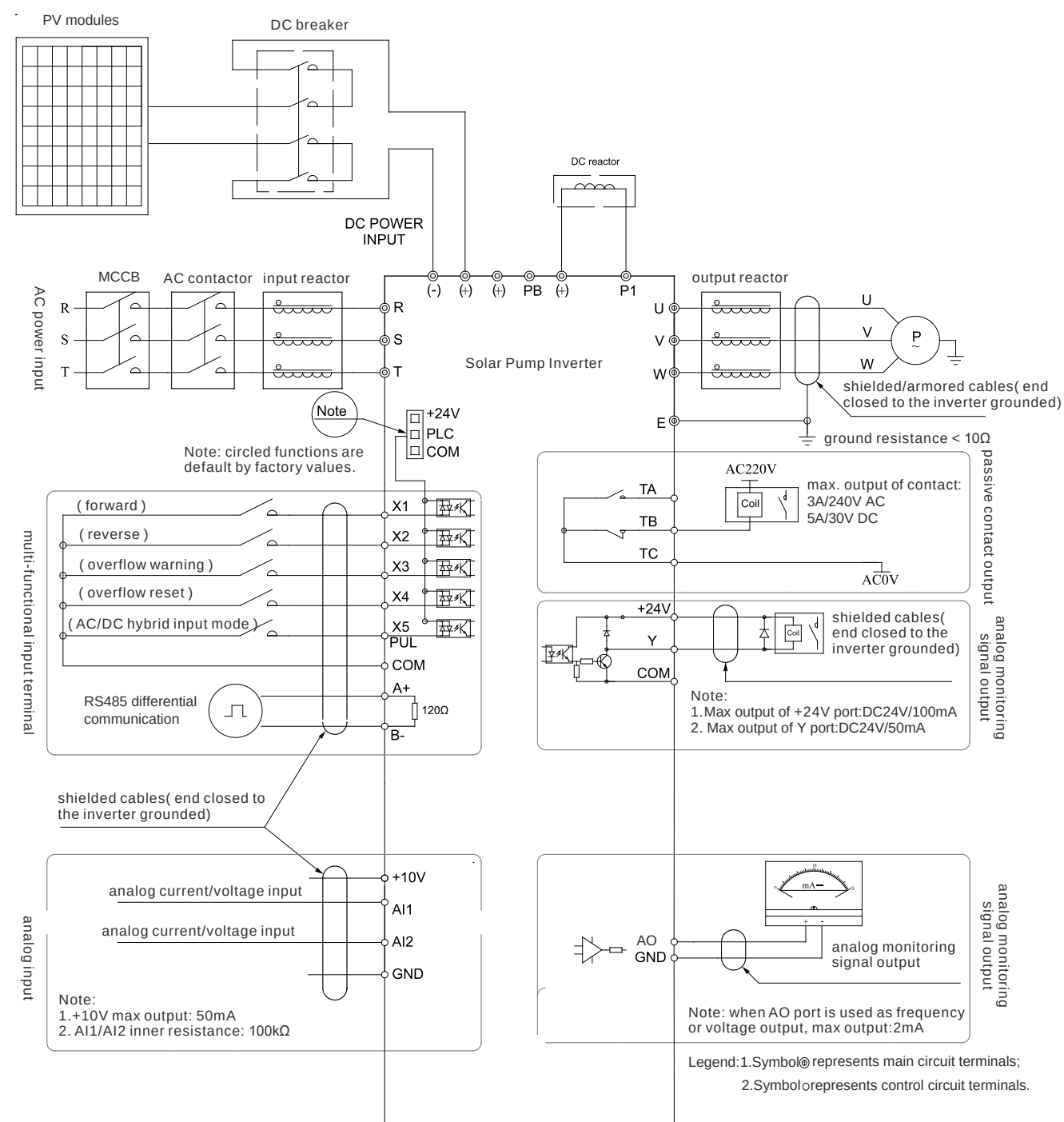


SI23 Series Electric Wiring



SI23 Series Solar Pump Inverter

New structure | High efficiency | Reliable Performance



Product Features

New look, narrow body

- Book-like narrow structure saves up 60% space max.
- New keyboard with simple design appearance simplifies operation .
- European terminals raises wiring efficiency.

