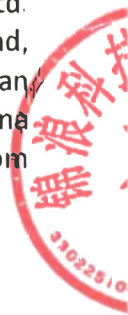




Ginlong Technologies Co., Ltd.
No.57 Jintong Road,
Binhai Industrial Park – Xiangshan
Ningbo – Zhejiang Province, 315712 – P.R. China
Tel: (+86) 574 6580 2188 – info@ginlong.com



Dichiarazione di conformità alle prescrizioni della Norma CEI 0-16
Declaration of conformity to the requirements of the standard CEI 0-16

TIPOLOGIA DEL SISTEMA DI ACCUMULO CUI SI RIFERISCE LA DICHIARAZIONE:
TYPE OF STORAGE SYSTEM TO WHICH THIS DECLARATION REFERS:

DISPOSITIVO DI INTERFACCIA INTERFACE DEVICE	PROTEZIONE DI INTERFACCIA INTERFACE PROTECTION	DISPOSITIVO DI CONVERSIONE STATICA STATIC CONVERSION DEVICE	DISPOSITIVO DI GENERAZIONE ROTANTE ROTARY GENERATING DEVICE
Sì/Yes	Sì/Yes	Sì/Yes	No

COSTRUTTORE: MANUFACTURER	MODELLO DI INVERTER: INVERTER MODEL	VERSIONE FIRMWARE: FIRMWARE VERSION:	NUMERO DI FASI (monofase/trifase) NUMBER OF PHASE (single/triphas)	POTENZA NOMINALE DI CARICA/SCARICA: CHARGE/DISCHARGE NOMINAL POWER P _{cn} /P _{sn} [W]	POTENZA MASSIMA DI CARICA/SCARICA: CHARGE/DISCHARGE MAX POWER P _{smax} /P _{cmax} [W]	CORRENTE MASSIMA DI CARICA/SCARICA CHARGE/DISCHARGE MAX CURRENT [A]
Ginlong Technologies Co., Ltd. No. 57 Jintong Road, Binhai Industrial Park – Xiangshan Ningbo – Zhejiang Province, 315712 – P.R. China	RHI-3P5K-HVES-5G	31 o superior or upper	Trifase Three-phase	5000	5000	25
	RHI-3P6K-HVES-5G			6000	6000	25
	RHI-3P8K-HVES-5G			8000	8000	25
	RHI-3P10K-HVES-5G			10000	10000	25

Il generatore – The generator:

✓ è idoneo per installazione in impianti con potenza superiore a 11,08 kW - It is suitable for installation in systems with a power greater than 11.08 kW

✓ È in grado di limitare la I_{dc} allo 0,5% della corrente nominale - It is able to limit the I_{dc} to 0.5% of the rated current:

✓ utilizza una funzione di protezione sensibile alla corrente continua - Uses a DC sensitive protection feature

□ utilizza un trasformatore operante alla frequenza di rete - Uses a transformer operating at the mains frequency

Gli inverter suddetti sono certificati in combinazione con una delle seguenti opzioni di batteria al Litio:

The inverters here above listed are certified according with one of the following options of Lithium Battery(See Appendix):

Esaminati i Fascicoli Prove n° CN2134SX 002, emessi dal laboratorio TÜV Rheinland (Shanghai) Co.; Ltd.

In conformità a quanto previsto dalla CEI 0-16; V3 del 01-2024, all'allegato Nbis 1.2 che consente l'estensione della certificazione suddetta a sistemi di accumulo appartenenti alla stessa famiglia.

In particolare:

- essendo il sottosistema di accumulo elettrochimico;
- qualificato secondo la norma CEI EN 62619;
- rimanendo invariati i perimetri di sicurezza e operativi (es. P_SMAX , P_CMAX, V, I);
- mantenendo la stessa configurazione (Tipo a – per quanto definito in fig. 5 di CEI EN 62619) che non modifica in alcun modo il contenuto del “convertitore” (inverter) per il quale il sottosistema di accumulo è costituito da uno o più pacchi batterie collegati in parallelo, ciascuno dei quali ha un proprio BMS e moduli batterie collegati in serie.



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Ai sensi degli articoli 76 del DPR 28 Dicembre 2000, n° 445, il sottoscritto Yiming Wang, in qualità di legale rappresentante di Ginlong Technologies Co., Ltd. No.57 Jintong Road, Binhai Industrial Park - Xiangshan Ningbo – Zhejiang Province, 315712 – P.R. China

dichiara

che il sistema di accumulo, combinazione degli inverter di propria costruzione con le batterie sopra menzionate, è conforme alle prescrizioni della CEI 0-16:2022-03,CEI 0-16; V1:2022-11,CEI 0-16 V2:2023,CEI 0-16;V3:2024-01/01.24.

Taken into account test report No. CN2134SX 002 issued by test TÜV Rheinland (Shanghai) Co.; Ltd.

In compliance with the provisions of CEI 0-16; V3 del 01-2024, in Annex Nbis 1.2 which allows the extension of the aforementioned certification to storage systems belonging to the same family.

In particular:

- *being the electrochemical storage subsystem;*
- *qualified according to the CEI EN 62619 standard;*
- *the safety and operational perimeters remaining unchanged (e.g. P_{SMAX} , P_{CMAX} , V , I);*
- *maintaining the same configuration (Type a - as defined in fig. 5 of CEI EN 62619) which does not modify in any way the content of the "converter" (inverter) for which the storage subsystem is made up of one or more packs batteries connected in parallel, each of which has its own BMS and battery modules connected in series.*

According with the articles 76 of Italian DPR 28 December 2000, n° 445, the undersigned Yiming Wang, as legal representative of Ginlong Technologies Co., Ltd. No.57 Jintong Road, Binhai Industrial Park – Xiangshan Ningbo – Zhejiang Province, 315712 – P.R. China, herewith

Declare

that the storage system, combination of hybrid inverters manufactured by us with the batteries here above listed, is compliant with the requirements of CEI 0-16:2022-03,CEI 0-16; V1:2022-11,CEI 0-16 V2:2023,CEI 0-16;V3:2024-01/01.24.

