

# TECHNICAL DATA SHEET

## DLC6-420EV



### Applications



CYCLIC



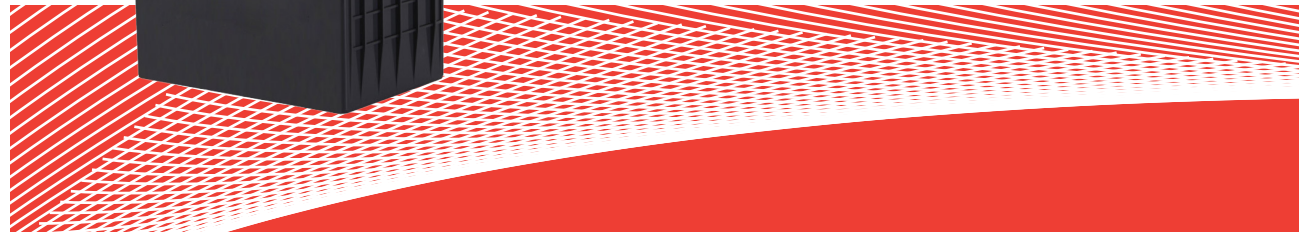
STATIONARY



SOLAR



MARINE

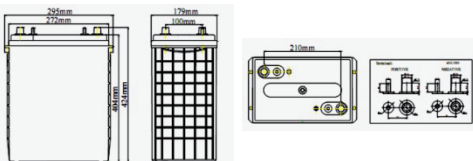


### General Features

- › Lead-carbon composite negative plate, both capacitance and battery characteristics
- › Long cycle life, excellent deep cycle discharge ability
- › Excellent charge acceptance ability
- › Optimized capability of instant high-current discharging
- › Strong high and low temperature performance
- › Precision sealing technology



Dimension: 295(L)×179(W)×404(H)×424(TH) Unit: mm



### Applications

- › Electric vehicle
- › Electric wheelchair
- › Electric scooter
- › Electric play car for children
- › Garbage truck
- › Patrol car

### Specification

Nominal Voltage	6V
Nominal Capacity	420Ah
Design life	15 years
Terminal	M8/DT
Approx. Weight	Approx 59kg
Container Material	ABS

Rated Capacity	428 Ah	20Hour Rate	(21.4A to 5.25 V)
	393 Ah	10Hour Rate	(39.3A to 5.25 V)
	334 Ah	5Hour Rate	(66.8A to 5.25 V)

Internal resistance	Full charged at 25°C:	2.00 mΩ
	Discharge:	-20 ~50°C(-4~ 122°F)
	Charge:	-20 ~50°C(-4~ 122°F)
Operating Temperature	Storage:	-20 ~50°C(-4~ 122°F)

Charge current: Max. 84A

Charge Method (25 °C)	Float Charge:	6.75 -6.90 V, recom.6.90 V(-9mV/ °C)
	Cycle charge:	7.14 -7.20 V, recom.7.20 V(-15mV/ °C)

Self discharge	3% of capacity declined per month at 25°C
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### Constant Current Discharge Characteristics : A(25°C)

F.V/Time	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	424.5	246.8	145.8	112.9	88.8	75.5	50.8	42.2	22.1
1.65V	407.5	238.4	141.1	109.4	86.4	73.6	50.2	41.7	21.7
1.70V	389.5	230.6	136.5	106.5	84.0	71.7	49.4	41.1	21.5
1.75V	372.3	222.2	131.7	103.3	81.9	69.9	48.7	40.5	21.2
1.80V	355.8	213.7	127.0	100.1	79.5	68.1	47.9	40.0	21.0
1.85V	306.5	191.7	116.3	92.5	73.9	63.5	45.0	37.7	19.9

### Constant Power Discharge Characteristics : WPC(25°C)

F.V/Time	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	770.9	463.9	276.2	215.7	170.4	145.6	99.1	83.0	43.5
1.65V	747.9	450.5	268.7	209.9	166.4	142.4	98.2	82.1	42.8
1.70V	722.0	438.6	261.3	205.1	162.5	139.1	96.9	80.9	42.4
1.75V	697.2	425.1	253.4	199.8	158.9	136.1	95.8	80.0	41.9
1.80V	673.1	411.2	245.5	194.4	154.9	133.1	94.4	79.0	41.5
1.85V	585.5	371.1	226.2	180.5	144.6	124.5	88.8	74.5	39.5

(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values.

