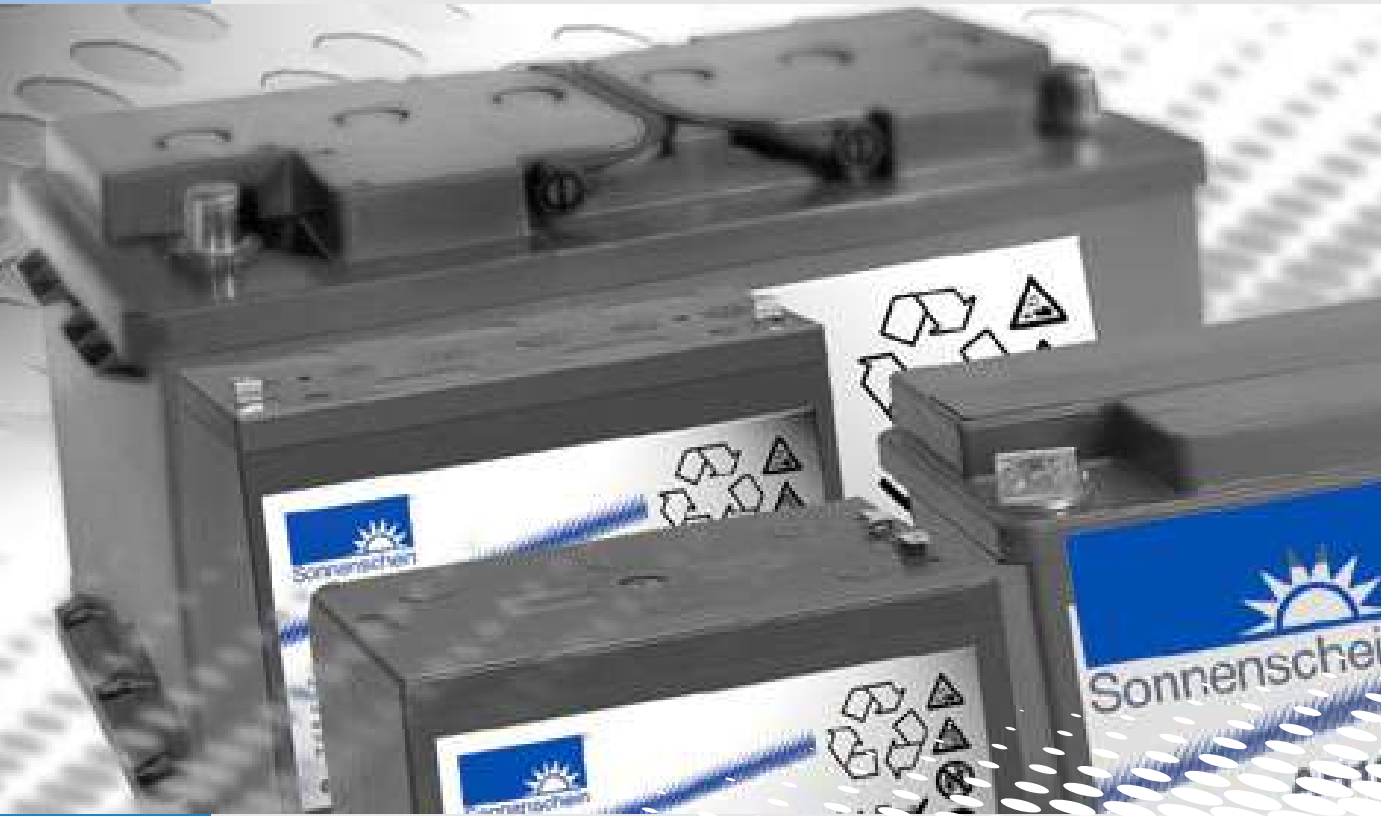




Industrial Batteries – Sonnenschein A500
A powerful, universal safety package.

Specifications

If reliability in power supply has priority.

Specifications

- The success of A500 batteries comes from the internationally superior dryfit technology
- Excellent energy storage capacity combined with high reliability
- Maintenance-free (no topping up) during the whole service life due to the Sonnenschein dryfit technology
- Nominal capacity 1.2 – 200 Ah C₂₀
- 7 years design life at 20°C ambient temperature (80% remaining capacity from C₂₀)
- Grid plate construction consisting of a lead calcium alloy
- Very low gassing due to the internal gas recombination
- Shelf life up to 2 years at 20°C without recharge due to the very low self discharge rate
- Short recharging time
- Proof against deep discharge according to DIN 43 539 T5
- Trouble-free transportation of operational blocks, no restrictions for rail, road, sea and air transportation (IATA, DGR clause A 67)
- Completely recyclable



Applications

Sonnenschein A500 batteries make an absolutely reliable means of energy source in many applications including telecommunications, security, UPS, emergency lighting, medical and other power supplies for safety systems.



Valve regulated
lead acid
batteries



Grid plate



Nominal
capacity
1.2–200 Ah



Block battery



Design life:
7 years



Maintenance-
free
(no topping up)



Proof against
deep discharge
acc. to
DIN 43 539 T5



Recyclable

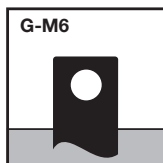
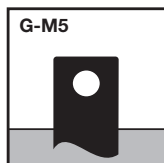
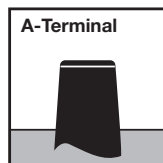
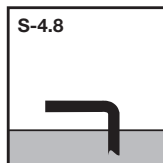
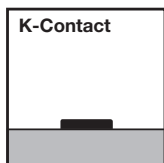
Type	Part number	Nominal voltage	Nominal capacity C_{20} 1.75 V/C	Discharge current I_{20}	Max. load*	Length (l)	Width (b/w)	Height up to top of cover (h1)	Height over terminals (h2)	Weight	Internal resistance acc. to IEC 896-2	Short circuit current acc. to IEC 896-2	Terminal	VdS approval
		V	20°C Ah	A	approx. A	max. mm	max. mm	max. mm	max. mm	approx. kg	m Ω	A		
A502/10 S	NGA5020010HSOSA	2	10.0	0.500	80	52.9	50.5	94.5	98.4	0.70	11.2	189	S-4.8	
A504/3.5 S	NGA50403D5HSOSA	4	3.5	0.175	60	90.5	34.5	60.5	64.4	0.50	48.0	88	S-4.8	
A506/1.2 S	NGA50601D2HSOSA	6	1.2	0.060	30	97.3	25.5	51.0	54.9	0.33	165.0	38	S-4.8	
A506/3.5 S	NGA50603D5HSOSA	6	3.5	0.175	60	134.5	34.5	60.5	64.4	0.75	71.0	88	S-4.8	
A506/4.2 S	NGA50604D2HSOSA	6	4.2	0.210	60	52.0	62.3	98.0	101.9	0.90	63.8	98	S-4.8	
A506/4.2 K	NGA50604D2HSOKA	6	4.2	0.210	60	52.0	62.3	98.0	98.3	0.90	63.8	98	K-Contact	
A506/6.5 S	NGA50606D5HSOSA	6	6.5	0.325	80	151.5	34.5	94.5	98.4	1.33	48.0	131	S-4.8	
A506/10 S	NGA5060010HSOSA	6	10.0	0.500	80	151.7	50.5	94.5	98.4	2.05	34.0	189	S-4.8	G 189230
A508/3.5 S	NGA50803D5HSOSA	8	3.5	0.175	60	178.5	34.1	60.5	64.4	1.00	95.0	88	S-4.8	
A512/1.2 S	NGA51201D2HSOSA	12	1.2	0.060	30	97.5	49.5	51.0	54.9	0.66	330.0	38	S-4.8	G 195088
A512/2 S	NGA5120002HSOSA	12	2.0	0.050	40	178.5	34.1	60.5	64.4	1.00	172.0	73	S-4.8	G 191016
A512/3.5 S	NGA51203D5HSOSA	12	3.5	0.175	60	134.5	66.8	60.5	64.4	1.50	142.0	88	S-4.8	G 190045
A512/6.5 S	NGA51206D5HSOSA	12	6.5	0.325	80	151.7	65.5	94.5	98.4	2.60	95.0	131	S-4.8	G 189023
A512/10 S	NGA5120010HSOSA	12	10.0	0.500	80	152.0	98.0	94.5	98.4	4.00	66.0	189	S-4.8	G 189231
A512/16 G5	NGA5120016HSOBA	12	16.0	0.800	200	181.0	76.0	167.0	167.0	6.00	24.2	512	G-M5	G 189232
A512/25 G5	NGA5120025HSOBA	12	25.0	1.250	200	167.0	176.0	126.0	126.0	9.65	21.3	583	G-M5	G 196025
A512/30 G6	NGA5120030HSOBA	12	30.0	1.500	400	197.0	132.0	161.0	180.0	11.10	13.1	932	G-M6	G 191047
A512/40 A	NGA5120040HSOCA	12	40.0	2.000	400	210.0	175.0	175.0	175.0	14.60	11.6	1069	A-Terminal	G 191015
A512/40 G6	NGA5120040HSOBA	12	40.0	2.000	400	210.0	175.0	175.0	175.0	14.60	11.6	1069	G-M6	G 191015
A512/55 A	NGA5120055HSOCA	12	55.0	2.750	400	261.0	136.0	208.0	230.0	18.80	8.9	1403	A-Terminal	
A512/60 A	NGA5120060HSOCA	12	60.0	3.000	400	278.0	175.0	190.0	190.0	21.70	6.6	1887	A-Terminal	
A512/60 G6	NGA5120060HSOBA	12	60.0	3.000	400	278.0	175.0	190.0	190.0	21.70	6.6	1887	G-M6	
A512/65 A	NGA5120065HSOCA	12	65.0	3.250	400	353.0	175.0	190.0	190.0	24.40	8.5	1471	A-Terminal	
A512/65 G6	NGA5120065HSOBA	12	65.0	3.250	400	353.0	175.0	190.0	190.0	24.40	8.5	1471	G-M6	
A512/85 A	NGA5120085HSOCA	12	85.0	4.250	600	330.0	171.0	213.0	236.0	31.00	6.2	2018	A-Terminal	G 190046
A512/115 A	NGA5120115HSOCA	12	115.0	5.750	770	286.0	269.0	208.0	230.0	40.00	4.6	2660	A-Terminal	
A512/120 A	NGA5120120HSOCA	12	120.0	6.000	770	513.0	189.0	195.0	223.0	41.00	5.2	2475	A-Terminal	
A512/140 A	NGA5120140HSOCA	12	140.0	7.000	770	513.0	223.0	195.0	223.0	48.00	4.1	3132	A-Terminal	
A512/200 A	NGA5120200HSOCA	12	200.0	10.000	770	518.0	274.0	216.0	238.0	70.00	3.5	3606	A-Terminal	

