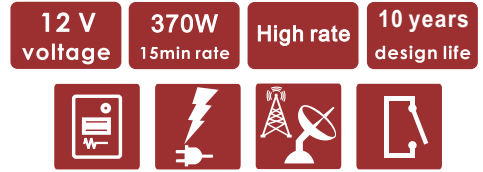


## HIGH RATE SERIES VRLA BATTERY

The HR (High Rate) series is especially designed for high rate discharge applications. By using strong grids and specially designed active material, the HR series offers stable performance during high current discharge. It offers extremely high power output at 5~15 minutes backup time and 10 years design life. It is highly suited for high rate UPS/EPS systems and power switchgear applications.



### TECHNICAL SPECIFICATIONS

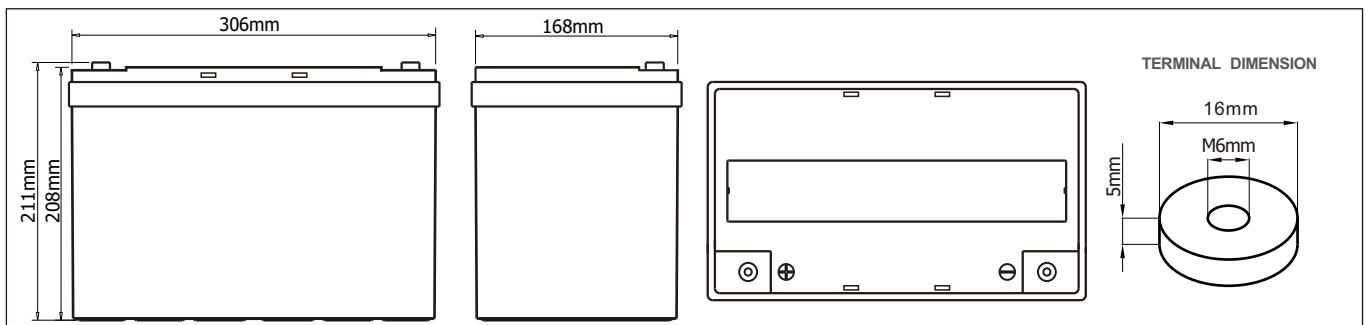
|                               |   |
|-------------------------------|---|
| Nominal Voltage (V)           | 12 (6 cells per unit)                                       |
| Designed Floating Life (20°C) | 10 Years  |
| Power (15min, 1.67Vpc, 25°C)  | 370W  |
| Nominal Capacity (25°C)       | 92 Ah @ 10HR-rate (to 1.80Vpc)                              |
| Dimension (mm)                | L306mm x W168mm x H211mm                                    |
| Approx. Weight                | 28.3 kg   |
| Terminal Type                 | Female Copper Insert M6 (torque: 7~8N.m)                    |
| Internal Resistance           | Approx. 4.0 mOhm (fully charged @ 25°C)                     |
| Max. Charge Current           | 27.5A   |
| Max. Discharge Current (5S)   | 900 A   |
| Short Circuit Current         | 2200 A  |
| Self Discharge                | Approx. 2.5% per month @ 20°C                               |
| Ambient Temperature           | Discharge: -20~55°C<br>Charge: -5~40°C<br>Storage: -15~40°C |
| Float Charge Voltage          | 13.6V @25°C (-3mV/ cell/ °C)                                |
| Equalize Charge Voltage       | 14.1V @25°C   |
| Container Material            | ABS (UL94-V0 optional)                                      |



