





## 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 @ 20HR-rate (to 1.80Vpc)
Dimension (mm)	L306mm x W169mm x H216mm
Approx. Weight	28.3 kg (62.4 lbs)
Terminal Type	Female Copper Insert M6 (torque:6~7N.m)
Internal Resistance	Approx. 0.005 Ohm (fully charged @ 20°C)
Max. Charge Current	25A
Max. Discharge Current (5S)	800 A
Short Circuit Current	2400 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)

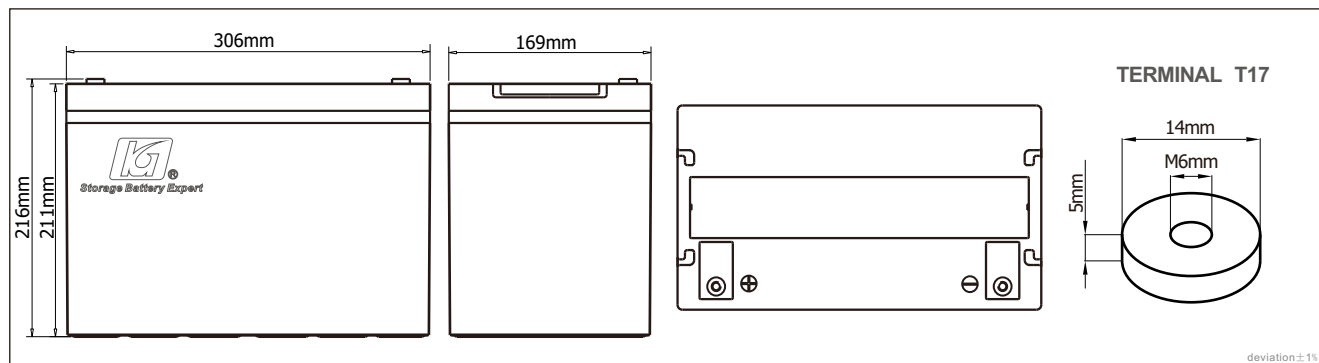



ISO9001 ISO14001

**Complied standards**

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

### BATTERY DIMENSIONS

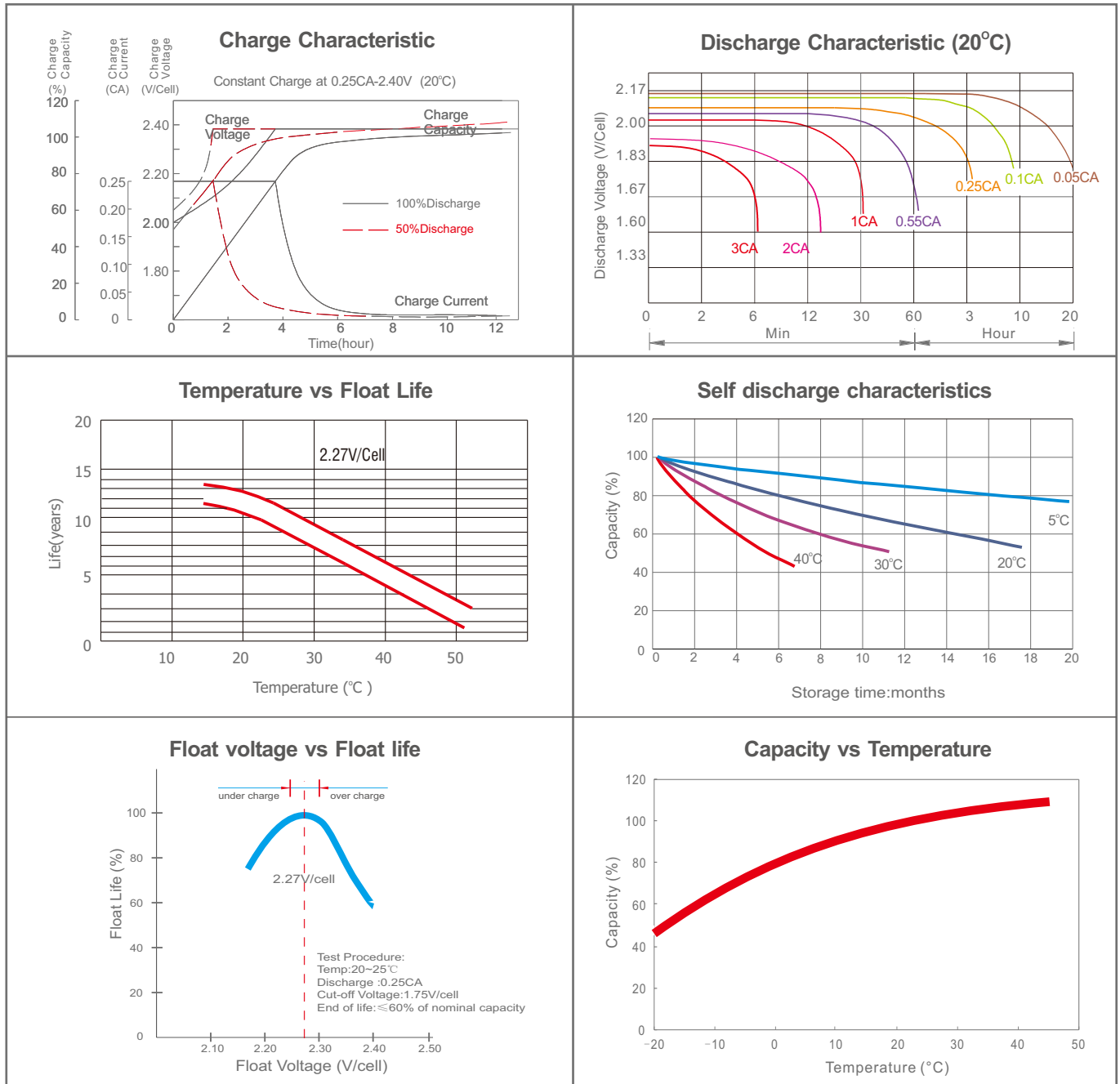


### BATTERY DISCHARGE TABLE

Constant Current Discharge Characteristics: Amps (25°C)												
F.V/Time	5m in	10m in	15m in	30m in	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	286	211	174	106	63.8	37.1	26.8	21.3	17.8	12.1	10.1	5.45
1.67V	255	195	164	102	62.2	36.5	26.5	21.1	17.5	12.0	10.0	5.32
1.70V	228	177	155	97.9	60.8	36.0	26.1	20.9	17.4	11.8	9.86	5.20
1.75V	198	164	144	94.5	59.5	35.4	25.7	20.6	17.2	11.7	9.73	5.10
1.80V	175	149	134	90.3	57.6	34.6	25.2	20.1	16.8	11.4	9.50	5.00
1.85V	150	134	122	85.2	55.1	33.2	24.4	19.6	16.4	11.2	9.29	4.89

Constant Power Discharge Characteristics: W/cell (25°C)												
F.V/Time	5m in	10m in	15m in	30m in	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	504	380	318	197	119	69.7	50.6	40.5	33.9	23.3	19.4	10.5
1.67V	455	353	302	189	117	68.9	50.3	40.2	33.7	23.2	19.2	10.3
1.70V	411	324	288	183	115	68.5	50.0	40.1	33.6	23.1	19.1	10.2
1.75V	362	305	270	178	113	67.9	49.7	40.0	33.4	22.9	19.0	10.0
1.80V	325	280	254	172	111	67.0	49.1	39.4	32.9	22.6	18.8	9.91
1.85V	283	256	234	164	107	65.0	48.0	38.6	32.4	22.2	18.4	9.74

## 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