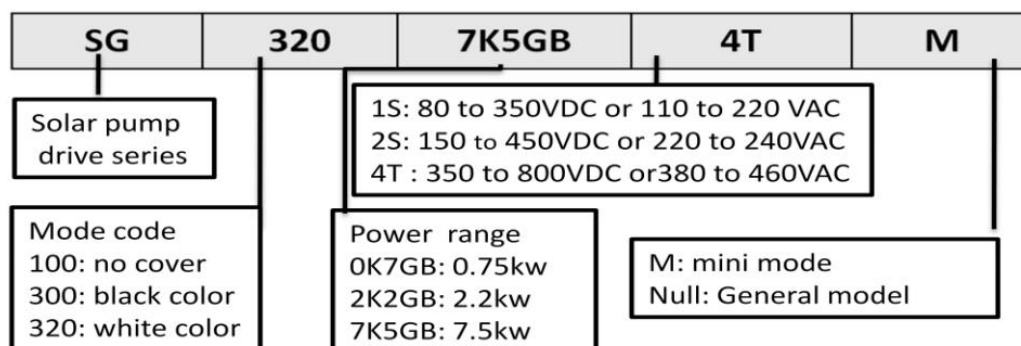


Models specification:



1S: For 3 phase, 110V to 200VAC pumps, 0.75kw to 1.5kw, 80V to 350VDC input.

2S: For 3 phase, 170V to 240VAC pumps, 0.75kw to 4.0kw, 150 to 450VDC input.

4T: For 3 phase, 380V to 460VAC pumps, 0.75kw to 400kw, 350 to 800VDC input.

Models list:

Model	Input voltage	Output for pumps	Power	Pictures
SG100-2S	150 to 450VDC, or 220 to 240VA	3 PH 220V to 240VAC	0.75kw	
SG300-1S-M SG300-2S-M	90 to 400VDC, 150 to 450VDC or 110 to 230VA	3 PH 1100VAC 3PH 220VAC	0.75—1.5kw	
SG300-4T-M	250 to 800VDC 380 to 460VAC	3 PH 380V to 460VAC	0.75—2.2kw	
SG320-2S	150 to 400VDC 220 to 230VA	3 PH 220V to 230VAC	0.75—4kw	
SG320-4T	250 to 800VDC 380 to 440VAC	3 PH 380V to 440VAC	0.75—15kw	
SG320-4T	350 to 800VDC 380 to 440VAC	3 PH 380V to 440VAC	18—132kw	

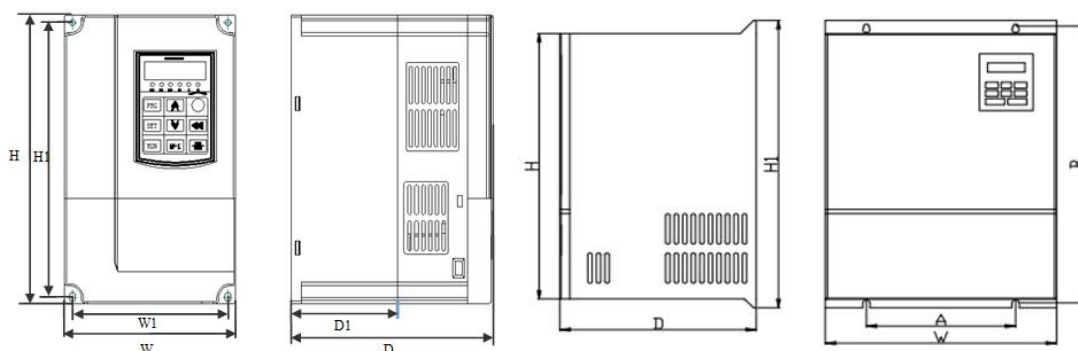
Technical specification:

