

DESCRIPTION

Euro Charger DR-SMPS series are DIN Rail mounted, fixed output voltage, current limited lead acid battery chargers specially designed for use in gen-sets. Thanks to their continuous DC outputs they may also be used in a wide range of industrial applications where DC power is required.

The chargers are designed for permanent connection to gen-set starter batteries. When the battery voltage is below the float charge level, the charger provides constant current, nearly equal to the rated output current allowing a rapid recovery of the missing charge. When the battery voltage reaches the float level, the charger switches to constant voltage charge mode and maintains the battery fully charged, providing the maximum battery life, without overcharging or gassing.

The chargers are designed in switch mode technology. Their rugged design allows surviving in harsh electromagnetic environments found in automotive industry.

The unit has overload and short circuit protections. This feature makes the units deliver only the rated current during engine cranking or a short circuit condition. They do not need disconnection during cranking.

The high temperature protection of the unit reduces the output current in case of overheating. Thanks to their high efficiency, the self-heating of the chargers is kept in minimum levels allowing operation in warm environments.

The fail output is a relay dry contact. The dry contact is open while charger fail, and short while charger work properly. User could use the dry contact to get high or low signal to give an alarm in case of charger failure.

The chargers are able to operate in parallel with the engine's charge alternator and other battery chargers. Multiple units may be connected in parallel in order to obtain higher current ratings.

The low weight of the unit makes it ideal for use in highly vibrating generator control panels. The small dimensions allow compact panel design.

The wide input voltage range allows the chargers to be used in most countries.



€C1120C – 12DR



€C1120C – 24DR

FEATURES

- High frequency switchmode architecture
- Float charging system
- Constant voltage output
- Current limited
- Rugged design for industrial environments
- Wide operating voltage range
- Rectifier fail output
- Short circuit protection
- Overload protection
- High temperature protection
- Output charge fail relay contact



Dimensions: 121(D)x110(H)x75(W)mm

Features:

- ◆ Convection cooled
- ◆ RoHS compliance
- ◆ 3 -y ear warranty⁽¹⁾
- ◆ Over voltage protection
- ◆ High temperature protection
- ◆ High frequency switching mode architecture, float charge
- ◆ Overload protection
- ◆ Short circuit protection
- ◆ Reverse polarity protection
- ◆ C.C, C.V 2-stage charging control⁽²⁾
- ◆ Rectifier fail output (relay dry contact)

General Specifications

INPUT

Input voltage.....100~240VAC/120~370VDC
 Input frequency47~63Hz
 Inrush current22A/115VAC

OUTPUT

Hold-up time (Full load@230VAC).....20mS Min.
 Temp. Coefficient 0.04% /°C
 Over voltage protectionAutorecovery
 Overload protection Power limited
 Short circuit protection..... Autorecovery

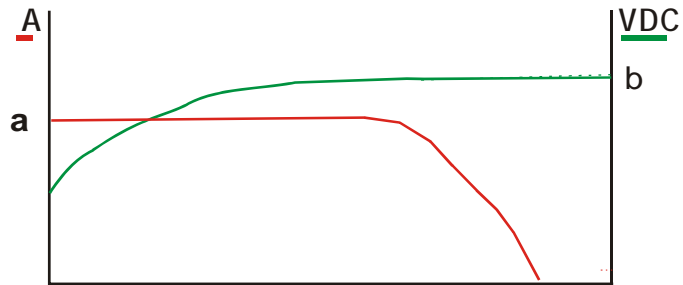
EMC STANDARDS

EN 55022	Class A
EN 61000-4-2	Level 3
EN 61000-4-3	Level 3
EN 61000-4-4	Level 3
EN 61000-4-5	Level 3

SAFETY STANDARDS



Charging Curve

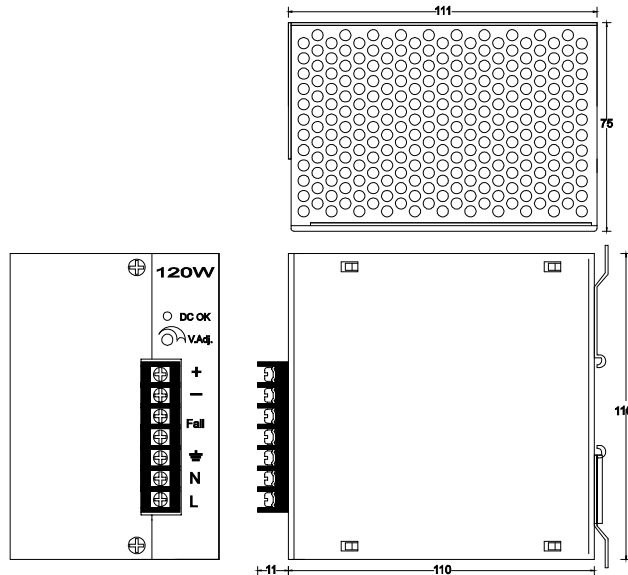


Charging time

12V : a: 10A, b: 13.8VDC

24V : a: 5A, b: 27.6VDC

Mechanical Details



Output Specifications

Model	Charging Voltage	Charging Curre	Line Reg.	Load Reg.	Efficiency
▪ C1120C-12DR	13.8VDC	10A Max.	± 1%	± 2%	80%
▪ C1120C-24DR	27.6VDC	5A Max.	± 1%	± 2%	80%

ENVIRONMENTAL

Operation temperature: -30°C~40°C ambient, derating output at 2.5% per degree from 40°C to 60°C

Operation humidity: Bob-condensing, 5% - 95%RH

Vibration: Random vibration, 10Hz ~ 100Hz

MTBF: 50,000hrs Min. per MIL-HDBK-217F

⁽¹⁾Conditions apply

⁽²⁾C.C = Constant Current, C.V = Constant Voltage