

PSU

EN54-4 Approved Switched Mode Power Supply/ Charger



BS-EN54-4
KM 73505

S407 Features

- Complies with EN54-4
- Fully enclosed construction
- Small & lightweight
- True 2.5 Amp continuous output
- Comprehensive fault monitoring
- Temperature compensated charger
- Wide input supply voltage
- Low battery shut off to prevent deep discharge of battery

S406 Features

- Complies with EN54-4
- Fully enclosed construction
- Small & lightweight
- True 5.25 Amp continuous output
- Comprehensive fault monitoring
- Microprocessor controlled
- Temperature compensated charger
- Wide input supply voltage
- Low battery shut off to prevent deep discharge of battery

Product Overview

- The S407/S406 power supply/battery charger has been developed using switched mode technology to produce an efficient and lightweight power unit for a host of fire alarm applications.
- Suited to almost any application, the S407/S406 is designed to be a universal power source which will reduce spares stock holding and increase serviceability of systems.
- The comprehensive monitoring features of the S407/S406 include true battery present detection, low battery voltage warning, battery overcharge warning, high battery impedance monitoring and low battery shut off.
- These features combined with the temperature compensated charger output will increase the service life of sealed lead acid batteries.



S407 - 2.5 Amp PSU



S406 - 5.25 Amp PSU

Formula

Battery Calculation BS 5839-1:2002

$$C_{\min} = 1.25 (T_1 I_1 + D I_2 / 2)$$

Where:

- C min** = Minimum capacity of the battery when new at the 20 hour discharge rate and at 20 °C in ampere-hours;
- T₁** = Total battery stand by period in hours;
- I₁** = Total battery stand by load in amperes;
- I₂** = Total battery alarm load in amperes;
- D** = a de-rating factor. (1.75)

S407 Technical

Construction	- Aluminium base - sheet steel cover
Finish	- Epoxy powder coated
Colour	- Black
Size	- 225mm x 120mm x 55mm
Weight	- 0.9Kg
Supply voltage	- 230V AC (+10%/-15%)
Output voltage	- 24V DC
Total output current	- 3.5 Amps (continuous)
Battery charge current	- 1.00 Amps max.
Load current	- 2.5 Amps (with flat battery)
Fault outputs rating	- 50mA max.
Mains fuse	- 3 Amp 20mm HRC
Load fuses	- 3 Amp (self resetting)
Mains failed warning	- Switched -ve output
Battery disconnected warning	- Switched -ve output
Battery low warning	- Switched -ve output
Battery overcharge warning	- Switched -ve output
Earth fault warning	- Switched -ve output
Common fault output	- Switched -ve output
Operating temperature	- -5 to +50 deg. C

S406 Technical

Construction	- Aluminium base - sheet steel cover
Finish	- Epoxy powder coated
Colour	- Black
Size	- 225mm x 120mm x 55mm
Weight	- 0.9Kg
Supply voltage	- 230V AC (+10%/-15%)
Output voltage	- 24V DC
Total output current	- 5.25 Amps (continuous)
Battery charge current	- 1.25 Amps max.
Load current	- 4.0 Amps (with flat battery)
Fault outputs rating	- 50mA max.
Mains fuse	- 3 Amp 20mm HRC
Load fuses	- 5 Amp (self resetting)
Mains failed warning	- Switched -ve output
Battery disconnected warning	- Switched -ve output
Battery low warning	- Switched -ve output
Battery overcharge warning	- Switched -ve output
Earth fault warning	- Switched -ve output
Common fault output	- Switched -ve output
Operating temperature	- -5 to +50 deg. C