

## Demonstration of compliance of the A1 inverters with RfG requirements according to Article 40 of Commission Regulation (EU) 2016/631 and PPDS

We GoodWe Technologies Co., Ltd. hereby confirms the compliance of the inverters listed below with the selected features of the EN50549-1 standard, required by the regulation RfG 2016/631 (EU) and compliance with the requirements of the grid operator listed in the PPDS, Annex No. 4.

Gw6000-BT-G2,Gw8000-BT-G2,Gw10K-BT-G2; Gw5048D-ES,Gw3648D-ES; Gw5048-EM,Gw3648-EM,Gw3048-EM; Gw3600-EH,Gw5000N-EH,Gw6000-EH; Gw3600-EH,Gw5000N-EH,Gw6000-BH; Gw3600-B,Gw5000-BH,Gw5000-BH,Gw5000-BH; Gw10KN-ET,Gw86.KN-ET,Gw6.5K-ET,Gw5KN-ET; Gw10KN-ET,Gw86.KN-ET,Gw6.5KN-ET,Gw5KN-ET; Gw10KN-ET,Gw86.KN-ET,Gw6.5KN-ET,Gw5KN-ET; Gw700-XS-11,Gw1000-XS-11,Gw1500-XS-11,Gw2000-XS-11,Gw2500-XS-11,G W3000-XS-11; Gw700-XS-30,Gw1000-XS-30,Gw1500-XS-30,Gw2000-XS-30,Gw2500-XS-30,G W3000-XS-30; Gw3000-DNS-30; Gw4000-DNS-30; Gw4000-SDT-20,Gw6000-SDT-20,Gw800-SDT-20,Gw8000-SDT-20,Gw8000-SDT-20,Gw8000-SDT-20,Gw800-SDT-20,Gw800-SDT-20,Gw8000-SDT-20,Gw8000-SDT-20,Gw8000-SDT-20,Gw800-SD		GW6000-ET-G2 GW8000-ET-G2 GW	10K-FT-G2 <sup>.</sup>			
ModelGWS048D-ES,GW3648D-ES, GW3600-EH,GW3000-EH,GW6000-EH; GW3600-EH,GW5000-EH,GW6000-EH; GW3600-EH,GW5000-EH,GW6000-EH; GW3600-EH,GW5000-EH,GW6000-BH; GW10K-ET,GW8KN-ET,GW6.5K-ET,GW5KN-ET; GW10K-ET,GW8KN-ET,GW6.5K-ET,GW5KN-ET; GW10K-ET,GW8KN-ET,GW6.5K-ET,GW5KN-ET; GW100-XS-11,GW1000-XS-11,GW1200-XS-11,GW2200-XS-11,GW2200-XS-11,GW2000-XS-11,GW2000-XS-11,GW2000-XS-11,GW2000-XS-11,GW2000-XS-11,GW2000-XS-30,GW2000-XS-30,GW2000-XS-30,GW2000-XS-30,GW2000-XS-30,GW2000-XS-30,GW2000-XS-30,GW2000-XS-30,GW2000-XS-30,GW2000-XS-30,GW2000-XS-30,GW2000-DNS-30,GW3000-DNS-30,GW3000-DNS-30,GW3000-DNS-30,GW3000-DNS-30,GW3000-DNS-30,GW2000-SDT-20,GW8000-SDT-20,GW8000-SDT-20,GW8000-SDT-20,GW2000-XS-30,GW2000-XS-30,GW2000-XS-30,GW2000-XS-30,GW2000-XS-30,GW2000-XS-30,GW2000-XS-30,GW2000-NS-30,GW2000-DNS-30,GW4000-SDT-20,GW2000-SDT-20,GW2000-SDT-20,GW2000-SDT-20,GW2000-SDT-20,GW2000-SDT-20,GW2000-XS-30,GW2000-XS-30,GW2000-SDT-20,GW200-SDT-20,GW2000-SDT-20,GW2000-SDT-20,GW2000-SDT-20,GW2000-SDT-20,GW200-SDT-20,GW2000-SDT-20,GW200-SDT-		GW6000-ET-G2,GW8000-ET-G2,GW10K-ET-G2; GW6000-BT-G2 GW8000-BT-G2 GW10K-BT-G2 <sup>.</sup>				
GW5048-EM,GW3648-EM,GW3048-EM;         GW3600-EH,GW5000-EH,GW6000-EH;         GW3600N-EH,GW5000N-EH;GW6000N-EH;         GW3K-ET,GW8500-ET,GW65K-ET,GW5K-ET;         GW10K-TGW8KN-ET,GW6.5KN-ET;         GW10K-TGW8KN-ET,GW6.5KN-ET;         GW700-XS-30,GW1000-XS-30,GW1500-XS-30,GW2000-XS-30,GW2500-XS-30,GW3000-NS-30,GW3000-DNS-30,GW3000-DNS-30,GW3000-DNS-30,GW3000-DNS-30,GW3000-DNS-30,GW3000-DNS-30,GW3000-DNS-30,GW4200-DNS-30,GW5000-DNS-30,GW4000-SDT-20,GW10K-SDT-20         Type       Hybrid Inverter; Grid-Tied PV Inverter; Battery Inverter         Manufacturer       GoodWe Technologies Co., Ltd.         Address       No.90 Zijin Rd, New District, Suzhou, 215011, PR. China         Tel       +86 512 6239 7998         E-mail address       service@goodwe.com         Reference standard       PPDS 2022 Type A1; (EU) 2016/631; EN 50549-1         Czech Republic settriped in the table below:       un=230V, 50Hz         Voltage protection       Un=230V, 50Hz       phase         Voltage protection       161 (0.7Un)       V         Under voltage operate time stage 1       161 (0.7Un)       V         Under voltage threshold stage 2       103.5 (0.45Un)       V			,			
