

sealed maintenance-free lead-acid **TECHNOCELL** battery **TCL** series



TCL 40-12

Batteries made in **AGM technology** - electrolyte is absorbed in highly porous fiber glass separators placed between the plates. One-way, self-regulating pressure relief valves prevent the case from blowing up, by preventing excessive buildup of pressure in the cells. They have a low internal resistance, which means a longer working time.

MAIN APPLICATIONS

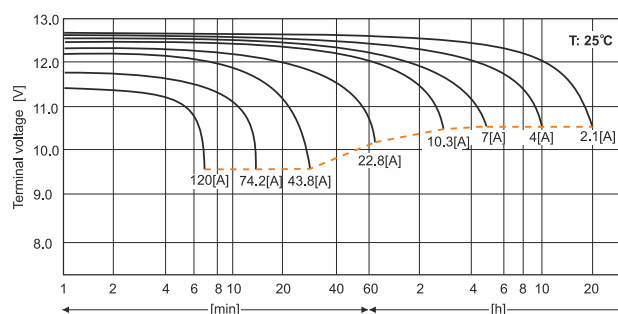
- uninterruptible power supplies
- cash registers and fiscal printers
- telecommunication PABX
- marine
- fire and security systems
- emergency lighting systems
- golf-carts, wheelchairs
- solar powered systems

TECHNICAL DATA

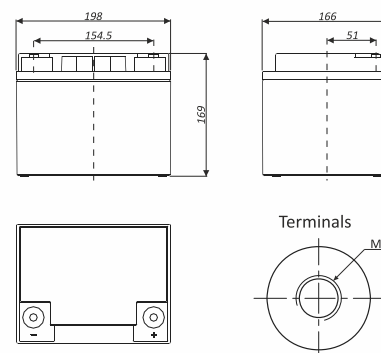
Nominal voltage	12 V
Nominal capacity	40Ah/C ₁₀ 1,75V/cell @25°C
Designed life	10-12 years @ 20°C 6-8 years @ 25°C
Weight	~ 12,4 kg
Internal resistance	~ 9 mΩ*
Dimensions	
Height	169 mm
Length	198 mm
Width	166 mm
Charging voltage @ 25°C	
Standby use	13,6 V - 13,8 V (-18mV/°C)
Cycle use	14,6 V - 14,8 V (-24mV/°C)
Charging current	
Recommended	4,0 A
Maximum	12,0 A
Max. discharge current (5s)	400 A
Ambient nominal temperature range	
Storage	-20°C - 60°C
Charge	0°C - 50°C
Discharge	-20°C - 60°C
Container material	
Standard	ABS UL 94-HB
Optional	ABS UL 94-V0

*for a fully charged battery

DISCHARGE CHARACTERISTICS



DIMENSIONS



Tolerance: +/- 1mm

Constant current discharge (Current [A], 25 [°C] / 77 [°F])

U _f [V/cell]	Discharge time											
	5 min	10 min	15 min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1,75	109,8	77,7	61,8	38,4	22,0	13,2	10,3	8,18	6,98	4,87	4,05	2,12
1,70	117,5	84,9	66,4	40,2	22,8	13,6	10,6	8,39	7,16	4,94	4,11	2,15
1,65	123,5	92,3	70,9	42,1	23,6	14,1	10,9	8,63	7,35	5,01	4,17	2,17

Constant power discharge (Power [W/cell], 25 [°C] / 77 [°F])

U _f [V/cell]	Discharge time											
	5 min	10 min	15 min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1,75	199,6	139,6	112,9	72,0	42,1	25,3	20,0	15,9	13,6	9,57	8,00	4,19
1,70	209,9	149,8	119,6	74,5	43,4	26,1	20,5	16,2	13,9	9,68	8,09	4,24
1,65	218,2	159,8	125,8	77,2	44,6	26,8	21,0	16,6	14,2	9,81	8,21	4,28

U_f - Final voltage

TECHNOCELL

www.emu.com.pl



Help restore balance in nature.
Recycle the used battery.