

EN54 Caged and Enclosure Power Supplies

EN-54 'Approved'

Supply Units can be used for any fire alarm system which specifies EN54-4 Power Supply Equipment.

Suited for almost any application, the power supply unit/battery charger has been developed using the latest surface mount technology to provide a high efficiency switch mode power supply.

The power supply units are available in fully enclosed construction providing power and fault indication, or alternatively in caged versions for mounting into existing enclosures of various sizes to suit different battery capacities.

Key Features

High efficiency switched mode power supplies
Compact 1.5A, 3.0A and 5.0A versions
Approved EN54-4
Boxed or Un-boxed
Power and Fault Indication
3 Year Warranty as Standard

Applications / Limitations

For any fire alarm system which specifies EN54-4 power supplies (e.g. BS5839 code of practice).

Compatibility

These power supply units can be used in any fire alarm installation requiring a 24Volt supply for operation.



BS EN 54-4: 1998 +A2 PSE
KM 6965



0086-CPD-536905

Features

- A range of power supply equipment with power output options to suit most applications.
- Universal AC Input on the 3.0A and 5.0A versions.
- PSE and charger or PSE only options on the 3.0A and 5.0A versions.
- A Serial Link option is provided on the 3.0A and 5.0A versions. Allows reporting of PSE status and voltages / current measurements to compatible control panel / modules.

Key Features

High Efficiency Switched Mode Power Supplies

EN54 Part 4 'Approved'

Boxed or Unboxed

3 Year Warranty as standard

Specification

Approvals	All Power Supply Units are approved with the requirements of BS EN54-4 1998, EN55022 class B emissions limits & EN60950: 2000 safety standards.
Input Supply	1.5A PSE:220-240V AC, 50/60Hz, Fuse T3.15H250 3.0A/5.0A PSE:120-230V AC, 50/60Hz,Fuse T3.15H250
Output Voltage	Max 28.5V DC, Min 18.5V DC at minimum battery voltage of 19V with mains disconnected
Charger voltage	27.4V DC nominal at 20°C temperature compensated over the range -5°C to +45°C
Output Current	1.5A PSE: 1.0A continuous load, 0.5A battery charge 3.0A PSE: 2.0A continuous load, 1.0A battery charge [3.0A to load if configured for PSE only] 5.0A PSE: 3.0A continuous load, 2.0A battery charge [5.0A to load if configured for PSE only]
Dimensions Caged (H x W x D)	1.5A 105 x 94 x38mm 250g 3A 184 x 94 x 58mm 690g 5A 105 x 94 x 58mm 690g
Enviroment	Indoor, Dry
Fault Output	Volt-free change-over contacts rated 1A @ 30V dc
On Board Indication	Mains Fail, Charger Fail, Battery Open Circuit, Battery low & Heartbeat

Order Codes

Mxs-049: 1.5A Caged Unit Only

Mxs-050: 3.0A Caged Unit Only

Mxs-051: 5.0A Caged Unit Only

Also available in enclosures for various battery sizes (battery not included)

Models, Sales Order Parts:	
Mxp-049 : 1.5A PSE in 7Ah enclosure	SPARES:
Mxp-050-001 : 3.0A PSE in 7Ah enclosure	Mxs-049 : 1.5A Caged Unit only
Mxp-050-002 : 3.0A PSE in 17Ah enclosure	Mxs-050 : 3.0A Caged Unit only
Mxp-051 : 5.0A PSE in 17Ah enclosure	Mxs-051 : 5.0A Caged Unit only
Mxp-051/D : 5.0A PSE in 38Ah enclosure	Mxp-501 : Remote Temp Sensor (Supplied with AC lead and terminal block)
Applications / Limitations:	
For any fire alarm system that specifies EN54-4 power supplies (e.g. BS5839 code of practice).	
Compatibility:	
These power supply units can be used in fire alarm installations requiring a 24Volt supply for operation.	

Item	Specification Details
Approvals	All Power Supply Units comply with the requirements of BS EN54-4:1998 +A2, EN55022 class B emissions limits & EN60950-1:2006 safety standards.
Input Supply	1.5A PSE : 220-240V AC, 50/60Hz, Fuse T3.15H250 3.0A/5.0A PSE : 200-240V AC, 50/60Hz, Fuse T3.15H250
Output Voltage	Max 28.5V DC, Min 20.5V DC / 18.5V DC at minimum battery voltage of 21V ¹ / 19V respectively with mains disconnected. Ripple 200mV max (Note: 1V p-p including switching frequency noise).
Charger Voltage	27.4V DC nominal at 20°C temperature compensated over the range -5°C to +40°C
Output Current (I _{max.a} = I _{max.b}) (I _{min} = 10mA)	1.5A PSE : 1.0A continuous load, 0.5A battery charge 3.0A PSE : 2.0A continuous load, 1.0A battery charge [3.0A to load if configured for PSE only ²] 5.0A PSE : 3.0A continuous load, 2.0A battery charge [5.0A to load if configured for PSE only ²]
Dimensions Enclosure IP30 (H x W x D)	7Ah : 320 x 345 x 88mm 3Kg without batteries 18Ah : 425 x 406 x 125mm 5Kg without batteries 38Ah : 425 x 406 x 190mm 7Kg without batteries
Dimensions Cage (H x W x D)	1.5A PSE : 105 x 94 x 38mm 250g 3.0/5.0A PSE : 184 x 94 x 58mm 690g
Environment	Indoor, Dry
Operating Temperature	-5°C to +40°C @ full load output
Relative Humidity	95% non-condensing (maximum)
Standby Battery and Internal Resistance	2 x 12V Sealed Lead-Acid Type (Yuasa or Powersonic recommended) 1.5A PSE : 3.3Ω 1.2Ah minimum to 7Ah maximum 3.0A PSE : 1.6Ω 1.2Ah minimum to 18Ah maximum 5.0A PSE : 0.8Ω 1.2Ah minimum to 38Ah maximum
Fault Output	Volt free change-over contacts rated 1A @ 30V dc (all models)
External Indication	Green: Power indicator, Amber: Fault indicator
On board indication	Mains Fail, Charger Fail, Battery open circuit, Battery Low & Heartbeat
Deep Discharge	All models incorporate battery deep discharge protection (19volts)
As our policy is one of constant product improvement the right is therefore reserved to modify product specifications without prior notice	

¹ The battery final discharge voltage recommended by battery manufacturer.

² NOT EN54-4 Compliant. EN54-4 specifies the provision of two power sources. These should comprise a main supply (AC mains) and a stand-by supply (battery).