

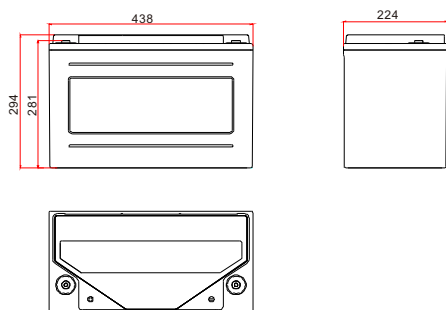
# REXC series

## 12REXC200

Narada®



### Dimension



### Feature

- Design life 20 years
- Combine the advantage of lead acid battery and supercapacitor
- Ideal for PSOC cycle application
- High power, rapid charge/discharge
- Reduce sulfation of negative plate, excellent recharge acceptance performance
- Waterproof, anti-salt treatment, shockproof module installation design
- Comply with IEC60896, IEC61427 etc. standard

### Application

- Home energy storage system
- Smart power grids and microgrid system
- Distributed energy storage system
- Hybrid energy storage system such as solar and wind
- Solar power generation grid/off-grid energy storage system
- Emergency lighting system
- Generator and battery hybrid energy system
- Other standby, cycling system

### Parameter

|                                |  |
|--------------------------------|--|
| Nominal Voltage                | 12V  |
| Capacity                       | 200Ah (100hr to 1.85V/cell @25°C)                          |
|                                | 165Ah (10hr to 1.80V/cell @25°C)                           |
| Typical Weight                 | 79.5kg   |
| Internal Resistance            | Approx 3.83mΩ (acc. to IEC60896-21 clause 6.3)             |
| Short-Circuit Current          | 3274A  |
| Self Discharge                 | Residual capacity is above 90% after 90 days storage(25°C) |
| Temperature Ranges             | Operation(recommended):15°C~25°C                           |
|                                | Operation(maximum):-20°C~50°C                              |
| Max. charging current          | 49.5A  |
| Max. constant charging current | 33A  |
| Charge Voltage                 | Floating: 2.25V/cell(25°C)                                 |
|                                | Equalizing/Cycle: 2.30V/cell(25°C)                         |
| Terminal                       | M8 embedded copper   |
| Terminal Hardware Torque       | >10N.m   |

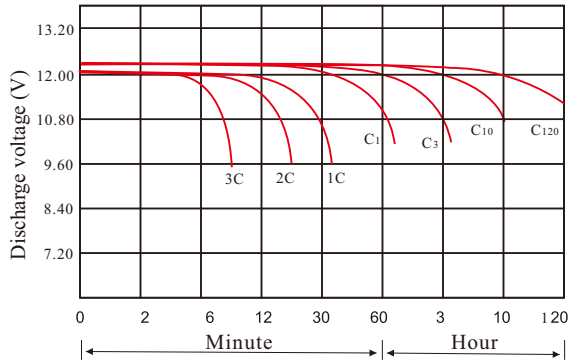
### Constant Current Discharge Characteristics Units: Amperes(25°C)

| End voltage per cell | 60min | 3hour | 5hour | 8hour | 10hour | 24hour | 48hour | 72hour | 120hour |
|----------------------|-------|-------|-------|-------|--------|--------|--------|--------|---------|
| 1.75V                | 94.25 | 43.33 | 30.08 | 21.08 | 17.58  | 7.83   | 4.04   | 2.77   | 1.76    |
| 1.80V                | 88.25 | 42.00 | 29.42 | 20.67 | 17.17  | 7.70   | 3.95   | 2.71   | 1.72    |
| 1.83V                | 82.67 | 40.67 | 28.67 | 20.33 | 16.83  | 7.53   | 3.87   | 2.65   | 1.68    |
| 1.85V                | 79.67 | 39.83 | 28.42 | 20.08 | 16.67  | 7.44   | 3.85   | 2.63   | 1.67    |
| 1.88V                | 76.33 | 39.00 | 28.08 | 19.83 | 16.58  | 7.38   | 3.82   | 2.61   | 1.66    |
| 1.90V                | 70.75 | 37.33 | 27.33 | 19.33 | 16.17  | 7.28   | 3.72   | 2.54   | 1.62    |

