

PowerSafe™
GC



**PERFORMANCE
SPECIFICATIONS**

EnerSys™

Power/Full Solutions



PowerSafe™ GC

The PowerSafe™ GC battery is a calcium flat plate battery specifically designed for power plant applications. Its copper inserted posts are designed to efficiently handle high load currents while the thick positive plates sustain long power demands. The time proven Slide-Lock™ post seal provides flexibility between the battery post and cover which compensates for natural plate growth as the battery ages. This virtually eliminates post seal leaks assuring optimum performance over the battery's useful service life.

Features

- Nominal Capacity - 930 Ah to 3900 Ah at the 8 hour rate.
- High Rate Performance - Copper inserted posts assure efficient high rate performance with minimum connector re-torquing requirements.
- Life - The battery has an expected design life of 20 years at 77°F under float service.
- Loads - The battery is designed to handle complex load profiles requiring high load currents as well as long duration discharges.
- Construction - Cover made from Flame Retardant PVC (UL94-V0/L.O.I.32%) as standard.
- Application - The battery is ideally suited for power plant, power switching and standby power applications.

Specifications

- Plate thickness:
Positive: 0.30 in/7.6 mm
Negative: 0.20 in/5.1 mm
- Plate suspension type:
Positive: Bridge hung
Negative: Bottom supported
- Sediment space: 0.87 in/22 mm
- Electrolyte over plates: 3.9 in/100 mm
- Specific Gravity: 1.215 (1.250 available upon request)
- Container:
Styrene Acrylonitrile Copolymer
GC-25 to 45 available in optional Flame Retardant PVC (UL94-VO/L.O.I. 32%)
- Cover: Made from Flame Retardant PVC (UL94-VO/L.O.I. 32%)
- Separators: Microporous rubber
- Retainers: "Vitrex"- glass fiber
- Bolt connectors: Stainless steel, standard English measure, hex-head
- Intercell connectors: Lead-plated copper
- Float voltage setting:
Acceptable min/max: 2.17/2.26Vpc
Recommended: 2.25Vpc
- Vent type: Flame Arrestor, Fused Alumina
- Electrolyte withdrawal tube: One per cell
- Post type:
Lead-plated copper insert
GC-9 to GC-15 - one positive post and one negative post per cell
GC-17 to GC-45 - two positive posts and two negative posts per cell
- Post seal type: Slide-Lock™

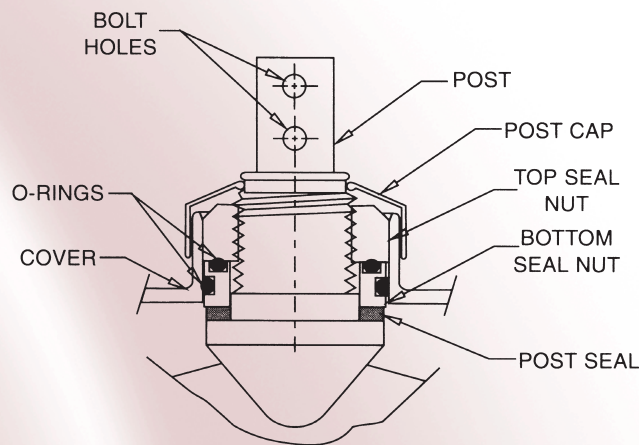
General Specifications

TYPE**	NOM. Ah CAP	Nominal Dimensions						Typical Weight									
		Length		Width		Height		Unpacked		Domestic Packed		Electrolyte Only / 1.215 S.G.				Short Circuit Current Amps	
		mm	in	mm	in	mm	in	kgs	lbs	kgs	lbs	kg	lbs	L	gal		
2GC-9	930	315	12.4	384	15.1	671	26.4	170	375	179	395	62	136	51	13.6	5323	
2GC-11	1080	315	12.4	384	15.1	671	26.4	185	410	195	430	57	127	48	12.7	6477	
2GC-13	1220	315	12.4	384	15.1	671	26.4	202	445	211	465	54	119	45	11.9	7540	
2GC-15	1320	315	12.4	384	15.1	671	26.4	220	485	229	505	50	111	42	11.1	8528	
2GC-17	1570	422	16.6	384	15.1	671	26.4	265	585	275	607	74	163	62	16.3	10160	
2GC-19	1680	422	16.6	384	15.1	671	26.4	281	620	291	642	70	155	59	15.5	11231	
2GC-21	1780	422	16.6	384	15.1	671	26.4	297	655	307	677	67	147	56	14.7	12311	
2GC-23	1870	422	16.6	384	15.1	671	26.4	315	695	325	717	63	139	53	13.9	13324	
GC-25	2260	315	12.4	384	15.1	671	26.4	199	440	209	460	56	123	46	12.3	14750	
GC-27	2380	315	12.4	384	15.1	671	26.4	209	460	218	480	54	119	45	11.9	15714	
GC-29	2490	315	12.4	384	15.1	671	26.4	217	480	227	500	52	115	43	11.5	16604	
GC-31	2570	315	12.4	384	15.1	671	26.4	224	495	233	515	50	111	42	11.1	17510	
GC-33	2660	315	12.4	384	15.1	671	26.4	233	515	243	535	48	107	40	10.7	18408	
GC-35	3430	422	16.6	384*	15.1*	671	26.4	277	610	287	632	72	160	60	16.0	20735	
GC-37	3540	422	16.6	384*	15.1*	671	26.4	285	630	296	652	71	156	59	15.6	21612	
GC-39	3650	422	16.6	384*	15.1*	671	26.4	295	650	305	672	69	152	57	15.2	22456	
GC-41	3730	422	16.6	384*	15.1*	671	26.4	302	665	311	687	67	148	56	14.8	23266	
GC-43	3820	422	16.6	384*	15.1*	671	26.4	311	685	321	707	65	144	54	14.4	24035	
GC-45	3900	422	16.6	384*	15.1*	671	26.4	320	705	330	727	63	140	53	14.0	24769	

*NOTE: "Width" dimensions determines required rack length, as cells are arranged on racks with plates parallel to the rails.