*With suitable matching contacts

Container, approval, terminal and torque

Container: 1.2–16 Ah = ABS
25–200 Ah = Polypropylene (PP)

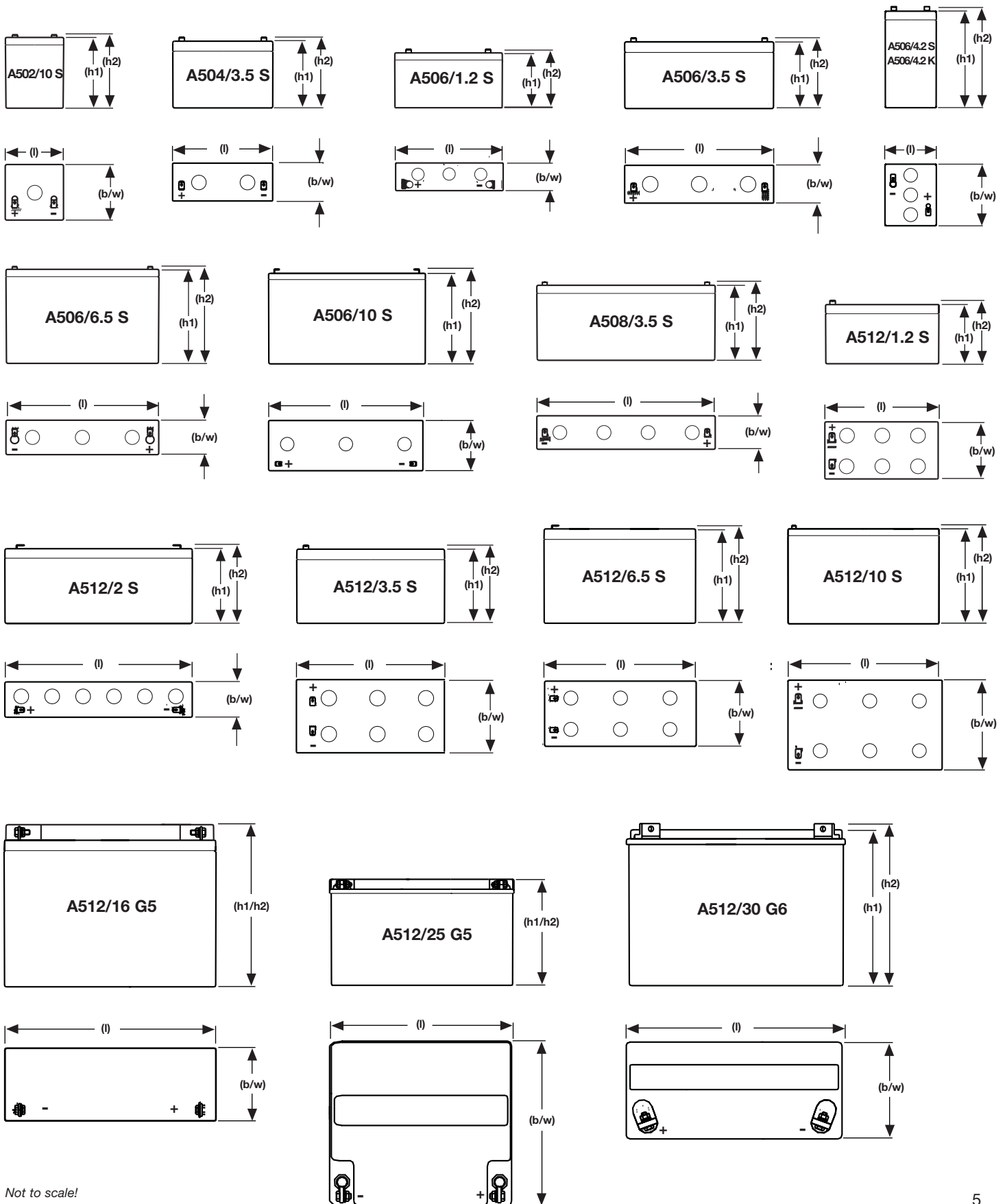
Approval: Underwriters Laboratories (UL), USA
VdS (Types see above)
DIN/Gost/TÜV, Russia

