**9 8 7 6 5 4 3 2 1**

**U**

**T**

0 2 4 6 8

Alimentation 12V

+

-

CAN

ARU

On/off

230 v

BATTERIE

USB

**- 1 23**

**R**

**Alim**

**- +**

**L+**

**B+**

**C+**

**Réponses 1) Analyse Structurelle :**

|  |  |  |  |
| --- | --- | --- | --- |
| N° élément | Désignation / Fonction ou Mesure | N° élément | Désignation / Fonction ou Mesure |
| 1 |  | 7 |  |
| 2 |  | 8 |  |
| 3 |  | 9 |  |
| 4 |  | 10 |  |
| 5 |  | 11 |  |
| 6 |  | 12 |  |

**Réponses 2) ANALYSE FONCTIONNELLE**

**2.1) Association des cellules :**

**2.2) Courant de Décharge  :**

**3) MESURES : 3.1) Décharge de 10% en 1/2 heure**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **DECHARGE** |  | Informations BMS | | | | | | | | Résistance SHUNT | |
| Temps (min) | SOC batterie (%) | | Capacité batterie (Ah)  **calculée** | U Cellule mini  (V ) | U Cellule maxi  (V ) | U batterie  ( V ) | T° cell mini  (°C) | T° cell  maxi  (°C) | Courant (A)  Valeur absolue | U mesuré  (mV) | I calculé  (A) |
| **0**  **Avant décharge** |  | |  |  |  |  |  |  |  |  |  |
| **10 secondes** |  | |  |  |  |  |  |  |  |  |  |
| **3** |  | |  |  |  |  |  |  |  |  |  |
| **6** |  | |  |  |  |  |  |  |  |  |  |
| **9** |  | |  |  |  |  |  |  |  |  |  |
| **12** |  | |  |  |  |  |  |  |  |  |  |
| **15** |  | |  |  |  |  |  |  |  |  |  |
| **18** |  | |  |  |  |  |  |  |  |  |  |
| **21** |  | |  |  |  |  |  |  |  |  |  |
| **24** |  | |  |  |  |  |  |  |  |  |  |
| **27** |  | |  |  |  |  |  |  |  |  |  |
| **30** |  | |  |  |  |  |  |  |  |  |  |
|  |  | |  |  |  |  |  |  |  |  |  |
| **Evolution en %** |  | |  |  |  |  |  |  |  |  |  |

**3.1) Décharge de 20% en 20 min**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **DECHARGE** |  | Informations BMS | | | | | | | | Résistance SHUNT | |
| Temps (min) | SOC batterie (%) | | Capacité batterie (Ah)  **calculée** | U Cellule mini  (V ) | U Cellule maxi  (V ) | U batterie  ( V ) | T° cell mini  (°C) | T° cell  maxi  (°C) | Courant (A)  Valeur absolue | U mesuré  (mV) | I calculé  (A) |
| **0**  **Avant décharge** |  | |  |  |  |  |  |  |  |  |  |
| **10 secondes** |  | |  |  |  |  |  |  |  |  |  |
| **2** |  | |  |  |  |  |  |  |  |  |  |
| **4** |  | |  |  |  |  |  |  |  |  |  |
| **6** |  | |  |  |  |  |  |  |  |  |  |
| **8** |  | |  |  |  |  |  |  |  |  |  |
| **10** |  | |  |  |  |  |  |  |  |  |  |
| **12** |  | |  |  |  |  |  |  |  |  |  |
| **14** |  | |  |  |  |  |  |  |  |  |  |
| **16** |  | |  |  |  |  |  |  |  |  |  |
| **18** |  | |  |  |  |  |  |  |  |  |  |
| **20** |  | |  |  |  |  |  |  |  |  |  |
|  |  | |  |  |  |  |  |  |  |  |  |
| **Evolution en %** |  | |  |  |  |  |  |  |  |  |  |

**3.2) Mesure de la trame CAN :**



**3.3) Charge :**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **CHARGE** |  | Informations BMS | | | | | | | |  |
| Temps (min) | SOC batterie (%) | | Capacité batterie (Ah)  **calculée** | U Cellule mini  (V ) | U Cellule maxi  (V ) | U batterie  ( V ) | T° cell mini  (°C) | T° cell  maxi  (°C) | Courant de charge (A) | Puissance de charge (W)  **calculée** |
| **0**  **Avant la charge** |  | |  |  |  |  |  |  |  |  |
| **30 secondes** |  | |  |  |  |  |  |  |  |  |
| **1** |  | |  |  |  |  |  |  |  |  |
| **2** |  | |  |  |  |  |  |  |  |  |
| **10** |  | |  |  |  |  |  |  |  |  |
| **30** |  | |  |  |  |  |  |  |  |  |
| **45** |  | |  |  |  |  |  |  |  |  |
| **60** |  | |  |  |  |  |  |  |  |  |
| **75** |  | |  |  |  |  |  |  |  |  |
| **90** |  | |  |  |  |  |  |  |  |  |
| **105** |  | |  |  |  |  |  |  |  |  |
| **115** |  | |  |  |  |  |  |  |  |  |
|  | **100%** | |  |  |  |  |  |  |  |  |
|  | **100% Fin de charge** | |  |  |  |  |  |  |  |  |