DATA 22/07/2025
DATE 22/07/2025

FIRMA LEGALE/RAPPRESENTANTE
SIGNATURE LEGAL REPRESENTATIVE





Ginlong Technologies Co., Ltd.
No.57 Jintong Road,
Binhai Industrial Park – Xiangshan
Ningbo – Zhejiang Province, 315712 – P.R. China
Tel: (+86) 574 6580 2188 – info@ginlong.com

Appendix:

COSTRUTTORE: MANUFACTURER	MODELLO SOTTOSISTEMA DI ACCUMULO SUBSYSTEM STORAGE MODEL			Numero di moduli batteria per singola pila collegati in serie Number(s) of battery module for single pile series connected	Capacità del sistema di accumulo (CUS) [Wh] Storage system capacity (CUS) [Wh]
Pylontech Pylontech	PowerCube X1/X2/H1/H 2	SC0500 (BMS)	H48050 (Modulo/ Modul)	n da 4 a 11 n from 4 to 11	N ⁽¹⁾ x n. di moduli batteria x 2400 N ⁽¹⁾ x n. of battery modules x 2400
		SC1000 (BMS)			
		SC0500 (BMS)	H48074 (Modulo/ Modul)		N ⁽¹⁾ x n. di moduli batteria x 3552 N ⁽¹⁾ x n. of battery modules x 3552
		SC1000 (BMS)			
	Force H1	FC0500-40S (BMS)		n da 4 a 7 n from 4 to 7	N ⁽¹⁾ x n. di moduli batteria x 3552 N ⁽¹⁾ x n. of battery modules x 3552
		FH48074 (Modulo/Modul)			
	Force H2	FC0500M-40S (BMS)		n da 2 a 4 n from 2 to 4	N ⁽¹⁾ x n. di moduli batteria x 3552 N ⁽¹⁾ x n. of battery modules x 3552
		FH9637M (Modulo/Modul)			
	Force H3	FC1000 (BMS)		n da 2 a 5 n from 2 to 5	N ⁽¹⁾ x n. di moduli batteria x 5120 N ⁽¹⁾ x n. of battery modules x 5120
		FH10050 (Modulo/Modul)			

(1) E' possibile installare fino a N = 6 pile in parallelo - It is allowed to install up to N = 6 piles (parallel connected)

I hereby certify,that the above is the true signature,subscribed in
my presence,of

**Mr.Yiming Wang, born on April 13,1981,business address
No.57 Jintong Road, Binhai Industrial Park, Xiangshan,
Ningbo, Zhejiang Province, China, identified himself by
submission of his valid government-issued photo identification**

Acting on behalf of Ginlong Technologies Co., Ltd. as Chief
Executive Officer under the document

*Dichiarazione-di-conformita-CEI0-16-SOLIS
RHI-3P(5-10)K-HVES-5G*

Grandall Law Firm (Beijing)

July 24, 2025



Handwritten signature in black ink.

CERTIFICATE of Conformity



Registration No.: A3 50630547 0001

Report No.: CN2134SX 002

Holder: **Ginlong technologies Co., Ltd.**
No.57 Jintong Road, Binhai,
(seafront), Industrial Park,
Xiangshan Ningbo
315712 Zhejiang
P.R. China

Product: **PV-Inverter**
(Hybrid Grid-Interactive Inverter With Storage Battery System)

Identification: Type Designation: Hybrid Inverter:RHI-3PxK-HVES-5G
(x=5, 6, 8, 10)
Serial Number : 110F40186080001
Firmware Version: Hybrid Inverter:A2; BMS:V4.6; Battery:V3.0
Remark(s): Model above maybe installed with: Pylon Battery:
H48074, H48050; Pylon BMS :SC1000, SC5000
Refer to report CN2134SX 002 for details.

Tested acc. to: CEI 0-16:2022-03
CEI 0-16; V1:2022-11
CEI 0-16 V2:2023
CEI 0-16;V3:2024-01/01.24

The certificate of conformity refers to the above mentioned product. This is to certify that the specimen is in conformity with the assessment requirement mentioned above. This certificate does not imply assessment of the production of the product and does not permit the use of a TÜV Rheinland mark of conformity.

Durch die DAkkS nach
DIN EN ISO/IEC 17065:2013
akkreditierte Zertifizierungsstelle.
Die Akkreditierung gilt nur für den in der
Urkundenanlage D-ZE-14169-01-02
aufgeführten Akkreditierungsumfang.

