Standard Series

Nickel-Cadmium **VRE Cs**

To expand its Ni-Cd offer, Saft has launched new High Energy Ni-Cd Cs cells, the VRE Cs.

Developed to fit Professional electronics and home appliances, these cells are also perfectly designed for all equipment where an extended cycle life and a longer operating time are required.

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

- Power tools
- Radio controls
- · Lawn and gardening equipment
- Home appliances
- Payment terminals

Main advantages

- Cycling application
- Fast charge
- · Extended cycle life
- Good charge retention

Technology

- Sintered 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)* | 1400 |
| IEC minimum capacity (mAh)* | 1300 |
| IEC designation | KRHR 23/43 |
| Impedance at 1000 Hz (m Ω) | 6 |

^{*} 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 ± 0.2 |
| Weight (g) | 43 |

Dimensions are given for bare cells.

| Charge conditions | | | |
|-------------------|----------|--------------|---------------------|
| Rate | Time (h) | Temp. (°C) | Charge current (mA) |
| Fast* | ~ 1 | + 10 to + 45 | up to 1300 |
| Standard | 16 | 0 to + 50 | 130 |
| Trickle * * | | | 30 to 65 |

 $^{^{\}star}$ 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 | 13 |
| Peak (A) at + 20°C* | 108 |

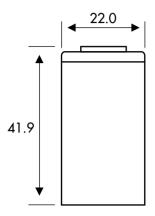
^{*} Peak duration: 0.3 second - final discharge voltage 0.65 volt/cell.

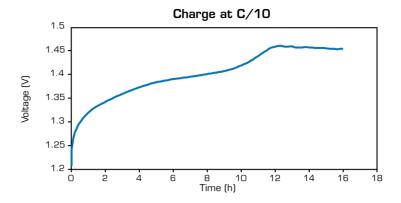


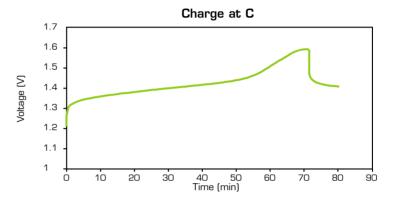
Typical performances

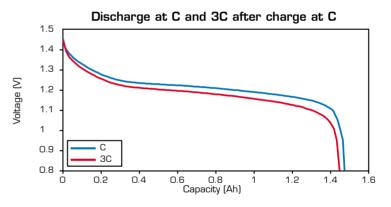
For graphs shown, C is the $\rm IEC_5$ capacity.

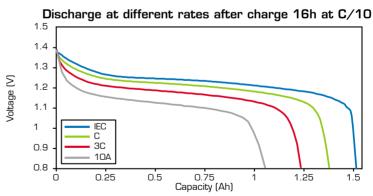
Dimensions are in mm.











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.

Saft Rechargeable Battery Systems

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