

BESS 1863

1300kW/1863kWh

Technical parameters

battery storage parameters

PARAMETERS OF BATTERY STORAGE	
Nominal AC power of the inverter (set)	1300 kW
Power factor (adjustable)	0.9 leading ÷ 1 ÷ 0.9 lagging
Nominal grid voltage (phase-phase)	550 V
Grid voltage range	500 ÷ 600 V
Nominal frequency of grid voltage	50 Hz
Installed battery capacity	1863 kWh
DoD	90 – 95 %
INVERTER	
Model:	PCS-9567-1375
AC Side	
Nominal AC power of the inverter	1513 kVA / 1375 kW
Power factor (adjustable)	0.9 leading ÷ 1 ÷ 0.9 lagging
Max AC current	1,588 A
Nominal grid voltage (phase-phase)	550 V
Voltage range	500 ÷ 600 V
Nominal frequency of grid voltage	50 Hz
THD	< 3 %
DC Side	
Nominal AC power of the inverter	1513 kVA / 1375 kW
Power factor (adjustable)	0.9 leading ÷ 1 ÷ 0.9 lagging
General	
Maximum efficiency	99 %
Inverter cooling	Controlled ventilation
Operating temperature	-35 ÷ +60 °C
Dimensions (w x h x d) and weight	1200x1450-2350 mm, 1600 kg
Protection	IP65
Battery Rack (parameters of 1pc rack)	
Battery rack type	R452280-P
Type of battery cells used	CATL prismatic - 280Ah
Battery cell technology	LFP
Connection of battery cells in battery module	52 in series
Connection of battery modules in battery rack	8 in series

CERTIFICATES AND STANDARDS



BESS 1863

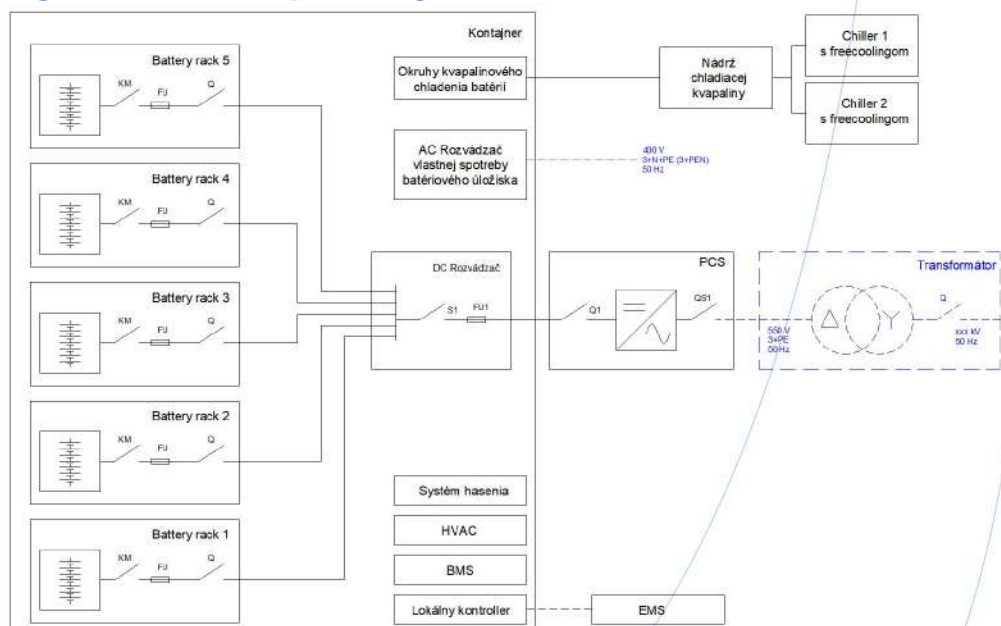
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Electrical Parameters	
Installed energy	372.7 kWh
Usable energy	335.4 kWh
Nominal DC voltage	1331.2 V
Operating range of DC voltage	1164.8 ÷ 1497.6 V
Maximum charging power	1P
Maximum discharging power	1P
Charging method	CC – CV
Energy storage efficiency (Round Trip DC Efficiency)	> 92%
Mechanical Parameters	
Dimensions (w x h x d)	935 x 1285 - 2329 mm
Weight	3100 kg
Protection	IP20
Environment	
Operating temperature (liquid cooling)	15 ÷ 21 °C
Relative humidity during storage	< 95%
Operating temperature - battery discharge	0 ÷ 55 °C
Battery cooling	50% ethylene glycol solution
Expected Lifespan	
Expected number of cycles at DoD 90%, SoH 70%, 18°C	6000
Expected service life Up to	15 years

Schematic diagram of the repository



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Specifications



Battery rack

(illustrative image of a rack with 8 battery modules installed)

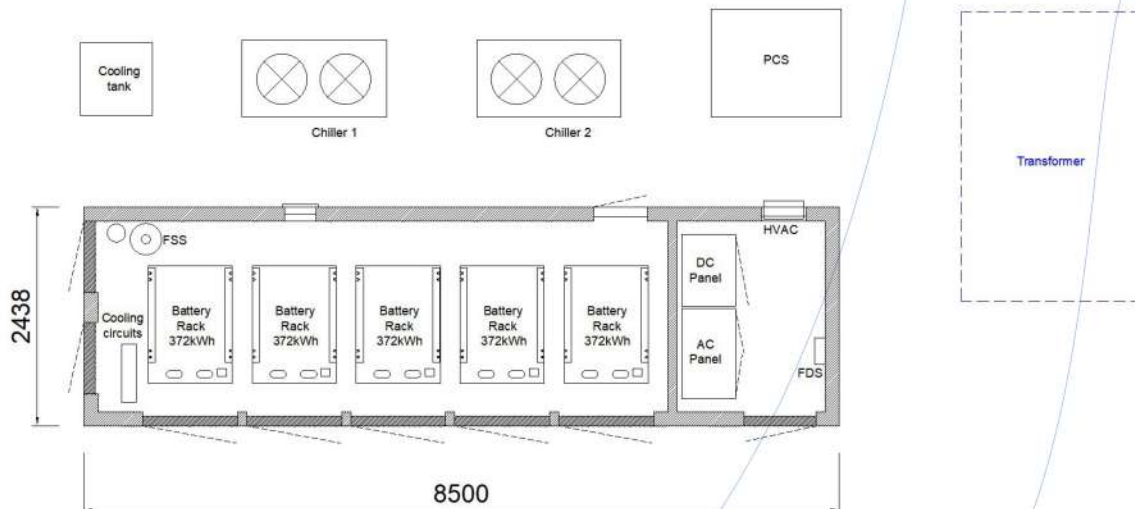


Converter NR PCS-9567-1375

(illustrative image)

Battery storage with an electrical power of 1300 kW and an installed battery capacity of 1863 kWh, consisting of:	
Container - Battery room - Switchgear room - Insulation - Electrical outlets, lighting - Power DC distribution, communication, control, AC power	1 unit
Bidirectional inverter NR-PCS-9567-1375	1 unit
Power distribution unit - AC circuits - distribution for own consumption - DC circuits, battery protection	1 unit
Data distribution unit - BMS - Local controller	1 unit
CATL battery rack R452280-P (372.7 kWh) - Cooling with ethylene glycol solution	5 unit
Technological fire suppression system	1 unit
Battery cooling system - 2x chiller - Air conditioning unit - fixtures - pipes	1 set
Battery storage monitoring (cloud access)	Yes
Commissioning and testing	
Commissioning and handover for use	Yes

Execution



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