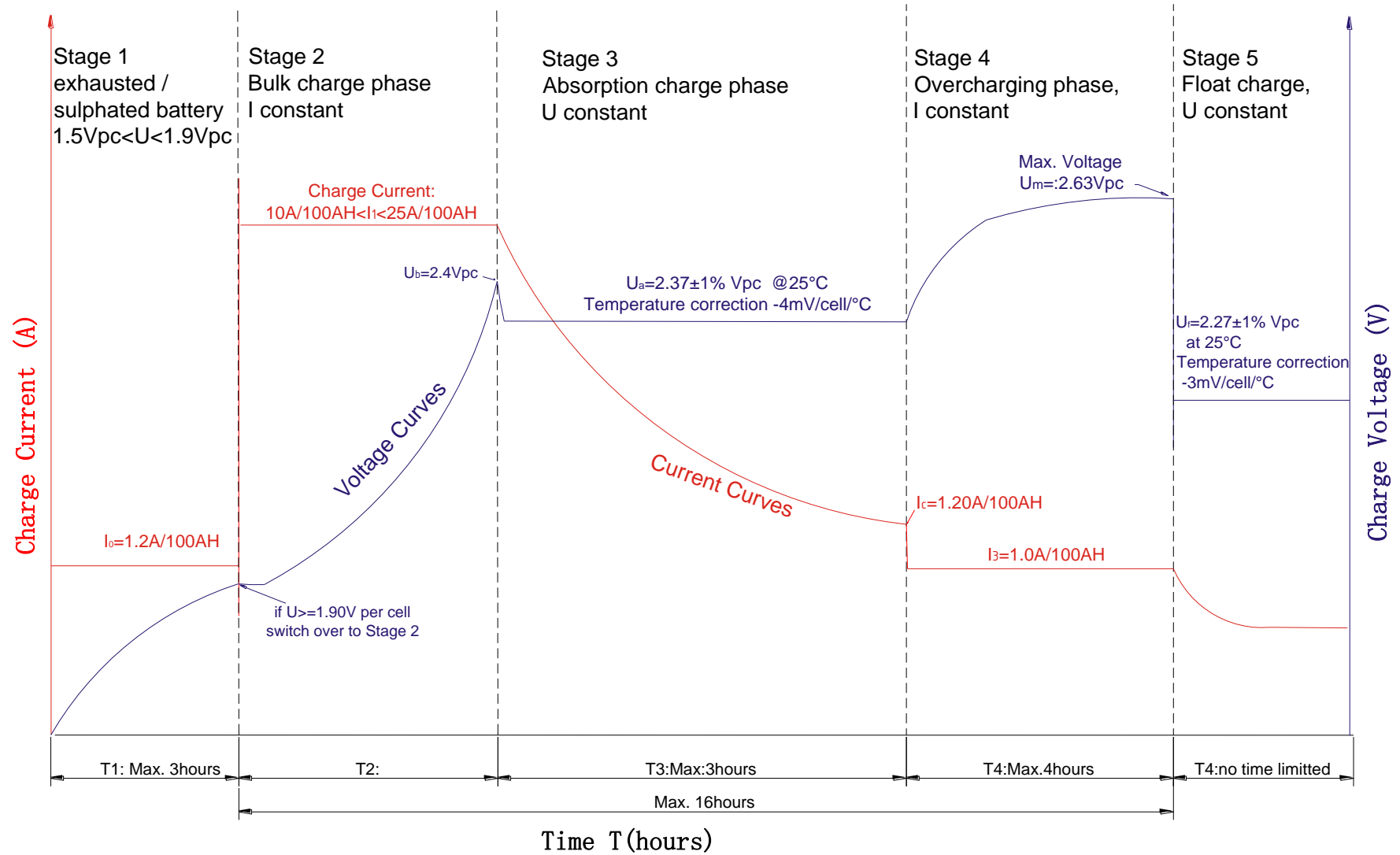


DCG series recharge with UIU characteristic





IUIU- characteristic DCG series(GEL Technology)- referred to 25°C

Charging phase	Description	Battery Parameters	Charger parameters	Switch over criterion	Switch-off criterion	Comment	Storing, if possible
	Battery failure	$U_{ocv} < 1.5V/C$					
Stage1	exhausted / sulphated battery	$1.5V/C < U_{ocv} < 1.9 V/C$	$I_0 = 1.2 A/100Ah$	$U_C = 1.90V/C$	$T_1 > 3h$	switch over to Stage 2	exhaustive discharges
Stage 2	Bulk charge, I constant		$10A/100Ah < I_1 < 25A/100Ah$	$U_b = 2.40V/C$			
Stage 3	Absorption charge, U constant		$U_a = 2.37V/C$	$I_C = 1.2A/100Ah$			
	Safety shutdown				$T_3 > 3h$		
Stage 4	overcharging phase, I constant		$I_3 = 1.0A/100Ah$		$T_4 > 4h$	T_4 min. 2h at every restart	
	Safety shutdown				$T_2 + T_3 + T_4 > 16h$ Max. $U_m = 2.60V/C$		
	Battery full					Switch over to Stage 5	
Stage 5	Floating charge		$U_f = 2.275V/C$				

Rev.2014.3