

Form



Product Service

Data form for electrical and electronic equipment/components

Aufbauübersicht für elektrische und elektronische Geräte/Komponenten

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Applicant / Auftraggeber:	SINENG ELECTRIC CO., LTD. No.6 Hehui Road, Huishan District 214174 Wuxi City PEOPLE'S REPUBLIC OF CHINA		
Manufacturer / Hersteller:	SINENG ELECTRIC CO., LTD. No.6 Hehui Road, Huishan District 214174 Wuxi City PEOPLE'S REPUBLIC OF CHINA		
Authorized person / Bevollmächtigter	Tao Su		
Factory / Fertigungsstätte:	SINENG ELECTRIC CO., LTD. No.6 Hehui Road, Huishan District 214174 Wuxi City PEOPLE'S REPUBLIC OF CHINA		
Type of equipment / Geräteart:	Grid-connected PV Inverter		
Type/model / Typenbezeichnung:			
Serial no. / Seriennr.:	N/A		
Rated voltage/frequency / Nennspannung/Frequenz:	See rating labels		
Rated input power/current / Nennaufnahme/Nennstrom:	See rating labels		
Connection to water installation / Anschlussdaten-Wasser:	N/A		
Dimensions / Abmessungen [HxWxD / HxBxT]:	[mm / cm / m]		
Weight / Gewicht:	72 [kg]		
Noise emission / Lärmemission:	<80 [dB(A)]		
Ambient temperature / Umgebungstemperatur	min.:	-30 °C max.: 60 °C	<input checked="" type="checkbox"/>
Operation / Einsatz:	< 2,000 m above sea level	/	< 2.000 m üNN <input type="checkbox"/>
	up to m	/ bis zu m	<input checked="" type="checkbox"/>
Classification of installation and use /: Installation und Nutzung	Stationary	Ortsfest	<input checked="" type="checkbox"/>
	Portable	Ortsveränderlich	<input type="checkbox"/>
	Hand-held	Handgerät	<input type="checkbox"/>
	Open-frame	Einbaugerät	<input type="checkbox"/>
Protection class / Schutzklasse:	I:	PE-connection	Schutzleiteranschluss <input checked="" type="checkbox"/>
	II:	Double insulation	Schutzisoliert <input type="checkbox"/>
	III:	SELV / internally powered	Schutzkleinspannung / interne Stromversorgung <input type="checkbox"/>
Degree of protection / Schutzart /:	IP	65	<input checked="" type="checkbox"/>
Degree of pollution / Verschmutzungsgrad:	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/> (Internal)	3 <input checked="" type="checkbox"/> (External) 4 <input type="checkbox"/>

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Overvoltage category / Überspannungskategorie: I II (PV) III (Mains) IV

Supply connection / Anschlussart: Nondetachable cord Feste Anschlussleitung
Permanent connection Fester Anschluss
Appliance inlet Gerätesteckvorrichtung
Pluggable equipment Gerätesteckvorrichtung

Rated operation / Netzbetriebsart: Continuous operation Dauerbetrieb
Intermittent operation Aussetzbetrieb
Short time operation Kurzzeitbetrieb

Additional information for Laser equipment, classification according to IEC/EN 60825

Zusätzliche Angaben für Laser, Klassifizierung nach IEC/EN 60825

Class / Klasse: N/A
Wavelength / Wellenlänge: N/A
Pulse duration / Pulsdauer: N/A

Safety relevant components: (switches, temperature regulators, heating elements, plugs, sockets, wiring, capacitors, motors and other components with windings e.g. transformers, coils, emergency off devices, 2-hand-control-devices, interlock switches, safety light barriers, safety valves, programmable electronic controllers -PLC, hydraulic controllers, pneumatic controllers, Software (Revision), housing parts, materials with contact to food etc.

Components for Functional Safety shall be listed in appropriate table.

The entry of safety relevant components into this table documents and confirms review of suitability and acceptance by the product specialist.

Sicherheitsrelevante Bauteile: (Schalter, Temperaturregler, Heizkörper, Stecker, Fassungen, Leitungen, Kondensatoren, Motoren und sonstige Wicklungen z.B. Transformatoren, Magnetspulen, Not-Aus Geräte, 2-Handsteuerungen, Verriegelungsschalter, Sicherheits-Lichtschränke, Sicherheitsventile, programmierbare Steuerungen-SPS, hydraulische Steuerungen, pneumatische Steuerungen, Software (Revisionsstand), Gehäuseteile, Materialien mit Kontakt zu Lebensmitteln usw.

Komponenten für Funktionale Sicherheit müssen in die entsprechende Tabelle eingetragen werden.

Der Eintrag sicherheitsrelevanter Komponenten in die Übersicht dokumentiert und bestätigt die Überprüfung der Eignung und Freigabe durch den „Product Specialist“.

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Note: Different assemblies may be separated by a blank line and a superscription
Anmerkung: Unterschiedliche Baugruppen können durch eine Leerzeile und Überschrift getrennt werden.

