Performance and durability

Version:1.1
Date: 10.09.2024

according Battery Regulation (EU) 2023/1542

Type	Nom. voltage	Rated capacity	Capacity fade	Power	Power fade	Internal resistance	Internal resistance increase	Expected life-time	Expected life-time	Energy round trip efficiency	Energy round trip efficiency fade
	V	C_{10} 1.80Vpc 20°C Ah	%	P_{10} 1.80Vpc 20°C W	%	mOhm	%	acc. ZVEI leaflet No. 19 years	cycles	%	%
Classic EnerSol											
03 EnerSol 380	2	276	20%	55	20%	0.83	100%	10	2000	83%	5%
04 EnerSol 490	2	365	20%	73	20%	0.69	100%	10	2000	83%	5%
05 EnerSol 600	2	450	20%	90	20%	0.59	100%	10	2000	83%	5%
06 EnerSol 720	2	535	20%	107	20%	0.53	100%	10	2000	83%	5%
07 EnerSol 840	2	613	20%	123	20%	0.47	100%	10	2000	83%	5%
08 EnerSol 950	2	694	20%	139	20%	0.43	100%	10	2000	83%	5%
09 EnerSol 1050	2	776	20%	155	20%	0.4	100%	10	2000	83%	5%
10 EnerSol 1110	2	848	20%	170	20%	0.37	100%	10	2000	83%	5%
Classic OGi											
4OGi 260 LA	2	260	20%	51	20%	0.64	100%	20	N/A	83%	5%
5 OGi 325 LA	2	325	20%	62.8	20%	0.53	100%	20	N/A	83%	5%
6 OGi 370 LA	2	370	20%	72.6	20%	0.46	100%	20	N/A	83%	5%
7 OGi 410 LA	2	410	20%	80.4	20%	0.41	100%	20	N/A	83%	5%
8 OGi 440 LA	2	440	20%	86.3	20%	0.37	100%	20	N/A	83%	5%
9 OGi 470 LA	2	470	20%	92.2	20%	0.34	100%	20	N/A	83%	5%
10 OGi 530 LA	2	530	20%	104	20%	0.32	100%	20	N/A	83%	5%
11 OGi 580 LA	2	580	20%	114	20%	0.3	100%	20	N/A	83%	5%
12 OGi 620 LA	2	620	20%	122	20%	0.28	100%	20	N/A	83%	5%
12 OGi 730 LA	2	730	20%	143	20%	0.25	100%	20	N/A	83%	5%
14 OGi 800 LA	2	800	20%	157	20%	0.21	100%	20	N/A	83%	5%
16 OGi 880 LA	2	880	20%	173	20%	0.19	100%	20	N/A	83%	5%
19 OGi 1000 LA	2	1000	20%	196	20%	0.17	100%	20	N/A	83%	5%
16 OGi 1260 LA	2	1260	20%	247	20%	0.16	100%	20	N/A	83%	5%
18 OGi 1340 LA	2	1340	20%	263	20%	0.15	100%	20	N/A	83%	5%
20 OGi 1520 LA	2	1520	20%	298	20%	0.14	100%	20	N/A	83%	5%
22 OGi 1600 LA	2	1600	20%	314	20%	0.13	100%	20	N/A	83%	5%

Performance and durability

Version:1.1
Date: 10.09.2024

according Battery Regulation (EU) 2023/1542

Type	Nom. voltage	Rated capacity	Capacity fade	Power	Power fade	Internal resistance	Internal resistance increase	Expected life-time	Expected life-time	Energy round trip efficiency	Energy round trip efficiency fade
	V	C_{10} 1.80Vpc 20°C Ah	%	P_{10} 1.80Vpc 20°C W	%	mOhm	%	acc. ZVEI leaflet No. 19 years	cycles	%	%
Classic OCSM											
2 OCSM 160 LA	2	160	20%	32	20%	1.34	100%	25	N/A	N/A	N/A
2 OCSM 160 LA D	2	160	20%	32	20%	1.34	100%	25	N/A	N/A	N/A
3 OCSM 240 LA	2	240	20%	48	20%	0.89	100%	25	N/A	N/A	N/A
3 OCSM 240 LA D	2	240	20%	48	20%	0.89	100%	25	N/A	N/A	N/A
4 OCSM 320 LA	2	320	20%	64	20%	0.67	100%	25	N/A	N/A	N/A
4 OCSM 320 LA D	2	320	20%	64	20%	0.67	100%	25	N/A	N/A	N/A
5 OCSM 400 LA	2	400	20%	80	20%	0.53	100%	25	N/A	N/A	N/A
5 OCSM 400 LA D	2	400	20%	80	20%	0.53	100%	25	N/A	N/A	N/A
5 OCSM 575 LA	2	575	20%	115	20%	0.43	100%	25	N/A	N/A	N/A
5 OCSM 575 LA D	2	575	20%	115	20%	0.43	100%	25	N/A	N/A	N/A
6 OCSM 480 LA	2	480	20%	96	20%	0.44	100%	25	N/A	N/A	N/A
6 OCSM 480 LA D	2	480	20%	96	20%	0.44	100%	25	N/A	N/A	N/A
6 OCSM 690 LA	2	690	20%	138	20%	0.36	100%	25	N/A	N/A	N/A
6 OCSM 690 LA D	2	690	20%	138	20%	0.36	100%	25	N/A	N/A	N/A
7 OCSM 560 LA	2	560	20%	112	20%	0.38	100%	25	N/A	N/A	N/A
7 OCSM 560 LA D	2	560	20%	112	20%	0.38	100%	25	N/A	N/A	N/A
7 OCSM 805 LA	2	805	20%	161	20%	0.31	100%	25	N/A	N/A	N/A
7 OCSM 805 LA D	2	805	20%	161	20%	0.31	100%	25	N/A	N/A	N/A
8 OCSM 920 LA	2	920	20%	184	20%	0.27	100%	25	N/A	N/A	N/A
8 OCSM 920 LA D	2	920	20%	184	20%	0.27	100%	25	N/A	N/A	N/A
9 OCSM 1035 LA	2	1035	20%	207	20%	0.24	100%	25	N/A	N/A	N/A
9 OCSM 1035 LA D	2	1035	20%	207	20%	0.24	100%	25	N/A	N/A	N/A
10 OCSM 1150 LA	2	1150	20%	230	20%	0.21	100%	25	N/A	N/A	N/A
10 OCSM 1150 LA D	2	1150	20%	230	20%	0.21	100%	25	N/A	N/A	N/A
11 OCSM 1265 LA	2	1265	20%	253	20%	0.19	100%	25	N/A	N/A	N/A
11 OCSM 1265 LA D	2	1265	20%	253	20%	0.19	100%	25	N/A	N/A	N/A
12 OCSM 1380 LA	2	1380	20%	276	20%	0.18	100%	25	N/A	N/A	N/A
12 OCSM 1380 LA D	2	1380	20%	276	20%	0.18	100%	25	N/A	N/A	N/A
11 OCSM 1595 LA	2	1595	20%	319	20%	0.19	100%	25	N/A	N/A	N/A
11 OCSM 1595 LA D	2	1595	20%	319	20%	0.19	100%	25	N/A	N/A	N/A
12 OCSM 1740 LA	2	1740	20%	348	20%	0.17	100%	25	N/A	N/A	N/A
12 OCSM 1740 LA D	2	1740	20%	348	20%	0.17	100%	25	N/A	N/A	N/A
14 OCSM 2030 LA	2	2030	20%	406	20%	0.15	100%	25	N/A	N/A	N/A
14 OCSM 2030 LA D	2	2030	20%	406	20%	0.15	100%	25	N/A	N/A	N/A
16 OCSM 2320 LA	2	2320	20%	464	20%	0.13	100%	25	N/A	N/A	N/A
16 OCSM 2320 LA D	2	2320	20%	464	20%	0.13	100%	25	N/A	N/A	N/A
18 OCSM 2610 LA	2	2610	20%	522	20%	0.11	100%	25	N/A	N/A	N/A
18 OCSM 2610 LA D	2	2610	20%	522	20%	0.11	100%	25	N/A	N/A	N/A
20 OCSM 2900 LA	2	2900	20%	580	20%	0.1	100%	25	N/A	N/A	N/A
20 OCSM 2900 LA D	2	2900	20%	580	20%	0.1	100%	25	N/A	N/A	N/A
22 OCSM 3190 LA	2	3190	20%	638	20%	0.09	100%	25	N/A	N/A	N/A
22 OCSM 3190 LA D	2	3190	20%	638	20%	0.09	100%	25	N/A	N/A	N/A
24 OCSM 3480 LA	2	3480	20%	696	20%	0.08	100%	25	N/A	N/A	N/A
24 OCSM 3480 LA D	2	3480	20%	696	20%	0.08	100%	25	N/A	N/A	N/A

