

BATTERIA SIGILLATA AGM DEEP-CYCLE (USO CICLICO)  
DEEP-CYCLE AGM MAINTENANCE FREE BATTERY

# ZL120190



### CHARACTERISTIC / CARATTERISTICHE

Volt	12V	
Capacity / Capacità	20h	130Ah
	5h	105Ah
Internal Resistance	Full Charged Battery 25°C ≤5.0mΩ	
Capacity affected by Temperature / Effetti delle temperature sulla capacità	40°C	102%
	25°C	100%
	0°C	85%
Self-Discharge 25°C Capacity / Autoscarica a 25°C	after 3 month storage	90%
	after 6 month storage	80%
	after 12 month storage	62%
Charge cycle / Ciclo di carica	IU + h	"In" max. 22Amp; "V1" 2.43V/cell
	IUIa	"In" max. 22Amp; "V1" 14.4Volt; "If" 1Amp.

### CHARACTERISTIC / CARATTERISTICHE

Battery dimensions / Dimensioni batteria			
L/L	W/P	H/A	Tot - H/A
331	175	217	223
Box Dimensions / Dimensioni scatola			
L/L	W/P	H/A	
346	188	289	
USA Type			31
Weight / Peso			33 Kg
Terminal / Terminali			M8
Case / Contenitore			ABS

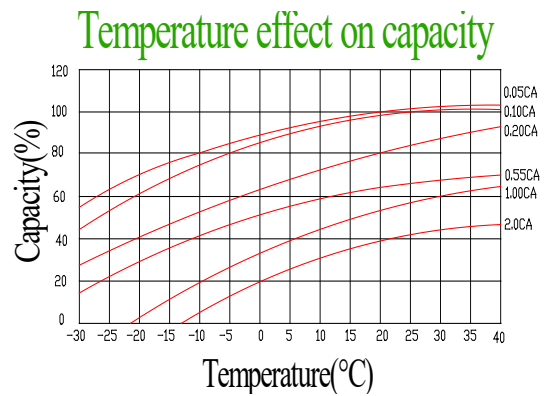
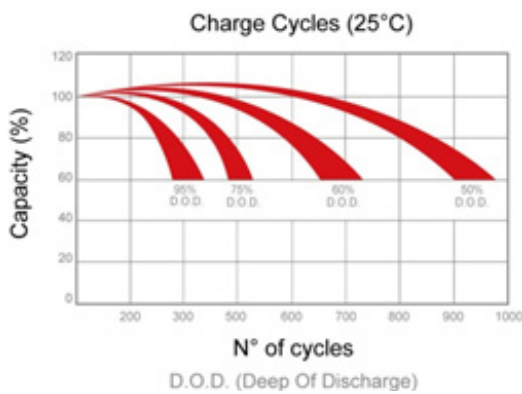
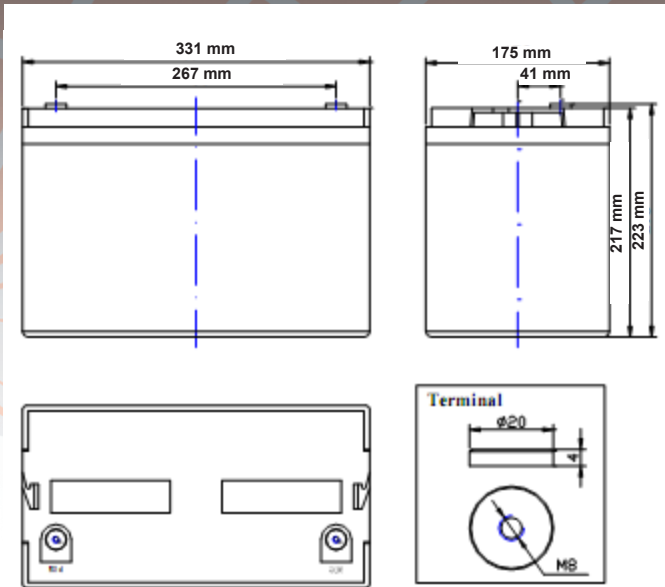
### Amp. (25°C)

