



## 3FM42/B (6V42Ah)

**LONGWAY®** Standard battery is design for a general purpose by KaiYing Power. 3FM42 is a general purpose battery up to 8 years in float service or more than 260 cycles at 100% discharge in cycle service. As with all **LONGWAY®** batteries, all are rechargeable highly efficient, leak proof and maintenance free.



ISO 9001:2008 Standard



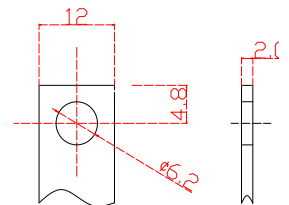
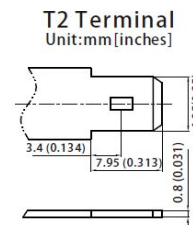
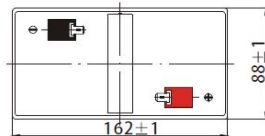
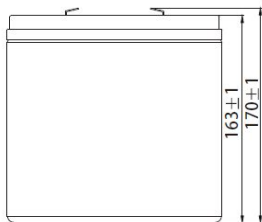
ISO 14001:2004 Standard



### Specifications:

Cells per Unit	3
Normal Voltage	6V
Capacity	42Ah@10Hr-rate to 1.80V per cell@25°C
Weight	Approx. (5.55±3%)kg(12.24bs)
Maximum Discharge Current	200A(5sec)
Internal Resistance	Approx. 4.2mΩ full charged @25°C
Operating Temperature Range	Discharge: -20°C~60°C Charge: 0°C~50°C Storage: -20°C~60°C
Nominal Operating Temperature Range	25°C±3°C
Float Charging Voltage	6.75~6.9VDC/unit Average @25°C
Maximum Charging Current	10.5A
Equalization and Cycle Service	7.20V~7.50VDC/unit Average @ 25°C
Self Discharge	LONGWAY Valve Regulated Lead Acid (VRLA) batteries can be stored for more than 6 months at 25°C. Self-discharge ratio less than 3% per month at 25°C. Please charge batteries before using.
Terminal	F2(0.250)/F4 (M6 Screw)
Container Material	ABS(UL94-HB) *Flammability resistance of (UL94-V0) can be available upon request

### Dimensions: L162\*W88\*H163(TH170)mm



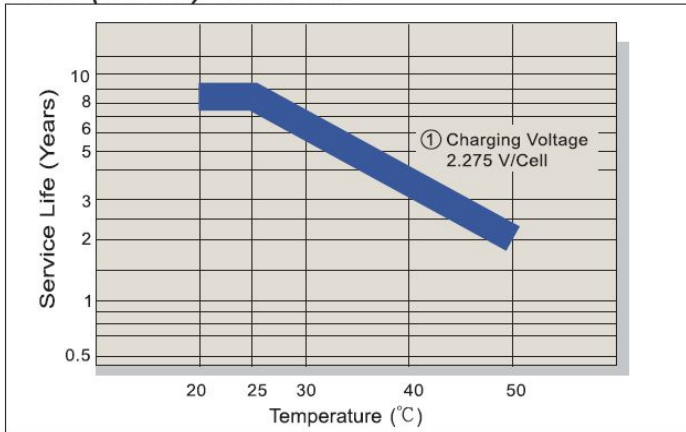
### Constaurent Discharge Characteristics (A, 25 °C)

F.V/TIME	5min	10min	15min	30min	60min	2h	3h	5h	8h	10h	20h
4.80	131	103	81.1	49.4	27.3	16.4	11.42	7.67	5.12	4.26	2.24
4.95	127	100	79.5	48.4	26.8	16.3	11.37	7.64	5.09	4.24	2.23
5.10	125	98	77.9	47.4	26.2	16.2	11.26	7.56	5.07	4.23	2.22
5.25	117	95	75.5	45.9	25.4	16.0	11.14	7.48	5.06	4.21	2.21
5.40	108	92	74.0	45.0	24.9	15.8	11.03	7.41	5.04	4.20	2.21

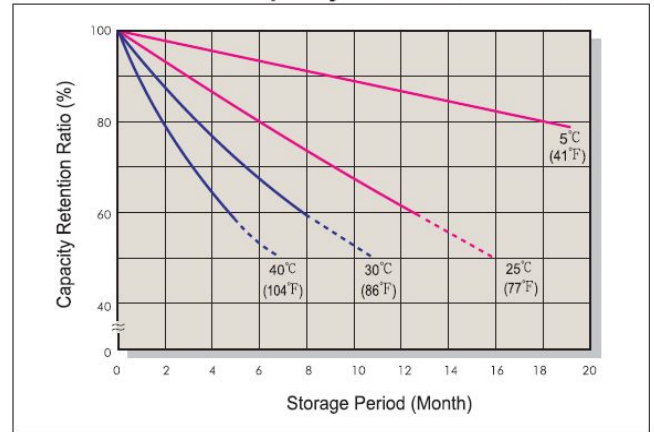
### Constant Power Discharge Characteristics (Watt, 25 °C)