Comply With Multiple International Standards Certification

EN 61800/EN 61000/EN IEC 61000
IEC 61683/IEC 62109~1/IEC62109-2



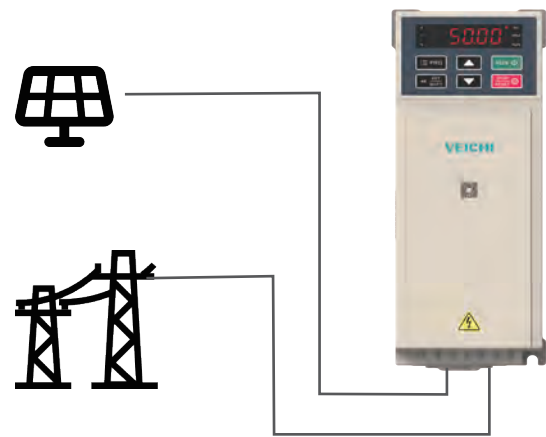
Top algorithm

- Asynchronous, single-phase, permanent magnet synchronous, synchronous reluctance etc. pump motors applicable
- Internationally leading self-learning algorithm with accurate and consistent motion control
- High-bandwidth current vector with 12 times high-precision weak magnetic output



AC/DC hybrid input

When the solar panel power is lower than the set value, solar panel will be switched to the utility power to ensure the normal operation of the system until the solar panel power is restored to the set value, then the utility power will be switched back again to supply power .



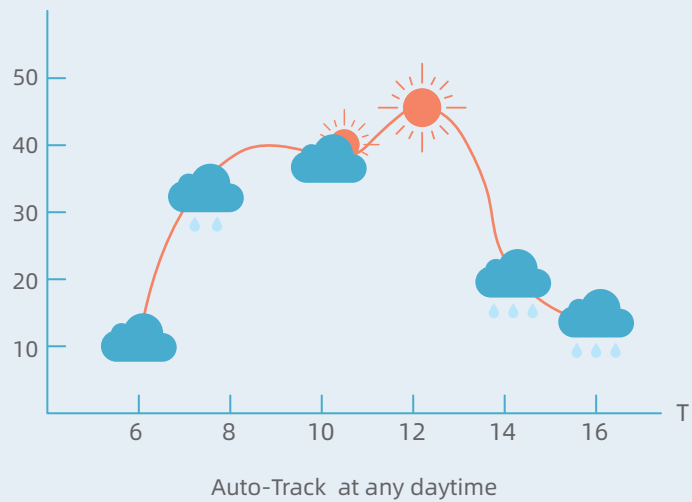
Smart IOT

- Support GPS positioning, WiFi data connection, offline data storage .
- Unattended, real-time, remote control .
- Big data analysis, calculation of cumulative power generation and flow .
- Auto identification of various APN remote data analysis devices and one-key Router connection.