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object/part No.	manufacturer/trademark	type/model	technical data	Standard	mark(s) of conformity
DC Switch	Beijing People's Electric Plant Co., Ltd.	GHX5-32P/4P	1100V, 32A, 85°C	EN 60947-3, EN 60947-1	TUV (B 17 10 83266 036)
-Alt.	Beijing People's Electric Plant Co., Ltd.	GHX5-32P/4P	1100V, 30A, 85°C	AS 60947.3:2018	AZ 69025462
-Alt.	Zhejiang Benyi Electrical Co., Ltd.	BYSS.1-32T-4P	1000V, 32A, 85°C	EN 60947-3	TUV (R 50425301)
-Alt.	Shanghai Liangxin Electrical Co., Ltd.	NDG3V-50 (H)	1100V, 32A, 85°C	EN 60947-3, EN 60947-1	TUV (B 083574 0316)
-Alt.	Santon International BV	XBCH-3410-2-D	1000V, 50A, 85°C	EN 60947-3	TUV (R 50436324)
Inductor	Click	SN28PTL1-CLK	Class F	IEC 62019-1, IEC 62109-2	No (Test with unit)
-Alt.	HaiGuang	SN28PTL1-HG	Class F	IEC 62019-1, IEC 62109-2	No (Test with unit)
-Alt.	Teng Ran	SN28PTL1-TR	Class F	IEC 62019-1, IEC 62109-2	No (Test with unit)
-Core	KDM	S6340L-3424L-E 66-060-HF	Fe-Si-Al	IEC 62019-1, IEC 62109-2	No (Test with unit)
-Alt.	KDM	S6350L-4024L-E 69-060-HF	Fe-Si-Al	IEC 62019-1, IEC 62109-2	No (Test with unit)
-Alt.	POCO	NPH6331210814V 5-75 P36GV	Fe-Si-Al	IEC 62019-1, IEC 62109-2	No (Test with unit)
-Alt.	POCO	NPH6335210815V 5-75 P36GV	Fe-Si-Al	IEC 62019-1, IEC 62109-2	No (Test with unit)
-Glue	Dongguan City Jia Di New Materials Co., Ltd.	JD-605	V-0, 150°C	UL 94	UL (E485392)
-Terminal	Changshu Guangda Tianlichang	RNB5.5-4, RNB5.5-4-90D	Cu	IEC 62019-1, IEC 62109-2	No (Test with unit)
-Magnet Wire	Wuxi Youfaun Electric Co., Ltd.	ANSI Type MW 36-C	200°C	UL 1446	UL (E343483))
-Alt.	Tongling Jingda Special Magnet Wire Co., Ltd.	ANSI Type MW 36-C	200°C	UL 1446	UL (E223994)
-Alt.	Guangzhou Tianshun Electric Equipment Co., Ltd.	ANSI Type MW 36-C	200°C	UL 1446	UL (E210986)

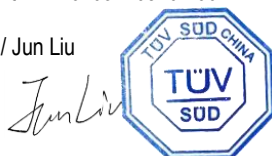
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-Lead Wire	3q Wire & Cable Co., Ltd.	10269	10AWG, 105°C	UL 758	UL (E341104)
-Alt.	Qifurui Electronics Co	10269	10AWG, 105°C	UL 758	UL (E211048)
-Alt.	Zhuhai Jingdeshun Technology Co., Ltd.	10269	10AWG, 105°C	UL 758	UL (E511656)
-Tape	Jingjiang Yahua Pressure Sensitive Glue Co., Ltd	PF-301	180°C	UL 510	UL (E165111)
- Press Boards	Fu Wei Insulation Technology Co Ltd	NMN	200°C	UL 1446	UL (E469673)
-Alt.	Sui On Insulating Materials Co Ltd	NMN	200°C	UL 1446	UL (E230926)
-Varnish	Yueyang Green Technology Co., Ltd	JX-1160*	180°C	UL 1446	UL (E328930)
-Tube	Changyuan Electronics Group Co Ltd	CB-HFT	600V, 125°C	UL 224	UL (E180908)
-Base	E I Dupont De Nemours & Co Inc	FR530	Polyethylene Terephthalate (PET), V-0, 155°C	UL 94, UL 746C	UL (E41938)
AC Terminal block	SuZhou Luyi Electronic Technology Co., Ltd.	G-Y2HT05	1000V, 75A, 80°C	EN 60998-2-1, EN 60998-1, EN 62444	CE (N8A 107880 0006)
Internal connecting wires for DC input	3Q Wire & Cable Co., Ltd.	10269	12AWG, 1000 Vac or 1250 Vdc, 105°C	UL 758	UL (E341104)
-Alt.	Hichain Electricity (Zhaoqing) Co., Ltd.	10269	12AWG, 1000 Vac or 1250 Vdc, 105°C	UL 758	UL (E304337)
IGBT (Q1, Q2, Q3, Q4)	ON Semiconductor	NGTB40N120FL3WG	1200V, 40A	IEC 62019-1, IEC 62109-2	No (Test with unit)
-Alt.	NCE power	NCE40TD120VTP	1200V, 40A	IEC 62019-1, IEC 62109-2	No (Test with unit)
-Alt.	Fuji Electric Co., Ltd.	FGW40XS120C	1200V, 40A	IEC 62019-1, IEC 62109-2	No (Test with unit)
-Alt.	Infineon	IKW40N120H3	1200V, 40A	IEC 62019-1, IEC 62109-2	No (Test with unit)
-Alt.	ST	STGWA40H120DF2	1200V, 40A	IEC 62019-1, IEC 62109-2	No (Test with unit)

