





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	75Ah capacity	AGM tech	12 years design life
			

TECHNICAL SPECIFICATIONS

Nominal Voltage (V)	12 (6 cells per unit)
Designed Floating Life (20C)	12 Years
Nominal Capacity (20C)	75 Ah @ 10HR-rate (to 1.80Vpc)
Dimension (mm)	L260mm x W166mm x H216mm
Approx. Weight	22.8 kg (50.3 lbs)
Terminal Type	Female Copper Insert M6 (torque:6~7N.m)
Internal Resistance	Approx. 0.0055 Ohm (fully charged @ 20°C)
Max. Charge Current	18.75A
Max. Discharge Current (5S)	675 A
Short Circuit Current	2180 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)

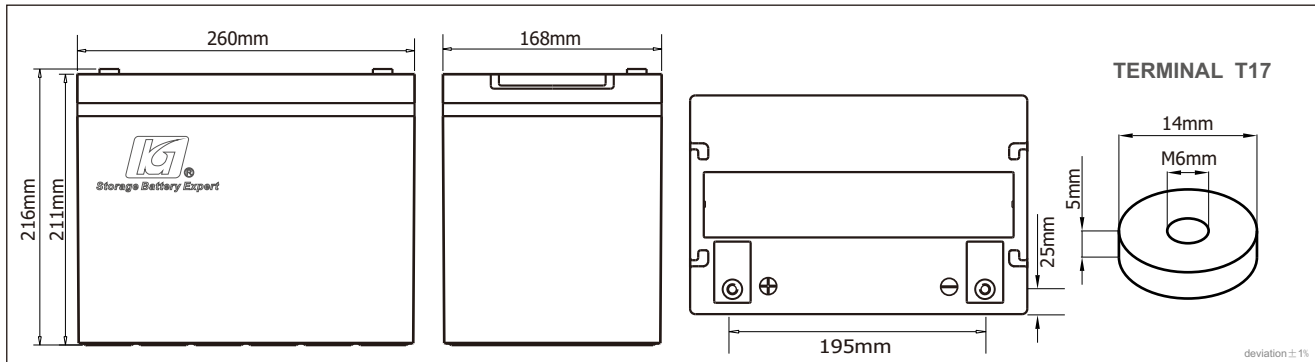



ISO9001 ISO14001

Complied standards

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

BATTERY DIMENSIONS

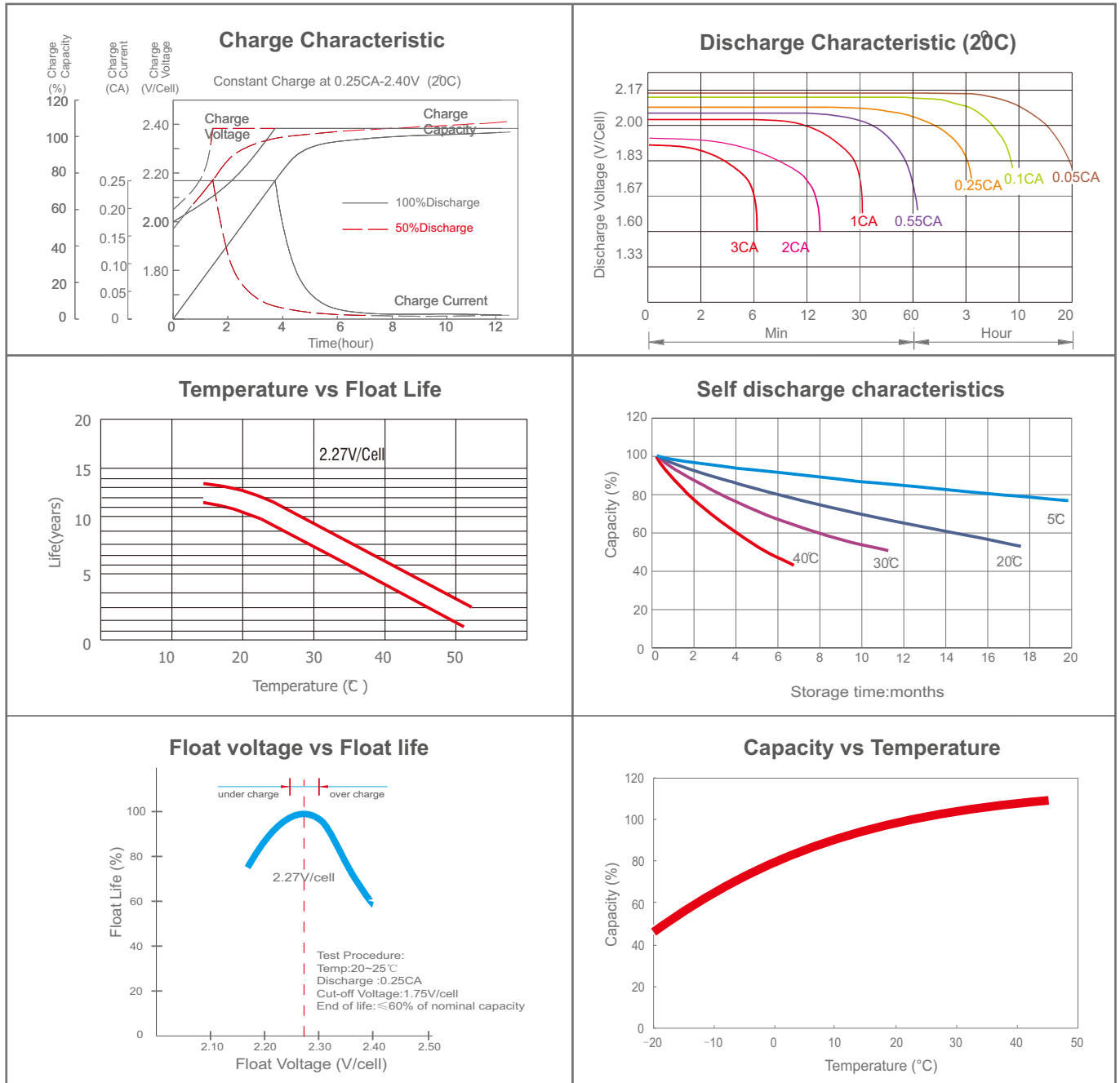


BATTERY DISCHARGE TABLE

Constant Current Discharge Characteristics: Amps (25°C)												
