12HRL36

HRL Series

MH27487

The Narada High Rate range of VRLA batteries provide reliable battery backup to any High Rate UPS application. All Narada High Rate series batteries use optimized plate technology and a patented post design offering exceptional service life.

TECHNICAL FEATURES:

- Flame Retardant ABS Cover and Container, UL94 V-0, LOI>28%
- Patented copper alloy terminal design
- Epoxy TPS design for high reliability post seal
- 6 months of storage at 77°F (25°C) with a capacity > 80%
- Initial capacity at 100%
- Low pressure one-way flame arresting valve(s) UL1989
- Absorbent Glass Mat (AGM) Sealed Technology, Recombination efficiency of 99.9%

COMPLIANCE AND SAFETY:

- ISO 9001:2000 and ISO 14001:2004 certified production facilities
- UL Recognized Component 924, for use in or with listed UL1778, UL1989 and UL924 systems
- IEC60896-21/22
- BS6290 part 4 / Eurobatt guide
- Manufactured under system ISO9001(TUV)
- All batteries meet or exceed IEEE recommended practices

TRANSPORTATION:

- Classified as Nonspillable UN 2800 and meet the Nonspillable criteria listed in DOT-CFR Title 49, 171-189 (d) (3) (i) and (ii) and exempt from CFR 49, Subchapter C requirements
- Meets transportation conditions of IMDG exemption 238, IATA/ICAO Special Provision A67 (Not Restricted)

WPC @ 15 min 1.67 VPC / 77°F (25°C)	36 watts
WPC @ 5 min 1.60 VPC / 77°F (25°C)	65 watts
Ah @ 20hr 1.75 VPC / 77°F (25°C)	8.4 Ah

Nominal Voltage	12V
Float Charge Voltage @25°C (2.23 – 2.27vpc)	13.5 – 13.62
Max. Charge Current (A) (5 hour rate @ 1.75vpc)	1.7 Amps

Electrolyte Absorbed H_2SO_4	1.300

Short Circuit Current (A)	460 Amps
Internal Resistance (mΩ)	18.0

Terminal Type	Torque
F2	N/A

Dimension	in	mm
Length	5.94	151
Length Base	5.91	150
Width	2.55	65
Overall Height	3.94	100

Weight	Lbs.	Kg
	5.4	2.45

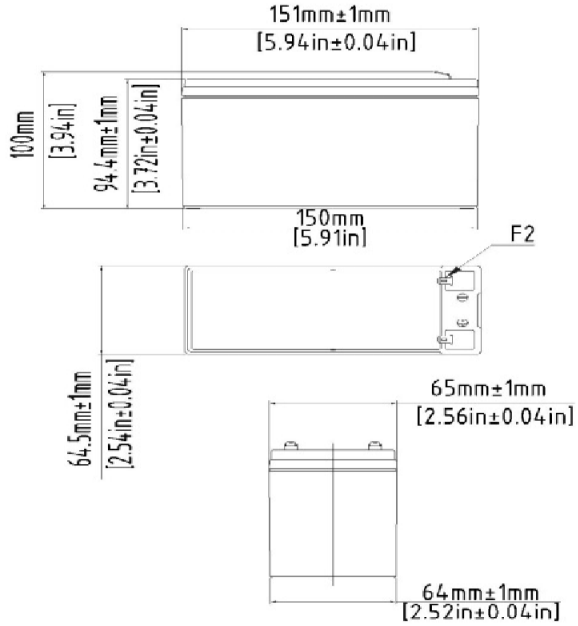
OPERATING PARAMETERS

Float Charging Voltage	13.5V / 2.25vpc @ 77ºF (25°C)
Equalize /Cycle	14.0V – 14.3V 2.33Vpc to 2.38Vpc @ 77°F (25°C)
See Operations and Maintenance Manual for specific guidelines and recharge times	

Charging Temperature Compensation	-2 mV/cell/°F > 77°F (-3.6 mV/cell /°C > 25°C)
	+2 mV/cell/°F < 77°F (+3.6 mV/cell/°C < 25°C)

Maximum AC Ripple (Charger)	0.5% RMS, 1.5% peak-to-peak for float charge voltage for best results

Operating Temperature Range	
Nominal	+74°F (24°C) to 80°F (27°C)
Charge	-20°F (-28°C) to +122°F (50°C)
Discharge	-40°F (-40°C) to +140°F (60°C)
Storage Temperature Range	-4°F (-20°C) to +104°F (40°C)



Constant Power Discharge Watts per cell (25°C, 77°F)									
End vpc	5min	10min	15min	20min	30min	40min	50min	1h	2h
1.60V	6 5 .0	4 4 .8	3 7 .1						
1.67V	6 0 .2	4 2 .9	3 6 .0	2 6 .9	1 9 .9	16.8	14.0	1 1 .3	6.7
1.70V	5 7 .0	4 1 .8	3 5 .3	2 6 .4	1 9 .6	16.6	13.8	1 1 .2	6.6
1.75V	5 5 .7	4 0 .3	3 4 .3	2 5 .4	1 9 .2	16.2	13.5	1 1 .1	6.5
1.80V	5 3 .8	3 8 .4	3 3 .3	2 4 .6	1 8 .5	15.6	13.1	1 0 .9	6.4
1.83V	5 1 .8	3 6 .6	3 2 .1	2 4 .1	1 8 .0	15.2	12.8	1 0 .7	6.3
1.85V	49.20	35 .8	3 1 .1	2 3 .5	17 .5	15.0	12.6	1 0 .5	6.2

Constant Current Discharge Amperes (25°C, 77°F)									
End vpc	5min	10min	15min	20min	30min	40min	50min	1h	2h
1.60V	38	21.8	11.0						
1.67V	36	21.0	10.6	6.1	3.33	1.78	0.95	0.77	0.41
1.70V	34	20.4	10.4	6.0	3.31	1.77	0.94	0.76	0.41
1.75V	33	19.7	10.1	5.8	3.25	1.75	0.93	0.75	0.40
1.80V	32	19.1	9.6	5.7	3.19	1.72	0.91	0.74	0.40
1.83V	30	18.0	9.3	5.5	3.14	1.70	0.90	0.73	0.39
1.85V	38	21.8	11.0	6.2	3.12	1.69	0.89	0.72	0.38

12HRL36-NA V0 May 2022 Subject to revision without prior notice. E.&.O.E