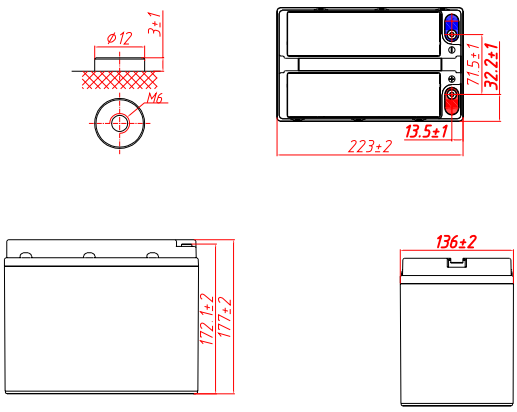
KB1255EV 12V 52.3Ah C_3

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	12V	
Dimensions	Length (mm / inch)	223 / 8.78
	Width (mm / inch)	136 / 5.35
	Height (mm / inch)	177 / 6.97
	Total Height (mm / inch)	177 / 6.97
Approx. Weight	(Kg / lbs)	14.1 / 31.1
Design Life	5 years	
Terminal	M6	
Container Material	ABS	
Rated Capacity	58.0 Ah / 5.80A	(10hr, 1.75V / cell, 20ºC / 77ºF)
	52.2 Ah /17.4 A	(3hr, 1.75V / cell, 20ºC / 77ºF)
	42.0 Ah / 42.0 A	(1hr, 1.75V / cell, 20ºC / 77ºF)
Operating Temp. Range	Discharge : -20 ~ 50ºC (-4 ~ 122ºF)	
	Charge : -20 ~ 50ºC (-4 ~ 122ºF)	
	Storage : -20 ~ 50ºC (-4 ~ 122ºF)	
Charge Method	Float use: 13.7~13.9V at 25ºC (77ºF)	
	Cycle use: 14.7~14.9V at 25ºC (77ºF)	
	Max charge current 7.85A	
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 1400

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 25ºC (77ºF)

Volts/cell	5min	15min	30min	1h	2h	3h	10h	20h
1.80V	153	91.7	65.1	40.9	24.1	17.3	5.74	3.19
1.75V	170	98.0	68.0	42.0	24.5	17.4	5.80	3.20
1.70V	185	102	68.5	42.6	24.9	17.6	5.86	3.21
1.65V	193	104	69.9	42.9	25.1	17.9	5.91	3.23
1.60V	199	107	71.3	43.2	25.2	18.0	5.97	3.25

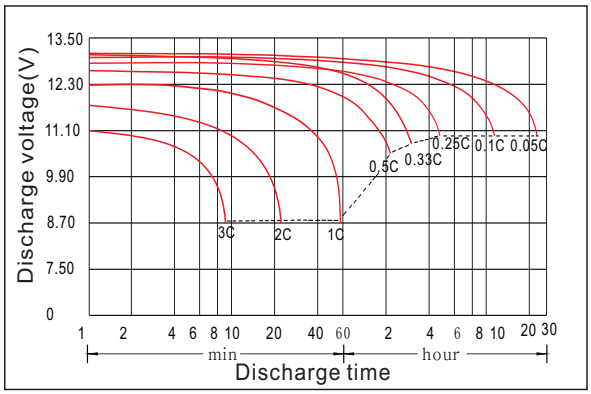
Constant Power Discharge (Watts per cell) at 25ºC (77ºF)

Volts/cell	5min	15min	30min	1h	2h	3h	10h	20h
1.80V	274	172	123	79.2	46.9	33.4	11.0	6.31
1.75V	298	182	127	79.9	47.0	33.5	11.2	6.34
1.70V	320	183	128	80.6	47.3	33.7	11.2	6.37
1.65V	321	185	128	81.3	47.5	33.9	11.4	6.40
1.60V	334	188	129	82.0	47.6	34.4	11.5	6.43

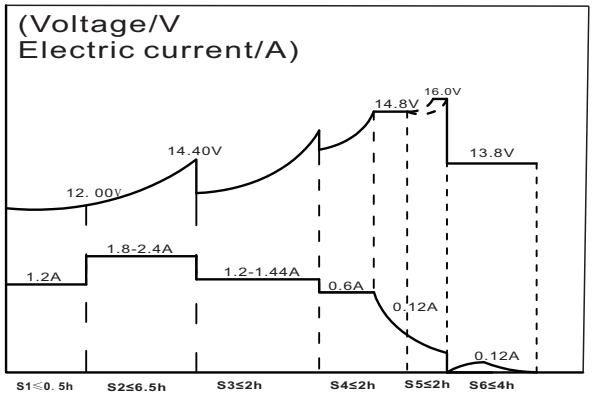
(Note) The above characteristics data are average values obtained within three charge/discharge cycles not the mimimum values.

