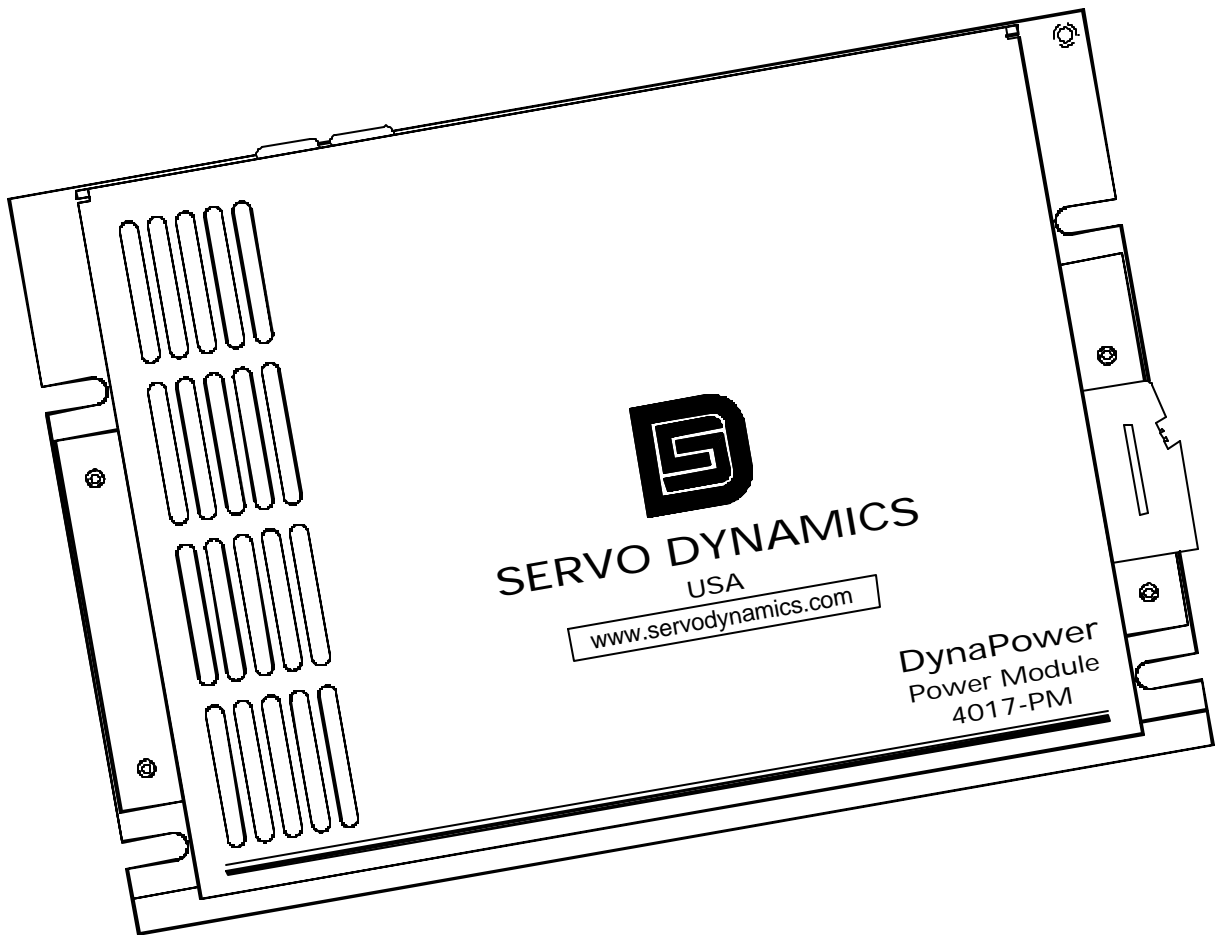


DynaPower
INFORMATION MANUAL
4017-PM



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4017-PM, 9/27/2000

INTRODUCTION

This information manual provides the product specifications, wiring diagram and mounting information for the DynaPower 4017-PM power module.

The DynaPower 4017-PM supplies 40 amps continuous current and 80 amps peak current at 170 VDC for a total of 6800 watts of continuous power. The DynaPower 4017-PM is an off-line rectifier-filter power source with a built-in shunt regulator designed to power as many as six servo amplifiers simultaneously.