Certification Body

Date 27.05.2024

A. Chen



TÜV Rheinland LGA Products GmbH - Tillystraße 2 - 90431 Nürnberg

OGGETTO: Dichiarazione di conformita aila normative CEI 0-16:2022-03,CEI 0-16; V1:2022-11,CEI 0-16 V2:2023,CEI 0-16;V3:2024-01/01.24
“Regola tecnica di riferimento per la connessione di Utenti attivi e passivi alle reti AT ed MT delle imprese distributrici di energia elettrica”
SUBJECT: Declaration of Conformity to CEI 0-16:2022-03,CEI 0-16; V1:2022-11,CEI 0-16 V2:2023,CEI 0-16;V3:2024-01/01.24
“Reference technical rules for the connection of active and passive consumers to the HV and MV electrical networks of distribution Company”

Certificate No.: A3 50630547 0001

TIPOLOGIA DI APPARATO A CUI SI RIFERISCE LA DICHIARAZIONE:
TYPE OF APPARATUS WHICH THE DECLARATION IS REFERED TO:

GENERATORI SINCRONI Synchronous generators	GENERATORI ASINCRONI Asynchronous generators	GENERATORI STATICI FV Static generators PV	GENERATORI EOLICI FULL CONVERTER Full Power Wind Generators
☐	☐	☒	☐

Costruttore Manufacturer	Ginlong technologies Co., Ltd. No.57 Jintong Road, Binhai, (seafront) Industrial Park, Xiangshan, Ningbo, Zhejiang, 315712, P.R. China							
Modello/Tipo Model/Type	RHI-3P10K-HVES-5G with H48050							
Potenza Attiva Nominata (P _{NINV}) Nominal Power [W]	10000							
Max. Potenza Apparente (S _{MAX}) Maximum Apparent Power [VA]	10000							
Numero di unità batteria Number of battery unit	4	5	6	7	8	9	10	11
Potenza di Scarica Massima (P _{Smax})* Maximum Discharge Power [W]	4500	5700	6800	8000	9200	10000	10000	10000
Potenza di Carica massima (P _{Cmax})* Maximum charging power [W]	5100	6400	7600	8800	10000	10000	10000	10000
Capacità della batteria Capacity of battery [kWh]	9.76	12.20	14.64	17.08	19.52	21.96	24.40	26.84



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OGGETTO: Dichiarazione di conformità alla normativa CEI 0-16:2022-03, CEI 0-16; V1:2022-11, CEI 0-16 V2:2023, CEI 0-16; V3:2024-01/01.24

“Regola tecnica di riferimento per la connessione di Utenti attivi e passivi alle reti AT ed MT delle imprese distributrici di energia elettrica”

SUBJECT: Declaration of Conformity to CEI 0-16:2022-03, CEI 0-16; V1:2022-11, CEI 0-16 V2:2023, CEI 0-16; V3:2024-01/01.24

“Reference technical rules for the connection of active and passive consumers to the HV and MV electrical networks of distribution Company”

Pagina 2/6

Modello/Tipo
Model/Type

RHI-3P10K-HVES-5G with H48074

Potenza Attiva Nominale (P_{NINV})
Nominal Power [W]

10000

Max. Potenza Apparente (S_{MAX})
Maximum Apparent Power [VA]

10000

Numero di unità batteria
Number of battery unit

4	5	6	7	8	9	10	11
---	---	---	---	---	---	----	----

Potenza di Scarica Massima (P_{Smax})*
Maximum Discharge Power [W]

4500	5700	6800	8000	9200	10000	10000	10000
------	------	------	------	------	-------	-------	-------

Potenza di Carica massima (P_{Cmax})*
Maximum charging power [W]

5100	6400	7600	8800	10000	10000	10000	10000
------	------	------	------	-------	-------	-------	-------

Capacità della batteria
Capacity of battery [kWh]

14.20	17.75	21.30	24.85	28.40	31.95	35.50	39.05
-------	-------	-------	-------	-------	-------	-------	-------

Modello/Tipo
Model/Type

RHI-3P8K-HVES-5G with H48050

Potenza Attiva Nominale (P_{NINV})
Nominal Power [W]

8000

Max. Potenza Apparente (S_{MAX})
Maximum Apparent Power [VA]

8000

Numero di unità batteria
Number of battery unit

4	5	6	7	8	9	10	11
---	---	---	---	---	---	----	----

Potenza di Scarica Massima (P_{Smax})*
Maximum Discharge Power [W]

4500	5700	6800	8000	8000	8000	8000	8000
------	------	------	------	------	------	------	------

Potenza di Carica massima (P_{Cmax})*
Maximum charging power [W]

5100	6400	7600	8000	8000	8000	8000	8000
------	------	------	------	------	------	------	------

Capacità della batteria
Capacity of battery [kWh]

9.76	12.20	14.64	17.08	19.52	21.96	24.40	26.84
------	-------	-------	-------	-------	-------	-------	-------



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OGGETTO: Dichiarazione di conformità alla normativa CEI 0-16:2022-03, CEI 0-16; V1:2022-11, CEI 0-16 V2:2023, CEI 0-16; V3:2024-01/01.24

“Regola tecnica di riferimento per la connessione di Utenti attivi e passivi alle reti AT ed MT delle imprese distributrici di energia elettrica”

SUBJECT: Declaration of Conformity to CEI 0-16:2022-03, CEI 0-16; V1:2022-11, CEI 0-16 V2:2023, CEI 0-16; V3:2024-01/01.24

“Reference technical rules for the connection of active and passive consumers to the HV and MV electrical networks of distribution Company”

Pagina 3/6

Modello/Tipo
Model/Type

RHI-3P8K-HVES-5G with H48074

Potenza Attiva Nominale (P_{NINV})
Nominal Power [W]

8000

Max. Potenza Apparente (S_{MAX})
Maximum Apparent Power [VA]

8000

Numero di unità batteria
Number of battery unit

4 5 6 7 8 9 10 11

Potenza di Scarica Massima (P_{Smax})*
Maximum Discharge Power [W]

4500 5700 6800 8000 8000 8000 8000 8000

Potenza di Carica massima (P_{Cmax})*
Maximum charging power [W]

5100 6400 7600 8000 8000 8000 8000 8000

Capacità della batteria
Capacity of battery [kWh]

14.20 17.75 21.30 24.85 28.40 31.95 35.50 39.05

Modello/Tipo
Model/Type

RHI-3P6K-HVES-5G with H48074

Potenza Attiva Nominale (P_{NINV})
Nominal Power [W]

