PowerSafe® RL

Renewables, Telecommunications and Utility

Battery Range Summary

The PowerSafe® RL series of nickel-cadmium (Ni-Cd) batteries are specifically designed for low rates of discharge over long periods where the current is relatively low in comparison to the total amp hour rating. The pocket plate design and Ni-Cd chemistry provide exceptionally long life at extreme temperatures. This coupled with the inherent low maintenance requirements make the PowerSafe RL battery series an ideal choice for renewables, telecommunications and complex duty cycle applications.

The robust design means an excellent resistance against electrical and mechanical stress, low risk of terminal degradation and a proven 20 plus year service life. This combination and extensive use in service make the PowerSafe RL battery the right choice for industrial applications requiring superior reliability and the highest safety integrity covering discharges of one hour to 100 hours.

Features and Benefits

- Capacity range 11 - 1700Ah
- Single one piece container construction
- Ni-Cd pocket plate design
- Long storage and shelf life
- Wide operating temperature
- Low risk of terminal degradation
- Translucent plastic case for visible electrolyte level verification
- Proven 20 plus year service life

Construction

- Robust construction means low risk of terminal degradation
- Electrolyte reserve reduces watering requirements
- Dual post seal minimizes carbon formation
- Plate lugs are connected to post by bolting or welding
- Spacer plate prevents movement of the cell pack
- Corrugated and perforated separator allows for free circulation of the electrolyte
- Dilute potassium hydroxide electrolyte
- Gas drying / flame arresting vent standard

Installation and Operation

- Optimized for low rate discharges between 1 and 100 hours
- Cells can be stored for long durations without damage
- Translucent case allows for electrolyte level verification
- Proven long service life with 20 plus years in stationary applications
- Operating temperature: -22°F (-30°C) to 122°F (50°C) Recommended temperature: 32ºF (0ºC) to 104ºF (40ºC)

Standards

- Conforms to EN60623
- Conforms to IEC60623
- The management systems governing the manufacture of this product are ISO 9001:2008 and ISO 14001:2004 certified