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Diode (D9, D10)	ST	STPSC30H12CWL	1200V, 30A	IEC 62019-1, IEC 62109-2	No (Test with unit)
-Alt.	Xiamen Sanan	SDS120J030G2	1200V, 30A	IEC 62019-1, IEC 62109-2	No (Test with unit)
-Alt.	Infineon	IDW30G120C5B	1200V, 30A	IEC 62019-1, IEC 62109-2	No (Test with unit)
-Alt.	ON Semiconductor	FFSH30120ADN	1200V, 30A	IEC 62019-1, IEC 62109-2	No (Test with unit)
-Alt.	Cree	C4D30120D	1200V, 30A	IEC 62019-1, IEC 62109-2	No (Test with unit)
-Alt.	Basic	B1D30120HC	1200V, 30A	IEC 62019-1, IEC 62109-2	No (Test with unit)
IGBT (Q11, Q12, Q13, Q14, Q15, Q16)	ON Semiconductor	FGY75T120SQDN	1200V, 75A	IEC 62019-1, IEC 62109-2	No (Test with unit)
-Alt.	NCE power	NCE75TD120VTP	1200V, 75A	IEC 62019-1, IEC 62109-2	No (Test with unit)
-Alt.	Renesas	RBN75H125S1FP4	1250V, 75A	IEC 62019-1, IEC 62109-2	No (Test with unit)
IGBT (Q5, Q6, Q7, Q8, Q9, Q10)	Infineon	IKW75N65ES5	650V, 75A	IEC 62019-1, IEC 62109-2	No (Test with unit)
-Alt.	ON Semiconductor	FGH75T65SHD_F155	650V, 75A	IEC 62019-1, IEC 62109-2	No (Test with unit)
-Alt.	NCE power	NCE80TD65BT	650V, 80A	IEC 62019-1, IEC 62109-2	No (Test with unit)
-Alt.	Infineon	IKW50N65ES5	650V, 50A	IEC 62019-1, IEC 62109-2	No (Test with unit)
-Alt.	NCE power	NCE60TD65BT	650V, 60A	IEC 62019-1, IEC 62109-2	No (Test with unit)
-Alt.	KEC	KGF50N65KDF	650V, 50A	IEC 62019-1, IEC 62109-2	No (Test with unit)
-Alt.	KEC	KGF75N65KDF	650V, 75A	IEC 62019-1, IEC 62109-2	No (Test with unit)
-Alt.	Renesas	RBN50H65T1FPQ	650V, 50A	IEC 62019-1, IEC 62109-2	No (Test with unit)
-Alt.	Renesas	RBN75H65T1FPQ	650V, 75A	IEC 62019-1, IEC 62109-2	No (Test with unit)
Inside Fan	Asia Vital Components Co., Ltd.	DBTB1225B2HP062	12V, 0.75A, 85°C	EN 62368-1	TUV (B 0257300887)
-Alt.	MinebeaMitsumi Inc	11925SA-12P-BWE-1	12V, 0.75A, 85°C	UL 507	UL (E89936)

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Heatsink	Dihaote	-	W335mm by H253mm by D106.5mm	IEC 62019-1, IEC 62109-2	No (Test with unit)
-Alt.	Huashengyuan	-	W335mm by H253mm by D106.5mm	IEC 62019-1, IEC 62109-2	No (Test with unit)
-Alt.	Shirongguang	-	W335mm by H253mm by D106.5mm	IEC 62019-1, IEC 62109-2	No (Test with unit)
-Alt.	Wenxuan	-	W335mm by H253mm by D106.5mm	IEC 62019-1, IEC 62109-2	No (Test with unit)
-Alt.	Honglian	-	W335mm by H253mm by D106.5mm	IEC 62019-1, IEC 62109-2	No (Test with unit)
DC Input terminal	Vaconn	VP-D4B-PHSF0	1100V, 35A, 85°C	EN 62852	TUV (R 50396796)
-Alt.	Vaconn	VP-D4B-PHSM0	1100V, 35A, 85°C	EN 62852	TUV (R 50396796)
-Alt.	Amphenol	H4LMB0TM	1000V, 31A, 85°C	EN 62852	TUV (R50157783)
-Alt.	Amphenol	H4LFB0TM	1000V, 31A, 85°C	EN 62852	TUV (R50157783)
PCB material	Huizhou Glorysky Electronics Co., Ltd	FR-4	V-0, 130°C	UL 796	UL (E257384)
-Alt.	Shenzhen Jove Enterprise Ltd	JVE-D2 JVE-M2	V-0, 130°C	UL 796	UL (E232940)
-Alt.	Shenzhen King Brother Electronics Technology Co., Ltd.	KB-06 KB-07	V-0, 130°C	UL 796	UL (E225430)
-Alt.	Shen Zhen Sun & Lynn Circuits Co., Ltd	SL-D SL-M	V-0, 130°C	UL 796	UL (E234156)
Metal enclosure	DIHAOTE	Aluminium alloy	Min thick. 2.0mm, Enclosure Dimension: W 580mm by H 430mm by D 295mm	IEC 62019-1, IEC 62109-2	No (Test with unit)
-Alt.	WEIRUN	Aluminium alloy	Min thick. 2.0mm, Enclosure Dimension: W 580mm by H 430mm by D 295mm	IEC 62019-1, IEC 62109-2	No (Test with unit)
Current sensor of DC side T1, T2	Sinomags Technology Co., Ltd.	STK-32HD/K	5V, 32A	UL 508	UL (E507664)
-Alt.	LEM	HLSR 32-P	5V, 32A	IEC 62019-1, IEC 62109-2	No (Test with unit)

