High Energy Series
Nickel-Cadmium
VSE AA

Saft has upgraded its Ni-Cd product offer and has launched the VSE AA cell to meet the needs of increasingly light and compact applications.

Foam electrode technology has especially been developed for the VSE series. The result is an "ultra-high energy" battery, fully recommended for the whole range of professional appliances.

To meet customers' requirements, Saft provides custom-designed and standardized battery packs.

For your battery design and system needs, please contact Saft's engineers.

Applications
- Professional appliances
- Radio control models
- Home appliances
- Hand held terminals

Main advantages
- Cycling application
- Quick and fast charge
- Super high energy series giving a higher operating time
- Good storage retention

Technology
- Foam positive electrode
- Plastic bonded negative electrode

Temperature range in discharge
- 20°C to + 60°C

Storage
Recommended: + 5°C to + 25°C
Relative humidity: 65 ± 5 %

Electrical characteristics	
Nominal voltage (V)	1.2
Typical capacity (mAh)*	980
IEC minimum capacity (mAh)*	940
IEC designation	KRMR 15/51
Impedance at 1000 Hz (m Ω)	16

* Charge 16 h at C/10, discharge at C/5.

Dimensions	
Diameter (mm)	13.9 ± 0.1
Height (mm)	48.9 ± 0.3
Top projection (mm)	0.8 ± 0.2
Top flat area diameter (mm)	4 ± 0.2
Weight (g)	22

Dimensions are given for bare cells.

Charge conditions			
Rate	Time (h)	Temp. (°C)	Charge current (mA)
Fast	~1	+ 10 to + 40	940
Standard	16	0 to + 50	94
Trickle*			23 to 47

End of charge cut-off is requested: -dV or dT°C/dt.
* Trickle charge follows fast charge.

Maximum discharge current	
Continuous (A) at + 20°C	2.9
Peak (A) at + 20°C*	41

* Peak duration: 0.3 second - final discharge voltage 0.65 volt/cell.

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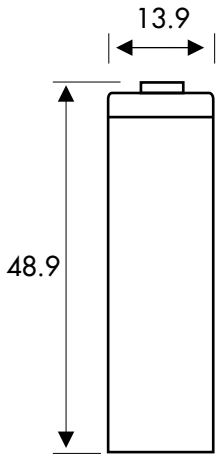
Typical performances

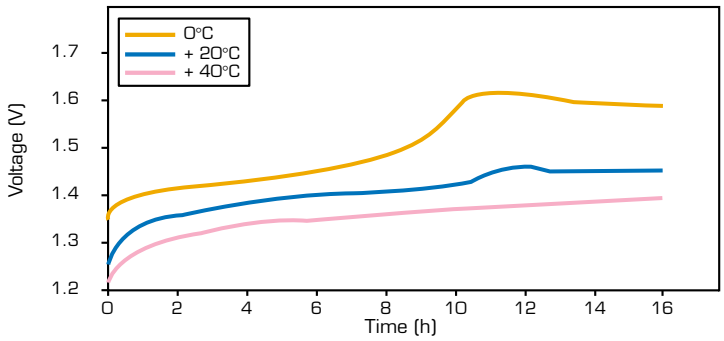
For graphs shown, C is the IEC_5 capacity.
Dimensions are in mm.



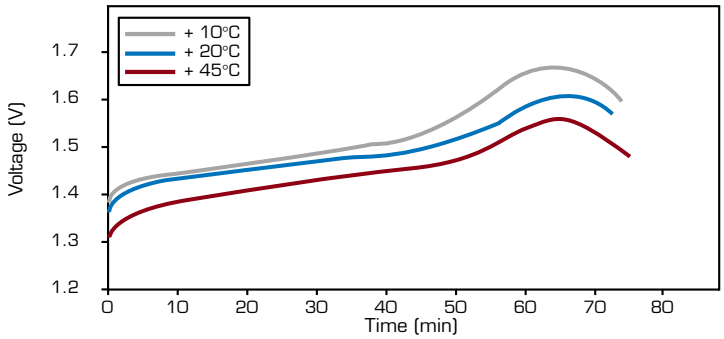
Data are given for single cells.
Please consult Saft for utilization of cell outside this datasheet.

Data in this document are subject to change without notice and become contractual only after written confirmation by Saft.

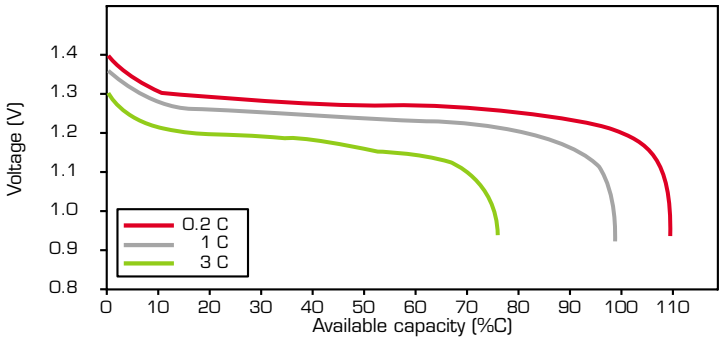
Voltage in slow charge (current 0.1 C)



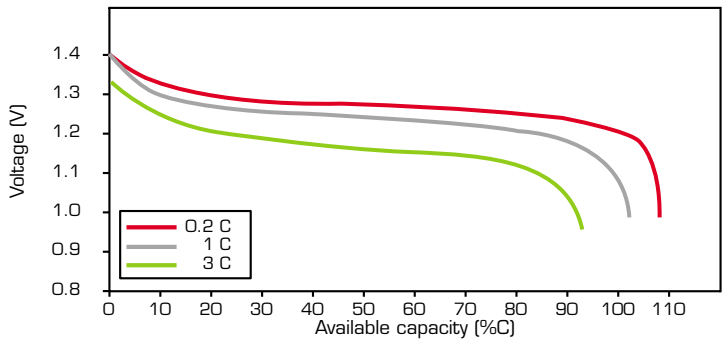
Voltage in fast charge (current C)



Voltage in discharge at + 20°C (after slow charge 0.1 C x 16 hours at + 20°C)



Voltage in discharge at + 20°C (after fast charge 0.1 C x 1.2 hours at + 20°C)



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