



Product Service

Attestation of Conformity

No. N8A 15 07 83296 032

Holder of Certificate: Northern Electric & Power Co., Ltd.

No. 1 Anhe Road, Hetao Street
 Qingdao Export Processing Zone
 Chengyang District
 266113 Qingdao, Shandong
 PEOPLE'S REPUBLIC OF CHINA

**Product: Converter
(PV grid-connected inverter)**

This Attestation of Conformity is issued on a voluntary basis according to the Low Voltage Directive 2014/35/EU relating to electrical equipment designed for use within certain voltage limits. It confirms that the listed equipment complies with the principal protection requirements of the directive and is based on the technical specifications applicable at the time of issuance. It refers only to the particular sample submitted for testing and certification. See also notes overleaf.

Test report no.: 64290140193202



Date, 2015-07-17


 (Billy Qiu)

CE After preparation of the necessary technical documentation as well as the EU conformity declaration the required CE marking can be affixed on the product. That declaration of conformity is issued under the sole responsibility of the manufacturer. Other relevant EU-directives have to be observed.

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Model(s): **BDM-300-EU, BDM-R-300-EU,
BDM-300-EU-D, BDM-R-300-EU-D**

Parameters:	Maximum rated d.c. input voltage/Vmax PV(V):	60Vd.c.
	Maximum total PV array s-c current/Isc PV (A):	14.0Ad.c.
	PV input operating voltage range (V):	22-55Vd.c.
	Maximum operating PV input current (A):	12.0 Ad.c.
	Nominal a.c. output voltage (V):	230Va.c.
	Nominal a.c. output frequency (Hz):	50Hz
	Nominal active output power (Pn)(W):	250W
	Nominal a.c. output current(A):	1.1Aa.c.
	Maximum continuous a.c. output current(A):	1.2Aa.c.
	Maximum active power of the power generation unit (PEMax)(W):	252W
	Maximum apparent power of a power generation unit (SEmax)(VA):	255VA
	Power factor (cos phi):	Fixed, >0.99 (full load)
	Protection class:	I
	IP code:	IP66/IP67
	Overvoltage category (OVC):	II (PV), III (Grid)
	Pollution degree:	PD3 (External)
	See page 3 for license condition	

Tested according to: EN 62109-1:2010
EN 62109-2:2011



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License condition:

1. The units are isolated type PV grid-connected inverters inverting the DC output of one PV module, and are intended to be connected in parallel to the public grid;
2. The assembly of the unit is secured by screws and filled with potting inside, it is not designed for service with any maintenance of parts and components inside the enclosure;
3. The inverters are isolated type with high frequency transformer and the residual current is limited within 30mA. According to IEC 62109-2, RCD or RCM for residual current protection is not necessary and is not provided in the inverter. However, to protect against the earth fault in the external power line of a.c. output of the PV inverter, a RCD is required in the AC distribution board. And considering the DC component of injection power, the RCD is required as type B;
4. The grid connection protection system is evaluated according to VDE 0126-1-1 new edition and VDE-AR-N 4105. Some features required by VDE-AR-N 4105 are described as follows:
 - a) Multiple units are allowed to inter-connected to constitute a PV plant with limited capacity up to 3.68kVA. The unit provide fixed displacement factor larger than 0.95;
 - b) The inverter is capable to decrease the active power output when the grid frequency goes up between 50.2Hz and 51.5Hz. However, the remote active power control function is not provided in the unit;
 - c) The information of status and fault condition report is transmitted via PLC from the micro inverter to the gateway. The gateway identifies the micro inverter with IP address. The gateway is installed for each plant and considered as necessary unit of a PV plant.
 - d) For other countries, the local grid code shall be further considered and not evaluated in this report.
5. The inverters are designed for indoor and outdoor use. It is fixed mounted on rack or other reliable fixing and the environmental parameter shall meet its rating as specification;
6. The PLC is not evaluated in term of subject standards;
The firmware version is BDM-300-01.

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