

24V 8A
24V 12A

Primary switched
Housing

Battery Charger

Chapt. 2.4.5. Series G22-300



Technical Description

The chargers of the series G22-300 are designed in primary switch mode technology. A constant DC with only a small portion of AC influence is a guarantee for long life of sealed lead acid batteries. The standard charger follows an IUoU charge profile with 2 step charging and 10 hour timer. 2 different charge profiles with IUIa-characteristic can be choose. 3 LED will signal the following:

- LED "yellow" Charging (LED illuminates). Battery 90% fully charged (LED flashes)
- LED "green" battery fully charged
- LED "red" Reverse polarity connection (LED illuminates), charged time too long or over temperature (LED flashes)

Mechanical Construction

All components are assembled on a printed circuit board which is fixed in an aluminium holder and fixed front and back panels. Charger type 24V

12A has a temperature controlled ventilation. Mains connection is fixed All connectors fulfil the requirements of the protection class I.

Special features

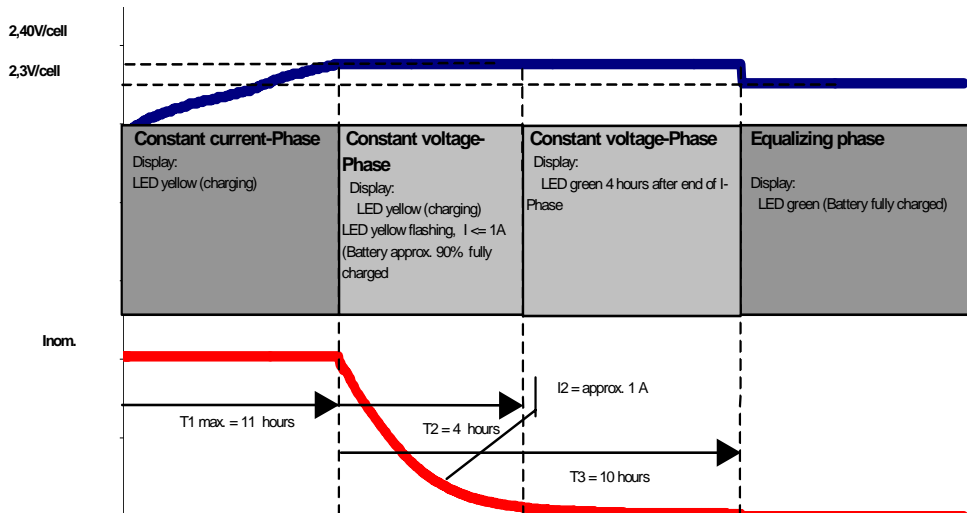
- current limitation, over voltage protection
- short cut proofed, protected against reverse polarity
- reverse polarity and charge control monitoring
- light weight
- 3 adjustable charge profiles
- charge of deep discharged batteries
- Derating at high temperature
- Start of a new charge cycle after mains reset or change of battery

CE Marking

The chargers meet the requirements with regard to the electro-magnetic compatibility laid down in the EU law (EWG-Vertrag 89/336/EWG.)

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Annexed is an example for a charge profile IUoU-characteristic, 2 step charging, 1. step 28,8 V (2,4V/cell), 2. step (equalizing mode) at 27,6 V (2,3V/cell) after 10 hours.



Technical Data G22-300

Type	G2-324-8	G2-324-12
Nominal voltage DC ^{1.)}	24 V	24 V
Nominal current DC	8 A	12 A
Voltage setting 1. Phase	28,8 V	28,8 V
Voltage setting 2. Phase	27,6 V	27,6 V
Current limit appr.	± 2% nom. current DC	
Charge profile	IUoU, IU1a, Standard version IUoU	
Mains interference	EN 55014	
Class of protection	I	
limit for harmonic current emissions (aims current)	EN 61000-3-2 class A	
Law requirements	EN 60335, EN 50081-1, EN 50082-1, EN 61000-3-2	
Reverse polarity protection	electric	
Back current at mains failure approx.	<1 mA	
Mains voltage AC, 50/60Hz	230V	
Input voltage at 230V (rms)	1,50 A	2,20 A
Switching frequency approx.	80 kHz	
Efficiency approx.	0,88	0,87
Range of ambient temp. approx.	0°C / +35°C	
Ripple output voltage approx.	< 3 %	
Variation of the output voltage between 195 - 265 V ca. ^{2.)}	< 0,5 %	
*Voltage regulation	< 2 %	
Cooling	convection	ventilation
Weight approx.	2,7 kg	
Dimensions (LxWxH) mm	210x170x90 (height without handle)	

1.) Other voltages and currents adjustments upon request

2.) Measured at the charger terminals