

# DAkKS Scope Flexible Scope

**TÜV SÜD Certification and Testing (China) Co., Ltd.**  
**Guangzhou Branch D-PL-19065-01-00 according to**  
**ISO/IEC 17025:2017**



Tests in the fields:

**Photovoltaic Inverters and Wind Converters, ESS-Converters**

The testing laboratory is permitted, without being required to inform and obtain prior approval from DAkKS, to use standards or equivalent testing methods listed in the annex to the Accreditation Certificate D-PL-19065-01-00 according to ISO/IEC 17025:2017 with different issue dates.

The current status of any given scope of accreditation may be found respectively in the database of accredited bodies of Deutsche Akkreditierungsstelle GmbH <https://www.dakks.de/en/content/accredited-bodies-dakks>

Existing scope	Flexible scope (Category III)	Description	Update date of flexible scope
Australia:			
AS/NZS 4777.2:2020+ Amd 1:2021	AS 4777.2:2015	Grid connection of energy systems via inverters, Part 2: Inverter requirements	2016-04-22
	AS 4777.2: 2020	Grid connection of energy systems via inverters, Part 2: Inverter requirements	2021-02-09
	AS/NZS 4777.2:2020+Amd 2:2024	Grid connection of energy systems via inverters, Part 2: Inverter requirements	2024-05-20
AS 4777.3:2005		Grid connection of energy systems via inverters, Part 3: Grid protection requirements	
Austria:			
OVE E 8001-4-712/A2:2016		Erection of electrical installations with rated voltages up to AC 1000 V and DC 1500 V - Part 4-712: Photovoltaic power-systems - Erection and safety requirements systems	
TOR D4: 2016		Technical and organizational rules for operators and users of networks Part D: Special technical rules	
OVE-Richtlinie R 25:2020		Test requirements for generator units to be connected to and operated in parallel with low-voltage distribution networks	
TOR Erzeuger type A V1.2	TOR Erzeuger type A V1.3	Connection and parallel operation of type A power generation plants and microgeneration plants. (maximum capacity < 250kW and nominal voltage <110 kV)	2024-11-08
TOR Erzeuger type B V1.2	TOR Erzeuger type B V1.3	Connection and parallel operation of type B power generation systems (maximum capacity ≥ 250 kW and < 35MW and nominal voltage <110 kV)	2024-11-08

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TOR Erzeuger type C V1.2	TOR Erzeuger type C V1.3	Connection and parallel operation of type C power generation systems (maximum capacity $\geq$ 35 MW and $<$ 50 MW and nominal voltage $<$ 110 kV)	2024-11-08
TOR Erzeuger type D V1.2	TOR Erzeuger type D V1.3	Connection and parallel operation of type D power generation systems (maximum capacity $\geq$ 50 MW or nominal voltage $\geq$ 110kV)	2024-11-08
RKS-AT Type B: 2022	RKS-AT Type B: 2024	Guidelines for the proof of conformity of power generation plants in Austria (maximum capacity $\geq$ 250 kW and $<$ 35MW and nominal voltage $<$ 110 kV)	2024-11-08
RKS-AT Type C: 2022	RKS-AT Type C: 2024	Guidelines for the proof of conformity of power generation plants in Austria (maximum capacity $\geq$ 35 MW and $<$ 50 MW and nominal voltage $<$ 110 kV)	2024-11-08
RKS-AT Type D: 2022	RKS-AT Type D: 2024	Guidelines for the proof of conformity of power generation plants in Austria (maximum capacity $\geq$ 50 MW or nominal voltage $\geq$ 110 kV)	2024-11-08
<b>Belgium:</b>			
C10/11:2021	C10/11:2012	SPECIFIC TECHNICAL PRESCRIPTIONS REGARDING POWER-GENERATING PLANTS OPERATING IN PARALLEL TO THE DISTRIBUTION NETWORK	2013-08-29
	C10/11:2019	SPECIFIC TECHNICAL PRESCRIPTIONS REGARDING POWER-GENERATING PLANTS OPERATING IN PARALLEL TO THE DISTRIBUTION NETWORK	2021-02-08
	C10/11:2024	SPECIFIC TECHNICAL PRESCRIPTIONS REGARDING POWER-GENERATING PLANTS OPERATING IN PARALLEL TO THE DISTRIBUTION NETWORK	2025-03-20
	C10/11:2025	SPECIFIC TECHNICAL PRESCRIPTIONS REGARDING POWER-GENERATING PLANTS OPERATING IN PARALLEL TO THE DISTRIBUTION NETWORK	2025-11-26
<b>Brazil:</b>			
ABNT NBR 16149: 2013		Photovoltaic (PV) systems – Characteristics of the utility interface	
ABNT NBR 16150: 2013		Photovoltaic (PV) systems – Characteristics of the utility interface – Conformity test procedure	
INMETRO ORDINANCE n°16/2021		Photovoltaic Power Generation Equipment INMETRO ORDINANCE n°16/2021	