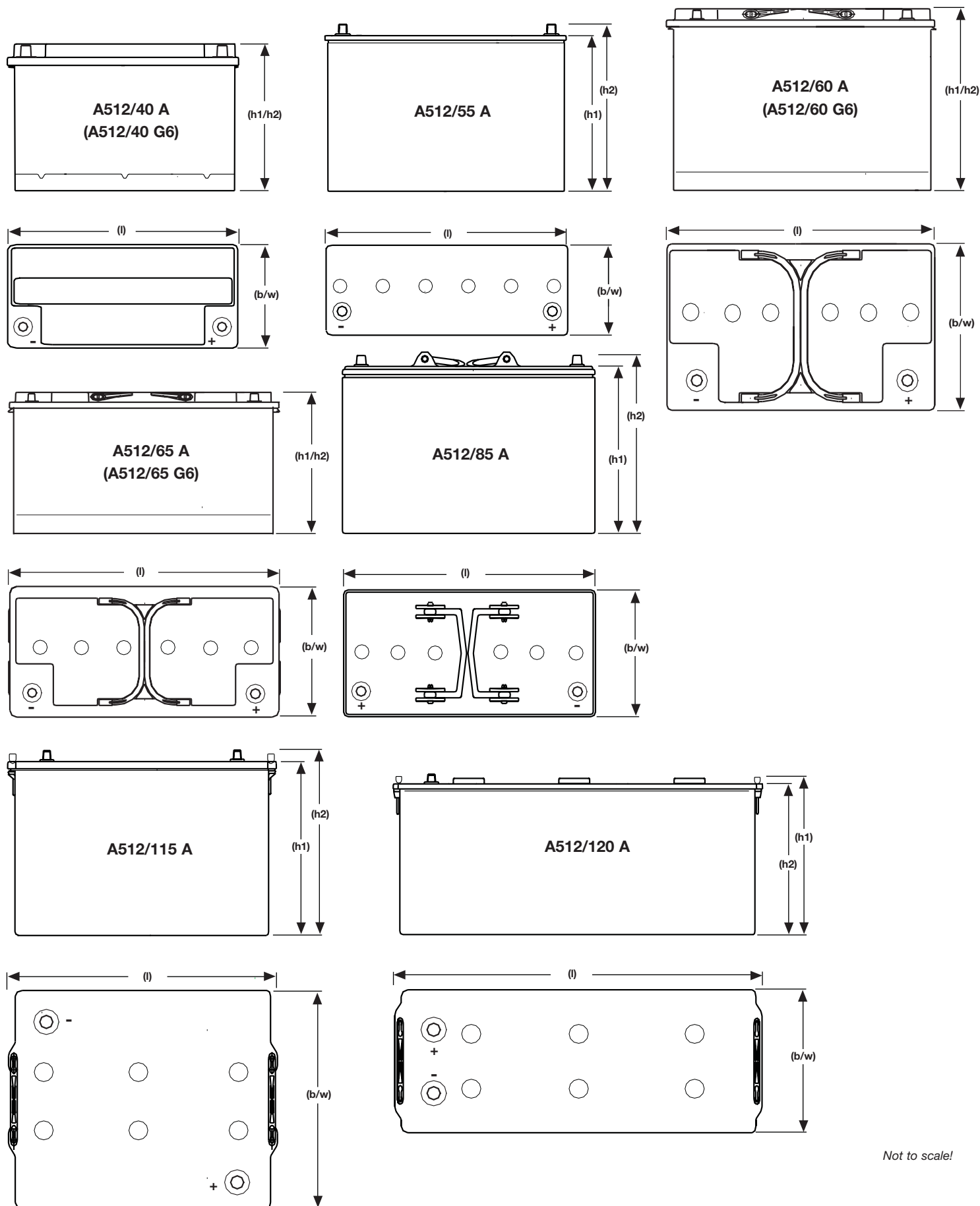


8 Nm

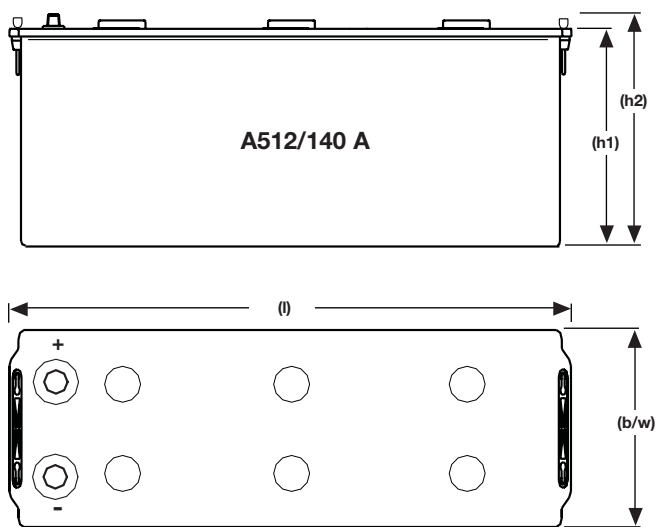
5 Nm

6 Nm

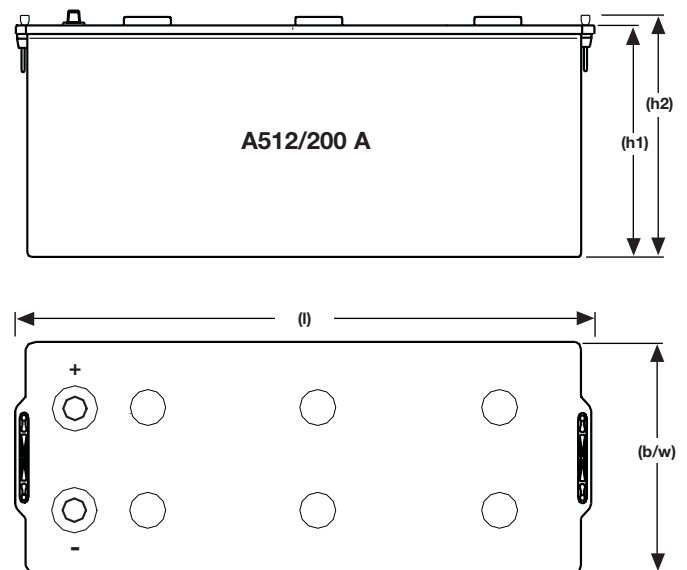




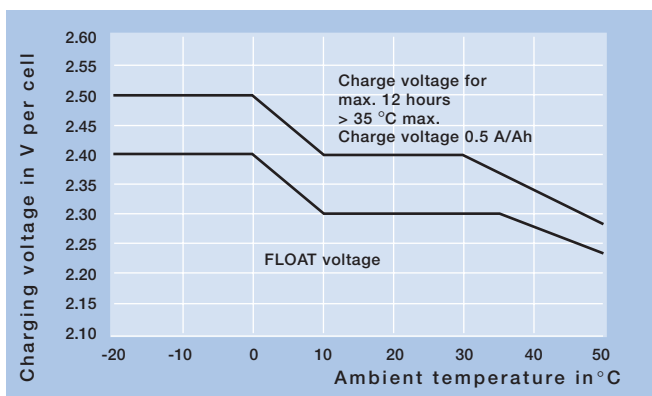
Not to scale!



Not to scale!



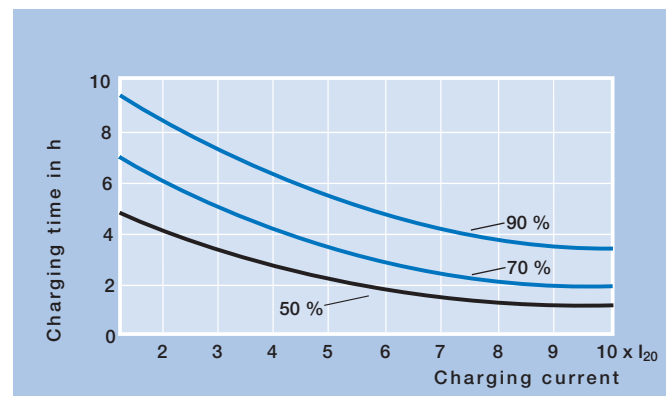
Technical data at a glance



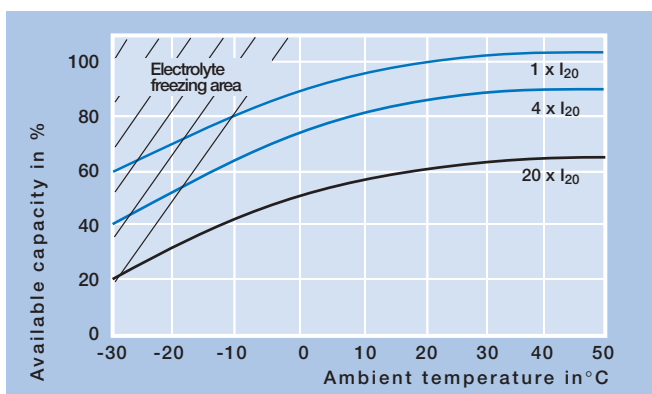
Constant charge voltages for various ambient temperatures.

