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# DC85-12

GROUP 24

## CYCLING CAPACITY

20 Hour Rate **85 Amp Hours**

## RESERVE CAPACITY

Reserve @25 AMPS **145 Minutes** Reserve @75 AMPS **34 Minutes**

## ELECTRICAL SPECIFICATIONS

|                     |                  |
|---------------------|------------------|
| Nominal Voltage     | <b>12 Volt</b>   |
| C100                | <b>95AH</b>      |
| C20                 | <b>85AH</b>      |
| C10                 | <b>77AH</b>      |
| C5                  | <b>70AH</b>      |
| CCA                 | <b>510</b>       |
| CA or MCA           | <b>600</b>       |
| HPCA                | <b>1000 Amps</b> |
| Internal Resistance | <b>5.3m Ω</b>    |

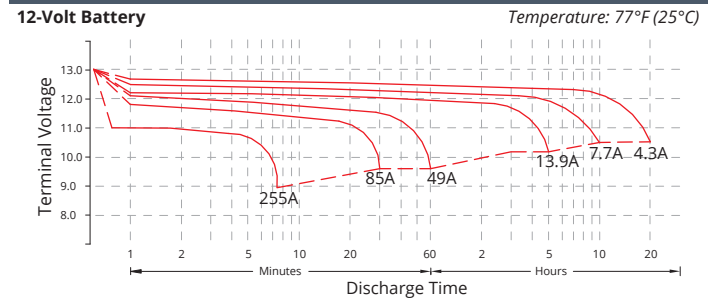
## MECHANICAL SPECIFICATIONS

|                      |  |                |
|----------------------|--|----------------|
| Group Size           | <b>24</b>                                      |                |
| Terminal Type        | <b>M8 with TP08 Brass AP</b>                   |                |
| Terminal Torque      | <b>See reverse side</b>                        |                |
| Height (w/ terminal) | <b>9.29"</b>                                   | <b>236mm</b>   |
| Height (case only)   | <b>8.31"</b>                                   | <b>211mm</b>   |
| Width                | <b>6.65"</b>                                   | <b>169mm</b>   |
| Length               | <b>10.24"</b>                                  | <b>260mm</b>   |
| Weight               | <b>55.3 lbs</b>                                | <b>25.1 kg</b> |
| Case Type            | <b>ABS Plastic - Flame Res. Rating UL94-HB</b> |                |

## DISCHARGE TABLE (Constant Current)

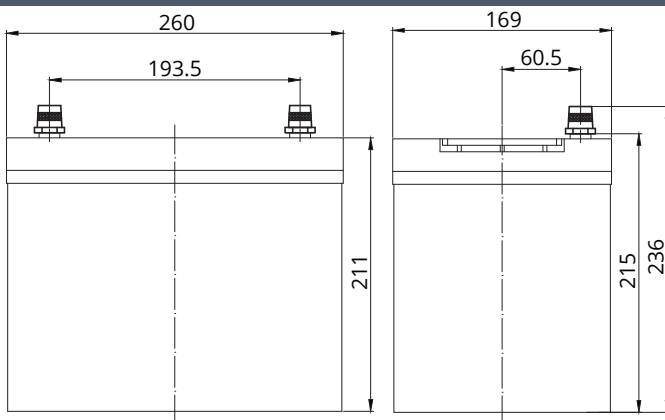
| Time | Amps | Rate   |
|------|------|--------|
| 20hr | 4.3  | 0.05CA |
| 10hr | 7.7  | 0.10CA |
| 8hr  | 9.2  | 0.13CA |
| 5hr  | 13.9 | 0.20CA |
| 3hr  | 19.2 | 0.33CA |
| 2hr  | 25.6 | 0.50CA |
| 1hr  | 48.3 | 1.00CA |

## DISCHARGE PROFILE (Constant Current)



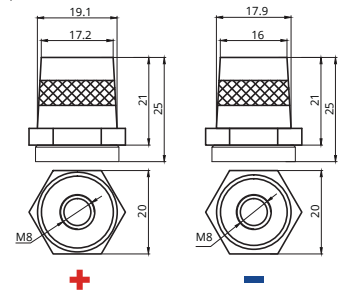
- All listed ratings are @ 100% SoC, T=77°F (25°C), 1.75VPC unless otherwise specified.  
 - Specifications listed are for estimation purposes only. Battery performance can vary depending on application. Battery design subject to change.