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INMETRO ORDINANCE n°140/2022	INMETRO ORDINANCE n°515/2023	Photovoltaic Power Generation Equipment INMETRO ORDINANCE n°140/2022	2025-01-30
Chile:			
NTCO-PMGD:2019	NTCO MT:2024	Technical standard for the connection and operation of PMGD in medium voltage medium voltage installations (Chile)	2025-04-20
NTSyCS 2020-09	NTSyCS:2024	Safety and quality of service technical standard (Chile)	2025-04-25
Cyprus:			
Technical Guide SM10:2020		Technical provisions, requirements and conditions for the interconnection and parallel operation of a photovoltaic system with the low voltage distribution network (Cyprus)	
SAAH: 2023		Technical provisions, requirements and conditions for interconnection and parallel operation of a system for the production of electricity from renewable energy sources the distribution network of the distribution system operator (Cyprus)	
Czech Republic:			
PPDS:2022		Rules for parallel operation of products and accumulation equipment networking by distribution system operators	
Denmark:			
Technical Regulation 3.2.1:2016	Annex to technical regulation 3.2.1 version 3:2017	Technical regulation 3.2.1 for power plants up to and including 11 kW	2025-01-05
Technical Regulation 3.3.1:2023	Technical Regulation 3.3.1:2024	Technical regulation for battery plants	2025-01-05
	Technical Regulation 3.3.1:2025	Technical regulation for battery plants	2025-07-05
DANSK ENERGI LV:2019	DANSK ENERGI LV:2022	Technical requirements for connection of power-generating plants to the low-voltage grid ( $\leq 1\text{kV}$ ) Type A and B (Denmark)	2024-11-19
	DANSK ENERGI LV:2025	Technical requirements for connection of power-generating plants to the low-voltage grid ( $\leq 1\text{kV}$ ) Type A and B (Denmark)	2025-06-01
DANSK ENERGI MV HV:2019	DANSK ENERGI MV HV:2022	Technical requirements for connection of power-generating plants to the medium and high-voltage grid ( $>1\text{kV}$ ) Type B, C and D (Denmark)	2024-11-19

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	DANSK ENERGI MV HV:2025	Technical requirements for connection of power-generating plants to the medium and high-voltage grid (>1kV) Type B, C and D (Denmark)	2025-07-05
Dubai:			
DEWA DRRG: 2016	DEWA DRRG: 2023	Standards for distributed renewable resources generators connected to the distribution network.	2025-03-19
Egypt:			
ssPV:2014		Technical Requirements for Connecting Small Scale PV (ssPV) Systems to Low Voltage Distribution Networks (Egypt)	
Solar Energy Plants Grid Connection Code:2017		Solar Energy Plants Grid Connection Code In addition to the Egyptian Transmission Grid Code and The Egyptian Distribution Network (Egypt)	
Europe:			
EN 50438: 2013		Requirements for the connection of micro-generators in parallel with public low-voltage distribution networks	
COMMISSION REGULATION (EU) 2016/631		COMMISSION REGULATION (EU) 2016/631 of 14 April 2016 establishing a network code on requirements for grid connection of generators	
EN 50549-1:2019	EN 50549-1:2019/AC:2019	Requirements for generating plants to be connected in parallel with distribution networks - Part 1: Connection to a LV distribution network above 16 A	2022-02-08
	EN 50549-1:2019+A1:2023	Requirements for generating plants to be connected in parallel with distribution networks - Part 1: Connection to a LV distribution network above 16 A	2025-04-10
EN 50549-2:2019	EN 50549-2:2019/AC:2019	Requirements for generating plants to be connected in parallel with distribution networks - Part 2: Connection to a MV distribution network	2021-02-28
	EN 50549-2:2019+A1:2023	Requirements for generating plants to be connected in parallel with distribution networks - Part 2: Connection to a MV distribution network	2025-04-10
EN 50549-10:2022		Requirements for generating plants to be connected in parallel with distribution networks. Part 10: Tests for conformity assessment of generating units.	
Finland:			
VJV 2018		Grid Code Specifications for Power Generating Facilities (Finland)	

