

Industrial Batteries – Sonnenschein A400 FT
The dryfit range for modular performance adaption.

A400 FT: Modular concept for ETSI-, 19" and 23" standards.

A400 FT Specifications

- Sonnenschein A400 FT (Front-Terminal) batteries are a powerful and reliable means of energy which simplifies the installation into power equipment racks
- Designed for user-friendly front connector assembly
- Excellent combination between energy storage performance and life expectancy
- Absolutely maintenance-free during their whole service life due to the dryfit technology
- Central degassing
- Nominal capacity from 26 up to 110 Ah
- 10 years design life time at 20°C ambient temperature (80% remaining capacity)
- Optional case material acc. to UL 94 V-0
- Grid plate construction consisting of a lead calcium alloy
- Very low gassing due to internal gas recombination
- Shelf life of up to 2 years at 20°C without recharge due to the very low self discharge rate
- Short recharging time
- Proof against deep discharge conditions according to DIN 43539 T5
- Trouble-free transportation of operational blocks, no restrictions for air, rail and sea transportation (IATA, DGR clause A 67)
- Completely recyclable

Applications

In telecommunications, Sonnenschein A400 FT batteries are perfect for an uninterrupted connection. But they can also be used for various other power supplies for safety systems.



Technical Characteristics and Data

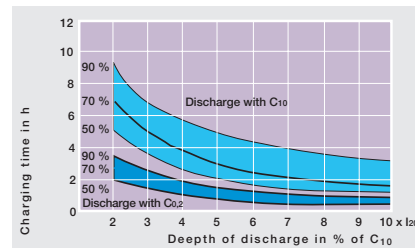
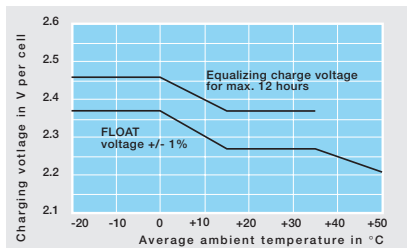
Standard

Typ	Part Number	Voltage (V)	Capacity (Ah)			L x W x H (mm)	Weight (kg)	Internal resistance IEC 896-2 (m Ω)	Max. dis. current IEC 896-2 (A)	Type of Terminals
			10h 1,80 V/Cell 20°C	8h 1,75 V/Cell 20°C	1h 1,60 V/Cell 20°C					
A412/26 FT	NGA4120026HSOMB	12	26	25,6	16,1	280 108 195	11,5	21	600	M6
A412/37 FT	NGA4120037HSOMB	12	37	33,6	21,2	280 108 237	15,5	14	921	M6
A412/48 FT	NGA4120048HSOMB	12	48	47,2	30,1	280 108 282	19,0	12	938	M6
A412/85 FT	NGA4120085HSOMB	12	85	82,4	51,2	548 115 230	33,5	8	1532	M8
A412/110 FT	NGA4120110HSOMB	12	110	106,4	66,3	548 115 275	41,5	7	1725	M8

Optional case material UL 94 V-0

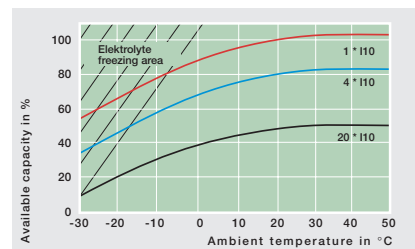
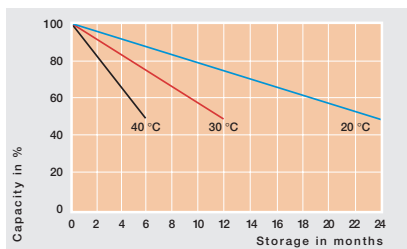
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			10h 1,80 V/Cell 20°C	8h 1,75 V/Cell 20°C	1h 1,60 V/Cell 20°C					
A412/26 FT	NGA4120026VSOMB	12	26	25,6	16,1	280 108 195	11,5	21	600	M6
A412/37 FT	NGA4120037VSOMB	12	37	33,6	21,2	280 108 237	15,5	14	921	M6
A412/48 FT	NGA4120048VSOMB	12	48	47,2	30,1	280 108 282	19,0	12	938	M6
A412/85 FT	NGA4120085VSOMB	12	85	82,4	51,2	548 115 230	33,5	8	1532	M8
A412/110 FT	NGA4120110VSOMB	12	110	106,4	66,3	548 115 275	41,5	7	1725	M8

For charging 2.27 V/cell is recommended. The charging voltage must be compensated according to the curve for continuously different battery ambient temperature.



