

# VRE AA 700

## Standard Series

ARTS Energy's VRE standard Ni-Cd series are perfectly suited to cycling applications such as home appliances. It is ideally designed for cordless equipment and advanced technology professional appliances.

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

- Home appliances
- Personal care

### Main advantages

- High energy series giving a higher operating time
- Good storage retention
- Fast charge
- Cycling application

### 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)*	780
IEC minimum capacity (mAh)*	700
IEC designation	KRMR 15/49
Impedance at 1000 Hz (mΩ)	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)	21

Dimensions are given for bare cells.

Charge conditions Rate	Time (h)	Temp. (°C)	Charge current (mA)
Fast*	~1	+10 to +45	up to 700
Standard*	16	0 to +50	70
Trickle**			17.5 to 35

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

\*\* Trickle charge follows quick charge.

Maximum discharge current	
Continuous (A) at +20°C	2.1
Peak (A) at +20°C*	46

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

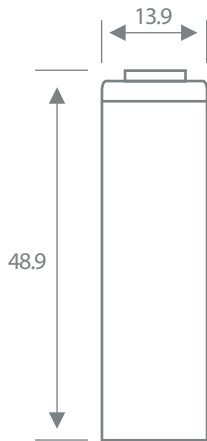


Advanced Rechargeable Technology and Solutions



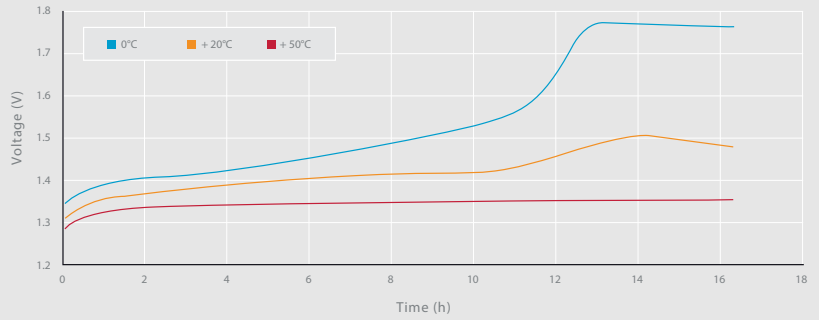
## Typical performances

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

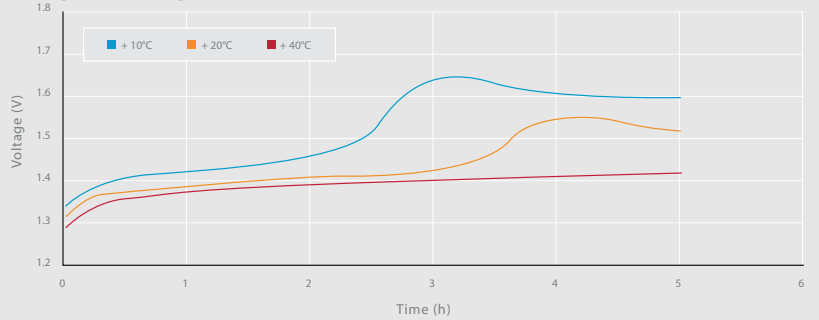


Dimensions are in mm.

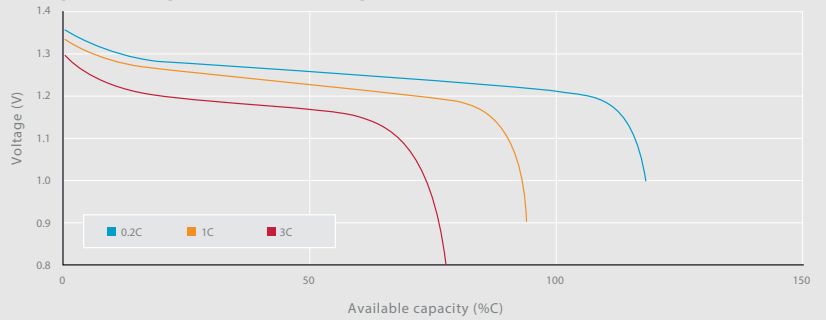
Voltage in normal charge (current 0.1 C)



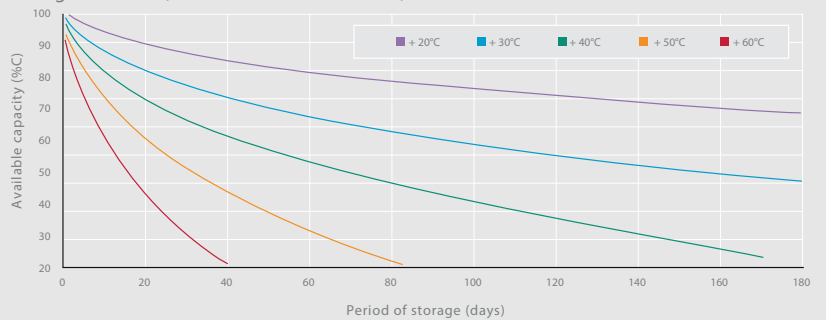
Voltage in fast charge (current 0.3 C)



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



Charge retention (between + 20°C and + 60°C)



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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