



ELECTRICAL SERVICES

TYPE TESTED INVERTERS/EQUIPMENT IN TERMS OF NRS 097-2-1

14 March 2023

Make	Model	Inverter / Equipment type	Test House	Certificate date	Valid until	Report number	Certificate Compliance number	NRS 097-2-1: 2017 Ed2 Certification	NRS 097-2-1: 2017 Ed 2.1 Certification	Comments
ABB	TRIO-TM-50-0-400	Grid-tied PV inverter	TUV Rheinland	2019/07/15		28110633 031	AK 60141064 0001	Yes		Inverter may only be used in plants according to category A3: 100 kVA - 1MVA and connection to the grid via an external customer MVLV AC transformer.
ABB	PVS - 50 - TL	Grid-tied PV inverter	TUV Rheinland	2020/01/22		28111830 029	AK 60146346 0001	Yes		Inverter may only be used in plants according to Category A3: 100 kVA - 1MVA and connection to the grid via an external customer MVLV AC transformer.
ABB	PVS - 50 - TL - S	Grid-tied PV inverter	TUV Rheinland	2020/01/22		28111830 029	AK 60146346 0001	Yes		Inverter may only be used in plants according to Category A3: 100 kVA - 1MVA and connection to the grid via an external customer MVLV AC transformer.
ABB	PVS - 50 - TL - SX	Grid-tied PV inverter	TUV Rheinland	2020/01/22		28111830 029	AK 60146346 0001	Yes		Inverter may only be used in plants according to Category A3: 100 kVA - 1MVA and connection to the grid via an external customer MVLV AC transformer.
ABB	PVS - 50 - TL - SX2	Grid-tied PV inverter	TUV Rheinland	2020/01/22		28111830 029	AK 60146346 0001	Yes		Inverter may only be used in plants according to Category A3: 100 kVA - 1MVA and connection to the grid via an external customer MVLV AC transformer.
ABB	PVS-100-TL	Grid-tied PV inverter	TUV Rheinland	2019/11/29		28110923 035	AK 60144898 0001	Yes		
ABB	REACT2-UNO-3.6-TL	Grid-tied PV inverter	TUV Rheinland	2018/11/07		28111587 003	AK 60134062 0001	Yes		A maximum of three REACT2-BATT may be used in combination with this inverter unit.
ABB	REACT2-UNO-5.0-TL	Grid-tied PV inverter	TUV Rheinland	2018/11/07		28111587 003	AK 60134062 0001	Yes		
ABB	CM-UFD.M31 and CM-UFD.M31	Network & system relay	TÜV SÜD	2022/10/28		713200958-000	ESY 0442540043 Rev.00	No	No	Network and system grid protection voltage and frequency relay only in accordance with VDE-AR-N 4105:2010. Must be programmed in NRS 097-2-1 or the applicable South African Grid Codes and may only be used in conjunction with approved NRS 097-2-1 type tested inverters on this list.
Afore	HNS3000HS	Hybrid PV inverter grid-tied	Dekra	2020/09/17		6076139.50	6076139.01AOC	Yes		
Afore	HNS3600HS	Hybrid PV inverter grid-tied	Dekra	2020/09/17		6076139.50	6076139.01AOC	Yes		
Afore	HNS4000HS	Hybrid PV inverter grid-tied	Dekra	2020/09/17		6076139.50	6076139.01AOC	Yes		
Afore	HNS4600HS	Hybrid PV inverter grid-tied	Dekra	2020/09/17		6076139.50	6076139.01AOC	Yes		
Afore	HNS5000HS	Hybrid PV inverter grid-tied	Dekra	2020/09/17		6076139.50	6076139.01AOC	Yes		
Afore	HNS5500HS	Hybrid PV inverter grid-tied	Dekra	2020/09/17		6076139.50	6076139.01AOC	Yes		
Afore	HNS6000HS	Hybrid PV inverter grid-tied	Dekra	2020/09/17		6076139.50	6076139.01AOC	Yes		
Afore	HNS6500HS	Hybrid PV inverter grid-tied	Dekra	2020/09/18		6076141.50	6076141.01AOC.V1.1	Yes		
Afore	HNS6500HS-HV	Hybrid PV inverter grid-tied	Dekra	2020/09/18		6076141.50	6076141.01AOC.V1.1	Yes		
Afore	HNS3600HS-HV	Hybrid PV inverter grid-tied	Dekra	2020/09/18		6076141.50	6076141.01AOC.V1.1	Yes		
Afore	HNS4000HS-HV	Hybrid PV inverter grid-tied	Dekra	2020/09/18		6076141.50	6076141.01AOC.V1.1	Yes		
Afore	HNS4600HS-HV	Hybrid PV inverter grid-tied	Dekra	2020/09/18		6076141.50	6076141.01AOC.V1.1	Yes		
Afore	HNS5000HS-HV	Hybrid PV inverter grid-tied	Dekra	2020/09/18		6076141.50	6076141.01AOC.V1.1	Yes		
Afore	HNS5500HS-HV	Hybrid PV inverter grid-tied	Dekra	2020/09/18		6076141.50	6076141.01AOC.V1.1	Yes		
Afore	HNS6000HS-HV	Hybrid PV inverter grid-tied	Dekra	2020/09/18		6076141.50	6076141.01AOC.V1.1	Yes		
Atess	HPS 30	Hybrid PV inverter grid-tied	Shenzhen Balun	2020/10/09		BL-DG2080269-B01	BL-DG2080269D01	Yes		The maximum DC voltage is dependent on PV array and may not exceed 820 V as declared by the inverter manufacturer.
Atess	HPS 50	Hybrid PV inverter grid-tied	Shenzhen Balun	2020/10/09		BL-DG2080269-B01	BL-DG2080269D01	Yes		The maximum DC voltage is dependent on PV array and may not exceed 820 V as declared by the inverter manufacturer.
Atess	HPS100	Hybrid PV inverter grid-tied	Shenzhen Balun	2020/10/09		BL-DG2080269-B02	BL-DG2080269D02	Yes		The maximum DC voltage is dependent on PV array and may not exceed 820 V as declared by the inverter manufacturer.
Atess	HPS120	Hybrid PV inverter grid-tied	Shenzhen Balun	2020/10/09		BL-DG2080269-B02	BL-DG2080269D02	Yes		The maximum DC voltage is dependent on PV array and may not exceed 820 V as declared by the inverter manufacturer.
Atess	HPS150	Hybrid PV inverter grid-tied	Shenzhen Balun	2020/10/09		BL-DG2080269-B02	BL-DG2080269D02	Yes		The maximum DC voltage is dependent on PV array and may not exceed 820 V as declared by the inverter manufacturer.
Alpha	SMILES-INV	Hybrid PV inverter grid-tied	Bureau Veritas	2019/03/22		ABYD-19JA1440FCSHP	U19-0178	Yes		The maximum DC voltage is dependent on PV array and may not exceed 820 V as declared by the inverter manufacturer.
Storion-SMILE-B3	Battery based inverter grid-tied		Bureau Veritas	2020/08/19		ABYD-ESSH-P20071636	U20-0680	Yes		
Canadian Solar	CSI-20, 25 and 30KTL-GI-FL	Grid-tied PV inverter	TUV Rheinland	2018/05/07		50128276 002	AK 50406933 0001	Yes		The maximum DC voltage is dependent on PV array and may not exceed 1000V when this inverter is used.
Canadian Solar	CSI-40KTL-GI-FL	Grid-tied PV inverter	TUV Rheinland	2018/05/03		50131287 002	AK 50406675 0001	Yes		The maximum DC voltage is dependent on PV array and may not exceed 1000V when this inverter is used.
Canadian Solar	CSI-50KTL-GI	Grid-tied PV inverter	TUV Rheinland	2018/05/03		50131287 002	AK 50406675 0001	Yes		The maximum DC voltage is dependent on PV array and may not exceed 1000V when this inverter is used.
Canadian Solar	CSI-25K-T400GL02-E	Grid-tied PV inverter	TUV Rheinland	2020/04/13		50344275 002	AK 50464349 0001	Yes		The maximum DC voltage is dependent on PV array and may not exceed 1000V when this inverter is used.
Canadian Solar	CSI-30K-T400GL02-E	Grid-tied PV inverter	TUV Rheinland	2020/04/13		50344275 002	AK 50464349 0001	Yes		The maximum DC voltage is dependent on PV array and may not exceed 1000V when this inverter is used.
Canadian Solar	CSI-33K-T400GL02-E	Grid-tied PV inverter	TUV Rheinland	2020/04/13		50344275 002	AK 50464349 0001	Yes		The maximum DC voltage is dependent on PV array and may not exceed 1000V when this inverter is used.
Canadian Solar	CSI-36K-T400GL02-E	Grid-tied PV inverter	TUV Rheinland	2020/04/13		50344275 002	AK 50464349 0001	Yes		The maximum DC voltage is dependent on PV array and may not exceed 1000V when this inverter is used.
Canadian Solar	CSI-40K-T400GL02-E	Grid-tied PV inverter	TUV Rheinland	2020/04/13		50344275 002	AK 50464349 0001	Yes		The maximum DC voltage is dependent on PV array and may not exceed 1000V when this inverter is used.
Canadian Solar	CSI-75 K-T400GL02-E	Grid-tied PV inverter	TUV Rheinland	2020/10/21		50376758 002	AK 50483986 0001	Yes		The maximum DC voltage is dependent on PV array and may not exceed 1000V when this inverter is used.
Canadian Solar	CSI 100 K-T400GL02-E	Grid-tied PV inverter	TUV Rheinland	2020/10/21		50376758 002	AK 50483986 0001	Yes		The maximum DC voltage is dependent on PV array and may not exceed 1000V when this inverter is used.
Canadian Solar	CSI 110 K-T400GL02-E	Grid-tied PV inverter	TUV Rheinland	2020/10/21		50376758 002	AK 50483986 0001	Yes		The maximum DC voltage is dependent on PV array and may not exceed 1000V when this inverter is used.
Canadian Solar	CSI-50K-T400GL03-E	Grid-tied PV inverter	TUV Rheinland	2021/08/27		CN21F7XT 0002	AK 50516584 0001	Yes		The maximum DC voltage is dependent on PV array and may not exceed 1000V when this inverter is used.
Canadian Solar	CSI-60K-T400GL03-E	Grid-tied PV inverter	TUV Rheinland	2021/08/27		CN21F7XT 0002	AK 50516584 0001	Yes		The maximum DC voltage is dependent on PV array and may not exceed 1000V when this inverter is used.
Canadian Solar	CSI-70K-T500GL03-E	Grid-tied PV inverter	TUV Rheinland	2021/08/27		CN21F7XT 0002	AK 50516584 0001	Yes		The maximum DC voltage is dependent on PV array and may not exceed 1000V when this inverter is used.
Canadian Solar	CSI-xxK-T400GL02-E	Grid-tied PV inverter	TUV Rheinland	2021/10/29		50 376 758 007	AK 50522798 0001	Yes		(xx=80, 100, 110); The maximum DC voltage is dependent on PV array and not exceed 1000V when this inverter is used.
Canadian Solar	CSI-xxK-T400GL03-E	Grid-tied PV inverter	TUV Rheinland	2021/10/29		50 376 758 007	AK 50522798 0001	Yes		(xx=100, 110); The maximum DC voltage is dependent on PV array and may not exceed 1000V when this inverter is used.
Canadian Solar	CSI-xxK-T400GL02-ZA	Grid-tied PV inverter	TUV Rheinland	2021/10/29		50 376 758 007	AK 50522798 0001	Yes		(xx=100, 110); The maximum DC voltage is dependent on PV array and may not exceed 1000V when this inverter is used.
Canadian Solar	CSI-xKxT400GL03-ZA	Grid-tied PV inverter	TUV Rheinland	2021/10/29		50 376 758 007	AK 50522798 0001	Yes		(xx=100, 110); The maximum DC voltage is dependent on PV array and may not exceed 1000V when this inverter is used.
Deye	SUN-8K-SG01LP1-EU	Hybrid PV inverter grid-tied	Dongguan Balun	2022/03/16		BL-DG21C0114-B01 (G1)	BL-DG21C0114D02	Yes		
Deye	SUN-7.6K-SG01LP1-EU	Hybrid PV inverter grid-tied	Dongguan Balun	2022/03/16		BL-DG21C0114-B01 (G1)	BL-DG21C0114D02	Yes		
Deye	SUN-6K-SG01LP1-EU	Hybrid PV inverter grid-tied	Dongguan Balun	2022/03/16		BL-DG21C0114-B01 (G1)	BL-DG21C0114D02	Yes		
Deye	SUN-5K-SG01LP1-EU	Hybrid PV inverter grid-tied	Dongguan Balun	2022/03/16		BL-DG21C0114-B01 (G1)	BL-DG21C0114D02	Yes		
Deye	SUN-3.6K-SG01LP1-EU	Hybrid PV inverter grid-tied	Dongguan Balun	2022/03/16		BL-DG21C0114-B01 (G1)	BL-DG21C0114D02	Yes		
Deye	SUN-3.6K-SG01LP1-EU-B	Hybrid PV inverter grid-tied	Dongguan Balun	2022/03/16		BL-DG21C0114-B01 (G1)	BL-DG21C0114D02	Yes		
Deye	SUN-7.6K-SG01LP1-EU-B	Hybrid PV inverter grid-tied	Dongguan Balun	2022/03/16		BL-DG21C0114-B01 (G1)	BL-DG21C0114D02	Yes		
Deye	SUN-6K-SG01LP1-EU-B	Hybrid PV inverter grid-tied	Dongguan Balun	2022/03/16		BL-DG21C0114-B01 (G1)	BL-DG21C0114D02	Yes		
Deye	SUN-5K-SG01LP1-EU-B	Hybrid PV inverter grid-tied	Dongguan Balun	2022/03/16		BL-DG21C0114-B01 (G1)	BL-DG21C0114D02	Yes		
Deye	SUN-5K-SG01LP1-EU-B	Hybrid PV inverter grid-tied	Dongguan Balun	2022/03/16		BL-DG21C0114-B01 (G1)	BL-DG21C0114D02	Yes		

