



HR Series

HR 1224W Datasheet

12V Top Terminal VRLA-AGM



Valve Regulated Lead Acid (VRLA) Battery

Maintenance-Free, Absorbent Glass Mat (AGM) Technology for Efficient Gas Recombination of up to 99%

Pure Lead Construction and Proprietary Elements

Designed for High-Rate UPS, Float Service Standby Power Applications

Built in Accordance with IEC 61056-1/2:2012 and UL1989 Recognized (MH14533)



Specifications	
Voltage (Vdc)	12
Nominal Capacity (1.67 VPC @25°C)	24W @15min-rate
Watts Per Cell (30-Sec 1.67 VPC @ 25°C)	--
Watts Per Cell (5-Min 1.67 VPC @ 25°)	54.8
Watts Per Cell (15-Min 1.67 VPC @ 25°)	27.0
Max Charge Current (A)	2.40
Max Discharge Current (A)	130 *
Short Circuit Current (A)	260
Internal Resistance (mΩ)	Approx. 20.6
Terminal Type	F2-Faston Tab250 *
Terminal Torque	--
Container Material	ABS (UL 94-HB) & Flame Retardant (94-V0) available upon request
Weight (kg. / lb., Approx.)	1.95 / 4.30
Length (L) (mm / in)	150.9±2.0 / 5.94±0.08
Width (W) (mm / in)	51.0±1.0 / 2.01±0.04
Height (H) (mm / in)	98.6±1.0 / 3.89±0.04
Design Life	Up to 5 Years in Standby Service at 25°C Eurobat (20°C): 3-5 Years Standard Commercial
Operating Temperature	Nominal: 25°C (77°F) Discharge: -15°C - 50°C (5°F-122°F) Charge/Storage: -15°C - 40°C (5°F - 104°F)
Float Charging Voltage	13.5 - 13.8 Vdc/battery 25°C (77°F)
Eq. Charging Voltage	14.4 - 15.0 Vdc/battery 25°C (77°F)
Self-Discharge	Less than 10% after 90 days, can be stored up to 6 months at 25°C (77°F); Fully recharging is required before usage, and charged sooner if stored at higher temperature than 25°C (77°F).



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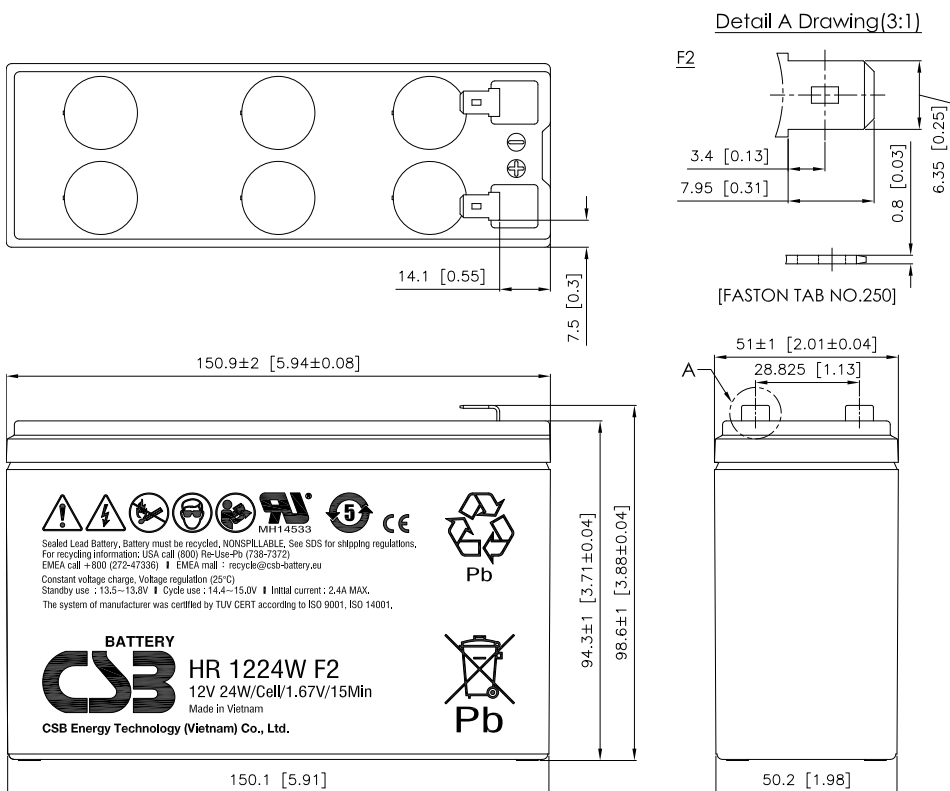
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Constant Current Discharge Characteristics Unit: A (25°C, 77°F)

F.V/Time	2MIN	4MIN	5MIN	6MIN	8MIN	10MIN	15MIN	20MIN	30MIN	45MIN	60MIN	90MIN
10.02V (1.67 VPC)	44.1	31.1	27.4	24.7	21.0	18.0	13.5	10.6	7.76	5.42	4.20	3.34
10.50V (1.75 VPC)	40.5	28.8	25.4	23.0	19.8	17.0	12.8	10.2	7.56	5.29	4.10	3.26
10.80V (1.80 VPC)	38.4	27.4	24.4	22.2	19.1	16.4	12.5	10.0	7.49	5.23	4.06	3.22

Constant Power Discharge Characteristics Unit: W (25°C, 77°F)

F.V/Time	2MIN	4MIN	5MIN	6MIN	8MIN	10MIN	15MIN	20MIN	30MIN	45MIN	60MIN	90MIN
10.02V (1.67 VPC)	529	373	329	297	251	217	162	128	92.9	64.9	50.3	40.2
10.50V (1.75 VPC)	486	346	306	277	238	204	154	123	90.8	63.5	49.3	39.2
10.80V (1.80 VPC)	461	329	293	266	229	197	149	121	89.9	62.9	48.8	38.8



* F1 terminal is available, Max Discharge Current = 100 A