

**PowerSafe™**  
CC



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**PERFORMANCE  
SPECIFICATIONS**

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**EnerSys™**  
Power/Full Solutions





PowerSafe™  
CC

The PowerSafe™ CC battery has been carefully engineered to meet the varying power needs of the utility market. The lead-calcium design reduces the maintenance (watering intervals) associated with lead-antimony batteries. This makes the CC battery ideal for challenging utility switchgear applications.

Its 0.28 inch positive grids are one of the thickest in the industry, making it an excellent long discharge battery. At the same time, its nearly square plate configuration enhances high rate performance. Coupling these two operating characteristics with multi-cell construction to minimize floor space makes the CC ideally suited for the complex duty cycle requirements of the switchgear application.

The PowerSafe CC now features the Slide-Lock™ post seal design. The slightly taller jar allows for more free electrolyte, a longer watering interval and now enables the PowerSafe CC to deliver 100% initial capacity. The PowerSafe CC's space efficient footprint remains the same as the length and width have not changed.

The PowerSafe CC was designed for easier maintenance since all the posts and connectors reside above the cell cover; maintenance routines, including individual cell monitoring and intercell resistance measurements are simplified. The individual cell post feature along with the Slide-Lock™ post seal and 100% initial capacity make the CC the battery of choice for utility switchgear applications.

## Features

- Slide-Lock™ Post seal design.
- Calcium grids and added electrolyte reserve reduce watering requirements.
- Individual posts to monitor individual cell performance in a multi-cell container.
- Thick grids provide excellent long discharge rate performance and long life.
- Square plate configuration enhances high rate performance.
- 100% Initial capacity.
- Applications: Switchgear, Utility, Telecommunications.
- 20 year life expectancy in float service at 77°F ambient temperature.
- Capacity from 50 Ah to 200 Ah.

## Specifications

- Plate thickness:  
Positive: 0.28 in/7.1 mm  
Negative: 0.14 in/3.6 mm
- Plate suspension type:  
Positive: Bottom supported  
Negative: Bottom supported
- Sediment space: 1.0 in/25 mm
- Electrolyte over plates: 2.38 in/60.5 mm
- Specific gravity: 1.215 standard (1.250 available upon request)
- Container: Styrene Acrylonitrile Copolymer, optional PC
- Cover: Made from flame retardant PVC, (UL94-VO/L.O.I. 28%)
- Separators: Microporous rubber
- Bolt connectors: Stainless steel, Standard English measure, Hex-Head
- Intercell connectors: Lead-plated copper
- Retainers: "Vitrex" - glass fiber
- Float voltage settings: Acceptable min/max: 2.17/2.26 Vpc, Recommended: 2.25 Vpc
- Vent type: Flame Arrestor, Fused Alumina
- Post seal type: Slide-Lock™

*NOTE: All inter-cell, inter-tier, inter-step, end-to-end inter-rack, and back-to-back inter-rack connectors for standard configurations are included with every battery. Across-aisle inter-rack connectors are not included.*

General Specifications

TYPE*	NOM. Ah CAP	Nominal Dimensions						Weights - Volumes								
		Length**		Width		Height		Unpacked		Domestic Packed		Electrolyte Only / 1.215 S.G.				Short Circuit Current Amps
		in	mm	in	mm	in	mm	lbs	kg	lbs	kg	lbs	kg	gal	l	
2CC-3M	50	7.0	178	9.0	229	14.8	375	42	19.1	55	24.9	11	5.0	1.1	4.6	536
3CC-3M	50	7.0	178	9.0	229	14.8	375	57	25.9	62	28.1	16	7.3	1.6	6.1	536
2CC-5M	100	7.0	178	9.0	229	14.8	375	51	23.1	55	24.9	10	4.5	1.0	3.7	1055
3CC-5M	100	7.0	178	9.0	229	14.8	375	74	33.6	79	35.8	15	6.8	1.5	5.7	1055
2CC-7M	150	12.2	310	9.0	229	14.8	375	76	34.5	84	38.1	22	10.0	2.2	8.3	1557
3CC-7M	150	12.2	310	9.0	229	14.8	375	114	51.7	122	55.3	33	15.0	3.3	12.5	1557
2CC-9M	200	12.2	310	9.0	229	14.8	375	88	39.9	95	43.1	22	10.0	2.1	7.9	2044
3CC-9M	200	12.2	310	9.0	229	14.8	375	132	59.9	141	65.0	33	15.0	3.2	12.1	2044

\* Prefix number indicates cells per unit. Suffix number indicates total plates per cell.  
 \*\*0.25" must be added between cells for spacing purposes when calculating total battery length.