Deye	SUN-3.6K-SG01LP1-EU-B	Hybrid PV inverter grid-tied	Dongguan Balun	2022/03/16	BL-DG21C0114-B01 (G1)	BL-DG21C0114D02		Yes
Deye	SUN-8K-SG02LP1-EU	Hybrid PV inverter grid-tied	Dongguan Balun	2022/03/16	BL-DG21C0114-B01 (G1)	BL-DG21C0114D02		Yes
Deye	SUN-7.6K-SG02LP1-EU	Hybrid PV inverter grid-tied	Dongguan Balun	2022/03/16	BL-DG21C0114-B01 (G1)	BL-DG21C0114D02		Yes
Deye	SUN-6K-SG02LP1-EU	Hybrid PV inverter grid-tied	Dongguan Balun	2022/03/16	BL-DG21C0114-B01 (G1)	BL-DG21C0114D02		Yes
Deye	SUN-5K-SG02LP1-EU	Hybrid PV inverter grid-tied	Dongguan Balun	2022/03/16	BL-DG21C0114-B01 (G1)	BL-DG21C0114D02		Yes
Deye	SUN-3.6K-SG02LP1-EU	Hybrid PV inverter grid-tied	Dongguan Balun	2022/03/16	BL-DG21C0114-B01 (G1)	BL-DG21C0114D02		Yes
Deye	SUN-5K-SG02LP1-EU-B	Hybrid PV inverter grid-tied	Dongguan Balun	2022/03/16	BL-DG21C0114-B01 (G1)	BL-DG21C0114D02		Yes
Deye	SUN-7.6K-SG02LP1-EU-B	Hybrid PV inverter grid-tied	Dongguan Balun	2022/03/16	BL-DG21C0114-B01 (G1)	BL-DG21C0114D02		Yes
Deye	SUN-8K-SG02LP1-EU-B	Hybrid PV inverter grid-tied	Dongguan Balun	2022/03/16	BL-DG21C0114-B01 (G1)	BL-DG21C0114D02		Yes
Deye	SUN-3.6K-SG03LP1-EU	Hybrid PV inverter grid-tied	Dongguan Balun	2022/03/16	BL-DG21C0114-B01 (G1)	BL-DG21C0114D02		Yes
Deye	SUN-5K-SG03LP1-EU	Hybrid PV inverter grid-tied	Dongguan Balun	2022/03/16	BL-DG21C0114-B01 (G1)	BL-DG21C0114D02		Yes
Deye	SUN-7.6K-SG03LP1-EU	Hybrid PV inverter grid-tied	Dongguan Balun	2022/03/16	BL-DG21C0114-B01 (G1)	BL-DG21C0114D02		Yes
Deye	SUN-8K-SG03LP1-EU	Hybrid PV inverter grid-tied	Dongguan Balun	2022/03/16	BL-DG21C0114-B01 (G1)	BL-DG21C0114D02		Yes
Deye	SUN-3.6K-SG03LP1-EU-B	Hybrid PV inverter grid-tied	Dongguan Balun	2022/03/16	BL-DG21C0114-B01 (G1)	BL-DG21C0114D02		Yes
Deye	SUN-5K-SG03LP1-EU-B	Hybrid PV inverter grid-tied	Dongguan Balun	2022/03/16	BL-DG21C0114-B01 (G1)	BL-DG21C0114D02		Yes
Deye	SUN-7.6K-SG03LP1-EU-B	Hybrid PV inverter grid-tied	Dongguan Balun	2022/03/16	BL-DG21C0114-B01 (G1)	BL-DG21C0114D02		Yes
Deye	SUN-8K-SG03LP1-EU-B	Hybrid PV inverter grid-tied	Dongguan Balun	2022/03/16	BL-DG21C0114-B01 (G1)	BL-DG21C0114D02		Yes
Deye	SUN-3.6K-SG04LP1-EU	Hybrid PV inverter grid-tied	Dongguan Balun	2022/03/16	BL-DG21C0114-B01 (G1)	BL-DG21C0114D02		Yes
Deye	SUN-5K-SG04LP1-EU	Hybrid PV inverter grid-tied	TUV Rheinland	2022/12/13	CN22MSO 001	AK 50544599 0001		Yes
Deye	SUN-7.6K-SG04LP1-EU	Hybrid PV inverter grid-tied	TUV Rheinland	2022/12/13	CN22MSO 001	AK 50544599 0001		Yes
Deye	SUN-8K-SG04LP1-EU	Hybrid PV inverter grid-tied	TUV Rheinland	2022/12/13	CN22MSO 001	AK 50544599 0001		Yes
Eaton	XSTH1P036P048V01	Hybrid PV inverter grid-tied	Bureau Veritas	2019/12/10	PVZA190716C26 163818-743394	U19-0642	Yes	
Eaton	XSTH1P046P048V01	Hybrid PV inverter grid-tied	Bureau Veritas	2019/12/10	PVZA190716C26 163818-743394	U19-0642	Yes	
Eaton	XSTH1P060P048V01	Hybrid PV inverter grid-tied	Bureau Veritas	2019/12/10	PVZA190716C26 163818-743394	U19-0642	Yes	
Enphase Energy	IQ7A-72-V-W-Y-Z	Grid-tied PV inverter	EnTest	2020/11/06	P2020082402	COCP2020082402	Yes	
Enphase Energy	IQ7X-96-V-W-Y-Z	Grid-tied PV inverter	EnTest	2020/11/06	P2020082402	COCP2020082402	Yes	
Enphase Energy	IQ7PLUS-72-V-W-Y-Z	Grid-tied PV inverter	EnTest	2020/11/06	P2020082402	COCP2020082402	Yes	
Enphase Energy	IQ7-60-V-W-Y-Z	Grid-tied PV inverter	EnTest	2020/11/06	P2020082402	COCP2020082402	Yes	
Enphase Energy	Q-RELAY-1P-INT	Disconnect device	EnTest	2020/11/06	P2020082402	COCP2020082402	Yes	
Enphase Energy	Q-RELAY-3P-INT	Disconnect device	EnTest	2020/11/06	P2020082402	COCP2020082402	Yes	
FOXESS	H1-6.0-E	Hybrid PV inverter grid-tied	TUV NORD & Donguan Balun	2021/05/17	TRPV03014/21E/02	COCPVP03014/21E-02		Yes
FOXESS	H1-5.0-E	Hybrid PV inverter grid-tied	TUV NORD & Donguan Balun	2021/05/17	TRPV03014/21E/02	COCPVP03014/21E-02		Yes
FOXESS	H1-4.6-E	Hybrid PV inverter grid-tied	TUV NORD & Donguan Balun	2021/05/17	TRPV03014/21E/02	COCPVP03014/21E-02		Yes
FOXESS	H1-3.7-E	Hybrid PV inverter grid-tied	TUV NORD & Donguan Balun	2021/05/17	TRPV03014/21E/02	COCPVP03014/21E-02		Yes
FOXESS	H1-3.0-E	Hybrid PV inverter grid-tied	TUV NORD & Donguan Balun	2021/05/17	TRPV03014/21E/02	COCPVP03014/21E-02		Yes
FOXESS	AIO-H1-6.0	Hybrid PV inverter grid-tied	TUV NORD & Donguan Balun	2021/05/17	TRPV03014/21E/02	COCPVP03014/21E-02		Yes
FOXESS	AIO-H1-5.0	Hybrid PV inverter grid-tied	TUV NORD & Donguan Balun	2021/05/17	TRPV03014/21E/02	COCPVP03014/21E-02		Yes
FOXESS	AIO-H1-4.6	Hybrid PV inverter grid-tied	TUV NORD & Donguan Balun	2021/05/17	TRPV03014/21E/02	COCPVP03014/21E-02		Yes
FOXESS	AIO-H1-3.7	Hybrid PV inverter grid-tied	TUV NORD & Donguan Balun	2021/05/17	TRPV03014/21E/02	COCPVP03014/21E-02		Yes
FOXESS	AIO-H1-3.0	Hybrid PV inverter grid-tied	TUV NORD & Donguan Balun	2021/05/17	TRPV03014/21E/02	COCPVP03014/21E-02		Yes
FOXESS	AC1-6.0-E	Hybrid PV inverter grid-tied	TUV NORD & Donguan Balun	2021/05/17	TRPV03014/21E/02	COCPVP03014/21E-02		Yes
FOXESS	AC1-5.0-E	Hybrid PV inverter grid-tied	TUV NORD & Donguan Balun	2021/05/17	TRPV03014/21E/02	COCPVP03014/21E-02		Yes
FOXESS	AC1-4.6-E	Hybrid PV inverter grid-tied	TUV NORD & Donguan Balun	2021/05/17	TRPV03014/21E/02	COCPVP03014/21E-02		Yes
FOXESS	AC1-3.7-E	Hybrid PV inverter grid-tied	TUV NORD & Donguan Balun	2021/05/17	TRPV03014/21E/02	COCPVP03014/21E-02		Yes
FOXESS	AC1-3.0-E	Hybrid PV inverter grid-tied	TUV NORD & Donguan Balun	2021/05/17	TRPV03014/21E/02	COCPVP03014/21E-02		Yes
FOXESS	AIO-AC1-6.0	Hybrid PV inverter grid-tied	TUV NORD & Donguan Balun	2021/05/17	TRPV03014/21E/02	COCPVP03014/21E-02		Yes
FOXESS	AIO-AC1-5.0	Hybrid PV inverter grid-tied	TUV NORD & Donguan Balun	2021/05/17	TRPV03014/21E/02	COCPVP03014/21E-02		Yes
FOXESS	AIO-AC1-4.6	Hybrid PV inverter grid-tied	TUV NORD & Donguan Balun	2021/05/17	TRPV03014/21E/02	COCPVP03014/21E-02		Yes
FOXESS	AIO-AC1-3.7	Hybrid PV inverter grid-tied	TUV NORD & Donguan Balun	2021/05/17	TRPV03014/21E/02	COCPVP03014/21E-02		Yes
FOXESS	AIO-AC1-3.0	Hybrid PV inverter grid-tied	TUV NORD & Donguan Balun	2021/05/17	TRPV03014/21E/02	COCPVP03014/21E-02		Yes
FOXESS	KH7	Hybrid PV inverter grid-tied	TUV Rheinland	2022/05/05	CN22ETYS 001	AK 50542790 0001		Yes
FOXESS	KH8	Hybrid PV inverter grid-tied	TUV Rheinland	2022/05/05	CN22ETYS 001	AK 50542790 0001		Yes
FOXESS	KH9	Hybrid PV inverter grid-tied	TUV Rheinland	2022/05/05	CN22ETYS 001	AK 50542790 0001		Yes
FOXESS	KH10	Hybrid PV inverter grid-tied	TUV Rheinland	2022/05/05	CN22ETYS 001	AK 50542790 0001		Yes
FOXESS	KH10.5	Hybrid PV inverter grid-tied	TUV Rheinland	2022/05/05	CN22ETYS 001	AK 50542790 0001		Yes
FOXESS	KA7	Battery based inverter grid-tied	TUV Rheinland	2022/05/05	CN22ETYS 001	AK 50542790 0001		Yes
FOXESS	KA8	Battery based inverter grid-tied	TUV Rheinland	2022/05/05	CN22ETYS 001	AK 50542790 0001		Yes
FOXESS	KA9	Battery based inverter grid-tied	TUV Rheinland	2022/05/05	CN22ETYS 001	AK 50542790 0001		Yes
FOXESS	KA10	Battery based inverter grid-tied	TUV Rheinland	2022/05/05	CN22ETYS 001	AK 50542790 0001		Yes
FOXESS	KA10.5	Battery based inverter grid-tied	TUV Rheinland	2022/05/05	CN22ETYS 001	AK 50542790 0001		Yes
Fronius	Primo 3.0-1	Grid-tied PV inverter	TUV Rheinland	2020/09/22	28119635_003	AK 60152048 0001	Yes	
Fronius	Primo 3.5-1	Grid-tied PV inverter	TUV Rheinland	2020/09/22	28119635_003	AK 60152048 0001	Yes	
Fronius	Primo 3.6-1	Grid-tied PV inverter	TUV Rheinland	2020/09/22	28119635_003	AK 60152048 0001	Yes	
Fronius	Primo 4.0-1	Grid-tied PV inverter	TUV Rheinland	2020/09/22	28119635_003	AK 60152048 0001	Yes	
Fronius	Primo 4.6-1	Grid-tied PV inverter	TUV Rheinland	2020/09/22	28119635_003	AK 60152048 0001	Yes	
Fronius	Primo 5.0-1	Grid-tied PV inverter	TUV Rheinland	2020/09/22	28119635_003	AK 60152048 0001	Yes	
Fronius	Primo 6.0-1	Grid-tied PV inverter	TUV Rheinland	2020/09/22	28119635_003	AK 60152048 0001	Yes	
Fronius	Primo 8.2-1	Grid-tied PV inverter	TUV Rheinland	2020/09/22	28119635_003	AK 60152048 0001	Yes	
Fronius	Symo 10.0-3-M	Grid-tied PV inverter	TUV Rheinland	2020/09/22	28119635_005	AK 60152049 0001	Yes	
Fronius	Symo 12.5-3-M	Grid-tied PV inverter	TUV Rheinland	2020/09/22	28119635_005	AK 60152049 0001	Yes	

