

# 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	

### 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
<b>Reserve Capacity</b>	
Reserve @25 AMPS	350Minutes
Reserve @75 AMPS	85Minutes

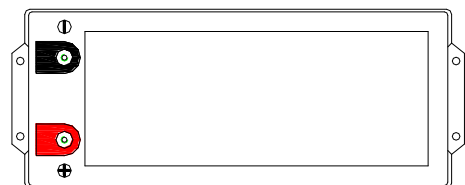
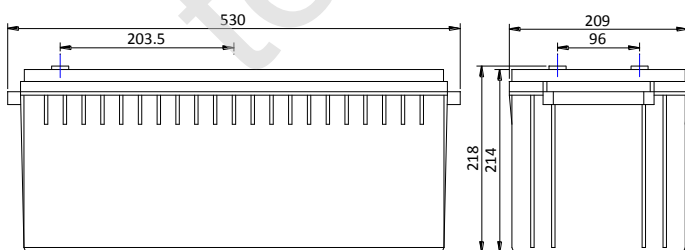
### Temperature Range Specifications

Operating Temperature Range	Discharge: -15 ~ +50 (5 ~ 122 °F)
	Charge: -15 ~ +40 (5 ~ 104 °F)
	Storage: -15 ~ +40 (5 ~ 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 (77 °F); Fully recharging is required before usage, For higher temperatures the time interval will be shorter.

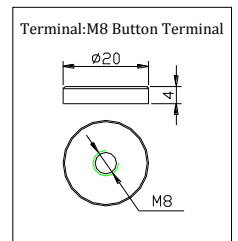
### Charge Voltages

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/
	Float use	-3mV/cell/

### BATTERY & TERMINAL DIMENSIONS (All units shown in mm)



Battery bank spacing required 12.5mm (1/2"inch) minimum



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

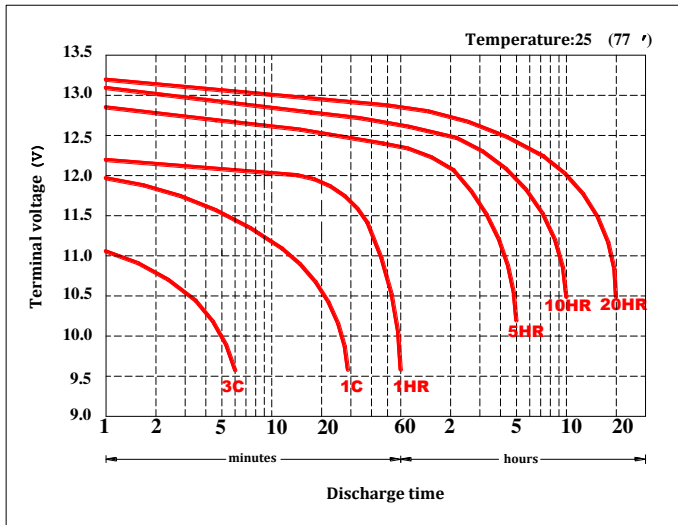
Cut off voltage V/cell	15M	30M	45M	1H	2H	3H	5H	8H	10H	12H	20H
1.75V	252	168	124	102.3	54.2	40.7	28.6	19.6	16.20	13.80	9.00