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SJV 2019		Grid Code Specifications for Grid Energy Storage Systems (Finland)	
France:			
UTE C 15-712-1: 2010	UTE C15-712-1:2013	LOW-VOLTAGE ELECTRICAL INSTALLATIONS: Photovoltaic installations connected to the public distribution network	2023-08-03
Arrêté du 2020-06-09		French Republic Official JOURNAL of the Laws and decrees <i>(Only for Title 1: Technical design and operating specifications for connection of an electricity generating installation to the public electricity network)</i>	
Germany:			
DIN V VDE V 0124-100:2020	DIN V VDE V 0124-100:2012	Grid integration of generator plants - Generator units - Test requirements for generation units to be connected and operated parallel with the low-voltage distribution networks	2013-08-29
DIN VDE V 0126-1-1:2013		Automatic disconnection device between a generator and the public low-voltage grid	
VDE-AR-N 4105: 2018		Generators connected to the low-voltage distribution network - Technical requirements for the connection to and parallel operation with low-voltage distribution networks	
VDE-AR-E 2510-2: 2021	VDE-AR-E 2510-2: 2015	Stationary electrical energy storage systems intended for connection to the low voltage grid	2017-11-22
VDE-AR-N 4100:2019	VDE-AR-N 4100:2017	Technical rules for the connection and operation of customer installations to the low voltage network (TAR low voltage)	2019-02-28
VDE-AR-N 4110: 2023	VDE-AR-N 4110: 2018	Technical requirements for the connection and operation of customer installations to the medium voltage network (TAR medium voltage)	2019-02-28
	VDE-AR-N 4110:2018+A1:2022	Technical requirements for the connection and operation of customer installations to the medium voltage network (TAR medium voltage)	2023-08-03
VDE-AR-N 4120: 2018	VDE-AR-N 4120:2018+A1:2024	Technical requirements for the connection and operation of customer installations to the high voltage network (TAR high voltage)	2025-06-16
VDE-AR-N 4130: 2018		Technical requirements for the connection and operation of customer installations to the extra high voltage network (TCR extra high voltage)	

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BDEW:2008+ Supplement 1/2009 7/2010 2/2011 1/2013		Technical Guideline Generating Plants Connected to the Medium- Voltage Network Guideline for generating plants' connection to and parallel operation with the medium-voltage network	
FGW TR3 Rev.26	FGW TR3 Rev.23	Technical Guidelines for Power Generating Units Part 3 Determination of electrical characteristics of power generating units connected to MV, HV and EHV grids	2013-08-29
	FGW TR3 Rev.24	Technical Guidelines for Power Generating Units Part 3 Determination of electrical characteristics of power generating units connected to MV, HV and EHV grids	2017-08-15
	FGW TR3 Rev.25	Technical Guidelines for Power Generating Units Part 3 Determination of electrical characteristics of power generating units connected to MV, HV and EHV grids	2021-07-05
FGW TR4 Rev.10	FGW TR4 Rev.6	Technical Guidelines for Power Generating Units Part 4 Demands on Modelling and Validating Simulation Models of the Electrical Characteristics of Power Generating Units and Systems	2015-09-01
	FGW TR4 Rev.7	Technical Guidelines for Power Generating Units Part 4 Demands on Modelling and Validating Simulation Models of the Electrical Characteristics of Power Generating Units and Systems	2016-04-29
	FGW TR4 Rev.8	Technical Guidelines for Power Generating Units Part 4 Demands on Modelling and Validating Simulation Models of the Electrical Characteristics of Power Generating Units and Systems	2017-08-15
	FGW TR4 Rev.9	Technical Guidelines for Power Generating Units Part 4 Demands on Modelling and Validating Simulation Models of the Electrical Characteristics of Power Generating Units and Systems	2021-07-05

