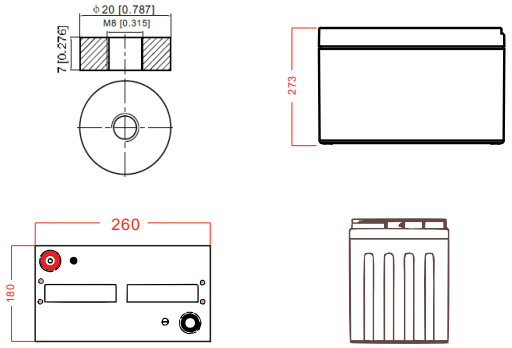
KB6220EV 6V 220Ah C_3

The Electric Vehicle batteries were developed based on a specialized grid as well as active material. These batteries have anchored plates and a high impact reinforced polypropylene case which can withstand the most extreme environments and vibrations. The KB EV series is constituted of batteries of several different sizes so that they may be used for many different applications. The KB EV series uses dry cell technology that allows for a superior performance and an unparalleled quality and reliability. Through the use of the dry cell technology this series was designed for sensitive environments that require improved life cycles for commercial, industrial, residential and private applications. Without any need for maintenance and with an advanced construction the EV series is an excellent option for many applications.

Dimensions and Terminal (Unit: mm (inches))



Performance Characteristics

Nominal Voltage	6V	
Dimensions	Length (mm / inch)	260 / 10.2
	Width (mm / inch)	180 / 7.1
	Height (mm / inch)	268 / 10.6
	Total Height (mm / inch)	273 / 10.7
Approx. Weight	(Kg / lbs)	35.0 / 77.2
Design Life	5 years	
Terminal	M8	
Container Material	ABS	
Rated Capacity	250 Ah / 25.0 A	(10hr, 1.75V / cell, 20ºC / 77ºF)
	220 Ah /73.3 A	(3hr, 1.75V / cell, 20ºC / 77ºF)
	194 Ah / 194 A	(1hr, 1.65V / cell, 20ºC / 77ºF)
Operating Temp. Range	Discharge : -20 ~ 50ºC (-4 ~ 122ºF)	
	Charge : -20 ~ 50ºC (-4 ~ 122ºF)	
	Storage : -20 ~ 50ºC (-4 ~ 122ºF)	
Max Charge Current	44.0A	
Cycle Use	Voltage: 7.35V ~ 7.45V at 25ºC	
Standby Use	Voltage: 6.85V ~ 6.95V at 25ºC	
Capacity affected by Temperature	40ºC (104ºF)	103%
	25ºC (77ºF)	100%
	0ºC (32ºF)	86%
Self Discharge	Fully charged Kaise Electric Vehicle batteries may be stored for up to 6 months at 25ºC (77ºF) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	

Applications

Electric wheelchair
Electric vehicle / golf car
Electric toys
Renewable energies
Marine equipment

Certifications

ISO 9001 / ISO 14001

Discharge Current vs. Discharge Voltage

Final discharge voltage V/CELL	1,8	1,75	1,7	1,6
Discharge current (A)	I ≤ 0,1CA	0.25CA ≥ I > 0.1CA	0.55CA ≥ I > 0.25CA	I > 0.55CA

Constant Current Discharge (Amperes) at 77ºF (20ºC)

Volts/cell	5min	15min	30min	1h	3h	5h	10h	20h
1.80V	860	465	297	185	72.7	46.7	24.8	13.6
1.75V	930	500	310	190	73.3	48.0	25.0	13.7
1.70V	961	516	313	192	74.0	48.6	25.4	13.7
1.65V	981	527	317	194	75.1	49.1	25.6	13.9
1.60V	1013	544	324	195	75.9	49.5	25.8	14.0

Constant Power Discharge (Watts per cell) at 77ºF (20ºC)

Volts/cell	5min	15min	30min	1h	3h	5h	10h	20h
1.80V	1551	876	563	358	141	91.1	47.6	27.0
1.75V	1626	925	578	360	141	92.2	48.1	27.2
1.70V	1657	931	580	364	142	92.7	48.6	27.3
1.65V	1630	942	580	367	143	93.5	49.1	27.4
1.60V	1699	959	585	369	144	93.9	49.6	27.5