** Suffix number indicates total plates per cell. Prefix indicates number of cells per jar.

Slide-Lock™ Post Seal



Discharge Rates in Amperes ** to 1.75Vpc at 25°C (77°F)*

Type	NOM. Ah CAP:	Minutes			Hours									
		1	15	30	1	1.5	2	3	4	5	8	12	24	72
GC-9	930	752	649	555	413	324	279	219	182	158	116	86	49	18.8
GC-11	1080	910	790	667	502	390	331	262	217	187	135	100	57	21.8
GC-13	1220	1056	922	796	585	450	385	300	249	214	152	112	64	24.3
GC-15	1320	1190	1046	883	662	518	420	332	277	236	165	120	69	25.7
GC-17	1570	1432	1298	1110	826	640	520	412	335	283	196	140	77	30.0
GC-19	1680	1584	1441	1237	917	710	587	451	363	305	210	150	82	31.1
GC-21	1780	1730	1580	1364	1005	772	640	483	390	328	223	158	86	31.6
GC-23	1870	1870	1713	1493	1087	825	693	516	411	344	234	165	89	31.9
GC-25	2260	2064	1845	1663	1170	845	756	618	504	422	283	202	115	43.2
GC-27	2380	2197	1970	1745	1248	921	800	660	533	443	298	212	119	44.4
GC-29	2490	2324	2093	1859	1324	970	840	691	560	466	311	220	123	45.5
GC-31	2570	2445	2211	1968	1396	1018	882	724	585	485	321	227	126	46.0
GC-33	2660	2560	2324	2000	1465	1095	917	756	608	502	332	233	128	46.4
GC-35	3430	2798	2412	2040	1479	1148	960	799	671	583	429	313	167	61.4
GC-37	3540	2909	2517	2079	1539	1215	1017	831	697	606	443	322	171	61.9
GC-39	3650	3014	2615	2139	1596	1283	1074	862	722	627	456	328	172	62.0
GC-41	3720	3112	2710	2211	1650	1337	1131	891	745	646	466	334	174	62.0
GC-43	3820	3205	2803	2288	1701	1377	1170	917	766	664	478	340	175	62.0
GC-45	3900	3292	2891	2376	1749	1400	1200	942	786	681	487	345	176	62.0

Discharge Rates in Amperes ** to 1.81Vpc at 25°C (77°F)*

GC-9	930	582	506	449	351	283	245	200	169	148	110	82	46	16.7
GC-11	1080	704	616	549	426	340	294	239	201	175	128	95	53	19.5
GC-13	1220	817	719	642	497	396	342	273	231	201	144	106	60	21.9
GC-15	1320	922	815	714	562	452	371	304	257	221	156	114	65	23.7
GC-17	1570	1164	1012	873	702	563	435	378	311	263	186	134	72	26.4
GC-19	1680	1289	1123	992	779	624	527	413	337	285	197	140	76	28.0
GC-21	1780	1408	1232	1095	854	677	572	446	362	306	211	150	81	29.9
GC-23	1870	1524	1336	1170	923	748	626	473	382	322	222	158	86	31.5
GC-25	2260	1635	1439	1399	994	680	618	570	468	392	268	192	106	39.1
GC-27	2380	1743	1536	1386	1039	794	705	602	495	416	283	202	112	41.3
GC-29	2490	1845	1632	1499	1125	849	752	635	520	436	295	210	116	43.1
GC-31	2570	1944	1724	1568	1168	882	782	667	544	453	304	216	120	44.4
GC-33	2660	2037	1812	1618	1226	946	816	694	565	470	315	224	124	46.0
GC-35	3430	2098	1881	1636	1257	1000	855	731	624	548	407	295	153	55.4
GC-37	3540	2181	1956	1687	1308	1062	913	761	648	569	420	303	158	57.4
GC-39	3650	2260	2039	1713	1342	1122	954	788	671	588	433	314	166	60.7
GC-41	3720	2334	2113	1773	1374	1151	1003	813	692	606	442	317	166	60.7
GC-43	3820	2404	2186	1838	1416	1175	1017	819	698	614	454	328	171	60.7
GC-45	3900	2468	2254	1964	1456	1135	1000	832	708	622	461	333	172	60.7

*Ampere values listed represent 100% of the cell's capacity. Initial capacity shall be a minimum of 90% of these values per IEEE 450.

**1.215 S.G. electrolyte at 77°F (25°C) includes intercell connector drop.

'Nominal AMP hour capacity at the 8 hour rate.

All data subject to change without notice.



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