



Industrial Batteries – Network Power
Classic OPzS
Energy storage for economical safety.

Specifications

Developed from experience - produced for safe power supply.

Specifications

- Classic OPzS batteries have been proven energy suppliers for decades, which captivate in robustness, extreme long design life and reliability
- Very high operational reliability under rough operating conditions
- Low maintenance due to reduced antimony in the alloy and high electrolyte reserve
- Nominal capacity 50 – 3350 Ah C₁₀; up to 12000 Ah on request
- Design life at 20°C
 - 15 years for 6/12 V blocks and cells \geq 3500 Ah;
 - 20 years for 2 V cells 125 – 3350 Ah (80% remaining capacity from C₁₀)
- Also designed for cyclic applications
- Containers made from high-quality transparent plastics (blocks= ABS/ cells = SAN)
- Tubular plates in block and single cell version
- Also available in dry charged condition with separate electrolyte
- Low gassing due to antimony alloy < 3% (EN 50272-2)
- Conforms to DIN 40 736 and DIN 40 737 T3
- Electrolyte: diluted sulphuric acid $d_N = 1.24$ kg/l
- Optimised plate design produces increased capacities compared to DIN
- Completely recyclable



Applications

Classic OPzS batteries are robust energy storage solutions, with proven technology that has been relied upon for decades in applications such as telecommunications, power supply and power distribution, data, alarm security systems and emergency lighting as well as all other power supplies for safety systems.



Design life in years:
15 for blocks + cells
≥ 3500 Ah
20 for cells ≤ 3350 Ah



Nominal capacity
50.0 – 3350 Ah
(up to 12000 Ah
on request)



Block battery / single cell



Tubular plate



Recyclable



Low maintenance

Type	Part number	Nom. voltage	Nominal capacity	Length (l)	Width (b/w)	Height* (h)	Installed length (L)	Weight incl. acid	Weight acid**	Internal resistance	Short circuit current	Terminal	Pole pairs
acc. DIN 40 737 T3 blocks 40 736 T1 cells		V	C ₁₀ 1.80 Vpc 20 °C Ah	max. mm	max. mm	max. mm	mm	approx. kg	approx. kg	mOhm	A		
6V 4 OPzS 200 LA	NVZS060200WC0FA	6	200	273	204	358	283	41.0	13.0	2.68	2283	F-M8	1
6V 5 OPzS 250 LA	NVZS060250WC0FA	6	250	381	204	358	391	56.0	20.0	2.39	2800	F-M8	1
6V 6 OPzS 300 LA	NVZS060300WC0FA	6	300	381	204	358	391	63.0	20.0	1.96	3106	F-M8	1
12V 1 OPzS 50 LA	NVZS120050WC0FA	12	50.0	273	204	358	283	35.0	15.0	18.1	688	F-M8	1
12V 2 OPzS 100 LA	NVZS120100WC0FA	12	100	273	204	358	283	45.0	14.0	9.26	1314	F-M8	1
12V 3 OPzS 150 LA	NVZS120150WC0FA	12	150	381	204	358	391	64.0	19.0	6.46	1884	F-M8	1
2 OPzS 100 LA	NVZS020100WC0FA	2	125	105	208	395	115	13.7	5.20	1.45	1400	F-M8	1
3 OPzS 150 LA	NVZS020150WC0FA	2	165	105	208	395	115	15.2	5.00	1.05	1950	F-M8	1
4 OPzS 200 LA	NVZS020200WC0FA	2	210	105	208	395	115	16.6	4.60	0.83	2450	F-M8	1
5 OPzS 250 LA	NVZS020250WC0FA	2	260	126	208	395	136	20.0	5.80	0.72	2850	F-M8	1
6 OPzS 300 LA	NVZS020300WC0FA	2	310	147	208	395	157	23.3	6.90	0.63	3250	F-M8	1
5 OPzS 350 LA	NVZS020350WC0FA	2	380	126	208	511	136	26.7	8.10	0.63	3250	F-M8	1
6 OPzS 420 LA	NVZS020420WC0FA	2	455	147	208	511	157	31.0	9.30	0.56	3650	F-M8	1
7 OPzS 490 LA	NVZS020490WC0FA	2	530	168	208	511	178	35.4	10.8	0.50	4100	F-M8	1
6 OPzS 600 LA	NVZS020600WC0FA	2	680	147	208	686	157	43.9	13.0	0.47	4350	F-M8	1
7 OPzS 700 LA	NVZS020700WC0FA	2	750	147	208	686	157	47.2	12.8	0.43	4800	F-M8	1
8 OPzS 800 LA	NVZS020800WC0FA	2	910	212	193	686	222	59.9	17.1	0.30	6800	F-M8	2
9 OPzS 900 LA	NVZS020900WC0FA	2	980	212	193	686	222	63.4	16.8	0.27	7500	F-M8	2
10 OPzS 1000 LA	NVZS021000WC0FA	2	1140	212	235	686	222	73.2	21.7	0.26	7900	F-M8	2
12 OPzS 1200 LA	NVZS021200WC0FA	2	1370	212	277	686	222	86.4	26.1	0.23	8900	F-M8	2
12 OPzS 1500 LA	NVZS021500WC0FA	2	1700	212	277	836	222	108	33.7	0.24	8500	F-M8	2
14 OPzS 1750 LA	NVZS021750WC0FA	2	1800	212	277	836	222	114	32.7	0.22	9300	F-M8	2
16 OPzS 2000 LA	NVZS022000WC0FA	2	2250	215	400	812	225	151	50.0	0.16	12800	F-M8	3
18 OPzS 2250 LA	NVZS022250WC0FA	2	2450	215	400	812	225	158	48.0	0.14	14600	F-M8	3
20 OPzS 2500 LA	NVZS022500WC0FA	2	2800	215	490	812	225	184	60.0	0.12	17000	F-M8	4
22 OPzS 2750 LA	NVZS022750WC0FA	2	3000	215	490	812	225	191	58.0	0.11	17800	F-M8	4
24 OPzS 3000 LA	NVZS023000WC0FA	2	3350	215	580	812	225	217	71.0	0.11	18600	F-M8	4

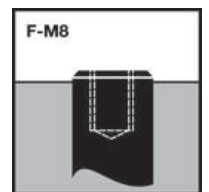
* Includes installed connector, the above mentioned height can differ depending on the used vent(s)

** Acid density $d_N = 1.24 \text{ kg/l}$

Data are also valid for dry charged version.
Change „W“ (Wet) to „D“ (Dry)
in the part number.