Note:

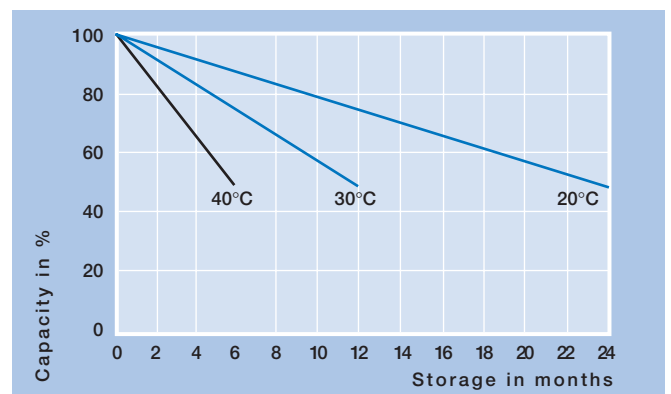
For charge voltages > 2.4 V per cell the charging current must be limited to max. 0.4 A/Ah.



Recharging time in relation to initial current up to 50%, 70% and 90% charging state, charging voltage 2.4 V/cell.



Available capacity in relation to the ambient temperature.



Self-discharge in relation to the storage temperature.

1.85 V/C – Discharge in A at 20°C												1.80 V/C – Discharge in A at 20°C									
Type	Part number	5'	10'	20'	30'	1h	3h	5h	8h	10h		5'	10'	20'	30'	1h	3h	5h	8h	10h	
A502/10S	NGA5020010HSOSA	30.00	22.00	15.00	11.20	6.40	2.80	1.80	1.18	0.96		33.00	24.00	16.00	11.90	6.80	2.90	1.90	1.23	1.00	
A504/3.5S	NGA50403D5HSOSA	9.50	6.70	4.50	3.40	2.10	0.95	0.60	0.39	0.32		10.60	7.40	4.90	3.70	2.20	0.98	0.62	0.40	0.33	
A506/1.2S	NGA50601D2HSOSA	3.52	2.44	1.58	1.20	0.75	0.34	0.21	0.13	0.10		3.92	2.67	1.69	1.26	0.77	0.35	0.21	0.13	0.10	
A506/3.5S	NGA50603D5HSOSA	9.50	6.70	4.50	3.40	2.10	0.95	0.60	0.39	0.32		10.60	7.40	4.90	3.70	2.20	0.98	0.62	0.40	0.33	
A506/4.2S	NGA50604D2HSOSA	9.90	6.30	4.20	3.40	2.40	1.22	0.75	0.49	0.39		11.70	6.70	4.40	3.40	2.40	1.24	0.77	0.50	0.40	
A506/6.5S	NGA50606D5HSOSA	17.00	12.00	8.10	6.10	3.60	1.50	1.10	0.73	0.61		19.00	13.00	8.80	6.50	3.80	1.60	1.10	0.75	0.63	
A506/10S	NGA5060010HSOSA	30.00	22.00	15.00	11.20	6.40	2.80	1.80	1.18	0.96		33.00	24.00	16.00	11.90	6.80	2.90	1.90	1.23	1.00	
A508/3.5S	NGA50803D5HSOSA	9.50	6.70	4.50	3.40	2.10	0.95	0.60	0.39	0.3		10.60	7.40	4.90	3.70	2.20	0.98	0.62	0.40	0.33	
A512/1.2S	NGA51201D2HSOSA	3.52	2.44	1.58	1.20	0.75	0.34	0.21	0.13	0.10		3.92	2.67	1.69	1.26	0.77	0.35	0.21	0.13	0.10	
A512/2S	NGA5120002HSOSA	5.40	3.70	2.60	2.00	1.50	0.56	0.34	0.22	0.18		6.20	4.20	2.80	2.10	1.50	0.58	0.36	0.23	0.19	
A512/3.5S	NGA51203D5HSOSA	9.50	6.70	4.50	3.40	2.10	0.95	0.60	0.39	0.32		10.60	7.40	4.90	3.70	2.20	0.98	0.62	0.40	0.33	
A512/6.5S	NGA51206D5HSOSA	17.00	12.00	8.10	6.10	3.60	1.50	1.10	0.73	0.61		19.00	13.00	8.80	6.50	3.80	1.60	1.10	0.75	0.63	
A512/10S	NGA5120010HSOSA	30.00	22.00	15.00	11.20	6.40	2.80	1.80	1.18	0.96		33.00	24.00	16.00	11.90	6.80	2.90	1.90	1.23	1.00	
A512/16G5	NGA5120016HSOBA	40.0	29.0	20.0	15.0	9.8	4.3	2.7	1.8	1.4		47.0	33.0	22.0	16.0	10.2	4.4	2.8	1.8	1.5	
A512/25G5	NGA5120025HSOBA	41.1	36.2	24.8	20.5	13.1	5.8	3.9	2.5	2.1		46.1	38.8	27.0	21.3	13.8	6.0	4.0	2.6	2.2	
A512/30G6	NGA5120030HSOBA	60.7	49.3	36.5	28.0	18.0	7.6	4.9	3.2	2.6		75.5	54.8	39.9	30.0	19.1	7.9	5.1	3.3	2.7	
A512/40A	NGA5120040HSOCA	75.0	63.0	42.0	34.0	22.0	8.8	6.4	4.3	3.5		86.0	69.0	47.0	36.0	23.0	9.2	6.7	4.4	3.6	
A512/40G6	NGA5120040HSOBA	75.0	63.0	42.0	34.0	22.0	8.8	6.4	4.3	3.5		86.0	69.0	47.0	36.0	23.0	9.2	6.7	4.4	3.6	
A512/55A	NGA5120055HSOCA	99.2	83.1	59.1	46.4	32.7	13.6	9.0	6.0	4.9		114.9	89.8	65.3	50.2	34.2	14.0	9.2	6.1	5.0	
A512/60A	NGA5120060HSOCA	122.8	100.8	69.2	54.2	33.8	15.3	9.9	6.6	5.4		145.8	108.9	75.9	58.1	35.5	15.8	10.3	6.8	5.6	
A512/60G6	NGA5120060HSOBA	122.8	100.8	69.2	54.2	33.8	15.3	9.9	6.6	5.4		145.8	108.9	75.9	58.1	35.5	15.8	10.3	6.8	5.6	
A512/65A	NGA5120065HSOCA	95.8	83.1	65.8	56.4	35.8	16.6	11.0	7.4	6.1		120.8	100.3	75.4	60.4	38.6	17.4	11.5	7.5	6.2	
A512/65G6	NGA5120065HSOBA	95.8	83.1	65.8	56.4	35.8	16.6	11.0	7.4	6.1		120.8	100.3	75.4	60.4	38.6	17.4	11.5	7.5	6.2	
A512/85A	NGA5120085HSOCA	168.0	141.0	100.0	78.0	53.0	22.0	14.2	9.4	7.7		193.0	154.0	112.0	85.0	56.0	23.0	14.7	9.8	8.0	
A512/115A	NGA5120115HSOCA	210.0	179.0	128.0	100.0	60.0	26.0	18.0	12.0	10.1		244.0	192.0	140.0	107.0	64.0	27.0	18.0	13.0	10.4	
A512/120A	NGA5120120HSOCA	257.0	201.0	135.0	104.0	65.5	27.8	18.1	11.9	9.8		293.0	221.0	147.0	112.0	69.5	28.9	18.6	12.3	10.2	
A512/140A	NGA5120140HSOCA	275.0	220.0	151.0	118.0	75.1	32.5	21.3	14.0	11.5		315.0	244.0	166.0	128.0	79.7	33.8	22.0	14.5	11.9	
A512/200A	NGA5120200HSOCA	329.0	274.0	196.0	160.0	104.0	46.6	31.0	20.4	16.7		381.0	313.0	222.0	176.0	110.0	48.5	32.0	21.1	17.3	

