



PowerSafe®
CA-M

Switchgear, Telecommunications and Utility

Battery Performance Specifications



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EnerSys®

Power/Full Solutions

RESERVE
POWER

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Features and Benefits

- Capacity range 50 - 200Ah
- Lead-antimony alloy
- Electrolyte reserve reduces watering requirements
- Standard Styrene Acrylonitrile (SAN) jar with flame retardant UL94 V-0 PVC cover; flame retardant jar available
- Lead-antimony grids maximize performance in cycling applications
- 20 year life expectancy in float service at 77°F (25°C) ambient temperature

Construction

- 0.28" thick positive plates provide excellent long discharge rates and long life
- Square plate configuration enhances high rate performance
- Separator – microporous rubber with "Vitrex" glass fiber retainers
- Electrolyte – dilute sulfuric acid with specific gravity of 1.215 (1.250 available upon request)
- Individual posts to monitor individual cell performance
- Slide-Lock™ post seal design
- Flame arrestors – included for increased operational safety

Installation and Operation

- Space efficient footprint
- Designed to be rack mounted
- Excellent long discharge and complex duty cycle capability
- All posts and connectors reside above the cell cover for easier maintenance, cell monitoring and measurements
- Operating temperature: 32°F (0°C) to 104°F (40°C)
Recommended temperature: 68°F (20°C) to 86°F (30°C)

Standards

- The management systems governing the manufacture of this product are ISO 9001:2008 and ISO 14001:2004 certified

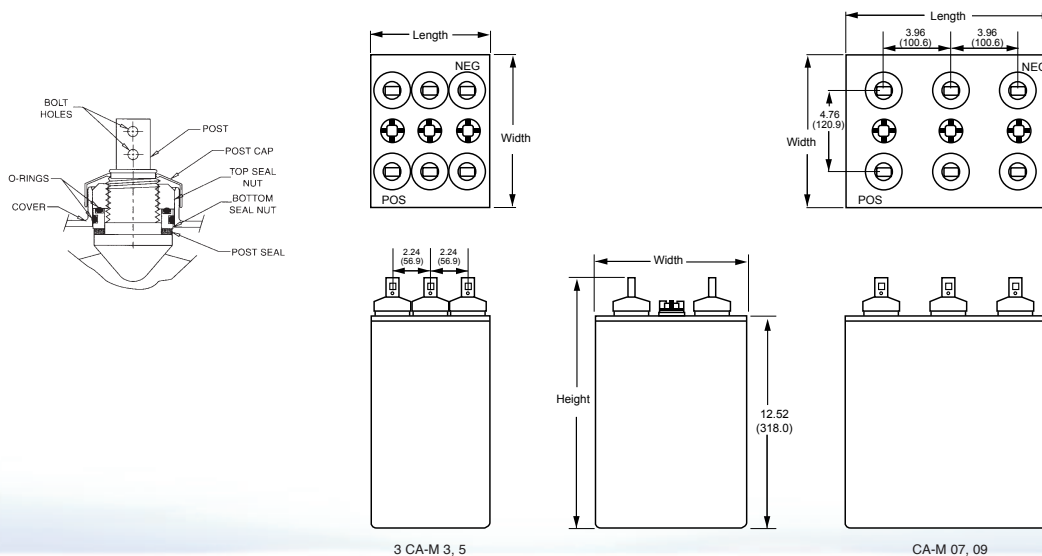
General Specifications

		Nominal Dimensions						Weight - Volumes						Short Circuit Current Amp
Cell Type*	Nominal Ah Capacity ¹	Length**		Width		Height		Unpacked		Electrolyte only/1.215 SG				
		in	mm	in	mm	in	mm	lbs	kg	lbs	kg	gal	L	
3CA-3M	50	7.0	178	9.0	229	14.8	375	57.0	25.9	16.0	7.3	1.6	6.1	494
3CA-3M	100	7.0	178	9.0	229	14.8	375	74.0	33.6	15.0	6.8	1.5	5.7	972
3CA-7M	150	12.2	310	9.0	229	14.8	375	114.0	51.7	33.0	15.0	3.3	12.5	1434
3CA-9M	200	12.2	310	9.0	229	14.8	375	132.0	59.9	33.0	15.0	3.2	12.1	1862

* 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.

¹Nominal Ah Capacity is based on an 8 hour discharge rate to 1.75 final voltage per cell @ 77°F (25°C)



Battery Performance Specifications

Rint and Isc

	*Resistance	Isc
Cell Type	Milliohms	Amps
3CA-3M	4.050	490
3CA-5M	2.060	970
3CA-7M	1.395	1430
3CA-9M	1.075	1860

* Resistance values are for reference only not intended to represent an ohmic value or base line measurement

Constant Current

1.215 Specific Gravity

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

Cell Type	Nominal Ah Capacity ¹	Minutes			Hours								
		1	15	30	1	1.5	2	3	4	5	8	12	24
3CA-3M	50	68.0	45.0	35.2	25.5	20.2	16.8	12.9	10.4	8.8	6.3	4.4	2.5
3CA-5M	100	136.0	89.0	70.3	51.0	40.4	33.6	25.7	20.7	17.6	12.5	9.1	5.0
3CA-7M	150	204.0	134.0	105.4	76.5	60.6	50.4	38.6	31.1	26.4	18.8	13.6	7.5
3CA-9M	200	272.0	178.0	140.6	102.0	80.8	67.2	51.4	41.4	35.2	25.0	18.1	10.0

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

Cell Type	Nominal Ah Capacity ¹	Minutes			Hours								
		1	15	30	1	1.5	2	3	4	5	8	12	24
3CA-3M	50	51.0	38.0	30.0	22.3	18.0	15.3	11.8	9.8	8.4	5.9	4.3	2.4
3CA-5M	100	102.0	75.0	59.9	45.5	36.0	30.5	23.6	19.5	16.7	11.8	8.5	4.7
3CA-7M	150	153.0	113.0	81.8	66.8	54.0	45.8	35.4	29.3	25.1	17.7	12.8	7.1
3CA-9M	200	204.0	150.0	119.8	89.0	72.0	61.0	47.2	39.0	33.4	23.6	17.1	9.4

¹ Nominal Ah Capacity based on an 8 hour discharge



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