



Industrial Batteries – Marathon T
AGM long-term power on modular basis.

Marathon T: Modular concept for ETSI-, 19" and 23" standards.

Marathon T Specifications

- Marathon T batteries are reliable compact front terminal AGM power packages offering a simplified modular power concept
- Designed for user-friendly front connector assembly
- Absolutely maintenance-free during their whole service life
- Central degassing
- Nominal capacity from 35 up to 130 Ah
- 12 years service life at 20°C ambient temperature (80% remaining capacity) in combination with extraordinary high current performance
- Optional case material acc. to UL 94 V-0
- Grid plate construction consisting of a lead calcium alloy
- Low self-discharge rate
- Short recharging time
- Safe under deep discharge conditions according to DIN 43539 T5
- Trouble-free transportation of operational blocks, no restrictions for most air, rail and sea-transportation (IATA, DGR clause A 67)
- Completely recyclable

Applications

Well graded capacities make Marathon T batteries especially suited for telecommunications. Furthermore this range also offers great benefits for other security applications where the continuity of power is important.



Technical Characteristics and Data

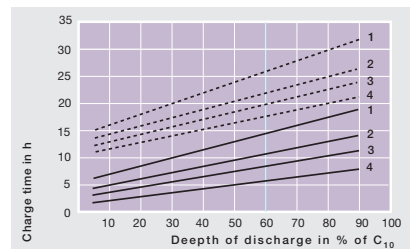
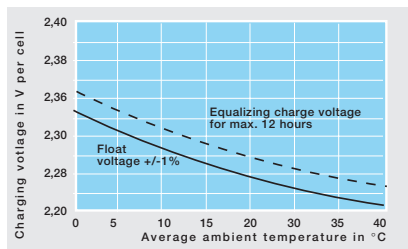
Standard

Typ	Part Number	Voltage (V)	Capacity (Ah)			L x W x H (mm)			Weight (kg)	Internal resistance IEC 896-2 (mΩ)	Max. dis. current IEC 896-2 (A)	Type of Terminals
			10h 1,80 V/Cell 20°C	8h 1,80 V/Cell 20°C	1h 1,60 V/Cell 20°C							
T12V35	NATF120035HMOMA	12	35	37,6	24,5	280	108	194	14,6	8,8	1300	M6
T12V50	NATF120050HMOMA	12	47	50,4	32,6	280	108	236	18,7	7,4	1700	M6
T12V60	NATF120060HMOMA	12	59	63,2	41,2	280	108	281	23,1	6,2	2100	M6
T12V75	NATF120075HMOMA	12	76	81,6	52,1	548	115	188	31,3	4,7	2700	M8
T12V100	NATF120100HMOMA	12	102	109,6	69,9	548	115	230	40,3	3,6	3600	M8
T12V130	NATF120130HMOMA	12	129	138,6	88,3	548	115	275	50	3,1	4500	M8

Optional case material UL 94 V-0

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T12V50	NATF120050VMOMA	12	47	50,4	32,6	280	108	236	18,7	7,4	1700	M6
T12V60	NATF120060VMOMA	12	59	63,2	41,2	280	108	281	23,1	6,2	2100	M6
T12V75	NATF120075VMOMA	12	76	81,6	52,1	548	115	188	31,3	4,7	2700	M8
T12V100	NATF120100VMOMA	12	102	109,6	69,9	548	115	230	40,3	3,6	3600	M8
T12V130	NATF120130VMOMA	12	129	138,6	88,3	548	115	275	50	3,1	4500	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.

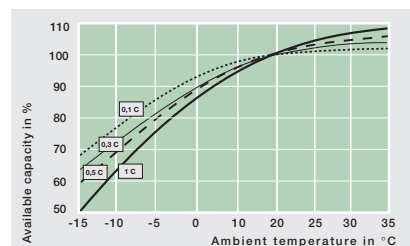
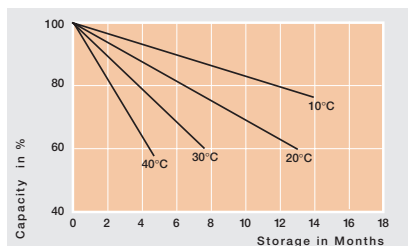


Current limitation (in A):
 1 = 0.05 C₁₀ 3 = 0.1 C₁₀
 2 = 0.075 C₁₀ 4 = 0.2 C₁₀

Battery recharged at:
 - - - - - 90%
 ————— 100%

Recharging time in dependence of charging current (guide values) at 20°C and with charging voltage of 2.27 V/cell.

Self-discharge in relation to the storage temperature.



