

Deep Cycle VRLA AGM Battery

VTD6-330

The Valiant VTD series deep cycle AGM battery features special additives to the positive plate and advanced AGM separators which increase cycle life up to 70% higher compared with standard AGM batteries. This technology also provides up to 15 years of float life. The VTD series is highly suited for systems that rely heavily on battery storage power such as off-grid solar systems, RV and marine and electric vehicles.

6V Voltage	330Ah Capacity	AGM Technology	Deep Cycle
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COMPLIED STANDARDS

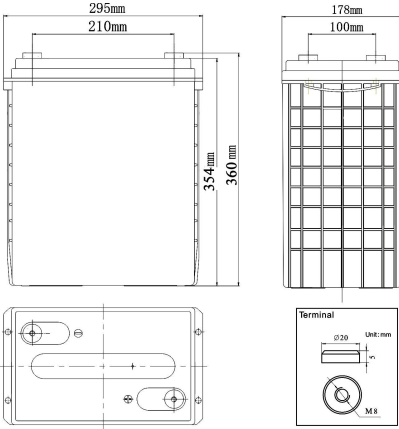
IEC 60896-21/22	JIS C8704
YD/T799	ISO9001
GB/T 19638	CE

- GENERAL FEATURES**
- Thick plate with high tin/low calcium alloy
 - Deep discharge recovery, 1200 cycles @ 50% DOD
 - 2 year full warranty in most applications
 - Long service life in both float and cycling applications
 - High power density

- APPLICATIONS**
- Off-grid solar systems
 - RV and marine
 - UPS/Telecom
 - Electric vehicle
 - Golf cart

DIMENSIONS & WEIGHT

Length(mm)	295 ± 1
Width(mm)	178 ± 1
Height(mm)	354 ± 1
Total Height(mm)	360 ± 1
Weight(kg)	46.6 ± 3%



TECHNICAL

Nominal Voltage		6V(3 cells per unit)
Design Floating Life @25°C		15 Years
Nominal Capacity @25°C (20 hour rate@16.5A,5.4V)		330Ah
Capacity @25°C	10 hour rate (29.7A,5.4V)	297Ah
	5 hour rate (52.5A,5.25V)	262.5Ah
	1 hour rate (183.3A, 4.8V)	183.3Ah
Internal Resistance	Full Charged Battery@25°C	≤2.2 mΩ
Ambient Temperature	Discharge	-15°C~45°C
	Charge	-15°C~45°C
	Storage	-15°C~45°C
Max.Discharge Current@25°C		1100A(5s)
Capacity affected by Temperature (10 hour)	40°C	105%
	25°C	100%
	0°C	85%
	-15°C	65%
Self-Discharge@25°C per Month		3%
Charge (Constant Voltage) @25°C	Standby Use	Initial Charging Current Less than 66A Voltage 6.8-6.9V
	Cycle Use	Initial Charging Current Less than 66A Voltage 7.2-7.45V

BATTERY DISCHARGE TABLE

Discharge Constant Current per Cell (Amperes at 25°C)

F.V/Time	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h	100h
1.60V	424.7	270.4	199.7	183.3	116.3	81.7	55.5	36.7	32.7	17.82	3.96
1.65V	417.0	265.5	196.0	180.0	114.2	80.2	54.5	36.0	32.1	17.49	3.88
1.70V	409.3	260.6	192.4	176.6	112.1	78.7	53.5	35.3	31.5	17.16	3.81
1.75V	401.5	255.7	188.8	173.3	110.0	77.2	52.5	34.7	30.9	16.83	3.74
1.80V	386.1	245.9	181.5	166.7	105.8	74.3	50.5	33.3	29.7	16.5	3.66

Discharge Constant Power per Cell (Watts at 25°C)

