12HRL390

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 facilities
- UL Recognized Component 924, for use in or width listed UL1778, UL1989 and UL924 systems
- IEC60896-21/22 / BS6290 part 4
- Certified to NEBS Version 8, Level 3
- Telcordia GR-1089-CORE, Issue 6
- Telcordia GR-63-CORE, Issue 4
- 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)	390 watts
WPC @ 5 min 1.60 VPC / 77°F (25°C)	709 watts
Ah @ 20hr 1.75 VPC / 77°F (25°C)	101 Ah

Nominal Voltage	12V
Float Charge Voltage @25°C (2.23 vpc)	13.4
Max. Charge Current (A) (5 hour rate @ 1.75vpc)	20.3 Amps

Electrolyte Absorbed H_2SO_4	1.300

Short Circuit Current (A)	3100 Amps
Internal Resistance (mΩ)	4.25

Terminal Type	Torque
M6-M (Front L Bracket)	71.2±8.9 in-lbs (8 ±1 Nm)
M6-F (Top Insert)	71.2±8.9 in-lbs (8 ±1 Nm)

Dimension	in	mm
Length	11.98	304
Length Base	11.93	303
Width	6.58	167
Overall Height	8.32	211

Weight	Lbs.	Kg
	66.4	30.2

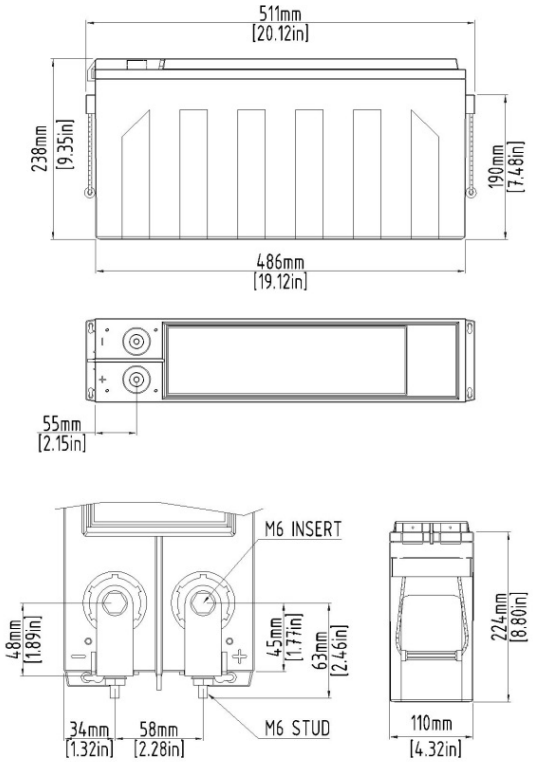
OPERATING PARAMETERS

Float Charging Voltage	13.38V / 2.23vpc @ 77°F (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	-1.7 mV/cell/°F > 77°F (-3 mV/cell /°C > 25°C)
	+1.7 mV/cell/°F < 77°F (+3 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	708.7	524.1	403.7	330.3	242.9				
1.67V	666.0	499.0	390.0	322.0	241.0	184.9	155.2	134.0	75.5
1.70V	646.0	488.0	384.0	318.0	239.0	184.2	154.0	133.0	75.3
1.75V	602.0	462.0	368.0	309.0	235.0	182.8	153.0	132.0	75.1
1.80V	537.6	426.3	348.0	296.3	230.5	180.9	152.0	131.0	73.5
1.83V	497.6	404.3	334.2	286.7	224.9	177.1	150.7	130.0	71.6
1.85V	472.6	389.0	323.5	278.6	219.4	173.1	147.3	128.1	69.7

Constant Current Discharge Amperes (25°C, 77°F)									
End vpc	5min	10min	15min	20min	30min	40min	50min	1h	2h
1.60V	407	213	128						
1.67V	381	208	127	70	39.2	21.6	11.8	9.7	5.09
1.70V	364	205	126	70	39.1	21.5	11.7	9.7	5.09
1.75V	332	197	123	69	38.9	21.4	11.6	9.6	5.04
1.80V	298	185	118	67	38.2	21.1	11.5	9.5	4.99
1.83V	276	175	113	65	37.6	20.9	11.4	9.4	4.94
1.85V	261	166	109	63	36.8	20.5	11.2	9.1	4.78

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