

CLC40-12FT

12V 40AH

Pure Lead Carbon

CANBAT

CLC40-12FT



Physical Specification

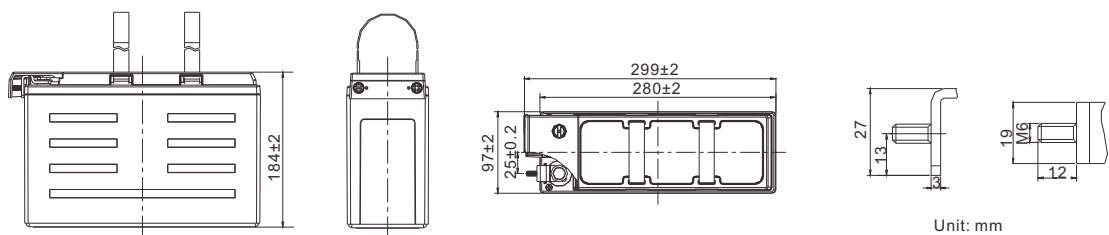
Part Number:	CLC40-12FT
Length:	299 ± 2 mm (11.76 inches)
Width:	97 ± 2 mm (3.82 inches)
Container Height:	184 ± 2 mm (7.24 inches)
Total Height (with terminal):	184 ± 2 mm (7.24 inches)
Approx Weight:	12.5 kg (27.5 lbs)

Specifications

	Nominal Voltage	12V
	Nominal Capacity (10HR)	40AH
Terminal Type	Standard Terminal	M6
	Optional Terminal	M8
Container Material	Standard Option	ABS
	Flame Retardant Option (FR)	Non-halogenated, thermally sealed PPOI plastic casing & cover
Rated Capacity(35°)	38.0Ah	(C10 to 1.80VDC @ 25°C)
	38.0Ah	(C8 to 1.75VDC @ 25°C)
	35.9Ah	(C5 to 1.75VDC @ 25°C)
	32.4Ah	(C3 to 1.75VDC @ 25°C)
Max Charge Current (A)	11.4A	
Max Discharge Current	456A	
Internal Resistance	Approx 3.9mΩ @ 25°C @ 1Khz	
Discharge Characteristics	Operating Temp. Range	Discharge: -40 ~ 65°C
		Charge: 0 ~ 40°C
		Storage: -20 ~ 40°C
	Nominal Operating Temp. Range	25 ± 3°C (77 ± 5°F)
	Cycle Life	Exceptional PSoC cyclic performance 2500+ cycles at 50% Depth of Discharge (DoD)
	Features	Lead carbon added to negative electrodes increases power and reduces sulfation, leak-proof operation
Capacity affected by Temperature	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	79%
Design Floating Life at 20°C	20+ Years	
Self Discharge	Canbat Pure Lead Carbon Batteries may be stored for up to 24 months at 25°C (°77F). For higher temperatures, the time interval will be shorter. A refresh charge is required when the OCV approach 2.10V/cell or when the maximum storage time is reached, whichever occurs first.	

Dimensions

M6 Terminal



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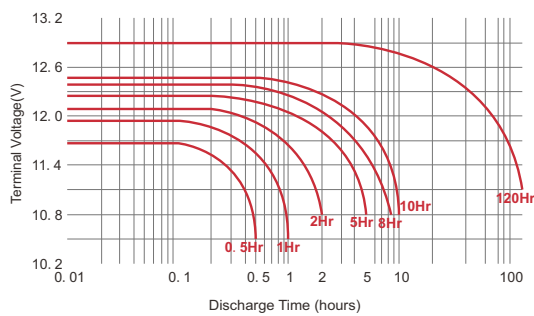
Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	10 min	15min	20min	30min	45min	1h	2h	3h	4h	5h	8h	10h	20h
1.85V/cell	72.5	59.7	51.1	40.0	30.5	24.3	14.6	10.4	8.44	6.92	4.60	3.76	2.02
1.80V/cell	79.7	64.7	54.8	42.4	31.9	25.5	14.9	10.6	8.57	7.05	4.69	3.80	2.06
1.75V/cell	87.1	69.8	58.6	44.7	33.4	26.6	15.3	10.8	8.74	7.18	4.75	3.89	2.11
1.70V/cell	93.7	74.2	61.7	46.7	34.6	27.4	15.6	10.9	8.87	7.30	4.81	3.93	2.14
1.67V/cell	97.2	76.4	63.3	47.6	35.1	28.1	15.7	11.0	8.91	7.30	4.86	3.93	2.15
1.60V/cell	103.7	80.0	65.7	48.9	35.8	28.4	15.9	11.2	9.04	7.39	4.94	4.01	2.17

