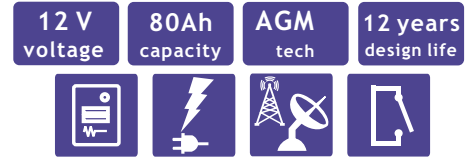


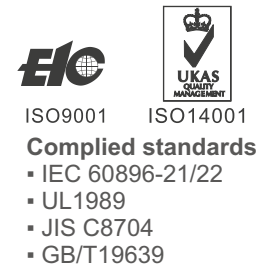
## DURATION SERIES VRLA BATTERY

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.

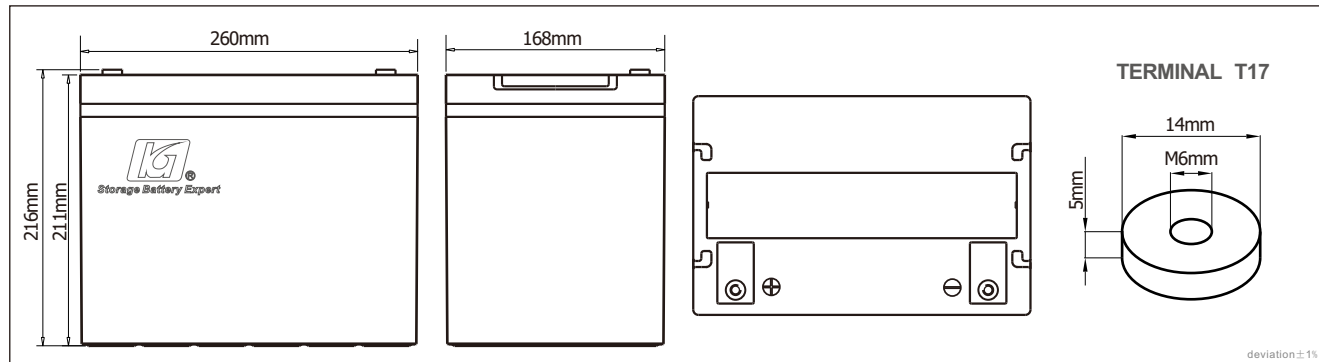


### TECHNICAL SPECIFICATIONS

Nominal Voltage (V)	12 (6 cells per unit)
Designed Floating Life (20°C)	12 Years
Nominal Capacity (20°C)	80 Ah @ 10HR-rate (to 1.80Vpc)
Dimension (mm)	L260mm x W166mm x H216mm
Approx. Weight	23.0 kg (50.7 lbs)
Terminal Type	Female Copper Insert M6 (torque:6~7N.m)
Internal Resistance	Approx. 0.0054 Ohm (fully charged @ 20°C)
Max. Charge Current	20A
Max. Discharge Current (5S)	720 A
Short Circuit Current	2200 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)