## BATTERY & TERMINAL DIMENSIONS (All units shown in mm)



Battery bank spacing required, 12.5mm (1/2" inch) minimum

### Terminal: M8 with TP08 Brass AP



(unit: mm)

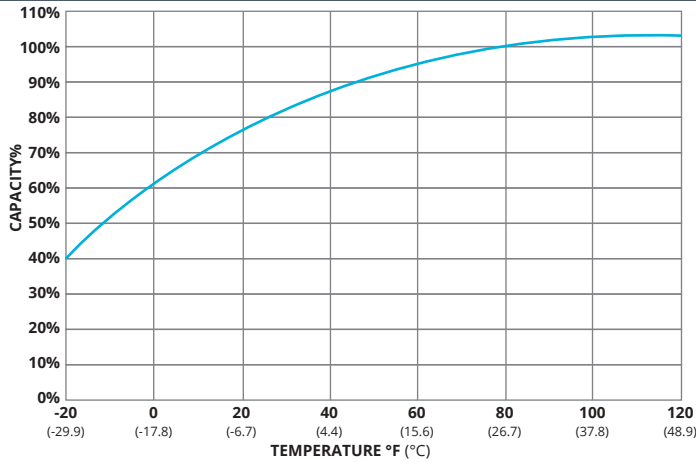
## Two Great Stores to choose from...

7 Cemetery Rd,  
Mackay QLD 4740  
Phone 07 4957 6123

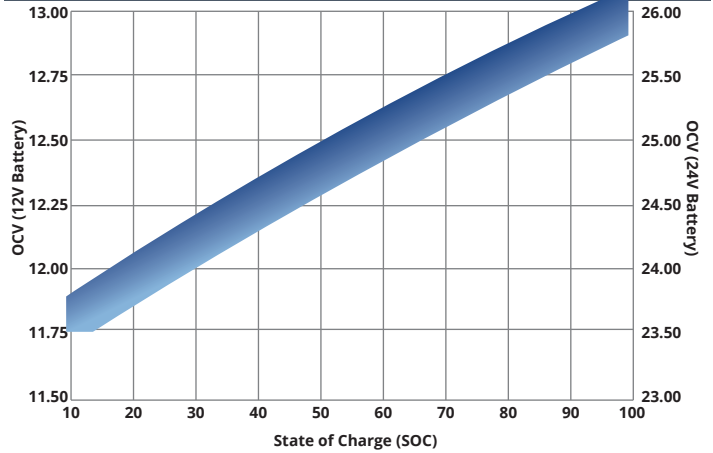
Unit 16, 547 Woolcock St,  
Mt Louisa, Townsville QLD 4814  
Phone 07 4774 7344