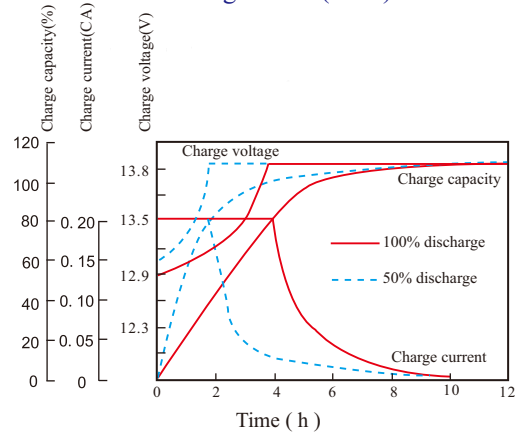
### Discharge Data with Constant Power Units: Watts per cell(25°C)

| End voltage per cell | 15min | 30min | 1hour | 2hour | 3hour | 4hour | 5hour | 6hour | 8hour | 10hour |
|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| 1.75V                | 411.4 | 310.5 | 190.3 | 124.8 | 89.1  | 73.1  | 62.1  | 53.4  | 40.9  | 34.3   |
| 1.80V                | 374.1 | 300.6 | 185.9 | 122.5 | 85.9  | 70.8  | 60.3  | 51.9  | 39.8  | 33.8   |
| 1.83V                | 354.3 | 285.2 | 179.3 | 117.5 | 83.8  | 69.7  | 59.1  | 50.3  | 39.1  | 33.2   |
| 1.85V                | 344.2 | 270.5 | 169.1 | 112.5 | 81.4  | 68.0  | 57.6  | 49.2  | 38.5  | 32.5   |
| 1.88V                | 309.6 | 253.6 | 158.9 | 104.6 | 78.6  | 65.7  | 55.7  | 47.4  | 37.5  | 31.7   |

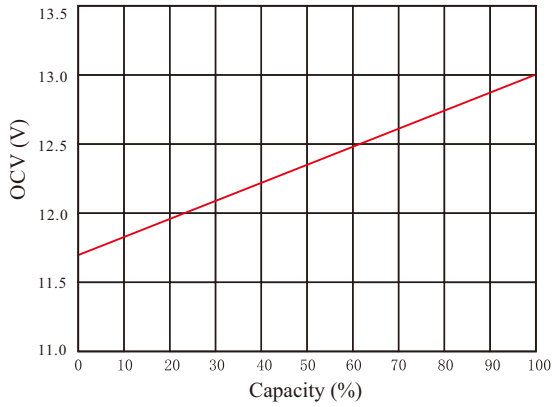
Discharge curve at different rate (25°C)



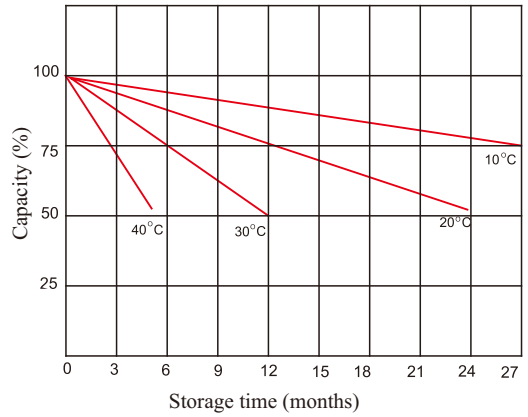
Charge curve (25°C)



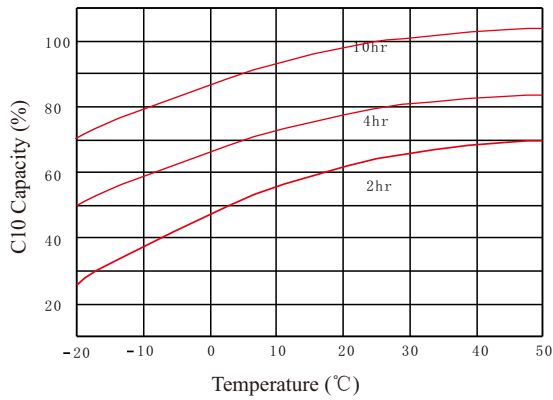
Capacity vs OCV curve



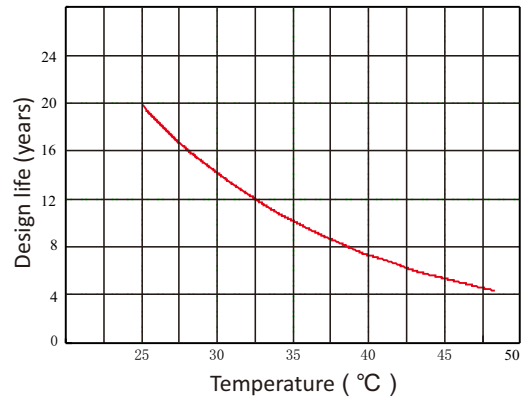
Residue capacity vs storage time



Capacity vs temperature curve



Design life vs temperature



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Subject to revision without prior notice