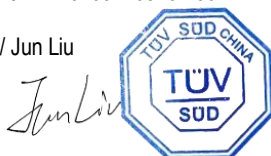
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-Alt.	Sinomags Technology Co., Ltd.	STK-32PL	5V, 32A	UL 508	UL (E507664)
DC SPD (MOV4)	PTG Corporation	PV 500-20M2-10	500Vdc, In:10kA, 70°C	EN 61643-11	TUV (B 17 01 88817 016)
-Alt.	Xiamen Set Electronics Co., Ltd.	TFMOV25S621	505Vdc, In:10kA, 70°C	EN 61643-11	TUV (J 50210179)
-Alt.	Shenzhen Haipengxin Electronics Co., Ltd	PV20K-500	500Vdc, In:10kA, 85°C	UL 1449	UL (E321856)
-Alt.	TDK	B72220S2511K101 (S20K510E2)	670Vdc, In:5kA, 85°C	UL 1449	UL (E321126)
DC SPD (MOV1, MOV2, MOV3)	Shenzhen Haipengxin Electronics Co., Ltd	PV20K-670	670Vdc, In:10kA, 85°C	UL 1449	UL (E321856)
-Alt.	Xiamen Set Electronics Co., Ltd.	TFMOV25S821B	670Vdc, In:10kA, 70°C	EN 61643-11	TUV (J 50210179)
-Alt.	PTG Corporation	PV 670-20M2-10	670Vdc, In:10kA, 70°C	EN 61643-11	TUV (B 17 01 88817 016)
Y Cap. C298, C299, C300, C301, C302, C303, C304, C305, C306)	TDK Corporation	CD45-B2GA471K-NKA	Rated 470pF, 400Vac, Y1 type, 85°C	UL 60384-14	UL (E37861)
-Alt.	Murata Mfg. Co., Ltd	DE1B3KX471KA4BN01 F	Rated 470pF, 300Vac, Y1 type, 125°C	EN 60384-14	VDE (40002831)
-Alt.	Welson Industrial Co., Ltd.	HYWD471K2GY5P00LE Y1	Rated 470pF, 400Vac, Y1 type, 125°C	UL 60384-14	UL (E104572)
Y Cap. (C87, C88, C89, C90, C91, C109, C110, C111, C112, C113, C114, C115, C116, C120)	TDK Corporation	CD45-E2GA472M-NKA	Rated 470pF, 400Vac, Y1 type, 125°C	UL 60384-14	UL (E37861)
-Alt.	Welson Industrial Co., Ltd	HYWD472M2GY5U00L E	Rated 470pF, 400Vac, Y1 type, 125°C	UL 60384-14	UL (E104572)
BUS Cap (C199, C200, C201, C202, C203, C204)	Xiamen Faratronic Co., Ltd	C3D1U147KM0AC00	600V, 140uF, 105°C	UL 810	UL (E256238)
-Alt.	Sichuan Zhongxing Electronic Co., Ltd	C60B147K1UG05000	600V, 140uF, 105°C	IEC 62019-1, IEC 62109-2	No (Test with unit)
-Alt.	Wuxi Cre New	DPS1470600K422101	600V, 140uF, 105°C	UL 810	UL (E496566)

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	Energy Technology Co., Ltd.				
Current sensor of T1, T2, T3 AC side	Sinomags	STK-50PL/A	5V, 50A	UL 508	UL (E507664)
-Alt.	CRRC	NACA.50T-P6VN	5V, 50A	IEC 62019-1, IEC 62109-2	No (Test with unit)
-Alt.	LEM	HLSR 50-P	5V, 50A	IEC 62019-1, IEC 62109-2	No (Test with unit)
AC SPD (R576, R577, R578)	PTG Corporation	PE 385-20M2-10	385Vac, In:10kA, 70°C	EN 61643	TUV (B 17 01 88817 016)
-Alt.	Xiamen Set Electronics Co., Ltd.	TFMOV25S621B-IT	385Vac, In:10kA, 80°C	UL 1449	UL (E322662)
-Alt.	TDK	B72220S0511K101 (S20K510)	510Vac In: 3kA, 105°C	UL 1449	UL (E321126)
-Alt.	Thinking Electronic Industrial Co., Ltd.	TVR20821KSY	510Vac, In: 5kA, 105°C	UL 1449	UL (E314979)
AC SPD (R579)	SET	TFMOV25S821B-IT	510Vac, In:10kA, 80°C	UL 1449	UL (E322662)
-Alt.	PTG Corporation	PE 510-25M2-10R	510Vac, In:10kA, 70°C	EN 61643	TUV (B 17 01 88817 016)
Gas tube	Yageo Corp	2RM600L-8	600Vdc, 10kA, 85°C	UL 1449	UL (E504762)
-Alt.	TDK	B88069X6461S102	600Vdc, 5kA, 85°C	UL 1449	UL (E319264)
-Alt.	TDK	B88069X2641S102	800Vdc, 5kA, 85°C	UL 1449	UL (E319264)
-Alt.	Citel America Inc	BHS600V/20	600Vdc, 10kA, 85°C	UL 1449	UL (E326289)
-Alt.	Citel America Inc	BHS800V/15	800Vdc, 10kA, 85°C	UL 1449	UL (E326289)
LC Cap (C86, C87, C88)	Panasonic	EZPQ38805LTB	380Vac, 8uF, 105°C	IEC 62019-1, IEC 62109-2	No (Test with unit)
Relay (RLY12, RLY13, RLY14, RLY15, RLY16, RLY17)	Dongguan Churod	CHS01-V-112HA2(43G)	12Vdc, 43A, 277Vac, 85°C	EN 61810-1	TUV (R 50271657)
-Alt.	SongChuan	220-BH1AH1-F-C	12Vdc, 60A, 250Vac, 85°C	EN 61810-1	TUV (R 50503687)
X Cap. (C83, C84, C85)	Xiamen Faratronic Co Ltd	C4BG2225KB2C450	Rated 2.2uF, 400Vac, X2 type, 85°C	UL 60384-14	UL (E186600)
Common	ZhongYan	SN25PTL3_ZY	Class B	IEC 62019-1,	No (Test with

