

# VOLTA

## BATTERIES

### 6-FMX (12V) Front Access VRLA Deep Cycle AGM Batteries

6-FMX Front Access VRLA Deep Cycle AGM Batteries deliver superior performance while occupying less space than conventional standby power batteries. This series is of compact design, suitable for 19 inch, 23 inch cabinet/rack, provides users with the benefit of increased energy density. Therefore it has an excellent performance in heat dissipation reducing greatly the possible thermal runaway. With electrical connections at the front, installation and inspection are safer, quicker and easier. It is designed using proven gas recombination VRLA technology, which removes the need for regular water addition by controlling the evolution of hydrogen and oxygen during charging. Each cell incorporates its own safety valve that allows automatically the controlled release of small amounts of gas when pressure builds up within the cell. This technology provides the user with the freedom to use valve regulated lead acid batteries in a wide range of applications. The product is suitable for service in telecom, UPS, Power plants, transmission substation, security system, microwave relay station, remote sensing device, emergency light system, mobile measuring equipment, power supply system, military facilities, railway signaling, solar PV street lights, garden lights, lawn lights, traffic lights, warning lights and auto control equipment.



**Power Management  
Instruments**



## 6-FMX (12V) Front Access VRLA Deep Cycle AGM Batteries

The 6FMX VRLA battery uses gas recombination, AGM technology. It is design for high energy desity front terminal telecom installations. 6FMX series battery is well suited for discharge 30 Mins up to 10 Hours.

### Application

- Telecom BTS : Wireless Applications.
- Outdoor Wire Line Cabinet.
- IT Net Work System.
- Broadband, Micro wave repeater and fiber optic regeneration site.
- Use in area with stable on - grid power supply.

### Product Features

- 12 Volt.
- Maintenance Free : No topping up during whole service life.
- High energy density allows more compact lay out.
- Non spillable.
- VRLA AGM and gas recombination technology with 98% internal recombination.
- Front terminal design for reduce headspace , high energy density and compact battery lay-out.
- One way safety valve.
- Flame retardant ABS container & cover.

### Electrical Charcteristics

Nominal voltage	: 12V.
Capacity range	: 75AH~ 180AH.
Self discharge	: < 2~3%/month at 25°C.
Operating temperature	: Discharge : - 40°C ~ 50°C. Charge : - 20°C ~ 45°C. Storage : - 20°C ~ 40°C.
Recommended temperature	: 25°C.
Design life	: 7 year (in float operation in temperature controlled environment).
Standby use float voltage	: 13.50V.
Cycle use voltage	: 14.10V.