E.g.:
filled and charged NVZS120050 W C0FA
dry charged NVZS120050 D C0FA

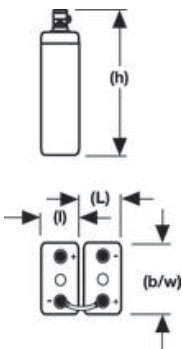
Container, terminal and torque



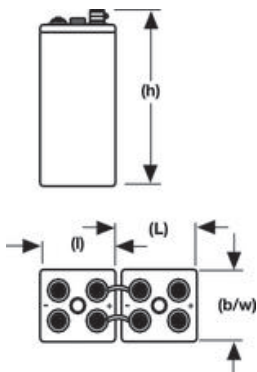
20 Nm

Container: ABS (Block)
SAN (Styrolacrylnitril) (Cell)

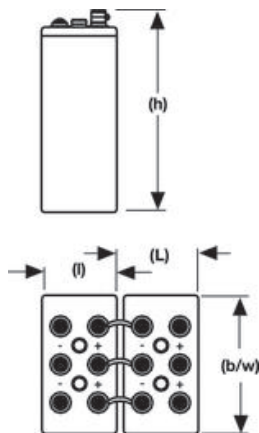
2 OPzS 100 LA
-
7 OPzS 700 LA



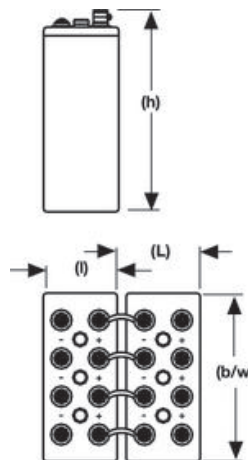
8 OPzS 800 LA
-
14 OPzS 1750 LA



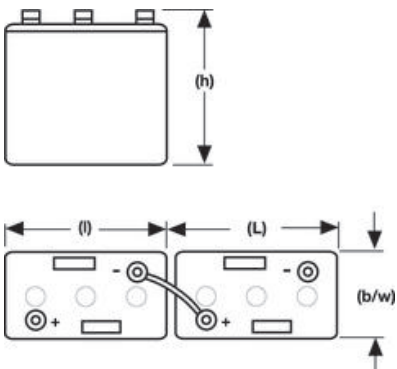
16 OPzS 2000 LA
-
18 OPzS 2250 LA



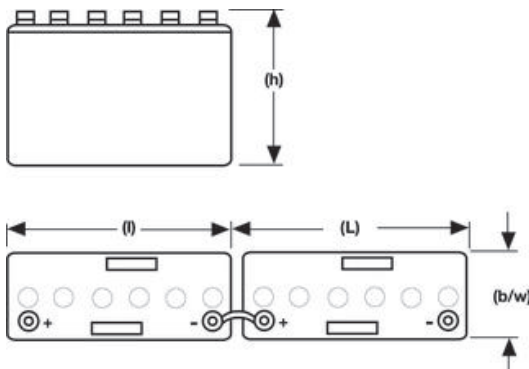
20 OPzS 2500 LA
-
24 OPzS 3000 LA



6V 4 OPzS 200 LA
-
6V 6 OPzS 300 LA



12V 1 OPzS 50 LA
-
12V 3 OPzS 150 LA



OPzS blocks

1.90 Vpc – Discharge in A at 20 °C													
Type	Part number	5 min	10 min	15 min	30 min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h
6V 4 OPzS 200 LA	NVZS060200WC0FA	120	105	96.0	85.0	62.0	46.0	35.3	30.0	26.7	24.1	19.8	16.1
6V 5 OPzS 250 LA	NVZS060250WC0FA	145	132	122	102	70.0	56.0	43.5	34.0	32.0	29.0	25.2	21.7
6V 6 OPzS 300 LA	NVZS060300WC0FA	160	147	136	118	91.0	66.0	53.0	45.3	39.0	34.0	28.0	24.5
12V 1 OPzS 50 LA	NVZS120050WC0FA	32.0	29.0	25.0	21.3	16.1	11.7	9.70	8.20	7.00	6.30	5.60	5.00
12V 2 OPzS 100 LA	NVZS120100WC0FA	66.5	58.0	52.2	41.5	31.5	24.5	17.4	15.0	13.7	12.5	10.6	8.90
12V 3 OPzS 150 LA	NVZS120150WC0FA	99.0	84.0	76.0	64.0	47.2	34.1	26.4	22.3	19.7	17.7	14.6	12.0

1.87 Vpc – Discharge in A at 20 °C													
Type	Part number	5 min	10 min	15 min	30 min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h
6V 4 OPzS 200 LA	NVZS060200WC0FA	150	132	120	100	72.4	52.0	40.0	33.2	29.4	26.8	22.2	18.0
6V 5 OPzS 250 LA	NVZS060250WC0FA	180	161	140	118	88.7	63.2	50.0	42.0	36.7	33.4	28.1	23.3
6V 6 OPzS 300 LA	NVZS060300WC0FA	195	176	160	135	104	76.5	59.2	51.0	44.0	38.0	32.0	27.0
12V 1 OPzS 50 LA	NVZS120050WC0FA	40.0	35.0	31.0	25.5	19.4	13.6	11.2	9.30	8.20	7.20	6.00	5.50
12V 2 OPzS 100 LA	NVZS120100WC0FA	80.0	70.0	62.0	50.0	37.9	27.2	19.9	16.9	15.2	13.7	11.5	9.50
12V 3 OPzS 150 LA	NVZS120150WC0FA	120	102	90.0	75.0	55.0	39.5	30.0	25.4	22.0	19.8	16.4	13.8