PREMIUM DEEP CYCLE SERIES | DEEP CYCLE AGM

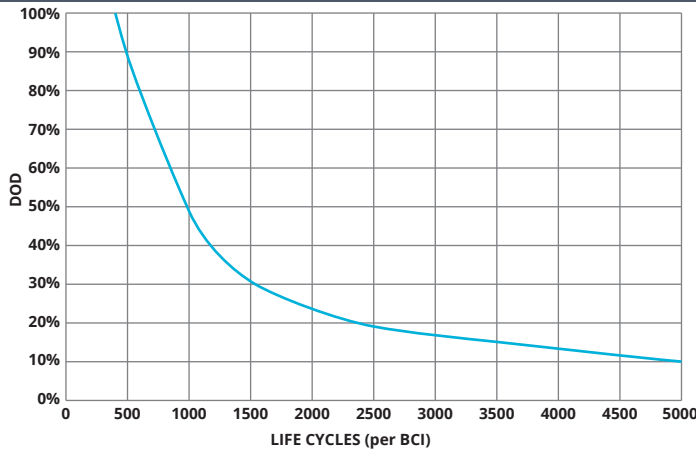
## TEMPERATURE vs CAPACITY



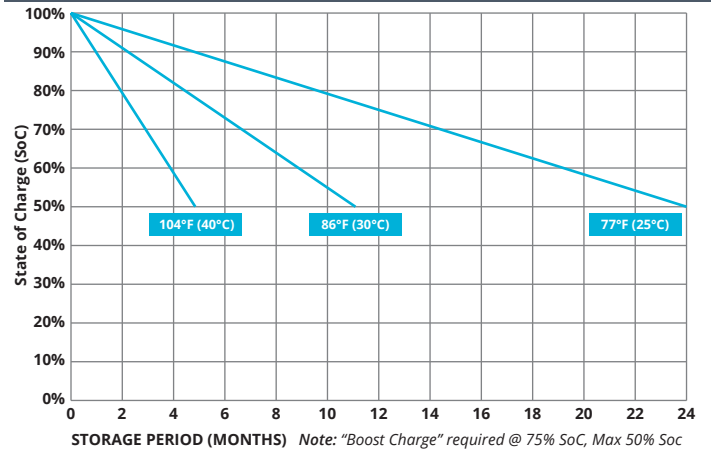
## STATE of CHARGE (SOC) vs OPEN CIRCUIT VOLTAGE (OCV)



## CYCLE LIFE vs DEPTH of DISCHARGE (DOD) \*(Based on BCI Testing @ 2-hr Rate)



## SELF DISCHARGE vs TIME/TEMPERATURE



## TEMPERATURE RANGE SPECIFICATIONS

| Condition      | Recommended   | Maximum        | Recommended   | Maximum       |
|----------------|---------------|----------------|---------------|---------------|
| Storage        | 5°F to 122°F  | -40°F to 160°F | -15°C to 50°C | -40°C to 71°C |
| Operation      | 5°F to 104°F  | -40°F to 160°F | -15°C to 40°C | -40°C to 71°C |
| Charge with TC | 5°F to 122°F  | -40°F to 160°F | -15°C to 50°C | -40°C to 71°C |
| Charge w/o TC  | 32°F to 104°F | 5°F to 122°F   | 0°C to 40°C   | -15°C to 50°C |

\*TC= Temperature Compensation

## CHARGE VOLTAGES

| Charge Stage | Battery Voltages |       |       |       |
|--------------|------------------|-------|-------|-------|
|              | 12V              | 24V   | 36V   | 48V   |
| Bulk         | 14.7V            | 29.4V | 44.1V | 58.8V |
| Absorption   | 14.7V            | 29.4V | 44.1V | 58.8V |
| Float        | 13.6V            | 27.2V | 40.8V | 54.6V |

TC Factor: (-2mV/°F/cell) or (-4mV/°C/cell)

## TERMINAL TORQUE SPECS (applicable values are highlighted)

| M6, AP        | M8            | M10           | M6M (Stud)    | M8M (Stud)    | M10M (Stud)   | 3/8" Stud     | FR45          | TP06 (AP)     | TP08/TP68 (AP) |
|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|
| 4.1-5.8ft-lbs | 7.1-7.9ft-lbs | 9.6-12ft-lbs  | 3.3-4.6ft-lbs | 4.9-6.3ft-lbs | 7.7-9.6ft-lbs | 8.9-12ft-lbs  | 5.8-7.4ft-lbs | 3.3-4.6ft-lbs | 50-70ft-lbs    |
| 50-70lbs-in   | 85-95lbs-in   | 115-141lbs-in | 40-56lbs-in   | 58-75lbs-in   | 92-115lbs-in  | 106-150lbs-in | 70-90lbs-in   | 40-56lbs-in   | 63-83lbs-in    |
| 5.6-7.9Nm     | 9.6-10.7Nm    | 13-16Nm       | 4.5-6.3Nm     | 6.6-8.5Nm     | 10.4-13Nm     | 12-16.9Nm     | 7.9-10.1Nm    | 4.5-6.3Nm     | 7.1-9.4Nm      |

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