

DICHIARAZIONE DI CONFORMITÀ / DECLARATION OF CONFORMITY

alle prescrizioni della Norma Italiana CEI 0-21: 2014-09 + V1:2014-12

Certificato N°/ *Certificate n°*: EPT.15.CEI021 0199
 Tipologia di prova / *Type of test*: Prove di tipo / *Type testing*

TIPOLOGIA DI APPARATO CUI SI RIFERISCE LA DICHIARAZIONE

Equipment classification

DISPOSITIVO DI INTERFACCIA (DDI)	Sistema di Protezione di Interfaccia (SPI)	DISPOSITIVO DI CONVERSIONE STATICA	DISPOSITIVO DI GENERAZIONE ROTANTE
	X	X	

COSTRUTTORE: **ATON S.r.l.**
Manufacturer: Sede legale: Via Circonvallazione, 57/B – 47923 Rimini (RN) - Italy
 Sede operativa: Via Borsellino n°3 41057 Spilamberto (MO) – Italy

MODELLI* / Models: **RA 5K 2S H – xx.x L** | **RA 5K 2S M – xx.x L** | **RA 4K 2S H – xx.x L** | **RA 4K 2S M – xx.x L** | **RA 3K 2S M – xx.x L**

VERSIONE FIRMWARE :** Manager: V2.07.XX - Inverter: V2.02.XX - Charger: V2.03.XX - Controller: V1.00.XX.XX

TIPO / Type : Sistema di accumulo con convertitore statico connesso alla rete - Monofase 230V_{AC}
Grid connected Energy Storage System (EES) – Single phase 230 V_{AC}

Potenza apparente nominale @cosfi = 0.95 [kVA] / <i>Rated apparent power @cosfi = 0.95 [kVA]</i>	4850	4850	3900	3900	3200
Potenza attiva nominale [kW] / <i>Rated active power [kW]</i>	4600	4600	3680	3680	3000

Note / Remarks: *V. Allegato #1 / *See Annex# 1*

** I numeri indicati con "X" corrispondono a blocchi funzionali del firmware non in contrasto con i requisiti della norma di riferimento / *the numbers replaced by "X" relate to functional blocks within the firmware which are not in contrast with the requirements of the reference standard*


RIFERIMENTI DEI LABORATORI CHE HANNO ESEGUITO LE PROVE / *Testing Laboratories*

- **Esaminati i Rapporti di Prova / *After reviewing the Test Reports:***
 - (021) n° EPT.15.NRG.0432/53560 del 30/11/2015, emesso dal Laboratorio Eurofins Product Testing Italy S.r.l. (n° EA 0085)
 - (021) n° 3162473.50 del 24/04/2015, emesso dal Laboratorio DEKRA Testing and Certification (Shanghai) Ltd. - China
 - (LVD) n° EPT.15.NRG.0434/53560 del 30/11/2015, emesso dal laboratorio Eurofins Product Testing Italy S.r.l. (n° EA 0085)
 - (EMC) n° EPT.15.NRG.0433/53560 del 30/11/2015, emesso dal laboratorio Eurofins Product Testing Italy S.r.l. (n° EA 0085)
- **Esaminata la documentazione tecnica di costruzione (fascicolo tecnico) fornita dal Costruttore / *After reviewing the technical construction file submitted by the applicant.***

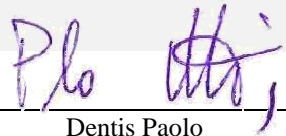
Si dichiara che il prodotto è conforme alle prescrizioni della norma
We undersigned declare that the product complies with the requirements of the standard

CEI 0-21: 2014-09 + V1: 2014-12

Torino, 30/11/2015



 Giovanni Bellenda
Responsabile Tecnico area EMC-LVD-ENERGY
 Head of EMC-LVD-ENERGY Area



 Dentis Paolo
 Certification Body Manager

This declaration is valid for three years and doesn't exonerate the manufacturer from other obligations of law regarding the responsibility from product. Every change in the design or realization of the product can make not valid this declaration and requires communication to the Certification Body. The reviewed technical documentation regards the requirements as defined in the Italian standard CEI 0-21:2014-09 + V1: 2014-12 only. Any modification of the reference standard makes this declaration invalid. This Certificate is composed by 2 pages and it is reproducible only in whole.

