV							
SC500-2S-055G-PV							
SC500-2S-075G-PV	1126	410	383.7	776	356	320	12
SC500-2S-093G-PV							
SC500-2S-110G-PV	1472	650	430.2	1046.8	426	520	13
SC500-2S-132G-PV							
SC500-2S-160G-PV							
Model (General Plastic)	H (mm)	W (mm)	D (mm)	H1 (mm)	H2 (mm)	W1 (mm)	Mounting Aperture (mm)
<b>Specification 3-Phase 380~480VAC</b>							
SC500-4T-P75G-PV	187	90	133	177	-	80	4.5
SC500-4T-1P5G-PV							
SC500-4T-2P2G-PV							
SC500-4T-4P0G-PV	207	100	142	197	-	90	4.5
SC500-4T-5P5G-PV	247	130	162	236.5	-	115	5
SC500-4T-7P5G-PV							
SC500-4T-011G-PV	272	160	201	259	-	146	5.2
SC500-4T-015G-PV							
SC500-4T-018G-PV	313	211	205	299	-	196	6.5
SC500-4T-022G-PV							
SC500-4T-030G-PV	418	252	206.9	399	-	201	9
SC500-4T-037G-PV							
SC500-4T-045G-PV	603	299	276.7	581	-	240	9
SC500-4T-055G-PV							
SC500-4T-075G-PV	643	338	312	619	-	280	11
SC500-4T-093G-PV							
SC500-4T-110G-PV							



Model (General Plastic)	H (mm)	W (mm)	D (mm)	H1 (mm)	H2 (mm)	W1 (mm)	Mounting Aperture (mm)
SC500-4T-132G-PV	1126	410	383.7	776	356	320	12
SC500-4T-160G-PV							
SC500-4T-185G-PV							
SC500-4T-200G-PV							
SC500-4T-220G-PV	1472	650	430.2	1046.8	426	520	13
SC500-4T-250G-PV							
SC500-4T-280G-PV							
SC500-4T-315G-PV							

✧ H2 is the base size, 132KW~200KW base is optional, 220KW and above power is standard base.

# Diagram of SOCON Inverter



**SOCON - Reference Wiring Diagram of Solar Pumping System.**





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