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Mode Inductor (L13)				IEC 62109-2	unit)
-Alt.	Click	SN25PTL3_CLK	Class B	IEC62019-1	No (Test with unit)
-Core	China Amorphous Technology Co., Ltd	NANO CRYSTALLINE	NC-0177-L-S-02 (45*30*15)	IEC 62019-1, IEC 62109-2	No (Test with unit)
-Magnet Wire	Tongling Jingda Special Magnet Wire Co., Ltd	QZY -* /180	180°C	UL 1446	UL (E223994)
-Alt.	Ningbo Jintian New Material Co., Ltd	*EI/AIW/180 Q(ZY/XY)-*/180	180°C	UL 1446	UL (E227047)
-Spacer	Kingboard Laminates Holdings Ltd	FR-4	130°C	UL 94, UL 746	UL (E123995)
-Tube	Dongguan City Changjie Metals & Plastic Products Co., Ltd	CJ-TT-L, CJ-TT-T	200°C	UL 224	UL (E338209)
-Adhesive	Dongguan Topkey Electronic Co., Ltd	G610A/B	V-0, 130°C	UL 94	UL (E356931)
-Alt.	Wuxi Jialine Electronic Materials Co., Ltd	5201A/B	V-0, 130°C	UL 94	UL (E308923)
-Insulating Paper	Dupont Specialty Products Usa, Llc	410	V-0, 220°C	UL 94	UL (E34739)
-Alt.	Yantai Metastar Special Paper Co., Ltd	YT510	V-0, 210°C	UL 94	UL (E331406)
Isolation transformer (T8)	Click	SP25KT2-CLK	Class B	IEC 62019-1, IEC 62109-2	No (Test with unit)
-Core	ZheJiangGanCi	ACP44	EI33	IEC 62019-1, IEC 62109-2	No (Test with unit)
-Alt.	TDG	TP4A	EI33	IEC 62019-1, IEC 62109-2	No (Test with unit)
-Alt.	Sunshine	SSP-44	EI33	IEC 62019-1, IEC 62109-2	No (Test with unit)
-Bobbin	SUMITOMO BAKELITE Co., Ltd	PM-9823	Phenolic (PF), V-0, 150°C	UL 94	UL (E41429)
-Alt.	SUMITOMO BAKELITE Co., Ltd	PM-9820	Phenolic (PF), V-0, 150°C	UL 94	UL (E41429)
-Alt.	SUMITOMO BAKELITE Co., Ltd	PM-9630	Phenolic (PF), V-0, 150°C	UL 94	UL (E41429)
-Triple Insulation Wire	Great Leoflon Industrial Co., Ltd	TRW(B)	130°C	UL 2353	UL (E211989)

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Place / Ort: Suzhou

Date / Datum: 2022-08-20

Name of Project manager / Jun Liu
Name Projektleiter:



Name, seal and signature of Certificate Holder /
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Product Service

