



# TPL Series

## Extended Discharge Tables

12V Front Terminal VRLA-AGM

\* Published specification data is subject to change without notice

### TPL12400T

#### Constant Current Discharge Characteristics Unit: Amperes (25°C, 77°F)

F.V/Time	15MIN	30MIN	60MIN	90MIN	2HR	3HR	4HR	5HR	6HR	8HR	10HR	20HR
<b>1.67V</b>	86.1	50.9	29.3	21.1	16.7	11.9	9.36	7.71	6.59	5.14	4.23	2.28
<b>1.70V</b>	85.1	50.6	29.2	21.0	16.6	11.8	9.33	7.69	6.57	5.12	4.22	2.27
<b>1.75V</b>	82.4	49.6	28.9	20.9	16.5	11.7	9.26	7.63	6.52	5.08	4.19	2.26
<b>1.80V</b>	78.3	47.8	28.3	20.6	16.3	11.6	9.14	7.53	6.43	5.01	4.13	2.23
<b>1.83V</b>	73.6	45.9	27.5	20.1	15.9	11.4	8.96	7.39	6.31	4.92	4.05	2.18
<b>1.85V</b>	70.6	44.7	26.9	19.8	15.7	11.3	8.85	7.29	6.23	4.85	4.00	2.15

#### Constant Power Discharge Characteristics Unit: Watts (25°C, 77°F)

F.V/Time	15MIN	30MIN	60MIN	90MIN	2HR	3HR	4HR	5HR	6HR	8HR	10HR	20HR
<b>1.67V</b>	951	572	338	247	196	142	112	94.2	80.2	62.2	51.0	27.3
<b>1.70V</b>	942	569	337	246	195	141	111	94.1	80.0	62.0	50.9	27.2
<b>1.75V</b>	915	560	335	245	194	140	110	93.6	79.7	61.7	50.7	27.1
<b>1.80V</b>	865	543	329	243	193	139	109	92.5	78.7	61.0	50.1	26.8
<b>1.83V</b>	817	524	321	239	190	137	108	90.8	77.3	59.9	49.2	26.3
<b>1.85V</b>	787	512	315	236	187	136	107	89.8	76.4	59.2	48.6	26.0

### TPL12600T

#### Constant Current Discharge Characteristics Unit: Amperes (25°C, 77°F)

F.V/Time	15MIN	30MIN	60MIN	90MIN	2HR	3HR	4HR	5HR	6HR	8HR	10HR	20HR
<b>1.67V</b>	121.0	75.0	44.6	32.5	25.8	18.5	14.6	12.0	10.3	8.0	6.6	3.51
<b>1.70V</b>	118.0	74.0	44.4	32.4	25.7	18.4	14.5	11.9	10.3	8.0	6.6	3.50
<b>1.75V</b>	110.0	71.0	43.7	32.1	25.5	18.3	14.4	11.8	10.2	8.0	6.6	3.48
<b>1.80V</b>	99.5	67.4	42.3	31.4	25.0	17.9	14.1	11.7	10.0	7.8	6.5	3.43
<b>1.83V</b>	91.7	64.5	40.9	30.7	24.4	17.6	13.9	11.5	9.8	7.7	6.37	3.37
<b>1.85V</b>	86.1	62.3	39.7	30.0	23.8	17.2	13.6	11.2	9.6	7.6	6.26	3.31

#### Constant Power Discharge Characteristics Unit: Watts (25°C, 77°F)

F.V/Time	15MIN	30MIN	60MIN	90MIN	2HR	3HR	4HR	5HR	6HR	8HR	10HR	20HR
<b>1.67V</b>	1319	825	503	373	298	215	171	143	122	95.2	78.5	42.2
<b>1.70V</b>	1287	817	501	372	297	214	170	143	121	95.0	78.3	42.1
<b>1.75V</b>	1211	796	495	370	295	213	169	141	120	94.3	77.8	41.8
<b>1.80V</b>	1106	762	482	363	290	210	167	139	119	93.1	76.9	41.3
<b>1.83V</b>	1030	734	468	356	284	206	164	137	117	91.6	75.7	40.7
<b>1.85V</b>	975	713	456	349	278	202	161	134	115	90.1	74.6	40.0



