



# RS Stock Number 721-2405

1A enclosed power supply  
with built-in battery back-up



## Features

- UK and European input voltage
- Built-in charger for lead-acid batteries
- Power on indication
- Protections: overload, short circuit & accidental inversion of battery clips.
- 100% full load burn in test
- 1 Year Warranty

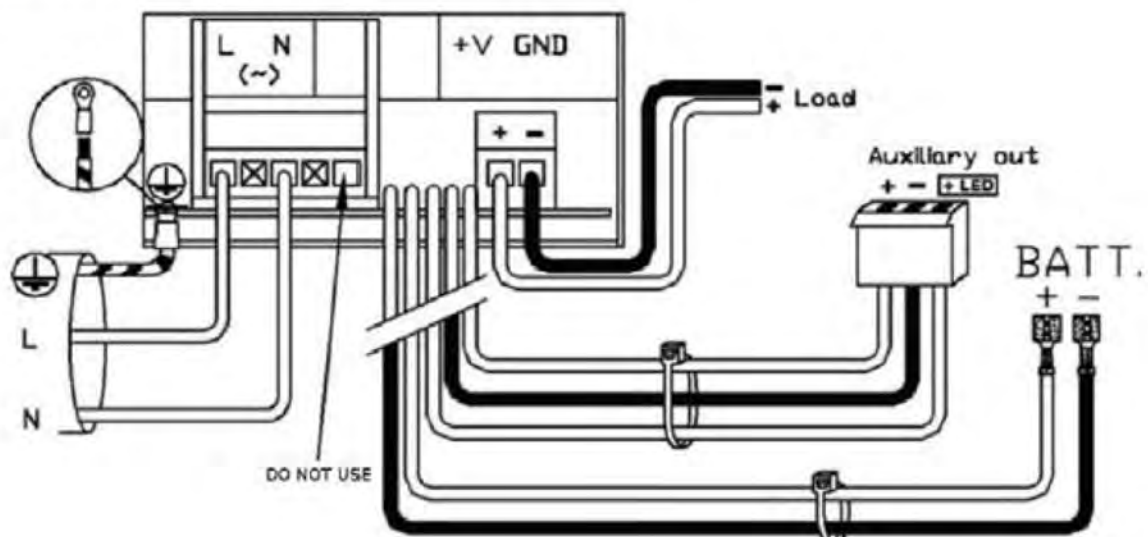
## Description

Reliable and easy to use switching power supply with built-in battery backup circuit. Small footprint and galvanised sheet metal design make this unit practical and strong. In the presence of the mains (230VAC) the unit supplies voltage and load and recharges attached battery. In the event of a power outage the battery activates automatically granting a continuity of supply. Please note batteries are not supplied.

## Applications

The 721-2405 is ideal for any application where battery back-up is essential, can be used in Building Management Systems, Biometric Displays, CCTV Monitoring Equipment, Access Control, Electromagnetic Locks and Door Entry Systems.

## Connection Diagram





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## Electrical Specifications

INPUT CHARACTERISTICS	
Voltage Range	195-253VAC
Voltage Rating	230VAC
Frequency Range	47-63Hz
Inrush Current	40A (230VAC full load cold start)

MAIN OUTPUT CHARACTERISTICS	
Voltage Range	13.66 – 13.94VDC
Voltage Rating	13.8VDC
Voltage adjustment range (user adjustable)	The adjust range is +/-5% of the rating
Current Range	0-1.5Amp
Load Regulation	1%
Ripple & Noise	120mV
Efficiency	70% typical, - 65% minimum

BATTERY CHARGING CHARACTERISTICS	
Battery Charging Voltage	13.8Vdc
Battery Fuse	6.3A (F)
Battery Protection	Built-In protection against accidental inversion of the battery clips
Battery type	12V 4ah lead acid batteries
Protection for deeply discharged battery	When the voltage of battery falls to 10V±5%, the power supply will automatically cut off output of battery. When the AC input is restarted, the battery will normally charge and discharge.

ENVIRONMENTAL CHARACTERISTICS	
Operating Temperature Range	0 to +45°C
Operating Temperature Rating	25°C
Storage Temperature Range	-20 to +70°C
Operating Humidity Range	5 – 95% RH
Storage Humidity Range	5 – 95% RH
Cooling Mode	Air Cooling



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FURTHER CHARACTERISTICS	
Setup Time	200mS
DC Output Hold Up Time	20mS
Overshoot Response	Turn-on and turn-off overshoot should not exceed 3% over nominal voltage.
Power-On Indication	When LED is on, it indicates that the supply is operating and DC out good
Burn-In Test	230Vac (50Hz) input voltage applied to the power supply, Full load is applied on the product in a 40°C +/- 5°C environment in a burn-in room for 4 hours.
MTBF	100,000 hours at 25°C
Enclosure dimension	200 x 240 x 80mm (L x W x H)
Isolation Class	I
Safety & EMC	Designed to meet: EN60950, EN55022 Class B
Hi-Pot	I/P-O/P: 3KVAC/min I/P-FG: 1.5KVA/min

PROTECTION CHARACTERISTICS	
Input Circuit Protection	There is a protection fuse in the primary circuit of the power supply. The fuse shall be blown only by an internal catastrophic fault of the power supply. Any overload or short at any or all outputs either momentarily or permanently, should not blow the input fuse.
Short Circuit Protection	Short circuit can be continuous ( $\geq 60S$ ) without damage and AC recycle to re-start
Overload Protection	Fully protected against short circuit and output overload as well as total power overload. Current limits at 300% of the rated maximum output current.