Performance and durability

according Battery Regulation (EU) 2023/1542

Type	Nom. voltage	Rated capacity	Capacity fade	Power	Power fade	Internal resistance	Internal resistance increase	Expected life-time	Expected life-time	Energy round trip efficiency	Energy round trip efficiency fade
	V	C_{10} 1.80Vpc 20°C	%	P_{10} 1.80Vpc 20°C	%	mOhm	%	acc. ZVEI leaflet No. 19	cycles	%	%
		Ah		W				years			
Classic OPzS											
2 OPzS 100 LA	2	105	20%	20.3	20%	1.45	100%	20	N/A	N/A	N/A
2 OPzS 100 LA D	2	105	20%	20.3	20%	1.45	100%	20	N/A	N/A	N/A
3 OPzS 150 LA	2	158	20%	30.8	20%	1.05	100%	20	N/A	N/A	N/A
3 OPzS 150 LA D	2	158	20%	30.8	20%	1.05	100%	20	N/A	N/A	N/A
4 OPzS 200 LA	2	210	20%	40.9	20%	0.83	100%	20	N/A	N/A	N/A
4 OPzS 200 LA D	2	210	20%	40.9	20%	0.83	100%	20	N/A	N/A	N/A
5 OPzS 250 LA	2	260	20%	50.6	20%	0.72	100%	20	N/A	N/A	N/A
5 OPzS 250 LA D	2	260	20%	50.6	20%	0.72	100%	20	N/A	N/A	N/A
6 OPzS 300 LA	2	310	20%	60.3	20%	0.63	100%	20	N/A	N/A	N/A
6 OPzS 300 LA D	2	310	20%	60.3	20%	0.63	100%	20	N/A	N/A	N/A
5 OPzS 350 LA	2	380	20%	73.9	20%	0.63	100%	20	N/A	N/A	N/A
5 OPzS 350 LA D	2	380	20%	73.9	20%	0.63	100%	20	N/A	N/A	N/A
6 OPzS 420 LA	2	455	20%	88.5	20%	0.56	100%	20	N/A	N/A	N/A
6 OPzS 420 LA D	2	455	20%	88.5	20%	0.56	100%	20	N/A	N/A	N/A
7 OPzS 490 LA	2	530	20%	103	20%	0.5	100%	20	N/A	N/A	N/A
7 OPzS 490 LA D	2	530	20%	103	20%	0.5	100%	20	N/A	N/A	N/A
6 OPzS 600 LA	2	680	20%	132	20%	0.47	100%	20	N/A	N/A	N/A
6 OPzS 600 LA D	2	680	20%	132	20%	0.47	100%	20	N/A	N/A	N/A
7 OPzS 700 LA	2	750	20%	145	20%	0.43	100%	20	N/A	N/A	N/A
7 OPzS 700 LA D	2	750	20%	145	20%	0.43	100%	20	N/A	N/A	N/A
8 OPzS 800 LA	2	910	20%	177	20%	0.3	100%	20	N/A	N/A	N/A
8 OPzS 800 LA D	2	910	20%	177	20%	0.3	100%	20	N/A	N/A	N/A
9 OPzS 900 LA	2	980	20%	190	20%	0.27	100%	20	N/A	N/A	N/A
9 OPzS 900 LA D	2	980	20%	190	20%	0.27	100%	20	N/A	N/A	N/A
10 OPzS 1000 LA	2	1140	20%	221	20%	0.26	100%	20	N/A	N/A	N/A
10 OPzS 1000 LA D	2	1140	20%	221	20%	0.26	100%	20	N/A	N/A	N/A
12 OPzS 1200 LA	2	1370	20%	266	20%	0.23	100%	20	N/A	N/A	N/A
12 OPzS 1200 LA D	2	1370	20%	266	20%	0.23	100%	20	N/A	N/A	N/A
12 OPzS 1500 LA	2	1700	20%	328	20%	0.24	100%	20	N/A	N/A	N/A
12 OPzS 1500 LA D	2	1700	20%	328	20%	0.24	100%	20	N/A	N/A	N/A
14 OPzS 1750 LA	2	1800	20%	347	20%	0.22	100%	20	N/A	N/A	N/A
14 OPzS 1750 LA D	2	1800	20%	347	20%	0.22	100%	20	N/A	N/A	N/A
16 OPzS 2000 LA	2	2250	20%	434	20%	0.16	100%	20	N/A	N/A	N/A
16 OPzS 2000 LA D	2	2250	20%	434	20%	0.16	100%	20	N/A	N/A	N/A
18 OPzS 2250 LA	2	2450	20%	473	20%	0.14	100%	20	N/A	N/A	N/A
18 OPzS 2250 LA D	2	2450	20%	473	20%	0.14	100%	20	N/A	N/A	N/A
20 OPzS 2500 LA	2	2800	20%	540	20%	0.12	100%	20	N/A	N/A	N/A
20 OPzS 2500 LA D	2	2800	20%	540	20%	0.12	100%	20	N/A	N/A	N/A
22 OPzS 2750 LA	2	3000	20%	579	20%	0.11	100%	20	N/A	N/A	N/A
22 OPzS 2750 LA D	2	3000	20%	579	20%	0.11	100%	20	N/A	N/A	N/A
24 OPzS 3000 LA	2	3350	20%	647	20%	0.11	100%	20	N/A	N/A	N/A
24 OPzS 3000 LA D	2	3350	20%	647	20%	0.11	100%	20	N/A	N/A	N/A

Performance and durability

according Battery Regulation (EU) 2023/1542

Type	Nom. voltage	Rated capacity	Capacity fade	Power	Power fade	Internal resistance	Internal resistance increase	Expected life-time	Expected life-time	Energy round trip efficiency	Energy round trip efficiency fade
	V	C_{10} 1.80Vpc 20°C	%	P_{10} 1.80Vpc 20°C	%	mOhm	%	acc. ZVEI leaflet No. 19	cycles	%	%
		Ah		W				years			
Classic OPzS											
4V 6 OPzS 300 LA	4	300	20%	120	20%	*	100%	20	N/A	N/A	N/A
6V 4 OPzS 200 LA	6	200	20%	120	20%	2.68	100%	20	N/A	N/A	N/A
6V 4 OPzS 200 LA D	6	200	20%	120	20%	2.68	100%	20	N/A	N/A	N/A
6V 5 OPzS 250 LA	6	250	20%	150	20%	2.39	100%	20	N/A	N/A	N/A
6V 5 OPzS 250 LA D	6	250	20%	150	20%	2.39	100%	20	N/A	N/A	N/A
6V 6 OPzS 300 LA	6	300	20%	180	20%	1.96	100%	20	N/A	N/A	N/A
6V 6 OPzS 300 LA D	6	300	20%	180	20%	1.96	100%	20	N/A	N/A	N/A
10V 3 OPzS 150 LA	10	150	20%	150	20%	*	100%	20	N/A	N/A	N/A
12V 1 OPzS 50 LA	12	50	20%	60	20%	18.1	100%	20	N/A	N/A	N/A
12V 1 OPzS 50 LA D	12	50	20%	60	20%	18.1	100%	20	N/A	N/A	N/A
12V 2 OPzS 100 LA	12	100	20%	120	20%	9.26	100%	20	N/A	N/A	N/A
12V 2 OPzS 100 LA D	12	100	20%	120	20%	9.26	100%	20	N/A	N/A	N/A
12V 3 OPzS 150 LA	12	150	20%	180	20%	6.46	100%	20	N/A	N/A	N/A
12V 3 OPzS 150 LA D	12	150	20%	180	20%	6.46	100%	20	N/A	N/A	N/A
Classic Energy Bloc											
EB 6215	6	213	20%	132	20%	1.73	100%	15	N/A	N/A	N/A
EB 6240	6	237	20%	145	20%	1.43	100%	15	N/A	N/A	N/A
EB 6310	6	302	20%	189	20%	1.33	100%	15	N/A	N/A	N/A
EB 6350	6	340	20%	210	20%	1.23	100%	15	N/A	N/A	N/A
EB 1260	12	61	20%	75.6	20%	8.81	100%	15	N/A	N/A	N/A
EB 12110	12	105	20%	129	20%	4.91	100%	15	N/A	N/A	N/A
EB 12160	12	158	20%	193	20%	4.08	100%	15	N/A	N/A	N/A

* Values are under preparation and will be available soon.