ELECTRICAL CAUTIONS

Make sure that all voltages and tests are made with battery powered or electrically isolated instruments.

Make sure that the total current supplied to all connected amplifiers does not exceed 40 amps continuous.

SPECIFICATIONS

POWER MODULE 4017-PM

Performance Characteristics	
Output Voltage (1.4 times input AC)	60 to 170 vdc
Continuous Output Current	40 amps
Peak Output current	80 amps (2 seconds)
Bus Capacitance	8800 microfarads
Internal Shunt Regulator	220 W continuous, 7.2 kw peak for .03 seconds (activates at 190 vdc)
Input Power Requirements	
Input Voltage	45 to 120 VAC, 1 phase, 50 – 60 Hz
Physical Characteristics	
Module Dimensions (L x W x H)	7.6 in. x 2.7 in. x 5.2 in.
Weight	3.8 lbs
Ambient Temperature – Operating	0 °C to 50 °C
Maximum Heat Sink Temperature	80 °C
Relative Humidity	5 - 95% non-condensing
I / O Connections	
AC Connector	3 ea. screw terminals (line, neutral, earth ground)
DC Output	6 ea. 2 pin screw terminal plugs (+ DC, -DC)

CONNECTOR INFORMATION

J1 thru J6

Pin	Label	Description
1	+ DC BUS OUT	Positive Output Voltage
2	- DC BUS OUT	Output Voltage Return

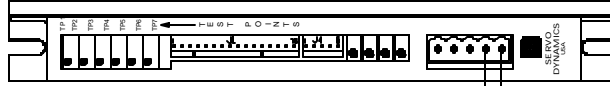
J7

Pin	Label	Description
1	(L1) Line	AC Line input – Hi side
2	(N) Neutral	AC Line input – Low side
3	Earth Ground	Chassis Ground

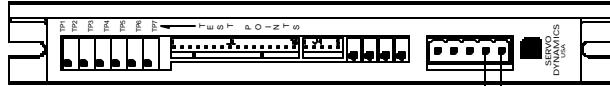
WIRING DIAGRAM

DynaPower 4017-PM

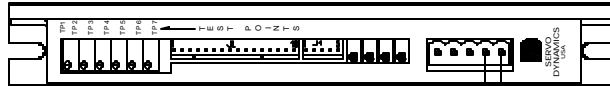
AMP. #6



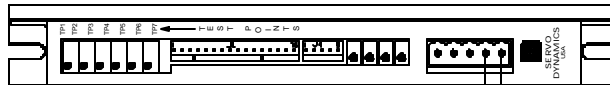
AMP. #5



AMP. #4



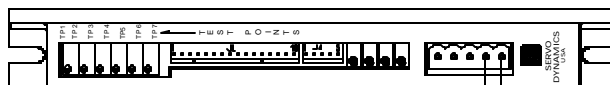
AMP. #3



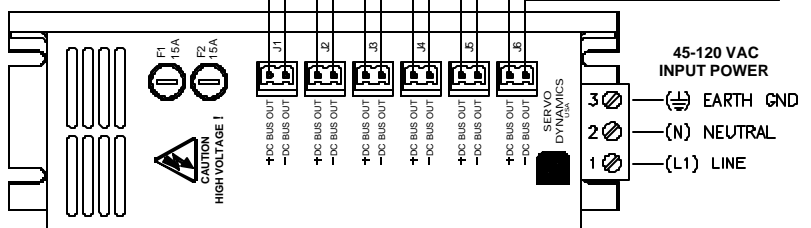
AMP. #2



AMP. #1



POWER MODULE



NOTES:

1. MAXIMUM TOTAL CONTINUOUS CURRENT FROM J1 THRU J6 NOT TO EXCEED 40 AMPS.
2. MAXIMUM CURRENT FROM EACH OUTPUT NOT TO EXCEED 15 AMPS.

TROUBLESHOOTING

The DynaPower 4017-PM has four fuses:

F1 and F2 are 15 amp fuses that protect the shunt regulator resistors and transistors. These fuses are located near the output connector J1 and are easily accessible.

F3 and F4 are 40 amp fuses that are in series with the AC line inputs and protect all bus supply components as well as components connected to the bus. These fuses are located inside the 4017-PM power module and are accessible by removing the cover of the module.

MOUNTING DIMENSIONS

DynaPower 4017-PM