Data form for electrical and electronic equipment/components

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-Alt.	Wuhu Ouly Electronics Co., Ltd	OLTIW-B	130°C	UL 2353	UL (E466302)
-Alt.	Shanghai Xiangxiang Electron Co., Ltd	TKW-B	130°C	UL 2353	UL (E308908)
-Tape	Jingjiang Yahua Pressure Sensitive Glue Co., Ltd	CT, PZ	130°C	UL 510	UL (E165111)
-Alt.	Jingjiang Jingyi Adhesive Product Co., Ltd	JY25-A (b)	130°C	UL 510	UL (E246950)
-Varnishes	Yueyang Green Technology Co., Ltd	JX-1150*	155°C	UL 1446	UL (E303754)
-Alt.	Elantas Zhuhai Co., Ltd	5183SW	155°C	UL 1446	UL (E314793)
-Epoxy	Dongguan Eatto Electronic Material Co., Ltd	E-500 (XX)	V-0, 130°C	UL 94	UL (E218090)
-Magnet Wire	Tai-I Electric Wire & Cable Co., Ltd	ANSI Type MW 75-C	130°C	UL 1446	UL (E85640)
-Alt.	Feng Ching Metal Corp	ANSI Type MW 75-C	130°C	UL 1446	UL (E172395)
-Alt.	Heng Ya Electric (Dongguan) Ltd	ANSI Type MW 75-C	130°C	UL 1446	UL (E197768)
-Tube	Changyuan Electronics Group Co., Ltd	CB-TT-L	200°C	UL 224	UL (E180908)
-Alt.	Dongguan City Changjie Metals & Plastic Products Co., Ltd	CJ-TT-L	200°C	UL 224	UL (E338209)
Current sensor of GFCI T9	Sinomags	STK-1.0P/M1T	5V, 0.3A	UL 508	UL (E507664)
Isolation transformer (T1)	Click	SP25KHAT1-CLK	Class F	IEC 62019-1, IEC 62109-2	No (Test with unit)
-Core	ZheJiangGanCi	ACP40	ER2828	IEC 62019-1, IEC 62109-2	No (Test with unit)
-Alt.	Lianfeng	NH2B	ER2828	IEC 62019-1, IEC 62109-2	No (Test with unit)
-Alt.	Zhongde	ZP40	ER2828	IEC 62019-1, IEC 62109-2	No (Test with unit)
-Bobbin	SUMITOMO BAKELITE Co., Ltd	PM-9823	Phenolic (PF), V-0, 150°C	UL 94	UL (E41429)
-Alt.	SUMITOMO BAKELITE Co., Ltd	PM-9820	Phenolic (PF), V-0, 150°C	UL 94	UL (E41429)

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-Alt.	SUMITOMO BAKELITE Co., Ltd	PM-9630	Phenolic (PF), V-0, 150°C	UL 94	UL (E41429)
-Triple Insulation Wire	Great Leoflon Industrial Co., Ltd	TRW(B)	130°C	UL 2353	UL (E211989)
-Alt.	Wuhu Ouly Electronics Co., Ltd	OLTIW-B	130°C	UL 2353	UL (E466302)
-Alt.	Furukawa Electric Co., Ltd.	TEX-E	130°C	UL 2353	UL (E206440)
-Tape	Jingjiang Yahua Pressure Sensitive Glue Co., Ltd	PF	180°C	UL 510	UL (E165111)
-Alt.	Jingjiang Jingyi Adhesive Product Co., Ltd	J16	180°C	UL 510	UL (E246950)
-Varnishes	Yueyang Green Technology Co., Ltd	JX-1150*	155°C	UL 1446	UL (E303754)
-Alt.	Elantas Zhuhai Co., Ltd	5183SW	155°C	UL 1446	UL (E314793)
-Epoxy	Dongguan Eatto Electronic Material Co., Ltd	E-500 (XX)	V-0, 130°C	UL 94	UL (E218090)
-Magnet Wire	Tai-I Electric Wire & Cable Co., Ltd	ANSI Type MW 79-C, MW 80-C	Min. 155°C	UL 1446	UL (E85640)
-Alt.	Feng Ching Metal Corp	ANSI Type MW 79-C, MW 80-C	Min. 155°C	UL 1446	UL (E172395)
-Alt.	Heng Ya Electric (Dongguan) Ltd	ANSI Type MW 79-C, MW 80-C	Min. 155°C	UL 1446	UL (E197768)
-Tube	Changyuan Electronics Group Co., Ltd	CB-TT-L	200°C	UL 224	UL (E180908)
-Alt.	Dongguan City Changjie Metals & Plastic Products Co., Ltd	CJ-TT-L	200°C	UL 224	UL (E338209)
Current sensor of T1, T2 DC side	Sinomags Technology Co., Ltd.	STK-25CTS/P	5V, 25A	UL 508	UL (E507664)
-Alt.	CRRC	NACA.25S-P6/VN	5V, 25A	IEC 62019-1, IEC 62109-2	No (Test with unit)
Y Cap. (C30, C31, C32, C33, C34, C35, C36, C37)	TDK Corporation	CD45-B2GA471K-NKA	Rated 470pF, 400Vac, Y1 type, 85°C	UL 60384-14	UL (E37861)
-Alt.	Murata Mfg Co., Ltd.	DE1B3KX471KA4BN01 F	Rated 470pF, 300Vac, Y1 type,	UL 60384-14	UL (E37921)

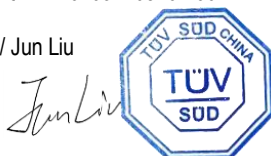
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			125°C		
-Alt.	Welson Industrial Co., Ltd	HYWD471K2GY5P00L	Rated 470pF, 400Vac, Y1 type, 125°C	UL 60384-14	UL (E104572)
DSP1 (U1)	TI	TMS320F28377DPTPT	3.3Vdc, 32-Bit CPU, 200MHz, -40°C to 105°C	IEC 62019-1, IEC 62109-2	No (Test with unit)
-Alt.	TI	TMS320F28379DPTPT	3.3Vdc, 32-Bit CPU, 200MHz, -40°C to 105°C	IEC 62019-1, IEC 62109-2	No (Test with unit)
DSP2 (U2)	TI	TMS320F280023PMSR	3.3Vdc, 32-Bit DSP, 100MHz, -40°C to 125°C	IEC 62019-1, IEC 62109-2	No (Test with unit)
ARM (U1)	ST	STM32F407VGT7	3.3Vdc, 32-Bit MCU+FPU, 168MHz, -40°C to 85°C	IEC 62019-1, IEC 62109-2	No (Test with unit)

