

CERTIFICATE

of conformity with the following European Directives

Low Voltage Directive 2014/35/EU

This certifies that below described products of the applicant:

Zucchetti Centro Sistemi SpA

Via Lungarno 305/A 52028 Terranuova Bracciolini (AR) Italy

comply to the essential requirements of the above mentioned European Directive and the following standards, taking into account the German national deviations:

| | |
|-----------------------|--|
| Product(s): | Solar Grid-tied Inverter |
| Model type(s): | AZZURRO 3PH 25KTL-V3, AZZURRO 3PH 30KTL-V3, AZZURRO 3PH 30KTL-V3-A, AZZURRO 3PH 33KTL-V3, AZZURRO 3PH 36KTL-V3, AZZURRO 3PH 40KTL-V3, AZZURRO 3PH 45KTL-V3, AZZURRO 3PH 50KTL-V3, AZZURRO 3PH 40KTL-V3-HV, AZZURRO 3PH 50KTL-V3-HV |

This certificate of conformity is based on the evaluation of samples of the product. It does not imply an assessment of the production and it does not permit the use of a mark of conformity or of a safety mark of the TÜV NORD CERT GmbH. The holder of this certificate may use this Certificate together with his EC-Declaration of Conformity.

| | |
|-------------------------------|----------------------------------|
| Certification program: | P31-VA-01 Rev. 02 / 04.20 |
| Certification fundamental(s): | EN 62109-1:2010; EN 62109-2:2011 |
| Registered no.: | 44 799 22 406749 - 096 |
| Report no.: | 492012125.001 |
| File no.: | PVP05068/22B-01 |



TÜV NORD CERT GmbH
Certification Body
Balance of System (BOS) for Photovoltaics

Essen, 2022-08-03

TÜV NORD CERT GmbH

Am TÜV 1, D-45307 Essen

www.tuev-nord-cert.de

prodcert@tuev-nord.de

Please also pay attention to the information stated overleaf.

ANNEX

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to Certificate registration no. 44 799 22 406749 - 096

Description of product(s):

| | | | |
|-------------------------------------|---------------------------|--------------------------------------|------------------------------|
| Model type | AZZURRO 3PH 25KTL-V3 | | |
| General information | | | |
| Type of inverter | Transformer-less | Separated by | Non-isolated |
| Safety class..... | Class I | IP grade | IP65 |
| Over-voltage category..... | II (PV) III (AC mains) | Pollution degree..... | External PD3 Internal PD2 |
| Hardware Version | V102 | Software Version | V000001 |
| PV input | | | |
| V _{max} [V d.c.] | 1100 | I _{sc} [V d.c.] | 50*3 |
| MPP voltage range [V d.c.]..... | 180-1000 | Max. input current [A d.c.]..... | 40*3 |
| AC output | | | |
| Rated output voltage [V a.c.] | 380/400 3/N/PE | Rated output frequency [Hz]..... | 50/60 |
| Rated output power [kW a.c.] | 25 | Max. apparent power [kVA a.c.] | 28 |
| Max. output current [A a.c.]..... | 42.4 | Power factor | 1 (adjustable+/-0.8) |



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| | | | |
|-------------------------------------|---------------------------|--------------------------------------|------------------------------|
| Model type | AZZURRO 3PH 30KTL-V3 | | |
| General information | | | |
| Type of inverter | Transformer-less | Separated by | Non-isolated |
| Safety class..... | Class I | IP grade | IP65 |
| Over-voltage category..... | II (PV) III (AC mains) | Pollution degree..... | External PD3 Internal PD2 |
| Hardware Version | V102 | Software Version | V000001 |
| PV input | | | |
| V _{max} [V d.c.] | 1100 | I _{sc} [V d.c.] | 50*3 |
| MPP voltage range [V d.c.] | 180-1000 | Max. input current [A d.c.]..... | 40*3 |
| AC output | | | |
| Rated output voltage [V a.c.] | 380/400 3/N/PE | Rated output frequency [Hz]..... | 50/60 |
| Rated output power [kW a.c.] | 30 | Max. apparent power [kVA a.c.] | 34 |
| Max. output current [A a.c.]..... | 51.5 | Power factor | 1 (adjustable+/-0.8) |



