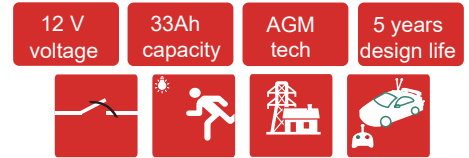


# KBL12330 12V 33Ah



Kaise Battery series are Top terminal VRLA AGM battery for General use. With advanced manufacturing technique and industry scale, KBL series delivers high energy density and high reliability performance, highly suited for UPS systems, security and alarm systems, telecommunication, utilities, emergency light systems, CATV and other backup applications.



## Technical Specifications

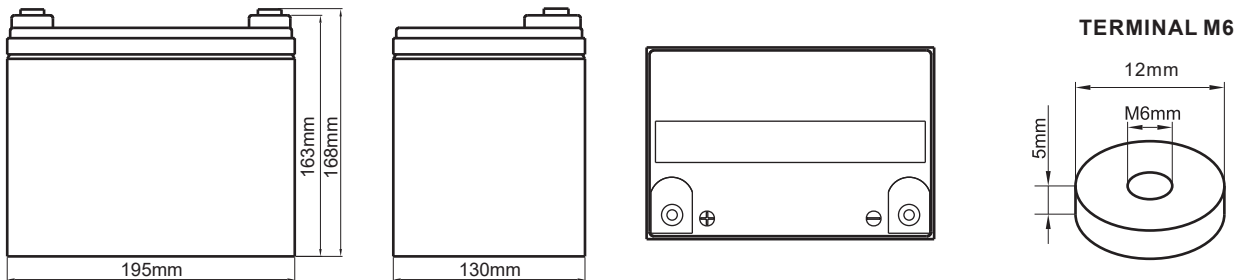
Nominal Voltage (V)	12 (6 cells per unit)
Designed Floating Life (25°C)	5 Years
Nominal Capacity (25°C)	33 Ah @ 20HR-rate (to 1.75Vpc)
Dimension (mm)	L195 x W130 x H168
Approx. Weight	10.5 Kg (23.1 lbs)
Terminal Type	Female Copper Insert M6 (torque: 6~8N.m)
Internal Resistance	Approx. 0.009 Ohm (fully charged @ 25°C)
Max. Charge Current	10A
Max. Discharge Current (5S)	400A
Short Circuit Current	1300A
Self Discharge	Approx. 2.5% per month @ 20°C
Ambient Temperature	Discharge: -20~55°C Charge: -20~50°C Storage: -20~45°C
Float Charge Voltage	13.6V @25°C (-3mV/cell/ C)
Equalize and cycle Use Charge Voltage	14.4V @25°C
Container Material	ABS (UL94-V0 optional)



## Complied standards

- IEC 60896-21/22
- GB/T19638
- JIS C8704
- BS6290 part 4

## Battery Dimensions



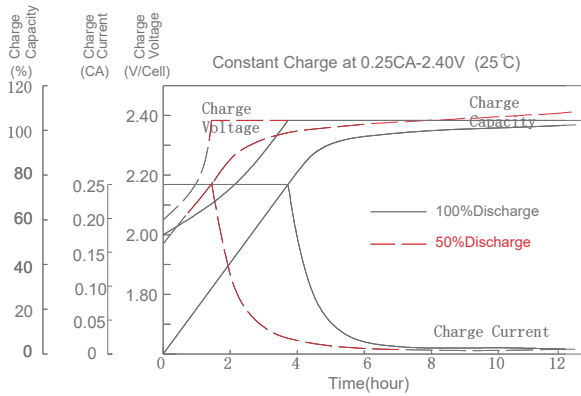
## Constant Current Discharge Characteristics: Amps (25°C)

FV/Time	5min	10min	15min	30min	1h	3h	4h	5h	10h	20h
1.60V	132	82.0	62.6	37.2	21.7	9.19	7.19	5.93	3.27	1.75
1.67V	123	79.2	60.4	36.4	21.5	9.09	7.08	5.87	3.23	1.72
1.70V	114	75.8	58.9	35.7	21.1	9.01	7.00	5.79	3.19	1.69
1.75V	104	72.4	57.4	34.9	20.8	8.92	6.92	5.71	3.16	1.65
1.80V	93.1	68.5	56.1	34.3	20.3	8.79	6.83	5.64	3.12	1.61
1.85V	82.4	64.5	54.6	33.6	20.0	8.68	6.76	5.59	3.08	1.57

