

HIGH-RATE SERIES

TC-12120S

VALVE REGULATED
LEAD ACID BATTERY (V.R.L.A.)

ABSORBED GLASS MAT
TECHNOLOGY (A.G.M.)

10 YEAR DESIGN FOR UPS &
STANDBY APPLICATIONS



FEATURES & BENEFITS

- Ten year design life in float service.
- Available with High Temperature feature, which permits normal life at temperatures up to 90°F (32°C). Add "HT" to part #: TC-12120S-HT.
- Flame retardant case compliant with UL1778 requirements.
- Absorbed glass mat technology (AGM) with gas recombination greater than 99%.
- Operates at a low internal pressure.
- Never needs watering; minimal maintenance.
- Shock absorbent thick wall polypropylene plastic, case and cover.
- Advanced lead tin calcium alloy, reduces grid corrosion and promotes long battery life.
- Pressure cast non-porous terminal bushings, eliminates post leakage.
- Thermally welded case to cover bond; eliminates both acid and electrical leaks.
- Over-sized, through the partition inter-cell welds for minimal power loss.
- Measured high vacuum acid fill, reduces electrical variability between cells.
- 100% recyclable materials.

SPECIFICATIONS

Cells / Volts	6 cells / 12 volts
Terminal type	1/4" Stainless Steed Stud
Maximum discharge current	700 amps
Short circuit current	4182 amps
Impedance @ 25°C/77°F	3.30 milliohms
Electrolyte (S.G.)	1.300
Electrolyte content	4.2 lit. / 1.11 gal. / 12.15 lbs
Capacity @ 25°C/77°F to 1.75 V.P.C.	109.6 AH @ C/20 96 AH @ C/8
Operating temperature range:	-40°C/-40°F to 60°C/140°F
Charging voltage / current:	2.27 to 2.30 volts per cell, constant voltage at a maximum current of C/4 amps.
Temperature compensation: Apply for temperature range of 0°C/32°F to 40°C/104°F.	Subtract 3mV/°C/cell or 1.7 mV/ °F/cell, above 25°C/77°F. Add 3 mV/°C/cell or 1.7 mV/ °F/cell, below 25°C/77°F.
Storage time from a fully charged condition:	6 months at 25°C/77°F. For each 9°C/15°F rise, reduce the storage time by half.
AC ripple from charging source	1.5% peak to peak of float
Overall dimensions (inches, mm)	9.25" H x 13.50" L x 6.76" W 235mm H x 344mm L x 172mm W
Weight lbs/kgs	78.5 / 35.6

NO TRANSPORT RESTRICTIONS

- Surface transport. Classified as non-hazardous material as relates to DOTCFR Title 49 part 171-189.
- Maritime transport. Classified as non-hazardous material as per IMDG amendment 27.
- Air transport. Complies with IATA / ICAO, special provision A67.

OPTIONS

- Custom inter-connecting battery cables.
- Hardware kit: HMP-15.
- Terminal cover: TC7L & TC7R.
- Handle.

DISCHARGE SPECIFICATIONS

	WATTS PER BATTERY/CELL TO 1.67 V.P.C. @ 77°F (25°C) IN MINUTES									
Model #	5	10	15	20	30	40	50	60	90	100
Per Battery	4518	3072	2400	1980	1464	1182	984	846	594	547
Per Cell	753	512	400	330	244	197	164	141	99	91

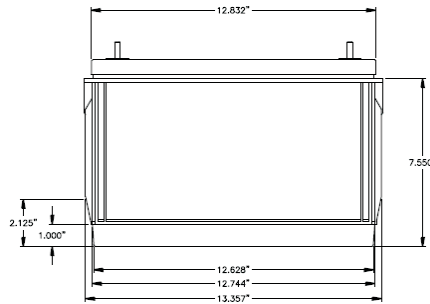
HIGH-RATE SERIES

TC-12120S

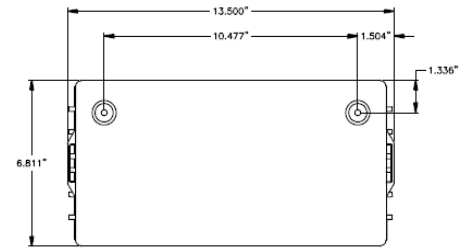
POWER BATTERY offers an extensive line of pre-wired and fused battery cabinets complete with UL and CUL approval. Custom DC voltages, breakers and chargers are also available.



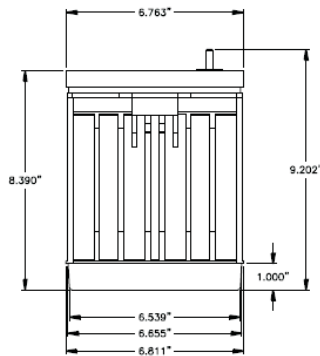
FRONT VIEW



SIDE VIEW



SIDE VIEW



BATTERY CABINET SYSTEMS (PRE-WIRED WITH PRC/TC-12120S BATTERIES)

Battery cabinet model	Maximum # of batteries	Dimensions			Weight lbs/kg
		inches / millimeters			
		W	D	H	
KS7	8	16.0/406	34.5/876	37.25 / 946	778 / 353
CR1	12	24.0/610	32.5/826	43.2 / 1092	1202 / 545
CR3	20	40.0/1016	32.5/826	43.2 / 1092	1896 / 860
CR6	30	40.0/1016	32.5/826	60.0 / 1524	2797 / 1269
CR4	40	40.0/1016	32.5/826	77.0 / 1956	3698 / 1677
CR5	48	48.0/1219	32.5/826	77.0 / 1956	4383 / 1988
CR7	40	36.0/914	29.6/749	78.7 / 1999	3665 / 1662

DISCHARGE SPECIFICATIONS

CONSTANT POWER RATINGS, WATTS PER BATTERY @ 77°F (25°C) IN MINUTES

Final V.P.C.	5	10	15	20	30	40	50	60	90	100
1.60	4676	3131	2426	2028	1505	1190	989	850	595	548
1.67	4518	3072	2400	1980	1464	1182	984	846	594	547
1.70	4449	3049	2384	1969	1459	1179	982	845	590	543
1.75	4218	2870	2298	1931	1445	1167	920	794	551	542

CONSTANT POWER RATINGS, WATTS PER CELL @ 77°F (25°C) IN MINUTES

Final V.P.C.	5	10	15	20	30	40	50	60	90	100
1.60	779	522	404	338	251	198	165	142	99	91
1.67	753	512	400	330	244	197	164	141	99	91
1.70	742	508	397	328	243	196	163	140	98	90
1.75	703	478	383	322	241	194	153	132	92	90

CONSTANT CURRENT RATINGS, AMPERES @ 77°F (25°C) IN HOURS

Final V.P.C.	1	2	3	4	5	6	8	10	12	24
1.75	70.6	39.5	28.2	22.1	18.2	15.5	12.0	9.80	8.37	4.51
1.80	69.5	38.5	27.9	21.7	17.9	15.3	11.9	9.75	8.29	4.46
1.85	66.8	37.5	26.9	21.0	17.3	14.8	11.5	9.42	8.01	4.30
1.90	61.4	35.0	25.3	19.8	16.3	13.9	10.7	8.70	7.33	3.97

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