Recharging time in dependence of charging current (guide values) for up to 50, 70 and 90% of capacity at 20°C and with charging voltage of 2.27 V/cell.

Self-discharge in relation to the storage temperature.



Extrated capacity in relation to the temperature.

Sonnenschein A400 FT

Constant Current Discharge

1,85 Volt/Cell – Discharge in A								
Type	10'	30'	1 h	3 h	5 h	8 h	10 h	20 h
A 412/26,0 M6	40,1	22,9	14,4	6,6	4,4	3,0	2,5	1,3
A 412/37,0 M6	48,0	29,9	18,8	9,0	6,0	4,0	3,5	1,9
A 412/48,0 M6	65,4	41,4	26,2	12,4	8,2	5,6	4,6	2,4
A 412/85,0 M8	93,9	64,9	43,5	21,0	14,1	9,6	8,1	4,4
A 412/110 M8	121,5	84,0	56,4	27,2	18,3	12,5	10,5	5,4

1,80 Volt/Cell – Discharge in A								
Type	10'	30'	1 h	3 h	5 h	8 h	10 h	20 h
A 412/26,0 M6	46,1	24,6	15,4	7,0	4,6	3,1	2,6	1,4
A 412/37,0 M6	57,9	32,9	20,1	9,4	6,2	4,2	3,7	2,0
A 412/48,0 M6	78,9	44,3	28,2	13,0	8,5	5,8	4,8	2,5
A 412/85,0 M8	120,9	70,9	47,3	22,1	14,7	10,1	8,5	4,6
A 412/110 M8	156,5	91,8	61,2	28,6	19,1	13,1	11,0	5,6

1,75 Volt/Cell – Discharge in A								
Type	10'	30'	1 h	3 h	5 h	8 h	10 h	20 h
A 412/26,0 M6	50,5	25,8	15,9	7,1	4,7	3,2	2,6	1,4
A 412/37,0 M6	64,0	34,5	20,7	9,6	6,3	4,2	3,7	2,0
A 412/48,0 M6	65,4	41,4	26,2	12,4	8,2	5,6	4,6	2,4
A 412/85,0 M8	137,4	75,9	49,4	22,6	15,0	10,3	8,5	4,6
A 412/110 M8	177,8	98,3	64,0	29,3	19,4	13,3	11,0	5,6

1,70 Volt/Cell – Discharge in A								
Type	10'	30'	1 h	3 h	5 h	8 h	10 h	20 h
A 412/26,0 M6	58,6	27,0	16,2	7,1	4,6	3,1	2,6	1,4
A 412/37,0 M6	69,5	35,1	21,0	9,7	6,3	4,2	3,7	2,0
A 412/48,0 M6	93,7	48,8	29,8	13,3	8,7	5,9	4,8	2,5
A 412/85,0 M8	148,3	78,5	50,5	22,8	15,1	10,3	8,5	4,6
A 412/110 M8	191,9	101,6	65,3	29,5	19,5	13,3	11,0	5,6

1,65 Volt/Cell – Discharge in A								
Type	10'	30'	1 h	3 h	5 h	8 h	10 h	20 h
A 412/26,0 M6	56,9	26,9	16,1	7,1	4,6	3,2	2,6	1,4
A 412/37,0 M6	71,7	35,4	21,2	9,7	6,3	4,2	3,7	2,0
A 412/48,0 M6	100,1	49,7	30,0	13,3	8,7	5,9	4,8	2,5
A 412/85,0 M8	156,2	80,2	51,0	22,8	15,1	10,3	8,5	4,6
A 412/110 M8	202,2	103,8	66,0	29,5	19,5	13,3	11,0	5,6

