

12HRL550



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 with 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) | 550 watts |
| WPC @ 5 min 1.60 VPC / 77°F (25°C) | 1096 watts |
| Ah @ 20hr 1.75 VPC / 77°F (25°C) | 148 Ah |

| | |
|---|-----------|
| Nominal Voltage | 12V |
| Float Charge Voltage @25°C (2.23 vpc) | 13.4 |
| Max. Charge Current (A) (5 hour rate @ 1.75vpc) | 50.0 Amps |

| | |
|---|-------|
| Electrolyte Absorbed H ₂ SO ₄ | 1.300 |
|---|-------|

| | |
|---------------------------|-----------|
| Short Circuit Current (A) | 4270 Amps |
|---------------------------|-----------|

| | |
|--------------------------|------|
| Internal Resistance (mΩ) | 3.44 |
|--------------------------|------|

| | |
|-------------------|---------------------|
| Terminal Type | Torque |
| M6-F (Top Insert) | 78 in-lbs (8 ±1 Nm) |

| Dimension | in | mm |
|----------------|-------|-----|
| Length | 13.3 | 338 |
| Length Base | 13.3 | 338 |
| Width | 6.77 | 172 |
| Overall Height | 10.98 | 279 |

| Weight | Lbs. | Kg |
|--------|------|----|
| | 101 | 45 |

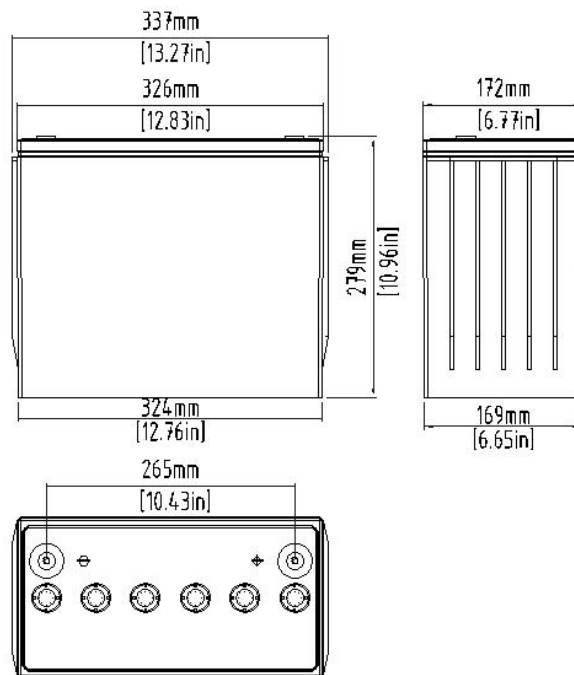
OPERATING PARAMETERS

| | |
|--|---|
| 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 |
|---------|------|-------|-------|-------|-------|-------|-------|-----|-----|
| 1.60 | 1096 | 758 | 577 | 472 | | | | | |
| 1.63 | 1075 | 743 | 566 | 463 | 353 | | | | |
| 1.67 | 1044 | 722 | 550 | 449 | 343 | 277 | 232 | 199 | 110 |
| 1.70 | 1023 | 707 | 539 | 440 | 336 | 271 | 227 | 195 | 108 |
| 1.75 | 1002 | 693 | 528 | 432 | 329 | 263 | 220 | 189 | 106 |
| 1.80 | 970 | 671 | 511 | 418 | 319 | 258 | 216 | 185 | 105 |
| 1.83 | 908 | 628 | 478 | 391 | 298 | 252 | 211 | 181 | 104 |
| 1.85 | 866 | 599 | 456 | 373 | 285 | 244 | 204 | 175 | 102 |

Constant Current Discharge Amperes (25°C, 77°F)

| End vpc | 5min | 10min | 15min | 20min | 30min | 40min | 50min | 1h | 2h |
|---------|------|-------|-------|-------|-------|-------|-------|------|------|
| 1.60V | 599 | 313 | 187 | | | | | | |
| 1.67V | 527 | 300 | 184 | 105 | 57.4 | 30.9 | 16.8 | 14.3 | 7.51 |
| 1.70V | 498 | 293 | 181 | 104 | 57.2 | 30.8 | 16.7 | 14.2 | 7.46 |
| 1.75V | 455 | 276 | 174 | 102 | 56.6 | 30.7 | 16.5 | 14.1 | 7.40 |
| 1.80V | 412 | 251 | 163 | 98 | 55.6 | 30.5 | 16.4 | 14.0 | 7.35 |
| 1.83V | 382 | 231 | 152 | 94 | 54.8 | 30.4 | 16.2 | 13.6 | 7.14 |
| 1.85V | 353 | 214 | 144 | 92 | 54.5 | 30.3 | 15.8 | 13.1 | 6.88 |