THE ENERGY DOCTOR®

TED

BATTERY EXPERTS

Data sheet

Valve-Regulated Lead-Acid battery

AGM TED1271
12V 7.1Ah

Physical Specifications

Part Number: AGM TED1271
Length: 151 ± 2 mm (5.94 inches)
Width: 65 ± 2 mm (2.55 inches)
Container height: 93 ± 2 mm (3.68 inches)
Weight: ~ 2.2kg (4.85lbs)
Height: 99 ± 2 mm (3.89 inches)

Standard case material is flame retardant to (UL94) HBO.
The TED Batteries range provide an extremely reliable and versatile valve regulated lead acid battery. Their unique construction and sealing techniques ensures that no electrolyte leakage can occur, provides safe and effective operation in any orientation and meets all requirements of the International Air Transport Association Dangerous Goods Regulations to allow transportation by air.

Specifications

Terminal Type: Standard F2 (T2) or any suitable terminal (at costumer request)

Design Floating Life 20ºC (68ºF): 6 Years

Maxim Discharge Current: 99A/5sec.

Internal Resistance: Approximative 24mΩ

Cycle Use: Initial Charging Current Less Than 2.10A • Voltage 14.4÷14.8 at 25ºC (77ºF) • Temperature Coefficient -30mV/ºC
Standby Use: No Limit on Initial Charging Current Voltage 13.5÷13.8V at 25ºC (77ºF) • Temperature Coefficient -20mV/ºC
Capacity Affected by Temperature 40ºC (104ºF) 103% 25ºC (77ºF) 100% 0ºC (32ºF) 86%

Self Discharge: TED Batteries may be stored for up to 6 months at 25ºC (77ºF) and than refresh charge is required. For higher temperatures the time interval will be shorter.

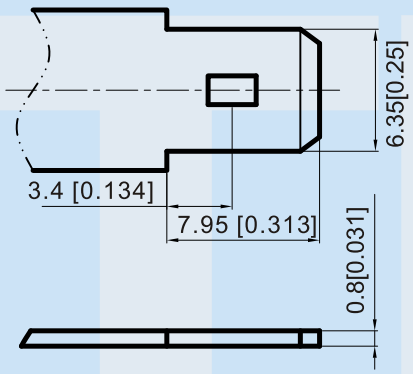
Rated Capacity

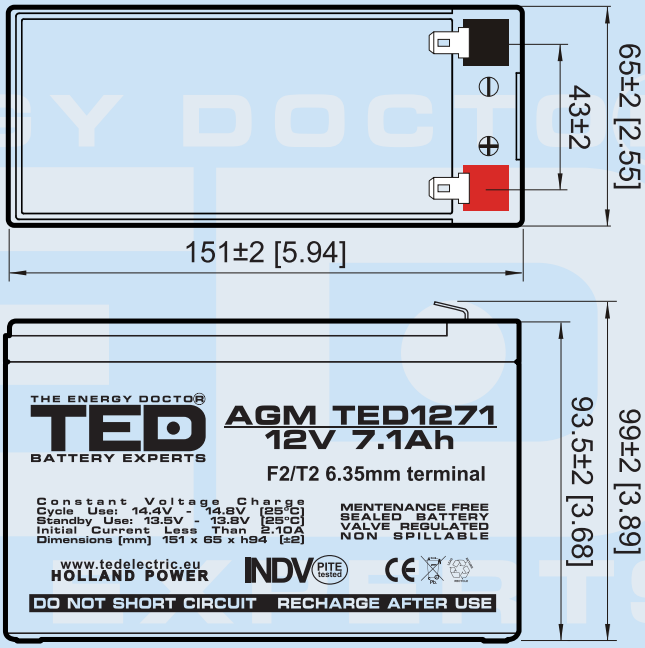
7.10 Ah/0.35A	20hr	1.80V/cell 25ºC/77ºF
6.56 Ah/0.65A	10hr	1.80V/cell 25ºC/77ºF
6.05 Ah/1.20A	5hr	1.75V/cell 25ºC/77ºF
5.40 Ah/1.79A	3hr	1.75V/cell 25ºC/77ºF
4.58 Ah/4.55A	1hr	1.60V/cell 25ºC/77ºF

Discharge Characteristics

Operating Temperature Range
Charge: 0ºC÷40ºC (5ºF÷104ºF)
Storage: -15ºC÷40ºC (5ºF÷104ºF)
Nominal: 25ºC±3ºC (77ºF±5ºF)
Discharge: -15ºC÷50ºC (5ºF÷122ºF)

F2 (T2) terminal 6,35mm





TED Electric, Holland, City: Wassenaar, Dr. Mansveltkade Street 48, Postal code: 2242XM

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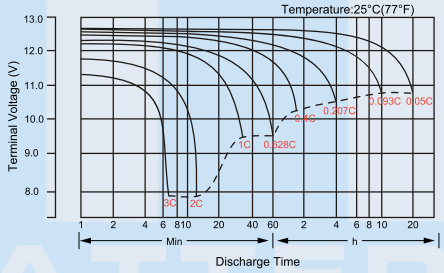
Constant Current Discharge (Amperes) at 25ºC

