ELECTRICITY SERVICES

MBM/COMM

SSEG INSTALLATION COMMISSIONING REPORT

The following SSEG Commissioning Report must be submitted for each installation, confirming compliance with the Municipality's requirements.

Site Details	
Property address (incl. post code)	17 MOSSEL STREET FRAAIUITSIG 6503
Contract account number	280007940051
Contact Details	
SSEG property owner	HERMAN CLAASSENS
Contact person	HERMAN CLAASSENS
Contact telephone number	083 417 7726
SSEG Details	
Manufacturer	SUNSYNK
Type	HYBRID INVERTER
Model	SUNSYNK-5K-SG01LP1
Serial number/s of inverter/s and independent disconnection switching unit/s (if not integrated into one of the components of the embedded generator)	2210316424
Serial number / version numbers of software (where appropriate)	
SSEG rating (kVA) and power factor (under normal running conditions)	5kVA, 1
Single or three phase	SINGLE
Maximum peak AC short circuit current (A)	
Type of prime mover (e.g. inverter or rotating machine) and fuel source (e.g. sun, biomass, wind)	INVERTER WITH SOLAR PANELS
Location of SSEG within the installation	WALL MOUNTED IN GARAGE

Installer Details	
Installer	COMTO WORKS HIGH CELL SOLAR SOLUTIONS
Accreditation/qualification	INSTALLATION ELECTRICIAN
Address (incl. post code)	33 MEEU + DAL SEEMEEU PARK MOSSEL BAY 6500
Contact person	JACOB PETRUS BENADE
Telephone number	061 619 4742
Fax number	—
E-mail address	JAAPBENADE@GMAIL.COM

Information to be enclosed	
Final copy of circuit diagram	
Inverter type test Certificate of Compliance and Test Report according to NRS 097-2-1, issued by accredited 3rd party test house (not necessary if already provided).	
Factory setting sheet or other documentation showing that the inverter has been set according to NRS 097-2-1	
An electrical installation Certificate of Compliance.	
Signed contract for SSEG	
Operation and maintenance procedure	

Compulsory declaration – to be completed by ECSA registered Pr. Eng. or Pr. Tech Eng.	
The SSEG installation complies with the relevant sections of NRS 097-2-1.	
The loss of mains protection has been proved by a functional test carried out as part of the on-site commissioning, e.g. a momentary disconnection of the supply to the SSEG in order to prove that the loss of mains protection operates as expected.	
Protection settings have been set to comply with NRS 097-2-1	
Safety labels have been fitted in accordance with NRS 097-2-1	
The SSEG installation complies with the relevant sections of SANS 10142-1 and an installation certificate of compliance is attached.	
Reverse power blocking protection system installed and commissioned to prevent reverse power flow onto the distribution electricity network (where applicable)	
Comments (continue on separate sheet if necessary)	

Name:		Signature:		Date:	
ECSA Prof. Category:		Reg. No.:			

Vonk Claassens

Annexure 1

DEPARTMENT OF LABOUR
OCCUPATIONAL HEALTH AND SAFETY ACT, 1993
CERTIFICATE OF COMPLIANCE

Certificate of compliance in accordance with regulation 7(1) of the Electrical Installation Regulations, 2009.	CERTIFICATE NO. ECB 2066970	Certificate type (tick appropriate block) Initial Certificate ☐ Supplementary Certificate ☐

Supplement No.: ..... to Initial Certificate No.: ..... as issued on: .....

Identification of the relevant electrical installation
(Address or other unique reference, where applicable)

Physical address: 17 MOSSEL ST.

Name of building: ..... GPS Co-ordinates: .....

Suburb / Township: ..... Pole number: .....

District / Town / City: KLEINBRAK ..... Erf / Lot No: .....

Declaration by registered person

I, J.P. BENADE (ID No 6405165046080)

a registered person declare that I have personally carried out the inspection and testing of the electrical installation described in the attached test report as per the requirements of:

a) electrical installation regulations 9(2) (a); (new electrical installation); or ☐

b) electrical installation regulations 9(2) (b); (existing electrical installation); or ☐ **(Tick appropriate box)**

c) electrical installation regulations 9(2) (c); (new part to existing installation) ☒

and deem the installation to be reasonably safe when properly used.

