MARATHON™

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

Specifications

EXIDE TECHNOLOGIES

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
- Maintenance-free (no topping up) during the whole service life
- Nominal capacity from 35 up to 130 Ah
- 12 years design life at 20°C ambient temperature (80% remaining capacity) in combination with extraordinary high current performance
- 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.

Marathon T

Constant Current Discharge

1.90 Volt/Cell – Discharge in A at 20°C								
Type	30'	45'	1 h	3 h	5 h	8 h	10 h	20 h
T 12 V 35 M6	27.2	21.1	17.5	8.1	5.4	3.7	3.0	1.6
T 12 V 50 M6	36.5	28.7	23.9	10.9	7.3	4.9	4.1	2.2
T 12 V 60 M6	46.5	36.0	29.8	13.7	9.1	6.2	5.1	2.7
T 12 V 100 M8	72.5	57.8	48.6	22.8	15.7	10.7	8.9	4.7
T 12 V 130 M8	93.0	74.0	62.0	29.1	19.8	13.6	11.3	6.0

1.85 Volt/Cell – Discharge in A at 20°C								
Type	30'	45'	1 h	3 h	5 h	8 h	10 h	20 h
T 12 V 35 M6	32.2	24.6	20.4	9.1	6.0	4.1	3.3	1.8
T 12 V 50 M6	42.7	33.2	27.5	12.1	8.1	5.5	4.5	2.4
T 12 V 60 M6	55.0	42.1	34.4	15.3	10.1	6.8	5.6	3.0
T 12 V 100 M8	88.8	69.4	57.7	25.7	17.5	11.9	9.8	5.2
T 12 V 130 M8	111.5	88.0	72.8	32.7	21.9	14.9	12.4	6.6

1.80 Volt/Cell – Discharge in A at 20°C								
Type	30'	45'	1 h	3 h	5 h	8 h	10 h	20 h
T 12 V 35 M6	36.0	27.3	22.3	9.5	6.2	4.2	3.5	1.9
T 12 V 50 M6	47.3	36.2	29.8	12.7	8.4	5.7	4.7	2.5
T 12 V 60 M6	60.2	45.5	37.0	15.9	10.5	7.1	5.9	3.2
T 12 V 100 M8	100.0	76.9	62.8	27.4	18.1	12.3	10.2	5.5
T 12 V 130 M8	126.0	96.7	79.5	34.5	22.6	15.4	12.9	6.9

1.75 Volt/Cell – Discharge in A at 20°C								
Type	30'	45'	1 h	3 h	5 h	8 h	10 h	20 h
T 12 V 35 M6	38.1	28.4	23.1	9.7	6.3	4.3	3.5	1.9
T 12 V 50 M6	50.0	37.8	30.9	13.0	8.5	5.7	4.7	2.5
T 12 V 60 M6	62.5	47.2	38.4	16.3	10.7	7.2	5.9	3.2
T 12 V 100 M8	105.0	80.2	65.4	28.0	18.5	12.4	10.3	5.5
T 12 V 130 M8	133.0	101.0	82.5	35.3	22.9	15.5	13.0	7.0

1.70 Volt/Cell – Discharge in A at 20°C								
Type	30'	45'	1 h	3 h	5 h	8 h	10 h	20 h
T 12 V 35 M6	39.3	29.3	23.6	9.9	6.4	4.3	3.5	1.9
T 12 V 50 M6	52.3	39.4	31.7	13.2	8.6	5.8	4.8	2.6
T 12 V 60 M6	65.0	48.3	39.2	16.6	10.8	7.2	6.0	3.2
T 12 V 100 M8	110.0	83.0	67.2	28.5	18.7	12.5	10.3	5.6
T 12 V 130 M8	140.0	104.5	84.6	35.6	23.1	15.6	13.0	7.0