6000

Max. Potenza Apparente (S_{MAX})
Maximum Apparent Power [VA]

6000

Numero di unità batteria
Number of battery unit

4 5 6 7 8 9 10 11

Potenza di Scarica Massima (P_{Smax})*
Maximum Discharge Power [W]

4500 5700 6000 6000 6000 6000 6000 6000

Potenza di Carica massima (P_{Cmax})*
Maximum charging power [W]

5100 6000 6000 6000 6000 6000 6000 6000

Capacità della batteria
Capacity of battery [kWh]

14.20 17.75 21.30 24.85 28.40 31.95 35.50 39.05



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“Regola tecnica di riferimento per la connessione di Utenti attivi e passivi alle reti AT ed MT delle imprese distributrici di energia elettrica”

SUBJECT: Declaration of Conformity to CEI 0-16:2022-03, CEI 0-16; V1:2022-11, CEI 0-16 V2:2023, CEI 0-16; V3:2024-01/01.24

“Reference technical rules for the connection of active and passive consumers to the HV and MV electrical networks of distribution Company”

Pagina 4/6

Modello/Tipo
Model/Type

RHI-3P6K-HVES-5G with H48050

Potenza Attiva Nominale (P_{NINV})
Nominal Power [W]

6000

Max. Potenza Apparente (S_{MAX})
Maximum Apparent Power [VA]

6000

Numero di unità batteria
Number of battery unit

4

5

6

7

8

9

10

11

Potenza di Scarica Massima (P_{Smax})*
Maximum Discharge Power [W]

4500

5700

6000

6000

6000

6000

6000

6000

Potenza di Carica massima (P_{Cmax})*
Maximum charging power [W]

5100

6000

6000

6000

6000

6000

6000

6000

Capacità della batteria
Capacity of battery [kWh]

9.76

12.2

14.64

17.08

19.52

21.96

24.40

26.84

Modello/Tipo
Model/Type

RHI-3P5K-HVES-5G with H48050

Potenza Attiva Nominale (P_{NINV})
Nominal Power [W]

5000

Max. Potenza Apparente (S_{MAX})
Maximum Apparent Power [VA]

5000

Numero di unità batteria
Number of battery unit

4

5

6

7

8

9

10

11

Potenza di Scarica Massima (P_{Smax})*
Maximum Discharge Power [W]

4500

5000

5000

5000

5000

5000

5000

5000

Potenza di Carica massima (P_{Cmax})*
Maximum charging power [W]

5000

5000

5000

5000

5000

5000

5000

5000

Capacità della batteria
Capacity of battery [kWh]

9.76

12.2

14.64

17.08

19.52

21.96

24.40

26.84



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OGGETTO: Dichiarazione di conformita alla normative CEI 0-16:2022-03,CEI 0-16; V1:2022-11,CEI 0-16 V2:2023,CEI 0-16;V3:2024-01/01.24
"Regola tecnica di riferimento per la connessione di Utenti attivi e passivi alle reti AT ed MT delle imprese distributrici di energia elettrica"
SUBJECT: Declaration of Conformity to CEI 0-16:2022-03,CEI 0-16; V1:2022-11,CEI 0-16 V2:2023,CEI 0-16;V3:2024-01/01.24
"Reference technical rules for the connection of active and passive consumers to the HV and MV electrical networks of distribution Company"

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Modello/Tipo Model/Type	RHI-3P5K-HVES-5G with H48074							
Potenza Attiva Nominata (P _{NIN}) Nominal Power [W]	5000							
Max. Potenza Apparente (S _{MAX}) Maximum Apparent Power [VA]	5000							
Numero di unità batteria Number of battery unit	4	5	6	7	8	9	10	11
Potenza di Scarica Massima (P _{Smax})* Maximum Discharge Power [W]	4500	5000	5000	5000	5000	5000	5000	5000
Potenza di Carica massima (P _{Cmax})* Maximum charging power [W]	5000	5000	5000	5000	5000	5000	5000	5000
Capacità della batteria Capacity of battery [kWh]	14.20	17.75	21.30	24.85	28.40	31.95	35.50	39.05
Firmware release Firmware	A2							
Numero di Fasi Number of phases	Tre fasi Three phases							
Potenza massima dell'impianto di destinazione: Maximum power of the destination plant:	☐ P_{plant} < 400 kW ☒ P_{plant} ≥ 400 kW							
laboratorio di prova Test laboratory	TÜV Rheinland (Shanghai) Co., Ltd. Accreditation CNAS no.: L3038							

Esaminati I Fascicoli Prove N.: CN2134SX 002 emesso da TÜV Rheinland (Shanghai) S.r.l.
Having assessed the Test Files N. CN2134SX 002 issued by TÜV Rheinland (Shanghai) Co., Ltd.



TÜV Rheinland LGA Products GmbH
Tillystraße 2 · 90431 Nürnberg · Germany



OGGETTO: Dichiarazione di conformita aila normative CEI 0-16:2022-03,CEI 0-16; V1:2022-11,CEI 0-16 V2:2023,CEI 0-16;V3:2024-01/01.24

“Regola tecnica di riferimento per la connessione di Utenti attivi e passivi alle reti AT ed MT delle imprese distributrici di energia elettrica”

SUBJECT: Declaration of Conformity to CEI 0-16:2022-03,CEI 0-16; V1:2022-11,CEI 0-16 V2:2023,CEI 0-16;V3:2024-01/01.24

“Reference technical rules for the connection of active and passive consumers to the HV and MV electrical networks of distribution Company”

