





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	120Ah 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)	120 Ah @ 10HR-rate (to 1.80Vpc)
Dimension (mm)	L406mm x W174mm x H233mm
Approx. Weight	35.5 kg (78.3 lbs)
Terminal Type	Female Copper Insert M8 (torque:10~12N.m)
Internal Resistance	Approx. 0.004 Ohm (fully charged @ 20°C)
Max. Charge Current	30A
Max. Discharge Current (5S)	960 A
Short Circuit Current	3000 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)

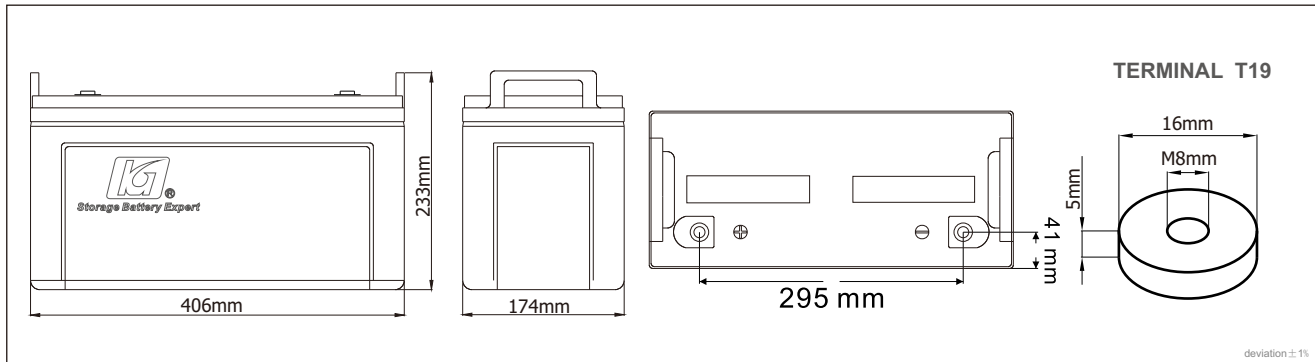



ISO9001 ISO14001

Complied standards

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

BATTERY DIMENSIONS

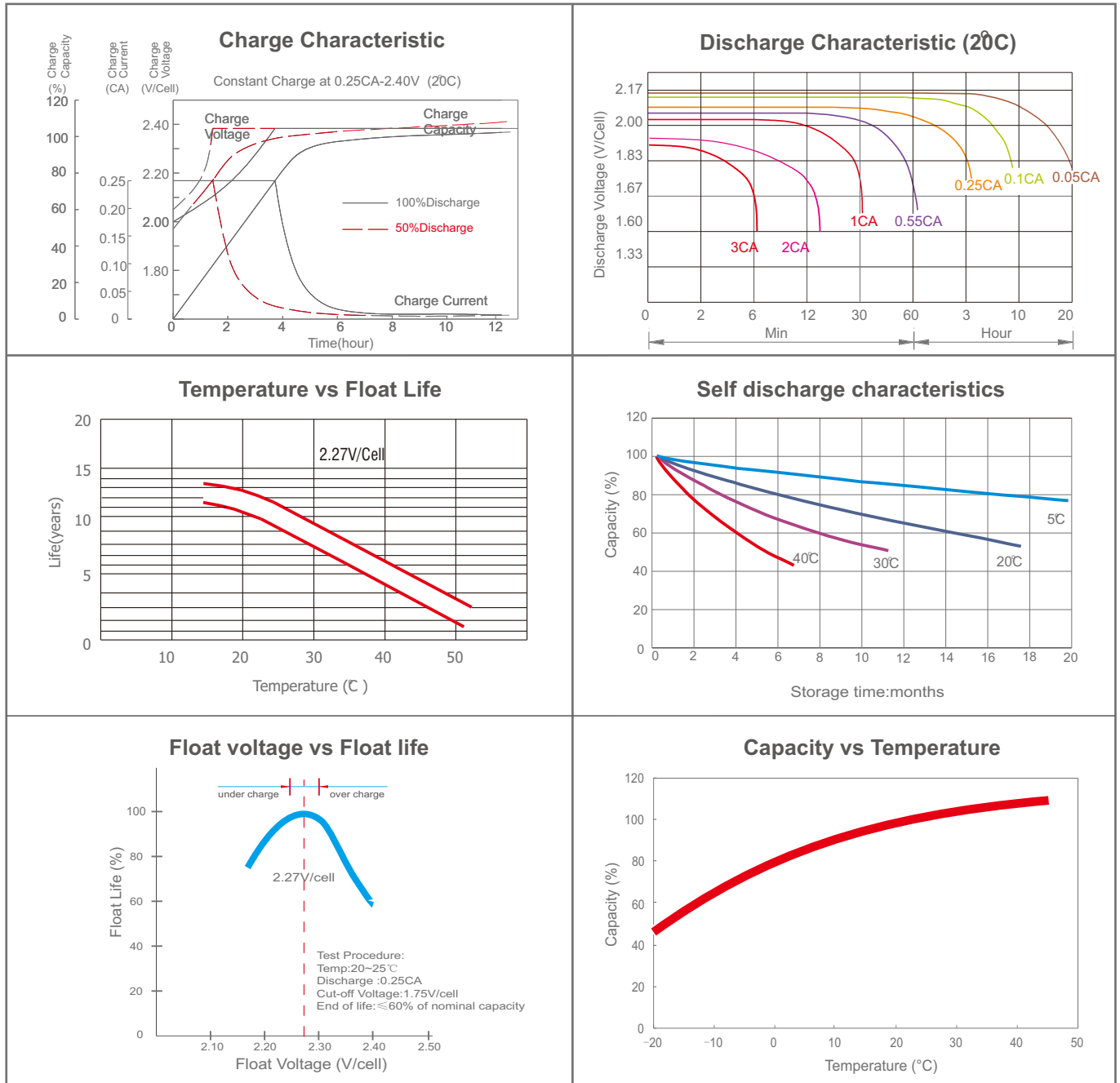


BATTERY DISCHARGE TABLE

Constant Current Discharge Characteristics: Amps (25°C)												
F.V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	349	258	213	131	81.1	47.1	34.0	27.1	22.6	15.4	12.7	6.85
1.67V	312	237	200	125	79.0	46.3	33.6	26.8	22.3	15.2	12.6	6.70
1.70V	278	216	189	121	77.1	45.7	33.2	26.5	22.1	15.0	12.4	6.54
1.75V	242	200	176	116	75.6	44.9	32.7	26.2	21.8	14.8	12.2	6.42
1.80V	214	182	164	111	73.1	43.9	32.0	25.6	21.3	14.5	12.0	6.30
1.85V	183	164	149	105	69.9	42.2	31.0	24.8	20.8	14.2	11.7	6.15

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	615	463	388	242	151	88.5	64.2	51.4	43.0	29.6	24.6	13.3
1.67V	556	431	368	233	148	87.5	63.8	51.0	42.8	29.4	24.4	13.1
1.70V	502	396	351	226	146	87.0	63.5	50.9	42.7	29.3	24.3	12.9
1.75V	442	372	330	220	144	86.2	63.1	50.7	42.5	29.1	24.1	12.7
1.80V	396	342	310	212	140	85.1	62.4	50.0	41.8	28.7	23.8	12.6
1.85V	345	312	286	202	136	82.6	60.9	49.0	41.1	28.2	23.4	12.4

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