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

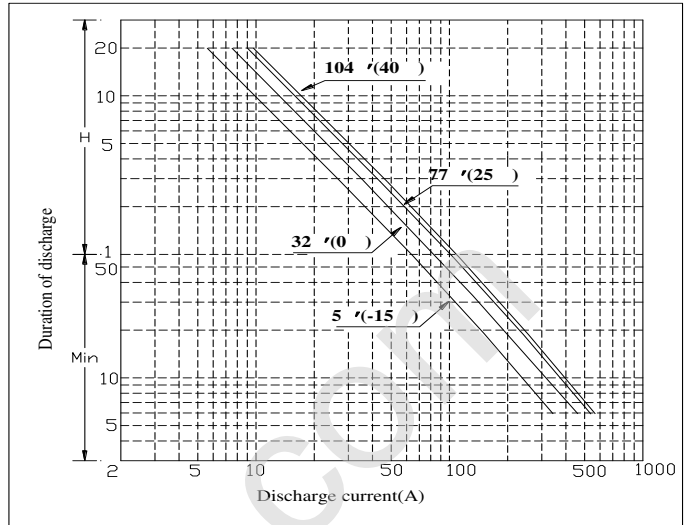


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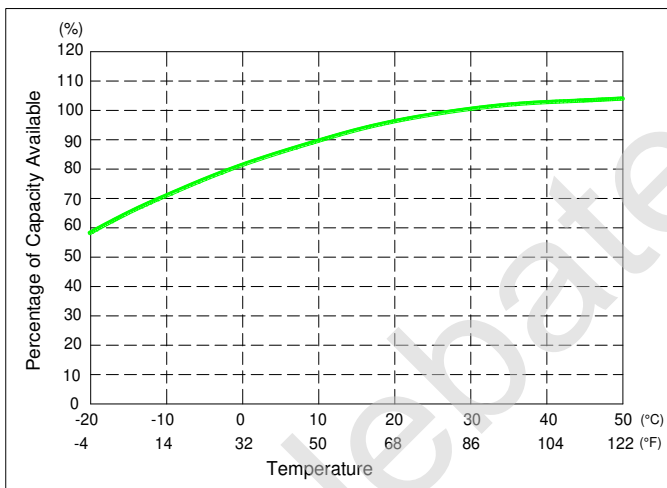
## Terminal Voltage(V) and Discharge Time



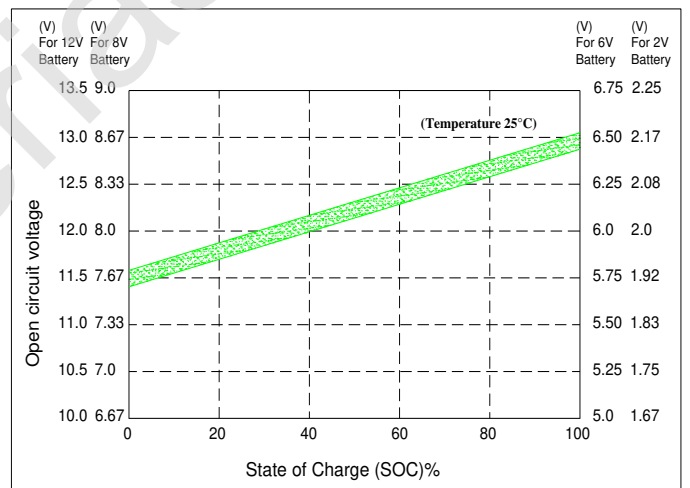
## Duration of discharge vs. Discharge current



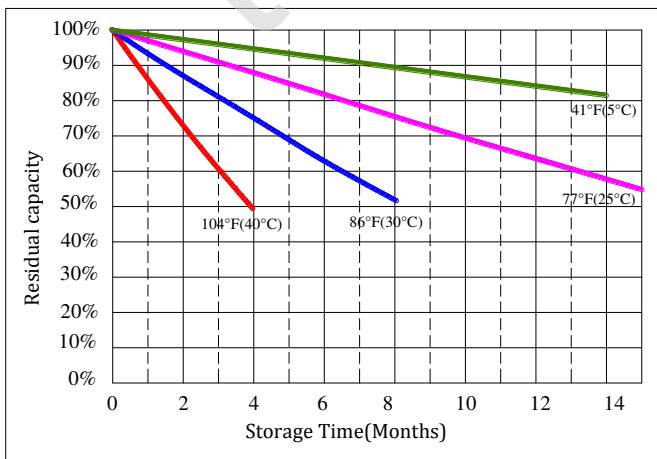
## Percent Capacity vs. Temperature



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



## Capacity Retention Characteristic



## Cycle Life vs. Depth of Discharge(DOD)

