

# VRE Cs 1800

## Standard Series

ARTS Energy's VRE standard Ni-Cd series are perfectly suited to cycling applications. It is designed for professional electronics and home appliances where an extended cycle life and a longer operating time are required.

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

For your battery design and system needs, please contact ARTS Energy'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)*	1800
IEC minimum capacity (mAh)*	1700
IEC designation	KRHR 23/43
Impedance at 1000 Hz (mΩ)	5

\* 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)	9.0 min
Weight (g)	49

Dimensions are given for bare cells.

Charge conditions Rate	Time (h)	Temp. (°C)	Charge current (mA)
Fast*	~1	+ 10 to + 45	up to 1700
Standard	16	0 to + 50	170
Trickle**			45 to 80

\* 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	17
Peak (A) at + 20°C*	130

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

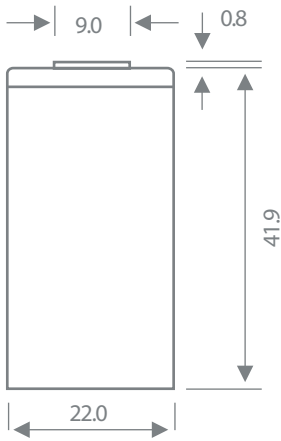


Advanced Rechargeable Technology and Solutions



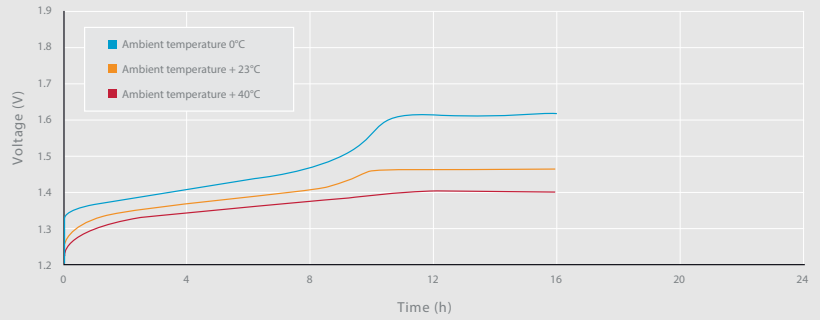
## Typical performances

For graphs shown, C is the IEC<sub>5</sub> capacity.

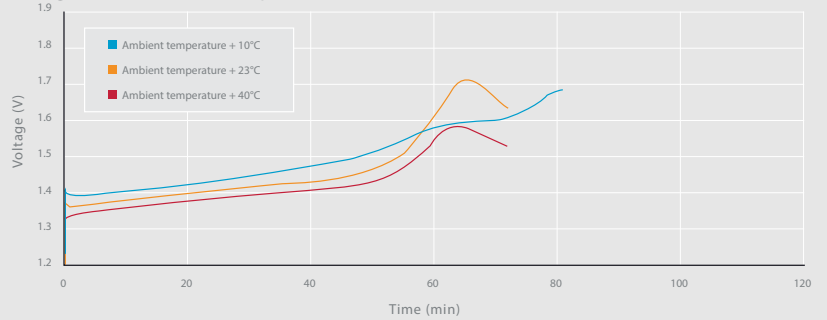


Dimensions are in mm.

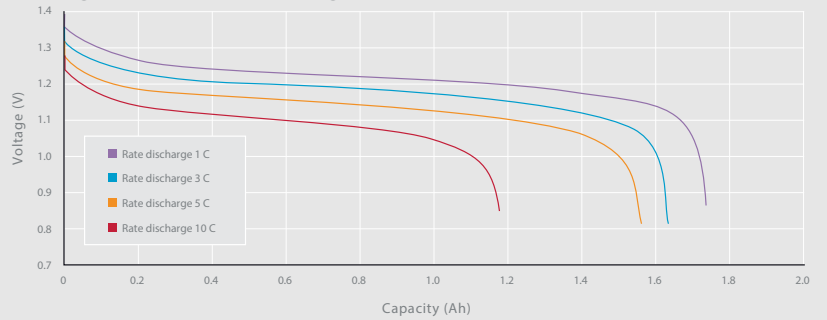
Charge at C/10 at different temperatures



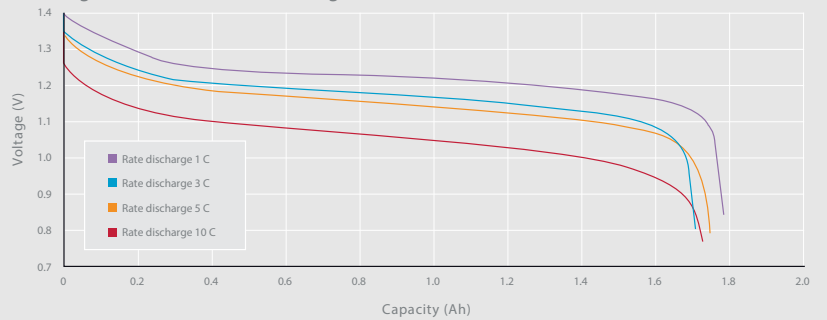
Charge at 1C at different temperatures



Discharge at different rates after charge at C/10



Discharge at different rates after charge at 1C



Data are given for single cells. Please consult ARTS Energy for utilization of cell outside this specification.

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



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