

## Basic Specifications

Voltage:	12 Volt
Capacity:	20 hour rate: 60Ah 10 hour rate: 58h 5 hour rate: 52 Ah
Design life:	10 years
Appr. dimensions:	228x138x212/213mm (LxWxH)
Terminal:	M6
Container & lid:	Flame retardant ABS
Internal Resistance:	5.8mΩ (Fully charged)
Approximate weight:	17.3kg
Max charge current:	18A
Max discharge current:	550A (5 sec.)
Operating temp. range:	-20°C ~ +50°C
Self discharge:	lower than 3% per month

## Typical Applications

- UPS / Emergency Power
- Evacuation system
- Security systems
- Traffic systems
- Data center
- Telecommunication
- Hospitals

## Discharge data in Watts per cell (25°C)

	(V/cell)	5 Min	10 Min	15 Min	30 Min	1 Hr	3 Hr	5 Hr	10 Hr	20 Hr
End Voltage	1.80V	397	235	177	115	70,6	28,8	19,2	10,70	5,66
	1.75V	422	250	189	123	75,1	30,7	20	11,40	6,02
	1.70V	432	255	193	126	76,8	31,3	20,8	11,60	6,15
	1.65V	437	258	195	127	77,7	31,7	-	-	-
	1.60V	441	261	197	128	78,5	32,0	-	-	-

## Discharge data in Amperes (25°C)

	(V/cell)	5 Min	10 Min	15 Min	30 Min	1 Hr	3 Hr	5 Hr	10 Hr	20 Hr
End Voltage	1.80V	192	125,0	99,3	61,4	36,7	15,2	9,93	5,4	2,8
	1.75V	204	134	106,0	65,4	39,0	16,1	10,60	5,76	2,98
	1.70V	208	136	108,0	66,8	39,9	16,5	10,8	5,9	3,04
	1.65V	211	138	109,0	67,6	40,4	16,7	-	-	-
	1.60V	213	140	110,0	68,3	40,8	16,9	-	-	-

## Long Life series

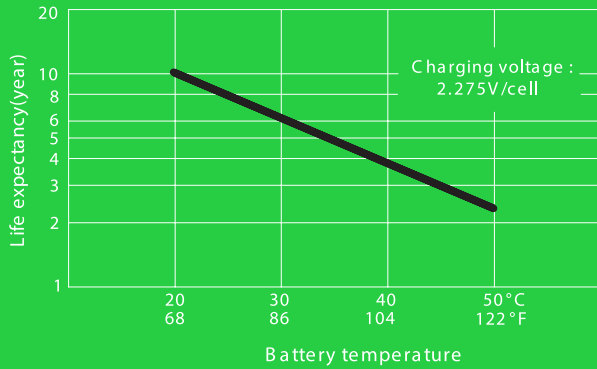
These VRLA batteries use thicker plates than the standard 4-5 year models. The electrolyte is absorbed by the AGM separators and plates and therefore these batteries can be mounted in any position. The one-way valve allow gases to escape, avoiding excessive pressure build-up in the case of accidentally overcharge.

The pbq Long Life series: a range of standard shaped Long Life batteries with a functional life of 10-years for standby applications in accordance to the EUROBAT "High Performance" specifications.

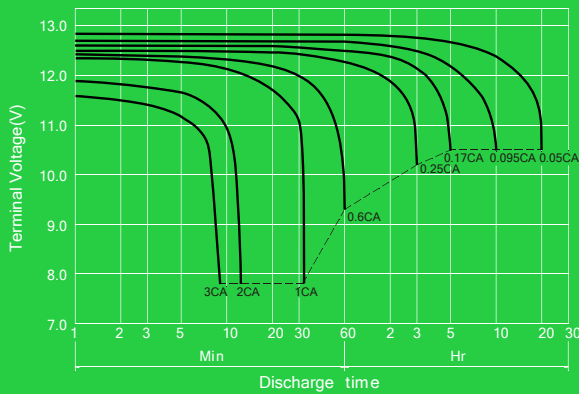
### General Features of the pbq Long Life series

- Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom.
- from electrolyte maintenance or water adding.
- Not restricted for air transport-complies with IATA/ICAO Special Provision A67
- Can be mounted in any position
- Computer designed lead, calcium tin alloy grid for high power density
- Long service life, float or cyclic applications. Maintenance free operation
- Low self discharge
- Flame retardant ABS, UL94V-0 / 92-2
- International Standard, JIS and DIN
- High Reliability and Good Quality
- Deep Discharge Recovery
- High Power Density

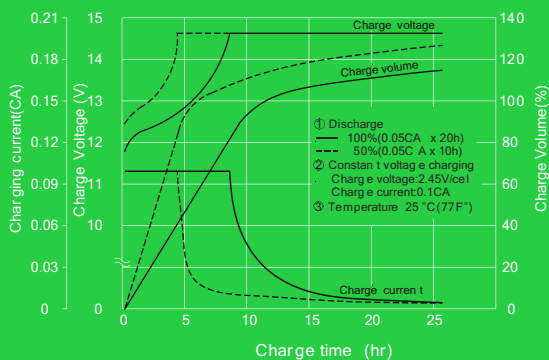
### Effect of Temperature on Long term Float Life



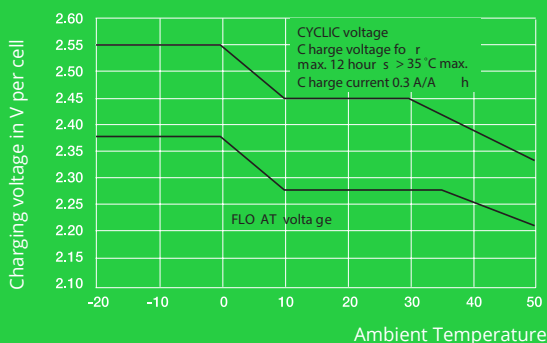
### Discharge Time VS. Discharge Current (25°C)



### Battery Charging Characteristics



### Charging voltage and temperature



### Models available

Model pbq	Capacity in Ah	Dimensions (±2mm) (LxWxH1/H2)	Weight
pbq L 7-12	7	151x65x100mm	2.5 kg
pbq L 9-12	9	151x65x102mm	2.7 kg
pbq L 12-12	12	151x98x101mm	3.7 kg
pbq L 17-12	17	181x77x167mm	5.5 kg
pbq L 28-12	28	168x178x124mm	8.4 kg
pbq L 33-12	33	195x130x160mm	10.7 kg
pbq L 40-12	40	198x167x157mm	13.8 kg
pbq L 55-12	55	229x138x213mm	17.3 kg
pbq L 65-12	65	350x167x179mm	23.4 kg
pbq L 80-12	80	350x167x179mm	22.5 kg
pbq L 100-12	100	330x171x220mm	32 kg
pbq L 120-12	120	410x176x227mm	38 kg
pbq L 150-12	150	482x170x240mm	47 kg
pbq L 200-12	200	522x238x223mm	65 kg
pbq L 230-12	230	520x269x208mm	72.6 kg



### Certificates



### Features

- Absorbent Glassmat Technology
- Low self discharge
- Classified as non-spillable and Non Dangerous goods by IATA, FAA, ADR, IMDG
- Can be discharged or stored in any position without leakage
- Cannot be charged while the terminal is downward.