

## Overview of Charging Characteristics HJ519C

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	160 Ah ... 210 Ah	30 A	14.4 V	3.6 A	30 A	13.5 V	7 h	8 h	∞	
1	12 V	FVLA	210 Ah ... 280 Ah	40 A	14.4 V	4.8 A	40 A	13.5 V	7,5 h	8,5 h	∞	
2	12 V	FVLA	280 Ah ... 370 Ah	50 A	14.4 V	6.4 A	50 A	13.5 V	8 h	9 h	∞	
3	12 V	FVLA	370 Ah ... 500 Ah	50 A	14.4 V	8.4 A	50 A	13.5 V	10 h	11 h	∞	
4	12 V	VRLA	500 Ah ... 650 Ah	50 A	14.4 V	1.2 A	50 A	13.5 V	13 h	14 h	∞	
5	12 V	VRLA	160 Ah ... 210 Ah	30 A	14.1 V	1.8 A	30 A	13.5 V	7 h	8 h	∞	
6	12 V	VRLA	210 Ah ... 280 Ah	40 A	14.1 V	2.4 A	40 A	13.5 V	7,5 h	8,5 h	∞	
7	12 V	VRLA	280 Ah ... 370 Ah	50 A	14.1 V	3.3 A	50 A	13.5 V	8 h	9 h	∞	
8	12 V	VRLA	370 Ah ... 500 Ah	50 A	14.1 V	4.4 A	50 A	13.5 V	10 h	11 h	∞	
9	12 V	VRLA	500 Ah ... 650 Ah	50 A	14.1 V	5.8 A	50 A	13.5 V	13 h	14 h	∞	
A	12 V	VRLA*	160 Ah ... 210 Ah	30 A	14.4 V	1.8 A	30 A	13.8 V	7 h	8 h	∞	
B	12 V	VRLA*	210 Ah ... 280 Ah	40 A	14.4 V	2.4 A	40 A	13.8 V	7,5 h	8,5 h	∞	
C	12 V	VRLA*	280 Ah ... 370 Ah	50 A	14.4 V	3.3 A	50 A	13.8 V	8 h	9 h	∞	
D	12 V	VRLA*	370 Ah ... 500 Ah	50 A	14.4 V	4.4 A	50 A	13.8 V	10 h	11 h	∞	
E	12 V	VRLA*	500 Ah ... 650 Ah	50 A	14.4 V	5.8 A	50 A	13.8 V	13 h	14 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.

