AutroSafe Power Supply - BSS-103A/02, BSS-103A

Features

- Provides 27,4V DC / 20°C.
- Designed to meet EN-54 and LPCB requirements and conforms to CE standards.
- Electronic current limitation at short circuiting.
- Pole reverse secure.
- Transient protection.
- Temperature compensated battery charging voltage.

Applications

Power Supply BSS-103A can be delivered as two types:

- BSS-103A/02, which is an open circuit board for internal use in AutroSafe fire alarm control panels
- BSS-103A with a metal front cover. Used for external mounting as an additional unit in the fire alarm system (see photo).

The Power Supply provides 27V DC / 3A to the Fire Alarm Control Panel. The unit is connected to the mains outlet 230V AC.

For the AutroSafe Interactive Fire Alarm System it provides 24V DC / 3A to the *BS-310/320* or *Controller BC-320*.

The Power Supply provides the following outputs / inputs:

- Output for 24V DC / 3A (27,4V DC / 20°C)
- Output for battery load test (X90-X91)
- Output for indication of mains power ON
- Mains fault output (X92-X93)
- Input for 160 -265 VAC or 180 - 375 VDC
- Control input for battery test (X6)
- Plug-in connection of external termistor for temperature control of externally mounted batteries

Mounting

The BSS-103A/02 is easily mounted inside the Fire Alarm Control Panel and Controllers (AutroSafe system).

The BSS-103A is used for external mounting in larger cabinets.

Cabling

The Power Supply BSS-103A/02 has the following internal connections:

- a ribbon cable between the Power Supply BSS-103A/02 and the internal circuit board inside the Fire Alarm Control Panel.
- A two-wire battery connection

Refer to connection drawing on the back page.

Fuses

Fuse	Size	Type	Protecting
F1	1,4 A	Slow	Mains
F2	6,3 A	Fast	Battery
F3	1 A	Slow	External 24V DC

Technical Specifications

Various

Temperature range	-5 to +55°C
Dimensions (mm) BSS-103	265 x 102 x 67
Dimensions (mm) BSS-103/01	265 x 80 x 50
Weight (g)	1100
Materials	Painted metal cover
Electrical connection	Internal plug connection. Screw terminals for mains and battery.
Mounting	4 screws
Protection grade	IP-20

Input

Input voltage range	160 -265 VAC
Frequency	47 - 63 Hz
Current	0.92 A at V_{inn} = 160 VAC
Power	110 W
Power efficiency	≥ 83 % at maximum load
Protection	Transient protection
Safety fuse	1,4 A (slow)

Output

Output Current	3A
Output voltage	27,4 VDC at 20°C
Adjustment range	22 - 30 VDC
Voltage accuracy	± 50 mV
Ripple voltage across load	< 25 mV_{RMS} , < 170 mV_p
Temperature compensating	U_{ut} v/5°C: 28.2 VDC U_{ut} v/35°C: 26.6 VDC
Protection	Electronic current limitation at short circuiting. Pole reverse secure. Transient protection.

Output for extra load test (X90-X91)

Voltage	U_{ut} - 0.6 VDC
Current	1 A
Activating current	- 3 mA
Activated when J1,9 is put to OV.	

Output for indication of mains power (J7-J8)

Voltage	15.0 V ± 0.7 V
Current	1,0 mA
Time delay	20 s ± 5 s
The voltage drops to 0V when mains power is turned off.	

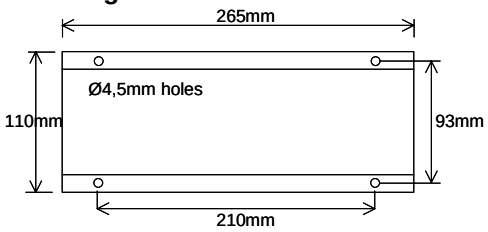
Mains fault output (relay output X92-X93)

Time delay	20 s ± 5 s
Closed contact when mains power is turned on, Open contact when mains power is turned off.	
Control input for battery test (X6-X8)	
Activating current	Activating current
Battery voltage fault level during test period	Battery voltage fault level during test period
Activated when X6 (T) is put to OV.	

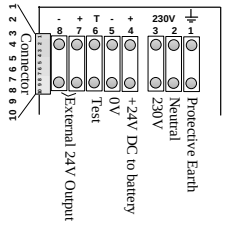
Order numbers

Order number	Description
116-BSS-103A	Power Supply, complete with metal cover
116-BSS-103A/02	Power Supply circuit board

Mounting

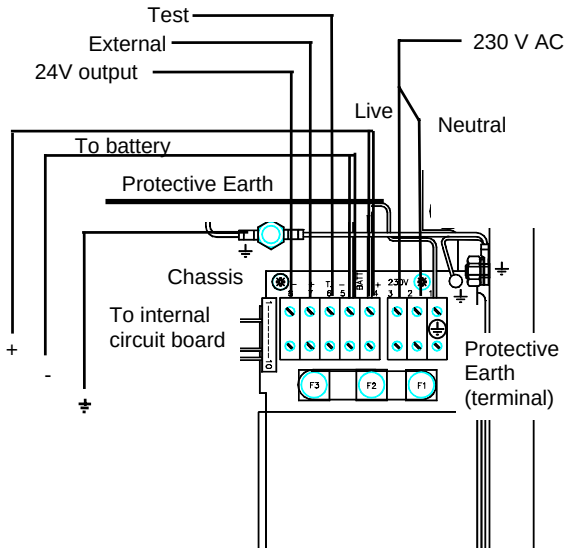


Connections



Screw Terminals on Power Supply BSS-103A

Screw Terminal no.	Description
1	Protective Earth
2	Neutral
3	230V AC/DC input
4	Battery +24V DC output
5	Battery 0V output
6	Battery test input
7	+24V DC external output
8	0V external output



Autronica Fire and Security AS

Fire and Security, Trondheim, Norway. Phone: + 47 73 58 25 00, fax: + 47 73 58 25 01.
Oil & Gas, Stavanger, Norway. Phone: + 47 51 84 09 00, fax: + 47 51 84 09 99.

Visit Autronica Fire and Security's Web site: www.autronicafire.com