1.75 V/C – Discharge in A at 20°C												1.70 V/C – Discharge in A at 20°C									
Type	Part number	5'	10'	20'	30'	1h	3h	5h	8h	10h		5'	10'	20'	30'	1h	3h	5h	8h	10h	
A502/10S	NGA5020010HSOSA	35.00	26.00	17.00	12.30	6.90	3.00	1.90	1.25	1.02		37.00	27.00	17.00	12.60	7.00	3.00	1.90	1.25	1.02	
A504/3.5S	NGA50403D5HSOSA	11.30	7.90	5.10	3.80	2.30	0.99	0.62	0.41	0.34		12.10	8.30	5.20	3.90	2.30	1.00	0.63	0.41	0.34	
A506/1.2S	NGA50601D2HSOSA	4.12	2.82	1.74	1.30	0.78	0.35	0.22	0.13	0.10		4.32	2.91	1.77	1.31	0.79	0.35	0.22	0.13	0.10	
A506/3.5S	NGA50603D5HSOSA	11.30	7.90	5.10	3.80	2.30	0.99	0.62	0.41	0.34		12.10	8.30	5.20	3.90	2.30	1.00	0.63	0.41	0.34	
A506/4.2S	NGA50604D2HSOSA	13.30	6.90	54.40	3.50	2.40	1.25	0.78	0.50	0.41		14.20	7.00	4.50	3.50	2.50	1.26	0.79	0.50	0.41	
A506/6.5S	NGA50606D5HSOSA	20.00	14.00	9.20	6.80	3.90	1.60	1.10	0.76	0.63		21.00	15.00	9.50	6.90	3.90	1.60	1.10	0.76	0.63	
A506/10S	NGA5060010HSOSA	35.00	26.00	17.00	12.30	6.90	3.00	1.90	1.25	1.02		37.00	27.00	17.00	12.60	7.00	3.00	1.90	1.25	1.02	
A508/3.5S	NGA50803D5HSOSA	11.30	7.90	5.10	3.80	2.30	0.99	0.62	0.41	0.34		12.10	8.30	5.20	3.90	2.30	1.00	0.63	0.41	0.34	
A512/1.2S	NGA51201D2HSOSA	4.12	2.82	1.74	1.30	0.78	0.35	0.22	0.13	0.10		4.32	2.91	1.77	1.31	0.79	0.35	0.22	0.13	0.10	
A512/2S	NGA5120002HSOSA	6.80	4.60	2.90	2.20	1.50	0.59	0.36	0.24	0.19		7.40	4.80	3.00	2.20	1.50	0.60	0.37	0.24	0.19	
A512/3.5S	NGA51203D5HSOSA	11.30	7.90	5.10	3.80	2.30	0.99	0.62	0.41	0.34		12.10	8.30	5.20	3.90	2.30	1.00	0.63	0.41	0.34	
A512/6.5S	NGA51206D5HSOSA	20.00	14.00	9.20	6.80	3.90	1.60	1.10	0.76	0.63		21.00	15.00	9.50	6.90	3.90	1.60	1.10	0.76	0.63	
A512/10S	NGA5120010HSOSA	35.00	26.00	17.00	12.30	6.90	3.00	1.90	1.25	1.02		37.00	27.00	17.00	12.60	7.00	3.00	1.90	1.25	1.02	
A512/16G5	NGA5120016HSOBA	51.0	36.0	23.0	17.0	10.4	4.5	2.9	1.8	1.5		54.0	39.0	24.0	17.0	10.5	4.6	2.9	1.8	1.5	
A512/25G5	NGA5120025HSOBA	54.2	41.4	28.6	21.9	14.2	6.1	4.0	2.7	2.2		61.7	43.3	29.6	22.4	14.4	6.2	4.1	2.7	2.2	
A512/30G6	NGA5120030HSOBA	84.7	60.3	42.0	31.3	19.7	8.1	5.2	3.4	2.8		92.0	64.3	43.3	32.0	20.0	8.2	5.3	3.4	2.8	
A512/40A	NGA5120040HSOCA	103.0	74.0	50.0	37.0	24.0	9.4	6.8	4.5	3.7		115.0	79.0	52.0	38.0	24.0	9.5	6.8	4.5	3.7	
A512/40G6	NGA5120040HSOBA	103.0	74.0	50.0	37.0	24.0	9.4	6.8	4.5	3.7		115.0	79.0	52.0	38.0	24.0	9.5	6.8	4.5	3.7	
A512/55A	NGA5120055HSOCA	139.7	99.0	69.5	52.5	35.0	14.2	9.3	6.2	5.1		151.6	106.7	72.0	53.9	35.5	14.3	9.3	6.2	5.1	
A512/60A	NGA5120060HSOCA	168.0	118.1	80.4	60.5	36.4	16.1	10.4	6.9	5.6		178.3	125.2	82.6	61.6	36.9	16.2	10.4	6.9	5.6	
A512/60G6	NGA5120060HSOBA	168.0	118.1	80.4	60.5	36.4	16.1	10.4	6.9	5.6		178.3	125.2	82.6	61.6	36.9	16.2	10.4	6.9	5.6	
A512/65A	NGA5120065HSOCA	140.6	111.3	81.9	63.8	40.0	17.8	11.7	7.6	6.3		158.3	121.3	86.2	65.9	40.6	17.9	11.7	7.6	6.3	
A512/65G6	NGA5120065HSOBA	140.6	111.3	81.9	63.8	40.0	17.8	11.7	7.6	6.3		158.3	121.3	86.2	65.9	40.6	17.9	11.7	7.6	6.3	
A512/85A	NGA5120085HSOCA	226.0	169.0	120.0	90.0	58.0	23.0	15.0	9.9	8.1		244.0	182.0	125.0	93.0	59.0	23.0	15.1	9.9	8.1	
A512/115A</																					

The values are measured at 20°C and may change depending on the application or ambient temperature.

