

date: MARCH 11TH 2024
project: STANDARD MODULE BATTERY PACK

400V - 12P - P45B

Basic information

Application:	RESS
Rated energy (kWh):	18,7
Configuration:	96S-12P
Minimum voltage (VDC):	268,8
Nominal voltage (VDC):	345,6
Maximum voltage (VDC):	403,2
Rated capacity (Ah):	54,0
Charging:	CCCV

Detailed information:

Cell type:	NCA cylindrical
Fuse rating (A):	420
Main contactors (A):	2x 600
Precharge contactor (A):	1x 50
Precharge resistor (Ohm):	tbd
Data connector:	Ampseal 23pins
Water connectors:	BSP 3/8" female
HV connectors:	Amphenol UPC
IP rating:	IP65
Coolant type:	Water / glycol
Maximum allowed pressure (bar):	1
System voltage (VDC):	12-24*
Mounting system:	threaded hole pattern
Size (mm):	584x386x95
Estimated weight: (kg)	119
Estimated volume (L):	95
External cooling/heating system:	Excluded
Charger:	Excluded
IMD:	Optional*
DC-DC converter	Excluded

* State when ordering

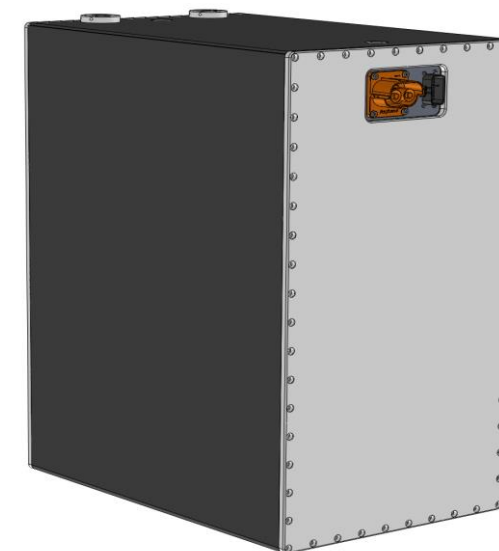
BMS information & settings

Type BMS*:	EMUS
Charging*:	CAN J1939 compatible
Datalogging*:	CAN
Maximum cell voltage** (V):	4,20
Minimum cell voltage** (V):	2,80
Allowed disbalance (V):	0,05
Continuous discharge current**/*** (A):	420
Maximum discharge current**/*** (A):	540
Maximum charge current**/*** (A):	120
Maximum discharge temperature**/*** (°C):	60
Maximum charge temperature**/*** (°C):	60
Minimum discharge temperature**/*** (°C):	-20
Minimum charge temperature**/*** (°C):	0

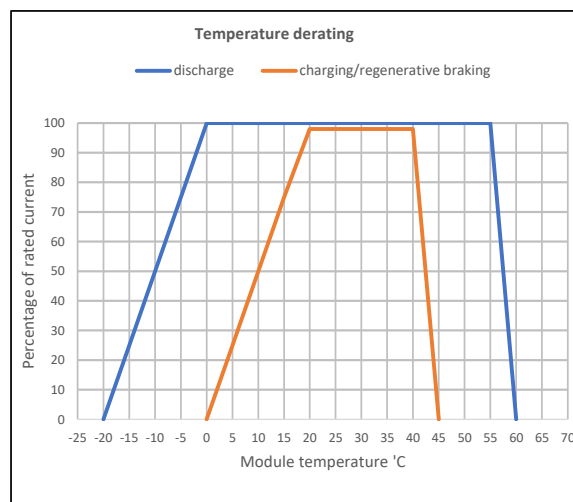
* See emus documentation for details

** Will open contactors when fault condition exceeds 2sec

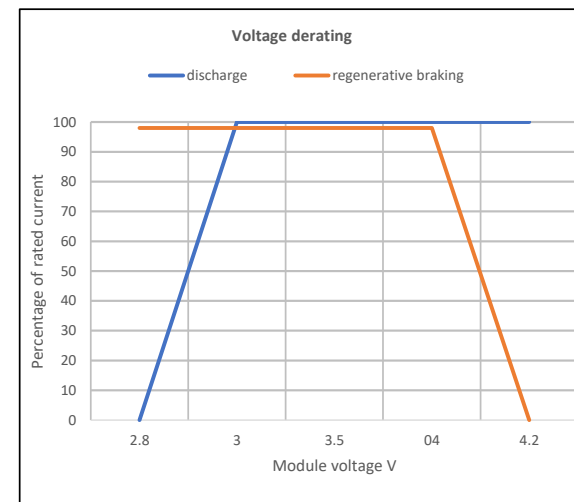
*** Note derate curves.



generic picture



For maximum cycle life stay as close as possible to 25°C



For maximum cycle life reduce the voltage band