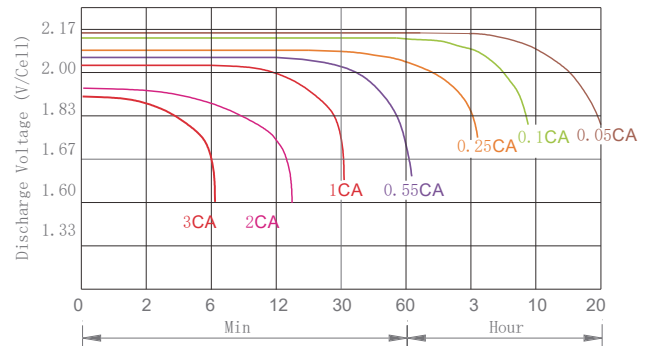
## Constant Power Discharge Characteristics: W/Cell (25°C)

FV/Time	5min	10min	15min	30min	1h	3h	4h	5h	10h	20h
1.60V	233	147	114	68.8	40.5	17.4	13.6	11.3	6.32	3.40
1.67V	219	144	111	67.6	40.2	17.3	13.5	11.2	6.28	3.36
1.70V	206	139	109	66.9	39.9	17.2	13.4	11.1	6.25	3.32
1.75V	190	134	108	66.0	39.5	17.1	13.3	11.0	6.22	3.28
1.80V	173	128	106	65.3	39.0	17.0	13.2	10.9	6.20	3.22
1.85V	155	123	104	64.7	38.4	16.9	13.1	10.8	6.15	3.16

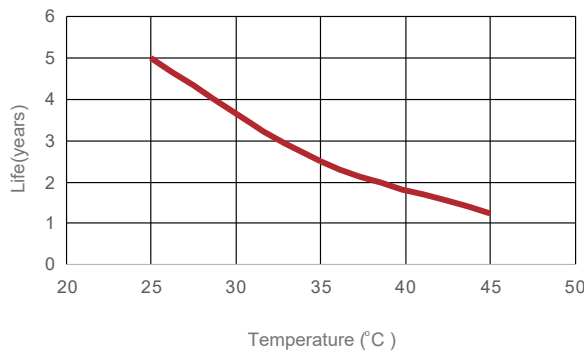
## Charge Characteristic



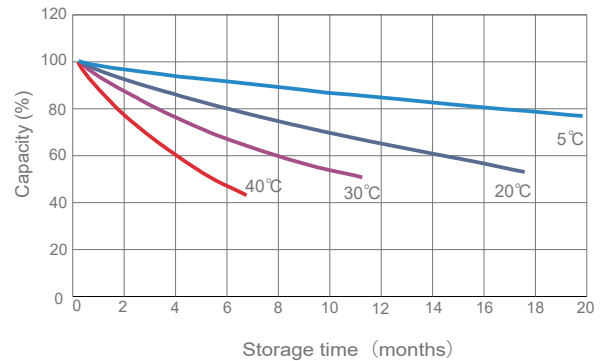
## Discharge Characteristic (25°C)



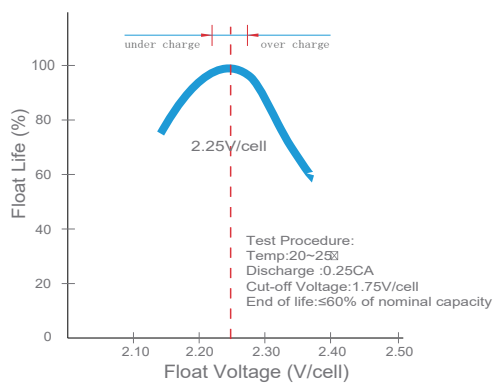
## Temperature vs Float Life



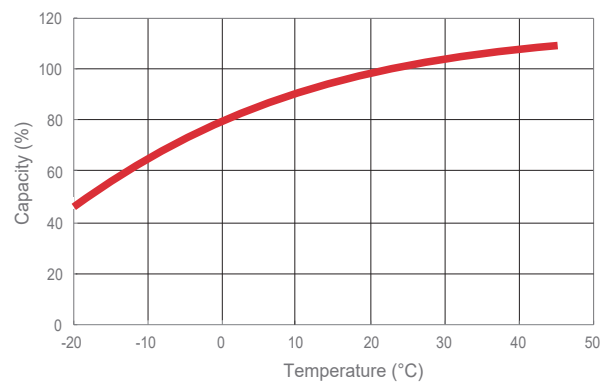
## Self discharge characteristics



## Float voltage vs Float life



## Capacity vs Temperature



## Final voltage settings recommended according to the discharge current

Discharge Current I (A)	$I \leq 0.08C$	$0.08C \leq I < 0.2C$	$0.2C \leq I < 0.6C$	$0.6C \leq I < 1.0C$	$I \geq 1.0C$
Final of Voltage	$\geq 1.85V_{pc}$	$\geq 1.80V_{pc}$	$\geq 1.75V_{pc}$	$\geq 1.70V_{pc}$	$\geq 1.60V_{pc}$