Performance and durability

according Battery Regulation (EU) 2023/1542

Type	Nom. voltage	Rated capacity	Capacity fade	Power	Power fade	Internal resistance	Internal resistance increase	Expected life-time	Expected life-time	Energy round trip efficiency	Energy round trip efficiency fade
	V	C_{10} 1.80Vpc 20°C	%	P_{10} 1.80Vpc 20°C	%	mOhm	%	acc. ZVEI leaflet No. 19	cycles	%	%
		Ah		W				years			
Classic Rail											
CR 12V 40	12	43	20%	97	20%	11.8	100%	5	N/A	N/A	N/A
CR 12V 50	12	53	20%	122	20%	7.9	100%	5	N/A	N/A	N/A
CR 12V 60	12	64	20%	77	20%	*	100%	5	N/A	N/A	N/A
CR 12V 80 L	12	84	20%	101	20%	*	100%	5	N/A	N/A	N/A
CR 12V 105	12	112	20%	255	20%	5.2	100%	5	N/A	N/A	N/A
CR 12V 135	12	144	20%	329	20%	4.1	100%	5	N/A	N/A	N/A
CR 12V 190	12	203	20%	244	20%	*	100%	5	N/A	N/A	N/A

* Values are under preparation and will be available soon.

Performance and durability

according Battery Regulation (EU) 2023/1542

Type	Nom. voltage	Rated capacity	Capacity fade	Power	Power fade	Internal resistance	Internal resistance increase	Expected life-time	Expected life-time	Energy round trip efficiency	Energy round trip efficiency fade
	V	C_{10} 1.80Vpc 20°C	%	P_{10} 1.80Vpc 20°C	%	mOhm	%	acc. ZVEI leaflet No. 19	cycles	%	%
		Ah		W				years			
Classic OPzS Solar											
OPzS Solar 190	2	128	20%	26	20%	1.45	100%	15	2800	83%	5%
OPzS Solar 190 D	2	128	20%	26	20%	1.45	100%	15	2800	83%	5%
OPzS Solar 245	2	168	20%	34	20%	1.05	100%	15	2800	83%	5%
OPzS Solar 245 D	2	168	20%	34	20%	1.05	100%	15	2800	83%	5%
OPzS Solar 305	2	213	20%	43	20%	0.83	100%	15	2800	83%	5%
OPzS Solar 305 D	2	213	20%	43	20%	0.83	100%	15	2800	83%	5%
OPzS Solar 380	2	265	20%	53	20%	0.72	100%	15	2800	83%	5%
OPzS Solar 380 D	2	265	20%	53	20%	0.72	100%	15	2800	83%	5%
OPzS Solar 450	2	315	20%	63	20%	0.63	100%	15	2800	83%	5%
OPzS Solar 450 D	2	315	20%	63	20%	0.63	100%	15	2800	83%	5%
OPzS Solar 550	2	379	20%	76	20%	0.63	100%	15	2800	83%	5%
OPzS Solar 550 D	2	379	20%	76	20%	0.63	100%	15	2800	83%	5%
OPzS Solar 660	2	455	20%	91	20%	0.56	100%	15	2800	83%	5%
OPzS Solar 660 D	2	455	20%	91	20%	0.56	100%	15	2800	83%	5%
OPzS Solar 765	2	530	20%	106	20%	0.5	100%	15	2800	83%	5%
OPzS Solar 765 D	2	530	20%	106	20%	0.5	100%	15	2800	83%	5%
OPzS Solar 985	2	679	20%	136	20%	0.47	100%	15	2800	83%	5%
OPzS Solar 985 D	2	679	20%	136	20%	0.47	100%	15	2800	83%	5%
OPzS Solar 1080	2	776	20%	155	20%	0.43	100%	15	2800	83%	5%
OPzS Solar 1080 D	2	776	20%	155	20%	0.43	100%	15	2800	83%	5%
OPzS Solar 1320	2	909	20%	182	20%	0.3	100%	15	2800	83%	5%
OPzS Solar 1320 D	2	909	20%	182	20%	0.3	100%	15	2800	83%	5%
OPzS Solar 1410	2	979	20%	196	20%	0.27	100%	15	2800	83%	5%
OPzS Solar 1410 D	2	979	20%	196	20%	0.27	100%	15	2800	83%	5%
OPzS Solar 1650	2	1139	20%	228	20%	0.26	100%	15	2800	83%	5%
OPzS Solar 1650 D	2	1139	20%	228	20%	0.26	100%	15	2800	83%	5%
OPzS Solar 1990	2	1369	20%	274	20%	0.23	100%	15	2800	83%	5%
OPzS Solar 1990 D	2	1369	20%	274	20%	0.23	100%	15	2800	83%	5%
OPzS Solar 2350	2	1698	20%	340	20%	0.24	100%	15	2800	83%	5%
OPzS Solar 2350 D	2	1698	20%	340	20%	0.24	100%	15	2800	83%	5%
OPzS Solar 2500	2	1798	20%	360	20%	0.22	100%	15	2800	83%	5%
OPzS Solar 2500 D	2	1798	20%	360	20%	0.22	100%	15	2800	83%	5%
OPzS Solar 3100	2	2248	20%	450	20%	0.16	100%	15	2800	83%	5%
OPzS Solar 3100 D	2	2248	20%	450	20%	0.16	100%	15	2800	83%	5%
OPzS Solar 3350	2	2448	20%	490	20%	0.14	100%	15	2800	83%	5%
OPzS Solar 3350 D	2	2448	20%	490	20%	0.14	100%	15	2800	83%	5%
OPzS Solar 3850	2	2797	20%	559	20%	0.12	100%	15	2800	83%	5%
OPzS Solar 3850 D	2	2797	20%	559	20%	0.12	100%	15	2800	83%	5%
OPzS Solar 4100	2	2997	20%	599	20%	0.11	100%	15	2800	83%	5%
OPzS Solar 4100 D	2	2997	20%	599	20%	0.11	100%	15	2800	83%	5%
OPzS Solar 4600	2	3347	20%	669	20%	0.11	100%	15	2800	83%	5%
OPzS Solar 4600 D	2	3347	20%	669	20%	0.11	100%	15	2800	83%	5%

Performance and durability

according Battery Regulation (EU) 2023/1542

Type	Nom. voltage	Rated capacity	Capacity fade	Power	Power fade	Internal resistance	Internal resistance increase	Expected life-time	Expected life-time	Energy round trip efficiency	Energy round trip efficiency fade
	V	C_{10} 1.80Vpc 20°C	%	P_{10} 1.80Vpc 20°C	%	mOhm	%	acc. IEC 60896-21	cycles	%	%
		Ah		W				years			