Capacity in relation to temperature.

Marathon T

Constant Current Discharge

1,90 Volt/Cell – Discharge in A								
Type	30'	45'	1 h	3 h	5 h	8 h	10 h	20 h
T 12 V 35 M6	25,2	20,9	17	8,15	5,43	3,68	3,05	1,63
T 12 V 50 M6	33,5	26,7	22,7	10,9	7,3	4,94	4,1	2,19
T 12 V 60 M6	42,3	33,7	28,6	13,75	9,2	6,22	5,14	2,7
T 12 V 75 M8	53	42,5	36,2	17,5	11,75	7,97	6,63	3,54
T 12 V 100 M8	71,2	57,1	48,6	23,5	15,8	10,7	8,9	4,75
T 12 V 130 M8	90	72	61,4	29,7	20	13,5	11,3	6

1,85 Volt/Cell – Discharge in A								
Type	30'	45'	1 h	3 h	5 h	8 h	10 h	20 h
T 12 V 35 M6	31,1	24,4	20,4	9,09	6,02	4,06	3,35	1,78
T 12 V 50 M6	41,4	32,5	27,1	12,15	8,08	5,46	4,50	2,39
T 12 V 60 M6	52,3	41	34,2	15,35	10,15	6,87	5,65	3,00
T 12 V 75 M8	65,5	51,8	43,3	19,5	13,05	8,86	7,30	3,87
T 12 V 100 M8	87,9	69,5	58,1	26,2	17,5	11,9	9,8	5,2
T 12 V 130 M8	111	88	73,4	33,1	22,1	15	12,4	6,57

1,80 Volt/Cell – Discharge in A								
Type	30'	45'	1 h	3 h	5 h	8 h	10 h	20 h
T 12 V 35 M6	35,3	27,1	22,3	9,5	6,24	4,23	3,50	1,88
T 12 V 50 M6	47	36	29,7	12,7	8,37	5,68	4,7	2,52
T 12 V 60 M6	59,4	45,4	37,5	16,00	10,55	7,13	5,9	3,16
T 12 V 75 M8	74,5	57,3	47,4	20,4	13,50	9,16	7,6	4,08
T 12 V 100 M8	100	76,9	63,6	27,4	18,1	12,3	10,2	5,48
T 12 V 130 M8	126	97	80,4	34,6	22,8	15,5	12,9	6,93

1,75 Volt/Cell – Discharge in A								
Type	30'	45'	1 h	3 h	5 h	8 h	10 h	20 h
T 12 V 35 M6	37,6	28,4	23,2	9,71	6,35	4,27	3,53	1,9
T 12 V 50 M6	50	37,8	30,9	13	8,52	5,74	4,74	2,55
T 12 V 60 M6	63,2	47,7	39	16,35	10,75	7,22	5,95	3,2
T 12 V 75 M8	79	60,2	49,3	20,9	13,75	9,28	7,67	4,13
T 12 V 100 M8	106	80,8	66,2	28	18,5	12,45	10,3	5,55
T 12 V 130 M8	134	102	83,7	35,4	23,3	15,7	13	7,01

1,70 Volt/Cell – Discharge in A								
Type	30'	45'	1 h	3 h	5 h	8 h	10 h	20 h
T 12 V 35 M6	39,3	29,7	23,8	9,88	6,44	4,31	3,55	1,91
T 12 V 50 M6	52,3	39,4	31,7	13,2	8,64	5,79	4,77	2,56
T 12 V 60 M6	66,1	49,8	40	16,6	10,85	7,3	5,99	3,22
T 12 V 75 M8	82,7	62,7	50,7	21,2	13,85	9,35	7,71	4,15
T 12 V 100 M8	111	84,2	68	28,5	18,7	12,55	10,35	5,57
T 12 V 130 M8	140	106,5	86	36	23,6	15,8	13,05	7,04

1,65 Volt/Cell – Discharge in A								
Type	30'	45'	1 h	3 h	5 h	8 h	10 h	20 h
T 12 V 35 M6	40,3	30,3	24,3	10	6,5	4,36	3,56	1,92
T 12 V 50 M6	53,6	40,2	32,3	13,35	8,72	5,83	4,79	2,57
T 12 V 60 M6	67,7	50,8	40,8	16,8	11	7,35	6,02	3,23
T 12 V 75 M8	85	64	51,6	21,5	14,1	9,42	7,73	4,16
T 12 V 100 M8	114	85,9	69,2	28,8	18,9	12,65	10,38	5,59
T 12 V 130 M8	144	108	87,5	36,4	23,8	15,9	13,1	7,06

