

OPTION ZH / FET SWITCH

含實驗室電源用兩象限模組 / INCL. 2-QUADRANTS MODULE FOR LAB POWER SUPPLIES



FET-開關 / FET Switch

EA-PS 9080-100 ZH

- 高達**2400W** 峰值脈沖功率的內部電子負載模塊
- 峰值脈沖電流高達**240A**
- 連續輸出（**400V**產品）功率為**100W**或**150W**（**80V**產品）
- 模擬汽車引擎啟動電性測試
- 為汽車高保真度**HIFI**測試提供大電流
- 輸出電壓高達**360V**的各個型號
- 符合**DIN 40839**標準的電壓序列
- 無外部負載時快速電壓階躍
- **Internal electronic load for up to 2400W peak pulse power**
- **Peak pulse current up to 240A**
- **Continuous power 100W (400V model) or 150W (80V model)**
- **Simulation of car engine start for automotive tests**
- **High current for car Hi-Fi tests**
- **For models with up to 360V**
- **Integrated voltage sequence according DIN 40839**
- **Increased voltage dynamics without external load**

概要

PS 9000, PSI 9000, PS 8000 2U/3U和EA-PSI 8000 2U/3U系列**360V**以下產品可選擇配備內部電子負載。

該選項功能對操作小本負載非常重要，它可快速給輸出電容放電。從而達到快速動態控制設備的目的。ZH型號產品採用源-吸原理操作。意指根據需求，產品可當電壓/電流源和電流吸收器操作。快速的曲線描述和特短電壓降低時間，使產品應用於無複雜和昂貴綫性控制器支援的設備上。結合有源負載模組能進行脈動操作，可允許高達**2400W**的峰值功率，且配有內置熱過載保護功能。

FET開關

本產品安裝於**19"**機櫃內，是基於場效應三極管的大電流FET開關。可轉換高達**400A**的電流，用外部控制器還可轉換更大電流，且只消耗極低的功耗。這些開關適用於測試和生產車間，產生極快的方形躍變。

General

Models with up to **360V** nominal output voltage of series PS 9000, PSI 9000, PS 8000 2U/3U and PSI 8000 2U/3U can be equipped with an optional, internal electronic load.

It quickly discharges the output capacitors, which is important when using small loads. Thus a rapid control dynamics of the unit is achieved. The ZH models work according to the source-sink principle. This means that the units can function as voltage and current sources and as current sinks, depending on the requirement. Rapid curve tracing and especially short reduction times enable their use in applications which previously could only be supported by complex and expensive linear controllers. The integrated active load module is suitable for pulsed operation and can take a peak power of up to **2400W**, with an inbuilt thermal overload protection.

FET Switch

This devices is housed in a **19"** cabinet and is a high-current FET switch based upon field-effect transistors. It is able to switch up to **400A** and more by external control with extremely low power dissipation. FET switches are used in testing or production environment where it is required to generate extremely fast and rectangular ramping.



EA-PS 9000 ZH / EA-PSI 9000 ZH / EA-PS 8000 2U ZH / EA-PSI 8000 2U ZH / FET SWITCH 含實驗室電源用兩象限模組 / INCL. 2-QUADRANTS MODULE FOR LAB POWER SUPPLIES



EA-PSI 9080-100 與 EA-EL 9080-200組合產品

ZH系列產品的馬達起動機序列

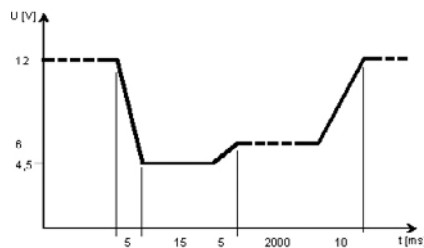
通過推動按鈕或外部觸發信號，可重現符合DIN 40839標準的汽車功率網用電壓曲線。PSI 9000和PSI 8000系列的電壓曲線也可通過內置函數管理器模擬出來。該曲線預選編好程序，可以修改以符合客戶需求。

起動電壓可調至80V，適合各種標準汽車電壓，如：12V，24V和未來的42V。

Motor start sequence of option ZH

By pushbutton or external trigger signal, the voltage trace of an automotive power network according to DIN 40839 is reproduced. For PSI 9000 and PSI 8000 series this voltage trace can also be emulated by the integrated function manager. It is preprogrammed for this purpose and can be modified to suit custom needs.

The starting voltage is fully adjustable up to 80V and is therefore suitable for all standard automotive voltages, e.g. 12V, 24V and the future 42V.



符合DIN 40839標準的電壓曲線圖
Voltage characteristic DIN 40839

電源與負載的組合

PS 9000, PSI 9000, PS 8000或EA-PSI 8000系列與EL 9000系列經內置„System bus“系統匯流排連接起來，可實現外部兩象限操作。

電源產品的系統匯流排連到負載產品的系統匯流排上。通過該匯流排，電源的輸出電流可在兩象限操作模式下由負載控制。

負載和電源都能用電腦來管理和監控，實現自動測試。測試設備可以是吸收電源能量（負載不工作）後又釋放能量（電源此時不工作）的設備。舉例說明該種測試：如電感，線圈，直流馬達（剎車類回感產品），聚光器，電池（充/放電），還有保險絲、繼電器、接觸件的預先測試等類似應用。

Combination of Power Supply & Load

External two-quadrants operation can be achieved by connecting a power supply of PS 9000, PSI 9000, PSI 8000 or PS 8000 series with an electronic load of EL 9000 series via the built-in „System bus“.

The system bus of the power supplies is tuned to that of the electronic loads. Via this system bus, the current of the power supply is controlled by the load in two quadrant operation.

Load and power supply can both be directed and monitored by PC, enabling automatic testing. The equipment to be tested could be a piece which absorbs energy from a power supply (the load is inactive) and then delivers this energy (the power supply is then inactive). An example of such testing would be chokes, coils, DC motors (return inductive such as braking), as well as condensators, batteries (charge/discharge), and predetermined tests for fuses, relays, contacts and similar applications.