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ALLEGATO # 1 / ANNEX # 1

General remarks (NOTE * - page 1)

Tested model: RA 5K 2S H – 20L: rated active power 4600W, inverter model: INV-RA5K, battery charger model: BMU-RA5K
 Other models covered by this certificate:

- RA 3K 2S M – xx.x L: rated active power 3000W, inverter model INV-RA3K, battery charger model: BMU-RA3K
- RA 4K 2S M – xx.x L: rated active power 3680W, inverter model INV-RA4K, battery charger model: BMU-RA3K
- RA 4K 2S H – xx.x L: rated active power 3680W, inverter model INV-RA4K, battery charger model: BMU-RA5K
- RA 5K 2S M – xx.x L: rated active power 4600W, inverter model INV-RA5K, battery charger model: BMU-RA3K

All the evaluated models have the same construction and firmware. The differences relate only to :

- Storage capacity and number of the lithium accumulators: symbols "xx.x" in the identification codes correspond to 5, 7.5, 10, 12.5, 15, 17.5 or 20, depending on the number (2, 3, 4, 5, 6, 7 or 8) of lithium accumulators installed (the letter "L" in the id- code means Lithium accumulator)
- Rated power of inverters and battery chargers

Technical Documentation:

The reviewed Technical Construction File includes:	Block diagram / Sketch of the intended connection to the grid	<input checked="" type="checkbox"/>
	Critical Components list	<input checked="" type="checkbox"/>
	External/internal photos – Mechanical drawings	<input checked="" type="checkbox"/>
	Circuit description	<input checked="" type="checkbox"/>
	Schematic diagram	<input checked="" type="checkbox"/>
	User manual	<input checked="" type="checkbox"/>

Compliance with Requirements of CEI 0-21: 2014-09 + V1:2014-12 – Documentary evidences

To demonstrate conformity with art. B.1 – CE marking requirements – SAFETY

Applied standards	Version	Report or Certificate n°	Issued by	Issue date
EN 62109-2:2011	2011	EPT.15.NRG.0434/53560	EUROFINS Product Testing Italy S.r.l.	2015-11-30
EN 62109-1:2010	2010			

To demonstrate conformity with art. B.1 – CE marking requirements – EMC

Applied standards	Version	Report or Certificate	Issued by	Issue date
EN 61000-6-3 EMC - <u>Emission</u> standard for residential environments	2007 + A1:2011	EPT.15.NRG.0433/53560	EUROFINS Product Testing Italy S.r.l.	2015-11-30
EN 61000-6-2 EMC - <u>Immunity</u> standard for industrial environments	2005			

To demonstrate conformity with art. B.1 - cl. a), b), c), g) – POWER QUALITY requirements

Applied standards	Version	Report or Certificate	Issued by	Issue date
EN 61000-3-2* EN 61000-3-3*	2006 +A1:2009 +A2:2009 2008	n° 3162473.50	DEKRA Testing and Certification (Shanghai) Ltd. - China	2015-04-24

Remarks: *Test also performed at extreme temperature conditions on inverter model INV-RA5K (Pn = 4600 W)

To demonstrate conformity with artt. 8.4, 8.5, 8.6 ; B.1.1 to B.1.6 – Technical and FUNCTIONAL REQUIREMENTS, grid services

Applied standards	Version	Report or Certificate	Issued by	Issue date
CEI 0-21	2014-09 + V1:2014-12	EPT.15.NRG.0432/53560	EUROFINS Product Testing Italy S.r.l.	2015-11-30
		n° 3162473.50	DEKRA Testing and Certification (Shanghai) Ltd. - China	2015-04-24

Remarks: Adjustable delays on the P(f) and Q(V) functions of the power converters have been checked to be implemented in the controller (firmware)

To demonstrate conformity with art. 8.6.2; A.4 – REQUIREMENTS for the Interface Protection System (SPI)

Applied standards	Version	Report or Certificate	Issued by	Issue date
CEI 0-21	2014-09 + V1:2014-12	EPT.15.NRG.0432/53560	EUROFINS Product Testing Italy S.r.l.	2015-11-30

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