

## Overview of Charging Characteristics VJ019D3 / 2VJ019D3

No.	Battery voltage	Battery type	Battery capacity	I <sub>1</sub>	U <sub>1</sub>	I <sub>2</sub>	I <sub>3</sub>	U <sub>3</sub>	T <sub>I1 max</sub>	TU <sub>1 max</sub>	TU <sub>3</sub>	Note
0	12 V	FVLA	225 Ah ... 300 Ah	95 A	14.4 V	6.5 A	95 A	13.5 V	5 h	2 h	∞	
1	12 V	FVLA	300 Ah ... 400 Ah	120 A	14.4 V	9.0 A	120 A	13.5 V	5 h	3 h	∞	
2	12 V	FVLA	400 Ah ... 600 Ah	120 A	14.4 V	13.5 A	120 A	13.5 V	7 h	4 h	∞	
3	12 V	FVLA	600 Ah ... 800 Ah	120 A	14.4 V	18 A	120 A	13.5 V	10 h	5 h	∞	
4	12 V	FVLA	800 Ah ... 1000 Ah	120 A	14.4 V	23 A	120 A	13.5 V	11 h	6 h	∞	
5	12 V	VRLA	225 Ah ... 300 Ah	95 A	14.1 V	3.5 A	95 A	13.5 V	5 h	2 h	∞	
6	12 V	VRLA	300 Ah ... 400 Ah	120 A	14.1 V	5.0 A	120 A	13.5 V	5 h	3 h	∞	
7	12 V	VRLA	400 Ah ... 600 Ah	120 A	14.1 V	7.0 A	120 A	13.5 V	7 h	4 h	∞	
8	12 V	VRLA	600 Ah ... 800 Ah	120 A	14.1 V	9.5 A	120 A	13.5 V	10 h	5 h	∞	
9	12 V	VRLA	800 Ah ... 1000 Ah	120 A	14.1 V	12 A	120 A	13.5 V	11 h	6 h	∞	
A	12 V	VRLA*	225 Ah ... 300 Ah	95 A	14.4 V	3.5 A	95 A	13.8 V	5 h	2 h	∞	
B	12 V	VRLA*	300 Ah ... 400 Ah	120 A	14.4 V	5.0 A	120 A	13.8 V	5 h	3 h	∞	
C	12 V	VRLA*	400 Ah ... 600 Ah	120 A	14.4 V	7.0 A	120 A	13.8 V	7 h	4 h	∞	
D	12 V	VRLA*	600 Ah ... 800 Ah	120 A	14.4 V	9.5 A	120 A	13.8 V	10 h	5 h	∞	
E	12 V	VRLA*	800 Ah ... 1000 Ah	120 A	14.4 V	12 A	120 A	13.8 V	11 h	6 h	∞	
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**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<sub>I1 max</sub> is exceeded, the charger switches off and the red LED flashes.
5. If the time TU<sub>1 max</sub> is exceeded, the next charging phase begins automatically.

