

Overview of Charging Characteristics J019C

No.	Battery voltage	Battery type	Battery capacity	I ₁	U ₁	I ₂	I ₃	U ₃	T _{I1 max}	TU _{1 max}	TU ₃	Note
0	12 V	FVLA	45 Ah ... 60 Ah	15 A	14.4 V	1.0 A	15 A	13.5 V	5 h	6 h	∞	
1	12 V	FVLA	60 Ah ... 80 Ah	15 A	14.4 V	1.4 A	15 A	13.5 V	5 h	6 h	∞	
2	12 V	FVLA	80 Ah ... 120 Ah	15 A	14.4 V	2.0 A	15 A	13.5 V	7 h	8 h	∞	
3	12 V	FVLA	120 Ah ... 160 Ah	15 A	14.4 V	2.8 A	15 A	13.5 V	10 h	11 h	∞	
4	12 V	FVLA	160 Ah ... 200 Ah	15 A	14.4 V	3.6 A	15 A	13.5 V	11 h	12 h	∞	
5	12 V	VRLA	45 Ah ... 60 Ah	15 A	14.2 V	0.55 A	15 A	13.6 V	5 h	6 h	∞	
6	12 V	VRLA	60 Ah ... 80 Ah	15 A	14.2 V	0.7 A	15 A	13.6 V	5 h	6 h	∞	
7	12 V	VRLA	80 Ah ... 120 Ah	15 A	14.2 V	1.0 A	15 A	13.6 V	7 h	8 h	∞	
8	12 V	VRLA	120 Ah ... 160 Ah	15 A	14.2 V	1.4 A	15 A	13.6 V	10 h	11 h	∞	
9	12 V	VRLA	160 Ah ... 200 Ah	15 A	14.2 V	1.8 A	15 A	13.6 V	11 h	12 h	∞	
A	12 V	VRLA*	45 Ah ... 60 Ah	15 A	14.4 V	0.55 A	15 A	13.8 V	5 h	6 h	∞	
B	12 V	VRLA*	60 Ah ... 80 Ah	15 A	14.4 V	0.7 A	15 A	13.8 V	5 h	6 h	∞	
C	12 V	VRLA*	80 Ah ... 120 Ah	15 A	14.4 V	1.0 A	15 A <td 13.8 V	7 h	8 h	∞		
D	12 V	VRLA*	120 Ah ... 160 Ah	15 A	14.4 V	1.4 A	15 A	13.8 V	10 h	11 h	∞	
E	12 V	VRLA*	160 Ah ... 200 Ah	15 A	14.4 V	1.8 A	15 A	13.8 V	11 h	12 h	∞	
F	---	---	---	---	---	---	---	---	---	---	---	

FVLA: open lead-acid batteries, batteries with water refill

VRLA: Valve-regulated lead-acid batteries, maintenance-free wet batteries

VRLA*: Gel batteries, AGM

Description

1. If a temperature sensor (CTS/TS) is connected and the battery temperature is higher than 45°C, the charging current is reduced to 50%. Only when the battery temperature falls below 40°C again does the charging capacity increase to 100%.
2. If a temperature sensor (CTS/TS) is connected and the battery temperature is higher than 50°C, the charger switches off until the battery temperature is below 45°C.
3. If a temperature sensor (CTS/TS) is connected, the output voltage will be increased by 21 mV per degree if the battery temperature is below 25°C and decreased if the battery temperature is above 25°C.
4. If the time T_{I1 max} is exceeded, the charger switches off and the red LED flashes.
5. If the time TU_{1 max} is exceeded, the next charging phase begins automatically.