1.65 V/C – Discharge in A at 20°C												1.60 V/C – Discharge in A at 20°C									
Type	Part number	5'	10'	20'	30'	1h	3h	5h	8h	10h		5'	10'	20'	30'	1h	3h	5h	8h	10h	
A502/10S	NGA5020010HS0SA	39.00	28.00	17.00	12.70	7.10	3.00	1.90	1.25	1.02		42.00	29.00	17.00	12.80	7.10	3.00	1.90	1.25	1.02	
A504/3.5S	NGA50403D5HS0SA	12.70	8.50	5.30	3.90	2.30	1.01	0.63	0.41	0.34		13.10	8.70	5.30	3.90	2.30	1.01	0.63	0.41	0.34	
A506/1.2S	NGA50601D2HS0SA	4.52	2.96	1.79	1.32	0.80	0.36	0.22	0.13	0.10		4.66	3.00	1.80	1.33	0.80	0.36	0.22	0.13	0.10	
A506/3.5S	NGA50603D5HS0SA	12.70	8.50	5.30	3.90	2.30	1.01	0.63	0.41	0.34		13.10	8.70	5.30	3.90	2.30	1.01	0.63	0.41	0.34	
A506/4.2S	NGA50604D2HS0SA	14.80	7.00	4.50	3.50	2.50	1.27	0.79	0.50	0.41		15.20	7.00	4.50	3.50	2.50	1.27	0.79	0.50	0.41	
A506/6.5S	NGA50606D5HS0SA	23.00	15.00	9.60	7.00	4.00	1.60	1.10	0.76	0.63		24.00	16.00	9.70	7.00	4.00	1.60	1.10	0.76	0.63	
A506/10S	NGA5060010HS0SA	39.00	28.00	17.00	12.70	7.10	3.00	1.90	1.25	1.02		42.00	29.00	17.00	12.80	7.10	3.00	1.90	1.25	1.02	
A508/3.5S	NGA50803D5HS0SA	12.70	8.50	5.30	3.90	2.30	1.01	0.63	0.41	0.34		13.10	8.70	5.30	3.90	2.30	1.01	0.63	0.41	0.34	
A512/1.2S	NGA51201D2HS0SA	4.52	2.96	1.79	1.32	0.80	0.36	0.22	0.13	0.10		4.66	3.00	1.80	1.33	0.80	0.36	0.22	0.13	0.10	
A512/2S	NGA5120002HS0SA	7.80	4.90	3.00	2.20	1.50	0.60	0.37	0.24	0.19		8.20	5.00	3.10	2.20	1.50	0.60	0.37	0.24	0.19	
A512/3.5S	NGA51203D5HS0SA	12.70	8.50	5.30	3.90	2.30	1.01	0.63	0.41	0.34		13.10	8.70	5.30	3.90	2.30	1.01	0.63	0.41	0.34	
A512/6.5S	NGA51206D5HS0SA	23.00	15.00	9.60	7.00	4.00	1.60	1.10	0.76	0.63		24.00	16.00	9.70	7.00	4.00	1.60	1.10	0.76	0.63	
A512/10S	NGA5120010HS0SA	39.00	28.00	17.00	12.70	7.10	3.00	1.90	1.25	1.02		42.00	29.00	17.00	12.80	7.10	3.00	1.90	1.25	1.02	
A512/16G5	NGA5120016HS0BA	58.0	41.0	24.0	18.0	10.6	4.6	2.9	1.8	1.5		61.0	42.0	25.0	18.0	10.7	4.6	2.9	1.8	1.5	
A512/25G5	NGA5120025HS0BA	67.5	45.4	30.2	22.7	14.4	6.2	4.1	2.7	2.2		71.8	46.9	30.7	22.9	14.5	6.2	4.1	2.7	2.2	
A512/30G6	NGA5120030HS0BA	98.9	67.0	44.0	32.4	20.1	8.2	5.3	3.4	2.8		105.1	68.7	44.4	32.6	20.1	8.2	5.3	3.4	2.8	
A512/40A	NGA5120040HS0CA	121.0	82.0	53.0	39.0	24.0	9.5	6.8	4.5	3.7		127.0	85.0	54.0	39.0	24.0	9.5	6.8	4.5	3.7	
A512/40G6	NGA5120040HS0BA	121.0	82.0	53.0	39.0	24.0	9.5	6.8	4.5	3.7		127.0	85.0	54.0	39.0	24.0	9.5	6.8	4.5	3.7	
A512/55A	NGA5120055HS0CA	161.2	112.3	73.6	54.7	35.7	14.4	9.3	6.2	5.1		169.8	116.2	74.6	55.2	35.8	14.4	9.3	6.2	5.1	
A512/60A	NGA5120060HS0CA	185.2	130.3	83.2	61.7	37.1	16.2	10.4	6.9	5.6		191.0	133.3	83.5	61.8	37.2	16.2	10.4	6.9	5.6	
A512/60G6	NGA5120060HS0BA	185.2	130.3	83.2	61.7	37.1	16.2	10.4	6.9	5.6		191.0	133.3	83.5	61.8	37.2	16.2	10.4	6.9	5.6	
A512/65A	NGA5120065HS0CA	178.5	129.8	88.8	67.0	40.9	17.9	11.7	7.6	6.3		193.1	135.7	90.3	67.7	41.1	18.0	11.7	7.6	6.3	
A512/65G6	NGA5120065HS0BA	178.5	129.8	88.8	67.0	40.9	17.9	11.7	7.6	6.3		193.1	135.7	90.3	67.7	41.1	18.0	11.7	7.6	6.3	
A512/85A	NGA5120085HS0CA	259.0	192.0	128.0	94.0	59.0	24.0	15.1	9.9	8.1		273.0	199.0	130.0	95.0	60.0	23.0	15.1	9.9	8.1	
A512/115A	NGA5120115HS0CA	332.0	222.0	156.0	116.0	67.0	28.0	19.0	13.0	10.5		343.0	227.0	158.0	117.0	68.0	28.0	19.0	13.0	10.5	
A512/120A	NGA5120120HS0CA	387.0	260.0	165.0	122.0	74.0	30.1	18.0	11.3	9.0		409.0	267.0	168.0	124.0	74.7	30.2	18.1	11.3	9.0	
A512/140A	NGA5120140HS0CA	423.0	294.0	189.0	141.0	85.4	35.4	21.2	13.3	10.6		452.0	303.0	193.0	143.0	86.3	35.4	21.2	13.3	10.6	
A512/200A	NGA5120200HS0CA	531.0	395.0	262.0	198.0	120.0	51.0	30.6	19.1	15.3		581.0	411.0	269.0	202.0	121.0	51.1	30.6	19.1	15.3	

The values are measured at 20°C and may change depending on the application or ambient temperature.

1.85 V/C – Discharge in W/block at 20°C												1.80 V/C – Discharge in W/block at 20°C									
Type	Part number	3'	5'	10'	15'	20'	30'	45'	60'	90'		3'	5'	10'	15'	20'	30'	45'	60'	90'	
A502/10S	NGA5020010HSOSA	56.0	50.0	41.0	33.0	27.0	20.0	16.0	13.0	9.0		56.0	53.0	44.0	35.0	29.0	21.0	17.0	14.0	10.0	
A504/3.5S	NGA50403D5HSOSA	41.0	34.0	26.0	21.0	17.0	13.0	11.0	9.0	6.0		45.0	38.0	28.0	22.0	19.0	14.0	11.0	9.0	6.0	
A506/1.2S	NGA50601D2HSOSA	21.4	17.2	12.2	10.3	8.6	6.6	4.9	4.0	3.0		23.5	19.1	13.3	10.9	9.1	6.9	5.1	4.1	3.0	
A506/3.5S	NGA50603D5HSOSA	62.0	51.0	38.0	32.0	26.0	20.0	16.0	13.0	9.0		68.0	57.0	42.0	33.0	28.0	21.0	17.0	13.0	10.0	
A506/4.2S	NGA50604D2HSOSA	77.0	63.0	44.0	35.0	30.0	23.0	16.0	14.0	11.0		83.0	71.0	49.0	39.0	35.0	31.0	17.0	14.0	11.0	
A506/6.5S	NGA50606D5HSOSA	120.0	100.0	73.0	60.0	51.0	38.0	28.0	23.0	16.0		128.0	112.0	80.0	63.0	54.0	40.0	30.0	24.0	17.0	
A506/10S	NGA5060010HSOSA	167.0	149.0	124.0	98.0	80.0	60.0	49.0	39.0	28.0		168.0	159.0	131.0	104.0	86.0	64.0	51.0	41.0	29.0	
A508/3.5S	NGA50803D5HSOSA	83.0	68.0	51.0	42.0	35.0	27.0	22.0	17.0	12.0		91.0	76.0	56.0	44.0	37.0	28.0	23.0	18.0	13.0	
A512/1.2S	NGA51201D2HSOSA	42.7	34.4	24.3	20.7	17.2	13.2	9.8	8.0	5.9		47.0	38.3	26.5	21.7	18.1	13.7	10.2	8.2	6.0	
A512/2S	NGA512002HSOSA	74.0	60.0	44.0	36.0	30.0	23.0	17.0	14.0	10.0		83.0	68.0	49.0	38.0	32.0	24.0	18.0	15.0	11.0	
A512/3.5S	NGA51203D5HSOSA	124.0	102.0	77.0	63.0	52.0	40.0	33.0	26.0	18.0		136.0	114.0	84.0	66.0	56.0	42.0	34.0	27.0	19.0	
A512/6.5S	NGA51206D5HSOSA	240.0	200.0	146.0	120.0	102.0	76.0	56.0	46.0	32.0		256.0	224.0	160.0	126.0	108.0	80.0	60.0	48.0	34.0	
A512/10S	NGA5120010HSOSA	335.0	298.0	248.0	195.0	160.0	120.0	98.0	78.0	56.0		336.0	318.0	261.0	209.0	172.0	128.0	101.0	81.0	59.0	
A512/16G5	NGA5120016HSOBA	485.0	433.0	352.0	295.0	252.0	192.0	150.0	119.0	87.0		584.0	485.0	384.0	309.0	269.0	203.0	156.0	124.0	90.0	
A512/25G5	NGA5120025HSOBA	535.0	463.0	387.0	324.0	278.0	225.0	170.0	140.0	105.0		623.0	555.0	418.0	360.0	303.0	240.0	180.0	146.0	109.0	
A512/30G6	NGA5120030HSOBA	857.0	751.0	568.0	479.0	400.0	310.0	251.0	200.0	144.0		1036.0	850.0	637.0	517.0	433.0	330.0	264.0	210.0	151.0	
A512/40A	NGA5120040HSOCA	958.0	848.0	703.0	578.0	490.0	395.0	300.0	243.0	178.0		1092.0	1007.0	758.0	646.0	538.0	415.0	318.0	255.0	186.0	
A512/40G6	NGA5120040HSOBA	958.0	848.0	703.0	578.0	490.0	395.0	300.0	243.0	178.0		1092.0	1007.0	758.0	646.0	538.0	415.0	318.0	255.0	186.0	
A512/55A	NGA5120055HSOCA	1348.0	1172.0	922.0	844.0	718.0	572.0	457.0	367.0	269.0		1555.0	1362.0	1014.0	888.0	777.0	606.0	478.0	382.0	278.0	
A512/60A	NGA5120060HSOCA	1618.0	1414.0	1096.0	963.0	807.0	625.0	459.0	369.0	271.0		1955.0	1634.0	1181.0	1041.0	873.0	669.0	489.0	390.0	283.0	
A512/60G6	NGA5120060HSOBA	1618.0	1414.0	1096.0	963.0	807.0	625.0	459.0	369.0	271.0		1955.0	1634.0	1181.0	1041.0	873.0	669.0	489.0	390.0	283.0	
A512/65A	NGA5120065HSOCA	1180.0	1113.0	991.0	861.0	763.0	659.0	500.0	411.0	307.0		1459.0	1316.0	1109.0	989.0	851.0	693.0	544.0	441.0	327.0	
A512/65G6	NGA5120065HSOBA	1180.0	1113.0	991.0	861.0	763.0	659.0	500.0	411.0	307.0		1459.0	1316.0	1109.0	989.0	851.0	693.0	544.0	441.0	327.0	
A512/85A	NGA5120085HSOCA	1979.0	1802.0	1527.0	1310.0	1118.0	905.0	690.0	565.0	425.0		2279.0	2132.0	1684.0	1487.0	1245.0	970.0	740.0	600.0	447.0	
A512/115A	NGA5120115HSOCA	2808.0	2531.0	2009.0	1705.0	1439.0	1155.0	872.0	702.0	512.0		3189.0	2873.0	2190.0	1888.0	1569.0	1209.0	926.0	739.0	535.0	
A512/120A	NGA5120120HSOCA	3350.0	2862.0	2300.0	1895.0	1583.0	1200.0	938.0	757.0	583.0		3763.0	3276.0	2543.0	2027.0	1720.0	1285.0	966.0	794.0	608.0	
A512/140A	NGA5120140HSOCA	3674.0	3172.0	2549.0	2101.0	1755.0	1330.0	1040.0	839.0	647.0		4127.0	3631.0	2819.0	2246.0	1906.0	1424.0	1070.0	880.0	674.0	
A512/200A	NGA5120200HSOCA	4690.0	4102.0	3449.0	2843.0	2375.0	1800.0	1408.0	1135.0	875.0		5268.0	4695.0	3815.0	3040.0	2580.0	1928.0	1449.0	1191.0	912.0	

