

ARTS

ENERGY

ARTS Energy's VRE standard Ni-Cd series are perfectly suited to cycling applications. It is designed for a wide range of applications requiring a high level of robustness.

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

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

APPLICATIONS

- Professional electronics
- Professional lighting equipment
- Military equipment

MAIN BENEFITS

- Excellent cycling performance
- High power
- Superior robustness
- Extreme low temperatures (-40°C)

TECHNOLOGY

- Sintered positive electrode
- Plastic bonded negative electrode



ELECTRICAL CHARACTERISTICS

Nominal voltage (V)	1.2
Typical capacity (mAh)*	5500
IEC minimum capacity (mAh)*	5000
IEC designation	KRHR 33/62
Impedance at 1000 Hz (mΩ)	< 4

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

DIMENSIONS

Diameter (mm)	32.15 ± 0.10
Height (mm)	58.2 ± 0.4
Top projection (mm)	1.4 ± 0.4
Top flat area diameter (mm)	5.6 ± 0.1
Weight (g)	150

Dimensions are given for bare cells.

CHARGE CONDITIONS

	Temp. (°C)	Current
Fast	0 to +40	5A max
Topping (after fast charge)	0 to +40	Consult ARTS Energy
Trickle (after topping)	0 to +40	Consult ARTS Energy
Charge below 0°C	-40 to 0	Consult ARTS Energy

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

DISCHARGE CONDITIONS

	Temp. (°C)	Current
	10 to +60	50A max
	-30 to +60	1C max
	-40 to +60	C/2 max

CYCLING CONDITIONS

	Cycling	Life duration
	Full cycles (100% DOD)	> 1000 cycles

NI-CD

VRE D 5500

Standard Series

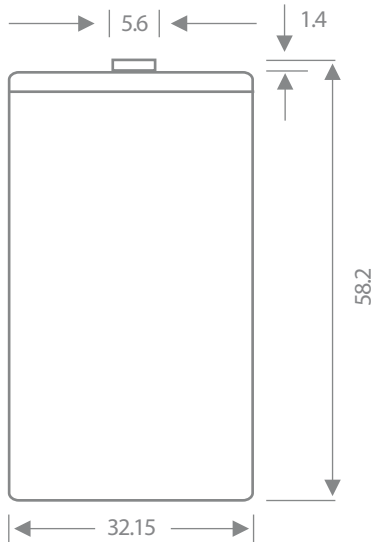
VRE D 5500

Standard Series

STORAGE

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

TYPICAL DIMENSIONS



Typical dimensions (mm). Without tube.

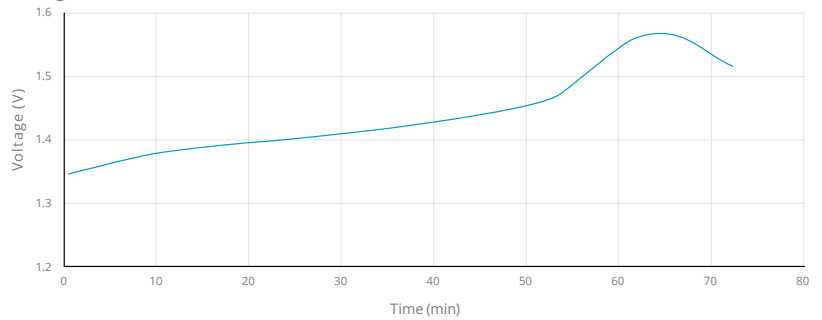
The operation of the battery must strictly be in accordance with ARTS Energy technical recommendations, to obtain the performances stated by ARTS Energy.

Data is given for single cells. Please consult ARTS Energy for utilisation of cells outside specification.

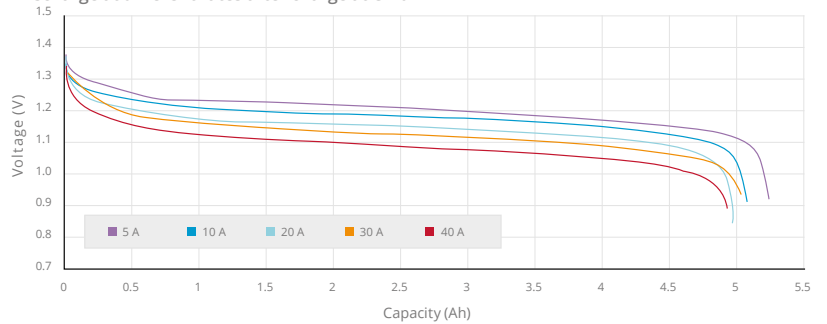
Data in this document is subject to change without notice and become contractual only after written confirmation by ARTS Energy.

For graphs shown, C is the IEC₅ capacity.

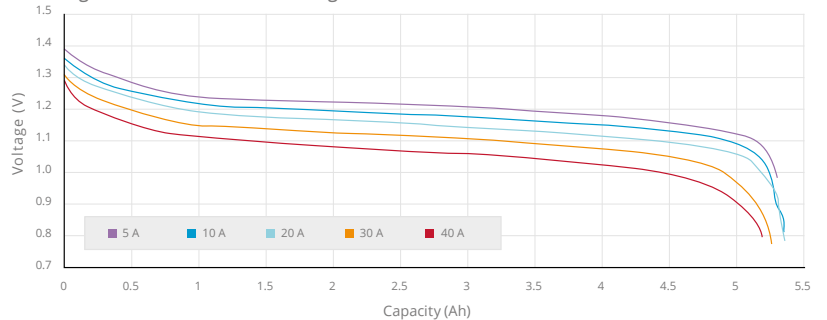
Charge at 5 A



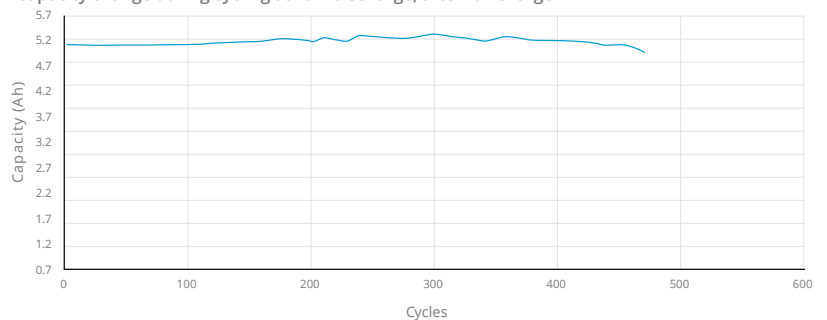
Discharge at different rates after charge at C/10



Discharge at different rates after charge at 1C



Capacity change during cycling at 10 A discharge, after full charge



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