

BAE SECURA OGiV BLOCK

Technical Specification for Stationary VRLA – Block Batteries

1. Application

BAE OGiV - Batteries belongs to the best EUROBAT classification for maintenance free lead-acid batteries. These are classified as >12 years, long life, the highest classification according to EUROBAT.

Where operational safety has top priority and short autonomy times of 15min to several hours are required, the OGiV is the right choice.

Application Uses:

- UPS and Data centres
- Telecommunications
- Microwave radio systems
- Emergency lighting
- Electrical utilities applications
- Diesel generating starting



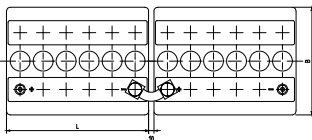
2. Types, capacities, dimensions, mass

Type	C10 20°C	C _{15min} 25°C	C _{15min} 25°C	C1 25°C	C3 25°C	C8 25°C	R _i 1)	I _{Ks} 2)	length	width	height (Max)	Mass
U _e V / cell	Ah	Amps	Amps	Amps	Amps	Amps	mΩ	kA	inch	inch	inch	lbs
12V 1 OGiV 25	28	87	47	19	7.6	3.2	19.20	0.65	10.71	8.07	15.16	77.35
12V 2 OGiV 50	51	174	95	37	15	6.3	9.60	1.29	10.71	8.07	15.16	97.24
12V 3 OGiV 75	77	261	142	56	23	9.4	6.40	1.94	10.71	8.07	15.16	117.13
12V 4 OGiV 100	101	349	190	75	31	12.5	4.80	2.59	10.71	8.07	15.16	137.02
12V 5 OGiV 125	130	421	234	93	37	15.7	3.84	3.23	14.96	8.07	15.16	185.64
12V 6 OGiV 150	157	495	280	111	45	18.8	3.20	3.88	14.96	8.07	15.16	205.53
6V 7 OGiV 175	178	596	323	128	51	21.9	1.37	4.53	10.71	8.07	15.16	117.13
6V 8 OGiV 200	205	641	369	146	59	25.0	1.20	5.18	10.71	8.07	15.16	125.97
6V 9 OGiV 225	229	678	397	164	67	28.2	1.07	5.80	14.96	8.07	15.16	161.33
6V 10 OGiV 250	255	715	421	183	75	31.3	0.96	6.47	14.96	8.07	15.16	172.38
6V 11 OGiV 275	281	752	446	202	83	34.4	0.87	7.14	14.96	8.07	15.16	179.01
6V 12 OGiV 300	308	789	472	220	92	37.5	0.80	7.76	14.96	8.07	15.16	187.85
2V 24 OGiV 600	615	1,920	1,180	438	177	75.0	0.13	15.53	14.96	8.07	15.16	125.97
2V 30 OGiV 750	765	2,145	1,260	549	225	93.9	0.11	19.41	14.96	8.07	15.16	179.01
2V 36 OGiV 900	924	2,367	1,416	660	276	112.5	0.09	23.29	14.96	8.07	15.16	187.85

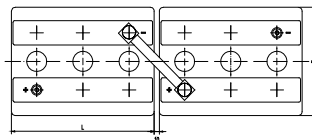
1) 2) internal resistance and short-circuit current according to IEC 896-11

3) dry-charged

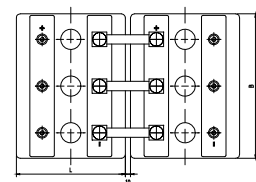
4) filled and charge



12V 1 OGiV 25 to 12V 6 OGiV 150



6V 7 OGiV 175 to 6V 12 OGiV 300



2V 24 OGiV 600 to 2V 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	grid - plate in a PbCaSn alloy with long - life expander material
Separation	microporous separator
Electrolyte	sulphuric acid with a density of 1.24 kg/l, fixed as a GEL by fumed silica
Container and lid	high impact SAN (Styrol-Acrylic-Nitrile), grey coloured, UL-94 rating: HB (Alternatively container and lid in ABS(Acrylonitrile-Butadiene-Styrene), UL-94 rating: V0)
Blocks with blind cells	4V, 8V, and 10V
Valve	valve with flame arrestor, opening pressure approx. 120 mbar, closing pressure approx. 50 mbar
Pole - bushing	100% gas- and electrolyte-tight, sliding, injection moulded "Panzerpol"
Kind of pole	M10 brass insertion
Intercell connectors	insulated PVC coated solid copper connectors with cross-sections of 90, 150 or 300 mm ² depending upon application
Inter-tier connectors	flexible insulated copper cables
Connector screw	M10 stainless steel with insulated cap
Kind of protection	IP 25 regarding DIN 40050, touch protected according VBG 4.
Horizontal operation	Please use BAE special type OGiV "horizontal". The construction and production of this type is adapted to the horizontal operation.

4. Charging

IU - characteristic	I_{max} without limitation $U = 2,25V/cell \pm 1\%$, between 10°C and 45°C (50°F to 113°F) $\Delta U/\Delta T = -0,003 V/K$ below 10°C in the monthly average
float current	20 – 30 mA/100Ah
boost charge	$U = 2,33$ to $2,40V/cell$, time limited
charging time up to 92%	6h with $1,5 \cdot I_{10}$ initial current, 2.25 V/cell, 50% C10 discharged

5. Discharge characteristics

reference temperature	25°C (77°F)
initial capacity	according to IEC 60896-21: 95% or greater
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

6. Maintenance

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

7. Operational data

Classification according to EUROBAT	> 12 years, Long life
Operational life	15 to 20 years in stand-by operation, float at 20°C to 25°C (68°F to 77°)
Maintenance-free	no topping off water during life
IEC 60 896-2 cycles	>800
Self-discharge	approx. 2% per month at 25°C (68°F)
Operational temperature	-20°C to 45°C (-4°F to 113°F), recommended 10°C to 30°C (50°F to 86°F), short-periods 45°C to 55°C (113°F to 131°F)
Standard	DIN 40 742 part 1
Tests according to	IEC 60 896 - 21, -22
Safety standard, ventilation	DIN EN 50 272-2, Ventilation requirements are reduced to 20% compared to those for vented batteries of the same capacity
Transport	Batteries are not subject to ADR (road transport), if the conditions of the special rule (chapter 3.3) are observed.

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ENERGY FROM BATTERIES