1.75 V/C – Discharge in W/block at 20°C												1.70 V/C – Discharge in W/block at 20°C									
Type	Part number	3'	5'	10'	15'	20'	30'	45'	60'	90'		3'	5'	10'	15'	20'	30'	45'	60'	90'	
A502/10S	NGA5020010HSOSA	60.0	58.0	45.0	36.0	30.0	22.0	17.0	14.0	10.0		64.0	60.0	46.0	38.0	31.0	22.0	17.0	14.0	10.0	
A504/3.5S	NGA50403D5HSOSA	49.0	41.0	30.0	23.0	20.0	15.0	12.0	9.0	6.0		53.0	44.0	31.0	24.0	20.0	15.0	12.0	9.0	7.0	
A506/1.2S	NGA50601D2HSOSA	25.1	20.7	14.0	11.1	9.3	7.0	5.2	4.2	3.0		26.8	21.9	14.4	11.2	9.4	7.1	5.2	4.2	3.1	
A506/3.5S	NGA50603D5HSOSA	73.0	62.0	45.0	35.0	29.0	22.0	18.0	14.0	10.0		80.0	66.0	46.0	36.0	30.0	22.0	18.0	14.0	10.0	
A506/4.2S	NGA50604D2HSOSA	89.0	77.0	52.0	40.0	36.0	31.0	17.0	15.0	11.0		97.0	81.0	54.0	41.0	36.0	32.0	17.0	15.0	11.0	
A506/6.5S	NGA50606D5HSOSA	138.0	121.0	86.0	66.0	57.0	42.0	30.0	24.0	17.0		150.0	126.0	88.0	68.0	58.0	42.0	31.0	24.0	17.0	
A506/10S	NGA5060010HSOSA	181.0	173.0	135.0	109.0	90.0	66.0	51.0	42.0	30.0		193.0	180.0	139.0	113.0	92.0	67.0	52.0	42.0	30.0	
A508/3.5S	NGA50803D5HSOSA	97.0	82.0	60.0	46.0	39.0	29.0	23.0	18.0	13.0		106.0	88.0	61.0	48.0	40.0	30.0	24.0	19.0	13.0	
A512/1.2S	NGA51201D2HSOSA	50.1	41.4	28.0	22.2	18.6	14.0	10.3	8.3	6.1		53.7	43.7	28.8	22.4	18.8	14.1	10.4	8.4	6.1	
A512/2S	NGA512002HSOSA	91.0	75.0	52.0	40.0	33.0	25.0	18.0	15.0	11.0		99.0	80.0	53.0	41.0	34.0	25.0	19.0	15.0	11.0	
A512/3.5S	NGA51203D5HSOSA	146.0	123.0	89.0	69.0	59.0	44.0	35.0	27.0	19.0		159.0	131.0	92.0	72.0	60.0	45.0	35.0	28.0	20.0	
A512/6.5S	NGA51206D5HSOSA	276.0	242.0	172.0	132.0	114.0	84.0	60.0	48.0	34.0		300.0	252.0	176.0	136.0	116.0	84.0	62.0	48.0	34.0	
A512/10S	NGA5120010HSOSA	361.0	346.0	270.0	219.0	179.0	132.0	103.0	83.0	60.0		385.0	360.0	278.0	226.0	185.0	135.0	103.0	84.0	60.0	
A512/16G5	NGA5120016HSOBA	636.0	534.0	407.0	322.0	280.0	209.0	159.0	126.0	91.0		688.0	573.0	418.0	331.0	285.0	212.0	161.0	127.0	91.0	
A512/25G5	NGA5120025HSOBA	689.0	616.0	454.0	385.0	320.0	248.0	185.0	150.0	111.0		776.0	652.0	482.0	395.0	330.0	253.0	187.0	151.0	112.0	
A512/30G6	NGA5120030HSOBA	1118.0	951.0	690.0	538.0	453.0	341.0	271.0	214.0	153.0		1214.0	1037.0	726.0	558.0	465.0	347.0	274.0	216.0	155.0	
A512/40A	NGA5120040HSOCA	1226.0	1074.0	822.0	691.0	569.0	432.0	326.0	261.0	189.0		1391.0	1157.0	870.0	719.0	587.0	441.0	331.0	264.0	191.0	
A512/40G6	NGA5120040HSOBA	1226.0	1074.0	822.0	691.0	569.0	432.0	326.0	261.0	189.0		1391.0	1157.0	870.0	719.0	587.0	441.0	331.0	264.0	191.0	
A512/55A	NGA5120055HSOCA	1799.0	1496.0	1102.0	917.0	813.0	626.0	489.0	388.0	281.0		1912.0	1624.0	1163.0	935.0	834.0	636.0	493.0	392.0	283.0	
A512/60A	NGA5120060HSOCA	2																			