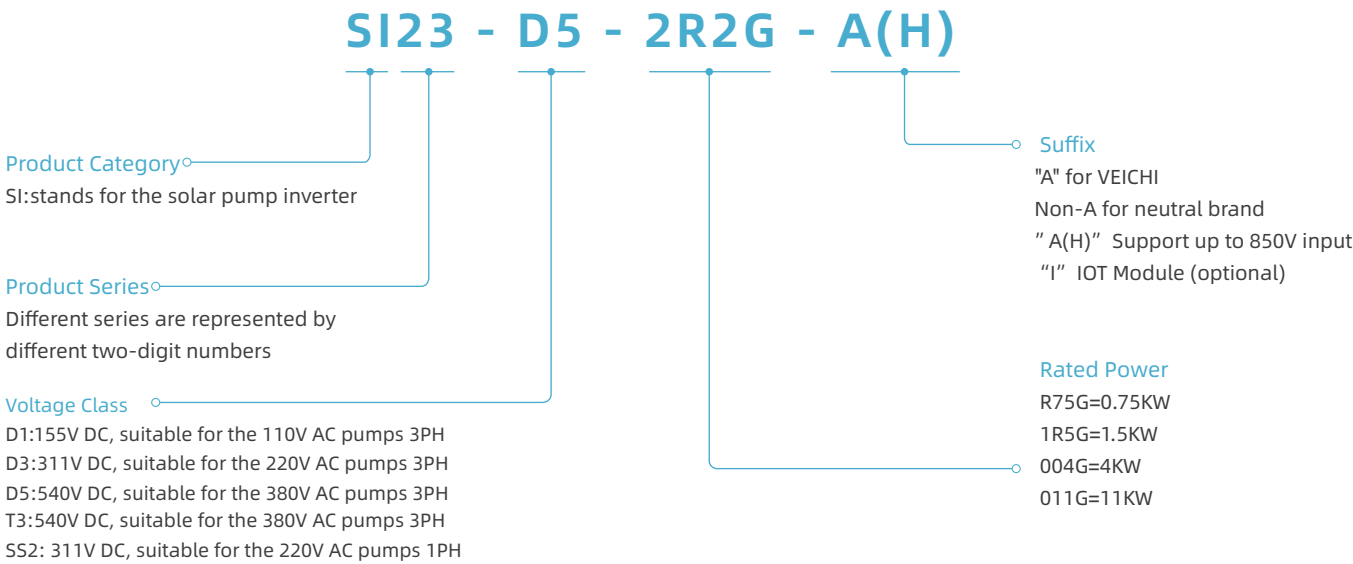


Customized photovoltaic functions

- MPPT enables real-time adjustment of the optimal output frequency.
- Complete pump protections extend service life.
- Customized PQ curve offers users cumulative flow and power generation.
- AC/DC hybrid input, timing, and water pump cleaning etc. meet market demands.



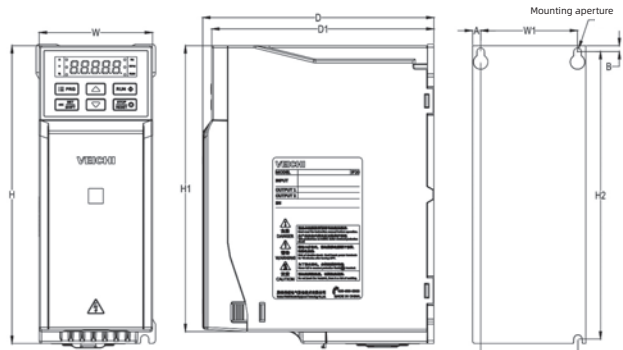
SI23 Series Naming Rules



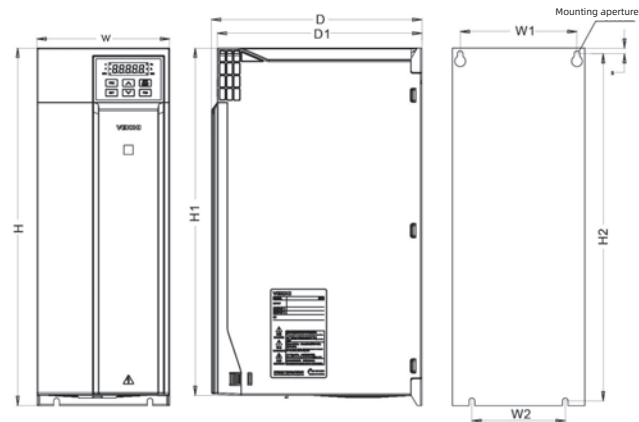
Technical Specification

MODEL		D1	D3	SS2	D5	T3
PV Input (D5 and T3 with suffix "H" support up to 850V input)						
Input voltage range		60~400V	150~450V	150~450V	250~780V	350~780V
Recommended Voc voltage		175~380V	360~430V	360~430V	620~750V	620~750V
Maximum MPPT efficiency		up to 99.8%	up to 99.8%	up to 99.8%	up to 99.8%	up to 99.8%
AC Input						
Input voltage range		1PH/3PH 110V	1PH/3PH 220V~240V	1PH/3PH 220V~240V	3PH 380~480V	3PH 380~480V
Input voltage frequency		50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz
Output						
Output voltage range		110~230V	150~230V	150~230V	230~460V	230~460V
Output frequency range		0~600Hz	0~600Hz	0~600Hz	0~600Hz	0~600Hz
Output power range		0.75~1.5kW	0.75~55kW	0.75~55kW	0.75~30kW	37~500kW
Power		Rated output current				
0.75kW	7A	4A	7A	3A	-	
1.5kW	10A	7A	10A	4A	-	
2.2kW	-	10A	16A	6A	-	
4kW	-	16A	30A	10A	-	
5.5kW	-	20A	42A	13A	-	
7.5kW	-	30A	55A	17A	-	
11kW	-	42A	-	25A	-	
15kW	-	55A	-	32A	-	
18.5kW	-	70A	-	38A	-	
22kW	-	80A	-	45A	-	
30kW	-	110A	-	60A	-	
37kW	-	130A	-	-	75A	
45kW	-	160A	-	-	90A	
55kW	-	200A	-	-	110A	
75kW	-	-	-	-	150A	
90kW	-	-	-	-	180A	
110kW	-	-	-	-	210A	
132kW	-	-	-	-	250A	
160kW	-	-	-	-	310A	
185kW	-	-	-	-	340A	
200kW	-	-	-	-	380A	
Control Performance						
Motor type	Asynchronous motors Permanent magnet synchronous motor Synchronous reluctance motor	Asynchronous motors Permanent magnet synchronous motor Synchronous reluctance motor	Single phase motor	Asynchronous motors Permanent magnet synchronous motor Synchronous reluctance motor	Asynchronous motors Permanent magnet synchronous motor Synchronous reluctance motor	
Control mode	V/F control, open-loop vector control, closed-loop vector control, voltage-frequency separated control					
Overload capacity	150% of rated load for 60s, 180% of overload capacity for 10s, 200% of overload capacity for 0.5s					
System						
Installation	Hitch mounting					
Protection class	IP20/ IP65					
Working temperature	-25~60℃					
Cooling method	Forced air cooling					
Humidity	20%~95%RH（condensation free）					
Installation environment	Altitude lower than 1000m. Derate 1% for each 100m rise when above 1000m.No condensation, icing, rain, snow, hail, etc., solar radiation below 700W/m2, air pressure 70kPa ~ 106kPa					
Protection						
Common potection	Undervoltage / overvoltage	√	√	√	√	√
	Input/output phase loss	√	√	√	√	√
	Overload	√	√	√	√	√
	Overcurrent	√	√	√	√	√
	Drive overheat	√	√	√	√	√
	Short circuit between phases and to ground	√	√	√	√	√
Specialized protection	Low frequency	√	√	√	√	√
	Pump overcurrent	√	√	√	√	√
	Dryout	√	√	√	√	√
	Min. power	√	√	√	√	√
	Overflow	√	√	√	√	√
	Sleep protection	√	√	√	√	√

