



# 6GFM33 (12V33Ah)

**KAIYING®** Standard battery is design for a general purpose by KaiYing Power. 6GFM33 is a general purpose battery up to 8 years in float service. As with all **KAIYING®** batteries, all are rechargeable highly efficient, leak proof and maintenance free.

## Specifications:

opeomouter.				
Cells per Unit	6			
Normal Voltage	12V			
Capacity	33Ah@10hr-rate to 1.80V per cell@25℃			
Weight	Approx.(10±3%) kg			
Maximum Discharge Current	330A(5sec)			
Internal Resistance	Approx. 9m $\Omega$ full charged @25 $^{\circ}$ C			
Operating Temperature Range	Discharge: -20℃~60℃			
	Charge: 0℃~50℃			
	Storage: -20°C~60°C			
Nominal Operating Temperature Range	25℃±3℃			
Float Charging Voltage	13.6~13.8VDC/unit Average @25 °C			
Maximum Charging Current	8.25A			
Equalization and Cycle Service	14.4V~15.0VDC/unit Average @ 25°C			
Self Discharge	KAIYING Valve Regulated Lead Acid (VRLA) batteries can be stored			
	for more than 6 months at 25°C(77°F). Self-discharge ratio less than 3%			
	per month at 25℃(77°F). Please charge batteries before using.			
Terminal	Terminal F9			
Container Material	ABS(UL94-HB)			
	*Flammability resistance of (UL94-V0) can be available upon request			



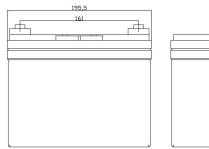


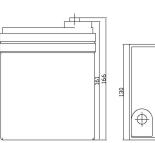


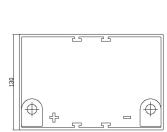


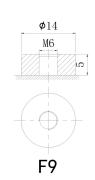


## **Dimensions:** L195.5\*W130\*H161(TH166)mm









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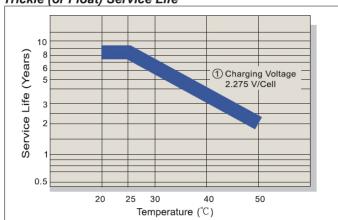
F.V/TIME	5min	10min	15min	30min	60min	2h	3h	5h	8h	10h	20h
9.60	98.3	81.2	63.8	38.8	21.5	12.9	9.71	6.23	4.02	3.35	1.76
9.90	95.4	78.7	62.5	38.0	21.0	12.8	9.67	6.20	4.00	3.33	1.75
10.2	93.4	77.1	61.2	37.2	20.6	12.7	9.57	6.14	3.98	3.32	1.74
10.5	88.0	74.7	59.3	36.1	19.9	12.6	9.47	6.08	3.97	3.31	1.74
10.8	80.6	72.5	58.1	35.4	19.6	12.5	9.38	6.02	3.96	3.30	1.73

# Constant Power Discharge Characteristics (Watt, 25 ${\mathcal C}$ )

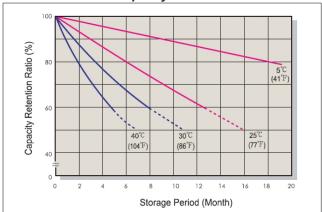
F.V/TIME	5min	10min	15min	30min	60min	2h	3h	5h	8h	10h	20h
9.60	1062	886	708	435	245	149	114.2	73.6	48.2	40.0	21.1
9.90	1030	860	686	426	240	149	113.7	73.3	48.0	39.8	21.0
10.2	1009	842	672	418	235	147	112.5	72.6	47.8	39.6	20.9
10.5	951	816	651	405	227	146	111.4	71.8	47.7	39.5	20.9
10.8	871	792	638	397	223	144	110.3	71.1	47.5	39.4	20.8



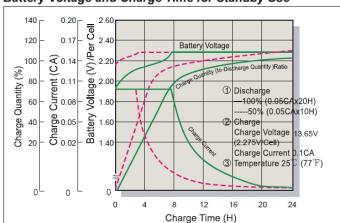
## Trickle (or Float) Service Life



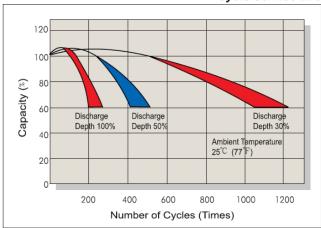
#### Capacity Retention Characteristic



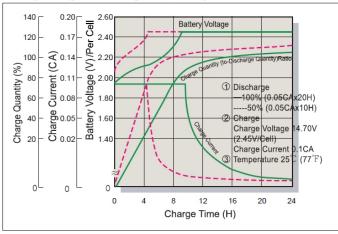
#### Battery Voltage and Charge Time for Standby Use



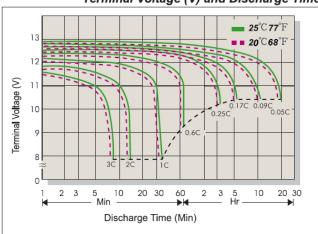
#### Cycle Service Life



#### Battery Voltage and Charge Time for Cycle Use



# Terminal Voltage (V) and Discharge Time



#### **Charging Procedures**

Application	Ch	Max. Charge		
Application	Temperature	Set Point	Allowable Range	Current
Cycle Use	25℃(77°F)	2.45	2.40~2.50	0.250
Standby	25℃(77°F)	2.275	2.25~2.30	0.25C

Discharge Current VS. Discharge Voltage

Final Discharge	1.75	1.70	1.65	1.60	
Voltage V/cell	1.75	1.70	1.03		
Discharge	0.20>(A)	0.2C<(A)	0.5C<(A)	(A)>1.00	
Current (A)	0.2C>(A)	<0.5C	<1.0C	(A)>1.0C	

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