Marathon L/XL

l2V220	2	220	20%	43.2	20%	0.41	100%	12	N/A	N/A	N/A
L2V220 V0	2	220	20%	43.2	20%	0.41	100%	12	N/A	N/A	N/A
L2V270	2	270	20%	53	20%	0.35	100%	12	N/A	N/A	N/A
L2V270 V0	2	270	20%	53	20%	0.35	100%	12	N/A	N/A	N/A
L2V320	2	320	20%	62.8	20%	0.32	100%	12	N/A	N/A	N/A
L2V320 V0	2	320	20%	62.8	20%	0.32	100%	12	N/A	N/A	N/A
L2V375	2	375	20%	73.5	20%	0.26	100%	12	N/A	N/A	N/A
L2V375 V0	2	375	20%	73.5	20%	0.26	100%	12	N/A	N/A	N/A
L2V425	2	425	20%	83.5	20%	0.25	100%	12	N/A	N/A	N/A
L2V425 V0	2	425	20%	83.5	20%	0.25	100%	12	N/A	N/A	N/A
L2V470	2	470	20%	92.4	20%	0.22	100%	12	N/A	N/A	N/A
L2V470 V0	2	470	20%	92.4	20%	0.22	100%	12	N/A	N/A	N/A
L2V520	2	520	20%	102	20%	0.19	100%	12	N/A	N/A	N/A
L2V520 V0	2	520	20%	102	20%	0.19	100%	12	N/A	N/A	N/A
L2V575	2	575	20%	113	20%	0.18	100%	12	N/A	N/A	N/A
L2V575 V0	2	575	20%	113	20%	0.18	100%	12	N/A	N/A	N/A
L2V600	2	601	20%	118	20%	0.16	100%	12	N/A	N/A	N/A
L2V600 V0	2	601	20%	118	20%	0.16	100%	12	N/A	N/A	N/A
L6V110	6	112	20%	66.5	20%	2.1	100%	12	N/A	N/A	N/A
L6V110 V0	6	112	20%	66.5	20%	2.1	100%	12	N/A	N/A	N/A
L6V160 V0	6	162	20%	96.5	20%	1.9	200%	12	N/A	N/A	N/A
XL6V180	6	179	20%	101	20%	1.6	100%	12	N/A	N/A	N/A
XL6V180 V0	6	179	20%	101	20%	1.6	100%	12	N/A	N/A	N/A
L12V24	12	23.5	20%	27	20%	14.3	100%	12	N/A	N/A	N/A
L12V24 V0	12	23.5	20%	27	20%	14.3	100%	12	N/A	N/A	N/A
L12V32	12	31.5	20%	37	20%	13	100%	12	N/A	N/A	N/A
L12V32 V0	12	31.5	20%	37	20%	13	100%	12	N/A	N/A	N/A
XL12V50	12	50.4	20%	60.3	20%	9.2	100%	12	N/A	N/A	N/A
XL12V50 V0	12	50.4	20%	60.3	20%	9.2	100%	12	N/A	N/A	N/A
XL12V70	12	66.6	20%	77.5	20%	9	100%	12	N/A	N/A	N/A
XL12V70 V0	12	66.6	20%	77.5	20%	9	100%	12	N/A	N/A	N/A
XL12V85	12	85.7	20%	102	20%	5.7	100%	12	N/A	N/A	N/A
XL12V85 V0	12	85.7	20%	102	20%	5.7	100%	12	N/A	N/A	N/A

Marathon PowerCycle

M12V100PC	12	100	20%	113	20%	5.1	100%	20	1500	N/A	N/A
M12V100PC V0	12	100	20%	113	20%	5.1	100%	20	1500	N/A	N/A
M12V155PC	12	155	20%	175	20%	3.9	100%	20	1500	N/A	N/A
M12V155PC V0	12	155	20%	175	20%	3.9	100%	20	1500	N/A	N/A
M12V190PC	12	190	20%	220	20%	3.5	100%	20	1500	N/A	N/A
M12V190PC V0	12	190	20%	220	20%	3.5	100%	20	1500	N/A	N/A

Performance and durability

according Battery Regulation (EU) 2023/1542

Type	Nom. voltage	Rated capacity	Capacity fade	Power	Power fade	Internal resistance	Internal resistance increase	Expected life-time	Expected life-time	Energy round trip efficiency	Energy round trip efficiency fade
	V	C_{10} 1.80Vpc 20°C	%	P_{10} 1.80Vpc 20°C	%	mOhm	%	acc. IEC 60896-21	cycles	%	%
		Ah		W				years			

Marathon M-FT

M6V200FT	6	200	20%	116	20%	1.7	100%	15	N/A	N/A	N/A
M6V200FT V0	6	200	20%	116	20%	1.7	100%	15	N/A	N/A	N/A
M12V35FT	12	35	20%	41.3	20%	11	100%	15	N/A	N/A	N/A
M12V35FT V0	12	35	20%	41.3	20%	11	100%	15	N/A	N/A	N/A
M12V50FT	12	47	20%	55.5	20%	8.2	100%	15	N/A	N/A	N/A
M12V50FT V0	12	47	20%	55.5	20%	8.2	100%	15	N/A	N/A	N/A
M12V60FT	12	59	20%	69.5	20%	7	100%	15	N/A	N/A	N/A
M12V60FT V0	12	59	20%	69.5	20%	7	100%	15	N/A	N/A	N/A
M12V90FT	12	86	20%	103	20%	5.1	100%	15	N/A	N/A	N/A
M12V90FT V0	12	86	20%	103	20%	5.1	100%	15	N/A	N/A	N/A
M12V100FT	12	100	20%	114	20%	5	100%	15	N/A	N/A	N/A
M12V100FT V0	12	100	20%	114	20%	5	100%	15	N/A	N/A	N/A
M12V105FT	12	100	20%	114	20%	4.9	100%	15	N/A	N/A	N/A
M12V105FT V0	12	100	20%	114	20%	4.9	100%	15	N/A	N/A	N/A
M12V125FT	12	121	20%	151	20%	4.7	100%	15	N/A	N/A	N/A
M12V125FT V0	12	121	20%	151	20%	4.7	100%	15	N/A	N/A	N/A
M12V155FT	12	155	20%	177	20%	3.8	100%	15	N/A	N/A	N/A
M12V155FT V0	12	155	20%	177	20%	3.8	100%	15	N/A	N/A	N/A
M12V190FT	12	190	20%	223	20%	3.4	100%	15	N/A	N/A	N/A
M12V190FT V0	12	190	20%	223	20%	3.4	100%	15	N/A	N/A	N/A

Performance and durability

according Battery Regulation (EU) 2023/1542

Type	Nom. voltage	Rated capacity	Capacity fade	Power	Power fade	Internal resistance	Internal resistance increase	Expected life-time	Expected life-time	Energy round trip efficiency	Energy round trip efficiency fade
	V	C_{10} 1.80Vpc 20°C	%	P_{10} 1.80Vpc 20°C	%	mOhm	%	acc. IEC 60896-21	cycles	%	%
		Ah		W				years			

Powerfit S100

S112/7.2 S	12	6.5	20%	7.8	20%	22	100%	5	N/A	N/A	N/A
S112/7.2 SR	12	6.5	20%	7.8	20%	22	100%	5	N/A	N/A	N/A
S112/9 SR	12	8.7	20%	9.2	20%	18	100%	5	N/A	N/A	N/A

Powerfit S100L

S112/7L SR	12	6.7	20%	8.1	20%	23	100%	10	N/A	N/A	N/A
S112/12L SR	12	11.2	20%	13.9	20%	27	100%	10	N/A	N/A	N/A
S112/18L F5	12	16.8	20%	20.9	20%	24	100%	10	N/A	N/A	N/A
S112/25L F5	12	23.1	20%	27.9	20%	14	100%	10	N/A	N/A	N/A

Powerfit S300

S306/4 S	6	4.2	20%	2.5	20%	25	100%	5	N/A	N/A	N/A
S306/12 S	6	11.2	20%	6.6	20%	15	100%	5	N/A	N/A	N/A
S312/2.3 S	12	1.8	20%	2.2	20%	90	100%	5	N/A	N/A	N/A
S312/3.2 S	12	2.7	20%	3.3	20%	45	100%	5	N/A	N/A	N/A
S312/4 S	12	4.2	20%	5	20%	67.5	100%	5	N/A	N/A	N/A
S312/7 S	12	6.7	20%	7.9	20%	18	100%	5	N/A	N/A	N/A
S312/7 SR	12	6.7	20%	7.9	20%	18	100%	5	N/A	N/A	N/A
S312/12 S	12	11.2	20%	13.3	20%	14	100%	5	N/A	N/A	N/A
S312/12 SR	12	11.2	20%	13.3	20%	14	100%	5	N/A	N/A	N/A
S312/18 F5	12	16.7	20%	19.9	20%	16	100%	5	N/A	N/A	N/A
S312/26 F5	12	24.2	20%	28.7	20%	14	100%	5	N/A	N/A	N/A
S312/40 F6	12	36.1	20%	42.8	20%	10	100%	5	N/A	N/A	N/A

Performance and durability

Version:1.1
Date: 10.09.2024

according Battery Regulation (EU) 2023/1542

Type	Nom. voltage	Rated capacity	Capacity fade	Power	Power fade	Internal resistance	Internal resistance increase	Expected life-time	Expected life-time	Energy round trip efficiency	Energy round trip efficiency fade
	V	C_{10} 1.80Vpc 20°C Ah	%	P_{10} 1.80Vpc 20°C W	%	mOhm	%	acc. IEC 60896-21 years	cycles	%	%