Pagina 6/6

Si dichiara che i prodotti indicati soddisfano i requisiti della CEI 0-16:2022-03,CEI 0-16; V1:2022-11,CEI 0-16 V2:2023,CEI 0-16;V3:2024-01/01.24 “Regola tecnica di riferimento per la connessione di Utenti attivi e passivi alle reti AT ed MT delle imprese distributrici di energia elettrica”

We declare that the products indicated meet the requirements laid down by CEI 0-16:2022-03,CEI 0-16; V1:2022-11,CEI 0-16 V2:2023,CEI 0-16;V3:2024-01/01.24 “Reference technical rules for the connection of active and passive consumers to the HV and MV electrical networks of distribution Company”

Validità della Dichiarazione
Validity of the Declaration

Questa Dichiarazione è valida per i prodotti indicate, così come descritt nei Fascicoli citati. Nuovi requisiti o emendamenti a requisiti esistenti, così come modifiche al prodotto, bbbpossono implicare nuove verifiche e certificazioni.

This Declaration is valid only for the products indicated herein, as described in the Files mentioned. New requirements or amendment to existing ones, or modifications to the product, may imply re-verification and re-certification.

Date: 27.05.2024

Signature :



A. Chen



TÜV Rheinland LGA Products GmbH
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N. 6 Verifica dei requisiti costruttivi circa lo scambio di potenza reattiva <i>/Reactive power capability</i>				
Test	Ref. CEI 0-16	Ref. standard	Result	Sample
Verifica della capability di erogazione della potenza reattiva <i>/reactive power production capability</i>	N.6.1	CEI 0-16:2022-03 CEI 0-16; V1:2022-11 CEI 0-16; V2:2023 CEI 0-16;V3:2024-01/01.24	P	Refer to CEI 0-21 test report 50387786 001
Scambio di potenza reattiva secondo un livello assegnato <i>/Reactive power production according to an assigned level</i>	N.6.2 Annex I	CEI 0-16:2022-03 CEI 0-16; V1:2022-11 CEI 0-16; V2:2023 CEI 0-16;V3:2024-01/01.24	P	Refer to CEI 0-21 test report 50387786 001
Tempo di risposta ad una variazione a gradino del livello assegnato <i>/Reaction time after a step variation of the assigned level.</i>	N.6.2.1	CEI 0-16:2022-03 CEI 0-16; V1:2022-11 CEI 0-16; V2:2023 CEI 0-16;V3:2024-01/01.24	P	Refer to CEI 0-21 test report 50387786 001
Regolazione automatica di potenza reattiva secondo una curva caratteristica $\cos\phi = f(P)$ <i>/Automatic reactive power production according to a characteristic curve $\cos(\phi)=f(P)$</i>	N.6.3	CEI 0-16:2022-03 CEI 0-16; V1:2022-11 CEI 0-16; V2:2023 CEI 0-16;V3:2024-01/01.24	P	Refer to CEI 0-21 test report 50387786 001
Erogazione/assorbimento automatico di potenza reattiva secondo una curva caratteristica $Q=f(V)$ applicabile a generatori con capability rettangolare <i>/Automatic reactive power production according to a characteristic curve $Q=f(V)$</i>	N.6.4	CEI 0-16:2022-03 CEI 0-16; V1:2022-11 CEI 0-16; V2:2023 CEI 0-16;V3:2024-01/01.24	P	Refer to CEI 0-21 test report 50387786 001

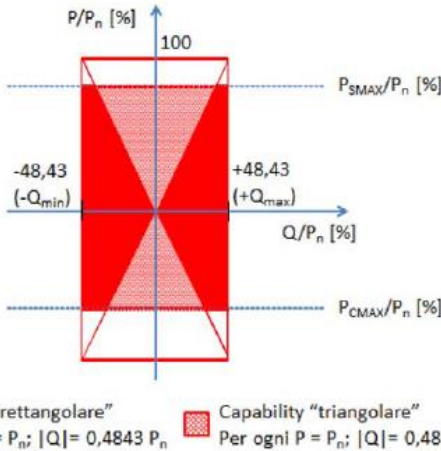
8.4.4.2 Bbis.6.1 Bbis.6.2	TABLE: check of the constructive requirements: reactive power production capability	
Ambient temperature (°C)		25 °C ± 5 °C
Humidity (RH %)		65% ± 5% RH
Instrumentation list		See table “Measurement equipment and instrumentation”
Uncertainty		See table
Max. cosφ declared.....		☐ cosφ: 0.9 → Pout ≤ 11.08 KW (triangular) ☒ Q/Pn% = 48.43% → Pout > 11.08 KW (rectangular)
 ■ Capability “rettangolare” Per ogni P = P_n; Q = 0,4843 P_n ▨ Capability “triangolare” Per ogni P = P_n; Q = 0,4843 P Figura 3Bbis – Capability per un sistema di accumulo con inverter bidirezionale.		
Supplementary information:		
For each of the 10 levels of active power, 1 value of inductive reactive power and 1 value of conductive reactive power shall be registered as average values in 1 min, based on the measurements at the fundamental in a window of 200ms.		
Operator		See cover page
Supervisor		See cover page
Test Date.....		See cover page