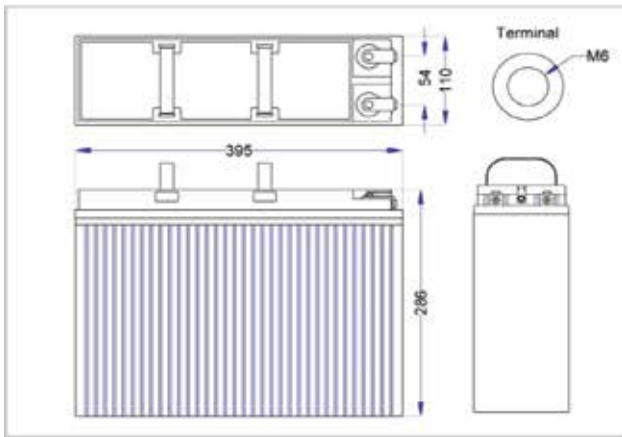
### Standard

- ISO9001
- ISO14001
- IEC 60896-21 & 22

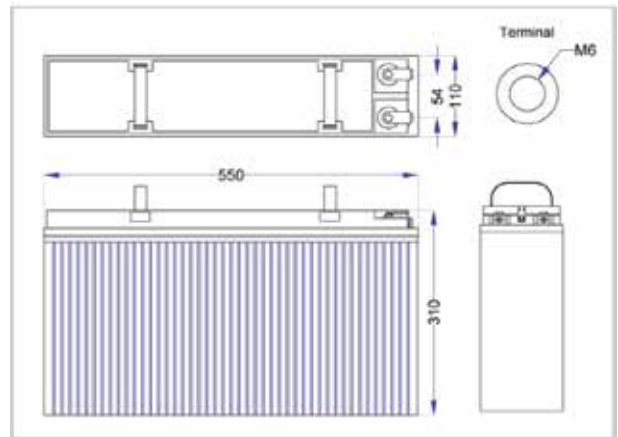
### Main Specification & Type

Type	Voltage (V)	Rated Capacity (AH)			Dimensions (mm)			Total Weight (Kg)
		C10 F.V= 1.8V/cell	C5 F.V= 1.75V/cell	C1 F.V= 1.65V/cell	L±2	W±2	H±3	
6FMX75B	12	75	69	48	395	110	286	26
6FMX100B	12	100	92	63	395	110	286	32
6FMX120B	12	120	115	79	550	110	310	40
6FMX150B	12	150	138	95	550	110	310	48
6FMX150C	12	155	142	98	557	125	315	53
6FMX180B	12	180	166	114	557	125	315	60

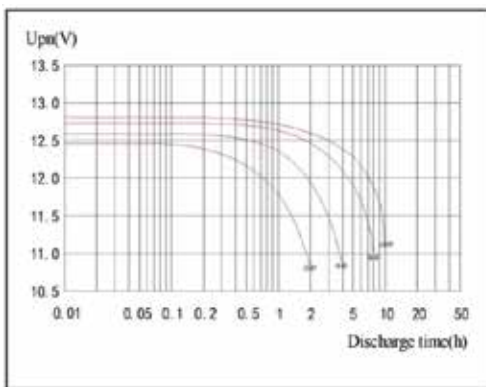
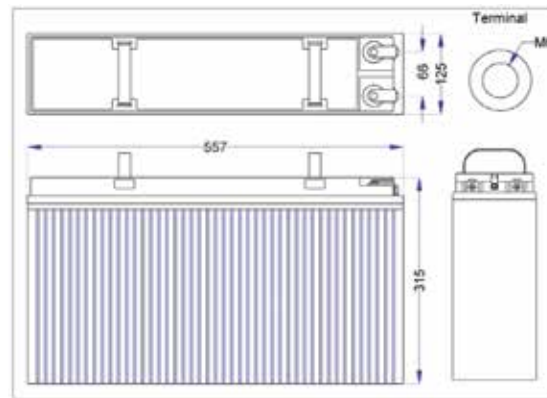
6FMX75B~6FMX100B



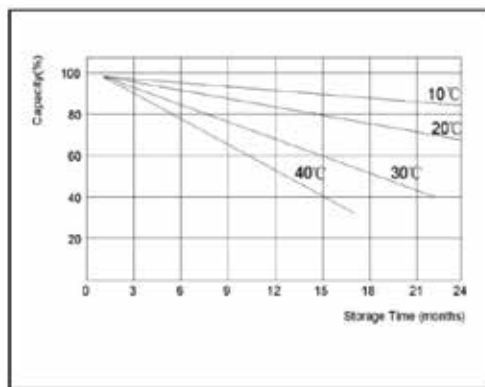
6FMX125B~6FMX150B



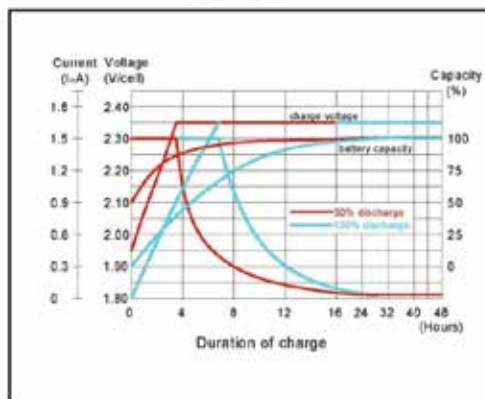
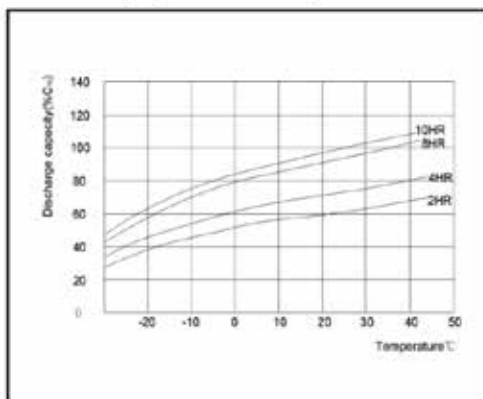
6FMX150C~6FMX180B



