

GENERAL DESCRIPTION

The TA-1200 throttle actuator is a high response electric actuator which is used with Jordan Controls AD-7530 servo amplifier to control throttle linkage in engine test stands. The actuator is a self-contained, bi-directional, electrically operated unit with output torque of 45 inch-pounds (5.1Nm). It contains a high response servomotor with precision potentiometer feedback and an output shaft rotation of 90 degrees in 0.25 seconds under full load.

The remote mounted AD-7530 servo amplifier accepts a potentiometer or an analog computer input command and produces a proportional dc output to drive the TA-1200.

TA-1200 FEATURES

- NEMA Type 12 enclosure with threaded conduit entry and terminal strip wiring
- Permanently lubricated for any position mounting
- 1000 ohm potentiometer
- Anti-backlash feedback for maximum accuracy
- Heavy-duty, high response permanent magnet servo motor
- Positioning accuracy - better than 0.25% of full stroke
- Cushioned mechanical end stops
- Full one year warranty

TA-1200 SPECIFICATIONS

Torque: Up to 45 in.lbs. (5.1 Nm)

Rotation: 90°

Speed: 0.25 sec. for 90°

Temperature Limits: 32°F to 131°F (0°C to 55°C)
For greater temperature ranges, consult factory.

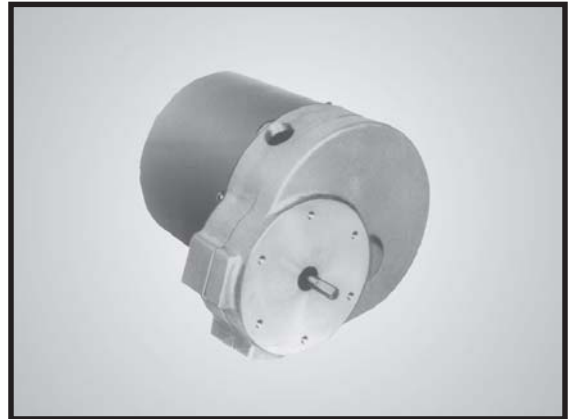
Environmental Ratings: NEMA Type 12

Input Power: See selection chart on next page

Field Wiring: To barrier terminal blocks

Backdrive: Self-locking with amplifier

Approximate Weight: 20 lbs. (8.1 kg)



AD-7530 FEATURES

- Current limiting overload protection
- Fast response
- Null output

AD-7530 SPECIFICATIONS

Power Input: 120/240 Vac, 1 phase, 50/60 Hz into 175 VA

Signal Inputs:

Command: 0 to 10 Vdc, 4 to 20 mA

Position Feedback: 1000 ohm potentiometer

Approximate Weight: 15 lbs. (6.8 kg)

POPULAR OPTIONS *(See Pages 197-206)*

- Calibrated drive arm
- Anti-condensation heater and thermostat
- Increased rotation to 135°
- 1/2 inch output shaft
- NEMA 4 enclosure for AD-7530

