Technical specification for TAB traction 2V cells type

2V 5PzV500

Technical data

Technology/type of cells	VRLA-Gel type
Nominal voltage of cells:	2,0 V
Capacity C_5:	500 Ah
Discharge current:	C_5/5h = 100,0 A
Final discharge voltage/cell	1,70 V/cell
Electrolyte:	Gel
Rated temperature:	30°C
Specified torque for poll screws:	20-25 Nm
Ventilation requirement	EN IEC 62485-3



Dimensions and weight of the cell (EN IEC 60254-2)

Width (a)	101 mm
Length (b)	198 mm
Height h1	563 mm
Height h2	573 mm
Wet weight	34,3 kg ±5%

Design:

Positive electrode	Tubular type with non-woven polyester gauntlet and solid grids in PbCaSn alloy
Negative electrode	Pasted grid plate with long life expander material in CaPb alloy
Separation	Phenolic micro porous separator
Electrolyte	Sulfuric acid immobilized in Gel
Container	Polypropylene (PP) box and lid
Pole	Bolt-on with M10 brass insert
Valve	Valves with optimized opening pressure

Execution of cells and batteries

Flooded - Electrolyte-charged version	A battery /cell can be installed immediately, it is already filled up with electrolyte and electrically charged.

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Recommended optional systems

Battery monitoring system - BMS

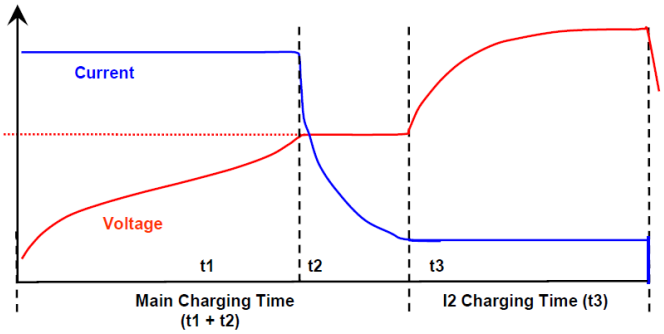
Discharge characteristics

EN IEC 60254-1 cycles	1200
Depth of discharge (DOD)	up to 80%*

* Deep discharges more than 80% DOD or discharges beyond final discharge voltages (dependent on discharge current) should be avoided.

Cut-off voltage at 60% DOD: 1,94 V/cell
Cut-off voltage at 80% DOD: 1,89 V/cell
Operating temperature : -10°C to +45°C

Charge characteristics



Charging curve IUIa

I_1 = 13-15 A/100 Ah;
U = 2,35 V/cell
I_2 = 1,2-1,5 A/100Ah;

t_1+t_2 = max 12h
$1h < t_3=t_1+t_2 < 4h$

Cells manufactured to existing ISO 9001, ISO 14001 and EN/IEC 60254 standards.