## AD-8240 SERIES REMOTE SERVO AMPLIFIERS

## **GENERAL DESCRIPTION**

The AD-8240 Series Remote Servo Amplfiers are full-featured, single phase ac triac switching devices designed for remote mounting for new installations, or for direct replacement of existing AD-8800 Series remote mounted servo-amplifiers.

### **FEATURES**

- Accepts analog current and voltage command signals that are DIP switch selectable
- Field selectable command signal monitor to cause actuator to lock-in-place or drive to a desired position on loss of current command signal
- Adjustable deadband
- Field selectable dynamic brake
- Adjustable SPAN and ZERO
- 120 or 240 Vac input, field selectable to match actuator motor voltage
- 4 to 20 mA position feedback signal
- Anti-condensation heater and thermostat (for E & X models)

## **POPULAR OPTIONS**

- Versions are available to serve as direct replacement of all previous AD-8800 series remote mounted servo amplifiers
- On board signal conditioner for 4 to 20 mA position feedback signal (AD-8240/EC-10836 only)
- Watertight and explosion-proof enclosures
- Local controls for enclosed versions

### **BASIC MODELS**

**AD-8240**: For use with all AC powered, single phase 1100, 1500, 1600, 1700, 3300, 2000 Series and 5000 Series actuators.

### **SPECIFICATIONS**

#### Power:

*Voltage Input*: 120 or 240 Vac, 50/60 Hz, single phase. Switch selectable.

Voltage Output: Identical to voltage input Current Output: 10 amps max. at 120 or 240 Vac Null Output: 2 amps at 120 Vac or 240 Vac or half wave dc derivative. Jumper selectable Fuse Protection: Customer supplied and sized based on actuator controlled

**Command Signal Inputs**: (field selectable) 4 to 20 mA current command into a 200 ohm impedence

0 to 5 or 0 to 10 Vdc voltage command into a 100,000 ohm impedence.

1000 ohm potentiometer command signal input is an option on the AD-8240/EC-10836 model only

Position Feedback Signal: 1000 ohm potentiometer

**Position Signal Output**: Loop powered, 2 wire 4 to 20 mA signal

#### Approximate Weights:

AD-8240-P: 2 lbs. (0.9 kg) with enclosure "E": 25 lbs. (11 kg) with enclosure "X": 40 lbs. (18 kg)

**Remote Mounting Distance**: 50 feet or less. (Consult factory for longer runs.)

# **AD-8240 SERIES SELECTION CHART**

Selection

1	Basic Model	AD-8240-P, 120/240 Vac, 1 phase, 50/60 Hz input; 10 amp maximum output.	
		AD-8240-E, 120/240 Vac, 1 phase, 50/60 Hz input; 10 amp maximum output, mounted in a NEMA 4 enclosure	
		AD-8240-X, 120/240 Vac, 1 phase, 50/60 Hz input; 10 amp maximum output, mounted in a NEMA 7 & 9 enclosure	
		AD-8240-R, replacement for AD-8813, AD-8823, AD-8833 and AD-8843	
2	Voltage	1: 120 Vac, 1 Phase, 50/60 Hz	
	Input	2: 240 Vac, 1 Phase, 50/60 Hz	
3	Actuator Controlled	A: The Jordan Controls actuator to be used with this amplifier	
4	Feedback Signal	P: 1000 ohm potentiometer	
		<b>V</b> : 0 to 10 Vdc	
		<b>M</b> : 4 to 20 mA dc	
5	Command	<b>O</b> : Current - 4 to 20 mA or Voltage - 0 to 5 Vdc or 0 to 10 Vdc	
	Signal	P: 1000 ohm potentiometer	

## **AD-8240 STANDARD OPTIONS**

Code	Description	Selection		
Heater				
H002	Anti-Condensation Heater (120 VAC),			
11002	only available with enclosure option			
1002	Anti-Condensation Heater (240 VAC),			
HUU3	only available with enclosure option			
	Special Electrical Options			
	24 Vdc power supply, 320 mA,			
X001	100-240 Vac input (only available with			
	AD-8240/EC-10836			
V021	EC-10842 (AD-8210 and AD-8220			
X021	replacement)			

For a full description of options, go to the Complete Listing of Options starting on page 197.

# MAJOR DIMENSIONS

Panel Mount (AD-8240-P & AD-8240-R)



## ENCLOSURE MAJOR DIMENSIONS



These dimensions are subject to change without notice and should not be used for preparation of drawings or fabrication of installation mounting. For current installation manuals and other product information, see www.jordancontrols.com.



#### NOTES:

- 1. Maximum wire run from amplifier to actuator must not exceed 50 feet. Consult factory for longer runs.
- 2. Shielded wiring is required with the shield grounded at source common for all low level circuits. This includes command & feedback signals and position torque limit switches.
- 3. Wire size must allow for minimal voltage drop in wiring to the actuator motor, but not smaller than 14 AWG.

Due to wide variations in the terminal numbering of actuator products, actual wiring should follow the print supplied with the actuator and amplifier.