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FGW TR8 Rev.9	FGW TR8 Rev.6	Technical Guidelines for Power Generating Units Part 8 Certification of the electrical characteristics of power generating units and systems in the medium-, high- and highest-voltage grids	2013-08-29
	FGW TR8 Rev.7	Technical Guidelines for Power Generating Units Part 8 Certification of the electrical characteristics of power generating units and systems in the medium-, high- and highest-voltage grids	2017-08-17
	FGW TR8 Rev.8	Technical Guidelines for Power Generating Units Part 8 Certification of the electrical characteristics of power generating units and systems in the medium-, high- and highest-voltage grids	2018-09-16
FNN Hinweis: 2022	FNN Hinweis: 2016	Connection and operation of storage system to low voltage network (Anschluss und Betrieb von Speichern am Niederspannungsnetz)	2017-08-22
	FNN Hinweis: 2024	Connection and operation of storage system to low voltage network (Anschluss und Betrieb von Speichern am Niederspannungsnetz)	2024-04-08
	FNN Hinweis: 2019	Connection and operation of storage system to low voltage network (Anschluss und Betrieb von Speichern am Niederspannungsnetz)	2021-02-02
BVES 2.0		Efficiency guideline for PV storage systems	
Global:			
IEC 62116:2014		Test procedure of islanding prevention measures for utility-interconnected photovoltaic inverters	
EN 62116:2014		Test procedure of islanding prevention measures for utility-interconnected photovoltaic inverters	
IEC 61727:2004		Photovoltaic (PV) systems - Characteristics of the utility interface	
IEEE 1547:2018	IEEE 1547:2003	IEEE Standard for Interconnection and Interoperability of Distributed Energy Resources with Associated Electric Power Systems Interfaces	2018-10-10

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	IEEE 1547a™-2020	IEEE Standard for Interconnection and Interoperability of Distributed Energy Resources with Associated Electric Power Systems Interfaces	2024-04-08
IEEE 1547.1:2020	IEEE 1547.1:2005	IEEE Standard Conformance Test Procedures for Equipment Interconnecting Distributed Energy Resources with Electric Power Systems and Associated Interfaces	2018-10-10
IEC 61400-21-1:2019		Wind energy generation systems – Part 21-1: Measurement and assessment of electrical characteristics – Wind turbines <i>(Only Grid Connection in laboratory tests)</i>	
IEC 61400-27-2:2020		Wind energy generation systems - Part 27-1: Electrical simulation models - Generic models	
EN 50530:2010	EN 50530:2010+A1:2013	Overall efficiency of grid connected photovoltaic inverters	2022-07-05
IEC 61683:1999		Photovoltaic systems - Power conditioners - Procedure for measuring efficiency	
IEC TS 63217:2021		Utility-interconnected photovoltaic (PV) inverters - Test procedure of over-voltage ride-through measurements	
IEC TS 62910:2020	IEC TS 62910:2015	Utility-interconnected photovoltaic inverters – Test procedure for low voltage ride-through measurements	2019-03-02
<b>Greece:</b>			
Decision RAE 1165/2020		Determination of maximum power thresholds applicable to power plants and parameters of general application of Regulation (EU) 2016/631 (Greece)	
<b>Hungary:</b>			
Hungary grid code		Parameters for the Essential requirements in accordance with COMMISSION REGULATION (EU) 2016/631 of 14 April 2016 establishing a network code on requirements for grid connection of generators (RfG regulation)	
<b>India:</b>			
CEA:2019	CEA:2019 +COR:2023	Central Electricity Authority (Technical standard for connectivity to the grid)	2025-04-10
<b>Ireland:</b>			