I have entered the number of this certificate on the attached test report(s).

I declare that the persons responsible for the design, specification, procurement, construction commissioning and inspection and test have completed the relevant sections of the test report.

Registered person registration number: IE 17570 Date of registration: 10.07.97

Type of registration: **(Tick appropriate box)**

Tester for Single Phase ☐ Installation Electrician ☒ Master Installation Electrician ☐

Signature: ..... Date: 17.01.23

Contact details of registered person:

Address: 33 MEER & DAL

Tel. No.: ..... Fax No.: .....

Cell No.: 061 619 6762 Email: jacpbenade@gmail.com

NOTE: 1. This certificate is not valid unless all the sections have been completed correctly and the test report in the format approved by the chief inspector is attached.
2. This certificate will be invalid if any corrections have been made.

Declaration by electrical contractor

I, J.P. BENADE (ID No 6405165046089)

declare that the electrical installation has been carried out in accordance with the requirements of the Occupational Health and Safety Act, 1993, and regulations made thereunder.

Electrical contractor registration number: WC 03346 Date of registration: 07.08.20

Signature: ..... Date: 17.01.23

Contact details of electrical contractor: Name: COMBO WORKS

Address: 33 MEER & DAL

Tel. No.: ..... Fax No.: .....

Cell No.: 061 619 6762 Email: .....

Recipient Name: VONK CLAASSENS Signature: ..... Date: .....

Register your CoC & Test Report at https://ecb.org.za/coc

Electrical Conformance Board

TEST REPORT *(see 8.6 for guidelines)*

FOR ALL GENERAL ELECTRICAL INSTALLATIONS TO SANS10142-1

Register your CoC & Test Report at https://ecb.org.za/coc

Certificate Of Compliance (CoC) No. ECB 2066970	DB/Supply No:	Date of Issue:

IMPORTANT NOTE: SOUTH AFRICAN LEGISLATION STATES THE USER OR LESSOR IS RESPONSIBLE FOR THE SAFETY, SAFE USE AND MAINTENANCE OF AN ELECTRICAL INSTALLATION.

NOTE 1 - This report covers only the part of the installation described in Section 3.
NOTE 2 - This report covers the circuits for fixed appliances but not the actual appliances.
NOTE 3 - Medical and hazardous used locations require additional test reports (see 8.7).
NOTE 4 - Enter the required information or tick the appropriate block.
NOTE 5 - It is suggested that the CoC Number be attached to the distribution board (DB).
NOTE 6 - Regulations are not made retrospective.
NOTE 7 - In most circumstances this test report should be accompanied by annex pages for circuits, earth continuity and ideally wiring diagrams and photographs. Please query if not the case.

SECTION 1 - LOCATION *Only required if not provided on Certificate of Compliance*

Physical address:

Name of building and/or location of installation:

SECTION 2 - ABOUT THE INSTALLATION

Type of electrical installation system

X Permanent Installation		Temporary Installation		Common area for multiple users (sectional title)	
TN-S	TN-C-S	TN-C	TT	IT	X Supplier's earth is functional

Characteristics of supply

Voltage	X 230	400	525	Other:	Volts			
Frequency	X 50Hz	Other	Hz	D.C.				
Number of phases	X One	Two	Three	Phase rotation	Clockwise	Anti clockwise	NA	

Main switch type

Switch Disconnector (no load isolator)	Fused Switch	X Circuit Breaker	Earth Leakage Circuit Breaker	Earth Leakage Switch Disconnector

Number of poles	2	Current rating	20	Amps	Short circuit/withstand rating	6.0	kAmps	
Rated earth leakage tripping current $I_{\Delta n}$	30 mA	Other		mA				
Is surge protection installed? *(see 6.7.6 and annex J)*		X Yes		No				
Is lightning protection installed? *(see 6.7.6 and annex J)*		Yes		No	*If applicable, complete Table 1.10 Lightning protection system installation safety report*			
Is an alternative power supply installed? *(see 7.12)*		X Yes		No	If Yes Generator	kVA &/or	X UPS	3.5 kVA
Is any part of installation a specialised electrical installation?		Yes		No	*If yes, complete additional specialised test report (see 8.7 of SANS 10142-1 - Wiring of Premises)*			
Is any part of the installation at a voltage above 1 kV		Yes		No	*If yes, competent person must approve design and additional test reports (see 8.5.3 and SANS 10142-2).*			

