





DURATION SERIES VRLA BATTERY

By combining a newly developed corrosion resistance alloy and advanced curing process, CATE created a range of long life batteries - Duration range. The range features top termination and offers 12 years design life. This battery series is highly suited to UPS systems, switchgear, CATV and telecommunication systems applications.

12 V voltage	100Ah capacity	AGM tech	12 years design life
			

TECHNICAL SPECIFICATIONS

Nominal Voltage (V)	12 (6 cells per unit)
Designed Floating Life (20°C)	12 Years
Nominal Capacity (20°C)	100 Ah @ 10HR-rate (to 1.80Vpc)
Dimension (mm)	L330mm x W171mm x H220mm
Approx. Weight	30.0 kg (66.2 lbs)
Terminal Type	Female Copper Insert M6 (torque:6~7N.m)
Internal Resistance	Approx. 0.0045 Ohm (fully charged @ 20°C)
Max. Charge Current	25A
Max. Discharge Current (5S)	800 A
Short Circuit Current	2600 A
Self Discharge	Approx. 3% per month @ 20°C
Ambient Temperature	Discharge: -20~60°C Charge: -20~60°C Storage: -20~45°C
Float Charge Voltage (20~25°C)	13.6-13.8V (-3mV/ cell/ °C)
Equalize and cycle Use Charge Voltage (20~25°C)	14.4-14.8V (-5mV/ cell / °C)
Container Material	ABS (UL94-V0 optional)