# TPL Series

## Extended Discharge Tables

12V Front Terminal VRLA-AGM

\* Published specification data is subject to change without notice

### TPL121000FR

#### Constant Current Discharge Characteristics Unit: Amperes (25°C, 77°F)

F.V/Time	15MIN	30MIN	60MIN	90MIN	2HR	3HR	4HR	5HR	6HR	8HR	10HR	20HR
<b>1.67V</b>	186	118	69.1	50.2	40.1	29.6	23.8	19.8	16.9	13.0	10.6	5.56
<b>1.70V</b>	175	114	67.4	49.4	39.4	29.3	23.5	19.5	16.6	12.8	10.5	5.50
<b>1.75V</b>	157	106	64.0	47.3	38.0	28.4	22.8	18.8	16.0	12.5	10.3	5.38
<b>1.80V</b>	139	98.0	60.3	44.7	36.3	27.0	21.8	18.1	15.6	12.1	10.0	5.25
<b>1.83V</b>	129	92.5	58.0	43.5	35.1	26.1	21.1	17.6	15.2	11.7	9.63	5.13
<b>1.85V</b>	122	88.2	56.0	42.5	34.3	25.4	20.7	17.2	14.8	11.5	9.50	5.00

#### Constant Power Discharge Characteristics Unit: Watts (25°C, 77°F)

F.V/Time	15MIN	30MIN	60MIN	90MIN	2HR	3HR	4HR	5HR	6HR	8HR	10HR	20HR
<b>1.67V</b>	1969	1272	757	554	446	331	268	223	191	147	120	63.1
<b>1.70V</b>	1878	1233	746	549	439	329	267	222	189	145	119	62.9
<b>1.75V</b>	1716	1161	723	534	428	322	261	216	185	144	118	62.3
<b>1.80V</b>	1549	1075	691	511	414	313	254	212	183	141	116	61.6
<b>1.83V</b>	1450	1025	669	502	405	305	246	207	179	138	114	60.6
<b>1.85V</b>	1382	994	655	496	399	299	241	203	175	136	113	59.5

### TPL121000TFR

#### Constant Current Discharge Characteristics Unit: Amperes (25°C, 77°F)

F.V/Time	15MIN	30MIN	60MIN	90MIN	2HR	3HR	4HR	5HR	6HR	8HR	10HR	20HR
<b>1.67V</b>	203	123	72.6	52.9	41.9	29.8	23.4	19.4	16.6	12.9	10.7	5.55
<b>1.70V</b>	198	122	72.2	52.7	41.5	29.7	23.3	19.3	16.5	12.8	10.6	5.51
<b>1.75V</b>	184	117	71.1	52.0	41.2	29.4	23.1	19.2	16.4	12.7	10.5	5.47
<b>1.80V</b>	164	111	68.7	50.8	40.2	28.7	22.6	18.8	16.0	12.5	10.4	5.37
<b>1.83V</b>	148	105	65.9	49.2	38.9	27.9	22.0	18.3	15.7	12.3	10.1	5.24
<b>1.85V</b>	138	101	64.0	48.1	38.1	27.3	21.6	18.0	15.4	12.1	9.91	5.15

#### Constant Power Discharge Characteristics Unit: Watts (25°C, 77°F)

F.V/Time	15MIN	30MIN	60MIN	90MIN	2HR	3HR	4HR	5HR	6HR	8HR	10HR	20HR
<b>1.67V</b>	2117	1370	843	619	488	344	270	223	192	152	127	66.6
<b>1.70V</b>	2069	1361	837	615	487	342	268	222	190	149	124	65.6
<b>1.75V</b>	1944	1327	828	611	482	341	265	221	189	148	123	65.3
<b>1.80V</b>	1753	1261	798	598	472	334	262	217	187	147	122	65.0
<b>1.83V</b>	1611	1211	768	581	457	326	256	213	183	145	121	63.6
<b>1.85V</b>	1516	1177	748	569	447	320	252	210	181	144	120	62.6



# TPL Series

## Extended Discharge Tables

12V Front Terminal VRLA-AGM

\* Published specification data is subject to change without notice

### TPL121250AFR

#### Constant Current Discharge Characteristics Unit: Amperes (25°C, 77°F)

F.V/Time	15MIN	30MIN	60MIN	90MIN	2HR	3HR	4HR	5HR	6HR	8HR	10HR	20HR
<b>1.67V</b>	232	147	86.3	63.0	50.2	37.0	29.8	24.7	21.1	16.3	13.3	6.95
<b>1.70V</b>	220	142	84.4	61.8	49.1	36.6	29.4	24.4	20.8	15.9	13.1	6.88
<b>1.75V</b>	199	132	81.2	59.3	47.2	35.2	28.5	23.4	20.0	15.6	12.8	6.72
<b>1.80V</b>	176	121	76.7	56.4	45.1	33.8	27.2	22.7	19.5	15.1	12.5	6.56
<b>1.83V</b>	162	115	73.1	54.5	43.8	32.7	26.4	22.0	19.0	14.6	12.0	6.41
<b>1.85V</b>	153	110	70.4	52.7	42.8	31.9	25.5	21.5	18.5	14.4	11.9	6.25