SECTION 3 - DESCRIPTION OF INSTALLATION COVERED BY THIS REPORT *Include annex pages for additional notes, specification references, wiring drawings, etc, to represent all applicable information of work done*

NUMBER OF CIRCUITS OR POINTS	New	Existing	NUMBER OF APPLIANCES, EARTH LEAKAGE & OTHER	New	Existing
Lighting circuits			Cooking		
Lighting points			Geyser		
Socket outlet circuits			Fixed appliance circuits: Pool pump		
Socket outlets			Borehole pump		
Transformer circuits: Lighting			Other: 5.5 KW INVERTER		
Bell			Other circuits or points: 5.4 KW BATT		
Other			Other circuits or points: 2550 W PV PANELS		
Air-conditioning circuits			No. of socket outlets protected by earth leakage		
Heating circuits			The Earth Leakage Protects: The complete installation (Yes/No)		
Fan circuits			Only partial installation (Yes/No)		
Alternative power supply connections: ALL CIRCUITS			Is there photographic evidence? *(or saved on the DB)*	Before work started	X After work completed

IMPORTANT NOTE: *Items not listed must not be ignored and must be on annex page to this test report. Contact the ECB for annex page templates.*

SECTION 4 - INSPECTION AND TESTING OF NEW AND EXISTING INSTALLATIONS *Annex pages are likely needed to accompany the test information below*

1. Conductors are of the correct rating and current-carrying capacity for the protective devices and connected load	X Yes	No	N/A
2. Components have been correctly selected and installed	X Yes	No	N/A
3. Disconnecting devices are correctly located and all switchgear correctly switches the phase conductors	X Yes	No	N/A
4. Circuits, fuses, switches, terminals, earth leakage units, circuit breakers, distribution boards are correctly and permanently marked or labelled	X Yes	No	N/A

TESTS	UNITS	READING	INSTRUMENT	IS COMPLIANT?
1. Continuity of bonding	Ω			X Compliant / N/A
2. Resistance of earth continuity conductor at ALL points of consumption: *(use annex pages to list all)*	Ω			X Compliant / N/A
3. Continuity of ring circuits: *(use annex page if applicable)*	-			N/A
4. Earth loop impedance test at main or local switch: *(use annex page if applicable)*	Ω			N/A
5. Neutral loop impedance test at main or local switch: *(use annex page if applicable)*	Ω			N/A
6. Prospective short circuit current at main or local switch (PSCC) *(use annex page if applicable)*	kA			Calculated or Measured
7. Elevated voltage between incoming neutral and external earth: *(ground) (empty load, measure and record)*	V			
8. Insulation resistance:	MΩ			
9. Voltage at distribution board with no load for each phase to neutral:	V R	230		
	Y			
	B			
10. Voltage at distribution board with load (as calculated for full load) for each phase to neutral	V R	230		
	Y			
	B			
11. Record value of operation of earth leakage units: *(record tripping current)*	mA			
12. Operation of earth leakage test button: *(test button)*	Correct			
13. Polarity of points of consumption: *(check every socket for correct polarity)*	Correct		N/A	
14. Phase rotation is consistent at points all of consumption for three-phase systems:	Correct		X N/A	
15. All switching devices, make-and-break circuits: *(function test)*	Correct			

Other comments pertaining to this project/test report:

Comments on parts of the installation not covered by this report:

SECTION 5 - RESPONSIBILITY, INSPECTION AND TESTS *When relevant, include other responsible parties & signatures in an annex pages or take full responsibility.*

of annex pages

I, being the person responsible for the INSPECTION AND TESTING of the electrical installation, particulars of which are described in section 3 of this form, CERTIFY that the inspection and testing were done in accordance with this part of SANS 10142, that the results obtained and reflected on this report and annex pages are correct and indicate the extent of the liability of the signatory is limited to the installation described in Section 3 of this form.

Full name of registered person: JACOB PETRUS BENADE ID number 6405165074080

Signature: Date 17.01.23 Tel No 0616194742 Email

Registration Certificate No. EE 17320 Date of registration 10.07.97

Electrical Tester for Single Phase (ETSP) | X Installation Electrician (IE) | Master Installation Electrician (MIE)