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DTIS-230206-BRL:2018		Conditions Governing the Connection and Operation of Micro-Generation (Ireland)	
DTIS-250701-BDW:2019		Connections Governing Connection to the Distribution System at Medium Voltage (Ireland)	
Distribution Code Version 8		Distribution Code for connected to ESB Networks (Ireland)	
Italy:			
CEI 0-21:2022 +V1:2022+V2:2024	CEI 0-21:2014 + V1:2014	Reference technical rules for the connection of active and passive users to the LV electrical Utilities	2016-04-22
	CEI 0-21:2019	Reference technical rules for the connection of active and passive users to the LV electrical Utilities	2019-07-01
	CEI 0-21:2019+V1:2020	Reference technical rules for the connection of active and passive users to the LV electrical Utilities	2021-07-01
CEI 0-16:2022 +V1:2022+V2:2023+ V3:2024	CEI 0-16:2014 + V1:2014	Reference technical rules for the connection of active and passive consumers to the HV and MV electrical networks of distribution Company	2016-04-22
	CEI 0-16: 2019	Reference technical rules for the connection of active and passive consumers to the HV and MV electrical networks of distribution Company	2019-07-02
	CEI 0-16:2019+V1:2020	Reference technical rules for the connection of active and passive consumers to the HV and MV electrical networks of distribution Company	2021-07-02
	CEI 0-16:2022+V1:2022+V2:2023	Reference technical rules for the connection of active and passive consumers to the HV and MV electrical networks of distribution Company	2023-09-14
Jordan:			
IRR-TIC:2015		Intermittent Renewable Resources (IRR) Transmission Interconnection Code (TIC)	
IRR-DCC-MV:2015	IRR-DCC-MV:2016(Version 2)	Intermittent Renewable Resources (Wind and PV) Distribution Connection Code (DCC) At Medium Voltage (MV)	2025-05-30
Netherland:			
Netcode elektriciteit:2023	Netcode elektriciteit:2022	Electricity Network Code issued by ACM Netherland	2023-09-08
	Netcode elektriciteit:2024	Electricity Network Code issued by ACM Netherland	2025-11-22
Norway:			

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NVF:2023	NVF:2025	National guide for functional requirements in the power system	2025-10-08
<b>Poland:</b>			
NC RFG:2018	NC RFG:2025	Poland: General applicability requirements resulting from EU commission regulation 2016/631 of 14 April 2016 establishing a network code concerning the requirements for with regard to the connection of generating units to the grid (NC RfG May 2025)- approved by the Decision of the President of the Energy Regulatory Office 744.18.15.2024.WZ.MKo4 dated 15 May 2025.	2025-06-27
PTPIREE: 2021	PTPIREE: 2024	Conditions and procedures for the use of certificates in the process of connecting modules in power generation to electricity grids Consider set of protection settings and criteria and configuration parameters for regulatory characteristics of type A and B MWE (Bank setting for Poland) V1.1	2025-06-10
<b>Portugal:</b>			
Ordinance No. 73/2020		Non-exhaustive requirements for connecting the generating modules to the Public Service Electrical Network (RESP) (Portugal)	
<b>Romania:</b>			
ANRE Order 208:2018		Technical norm on the technical requirements to connect power-generating modules, power plants modules and offshore power park modules to public electrical grids	
<b>South Africa:</b>			
NRS 097-2-1:2024	NRS 097-2-1:2017	Grid interconnection of embedded generation Part 2: Small-scale embedded generation	2017-08-12
RPPs:2022	RPPs:2019	Grid connection code for renewable power plants (RPPs) connected to the electricity transmission system (TS) or the distribution system (DS) in South Africa	2022-06-28
<b>Spain:</b>			
RD 1663:2000		Royal Decree 1663/2000, Connection of photovoltaic system to the low-voltage grid network	
RD 661:2007		Royal Decree 661/2007, About the generation of electric energy	