**Solar pump drive specification when FA-00 set to 1&2 for solar pumping controlling function.	
Recommended MPPT voltage range	Vmpp 131 to 350 VDC for 1S (80V to 350VDC input, 3PH 110 to 220VAC output) Vmpp 280 to 375VDC for 2S (150V to 450VDC input, 3PH 220 to 240VAC output) Vmpp 486 to 750 VDC for 4T (350V to 800VDC input, 3PH 380 to 460VAC output)
Recommended input Voc and Vmpp voltage	Voc 180(VDC), Vmpp 155(VDC) for 1S model or 110V AC pumps Voc 355(VDC), Vmpp 310(VDC) for 2S model or 220V AC pumps Voc 620(VDC), Vmpp 540(VDC) for 4T model or 380V AC pumps
Motor type (Pumps type)	Control for permanent magnet synchronous motor and asynchronous motor pumps. 1 phase or 3 phase AC pumps
Rated output voltage	3-Phase, 110V/160V/220V. 3-phase, 220V/380V/460V
Output frequency range	0~maximum frequency 600Hz. Resolution 0.01 Hz
Inverter efficiency	Above 99.2%
Ambient temperature range	G-type for submersible pumps, 150% rated current for 60s, 180% rated current for 2s P type for general pumps, 120% rated current for 60s, 150% rated current for 2s
Solar pump control special performance	MPPT (maximum power point tracking), CVT (constant voltage tracking), auto/manual operation, dry run protection, low stop frequency protection, minimum power input, motor maximum current protection, flow calculating, energy generated calculating and water tank level detected
Protection function	Phase loss protection, phase short circuit protection, ground to phase circuit protection , input and output short circuit protection. Stall protection
Protection degree	IP20, Air force cooling
Running mode	MPPT or CVT
Altitude	Below 1000m; above 1000m, derated 1% for every additional 100m.
Power factor	Above 95%
Standard AC input backup circuit	CE, Design based on vector control drive S300 and S3200 series, more specification please refer to S300 or S320 vector control drive operation manual
Technical specification when it used for speed and torque controlling of motor as FA00 set to 0.	
Voltage, frequency	Single phase 220V, 3 phase, 220V, 380V, 660V and 1140V. Power 0.75kw to 37kw.
Control mode	0: VF control ; 1: Vectorized VF control ; 2: Open loop vector control 1 ; 3: High performance open loop vector control 2
Maximum frequency	0-650Hz
Multi-functions	PID Control, Carrier Frequency Adjustable, Current Limiter, Speed Search, Momentary Power Loss Restart, 16 Step Speed (Max), 3-Wire connection, Slip Compensation, Frequency Jump, DC braking, Upper/Lower Frequency, Torque control, Compatible for PMSM and IM, built in RS485, counting, fault information checking, fully fault protection function, frequency combination reference.