Constant Current

1.215 Specific Gravity

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

Type	NOM. Ah CAP <sup>1</sup>	Minutes			Hours								
		1	15	30	1	1.5	2	3	4	5	8	12	24
2CC-3M	50	75	48	37.8	27.0	21.0	17.3	12.9	10.4	8.8	6.3	4.4	2.5
3CC-3M	50	75	48	37.8	27.0	21.0	17.3	12.9	10.4	8.8	6.3	4.4	2.5
2CC-5M	100	148	96	75.6	54.0	42.0	34.6	25.7	20.7	17.6	12.5	9.1	5.0
3CC-5M	100	148	96	75.6	54.0	42.0	34.6	25.7	20.7	17.6	12.5	9.1	5.0
2CC-7M	150	222	144	113.0	81.0	63.0	51.9	38.6	31.0	26.4	18.8	13.6	7.5
3CC-7M	150	222	144	113.0	81.0	63.0	51.9	38.6	31.0	26.4	18.8	13.6	7.5
2CC-9M	200	296	192	151.0	108.0	84.0	69.2	51.4	41.4	35.2	25.0	18.1	10.0
3CC-9M	200	296	192	151.0	108.0	84.0	69.2	51.4	41.4	35.2	25.0	18.1	10.0

1.215 Specific Gravity

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

Type	NOM. Ah CAP <sup>1</sup>	Minutes			Hours								
		1	15	30	1	1.5	2	3	4	5	8	12	24
2CC-3M	50	59	39	31.5	23.3	18.5	15.4	11.8	9.6	8.2	5.9	4.3	2.5
3CC-3M	50	59	39	31.5	23.3	18.5	15.4	11.8	9.6	8.2	5.9	4.3	2.5
2CC-5M	100	116	78	63.0	46.5	37.0	30.9	23.5	19.2	16.4	11.8	8.6	5.0
3CC-5M	100	116	78	63.0	46.5	37.0	30.9	23.5	19.2	16.4	11.8	8.6	5.0
2CC-7M	150	174	117	94.5	69.8	55.5	46.3	35.3	28.8	24.6	17.7	13.1	7.5
3CC-7M	150	174	117	94.5	69.8	55.5	46.3	35.3	28.8	24.6	17.7	13.1	7.5
2CC-9M	200	232	156	126.0	93.0	74.0	61.8	47.0	38.4	32.8	23.6	17.5	10.0
3CC-9M	200	232	156	126.0	93.0	74.0	61.8	47.0	38.4	32.8	23.6	17.5	10.0

1.215 Specific Gravity

Discharge Rates in Amperes per Cell\*\* to 1.84Vpc at 25°C (77°F)\*

Type	NOM. Ah CAP.†	Minutes			Hours								
		1	15	30	1	1.5	2	3	4	5	8	12	24
2CC-3M	50	49	35	29	21	17	14	11	9	7.8	5.6	4.1	2.2
3CC-3M	50	49	35	29	21	17	14	11	9	7.8	5.6	4.1	2.2
2CC-5M	100	99	70	57	42	34	29	22	18	15.7	11.2	8.1	4.5
3CC-5M	100	99	70	57	42	34	29	22	18	15.7	11.2	8.1	4.5
2CC-7M	150	148	105	86	64	51	43	33	27	23.5	16.8	12.2	6.7
3CC-7M	150	148	105	86	64	51	43	33	27	23.5	16.8	12.2	6.7
2CC-9M	200	198	141	114	85	68	57	44	37	31.4	22.4	16.3	9.0
3CC-9M	200	198	141	114	85	68	57	44	37	31.4	22.4	16.3	9.0

1.215 Specific Gravity

Discharge Rates in Amperes per Cell\*\* to 1.88Vpc at 25°C (77°F)\*

Type	NOM. Ah CAP.†	Minutes			Hours								
		1	15	30	1	1.5	2	3	4	5	8	12	24
2CC-3M	50	38	30	25	19	15	13	10	8	7.2	5.2	3.8	2.1
3CC-3M	50	38	30	25	19	15	13	10	8	7.2	5.2	3.8	2.1
2CC-5M	100	76	60	49	37	30	26	20	17	14.4	10.4	7.6	4.2
3CC-5M	100	76	60	49	37	30	26	20	17	14.4	10.4	7.6	4.2
2CC-7M	150	114	90	74	56	45	38	30	25	21.6	15.6	11.4	6.2
3CC-7M	150	114	90	74	56	45	38	30	25	21.6	15.6	11.4	6.2
2CC-9M	200	152	120	99	74	60	51	40	33	28.8	20.8	15.1	8.3
3CC-9M	200	152	120	99	74	60	51	40	33	28.8	20.8	15.1	8.3

\*Amperes values listed represent 100% of the initial capacity.  
 \*\*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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