Sprinter P/XP

P6V1700	6	117	20%	69.8	20%	1.8	100%	10	N/A	N/A	N/A
P6V1700 V0	6	117	20%	69.8	20%	1.8	100%	10	N/A	N/A	N/A
XP6V2800	6	188	20%	107	20%	1.6	100%	10	N/A	N/A	N/A
XP6V2800 V0	6	188	20%	107	20%	1.6	100%	10	N/A	N/A	N/A
P12V600	12	23.1	20%	28.3	20%	15.4	100%	10	N/A	N/A	N/A
P12V600 V0	12	23.1	20%	28.3	20%	15.4	100%	10	N/A	N/A	N/A
P12V875	12	39.4	20%	46.4	20%	10.6	100%	10	N/A	N/A	N/A
P12V875 V0	12	39.4	20%	46.4	20%	10.6	100%	10	N/A	N/A	N/A
XP12V1800	12	54.3	20%	63.6	20%	8.1	100%	10	N/A	N/A	N/A
XP12V1800 V0	12	54.3	20%	63.6	20%	8.1	100%	10	N/A	N/A	N/A
XP12V2500	12	66.9	20%	75.1	20%	6.2	100%	10	N/A	N/A	N/A
XP12V2500 V0	12	66.9	20%	75.1	20%	6.2	100%	10	N/A	N/A	N/A
XP12V3000	12	89.3	20%	107	20%	5.2	100%	10	N/A	N/A	N/A
XP12V3000 V0	12	89.3	20%	107	20%	5.2	100%	10	N/A	N/A	N/A
XP12V3400	12	101	20%	114	20%	4.5	100%	10	N/A	N/A	N/A
XP12V3400 V0	12	101	20%	114	20%	4.5	100%	10	N/A	N/A	N/A
XP12V4000	12	115	20%	129	20%	4.22	100%	10	N/A	N/A	N/A
XP12V4000 V0	12	115	20%	129	20%	4.22	100%	10	N/A	N/A	N/A
XP12V4800	12	135	20%	149	20%	3.74	100%	10	N/A	N/A	N/A
XP12V4800 V0	12	135	20%	149	20%	3.74	100%	10	N/A	N/A	N/A

Sprinter XP-FT

XP12V4400FT	12	155	20%	185	20%	4	100%	12	N/A	N/A	N/A
XP12V4400FT V0	12	155	20%	185	20%	4	100%	12	N/A	N/A	N/A
XP12V5300FT	12	186	20%	199	20%	3.2	100%	12	N/A	N/A	N/A
XP12V5300FT V0	12	186	20%	199	20%	3.2	100%	12	N/A	N/A	N/A

Sprinter PP

S6V3100PP	6	188	20%	107	20%	1.42	100%	12	N/A	N/A	N/A
S6V3100PP V0	6	188	20%	107	20%	1.42	100%	12	N/A	N/A	N/A
S12V2000PP	12	54.3	20%	63.6	20%	7.29	100%	12	N/A	N/A	N/A
S12V2000PP V0	12	54.3	20%	63.6	20%	7.29	100%	12	N/A	N/A	N/A
S12V2800PP	12	66.9	20%	75.1	20%	5.58	100%	12	N/A	N/A	N/A
S12V2800PP V0	12	66.9	20%	75.1	20%	5.58	100%	12	N/A	N/A	N/A
S12V3400PP	12	89.3	20%	107	20%	4.71	100%	12	N/A	N/A	N/A
S12V3400PP V0	12	89.3	20%	107	20%	4.71	100%	12	N/A	N/A	N/A
S12V3800PP	12	101	20%	114	20%	4.05	100%	12	N/A	N/A	N/A
S12V3800PP V0	12	101	20%	114	20%	4.05	100%	12	N/A	N/A	N/A
S12V4500PP	12	115	20%	129	20%	3.8	100%	12	N/A	N/A	N/A
S12V4500PP V0	12	115	20%	129	20%	3.8	100%	12	N/A	N/A	N/A
S12V5200PP	12	135	20%	149	20%	3.41	100%	12	N/A	N/A	N/A
S12V5200PP V0	12	135	20%	149	20%	3.41	100%	12	N/A	N/A	N/A

Performance and durability

Version:1.1
Date: 10.09.2024

according Battery Regulation (EU) 2023/1542

Type	Nom. voltage	Rated capacity	Capacity fade	Power	Power fade	Internal resistance	Internal resistance increase	Expected life-time	Expected life-time	Energy round trip efficiency	Energy round trip efficiency fade
	V	C_{10} 1.80Vpc 20°C	%	P_{10} 1.80Vpc 20°C	%	mOhm	%	acc. IEC 60896-21	cycles	%	%
		Ah		W				years			
Sonnenschein A400											
A412/5.5SR	12	5.5	20%	7	20%	138	100%	12	N/A	N/A	N/A
A412/8.5SR	12	8.5	20%	10	20%	86	100%	12	N/A	N/A	N/A
A412/12SR	12	12	20%	14	20%	47	100%	12	N/A	N/A	N/A
A412/20G5	12	20	20%	22.2	20%	25	100%	12	N/A	N/A	N/A
A412/32F10	12	32	20%	38	20%	15	100%	12	N/A	N/A	N/A
A412/32G6	12	32	20%	38	20%	15	100%	12	N/A	N/A	N/A
A412/32G6 V0	12	32	20%	38	20%	15	100%	12	N/A	N/A	N/A
A412/50A	12	50	20%	50	20%	10	100%	12	N/A	N/A	N/A
A412/50A V0	12	50	20%	50	20%	10	100%	12	N/A	N/A	N/A
A412/50F10	12	50	20%	50	20%	10	100%	12	N/A	N/A	N/A
A412/50F10 V0	12	50	20%	50	20%	10	100%	12	N/A	N/A	N/A
A412/50G6	12	50	20%	50	20%	10	100%	12	N/A	N/A	N/A
A412/65F10	12	65	20%	74.4	20%	9	100%	12	N/A	N/A	N/A
A412/65G6	12	65	20%	74.4	20%	9	100%	12	N/A	N/A	N/A
A412/65G6 V0	12	65	20%	74.4	20%	9	100%	12	N/A	N/A	N/A
A412/90A	12	90	20%	110	20%	7	100%	12	N/A	N/A	N/A
A412/90A V0	12	90	20%	110	20%	7	100%	12	N/A	N/A	N/A
A412/90F10	12	90	20%	110	20%	7	100%	12	N/A	N/A	N/A
A412/100A	12	92.8	20%	114	20%	6.9	100%	12	N/A	N/A	N/A
A412/100A V0	12	92.8	20%	114	20%	6.9	100%	12	N/A	N/A	N/A
A412/100F10	12	92.8	20%	114	20%	6.9	100%	12	N/A	N/A	N/A
A412/120A	12	120	20%	135	20%	5.7	100%	12	N/A	N/A	N/A
A412/120A V0	12	120	20%	135	20%	5.7	100%	12	N/A	N/A	N/A
A412/120F10	12	120	20%	135	20%	5.7	100%	12	N/A	N/A	N/A
A406/165A	6	165	20%	177	20%	2.1	100%	12	N/A	N/A	N/A
A406/165F10	6	165	20%	177	20%	2.1	100%	12	N/A	N/A	N/A
A412/180A	12	180	20%	162	20%	3.8	100%	12	N/A	N/A	N/A
A412/180A V0	12	180	20%	162	20%	3.8	100%	12	N/A	N/A	N/A
A412/180F10	12	180	20%	162	20%	3.8	100%	12	N/A	N/A	N/A
Sonnenschein A400 FT											
A412/120FT	12	120	20%	141	20%	7	100%	12	N/A	N/A	N/A

Performance and durability

according Battery Regulation (EU) 2023/1542

Type	Nom. voltage	Rated capacity	Capacity fade	Power	Power fade	Internal resistance	Internal resistance increase	Expected life-time	Expected life-time	Energy round trip efficiency	Energy round trip efficiency fade
	V	C_{10} 1.80Vpc 20°C	%	P_{10} 1.80Vpc 20°C	%	mOhm	%	acc. IEC 60896-21	cycles	%	%
		Ah		W				years			