F.V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	225	166	137	84.5	50.7	29.4	21.3	16.9	14.1	9.64	7.95	4.28
1.67V	201	153	129	80.7	49.4	28.9	21.0	16.7	13.9	9.51	7.85	4.19
1.70V	179	139	122	77.7	48.2	28.5	20.8	16.6	13.8	9.39	7.76	4.09
1.75V	156	129	113	75.0	47.2	28.1	20.4	16.4	13.6	9.26	7.65	4.01
1.80V	138	117	106	71.7	45.7	27.5	20.0	16.0	13.3	9.05	7.50	3.94
1.85V	118	106	96.3	67.7	43.7	26.4	19.4	15.5	13.0	8.85	7.31	3.84

Constant Power Discharge Characteristics: W/cell (25°C)												
F.V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	396	298	250	156	94.5	55.3	40.1	32.1	26.9	18.5	15.4	8.31
1.67V	358	278	237	150	92.6	54.7	39.9	31.9	26.7	18.4	15.3	8.18
1.70V	323	255	226	145	91.0	54.4	39.7	31.8	26.6	18.3	15.2	8.06
1.75V	285	240	212	142	89.9	53.9	39.4	31.7	26.5	18.2	15.1	7.95
1.80V	255	220	200	137	87.7	53.2	39.0	31.3	26.1	17.9	14.9	7.86
1.85V	222	201	184	130	84.8	51.6	38.1	30.6	25.7	17.6	14.6	7.73

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