1. Legend: Where V=2, S, E or blank, W = blank or ACM, Y = INT, Z = blank, RMA or NM.

2. The inverter installation must be provided with an external RCD type B.

3. Q- RELAY may only be used with these Enphase Energy inverters.

Fronius	Symo 15.0-3-M	Grid-tied PV inverter	TUV Rheinland	2020/09/22	28119635 005	AK 60152049 0001	Yes	
Fronius	Symo 17.5-3-M	Grid-tied PV inverter	TUV Rheinland	2020/09/22	28119635 005	AK 60152049 0001	Yes	
Fronius	Symo 20.0-3-M	Grid-tied PV inverter	TUV Rheinland	2020/09/22	28119635 005	AK 60152049 0001	Yes	
Fronius	Symo GEN24 XX Plus	Grid-tied PV inverter	TUV Rheinland	2021/05/19	IT2157N9 001	AK 60156753 0001	Yes	X can be 10.0; 9.0; 8.0; 7.0 and 6.0
Fronius	Symo GEN24 XX	Grid-tied PV inverter	TUV Rheinland	2021/05/19	IT2157N9 001	AK 60156753 0001	Yes	X can be 10.0; 9.0; 8.0; 7.0 and 6.0
Fronius	Symo GEN24 XX Lite	Grid-tied PV inverter	TUV Rheinland	2021/05/19	IT2157N9 001	AK 60156753 0001	Yes	X can be 10.0; 9.0; 8.0; 7.0 and 6.0
Fronius	Primo GEN24 XX Plus	Grid-tied PV inverter	TUV Rheinland	2021/05/19	IT21WUZG 001	AK 60156751 0001	Yes	X can be 3.0; 3.6; 4.0; 4.6; 5.0 and 6.0
Fronius	Primo GEN24 XX	Grid-tied PV inverter	TUV Rheinland	2021/05/19	IT21WUZG 001	AK 60156751 0001	Yes	X can be 3.0; 3.6; 4.0; 4.6; 5.0 and 6.0
Fronius	Primo GEN24 XX Lite	Grid-tied PV inverter	TUV Rheinland	2021/05/19	IT21WUZG 001	AK 60156751 0001	Yes	X can be 3.0; 3.6; 4.0; 4.6; 5.0 and 6.0
Fronius	ECO 25.0-3-S	Grid-tied PV inverter	TUV Rheinland	2021/05/05	IT210GJ 003	AK 60156511 0001	Yes	Inverter may only be used in plants according to Category A3: 100 kVA - 1MVA and connection to the grid via an external customer MVLV AC transformer.
Fronius	ECO 27.0-3-S	Grid-tied PV inverter	TUV Rheinland	2021/05/05	IT210GJ 003	AK 60156511 0001	Yes	Inverter may only be used in plants according to Category A3: 100 kVA - 1MVA and connection to the grid via an external customer MVLV AC transformer.
Fronius	TAURO ECO 50-3-P	Grid-tied PV inverter	TUV Rheinland	2022/01/25	IT22ZT00 001	AK 60161549 0001	Yes	Inverter may only be used in plants according to Category A3: 100 kVA - 1MVA and connection to the grid via an external customer MVLV AC transformer.
Fronius	TAURO ECO 50-3-D	Grid-tied PV inverter	TUV Rheinland	2022/01/25	IT22ZT00 001	AK 60161549 0001	Yes	Inverter may only be used in plants according to Category A3: 100 kVA - 1MVA and connection to the grid via an external customer MVLV AC transformer.
Fronius	TAURO ECO 99-3-P	Grid-tied PV inverter	TUV Rheinland	2022/01/25	IT22ZT00 001	AK 60161549 0001	Yes	Inverter may only be used in plants according to Category A3: 100 kVA - 1MVA and connection to the grid via an external customer MVLV AC transformer.
Fronius	TAURO ECO 99-3-D	Grid-tied PV inverter	TUV Rheinland	2022/01/25	IT22ZT00 001	AK 60161549 0001	Yes	Inverter may only be used in plants according to Category A3: 100 kVA - 1MVA and connection to the grid via an external customer MVLV AC transformer.
Fronius	TAURO ECO 100-3-P	Grid-tied PV inverter	TUV Rheinland	2022/01/25	IT22ZT00 001	AK 60161549 0001	Yes	Inverter may only be used in plants according to Category A3: 100 kVA - 1MVA and connection to the grid via an external customer MVLV AC transformer.
Fronius	TAURO ECO 100-3-D	Grid-tied PV inverter	TUV Rheinland	2022/01/25	IT22ZT00 001	AK 60161549 0001	Yes	Inverter may only be used in plants according to Category A3: 100 kVA - 1MVA and connection to the grid via an external customer MVLV AC transformer.
Fronius	TAURO 50-3-P	Grid-tied PV inverter	TUV Rheinland	2022/01/27	IT221Y5I 001	AK 60161577 0001	Yes	Inverter may only be used in plants according to Category A3: 100 kVA - 1MVA and connection to the grid via an external customer MVLV AC transformer.
Fronius	TAURO 50-3-D	Grid-tied PV inverter	TUV Rheinland	2022/01/27	IT221Y5I 001	AK 60161577 0001	Yes	Inverter may only be used in plants according to Category A3: 100 kVA - 1MVA and connection to the grid via an external customer MVLV AC transformer.
Goodwe	GW3648D-ES	Hybrid PV inverter grid-tied	TUV SUD	2018/11/12	704091815302-00	D 083373 039 Rev.00	Yes	
Goodwe	GW5048D-ES	Hybrid PV inverter grid-tied	TUV SUD	2018/11/12	704091815302-00	D 083373 039 Rev.00	Yes	
Goodwe	GW3048-EM	Hybrid PV inverter grid-tied	TUV Rheinland	2017/07/14	50085060 001	AK 50383738 0001	Yes	
Goodwe	GW3648-EM	Hybrid PV inverter grid-tied	TUV Rheinland	2017/07/14	50085060 001	AK 50383738 0001	Yes	
Goodwe	GW5048-EM	Hybrid PV inverter grid-tied	TUV Rheinland	2017/07/14	50085060 001	AK 50383738 0001	Yes	
Goodwe	GW4K-DT	Grid-tied PV inverter	Bureau Veritas	2019/11/20	ZEM-190C0893FTSHP	U19-0609	Yes	
Goodwe	GW5K-DT	Grid-tied PV inverter	Bureau Veritas	2019/11/20	ZEM-190C0893FTSHP	U19-0609	Yes	
Goodwe	GW6K-DT	Grid-tied PV inverter	Bureau Veritas	2019/11/20	ZEM-190C0893FTSHP	U19-0609	Yes	
Goodwe	GW8K-DT	Grid-tied PV inverter	Bureau Veritas	2019/11/20	ZEM-190C0893FTSHP	U19-0609	Yes	
Goodwe	GW10KT-DT	Grid-tied PV inverter	Bureau Veritas	2019/11/20	ZEM-190C0893FTSHP	U19-0609	Yes	
Goodwe	GW12KT-DT	Grid-tied PV inverter	Bureau Veritas	2019/11/20	ZEM-190C0893FTSHP	U19-0609	Yes	
Goodwe	GW15KT-DT	Grid-tied PV inverter	Bureau Veritas	2019/11/20	ZEM-190C0893FTSHP	U19-0609	Yes	
Goodwe	GW5005-BP	Battery based inverter grid-tied	TUV Rheinland	2018/11/12	50180648 001	AK 50419930 0001	Yes	
Goodwe	GW36005-BP	Battery based inverter grid-tied	TUV Rheinland	2018/11/12	50180648 001	AK 50419930 0001	Yes	
Goodwe	GW5K-ET	Hybrid PV inverter grid-tied	Bureau Veritas	2019/05/23	PVZA190507N014	1988AP0507N014001	Yes	
Goodwe	GW8K-ET	Hybrid PV inverter grid-tied	Bureau Veritas	2019/05/23	PVZA190507N014	1988AP0507N014001	Yes	
Goodwe	GW10K-ET	Hybrid PV inverter grid-tied	Bureau Veritas	2019/05/23	PVZA190507N014	1988AP0507N014001	Yes	
Goodwe	GW25K-MT	Grid-tied PV inverter	Bureau Veritas	2020/03/05	PVZA181008N021-R1	1988AP1008N021015	Yes	The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used.
Goodwe	GW30K-MT	Grid-tied PV inverter	Bureau Veritas	2020/03/05	PVZA181008N021-R1	1988AP1008N021015	Yes	The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used.
Goodwe	GW36K-MT	Grid-tied PV inverter	Bureau Veritas	2020/03/05	PVZA181008N021-R1	1988AP1008N021015	Yes	The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used.
Goodwe	GW50K-MT	Grid-tied PV inverter	Bureau Veritas	2022/05/06	PVZA180903N057-R2	1988AP0903N057004	Yes	The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used.
Goodwe	GW60K-MT	Grid-tied PV inverter	Bureau Veritas	2022/05/06	PVZA180903N057-R2	1988AP0903N057004	Yes	The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used.
Goodwe	GW50KN-MT	Grid-tied PV inverter	Bureau Veritas	2022/05/06	PVZA180903N057-R2	1988AP0903N057004	Yes	The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used.
Goodwe	GW60KN-MT	Grid-tied PV inverter	Bureau Veritas	2022/05/06	PVZA180903N057-R2	1988AP0903N057004	Yes	The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used.
Goodwe	GW 3000D-NIS	Grid-tied PV inverter	Bureau Veritas	2020/01/19	PVZA190627N029	1988AP0627N0290001	Yes	
Goodwe	GW 36000-NIS	Grid-tied PV inverter	Bureau Veritas	2020/01/19	PVZA190627N029	1988AP0627N0290001	Yes	
Goodwe	GW 42000D-NIS	Grid-tied PV inverter	Bureau Veritas	2020/01/19	PVZA190627N029	1988AP0627N0290001	Yes	
Goodwe	GW 50000-NIS	Grid-tied PV inverter	Bureau Veritas	2020/01/19	PVZA190627N029	1988AP0627N0290001	Yes	
Goodwe	GW 60000-NIS	Grid-tied PV inverter	Bureau Veritas	2020/01/19	PVZA190627N029	1988AP0627N0290001	Yes	
Goodwe	GW 20KN-DT	Grid-tied PV inverter	Bureau Veritas	2020/04/17	ASB-J-190C2322FTSHS	U20-0270	Yes	
Goodwe	GW 17KN-DT	Grid-tied PV inverter	Bureau Veritas	2020/04/17	ASB-J-190C2322FTSHS	U20-0270	Yes	
Goodwe	GW 15KN-DT	Grid-tied PV inverter	Bureau Veritas	2020/04/17	ASB-J-190C2322FTSHS	U20-0270	Yes	
Goodwe	GW 12KN-DT	Grid-tied PV inverter	Bureau Veritas	2020/04/17	ASB-J-190C2322FTSHS	U20-0270	Yes	
Goodwe	GW 100K-HT	Grid-tied PV inverter	TUV Rheinland	2020/12/24	CN20W6U 001	AK 50490607 0001	Yes	The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used.
Goodwe	GW 110K-HT	Grid-tied PV inverter	TUV Rheinland	2020/12/24	CN20W6U 001	AK 50490607 0001	Yes	The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used.
Goodwe	GW 120K-HT	Grid-tied PV inverter	TUV Rheinland	2020/12/24	CN20W6U 001	AK 50490607 0001	Yes	The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used.
Goodwe	GW 136K-HTH	Grid-tied PV inverter	TUV Rheinland	2020/12/24	CN20W6U 001	AK 50490607 0001	Yes	The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used.
Goodwe	GW5000-EHB	Hybrid PV inverter grid-tied	SGS	2021/11/11	2220/0404-E1	2620/0404-E1-CER	Yes	
Goodwe	GW6500-EHB	Hybrid PV inverter grid-tied	SGS	2021/11/11	2220/0404-E1	2620/0404-E1-CER	Yes	
Goodwe	GW8600-EHB	Hybrid PV inverter grid-tied	SGS	2021/11/11	2220/0404-E1	2620/0404-E1-CER	Yes	
Goodwe	GW0010-EHB	Hybrid PV inverter grid-tied	SGS	2021/11/11	2220/0404-E1	2620/0404-E1-CER	Yes	
Goodwe	GW 17KT-DT	Hybrid PV inverter grid-tied	TUV Rheinland	2022/04/15	60395681 002	AK 50540008 0001	Yes	The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used.
Goodwe	GW 20KT-DT	Hybrid PV inverter grid-tied	TUV Rheinland	2022/04/15	60395681 002	AK 50540008 0001	Yes	The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used.
Goodwe	GW 25KT-DT	Hybrid PV inverter grid-tied	TUV Rheinland	2022/04/15	60395681 002	AK 50540008 0001	Yes	The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used.
Goodwe	GW50KS-MT	Grid-tied PV inverter	Balun	2022/06/07	TRPV11058/21E/02	COCVPV11058/21E-04	Yes	The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used.
Goodwe	GW60KS-MT	Grid-tied PV inverter	Balun	2022/06/07	TRPV11058/21E/02	COCVPV11058/21E-04	Yes	The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used.
Goodwe	GWx-ES-20	Hybrid PV inverter grid-tied	TUV Rheinland	2022/07/06	CN22SCQU 001	AK 50550767 0001	Yes	Where x = 3000, 3600, 5000, 6000
Goodwe	GWx-ES-20	Hybrid PV inverter grid-tied	TUV Rheinland	2022/07/06	CN22SCQU 001	AK 50550767 0001	Yes	Where x = 3600, 5000, 6000
Goodwe	GWx-SBP-20	Hybrid PV inverter grid-tied	TUV Rheinland	2022/07/06	CN22SCQU 001	AK 50550767 0001	Yes	Where x = 3600, 5000, 6000

