



HRD-SERIES UPS BATTERY

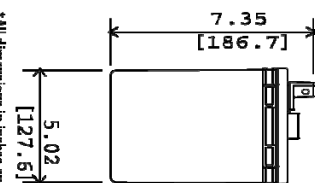
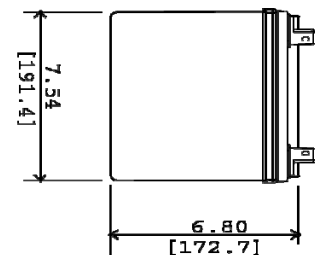
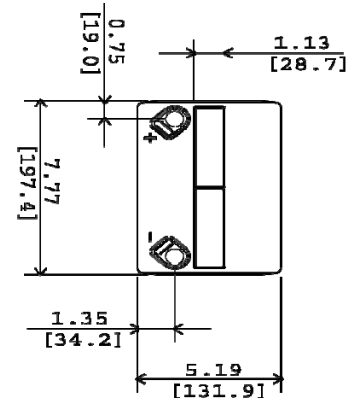
HRD12-140F

VALVE REGULATED
LEAD ACID BATTERY
FOR UPS STANDBY
POWER APPLICATIONS

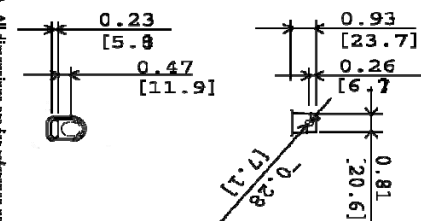
- 12V / 33 AH @ 20 HR RATE
- 12V / 137 WPC @ 15 MIN. RATE

FEATURES:

- 10 Year design life @ 25C (77F)
- Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance.
- Flame arresting one-way pressure relief valve providing vacuum and controlled backpressure for long life recombinant operation.
- Thermally welded case-to-cover bond to eliminate leakage.
- Designed to comply with ANSI and Eurobat battery standards.
- Can be mounted in any orientation. Upright, side or end mounting recommended.
- UL-Recognized component.
- Not restricted for air transport – Complies with IATA/ICAO Special Provision A67.
- Not restricted for surface transport – Classified as non-hazardous material as related to DOT-CFR Title 49 parts 171-189.
- Flame retardant polypropylene case and cover compliant with UL 1778.



*All dimensions in inches and (millimeters). All dimensions are for reference only. Contact a CAD Representative for complete dimensional information.



HRD12-140F – Specifications

Cells Per Unit	Voltage Per Unit	Weight	Electrolyte	Max. Dischg. Current	Short Circuit Current	Ohms Imped.
6	12	27 lbs 12 kg	Absorbed H ₂ SO ₄ SG = 1.300	500 Amps	2500 Amps	0.0060 Ohms

Capacity	137 watts per cell at the 15 minute rate to 1.67 volts per cell at 77F (25C). 33 Ampere-hours @ 20 hour rate to 1.75 volts per cell at 77F (25C). 29 Ampere-hours at 10 hour rate to 1.80 volts per cell at 20C (68F).
Operating Temp. Range	Discharge: -40F (40C) to 160F (71C) Charge: -10F (-23C) to 140F (60C)
Nominal Operating Temp.	74F (23C) to 80F (27C)
Float Charging Voltage	13.5 to 13.8 VDC per unit. Average at 77F (25C).
Max. Charging Current	C/5 Amperes (17.6 amperes @ 100% DOD) @ 20 hour rate.
Equalization & Cycle Service Charging Voltage	14.4 to 14.8 VDC per unit. Average at 77F (25C).
Max. AC Ripple Current	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 = 4.4 amperes RMS (C/20)
Self Discharge	Triton UPS batteries may be stored for up to 6 months at 77F (25C) 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	L-Terminal with 0.28" clearance hole to accept 0.25" (6mm) bolt.
Initial Hardware Torque	10 in-lbs (7.4 N-m)
Annual Hardware Torque	32 in-lbs (5.88 N-m)

Constant Power Discharge Ratings – Watts Per Cell @ 77F (25C)

End Point Volts/Cell	Operating Time to End Point Voltage (in minutes)									
	5	10	15	20	30	40	45	50	60	90
1.75	273	172	133	110	82	66.4	60.8	56.0	48.2	33.7
1.67	284	177	137	113	84	67.7	62.0	57.2	49.1	34.2

Constant Current Discharge Ratings – Amperes @ 77F (25C)

End Point Volts/Cell	Operating Time to End Point Voltage (in hours)									
	0.50	1	2	3	5	8	10	12	24	72
1.80	41.0	23.5	12.8	8.80	5.64	3.70	3.01	2.54	1.33	0.47
1.75	42.0	24.6	13.2	9.17	5.80	3.81	3.10	2.62	1.38	0.48