Sonnenschein A500

A502/10S	2	10	20%	2	20%	11.2	100%	10	600	83%	5%
A504/3,5S	4	3.5	20%	1	20%	48	100%	10	N/A	N/A	N/A
A506/1,2S	6	1.2	20%	1	20%	165	100%	10	N/A	N/A	N/A
A506/3,5S	6	3.5	20%	2	20%	142	100%	10	N/A	N/A	N/A
A506/6,5S	6	6.5	20%	4	20%	95	100%	10	N/A	N/A	N/A
A506/10S	6	10	20%	6	20%	34	100%	10	N/A	N/A	N/A
A508/3,5S	8	3.5	20%	3	20%	95	100%	10	N/A	N/A	N/A
A512/1,2S	12	1.2	20%	1	20%	330	100%	10	N/A	N/A	N/A
A512/2S	12	2	20%	2	20%	172	100%	10	N/A	N/A	N/A
A512/3,5S	12	3.5	20%	4	20%	142	100%	10	N/A	N/A	N/A
A512/6,5S	12	6.5	20%	8	20%	95	100%	10	N/A	N/A	N/A
A512/10S	12	10	20%	12	20%	66	100%	10	N/A	N/A	N/A
A512/16G5	12	16	20%	19	20%	37.8	100%	10	N/A	N/A	N/A
A512/25G5	12	25	20%	30	20%	28	100%	10	N/A	N/A	N/A
A512/30G6	12	30	20%	36	20%	21.8	100%	10	N/A	N/A	N/A
A512/40A	12	40	20%	48	20%	16.5	100%	10	N/A	N/A	N/A
A512/40G6	12	40	20%	48	20%	16.5	100%	10	N/A	N/A	N/A
A512/55A	12	55	20%	66	20%	10.9	100%	10	N/A	N/A	N/A
A512/60A	12	60	20%	72	20%	14	100%	10	N/A	N/A	N/A
A512/60G6	12	60	20%	72	20%	14	100%	10	N/A	N/A	N/A
A512/65A	12	65	20%	78	20%	8.3	100%	10	N/A	N/A	N/A
A512/65G6	12	65	20%	78	20%	8.3	100%	10	N/A	N/A	N/A
A512/85A	12	85	20%	102	20%	7.4	100%	10	N/A	N/A	N/A
A512/115A	12	115	20%	138	20%	5.5	100%	10	N/A	N/A	N/A
A512/120A	12	120	20%	144	20%	5.1	100%	10	N/A	N/A	N/A
A512/140A	12	140	20%	168	20%	4.1	100%	10	N/A	N/A	N/A
A512/200A	12	200	20%	240	20%	3.8	100%	10	N/A	N/A	N/A

Performance and durability

according Battery Regulation (EU) 2023/1542

Type	Nom. voltage	Rated capacity	Capacity fade	Power	Power fade	Internal resistance	Internal resistance increase	Expected life-time	Expected life-time	Energy round trip efficiency	Energy round trip efficiency fade
	V	C_{10} 1.80Vpc 20°C	%	P_{10} 1.80Vpc 20°C	%	mOhm	%	acc. IEC 60896-21	cycles	%	%
		Ah		W				years			

Sonnenschein A600

A602/225	2	224	20%	45	20%	0.95	100%	20	N/A	N/A	N/A
A602/225 V0	2	224	20%	45	20%	0.95	100%	20	N/A	N/A	N/A
A602/280	2	280	20%	56	20%	0.79	100%	20	N/A	N/A	N/A
A602/280 V0	2	280	20%	56	20%	0.79	100%	20	N/A	N/A	N/A
A602/335	2	337	20%	67	20%	0.61	100%	20	N/A	N/A	N/A
A602/335 V0	2	337	20%	67	20%	0.61	100%	20	N/A	N/A	N/A
A602/415	2	416	20%	83	20%	0.62	100%	20	N/A	N/A	N/A
A602/415 V0	2	416	20%	83	20%	0.62	100%	20	N/A	N/A	N/A
A602/500	2	499	20%	100	20%	0.53	100%	20	N/A	N/A	N/A
A602/500 V0	2	499	20%	100	20%	0.53	100%	20	N/A	N/A	N/A
A602/580	2	582	20%	116	20%	0.47	100%	20	N/A	N/A	N/A
A602/580 V0	2	582	20%	116	20%	0.47	100%	20	N/A	N/A	N/A
A602/750	2	748	20%	150	20%	0.48	100%	20	N/A	N/A	N/A
A602/750 V0	2	748	20%	150	20%	0.48	100%	20	N/A	N/A	N/A
A602/1010	2	998	20%	200	20%	0.38	100%	20	N/A	N/A	N/A
A602/1010 V0	2	998	20%	200	20%	0.38	100%	20	N/A	N/A	N/A
A602/1250	2	1248	20%	250	20%	0.33	100%	20	N/A	N/A	N/A
A602/1250 V0	2	1248	20%	250	20%	0.33	100%	20	N/A	N/A	N/A
A602/1510	2	1497	20%	299	20%	0.29	100%	20	N/A	N/A	N/A
A602/1510 V0	2	1497	20%	299	20%	0.29	100%	20	N/A	N/A	N/A
A602/1650 C	2	1643	20%	329	20%	0.23	100%	20	N/A	N/A	N/A
A602/1650 C V0	2	1643	20%	329	20%	0.23	100%	20	N/A	N/A	N/A
A602/2200	2	2190	20%	438	20%	0.19	100%	20	N/A	N/A	N/A
A602/2200 V0	2	2190	20%	438	20%	0.19	100%	20	N/A	N/A	N/A
A602/2740	2	2738	20%	548	20%	0.16	100%	20	N/A	N/A	N/A
A602/2740 V0	2	2738	20%	548	20%	0.16	100%	20	N/A	N/A	N/A
A602/3300	2	3286	20%	657	20%	0.13	100%	20	N/A	N/A	N/A
A602/3300 V0	2	3286	20%	657	20%	0.13	100%	20	N/A	N/A	N/A
A604/200	4	200	20%	71	20%	1.6	100%	15	N/A	N/A	N/A
A604/300	4	300	20%	106	20%	1.2	100%	15	N/A	N/A	N/A
A606/200	6	200	20%	106	20%	2.71	100%	15	N/A	N/A	N/A
A606/200 V0	6	200	20%	106	20%	2.71	100%	15	N/A	N/A	N/A
A606/300	6	300	20%	159	20%	1.9	100%	15	N/A	N/A	N/A
A606/300 V0	6	300	20%	159	20%	1.9	100%	15	N/A	N/A	N/A
A610/100	10	100	20%	88	20%	7.8	100%	15	N/A	N/A	N/A
A610/150	10	150	20%	133	20%	3.9	100%	15	N/A	N/A	N/A
A612/100	12	100	20%	106	20%	9.68	100%	15	N/A	N/A	N/A
A612/100 V0	12	100	20%	106	20%	9.68	100%	15	N/A	N/A	N/A
A612/150	12	150	20%	159	20%	6.43	100%	15	N/A	N/A	N/A
A612/150 V0	12	150	20%	159	20%	6.43	100%	15	N/A	N/A	N/A