Capacity at Different Temperature



Constant Voltage Charge Characteristics



6FMX75B	Discharge Rates in Ampere to Various End Voltage at 25°C									
	Final Voltage (V/Cell)	Min	Hour							
		30	1	2	3	4	5	6	8	10
	1.70	79.35	44.20	28.90	21.85	17.30	13.55	11.35	9.15	7.60
	1.75	75.00	42.80	28.55	21.45	17.05	13.40	11.25	9.10	7.55
	1.80	71.00	41.90	28.25	21.00	16.85	13.20	11.15	9.05	7.50
	1.83	67.90	40.10	27.90	20.70	16.75	13.10	11.10	9.00	7.45
	1.85	65.50	38.95	27.65	20.50	16.60	13.00	11.05	8.95	7.45
	Discharge Rates in Watt to Various End Voltage at 25°C									
	Final Voltage (V/Cell)	Min	Hour							
30		1	2	3	4	5	6	8	10	
1.70	143.85	82.10	55.40	42.65	32.30	26.90	22.35	18.30	15.20	
1.75	137.85	80.65	55.05	42.05	32.00	26.70	22.20	18.10	15.10	
1.80	131.90	79.75	54.75	41.35	31.55	26.40	22.00	18.05	15.05	
1.83	127.55	77.10	54.40	41.05	31.30	26.20	21.85	18.00	15.00	
1.85	124.75	75.25	54.10	40.75	31.10	26.05	21.75	17.95	14.95	

6FMX100B	Discharge Rates in Ampere to Various End Voltage at 25°C									
	Final Voltage (V/Cell)	Min	Hour							
		30	1	2	3	4	5	6	8	10
	1.70	105.80	58.93	38.53	29.13	23.07	18.07	15.13	12.20	10.13
	1.75	100.00	57.07	38.07	28.60	22.73	17.87	15.00	12.13	10.07
	1.80	94.67	55.87	37.67	28.00	22.47	17.60	14.87	12.07	10.00
	1.83	90.53	53.47	37.20	27.60	22.33	17.47	14.80	12.00	9.93
	1.85	87.33	51.93	36.87	27.33	22.13	17.33	14.73	11.93	9.93
	Discharge Rates in Watt to Various End Voltage at 25°C									
	Final Voltage (V/Cell)	Min	Hour							
30		1	2	3	4	5	6	8	10	
1.70	191.80	109.47	73.87	56.87	43.07	35.87	29.80	24.40	20.27	
1.75	183.80	107.53	73.40	56.07	42.67	35.60	29.60	24.13	20.13	
1.80	175.87	106.33	73.00	55.13	42.07	35.20	29.33	24.07	20.07	
1.83	170.07	102.80	72.53	54.73	41.73	34.93	29.13	24.00	20.00	
1.85	166.33	100.33	72.13	54.33	41.47	34.73	29.00	23.93	19.93	

6FMX120B	Discharge Rates in Ampere to Various End Voltage at 25°C									
	Final Voltage (V/Cell)	Min	Hour							
		30	1	2	3	4	5	6	8	10
	1.70	132.25	73.67	48.17	36.42	28.83	22.58	18.92	15.25	12.67
	1.75	125.00	71.33	47.58	35.75	28.42	22.33	18.75	15.17	12.58
	1.80	118.33	69.83	47.08	35.00	28.08	22.00	18.58	15.08	12.50
	1.83	113.17	66.83	46.50	34.50	27.92	21.83	18.50	15.00	12.42
	1.85	109.17	64.92	46.08	34.17	27.67	21.67	18.42	14.92	12.42
	Discharge Rates in Watt to Various End Voltage at 25°C									
	Final Voltage (V/Cell)	Min	Hour							
30		1	2	3	4	5	6	8	10	
1.70	239.75	136.83	92.33	71.08	53.83	44.83	37.25	30.50	25.33	
1.75	229.75	134.42	91.75	70.08	53.33	44.50	37.00	25.17	25.17	
1.80	219.83	132.92	91.25	68.92	52.58	44.00	36.67	25.08	25.08	
1.83	212.58	128.50	90.67	68.42	52.17	43.67	36.42	25.00	25.00	
1.85	207.92	125.42	90.17	67.92	51.83	43.42	36.25	24.92	24.92	