### Complied standards

- IEC 60896-21/22
- GB/T19638
- JIS C8704
- BS6290 part 4
- UL1989

### BATTERY DIMENSIONS

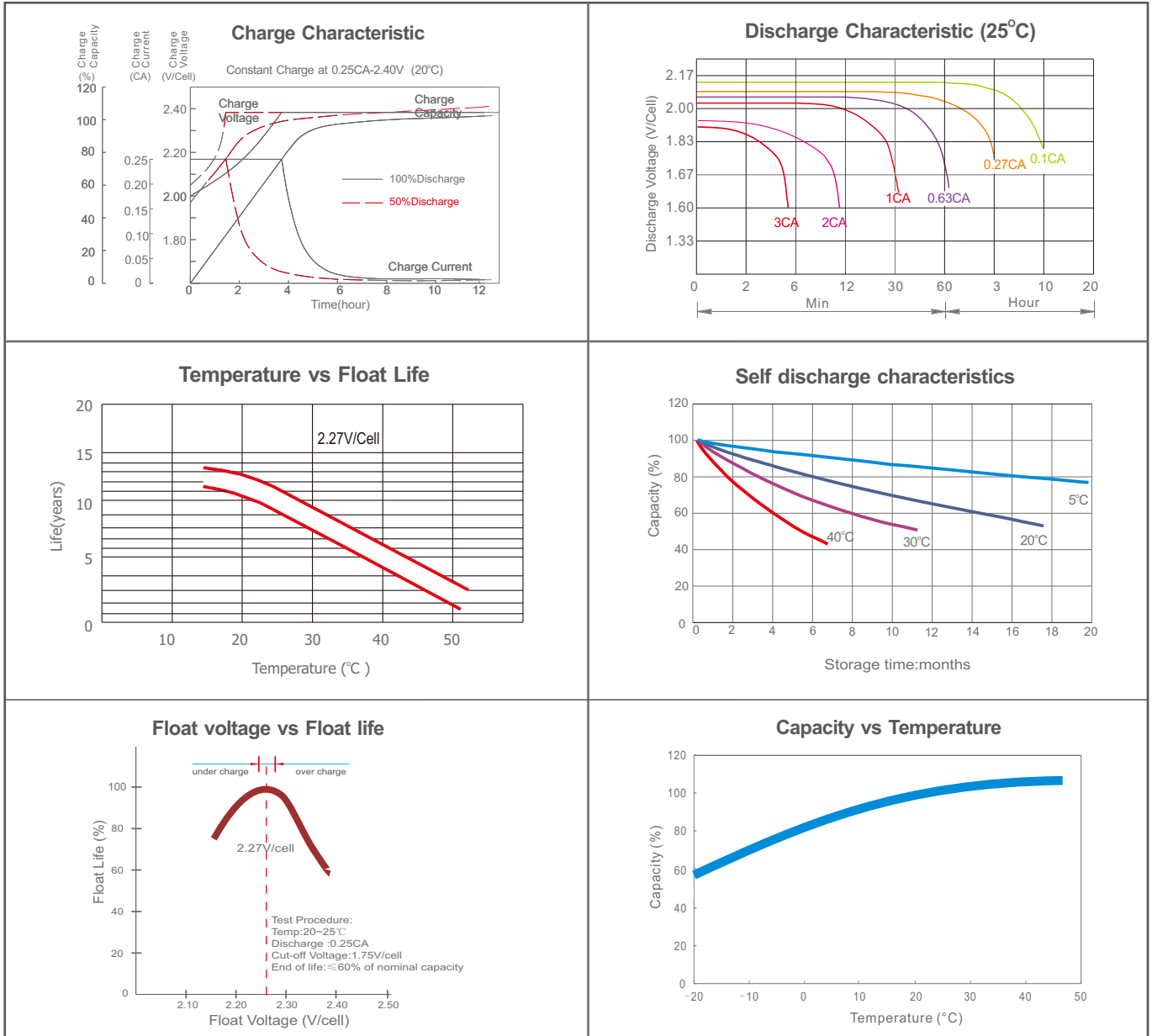


### BATTERY DISCHARGE TABLE

| Constant Current Discharge Characteristics: Amps (25°C) |       |       |        |        |        |        |        |        |        |
|---|-------|-------|--------|--------|--------|--------|--------|--------|--------|
| F.V/Time  | 5m in | 8m in | 10m in | 15m in | 20m in | 30m in | 45m in | 60m in | 90m in |
| 1.60V   | 306   | 271   | 241    | 208    | 165    | 119    | 84.1   | 66.6   | 53.1   |
| 1.67V   | 285   | 257   | 227    | 200    | 155    | 115    | 81.7   | 65.3   | 51.3   |
| 1.70V   | 277   | 251   | 220    | 194    | 151    | 113    | 80.4   | 64.2   | 50.4   |
| 1.75V   | 267   | 241   | 210    | 188    | 144    | 108    | 78.0   | 62.7   | 49.4   |
| 1.80V   | 256   | 232   | 197    | 182    | 139    | 104    | 75.5   | 61.2   | 48.6   |
| 1.85V   | 239   | 213   | 185    | 172    | 134    | 101    | 73.1   | 59.3   | 46.6   |

| Constant Power Discharge Characteristics: W/cell (25°C) |       |       |        |        |        |        |        |        |        |
|---|-------|-------|--------|--------|--------|--------|--------|--------|--------|
| F.V/Time  | 5m in | 8m in | 10m in | 15m in | 20m in | 30m in | 45m in | 60m in | 90m in |
| 1.60V   | 537   | 485   | 433    | 381    | 304    | 221    | 157    | 124    | 98.7   |
| 1.67V   | 507   | 465   | 414    | 370    | 288    | 215    | 153    | 121    | 96.8   |
| 1.70V   | 494   | 453   | 402    | 363    | 283    | 212    | 151    | 120    | 95.8   |
| 1.75V   | 483   | 443   | 388    | 352    | 272    | 207    | 149    | 120    | 94.9   |
| 1.80V   | 467   | 425   | 370    | 342    | 265    | 200    | 145    | 118    | 93.9   |
| 1.85V   | 450   | 402   | 353    | 330    | 258    | 194    | 141    | 116    | 91.2   |

**CHARACTERISTICS**



**FINAL VOLTAGE SETTINGS RECOMMENDED ACCORDING TO THE DISCHARGE CURRENT**

| Discharge Current I (A) | $I \leq 0.08C$    | $0.08C \leq I < 0.2C$ | $0.2C \leq I < 0.6C$ | $0.6C \leq I < 1.0C$ | $I \geq 1.0C$     |
|-------------------------|-------------------|-----------------------|----------------------|----------------------|-------------------|
| Final of Voltage        | $\geq 1.85V_{pc}$ | $\geq 1.80V_{pc}$     | $\geq 1.75V_{pc}$    | $\geq 1.70V_{pc}$    | $\geq 1.60V_{pc}$ |

Aeson Power  
18/40 Ricketts Road, Mount Waverley  
Tel: +61 3 9545 5993  
Website: www.aesonpower.com.au

Email: info@aesonpower.com.au