The battery must be fully charged before the capacity test. The C<sub>10</sub> should reach 95% after the first cycle and 100% after the third cycle.

## Charger recommendations

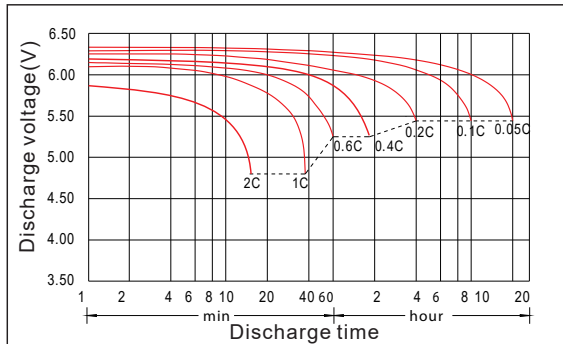
Type of charger	Zivan	AQHF WP	AQHF24-30FC G2
Matching profile	AGM =BA1+CU2	AMG SLA	AGM

**Max. charging current 2.4Vpc**

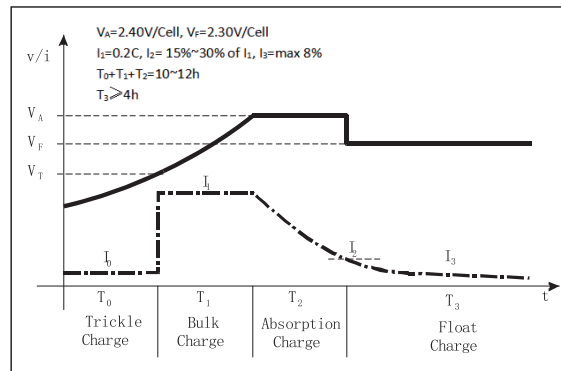
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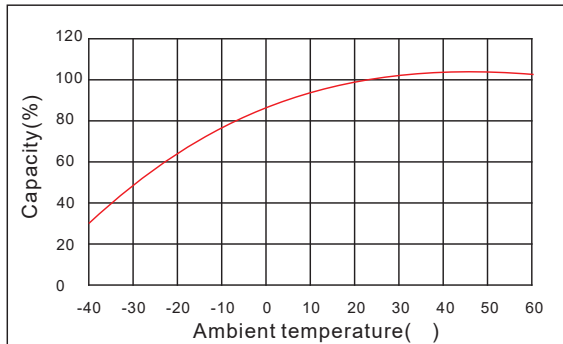
### Discharge characteristic



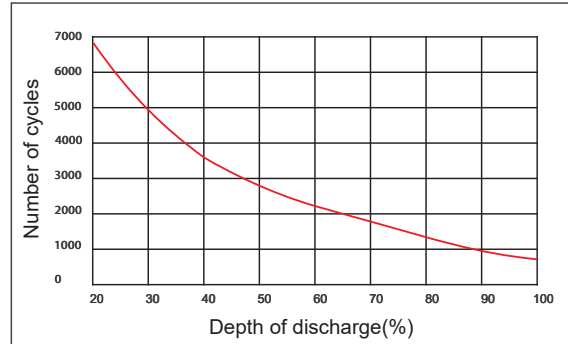
### Charging characteristic



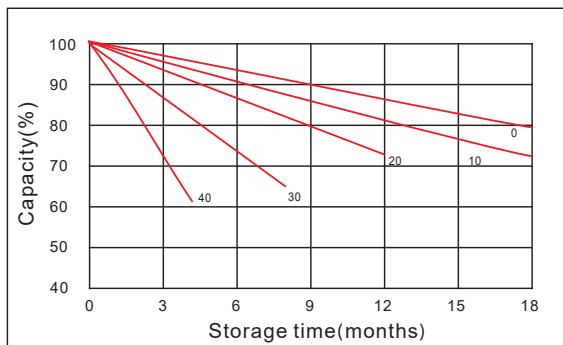
### The effect of temperature on capacity



### The effect of discharge depth on cycle life



### Curves of self-discharge



### The effect of temperature on float life

