

# Valve Regulated Lead Acid Batteries



## FEATURES

- High quality and reliability
- Exceptional deep discharge recovery
- No corrosive gas generation
- Long service life
- Quick chargeability
- High power density
- Maintenance-free operation

## APPLICATIONS

- UPS (uninterruptible power supplies)
- Emergency lighting
- Wheelchairs
- Telecom back-up power supplies
- Lawn and garden tools
- Engine starters
- Energy storage

## GENERAL DESCRIPTION

Panasonic's tough valve regulated lead acid (VRLA) rechargeable batteries are designed to provide outstanding performance in withstanding overcharge, overdischarge, and resisting vibration and shock. These compact batteries save installation space while providing full and reliable power. The use of special sealing epoxies, tongue and groove case construction, long-sealing paths for posts and connectors assures that the battery will offer exceptional leak resistance.

Panasonic VRLA batteries utilize pasted lead-calcium plates with the electrolyte in the battery held captive in an Absorbent Glass Mat (AGM) separator located between the plates that immobilizes the electrolyte in the cell. AGM separator material is a highly porous, absorbent micro fiberglass mat mixed with polymer fibers that immobilizes the electrolyte and creates a situation where a spill of electrolyte is highly unlikely.

Panasonic Valve Regulated Lead Acid batteries (weighing less than 2 lbs) are covered by the Rechargeable Battery Recycling Corporation's (RBRC) recycling program. For larger batteries call 1-800-SAV-LEAD.



## BACK-UP AND MAIN POWER SUPPLIES (CYCLE AND TRICKLE USE)

Model Number*	Nominal Voltage (V)	Rated capacity 20 hours rate (Ah)	Outline dimensions inch (mm)				Wt. (Approx.) lbs (kg)	Terminal Types	Battery-case resin	
			Length	Width	Height	Total height			UL94HB	UL94V-0
LC-R061R3P	6	1.3	3.82 (97)	0.95 (24)	1.97 (50)	2.17 (55)	0.66 (0.30)	B	○	
LC-R063R4P	6	3.4	5.28 (134)	1.34 (34)	2.36 (60)	2.6 (66)	1.37 (0.62)	B	○	
LC-R064R5P	6	4.5	2.76 (70)	1.89 (48)	4.02 (102)	4.26 (108)	1.72 (0.78)	B	○	
LC-R067R2P(a)	6	7.2	5.95 (151)	1.34 (34)	3.70 (94)	3.94 (100)	2.78 (1.26)	B/C	○	
LC-R0612P(a)	6	12.0	5.95 (151)	1.97 (50)	3.70 (94)	3.94 (100)	4.30 (1.95)	B/C	○	
LC-R121R3P	12	1.3	3.82 (97)	1.87 (48)	1.97 (50)	2.17 (55)	1.30 (0.59)	B	○	
LC-R122R2P	12	2.2	6.97 (177)	1.34 (34)	2.36 (60)	2.6 (66)	1.76 (0.80)	B	○	
LC-R123R4P	12	3.4	5.28 (134)	2.64 (67)	2.36 (60)	2.6 (66)	2.65 (1.20)	B	○	
LC-R127R2P(a)	12	7.2	5.95 (151)	2.54 (64.5)	3.70 (94)	3.94 (100)	5.45 (2.47)	B/C	○	
LC-RA1212P(a)	12	12.0	5.95 (151)	3.86 (98)	3.70 (94)	3.94 (100)	8.36 (3.80)	B/C	○	
LC-RD1217P	12	17.0	7.13 (181)	2.99 (76)	6.58 (167)	6.58 (167)	14.34 (6.50)	D	○	
LC-R1233P	12	33.0	7.70 (195.6)	5.12 (130)	6.10 (155)	7.09 (180)	26.50 (12.0)	E	○	●

\* Previous model number is given in parentheses

(a) Add applicable codes for terminal type: P = faston 187, P1 = faston 250

Note: Battery cases marked with a (○) are the normal product using the standard resin.

Those marked with a solid circle (●) indicate specifications as per special order.

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## MAIN POWER SUPPLIES (CYCLE USE)

Model Number	Nominal Voltage (V)	Rated capacity 20 hours rate (Ah)	Outline dimensions inch (mm)				Wt. (Approx.) lbs (kg)	Terminal Types	Battery-case resin	
			Length	Width	Height	Total height			UL94HB	UL94V-0
LC-XC1228AP	12	28.0	6.50 (165)	4.92 (125)	6.89 (175)	7.07 (179.5)	24.34 (11)	G	○	

Note: Battery cases marked with an ○ are the normal product using the standard resin. Those marked with a solid circle ● indicate specifications as per special order.