1.65 Volt/Cell – Discharge in A at 20°C								
Type	30'	45'	1 h	3 h	5 h	8 h	10 h	20 h
T 12 V 35 M6	40.0	29.8	24.0	10.0	6.5	4.3	3.6	1.9
T 12 V 50 M6	53.3	39.9	32.2	13.3	8.7	5.8	4.8	2.6
T 12 V 60 M6	66.5	49.3	39.6	16.7	10.8	7.3	6.0	3.2
T 12 V 100 M8	113.0	84.7	68.1	28.8	18.9	12.6	10.4	5.6
T 12 V 130 M8	143.0	106.0	85.2	35.9	23.3	15.7	13.1	7.1

1.60 Volt/Cell – Discharge in A at 20°C								
Type	30'	45'	1 h	3 h	5 h	8 h	10 h	20 h
T 12 V 35 M6	40.5	30.1	24.2	10.0	6.5	4.4	3.6	1.9
T 12 V 50 M6	54.0	40.1	32.4	13.4	8.8	5.9	4.8	2.6
T 12 V 60 M6	67.3	49.8	39.9	16.7	10.9	7.3	6.0	3.2
T 12 V 100 M8	115.0	85.2	68.6	29.0	19.0	12.7	10.4	5.6
T 12 V 130 M8	145.0	107.0	85.7	36.1	23.4	15.8	13.1	7.1

Constant Power Discharge

1.90 Volt/Cell – Discharge in W/Block at 20°C								
Type	30'	45'	1 h	3 h	5 h	8 h	10 h	20 h
T 12 V 35 M6	289.0	236.0	200.0	96.6	64.8	44.2	36.8	19.8
T 12 V 50 M6	381.0	311.0	264.0	128.5	86.4	59.0	49.1	26.4
T 12 V 60 M6	530.0	419.0	346.0	164.0	109.5	74.4	61.9	33.2
T 12 V 100 M8	840.0	680.0	575.0	276.0	187.0	128.0	106.6	57.3
T 12 V 130 M8	1100.0	880.0	740.0	349.0	237.0	162.0	134.0	72.0

1.85 Volt/Cell – Discharge in W/Block at 20°C								
Type	30'	45'	1h	3h	5h	8h	10h	20h
T 12 V 35 M6	353.0	281.0	234.0	107.2	71.7	48.2	40.0	21.5
T 12 V 50 M6	467.0	372.0	311.0	142.5	94.8	64.4	53.5	28.7
T 12 V 60 M6	620.0	480.0	396.0	180.0	120.0	81.3	67.5	36.1
T 12 V 100 M8	1010.0	795.0	666.0	307.0	205.0	140.0	116.2	62.3
T 12 V 130 M8	1275.0	1010.0	846.0	388.0	260.0	177.0	147.0	79.0

1.80 Volt/Cell – Discharge in W/Block at 20°C								
Type	30'	45'	1h	3h	5h	8h	10h	20h
T 12 V 35 M6	397.0	309.0	257.0	111.7	73.6	49.8	41.5	22.3
T 12 V 50 M6	525.0	410.0	341.0	148.5	98.2	66.6	55.5	29.8
T 12 V 60 M6	675.0	516.0	423.0	187.0	124.3	84.1	70.0	37.5
T 12 V 100 M8	1115.0	875.0	730.0	320.0	212.0	144.5	120.5	64.7
T 12 V 130 M8	1390.0	1090.0	905.0	403.0	268.0	183.0	152.5	81.0