GW3600N-EH,GW5000N-EH,GW6000N-EH;         GW36A-BH,GW3600-BH,GW5000-BH;         GW10K-ET,GW8K-ET,GW6.5K-ET,GW5K-ET;         GW10K-ET,GW8KN-ET,GW6.5KN-ET,GW5KN-ET;         GW700-XS-11,GW1000-XS-11,GW12000-XS-11,GW2200-XS-11,GW2500-XS-11,GW3000-XS-30,GW1000-XS-30,GW2000-XS-30,GW2200-XS-30,GW3000-XS-30;         GW700-XS-30,GW1000-XS-30,GW1200-DNS-30,GW2200-XS-30,GW2500-XS-30,GW3000-DNS-30;         GW3000-DNS-30,GW3600-DSN-30,GW4200-DNS-30,GW5000-DNS-30,GW4000-DNS-30;         GW4000-SDT-20,GW5000-SDT-20,GW8000-SDT-20,GW8000-SDT-20,GW8000-SDT-20;         GW4000-SDT-20         GW400-SDT-20         GW400-SDT-20         GW400-SDT-20         GW400-SDT-20         GW400-SDT-20         GW400-SDT-20         GW400-SDT-20         GW400-SDT-20         GW400-SDT-						
GW3k-BH,GW3600-BH,GW5000-BH; GW10k-ET,GW8K-ET,GW6.5K-ET,GW5K-ET; GW10k-ET,GW8KN-ET,GW6.5KN-ET,GW5KN-ET; GW700-XS-11,GW1000-XS-11,GW1500-XS-11,GW2200-XS-11,GW2500-XS-11,G W3000-XS-11; GW700-XS-10,GW1000-XS-30,GW2000-XS-30,GW2500-XS-30,G W3000-XS-30; GW3000-DNS-30,GW3600-DSN-30,GW2000-DNS-30,GW5000-DNS-30, GW6000-DNS-30; GW4000-SDT-20,GW5000-SDT-20,GW6000-SDT-20,GW8000-SDT-20, GW10K-SDT-20         Type       Hybrid Inverter, Grid-Tied PV Inverter, Battery Inverter         Manufacturer       GoodWe Technologies Co, Ltd.         Address       No.90 Zijin Rd, New District, Suzhou, 215011, P.R. China         Tel       +86 512 6239 7998         E-mail address       service@goodwe.com         Reference standard       PPDS 2022 Type A1; (EU) 2016/631; EN 50549-1         Czech Republic settings       service@goodwe.com         Protection settings       Unit         Gird Setting       161 (0.7Un)       V         Under voltage operate tire stage 1       ≤2.7       s         Under voltage threshold stage 1       103.5 (0.45Un)       V		GW3600-EH,GW5000-EH,GW6000-E	:H;			
ModelGW10K-ET,GW8K-ET,GW6.5K-ET,GW5K-ET; GW700-XS-11,GW1000-XS-11,GW1500-XS-11,GW2000-XS-11,GW2000-XS-11,GW2000-XS-11,GW2000-XS-11,GW2000-XS-11,GW2000-XS-30,GW1000-XS-30,GW1000-XS-30,GW2000-XS-30,GW2000-XS-30,GW3000-DNS-30,GW3000-DNS-30,GW3000-DNS-30,GW3000-DNS-30,GW3000-DNS-30,GW4000-SDT-20,GW6000-SDT-20,GW6000-SDT-20,GW8000-SDT-20,GW4000-SDT-20,GW200-SDT-20,GW200-SDT-20,SU20,SU20-SDT-20,SU20,SU20-SDT-20,SU20		GW3600N-EH,GW5000N-EH,GW600	OON-EH;			
ModelGW10KN-ET,GW8KN-ET,GW6.5KN-ET,GW5KN-ET; GW700-XS-11,GW1000-XS-11,GW1500-XS-11,GW2000-XS-11,GW2050-XS-11,GW2050-XS-11,GW2050-XS-11,GW2050-XS-11,GW2050-XS-11,GW2050-XS-11,GW2050-XS-11,GW2050-XS-11,GW2050-XS-11,GW2050-XS-11,GW2050-XS-30,GW200-XS-30,GW200-XS-30,SW200-XS-30,SW200-XS-30,SW200-XS-30,SW200-XS-30,SW200-XS-30,SW200-XS-30,GW200-XS-30,GW200-XS-30,GW200-XS-30,GW200-XS-30,GW200-XS-30,GW200-XS-30,GW20X-X-X-30,SW20-XS-30,GW20X-X-X-30,SW200-XS-30,GW20X-X-X-30,SW200-XS-30,GW20X-X-X-X-X-X-X-X-X-X-X-X-X-X-X-X-X-X-X-		GW3k-BH,GW3600-BH,GW5000-BH	GW6000-BH;			