Growatt	GW80K-MT	Grid-tied PV inverter	Bureau Veritas	2022/08/10		PVZA191217N016-R2	2288AP080035001		Yes	The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used
Growatt	SPH3000TL BL-UP	Hybrid PV inverter grid-tied	Intertek	2019/10/25		190719102GZU-001	CN-PV-190037	Yes		
Growatt	SPH3800TL BL-UP	Hybrid PV inverter grid-tied	Intertek	2019/10/25		190719102GZU-001	CN-PV-190037	Yes		
Growatt	SPH4000TL BL-UP	Hybrid PV inverter grid-tied	Intertek	2019/10/25		190719102GZU-001	CN-PV-190037	Yes		
Growatt	SPH4800TL BL-UP	Hybrid PV inverter grid-tied	Intertek	2019/10/25		190719102GZU-001	CN-PV-190037	Yes		
Growatt	SPH5000TL BL-UP	Hybrid PV inverter grid-tied	Intertek	2019/10/25		190719102GZU-001	CN-PV-190037	Yes		
Growatt	SPH6000TL BL-UP	Hybrid PV inverter grid-tied	Intertek	2019/10/25		190719102GZU-001	CN-PV-190037	Yes		
Growatt	MAX 80KTL3 LV	Grid-tied PV inverter	SGS	2020/06/04	2023/06/04	2220 - 0165 - A / E1	2620/0165-A-CER	Yes		The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used
Growatt	MAX 70KTL3 LV	Grid-tied PV inverter	SGS	2020/06/04	2023/06/04	2220 - 0165 - A / E1	2620/0165-A-CER	Yes		The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used
Growatt	MAX 60KTL3 LV	Grid-tied PV inverter	SGS	2020/06/04	2023/06/04	2220 - 0165 - A / E1	2620/0165-A-CER	Yes		The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used
Growatt	MAX 50KTL3 LV	Grid-tied PV inverter	SGS	2020/06/04	2023/06/04	2220 - 0165 - A / E1	2620/0165-A-CER	Yes		The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used
Growcol	GHyper-3000	Hybrid PV inverter grid-tied	Dekra	2018/08/20		6111798.51	6111798.02AOC	Yes		
Growcol	GHyper-3600	Hybrid PV inverter grid-tied	Dekra	2018/08/20		6111798.51	6111798.02AOC	Yes		
Growcol	GHyper-5000	Hybrid PV inverter grid-tied	Dekra	2018/08/20		6111798.51	6111798.02AOC	Yes		
Growcol	GX25KT	Grid-tied PV inverter	Intertek	2022/06/27		220120058GZU-001, Rev 1	CN-PV-220040R1	Yes		The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used
Growcol	GX25KT-S	Grid-tied PV inverter	Intertek	2022/06/27		220120058GZU-001, Rev 1	CN-PV-220040R1	Yes		The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used
Growcol	GX30KT	Grid-tied PV inverter	Intertek	2022/06/27		220120058GZU-001, Rev 1	CN-PV-220040R1	Yes		The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used
Growcol	GX30KT-S	Grid-tied PV inverter	Intertek	2022/06/27		220120058GZU-001, Rev 1	CN-PV-220040R1	Yes		The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used
Growcol	GX33KT	Grid-tied PV inverter	Intertek	2022/06/27		220120058GZU-001, Rev 1	CN-PV-220040R1	Yes		The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used
Growcol	GX33KT-S	Grid-tied PV inverter	Intertek	2022/06/27		220120058GZU-001, Rev 1	CN-PV-220040R1	Yes		The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used
Growcol	GX36KT	Grid-tied PV inverter	Intertek	2022/06/27		220120058GZU-001, Rev 1	CN-PV-220040R1	Yes		The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used
Growcol	GX36KT-S	Grid-tied PV inverter	Intertek	2022/06/27		220120058GZU-001, Rev 1	CN-PV-220040R1	Yes		The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used
Growcol	GX40KT	Grid-tied PV inverter	Intertek	2022/06/27		220120058GZU-001, Rev 1	CN-PV-220040R1	Yes		The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used
Growcol	GX40KT-S	Grid-tied PV inverter	Intertek	2022/06/27		220120058GZU-001, Rev 1	CN-PV-220040R1	Yes		The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used
Growcol	GX50KT	Grid-tied PV inverter	Intertek	2022/06/27		220120057GZU-001, Rev 1	CN-PV-220039R1	Yes		The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used
Growcol	GX50KT-L	Grid-tied PV inverter	Intertek	2022/06/27		220120057GZU-001, Rev 1	CN-PV-220039R1	Yes		The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used
Growcol	GX50KT-L-S	Grid-tied PV inverter	Intertek	2022/06/27		220120057GZU-001, Rev 1	CN-PV-220039R1	Yes		The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used
Growcol	GX50KT-S	Grid-tied PV inverter	Intertek	2022/06/27		220120057GZU-001, Rev 1	CN-PV-220039R1	Yes		The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used
Growcol	GX50KT-T	Grid-tied PV inverter	Intertek	2022/06/27		220120057GZU-001, Rev 1	CN-PV-220039R1	Yes		The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used
Growcol	GX56KT	Grid-tied PV inverter	Intertek	2022/06/27		220120057GZU-001, Rev 1	CN-PV-220039R1	Yes		The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used
Growcol	GX66KT-S	Grid-tied PV inverter	Intertek	2022/06/27		220120057GZU-001, Rev 1	CN-PV-220039R1	Yes		The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used
Growcol	GX70KT	Grid-tied PV inverter	Intertek	2022/06/27		220120057GZU-001, Rev 1	CN-PV-220039R1	Yes		The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used
Growcol	GX70KT-S	Grid-tied PV inverter	Intertek	2022/06/27		220120057GZU-001, Rev 1	CN-PV-220039R1	Yes		The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used
Growcol	GX100KT	Grid-tied PV inverter	Intertek	2022/06/27		220307041GZU-001, Rev 1	CN-PV-220070R1	Yes		The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used
Growcol	GX100KT-F	Grid-tied PV inverter	Intertek	2022/06/27		220307041GZU-001, Rev 1	CN-PV-220070R1	Yes		The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used
Growcol	GX110KT	Grid-tied PV inverter	Intertek	2022/06/27		220307041GZU-001, Rev 1	CN-PV-220070R1	Yes		The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used
Growcol	GX110KT-F	Grid-tied PV inverter	Intertek	2022/06/27		220307041GZU-001, Rev 1	CN-PV-220070R1	Yes		The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used
Growcol	GX136KT-L	Grid-tied PV inverter	Intertek	2022/06/27		220307041GZU-001, Rev 1	CN-PV-220070R1	Yes		The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used
Growcol	GX136KT-LF	Grid-tied PV inverter	Intertek	2022/06/27		220307041GZU-001, Rev 1	CN-PV-220070R1	Yes		The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used
Growcol	GX136KT-X	Grid-tied PV inverter	Intertek	2022/06/27		220307041GZU-001, Rev 1	CN-PV-220070R1	Yes		The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used
Growcol	GX136KT-XF	Grid-tied PV inverter	Intertek	2022/06/27		220307041GZU-001, Rev 1	CN-PV-220070R1	Yes		The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used
Growcol	GW-MPS030	Hybrid PV inverter grid-tied	TÜV NORD (Hangzhou)	2022/05/24		TRPV/P040/042/22E01	COCCPVP040/042/22E01	Yes		
Growcol	GW-MPS050	Hybrid PV inverter grid-tied	TÜV NORD (Hangzhou)	2022/05/24		TRPV/P040/042/22E01	COCCPVP040/042/22E01	Yes		
Growcol	GW-MPS100	Hybrid PV inverter grid-tied	TÜV NORD (Hangzhou)	2022/05/24		TRPV/P040/042/22E01	COCCPVP040/042/22E01	Yes		
Growcol	GW-MPS150	Hybrid PV inverter grid-tied	TÜV NORD (Hangzhou)	2022/05/24		TRPV/P040/042/22E01	COCCPVP040/042/22E01	Yes		
Growcol	GW8KS1	Hybrid PV inverter grid-tied	TÜV SUD	2022/10/14		64.290.22.31173.01	D 118596 0001 Rev.00			
Hoymiles	MI-500	Grid-tied PV inverter	Bureau Veritas	2018/07/10		BMH-18JA0680FCSP-R1	U18-0374	Yes		
Hoymiles	MI-600	Grid-tied PV inverter	Bureau Veritas	2018/07/10		BMH-18JA0680FCSP-R1	U18-0374	Yes		
Hoymiles	MI-700	Grid-tied PV inverter	Bureau Veritas	2018/07/10		BMH-18JA0680FCSP-R1	U18-0374	Yes		
Hoymiles	MI-1000	Grid-tied PV inverter	Bureau Veritas	2018/07/27		ZEM-18AP0889FCSPH	U18-0435	Yes		
Hoymiles	MI-1000T	Grid-tied PV inverter	Bureau Veritas	2018/07/27		ZEM-18AP0889FCSPH	U18-0435	Yes		
Hoymiles	MI-1200	Grid-tied PV inverter	Bureau Veritas	2018/07/27		ZEM-18AP0889FCSPH	U18-0435	Yes		
Hoymiles	MI-1200T	Grid-tied PV inverter	Bureau Veritas	2018/07/27		ZEM-18AP0889FCSPH	U18-0435	Yes		
Hoymiles	HM-500	Grid-tied PV inverter	TÜV NORD & Donguan Balun	2021/11/19		TRPV/P03078/21B/02	COCCPVP03078/21B-02		Yes	
Hoymiles	HM-500T	Grid-tied PV inverter	TÜV NORD & Donguan Balun	2021/11/19		TRPV/P03078/21B/02	COCCPVP03078/21B-02		Yes	
Hoymiles	HM-600	Grid-tied PV inverter	TÜV NORD & Donguan Balun	2021/11/19		TRPV/P03078/21B/02	COCCPVP03078/21B-02		Yes	
Hoymiles	HM-600T	Grid-tied PV inverter	TÜV NORD & Donguan Balun	2021/11/19		TRPV/P03078/21B/02	COCCPVP03078/21B-02		Yes	
Hoymiles	HM-700	Grid-tied PV inverter	TÜV NORD & Donguan Balun	2021/11/19		TRPV/P03078/21B/02	COCCPVP03078/21B-02		Yes	
Hoymiles	HM-700T	Grid-tied PV inverter	TÜV NORD & Donguan Balun	2021/11/19		TRPV/P03078/21B/02	COCCPVP03078/21B-02		Yes	
Hoymiles MI-500, 600 and 700 micro inverters are not equipped with an internal disconnection device and an external City listed neutral connection. Maximum voltage and frequency relay must be provided in the photovoltaic system with appropriately sized two in series conductors according to NRS 097-2-1 requirements and default settings.										

