



PowerSafe®
EA-M

Switchgear, Telecommunications and Utility

Battery Performance Specifications



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RESERVE
POWER

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Features and Benefits

- Capacity range 215 - 850Ah
- Lead-antimony alloy
- Volume of electrolyte optimizes performance
- Standard Styrene Acrylonitrile (SAN) jar with flame retardant UL94 V-0 PVC cover; flame retardant jar available
- Lead-antimony plates maximize performance in cycling applications
- 20 year life expectancy in float service at 77°F (25°C) ambient temperature

Construction

- 0.34" thick positive plates provide excellent long discharge rates and long life
- Negative plate design 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)
- Copper inserted posts
- Slide-Lock™ post seal design
- Flame arrestors – included for increased operational safety

Installation and Operation

- Tin plated copper inter-cell connectors (standard); lead plated optional
- Dual posts for high current carrying capability (EA-15M and above)
- Excellent long discharge and complex duty cycle capability for switchgear applications
- Post design features low resistance copper inserts for high rate performance
- Operating temperature: 32°F (0°C) to 104°F (40°C)
Recommended temperature: 68°F (20°C) to 86°F (30°C)

Standards

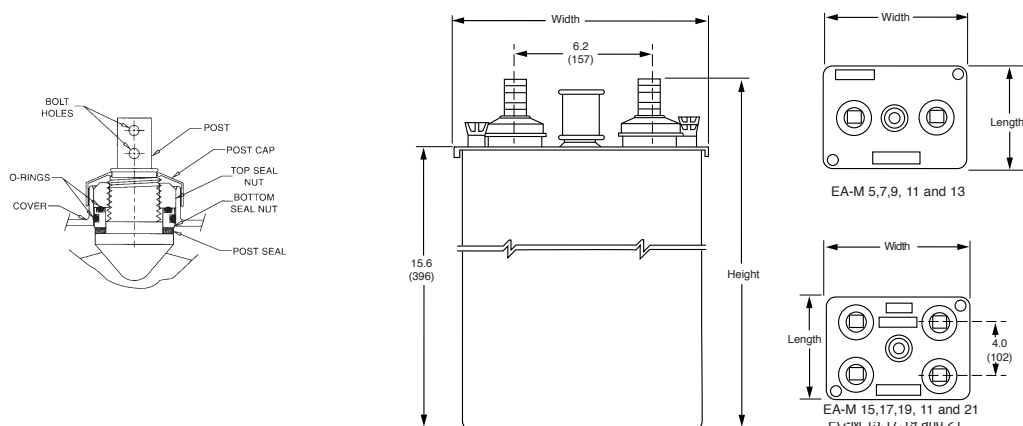
- The management systems governing the manufacture of this product are ISO 9001:2008 and ISO 14001:2004 certified

General Specifications

		Nominal Dimensions						Weight - Volumes						Short Circuit Current Amp
Cell Type*	Nominal Ah Capacity¹	Length**		Width		Height		Unpacked		Electrolyte only/1.215 SG				
		in	mm	in	mm	in	mm	lbs	kg	lbs	kg	gal	L	
EA-5M	215	5.1	130	11.0	279	18.7	475	60.0	27.2	21.0	9.5	2.1	7.8	2200
EA-7M	290	5.1	130	11.0	279	18.7	475	70.1	31.8	19.0	8.6	1.9	7.1	3240
EA-9M	365	5.1	130	11.0	279	18.7	475	80.9	36.7	17.0	7.7	1.7	6.4	4280
EA-11M	470	6.6	168	11.0	279	18.7	475	101.0	45.8	24.0	10.9	2.4	9.0	5430
EA-13M	525	6.6	168	11.0	279	18.7	475	111.0	50.3	20.0	9.1	2.0	7.5	6250
EA-15M	620	8.1	206	11.0	279	18.7	475	136.0	61.7	29.0	13.2	2.9	10.8	7290
EA-17M	670	8.1	206	11.0	279	18.7	475	147.0	66.7	27.0	12.2	2.7	10.1	8560
EA-19M	795	10.1	257	11.0	279	18.7	475	173.0	78.5	39.0	17.7	3.9	14.6	8780
EA-21M	850	10.1	257	11.0	279	18.7	475	182.0	82.6	36.0	16.3	3.6	13.5	9390

¹Nominal Ah capacity is based on an 8 hour rate to 1.75 volts per cell @77°F (25°C)

²0.25" must be added between cells for spacing purposes when calculating total battery length.



Battery Performance Specifications

Rint and Isc

	*Resistance	Isc
Cell Type	Milliohms	Amps
EA-5M	0.910	2200
EA-7M	0.617	3240
EA-9M	0.468	4280
EA-11M	0.368	5430
EA-13M	0.320	6250
EA-15M	0.274	7290
EA-17M	0.234	8560
EA-19M	0.228	8780
EA-21M	0.213	9390

* 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 to 1.75Vpc at 77°F (25°C)

		Minutes			Hours									
Cell Type	Nominal Ah Capacity ¹	1	15	30	1	1.5	2	3	4	5	8	10	12	24
EA-5M	215	244	177	137	99	79	66	52	43	37	27	23	20	12
EA-7M	290	351	260	201	142	112	94	72	59	51	36	31	27	16
EA-9M	365	460	344	265	186	146	121	92	76	64	46	38	33	20
EA-11M	470	574	434	335	236	186	154	118	96	82	58	49	42	25
EA-13M	525	670	501	386	271	212	176	134	109	93	65	54	47	28
EA-15M	620	785	584	448	315	247	205	157	128	109	77	65	56	33
EA-17M	670	895	677	518	361	281	232	175	142	120	84	70	60	34
EA-19M	795	949	726	564	401	316	263	201	164	140	100	83	72	43
EA-21M	850	1034	786	615	438	346	288	219	179	152	106	88	76	45

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

		Minutes			Hours									
Cell Type	Nominal Ah Capacity ¹	1	15	30	1	1.5	2	3	4	5	8	10	12	24
EA-5M	215	176	146	118	88	72	62	49	41	35	26	22	20	12
EA-7M	290	253	214	171	126	102	86	67	56	48	35	29	26	16
EA-9M	365	331	282	224	164	131	111	86	71	61	43	37	32	19
EA-11M	470	409	355	284	208	167	141	109	90	77	55	47	41	25
EA-13M	525	478	411	327	238	190	160	124	102	87	62	52	45	27
EA-15M	620	566	480	381	278	223	188	145	120	103	74	62	54	33
EA-17M	670	634	554	439	317	252	211	162	132	113	79	67	58	34
EA-19M	795	681	592	477	352	283	239	186	154	132	95	80	70	42
EA-21M	850	745	648	524	388	313	264	204	168	144	102	86	74	44

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



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