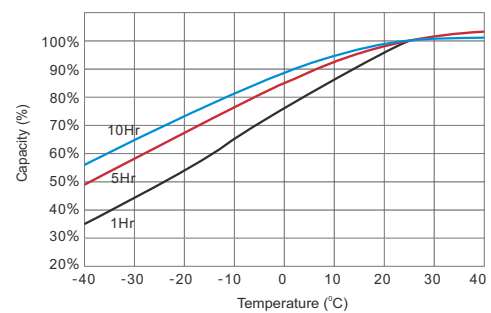
Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	10 min	15min	20min	30min	45min	1h	2h	3h	4h	5h	8h	10h	20h
1.85V/cell	140.8	112.8	97.0	75.2	57.5	48.2	27.6	20.5	16.6	13.8	9.13	7.46	3.99
1.80V/cell	153.2	120.6	104.2	79.2	59.8	50.3	28.4	20.8	16.9	13.9	9.21	7.59	4.11
1.75V/cell	159.4	124.0	106.2	81.2	61.0	50.9	28.8	21.1	17.2	14.1	9.34	7.67	4.17
1.70V/cell	166.1	131.1	109.3	83.0	62.2	51.0	29.1	21.4	17.4	14.3	9.46	7.75	4.21
1.67V/cell	173.4	135.9	112.7	85.3	63.6	51.3	29.6	21.5	17.5	14.4	9.50	7.79	4.25
1.60V/cell	178.8	139.0	112.8	86.5	64.3	51.8	29.8	21.7	17.6	14.5	9.58	8.02	4.26

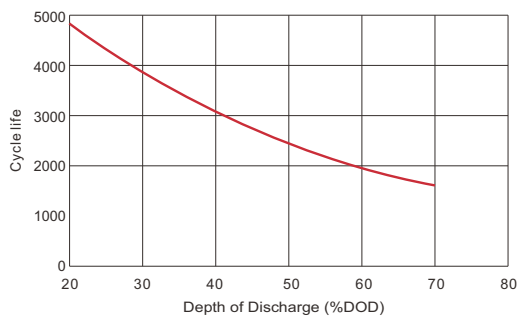
Discharge Characteristics



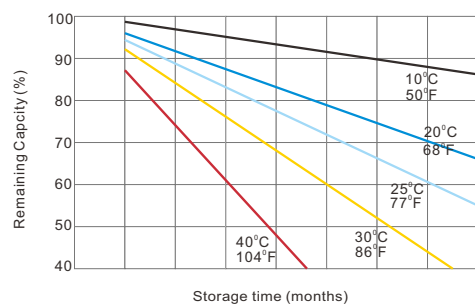
Temperature in Relation to Capacity



Cycle Life vs. Depth of Discharge



Self-discharge Characteristics



Features of Canbat Carbon Technology

- Exceptional PSoc cyclic performance 2500 cycles @50% DoD with a design life of 12+ years at 20°C (68°F)
- High modulus Polyphenylene Oxide (PPO) plastic, materials designed to withstand extended elevated operating temperatures.
- Flame retardant (UL 94 VO) and LOI of at least 28%
- Lead carbon added to negative electrodes increases power and reduces sulfation
- High potential fuel savings when used with hybrid genset applications
- Operating temperature range -40°C to +65°C (-40°F to 149°F)
- State-of-the-art automated manufacturing ensures consistency and reliability
- Advanced 3 stage terminal design to ensure leak-free operation - brass terminals provide maximum performance
- Non-halogenated thermally sealed plastic casing