

Technical Specification for Stationary VRLA - Block - Batteries

1. Application

BAE OGiV - batteries are maintenance-free and classified as >12 years, long life, the highest class according to EUROBAT. Where operational safety has top priority and short bridging times of 15 min to several hours are required, BAE OGiV is the right choice.

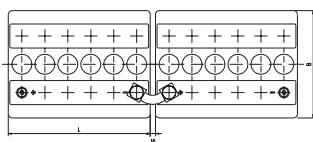
They are used as reserve power in telecommunications, radio relay stations, switching stations of utilities, emergency light equipment and uninterrupted power supplies.



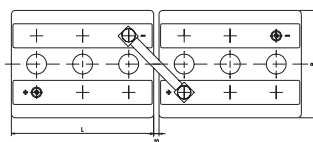
2. Types, capacities, dimensions, mass

Type	C10 20 °C Ah	C5 20 °C Ah	C3 20 °C Ah	C1 20 °C Ah	C1/2 20 °C Ah	C1/6 20 °C Ah	C 8 25 °C Ah	Ri 1) mΩ	I _{SC} 2) kA	length mm	width mm	height (max.) mm	mass kg
Ue V / cell	1,80	1,79	1,78	1,74	1,70	1,60	1,75						
12 V 1 OGiV 25	28	23	22,2	18,3	15,7	12,1	25,6	19,20	0,65	272	205	385	35
12 V 2 OGiV 50	51	46,5	44,4	36,6	31,5	24,1	50,4	9,60	1,29	272	205	385	44
12 V 3 OGiV 75	77	70	66,6	54,6	47,2	36,3	75,2	6,40	1,94	272	205	385	53
12 V 4 OGiV 100	101	93,5	89,1	73,2	63	48,3	100	4,80	2,59	272	205	385	62
12 V 5 OGiV 125	130	113	108	91	78	59,8	126	3,84	3,23	380	205	385	84
12 V 6 OGiV 150	157	136	130	108	93	71	150	3,20	3,88	380	205	385	93
6 V 7 OGiV 175	178	153	150	125	107	82,2	175	1,37	4,53	272	205	385	53
6 V 8 OGiV 200	205	179	172	142	122	93,3	200	1,20	5,18	272	205	385	57
6 V 9 OGiV 225	229	203	191	161	135	103	226	1,07	5,82	380	205	385	73
6 V 10 OGiV 250	255	228	218	180	148	112	250	0,96	6,47	380	205	385	78
6 V 11 OGiV 275	281	255	241	198	161	121	275	0,87	7,12	380	205	385	81
6 V 12 OGiV 300	308	281	266	216	175	130	300	0,80	7,76	380	205	385	85
2 V 24 OGiV 600	615	536	517	427	366	280	600	0,13	15,54	205	272	385	57
2 V 30 OGiV 750	765	684	653	539	444	335	751	0,11	19,31	205	380	385	81
2 V 36 OGiV 900	924	843	799	648	525	390	900	0,09	23,28	205	380	385	85

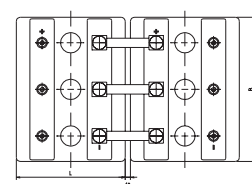
1, 2) internal resistance and short-circuit-current according to IEC 60 896-21, -22



12 V 1 OGiV 25 to 12 V 6 OGiV 150



6 V 7 OGiV 175 to 6 V 12 OGiV 300



2 V 24 OGiV 600 to 2 V 36 OGiV 900

Technical Specification for BAE SECURA OGiV BLOCK

3. Design

positive electrode	round-grid plate with circular bars in a corrosion-resistant PbCaSn alloy
negative electrode	flat plate with long life expander and PbCaSn alloy
separation	microporous separator
electrolyte	sulphuric acid of 1,24 kg/l, fixed as GEL by fumed silica
container	grey coloured, high-impact SAN, UL-rating 94 HB
lid	grey coloured, high-impact SAN, UL-rating 94 HB (as option: container and lid made from ABS, UL rating UL 94VO)
blocks with blind cells	4 V, 6 V, 8 V, 10 V
pole bushing	100% gas- and electrolyte-tight, sliding, injection-moulded Panzer pole
pole	with M10 brass inlay
valve	one valve per cell with flame arrestor, opening pressure approx. 100 mbar, closing pressure approx. 50 mbar
connector	insulated solid copper connector, cross section 90, 150 or 300 mm ² or flexible insulated copper cable, cross section 35, 50, 70, 95 or 120 mm ²
connector screw	M 10, steel, insulated
protection	IP 25 according to DIN 40050, touch-protected according to VBG 4
horizontal operation	Please use special type BAE OGiV „horizontal“. The construction and production of this type is adapted to the horizontal operation.

4. Charging

IU - characteristic	I_{max} without limitation $U = 2,25 \text{ V/cell} \pm 1\%$, between 10°C and 45°C $\Delta U/\Delta T = -0,003 \text{ V/K}$ below 10°C in the monthly average
float current	20–30 mA/100 Ah
boost charge	$U = 2,35 \text{ V/cell}$, time limited
charging time up to 92%	6 h with $1,5 \times I_{10}$ initial current, 2,23 V/cell, 80% C3 discharged

5. Discharge characteristics

reference temperature	20°C
initial capacity	100%
depth of discharge (DOD)	normally up to 80%
deep discharges	more than 80% DOD or discharges beyond final discharge voltages (dependent on discharge current) have to be avoided the GEL design allows a complete recharging after an unwanted deep discharge
deep discharge recovery	

6. Maintenance

every 6 months	check battery voltage, pilot block voltage, temperature
every 12 months	record battery and block voltages and temperatures

7. Operational data

classification according to EUROBAT	> 12 years, long life
operational life	15 years in standby operation, float
maintenance-free	no topping-up during life
IEC 60 896-2 cycles	> 800
self-discharge	approx. 2% per month at 20°C
operational temperature	-20°C to 45°C recommended 10°C to 30°C 45°C to 55°C only for short periods
deep discharge recovery	very good
dimensions according to test standards	DIN 40737, part 3
safety standard, ventilation	IEC 60 896-21, -22
transport	EN 50 272-2 Batteries are not subject to ADR (road transport), if the conditions of the special rule 598 (chapter 3.3) are observed.



BAE Batterien GmbH
Wilhelminenhofstraße 69/70
12459 Berlin · Germany
P.O. Box 9 · 12442 Berlin · Germany
Tel. +49 30 53001-647
Fax +49 30 53001-675
E-mail: international@bae-berlin.de
www.bae-berlin.de