F.V/Time	5min	10min	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h
1.60V	261.4	166.6	141.6	90.4	66.4	61.0	38.8	27.2	18.5	12.2	10.9	6.05
1.65V	256.6	163.6	139.0	88.7	65.2	59.9	38.1	26.7	18.2	12.0	10.7	5.94
1.70V	251.9	160.6	136.4	87.1	64.0	58.8	37.4	26.2	17.8	11.8	10.5	5.83
1.75V	247.1	157.5	133.8	85.5	62.8	57.7	36.7	25.7	17.5	11.5	10.3	5.72
1.80V	237.6	151.5	128.7	82.2	60.4	55.4	35.2	24.8	16.8	11.1	9.9	5.50

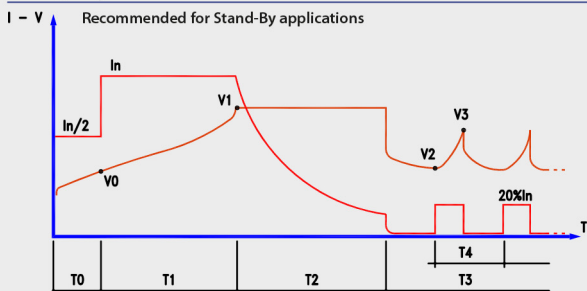
### Watts (25°C)

F.V/Time	5min	10min	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h
1.60V	503.1	320.7	272.5	174.0	127.9	117.4	74.6	52.4	35.6	23.5	21.0	11.6
1.65V	494.0	314.9	267.6	170.8	125.6	115.3	73.3	51.5	35.0	23.1	20.6	11.4
1.70V	484.8	309.1	262.6	167.7	123.2	113.1	71.9	50.5	34.3	22.6	20.2	11.2
1.75V	475.7	303.2	257.7	164.5	120.9	111.0	70.6	49.5	33.7	22.2	19.8	11.0
1.80V	457.4	291.6	247.7	158.2	116.3	106.7	67.8	47.6	32.4	21.3	19.1	10.6

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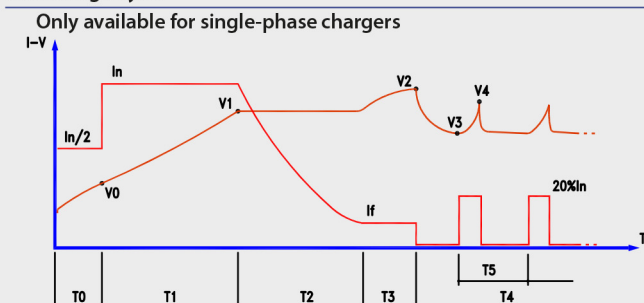
### Charge cycle for sealed batteries (GEL/AGM): IU + holding



- $I_n$  = PROGRAMMED CAPACITY/10
- $V_0$  = 1,90 V/CELL
- $V_1$  = PROGRAMMED VALUE
- $V_2$  = 2.10 V/CELL
- $V_3$  = 2.30 V/CELL
- $T_0$  = MAX. 1 HR
- $T_1$  = MAX. 12 HRS
- $T_2$  =  $T_1$  (MIN. 2-MAX. 5 HRS)
- $T_3$  = UNLIMITED

"IUIa" charge cycle is always recommended in case of more than 2 batteries in series  
Ciclo di carica "IUIa" è sempre necessario qualora ci siano più di 2 batterie collegate in serie.

### IUIa charge cycle



- $I_n$  = PROGRAMMED VALUE (CHARGE I)
- $I_f$  = PROGRAMMED VALUE (FINAL I)
- $V_0$  = 1,90 V/CELL
- $V_1$  = PROGRAMMED VALUE (THRESHOLD V)
- $V_2$  = PROGRAMMED VALUE (LOCK V)
- $V_3$  = 2.10 V/CELL
- $V_4$  = 2.30 V/CELL
- $T_0$  = MAX. 1 HR
- $T_1$  = MAX. 12 HRS
- $T_2$  = MAX.  $T_1 + 6$  HRS OR  $I = I_f$
- $T_3$  = MAX. 4 HRS
- $T_4$  = UNLIMITED
- $T_5$  = MAX. 6 HRS