High Temperature Series

Nickel-Cadmium VT Cs 1500

The VT Cs 1500 is designed to accept a permanent charge in high temperature environments such as security lighting installations.

The VT Cs series offers capacities from 1.35 Ah to 1.75 Ah to fit the needs for energy, required by security and lighting devices.

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

- Emergency lighting
- Professional lighting
- Memory back-up systems
- Security devices

Main advantages

- Good charge efficiency at high temperatures
- · Permanent charge
- Good storage retention

Technology

- Sintered positive electrode
- Plastic bonded negative electrode

Temperature range in discharge

- 20° C to + 70° C

Storage

Recommended: $+ 5^{\circ}\text{C}$ to $+ 25^{\circ}\text{C}$ Relative humidity: $65 \pm 5 \%$



Electrical characteristics	
Nominal voltage (V)	1.2
Typical capacity (mAh)*	1650
IEC minimum capacity (mAh)*	1500
IEC designation	KRMT 23/43
Impedance at 1000 Hz (m Ω)	<7

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

Dimensions	
Diameter (mm)	22.0 + 0.15/- 0.05
Height (mm)	41.9 ± 0.3
Top projection (mm)	0.8 ± 0.2
Top flat area diameter (mm)	10 ± 0.2
Weight (g)	47

Dimensions are given for bare cells.

Charge conditions			
Rate	Time (h)	Temp. (°C)	Charge current (mA)
Standard	16	+ 15 to + 40	150
Permanent		+ 15 to + 40	75
Trickle*			37 to 50

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

 ^{*} Trickle charge follows full charge.

Maximum discharge current	
Continuous (A) at + 20°C	5.2
Peak (A) at + 20°C*	40

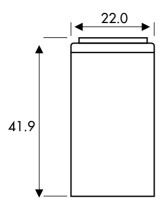
^{*} Peak duration: 0.3 second - final discharge voltage 0.65 volt/cell.

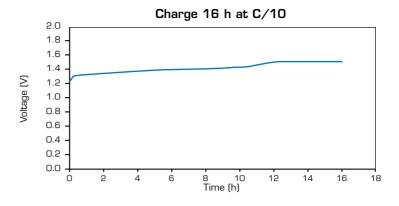


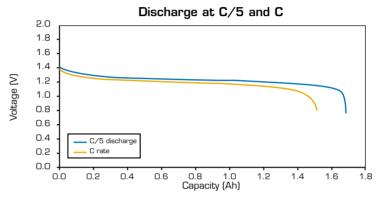
Typical performances

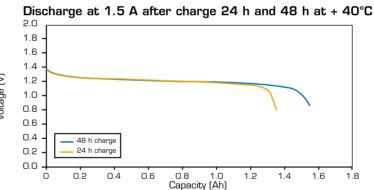
For graphs shown, C is the IEC $_5$ capacity.

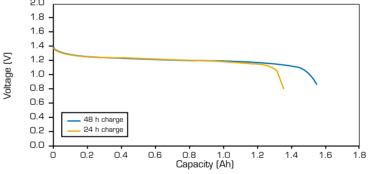
Dimensions are in mm.











Charge efficiency after different charge rate, discharge at C/2 100 90 % of rated capacity 80 70 60 50 40 30 20 C/10 C/20 10 0 30 35 40 45 60 65 . 70 Temperatures (°C)

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.

Saft Rechargeable Battery Systems

12, rue Sadi Carnot 93170 Bagnolet - France Tel.: +33 1 49 93 19 18 Fax: +33 1 49 93 19 68

Email: rbs.info@saftbatteries.com