Kodak	Kodak I3.6	Grid-tied PV inverter	Dekra	2019/12/10	6065813.50	6065813.01AAC	Yes			
Kodak	Kodak I4.6	Grid-tied PV inverter	Dekra	2019/12/10	6065813.50	6065813.01AAC	Yes			
Kodak	Kodak H3.0	Hybrid PV inverter grid-tied	TUV Rheinland	2019/12/17	50173405 002	AK 50454890 0001	Yes			
Kodak	Kodak H3.6	Hybrid PV inverter grid-tied	TUV Rheinland	2019/12/17	50173405 002	AK 50454890 0001	Yes			
Kodak	Kodak H4.6	Hybrid PV inverter grid-tied	TUV Rheinland	2019/12/17	50173405 002	AK 50454890 0001	Yes			
Koyee	KY-1Hhybrid-5k0-H	Hybrid PV inverter grid-tied	Intertek	2021/01/22	201102063GZU-001	CN-PV-210016	Yes			
Koyee	KY-1HYbrid-5k0-H-A	Hybrid PV inverter grid-tied	Intertek	2021/06/21	210525156GZU-001	CN-PV-210154	Yes			
Koyee	KY-EST06KH-A	Hybrid PV inverter grid-tied	TUV NORD	2021/12/30	TRPV/P04039/21E/09	COCPVP04039/21E/02	Yes			
Koyee	KY-EST08KH-A	Hybrid PV inverter grid-tied	TUV NORD	2021/12/30	TRPV/P04039/21E/09	COCPVP04039/21E/02	Yes			
Koyee	KY-EST10KH-A	Hybrid PV inverter grid-tied	TUV NORD	2021/12/30	TRPV/P04039/21E/09	COCPVP04039/21E/02	Yes			
Koyee	KY-EST12KH-A	Hybrid PV inverter grid-tied	TUV NORD	2021/12/30	TRPV/P04039/21E/09	COCPVP04039/21E/02	Yes			
Koyee	KY-EST15KH-A	Hybrid PV inverter grid-tied	TUV NORD	2021/12/30	TRPV/P04039/21E/09	COCPVP04039/21E/02	Yes			
Koyee	KY-EST17KH-A	Hybrid PV inverter grid-tied	TUV NORD	2021/12/30	TRPV/P04039/21E/09	COCPVP04039/21E/02	Yes			
Koyee	KY-EST20KH-A	Hybrid PV inverter grid-tied	TUV NORD	2021/12/30	TRPV/P04039/21E/09	COCPVP04039/21E/02	Yes			
Koyee	KY-EST06KH	Hybrid PV inverter grid-tied	TUV NORD	2021/10/15	TRPV/P04039/21E/04	COCPVP04039/21E/01	Yes			
Koyee	KY-EST08KH	Hybrid PV inverter grid-tied	TUV NORD	2021/10/15	TRPV/P04039/21E/04	COCPVP04039/21E/01	Yes			
Koyee	KY-EST10KH	Hybrid PV inverter grid-tied	TUV NORD	2021/10/15	TRPV/P04039/21E/04	COCPVP04039/21E/01	Yes			
Koyee	KY-EST12KH	Hybrid PV inverter grid-tied	TUV NORD	2021/10/15	TRPV/P04039/21E/04	COCPVP04039/21E/01	Yes			
Koyee	KY-EST15KH	Hybrid PV inverter grid-tied	TUV NORD	2021/10/15	TRPV/P04039/21E/04	COCPVP04039/21E/01	Yes			
Koyee	KY-EST17KH	Hybrid PV inverter grid-tied	TUV NORD	2021/10/15	TRPV/P04039/21E/04	COCPVP04039/21E/01	Yes			
Koyee	KY-EST20KH	Hybrid PV inverter grid-tied	TUV NORD	2021/10/15	TRPV/P04039/21E/04	COCPVP04039/21E/01	Yes			
KSTAR	Blue-S 3680D	Hybrid PV inverter grid-tied	TUV SUD	2021/09/23	64 290_20_30989_03	D 075386 0 136 Rev_02	Yes			
KSTAR	Blue-S 5000D	Hybrid PV inverter grid-tied	TUV SUD	2021/09/23	64 290_20_30989_03	D 075386 0 136 Rev_02	Yes			
KSTAR	Blue-S 3680D-M1	Hybrid PV inverter grid-tied	TUV SUD	2021/09/23	64 290_20_30989_03	D 075386 0 136 Rev_02	Yes			
KSTAR	Blue-G 3000S	Grid-tied PV inverter	TUV SUD	2021/09/23	64 290_21_30004_03	D 075386 0 136 Rev_02	Yes			
KSTAR	Blue-G 3000S-M1	Grid-tied PV inverter	TUV SUD	2021/09/23	64 290_21_30004_03	D 075386 0 137 Rev_02	Yes			
KSTAR	Blue-G 3000D	Grid-tied PV inverter	TUV SUD	2021/09/23	64 290_21_30004_03	D 075386 0 137 Rev_02	Yes			
KSTAR	Blue-G 3000D-M0	Grid-tied PV inverter	TUV SUD	2021/09/23	64 290_21_30004_03	D 075386 0 137 Rev_02	Yes			
KSTAR	Blue-G 3600D	Grid-tied PV inverter	TUV SUD	2021/09/23	64 290_21_30004_03	D 075386 0 137 Rev_02	Yes			
KSTAR	Blue-G 3600D-M0	Grid-tied PV inverter	TUV SUD	2021/09/23	64 290_21_30004_03	D 075386 0 137 Rev_02	Yes			
KSTAR	Blue-G 3600D-M1	Grid-tied PV inverter	TUV SUD	2021/09/23	64 290_21_30004_03	D 075386 0 137 Rev_02	Yes			
KSTAR	Blue-G 4000D	Grid-tied PV inverter	TUV SUD	2021/09/23	64 290_21_30004_03	D 075386 0 137 Rev_02	Yes			
KSTAR	Blue-G 4000D-M0	Grid-tied PV inverter	TUV SUD	2021/09/23	64 290_21_30004_03	D 075386 0 137 Rev_02	Yes			
KSTAR	Blue-G 4000D-M1	Grid-tied PV inverter	TUV SUD	2021/09/23	64 290_21_30004_03	D 075386 0 137 Rev_02	Yes			
KSTAR	Blue-G 4200D	Grid-tied PV inverter	TUV SUD	2021/09/23	64 290_21_30004_03	D 075386 0 137 Rev_02	Yes			
KSTAR	Blue-G 4200D-M0	Grid-tied PV inverter	TUV SUD	2021/09/23	64 290_21_30004_03	D 075386 0 137 Rev_02	Yes			
KSTAR	Blue-G 4200D-M1	Grid-tied PV inverter	TUV SUD	2021/09/23	64 290_21_30004_03	D 075386 0 137 Rev_02	Yes			
KSTAR	Blue-G 4600D	Grid-tied PV inverter	TUV SUD	2021/09/23	64 290_21_30004_03	D 075386 0 137 Rev_02	Yes			
KSTAR	Blue-G 4600D-M1	Grid-tied PV inverter	TUV SUD	2021/09/23	64 290_21_30004_03	D 075386 0 137 Rev_02	Yes			
Lifelynk	Life3.5hv6b02	Hybrid PV inverter grid-tied	Donguan Balun	2022/05/19	BL-DG2240044B01	BL-DG2240044D01	Yes			
Lifelynk	Life3.3hv6b02	Hybrid PV inverter grid-tied	Donguan Balun	2022/05/19	BL-DG2240044B01	BL-DG2240044D01	Yes			
Livotek	Hyper-2000	Hybrid PV inverter grid-tied	Dekra	2019/07/05	6055811_50	6055811_01AAC	Yes			
Livotek	Hyper-3000	Hybrid PV inverter grid-tied	Dekra	2019/07/05	6055811_50	6055811_01AAC	Yes			
Livotek	Hyper-3680	Hybrid PV inverter grid-tied	Dekra	2019/07/05	6055811_50	6055811_01AAC	Yes			
Livotek	Hyper-4600	Hybrid PV inverter grid-tied	Dekra	2019/07/05	6055811_50	6055811_01AAC	Yes			
