



DESCRIPTION

DATAKOM SMPS series are fixed output voltage, current limited lead acid battery chargers specially designed for use in gensets. 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 genset 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 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 wide input voltage range allows the chargers to be used in most countries.

The rectifier fail output is provided as a standard feature. This is a semiconductor output pulling to battery negative when the unit is not operating. Thanks to this output, a rectifier fail signal is provided for the genset control module which will give an alarm in case of failure.

The units provide a “boost charge” input as a standard feature. When this input is pulled to battery negative, the output voltage of the charger will be set to the boost charge voltage. This feature may be used temporarily to improve battery life.

TECHNICAL SPECIFICATIONS

| | | 123 | 125 | 243 | 245 |
|---|------|--------------------------------|-----|------|-----|
| Technology | - | Switchmode (flyback) 100KHz | | | |
| Output Voltage | V-DC | 13.7 | | 27.4 | |
| Output Current | Amp. | 3 | 5 | 3 | 5 |
| Input Voltage Range | V-AC | 170-270 | | | |
| Input Frequency Range | Hz | 45-65 | | | |
| Operating Temp. Range | °C | -20 / +70 | | | |
| Storage Temp. Range | °C | -40 / +80 | | | |
| Max. Relative Humidity (non-condensing) | % | 95 | | | |
| Max. Input Power | Watt | 45 | 73 | 85 | 145 |
| Efficiency (at full load) | % | 85 | | 86 | |
| Output Noise (Vpp) | Volt | 0.2 | | | |
| Rectifier Fail Output | - | Yes | | | |
| Rectifier Fail Output Impedance | ohm | 270 | | | |
| Boost Charge Input | - | Yes | | | |
| Boost Charge Voltage | Volt | 15.0 | | 30.0 | |
| High Temp. Protection | - | Yes | | | |
| Short Circuit Protection | - | Yes | | | |
| Electrical Connections | - | 2 Part plug-in connectors | | | |
| Width | mm | 90 | | | |
| Height | mm | 115 | | | |
| Depth | mm | 62 | | | |
| Weight (approx.) | gram | 270 | | | |

INSTALLATION



The unit is designed only for installation within other equipment by professional installers. It must not be operated as a stand alone product.

The unit is for enclosed panel mounting. The user should not be able to access the unit. Only authorized service personnel will be allowed to access the unit. Mount the unit on a flat, vertical surface. Allow at least 5cm space on the bottom and top sides to enable cooling by natural ventilation. Blocking the aeration will cause the unit to overheat.



Use 6 Amps external fuse at the phase input.

ALWAYS disconnect the power **BEFORE** connecting the unit.

CONNECTION DIAGRAM