## BACK-UP POWER SUPPLIES (LONG LIFE TRICKLE USE \*)

Model Number	Nominal Voltage (V)	Rated capacity 20 hours rate (Ah)	Outline dimensions inch (mm)				Wt. (Approx.) lbs (kg)	Terminal Types	Battery-case resin	
			Length	Width	Height	Total height			UL94HB	UL94V-0
LC-P067R2P(a)	6	7.2	5.95 (151)	1.34 (34)	3.70 (94)	3.94 (100)	2.87 (1.3)	B/C		
LC-P0612P(a)	6	12.0	5.95 (151)	1.97 (50)	3.70 (94)	3.94 (100)	4.41 (2.0)	B/C		
LC-P127R2P(a)	12	7.2	5.95 (151)	2.54 (64.5)	3.70 (94)	3.94 (100)	5.52 (2.5)	B/C		○
LC-PD1217P	12	17.0	7.13 (181)	2.99 (76)	6.58 (167)	6.58 (167)	14.34 (6.5)	D	●	
LC-P1220P	12	20.0	7.13 (181)	2.99 (76)	6.58 (167)	6.58 (167)	14.6 (6.6)	D	○	
LC-P1220AP	12	20.0	7.13 (181)	2.99 (76)	6.58 (167)	6.58 (167)	14.6 (6.6)	G	●	
LC-P1228P	12	28.0	6.50 (165)	4.92 (125)	6.89 (175)	7.07 (179.5)	24.3 (11)	D	○	
LC-P1228AP	12	28.0	6.50 (165)	4.92 (125)	6.89 (175)	6.89 (175)	24.3 (11)	G	○	●

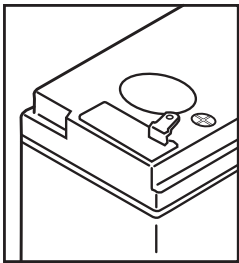
(a) Add applicable codes for terminal type: P = faston 187, P1 = faston 250, P2 = 187/250  
 Note: Battery cases marked with an ○ are the normal product using the standard resin. Those marked with a solid circle ● indicate specifications as per special order.

\*Expected trickle life approximately 6 years

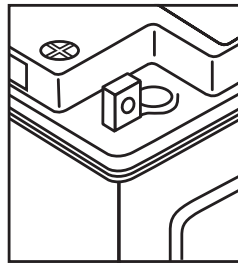
## BACK-UP POWER (HIGH POWER SERIES)

Model Number	Nominal Voltage (V)	Rated capacity Watts/Cell at 10 Minute Rate	Outline dimensions inch (mm)				Wt. (Approx.) lbs (kg)	Terminal Types	Battery-case resin	
			Length	Width	Height	Total height			UL94HB	UL94V-0
UP-VW1220P1	12	20	5.51 (140)	1.52 (38.5)	3.70 (94)	4.00 (101.5)	2.98 (1.35)	C	○	●
UP-VW1245P1	12	45	5.95 (151)	2.54 (64.5)	3.70 (94)	4.00 (101.5)	5.74 (2.6)	C	○	
UP-VW1228P1	12	28	5.95 (151)	2.54 (64.5)	3.70 (94)	4.00 (101.5)	4.07 (1.85)	C		
UP-VW1236P1	12	36	5.95 (151)	2.54 (64.5)	3.70 (94)	4.00 (101.5)	4.51 (2.05)	C		

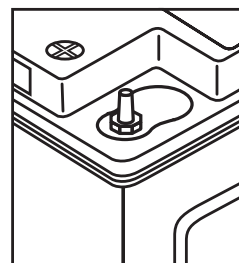
### TERMINAL TYPES:



(B) Faston type 187  
 (C) Faston type 250  
 Indicated by model # suffix:  
 P=187  
 P1=250  
 P2=250(+)/187(-)



(D) M5 bolt and nut type  
 (E) M6 bolt and nut type  
 Indicated by model # suffix: P



(G) M5 threaded post type  
 (H) M6 threaded post type  
 Indicated by model # suffix: AP

## WIND TURBINE PITCH CONTROL

Model Number	Nominal Voltage (V)	Rated capacity Watts/Cell at 10 Minute Rate	Outline dimensions inch (mm)				Wt. (Approx.) lbs	Terminal Types	Battery-case resin	
			Length	Width	Height	Total height			UL94HB	UL94V-0
LC-WTV127R2	12	7.2	5.95	2.53	3.71	3.94	5.51	NA		●
LC-WTV1212	12	12	5.95	3.86	3.71	3.94	8.49	NA		●
LC-WTP127R2	12	7.2	5.95	2.53	3.71	3.94	5.51	NA		●
LC-WTP1212	12	12	5.95	3.86	3.71	3.94	8.49	NA		●