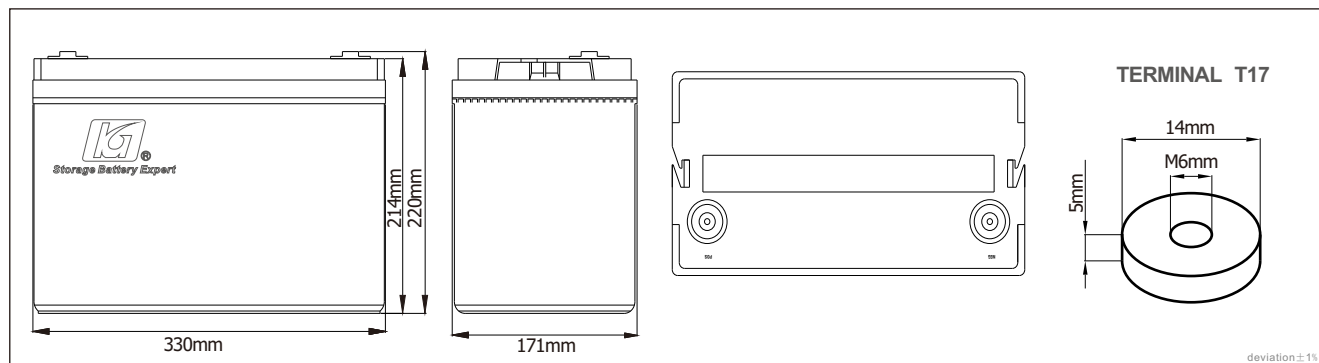



ISO9001 ISO14001

Complied standards

- IEC 60896-21/22
- UL1989
- JIS C8704
- GB/T19639

BATTERY DIMENSIONS

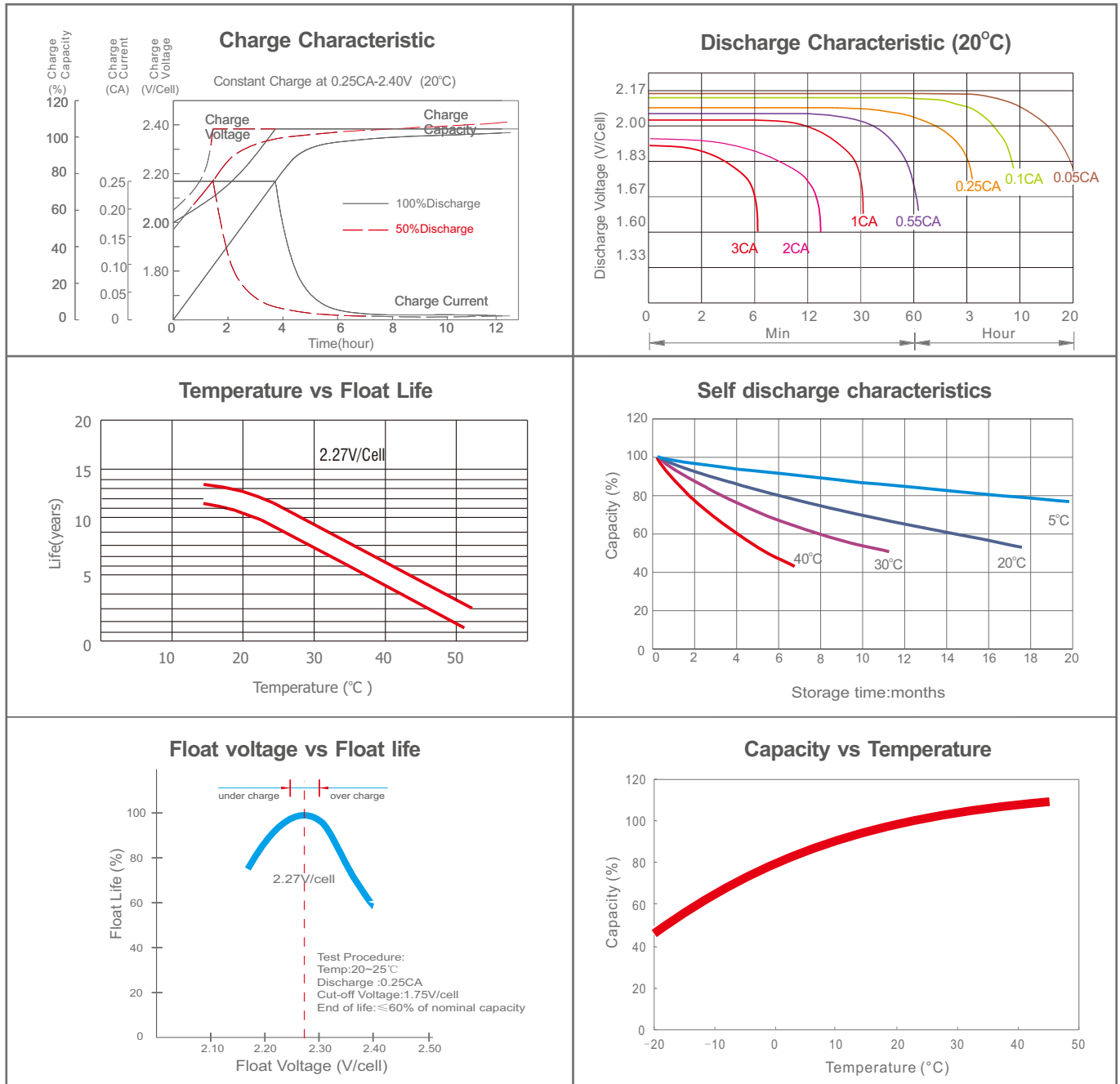


BATTERY DISCHARGE TABLE

Constant Current Discharge Characteristics: Amps (25°C)												
F.V/Time	5 m in	10 m in	15 m in	30 m in	1 h	2 h	3 h	4 h	5 h	8 h	10 h	20 h
1.60V	300	221	183	113	67.6	39.3	28.3	22.6	18.8	12.9	10.6	5.71
1.67V	268	204	172	108	65.8	38.6	28.0	22.3	18.6	12.7	10.5	5.58
1.70V	239	185	163	104	64.3	38.1	27.7	22.1	18.4	12.5	10.3	5.45
1.75V	208	172	151	100	63.0	37.4	27.2	21.8	18.2	12.4	10.2	5.35
1.80V	184	157	141	95.6	60.9	36.6	26.7	21.3	17.7	12.1	10.0	5.25
1.85V	157	141	128	90.2	58.3	35.2	25.8	20.7	17.3	11.8	9.74	5.13

Constant Power Discharge Characteristics: W/cell (25°C)												
F.V/Time	5 m in	10 m in	15 m in	30 m in	1 h	2 h	3 h	4 h	5 h	8 h	10 h	20 h
1.60V	528	398	333	208	126	73.7	53.5	42.8	35.8	24.7	20.5	11.1
1.67V	477	370	316	200	123	72.9	53.2	42.5	35.6	24.5	20.3	10.9
1.70V	431	340	302	194	121	72.5	52.9	42.4	35.5	24.4	20.2	10.7
1.75V	380	320	283	189	120	71.8	52.6	42.3	35.4	24.3	20.1	10.6
1.80V	340	294	267	182	117	70.9	52.0	41.7	34.8	23.9	19.9	10.5
1.85V	296	268	245	174	113	68.8	50.7	40.8	34.3	23.5	19.5	10.3

CHARACTERISTICS



FINAL VOLTAGE SETTINGS RECOMMENDED ACCORDING TO THE DISCHARGE CURRENT

Discharge Current I (A)	$I \leq 0.08C$	$0.08C \leq I < 0.2C$	$0.2C \leq I < 0.6C$	$0.6C \leq I < 1.0C$	$I \geq 1.0C$
Final of Voltage	$\geq 1.85V_{pc}$	$\geq 1.80V_{pc}$	$\geq 1.75V_{pc}$	$\geq 1.70V_{pc}$	$\geq 1.60V_{pc}$

HEADQUARTERS AND SUBSIDIARIES