TABLE: Reactive power production with set point Q = 0							
Power Step	Active Power		Reactive Power		DC Power		Power Factor
	[W]	[%Sn]	[VAr]	[%Sn]	[W]	[%Sn]	Cosφ
90% - 100% P_{Smax}	4358.8	43.59%	361.9	3.62%	4568.3	45.68%	0.997
70% - 80% P_{Smax}	3442.4	34.42%	370.4	3.70%	3597.1	35.97%	0.994
50% - 60% P_{Smax}	2523.3	25.23%	377.2	3.77%	2636.5	26.37%	0.989
30% - 40% P_{Smax}	1610.0	16.10%	387.7	3.88%	1689.6	16.90%	0.972
10% - 20% P_{Smax}	681.9	6.82%	372.9	3.73%	733.5	7.34%	0.875
10% - 20% P_{Cmax}	-800.7	-8.01%	397.4	3.97%	-751.2	-7.51%	-0.897
30% - 40% P_{Cmax}	-1854.2	-18.54%	422.5	4.23%	-1772.5	-17.72%	-0.975
50% - 60% P_{Cmax}	-2905.9	-29.06%	429.9	4.30%	-2782.6	-27.83%	-0.989
70% - 80% P_{Cmax}	-3957.6	-39.58%	439.8	4.40%	-3785.7	-37.86%	0.994
90% - 100% P_{Cmax}	-5025.4	-50.25%	450.0	4.50%	-4796.2	-47.96%	0.996

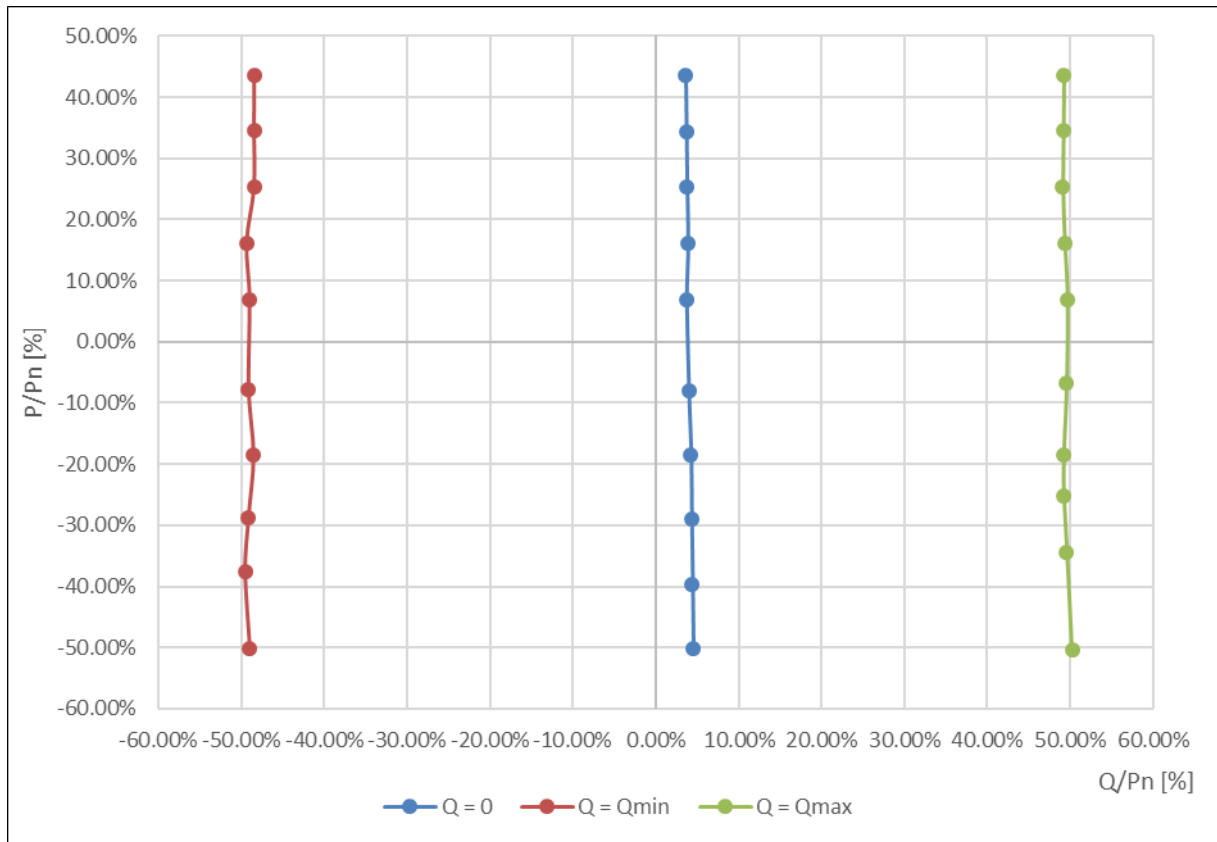
TABLE: Reactive power adsorbed with set point Q = Qmin							
Power Step	Active Power		Reactive Power		DC Power		Power Factor
	[W]	[%Sn]	[VAr]	[%Sn]	[W]	[%Sn]	Cosφ
90% - 100% P_{Cmax}	-5006.2	-50.06%	-4899.7	-49.00%	-4736.6	-47.37%	-0.715
70% - 80% P_{Cmax}	-3761.2	-37.61%	-4958.7	-49.59%	-3551.3	-35.51%	-0.604
50% - 60% P_{Cmax}	-2885.9	-28.86%	-4916.7	-49.17%	-2712.3	-27.12%	-0.506
30% - 40% P_{Cmax}	-1852.5	-18.53%	-4851.7	-48.52%	-1715.0	-17.15%	0.357
10% - 20% P_{Cmax}	-788.3	-7.88%	-4914.5	-49.14%	-677.1	-6.77%	-0.158
10% - 20% P_{Smax}	686.2	6.86%	-4902.9	-49.03%	798.4	7.98%	-0.139
30% - 40% P_{Smax}	1615.0	16.15%	-4941.3	-49.41%	1751.4	17.51%	-0.311
50% - 60% P_{Smax}	2525.5	25.25%	-4846.3	-48.46%	2692.6	26.93%	0.462
70% - 80% P_{Smax}	3447.0	34.47%	-4846.3	-48.46%	3656.0	36.56%	0.580
90% - 100% P_{Smax}	4357.4	43.57%	-4842.8	-48.43%	4616.1	46.16%	0.669