1,60 Volt/Cell – Discharge in A								
Type	30'	45'	1 h	3 h	5 h	8 h	10 h	20 h
T 12 V 35 M6	40,9	30,5	24,5	10,05	6,53	4,36	3,57	1,92
T 12 V 50 M6	54,5	40,5	32,6	13,45	8,77	5,86	4,8	2,58
T 12 V 60 M6	68,9	51,2	41,2	16,95	11,05	7,4	6,03	3,24
T 12 V 75 M8	86,5	64,5	52,1	21,6	14,2	9,45	7,75	4,17
T 12 V 100 M8	116	86,5	69,9	29,0	19	12,7	10,4	5,6
T 12 V 130 M8	146	109	88,3	36,6	24,0	16	13,15	7,08

Constant Power Discharge

1,90 Volt/Cell – Discharge in W/Block								
Type	30'	45'	1 h	3 h	5 h	8 h	10 h	20 h
T 12 V 35 M6	289	236	200	96,6	64,8	44,2	36,8	19,80
T 12 V 50 M6	381	311	264	128	86,4	59,0	49,1	26,4
T 12 V 60 M6	484	396	335	162	109	74,5	61,9	33,2
T 12 V 75 M8	603	495	421	206	139	95	79,4	42,7
T 12 V 100 M8	810	665	565	277	187	128	106	57,3
T 12 V 130 M8	1025	841	714	350	236	162	134	72

1,85 Volt/Cell – Discharge in W/Block								
Type	30'	45'	1h	3h	5h	8h	10h	20h
T 12 V 35 M6	353	281	234	107	71,7	48,2	40,0	21,50
T 12 V 50 M6	467	372	311	142	94,8	64,4	53,5	28,7
T 12 V 60 M6	594	472	394	180	120	81,3	67,5	36,1
T 12 V 75 M8	738	592	496	229	152	104	86,6	46,4
T 12 V 100 M8	990	795	666	307	205	140	116	62,3
T 12 V 130 M8	1250	1005	842	388	259	177	147	79

1,80 Volt/Cell – Discharge in W/Block								
Type	30'	45'	1h	3h	5h	8h	10h	20h
T 12 V 35 M6	397	309	257	112	73,6	49,8	41,5	22,30
T 12 V 50 M6	525	410	341	148	98,2	66,6	55,5	29,8
T 12 V 60 M6	666	521	432	187	124	84,1	70,0	37,5
T 12 V 75 M8	831	652	544	238	158	108	89,8	48,2
T 12 V 100 M8	1115	875	730	320	212	144	120	64,7
T 12 V 130 M8	1410	1106	923	405	268	183	152	89

