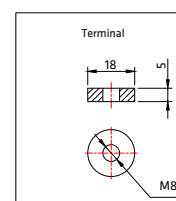
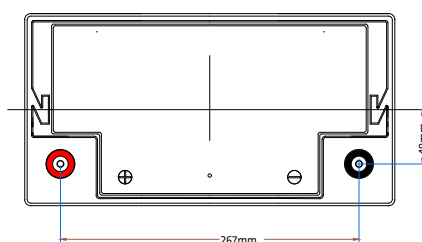
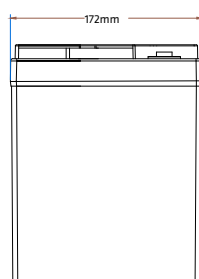
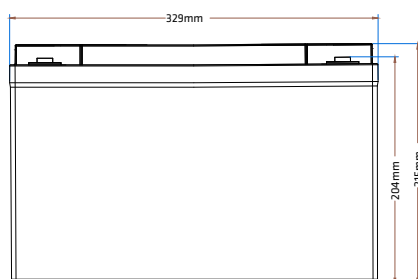


**ZGEL120190**

CHARACTERISTIC / CARATTERISTICHE		
Volt		12V
Capacity / Capacità	20h	100Ah
	5h	90Ah
	3h	82Ah
	2h	78Ah
Charge temperature / Temperatura di carica		-10°C / +50°C
Discharge temperature / Temperatura di scarica		-40°C / 50°C
Capacity affected by Temperature / Effetti della temperatura sulla capacità	40°C	106%
	25°C	100%
	0°C	80%
Expected Life Cycles affected by temperature / Effetti della temperatura sui cicli di vita attesi	40°C	60%
	20°C	100%
	0°C	120%
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. 42Amp; "V1" 2.40V/cell
	IUIa	"In" max. 42Amp; "V1" 14.1Volt; "If" 2Amp.

CHARACTERISTIC / CARATTERISTICHE		
Battery dimensions / Dimensioni batteria		
L/L	W/P	MAX - H/A
329	172	215
Box Dimensions / Dimensioni scatola		
L/L	W/P	H/A
-	-	-
USA Group	31	
Weight / Peso	32 Kg	
Terminal / Terminali	M8	
Case / Contenitore	ABS	
Pallet Qt	36	



This information is generally descriptive only and is not intended to make or imply any representation, guarantee or warranty with respect to any cells and batteries. Cell and battery designs/specifications are subject to modification without notice. Contact U.B.S. UNION BATTERY SERVICE for the latest information.

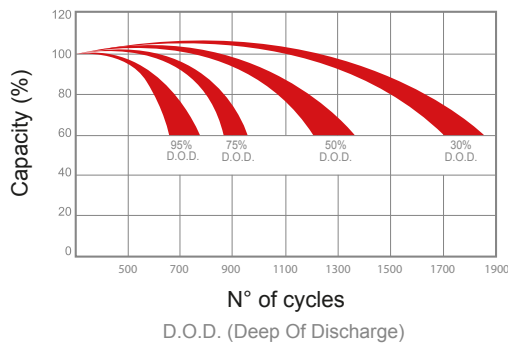
Le informazioni contenute in questa scheda tecnica sono solo descrittive e indicative, non sono una garanzia. U.B.S. UNION BATTERY SERVICE si riserva il diritto di aggiornarle/modificarle senza preavviso.



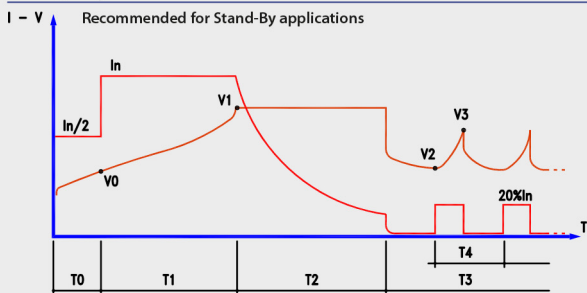
# ZGEL120190



Charge cycles (20°C, discharge 5h)



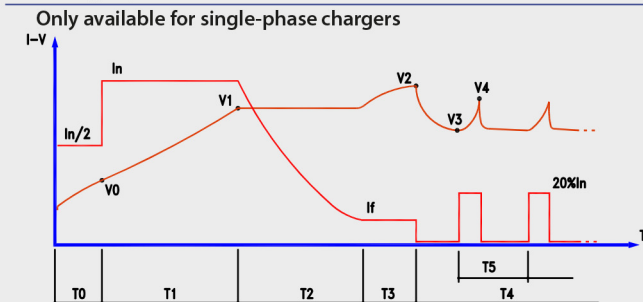
### Charge cycle for sealed batteries (GEL/AGM): IU + holding



- $I_n$  = 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

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

### IUla 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