

CERTIFICATE

Issued to:

Applicant:

Sigenergy Technology Co., Ltd.
Building 12-2, 678 Yunqiao Road, China (Shanghai)
Pilot Free Trade Zone, Pudong New Area
201206 Shanghai, China

Licensee:

Sigenergy Technology Co., Ltd.
Building 12-2, 678 Yunqiao Road, China (Shanghai)
Pilot Free Trade Zone, Pudong New Area
201206 Shanghai, China

Product : Solar-storage system (NS protection)
Trade name(s) : sigenergy
Type(s)/model(s) : SigenMate 2700 Ultra, SigenMate 2700 Ultra+, SigenMate 2700 Ultra+ AC and SigenMate 2700 Ultra AC

The product and any acceptable variation thereof as specified in the Annex to this certificate and the documents referred to therein.

DEKRA hereby declares that the above-mentioned product has been certified based on:

- a type test according to VDE-AR-N 4105:2018 and DIN VDE V 0124-100:2020
- an inspection of the factory location according to CENELEC Operational Document CIG 421
- a DEKRA certification agreement with the number 6072185

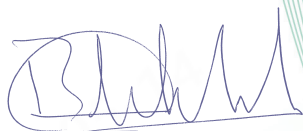
DEKRA hereby grants the right to use the DEKRA Mark.

The DEKRA Mark may be applied to the product as specified in this certificate for the duration and under the conditions of the DEKRA Mark certification agreement.

This certificate is issued on 14 May 2026 and expires upon withdrawal of one of the above mentioned standards.

Certificate number: 31-175873

DEKRA Certification B.V.



B.T.M. Holtus
Managing Director



Miranda Zhou
Certification Manager

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COUNCIL



31-175873

DEKRA Mark is the new KEMA-KEUR

The DEKRA Mark certificate for this product is to all intents and purposes equivalent to a KEMA-KEUR certificate, the other certification mark used by DEKRA and should be valued and used as such. DEKRA Mark is gradually replacing KEMA-KEUR.

For more information please check: [Introducing DEKRA Mark](#)

SPECIFICATION OF THE CERTIFIED PRODUCT**Product data**

Product	: Solar-storage system (NS protection)
Trade name(s)	: sigenergy
Type(s)/model(s)	: SigenMate 2700 Ultra, SigenMate 2700 Ultra+, SigenMate 2700 Ultra+ AC and SigenMate 2700 Ultra AC
Type of NS protection	: Integrated NS protection
Assigned to Power generation unit type	: SigenMate 2700 Ultra, SigenMate 2700 Ultra+, SigenMate 2700 Ultra AC, SigenMate 2700 Ultra+ AC
Software version	: V100R001C00

TESTS**Test requirements**

VDE-AR-N 4105:2018

DIN VDE V 0124-100:2020

Test result

The test results are documented in DEKRA test file 624171900.

Additional information

The list of components is laid down in test report 6241719.51.

Conclusion

The examination has confirmed that all requirements were met.

Factory location

Shanghai Sigeyuan Intelligent Technology Co., Ltd
Room 513, Floor 5, No. 175, Weizhan Road, Lingang New Area
201306 Shanghai, China

Trade name(s): Sigenergy stands for:



E.6 Certificate for network and system protection (VDE-AR-N 4105:2018-11)		
E.6 Zertifikat für den Netz- und Anlagenschutz		
Manufacturer / Address: Hersteller / Adresse:	Sigenergy Technology Co. Ltd. Building12-2, 678 Yunqiao Road, China (Shanghai) Pilot Free Trade Zone, Pudong New Area, Shanghai, China	
Type NS protection Typ NA-Schutz	Xiamen Hongfa Electroacoustic Co., Ltd. Relay: HF140FF-G	
Central NS protection Zentraler NA-Schutz	☐	--
Integrated NS protection Integrierter NA-Schutz	☒	Assigned to Power generation unit type: Zugeordnet zu Erzeugungseinheit Typ: SigenMate 2700 Ultra, SigenMate 2700 Ultra+, SigenMate 2700 Ultra AC
Network connection rule: Netzanschlussregel	VDE-AR-N 4105 „Erzeugungsanlagen am Niederspannungsnetz“ Technische Mindestanforderungen für Anschluss und Parallelbetrieb von Erzeugungsanlagen am Niederspannungsnetz	
Test requirement: Prüfanforderung	DIN VDE V 0124-100 (VDE V 0124-100) „Netzintegration von Erzeugungsanlagen – Niederspannung“ Prüfanforderungen an Erzeugungseinheiten vorgesehen zum Anschluss und Parallelbetrieb am Niederspannungsnetz	
The network and system protection described above meets the requirements of VDE-AR-N 4105. Der oben bezeichnete Netz- und Anlagenschutz erfüllt die Anforderungen der VDE-AR-N 4105.		