Livotek	Hyper-5000	Hybrid PV inverter grid-tied	Dekra	2019/07/05	6055811_50	6055811_01AAC	Yes			
Livotek	Retro-2000	Battery based inverter grid-tied	Dekra	2019/07/05	6055811_50	6055811_01AAC	Yes			
Livotek	Retro-3000	Battery based inverter grid-tied	Dekra	2019/07/05	6055811_50	6055811_01AAC	Yes			
Livotek	Retro-3680	Battery based inverter grid-tied	Dekra	2019/07/05	6055811_50	6055811_01AAC	Yes			
Livotek	Retro-4600	Battery based inverter grid-tied	Dekra	2019/07/05	6055811_50	6055811_01AAC	Yes			
Livotek	Retro-5000	Battery based inverter grid-tied	Dekra	2019/07/05	6055811_50	6055811_01AAC	Yes			
Lovato	PMVF 80	Network & system relay	TUV SUD	2020/10/28	TR-486879-82695-04 (Ed 01)	D 084111 Rev_00	No	No	No	
Lux Power	LXP 3K Hybrid	Hybrid PV inverter grid-tied	Intertek	2019/08/29	190624070GZU-001	CN-PV-190006	Yes			
Lux Power	LXP 4K Hybrid	Hybrid PV inverter grid-tied	Intertek	2019/08/29	190624070GZU-001	CN-PV-190006	Yes			
Lux Power	LXP 5K Hybrid	Hybrid PV inverter grid-tied	Intertek	2019/08/29	190624070GZU-001	CN-PV-190006	Yes			
Lux Power	LXP-I R-EU 8K	Hybrid PV inverter grid-tied	Intertek	2022/08/16	211111140GZU-001	CN-PV-220166	Yes			
Lux Power	LXP-LB-EU 10K	Hybrid PV inverter grid-tied	Intertek	2022/08/16	211111140GZU-001	CN-PV-220166	Yes			
Lux Power	LXP-LB-EU 12K	Hybrid PV inverter grid-tied	Intertek	2022/08/22	220630104GZU-001	CN-PV-220171	Yes			
Mecer	Mecer Sol-I-II-S-10M	Hybrid PV inverter grid-tied	Bureau Veritas	2020/10/30	PVZA180904N057-R1	2088AP0923N01002	Yes			
Megarevo	R3KL1	Hybrid PV inverter grid-tied	TUV SUD	2022/01/14	64 290_21_30686_01	D 115385 001 Rev_00	Yes			
Megarevo	R3K6L1	Hybrid PV inverter grid-tied	TUV SUD	2022/01/14	64 290_21_30686_01	D 115385 001 Rev_00	Yes			
Megarevo	R4KL1	Hybrid PV inverter grid-tied	TUV SUD	2022/01/14	64 290_21_30686_01	D 115385 001 Rev_00	Yes			
Megarevo	R4K6L1	Hybrid PV inverter grid-tied	TUV SUD	2022/01/14	64 290_21_30686_01	D 115385 001 Rev_00	Yes			
Megarevo	R5KL1	Hybrid PV inverter grid-tied	TUV SUD	2022/01/14	64 290_21_30686_01	D 115385 001 Rev_00	Yes			
Megarevo	R6KL1	Hybrid PV inverter grid-tied	TUV SUD	2022/01/14	64 290_21_30686_01	D 115385 001 Rev_00	Yes			
Megarevo	R8KL1	Hybrid PV inverter grid-tied	TUV SUD	2022/01/26	64 290_21_30636_01	D 115385 002 Rev_00	Yes			
Ohm	OHM-3K-W	Hybrid PV inverter grid-tied	Shenzhen Balun	2020/02/26	BL-SZ1910095-B02	BL-SZ1910095-D02	Yes			
Ohm	OHM-7.6K-W	Hybrid PV inverter grid-tied	Shenzhen Balun	2020/02/26	BL-SZ1910095-B02	BL-SZ1910095-D02	Yes			
Ohm	OHM-6K-W	Hybrid PV inverter grid-tied	Shenzhen Balun	2020/02/26	BL-SZ1910095-B02	BL-SZ1910095-D02	Yes			
Ohm	OHM-5K-W	Hybrid PV inverter grid-tied	Shenzhen Balun	2020/02/26	BL-SZ1910095-B02	BL-SZ1910095-D02	Yes			
Ohm	OHM-3.6K-W	Hybrid PV inverter grid-tied	Shenzhen Balun	2020/02/26	BL-SZ1910095-B02	BL-SZ1910095-D02	Yes			
Oucoo	M3KES	Hybrid PV inverter grid-tied	TUV SUD	2022/01/25	64 290_22_30047_01	D 115420 001 Rev_00	Yes			
Oucoo	M3K6ES	Hybrid PV inverter grid-tied	TUV SUD	2022/01/25	64 290_22_30047_01	D 115420 001 Rev_00	Yes			
Oucoo	M4KES	Hybrid PV inverter grid-tied	TUV SUD	2022/01/25	64 290_22_30047_01	D 115420 001 Rev_00	Yes			
Oucoo	M4K6ES	Hybrid PV inverter grid-tied	TUV SUD	2022/01/25	64 290_22_30047_01	D 115420 001 Rev_00	Yes			
Oucoo	MSKES	Hybrid PV inverter grid-tied	TUV SUD	2022/01/25	64 290_22_30047_01	D 115420 001 Rev_00	Yes			
Oucoo	M8KES	Hybrid PV inverter grid-tied	TUV SUD	2022/01/25	64 290_22_30047_01	D 115420 001 Rev_00	Yes			
Oucoo	M8KDS	Hybrid PV inverter grid-tied	TUV SUD	2022/01/27	64 290_22_30048_01	D 115420 002 Rev_00	Yes			
Rentech	HYD 3000-EP	Hybrid PV inverter grid-tied	Intertek	2020/12/22	201207035GZU-001	CN-PV-200172	Yes			
Rentech	HYD 3680-EP	Hybrid PV inverter grid-tied	Intertek	2020/12/22	201207035GZU-001	CN-PV-200172	Yes			
Rentech	HYD 4000-EP	Hybrid PV inverter grid-tied	Intertek	2020/12/22	201207035GZU-001	CN-PV-200172	Yes			
Rentech	HYD 4600-EP	Hybrid PV inverter grid-tied	Intertek	2020/12/22	201207035GZU-001	CN-PV-200172	Yes			
Rentech	HYD 5000-EP	Hybrid PV inverter grid-tied	Intertek	2020/12/22	201207035GZU-001	CN-PV-200172	Yes			
Rentech	HYD 5500-EP	Hybrid PV inverter grid-tied	Intertek	2020/12/22	201207035GZU-001	CN-PV-200172	Yes			
Rentech	HYD 6000-EP	Hybrid PV inverter grid-tied	Intertek	2020/12/22	201207035GZU-001	CN-PV-200172	Yes			
Rentech	INFINISOLAR PLUS 5 kW	Hybrid PV inverter grid-tied	Bureau Veritas	2021/02/20	PVZA2101WGD0269	2188AP0269001	Yes			
Royal	RH 3.6K-1PLVG1-EU	Hybrid PV inverter grid-tied	Intertek	2022/10/17	220600667SHA-004	CN-PV-220212R1	Yes			

•models shown are programmed for production testing and do not necessarily comply with DIN VDE 0124-100 and VDE-AR-N 4105:2018-11. Must be programmed to IEC 61000-3-2 or the applicable South African Grid Codes and may only be used in conjunction with approved IEC 61000-3-2 type tested inverters on this list.

