24VDC Switch Mode Boxed PSU

WBXPSU5A24VDT

Features：

- High efficiency, cost effective power supply. Ideal for use in Intruder, Access Control and General Security applications.
- Full 5A current to load.
- Additional 0.5A to charge standby battery.
- High efficiency electronics for reduced running costs and lower operating temperature.
- Installer safe design with all high voltage electronic fully shrouded.
- Full electronics short circuit and overload protection on load output under mains operation.
- Main transient protection.
- Lid open & box remove tamper detection.
- Fault LED.
- Mains LED.
- Battery LED
- Mains Fail Output Relay

Compliance:

This power supply unit meets the essential requirements of the following European Directives:

Low Voltage 2006/95/EC EMC 2004/108/EC

WEEE 2002/96/EC RoHS 2002/95/EC

Input Specification:

Voltage 180~264VAC

Frequency 47-63Hz

Mains Input Fuse 3.0A 250V

Output Specification:

Voltage Nominal 27.6VDC when mains present

Load Current 5.0A

Ripple 150mV pk-pk max.

Load output Fuse 5.0A

Overload Protection Electronics shutdown until overload or short circuit removed(under mains power only)

Standby Battery:

Battery type 24VDC Lead Acid

Battery Capacity 2 x DC12V7Ah

Local Indicators:

Fault LED: Red indicating output fuse fail.

Mains LED: Green indicating mains is normal.

Battery LED: Orange indicating battery is in charging.

Green indicating battery is full charged.

Red indicating battery is in discharging.

Signaling Output:

Lid &Rear Tamper N/O volt free contact

*(**NOTE**: contact close when both box fixed well to wall and lid closed.)*

Mains Fail Output Relay N/O or N/C volt free output

Box Size: 360x330x90mm (WxHxD, Hinge, for 2x7Ah)

Environmental:

Working Temperature -10℃~+40℃

Storage Temperature -20℃~+60℃

Humidity 95% RH non-condensing

Terminals:

+ OUTPUT - DC27.6V to load equipment

BATT+ Red lead to standby battery

BATT - Black lead to standby battery

Tamperx2 Tamper voltfree contact

N.C. Relay close to com when mains presents (Open when no mains)

COM Common terminal of Mains Fail Output Relay

N.O. Relay open to com when mains presents (Close when no mains)

Installation:

This unit is only suitable for installation as permanently connected equipment. The PSU is NOT SUITABLE for outdoor installation.

EQUIPMENTS MUST BE EARTHED.

The PSU should be installed according to all relevant safety regulations applicable to the application.

Mounting:

1) Mount securely in correct place.
2) Route mains and low voltage output cables via different knockouts and/or cable entry holes.

Mains Power Up:

3) Connect correctly rated mains cable (minimum 0.5mm^2 [3A],300/500Vac) .
4) Apply mains power. Check for 27.6Vdc on load outputs.
5) Check Mains LED is green, N/C is close to COM,N/O open to COM.
6) Disconnect mains power, N/C is Open to COM,N/O close to COM.

Load Output:

7) Connect correctly to rated load. NOTE POLARITY.
8) Apply mains power. Check Mains LED is on.
9) Verify load is operating correctly.
10) Remove load fuse and check Fault LED is Red.
11) Replace load fuse. Check Fault LED is off.
12) Disconnect mains power.

Standby Battery:

13) Connect the supplied battery cables to battery.
*(**NOTE**: ensure correct polarity of battery connections.LED 5 will light on if battery polarity reversed)*

14) Apply mains power. Check Mains LED is on, and Battery LED Green(full charged) or Orange(In charging).
15) Disconnect mains power. Mains LED should be off, Battery LED is Red. Check that the batteries continue to supply voltage and current to the load.
***NOTE**: Batteries must have sufficient charge to supply the load.*
16) Reconnect the mains power.

Tamper:

17) Check both tamper springs make good contact when box is fixed to wall and lid when closed.
-When Lid open, tamper contact is open.
-When Lid close, tamper contact is close.
-Make the box left wall by 5-10mm and close Lid, tamper contact is open.
- Re-fix the box to wall well and close Lid, tamper contact is open.

Operating Instructions:

This unit is intended for use by Service Personal only.
There are NO USER SERVICEABLE parts inside.
The green Mains LED will be illuminated whilst the mains supply is present.
In event of a fault condition, the red Fault LED will be illuminated.

Maintenance:

There is no regular maintenance required of the PSU other than periodic testing and replacement of the standby battery. Reference should be made to the battery manufacturer's documentation to determine typical/expected battery life with a view to periodic replacement of the battery.
If the output of the PSU fails, the cause of the failure should be investigated e.g. short circuit load.
The fault should be rectified before restoring power to the PSU. The fuses may need to be replaced. Ensure the correct fuse rating and type is used.

CAUTION

Risk of explosion if battery is replaced by an incorrect type.
Dispose of used batteries according to the battery manufacturer's instruction and all local and national Regulations.