zeroCO₂ - XL Shell 54K on-grid

Solution:

XL Shell is a plug & play system for managing, converting and exploiting energy in systems with high power demand and storage dimensions which determine deferred use of all the accumulated energy for several hours. Made with a loadbearing structure in powder-coated galvanized sheet metal with insulated and sealed infill panels with IP54 protection rating, inside which are housed the electrochemical storage batteries and the electrical power panel including PCS converters, EMS device that allows you to implement customized management logics (self-consumption, peak shaving, and energy trading), disconnectors on-board and panel protections; all pre-wired from the factory right down to the user-side interfaces.

- Pylontech H32148-C storage batteries for 0.5C charge/discharge rate;
- Powers from 62,5 kW to 500 kW and minimum storage size of 218 kWh in a single configuration;
- Expandable sizes with executions on request;
- Possibility of parallel connection to expand the power;
- Integrated fire suppression system;
- Air conditioning with integrated cell operating temperature control.



Dimensions:

Width: 3787 mm Height: 2464 mm Depht: 2292 mm

XL Shell 54K on-grid



XL Shell 54K	120K	180K	240K	300K	
Dimensions [WxHxD, mm]	3787x2464x2292				
Number of batteries pile in the basic version	2	3	4	5	
Number of optional additional batteries [n]	from 1 to 3	from 1 to 2	1	0	
Weight [kg]	5950+(n x 1150)		8250+(n x 1150)	9400	
Sound power [dB]	0,00 (11,12200)	, ,	79	7.00	
Sound pressure [dB(A)] (*)			65		
PCS technology	Transformerless				
AC PARAMETERS		i di loro	1111011000		
Rated power [kW]	120	180	240	300	
	132	198	264	330	
Maximum apparent power [kVA]	132	=	== :	330	
AC input type	0	•	'h + N + PE) x 185 (N, PE) / Eyelet	MO	
Number and maximum connection cable section per phase [mmq]	ZX		,	IVIO	
Voltage range [V]	11761.000	•	±10%)	. 440 / . 500	
Rated/Max electric current [A]	±176/±200	±264/±300	±352/±400	±440/±500	
Rated frequency [V-Hz]			50/60		
Power factor			ding / Lagging)		
Current DC component [%]			0,5		
Harmonic content THDi [%]	≤3				
AC and DC start function	Yes				
Current switching time [ms]			10		
Conversion efficiency [%]			97		
Standby power consumption [W]			200		
Permissible short-circuit current of short duration [kA]			6		
DC PARAMETERS					
Rated power [kW]	120	180	240	300	
Voltage range		680-	- 1000		
Voltage error, Constant voltage accuracy, Voltage and current limiting characteristic [%]			±1		
ENERGY STORAGE					
Cell technology		Lision	(I ED)		
Battery module	Li-ion (LFP) H32148-C				
Controller BMS			ntarnal power supply)		
			95		
Module efficiency [%]	16 1 (2 2 00)	69+(n x 23)	-	115	
Battery module quantity Rated electric current [A]	46+(n x 23) 148+(n x 74)	222+(n x 74)	92+(n x 23) 296+(n x 74)	115 370	
Maximum electric current [A]	296+(n x 148)			740	
	, ,	444+(n x 148)	592+(n x 148)		
Nominal capacity [kWh/Ah]	218+(n x 109)	327+(n x 109)	436+(n x 109)	545	
Depth of Discharge DOD [%]	106.(00)		98% SOC)	401	
Usable capacity [kWh]	196+(n x 98)	294+(n x 98)	392+(n x 98)	491	
AMBIENT CONDITIONS					
Working temperature range [°C]	$0 \sim 50$ (Derating over 45° C)				
Working humidity range [RH%]	<95 (without condensation)				
Storage temperature range [°C]	-20 ~ +60				
Storage humidity range [RH%]	$0 \sim 95$ (without condensation)				
System cooling System	Air cooled monoblock unit				
Altitude		<3	000		
COMMUNICATION					
Communication interfaces	R	3485, LAN, WAN,CA	N, ModBus RTU, TCP/I	Р	
SAFETY					
Battery overvoltage protection		Software	protection		
Battery overcurrent protection					
Fire protection systems	Software protection and DC fuse Detection, alarm, multipurpose powder extinguishing				
IP protection systems					
•	IP54				
Voltage resistance: input and output - PE [V DC]	3535				
Voltage resistance: input and output - CAN [V DC]	2828				
Surge: Input & Output - PE [kV]	6				
EMC characteristics			Voltage Directive -		
MTDE (Many averaged time between two welf, we stime \11	2		magnetic compatibilit	У	
MTBF (Mean expected time between two malfunctions) [h]	100000				
Compliance with connection regulations			DE AR-N 4105		
Warranty [years]			2		
Operational life [years]			5+		
Dangerous goods transport certificate		UN	38.3		