Royal	RH 4K-1PLVG1-EU	Hybrid PV inverter grid-tied	Intertek	2022/10/17	220600667SHA-004	CN-PV-220212R1		Yes	
Royal	RH 4.6K-1PLVG1-EU	Hybrid PV inverter grid-tied	Intertek	2022/10/17	220600667SHA-004	CN-PV-220212R1		Yes	
Royal	RH 5K-1PLVG1-EU	Hybrid PV inverter grid-tied	Intertek	2022/10/17	220600667SHA-004	CN-PV-220212R1		Yes	
SAJ	H1-3K-S2	Hybrid PV inverter grid-tied	TÜV SÜD	2022/11/18	64.290.20.30788.02	D 077831.0019 Rev.01		Yes	
SAJ	H1-3.6K-S2	Hybrid PV inverter grid-tied	TÜV SÜD	2022/11/18	64.290.20.30788.02	D 077831.0019 Rev.01		Yes	
SAJ	H1-4K-S2	Hybrid PV inverter grid-tied	TÜV SÜD	2022/11/18	64.290.20.30788.02	D 077831.0019 Rev.01		Yes	
SAJ	H1-4.6K-S2	Hybrid PV inverter grid-tied	TÜV SÜD	2022/11/18	64.290.20.30788.02	D 077831.0019 Rev.01		Yes	
SAJ	H1-5K-S2	Hybrid PV inverter grid-tied	TÜV SÜD	2022/11/18	64.290.20.30788.02	D 077831.0019 Rev.01		Yes	
SAJ	H1-4.6K-S2	Hybrid PV inverter grid-tied	TÜV SÜD	2022/11/18	64.290.20.30788.02	D 077831.0019 Rev.01		Yes	
Schneider	Conext CL-60E	Grid-tied PV inverter	TÜV SÜD	2018/02/01	701261703251-01	D 102650.0006		Yes	
Schneider	XW+6548E	Battery based inverter grid-tied	TÜV Rheinland	2020/08/11	50328664.002	AK 50477341.001		Yes	
Schneider	CL 33	Grid-tied PV inverter	TÜV NORD & Shenzhen Balun	2021/02/09	TRPVP11115/20B/01_R2	COCPVP11115/20B_R1			The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used.
Schneider	CL50	Grid-tied PV inverter	TÜV NORD & Shenzhen Balun	2021/02/09	TRPVP11115/20B/01_R2	COCPVP11115/20B_R1			The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used.
Sematec	SMT-5K-TL-LV	Hybrid PV inverter grid-tied	TÜV SÜD	2019/06/25	64.290.19.01426.01	D 102650.0007		Yes	
Sematec	SMT-10K-TL-TH	Hybrid PV inverter grid-tied	TÜV SÜD	2019/07/25	64.290.18.04743.01	D 102650.0009		Yes	
Sinexcel	PWG2-50K-EX	Hybrid PV inverter grid-tied	TÜV SÜD	2021/09/10	64.290.21.30201.02	D 076777.0016 Rev. 01		Yes	Inverter may only be used in plants according to Category A3: 100 kVA - 1MVA, inverter not equipped with an internal disconnection device and an external City listed network and system grid protection voltage and frequency relay must be provided with appropriately sized electromechanical switches.
Sinexcel	PWG2-100K-EX	Hybrid PV inverter grid-tied	TÜV SÜD	2021/09/10	64.290.21.30201.02	D 076777.0016 Rev. 01		Yes	Inverter may only be used in plants according to Category A3: 100 kVA - 1MVA, inverter not equipped with an internal disconnection device and an external City listed network and system grid protection voltage and frequency relay must be provided with appropriately sized electromechanical switches.
SMA	STP50-40	Grid-tied PV inverter	Bureau Veritas	2023/03/08	17TH0199-NRS 097-2-1_4	U23-0185		Yes	Inverter may only be used in plants according to Category A3: 100 kVA - 1MVA and connection to the grid via an external customer MVLV AC transformer.
SMA	STP50-41	Grid-tied PV inverter	Bureau Veritas	2023/03/08	17TH0199-NRS 097-2-1_4	U23-0185		Yes	Inverter may only be used in plants according to Category A3: 100 kVA - 1MVA and connection to the grid via an external customer MVLV AC transformer.
SMA	STP60-10	Grid-tied PV inverter	Bureau Veritas	2018/09/26	14TH0075-NRS 097-2-1_3	U18-0451		Yes	Inverter may only be used in plants according to Category A3: 100 kVA - 1MVA and connection to the grid via an external customer MVLV AC transformer.
SMA	SHP75-10	Grid-tied PV inverter	Bureau Veritas	2018/09/26	14TH0075-NRS 097-2-1_3	U18-0451		Yes	Inverter may only be used in plants according to Category A3: 100 kVA - 1MVA and connection to the grid via an external customer MVLV AC transformer.
SMA	STPS 60-10	Battery based PV inverter grid-tied	Bureau Veritas	2018/09/26	14TH0075-NRS 097-2-1_3	U18-0451		Yes	Inverter may only be used in plants according to Category A3: 100 kVA - 1MVA and connection to the grid via an external customer MVLV AC transformer.
SMA	SB3.0-1AV-41	Grid-tied PV inverter	Bureau Veritas	2023/01/20	16TH0348-NRS 097-2-1_1	U23-0041		Yes	
SMA	SB3.6-1AV-41	Grid-tied PV inverter	Bureau Veritas	2023/01/20	16TH0348-NRS 097-2-1_1	U23-0041		Yes	
SMA	SB4.0-1AV-41	Grid-tied PV inverter	Bureau Veritas	2023/01/20	16TH0348-NRS 097-2-1_1	U23-0041		Yes	
SMA	SB5.0-1AV-41	Grid-tied PV inverter	Bureau Veritas	2023/01/20	16TH0348-NRS 097-2-1_1	U23-0041		Yes	
SMA	SB6.0-1AV-41	Grid-tied PV inverter	Bureau Veritas	2023/01/20	16TH0348-NRS 097-2-1_1	U23-0041		Yes	
SMA	STP 15000TL-30	Grid-tied PV inverter	Bureau Veritas	2020/08/13	14TH0304-NRS 097-2-1-2017_0	U20-0641		Yes	
SMA	STP 20000TL-30	Grid-tied PV inverter	Bureau Veritas	2020/08/13	14TH0304-NRS 097-2-1-2017_0	U20-0641		Yes	
SMA	STP 25000TL-30	Grid-tied PV inverter	Bureau Veritas	2020/08/13	14TH0304-NRS 097-2-1-2017_0	U20-0641		Yes	
SMA	STP 110-60	Grid-tied PV inverter	TÜV SÜD	2021/01/21	704092001981-00	D 0701220010 Rev. 00		Yes	The maximum DC voltage is depended on PV array and may not exceed 1000V when this inverter is used.
SMA	STP3.0-3AV-40	Grid-tied PV inverter	Bureau Veritas	2021/07/14	18TH0325-NRS 2-1_0	U21-0861		Yes	
SMA	STP4.0-3AV-40	Grid-tied PV inverter	Bureau Veritas	2021/07/14	18TH0325-NRS 2-1_0	U21-0861		Yes	
SMA	STP5.0-3AV-40	Grid-tied PV inverter	Bureau Veritas	2021/07/14	18TH0325-NRS 2-1_0	U21-0861		Yes	
SMA	STP6.0-3AV-40	Grid-tied PV inverter	Bureau Veritas	2021/07/14	18TH0325-NRS 2-1_0	U21-0861		Yes	
SMA	STP8.0-3AV-40	Grid-tied PV inverter	Bureau Veritas	2021/07/14	18TH0325-NRS 2-1_0	U21-0861		Yes	
SMA	STP10.0-3AV-40	Grid-tied PV inverter	Bureau Veritas	2021/07/14	18TH0325-NRS 2-1_0	U21-0861		Yes	
SMA	STP5.0-3SE-40	Hybrid PV inverter grid-tied	TÜV Rheinland	2022/02/21	CN210918.001	AK 50510847.0001		Yes	
SMA	STP6.0-3SE-40	Hybrid PV inverter grid-tied	TÜV Rheinland	2022/02/21	CN210918.001	AK 50510847.0001		Yes	
SMA	STP8.0-3SE-40	Hybrid PV inverter grid-tied	TÜV Rheinland	2022/02/21	CN210918.001	AK 50510847.0001		Yes	
SMA	STP10.0-3SE-40	Hybrid PV inverter grid-tied	TÜV Rheinland	2022/02/21	CN210918.001	AK 50510847.0001		Yes	
SMA	STP12-50	Grid-tied PV inverter	TÜV SÜD	2022/12/21	713254379-006	ESY 070122 0040 Rev.00		Yes	Inverter is intended for use according to Category A3 and for grid connection with an external customer MVLV AC transformer.
SMA	STP15-50	Grid-tied PV inverter	TÜV SÜD	2022/12/21	713254379-006	ESY 070122 0040 Rev.00		Yes	Inverter is intended for use according to Category A3 and for grid connection with an external customer MVLV AC transformer.
SMA	STP20-51	Grid-tied PV inverter	TÜV SÜD	2022/12/21	713254379-006	ESY 070122 0040 Rev.00		Yes	Inverter is intended for use according to Category A3 and for grid connection with an external customer MVLV AC transformer.
SMA	STP25-50	Grid-tied PV inverter	TÜV SÜD	2022/12/21	713254379-006	ESY 070122 0040 Rev.00		Yes	Inverter is intended for use according to Category A3 and for grid connection with an external customer MVLV AC transformer.
Sofar Solar	HYD 6000-ES	Hybrid PV inverter grid-tied	Intertek	2019/07/16	19063089GZU-001	19063089GZU-001		Yes	
Sofar Solar	HYD 5000-ES	Hybrid PV inverter grid-tied	Intertek	2019/07/16	19063089GZU-001	19063089GZU-001		Yes	
Sofar Solar	HYD 3000-ES	Hybrid PV inverter grid-tied	Intertek	2019/07/16	19063089GZU-001	19063089GZU-001		Yes	
Sofar Solar	HYD 3000-ES	Hybrid PV inverter grid-tied	Intertek	2019/07/16	19063089GZU-001	19063089GZU-001		Yes	
Sofar Solar	60000TL	Grid-tied PV inverter	Intertek	2019/12/19	19102590GZU-001	CN-PV-190909		Yes	
Sofar Solar	50000TL	Grid-tied PV inverter	Intertek	2019/12/19	19102590GZU-001	CN-PV-190909		Yes	
Sofar Solar	HYD 5KTL-3PH	Hybrid PV inverter grid-tied	Shenzhen Balun	2020/07/10	BL-DG2060517D01	BL-DG2060517D01		Yes	
Sofar Solar	HYD 6KTL-3PH	Hybrid PV inverter grid-tied	Shenzhen Balun	2020/07/10	BL-DG2060517D01	BL-DG2060517D01		Yes	
Sofar Solar	HYD 8KTL-3PH	Hybrid PV inverter grid-tied	Shenzhen Balun	2020/07/10	BL-DG2060517D01	BL-DG2060517D01		Yes	
Sofar Solar	HYD 10KTL-3PH	Hybrid PV inverter grid-tied	Shenzhen Balun	2020/07/10	BL-DG2060517D01	BL-DG2060517D01		Yes	
Sofar Solar	HYD 15KTL-3PH	Hybrid PV inverter grid-tied	Shenzhen Balun	2020/07/10	BL-DG2060517D01	BL-DG2060517D01		Yes	
Sofar Solar	HYD 20KTL-3PH	Hybrid PV inverter grid-tied	Shenzhen Balun	2020/07/10	BL-DG2060517D01	BL-DG2060517D01		Yes	
Sofar Solar	3KTL-M-3	Grid-tied PV inverter	Intertek	2021/08/09	210715145GZU-002	CN-PV-210185		Yes	
Sofar Solar	3.6KTL-M-3	Grid-tied PV inverter	Intertek	2021/08/09	210715145GZU-002	CN-PV-210185		Yes	
Sofar Solar	4KTL-M-3	Grid-tied PV inverter	Intertek	2021/08/09	210715145GZU-002	CN-PV-210185		Yes	
Sofar Solar	4.6KTL-M-3	Grid-tied PV inverter	Intertek	2021/08/09	210715145GZU-002	CN-PV-210185		Yes	
Sofar Solar	5KTL-M-3	Grid-tied PV inverter	Intertek	2021/08/09	210715145GZU-002	CN-PV-210185		Yes	
Sofar Solar	5KTL-M-3A	Grid-tied PV inverter	Intertek	2021/08/09	210715145GZU-002	CN-PV-210185		Yes	
Sofar Solar	6KTL-M-3	Grid-tied PV inverter	Intertek	2021/08/09	210715145GZU-002	CN-PV-210185		Yes	
SolarEdge	SE25K	Grid-tied PV inverter	Bureau Veritas	2020/12/19	19TH0534-NRS 097-2-1_2	U20-1043		Yes	Grid connection inverter for 230 V, L-N / 400Vac, L-L output only and is intended with and without AC transformer for Category A2 and A3 plant.

