

High Rate Range VRLA



SEALED VRLA MONOBLOC **AGM BATTERIES**

HR-12230

VALVE REGULATED LEAD ACID BATTERY

12V 800WATTS/CELL @ 15MIN to 1.67 VPC

12V 230AH @ 10 HR to 1.80VPC 12V 262AH @ 20 HR to 1.75VPC

> FOR APPLICATION: **UPS SWITCHGEAR** INDUSTRIAL DC POWER

- One-way relief valve, Explosion Resistant.
- Patented long life alloy having the lowest calcium levels industry-minimizing grid growth, reducing gassing, and extending battery life.

PERFORMANCE







Innovative Features

- 12 years design life in float applications @ 25°C(77°F).
- UL Recognized component.
- ☑ Valve regulated lead acid battery (VRLA).
- High-Compression Absorbed Glass Mat technology (AGM) for greater than 99% recombination efficiency.
- Proprietary Fixed Orifice Plate Pasting technology applying active materials on both sides of the grid for consistent cell-to-cell performance, higher capacity and uniform grid protection.
- Operates at a low internal pressure.
- Heavy duty threaded copper alloy terminals for ease of assembly. reduced maintenance and increased safety.
- Advanced lead tin calcium alloy, reduces grid corrosion and promotes long battery life.
- Over-sized, through the partition inter-cell welds provide low resistance connections, with minimal power loss.
- Flame arresting, low pressure safety release venting system for individual cells, recognized per U.L. 924.
- Horizontal or vertical operation.
- Multicell design for ease of installation and maintenance.
- Standard: Reinforced ABS (UL 94HB) container and cover Optional: Flame-retardant reinforced ABS case and cover compliant with U.L.94 V-0 with an Oxygen Limiting Index of greater than 28%.

12 VOLTS - 800WATTS @ 15 MIN RATE Constant Power Discharging Ratings - Watts Per Cell @ 25°C (77°F) **End Point** 10min 15min 20min 30min 40min 45min 50min 60min 5min 90min Volts/Cell 440 1370 1030

For UPS / Switchgear / Industrial DC Power















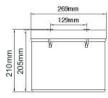




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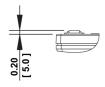












Length: 520mm Width: 269mm Height: 210mm

| Electrical Specifications | | | | | | | | | |
|---------------------------|--|---------------|-------------|---------------------------|-----------------------|---------------------|--|--|--|
| Cells Per Unit | Cells Per Unit Voltage Per Unit Weight | | Electrolyte | Maximum Discharge Current | Short Circuit Current | Ohms Imped 60 Hz(Ω) | | | |
| 6 | 12.84 | 155lbs 70.0kg | SG = 1.300 | 1460Amps | 6300 Amps | 0.0015 | | | |

| Capacity | 800Watts per all at the 15 minute rate to 1.67 volts per cell at 25°C (77°F). 230Ah @ 10 hr. rate to 1.80 volts per cell @ 25°C (77°F). 262Ah @ 20 hr. rate to 1.75 volts per cell @ 25°C (77°F). | | | | | |
|---|---|--|--|--|--|--|
| Applicable Operating Temperature Range | -40°F (-40°C) to +158°F (70°C). | | | | | |
| Ideal Operating Temperature Range | 68°F (+20°C) to +82.4°F (28°C). | | | | | |
| Floating Charging Voltage | 13.5 to 13.8 VDC/unit Average at 25°C (77°F). | | | | | |
| Recommended Maximum Charging Current Limit | C/5 amperes (52.4 amperes @ 100% depth of discharge) @ 20 hr. rate to 1.75VPC. | | | | | |
| Equalization and Cycle Service Charging Voltage | 14.4 to 14.8 VDC/unit Average at 25°C (77°F). | | | | | |
| Maximum AC Ripple (Charger) | 0.5% RMS or 1.5% P-P of float charge voltage recommended for best results. Maximum voltage allowed = 1.4% RMS (4% P-P). Maximum current allowed = 13.1 amperes RMS (C/20) to 1.75VPC. | | | | | |
| Self Discharge | EverExceed High Rate Range batteries may be stored for up to 12 months at 25°C (77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter. | | | | | |
| Accessories | Inter unit connectors racks and cabinet systems are available. | | | | | |
| Terminal: Inserted | Threaded copper alloy insert terminal | | | | | |
| Terminal Hardware Initial Torque: Inserted Terminal | 11 N-m | | | | | |

| | Constant Power Discharging Ratings - Watts Per Cell @ 25°C (77°F) | | | | | | | | | |
|-------------------------|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| End Point Volts/Cell | 5min | 10min | 15min | 20min | 30min | 40min | 45min | 50min | 60min | 90min |
| 1.75 | 1283 | 945 | 750 | 626 | 494 | 405 | 373 | 341 | 318 | 237 |
| 1.70 | 1347 | 993 | 778 | 665 | 520 | 429 | 391 | 356 | 332 | 250 |
| 1.67 | 1370 | 1030 | 800 | 686 | 535 | 440 | 398 | 366 | 341 | 259 |

| Constant Current Discharging Ratings - Ampere Per Cell @ 25°C (77°F) | | | | | | | | | | |
|--|-----|------|------|------|------|------|------|------|------|------|
| End Point Volts/Cell | 1hr | 2hr | 3hr | 5hr | 8hr | 10hr | 12hr | 20hr | 24hr | 72hr |
| 1.85 | 145 | 82.1 | 59.5 | 39.3 | 26.5 | 22.1 | 19.1 | 12.2 | 10.3 | 3.58 |
| 1.80 | 157 | 89.0 | 63.2 | 41.3 | 27.9 | 23.0 | 19.9 | 12.9 | 10.7 | 3.70 |
| 1.75 | 161 | 91.2 | 65.5 | 42.5 | 28.8 | 23.8 | 20.4 | 13.1 | 11.0 | 3.76 |

Note: Batteries to be mounted with 0.39 in (1.00 cm) spacing minimum and free air ventilation. Specifications subject to change without notification.















