

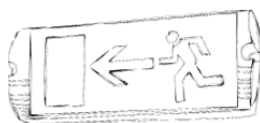
Product features

- Maintenance free battery, no need for watering
- Specific environmentally friendly formation process
- Spill & leak proof construction
- Analytical grade electrolyte
- Safety valves
- Container and lid made from ABS (UL 94 V-0 version available on request)
- Low self-discharge
- Non dangerous good according to FAA and IATA classification
- Complies with the following standards: IEC 60896-21/22, EUROBAT
- Tested by Det Norske Veritas / Germanischer Lloyd



Specification

Nominal voltage	12 V
Nominal capacity	135 Ah
Design life	12 years
Operating temperature	-20°C to 50°C (-4°F to 122°F)
Grid alloy	Lead-calcium-tin
Electrode design	Flat grid, pasted
Separator	Absorbent Glass Mat (AGM)
Active material	High purity lead and lead dioxide
Container and lid	ABS UL 94 HB (V-0 version on request)
Charge voltage	Float charging: 2.275 Vpc @ 20°C (68°F) Cyclic use: see instruction for use
	Maximum ripple: 0.05 C (A)
Electrolyte	Purified high grade sulfuric acid
Safety valve	EPDM rubber, opening pressure 10.5 to 14 kPa (1.5 to 2 psi), closing pressure ca. 7 kPa (1 psi)
Terminal	Insert M6



CTM GmbH encourages environmental awareness. Please observe all existing guidelines for recycling/disposal of lead.

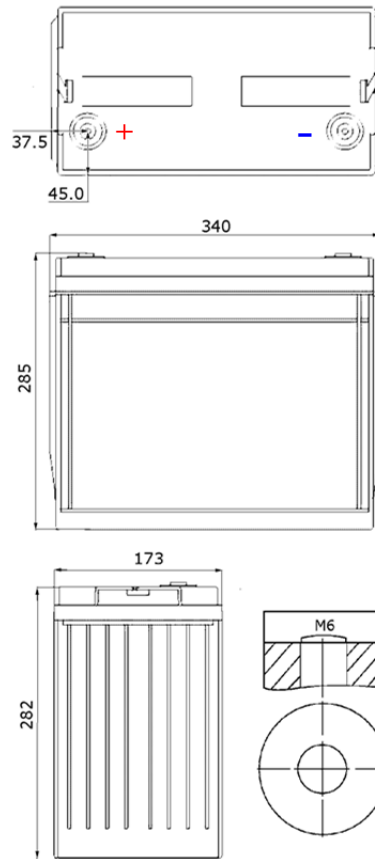
Physical Data

Dimension (±2 mm/± 0.08 inch)

Length	340 mm	13.39 inches
Width	173 mm	6.81 inches
Height	282 mm	11.10 inches
Height incl. terminal	285 mm	11.22 inches
Weight	43.3 kg	95.69 lbs.
Terminal	Standard	Insert M6
	Option	automotive

Electrical Data

Nominal voltage		12 V
Capacity 20°C (68°F) to 1.7 Vpc	20 h	172 Ah
	10 h	160 Ah
	5 h	145 Ah
	1 h	107 Ah
	15 min	65.7 Ah
	Internal resistance	3.2 mΩ
	Impedance	1300 S
Temperature correction factors (C20)	40°C (104°F)	102%
	20°C (68°F)	100%
	0°C (32°F)	85%
	-15°C (5°F)	65%
Self-discharge at 20°C (68°F) - capacity after	1 month storage	98%
	3 months storage	94%
	6 months storage	86%
Short circuit current	A @ 20°C (68°F)	3750
Charging voltage	Float charging	2.27-2.30 Vpc 25-15°C (77-59°F)
	cyclic	See operating instruction



Constant current discharge – A @ 20°C (68°F)

Uf Vpc	5 min	10 min	15 min	20 min	30 min	60 min	2 h	5 h	8 h	10 h	20 h
1.85	335	262	226	194	151	92.3	54.1	25.0	16.7	13.8	7.4
1.80	357	280	242	207	162	98.6	57.8	26.7	17.9	14.7	7.9
1.75	380	298	257	220	172	105	61.4	28.4	19.0	15.7	8.4
1.70	389	305	263	225	176	107	62.8	29.0	19.4	16.0	8.6
1.65	393	309	266	228	178	109	63.6	-	-	-	-
1.60	397	312	269	230	180	110	64.2	-	-	-	-

Constant power discharge – Watt per cell @ 20°C (68°F)

Uf Vpc	5 min	10 min	15 min	20 min	30 min	60 min	2 h	5 h	8 h	10 h	20 h
1.85	879	549	434	367	290	182	105	50.0	33.4	27.6	15.3
1.80	938	587	463	393	310	194	112	53.4	35.7	29.5	16.3
1.75	998	624	493	418	330	206	119	56.8	37.9	31.4	17.3
1.70	1020	638	504	427	337	211	122	58.0	38.8	32.1	17.7
1.65	1033	646	510	432	341	214	123	-	-	-	-
1.60	1043	652	515	436	344	216	125	-	-	-	-

Capacity – Ah @ 20°C (68°F)

Uf Vpc	2 h	3 h	5 h	8 h	10 h	20 h
1.85	108	116	125	134	138	149
1.80	116	124	134	143	147	159
1.75	123	132	142	152	157	169
1.70	126	134	145	155	160	173
1.65	127	136	-	-	-	-
1.60	128	137	-	-	-	-