GW700-XS-11,GW1000-XS-11,GW1500-XS-11,GW2000-XS-11,GW2500-XS-11,GW3000-XS-30,GW1000-XS-30,GW2000-XS-30,GW2500-XS-30,GW3000-DNS-30,GW3000-DNS-30,GW4200-DNS-30,GW5000-DNS-30,GW3000-DNS-30,GW4200-DNS-30,GW5000-DNS-30,GW6000-DNS-30,GW4000-SDT-20,GW800-SDT-20,GW8000-SDT-20,GW800-SDT-20,GW8000-SDT-20,GW8000-SDT-20,GW8000-SDT-20,GW8000-SDT-20,GW8000-SDT-20,GW8000-SDT-20,GW8000-SDT-20,GW8000-SDT-20,GW8000-SDT-20,GW8		GW10K-ET,GW8K-ET,GW6.5K-ET,GW	5K-ET;			
W3000-XS-11; GW700-XS-30,GW1000-XS-30,GW1500-XS-30,GW2000-XS-30,GW2500-XS-30,GW3000-DNS-30,GW3000-DNS-30,GW3000-DNS-30,GW3000-DNS-30,GW3000-DNS-30,GW4200-DNS-30,GW5000-DNS-30,GW6000-DNS-30,GW6000-DNS-30,GW6000-DNS-30,GW6000-DNS-30,GW4000-SDT-20,GW6000-SDT-20,GW6000-SDT-20,GW6000-SDT-20,GW10K-SDT-20TypeHybrid Inverter, Grid-Tied PV Inverter, Battery InverterManufacturerGoodWe Technologies Co., Ltd.AddressNo.90 Zijin Rd, New District, Suzhou, 215011, P.R. ChinaTel+86 512 6239 7998E-mail addressservice@goodwe.comReference standardPPDS 2022 Type A1; (EU) 2016/631; EN 50549-1Czech Republic settingsProtection parameterVoltage protectionUn = 230V, 50HzUnder voltage threshold stage 1161 (0.7Un)VVUnder voltage threshold stage 122.7S103.5 (0.45Un)Voltage threshold stage 2103.5 (0.45Un)	Model					
GW700-XS-30,GW1000-XS-30,GW1200-XS-30,GW2200-XS-30,GW2500-XS-30,GW3000-DNS-30,GW3000-DNS-30,GW4200-DNS-30,GW5000-DNS-30,GW6000-DNS-30,GW6000-DNS-30,GW6000-DNS-30,GW6000-DNS-30,GW6000-DNS-30,GW6000-DNS-30,GW6000-DNS-30,GW4200-DNS-30,GW2500-DNS-30,GW6000-DNS-30,GW250-DNS-30,GW250-DNS			500-XS-11,GW2000-XS-11,GW250	)0-XS-11,G		
W3000-XS-30; GW3000-DNS-30,GW3600-DSN-30,GW4200-DNS-30, GW5000-DNS-30, GW6000-DNS-30; GW6000-SDT-20, GW5000-SDT-20, GW8000-SDT-20, GW10K-SDT-20TypeHybrid Inverter, Grid-Tied PV Inverter, Battery InverterManufacturerGoodWe Technologies Co., Ltd.AddressNo.90 Zijin Rd,, New District, Suzhou, 215011, PR. ChinaTel+86 512 6239 7998E-mail addressservice@goodwe.comReference standardPPDS 2022 Type A1; (EU) 2016/631; EN 50549-1Czech Republic settingsProtection parameterUnitGird SettingUn=230V, 50HzphaseVoltage protection161 (0.7Un)VUnder voltage threshold sage 1161 (0.7Un)VUnder voltage threshold sage 2103.5 (0.45Un)V						
GW3000-DNS-30,GW3600-DSN-30,GW4200-DNS-30,GW5000-DNS-30, GW6000-DNS-30; GW4000-SDT-20,GW5000-SDT-20,GW8000-SDT-20, GW10K-SDT-20TypeHybrid Inverter, Grid-Tied PV Inverter, Battery InverterManufacturerGoodWe Technologies Co., Ltd.AddressNo.90 Zijin Rd., New District, Suzhou, 215011, P.R. ChinaTel+86 512 6239 7998E-mail addressservice@goodwe.comReference standardPPDS 2022 Type A1; (EU) 2016/631; EN 50549-1Czech Republic settingsProtection parameterVoltage protectionUnitGird SettingUn=230V, 50HzUnder voltage threshold tage 1161 (0.7Un)VVUnder voltage threshold tage 2103.5 (0.45Un)						