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Data form for electrical and electronic equipment/components

Aufbauübersicht für elektrische und elektronische Geräte/Komponenten

Label / Typenschild

SINENG

型号 (Model): SN12PT-X

名称 光伏并网逆变器
Name GRID-CONNECTED PV INVERTER

直流输入 DC-Input

最大输入电压 Max. Input Voltage	1100 Vd.c.
最大输入电流 Max. Input Current	32/20 Ad.c.
输入短路电流 Isc PV Current	50/25 Ad.c.
MPPT电压范围 MPPT Voltage Range	140-1000 Vd.c.

交流输出 AC-Output

额定输出电压 Rated Output Voltage	3/N/PE 230/400 Va.c.
额定输出功率 Rated Output Power	12 kW
最大视在功率 Max. Output Apparent Power	13.2 kVA
最大输出电流 Max. Output Current	19.1 Aa.c.
功率因数范围 Power Factor Range	0.8(leading)-0.8(lagging)

保护等级 I
防护等级 IP66
Ingress Protection
工作温度范围 -25°C~+60°C
过电压等级 III [AC], II [DC]
Overvoltage Category

序列号SN: 中国制造 MADE IN CHINA
上能电气股份有限公司
SINENG ELECTRIC CO., LTD.
地址: 无锡市惠山区和惠路6号
ADD: NO.6, Hehui Road, Huishan District, Wuxi

SINENG

型号 (Model): SN15PT

名称 光伏并网逆变器
Name GRID-CONNECTED PV INVERTER

直流输入 DC-Input

最大输入电压 Max. Input Voltage	1100 Vd.c.
最大输入电流 Max. Input Current	32/20 Ad.c.
输入短路电流 Isc PV Current	50/25 Ad.c.
MPPT电压范围 MPPT Voltage Range	140-1000 Vd.c.

交流输出 AC-Output

额定输出电压 Rated Output Voltage	3/N/PE 230/400 Va.c.
额定输出功率 Rated Output Power	15 kW
最大视在功率 Max. Output Apparent Power	16.5 kVA
最大输出电流 Max. Output Current	23.9 Aa.c.
功率因数范围 Power Factor Range	0.8(leading)-0.8(lagging)

保护等级 I
防护等级 IP66
Ingress Protection
工作温度范围 -25°C~+60°C
过电压等级 III [AC], II [DC]
Overvoltage Category

序列号SN: 中国制造 MADE IN CHINA
上能电气股份有限公司
SINENG ELECTRIC CO., LTD.
地址: 无锡市惠山区和惠路6号
ADD: NO.6, Hehui Road, Huishan District, Wuxi

SINENG

型号 (Model): SN17PT

名称 光伏并网逆变器
Name GRID-CONNECTED PV INVERTER

直流输入 DC-Input

最大输入电压 Max. Input Voltage	1100 Vd.c.
最大输入电流 Max. Input Current	32/32 Ad.c.
输入短路电流 Isc PV Current	50/50 Ad.c.
MPPT电压范围 MPPT Voltage Range	140-1000 Vd.c.

交流输出 AC-Output

额定输出电压 Rated Output Voltage	3/N/PE 230/400 Va.c.
额定输出功率 Rated Output Power	17 kW
最大视在功率 Max. Output Apparent Power	18.7 kVA
最大输出电流 Max. Output Current	27.1 Aa.c.
功率因数范围 Power Factor Range	0.8(leading)-0.8(lagging)

保护等级 I
防护等级 IP66
Ingress Protection
工作温度范围 -25°C~+60°C
过电压等级 III [AC], II [DC]
Overvoltage Category

序列号SN: 中国制造 MADE IN CHINA
上能电气股份有限公司
SINENG ELECTRIC CO., LTD.
地址: 无锡市惠山区和惠路6号
ADD: NO.6, Hehui Road, Huishan District, Wuxi

SINENG

型号 (Model): SN20PT

名称 光伏并网逆变器
Name GRID-CONNECTED PV INVERTER

直流输入 DC-Input

最大输入电压 Max. Input Voltage	1100 Vd.c.
最大输入电流 Max. Input Current	32/32 Ad.c.
输入短路电流 Isc PV Current	50/50 Ad.c.
MPPT电压范围 MPPT Voltage Range	140-1000 Vd.c.