F.V/Time	5 min	10 min	15 min	20 min	30 min	45 min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	25.9	16.7	13.1	10.9	8.11	5.88	4.63	2.58	1.83	1.45	1.21	1.05	0.841	0.704	0.382
1.80V/cell	29.1	18.2	14.1	11.68	8.58	6.18	4.84	2.66	1.89	1.49	1.25	1.09	0.875	0.723	0.390
1.75V/cell	31.1	19.4	15.0	12.3	8.92	6.43	5.09	2.75	1.95	1.55	1.29	1.12	0.897	0.743	0.398
1.70V/cell	33.0	20.4	15.7	12.8	9.27	6.61	5.22	2.82	2.01	1.59	1.33	1.15	0.913	0.757	0.403
1.67V/cell	34.6	21.2	16.2	13.2	9.52	6.78	5.31	2.88	2.05	1.62	1.35	1.17	0.925	0.765	0.406
1.60V/cell	35.5	21.7	16.6	13.4	9.67	6.90	5.41	2.92	2.07	1.64	1.37	1.18	0.933	0.771	0.408

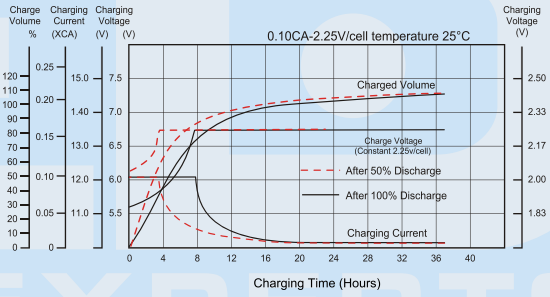
Constant Power Discharge (Watts) at 25ºC

F.V/Time	5 min	10 min	15 min	20 min	30 min	45 min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	48.3	31.3	24.6	20.5	15.4	11.3	8.93	5.01	3.58	2.84	2.38	2.07	1.66	1.39	0.757
1.80V/cell	52.7	33.3	26.1	21.8	16.2	11.8	9.28	5.13	3.67	2.91	2.44	2.13	1.72	1.43	0.771
1.75V/cell	55.6	35.2	27.5	22.9	16.7	12.2	9.72	5.28	3.77	3.00	2.51	2.18	1.76	1.47	0.786
1.70V/cell	58.4	36.5	28.5	23.5	17.2	12.4	9.94	5.42	3.87	3.07	2.57	2.23	1.79	1.49	0.795
1.67V/cell	60.3	37.3	29.0	24.0	17.6	12.7	10.1	5.50	3.93	3.12	2.61	2.26	1.81	1.51	0.801
1.60V/cell	60.6	37.6	29.2	24.0	17.6	12.8	10.2	5.56	3.96	3.15	2.64	2.29	1.82	1.52	0.803

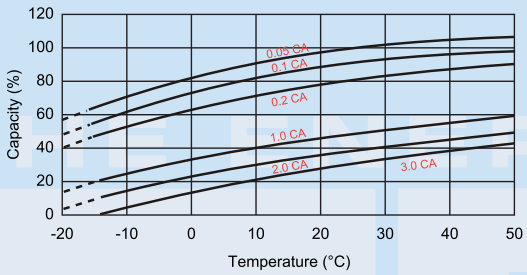
Discharge Characteristics



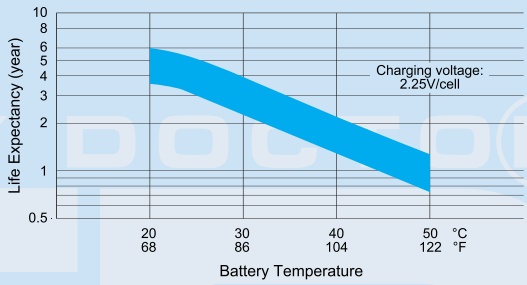
Float Charge Characteristics



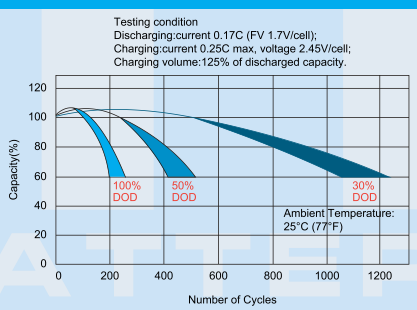
Temperature Effects in Relation to Battery Capacity



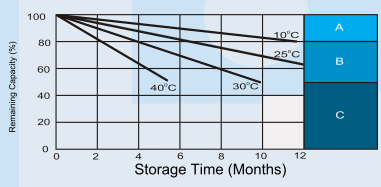
Effect of Temperature on Lung Term Float Life



Cycle Life in Relation to Depth of Discharge



General Relation of Capacity vs Storage Time



A — No supplementary required
(Carryout supplementary charge before use if 100% capacity is required.)

B — Supplementary charge required before use. Optional charging way as below:
1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.
2. Charged for above 20 hours at limited current 0.25CA and constant voltage 2.45V/cell.
3. Charged for 8 ~ 10 hours at limited current 0.05 CA.

C — Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.

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