1.65 V/C – Discharge in W/block at 20°C												1.60 V/C – Discharge in W/block at 20°C									
Type	Part number	3'	5'	10'	15'	20'	30'	45'	60'	90'		3'	5'	10'	15'	20'	30'	45'	60'	90'	
A502/10S	NGA5020010HS0SA	68.0	62.0	47.0	38.0	31.0	23.0	17.0	14.0	10.0		73.0	63.0	48.0	38.0	31.0	23.0	17.0	14.0	10.0	
A504/3.5S	NGA50403D5HS0SA	57.0	46.0	31.0	24.0	20.0	15.0	12.0	9.0	7.0		59.0	46.0	32.0	25.0	20.0	15.0	12.0	9.0	7.0	
A506/1.2S	NGA50601D2HS0SA	28.2	22.6	14.7	11.2	9.5	7.1	5.2	4.2	3.1		29.2	23.1	14.8	11.3	9.5	7.1	5.2	4.2	3.1	
A506/3.5S	NGA50603D5HS0SA	85.0	68.0	47.0	36.0	30.0	23.0	18.0	14.0	10.0		89.0	69.0	47.0	37.0	31.0	23.0	18.0	14.0	10.0	
A506/4.2S	NGA50604D2HS0SA	102.0	82.0	55.0	41.0	36.0	32.0	17.0	15.0	11.0		106.0	83.0	55.0	42.0	37.0	32.0	17.0	15.0	11.0	
A506/6.5S	NGA50606D5HS0SA	160.0	129.0	90.0	69.0	59.0	43.0	31.0	25.0	18.0		168.0	132.0	92.0	70.0	59.0	43.0	31.0	25.0	18.0	
A506/10S	NGA5060010HS0SA	205.0	186.0	142.0	114.0	93.0	68.0	52.0	42.0	30.0		218.0	190.0	144.0	115.0	94.0	68.0	52.0	42.0	30.0	
A508/3.5S	NGA50803D5HS0SA	113.0	91.0	62.0	49.0	41.0	30.0	24.0	19.0	13.0		119.0	93.0	63.0	49.0	41.0	30.0	24.0	19.0	13.0	
A512/1.2S	NGA51201D2HS0SA	56.4	45.3	29.4	22.5	18.9	14.2	10.5	8.4	6.1		58.4	46.2	29.7	22.5	19.0	14.2	10.5	8.4	6.2	
A512/2S	NGA5120002HS0SA	103.0	82.0	54.0	41.0	34.0	25.0	19.0	15.0	11.0		106.0	84.0	55.0	42.0	34.0	25.0	19.0	15.0	11.0	
A512/3.5S	NGA51203D5HS0SA	170.0	137.0	93.0	73.0	61.0	45.0	35.0	28.0	20.0		178.0	139.0	95.0	74.0	61.0	45.0	36.0	28.0	20.0	
A512/6.5S	NGA51206D5HS0SA	320.0	258.0	180.0	138.0	118.0	86.0	62.0	50.0	36.0		336.0	264.0	184.0	140.0	118.0	86.0	62.0	50.0	36.0	
A512/10S	NGA5120010HS0SA	410.0	371.0	283.0	229.0	187.0	136.0	104.0	84.0	61.0		437.0	381.0	287.0	231.0	188.0	136.0	104.0	85.0	61.0	
A512/16G5	NGA5120016HS0BA	741.0	601.0	423.0	335.0	288.0	213.0	161.0	128.0	92.0		783.0	621.0	426.0	338.0	289.0	214.0	162.0	128.0	92.0	
A512/25G5	NGA5120025HS0BA	854.0	693.0	501.0	400.0	335.0	255.0	188.0	152.0	112.0		908.0	725.0	514.0	403.0	339.0	256.0	189.0	153.0	113.0	
A512/30G6	NGA5120030HS0BA	1310.0	1095.0	746.0	569.0	471.0	351.0	276.0	217.0	155.0		1393.0	1121.0	755.0	576.0	474.0	352.0	276.0	218.0	156.0	
A512/40A	NGA5120040HS0CA	1514.0	1235.0	902.0	729.0	597.0	446.0	333.0	265.0	192.0		1577.0	1299.0	923.0	735.0	603.0	449.0	334.0	266.0	192.0	
A512/40G6	NGA5120040HS0BA	1514.0	1235.0	902.0	729.0	597.0	446.0	333.0	265.0	192.0		1577.0	1299.0	923.0	735.0	603.0	449.0	334.0	266.0	192.0	
A512/55A	NGA5120055HS0CA	2005.0	1726.0	1204.0	945.0	845.0	642.0	496.0	394.0	284.0		2107.0	1800.0	1231.0	957.0	851.0	645.0	498.0	395.0	285.0	
A512/60A	NGA5120060HS0CA	2548.0	2176.0	1404.0	1098.0	954.0	715.0	519.0	409.0	292.0		2680.0	2279.0	1439.0	1104.0	963.0	719.0	522.0	410.0	293.0	
A512/60G6	NGA5120060HS0BA	2548.0	2176.0	1404.0	1098.0	954.0	715.0	519.0	409.0	292.0		2680.0	2279.0	1439.0	1104.0	963.0	719.0	522.0	410.0	293.0	
A512/65A	NGA5120065HS0CA	2139.0	1853.0	1395.0	1171.0	976.0	749.0	582.0	466.0	341.0		2315.0	1976.0	1443.0	1183.0	987.0	754.0	584.0	468.0	342.0	
A512/65G6	NGA5120065HS0BA	2139.0	1853.0	1395.0	1171.0	976.0	749.0	582.0	466.0	341.0		2315.0	1976.0	1443.0	1183.0	987.0	754.0	584.0	468.0	342.0	
A512/85A	NGA5120085HS0CA	3115.0	2719.0	2109.0	1663.0	1410.0	1060.0	797.0	642.0	474.0		3264.0	2923.0	2190.0	1700.0	1427.0	1069.0	804.0	648.0	477.0	
A512/115A	NGA5120115HS0CA	4304.0	3582.0	2603.0	2057.0	1732.0	1296.0	980.0	776.0	557.0		4467.0	3755.0	2665.0	2073.0	1750.0	1306.0	985.0	780.0	560.0	
A512/120A	NGA5120120HS0CA	4847.0	4002.0	2761.0	2246.0	1883.0	1387.0	1022.0	843.0	640.0		5135.0	4156.0	2812.0	2276.0	1906.0	1403.0	1032.0	852.0	646.0	
A512/140A	NGA5120140HS0CA	5316.0	4435.0	3060.0	2489.0	2087.0	1538.0	1133.0	934.0	709.0		5631.0	4606.0	3117.0	2522.0	2113.0	1555.0	1144.0	945.0	716.0	
A512/200A	NGA5120200HS0CA	6786.0	5736.0	4142.0	3369.0	2825.0	2081.0	1533.0	1264.0	959.0		7189.0	5957.0	4218.0	3413.0	2860.0	2104.0	1548.0	1279.0	969.0	

The values are measured at 20°C and may change depending on the application or ambient temperature.

Exide Technologies Network Power – The Industry Leader.



ABSOLYTE

MARATHON

Sprinter

Classic

Powerfit



Exide Technologies Network Power Division is a global leader in stored electrical energy solutions for all major critical reserve power applications and needs. Network power applications include communication/data networks, UPS systems for computers and control systems, electrical power generation and distribution systems, as well as a wide range of other industrial standby power applications. With a strong manufacturing base in both North America and Europe and a truly global reach (operations in more than 80 countries) in sales and service, Exide Technologies Network Power Division is best positioned to satisfy your back up power needs locally as well as all over the world.

Based on over 100 years of technological innovation the Network Power Division leads the industry with the most recognized global brands such as Absolyte, Sonnenschein, Marathon, Sprinter, and Flooded Classic. They have come to symbolize quality, reliability, performance and excellence in all the markets served.

Exide Technologies takes pride in its commitment to a better environment. Its Total Battery Management program, an integrated approach to manufacturing, distributing and recycling of lead acid batteries, has been developed to ensure a safe and responsible life cycle for all of its products.

EXIDE Technologies
Network Power
Im Thiergarten
63654 Büdingen
Germany
Tel.: +49 (0) 60 42 / 81 70
Fax: +49 (0) 60 42 / 81 233

GNB Industrial Power
829 Parkview Boulevard
Lombard, IL 60148-3249
U.S.A.

Tel.: +1 630.629.5200
Fax: +1 630.629.2635

www.networkpower.exide.com

EXIDE
TECHNOLOGIES