Performance and durability

according Battery Regulation (EU) 2023/1542

Type	Nom. voltage	Rated capacity	Capacity fade	Power	Power fade	Internal resistance	Internal resistance increase	Expected life-time	Expected life-time	Energy round trip efficiency	Energy round trip efficiency fade
	V	C_{10} 1.80Vpc 20°C	%	P_{10} 1.80Vpc 20°C	%	mOhm	%	acc. IEC 60896-21	acc. IEC 60896-2 / IEC 61427-1	%	%
		Ah		W				years	cycles		
Sonnenschein A600 Solar											
A602/295 Solar	2	217	20%	43	20%	0.95	100%	15	2400	83%	5%
A602/295 Solar V0	2	217	20%	43	20%	0.95	100%	15	2400	83%	5%
A602/370 Solar	2	272	20%	54	20%	0.79	100%	15	2400	83%	5%
A602/370 Solar V0	2	272	20%	54	20%	0.79	100%	15	2400	83%	5%
A602/440 Solar	2	326	20%	65	20%	0.61	100%	15	2400	83%	5%
A602/440 Solar V0	2	326	20%	65	20%	0.61	100%	15	2400	83%	5%
A602/520 Solar	2	379	20%	76	20%	0.62	100%	15	2400	83%	5%
A602/520 Solar V0	2	379	20%	76	20%	0.62	100%	15	2400	83%	5%
A602/625 Solar	2	455	20%	91	20%	0.53	100%	15	2400	83%	5%
A602/625 Solar V0	2	455	20%	91	20%	0.53	100%	15	2400	83%	5%
A602/750 Solar	2	531	20%	106	20%	0.47	100%	15	2400	83%	5%
A602/750 Solar V0	2	531	20%	106	20%	0.47	100%	15	2400	83%	5%
A602/850 Solar	2	681	20%	136	20%	0.48	100%	15	2400	83%	5%
A602/850 Solar V0	2	681	20%	136	20%	0.48	100%	15	2400	83%	5%
A602/1130 Solar	2	908	20%	182	20%	0.38	100%	15	2400	83%	5%
A602/1130 Solar V0	2	908	20%	182	20%	0.38	100%	15	2400	83%	5%
A602/1415 Solar	2	1135	20%	227	20%	0.33	100%	15	2400	83%	5%
A602/1415 Solar V0	2	1135	20%	227	20%	0.33	100%	15	2400	83%	5%
A602/1695 Solar	2	1362	20%	272	20%	0.29	100%	15	2400	83%	5%
A602/1695 Solar V0	2	1362	20%	272	20%	0.29	100%	15	2400	83%	5%
A602/1960 C Solar	2	1593	20%	319	20%	0.23	100%	15	2400	83%	5%
A602/1960 C Solar V0	2	1593	20%	319	20%	0.23	100%	15	2400	83%	5%
A602/2600 Solar	2	2024	20%	405	20%	0.19	100%	15	2400	83%	5%
A602/2600 Solar V0	2	2024	20%	405	20%	0.19	100%	15	2400	83%	5%
A602/3270 Solar	2	2530	20%	506	20%	0.16	100%	15	2400	83%	5%
A602/3270 Solar V0	2	2530	20%	506	20%	0.16	100%	15	2400	83%	5%
A602/3920 Solar	2	3036	20%	607	20%	0.13	100%	15	2400	83%	5%
A602/3920 Solar V0	2	3036	20%	607	20%	0.13	100%	15	2400	83%	5%

Performance and durability

according Battery Regulation (EU) 2023/1542

Type	Nom. voltage	Rated capacity	Capacity fade	Power	Power fade	Internal resistance	Internal resistance increase	Expected life-time	Expected life-time	Energy round trip efficiency	Energy round trip efficiency fade
	V	C_{10} 1.80Vpc 20°C	%	P_{10} 1.80Vpc 20°C	%	mOhm	%	acc. IEC 60896-21	acc. IEC 60896-2	%	%
		Ah		W				years	cycles		
Sonnenschein Solar Block											
SB6/200 A	6	173	20%	104	20%	2.3	100%	9	1200	83%	5%
SB6/330 A	6	260	20%	156	20%	1.7	100%	9	1200	83%	5%
SB12/60 A	12	54	20%	64	20%	11.8	100%	9	1200	83%	5%
SB12/75 A	12	67	20%	81	20%	7.4	100%	9	1200	83%	5%
SB12/100 A	12	86	20%	104	20%	6.5	100%	9	1200	83%	5%
SB12/130 A	12	111	20%	133	20%	7.8	100%	9	1200	83%	5%
SB12/185 A	12	158	20%	190	20%	6.2	100%	9	1200	83%	5%
Sonnenschein Solar											
S12/6,6 S	12	6.6	20%	7.9	20%	*	100%	5	800	83%	5%
S12/17 G5	12	17	20%	20	20%	*	100%	5	800	83%	5%
S12/27 G5	12	23	20%	28	20%	28	100%	6	800	83%	5%
S12/32 G6	12	27	20%	32	20%	21.8	100%	6	800	83%	5%
S12/41 A	12	36	20%	44	20%	16.5	100%	6	800	83%	5%
S12/60 A	12	48	20%	58	20%	10.9	100%	6	800	83%	5%
S12/85 A	12	73	20%	87	20%	8.3	100%	6	800	83%	5%
S12/90 A	12	81	20%	97	20%	7.4	100%	6	800	83%	5%
S12/130 A	12	105	20%	127	20%	5.5	100%	6	800	83%	5%
S12/230 A	12	173	20%	208	20%	3.8	100%	6	800	83%	5%

* Values are under preparation and will be available soon.

Performance and durability

according Battery Regulation (EU) 2023/1542

Type	Nom. voltage	Rated capacity	Capacity fade	Power	Power fade	Internal resistance	Internal resistance increase	Expected life-time	Expected life-time	Energy round trip efficiency	Energy round trip efficiency fade
	V	C_{10} 1.80Vpc 20°C	%	P_{10} 1.80Vpc 20°C	%	mOhm	%	acc. IEC 60896-21	cycles	%	%
		Ah		W				years			
Sonnenschein RAIL											
SR 6V 180 A	6	188	20%	113	20%	2.3	100%	6	600	83%	5%
SR 6V 180 A HL3	6	188	20%	113	20%	2.3	100%	6	600	83%	5%
SR 6V 240 A	6	251	20%	151	20%	6.2	100%	6	600	83%	5%
SR 6V 240 A V0	6	251	20%	151	20%	6.2	100%	6	600	83%	5%
SR 12V 61 A V0	12	65	20%	78	20%	10	100%	6	600	83%	5%
SR 12V 61 F10	12	65	20%	78	20%	10	100%	6	600	83%	5%
SR 12V 61 F10 V0	12	65	20%	78	20%	10	100%	6	600	83%	5%
SR 12V 65 G	12	68	20%	82	20%	8.3	100%	6	600	83%	5%
SR 12V 65 G V0	12	68	20%	82	20%	8.3	100%	6	600	83%	5%
SR 12V 75 A V0	12	78	20%	94	20%	8.3	100%	6	600	83%	5%
SR 12V 80 A	12	80	20%	96	20%	7.4	100%	6	600	83%	5%
SR 12V 80 A V0	12	80	20%	96	20%	7.4	100%	6	600	83%	5%
SR 12V 82 A RF V0	12	78	20%	94	20%	7.4	100%	6	600	83%	5%
SR 12V 85 F10 V0	12	90	20%	108	20%	11.8	100%	6	600	83%	5%
SR 12V 88 A RF	12	80	20%	96	20%	7.4	100%	6	600	83%	5%
SR 12V 88 A RF V0	12	80	20%	96	20%	7.4	100%	6	600	83%	5%
SR 12V 105 A	12	110	20%	132	20%	0.3	100%	6	600	83%	5%
SR 12V 105 A HL3	12	110	20%	132	20%	0.3	100%	6	600	83%	5%
SR 12V 105 F10 HL3	12	110	20%	132	20%	0.2	100%	6	600	83%	5%
SR 12V 122 A	12	119	20%	143	20%	4.1	100%	6	600	83%	5%
SR 12V 122 A HL3	12	119	20%	143	20%	4.1	100%	6	600	83%	5%
SR 12V 122 A V0	12	119	20%	143	20%	4.1	100%	6	600	83%	5%
SR 12V 155 FT V0	12	165	20%	198	20%	5.1	100%	6	600	83%	5%
SR 12V 165 A	12	180	20%	216	20%	6.2	100%	6	600	83%	5%
SR 12V 165 A HL3	12	180	20%	216	20%	6.2	100%	6	600	83%	5%
SR 12V 165 A V0	12	180	20%	216	20%	6.2	100%	6	600	83%	5%
SR 12V 175 A	12	173	20%	208	20%	3.8	100%	6	600	83%	5%
SR 12V 175 A HL3	12	173	20%	208	20%	3.8	100%	6	600	83%	5%
SR 12V 175 F10 HL3	12	173	20%	208	20%	3.8	100%	6	600	83%	5%
SR 12V 190 A HL3	12	173	20%	208	20%	3.8	100%	6	600	83%	5%

* Values are under preparation and will be available soon.

