



DATASHEET

DCC 45-12

12V 45AH

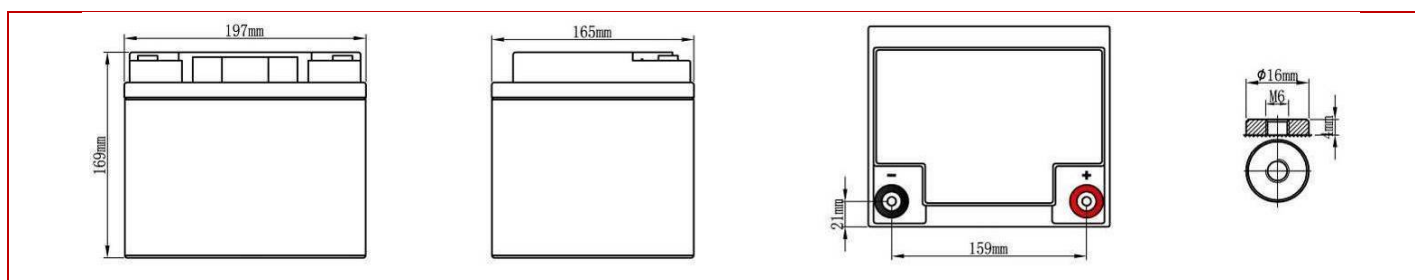
LEAD CARBON BATTERY

EUROBAT 2022 CLASSIFICATION: 15 Years – Very Long Life

Designed in accordance with IEC 60896-21/22

SPECIFICATIONS

Nominal Voltage	Nominal Capacity	Dimension ±3mm				Weight	Short-Circuit Current	Internal Resistance	Standard Terminal	Container Material
		L	W	H	TH					
12V	45AH	197mm	165mm	169mm	169mm	13.3kg	-	≈8.3 mΩ	M6	ABS UL94-V0



CONSTANT-VOLTAGE CHARGE

Rated Capacity	
20 hour rate (2.25A)	46.6AH
10 hour rate (4.5A)	45.0AH
5 hour rate (4.65A)	38.3AH
3 hour rate (11.25A)	33.9AH
1 hour rate (24.75A)	24.9AH
Capacity affected by temperature	
40°C (104°F)	103%
25°C (77°C)	100%
0°C (32°F)	86%

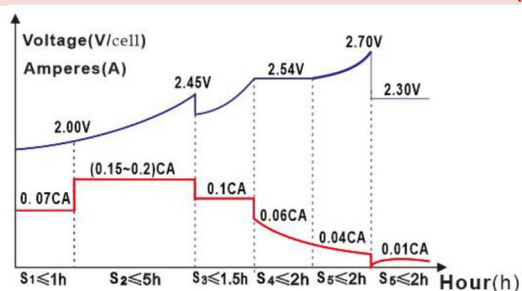
Cycle Application
1. Limit initial current less than 9A.
2. Charge until battery voltage (under charge) reaches 14.6V to 14.8V at 25°C(77°F).
3. Hold at 14.6V to 14.8V until current drop to under 0.27A for at least 3 hours.
4. Temperature compensation coefficient of charging voltage is -30mV/°C.
Standby Service
1. Hold battery across constant voltage source of 13.6 to 13.8 volts with current limit 9A continuously .When held at this voltage , the battery will seek its own current level and maintain itself in a fully charge status.
2. Temperature compensation coefficient of charging voltage is -18mV/°C.

Wide Operating Temp. Range

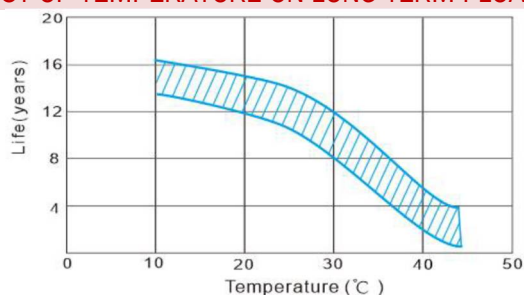
-20°C ~ 50°C

NOTE : The battery should be charged within 6 months of storage, Otherwise, permanent loss of capacity might occur as a result of sulfation.

CHARGE CHARACTERISTIC CURVE FOR CYCLE USE(IIUU)



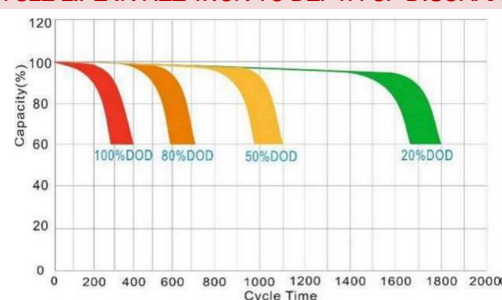
EFFECT OF TEMPERATURE ON LONG TERM FLOAT LIFE



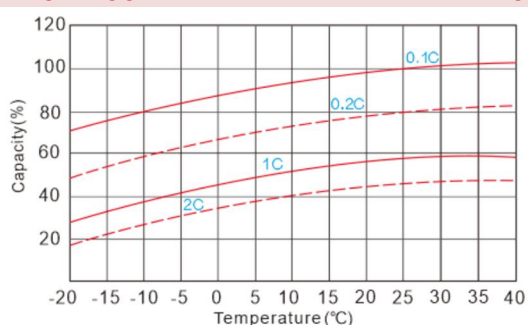
DISCHARGE CHARACTERISTIC (25°C/77°F)



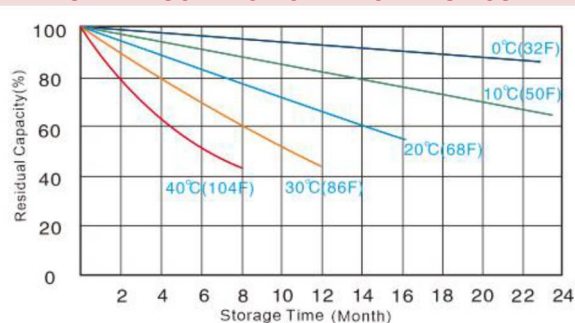
CYCLE LIFE IN RELATION TO DEPTH OF DISCHARGE



CAPACITY CURVE AT DIFFERENT TEMPERATURE



SELF DISCHARGE CHARACTERISTICS



End Voltage (V)	Minute (M)				Hour (H)							
	10	15	30	45	1	1.5	2	3	5	8	10	20

Constant Current Discharge Data Sheet (@25°C) Unit: A

9.6V	95	75	41.4	29.4	24.9	21.1	15.6	11.6	7.90	5.28	4.59	2.39
9.9V	91	73	39.7	28.7	24.4	20.6	15.0	11.4	7.83	5.25	4.58	2.38
10.2V	88	70	38.4	27.8	24.0	20.1	14.6	11.3	7.76	5.20	4.56	2.37
10.5V	83	66	36.8	26.6	23.3	19.2	13.7	10.9	7.65	5.14	4.53	2.35
10.8V	79	63	35.2	25.3	22.6	18.5	13.0	10.6	7.46	5.08	4.50	2.33

Constant Power Discharge Data Sheet (@25°C) Unit: W

9.6V	978	837	489	359	271	224	161	127	89	58.1	50.9	26.6
9.9V	954	817	486	354	269	221	159	126	86	57.7	50.4	26.3
10.2V	940	803	481	351	266	217	154	121	85	57.1	50.3	26.1
10.5V	907	776	471	339	259	211	149	118	84	56.4	49.6	25.6
10.8V	876	749	458	332	249	204	144	116	82	55.4	48.7	25.2