1.85 Vpc – Discharge in A at 20 °C													
Type	Part number	5 min	10 min	15 min	30 min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h
6V 4 OPzS 200 LA	NVZS060200WC0FA	162	145	135	110	78.7	55.5	42.2	35.0	30.8	28.1	23.3	18.7
6V 5 OPzS 250 LA	NVZS060250WC0FA	193	175	155	126	93.4	67.0	52.5	44.5	38.2	35.1	29.3	23.7
6V 6 OPzS 300 LA	NVZS060300WC0FA	216	195	177	147	113	79.0	62.0	54.0	46.0	40.5	33.7	28.0
12V 1 OPzS 50 LA	NVZS120050WC0FA	44.0	39.0	35.0	28.2	21.0	14.2	11.7	9.80	8.50	7.50	6.30	5.60
12V 2 OPzS 100 LA	NVZS120100WC0FA	87.5	78.0	69.5	55.0	41.0	28.8	21.4	17.8	15.6	14.3	11.8	9.70
12V 3 OPzS 150 LA	NVZS120150WC0FA	130	112	102	81.0	59.8	42.0	31.5	27.1	23.0	20.7	17.1	14.2

1.83 Vpc – Discharge in A at 20 °C													
Type	Part number	5 min	10 min	15 min	30 min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h
6V 4 OPzS 200 LA	NVZS060200WC0FA	175	158	150	120	85.0	59.1	44.5	36.7	32.3	29.2	24.0	19.5
6V 5 OPzS 250 LA	NVZS060250WC0FA	207	190	171	135	102	71.4	55.0	46.5	40.3	36.3	30.2	24.5
6V 6 OPzS 300 LA	NVZS060300WC0FA	237	213	195	160	123	85.7	66.3	56.5	48.3	42.5	34.8	29.0
12V 1 OPzS 50 LA	NVZS120050WC0FA	48.0	43.0	39.0	31.0	22.8	15.3	12.2	10.2	8.80	7.80	6.50	5.80
12V 2 OPzS 100 LA	NVZS120100WC0FA	95.0	85.0	77.0	60.0	44.0	30.6	22.8	18.6	16.1	14.6	12.1	10.0
12V 3 OPzS 150 LA	NVZS120150WC0FA	140	122	115	87.0	64.6	44.4	33.4	28.3	24.1	21.6	17.9	14.6

1.80 Vpc – Discharge in A at 20 °C													
Type	Part number	5 min	10 min	15 min	30 min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h
6V 4 OPzS 200 LA	NVZS060200WC0FA	205	178	160	130	92.0	61.3	47.5	38.5	34.9	30.4	25.0	20.3
6V 5 OPzS 250 LA	NVZS060250WC0FA	240	212	190	150	110	74.5	59.2	49.0	42.8	37.8	31.2	25.5
6V 6 OPzS 300 LA	NVZS060300WC0FA	260	240	218	177	135	89.3	70.4	59.5	51.0	44.5	35.8	30.3
12V 1 OPzS 50 LA	NVZS120050WC0FA	57.0	49.0	44.0	34.0	25.2	17.1	13.5	11.0	9.50	8.20	6.90	5.90
12V 2 OPzS 100 LA	NVZS120100WC0FA	110	96.0	85.0	66.0	49.0	32.3	24.1	19.6	17.1	15.4	12.5	10.1
12V 3 OPzS 150 LA	NVZS120150WC0FA	160	135	120	95.0	70.4	47.1	36.0	29.8	25.7	22.7	18.6	15.0

OPzS blocks

1.75 Vpc – Discharge in A at 20 °C													
Type	Part number	5 min	10 min	15 min	30 min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h
6V 4 OPzS 200 LA	NVZS060200WC0FA	235	206	185	140	97.9	66.0	50.0	40.5	35.8	31.2	25.7	20.4
6V 5 OPzS 250 LA	NVZS060250WC0FA	285	250	220	165	120	81.0	62.0	51.0	44.0	39.1	32.3	26.1
6V 6 OPzS 300 LA	NVZS060300WC0FA	340	295	260	200	143	98.3	74.5	62.0	52.5	45.8	36.8	30.6
12V 1 OPzS 50 LA	NVZS120050WC0FA	65.0	56.0	48.0	36.0	26.5	18.4	14.0	11.6	9.80	8.60	7.20	6.20
12V 2 OPzS 100 LA	NVZS120100WC0FA	125	109	95.0	71.0	51.3	34.0	25.9	20.8	18.2	16.2	13.0	10.2
12V 3 OPzS 150 LA	NVZS120150WC0FA	185	155	136	102	73.4	50.0	37.5	31.2	27.0	24.0	19.4	15.3

1.70 Vpc – Discharge in A at 20 °C													
Type	Part number	5 min	10 min	15 min	30 min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h
6V 4 OPzS 200 LA	NVZS060200WC0FA	270	232	208	155	108	68.0	51.6	41.5	36.1	31.7	26.0	20.8
6V 5 OPzS 250 LA	NVZS060250WC0FA	340	287	255	183	131	84.0	63.5	52.3	45.0	40.1	33.0	26.5
6V 6 OPzS 300 LA	NVZS060300WC0FA	380	333	295	220	159	103	77.0	63.6	53.5	46.4	37.3	31.2
12V 1 OPzS 50 LA	NVZS120050WC0FA	75.0	62.0	54.0	39.0	27.3	18.5	14.4	11.8	10.0	8.70	7.30	6.30
12V 2 OPzS 100 LA	NVZS120100WC0FA	145	122	106	78.0	54.0	35.0	26.7	21.3	18.8	16.6	13.3	10.4
12V 3 OPzS 150 LA	NVZS120150WC0FA	210	174	155	115	79.3	52.0	38.6	32.0	28.2	24.8	19.9	15.6

