

# ARTS ENERGY

ARTS Energy's VNT U high temperature Ni-Cd series are perfectly suited to emergency and security equipment applications. It is designed to accept a permanent charge for a minimum of 4 years in high temperature environments (up + 55°C).

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.



#### ELECTRICAL CHARACTERISTICS

Nominal voltage (V)	1.2
Typical capacity (mAh)*	4500
IEC minimum capacity (mAh)*	4200
IEC designation	KRMU 33/62
Impedance at 1000 Hz (mΩ)	6

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

#### DIMENSIONS

Diameter (mm)	32.15 ± 0.1
Height (mm)	59.9 ± 0.4
Top projection (mm)	3.1 ± 0.4
Top flat area diameter (mm)	5.6
Weight (g)	123

Dimensions are given for bare cells.

CHARGE CONDITIONS	Time (h)	Temp. (°C)	Current
Standard	16	+5 to +55	C/10
Permanent		+5 to +55	C/20

DISCHARGE CONDITIONS	Temp. (°C)	Current
	+5 to +55	12.6A max

#### CYCLING CONDITIONS

ELU applications	1 discharge / month MAX
Back up applications	Consult ARTS Energy

#### APPLICATIONS

- Emergency lighting
- Back-up systems
- Security devices

#### MAIN BENEFITS

- Permanent charge
- Good charge efficiency at high temperature
- Superior robustness
- Long life duration

#### TECHNOLOGY

- Plastic bonded positive electrode
- Plastic bonded negative electrode

**NI-Cd**

# VNT D U HC

## High Temperature Series

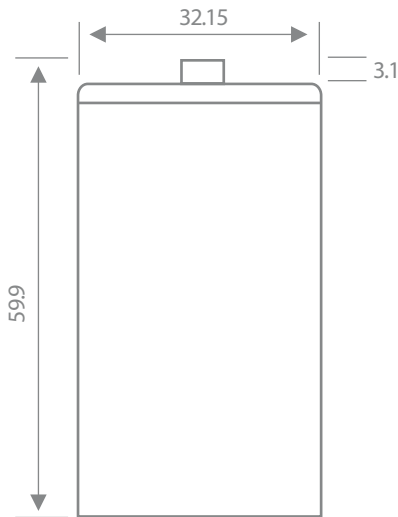
# VNT D U HC

## High Temperature Series

### STORAGE

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

### TYPICAL DIMENSIONS



Typical dimensions (mm). Without tube.

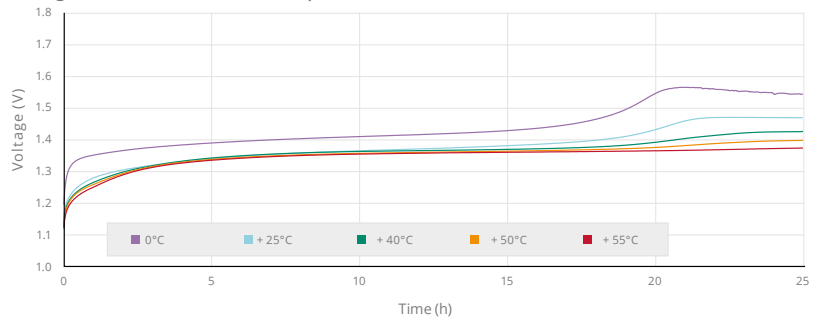
The operation of the battery must strictly be in accordance with ARTS Energy technical recommendations, to obtain the performances stated by ARTS Energy.

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

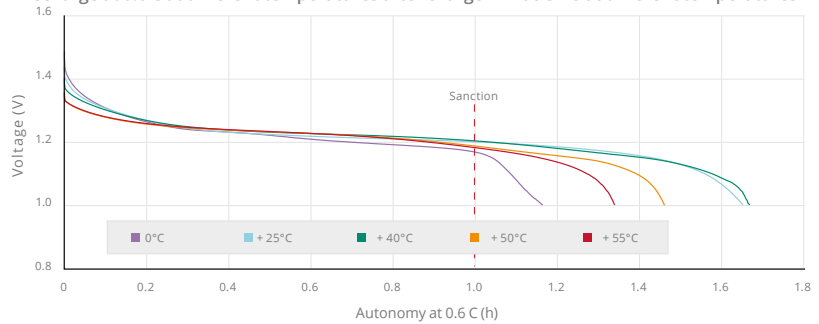
Data in this document is subject to change without notice and become contractual only after written confirmation by ARTS Energy.

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

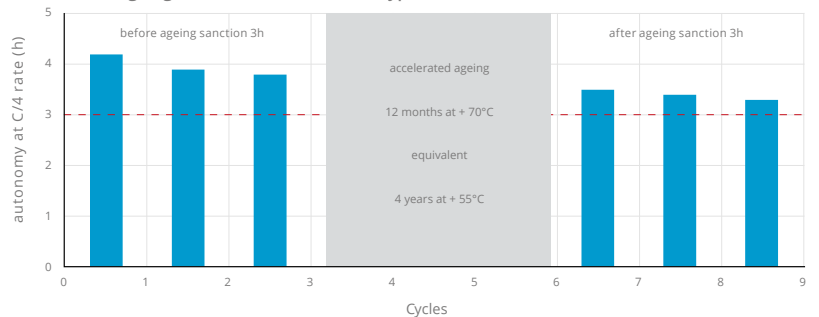
Charge 24h at C/20 at different temperatures



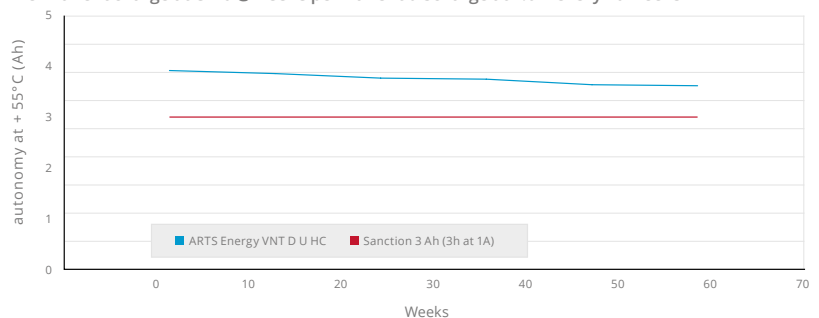
Discharge at 0.6 C at different temperatures after charge 24h at C/20 at different temperatures



Accelerated ageing test ICEL 1010: 2009: E55 type



Permanent charge at C/20 @ +55°C permanent discharge at 1.0 A every 10 weeks



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