E.7 Requirement for the NS protection test report (VDE-AR-N 4105:2018-11)

E.7 Anforderungen an den Prüfbericht zum NA-Schutz

Test report NS protection

Prüfbericht NA-Schutz

Type of NS protection: Typ NA-Schutz:	Integrated NS protection Integrierter NA-Schutz
Software version: Software version:	V100R001C00
Manufacturer: Hersteller:	Sigenergy Technology Co. Ltd.
Measuring period: Messzeitraum:	From 2026-01-23 to 2026-03-24 Vom 2026-01-23 bis 2026-03-24

	Inverter Umrichter		
Protection function Schutzfunktion	Setting tripping value Einstellwert	Measured tripping value Auslösewert	Measured tripping time Auslösezeit NA-Schutz
Rise-in-voltage protection $U >>$ Spannungssteigerungsschutz $U >>$	$1.25 * U_N$	288.46 V	140.8 ms
Rise-in-voltage protection $U >$ Spannungssteigerungsschutz $U >$	$1.1 * U_N$	$1.1 * U_N$	$\leq 100 \text{ ms}^*$
Voltage drop protection $U <$ Spannungsrückgangsschutz $U <$	$0.8 * U_N$	183.7 V	3047 ms
Voltage drop protection $U <<$ Spannungsrückgangsschutz $U <<$	$0.45 * U_N$	102.3 V	340.9 ms
Frequency decrease protection $f <$ Frequenzrückgangsschutz $f <$	47.5 Hz	47.48 Hz	140.4 ms
Frequency decrease protection $f >$ Frequenzsteigerungsschutz $f >$	51.5 Hz	51.49 Hz	146.2 ms

* The rise-in voltage protection as a running 10-minute mean value, Max. disconnecting time is 518 s.

* Der anstiege Spannungsschutz als laufender 10-Minuten-Mittelwert, Max. TrennZeit beträgt 518 s.

The tripping time covers the period from the limit value violation U/f to the tripping signal to the interface switch.

Die Auslösezeit umfasst den Zeitraum von der Grenzwertverletzung U/f bis zum Auslösesignal an den Kuppelschalter.

When planning the power generation system, the inherent time of the interface switch must be added to the highest time value determined above.

Bei der Planung der Erzeugungsanlage ist die Eigenzeit des Kuppelschalters zum höchsten oben ermittelten Zeitwert zu addieren.

The switch-off time (total of the tripping time NS protection plus the inherent time of the interface switch) must not exceed 200 ms.

Die Abschaltzeit (Summe der Auslösezeit NA-Schutz zzgl. Eigenzeit des Kuppelschalters) darf 200 ms nicht überschreiten.

☒ By integrated NS Protection Bei integriertem NA-Schutz

Assigned to PGU type: Typ Erzeugungseinheit:	SigenMate 2700 Ultra, SigenMate 2700 Ultra+, SigenMate 2700 Ultra AC, SigenMate 2700 Ultra+ AC
Integrated interface switch type: Typ integrierter Kuppelschalter	Xiamen Hongfa Electroacoustic Co., Ltd. Relay: HF140FF-G
Interface switch own time with integrated NS protection Eigenzeit des Kuppelschalters bei integriertem NA-Schutz	Operation time: 20 ms max; Release time: 15 ms max

The verification of the full function chain "NS protection- Interface switch" has yield to intended disconnection.

Die Überprüfung der Gesamtwirkungskette „integrierter NA-Schutz – Kuppelschalter“ führte zu einer erfolgreichen Abschaltung.