1.67 Vpc – Discharge in A at 20 °C													
Type	Part number	5 min	10 min	15 min	30 min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h
6V 4 OPzS 200 LA	NVZS060200WC0FA	293	247	219	160	111	68.5	52.5	41.8	36.2	32.0	26.1	21.0
6V 5 OPzS 250 LA	NVZS060250WC0FA	362	307	268	189	133	84.5	63.9	52.6	45.6	40.5	33.3	26.6
6V 6 OPzS 300 LA	NVZS060300WC0FA	417	355	315	231	163	105	78.0	64.1	54.0	46.6	37.5	31.3
12V 1 OPzS 50 LA	NVZS120050WC0FA	80.0	66.0	56.0	40.0	27.7	18.7	14.5	11.9	10.0	8.80	7.30	6.30
12V 2 OPzS 100 LA	NVZS120100WC0FA	156	130	111	81.0	55.0	35.3	26.8	21.6	18.9	16.8	13.4	10.4
12V 3 OPzS 150 LA	NVZS120150WC0FA	229	186	163	118	82.0	52.6	39.0	32.2	28.5	25.2	20.1	15.7

1.65 Vpc – Discharge in A at 20 °C													
Type	Part number	5 min	10 min	15 min	30 min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h
6V 4 OPzS 200 LA	NVZS060200WC0FA	307	258	226	163	113	69.0	52.9	42.0	37.5	32.2	26.2	21.0
6V 5 OPzS 250 LA	NVZS060250WC0FA	380	320	278	193	135	85.0	64.1	52.8	46.0	40.8	33.4	26.6
6V 6 OPzS 300 LA	NVZS060300WC0FA	435	369	326	237	165	106	78.5	64.4	54.2	46.8	37.6	31.3
12V 1 OPzS 50 LA	NVZS120050WC0FA	83.0	68.0	58.0	41.0	27.9	18.8	14.5	11.9	10.0	8.80	7.30	6.30
12V 2 OPzS 100 LA	NVZS120100WC0FA	162	135	115	83.0	55.5	35.5	26.9	21.7	19.0	16.9	13.5	10.4
12V 3 OPzS 150 LA	NVZS120150WC0FA	240	193	168	120	83.0	53.0	39.2	32.4	28.6	25.5	20.2	15.7

OPzS cells

1.87 Vpc – Discharge in A at 20 °C															
Type	Part number	3 min	10 min	15 min	20 min	30 min	1 h	1.5 h	2 h	3 h	4 h	5 h	8 h	10 h	20 h
2 OPzS 100 LA	NVZS020100WC0FA	82.4	81.0	75.9	71.5	65.1	51.1	42.7	36.3	28.5	23.4	20.0	14.1	11.7	6.33
3 OPzS 150 LA	NVZS020150WC0FA	106	104	98.5	91.5	83.3	66.1	55.2	47.4	37.3	30.6	26.2	18.6	15.4	8.36
4 OPzS 200 LA	NVZS020200WC0FA	135	133	125	117	107	84.2	70.3	60.4	47.5	39.0	33.3	23.7	19.6	10.6
5 OPzS 250 LA	NVZS020250WC0FA	163	160	150	142	130	102	86.2	74.4	58.2	47.9	41.0	29.2	24.3	13.1
6 OPzS 300 LA	NVZS020300WC0FA	189	186	175	165	152	120	101	88.4	68.7	56.5	48.7	34.6	29.0	15.7
5 OPzS 350 LA	NVZS020350WC0FA	190	187	179	174	160	134	114	99.7	79.8	66.5	57.7	41.7	34.8	19.2
6 OPzS 420 LA	NVZS020420WC0FA	216	214	206	200	186	156	134	118	95.5	79.7	69.1	49.9	41.6	23.0
7 OPzS 490 LA	NVZS020490WC0FA	247	244	236	229	212	179	155	136	111	92.5	80.5	58.1	48.5	26.8
6 OPzS 600 LA	NVZS020600WC0FA	279	276	267	257	239	206	181	162	130	111	98.4	72.8	62.2	34.4
7 OPzS 700 LA	NVZS020700WC0FA	307	305	294	283	264	227	199	179	144	123	108	80.4	68.7	38.0
8 OPzS 800 LA	NVZS020800WC0FA	403	396	377	364	336	289	251	222	178	152	134	98.0	83.3	46.1
9 OPzS 900 LA	NVZS020900WC0FA	430	426	406	392	362	312	270	239	192	164	144	105	89.7	49.6
10 OPzS 1000 LA	NVZS021000WC0FA	484	480	460	444	411	354	309	275	221	188	166	122	104	57.7
12 OPzS 1200 LA	NVZS021200WC0FA	562	557	538	518	482	416	364	327	263	225	198	146	125	69.4
12 OPzS 1500 LA	NVZS021500WC0FA	522	521	511	498	479	419	385	352	297	257	230	173	148	79.8
14 OPzS 1750 LA	NVZS021750WC0FA	553	552	541	532	508	444	408	372	314	272	245	183	157	84.5
16 OPzS 2000 LA	NVZS022000WC0FA	754	752	731	712	676	578	525	473	392	339	305	229	196	105
18 OPzS 2250 LA	NVZS022250WC0FA	791	789	769	748	712	615	561	507	427	370	333	249	213	115
20 OPzS 2500 LA	NVZS022500WC0FA	937	936	910	885	779	720	654	589	488	423	380	284	244	132
22 OPzS 2750 LA	NVZS022750WC0FA	1005	1005	976	949	903	771	700	631	523	453	407	305	262	141
24 OPzS 3000 LA	NVZS023000WC0FA	1080	1075	1050	1020	972	841	766	693	584	506	455	340	292	157

