



HRL Series

HRL12-475W (12V115Ah)

Alpha House powered by Sacred Sun HRL batteries feature a new design and structure, utilising automatic welding, through-partition welding, and heat sealing technology. The fully automated production process ensures excellent consistency. These batteries offer high power discharge, long floating backup time, and fast charging performance, making them ideal for use in data centres, UPS systems, and IDC rooms.



Benefits

- Very long life according to EUROBAT Classification
- High power density, 30% higher than ordinary batteries
- Special lead paste formula and additives improve the battery service life
- Maximum charge efficiency
- Low self-discharge rate
- Wide range of power, easy sizing of batteries
- Easy installation and handling

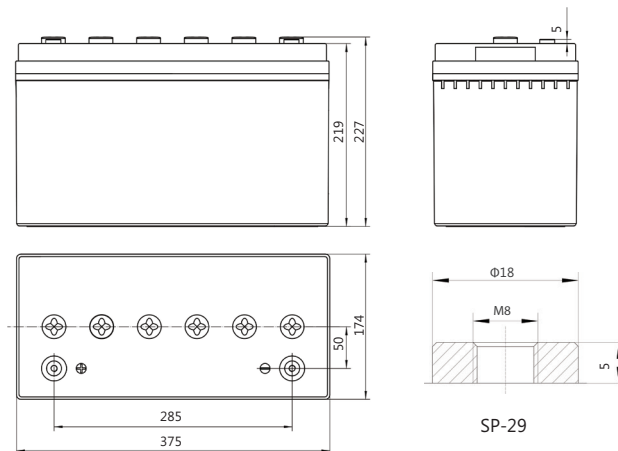
Applications

- Data centre
- UPS
- IDC room
- Emergency power
- HVDC system

Standards

- IEC 60896-21/22
- JIS C8704-1/2
- EUROBAT guide

Drawing



Specifications

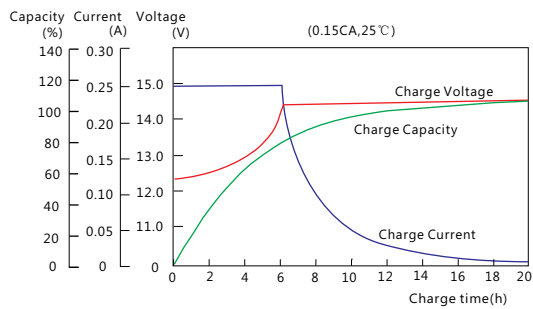
Battery Model	HRL12-475W			
Design Life (years, 25°C)	15			
Capacity (Ah, 25°C)	10min (1.60V)	15min (1.67V)	1HR (79.6A, 1.70V)	10HR(11.5A, 1.80V)
	584	475	79.6	115
Dimensions (mm)	Length	Width	Height	Total Height
	375	174	219	227
Approx. Weight (kg)	38.5			
Reference Internal Resistance (mΩ)	2.6 (fully charged @ 25°C)			
Maximum Discharge Current (A/3 Sec.)	1320			
Self-Discharge (25°C)	≤ 2% per month			
Charge Voltage (V/cell, 25°C)	Cycle use		Float use	
	2.35(-4mV/°C/cell), max charge current: 34.5A		2.27 (-3mV/°C/cell)	
Short Circuit Current (A)	3320			

