

**LC-R127R2PG**

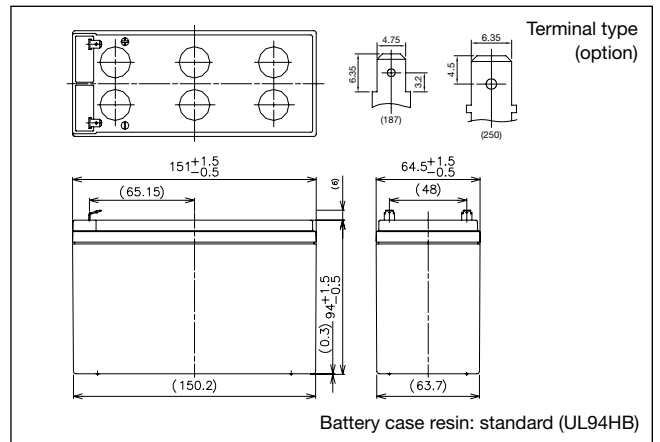
For main and standby power supplies. Expected trickle design life: 6 – 9 years at 20 °C according to Eurobat.

VdS

G193046



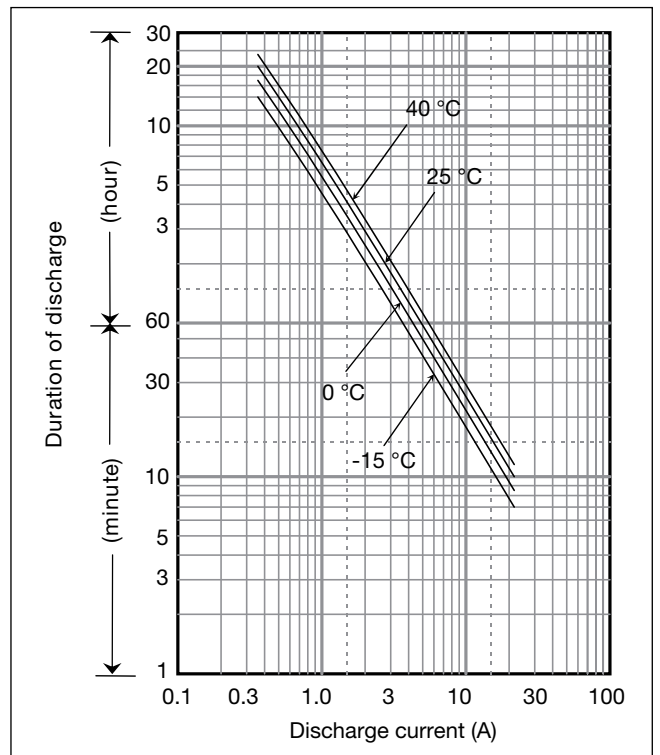
**Dimensions (mm)**



**Specifications**

|                                 |                                    |         |
|---------------------------------|------------------------------------|---------|
| Nominal voltage                 | 12 V                               |         |
| Nominal capacity (20 hour rate) | 7.2 Ah                             |         |
| Dimensions                      | Length                             | 151 mm  |
|                                 | Width                              | 64.5 mm |
|                                 | Height                             | 94 mm   |
|                                 | Total Height                       | 100 mm  |
| Approx. mass                    | 2.47 kg                            |         |
| Terminal                        | Faston 187 or Faston 250 with hole |         |

**Duration of discharge vs Discharge current**



**Characteristics**

|   |                               |        |
|---|-------------------------------|--------|
| Capacity (25 °C)                                  | 20 hour rate                  | 7.2 Ah |
|   | 10 hour rate                  | 6.8 Ah |
|   | 5 hour rate                   | 6.3 Ah |
|   | 1 hour rate                   | 4.9 Ah |
| Internal resistance                               | Fully charged battery (25 °C) | 21 mΩ  |
| Temperature dependency of capacity (20 hour rate) | 40 °C                         | 102 %  |
|   | 25 °C                         | 100 %  |
|   | 0 °C                          | 85 %   |
|   | -15 °C                        | 65 %   |
| Self discharge (25 °C)                            | After 3 months                | 91 %   |
|   | After 6 months                | 82 %   |
|   | After 12 months               | 64 %   |