1.85 Vpc – Discharge in A at 20 °C															
Type	Part number	3 min	10 min	15 min	20 min	30 min	1 h	1.5 h	2 h	3 h	4 h	5 h	8 h	10 h	20 h
2 OPzS 100 LA	NVZS020100WC0FA	93.4	91.1	84.5	79.6	71.4	54.8	45.5	38.5	30.1	24.6	20.9	14.6	12.2	6.56
3 OPzS 150 LA	NVZS020150WC0FA	121	117	109	101	90.7	70.9	58.9	50.3	39.4	32.2	27.3	19.3	16.1	8.66
4 OPzS 200 LA	NVZS020200WC0FA	153	150	139	131	117	90.3	74.9	64.0	50.1	41.0	34.8	24.5	20.5	11.0
5 OPzS 250 LA	NVZS020250WC0FA	185	181	168	158	142	110	91.9	78.9	61.5	50.3	42.9	30.2	25.4	13.6
6 OPzS 300 LA	NVZS020300WC0FA	215	210	195	184	167	129	108	93.7	72.6	59.4	50.9	35.9	30.3	16.2
5 OPzS 350 LA	NVZS020350WC0FA	215	211	201	194	178	147	124	107	84.3	70.2	60.8	43.7	36.4	19.9
6 OPzS 420 LA	NVZS020420WC0FA	244	240	232	223	207	171	146	127	101	84.0	72.8	52.3	43.6	23.8
7 OPzS 490 LA	NVZS020490WC0FA	279	274	264	255	236	196	168	146	117	98.1	84.8	60.9	50.8	27.8
6 OPzS 600 LA	NVZS020600WC0FA	313	309	296	285	265	227	197	176	140	118	103	76.1	65.2	35.7
7 OPzS 700 LA	NVZS020700WC0FA	345	341	327	315	292	251	218	195	154	130	114	84.0	72.0	39.3
8 OPzS 800 LA	NVZS020800WC0FA	457	445	422	404	373	317	274	241	191	161	141	102	87.3	47.7
9 OPzS 900 LA	NVZS020900WC0FA	486	480	454	436	401	342	295	259	205	173	151	110	94.0	51.4
10 OPzS 1000 LA	NVZS021000WC0FA	546	538	513	493	456	389	338	299	237	199	174	128	109	59.8
12 OPzS 1200 LA	NVZS021200WC0FA	631	623	597	575	534	458	398	356	282	237	208	153	131	71.9
12 OPzS 1500 LA	NVZS021500WC0FA	599	596	583	568	544	469	428	388	323	277	246	184	156	85.0
14 OPzS 1750 LA	NVZS021750WC0FA	635	632	617	602	576	497	454	410	342	293	261	194	166	90.0
16 OPzS 2000 LA	NVZS022000WC0FA	865	861	835	811	768	648	585	522	427	366	326	243	207	112
18 OPzS 2250 LA	NVZS022250WC0FA	908	903	878	853	808	688	623	559	465	399	355	265	225	122
20 OPzS 2500 LA	NVZS022500WC0FA	1075	1070	1040	1010	956	806	728	649	532	456	406	302	258	140
22 OPzS 2750 LA	NVZS022750WC0FA	1155	1150	1115	1080	1025	864	779	695	570	489	435	324	276	150
24 OPzS 3000 LA	NVZS023000WC0FA	1240	1235	1200	1165	1100	942	852	764	636	546	486	362	308	167

OPzS cells

1.83 Vpc – Discharge in A at 20 °C															
Type	Part number	3 min	10 min	15 min	20 min	30 min	1 h	1.5 h	2 h	3 h	4 h	5 h	8 h	10 h	20 h
2 OPzS 100 LA	NVZS020100WC0FA	104	100	93.0	86.8	76.7	57.4	47.3	39.9	31.2	25.4	21.6	14.8	12.4	6.73
3 OPzS 150 LA	NVZS020150WC0FA	134	129	119	110	97.3	74.2	61.2	52.1	40.8	33.2	28.2	19.6	16.4	8.89
4 OPzS 200 LA	NVZS020200WC0FA	171	166	153	143	126	94.6	77.9	66.4	51.9	42.4	35.9	24.9	20.9	11.3
5 OPzS 250 LA	NVZS020250WC0FA	207	200	185	173	153	115	95.7	81.9	63.6	52.0	44.2	30.7	25.8	14.0
6 OPzS 300 LA	NVZS020300WC0FA	241	231	215	201	179	136	113	97.2	75.1	61.4	52.5	36.5	30.8	16.7
5 OPzS 350 LA	NVZS020350WC0FA	238	232	221	212	193	157	131	112	87.8	72.6	62.4	44.4	37.0	20.3
6 OPzS 420 LA	NVZS020420WC0FA	272	265	254	244	225	183	154	133	105	86.8	74.8	53.2	44.4	24.3
7 OPzS 490 LA	NVZS020490WC0FA	310	302	290	279	256	209	177	153	122	102	87.1	62.0	51.7	28.3
6 OPzS 600 LA	NVZS020600WC0FA	347	340	325	312	289	245	211	186	146	123	106	77.7	66.3	36.3
7 OPzS 700 LA	NVZS020700WC0FA	382	375	358	344	318	270	233	206	161	135	117	85.8	73.2	40.1
8 OPzS 800 LA	NVZS020800WC0FA	505	493	464	443	406	341	292	255	199	166	145	105	88.8	48.6
9 OPzS 900 LA	NVZS020900WC0FA	540	531	500	477	437	367	314	274	214	179	156	113	95.6	52.4
10 OPzS 1000 LA	NVZS021000WC0FA	605	594	563	539	497	419	360	316	247	207	180	130	111	60.9
12 OPzS 1200 LA	NVZS021200WC0FA	698	686	654	629	582	494	426	376	295	247	214	156	133	73.2
12 OPzS 1500 LA	NVZS021500WC0FA	673	668	652	633	602	513	465	418	343	292	258	191	162	88.3
14 OPzS 1750 LA	NVZS021750WC0FA	713	708	691	671	638	543	493	442	364	310	274	201	172	93.4
16 OPzS 2000 LA	NVZS022000WC0FA	973	966	934	904	850	708	634	562	454	387	342	252	214	116
18 OPzS 2250 LA	NVZS022250WC0FA	1015	1010	982	951	894	752	677	602	495	421	373	275	233	127
20 OPzS 2500 LA	NVZS022500WC0FA	1205	1200	1165	1125	1060	881	790	700	566	482	426	313	267	145
22 OPzS 2750 LA	NVZS022750WC0FA	1295	1285	1245	1205	1135	944	846	750	606	516	457	336	286	156
24 OPzS 3000 LA	NVZS023000WC0FA	1390	1380	1345	1300	1220	1030	924	825	675	575	510	375	319	174