Discharge Data

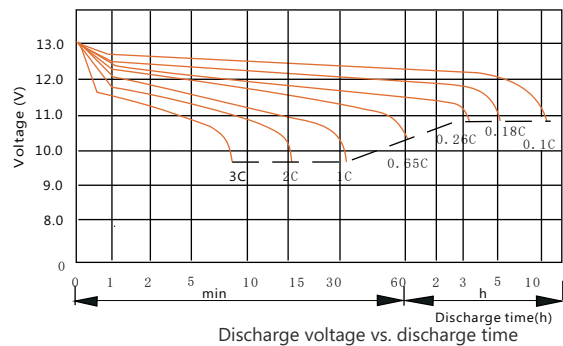
Constant Power Discharge Data (25°C, W/cell)																
End Voltage (V/cell)	min							h								
	5	10	15	20	25	30	45	1	1.5	2	3	4	5	6	8	10
1.60	770	584	487	393	336	276	216	160	124	92.6	67.9	51.4	43.9	37.8	29.9	24.7
1.65	758	577	480	387	331	271	213	158	123	92.0	67.4	51.1	43.6	37.6	29.7	24.5
1.67	749	570	475	382	326	266	211	157	122	91.5	67.1	50.7	43.4	37.4	29.6	24.3
1.70	736	561	467	375	320	260	208	155	121	90.7	66.6	50.3	43.1	37.1	29.4	24.2
1.75	707	541	449	360	305	245	201	150	118	89.1	65.4	49.4	42.3	36.5	28.8	23.7
1.80	672	516	427	341	287	228	192	145	114	87.1	64.0	48.3	41.5	35.8	28.2	23.2

Constant Current Discharge Data (25°C, A)																
End Voltage (V/cell)	min							h								
	5	10	15	20	25	30	45	1	1.5	2	3	4	5	6	8	10
1.60	453	334	273	216	183	147	114	83.1	64.3	47.9	35.0	26.5	22.5	19.3	15.2	12.5
1.65	444	328	268	212	179	144	112	81.9	63.5	47.4	34.6	26.2	22.3	19.1	15.1	12.4
1.67	437	323	263	208	175	141	110	80.9	62.8	47.0	34.3	25.9	22.1	19.0	15.0	12.3
1.70	427	316	257	203	171	137	108	79.6	61.9	46.4	34.0	25.6	21.9	18.8	14.8	12.2
1.75	406	301	243	192	161	128	103	76.6	59.9	45.2	33.1	25.0	21.3	18.4	14.5	11.9
1.80	381	283	227	179	150	117	97.8	73.0	57.5	43.7	32.1	24.2	20.7	17.8	14.0	11.5

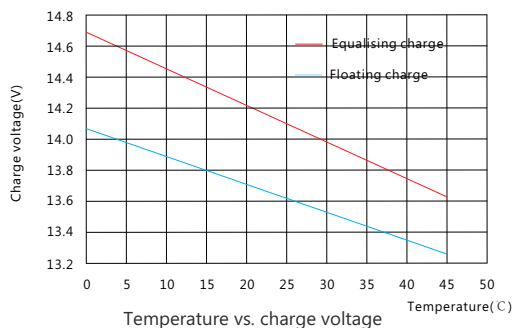
Performance Curve



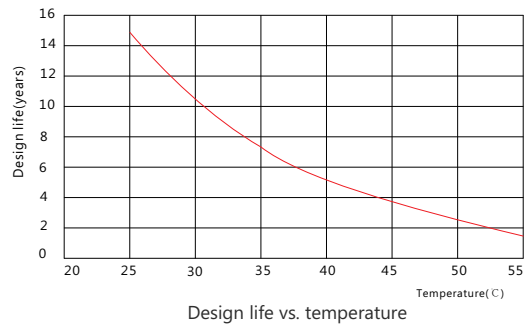
Charge performance



Discharge voltage vs. discharge time



Temperature vs. charge voltage



Design life vs. temperature



Disclaimer: The manufacturer reserves the right to amend and/or vary the specifications and parameters of the product and apply updates accordingly at any time. It is the sole responsibility of the buyer and user of the product to ensure all applicable product specifications referred to are valid, applicable and up to date at all times. All product specifications are available upon written request to Alpha House Ltd. All batteries must be installed, used and maintained at all times in accordance with standard BS EN IEC 62485-2:2018, and specifically installed, used and maintained at all times in accordance with manufacturer's guidelines and product specification documentation. (All top terminal, front terminal and top vented batteries must be positioned horizontally, plumb and level at all times unless specified otherwise by the manufacturer. Further details are available upon written request to Alpha House Ltd.)