General Specifications

		Nominal Dimensions						Weight - Volumes					
Cell Type	Nominal Ah Capacity*	Length		Width		Height		Unpacked		Electrolyte only 1.200 S.G.			
		in	mm	in	mm	in	mm	lbs	kg	lbs	kg	gal	liters
RL 11	11	1.8	46	3.3	85	9.3	237	2.6	1.2	0.9	0.4	0.09	0.3
RL 18	18	1.8	46	3.3	85	9.3	237	2.9	1.3	0.9	0.4	0.09	0.3
RL 24	24	1.8	46	3.3	85	9.3	237	3.1	1.4	0.7	0.3	0.07	0.2
RL 30	30	1.8	46	3.3	85	9.3	237	3.3	1.5	0.4	0.2	0.04	0.2
RL 40	40	3.3	85	3.3	85	9.3	237	5.5	2.5	1.5	0.7	0.15	0.6
RL 45	45	3.3	85	3.3	85	9.3	237	5.7	2.6	1.5	0.7	0.15	0.6
RL 55	55	3.3	85	3.3	85	9.3	237	5.9	2.7	1.3	0.6	0.13	0.5
RL 65	65	3.3	85	3.3	85	9.3	237	6.2	2.8	1.1	0.5	0.11	0.4
RL 80	80	2.7	69	5.3	134	14.3	364	11.2	5.1	3.7	1.7	0.37	1.4
RL 100	100	2.7	69	5.3	134	14.3	364	11.7	5.3	3.3	1.5	0.33	1.2
RL 120	120	2.7	69	5.3	134	14.3	364	12.3	5.6	3.5	1.6	0.35	1.3
RL 140	140	2.7	69	5.3	134	14.3	364	12.8	5.8	2.9	1.3	0.28	1.1
RL 150	150	2.8	70	6.5	164	14.3	364	14.7	6.7	4.0	1.8	0.39	1.5
RL 160	160	4.3	108	6.5	164	14.3	364	20.5	9.3	7.9	3.6	0.78	3.0
RL 185	185	4.3	108	6.5	164	14.3	364	21.3	9.7	7.5	3.4	0.74	2.8
RL 200	200	4.3	108	6.5	164	14.3	364	22.2	10.1	7.5	3.4	0.74	2.8
RL 230	230	4.3	108	6.5	164	14.3	364	23.1	10.5	6.6	3.0	0.65	2.5
RL 270	270	4.3	108	6.5	164	14.3	364	24.0	10.9	5.7	2.6	0.57	2.1
RL 300	300	4.3	108	6.5	164	14.3	364	24.9	11.3	4.8	2.2	0.48	1.8
RL 340	340	6.2	158	6.5	164	14.3	364	36.1	16.4	11.0	5.0	1.09	4.1
RL 370	370	6.2	158	6.5	164	14.3	364	37.0	16.8	10.1	4.6	1.00	3.8
RL 400	400	6.2	158	6.5	164	14.3	364	37.8	17.2	9.2	4.2	0.91	3.5
RL 435	435	6.2	158	6.5	164	14.3	364	38.7	17.6	8.4	3.8	0.83	3.1
RL 470	470	6.2	158	6.5	164	14.3	364	39.6	18.0	7.5	3.4	0.74	2.8
RL 520	520	6.9	176	9.7	246	15.0	382	57.2	26.0	16.9	7.7	1.68	6.3
RL 560	560	6.9	176	9.7	246	15.0	382	59.4	27.0	18.0	8.2	1.79	6.7
RL 625	625	6.9	176	9.7	246	15.0	382	61.6	28.0	16.7	7.6	1.65	6.3
RL 650	650	6.9	176	14.5	368	15.0	382	82.1	37.3	29.9	13.6	2.96	11.2
RL 740	740	6.9	176	14.5	368	15.0	382	85.6	38.9	28.6	13.0	2.83	10.7
RL 800	800	6.9	176	14.5	368	15.0	382	88.9	40.4	30.6	13.9	3.03	11.4
RL 840	840	6.9	176	14.5	368	15.0	382	89.1	40.5	27.3	12.4	2.70	10.2
RL 910	910	6.9	176	14.5	368	15.0	382	92.4	42.0	25.3	11.5	2.50	9.5
RL 1000	1000	6.9	176	17.6	448	15.0	382	110.0	50.0	23.5	10.7	2.33	8.8
RL 1040	1040	6.9	176	17.6	448	15.0	382	112.2	51.0	23.1	10.5	2.29	8.6
RL 1120	1120	6.9	176	17.6	448	15.0	382	115.5	52.5	24.2	11.0	2.40	9.1
RL 1250	1250	6.9	176	22.0	558	15.0	382	135.3	61.5	41.8	19.0	4.14	15.6
RL 1350	1350	6.9	176	22.0	558	15.0	382	138.6	63.0	39.8	18.1	3.94	14.9
RL 1400	1400	6.9	176	22.0	558	15.0	382	141.9	64.5	39.6	18.0	3.92	14.8
RL 1500	1500	6.9	176	22.0	558	15.0	382	144.1	65.5	36.5	16.6	3.61	13.7
RL 1620	1620	6.9	176	22.0	558	15.0	382	147.4	67.0	32.6	14.8	3.22	12.2
RL 1700	1700	6.9	176	22.0	558	15.0	382	149.6	68.0	27.5	12.5	2.72	10.3

**Nominal amp hour capacity at the 5 hour rate to 1.00 volts per cell @ 68F° (20°C)*

EnerSys®
Power/Full Solutions

www.enersys.com

EnerSys World Headquarters 2366 Bernville Road, Reading, PA 19605, USA Tel: +1-610-208-1991 / +1-800-538-3627
EnerSys EMEA EH Europe GmbH, Löwenstrasse 32, 8001 Zurich, Switzerland Tel: +41 44 215 7410
EnerSys Asia 152 Beach Road, Gateway East Building #11-03, Singapore 189721 Tel: +65 6508 1780

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