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FL090-Rev.007 ENG

(*) Sound pressure level referred to a 2m distance from the device

zeroCO₂ - XL Shell 76K on-grid

Solution:

XL Shell is a plug & play system for managing, converting and exploiting energy in systems with high power demand and storage dimensions which determine deferred use of all the accumulated energy for several hours. Made with a loadbearing structure in powder-coated galvanized sheet metal with insulated and sealed infill panels with IP54 protection rating, inside which are housed the electrochemical storage batteries and the electrical power panel including PCS converters, EMS device that allows you to implement customized management logics (self-consumption, peak shaving, and energy trading), disconnectors on-board and panel protections; all pre-wired from the factory right down to the user-side interfaces.

- Pylontech H32148-C storage batteries for 0.5C charge/discharge rate;
- Powers from 62,5 kW to 500 kW and minimum storage size of 654 kWh in a single configuration;
- Expandable sizes with executions on request;
- Possibility of parallel connection to expand the power;
- Integrated fire suppression system;
- Air conditioning with integrated cell operating temperature control.



Dimensions:

Width: 4770 mm Height: 2464 mm Depht: 2292 mm

XL Shell 76K on-grid



120K	180K	240K	300K	
4770x2464x2292				
	1	7		
12800	12830	12860	12890	
	<	79		
<65				
Transformerless				
120	180	240	300	
132	198	264	330	
	5 wire (3P	h + N + PE)		
2 x 1	.85 (L1, L2, L3) - 1 x	185 (N, PE) / Eyele	et M8	
	400 (:	±10%)		
±176/±200	±264/±300	±352/±400	±440/±500	
	400 -	50/60		
	0,8 ~ 1 (Leac	ling / Lagging)		
≤3				
	Y	es		
<10				
≥97				
<3200				
	1	6		
120	180	240	300	
120			000	
		-		
	111	(I ED)		
, ,				
			()	
	•	,		
	Ď.	57		
<95 (without condensation)				
-20 ~ +60				
0 ~ 95 (without condensation)				
	Air cooled m	onoblock unit		
	<3	000		
RS	485, LAN, WAN, CA	N, ModBus RTU, TCI	P/IP	
	Software	protection		
·				
Detection, alarm, multipurpose powder extinguishing				
		-		
20			lity	
EN 50549 - VDE AR-N 4105				
		2		
		2 5+		
	120 132 2×1 ±176/±200	12800 12830 12800 12830 120 180 132 198 5 wire (3P 2 x 185 (L1, L2, L3) - 1 x 400 (3P 2 x 185 (L1, L2, L3) - 1 x 400 - 0,8 ~ 1 (Lead 4	12800 12830 12860 77 12800 12830 12860 79 <65 Transformerless 120 180 240 132 198 264 5 wire (3Ph + N + PE) 2 x 185 (L1, L2, L3) - 1 x 185 (N, PE) / Eyele 400 (±10%) ±176 / ±200 ±264 / ±300 ±352 / ±400 400 - 50/60 0,8 ~ 1 (Leading / Lagging) <0,5 <3 <10 >97 <3200 6 120 180 240 680 - 1000 ±1 Li-ion (LFP) H32148-C SC1000-200J-C (intarnal power supply 95 161 518 1036 763 90% (8 - 98% SOC) 687 0 ~ 50 (Derating over 45°C) <95 (without condensation) -20 ~ +60 0 ~ 95 (without condensation) Air cooled monoblock unit <3000 RS485, LAN, WAN, CAN, ModBus RTU, TCR Software protection Software protection and DC fuse	

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zeroCO₂ - XL Shell 98K on-grid

Solution:

XL Shell is a plug & play system for managing, converting and exploiting energy in systems with high power demand and storage dimensions which determine deferred use of all the accumulated energy for several hours. Made with a loadbearing structure in powder-coated galvanized sheet metal with insulated and sealed infill panels with IP54 protection rating, inside which are housed the electrochemical storage batteries and the electrical power panel including PCS converters, EMS device that allows you to implement customized management logics (self-consumption, peak shaving, and energy trading), disconnectors on-board and panel protections; all pre-wired from the factory right down to the user-side interfaces.

