



AFP Series Power Supply

Description:

The AFP series fire power supply adopts advanced 32-bit microprocessor and precision operational amplifier design. The hardware is simple and compact, and the software adopts a modular structure design. It is a high-performance and highly reliable power supply.

AFP 系列消防電源採用先進的32位元微處理器及精密運算放大器設計，硬體簡潔緊湊，軟件採用模組化結構設計，是一種高性能，高可靠的電源。該產品用於火災報警控制系統的專用電源，具備電源管理功能，主、備電用電自動的切換，智慧蓄電池充電控制，監視和指示電源當前狀態，具備故障聲及靜音功能。



Product Main Features:

- Fault Alarm Function 故障報警功能

When the main power failure, backup power failure, battery undervoltage, the buzzer will sound an alarm, press the "Mute" button to eliminate the alarm sound.

當主電故障、備電故障、電池欠壓時蜂鳴器會發出報警聲音，按“靜音”鍵可以消除報警聲音

- Lamp Test Function 燈檢功能

Press the "Lamp Test" button, the system will check all LED indicators, digital displays, and buzzers, and automatically return to normal mode after the check.

按下“Lamp Test”鍵，系統對所有LED指示燈、數碼顯示器、蜂鳴器進行檢查，檢查完畢自動恢復到正常模式。

- Float Charge Operation 浮充操作

At a temperature of 20°C, the AFP series charges the battery in a normal mode with a charging voltage of 27.4V, and can also supply power to a DC load within the range of rated current.

在20°C溫度下，AFP系列對電池進行充電電壓為27.4V的正常模式充電，同時還可以在額定電流範圍內為直流負載供電。

When fully charged, the battery will only accept the trickle charge required to replace internal losses.

充滿電後，電池將只接受補充內部損耗所需的涓流充電。

- Auto Boost-charge Operation 自動升壓充電操作

Auto boost-charge operation provides a temporary increase in output voltage, equalizing the charge between cells and maximizing battery capacity and service life.

自動升壓充電操作可暫時增加輸出電壓，均衡電池之間的電荷並最大限度地提高電池容量和使用壽命。

Auto boost-charge is triggered automatically when the battery falls below a preset voltage. An auto boost cycle can also be triggered manually via panel push-button. Once the batteries have reached the boost-charge voltage level, AFP series reverts automatically to its normal float charge mode, preventing battery over-charge.

當電池低於預設電壓時，會自動觸發自動升壓充電。也可以通過面板按鈕手動觸發自動升壓循環。一旦電池達到升壓電壓水平，AFP系列自動恢復到正常的浮充模式，防止電池過度充電。

Standards:

BS EN 61204-6:2001

Low voltage power supplies, D.C. output. Requirements for low-voltage power supplies of assessed performance.

低壓電源，直流輸出。評估性能的低壓電源的要求。

IEC 61204 Edition 1.1:2001

Low-voltage power supply devices, D.C. output - Performance characteristics.

低壓電源設備，直流輸出 - 性能特性。

BS 7430:2011

Code of Practice for Earthing

接地操作規範

AFP series of Power Supply Specification



MODEL	AFP-10A	AFP-20A	AFP-30A	AFP-40A
Dimensions in mm (H x W x D)	480×420×164mm			
Input Voltage	187~264VAC			
Input Frequency	45~60Hz			
Operating Temperature	-10°C +50°C			
Relative Humidity	≤95% (40°C)			
Over Current Protection	110~130%			
Over Voltage Protection (DC)	31V±1V			
Surge Protection (L-N / LN-PE)	≤1KV/2KV			
Standard Color	Dark grey black			
Output Voltage (DC)	27.3V@25°C			
Output Current (DC)	10A	20A	30A	40A
Standby Battery Capacity (max)	33Ah	63Ah	63Ah	120Ah
Charging Current (DC)	3A	5A	5A	10A
Boost Charge Time (max.)	8 hrs.	8 hrs.	8 hrs.	8 hrs.
Output Voltmeter (7-segment)	Yes	Yes	Yes	Yes
Output Ammeter (7-segment)	Yes	Yes	Yes	Yes
Input Voltmeter (7-segment)	Yes	Yes	Yes	Yes
Input Ammeter (7-segment)	Yes	Yes	Yes	Yes
Boost Charge Push-buton	Yes	Yes	Yes	Yes
Buzzer Mute Push-buton	Yes	Yes	Yes	Yes
Lamp Test Push-buton	Yes	Yes	Yes	Yes
Dummy Test Push-buton	Yes	Yes	Yes	Yes
Double Lamp	Yes	Yes	Yes	Yes
Mains Fault (Yellow LED)	Yes	Yes	Yes	Yes
Mains On (Green LED)	Yes	Yes	Yes	Yes
Battery Fault (Yellow LED)	Yes	Yes	Yes	Yes
Battery On (Green LED)	Yes	Yes	Yes	Yes
Battery Low (Yellow LED)	Yes	Yes	Yes	Yes
Output Fault (Yellow LED)	Yes	Yes	Yes	Yes
System On (Green LED)	Yes	Yes	Yes	Yes
System Faul (Yellow LED)	Yes	Yes	Yes	Yes
Boost Charge (Red LED)	Yes	Yes	Yes	Yes
Earth Fault (Yellow LED)	Yes	Yes	Yes	Yes
Mains Fault Dry Contacts, NC	1A@24VDC	1A@24VDC	1A@24VDC	1A@24VDC
Battery Fault Dry Contacts, NC	1A@24VDC	1A@24VDC	1A@24VDC	1A@24VDC
System Fault Dry Contacts, NC	1A@24VDC	1A@24VDC	1A@24VDC	1A@24VDC