

DC180-12 DATA SHEET



DC180-12

180AH@20HR

12-Volt

DEEP CYCLE

**Maintenance-Free
Sealed AGM Battery**

Nominal Specifications

Battery Model	DC180-12	Rated Capacity	180AH/20HR
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Mechanical Specifications

Group Size	4D	
Overall Height (H)	218±2mm	8.58"
Container Height (h)	214±2mm	8.43"
Length	530±2mm	20.87"
Width	209±2mm	8.23"
Weight	Approx.56.8kg	125.22lbs.
Terminal Type	M8-Button Terminal	
Terminal Torque	9.6-10.7 N.m	
Container Material	ABS: Standard (UL 94-HB)	

Temperature Range Specifications

Operating Temperature Range	Discharge : -15°C ~+ 50°C (5°F ~122°F)
	Charge: -15°C ~ +40°C (5°F ~104°F)
	Storage: -15°C ~ +40°C (5°F ~104°F)
Recommended Operating Temperature Range	+74°F (23°C) to +80°F (27°C)
Self-Discharge	Less than 10% after 90 days, can be stored up to 6 months at 25°C (77°F); Fully recharging is required before usage, For higher temperatures the time interval will be shorter.

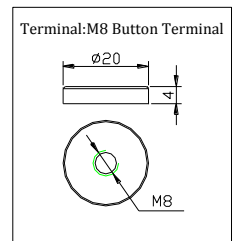
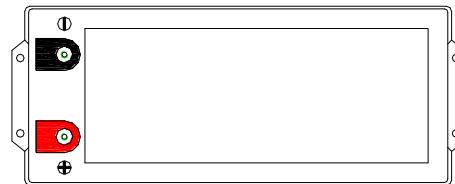
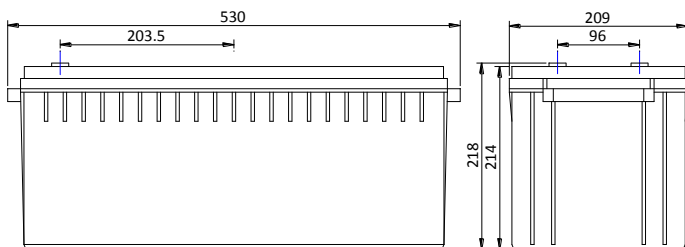
Electrical Specifications

C100	198AH
C20	180AH
C10	162AH
C5	147.5AH
CCA	990A
CA or MCA	1150A
HPCA	1400A
Max. Discharge Current	1800A (5s)
Internal Resistance	3.0mΩ
Reserve Capacity	
Reserve @25 AMPS	350Minutes
Reserve @75 AMPS	85Minutes

Charge Voltages

Float Charging Voltage	13.5 to 13.8 VDC/unit@ (25°C)	
Equalization and Cycle Service Charging Voltage	14.3 to 14.5 VDC/unit @ (25°C)	
Maximum Charge Current(A)	45A	
Charging Temperature Compensation	Cycle use	-4mV/cell/°C
	Float use	-3mV/cell/°C

BATTERY & TERMINAL DIMENSIONS (All units shown in mm)



Constant Current Discharge Rating Amperes @ 77°F (25°C)

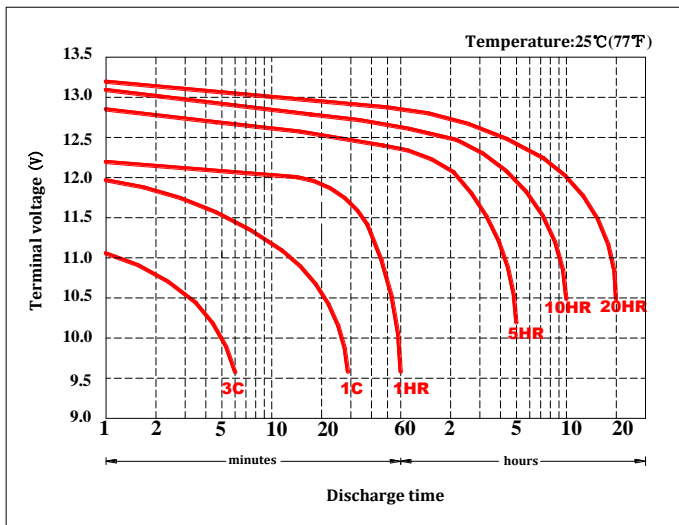
Cut off voltage V/cell	15M	30M	45M	1H	2H	3H	5H	8H	10H	12H	20H
1.75V	252	168	124	102.3	54.2	40.7	28.6	19.6	16.20	13.80	9.00

Note The above data are average values, and can be obtained with 3 charge/discharge cycles. These are not minimum values.