**Watt Table**

(Wattage/Battery)

| Cut-off V | 3min | 5min | 10min | 15min | 20min | 30min | 45min | 1h   | 1.5h | 2h   | 3h   | 4h   | 5h   | 6h   | 10h  | 20h  | 24h  |
|-----------|------|------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|
| 9.6V      | 433  | 341  | 223   | 170   | 143   | 106   | 75.1  | 60.1 | 41.3 | 32.0 | 23.8 | 18.3 | 15.1 | 12.1 | 8.04 | 4.36 | 3.64 |
| 9.9V      | 401  | 320  | 218   | 169   | 140   | 105   | 74.7  | 60.1 | 40.5 | 31.7 | 23.7 | 18.2 | 15.0 | 12.1 | 8.00 | 4.34 | 3.62 |
| 10.2V     | 370  | 300  | 213   | 166   | 138   | 104   | 74.0  | 58.9 | 39.7 | 30.9 | 23.4 | 18.0 | 14.9 | 12.0 | 7.92 | 4.33 | 3.61 |
| 10.5V     | 329  | 269  | 197   | 154   | 131   | 102   | 72.8  | 57.7 | 38.9 | 29.8 | 23.1 | 17.9 | 14.7 | 11.8 | 7.88 | 4.32 | 3.60 |
| 10.8V     | 278  | 237  | 176   | 144   | 128   | 98    | 71.6  | 56.5 | 37.8 | 28.4 | 22.6 | 17.7 | 14.4 | 11.7 | 7.80 | 4.30 | 3.58 |

**Ampere Table**

(Ampere/Battery)

| Cut-off V | 3min | 5min | 10min | 15min | 20min | 30min | 45min | 1h  | 1.5h | 2h   | 3h   | 4h   | 5h   | 6h    | 10h   | 20h   | 24h   |
|-----------|------|------|-------|-------|-------|-------|-------|-----|------|------|------|------|------|-------|-------|-------|-------|
| 9.6V      | 38.9 | 30.6 | 19.9  | 14.8  | 12.3  | 9.1   | 6.4   | 5.1 | 3.50 | 2.70 | 2.00 | 1.53 | 1.26 | 1.012 | 0.670 | 0.363 | 0.303 |
| 9.9V      | 36.1 | 28.7 | 19.5  | 14.7  | 12.1  | 9.0   | 6.4   | 5.1 | 3.43 | 2.68 | 1.99 | 1.52 | 1.25 | 1.008 | 0.667 | 0.362 | 0.302 |
| 10.2V     | 33.3 | 26.9 | 19.0  | 14.4  | 11.9  | 8.9   | 6.3   | 5.0 | 3.36 | 2.61 | 1.97 | 1.51 | 1.24 | 1.000 | 0.660 | 0.361 | 0.301 |
| 10.5V     | 29.6 | 24.1 | 17.6  | 13.4  | 11.3  | 8.7   | 6.2   | 4.9 | 3.29 | 2.52 | 1.94 | 1.50 | 1.23 | 0.988 | 0.657 | 0.360 | 0.300 |
| 10.8V     | 25.0 | 21.3 | 15.7  | 12.5  | 11.0  | 8.4   | 6.1   | 4.8 | 3.20 | 2.40 | 1.90 | 1.48 | 1.20 | 0.972 | 0.650 | 0.358 | 0.298 |

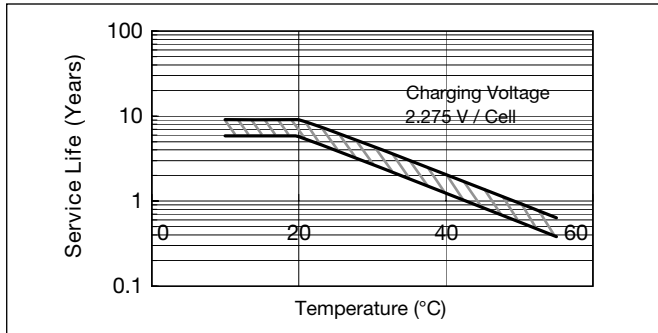
**Charging Method**

|             |  |
|-------------|--|
| Cycle use   | Control voltage: 14.5 - 14.9 V; Initial current: 2.88 A or smaller |
| Trickle use | Control voltage: 13.6 - 13.8 V; Initial current: 1.08 A or smaller |

