



Product Service

Compliance Document

No. D 090762 0114 Rev. 00

Holder of Certificate: **Pylon Technologies Co., Ltd.**No.300, Miaoqiao Road, Kangqiao Town
Pudong New Area
201315 Shanghai
PEOPLE'S REPUBLIC OF CHINA**Product:** **Hybrid Energy Storage System**
Force H3X Energy Storage System**Model(s):** FH3X-8K-HY-3P-10, FH3X-8K-HY-3P-15, FH3X-8K-HY-3P-20,
FH3X-8K-HY-3P-25, FH3X-8K-HY-3P-30, FH3X-8K-HY-3P-35,
FH3X-10K-HY-3P-10, FH3X-10K-HY-3P-15, FH3X-10K-HY-3P-20,
FH3X-10K-HY-3P-25, FH3X-10K-HY-3P-30, FH3X-10K-HY-3P-35,
FH3X-12K-HY-3P-10, FH3X-12K-HY-3P-15, FH3X-12K-HY-3P-20,
FH3X-12K-HY-3P-25, FH3X-12K-HY-3P-30, FH3X-12K-HY-3P-35,
FH3X-15K-HY-3P-10, FH3X-15K-HY-3P-15, FH3X-15K-HY-3P-20,
FH3X-15K-HY-3P-25, FH3X-15K-HY-3P-30, FH3X-15K-HY-3P-35**Parameters:** See next pages.**Tested according to:** RD 1699:2011
RD 661:2007
RD 413:2014
UNE 217002:2020

This Compliance document confirms the compliance with the listed standards on a voluntary basis. It refers only to the sample submitted for testing and certification and does not certify the quality or safety of the serial products. For details see: www.tuvsud.com/ps-cert

Test report no.: 704092459620-00**Date,** 2025-04-22
(Zhengdong Ma)



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Parameters:

Model	FH3X-8K-HY-3P-10, FH3X-8K-HY-3P-15, FH3X-8K-HY-3P-20, FH3X-8K-HY-3P-25, FH3X-8K-HY-3P-30, FH3X-8K-HY-3P-35	FH3X-10K-HY-3P-10, FH3X-10K-HY-3P-15, FH3X-10K-HY-3P-20, FH3X-10K-HY-3P-25, FH3X-10K-HY-3P-30, FH3X-10K-HY-3P-35
PV input parameters		
Max. input voltage	DC 1000 V	
Mppt voltage range	DC 200, ..., 850 V	
Max. input current	DC 20 A/20 A/20 A	
Isc PV (absolute maximum)	DC 30 A/30 A/30 A	
Grid output parameters		
Nominal grid voltage	3/N/PE~, 230/400 V	
Nominal grid frequency	50 Hz	
Max. (rated) continuous current to grid	AC 11.6 A	AC 14.5 A
Nominal active power to grid	8000 W	10000 W
Max. (rated) apparent power to grid	8000 VA	10000 VA
Power factor range	-0.8, ..., +0.8	

Model	FH3X-8K-HY-3P-10, FH3X-10K-HY-3P-10,	FH3X-8K-HY-3P-15, FH3X-10K-HY-3P-15	FH3X-8K-HY-3P-20, FH3X-10K-HY-3P-20,
Battery parameters			
Battery module	FH10050		
Number of packs	2	3	4
Energy	10.24 kWh	15.36 kWh	20.48 kWh
Nominal voltage	DC 204.8 V	DC 307.2 V	DC 409.6 V

Model	FH3X-8K-HY-3P-25, FH3X-10K-HY-3P-25	FH3X-8K-HY-3P-30, FH3X-10K-HY-3P-30	FH3X-8K-HY-3P-35, FH3X-10K-HY-3P-35
Battery parameters			
Battery module	FH10050		
Number of packs	5	6	7
Energy	25.60 kWh	30.72 kWh	35.84 kWh
Nominal voltage	DC 512 V	DC 614.4 V	DC 716.8 V

Model	FH3X-12K-HY-3P-10, FH3X-12K-HY-3P-15, FH3X-12K-HY-3P-20, FH3X-12K-HY-3P-25, FH3X-12K-HY-3P-30, FH3X-12K-HY-3P-35	FH3X-15K-HY-3P-10, FH3X-15K-HY-3P-15, FH3X-15K-HY-3P-20, FH3X-15K-HY-3P-25, FH3X-15K-HY-3P-30, FH3X-15K-HY-3P-35
PV input parameters		
Max. input voltage	DC 1000 V	
Mpvt voltage range	DC 200, ..., 850 V	
Max. input current	DC 20 A/20 A/20 A	
Isc PV (absolute maximum)	DC 30 A/30 A/30 A	



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Grid output parameters		
Nominal grid voltage	3/N/PE~, 230/400 V	
Nominal grid frequency	50 Hz	
Max. (rated) continuous current to grid	AC 17.4 A	AC 21.7 A
Nominal active power to grid	12000 W	15000 W
Max. (rated) apparent power to grid	12000 VA	15000 VA
Power factor range	-0.8, ..., +0.8	

Model	FH3X-12K-HY-3P-10, FH3X-15K-HY-3P-10	FH3X-12K-HY-3P-15, FH3X-15K-HY-3P-15	FH3X-12K-HY-3P-20, FH3X-15K-HY-3P-20
Battery parameters			
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Battery parameters			
Battery module	FH10050		
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Interface protection settings (Manufacturer default settings)

Parameter	Normative requirements		Internal threshold setting	
	Trip setting	Clearance time	Factory setting	Clearance time
Under voltage	Un – 15%	Max. 1.5 s	$V_{\varphi-n} - 15\% = 195.5V$	1.5 s
Over voltage stage 1	Un + 10%	Max. 1.5 s	$V_{\varphi-n} + 10\% = 253V$	1.5 s
Over voltage stage 2	Un + 15%	Max. 0.2 s	$V_{\varphi-n} + 15\% = 264.5V$	0.2 s
Under frequency	48.0 Hz	Min. 3.0 s	48,0 Hz	3.5 s
Over frequency	51.0 Hz	Max. 0.5 s	51,0 Hz	0.5 s
Reconnection voltage range after a network outage and response to abnormal conditions	-	85 % Un ... 110 % Un	-	85 % Un ... 110 % Un
Reconnection frequency range after a network outage and response to abnormal conditions	-	48.0 Hz to 50.00 Hz	-	48.0 Hz to 50.00 Hz
Reconnection time after voltage and frequency protection	-	180 s	-	180 s
Tolerances declared by manufacturer on trip values:				
- voltage: $\pm 1\%$;				
- frequency: $\pm 0,1\%$;				