

# Unit Certificate



FGW TG8 EZE

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ID 1900000000

**No.: 968/GI 1883.01/23**

**Grid Integration of Distributed Energy Resources**

**Certificate Holder** Shenzhen Growatt New Energy Co., **Manufacturer** see certificate holder Ltd.  
4-13/F, Building A, Sino-German(Europe) Industrial Park, Hangcheng Ave, Bao'an District Shenzhen, Guangdong P.R. China

**Subject** Grid-Connected PV-Inverter  
MAX xxKTL3-X2 LV (xx=100, 110, 120, 125, 133)  
MAX xxKTL3-X2(ID) LV (xx=100, 110, 120, 125, 133)  
MAX xxKTL3-X LV (xx=100, 110, 120, 125, 133)  
MAX xxKTL3-X(ID) LV (xx=100, 110, 120, 125, 133)

**Codes and Standards** VDE-AR-N 4110:2018 FGW TG 4:2019 Revision 9  
FGW TG 8:2019 Revision 9 FGW TG 3:2018 Revision 25

**Scope and result** The power generating units mentioned above meet the requirements of VDE-AR-N 4110:2018-11.  
The conformity is declared by following documents:  
Evaluation Report-No.: 968/GI 1883.01/23, 2023-10-16  
Validation Report-No.: 968/GI 1883.00/23, 2023-10-16  
Test Report No.: CN23WZF3 001, dated 2023-08-08

**Specific provisions** The manufacturer has provided proof of certification of the quality management system of his production facility in accordance with ISO 9001 or is subject to production monitoring.

The deviations and conditions for conformity according to the evaluation report must be observed. The corresponding conditions and deviations are listed on page 2 and 3 of the certificate.

Valid until 2028-10-16

The issue of this certificate is based upon an evaluation in accordance with the Certification Program CERT GI3 V5.0:2021-11 in its actual version, whose results are documented in Report No. 968/GI 1883.01/23 dated 2023-10-16. This certificate is specifically valid for the above mentioned system only. It becomes invalid, if any unapproved changes are implemented without prior assessment/approval by the certification body. Authenticity and validity of this certificate can be verified through the above indicated QR-code or at <http://www.fs-products.com>.

**TÜV Rheinland Industrie Service GmbH**  
Bereich Automation  
Funktionale Sicherheit  
Am Grauen Stein, 51105 Köln

Köln, 2023-10-16

Certification Body Safety & Security for Automation & Grid

Dipl.-Ing. Marco Klose

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Precisely Right.

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## Technical data of the PGU:

Typ:	MAX 100KTL3-X2 LV MAX 100KTL3-X2(ID) LV MAX 100KTL3-X LV MAX 100KTL3-X(ID) LV	MAX 110KTL3-X2 LV MAX 110KTL3-X2(ID) LV MAX 110KTL3-X LV MAX 110KTL3-X(ID) LV	MAX 120KTL3-X2 LV MAX 120KTL3-X2(ID) LV MAX 120KTL3-X LV MAX 120KTL3-X(ID) LV
Max. apparent power:	110.0 kVA	121.0 kVA	132.0 kVA
Rated active power:	100.0 kW	110.0 kW	120.0 kW
Max. active power (P <sub>600</sub> ):	110.0 kW	121.0 kW	132.0 kW
Rated current:	167.1 A <sub>AC</sub>	183.8 A <sub>AC</sub>	200.5 A <sub>AC</sub>
Typ:	MAX 125KTL3-X2 LV MAX 125KTL3-X2(ID) LV MAX 125KTL3-X LV MAX 125KTL3-X(ID) LV	MAX 133KTL3-X2 LV MAX 133KTL3-X2(ID) LV MAX 133KTL3-X LV MAX 133KTL3-X(ID) LV	
Max. apparent power:	137.5 kVA	146.3 kVA	
Rated active power:	125.0 kW	133.0 kW	
Max. active power (P <sub>600</sub> ):	137.5 kW	146.3 kW	
Rated current:	208.9 A <sub>AC</sub>	222.3 A <sub>AC</sub>	
Further general data valid for all types			
Rated voltage:	3/PE 400 V <sub>AC</sub>		
Nominal frequency:	50 Hz		
Minimum required short-circuit power (only for type 1 PGU):	N/A		
Software-Version:	V 1.0		

