## Powered by

## **TPL** series



# TPL 121500A 12V 159AH

### **Valve Regulated Lead Acid Battery**

Maintenance-Free Sealed Lead Acid Battery.

Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99%.

## **Design for Standby Power Applications**

#### Design Life

Up to 12 Years in Standby Service at 25°C Eurobat (20°C) : 10-12 years, Long Life

## [ Operating Temperature Range]

Nominal Operating Temperature :  $25^{\circ}C$  (77°F) Discharge :  $-15^{\circ}C \sim 50^{\circ}C$  (5°F~122°F) Charge:  $-15^{\circ}C \sim 40^{\circ}C$  (5°F~104°F) Storage:  $-15^{\circ}C \sim 40^{\circ}C$  (5°F~104°F)

#### [ Float Charging Voltage]

13.5 ~ 13.8 VDC/Unit at 25°C (77°F)

#### [Equalization Charging Voltage]

14.4 ~ 15.0 VDC/Unit at 25°C (77°F)

#### Self Discharge

Less than 10% after 90 days, can be stored up to 6 months at 25 $^{\circ}$ C (77 $^{\circ}$ F); Fully recharging is required before usage, and charged sooner if stored at higher temperature than 25 $^{\circ}$ C (77 $^{\circ}$ F).

## Specification Design according with IEC 60896-21/22:2004

Nominal Voltage 12V (6 cells per unit)

Nominal Capacity 159AH @8HR-rate to 1.75V per PCS @25 $^{\circ}$ C (77 $^{\circ}$ F)

Weight Approx. 54.80 Kg (120.78 lbs)

Maximum Discharge Current 800A (5sec) Internal Resistance Approx.  $3.70 \text{ m}\Omega$ 

Short Circuit Current 2593A Maximum Charge Current 45A

Terminal types I2 thread lead alloy terminal to accept M6 bolt

Terminal hardware Torque 138.6 Kgf-cm / 120.3 Lbf-in / 13.58 N-m

Container Material Flame Retardant ABS (UL 94-V0)

Length (L) 547.0±2.5 mm 21.54±0.10 inch

Dimensions (mm/inch) Width (W) 124.8±1.5 mm 4.94±0.06 inch

Overall Height (H) 320.3±2.5 mm 12.72±0.10 inch

(a) (b)	· •	<u> </u>	<b>○</b> ⊕	285 [1.16]	112 [0.47]
<b>©</b>	0	<u> </u>	Ф 19 [0.75]	3.5	[M6 bolf]
	547±2.5 [21.54±0.11 533±2.5 [20.98±0.11		H		124.8±1.5 [4.91±0.06] 65.8 [2.59]
				6±0.10]	
				306.342.5 [12.0640.10] 320.342.5 [12.61±0.10]	
1	529 [20.83]				122.6 [4.83]

Constant Current Discharge Characteristics Unit: A (25°C, 77°F)												
F.V/Time	15MIN	30MIN	60MIN	90MIN	2HR	3HR	4HR	5HR	6HR	8HR	10HR	20HR
1.67V	264	174	106	77.6	62.2	45.2	36.3	30.7	26.2	20.1	16.5	8.77
1.70V	251	169	105	77.2	62.1	45.2	36.2	30.5	26.1	20.0	16.4	8.72
1.75V	223	162	101	74.5	60.0	44.3	35.5	30.1	25.8	19.9	16.3	8.67
1.80V	194	152	94.7	70.7	57.4	42.6	34.7	29.4	25.1	19.5	16.1	8.50
1.83V	172	144	89.4	67.4	55.1	41.4	33.9	28.8	24.7	18.9	15.6	8.34
1.85V	155	135	85.0	64.3	52.8	40.3	33.1	28.2	24.1	18.6	15.4	8.12

Constant Power Discharge Characteristics Unit: W (25°C, 77°F)												
F.V/Time	15MIN	30MIN	60MIN	90MIN	2HR	3HR	4HR	5HR	6HR	8HR	10HR	20HR
1.67V	2672	1930	1223	897	720	529	425	358	305	237	195	104
1.70V	2582	1891	1200	884	711	521	420	357	304	236	194	103
1.75V	2354	1835	1154	856	692	517	417	356	302	234	191	102
1.80V	2113	1760	1092	821	670	505	410	353	301	233	190	101
1.83V	1870	1658	1034	784	644	488	402	339	291	226	186	99.0
1.85V	1849	1573	992	759	628	478	396	337	286	223	183	98.5

Please refer to the official site for the latest rating confirmation. URL: www.csb-battery.com

Recognized under UL 1989, and certified by ISO 9001, 14001.





Issued:



170201

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