

Datasheet gel type VRLA batteries

12V 40 Ah

1. Physical data

Box data

| Battery | | | CHG cond. | Ter- minal | Lid colour | Length max. | Length basic | Width max. | Width basic | Lid height | Height max. | Weight |
|---------|----|----------------|-----------|------------|------------|-------------|--------------|------------|-------------|------------|-------------|--------|
| type | V | C ₅ | series | | box | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] | [kg] |
| GF | 12 | 040 | Y | | | 242 | 242 | 175 | 175 | 190 | 190 | 16,0 |

Tightening torque values of connectors to terminal conical terminal according EN 60095-2

8 ± 1Nm

2. Performance data

| Discharge rate | Capacity | End Of DCH voltage DOD | | Effective DCH time DOD | | Energy density | | Power density | |
|----------------|-------------|------------------------|-------------|------------------------|------------|----------------|-------------|---------------|------------|
| | | 60% | 80% | 60% | 80% | [Wh/L] | [Wh/kg] | [W/L] | [W/kg] |
| [h] | [Ah] | [V] | | [h] | | [Wh/L] | [Wh/kg] | [W/L] | [W/kg] |
| 20,0 | 48,0 | 2,01 | 1,98 | 10,0 | 13,3 | 77,2 | 36,2 | 3,9 | 1,8 |
| 10,0 | 43,5 | 2,00 | 1,97 | 5,5 | 7,4 | 69,6 | 32,6 | 7,0 | 3,3 |
| 5,0 | 40,0 | 1,98 | 1,93 | 3,0 | 4,0 | 62,7 | 29,4 | 12,5 | 5,9 |
| 3,0 | 37,7 | 1,96 | 1,89 | 1,9 | 2,5 | 58,8 | 27,6 | 19,6 | 9,2 |
| 2,0 | 35,7 | 1,93 | 1,78 | 1,3 | 1,8 | 54,3 | 25,4 | 27,1 | 12,7 |
| 1,0 | 32,0 | 1,90 | 1,63 | 0,8 | 1,0 | 47,6 | 22,3 | 47,6 | 22,3 |
| 0,5 | 27,9 | 1,57 | 1,57 | 0,4 | -- | 40,4 | 18,9 | 80,8 | 37,9 |
| 0,2 | 21,6 | 1,40 | 1,40 | -- | -- | 30,9 | 14,5 | 154,7 | 72,5 |

Typical values after 20 - 50 C₅ cycles at 30 °C

Recommended max. load *) 80 A

*) With appropriate counter contacts only

Cyclic endurance according IEC 254-1 450

Temperature regime (depending on DOD) -20 °C up to 50 °C

Typical operational temperature regime 5 °C up to 40 °C

3. Charging

Charging profile(s) IU1a

according GNB specification

Fast charge possible

We reserve the right to discontinue or change the specification at any time without notice or obligation

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