1.80 Vpc – Discharge in A at 20 °C															
Type	Part number	3 min	10 min	15 min	20 min	30 min	1 h	1.5 h	2 h	3 h	4 h	5 h	8 h	10 h	20 h
2 OPzS 100 LA	NVZS020100WC0FA	122	115	105	97.6	84.7	61.4	50.1	42.0	32.8	26.6	22.5	15.2	12.7	7.00
3 OPzS 150 LA	NVZS020150WC0FA	155	147	134	123	107	79.2	64.8	54.9	42.9	34.8	29.5	20.1	16.8	9.24
4 OPzS 200 LA	NVZS020200WC0FA	199	190	174	160	139	101	82.5	69.9	54.6	44.4	37.5	25.6	21.4	11.7
5 OPzS 250 LA	NVZS020250WC0FA	241	230	210	194	169	123	101	86.3	66.9	54.5	46.3	31.5	26.5	14.5
6 OPzS 300 LA	NVZS020300WC0FA	281	267	245	226	198	145	119	102	78.9	64.3	54.9	37.4	31.6	17.3
5 OPzS 350 LA	NVZS020350WC0FA	273	264	250	240	216	172	141	120	93.1	76.2	64.9	45.6	38.0	20.9
6 OPzS 420 LA	NVZS020420WC0FA	314	303	288	276	251	200	166	142	111	90.9	77.8	54.6	45.5	25.0
7 OPzS 490 LA	NVZS020490WC0FA	358	345	329	315	287	228	191	164	129	106	90.6	63.6	53.0	29.1
6 OPzS 600 LA	NVZS020600WC0FA	398	387	367	352	325	271	231	201	156	129	111	80.2	68.0	37.4
7 OPzS 700 LA	NVZS020700WC0FA	439	427	405	388	358	299	255	222	172	144	123	88.5	75.0	41.2
8 OPzS 800 LA	NVZS020800WC0FA	572	564	527	500	456	377	318	276	211	175	151	108	91.0	50.0
9 OPzS 900 LA	NVZS020900WC0FA	623	607	568	539	491	406	343	297	227	188	163	116	98.0	53.9
10 OPzS 1000 LA	NVZS021000WC0FA	695	678	638	608	558	463	393	342	263	218	188	135	114	62.7
12 OPzS 1200 LA	NVZS021200WC0FA	800	780	741	709	654	546	467	406	315	261	224	161	137	75.3
12 OPzS 1500 LA	NVZS021500WC0FA	785	777	756	731	690	578	520	462	374	316	277	201	170	93.2
14 OPzS 1750 LA	NVZS021750WC0FA	831	823	801	774	731	612	551	490	396	334	293	212	180	98.6
16 OPzS 2000 LA	NVZS022000WC0FA	1135	1125	1080	1040	974	798	709	622	495	418	367	265	225	123
18 OPzS 2250 LA	NVZS022250WC0FA	1185	1175	1140	1095	1025	848	757	666	539	455	399	289	245	134
20 OPzS 2500 LA	NVZS022500WC0FA	1390	1375	1345	1300	1210	993	884	775	616	520	456	330	280	153
22 OPzS 2750 LA	NVZS022750WC0FA	1510	1495	1445	1390	1300	1065	946	830	660	557	489	354	300	164
24 OPzS 3000 LA	NVZS023000WC0FA	1620	1605	1555	1500	1400	1160	1035	911	737	622	546	395	335	184

OPzS cells

1.75 Vpc – Discharge in A at 20 °C															
Type	Part number	3 min	10 min	15 min	20 min	30 min	1 h	1.5 h	2 h	3 h	4 h	5 h	8 h	10 h	20 h
2 OPzS 100 LA	NVZS020100WC0FA	147	137	124	112	96.1	66.4	52.9	44.1	34.3	27.7	23.4	15.8	13.1	7.18
3 OPzS 150 LA	NVZS020150WC0FA	188	174	157	143	121	85.3	68.4	57.7	44.8	36.4	30.6	20.9	17.3	9.48
4 OPzS 200 LA	NVZS020200WC0FA	243	226	205	185	158	109	87.1	73.5	57.1	46.3	39.0	26.6	22.0	12.0
5 OPzS 250 LA	NVZS020250WC0FA	294	274	248	225	192	133	107	90.8	70.0	56.8	48.1	32.8	27.3	14.9
6 OPzS 300 LA	NVZS020300WC0FA	343	319	290	262	226	157	126	108	82.6	67.0	57.0	38.9	32.5	17.8
5 OPzS 350 LA	NVZS020350WC0FA	333	316	296	280	247	189	153	128	97.2	79.7	68.0	47.1	39.1	21.4
6 OPzS 420 LA	NVZS020420WC0FA	383	364	341	323	287	220	179	152	116	95.0	81.4	56.4	46.8	25.7
7 OPzS 490 LA	NVZS020490WC0FA	438	415	389	368	328	251	207	175	135	111	94.8	65.7	54.5	29.9
6 OPzS 600 LA	NVZS020600WC0FA	480	462	437	416	380	306	258	219	166	136	115	82.9	70.0	38.4
7 OPzS 700 LA	NVZS020700WC0FA	530	510	482	459	420	337	285	242	183	150	127	91.5	77.2	42.3
8 OPzS 800 LA	NVZS020800WC0FA	703	677	629	591	534	429	353	303	225	184	157	111	92.8	51.4
9 OPzS 900 LA	NVZS020900WC0FA	758	729	678	637	575	462	380	326	243	198	169	120	99.9	55.3
10 OPzS 1000 LA	NVZS021000WC0FA	843	811	760	719	653	525	437	373	281	229	195	139	116	64.4
12 OPzS 1200 LA	NVZS021200WC0FA	968	931	880	838	767	616	520	442	335	273	232	167	141	77.4
12 OPzS 1500 LA	NVZS021500WC0FA	966	952	923	884	824	676	598	524	413	346	301	212	178	97.4
14 OPzS 1750 LA	NVZS021750WC0FA	1025	1010	977	936	873	716	634	554	437	366	319	225	188	103
16 OPzS 2000 LA	NVZS022000WC0FA	1395	1375	1320	1260	1165	933	817	705	547	458	398	281	235	129
18 OPzS 2250 LA	NVZS022250WC0FA	1460	1440	1390	1325	1225	993	871	755	595	498	434	306	256	141
20 OPzS 2500 LA	NVZS022500WC0FA	1735	1710	1645	1565	1450	1165	1015	877	680	569	496	350	293	161
22 OPzS 2750 LA	NVZS022750WC0FA	1855	1830	1765	1680	1550	1245	1090	940	729	610	531	375	313	172
24 OPzS 3000 LA	NVZS023000WC0FA	2000	1970	1900	1810	1675	1360	1190	1030	814	681	593	419	350	192

