

Product design features:

- EUROBAT specification Long Life 12+ years
- Extremely high float life performance
- Low self discharge rates
- Low internal resistance
- Wide range of operating temperature -20°C to +55°C
- Compact design with high energy density
- ETSI Rack integration
- One-way valve regulated system with flame-arrestor
- Internal gas recombination efficiency 98% - 99%
- Low installation cost, maintenance free product
- Delivered ready for use
- Shock resistant FR ABS container and lid
- Sealed for leak-free operation, inline automatic tested
- Female M8 brass terminals with no need for retightening
- Non-hazardous cargo for ground, sea and air transport
- Fully recyclable product

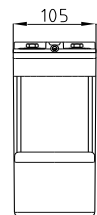
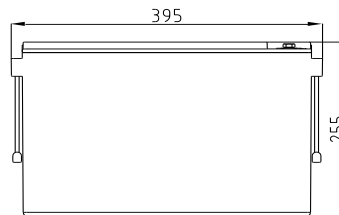
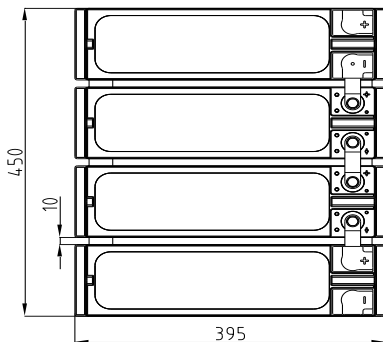
ISO 9001, ISO 14001, OHSAS 18001, AQAP 2110



All VRLA batteries are fully compliant with IEC 60 896 - 21/22, EN 60 896 - part 2, BS 6290 - part 4

Specifications:

- Nominal Voltage: 12V
- Terminal type: Front
- Grid alloy: Lead-Calcium-Tin alloy
- Plates: Flat Pasted
- Separators: AGM
- Active material: Very high purity lead
- Case and cover: FR ABS class V0
- Carrying Handles: Yes
- Terminal torque: 8 Nm
- Electrolyte: Sulphuric acid, Analytical grade purity
- Venting Valve: One way, self resealing,
  - Opening pressure 120 mBar
  - Resealing pressure 105 mBar
- Central degassing system: Available
- Terminal sealing: Mechanical + epoxy double sealing
- Connectors: Supplied as standard
- Shelf life: Up to 1 year



**Mechanical Characteristics**

	SI Units	US Units
<b>Length</b>	395 mm	15.55 inches
<b>Width</b>	105 mm	4.13 inches
<b>Height</b>	255 mm	10.04 inches
<b>Typical Weight</b>	23.8 kg	52.47 lbs
<b>Terminal Torque</b>	8.0 Nm	70.8 in.lbs

Performance characteristics:

- Charging voltage: Float 2.27 – 2.29 Vpc at (20-25°C)  
Boost charge 2.40 Vpc at 20°C
- Temperature compensation: -3mV/°C
- Short Circuit Current: 1550 A (IEC 60 896 -21/22)
- Internal resistance: 8.1 mOhms (IEC 60 896 -21/22)
- Recommended End of Discharge voltage:
  - From 5 min to 1 hour: 1.65 Vpc
  - From 1 to 5 hours: 1.70 Vpc
  - From 5 to 8 hours: 1.75 Vpc
  - From 8 to 20 hours: 1.80 Vpc
- Self discharge: Less than 2.5% per month at 20°C
- Storability without recharging: Up to 6 months at 20°C

**Performance and characteristics at different temperatures (capacity correction)**

Discharge time	0 °C	5 °C	10 °C	15 °C	20 °C	25 °C	30 °C	35 °C	40 °C
<b>From 5 to 59 minutes</b>	0.77	0.83	0.87	0.92	0.96	1	1.02	1.05	1.06
<b>From 1 to 24 hours</b>	0.83	0.87	0.91	0.94	0.97	1	1.02	1.03	1.04

**Battery capacity at constant current discharge (Ah) for battery 12MVR65TA at 25°C**

Uf, Vpc	5 min	15 min	30 min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h	20 h
<b>1.60</b>	19.17	29.25	35.0	46.0	52.6	58.0	60.0	66.0	69.6	72.0	72.5	80.0
<b>1.65</b>	17.67	28.75	34.0	45.5	52.2	57.5	59.6	65.5	68.4	71.2	72.0	79.0
<b>1.70</b>	16.33	28.0	33.5	44.5	51.6	57.0	59.2	65.0	67.2	70.4	71.5	78.0
<b>1.75</b>	14.00	26.0	32.5	44.0	50.8	56.5	58.8	64.0	66.0	69.6	71.0	77.0
<b>1.80</b>	11.75	24.5	31.5	43.0	50.4	56.0	58.0	63.0	64.5	65.8	70.0	76.0
<b>1.85</b>	9.17	21.0	28.5	41.5	48.6	54.0	56.4	60.0	61.2	65.6	67.5	75.0

**Discharge performance at constant current discharge (A) for battery 12MVR65TA at 25°C**

Uf, Vpc	5 min	15 min	30 min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h	20 h
<b>1.60</b>	230.0	117.0	70.0	46.0	26.3	19.3	15.0	13.2	11.6	9.0	7.25	4.0
<b>1.65</b>	212.0	115.0	68.0	45.5	26.1	19.2	14.9	13.1	11.4	8.9	7.2	3.95
<b>1.70</b>	196.0	112.0	67.0	44.5	25.8	19.0	14.8	13.0	11.2	8.8	7.15	3.9
<b>1.75</b>	168.0	104.0	65.0	44.0	25.4	18.8	14.7	12.8	11.0	8.7	7.1	3.85
<b>1.80</b>	141.0	98.0	63.0	43.0	25.0	18.6	14.6	12.6	10.8	8.5	7.0	3.8
<b>1.85</b>	110.0	84.0	57.0	41.5	24.3	18.0	14.1	12.0	10.2	8.2	6.75	3.75

**Discharge performance at constant power discharge (W per cell) for battery 12MVR65TA at 25°C**

Uf, Vpc	5 min	15 min	30 min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h	20 h
<b>1.60</b>	427.0	220.0	133.0	88.0	81.8	36.1	29.5	26.0	21.4	18.0	15.1	8.45
<b>1.65</b>	408.0	216.0	130.0	86.0	51.4	36.0	29.3	25.9	21.3	17.85	15.0	8.35
<b>1.70</b>	372.0	210.0	127.0	85.0	51.0	35.9	29.1	25.7	21.2	17.65	14.6	8.3
<b>1.75</b>	344.0	199.0	125.0	84.0	50.9	35.4	28.9	25.4	20.8	17.45	14.2	8.2
<b>1.80</b>	308.0	183.0	120.0	82.0	50.3	34.9	28.4	25.0	20.5	17.0	14.0	8.1
<b>1.85</b>	254.0	162.0	111.0	80.0	48.7	33.3	27.6	23.7	19.6	16.1	13.3	7.6