

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



TCL 18-12

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

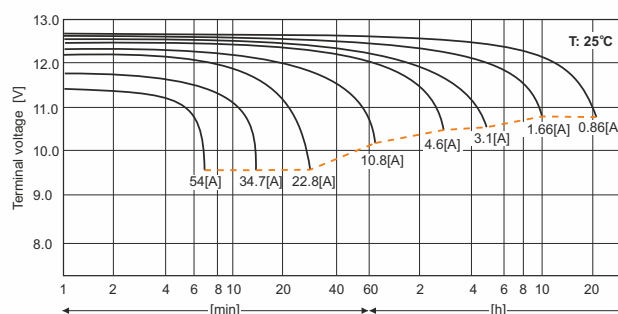
- uninterruptible power supplies
- cash registers and fiscal printers
- telecommunication PABX
- marine
- fire and security systems
- emergency lighting systems
- golf-carts, wheelchairs
- solar powered systems

TECHNICAL DATA

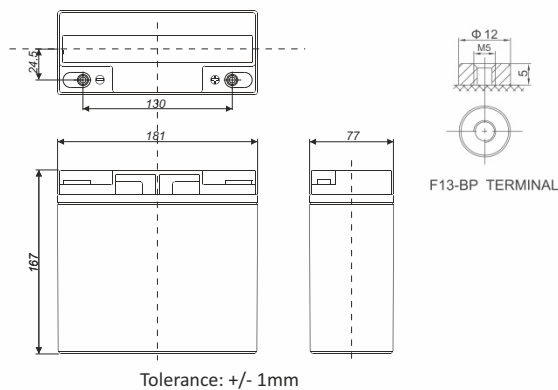
Nominal voltage	12 V
Nominal capacity	18Ah/C ₂₀ 1,75V/cell @25°C
Designed life	6-8 years @ 25°C 10-12 years @ 20°C according Eurobat, Long Life group
Weight	~ 5,0 kg
Internal resistance	~ 18 mΩ*
Dimensions	
Height	167 mm
Length	181 mm
Width	77 mm
Charging voltage @ 25°C	
Standby use	13,7 V - 13,9 V (-18mV/°C)
Cycle use	14,6 V - 14,8 V (-24mV/°C)
Charging current	
Recommended	1,8 A
Maximum	5,4 A
Max. discharge current (5s)	270 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



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	53,8	40,0	27,7	20,5	10,4	6,25	4,66	3,60	3,13	2,11	1,69	0,90
1,70	58,0	41,9	29,7	21,0	10,8	6,41	4,73	3,65	3,28	2,16	1,73	0,92
1,65	70,7	44,6	31,9	21,6	11,2	6,53	4,82	3,85	3,31	2,20	1,76	0,94

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	102	74,7	54,9	37,7	19,3	11,8	8,85	6,84	5,97	3,94	3,28	1,79
1,70	113	77,1	57,0	38,1	19,9	12,0	8,97	6,93	6,09	4,11	3,36	1,82
1,65	123	79,5	59,7	38,2	20,5	12,3	9,12	7,29	6,27	4,15	3,39	1,84

U_f - Final voltage