### BATTERY DIMENSIONS

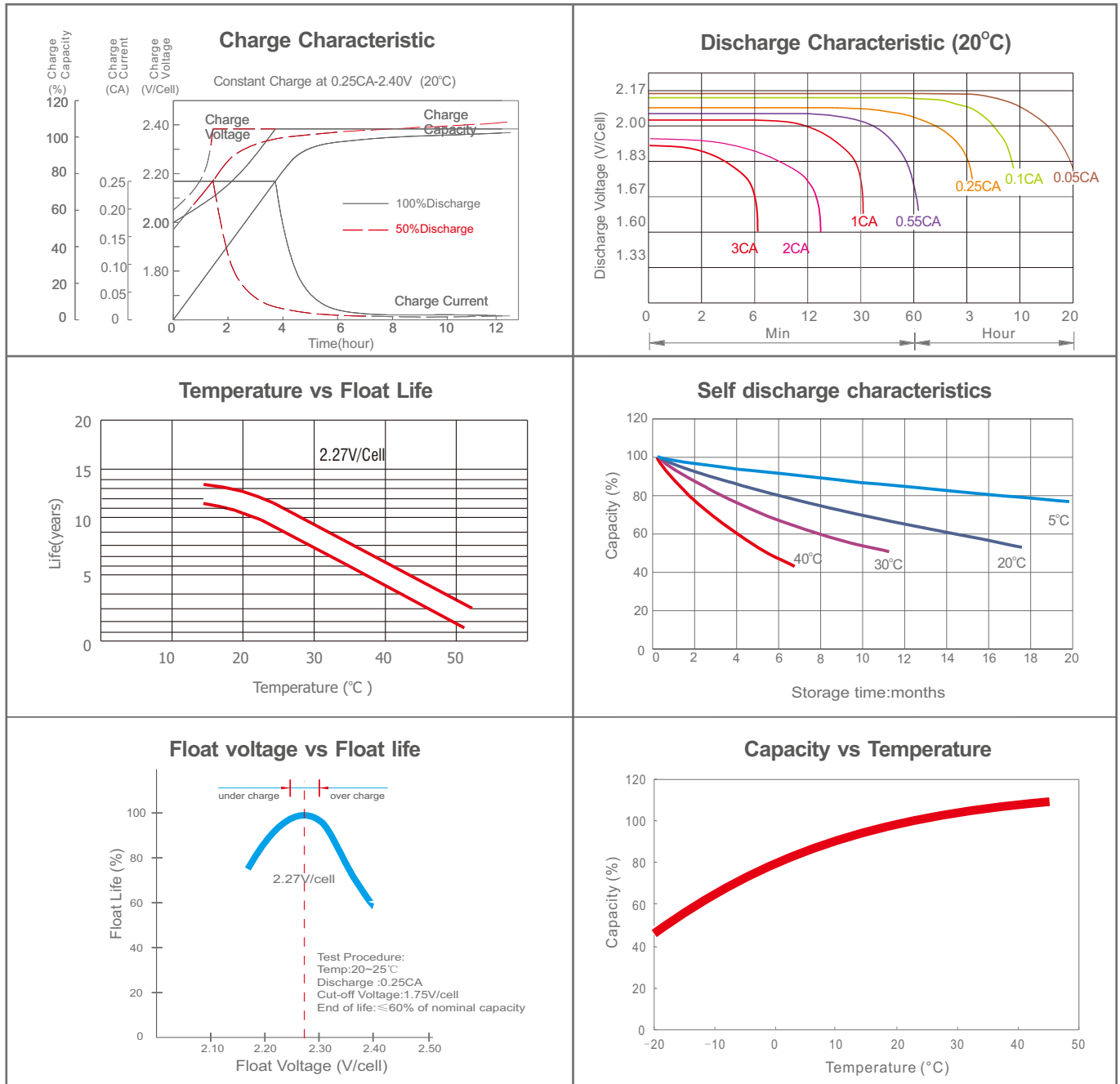


### BATTERY DISCHARGE TABLE

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	240	177	146	90.1	54.0	31.4	22.7	18.1	15.1	10.3	8.48	4.57
1.67V	214	163	138	86.1	52.7	30.9	22.4	17.8	14.8	10.1	8.38	4.46
1.70V	191	148	130	82.9	51.4	30.5	22.1	17.7	14.7	10.0	8.27	4.36
1.75V	166	138	121	80.0	50.4	29.9	21.8	17.5	14.5	9.88	8.16	4.28
1.80V	147	125	113	76.5	48.7	29.3	21.4	17.0	14.2	9.65	8.00	4.20
1.85V	126	113	103	72.2	46.6	28.1	20.7	16.6	13.9	9.44	7.79	4.10

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	423	318	267	166	101	59.0	42.8	34.3	28.7	19.8	16.4	8.87
1.67V	382	296	253	160	98.7	58.3	42.6	34.0	28.5	19.6	16.3	8.72
1.70V	345	272	241	155	97.1	58.0	42.4	33.9	28.4	19.5	16.2	8.60
1.75V	304	256	227	151	95.9	57.5	42.0	33.8	28.3	19.4	16.1	8.49
1.80V	272	235	213	146	93.6	56.7	41.6	33.3	27.9	19.1	15.9	8.39
1.85V	237	214	196	139	90.4	55.0	40.6	32.7	27.4	18.8	15.6	8.24

## 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