KB1255EV 12V 52.3Ah C_3

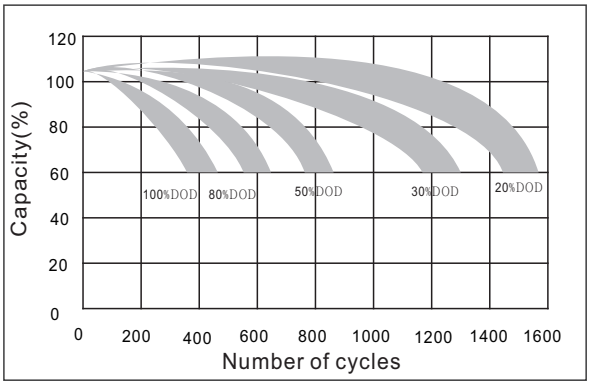
Disharging Characteristic



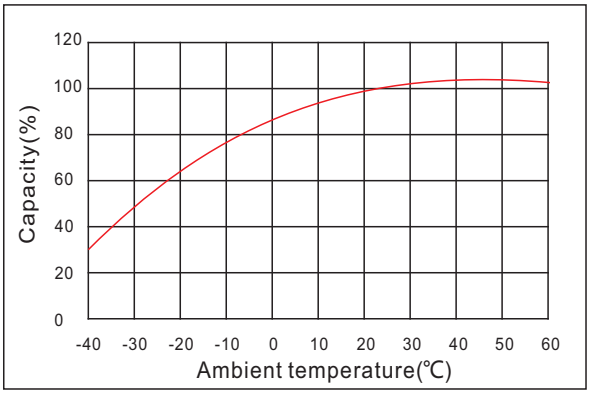
Charging Characteristics



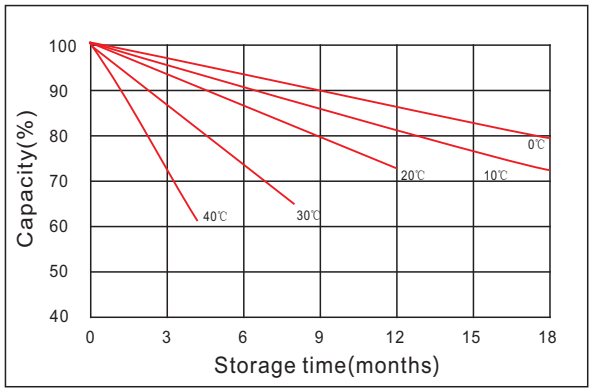
The effect of discharge depth on cycle life



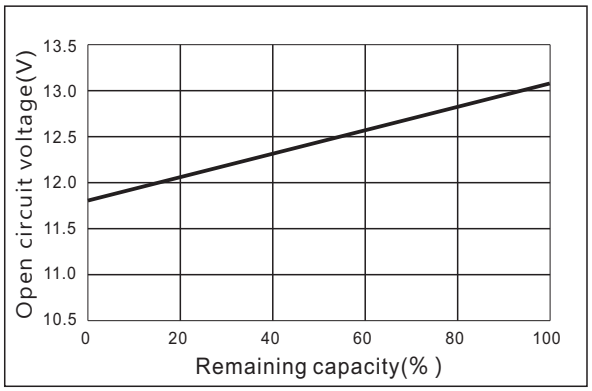
Temperature Effects on Capacity



Curves of self-discharge



Curves of open circuit voltage vs. capacity



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

2025/V/K

Contacto
customer.energy@tempelgroup.com
www.tempelgroup.com

Tempel Group en el mundo
HOUSTON · BARCELONA · MADRID · VALENCIA · BILBAO · SEVILLA · LISBOA · PORTO · ROMA · BUENOS AIRES · LIMA
SANTIAGO DE CHILE · BOGOTÁ · SÃO PAULO · CIUDAD DE MÉXICO · MONTERREY · CIUDAD DE PANAMÁ · MONTEVIDEO · QUITO