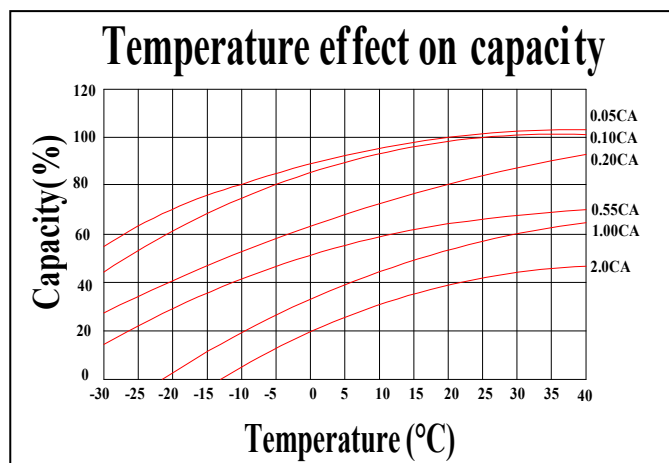
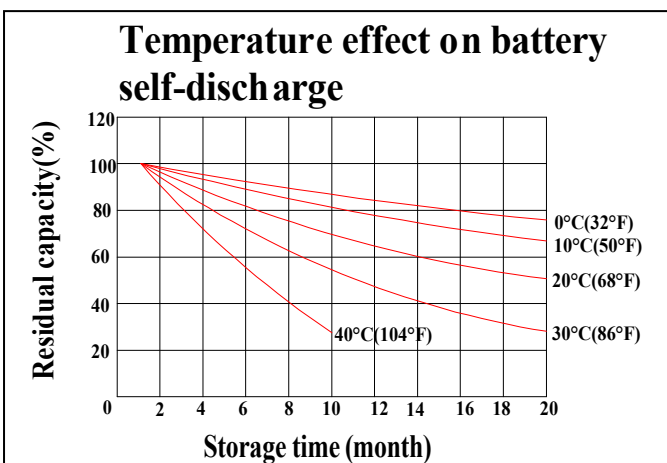
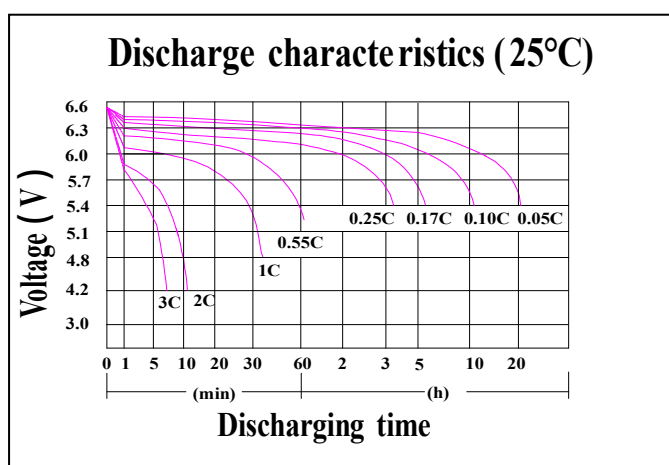
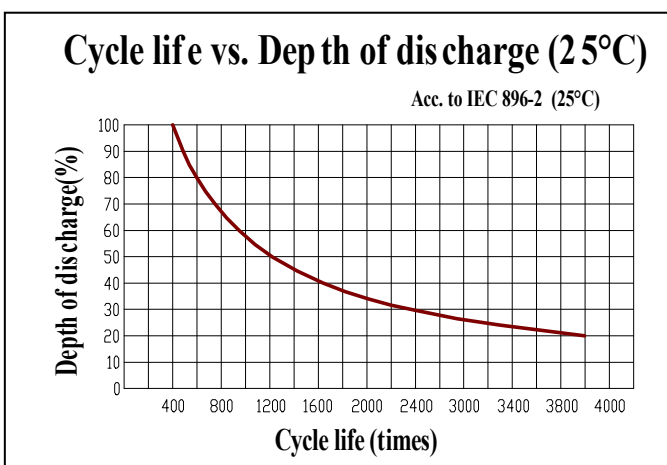
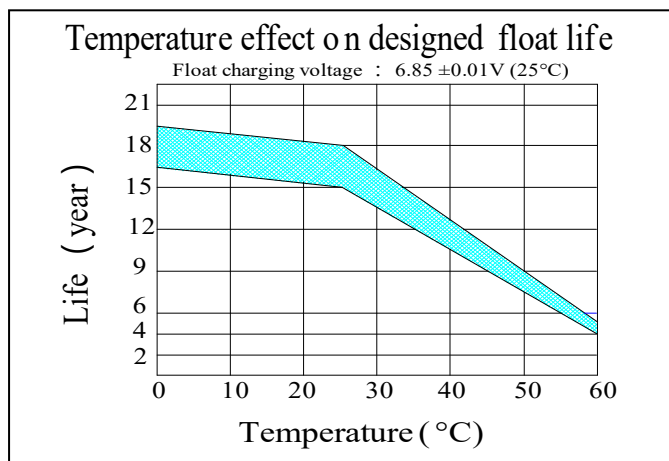
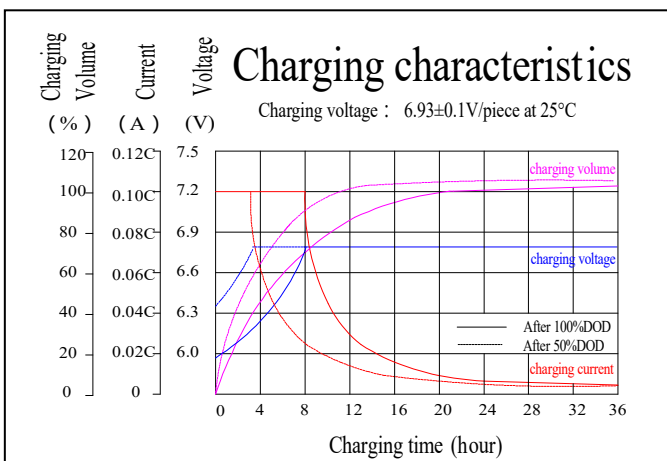
F.V/Time	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h	100h
1.60V	817.6	520.6	384.3	352.9	224.0	157.2	106.9	70.6	62.9	34.3	7.62
1.65V	802.7	511.1	377.3	346.5	219.9	154.4	105.0	69.3	61.7	33.7	7.47
1.70V	787.8	501.7	370.4	340.0	215.8	151.5	103.0	68.0	60.6	33.0	7.33
1.75V	773.0	492.2	363.4	333.6	211.7	148.6	101.1	66.7	59.5	32.4	7.19
1.80V	743.2	473.3	349.4	320.8	203.6	142.9	97.2	64.2	57.2	31.8	7.05

Note The above data are average values, and can be obtained within 3 charge/discharge cycles. These are not minimum values. Cell and battery designs/specifications are subject to modification without notice. Contact **VALIANT** for the latest information.

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PERFORMANCE CHARACTERISTICS



BATTERY CONSTRUCTION

Component	Positive plate	Negative plate	Container & Cover	Safety valve
Features	Thick high Sn low Ca grid with Special paste	Balanced Pb-Ca grid for improved recombination efficiency	Fire resistance ABS (UL94-V0 optional)	Flame Si-Rubber and aging resistance
Component	Terminal	Separator	Electrolyte	Pillar seal
Features	Female Copper Insert	Advanced PVC /AGM separator for high pressure cell desbm	Dilute high purity sulfuric acid	Two layers epoxy resin seal