GW6000-DNS-30; GW4000-SDT-20, GW5000-SDT-20, GW8000-SDT-20, GW10K-SDT-20TypeHybrid Inverter, Grid-Tied PV Inverter, Battery InverterManufacturerGoodWe Technologies Co., Ltd.AddressNo.90 Zijin Rd., New District, Suzhou, 215011, P.R. ChinaTel+86 512 6239 7998E-mail addressservice@goodwe.comReference standardPPDS 2022 Type A1; (EU) 2016/631; EN 50549-1Protection settingsProtection parameterGird SettingUn=230V, 50HzVoltage protectionUnUnder voltage threshold tage 1161 (0.7Un)VYUnder voltage threshold tage 2103.5 (0.45Un)				20		
GW4000-SDT-20, GW5000-SDT-20, GW8000-SDT-20, GW10K-SDT-20TypeHybrid Inverter, Grid-Tied PV Inverter, Battery InverterManufacturerGoodWe Technologies Co., Ltd.AddressNo.90 Zijin Rd., New District, Suzhou, 215011, P.R. ChinaTel+86 512 6239 7998E-mail addressservice@goodwe.comReference standardPPDS 2022 Type A1; (EU) 2016/631; EN 50549-1Czech Republic settingsProtection parameterProtection settingsUn = 230V, 50HzOftage protectionUn = 230V, 50HzUnder voltage threshold ±ge 1161 (0.7Un)VVUnder voltage operate tire stage 1serviceService 2103.5 (0.45Un)			GVV4200-DNS-50, GVV5000-DNS-	50,		
GW10K-SDT-20TypeHybrid Inverter, Grid-Tied PV Inverter, Battery InverterManufacturerGoodWe Technologies Co., Ltd.AddressNo.90 Zijin Rd., New District, Suzhou, 215011, PR. ChinaTel+86 512 6239 7998E-mail addressservice@goodwe.comReference standardPPDS 2022 Type A1; (EU) 2016/631; EN 50549-1Czech Republic settingsProtection parameterProtection settingsProtection parameterUnder voltage threshold stage 1161 (0.7Un)Under voltage threshold stage 1161 (0.7Un)Under voltage threshold stage 1103.5 (0.45Un)Voltage threshold stage 2103.5 (0.45Un)		,	GW6000-SDT-20. GW8000-SDT-2	0.		
ManufacturerGoodWe Technologies Co., Ltd.AddressNo.90 Zijin Rd., New District, Suzhou, 215011, P.R. ChinaTel+86 512 6239 7998E-mail addressservice@goodwe.comReference standardPPDS 2022 Type A1; (EU) 2016/631; EN 50549-1Czech Republic settings a described in the table below:Protection parameterUnitGird SettingUn=230V, 50HzphaseVoltage protection161 (0.7Un)VUnder voltage operate time stage 1161 (0.7Un)VUnder voltage threshold stage 2103.5 (0.45Un)V						
AddressNo.90 Zijin Rd., New District, Suzhou, 215011, P.R. ChinaTel+86 512 6239 7998E-mail addressservice@goodwe.comReference standardPPDS 2022 Type A1; (EU) 2016/631; EN 50549-1Czech Republic settingsdescribed in the table below:Protection settingsProtection parameterUnitGird SettingUn=230V, 50HzphaseVoltage protection161 (0.7Un)VUnder voltage threshold stage 1161 (0.7Un)VUnder voltage threshold stage 2103.5 (0.45Un)V	Туре	Hybrid Inverter, Grid-Tied PV Inverter, Battery Inverter				
Tel       +86 512 6239 7998         E-mail address       service@goodwe.com         Reference standard       PPDS 2022 Type A1; (EU) 2016/631; EN 50549-1         Czech Republic settings as described in the table below:         Protection settings         Protection settings       Protection parameter         Unit       Gird Setting       Un=230V, 50Hz         Voltage protection         Under voltage threshold stage 1       161 (0.7Un)       V         Under voltage threshold stage 2       103.5 (0.45Un)       V	Manufacturer	GoodWe Technologies Co., Ltd.				