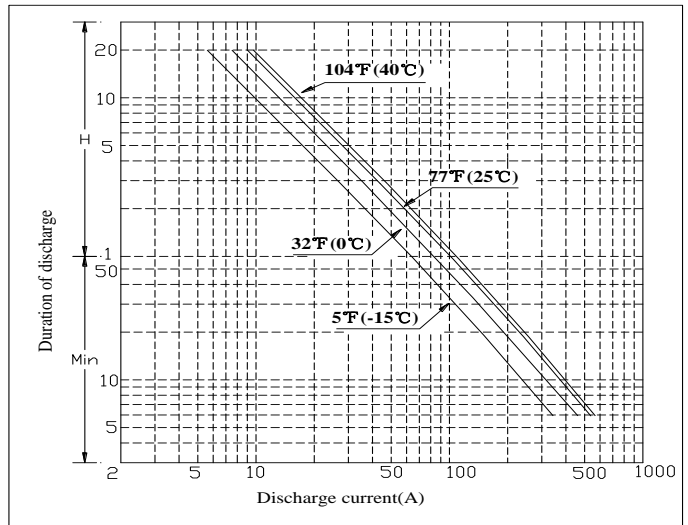


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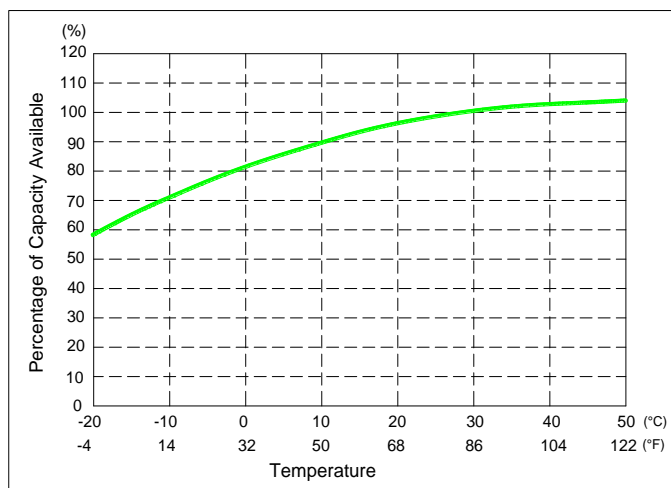
Terminal Voltage(V) and Discharge Time



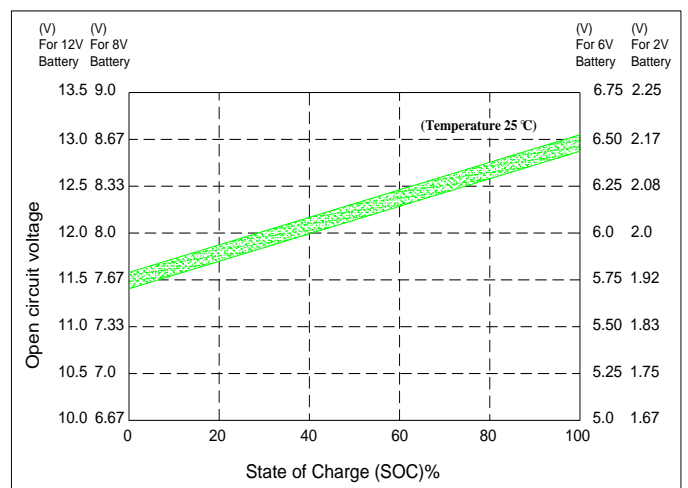
Duration of discharge vs. Discharge current



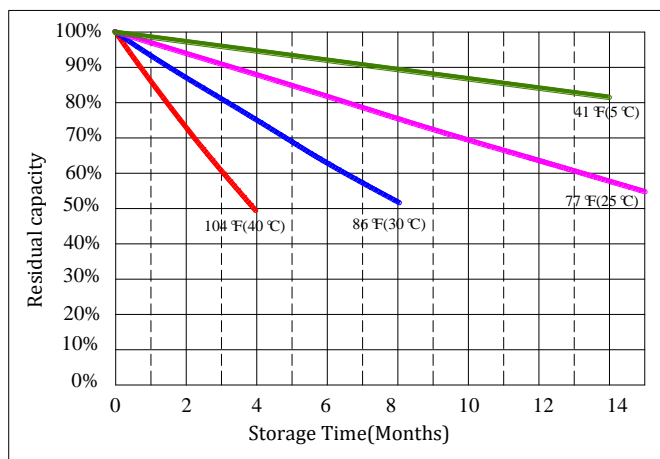
Percent Capacity vs. Temperature



State of Charge(SOC) vs Open Circuit Voltage(OCV)



Capacity Retention Characteristic



Cycle Life vs. Depth of Discharge(DOD)

