## High Rate Range VRLA



HIGH PERFORMANCE

SEALED VRLA MONOBLOC AGM BATTERIES

## **HR-1255**

# VALVE REGULATED LEAD ACID BATTERY

12V 204WATTS/CELL @ 15MIN to 1.67 VPC

12V 55.0AH @ 10 HR to 1.80VPC 12V 59.0AH @ 20 HR to 1.75VPC

FOR APPLICATION:

UPS

SWITCHGEAR

INDUSTRIAL DC POWER









#### **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.
- One-way relief valve, Explosion Resistant.
- Heavy duty threaded copper alloy terminals for ease of assembly, reduced maintenance and increased safety.
- Patented long life alloy having the lowest calcium levels industry-minimizing grid corrosion, reducing gassing, and extending 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 - 204WATTS @ 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	335	254	204	166	123	99.5	92.0	85.0	73.5	53.7		

### For UPS / Switchgear / Industrial DC Power













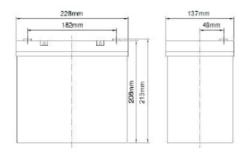


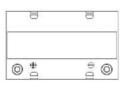


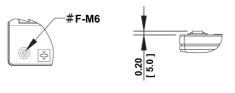


## High Rate Range VRLA









Length: 228mm Width: 137mm Height: 213mm

Electrical Specifications									
Cells Per Unit	Voltage Per Unit	Weight	Maximum Discharge Current (5s)	Short Circuit Current	Internal resistance (mΩ)				
6	12.84	37.0lbs 16.8kg	SG = 1.300	660Amps	2410 Amps	7.2			

Capacity	204Watts per all at the 15 minute rate to 1.67 volts per cell at 25°C (77°F). 55.0Ah @ 10 hr. rate to 1.80 volts per cell @ 25°C (77°F). 59.0 Ah @ 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	13.75 Amperes (0.25C10 Amperes)
Equalization and Cycle Service Charging Voltage	14.1 to 14.4 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 = 0.28 amperes RMS (C/10) to 1.8VPC.
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	5 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	310	248	180	156	118	96.5	90.0	83.5	72.0	52.1	
1.70	323	251	189	161	121	98.6	90.7	84.1	73.0	53.2	
1.67	335	254	204	166	123	99.5	92.0	85.0	73.5	53.7	

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	37.4	21.5	14.5	9.80	6.50	5.29	4.48	2.79	2.36	0.82
1.80	39.7	22.6	15.2	10.3	6.71	5.50	4.66	2.90	2.44	0.85
1.75	40.8	23.1	15.6	10.5	6.93	5.61	4.73	2.95	2.48	0.86

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

