1.70 Vpc – Discharge in A at 20 °C															
Type	Part number	3 min	10 min	15 min	20 min	30 min	1 h	1.5 h	2 h	3 h	4 h	5 h	8 h	10 h	20 h
2 OPzS 100 LA	NVZS020100WC0FA	173	156	139	125	104	69.7	54.8	45.1	35.2	28.3	23.8	16.0	13.2	7.25
3 OPzS 150 LA	NVZS020150WC0FA	220	199	177	160	133	89.4	70.9	59.0	46.0	37.0	31.1	21.1	17.4	9.57
4 OPzS 200 LA	NVZS020200WC0FA	284	258	229	206	172	114	90.3	75.1	58.5	47.3	39.6	26.8	22.2	12.1
5 OPzS 250 LA	NVZS020250WC0FA	344	313	278	249	210	140	111	92.9	71.8	57.9	48.8	33.1	27.5	15.0
6 OPzS 300 LA	NVZS020300WC0FA	403	365	324	291	246	166	131	110	84.7	68.4	58.0	39.2	32.8	17.9
5 OPzS 350 LA	NVZS020350WC0FA	394	367	339	316	273	202	160	133	100	81.4	69.2	47.1	39.9	22.0
6 OPzS 420 LA	NVZS020420WC0FA	453	423	390	364	318	235	188	158	120	97.7	82.8	57.7	47.7	26.3
7 OPzS 490 LA	NVZS020490WC0FA	517	483	445	415	363	268	217	182	139	114	96.5	67.3	55.6	30.7
6 OPzS 600 LA	NVZS020600WC0FA	562	535	506	478	433	336	278	232	173	139	117	84.3	70.7	39.1
7 OPzS 700 LA	NVZS020700WC0FA	619	590	558	528	477	371	307	256	191	154	129	93.0	78.0	43.1
8 OPzS 800 LA	NVZS020800WC0FA	824	785	728	677	606	471	379	322	236	190	160	113	94.6	52.3
9 OPzS 900 LA	NVZS020900WC0FA	888	845	784	730	652	507	408	346	254	204	172	122	101	56.3
10 OPzS 1000 LA	NVZS021000WC0FA	988	940	880	825	742	577	471	396	293	237	198	141	118	65.5
12 OPzS 1200 LA	NVZS021200WC0FA	1135	1080	1020	964	872	678	561	468	349	281	237	169	142	78.7
12 OPzS 1500 LA	NVZS021500WC0FA	1145	1125	1085	1030	950	768	665	573	442	367	318	219	182	100
14 OPzS 1750 LA	NVZS021750WC0FA	1215	1190	1150	1090	1005	814	704	607	468	389	337	232	193	106
16 OPzS 2000 LA	NVZS022000WC0FA	1655	1625	1555	1470	1345	1060	907	771	585	486	421	290	241	132
18 OPzS 2250 LA	NVZS022250WC0FA	1735	1700	1635	1545	1410	1125	968	826	637	529	458	316	262	144
20 OPzS 2500 LA	NVZS022500WC0FA	2060	2020	1930	1830	1670	1320	1130	960	728	605	524	361	300	165
22 OPzS 2750 LA	NVZS022750WC0FA	2205	2165	2070	1960	1785	1415	1210	1025	780	648	561	387	321	176
24 OPzS 3000 LA	NVZS023000WC0FA	2375	2330	2230	2115	1930	1540	1325	1130	871	723	626	432	358	197