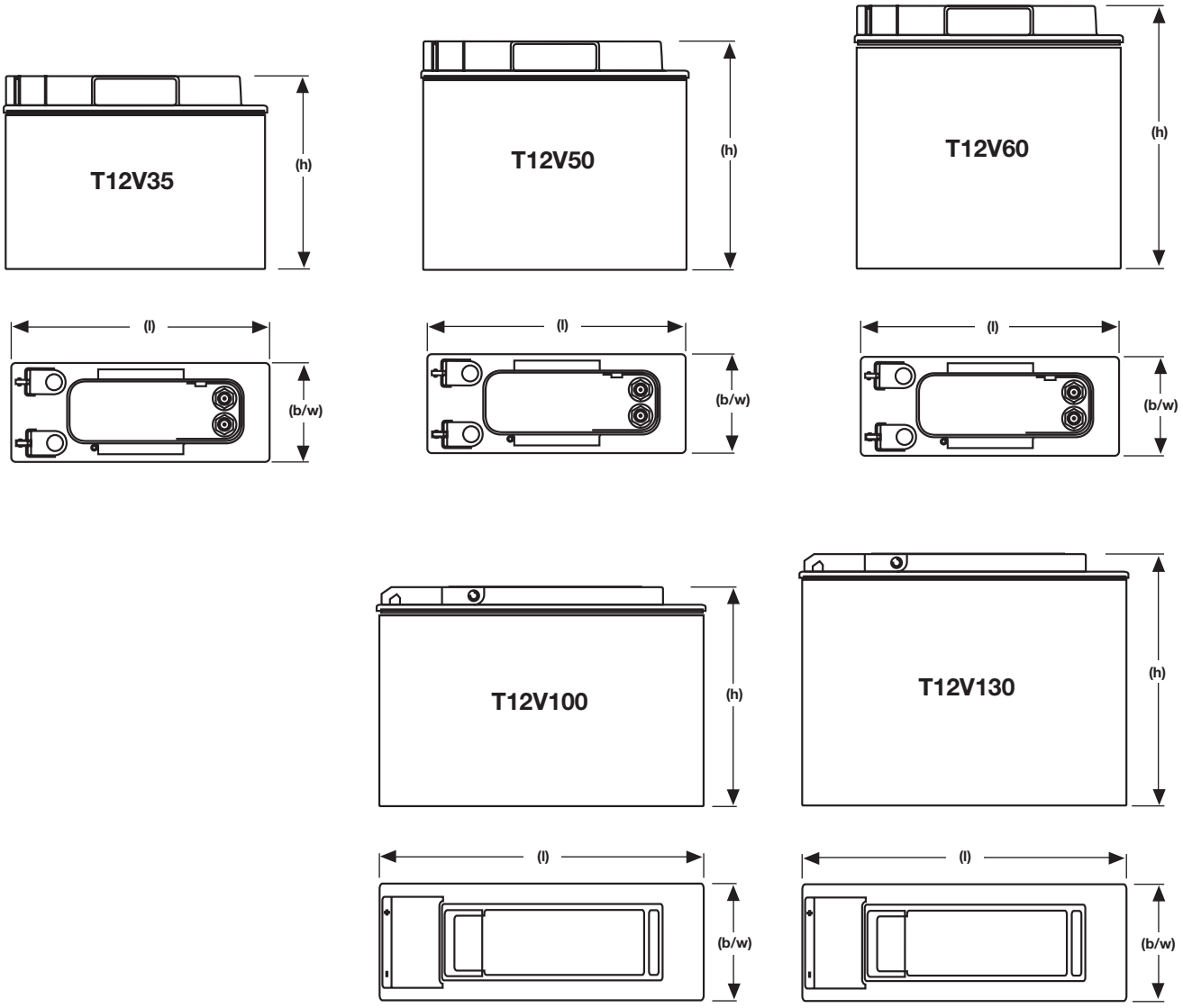
1.75 Volt/Cell – Discharge in W/Block at 20°C								
Type	30'	45'	1h	3h	5h	8h	10h	20h
T 12 V 35 M6	422.0	324.0	264.0	113.2	74.7	50.3	41.8	22.5
T 12 V 50 M6	559.0	429.0	350.0	150.5	99.6	67.2	55.9	30.0
T 12 V 60 M6	710.0	537.0	435.0	190.4	125.6	84.9	70.5	37.8
T 12 V 100 M8	1185.0	915.0	749.0	324.0	215.0	146.0	121.4	65.1
T 12 V 130 M8	1470.0	1135.0	930.0	409.0	272.0	185.0	153.5	82.0

1.70 Volt/Cell – Discharge in W/Block at 20°C								
Type	30'	45'	1h	3h	5h	8h	10h	20h
T 12 V 35 M6	436.0	331.0	270.0	114.2	75.4	50.7	42.0	22.6
T 12 V 50 M6	577.0	438.0	358.0	152.0	100.6	67.8	56.2	30.2
T 12 V 60 M6	726.0	547.0	445.0	191.7	126.5	85.5	70.9	38.0
T 12 V 100 M8	1225.0	935.0	766.0	328.0	217.5	147.0	122.0	65.5
T 12 V 130 M8	1510.0	1160.0	950.0	414.0	275.0	186.0	154.0	83.0