Performance and durability

according Battery Regulation (EU) 2023/1542

Type	Nom. voltage	Rated capacity	Capacity fade	Power	Power fade	Internal resistance	Internal resistance increase	Expected life-time	Expected life-time	Energy round trip efficiency	Energy round trip efficiency fade
	V	C_{10} 1.80Vpc 20°C	%	P_{10} 1.80Vpc 20°C	%	mOhm	%	acc. IEC 60896-21	acc. IEC 60896-21	%	%
		Ah		W				years	cycles		

Sonnenschein PowerCycle

PC12/180FT	12	180	20%	187	20%	5.1	100%	20	1600	83%	5%

Performance and durability

according Battery Regulation (EU) 2023/1542

Type	Nom. voltage	Rated capacity	Capacity fade	Power	Power fade	Internal resistance	Internal resistance increase	Expected life-time	Expected life-time	Energy round trip efficiency	Energy round trip efficiency fade
	V	1C Ah	%	CP_{10min} W	%	mOhm	%	Floating, 25°C years	cycles	%	%
Solition Data Center											
[6+0] Master Cabinet	384	76.5	20%	143100	20%	0.54	100%	10	N/A	N/A	N/A
[6+6] Master Cabinet	384	153	20%	286200	20%	0.27	100%	10	N/A	N/A	N/A
[6+0] Slave Cabinet	384	76.5	20%	143100	20%	0.54	100%	10	N/A	N/A	N/A
[6+6] Slave Cabinet	384	153	20%	286200	20%	0.27	100%	10	N/A	N/A	N/A
[7+0] Master Cabinet	448	76.5	20%	166950	20%	0.63	100%	10	N/A	N/A	N/A
[7+7] Master Cabinet	448	153	20%	333900	20%	0.315	100%	10	N/A	N/A	N/A
[7+0] Slave Cabinet	448	76.5	20%	166950	20%	0.63	100%	10	N/A	N/A	N/A
[7+7] Slave Cabinet	448	153	20%	333900	20%	0.315	100%	10	N/A	N/A	N/A
[8+0] Master Cabinet	512	76.5	20%	190800	20%	0.72	100%	10	N/A	N/A	N/A
[8+8] Master Cabinet	512	153	20%	381600	20%	0.36	100%	10	N/A	N/A	N/A
[8+0] Slave Cabinet	512	76.5	20%	190800	20%	0.72	100%	10	N/A	N/A	N/A
[8+8] Slave Cabinet	512	153	20%	381600	20%	0.36	100%	10	N/A	N/A	N/A

Performance and durability

Version:1.1
Date: 10.09.2024

according Battery Regulation (EU) 2023/1542

Type	Nom. voltage	Rated capacity	Capacity fade	Power	Power fade	Internal resistance	Internal resistance increase	Expected life-time	Expected life-time	Energy round trip efficiency	Energy round trip efficiency fade
	V	C_{10} 1.80Vpc 20°C Ah	%	P_{10} 1.80Vpc 20°C W	%	mOhm	%	years	cycles	%	%
Classic Rail cells											
02EPZS0120STC	2	126	20%	25	20%	2.1	100%	6	1200	83%	5%
02EPZS0180SLC	2	189	20%	38	20%	1.4	100%	6	1200	83%	5%
03EPZS0165PWC	2	173	20%	35	20%	1.3	100%	6	1200	83%	5%
03EPZS0180SC	2	189	20%	38	20%	1.4	100%	6	1200	83%	5%
04EPZS0240SC	2	252	20%	50	20%	1.8	100%	6	1200	83%	5%
04EPZS0320SC	2	336	20%	67	20%	2.4	100%	6	1200	83%	5%
05EPZS0400SC	2	420	20%	84	20%	0.7	100%	6	1200	83%	5%
06EPZS0330PWC	2	347	20%	69	20%	0.9	100%	6	1200	83%	5%
06EPZS0480SC	2	504	20%	101	20%	0.7	100%	6	1200	83%	5%
07EPZS0385PWC	2	404	20%	81	20%	0.4	100%	6	1200	83%	5%
07EPZS0420SC	2	441	20%	88	20%	0.3	100%	6	1200	83%	5%
08EPZS0480SC	2	504	20%	101	20%	0.4	100%	6	1200	83%	5%

Performance and durability

according Battery Regulation (EU) 2023/1542

Type	Nom. voltage	Rated capacity	Capacity fade	Power	Power fade	Internal resistance	Internal resistance increase	Expected life-time	Expected life-time	Energy round trip efficiency	Energy round trip efficiency fade
	V	C_{10} 1.80Vpc 20°C	%	P_{10} 1.80Vpc 20°C	%	mOhm	%	years	cycles	%	%
		Ah		W							
Sonnenschein Rail PzV cells											
02EPZV0100SITC	2	105	20%	21	20%	1.7	100%	6	1200	83%	5%
02EPZV0100STC	2	105	20%	21	20%	1.7	100%	6	1200	83%	5%
02EPZV0110STC	2	116	20%	23	20%	1.9	100%	6	1200	83%	5%
02EPZV0140SRC	2	147	20%	29	20%	1.5	100%	6	1200	83%	5%
02EPZV0140STC	2	147	20%	29	20%	1.5	100%	6	1200	83%	5%
02EPZV0200SIC	2	210	20%	42	20%	1.3	100%	6	1200	83%	5%
03EPZV0165PWC	2	173	20%	35	20%	1.3	100%	6	1200	83%	5%
03EPZV0165SC	2	189	20%	38	20%	1.3	100%	6	1200	83%	5%
03EPZV0165SRC	2	252	20%	50	20%	1.3	100%	6	1200	83%	5%
03EPZV0165SWC	2	173	20%	35	20%	1.3	100%	6	1200	83%	5%
03EPZV0210SC	2	173	20%	35	20%	1.0	100%	6	1200	83%	5%
03EPZV0210STC	2	221	20%	44	20%	1.0	100%	6	1200	83%	5%
04EPZV0220SFC	2	231	20%	46	20%	0.9	100%	6	1200	83%	5%
04EPZV0280SC	2	294	20%	59	20%	0.7	100%	6	1200	83%	5%
04EPZV0280SFC	2	294	20%	59	20%	0.7	100%	6	1200	83%	5%
04EPZV0400SFC	2	420	20%	84	20%	0.7	100%	6	1200	83%	5%
04EPZV0400SRC	2	420	20%	84	20%	0.7	100%	6	1200	83%	5%
04EPZV0480SFC	2	504	20%	101	20%	0.7	100%	6	1200	83%	5%
04EPZV0480SRC	2	504	20%	101	20%	0.7	100%	6	1200	83%	5%
05EPZV0275SFC	2	289	20%	58	20%	0.8	100%	6	1200	83%	5%
05EPZV0350SFC	2	368	20%	74	20%	0.6	100%	6	1200	83%	5%
05EPZV0350SRC	2	368	20%	74	20%	0.6	100%	6	1200	83%	5%
05EPZV0350STC	2	368	20%	74	20%	0.6	100%	6	1200	83%	5%
05PZVB0145STC	2	152	20%	30	20%	1.1	100%	6	1200	83%	5%
05PZVB0175STC	2	184	20%	37	20%	1.3	100%	6	1200	83%	5%
06EPZV0330SFC	2	347	20%	69	20%	0.6	100%	6	1200	83%	5%
06EPZV0600SIC	2	630	20%	126	20%	0.5	100%	6	1200	83%	5%
06PZVB0175STC	2	184	20%	37	20%	1.3	100%	6	1200	83%	5%
07EPZV0385SFC	2	404	20%	81	20%	0.4	100%	6	1200	83%	5%
07EPZV0385SRC	2	404	20%	81	20%	0.4	100%	6	1200	83%	5%
07EPZV0440SWC	2	462	20%	92	20%	0.3	100%	6	1200	83%	5%
08EPZV0385PWC	2	404	20%	81	20%	0.4	100%	6	1200	83%	5%
08EPZV0440PWC	2	462	20%	92	20%	0.3	100%	6	1200	83%	5%
08EPZV0440SRC	2	462	20%	92	20%	0.3	100%	6	1200	83%	5%
08EPZV0440SRC	2	462	20%	92	20%	0.3	100%	6	1200	83%	5%
08EPZV0440STC	2	462	20%	92	20%	0.3	100%	6	1200	83%	5%
10EPZV0550SRC	2	578	20%	116	20%	0.3	100%	6	1200	83%	5%
10EPZV0550STC	2	578	20%	116	20%	0.3	100%	6	1200	83%	5%