1,60 Volt/Cell – Discharge in A								
Type	10'	30'	1 h	3 h	5 h	8 h	10 h	20 h
A 412/26,0 M6	54,3	26,5	16,1	7,1	4,7	3,2	2,6	1,4
A 412/37,0 M6	73,7	35,5	21,2	9,7	6,3	4,2	3,7	2,0
A 412/48,0 M6	104,8	50,2	30,1	13,3	8,7	5,9	4,8	2,5
A 412/85,0 M8	162,4	81,2	51,2	22,8	15,1	10,3	8,5	4,6
A 412/110 M8	210,2	105,1	66,3	29,5	19,5	13,3	11,0	5,6

Constant Power Discharge

1,85 Volt/Cell – Discharge in W/Block								
Type	3'	5'	10'	15'	20'	30'	45'	60'
A 412/26,0 M6	630	544	437	364	321	256	195	161
A 412/37,0 M6	674	597	494	436	384	320	250	210
A 412/48,0 M6	967	853	693	600	530	445	344	287
A 412/85,0 M8	1460	1315	1094	964	887	737	577	495
A 412/110 M8	1889	1702	1416	1248	1148	953	747	641

1,80 Volt/Cell – Discharge in W/Block								
Type	3'	5'	10'	15'	20'	30'	45'	60'
A 412/26,0 M6	715	621	487	407	355	280	207	169
A 412/37,0 M6	800	709	575	491	431	351	269	223
A 412/48,0 M6	1143	999	806	691	606	491	373	307
A 412/85,0 M8	1795	1615	1310	1109	970	817	627	530
A 412/110 M8	2323	2090	1695	1435	1256	812	686	307

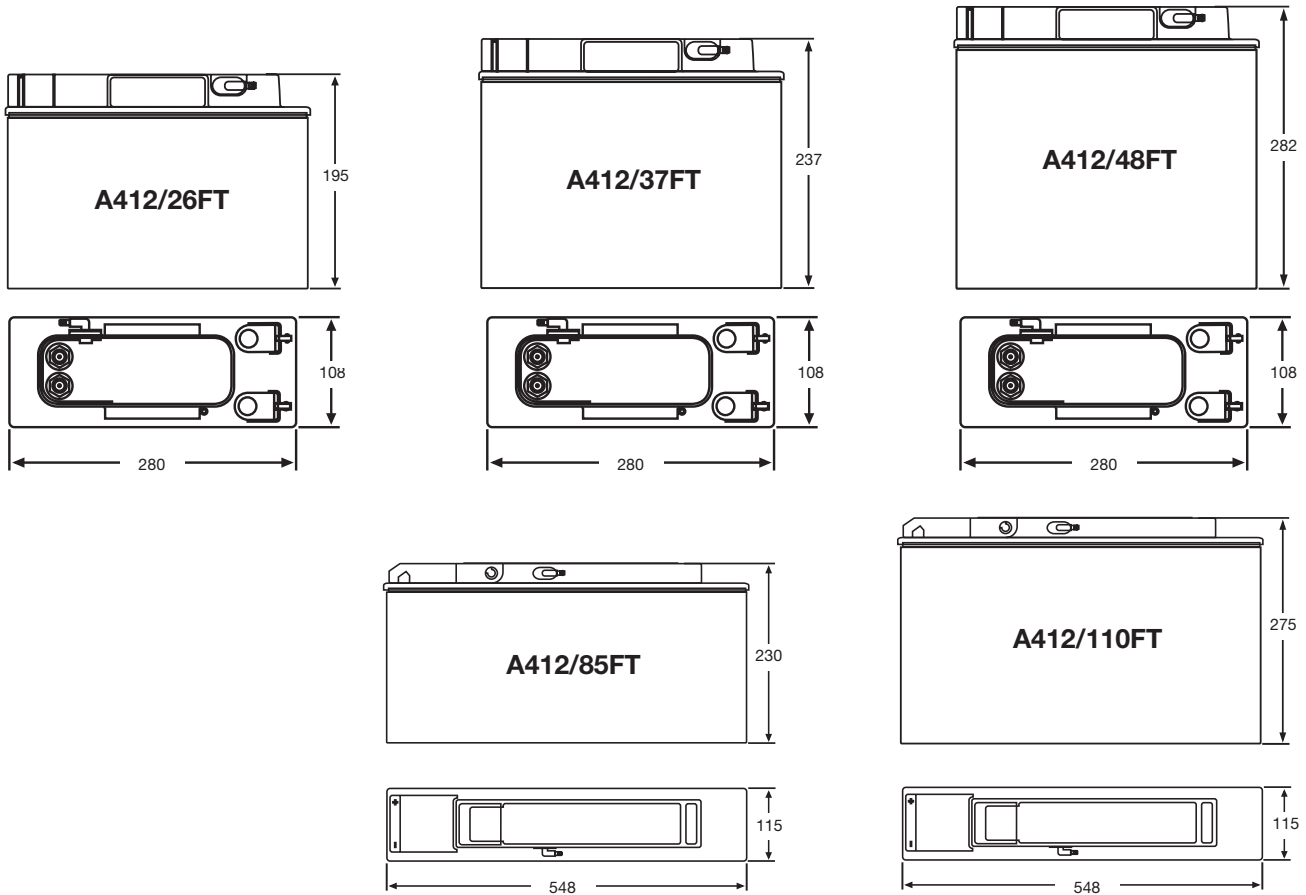
1,75 Volt/Cell – Discharge in W/Block								
Type	3'	5'	10'	15'	20'	30'	45'	60'
A 412/26,0 M6	794	685	532	436	376	296	214	174
A 412/37,0 M6	946	795	649	541	477	371	280	230
A 412/48,0 M6	1297	1121	898	763	667	528	390	318
A 412/85,0 M8	2000	1815	1480	1215	1042	864	656	549
A 412/110 M8	2588	2349	1915	1572	1349	1118	849	710