Plastic model

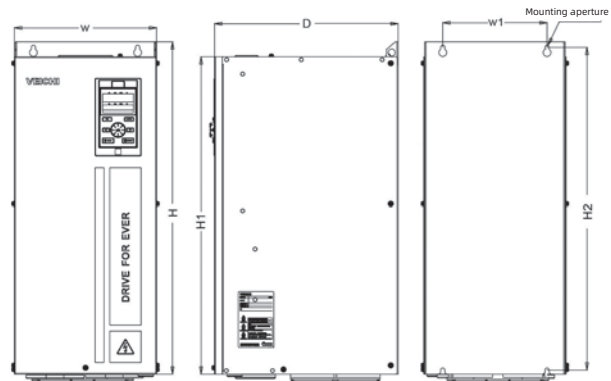


Model	Overall dimension(mm)					Installation dimension(mm)					Installation aperture
	W	H	H1	D	D1	W1	W2	H2	A	B	
SI23-D1-R75G-A	76	200	192	155	149	65	65	193	5.5	4	M4
SI23-D1-1R5G-A											
SI23-D3-R75G-A											
SI23-D3-1R5G-A											
SI23-SS2-R75G-A											
SI23-D5-R75G-A											
SI23-D5-1R5G-A											
SI23-D5-2R2G-A	100	242	231	155	149	84	86.5	231.5	8	5.5	M4
SI23-D3-2R2G-A											
SI23-D3-004G-A											
SI23-SS2-1R5G-A											
SI23-SS2-2R2G-A											
SI23-D5-004G-A											
SI23-D5-5R5G-A											
SI23-D3-5R5G-A	116	320	307.5	175	169	98	100	307.5	9	6	M5
SI23-SS2-004G-A											
SI23-SS2-5R5G-A											
SI23-D5-7R5G-A											
SI23-D5-011G-A											



Model	Overall dimension(mm)					Installation dimension(mm)					Installation aperture
	W	H	H1	D	D1	W1	W2	H2	A	B	
SI23-D3-7R5G-A	142	383	372	225	219	125	100	372	6	M5	
SI23-D3-011G-A											
SI23-SS2-7R5G-A											
SI23-D5-015G-A											
SI23-D5-018G-A											
SI23-D5-022G-A	172	430	/	225	219	150	150	416.5	7.5	M5	
SI23-D3-015G-A											
SI23-D3-018G-A											
SI23-D3-022G-A											
SI23-D5-030G-A											
SI23-T3-037G-A											

Steel model



Model	Overall dimension (mm)				Installation dimension (mm)		Installation aperture
	W	H	H1	D	W1	H2	
SI23-D3-030G-A	240	560	535	310	176	544	M6
SI23-D3-037G-A							
SI23-D3-045G-A							
SI23-T3-045G-A							
SI23-T3-075G-A							
SI23-D3-055G-A	270	638	580	350	195	615	M8
SI23-T3-090G-A							
SI23-T3-110G-A							
SI23-T3-132G-A	350	738	680	405	220	715	M8
SI23-T3-160G-A							
SI23-T3-185G-A	360	940	850	480	200	914	M16
SI23-T3-200G-A							