E-mail address       service@goodwe.com         Reference standard       PPDS 2022 Type A1; (EU) 2016/631; EN 50549-1         Czech Republic settings       described in the table below:         Protection settings       Protection parameter       Unit         Gird Setting       Un=230V, 50Hz       phase         Voltage protection       161 (0.7Un)       V         Under voltage threshold stage 1       161 (0.7Un)       V         Under voltage threshold stage 2       103.5 (0.45Un)       V	Address	No.90 Zijin Rd., New District, Suzhou, 215011, P.R. China				
Reference standard       PPDS 2022 Type A1; (EU) 2016/631; EN 50549-1         Czech Republic settings as described in the table below:       Protection parameter       Unit         Gird Setting       Un=230V, 50Hz       phase         Voltage protection       Un=230V, 50Hz       phase         Under voltage threshold stage 1       161 (0.7Un)       V         Under voltage operate time stage 1       ≤2.7       s         Under voltage threshold stage 2       103.5 (0.45Un)       V	Tel	+86 512 6239 7998				
Czech Republic settings as described in the table below:         Protection settings       Protection parameter       Unit         Gird Setting       Un=230V, 50Hz       phase         Voltage protection       161 (0.7Un)       V         Under voltage threshold stage 1       ≤2.7       s         Under voltage threshold stage 2       103.5 (0.45Un)       V	E-mail address	service@goodwe.com				
Protection settings     Protection parameter     Unit       Gird Setting     Un=230V, 50Hz     phase       Voltage protection     Voltage protection     V       Under voltage threshold stage 1     161 (0.7Un)     V       Under voltage operate time stage 1     ≤2.7     s       Under voltage threshold stage 2     103.5 (0.45Un)     V	Reference standard	PPDS 2022 Type A1; (EU) 2016/631; EN 50549-1				
Gird Setting       Un=230V, 50Hz       phase         Voltage protection           Under voltage threshold stage 1       161 (0.7Un)       V         Under voltage operate time stage 1       ≤2.7       s         Under voltage threshold stage 2       103.5 (0.45Un)       V	Czech Republic settings as described in the table below:					
Voltage protection       161 (0.7Un)       V         Under voltage threshold stage 1       161 (0.7Un)       V         Under voltage operate time stage 1       ≤2.7       s         Under voltage threshold stage 2       103.5 (0.45Un)       V	Protection settings		Protection parameter	Unit		
Under voltage threshold stage 1       161 (0.7Un)       V         Under voltage operate time stage 1       ≤2.7       s         Under voltage threshold stage 2       103.5 (0.45Un)       V	Gird Setting		Un=230V,50Hz	phase		
Under voltage operate time stage 1≤2.7sUnder voltage threshold stage 2103.5 (0.45Un)V	Voltage protection					
Under voltage threshold stage 2 103.5 (0.45Un) V	Under voltage threshold stage 1		161 (0.7Un)	V		
	Under voltage operate time stage 1		≤2.7	S		
Under voltage operate time stage 2 ≤0.2 s	Under voltage threshold stage 2		103.5 (0.45Un)	V		
	Under voltage operate time stage 2 ≤0.2			S		