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RD 1699: 2011		Royal Decree 1699/2011, the connection of generation system for electric energy with small power	
RD 413:2014		Royal Decree 413/2014, of June 6, which regulates the activity of electricity production from renewable energy sources, cogeneration and waste.	
RD 244:2019		Zero injection for inverters and other generation units	
UNE 206006: 2011		Performance tests for islanding detection of multiple grid-connected photovoltaic inverters in parallel	
UNE 206007-1: 2013		Requirements for connecting to the power system. Part1: Grid-connected inverters	
UNE 206007-2 IN:2014		Requirements for connecting to the power system. Part 2: Requirements concerning system security for installations containing inverters.	
P.O.12.2:2018		Generation and demand facilities: minimum design, equipment, operation, service and security requirements	
P.O. 12.3 :2006		Requirements for responding to voltage gaps in wind installations	
NTS V2.1:2021-07	NTS V1.0:2019-07	Technical standard for monitoring the conformity of the electricity generation modules according to EU Regulation 2016/631	2021-02-08
	NTS V2.0:2020-11	Technical standard for monitoring the conformity of the electricity generation modules according to EU Regulation 2016/631	2021-02-08
NTS SENP V1.1:2021-07		Technical standard for monitoring the compliance of power generating modules according to P.O. 12.2 SENP	
UNE 217001:2020		Requirements and tests for systems that avoid the discharge of energy to the distribution network	
UNE 217002:2020		Inverters for connection to the distribution network Testing of DC injection requirements to the grid, surge generation and island operation detection system	
PVVC:2018		Procedures for verification, validation and certification of the requirements of po 12.3 on the response of the wind and photovoltaic facilities to the voltage holes	

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TED/749:2020		Order TED/749/2020, of July 16, establishing the technical requirements for connection to the network necessary for the implementation of the connection network codes.	
Sweden:			
EIFS 2018:2		The Energy Market Inspectorate's Regulations on the determination of generally applicable requirements for network connection of generators	
Switzerland:			
NA/EEA-NE7 - CH 2020		Network connection for energy generation systems to the low-voltage network - Technical requirements for connection and parallel operation in NE7	
Thailand:			
MEA Guideline 2015		Regulation for an Inverter Used in Grid-connected Power Generating System of the Metropolitan Electricity Authority (MEA)	
PEA Guideline 2016		The Requirements on Grid Connection of Provincial Electricity Authority (PEA) for VSPP	
United Kingdom:			
ER G83 issue2:2012	G83 Issue 2 Amendment 3 :2019	Recommendations for the Connection of Type Tested Small-scale Embedded Generators (Up to 16A per Phase) in Parallel with Low-Voltage Distribution Systems	2023-08-03
ER G59 issue2:2011 ER G59 issue3:2013 ER G59 issue3-3:2018	G59/3/7 Issue 3:2019	Recommendations for the connection of generating plant to the distribution systems of licensed distribution network operators	2023-08-03
ER G98 Issue 1 - Amendment 7 :2022	ER G98 issue1-1:2018	Requirements for the connection of Fully type tested micro-generators (up to and including 16A per phase) in parallel with public low voltage distribution networks	2019-02-28
ER G99 Issue 1 -Amendment 9:2022	ER G99 issue1-1:2018	Requirements for the connection of generation equipment in parallel with public distribution networks	2019-02-28
	ER G99 issue1-8:2021	Requirements for the connection of generation equipment in parallel with public distribution networks	2024-03-19

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	ER G99 issue1- Amendment 10:2024	Requirements for the connection of generation equipment in parallel with public distribution networks	2025-03-20
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**Test and simulation of product types according to the standards NTS SENP and NTS of Spain Grid Code are listed below:**

**Table 1**

Product type	Standard	Test/simulation clause and details	Remark
Electricity Generation Units (UGE) and Energy Storage System to be installed in Electricity Generation Modules (MGE) of the Electrical Park Module (MPE) type.  Photovoltaic inverters and other power converters.  Battery Storage System	NTS SENP V1.1:2021-07 NTS V2.1:2021-07	5.1: Limited frequency sensitive mode - overfrequency (LFSM-O) 5.2: Limited frequency sensitive mode - underfrequency (LFSM-U) 5.3: Frequency sensitive mode (FSM) 5.5: Active power control range and remote controllability 5.7: Reactive power capability at maximum capacity and below maximum capacity 5.8: Reactive Power Control in PPM 5.11: Robustness requirements: Active power recovery after a fault, Fault ride Through Capability, and Fast Fault Current Injection Capability	Technical Standard for monitoring the conformity of electricity generating modules under EU Regulation 2016/631 (NTS)  Technical standard for monitoring the compliance of power generating modules according to P.O. 12.2 SENP (NTS SENP)

