

CxW Custom Battery

Ref. BB SB 48-90 Typ2210

Parameter	Value	Comment
Cell type	NMC Energy	Before any P.O. please confirm current discharge/charge profiles S-Box could be provided separately from Battery Block

Nominal Voltage	48,10 V	Average voltage of the battery system
Maximum Voltage	53,30 V	End of charge voltage of the battery system
Minimum Voltage	39,00 V	End of discharge voltage of the battery system

Energy content	4,33 kWh	Nominal energy content
Capacity	90,00 Ah	Nominal capacity

Maximum admissible current	Max. workload 24-min continuous		Workload 60-min continuous		Workload 120-min continuous		Workload 240-min continuous	
Continuous Charge	1,5 C	135 A	1,0 C	90 A	1,0 C	90 A	1,0 C	90 A
Continuous Discharge	2,5 C	225 A	1,0 C	90 A	0,50 C	45 A	0,25 C	23 A
Peak Discharge (10s max)	3 C	270 A	3 C	270 A	3 C	270 A	3 C	270 A
Cooling accessories	Required		Probably required (see below comment)		Likely not required (see below comment)		Not required	
	Cooling requirements depend on load profile and ambient conditions: they may add weight, size and costs Any idle time added to a/m continous workload profiles reduces cooling requirements Detailed AGV load profile will be required for proper battery validation							

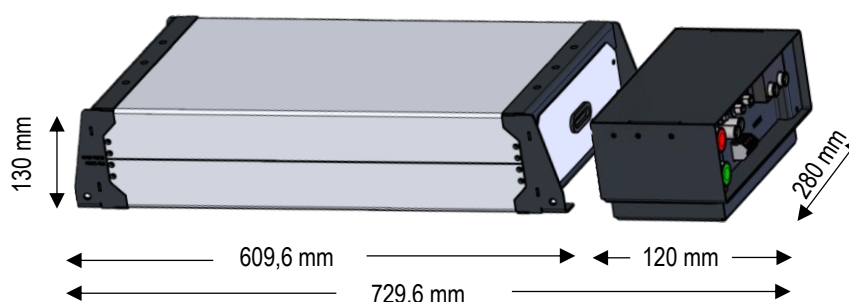
Lifecycle	4 000 cycles	at 80% Depth of Discharge (2 500 cycles at 100% DoD)
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Length	730 mm	Battery Block with S-Box (S-Box can be installed separately)
	610 mm	
	280 mm	
Width	280 mm	Battery Block alone (without S-Box)
Height	130 mm	
Weight	33 kg	Battery Block alone (+6 kg for one S-Box in total)
Configuration	13S3P 39 cells	Block configuration and number of cells

Mechanical Design

(not to scale)

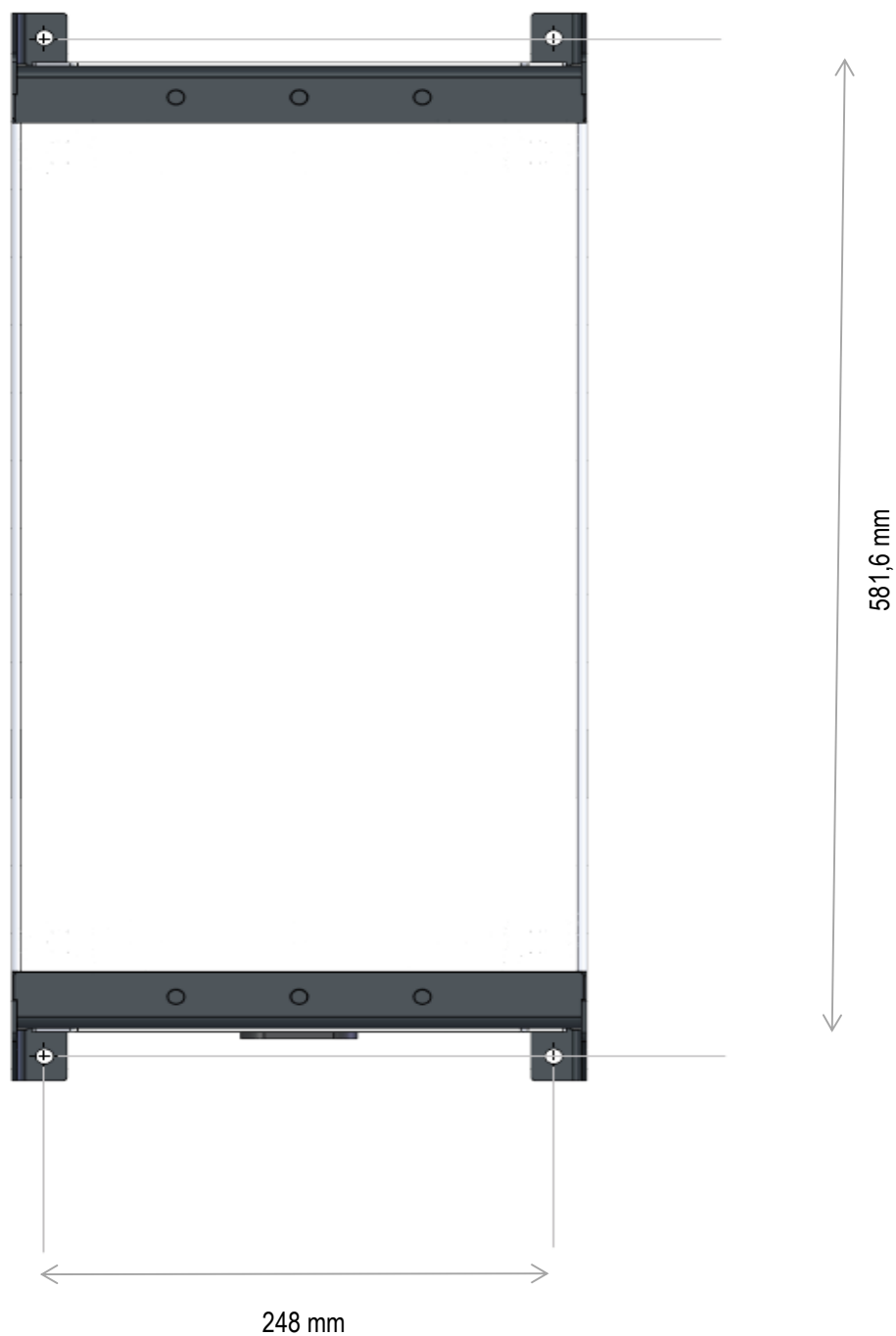
CxW - 13s3p - NMC Energy



S-Box (BMS) can be mounted separately from battery blocks

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Fixing Points



Drawing is not to scale