TABLE: Reactive power produced with set point Q = Q_{max}

Power Step	Active Power		Reactive Power		DC Power		Power Factor
	[W]	[%Sn]	[VAr]	[%Sn]	[W]	[%Sn]	Cos φ
90% - 100% P_{Cmax}	-5032.7	-50.33%	5024.9	50.25%	-4768.2	-47.68%	-0.708
70% - 80% P_{Cmax}	-3439.6	-34.40%	4959.6	49.60%	-3252.8	-32.53%	-0.570
50% - 60% P_{Cmax}	-2524.9	-25.25%	4921.9	49.22%	-2374.6	-23.75%	-0.456
30% - 40% P_{Cmax}	-1852.1	-18.52%	4919.8	49.20%	-1723.8	-17.24%	-0.352
10% - 20% P_{Cmax}	-685.3	-6.85%	4958.3	49.58%	-590.7	-5.91%	0.137
10% - 20% P_{Smax}	695.4	6.95%	4969.1	49.69%	793.7	7.94%	0.139
30% - 40% P_{Smax}	1616.9	16.17%	4932.9	49.33%	1744.3	17.44%	0.311
50% - 60% P_{Smax}	2523.7	25.24%	4910.4	49.10%	2682.7	26.83%	0.457
70% - 80% P_{Smax}	3449.3	34.49%	4916.6	49.17%	3649.0	36.49%	0.574
90% - 100% P_{Smax}	4362.8	43.63%	4922.5	49.23%	4613.4	46.13%	0.663

Grafico: P/Q

/ Graph: Maximum reactive power adsorbed (Q_{min}) and produced (Q_{max}) as a function of the active power fed into the grid.



SPECIFICATION (Force H1/ 96~336 V)



Basic Parameters						
Battery Module	FH48074					
Battery Module Voltage(Vdc)	48					
Battery Module Capacity(Ah)	74					
Battery Module Qty. (Optional)	2	3	4	5	6	7
Battery System Voltage (V)	96	144	192	240	288	336
Battery System Capacity(Ah)	74					
Battery System Capacity(kWh)	7.1	10.65	14.21	17.76	21.31	24.86
Dimension (W*D*H mm)	600*380*530	600*380*700	600*380*870	600*380*1040	600*380*1210	600*380*1380
Weight(kg)	86	122	158	194	230	266
Depth of Discharge	95%					
Charge/ Discharge Current(A)	(Recommend) 37 (Max.) 40					
Multi-group	Max. 6 systems in parallel					
Communication	CANBUS/Modbus RTU					
IP rating	IP55					
Working Temperature/ °C	0~50					
Shelf Temperature/ °C	-20~60					
Humidity	5%~95%(w/o condensing)					
Altitude	<2000					
Design Life	15+ Years (25 °C/°F)					
Cycle Life	>8,000, 25 °C					
Certification	UL 1973/VDE2510-50/IEC62619/IEC62477/ IEC62040-1/CE/UN38.3					

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Product Service

CERTIFICATE

No. Z2 090762 0022 Rev. 00

Holder of Certificate: **Pylon Technologies Co., Ltd.**
No. 73, Lane 887, Zu Chongzhi Road, Zhangjiang Hi-Tech Park
201203 Pudong, Shanghai
PEOPLE'S REPUBLIC OF CHINA

Certification Mark:



Product: **Batteries**
(LFP Lithium Ion Energy Storage Battery System)

The product was tested on a voluntary basis and complies with the essential requirements. The certification mark shown above can be affixed on the product. It is not permitted to alter the certification mark in any way. In addition the certification holder must not transfer the certificate to third parties. See also notes overleaf.

Test report no.: 64280190115301

Valid until: 2024-08-06

Date, 2019-08-07

(Harry Zhang)



Product Service

CERTIFICATE

No. Z2 090762 0022 Rev. 00

Model(s):

Force-H1-48/96V, Force-H1-48/144V,
Force-H1-48/192V, Force-H1-48/240V,
Force-H1-48/288V, Force-H1-48/336V,
Force-H1-48/384V

Brand Name:

PYLONTECH



Parameters:

Nominal voltage: Force-H1-48/96V: 96Vd.c.;
Force-H1-48/144V: 144Vd.c.;
Force-H1-48/192V: 192Vd.c.;
Force-H1-48/240V: 240Vd.c.;
Force-H1-48/288V: 288Vd.c.;
Force-H1-48/336V: 336Vd.c.;
Force-H1-48/384V: 384Vd.c.
Rated capacity: 74Ah

**Tested
according to:**

IEC 62619:2017

**Production
Facility(ies):**

091237

SPECIFICATION (Force H2/192~384 V)



Basic Parameters				
Battery Module		FH9637M		
Battery Module Voltage(Vdc)		96		
Battery Module Capacity(Ah)		37		
Battery Module Qty. (Optional)	2	3	4	5
Battery System Voltage (V)	192	288	384	480
Battery System Capacity(Ah)		37		
Battery System Capacity(kWh)	7.1	10.65	14.21	17.75
Dimension (W*D*H mm)	450*296*822	450*296*1118	450*296*1414	450*296*1710
Weight(kg)	82	117.5	152	188.5
Depth of Discharge		95%		
Charge/ Discharge Current(A)	(Recommend) (Max.)	18.5 40		
Multi-group		Max. 6 systems in parallel		
Communication		CANBUS/Modbus RTU		
IP rating		IP55		
Working Temperature/ °C		0~50		
Shelf Temperature/ °C		-20~60		
Humidity		5%~95%(w/o condensing)		
Altitude		<2000		
Design Life		15+ Years (25 C /77 F)		
Cycle Life		>8,000, 25 C		
Certification		VDE-AR-E 2510-50/ IEC62619/IEC63056/IEC62040-1/CEC/CE		



Product Service

CERTIFICATE

No. Z2 090762 0027 Rev. 00

Holder of Certificate: Pylon Technologies Co., Ltd.

