

GENERAL DESCRIPTION

The AD-7500 Series Remote Servo Amplifiers are designed for bi-directional positioning of dc actuators. These amplifiers are normally used to control an actuator in closed-loop servo positioning, and are designed for remote mounting.

The output voltage is proportional to the difference between command and position feedback signals for optimum performance results.

FEATURES

- Optimum motor efficiency achieved
- Fast response
- Extremely broad speed range
- Anti-condensation heater and thermostat (for E & X models)
- Current limiting overload protection tailored to the actuator being controlled
- Peak current operation for optimum response
- Motor speed clamp circuit
- Limit switch circuit for positive motor stopping
- Null output
- EMF or tachometer rate input. Potentiometer, current or voltage command signal inputs

SPECIFICATIONS

Power Input: 120/240 Vac, 1 phase, 50/60 Hz into a 175 VA (AD-7530) or 350 VA (AD-7540) isolation transformer.

Power Output:

Voltage: 0 to 28 Vdc

Current: 5 or 10 amp peak

Null: 15 Vdc, 100 mA maximum de-energized at null

Reference: ± 15 Vdc, 200 mA maximum each

Signal Inputs:

Command: 0 to 10 Vdc, 4 to 20 mA

Position Feedback: 1000 ohm potentiometer

Tachometer: Integral to actuator

Limit Switch: One for each end of travel

Ambient Temperature Range:

32° F to 131° F (0° C to 55° C)

Approximate Weight:

AD-7530: 15 lbs. (6.8 kg)

AD-7540: 20 lbs. (9.1 kg)

Enclosure: 35 lbs. (15.9 kg)

Remote Mounting Distance: 50 feet or less.

(Consult factory for longer runs.)

AD-7500 SERIES SELECTION CHART

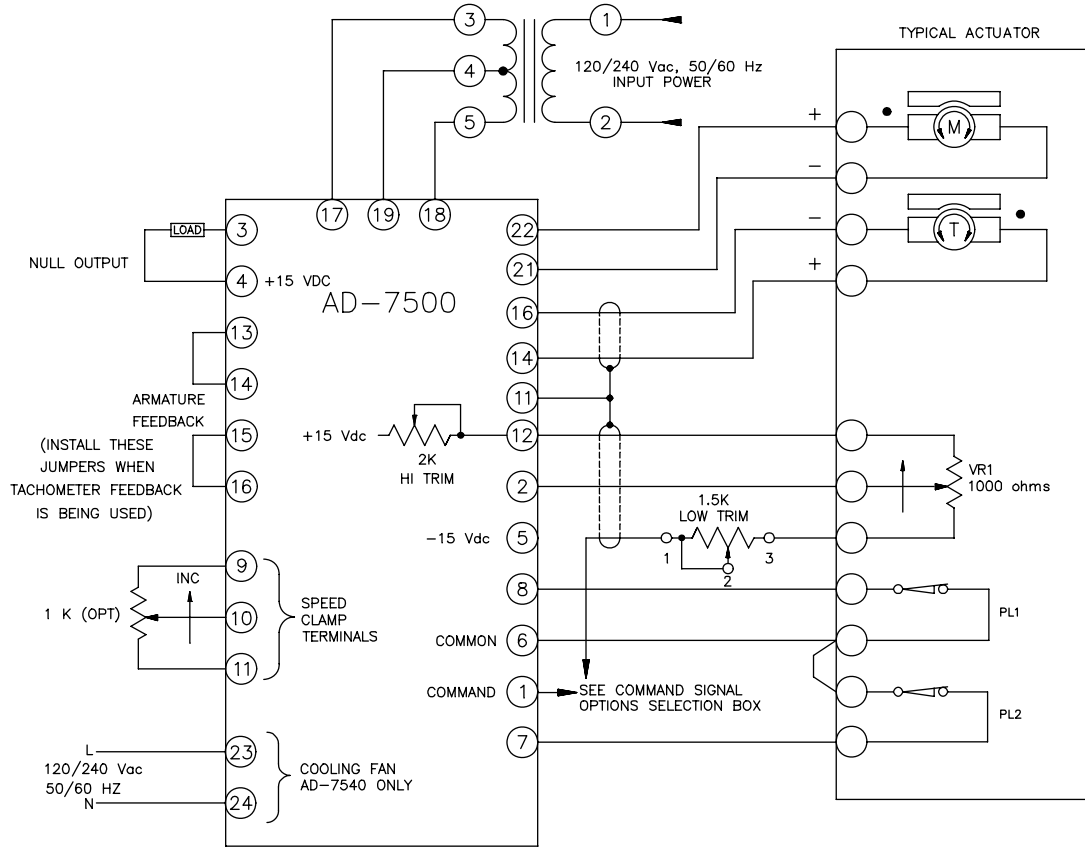
			Selection
1	Basic Model	AD-7530-P, 5A peak at 24 Vdc. 10A for 0.5 second peak	
		AD-7530-E, 5A peak at 24 Vdc. 10A for 0.5 second peak, mounted in a NEMA 4 enclosure	
		AD-7540-P, 10A peak at 24 Vdc. 20A for 0.5 second peak	
		AD-7540-E, 10A peak at 24 Vdc. 20A for 0.5 second peak, mounted in a NEMA 4 enclosure	
2	Voltage Input	1: 120 Vac, 1 Phase, 50/60 Hz	
		2: 240 Vac, 1 Phase, 50/60 Hz	
3	Actuator Controlled	A: The Jordan Controls 24 Vdc actuator to be used with this amplifier	
4	Input Signal	P: 1000 ohm potentiometer	
		V: 0 to 10 Vdc	
		M: 4 to 20 mA dc	