Over voltage threshold stage 1	264.5 (1.15Un)	V
Over voltage operate time stage 1	≤5	S
Over voltage threshold stage 2	276 (1.2Un)	V
Over voltage operate time stage 2	≤0.1	S
Over voltage threshold stage 3	NA	V
Over voltage operate time stage 3	NA	S
Over voltage 10min mean threshold	255.3 (1.11Un)	V
Over voltage operate time for 10min mean threshold	0	S
Frequency protection	·	
Under frequency threshold	47.5	Hz
Under frequency operate time	≤0.1	S
Over frequency threshold	51.5	Hz
Over frequency threshold	51.5	
Over frequency operate time <b>Automatic reconnection (art. 9.5. Appendices No. 4 PPDS</b> An inverter disconnected from the grid due to a voltage connected to the distribution network only when the following	≤0.1 <b>5; Article. Article 13(7) of the Rf</b> or frequency deviation will be g criteria are met:	automatical
Over frequency operate time <b>Automatic reconnection (art. 9.5. Appendices No. 4 PPDS</b> An inverter disconnected from the grid due to a voltage connected to the distribution network only when the following	≤0.1 <b>5; Article. Article 13(7) of the Rf</b> or frequency deviation will be g criteria are met:	<b>G)</b> automatical
Over frequency operate time <b>Automatic reconnection (art. 9.5. Appendices No. 4 PPDS</b> An inverter disconnected from the grid due to a voltage	≤0.1 <b>5; Article. Article 13(7) of the Rf</b> or frequency deviation will be	G)
Over frequency operate time <b>Automatic reconnection (art. 9.5. Appendices No. 4 PPDS</b> An inverter disconnected from the grid due to a voltage connected to the distribution network only when the followir Lower frequency	≤0.1 <b>5; Article. Article 13(7) of the Rf</b> or frequency deviation will be g criteria are met: 47.5	G) automatical Hz
Over frequency operate time <b>Automatic reconnection (art. 9.5. Appendices No. 4 PPDS</b> An inverter disconnected from the grid due to a voltage connected to the distribution network only when the followin Lower frequency Upper frequency	≤0.1 <b>5; Article. Article 13(7) of the Rf</b> or frequency deviation will be g criteria are met: 47.5 50.05	G) automatical Hz Hz
Over frequency operate time <b>Automatic reconnection (art. 9.5. Appendices No. 4 PPDS</b> An inverter disconnected from the grid due to a voltage connected to the distribution network only when the followin Lower frequency Upper frequency Lower voltage	≤0.1 <b>5; Article. Article 13(7) of the Rf</b> or frequency deviation will be g criteria are met: 47.5 50.05 195.5 (0.85Un)	G) automatical Hz Hz V
Over frequency operate time Automatic reconnection (art. 9.5. Appendices No. 4 PPDS An inverter disconnected from the grid due to a voltage connected to the distribution network only when the followin Lower frequency Upper frequency Lower voltage Upper voltage	≤0.1 c; Article. Article 13(7) of the Rf or frequency deviation will be g criteria are met: 47.5 50.05 195.5 (0.85Un) 253 (1.1Un)	G) automatical Hz Hz V V
Over frequency operate time Automatic reconnection (art. 9.5. Appendices No. 4 PPDS An inverter disconnected from the grid due to a voltage connected to the distribution network only when the followin Lower frequency Upper frequency Lower voltage Upper voltage Observation time	$\leq$ 0.1 <b>5; Article. Article 13(7) of the Rf</b> or frequency deviation will be g criteria are met: 47.5 50.05 195.5 (0.85Un) 253 (1.1Un) ≥300	G) automatical Hz Hz V V V s
Over frequency operate time Automatic reconnection (art. 9.5. Appendices No. 4 PPDS An inverter disconnected from the grid due to a voltage connected to the distribution network only when the followin Lower frequency Upper frequency Lower voltage Upper voltage Observation time Active power increase gradient	$\leq$ 0.1 <b>5; Article. Article 13(7) of the Rf</b> or frequency deviation will be g criteria are met: 47.5 50.05 195.5 (0.85Un) 253 (1.1Un) ≥300	G) automatical Hz Hz V V V s
Over frequency operate time Automatic reconnection (art. 9.5. Appendices No. 4 PPDS An inverter disconnected from the grid due to a voltage connected to the distribution network only when the followin Lower frequency Upper frequency Lower voltage Upper voltage Observation time Active power increase gradient Startup	≤0.1 <b>5; Article. Article 13(7) of the Rf</b> or frequency deviation will be g criteria are met: 47.5 50.05 195.5 (0.85Un) 253 (1.1Un) ≥300 ≤10 %	G) automatical Hz Hz V V S Pn/mir
Over frequency operate time Automatic reconnection (art. 9.5. Appendices No. 4 PPDS An inverter disconnected from the grid due to a voltage connected to the distribution network only when the followin Lower frequency Upper frequency Lower voltage Upper voltage Observation time Active power increase gradient Startup Lower frequency threshold	≤0.1 i; Article. Article 13(7) of the Rf or frequency deviation will be g criteria are met: 47.5 50.05 195.5 (0.85Un) 253 (1.1Un) ≥300 ≤10 % 49.5	G) automatical Hz Hz V V V s Pn/mir
Over frequency operate time Automatic reconnection (art. 9.5. Appendices No. 4 PPDS An inverter disconnected from the grid due to a voltage connected to the distribution network only when the followin Lower frequency Upper frequency Lower voltage Upper voltage Observation time Active power increase gradient Startup Lower frequency threshold Upper frequency threshold	≤0.1 <b>5</b> ; Article. Article 13(7) of the Rf         or frequency deviation will be         g criteria are met:         47.5         50.05         195.5 (0.85Un)         253 (1.1Un)         ≥300         ≤10 %         49.5         50.5	G) automatical Hz Hz V V S Pn/mir Hz Hz

The inverter must also be able to withstand time variations in grid frequency (RoCoF) up to  $\pm$  2 Hz/s.

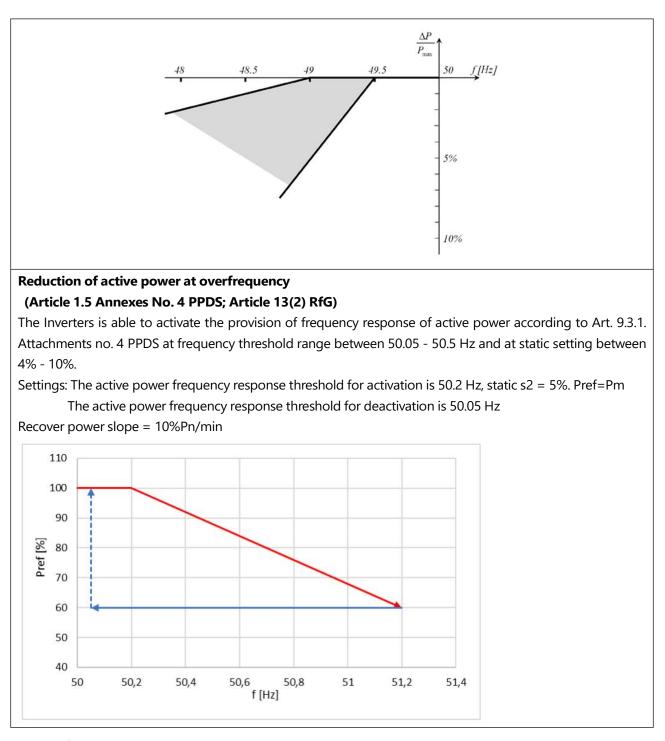


Duration         0.85 Un – 1.1 Un       unlimited         LVRT Voltage-Time-Diagram       0.0000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000	
49 - 51 Hz       unlimited         51 - 51,5 Hz       30 minutes         Operating voltage range       The Inverters must remain connected and be able to operate in the voltage range specified be         Voltage range       Duration         0.85 Un - 1.1 Un       unlimited         LVRT Voltage-Time-Diagram       Image: Constrained of the state of	
51 - 51,5 Hz     30 minutes       Operating voltage range       The Inverters must remain connected and be able to operate in the voltage range specified be       Voltage range     Duration       0.85 Un - 1.1 Un     unlimited	
Operating voltage range         The Inverters must remain connected and be able to operate in the voltage range specified be         Voltage range       Duration         0.85 Un – 1.1 Un       unlimited         LVRT Voltage-Time-Diagram       Image: Construction of the state of the st	
0.85 Un – 1.1 Un unlimited LVRT Voltage-Time-Diagram	
0.85 Un – 1.1 Un unlimited LVRT Voltage-Time-Diagram	d below.
LVRT Voltage-Time-Diagram	
0,9 0,8 0,7 0,6 0,6 0,6 0,6 0,6 0,6 0,4 0,4 0,3	
0,9 0,8 0,7 0,6 0,6 0,6 0,6 0,6 0,6 0,4 0,4 0,3	
0,2 0,1 0,1 0,0,15;0,05 -0,1 0,4 0,9 1,4 1,9 2,4 2,9 OVRT Voltage-Time-Diagram	
U [p.j.] 1,2 1,2 1,2 1,2 1,2 1,2 1,2 1,2	
0,4 0,2 0 0 0 0 0,5 4,5 5,0 5,5 59,5 60,0 60,5 čas [s]	

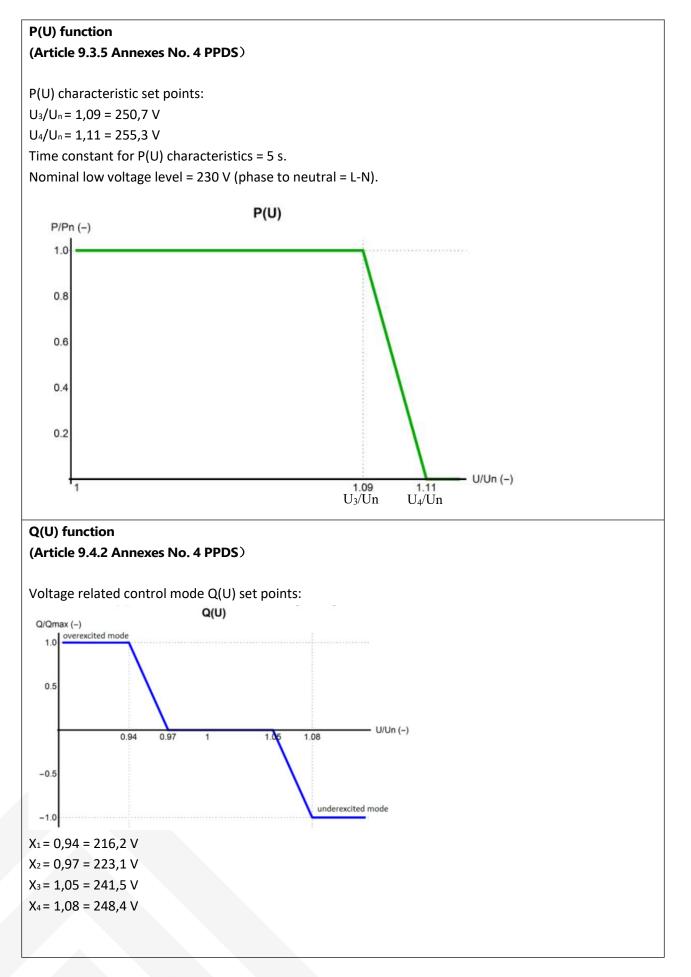
## (Article 9.3.2. Annexes No. 4 PPDS; Article 13 paragraphs 4 and 5 RfG)

The Inverters is able to maintain the supply of active power when the frequency drops at the same value as during operation corresponding to the frequency in the 50 Hz system. In case the inverter's technology does not allow to maintain the active power at the inverter's output at P value as at 50 Hz, below 49 Hz a drop of 2% of the maximum capacity at 50 Hz is allowed for every 1 Hz drop in frequency. If the inverter is unable to fulfill this requirement, this must be documented by the distribution system operator with a technical study.









Where the sun shines there is Good We



## Logical interface

## (Art. 5.1. Annex No. 4 PPDS; Art. 13 para. 6 RfG)

The inverters is equipped with a logical interface (input port) for interrupting the supply of active power, which allows to interrupt the supply of active power at the output within five seconds after receiving an instruction to this port.

This declaration applies to all products from listed product series.

This declaration loses its validity if the device is modified or incorrectly connected.

This declaration certifies the compliance with the mentioned regulations but does not ensure the properties. The safety instructions in the product documentation provided must be observed!

Signed	Young Wang	Data	2024,4,28
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