Sunsynk	SYNK-9K-SG04LP3	Hybrid PV inverter grid-tied	TÜV NORD & Shenzhen Balun	2021/06/10		BL-DG2160287-B01	BL-DG2160288D01		Yes
Sunsynk	SYNK-10K-SG04LP3	Hybrid PV inverter grid-tied	TÜV NORD & Shenzhen Balun	2021/06/10		BL-DG2160287-B01	BL-DG2160288D01		Yes
Sunsynk	SYNK-12K-SG04LP3	Hybrid PV inverter grid-tied	TÜV NORD & Shenzhen Balun	2021/06/10		BL-DG2160287-B01	BL-DG2160288D01		Yes
Sunsynk	SUNSINK-29.9K-SG01HP3-EU-BM3	Hybrid PV inverter grid-tied	TÜV Rheinland	2022/12/05	CN22C75A_002	AK 50567025_0001			Yes
Sunsynk	SUNSINK-30K-SG01HP3-EU-BM3	Hybrid PV inverter grid-tied	TÜV Rheinland	2022/12/05	CN22C75A_002	AK 50567025_0001			Yes
Sunsynk	SUNSINK-35K-SG01HP3-EU-BM3	Hybrid PV inverter grid-tied	TÜV Rheinland	2022/12/05	CN22C75A_002	AK 50567025_0001			Yes
Sunsynk	SUNSINK-40K-SG01HP3-EU-BM4	Hybrid PV inverter grid-tied	TÜV Rheinland	2022/12/05	CN22C75A_002	AK 50567025_0001			Yes
Sunsynk	SUNSINK-50K-SG01HP3-EU-BM4	Hybrid PV inverter grid-tied	TÜV Rheinland	2022/12/05	CN22C75A_002	AK 50567025_0001			Yes
Sunsynk	SYNK-3K-SG04LP1	Hybrid PV inverter grid-tied	TÜV Rheinland	2023/01/05	CN22MT63_002	AK 50570087_0001			Yes
Sunsynk	SYNK-3K-SG04LP1-24	Hybrid PV inverter grid-tied	TÜV Rheinland	2023/01/05	CN22MT63_002	AK 50570087_0001			Yes
Sunsynk	SYNK-3.6K-SG04LP1	Hybrid PV inverter grid-tied	TÜV Rheinland	2023/01/05	CN22MT63_002	AK 50570087_0001			Yes
Sunsynk	SYNK-5K-SG04LP1	Hybrid PV inverter grid-tied	TÜV Rheinland	2023/01/05	CN22MT63_002	AK 50570087_0001			Yes
Sunsynk	SYNK-6K-SG04LP1	Hybrid PV inverter grid-tied	TÜV Rheinland	2023/01/05	CN22MT63_002	AK 50570087_0001			Yes
Sunways	STH-4KTL-HT	Hybrid PV inverter grid-tied	TÜV SUD	2021/01/14	70492001222-00	D 104339_0044 Rev. 00			Yes
Sunways	STH-5KTL-HT	Hybrid PV inverter grid-tied	TÜV SUD	2021/01/14	70492001222-00	D 104339_0044 Rev. 00			Yes
Sunways	STH-6KTL-HT	Hybrid PV inverter grid-tied	TÜV SUD	2021/01/14	70492001222-00	D 104339_0044 Rev. 00			Yes
Sunways	STH-8KTL-HT	Hybrid PV inverter grid-tied	TÜV SUD	2021/01/14	70492001222-00	D 104339_0044 Rev. 00			Yes
Sunways	STH-10KTL-HT	Hybrid PV inverter grid-tied	TÜV SUD	2021/01/14	70492001222-00	D 104339_0044 Rev. 00			Yes
Sunways	STH-12KTL-HT	Hybrid PV inverter grid-tied	TÜV SUD	2021/01/14	70492001222-00	D 104339_0044 Rev. 00			Yes
Sunways	STH-12KTL-HSS	Hybrid PV inverter grid-tied	TÜV SUD	2021/12/08	704921617-00	D 104339_0065 Rev.00			Yes
Sunways	STH-12KTL-HS	Hybrid PV inverter grid-tied	TÜV SUD	2021/12/08	704921617-00	D 104339_0065 Rev.00			Yes
Sunways	STH-3KTL-HSS	Hybrid PV inverter grid-tied	TÜV SUD	2021/12/08	704921617-00	D 104339_0065 Rev.00			Yes
Sunways	STH-4KTL-HS	Hybrid PV inverter grid-tied	TÜV SUD	2021/12/08	704921617-00	D 104339_0065 Rev.00			Yes
Sunways	STH-5KTL-HS	Hybrid PV inverter grid-tied	TÜV SUD	2021/12/08	704921617-00	D 104339_0065 Rev.00			Yes
Sunways	STH-6KTL-HS	Hybrid PV inverter grid-tied	TÜV SUD	2021/12/08	704921617-00	D 104339_0065 Rev.00			Yes
Sunways	STH-8KTL-HS	Hybrid PV inverter grid-tied	TÜV SUD	2021/12/08	704921617-00	D 104339_0065 Rev.00			Yes
Sunways	STH-9KTL-HS	Hybrid PV inverter grid-tied	TÜV SUD	2021/12/08	704921617-00	D 104339_0065 Rev.00			Yes
Sunways	STH-10KTL-HS	Hybrid PV inverter grid-tied	TÜV SUD	2021/12/08	704921617-00	D 104339_0065 Rev.00			Yes
TBB Power	Apollo Matrix 3.0S	Hybrid PV inverter grid-tied	TÜV NORD (Hangzhou)	2022/03/03	TRPV12002/21B/01	COCCPVP12002/21B-01			Yes
TBB Power	Apollo Matrix 3.0M	Hybrid PV inverter grid-tied	TÜV NORD (Hangzhou)	2022/03/03	TRPV12002/21B/01	COCCPVP12002/21B-01			Yes
TBB Power	Apollo Matrix 5.0S	Hybrid PV inverter grid-tied	TÜV NORD (Hangzhou)	2022/03/03	TRPV12002/21B/01	COCCPVP12002/21B-01			Yes
TELE Haase Steuergerate	NA003	Network & system relay	Primara	2018/09/20	14PP035-12	18-315-00			
Tesla	AC Powerwall 1092170-xxx-y	Battery based inverter grid-tied	Intertek	2020/05/20	102591059CRT-051c	102591059CRT-051c			Yes
Tesla	AC Powerwall 2012170-xxx-y	Battery based inverter grid-tied	Intertek	2020/05/20	102591059CRT-051c	102591059CRT-051c			Yes
Victron	MultGrid 12/3000/120-50	Battery based inverter grid-tied	Primara	2017/11/20	16PP_183-0_6	17-303-00			Yes
Victron	MultGrid 24/3000/70-50	Battery based inverter grid-tied	Primara	2017/11/20	16PP_183-0_6	17-303-00			Yes
Victron	MultGrid 48/3000/35-50	Battery based inverter grid-tied	Primara	2017/11/20	16PP_183-0_6	17-303-00			Yes
Victron	MultGrid - I 48/3000/35-32	Battery based inverter grid-tied	Primara	2018/10/02	17PP_264-0_7	18-320-00			Yes
Victron	MultPlus - II 48/3000/35-32	Battery based inverter grid-tied	Kiwa Primara	2019/08/22	17PP_264-0_7	18-320-01			Yes
Victron	MultPlus - II 48/3000/35-32GX	Battery based inverter grid-tied	Kiwa Primara	2019/08/22	17PP_264-0_7	18-320-01			Yes
Victron	MultPlus - II 48/5000/70-50	Battery based inverter grid-tied	Kiwa Primara	2019/08/22	17PP_264-0_7	18-320-01			Yes
Voltronic	InfriSolar 10k	Hybrid PV inverter grid-tied	Bureau Veritas	2020/10/30	PVZA18094N057-R1	2088AP0923N001001			
Ziehl	UFR100E relay	Network & system relay	Bureau Veritas	2018/06/07	11TH0501-NRS 097-2-1	U18-0308			

RCMU - residual current monitoring unit

RCD - residual current device

RCM - residual current monitoring

SPD - surge protection device
Notes:

Notes:

1. Overstrand Municipality shall not incur any liability of any nature whatsoever arising out of the publication by it of this list, or arising out of the selection by the use of a particular device. This includes liability for any losses incurred as a result of safety issues or negligence relating to the design, construction, installation, commissioning, operation and maintenance of any device listed on this list.
 2. This list is for Overstrand Municipal purposes only and the use thereof as a guideline for the selection of a device is at the sole risk of the user.
 3. Overstrand Municipality does not guarantee the functionality or suitability of any device listed on the list.
 4. Type testing certificates for inverters and ancillary equipment that must be added to Overstrand Municipality's inverter list, shall be in accordance with the latest NRS 097-2-1, currently NRS 097-2-1 : 2017 Edition 2.1 (published 2020-07-20).
 5. All grid-tied hybrid inverters shall be equipped with a separate suitably interlocked change-over switch if interlocked with the grid as specified in the Guidelines for small scale embedded generation (SSEG) document.