



# PowerSafe<sup>®</sup> CA-M

Switchgear, Telecommunications and Utility

## Battery Performance Specifications



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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)

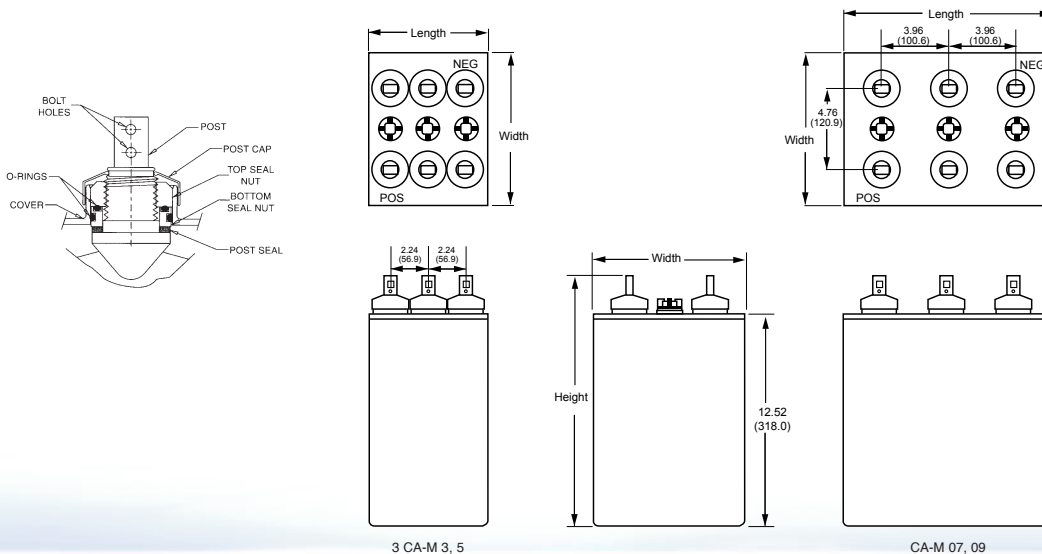
### Standards

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

### General Specifications

Cell Type*	Nominal Ah Capacity <sup>1</sup>	Nominal Dimensions						Weight - Volumes						Short Circuit Current Amp
		Length**		Width		Height		Unpacked		Electrolyte only/1.215 SG				
		in	mm	in	mm	in	mm	lbs	kg	lbs	kg	gal	L	
<b>3CA-3M</b>	50	7.0	178	9.0	229	14.8	375	57.0	25.9	16.0	7.3	1.6	6.1	494
<b>3CA-5M</b>	100	7.0	178	9.0	229	14.8	375	74.0	33.6	15.0	6.8	1.5	5.7	972
<b>3CA-7M</b>	150	12.2	310	9.0	229	14.8	375	114.0	51.7	33.0	15.0	3.3	12.5	1434
<b>3CA-9M</b>	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.  
<sup>1</sup>Nominal 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

Cell Type	*Resistance Milliohms	Isc 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 <sup>1</sup>	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 <sup>1</sup>	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

<sup>1</sup> Nominal Ah Capacity based on an 8 hour discharge



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