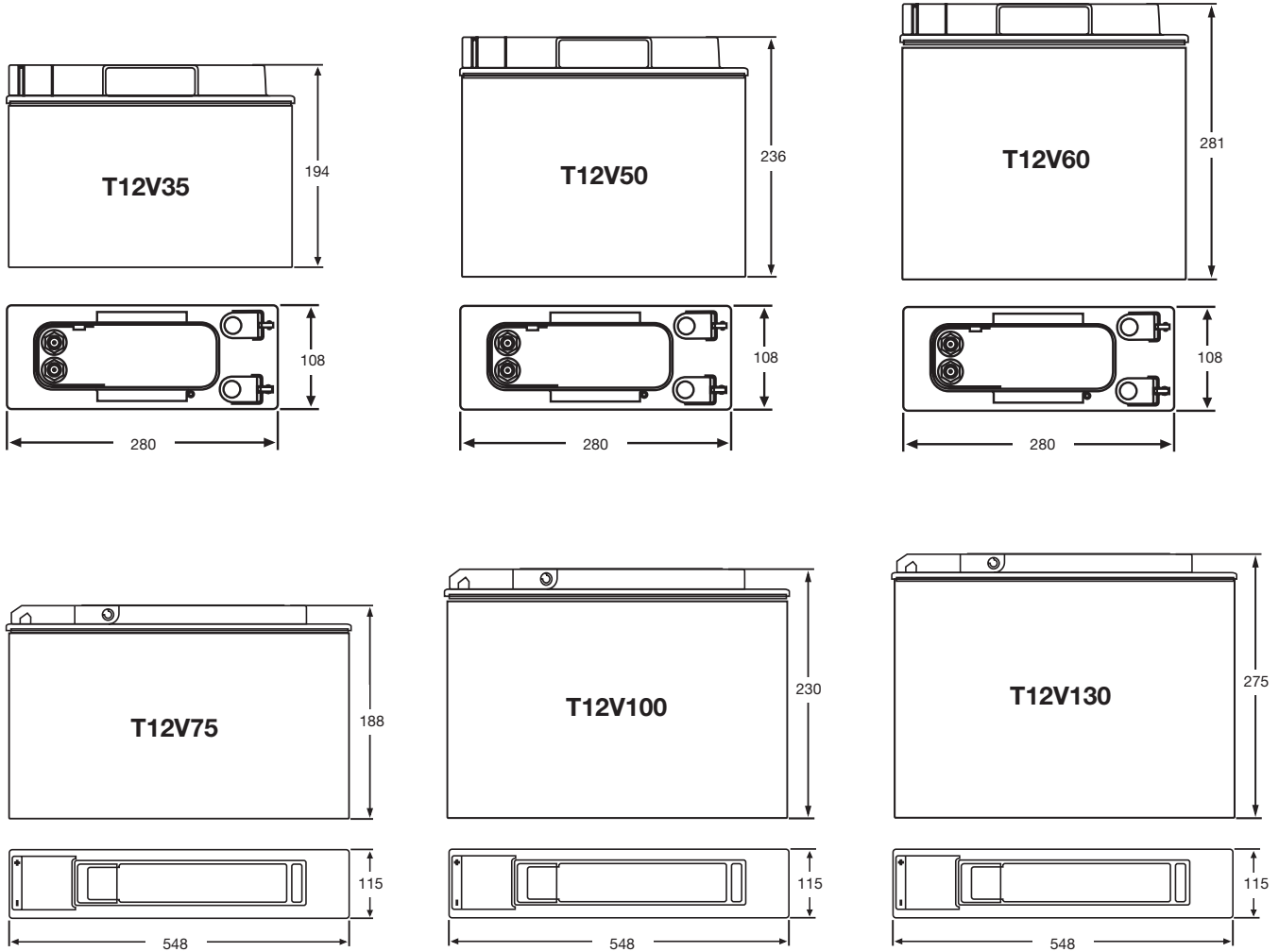
1,75 Volt/Cell – Discharge in W/Block								
Type	30'	45'	1h	3h	5h	8h	10h	20h
T 12 V 35 M6	422	324	264	113	74,7	50,3	41,8	22,45
T 12 V 50 M6	559	429	350	150	99,6	67,2	55,9	30,0
T 12 V 60 M6	711	545	444	190	126	84,9	70,5	37,8
T 12 V 75 M8	883	682	558	241	160	109	90,4	48,5
T 12 V 100 M8	1185	915	749	324	215	146	121	65,1
T 12 V 130 M8	1500	1157	947	410	272	185	153	82

1,70 Volt/Cell – Discharge in W/Block								
Type	30'	45'	1h	3h	5h	8h	10h	20h
T 12 V 35 M6	436	331	270	114	75,4	50,7	42,0	22,60
T 12 V 50 M6	577	438	358	152	100	67,8	56,2	30,2
T 12 V 60 M6	734	556	454	192	127	85,7	70,8	38,0
T 12 V 75 M8	915	697	570	244	162	109	90,9	48,8
T 12 V 100 M8	1225	935	766	328	217	147	122	65,5
T 12 V 130 M8	1550	1182	969	415	275	186	154	83

1,65 Volt/Cell – Discharge in W/Block								
Type	30'	45'	1h	3h	5h	8h	10h	20h
T 12 V 35 M6	443	335	272	115	75,7	51,0	42,3	22,65
T 12 V 50 M6	587	444	361	153	101	68,1	56,4	30,3
T 12 V 60 M6	745	563	458	194	128	86,1	71,1	38,1
T 12 V 75 M8	930	707	576	246	162	110	91,3	49,0
T 12 V 100 M8	1245	950	773	331	218	148	122	65,7
T 12 V 130 M8	1575	1202	978	418	276	187	154	83

1,60 Volt/Cell – Discharge in W/Block								
Type	30'	45'	1h	3h	5h	8h	10h	20h
T 12 V 35 M6	449	337	274	116	75,8	51,1	42,3	22,70
T 12 V 50 M6	594	447	363	154	101	68,3	56,5	30,4
T 12 V 60 M6	750	567	461	195	128	86,3	71,2	38,2
T 12 V 75 M8	940	710	579	247	163	111	91,4	49,1
T 12 V 100 M8	1260	955	777	332	219	148	123	65,9
T 12 V 130 M8	1595	1208	983	420	277	188	155	83

Technical Characteristics and Data



Valve regulated lead-acid	Grid plate	Nominal capacity 30 - 130 Ah	Block battery
Service life: 12 years	Completely maintenance-free	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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