

HA SERIES HA140-520FR

AGM BLOCK RANGE VRLA INDUSTRIAL BATTERY

Sterling HA Series of VRLA Industrial Batteries provide superior high integrity reliability for critical backup power applications. The maintenance-free valve regulated lead acid (VRLA) construction make Sterling HA series batteries the definitive choice for UPS, telecom and utility applications.

Sterling HA series are constructed with proprietary grid alloy and active material with a unique plate curing manufacturing process. This process allows for 99% gas recombination, providing extended float service life.

From grid design to curing and formation, every facet of the manufacturing process is controlled and completed in one production facility utilizing cutting edge, fully automated production technologies. Production standards for quality control are among the highest in the industry and are ISO 9000 certified.

Specifications

MODEL	C ₂₀ 1.75	C ₈ 1.75	C ₅ 1.75	R _{INT} mohms	Max. Discharge Amps	L inches	W inches	H inches	M lbs
HA140-520FR	140.0	130.2	119.0	2.5	2100	13.43	6.81	11.3	104.7

All capacities in ampere-hours at 77°F (25°C). R_{INT} for fully charged battery at 77°F (25°C). Maximum discharge is 77°F (25°C), 5 seconds.

Discharge Data - Amperes

END VOLTAGE	30mins.	60mins.	2hrs.	3hrs.	4hrs.	5hrs.	6hrs.	8hrs.
1.75	138.8	82.1	46.4	33.4	26.2	23.8	19.8	15.9
1.80	130.8	80.5	45.4	32.2	25.4	23.2	19.2	15.9
1.85	118.4	73.4	41.8	30.3	24.0	22.0	18.2	15.1
1.90	99.7	62.7	38.5	28.0	22.3	20.4	16.9	14.2

All discharge ratings at 77°F (25°C).

Discharge Data - Watts Per Cell

END VOLTAGE	5mins.	10mins.	15mins.	20mins.	30mins.	45mins.	50mins.	60mins.
1.60	812.0	619.0	513.0	459.0	315.0	232.0	207.5	181.0
1.67	775.0	596.0	520.0	450.0	309.0	227.0	205.4	178.0
1.70	742.0	574.0	467.0	441.0	303.0	224.0	201.3	177.0
1.75	704.0	545.0	447.0	414.0	293.0	218.0	193.1	175.0

All discharge ratings at 77°F (25°C).

FEATURES & BENEFITS

Flame Retardant ABS Case and Cover

- > Impact resistant, self-extinguishing material with standard Underwriters Laboratories (UL) 94 VO rating

Tank Formed Plate Construction

- > 100% capacity on shipment
- > Plate consistency and matching dependable performance

Threaded Copper Insert Post

- > High conductivity
- > Increased retorque intervals

Epoxy Post Seal

- > Elimination of acid egress for trouble-free service life



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TECHNICAL DATA

- Positive Plate** > Tank formed grid plate, lead-tin-calcium alloy, wrapped
- Negative Plate** > Tank formed grid plate, lead-tin-calcium alloy
- Separator** > Non woven glass-fleece high absorption grade
- Electrolyte** > 1300 S.G. AGM Suspension
- Case Material** > Standard impact resistant acrylobutadien-styrene (ABS), UL 94 VO
- Post** > Threaded copper insert, M6 stainless steel bolt and washer supplied
M6 bolt will fit lugs with 1/4 inch hole
> 40 in-lbs initial, 32 in-lbs retorque
- Valve** > One-way pressure release, self-sealing neoprene
- Charging** > Cycle service - 14.5-14.9 Volt at 77°F (25°C)
> Float service - 13.6-13.8 Volt at 77°F (25°C)
- Capacity vs. Temperature** > 104°F (40°C) - 102%
> 32°F (0°C) - 85%
- Self Discharge** > 3% per month at 77°F (25°C)
- Operating Temperature** > Charge: 32°F (0°C) - 104°F (40°C)
> Discharge: 5°F (-15°C) - 122°F (50°C)
> Storage: 5°F (-15°C) - 104°F (40°C)
- Transport** > Unregulated for transportation via truck, rail, water and air transportation
- Approvals** > CE Mark, UL standard 1989 approved component

