PS Series Linear Supplies

Features:

* Low cost and high reliability
* 3 main outputs plus 1 auxiliary output
* Short circuit and over-voltage protection
* Simple structure
* PS405 / PS408 / PS804 / PS806 are available

Introduction

The PS series linear power supplies are specifically designed to power stepping and servo systems. They have 3 group main output connectors for stepping & servo drives, and 1 auxiliary output (5V/1A, or 12V/1A) for customer use. By selecting appropriate model, one PS power supply can supply 1-3 drivers, saving the average cost of per shaft.

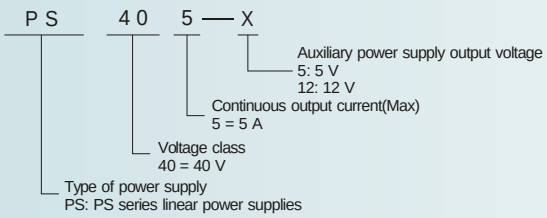
When stepping or servo system running, the driving current varies extremely fast, which is belonged to inductive load, herein the drives and power supplies would be damaged easily if used normal power supplies. PS series supplies are capable of delivering current to drives without affecting the reliability due to their unregulated specialty and bulky capacitors.

Electrical Specifications

Model	Main Output	Auxiliary Output	Power (W)	Matching Drives	Size/ Weight
PS405-5	36 VDC/ 5A	5 VDC/ 1A	200	DM432/ DM556/ DM856/ DM870 M542/ M752/ M760/ M880A 3DM683/ 3ND583/ 3ND883 DCS810/ DCS810S/ ACS606	175*110*70mm/ 2 Kg
PS405-12	36 VDC/ 5A	12 VDC/ 1A	200		
PS408-5	36 VDC/ 8A	5 VDC/ 1A	300		
PS408-12	36 VDC/ 8A	12 VDC/ 1A	300		
PS804-5	68 VDC/ 4A	5 VDC/ 1A	300	DM856/ DM870 M752/ M760/ M880A 3ND883/ DCS810/ ACS806	175*110*70mm/ 2 Kg
PS804-12	68 VDC/ 4A	12 VDC/ 1A	300		
PS806-5	68 VDC/ 6A	5 VDC/ 1A	500		215*130*70mm/ 3.5 Kg
PS806-12	68 VDC/ 6A	12 VDC/ 1A	500		

* Above models are our standard products. Please contact ***Leadshine*** if you need a custom model.

Part Number



Note: Both regulated and unregulated power supplies can be used to supply stepping and servo drives. However, unregulated power supplies are preferred due to their ability to withstand current surge. If regulated power supplies (such as most switching mode power supplies.) are indeed used, it is important to have large current output rating to avoid problems like current clamp, for example using 4A supply for 3A motor-drive operation. On the other hand, if unregulated supply is used, one may use a power supply of lower current rating than that of motor (typically 50% ~ 70% of motor current). The reason is that the drive draws current from the power supply capacitor of the unregulated supply only during the ON duration of the PWM cycle, but not during the OFF duration. Therefore, the average current withdrawn from power supply is considerably less than motor current. For example, two 3A motors can be well supplied by one power supply of 4A rating.

Auxiliary Output Setting

Auxiliary Output Voltage	PS405	PS804	PS806
5 VDC	Jp1 Short-circuit	Jp1 Short-circuit	R5=510Ω(1/4W)
12 VDC	Jp1 Open-circuit	Jp1 Open-circuit	R5=180Ω(1/4W)

Pin Assignment and Description

L,N (AC, AC)	AC power input.
VH+, VH+, VH+	Main output positive.
VH-, VH-, VH-	Main output negative.
VL	Auxiliary output positive.
VL-	Auxiliary output negative.

Mechanical Specifications (unit: mm 1 inch = 25.4 mm)

Model	A	B	C	D	E	F
PS405/PS408	175	110	96	94	∅6	∅4
PS804	175	110	96	94	∅6	∅4
PS806	215	130	112	108	∅6	∅4