## Validated Simulation Model:

Reference name: TUVR\_MAX+(100-133)KTL3-X(2)+LV\_Encrypted.pfd

MD5 Checksum: 9493f09b46bb30768622561a484cb69f

Simulation platform: DlgSILENT PowerFactory 2023

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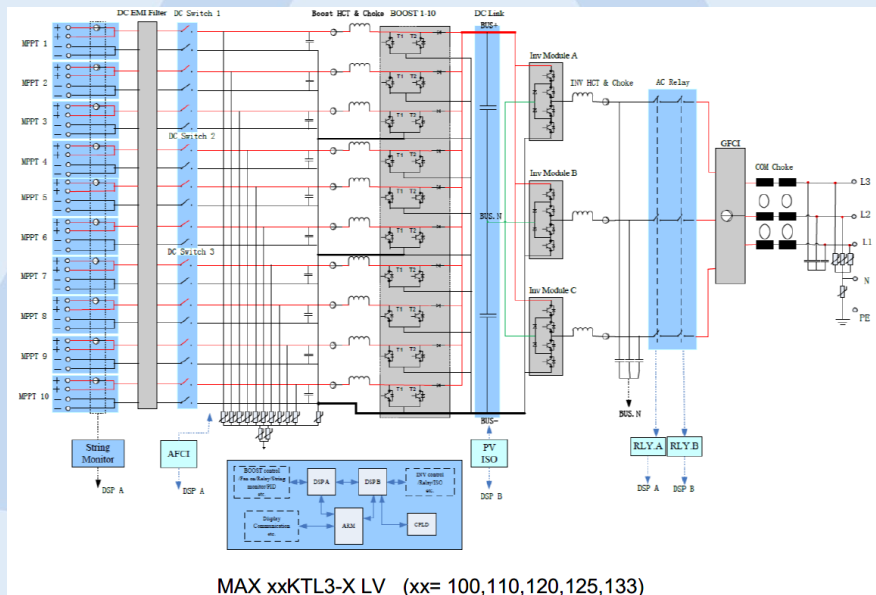
The following deviations and restrictions apply:

None

The following:

- Separate interfaces for setpoint specifications regarding active power (e.g. grid operator, direct marketer) must be implemented at PGS level (e.g. by PGS-controller) and be evaluated as part of system certification.
- As the unit does not contain a display, this has to be considered on project level. With regard To the requirements of the corresponding grid provider, an appropriate device to check the protection settings has to be provided on demand or should be stored on site.
- The certified product does not provide a test terminal. A connecting terminal plate has to be installed separately, if necessary.

Schematic overview of the PGU:

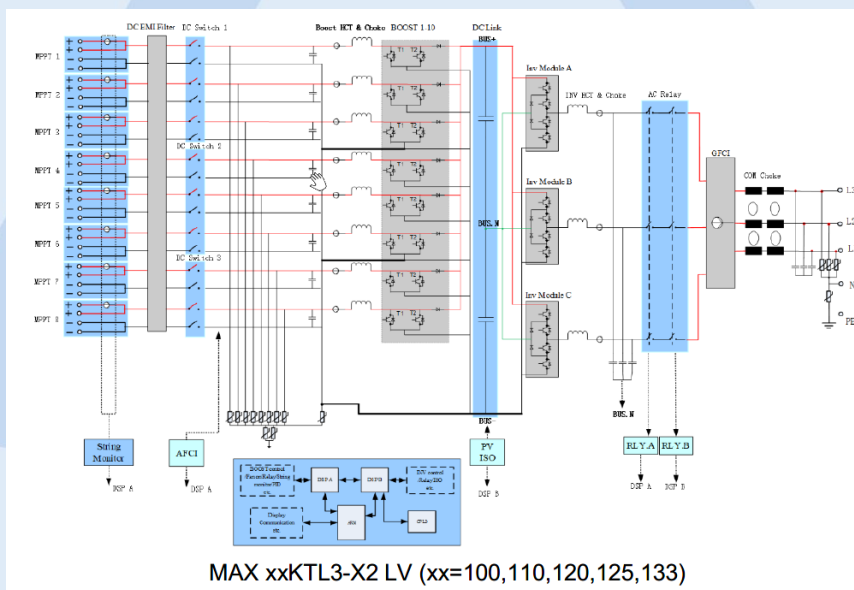
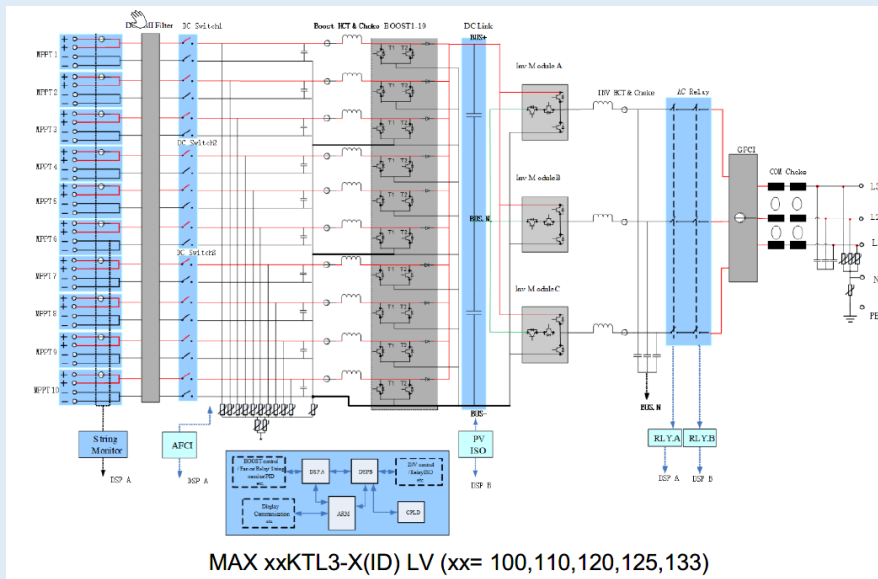


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## Schematic overview of the PGU:



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## Schematic overview of the PGU:

