

DECLARATION

Declaration of Compliance



Applicant: KOSTAL Solar Electric GmbH
Hanferstraße 6
79108 Freiburg i. Br.
Germany

Product type: PV-Inverter with Battery Option

Model: PLENTICORE L G3
PLENTICORE M G3
PLENTICORE S G3

Rating: See page 2 and 3

A representative test sample of above stated model passed the tests according to:

Standard: VDE-AR-E 2510-2:2021-02

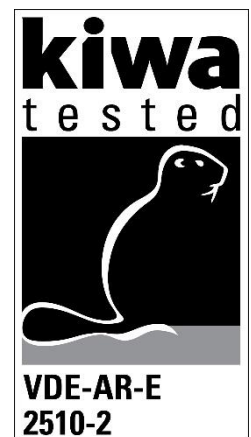
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Technical Data

Model:	PLENTICORE L G3			PLENTICORE M G3		
Power activation:	2 PLENTI-COIN	1 PLENTI-COIN	-	2 PLENTI-COIN	1 PLENTI-COIN	-
Mains voltage Un:	230V / 400 V (3/N/PE)					
Mains nominal current In:	28,9A	25,3A	21,7A	18,0A	14,4A	12,7A
Mains max. current (IACmax):	32,0A			20,0A		
Power factor (cosφ):	0,8...1					
^{*1)} Apparent Power S _{FE} :	20,0kVA	17,5kVA	15,0kVA	12,5kVA	10,0kVA	8,5kVA
^{*1)} Mains power P _{FE} : @ cosφ = 1.0	20,0kW	17,5kW	15,0kW	12,5kW	10,0kW	8,5kW
^{*1)} Max. Active Power P _{Smax} :	20,0kW	17,5kW	15,0kW	12,5kW	10,0kW	8,5kW
^{*2)} Nom. Active Power P _n : @ cosφ = 0.9	18,0kW	15,75kW	13,5kW	11,25kW	9,0kW	7,65kW
PV-Voltage (MPP Range): 1 ; 2 ; 3 String in use	---; 350V..800V; 235V..800V	605V..800V; 310V..800V; 210V..800V	520V..800V; 265V..800V; 180V..800V	---; 335V..800V; 210V..800V	610V..800V; 310V..800V; 170V..800V	520V..800V; 265V..800V; 145V..800V
^{*3)} PV-Voltage (max./Range):	75V..900V					
PV-current (feed-in) per Input:	30 / 30 / 30 A			17 / 17 / 30 A		
PV short circuit current (feed-in) per Input:	42,0 / 42,0 / 42,0 A			23,8 / 23,8 / 42,0 A		
MPP inputs:	3					
Battery Voltage operation Range:	95...900V					
Battery current (charge / discharge):	30A					



Model:	PLENTICORE S G3		
Power activation:	2 PLENTICOIN	1 PLENTICOIN	-
Mains voltage U_n :	230V / 400V (3/N/PE)		
Mains nominal current I_n :	10,1A	7,9A	5,8A
Mains max. current (I_{ACmax}):	11,2A		
Power factor ($\cos\phi$):	0,8...1 optional		
* ¹) Apparent Power S_{rE} :	7,0kVA	5,5kVA	4,0kVA
* ¹) Mains power P_{rE} : @ $\cos\phi = 1.0$	7,0kW	5,5kW	4,0kW
* ¹) Max. Active Power P_{Smax} :	7,0kW	5,5kW	4,0kW
* ²) Nom. Active Power P_n : @ $\cos\phi = 0.9$	6,3kW	4,95kW	3,6kW
PV-Voltage (MPP Range): 1 ; 2 ; 3 String in use	430V..800V; 220V..800V; 150V..800V	340V..800V; 175V..800V; 115V..800V	250V..800V; 130V..800V; 95V..800V
* ³) PV-Voltage (max./Range):	75...900V		
PV-current (feed-in) per Input:	17 / 17 / 17 A		
PV short circuit current (feed-in) per Input:	23,8 / 23,8 / 23,8 A		
MPP inputs:	3		
Battery Voltage operation Range:	95...900V		
Battery current (charge / discharge):	17A		
Notes:	*¹) Main Power per Software adjustable. Due to this also the current and apparent power is pending on the software limitation. *²) applicable where the nominal active power refers to the nominal $\cos\phi = 0,9$ as in Italy *³) Operating voltage range; maximum input voltage 1000V		



Summary of testing

The Product was tested to the standard VDE-AR-E 2510-2.

1. The electrical energy storage systems consist of a PV-inverter with optional battery input and the manual transfer switch KOSTAL Backup-Switch. Batteries were not part of the system under test. The Batterie was replaced by a bidirectional DC-source for testing.
2. The inverter was tested together with following manual and automatic switches:

Manual:
KOSTAL BackUp Switch
KOSTAL Art.No: 12184452

Automatic:
Netzumschaltbox für KOSTAL PLENTICORE G3 - DE/CH
3PH_KOSTAL_BBD3(A)P_63A_DE-CH
ENWITEC Art-No: 10017468

Netzumschaltbox für KOSTAL PLENTICORE G3 - AUT
3PH_KOSTAL_BBD3(A)P_63A_FRT_AUT
ENWITEC Art-No: 10017469
3. The KOSTAL Backup-Switch disconnect the inverter from ac-mains, is representative for the star point replica (IEC: system referencing conductor) and is connected via signal to the inverter for information on the switch position. In the case of the manual switch, the mechanical lock ensures the star point replica during backup operation and vice versa. The star point replica is single fault save for both type of switches.
4. The system was tested in the test laboratory see test location. The requirements for the end-installation must be considered after installation by the installer and was not evaluated within this report.