

# ARTS ENERGY

ARTS Energy's VST 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 + 40°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.

## APPLICATIONS

- Emergency lighting
- Memory back-up systems
- Security devices

## MAIN BENEFITS

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

## TECHNOLOGY

- Foam positive electrode
- Plastic bonded negative electrode



### ELECTRICAL CHARACTERISTICS

|                             |            |
|-----------------------------|------------|
| Nominal voltage (V)         | 1.2        |
| Typical capacity (mAh)*     | 860        |
| IEC minimum capacity (mAh)* | 800        |
| IEC designation             | KRMT 15/49 |
| Impedance at 1000 Hz (mΩ)   | 30         |

\* 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 ± 0.2  |
| Weight (g)                  | 24         |

Dimensions are given for bare cells.

| CHARGE CONDITIONS | Time (h) | Temp. (°C) | Current |
|-------------------|----------|------------|---------|
| Standard          | 16       | +5 to +40  | C/10    |
| Permanent         |          | +5 to +40  | C/20    |

| DISCHARGE CONDITIONS | Temp. (°C) | Current  |
|----------------------|------------|----------|
|                      | +5 to +40  | 2,4A max |

### CYCLING CONDITIONS

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

**NI-CD**

# VST AA

## High Temperature Series

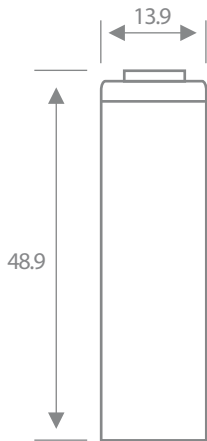
# VST AA

## High Temperature Series

### STORAGE

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

### TYPICAL DIMENSIONS



Typical dimensions (mm). Without tube.

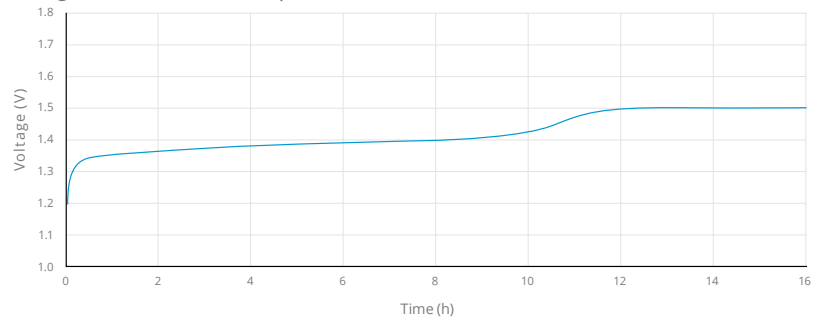
The operation of the battery must strictly be in accordance with ARTS Energy technical recommendations, to obtain the performances stated by ARTS Energy.

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

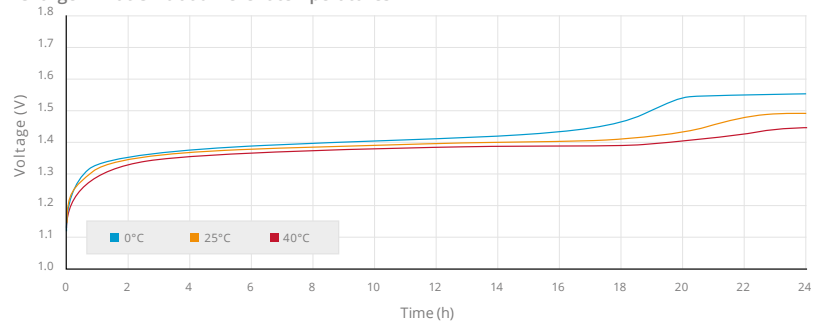
Data in this document is subject to change without notice and become contractual only after written confirmation by ARTS Energy.

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

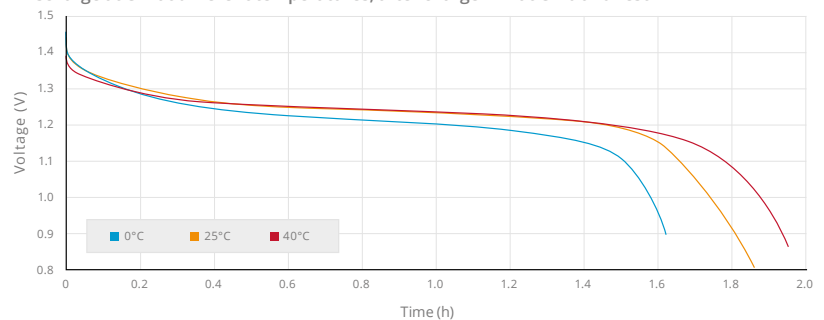
Charge 16h at C/10 at room temperature



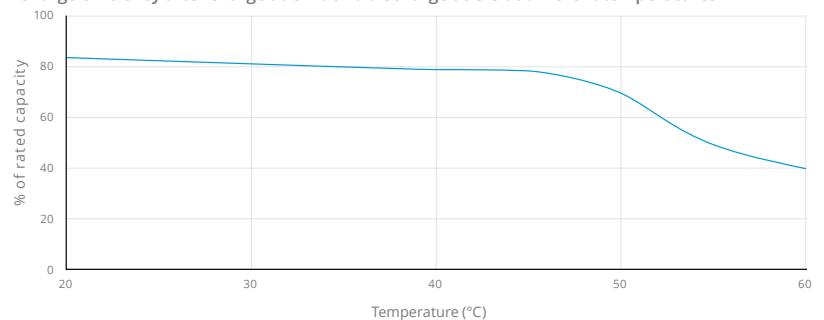
Charge 24h at C/20 at different temperatures



Discharge at C/2 at different temperatures, after charge 24h at C/20 and rest 1h



Charge efficiency after charge at C/20 and discharge at C/5 at different temperatures



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Doc No.: 051-A-0417 - Edition: April 2017  
ARTS Energy SAS. Stock capital 971.002  
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Conception in FR by Alain Bruneaud Création



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