VARTA bloc range Vb 12142…Vb 6159

Application

VARTA bloc batteries are long life industrial batteries and were developed for universal use in reserve power supply equipment where there are high safety requirements.
They are suitable for short discharge times at high currents and for capacitive discharge over longer periods.
They are used as reserve power supplies in power stations, nuclear power stations, transformer stations, information technology equipment, UPS, industrial equipment and power storage in solar power installations.

Construction

Positive Electrode	Rod plate with VARTA-low antimony alloy (Sb-content: 1.6%)
Negative Electrode	Grid plate with lead calcium alloy
Separation	Micro-porous separator, combined with glass fibre mat
Casing Material	Modified Acrylonitrile-butadiene-styrene (ABS) with high impact resistance, transparent
Electrolyte	Dilute sulphuric acid d = 1.24 kg/l
Terminal Design	Leakproof VARTA safety pole with brass insert, M8
Connectors	Solid copper (20 x 3 mm), insulated, bolt-on type
Vent Plugs	VARTA safety plugs with flame arrestor, optional ceramic vent plug
Charging	Float charge voltage: 2.23 volts/cell at 20°C
Temperature Range	0°…+55°C (Preferred value 20°C)

Installation

All standard types of installation are permissible.
Due to the improved energy density, area required for installation is reduced.
For use in earthquake zones special approved racking is available. When installing in battery rooms the local safety provisions must be adhered to.

Features

- **12V / 6V bloc batteries**
- **Economical, universal use** for all modes of discharge
- Leakproof **VARTA Safety Pole**, proven in operation
- **VARTA-Safety vent plug** with flame arrestor, optional ceramic vent plug
- **Maintenance free to DIN standards > 5 years** in standby parallel operation
- **Long service life** due to VARTA Rod plate technology
- **Vent plug strip and grip slots integrated in cover**, smooth sides, attractive design

EnerSys Canada Inc.• 392 Deerhurst Drive, Brampton, Ontario L6T 5H9
Tel: (905) 790-0730 • 1-888-842-2288 • Fax: (905) 790-0744 • www.vhbbatteries.com

Technical data

Type designation	Capacity (Ah) C_{10}	C_8	C_1	Inner resistance	Theoretical short circuit current	Cell dimensions (mm) L	W	H*	(inch) L	W	H*	Weight [kg] Cell wt w. elec.	Elec. wt	[lb] Cell wt w. elec.	Elec. wt
	Final voltage 1.80	1.75	1.65	without connectors,loade [mOhm/blocb	[A]										
12 V monoblocs															
Vb 12142	34.4	33.8	22.5	12.2	983	221	176	277	8.70	6.93	10.91	20.8	5.4	45.9	11.9
Vb 12143	51.6	50.7	33.7	8.10	1487	221	176	277	8.70	6.93	10.91	24.8	5.3	54.7	11.7
Vb 12144	68.8	67.6	44.8	6.10	1960	311	176	277	12.24	6.93	10.91	33.7	7.8	74.3	17.2
Vb 12146	103	101	67.3	4.10	2934	389	176	277	15.31	6.93	10.91	45.6	9.7	101	21.4
Vb 12147	121	118	78.5	3.50	3433	469	176	277	18.46	6.93	10.91	53.5	12.0	118	26.5
Vb 12149	155	152	101	2.70	4399	553	176	277	21.77	6.93	10.91	65.5	14.5	144	32.0
6 V monoblocs															
Vb 6157	197	195	127	1.70	3604	284	229	332	11.18	9.02	13.07	45.8	12.5	101	27.6
Vb 6159	253	251	163	1.30	4610	284	229	332	11.18	9.02	13.07	51.6	11.4	114	25.1

The electrical values shown in the table relate to loadings from a fully charged condition and an ambient temperature of + 25 °C.

* Height includes connectors.

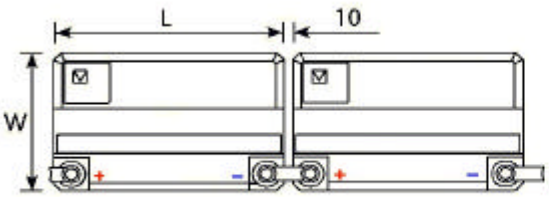
Project planning data

Final voltage = 1.75V/cell **discharge current in A**

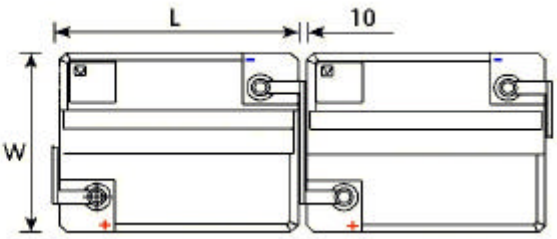
Type	30"	1'	2'	3'	5'	7'	10'	15'	20'	30'	1h	2h	3h	5h	8h	10h
Vb 12142	119	117	109	100	88	78.1	67	55	46.2	35.7	21.9	13.1	9.47	6.33	4.22	3.49
Vb 12143	179	176	163	150	131	117	101	82	69.3	53.6	32.9	19.7	14.2	9.50	6.33	5.23
Vb 12144	239	234	217	201	175	156	135	110	92.5	71.4	43.9	26.2	18.9	12.7	8.45	6.97
Vb 12146	358	351	326	301	263	234	202	165	139	107	65.8	39.3	28.4	19.0	12.7	10.5
Vb 12147	417	410	380	351	307	273	235	192	162	125	76.8	45.9	33.1	22.2	14.8	12.2
Vb 12149	537	527	489	451	394	351	303	247	208	161	98.7	59.0	42.6	28.5	19.0	15.7
Vb 6157	485	485	471	448	408	376	335	285	245	196	124	74.3	54.0	36.2	24.4	20.0
Vb 6159	624	624	597	570	521	480	428	364	316	251	159	95.5	69.4	46.5	31.4	25.7

The current levels shown in the tables relate to loadings from a fully charged condition and an ambient temperature of + 25 °C.
Connector losses are taken into account.

Vb 12142-Vb 12149



Vb 6157-Vb 6159



All dimensions and weights shown are subject to the usual manufacturing tolerances. Electrical values are approximate.
The right is reserved to make alterations with a view to technically improved execution without prior notice.