

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

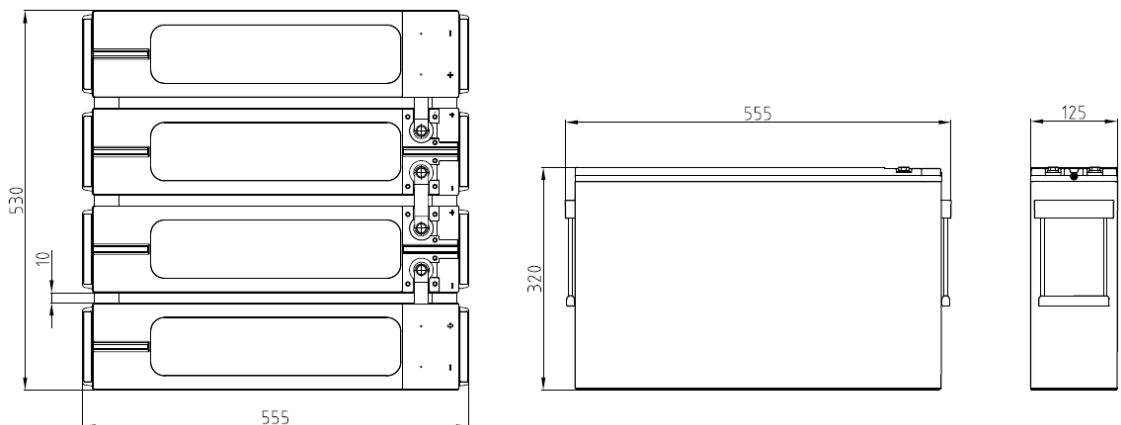
ISO 9001, ISO 14001, OHSAS 18001, AQAP 2110



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>	555 mm	21.8 inches
<b>Width</b>	125 mm	4.9 inches
<b>Height</b>	320 mm	12.6 inches
<b>Typical Weight</b>	58.5 kg	128.97 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: 3200 A (IEC 60 896 -21/22)
- Internal resistance: 3.89 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 12MVR200 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>	45.4	84.7	111.5	129.0	153.0	156.3	168.0	173.9	183.7	192.5	195.4	209.0
<b>1.65</b>	44.7	82.0	109.5	125.5	152.0	155.2	166.8	172.0	182.4	191.1	194.0	208.0
<b>1.70</b>	41.4	79.0	106.0	118.0	146.0	153.0	164.0	171.0	180.2	190.4	193.0	206.5
<b>1.75</b>	36.8	74.5	100.5	117.4	140.0	150.2	159.8	169.4	177.6	189.6	192.5	206.0
<b>1.80</b>	31.8	69.5	87.0	115.9	136.8	148.2	157.7	167.2	171.0	187.2	190.0	202.0
<b>1.85</b>	28.0	61.2	83.5	112.0	135.0	145.5	155.2	164.6	168.3	184.0	187.0	198.0

**Discharge performance at constant current discharge (A) for battery 12MVR200 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>	545	339	223	129.0	76.5	52.1	42.0	34.8	30.6	24.06	19.5	10.5
<b>1.65</b>	537	328	219	125.5	76.0	51.7	41.7	34.4	30.4	23.9	19.4	10.4
<b>1.70</b>	497	316	212	118.0	73.0	51.0	41.0	34.2	30.0	23.8	19.3	10.3
<b>1.75</b>	442	298	201	117.4	70.0	50.0	39.9	33.8	29.6	23.7	19.2	10.3
<b>1.80</b>	382	278	174	115.9	68.4	49.4	39.4	33.4	28.5	23.4	19.0	10.2
<b>1.85</b>	336	245	167	112.0	67.5	48.5	38.8	32.9	28.0	23.0	18.7	9.9

**Discharge performance at constant power discharge (W per cell) for battery 12MVR200 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>	897.0	607.5	414.9	244.8	148.6	101.5	82.6	68.8	61.0	48.2	39.2	21.3
<b>1.65</b>	891.9	585.8	406.5	237.3	147.5	100.6	82.0	67.9	60.5	47.9	38.9	21.1
<b>1.70</b>	807.7	560.9	391.7	221.3	140.9	99.1	80.4	67.5	59.6	47.6	38.7	20.9
<b>1.75</b>	706.9	524.8	368.7	220.0	134.4	96.9	78.0	66.6	58.7	47.4	38.5	20.8
<b>1.80</b>	598.9	484.9	313.0	216.8	130.9	95.6	76.9	65.7	56.2	46.7	38.0	20.6
<b>1.85</b>	517.7	420.0	298.7	208.5	128.9	94.0	75.5	64.6	55.1	45.8	37.3	19.9