No. 73, Lane 887, Zu Chongzhi Road, Zhangjiang Hi-Tech Park
201203 Pudong, Shanghai
PEOPLE'S REPUBLIC OF CHINA

Certification Mark:

**Product:**

Batteries

(LFP Lithium Ion Energy Storage Battery System)

The product was tested on a voluntary basis and complies with the essential requirements. The certification mark shown above can be affixed on the product. It is not permitted to alter the certification mark in any way. In addition the certification holder must not transfer the certificate to third parties. See also notes overleaf.

Test report no.: 64280193048401

Valid until: 2025-03-03

Date, 2020-03-04


(Harry Zhang)



Product Service

CERTIFICATE

No. Z2 090762 0027 Rev. 00

Model(s): Force-H2-96/96V, Force-H2-96/192V,
Force-H2-96/288V, Force-H2-96/384V,
Force-H2-96/480V

Brand Name: PYLONTECH



Parameters:

Nominal voltage: Force-H2-96/96V: 96Vd.c.,
Force-H2-96/192V: 192Vd.c.,
Force-H2-96/288V: 288Vd.c.,
Force-H2-96/384V: 384Vd.c.,
Force-H2-96/480V: 480Vd.c.

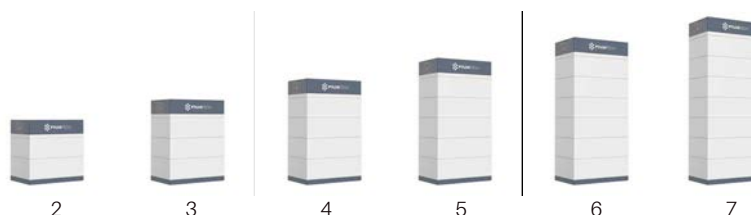
Rated capacity: 37Ah

**Tested
according to:**
**Production
Facility(ies):**

IEC 62619:2017

091237

SPECIFICATION (Force H3/204.8~716.8 V)



Basic Parameters						
Battery Module			FH10050			
Battery Module Voltage(Vdc)			102.4			
Battery Module Capacity(Ah)			50			
Battery Module Qty. (Optional)	2	3	4	5	6	7
Battery System Voltage (V)	204.8	307.2	409.6	512	614.4	716.8
Battery System Capacity(Ah)			50			
Battery System Capacity(kWh)	10.2	15.4	20.5	25.6	30.7	35.8
Dimension (W*D*H mm)	540*350*530	540*350*700	540*350*870	540*350*1040	540*350*1210	540*350*1380
Weight(kg)	92	131	170	209	248	287
Depth of Discharge			95%			
Charge/ Discharge	(Recommend)		50			
Current(A)	(Max.)		52			
Multi-group			Max. 6 systems in parallel			
Communication			CANBUS/Modbus RTU			
IP rating			IP55			
Working Temperature/ °C			-10~50			
Shelf Temperature/ °C			-20~60			
Humidity			5%~95%(w/o condensing)			
Altitude			<4000			
Design Life			15+ Years (25 °C /77 °F)			
Cycle Life			>8,000, 25 °C			
Certification			UL 9540A/UL 1973/IEC62619/IEC63056/IEC62040-1/VDE-AR-E 2510-50/IEC62477-1/UN38.3			



Product Service

CERTIFICATE

No. B 090762 0075 Rev. 00

Holder of Certificate: **Pylon Technologies Co., Ltd.**

No. 73, Lane 887, Zu Chongzhi Road, Zhangjiang Hi-Tech Park
201203 Pudong, Shanghai
PEOPLE'S REPUBLIC OF CHINA

Certification Mark:



Product:

Batteries
(LFP Lithium Ion Energy Storage Battery
System)

The product was tested on a voluntary basis and complies with the essential requirements.
The certification mark shown above can be affixed on the product. It is not permitted to alter the certification mark in any way. In addition, the certification holder must not transfer the certificate to third parties. This certificate is valid until the listed date, unless it is cancelled earlier.
All applicable requirements of the testing and certification regulations of TÜV SÜD Group have to be complied. For details see: www.tuvsud.com/ps-cert

Test report no.: 64280236042201

Valid until: 2028-10-26

Date, 2023-10-27

(Harry Zhang)

CERTIFICATE

No. B 090762 0075 Rev. 00

Model(s): Force-H3-102.4/102.4, Force-H3-102.4/204.8,
Force-H3-102.4/307.2, Force-H3-102.4/409.6,
Force-H3-102.4/512, Force-H3-102.4/614.4,
Force-H3-102.4/716.8, Force-H3-102.4/819.2

Brand Name: PYLONTECH



Parameters:

Nominal voltage: Force-H3-102.4/102.4: 102.4Vd.c.;
Force-H3-102.4/204.8: 204.8Vd.c.;
Force-H3-102.4/307.2: 307.2Vd.c.;
Force-H3-102.4/409.6: 409.6Vd.c.;
Force-H3-102.4/512: 512.0Vd.c.;
Force-H3-102.4/614.4: 614.4Vd.c.;
Force-H3-102.4/716.8: 716.8Vd.c.;
Force-H3-102.4/819.2: 819.2Vd.c.

Rated capacity: 50Ah

Tested according to: IEC 62619:2022