交流输出 AC-Output

额定输出电压 Rated Output Voltage	3/N/PE 230/400 Va.c.
额定输出功率 Rated Output Power	20 kW
最大视在功率 Max. Output Apparent Power	22 kVA
最大输出电流 Max. Output Current	31.9 Aa.c.
功率因数范围 Power Factor Range	0.8(leading)-0.8(lagging)

保护等级 I
防护等级 IP66
Ingress Protection
工作温度范围 -25°C~+60°C
过电压等级 III [AC], II [DC]
Overvoltage Category

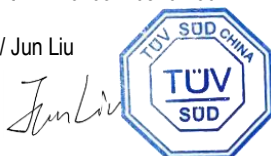
序列号SN: 中国制造 MADE IN CHINA
上能电气股份有限公司
SINENG ELECTRIC CO., LTD.
地址: 无锡市惠山区和惠路6号
ADD: NO.6, Hehui Road, Huishan District, Wuxi

Test Report No. / Prüfbericht Nr.: 704092105401-00

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Data form for electrical and electronic equipment/components

Aufbauübersicht für elektrische und elektronische Geräte/Komponenten

型号 (Model): SN23PT	
名称 光伏并网逆变器 Name GRID-CONNECTED PV INVERTER	
直流输入 DC-Input	
最大输入电压 Max. Input Voltage	1100 Vd.c.
最大输入电流 Max. Input Current	40/32 Ad.c.
输入短路电流 Isc PV Current	50/50 Ad.c.
MPPT电压范围 MPPT Voltage Range	140-1000 Vd.c.
交流输出 AC-Output	
额定输出电压 Rated Output Voltage	3/N/PE 230/400 Va.c.
额定输出频率 Rated Output Frequency	50/60 Hz
额定输出功率 Rated Output Power	23 kW
最大视在功率 Max. Output Apparent Power	25.3 kVA
最大输出电流 Max. Output Current	36.7 Aa.c.
功率因数范围 Power Factor Range	0.8(leading)-0.8(lagging)
保护等级 Protective Class	I
防护等级 Ingress Protection	IP66
工作温度范围 Operating Temperature Range	-25°C~+60°C
过电压等级 Overvoltage Category	III [AC], II [DC]
序列号SN:	
中国制造 MADE IN CHINA 上能电气股份有限公司 SINENG ELECTRIC CO., LTD. 地址: 无锡市惠山区和惠路6号 ADD: NO.6, Hehui Road, Huishan District, Wuxi	

型号 (Model): SN25PT	
名称 光伏并网逆变器 Name GRID-CONNECTED PV INVERTER	
直流输入 DC-Input	
最大输入电压 Max. Input Voltage	1100 Vd.c.
最大输入电流 Max. Input Current	40/32 Ad.c.
输入短路电流 Isc PV Current	50/50 Ad.c.
MPPT电压范围 MPPT Voltage Range	140-1000 Vd.c.
交流输出 AC-Output	
额定输出电压 Rated Output Voltage	3/N/PE 230/400 Va.c.
额定输出频率 Rated Output Frequency	50/60 Hz
额定输出功率 Rated Output Power	25 kW
最大视在功率 Max. Output Apparent Power	27.5 kVA
最大输出电流 Max. Output Current	39.9 Aa.c.
功率因数范围 Power Factor Range	0.8(leading)-0.8(lagging)
保护等级 Protective Class	I
防护等级 Ingress Protection	IP66
工作温度范围 Operating Temperature Range	-25°C~+60°C
过电压等级 Overvoltage Category	III [AC], II [DC]
序列号SN:	
中国制造 MADE IN CHINA 上能电气股份有限公司 SINENG ELECTRIC CO., LTD. 地址: 无锡市惠山区和惠路6号 ADD: NO.6, Hehui Road, Huishan District, Wuxi	

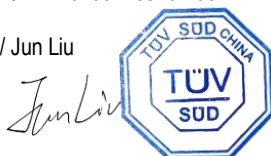
型号 (Model): SN28PT	
名称 光伏并网逆变器 Name GRID-CONNECTED PV INVERTER	
直流输入 DC-Input	
最大输入电压 Max. Input Voltage	1100 Vd.c.
最大输入电流 Max. Input Current	40/32 Ad.c.
输入短路电流 Isc PV Current	50/50 Ad.c.
MPPT电压范围 MPPT Voltage Range	140-1000 Vd.c.
交流输出 AC-Output	
额定输出电压 Rated Output Voltage	3/N/PE 230/400 Va.c.
额定输出频率 Rated Output Frequency	50/60 Hz
额定输出功率 Rated Output Power	28 kW
最大视在功率 Max. Output Apparent Power	28 kVA
最大输出电流 Max. Output Current	40.6 Aa.c.
功率因数范围 Power Factor Range	0.8(leading)-0.8(lagging)
保护等级 Protective Class	I
防护等级 Ingress Protection	IP66
工作温度范围 Operating Temperature Range	-25°C~+60°C
过电压等级 Overvoltage Category	III [AC], II [DC]
序列号SN:	
中国制造 MADE IN CHINA 上能电气股份有限公司 SINENG ELECTRIC CO., LTD. 地址: 无锡市惠山区和惠路6号 ADD: NO.6, Hehui Road, Huishan District, Wuxi	

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Routine Safety Test

Final inspection requirements for production are described in: IEC 62109-1:2010, EN 62109-1:2010,

Required

Not Required

Reason:

Class III product

Other:

Test Details:

Dielectric Strength

Ground Continuity

Insulation Resistance

Leakage Current

Other:

Test Points:

BI: L/N – Chassis

DI: L/N – Secondary

RI: L/N – Secondary

AC-Inlet – Chassis

Test Values:

1500 Vac / 2120 Vdc

 Vac / Vdc

3000 Vac / 4240 Vdc

30 A, 1s, <0.1 Ohm (Ω)

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