



# HIGH PERFORMANCE

SEALED VRLA MONOBLOC  
AGM BATTERIES



## HR-1245

VALVE REGULATED  
LEAD ACID BATTERY

12V 180WATTS/CELL  
@ 15MIN to 1.67 VPC

12V 45.0AH @ 10 HR to 1.80VPC  
12V 46.0AH @ 20 HR to 1.75VPC

FOR APPLICATION:  
UPS  
SWITCHGEAR  
INDUSTRIAL DC POWER

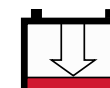
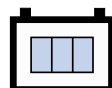
### Innovative Features

- ☑ 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.

- ☑ 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%.

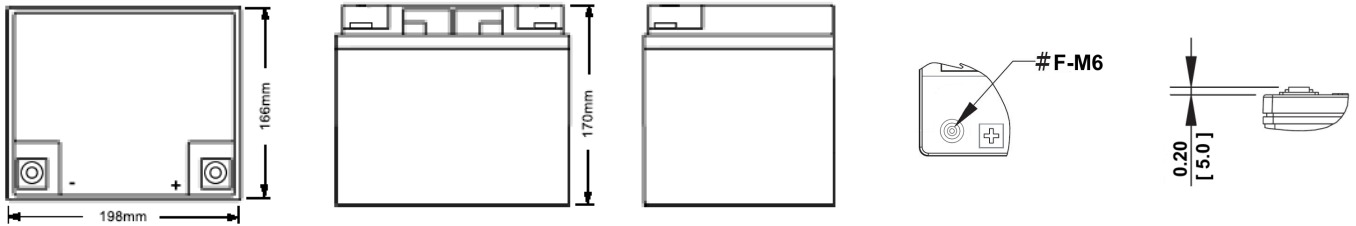
12 VOLTS - 180WATTS @ 15 MIN RATE										
Constant Power Discharging Ratings - Watts Per Cell @ 25°C (77°F)										
End Point Volts/Cell	5min	10min	15min	20min	30min	40min	45min	50min	60min	90min
1.67	366	238	180	149	113	91.3	81.8	74.6	63.8	46.5

For UPS / Switchgear / Industrial DC Power



# High Rate Range VRLA

**EverExceed**<sup>®</sup>  
power your applications



Length : 198mm    Width : 166mm    Height : 170mm

Electrical Specifications						
Cells Per Unit	Voltage Per Unit	Weight	Electrolyte	Maximum Discharge Current	Short Circuit Current	Ohms Imped 60 Hz(Ω)
6	12.84	32.4lbs 14.7kg	SG = 1.300	286Amps	2040 Amps	0.0065

<b>Capacity</b>	180Watts per all at the 15 minute rate to 1.67 volts per cell at 25°C (77°F). 45.0Ah @ 10 hr. rate to 1.80 volts per cell @ 25°C (77°F). 46.0 Ah @ 20 hr. rate to 1.75 volts per cell @ 25°C (77°F).
<b>Applicable Operating Temperature Range</b>	-40°F (-40°C) to +158°F (70°C).
<b>Ideal Operating Temperature Range</b>	+68°F (+20°C) to +82.4°F (28°C).
<b>Floating Charging Voltage</b>	13.5 to 13.8 VDC/unit Average at 25°C (77°F).
<b>Recommended Maximum Charging Current Limit</b>	C/5 amperes (9.20 amperes @ 100% depth of discharge) @ 20 hr. rate to 1.75VPC.
<b>Equalization and Cycle Service Charging Voltage</b>	14.4 to 14.8 VDC/unit Average at 25°C (77°F).
<b>Maximum AC Ripple (Charger)</b>	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 = 2.30 amperes RMS (C/20) to 1.75VPC.
<b>Self Discharge</b>	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.
<b>Accessories</b>	Inter unit connectors racks and cabinet systems are available.
<b>Terminal: Inserted</b>	Threaded copper alloy insert terminal
<b>Terminal Hardware Initial Torque: Inserted Terminal</b>	9 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	345	233	177	147	110	87.7	80.4	73.3	62.5	45.6
1.70	360	235	179	148	111	89.1	81.3	73.8	63.3	46.0
1.67	366	238	180	149	113	91.3	81.8	74.6	63.8	46.5

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	28.8	16.6	11.8	7.70	5.03	4.08	3.52	2.16	1.81	0.63
1.80	31.4	17.4	12.4	7.92	5.21	4.50	3.64	2.26	1.90	0.64
1.75	33.0	18.3	12.7	8.15	5.35	4.31	3.68	2.30	1.94	0.66

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