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

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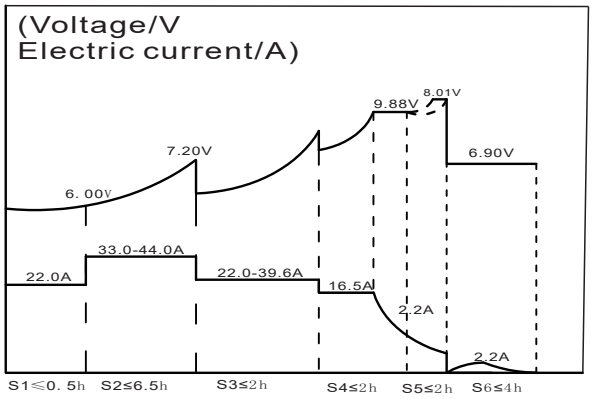
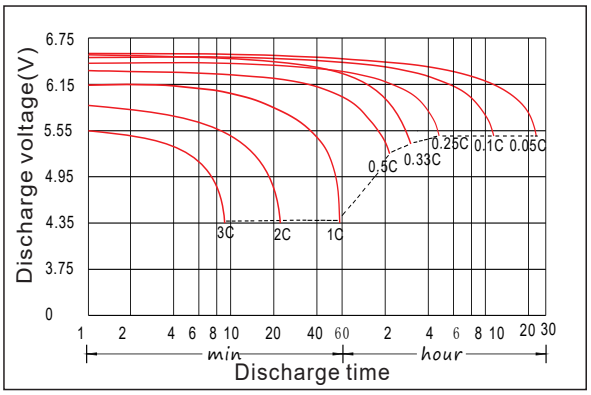
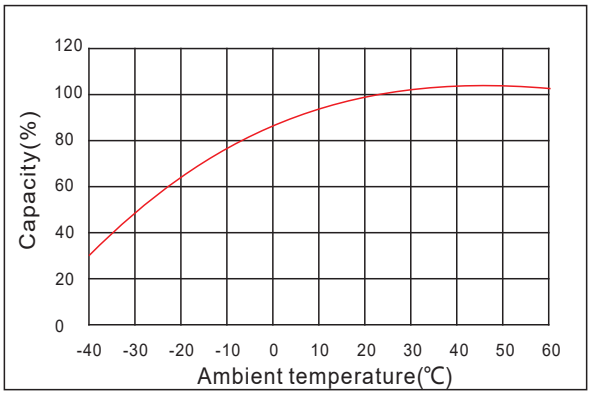
Charging Characteristic (cycle use)



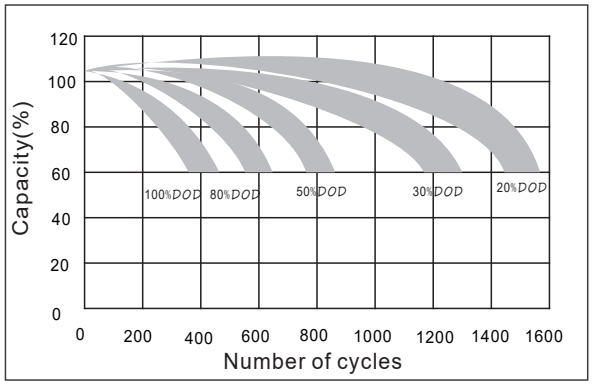
Discharge Characteristics



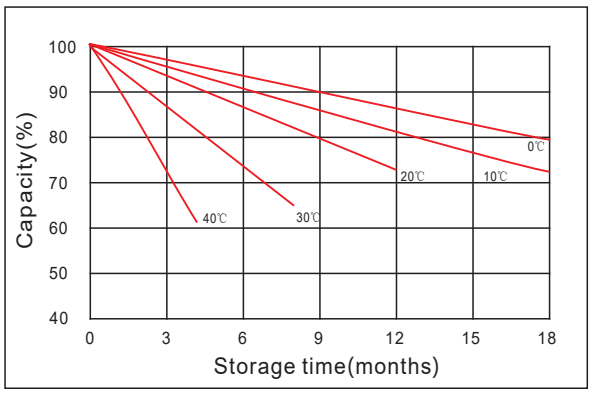
The effect of temperature on capacity



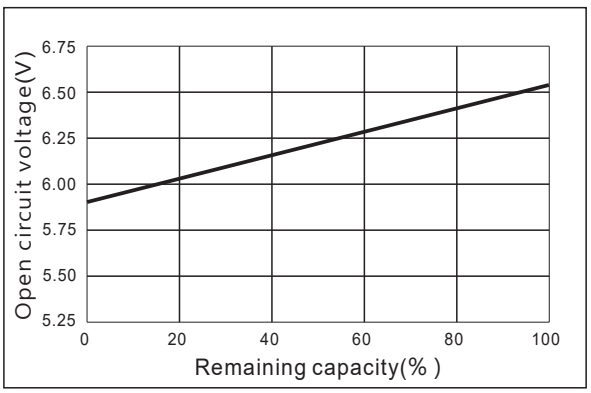
The effect of discharge depth on cycle life



Curves of self-discharge



Curves of open circuit voltage vs. capacity



IMPORTANT NOTE: The specifications presented herein are subject to revision without notice.

2024/V/K

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