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| | | | |
|-------------------------------------|---------------------------|--------------------------------------|------------------------------|
| Model type | AZZURRO 3PH 30KTL-V3-A | | |
| General information | | | |
| Type of inverter | Transformer-less | Separated by | Non-isolated |
| Safety class | Class I | IP grade | IP65 |
| Over-voltage category | II (PV) III (AC mains) | Pollution degree | External PD3 Internal PD2 |
| Hardware Version | V102 | Software Version | V000001 |
| PV input | | | |
| V _{max} [V d.c.] | 1100 | I _{sc} [V d.c.] | 50*3 |
| MPP voltage range [V d.c.] | 180-1000 | Max. input current [A d.c.] | 40*3 |
| AC output | | | |
| Rated output voltage [V a.c.] | 380/400 3/N/PE | Rated output frequency [Hz] | 50/60 |
| Rated output power [kW a.c.] | 29.9 | Max. apparent power [kVA a.c.] | 29.9 |
| Max. output current [A a.c.] | 45.3 | Power factor | 1 (adjustable +/-0.8) |



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| | | | |
|-------------------------------------|---------------------------|--------------------------------------|------------------------------|
| Model type | AZZURRO 3PH 33KTL-V3 | | |
| General information | | | |
| Type of inverter | Transformer-less | Separated by | Non-isolated |
| Safety class | Class I | IP grade | IP65 |
| Over-voltage category | II (PV) III (AC mains) | Pollution degree | External PD3 Internal PD2 |
| Hardware Version | V102 | Software Version | V000001 |
| PV input | | | |
| V _{max} [V d.c.] | 1100 | I _{sc} [V d.c.] | 50*3 |
| MPP voltage range [V d.c.] | 180-1000 | Max. input current [A d.c.] | 40*3 |
| AC output | | | |
| Rated output voltage [V a.c.] | 380/400 3/N/PE | Rated output frequency [Hz] | 50/60 |
| Rated output power [kW a.c.] | 33 | Max. apparent power [kVA a.c.] | 37 |
| Max. output current [A a.c.] | 56 | Power factor | 1 (adjustable+/-0.8) |



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|-------------------------------------|---------------------------|--------------------------------------|------------------------------|
| Model type | AZZURRO 3PH 36KTL-V3 | | |
| General information | | | |
| Type of inverter | Transformer-less | Separated by | Non-isolated |
| Safety class | Class I | IP grade | IP65 |
| Over-voltage category | II (PV) III (AC mains) | Pollution degree | External PD3 Internal PD2 |
| Hardware Version | V102 | Software Version | V000001 |
| PV input | | | |
| V _{max} [V d.c.] | 1100 | I _{sc} [V d.c.] | 50*3 |
| MPP voltage range [V d.c.] | 180-1000 | Max. input current [A d.c.] | 40*3 |
| AC output | | | |
| Rated output voltage [V a.c.] | 380/400 3/N/PE | Rated output frequency [Hz] | 50/60 |
| Rated output power [kW a.c.] | 36 | Max. apparent power [kVA a.c.] | 40 |
| Max. output current [A a.c.] | 60.6 | Power factor | 1 (adjustable +/-0.8) |



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|-------------------------------------|---------------------------|--------------------------------------|------------------------------|
| Model type | AZZURRO 3PH 40KTL-V3 | | |
| General information | | | |
| Type of inverter | Transformer-less | Separated by | Non-isolated |
| Safety class | Class I | IP grade | IP65 |
| Over-voltage category | II (PV) III (AC mains) | Pollution degree | External PD3 Internal PD2 |
| Hardware Version | V102 | Software Version | V000001 |
| PV input | | | |
| V _{max} [V d.c.] | 1100 | I _{sc} [V d.c.] | 50*4 |
| MPP voltage range [V d.c.] | 180-1000 | Max. input current [A d.c.] | 40*4 |
| AC output | | | |
| Rated output voltage [V a.c.] | 380/400 3/N/PE | Rated output frequency [Hz] | 50/60 |
| Rated output power [kW a.c.] | 40 | Max. apparent power [kVA a.c.] | 44 |
| Max. output current [A a.c.] | 66.7 | Power factor | 1 (adjustable +/-0.8) |



