IEEE/UL Battery Sizing by MooreU 610-952-6067 www.mooreu.com

HRL Series

HRL 12390W Datasheet

12V Top Terminal VRLA-AGM

Specifications

Voltage (Vdc)	12
Nominal Capacity (1.67 VPC @25°C)	390W @15min-rate
Watts Per Cell (30-Sec 1.67 VPC @ 25°C)	--
Watts Per Cell (5-Min 1.67 VPC @ 25°)	700
Watts Per Cell (15-Min 1.67 VPC @ 25°)	414
Max Charge Current (A)	39.0
Max Discharge Current (A)	800
Short Circuit Current (A)	2779
Internal Resistance (mΩ)	Approx. 3.00
Terminal Type	I2 thread lead alloy terminal to accept M6 bolt
Terminal Torque	51.7±10.3 Kgf·cm / 44.9±9.0 Lbf·in / 5.10±1.0 N·m
Container Material	PP (UL 94-HB) & Flame Retardant (94-V0) available upon request
Weight (kg. / lb., Approx.)	33.00 / 72.73
Length (L) (mm / in)	343.0±2.5 / 13.50±0.10
Width (W) (mm / in)	170.0±2.0 / 6.69±0.08
Height (H) (mm / in)	216.9±2.5 / 8.54±0.10
Design Life	Up to 10 Years in Standby Service at 25°C Eurobat (20°C): >12 Years Very Long Life
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).

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 60896-21/22:2004 and UL1989 Recognized (MH14533)

MH14533

11F, No. 150, Sec. 4, Chengde Rd., Shilin Dist., Taipei City 111052, Taiwan (R.O.C.)
Tel: +886-2-2880-5600 Mail: service@csb-battery.com.tw

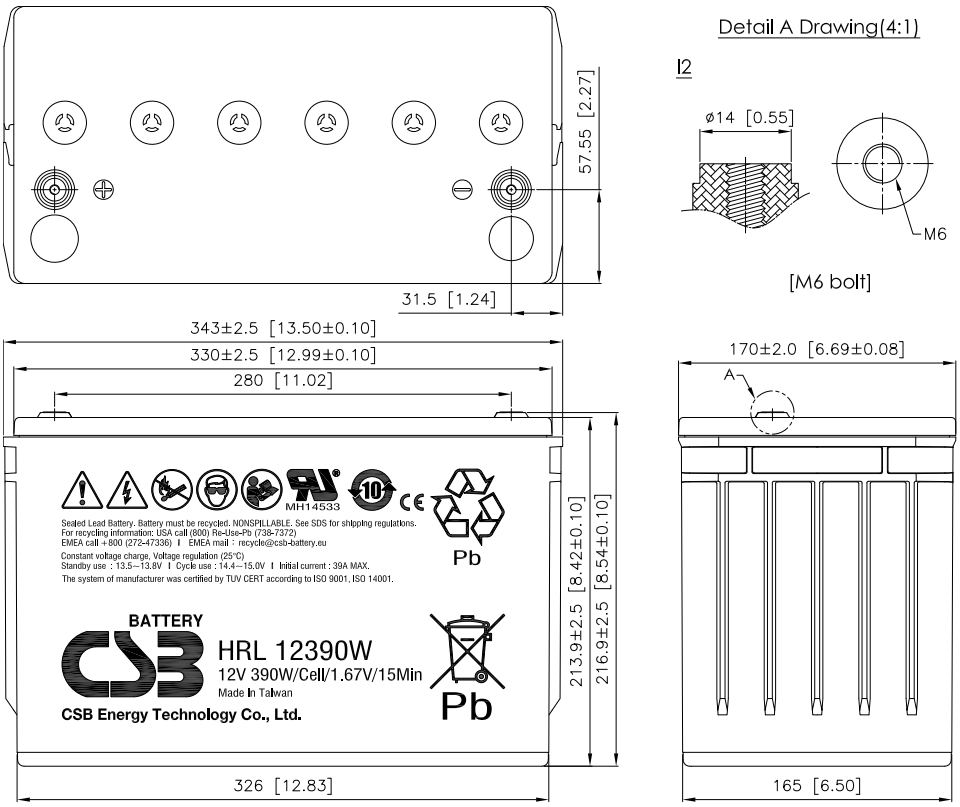
HRL Series

HRL 12390W Datasheet

12V Top Terminal VRLA-AGM

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)	532	456	416	386	334	298	230	186	138	99.6	78.9	56.8
10.50V (1.75 VPC)	463	384	354	330	296	266	212	174	132	96.1	76.7	55.7
10.80V (1.80 VPC)	382	330	310	296	266	239	197	163	125	91.8	73.8	54.2

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)	5312	4557	4197	3919	3518	3141	2483	2039	1545	1130	906	663
10.50V (1.75 VPC)	4583	3970	3736	3555	3190	2861	2348	1943	1488	1098	885	653
10.80V (1.80 VPC)	4044	3587	3451	3253	2893	2641	2215	1843	1423	1059	858	639



11F, No. 150, Sec. 4, Chengde Rd., Shilin Dist., Taipei City 111052, Taiwan (R.O.C.)
Tel: +886-2-2880-5600 Mail: service@csb-battery.com.tw