AD-7500 SERIES STANDARD OPTIONS

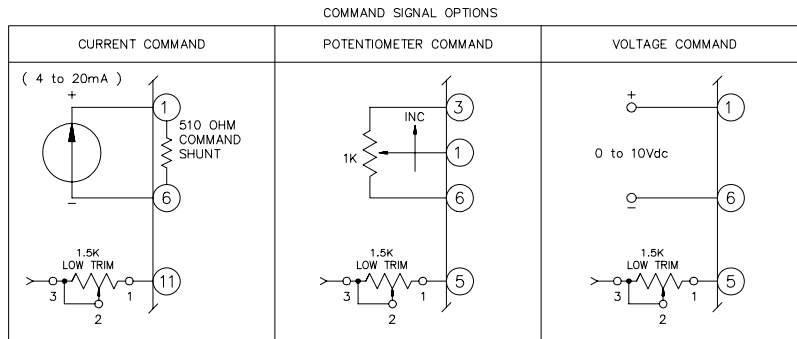
Code	Description	Selection
Heater		
H001	Anti-Condensation Heater (24 VDC)	
H002	Anti-Condensation Heater (120 VAC)	
H003	Anti-Condensation Heater (240 VAC)	

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

TYPICAL WIRING DIAGRAMS



COMMAND SIGNAL OPTIONS



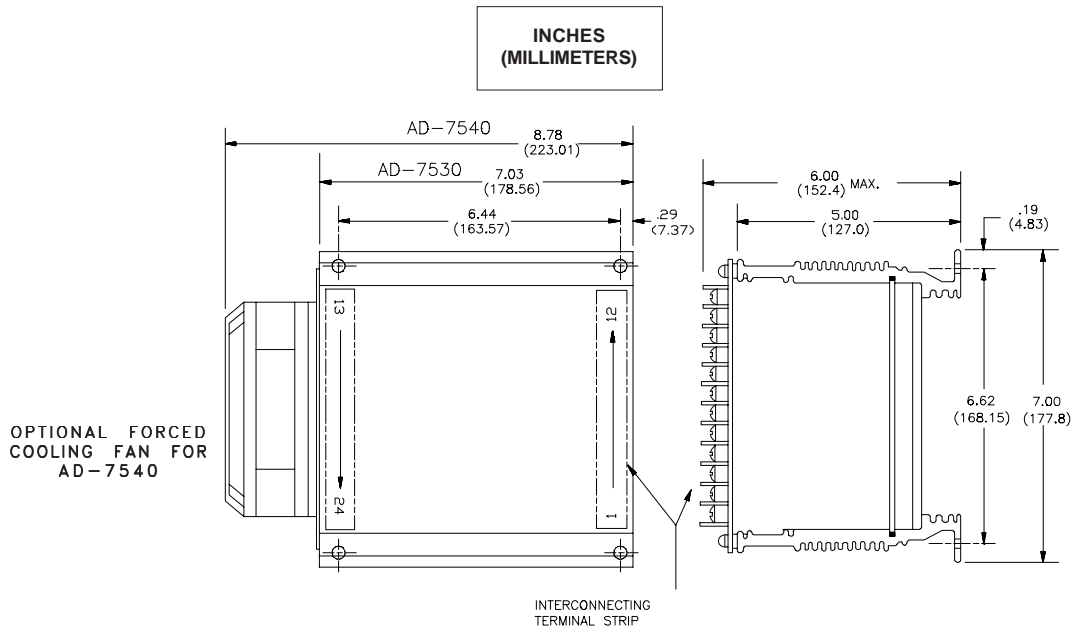
Due to wide variations in the terminal numbering of actuator products, actual wiring should follow the print supplied with the actuator and amplifier.

NOTES:

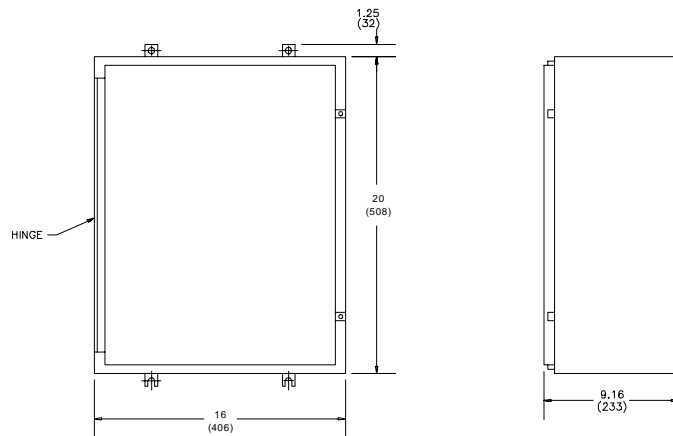
1. Maximum wire run from amplifier to actuator must not exceed 50 feet. Consult factory for longer runs.