- Pylontech H32148-C storage batteries for 0.5C charge/discharge rate;
- Powers from 62,5 kW to 500 kW and minimum storage size of 872 kWh in a single configuration;
- Expandable sizes with executions on request;
- Possibility of parallel connection to expand the power;
- Integrated fire suppression system;
- Air conditioning with integrated cell operating temperature control.



Dimensions:

Width: 5753 mm Height: 2464 mm

Depht: 2292 mm

XL Shell 98K on-grid



XL Shell 98K	120K	180K	240K	300K
Dimensions [WxHxD, mm]	5753x2464x2292			
Number of batteries pile in the basic version	9			
Weight [kg]	16670	16700	16730	16760
Sound power [dB]		< ^r	79	
Sound pressure [dB(A)] (*)	<65			
PCS technology	Transformerless			
AC PARAMETERS				
Rated power [kW]	120	180	240	300
Maximum apparent power [kVA]	132	198	264	330
AC input type	102		h + N + PE)	000
Number and maximum connection cable section per phase [mmq]	2 x 1	.85 (L1, L2, L3) - 1 x	,	t M8
Voltage range [V]			±10%)	
Rated/Max electric current [A]	±176/±200	±264/±300	±352/±400	±440/±500
Rated frequency [V-Hz]	1707 200	·	50/60	1.07 000
Power factor			,	
Current DC component [%]	0,8 ~ 1 (Leading / Lagging) ≤ 0,5			
Harmonic content THDi [%]		€		
AC and DC start function			es	
Current switching time [ms]			10	
Conversion efficiency [%]			97	
Standby power consumption [W]		<32		
Permissible short-circuit current of short duration [kA]			5	
DC PARAMETERS				
	100	100	040	000
Rated power [kW]	120	180	240	300
Voltage range		680 -		
Voltage error, Constant voltage accuracy, Voltage and current limiting characteristic [%]		±	1	
ENERGY STORAGE				
Cell technology	Li-ion (LFP)			
Battery module	H32148-C			
Controller BMS	SC1000-200J-C (intarnal power supply)			
Module efficiency [%]	95			
Battery module quantity	207			
Rated electric current [A]			56	
Maximum electric current [A]	1332			
Nominal capacity [kWh/Ah]	981			
Depth of Discharge DOD [%]	90% (8 - 98% SOC)			
Usable capacity [kWh]		88	33	
AMBIENT CONDITIONS				
Working temperature range [°C]	$0 \sim 50$ (Derating over 45° C)			
Working humidity range [RH%]	<95 (without condensation)			
Storage temperature range [°C]	-20 ~ +60			
Storage humidity range [RH%]	0 ~ 95 (without condensation)			
System cooling System	Air cooled monoblock unit			
Altitude		<30	000	
COMMUNICATION				
Communication interfaces	RS	485, LAN, WAN,CAN	N, ModBus RTU, TCF	P/IP
SAFETY				
Battery overvoltage protection		Software	protection	
Battery overcurrent protection	Software protection and DC fuse			
Fire protection systems	Detection, alarm, multipurpose powder extinguishing			
IP protection rating	200000		54	,
Voltage resistance: input and output - PE [V DC]			35	
Voltage resistance: input and output - CAN [V DC]			28	
Surge: Input & Output - PE [kV]			5	
	6 2014/35/CE Low Voltage Directive -			
EMC characteristics	2014/35/CE Low Voltage Directive - 2014/30/CE Electromagnetic compatibility			
MTBF (Mean expected time between two malfunctions) [h]	2014/30/02 Electromagnetic compatibility 100000			
Compliance with connection regulations	EN 50549 - VDE AR-N 4105			
Warranty [years]			2	
Operational life [years]		15		
Dangerous goods transport certificate	UN38.3			
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(*) Sound pressure level referred to a 2m distance from the device