F.V/TIME	5min	10min	15min	30min	60min	2h	3h	5h	8h	10h	20h
4.80	709	564	450	277	156	95.0	67.2	45.3	30.7	25.5	13.4
4.95	687	547	441	271	152	94.6	66.8	45.1	30.5	25.3	13.4
5.10	673	536	432	266	149	93.6	66.2	44.7	30.4	25.2	13.3
5.25	634	519	419	257	145	92.7	65.5	44.2	30.3	25.1	13.3
5.40	581	504	411	252	142	91.8	64.9	43.8	30.2	25.1	13.2

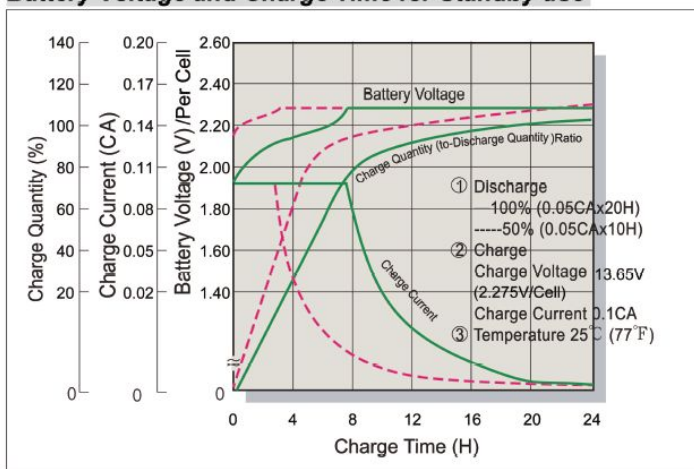
### Trickle (or Float) Service Life



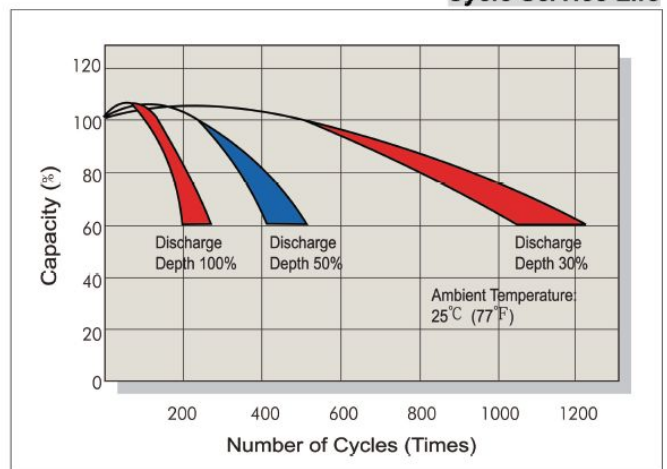
### Capacity Retention Characteristic



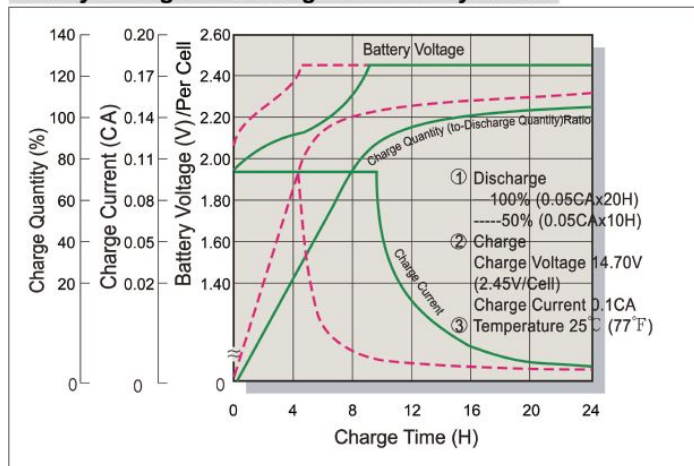
### Battery Voltage and Charge Time for Standby use



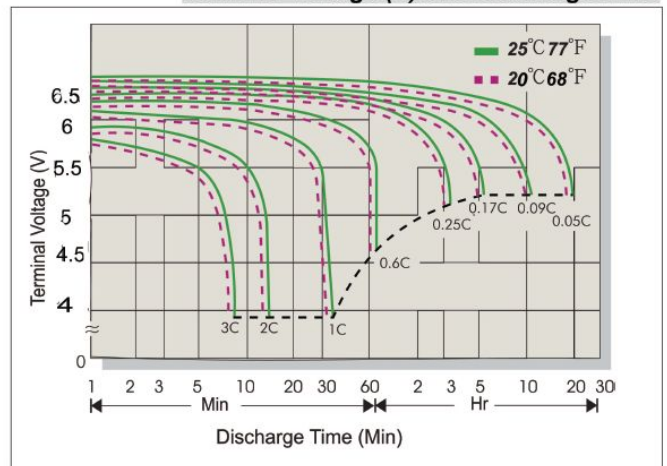
### Cycle Service Life



### Battery Voltage and Charge Time for Cycle Use



### Terminal Voltage (V) and Discharge Time



### Charging Procedures

Application	Charge Voltage(V/cell)			Max. Charge Current
	Temperature	Set Point	Allowable Range	
Cycle Use	25°C(77°F)	2.45	2.40~2.50	0.3C
Standby	25°C(77°F)	2.275	2.25~2.30	

### Discharge Current VS. Discharge Voltage

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

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