2. Shielded wiring is required with the shield grounded at source common for all low level circuits. This includes command & feedback signals and position torque limit switches.
3. Wire size must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

Actuator Model Prefix	Actuator Action on Increasing Command Signal
SM or TA	CW rotation as viewed facing output shaft
MC-1140-N	Increasing regulator outlet pressure
LA	Rack moves to the right when viewing rack block face with rack teeth down
MV	Actuator retracts (valve stem moves up)

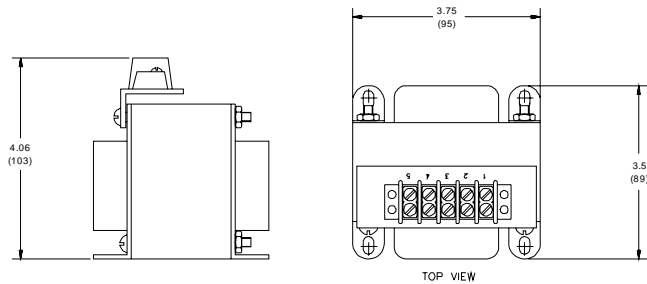
AD-7530-P & AD-7540-P MAJOR DIMENSIONS



AD-7530-E & AD-7540-E NEMA 4 ENCLOSURE



INPUT TRANSFORMER



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.