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**Table 1 (Continued#1)**

<p>Additional Components of the Electricity Generation Modules (CAMGE) to be installed in Electric Park Modules (MPE). Power Plant Controller (PPC), STATCOM and Battery Storage Systems PPC: Section 4.6.1. "Power Plant Controller". STATCOM: Section 4.6.2. "Reactive power provision active static compensation system"</p>	<p>NTS SENP V1.1:2021-07 NTS V2.1:2021-07</p>	<p>STATCOM (4.6.1): 4.6.1: Measurement of reactive power capacity exchanged by a STATCOM. 4.6.1: Measurement of the dynamics of response of a STATCOM in the face of a change of power/current setpoint  PPC tests according to: 5.1: Limited frequency sensitive mode - overfrequency (LFSM-O) 5.2: Limited frequency sensitive mode - underfrequency (LFSM-U) 5.3: Frequency sensitive mode (FSM) 5.5: Active power control range and remote controllability 5.7: Reactive power capability at maximum capacity and below maximum capacity 5.8: Reactive Power Control in PPM 5.11: Robustness requirements: Active power recovery after a fault, Fault ride Through Capability, and Fast Fault Current Injection Capability</p>	<p>Technical Standard for monitoring the conformity of electricity generating modules under EU Regulation 2016/631 (NTS) Technical standard for monitoring the compliance of power generating modules according to P.O. 12.2 SENP (NTS SENP)</p>
<p>Models of Electricity Generation Units (UGE) and Energy Storage System to be installed in Electricity Generation Modules (MGE) of the Electrical Park Module (MPE) type. Photovoltaic inverters and other power converters. Battery Storage System</p>	<p>NTS SENP V1.1:2021-07 NTS V2.1:2021-07</p>	<p>Simulations for the validation of the UGE model, according to section 6.2 of the NTS</p>	<p>Technical Standard for monitoring the conformity of electricity generating modules under EU Regulation 2016/631 (NTS) Technical standard for monitoring the compliance of power generating modules according to P.O. 12.2 SENP (NTS SENP)</p>

## DAkKS Scope Flexible Scope

**TÜV SÜD Certification and Testing (China) Co., Ltd.**  
**Guangzhou Branch D-PL-19065-01-00 according to**  
**ISO/IEC 17025:2017**



**Table 1 (Continued#2)**

<p>Models of Additional Components of Power Generation Modules (CAMGE) to be installed in Electric Park Modules (MPE). Power Plant Controller (PPC), PPC: Power Park controllers STATCOM</p>	<p>NTS SENP V1.1:2021-07 NTS V2.1:2021-07</p>	<p>Simulations for model validation of CAMGE, according to section 6.3 of the NTS</p>	<p>Technical Standard for monitoring the conformity of electricity generating modules under EU Regulation 2016/631 (NTS) Technical standard for monitoring the compliance of power generating modules according to P.O. 12.2 SENP (NTS SENP)</p>
<p>Models of Electricity Generation Units (UGE) Photovoltaic inverters and other power converters.  Battery Storage System</p>	<p>NTS SENP V1.1:2021-07 NTS V2.1:2021-07</p>	<p>Simulations: 5.1: Limited frequency sensitive mode - overfrequency (LFSM-O) 5.2: Limited frequency sensitive mode - underfrequency (LFSM-U) 5.3: Frequency sensitive mode (FSM)</p>	<p>Technical Standard for monitoring the conformity of electricity generating modules under EU Regulation 2016/631 (NTS) Technical standard for monitoring the compliance of power generating modules according to P.O. 12.2 SENP (NTS SENP)</p>
<p>Models of Additional Components of Power Generation Modules (CAMGE) to be installed in Electric Park Modules (MPE). Power Plant Controller (PPC), PPC: Power Park controllers STATCOM</p>	<p>NTS SENP V1.1:2021-07 NTS V2.1:2021-07</p>	<p>Simulations: 5.1: Limited frequency sensitive mode - overfrequency (LFSM-O) 5.2: Limited frequency sensitive mode - underfrequency (LFSM-U) 5.3: Frequency sensitive mode (FSM)</p>	<p>Technical Standard for monitoring the conformity of electricity generating modules under EU Regulation 2016/631 (NTS) Technical standard for monitoring the compliance of power generating modules according to P.O. 12.2 SENP (NTS SENP)</p>

End