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|-------------------------------------|---------------------------|--------------------------------------|------------------------------|
| Model type | AZZURRO 3PH 45KTL-V3 | | |
| General information | | | |
| Type of inverter | Transformer-less | Separated by | Non-isolated |
| Safety class | Class I | IP grade | IP65 |
| Over-voltage category | II (PV) III (AC mains) | Pollution degree | External PD3 Internal PD2 |
| Hardware Version | V102 | Software Version | V000001 |
| PV input | | | |
| V _{max} [V d.c.] | 1100 | I _{sc} [V d.c.] | 50*4 |
| MPP voltage range [V d.c.] | 180-1000 | Max. input current [A d.c.] | 40*4 |
| AC output | | | |
| Rated output voltage [V a.c.] | 380/400 3/N/PE | Rated output frequency [Hz] | 50/60 |
| Rated output power [kW a.c.] | 45 | Max. apparent power [kVA a.c.] | 50 |
| Max. output current [A a.c.] | 75.8 | Power factor | 1 (adjustable+/-0.8) |



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|-------------------------------------|---------------------------|--------------------------------------|------------------------------|
| Model type | AZZURRO 3PH 50KTL-V3 | | |
| General information | | | |
| Type of inverter | Transformer-less | Separated by | Non-isolated |
| Safety class | Class I | IP grade | IP65 |
| Over-voltage category | II (PV) III (AC mains) | Pollution degree | External PD3 Internal PD2 |
| Hardware Version | V102 | Software Version | V000001 |
| PV input | | | |
| V _{max} [V d.c.] | 1100 | I _{sc} [V d.c.] | 50*4 |
| MPP voltage range [V d.c.] | 180-1000 | Max. input current [A d.c.] | 40*4 |
| AC output | | | |
| Rated output voltage [V a.c.] | 380/400 3/N/PE | Rated output frequency [Hz] | 50/60 |
| Rated output power [kW a.c.] | 50 | Max. apparent power [kVA a.c.] | 55 |
| Max. output current [A a.c.] | 83.3 | Power factor | 1 (adjustable+/-0.8) |



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| | | | |
|-------------------------------------|---------------------------|--------------------------------------|------------------------------|
| Model type | AZZURRO 3PH 40KTL-V3-HV | | |
| General information | | | |
| Type of inverter | Transformer-less | Separated by | Non-isolated |
| Safety class | Class I | IP grade | IP65 |
| Over-voltage category | II (PV) III (AC mains) | Pollution degree | External PD3 Internal PD2 |
| Hardware Version | V102 | Software Version | V000001 |
| PV input | | | |
| V _{max} [V d.c.] | 1100 | I _{sc} [V d.c.] | 50*3 |
| MPP voltage range [V d.c.] | 180-1000 | Max. input current [A d.c.] | 40*3 |
| AC output | | | |
| Rated output voltage [V a.c.] | 480 3/N/PE | Rated output frequency [Hz] | 50/60 |
| Rated output power [kW a.c.] | 40 | Max. apparent power [kVA a.c.] | 44 |
| Max. output current [A a.c.] | 53 | Power factor | 1 (adjustable+/-0.8) |



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| | | | |
|-------------------------------------|---------------------------|---|------------------------------|
| Model type | AZZURRO 3PH 40KTL-V3-HV | | |
| General information | | | |
| Type of inverter | Transformer-less | Separated by | Non-isolated |
| Safety class..... | Class I | IP grade | IP65 |
| Over-voltage category..... | II (PV) III (AC mains) | Pollution degree..... | External PD3 Internal PD2 |
| Hardware Version | V102 | Software Version | V000001 |
| PV input | | | |
| V _{max} [V d.c.] | 1100 | I _{sc} [V d.c.] | 50*4 |
| MPP voltage range [V d.c.]..... | 180-1000 | Max. input current [A d.c.]..... | 40*4 |
| AC output | | | |
| Rated output voltage [V a.c.] | 480 3/N/PE | Rated output frequency [Hz]..... | 50/60 |
| Rated output power [kW a.c.] | 50 | Max. apparent power [kVA a.c.] | 55 |
| Max. output current [A a.c.]..... | 66.2 | Power factor | 1 (adjustable+/-0.8) |

Remark:

For detailed product information, please refer to CDF (Constructional Data Form) in Annex 1 of test report.



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