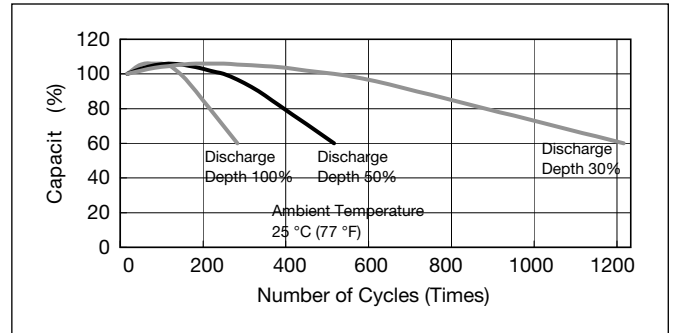
**Cut off voltage**

|                     |                 |                |               |                |                 |
|---------------------|-----------------|----------------|---------------|----------------|-----------------|
| Discharge current   | 0.36 A - 1.44 A | 1.44 A - 3.6 A | 3.6 A - 7.2 A | 7.2 A - 14.4 A | 14.4 A - 21.6 A |
| Cut off voltage (V) | 10.5            | 10.2           | 9.9           | 9.3            | 8.7             |

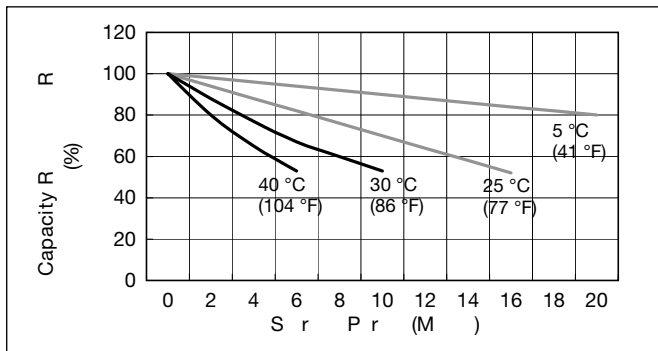
**Influence of Temperature on Trickle life**



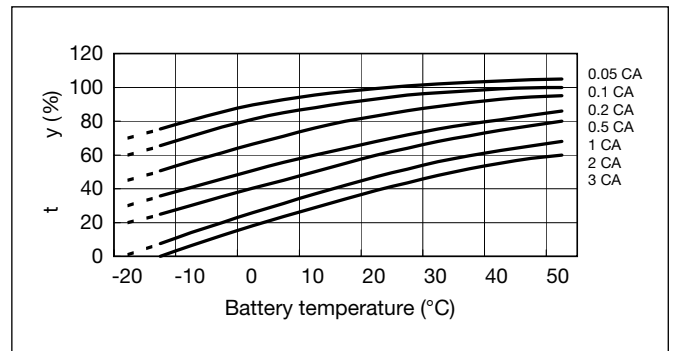
**Cycle life vs Depth of discharge**



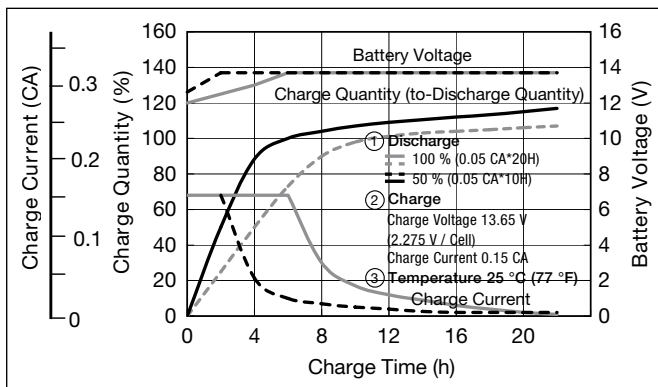
**Residual capacity vs storage period**



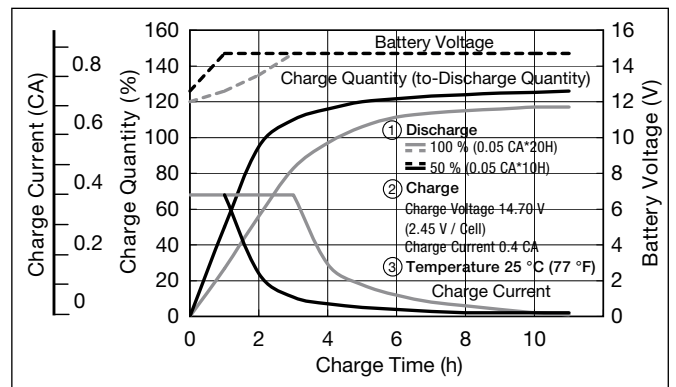
**Discharge capacity by temperature and by discharge current**



**Constant-voltage and constant-current charge characteristics for Trickle use**



**Constant-voltage and constant-current charge characteristics for Cycle use**



**Discharge characteristics**