1.65 Volt/Cell – Discharge in W/Block at 20°C								
Type	30'	45'	1h	3h'	5h	8h	10h	20h
T 12 V 35 M6	443.0	335.0	272.0	115.4	75.7	51.0	42.2	22.7
T 12 V 50 M6	587.0	444.0	361.0	153.5	100.9	68.1	56.4	30.3
T 12 V 60 M6	738.0	552.0	450.0	192.4	126.8	85.7	71.1	38.1
T 12 V 100 M8	1245.0	950.0	773.0	331.0	218.5	148.0	122.5	65.7
T 12 V 130 M8	1530.0	1170.0	955.0	417.0	276.0	187.0	154.5	83.0

1.60 Volt/Cell – Discharge in W/Block at 20°C								
Type	30'	45'	1h	3h	5h	8h'	10h	20h
T 12 V 35 M6	449.0	337.0	274.0	115.7	75.8	51.1	42.3	22.7
T 12 V 50 M6	594.0	447.0	363.0	154.0	101.1	68.3	56.5	30.4
T 12 V 60 M6	745.0	555.0	452.0	193.0	127.0	85.8	71.2	38.2
T 12 V 100 M8	1260.0	955.0	777.0	332.0	219.0	148.5	122.7	65.9
T 12 V 130 M8	1540.0	1175.0	960.0	419.0	277.0	188.0	155.0	83.0

Technical Characteristics and Data



Valve regulated lead-acid

Grid plate

Nominal capacity 30 - 130 Ah

Block battery

Design life: 12 years

Maintenance-free (no topping up)

Proof against deep discharge acc. to DIN 43 539 T5

Recyclable

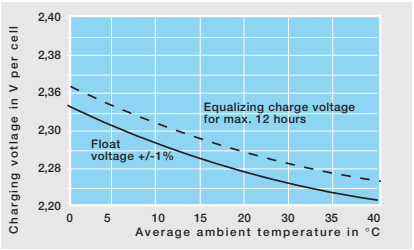
Marathon T

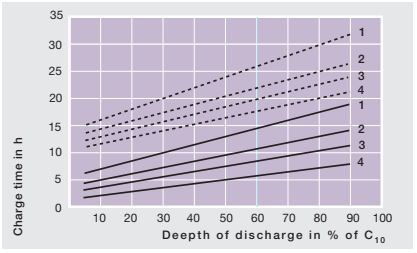
Technical Characteristics and Data

Standard

Typ	Part Number	Voltage (V)	Capacity (Ah) 10h 1.80 V/Cell 20°C	8h 1.80 V/Cell 20°C	1h 1.60 V/Cell 20°C	L x Wx H (mm)			Weight (kg)	Internal resistance IEC 896-2 (m Ω)	Max. dis. current IEC 896-2 (A)	Type of Terminals
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
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	50.0	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.



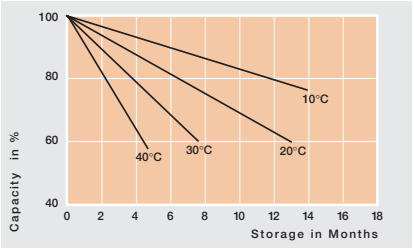


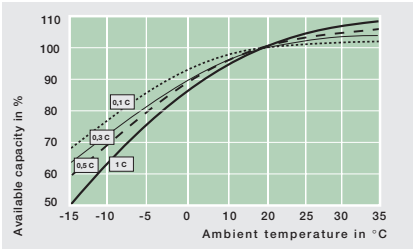
Current limitation (in A):
1 = 0.05 C_{10} 3 = 0.1 C_{10}
2 = 0.075 C_{10} 4 = 0.2 C_{10}

Battery recharged at
100%
90%

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.

Exide Technologies Network Power – The Industry Leader.

ABSOLYTE MARATHON Sprinter Classic Powerfit Sonnenschein

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.

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