OPzS cells

1.65 Vpc – Discharge in A at 20 °C															
Type	Part number	3 min	10 min	15 min	20 min	30 min	1 h	1.5 h	2 h	3 h	4 h	5 h	8 h	10 h	20 h
2 OPzS 100 LA	NVZS020100WC0FA	196	173	151	134	110	71.7	55.8	46.4	35.7	28.6	24.1	16.0	13.2	7.25
3 OPzS 150 LA	NVZS020150WC0FA	249	221	193	172	141	91.7	72.2	60.0	46.6	37.3	31.4	21.1	17.4	9.57
4 OPzS 200 LA	NVZS020200WC0FA	322	286	249	221	182	118	91.9	76.4	59.4	47.6	39.9	26.8	22.2	12.1
5 OPzS 250 LA	NVZS020250WC0FA	392	347	303	269	222	145	113	94.5	72.8	58.3	49.2	33.1	27.5	15.0
6 OPzS 300 LA	NVZS020300WC0FA	458	407	354	315	261	171	134	112	85.9	68.8	58.3	39.2	32.8	17.9
5 OPzS 350 LA	NVZS020350WC0FA	454	417	379	348	297	211	166	137	102	82.9	69.5	47.1	39.9	22.0
6 OPzS 420 LA	NVZS020420WC0FA	522	480	436	401	345	245	195	162	122	99.1	83.3	57.7	47.7	26.3
7 OPzS 490 LA	NVZS020490WC0FA	596	548	498	458	394	280	225	187	143	115	97.0	67.3	55.6	30.7
6 OPzS 600 LA	NVZS020600WC0FA	643	605	575	540	482	363	293	243	177	141	119	86.3	71.4	39.4
7 OPzS 700 LA	NVZS020700WC0FA	710	667	635	596	531	401	324	268	195	156	131	95.2	78.7	43.5
8 OPzS 800 LA	NVZS020800WC0FA	945	889	823	759	673	502	399	334	243	194	161	115	95.5	52.7
9 OPzS 900 LA	NVZS020900WC0FA	1015	958	886	818	725	540	430	360	262	209	174	124	102	56.8
10 OPzS 1000 LA	NVZS021000WC0FA	1130	1064	998	929	825	619	496	413	301	241	201	144	119	66.1
12 OPzS 1200 LA	NVZS021200WC0FA	1295	1220	1160	1090	971	732	591	490	357	286	239	173	143	79.4
12 OPzS 1500 LA	NVZS021500WC0FA	1330	1300	1240	1175	1070	853	721	612	462	382	330	223	184	101
14 OPzS 1750 LA	NVZS021750WC0FA	1410	1375	1315	1245	1135	904	763	648	490	405	349	236	194	107
16 OPzS 2000 LA	NVZS022000WC0FA	1920	1875	1775	1675	1510	1180	984	824	612	506	436	295	243	133
18 OPzS 2250 LA	NVZS022250WC0FA	2015	1965	1870	1765	1590	1250	1050	882	666	550	475	321	265	145
20 OPzS 2500 LA	NVZS022500WC0FA	2390	2335	2215	2090	1885	1465	1220	1025	762	630	543	367	302	166
22 OPzS 2750 LA	NVZS022750WC0FA	2555	2495	2370	2235	2015	1570	1310	1100	815	674	582	393	324	178
24 OPzS 3000 LA	NVZS023000WC0FA	2755	2690	2555	2415	2175	1710	1435	1205	911	753	650	439	362	199

1.60 Vpc – Discharge in A at 20 °C															
Type	Part number	3 min	10 min	15 min	20 min	30 min	1 h	1.5 h	2 h	3 h	4 h	5 h	8 h	10 h	20 h
2 OPzS 100 LA	NVZS020100WC0FA	216	187	162	142	115	73.3	56.3	46.4	35.9	29.4	24.1	16.0	13.2	7.25
3 OPzS 150 LA	NVZS020150WC0FA	275	239	207	181	146	93.3	72.9	60.7	47.0	37.5	31.5	21.1	17.4	9.57
4 OPzS 200 LA	NVZS020200WC0FA	355	309	267	235	190	120	92.8	77.2	59.8	47.7	40.1	26.8	22.2	12.1
5 OPzS 250 LA	NVZS020250WC0FA	434	376	325	286	232	148	114	95.6	73.3	58.6	49.4	33.1	27.5	15.0
6 OPzS 300 LA	NVZS020300WC0FA	508	441	381	335	272	175	135	114	86.5	69.3	58.6	39.2	32.8	17.9
5 OPzS 350 LA	NVZS020350WC0FA	515	465	417	377	318	217	170	138	104	83.4	69.9	47.1	39.9	22.0
6 OPzS 420 LA	NVZS020420WC0FA	592	535	480	434	370	252	200	164	125	99.3	83.7	57.7	47.7	26.3
7 OPzS 490 LA	NVZS020490WC0FA	676	611	549	496	422	288	230	189	145	116	97.4	67.3	55.6	30.7
6 OPzS 600 LA	NVZS020600WC0FA	723	673	645	602	528	387	304	252	178	142	119	86.3	71.4	39.4
7 OPzS 700 LA	NVZS020700WC0FA	799	742	711	664	582	427	336	278	197	156	131	95.2	78.7	43.5
8 OPzS 800 LA	NVZS020800WC0FA	1065	991	917	837	737	524	415	342	247	195	161	115	95.5	52.7
9 OPzS 900 LA	NVZS020900WC0FA	1150	1070	987	901	793	564	447	368	266	211	174	124	102	56.8
10 OPzS 1000 LA	NVZS021000WC0FA	1270	1185	1115	1030	904	653	515	425	304	242	201	144	119	66.1
12 OPzS 1200 LA	NVZS021200WC0FA	1455	1355	1300	1215	1065	780	613	508	360	286	239	173	143	79.4
12 OPzS 1500 LA	NVZS021500WC0FA	1515	1470	1395	1320	1190	933	767	642	476	391	337	224	184	101
14 OPzS 1750 LA	NVZS021750WC0FA	1605	1560	1475	1395	1260	988	812	680	504	414	356	238	194	107
16 OPzS 2000 LA	NVZS022000WC0FA	2185	2125	1995	1880	1680	1290	1045	864	630	518	445	297	243	133
18 OPzS 2250 LA	NVZS022250WC0FA	2290	2225	2100	1975	1765	1370	1115	926	686	564	485	323	265	145
20 OPzS 2500 LA	NVZS022500WC0FA	2725	2645	2485	2340	2090	1600	1305	1080	784	645	554	370	302	166
22 OPzS 2750 LA	NVZS022750WC0FA	2920	2835	2660	2510	2240	1715	1395	1155	840	690	594	396	324	178
24 OPzS 3000 LA	NVZS023000WC0FA	3135	3045	2870	2705	2415	1875	1525	1265	938	771	663	442	362	199

GNB[®] INDUSTRIAL POWER



Exide Technologies, with operations in more than 80 countries, is one of the world's largest producers and recyclers of lead-acid batteries. Exide provides a comprehensive and customized range of stored electrical energy solutions.

Based on over 100 years of experience in the development of innovative technologies, Exide is an esteemed partner of OEMs and serves the spare parts market for industrial and transportation applications. The GNB Industrial Power business unit offers an extensive range of storage products and services, including solutions for

telecommunications systems, railway applications, mining, photovoltaic (solar energy), uninterruptible power supply (UPS), electrical power generation and distribution, fork lifts and electric vehicles.

Exide Technologies takes pride in its commitment to a better environment. Its Total Battery Management programme, (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.