1,70 Volt/Cell – Discharge in W/Block								
Type	3'	5'	10'	15'	20'	30'	45'	60'
A 412/26,0 M6	875	748	571	471	398	300	216	175
A 412/37,0 M6	1051	897	707	578	499	383	286	234
A 412/48,0 M6	1297	1121	898	763	667	528	390	318
A 412/85,0 M8	2155	1940	1557	1285	1088	885	670	558
A 412/110 M8	2789	2511	2015	1663	1408	1145	866	722

1,65 Volt/Cell – Discharge in W/Block								
Type	3'	5'	10'	15'	20'	30'	45'	60'
A 412/26,0 M6	941	797	599	485	410	307	218	176
A 412/37,0 M6	1122	960	737	610	518	397	288	235
A 412/48,0 M6	1505	1302	1012	848	725	555	402	326
A 412/85,0 M8	2304	2070	1630	1328	1115	892	675	561
A 412/110 M8	2981	2679	2109	1719	1443	1155	873	726

1,60 Volt/Cell – Discharge in W/Block								
Type	3'	5'	10'	15'	20'	30'	45'	60'
A 412/26,0 M6	978	832	622	499	422	312	218	177
A 412/37,0 M6	1191	1011	768	641	537	407	290	236
A 412/48,0 M6	1636	1378	1057	878	755	568	404	327
A 412/85,0 M8	2443	2202	1653	1353	1130	905	676	562
A 412/110 M8	3161	2850	2140	1751	1462	1172	874	727

Technical Characteristics and Data



Valve regulated lead-acid batteries



Grid plate



Nominal capacity 26 - 110 Ah



Block battery



Service life: 10 years



Completely maintenancefree



Proof against deep discharge acc. to DIN 43539 T5



Recyclable

Exide Technologies Network Power – The Industry Leader.



Exide Technologies Network Power Division is the 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 are bywords for quality, reliability, performance and excellence in all the markets served.

Exide Technologies takes pride in its commitment to a better environment and 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.

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