6FMX150B	Discharge Rates in Ampere to Various End Voltage at 25°C									
	Final Voltage (V/Cell)	Min	Hour							
		30	1	2	3	4	5	6	8	10
	1.70	158.70	88.40	57.80	43.70	34.60	27.10	22.70	18.30	15.20
	1.75	150.00	85.60	57.10	42.90	34.10	26.80	22.50	18.20	15.10
	1.80	142.00	83.80	56.50	42.00	33.70	26.40	22.30	18.10	15.00
	1.83	135.80	80.20	55.80	41.40	33.50	26.20	22.20	18.00	14.90
	1.85	131.00	77.90	55.30	41.00	33.20	26.00	22.10	17.90	14.90
	Discharge Rates in Watt to Various End Voltage at 25°C									
	Final Voltage (V/Cell)	Min	Hour							
30		1	2	3	4	5	6	8	10	
1.70	287.70	164.20	110.80	85.30	64.60	53.80	44.70	36.60	30.40	
1.75	275.70	161.30	110.10	84.10	64.00	53.40	44.40	30.20	30.20	
1.80	263.80	159.50	109.50	82.70	63.10	52.80	44.00	30.10	30.10	
1.83	255.10	154.20	108.80	82.10	62.60	52.40	43.70	30.00	30.00	
1.85	249.50	150.50	108.20	81.50	62.20	52.10	43.50	29.90	29.90	

6FMX150C	Discharge Rates in Ampere to Various End Voltage at 25°C									
	Final Voltage (V/Cell)	Min	Hour							
		30	1	2	3	4	5	6	8	10
	1.70	166.64	92.82	60.69	45.89	36.33	28.46	23.84	19.22	15.96
	1.75	157.50	89.88	59.96	45.05	35.81	28.14	23.63	19.11	15.86
	1.80	149.10	87.99	59.33	44.10	35.39	27.72	23.42	19.01	15.75
	1.83	142.59	84.21	58.59	43.47	35.18	27.51	23.31	18.90	15.65
	1.85	137.55	81.80	58.07	43.05	34.86	27.30	23.21	18.80	15.65
	Discharge Rates in Watt to Various End Voltage at 25°C									
	Final Voltage (V/Cell)	Min	Hour							
30		1	2	3	4	5	6	8	10	
1.70	302.09	172.41	116.34	89.57	67.83	56.49	46.94	38.43	31.92	
1.75	289.49	169.37	115.61	88.31	67.20	56.07	46.62	31.71	31.71	
1.80	276.99	167.48	114.98	86.84	66.26	55.44	46.20	31.61	31.61	
1.83	267.86	161.91	114.24	86.21	65.73	55.02	45.89	31.50	31.50	
1.85	261.98	158.03	113.61	85.58	65.31	54.71	45.68	31.40	31.40	

6FMX180B	Discharge Rates in Ampere to Various End Voltage at 25°C									
	Final Voltage (V/Cell)	Min	Hour							
		30	1	2	3	4	5	6	8	10
	1.70	190.4	106.1	69.4	52.4	41.5	32.5	27.2	22.0	18.2
	1.75	180.0	102.7	68.5	51.5	40.9	32.2	27.0	21.8	18.1
	1.80	170.4	100.6	67.8	50.4	40.4	31.7	26.8	21.7	18.0
	1.83	163.0	96.2	67.0	49.7	40.2	31.4	26.6	21.6	17.9
	1.85	157.2	93.5	66.4	49.2	39.8	31.2	26.5	21.5	17.9
	Discharge Rates in Watt to Various End Voltage at 25°C									
	Final Voltage (V/Cell)	Min	Hour							
30		1	2	3	4	5	6	8	10	
1.70	345.2	197.0	133.0	102.4	77.5	64.6	53.6	43.9	36.5	
1.75	330.8	193.6	132.1	100.9	76.8	64.1	53.3	36.2	36.2	
1.80	316.6	191.4	131.4	99.2	75.7	63.4	52.8	36.1	36.1	
1.83	306.1	185.0	130.6	98.5	75.1	62.9	52.4	36.0	36.0	
1.85	299.4	180.6	129.8	97.8	74.6	62.5	52.2	35.9	35.9	

\*All data and specifications are subject to change without any prior notice.



Pakistan Accumulators (Pvt) Limited

Factory: Plot # 20, 21, 22 Phase III, Industrial Estate, Hattar, Distt. Haripur KPK, Pakistan  
UAN: +92-51-111-22-00-22, Fax: +92-51-2855164 | URL: www.volta.com.pk | Email: VRLA@volta.com.pk