#### Constant Power Discharge Characteristics Unit: Watts (25°C, 77°F)

F.V/Time	15MIN	30MIN	60MIN	90MIN	2HR	3HR	4HR	5HR	6HR	8HR	10HR	20HR
<b>1.67V</b>	2461	1590	946	695	557	414	335	279	238	184	150	78.9
<b>1.70V</b>	2344	1542	936	693	556	413	333	277	237	182	149	78.7
<b>1.75V</b>	2138	1456	910	681	555	407	328	270	231	180	148	77.9
<b>1.80V</b>	1927	1364	876	665	549	400	317	265	228	176	145	77.0
<b>1.83V</b>	1797	1304	844	649	538	389	310	259	224	172	142	75.8
<b>1.85V</b>	1705	1255	822	633	529	382	306	254	219	170	141	74.3

### TPL121600FR

#### Constant Current Discharge Characteristics Unit: Amperes (25°C, 77°F)

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

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



# TPL Series

## Extended Discharge Tables

12V Front Terminal VRLA-AGM

\* Published specification data is subject to change without notice

### TPL121800FR

#### Constant Current Discharge Characteristics Unit: Amperes (25°C, 77°F)

F.V/Time	15MIN	30MIN	60MIN	90MIN	2HR	3HR	4HR	5HR	6HR	8HR	10HR	20HR
<b>1.67V</b>	307	205	124	90.1	71.1	51.1	39.8	32.7	28.0	22.0	18.2	9.70
<b>1.70V</b>	292	201	123	89.2	70.7	50.9	39.6	32.6	27.9	21.9	18.1	9.67
<b>1.75V</b>	266	190	119	87.7	69.7	50.4	39.2	32.3	27.7	21.8	18.0	9.59
<b>1.80V</b>	238	177	114	84.6	67.6	49.2	38.4	31.7	27.2	21.4	18.0	9.44
<b>1.83V</b>	221	167	109	81.8	65.6	47.9	37.4	31.0	26.6	21.0	17.4	9.28
<b>1.85V</b>	205	158	105	79.2	63.9	46.7	36.6	30.4	26.1	20.6	17.0	9.11

#### Constant Power Discharge Characteristics Unit: Watts (25°C, 77°F)

F.V/Time	15MIN	30MIN	60MIN	90MIN	2HR	3HR	4HR	5HR	6HR	8HR	10HR	20HR
<b>1.67V</b>	3208	2217	1386	1023	816	589	466	387	333	261	217	116
<b>1.70V</b>	3096	2206	1382	1013	809	588	465	386	332	260	216	115
<b>1.75V</b>	2879	2106	1354	1004	803	583	462	383	330	259	215	114
<b>1.80V</b>	2624	1968	1302	975	782	569	454	377	324	255	211	113
<b>1.83V</b>	2455	1865	1253	946	765	561	445	370	318	250	208	111
<b>1.85V</b>	2341	1770	1209	920	747	550	436	363	313	247	205	110

### TPL122000FR

#### Constant Current Discharge Characteristics Unit: Amperes (25°C, 77°F)

F.V/Time	15MIN	30MIN	60MIN	90MIN	2HR	3HR	4HR	5HR	6HR	8HR	10HR	20HR
<b>1.67V</b>	351	235	142	102	80.3	57.1	44.8	37.2	31.9	25.0	20.8	10.9
<b>1.70V</b>	336	230	140	102	79.9	56.9	44.7	37.0	31.8	24.9	20.7	10.8
<b>1.75V</b>	308	217	136	100	79.1	56.3	44.2	36.7	31.5	24.7	20.5	10.7
<b>1.80V</b>	275	201	130	97.9	77.0	55.0	43.3	35.9	30.9	24.3	20.2	10.6
<b>1.83V</b>	256	190	124	94.6	74.6	53.4	42.1	35.1	30.2	23.8	19.8	10.5
<b>1.85V</b>	245	180	120	91.6	72.4	52.0	41.1	34.3	29.5	23.4	19.4	10.3

#### Constant Power Discharge Characteristics Unit: Watts (25°C, 77°F)

F.V/Time	15MIN	30MIN	60MIN	90MIN	2HR	3HR	4HR	5HR	6HR	8HR	10HR	20HR
<b>1.67V</b>	3638	2535	1582	1178	930	665	525	437	376	296	247	126
<b>1.70V</b>	3538	2493	1568	1174	926	663	523	435	374	295	246	125
<b>1.75V</b>	3352	2386	1533	1159	915	656	518	431	371	293	244	124
<b>1.80V</b>	3062	2215	1470	1124	890	641	508	424	365	289	242	123
<b>1.83V</b>	2858	2091	1418	1088	865	625	497	416	359	286	239	121
<b>1.85V</b>	2735	2001	1376	1057	842	611	487	408	353	282	236	119