Models specification

SN	Models	Rate current	Output voltage (3PH VAC)	Applicable for pumps	External of drive size(mm)	MPPT voltage (VDC)	Weight (kgs)
Mini type 2S series : 150 to 400 VDC or 200 to 240VAC input, (MPPT 280 to 375VDC)							
1	SG100-0K75GB-2S	4A	220V/240V	0.75KW	170*110*70	260 to 375	1.0
2	SG300-0K75GB-2S-M	4A	220V/240V	0.75KW	143*86*114	260 to 375	1.5
3	SG300-1K5GB-2S-M	7A	220V/240V	1.5KW	143*86*114	260 to 375	1.5
Mini type 4T series : 350 to 800 VDC or 380 to 440 VAC (MPPT 486 to 750VDC)							
4	SG300-0K7GB-4T-M	2.5A	380V-440V	0.75KW	143*86*114	486 to 750	1.5
5	SG300-1K5GB-4T-M	3.7A	380V-440V	1.5KW	143*86*114	486 to 750	1.5
6	SG300-2K2GB-4T-M	5A	380V-440V	2.2KW	143*86*114	486 to 750	1.5
General type 2S series : 150 to 400 V DC or 200 to 240 VAC input, (MPPT 280 to 375VDC)							
7	SG320-0K7GB-2S	4A	220V/240V	0.75KW	185*125*159	260 to 375	2.0
8	SG320-1K5GB-2S	7A	220V/240V	1.5KW	185*125*159	260 to 375	2.0
9	SG320-2K2GB-2S	10A	220V/240V	2.2KW	185*125*159	260 to 375	2.5
10	SG320-4K0GB-2S	16A	220V/240V	4.0KW	245*150*177	260 to 375	3.5
General type 4T series : 350 to 800 VDC or 380 to 440VAC input, (MPPT 486 to 750VDC)							
11	SG320-0K7GB-4T	2.5A	380V-440V	0.75KW	185*125*159	486 to 750	2
12	SG320-1K5GB-4T	3.7A	380V-440V	1.5KW	185*125*159	486 to 750	2
13	SG320-2K2GB-4T	5A	380V-440V	2.2KW	185*125*159	486 to 750	2
14	SG320-4K0GB-4T	10A	380V-440V	4.0KW	185*125*159	486 to 750	2.5
15	SG320-5K5GB-4T	13A	380V-440V	5.5KW	245*150*177	486 to 750	3.5
16	SG320-7K5GB-4T	17A	380V-440V	7.5KW	245*150*177	486 to 750	4
17	SG320-011GB-4T	22A	380V-440V	11KW	247*160*178	486 to 750	5
18	SG320-015GB-4T	30A	380V-440V	15KW	247*160*178	486 to 750	5
19	SG320-018GB-4T	37A	380V-440V	18KW	335*217*190	486 to 750	10
20	SG320-022GB-4T	45A	380V-440V	22KW	335*217*190	486 to 750	18
21	SG320-030GB-4T	60A	380V-440V	30KW	432*285*225	486 to 750	18
22	SG320-037GB-4T	75A	380V-440V	37KW	432*285*225	486 to 750	29
23	SG320-045GB-4T	90A	380V-440V	45KW	600*385*270	486 to 750	29
24	SG320-055GB-4T	110A	380V-440V	55KW	600*385*270	486 to 750	29
25	SG320-075GB-4T	150A	380V-440V	75KW	700*473*307	486 to 750	43
26	SG320-090GB-4T	180A	380V-440V	90KW	700*473*307	486 to 750	47
27	SG320-110GB-4T	220A	380V-440V	110KW	930*579*375	486 to 750	90
28	SG320-132GB-4T	260A	380V-440V	132KW	930*579*375	486 to 750	100
29	SG320-160GB-4T	320A	380V-440V	160kw	930*579*375	86 to 750	130

SG300 /SG320 series solar pump drive dimensions



Mini type Fig 1

General type Fig 2

Power	H	H1	W	W1	D	D1	Hole
0.4~1.5KW	143	132	86	74	114	62.5	Ø4.5

Power (3 phase 380V output)	H	H1	W	W1	D	D1	Hole
0.75~4KW	185	173	125	115	159	79	Ø5
5.5~7.5KW	244	232	150	136	176.5	93	Ø5
11kw -15kw	247	235	160	147	178	101	Ø5

Power (3 phase 380V output)	Inverter size				Install size/ hole		
	W	H1	H	D	A	B	Hole
SG320-018GB-4T	217	335	305	150	140	323	Φ6
SG320-022GB-4T							
SG320-030GB-4T	285	463	432	225	235	447	Φ8
SG320-037GB-4T							
SG320-045GB-4T	385	600	550	270	260	580	Φ10
SG320-055GB-4T							
SG320-075GB-4T	473	700	660	307	343	678	Φ10
SG320-90GB-4T							
SG320-110GB-4T	579	930	880	375	449	905	Φ10
SG320-132GB-4T							
SG320-160GB-4T							
185kw to 280kw (option)	650	1060	983	377	420	1030	Φ12
315kw to 500kw (option)	800	1358	1203	400	520	1300	Φ14