TA-1200 SERIES SELECTION CHART

Selection

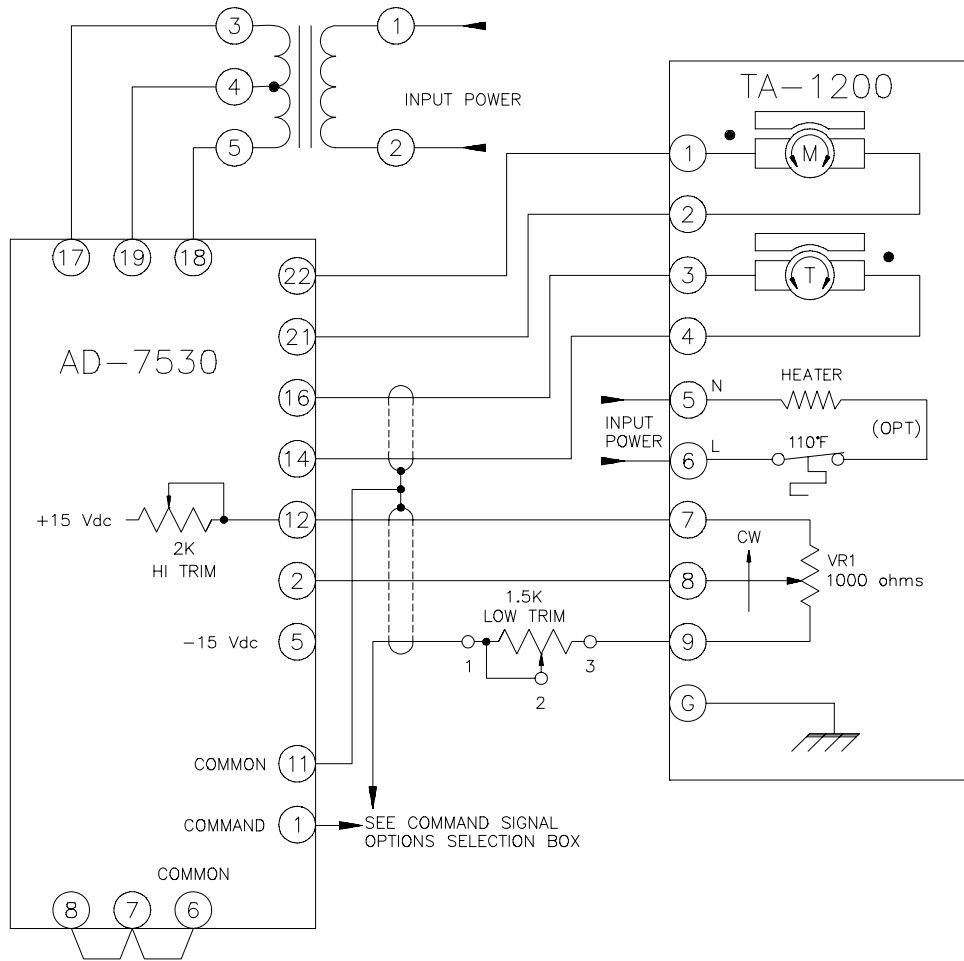
1	Basic Model	TA-1200	High speed rotary actuator		
		TA-1200-R	High speed rotary actuator with chassis mounted AD-7530		
		TA-1200-E	High speed rotary actuator with separately mounted AD-7530 in a NEMA 4 enclosure		
2	Input Voltage	1: 120 Vac, 1 Phase, 50/60 Hz (TA-1200-R & TA-1200-E)			
		2: 240 Vac, 1 Phase, 50/60 Hz (TA-1200-R & TA-1200-E)			
		6: 24 Vdc (TA-1200)			
3	Input Signal	P: 1000 ohm potentiometer (Required for TA-1200-R or TA-1200-E)			
		V: 0 to 10 Vdc (Required for TA-1200-R or TA-1200-E)			
		A: 4 to 20 mA dc (Required for TA-1200-R or TA-1200-E)			
		N: None			

TA-1200 STANDARD OPTIONS

Code	Description	Selection
Drive Arm/Adapter Clevis/Driven Arm		
D040	Calibrated Drive Arm	
D057	Adjustable drive arm for 1/2 inch output shaft of TA-1200 (Use with R008)	
Position Feedback		
F001	Potentiometer, 1000 ohms	
Heater		
H001	Anti-Condensation Heater (24 VDC) For units with enclosure	
H002	Anti-Condensation Heater (120 VAC) For units with enclosure	
H003	Anti-Condensation Heater (240 VAC) For units with enclosure	
Identification/Certifications		
J004	One year extended warranty	
J005	Two year extended warranty	
Shaft		
R008	1/2 inch Output Shaft	
Special Mechanical Options		
Y003	Increased rotation for TA-1200 Series actuators to 135°	

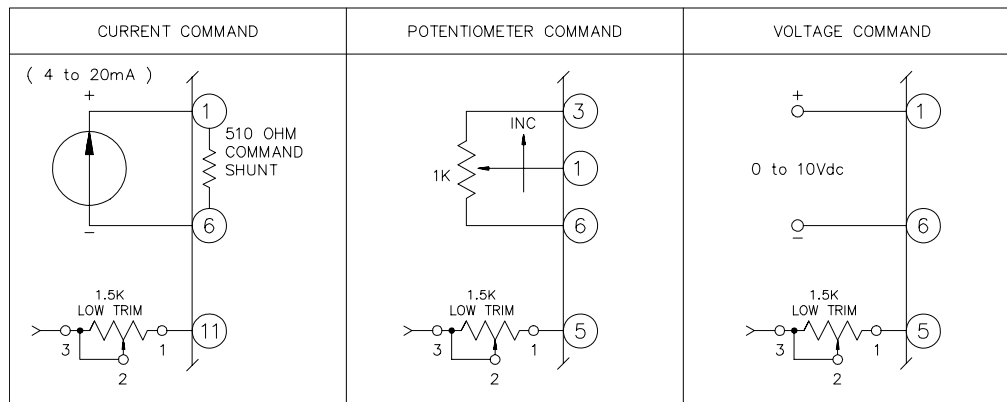
For a full description of options, go to the Complete Listing of Options starting on page 197.

TYPICAL WIRING DIAGRAMS



COMMAND SIGNAL OPTIONS

COMMAND SIGNAL OPTIONS



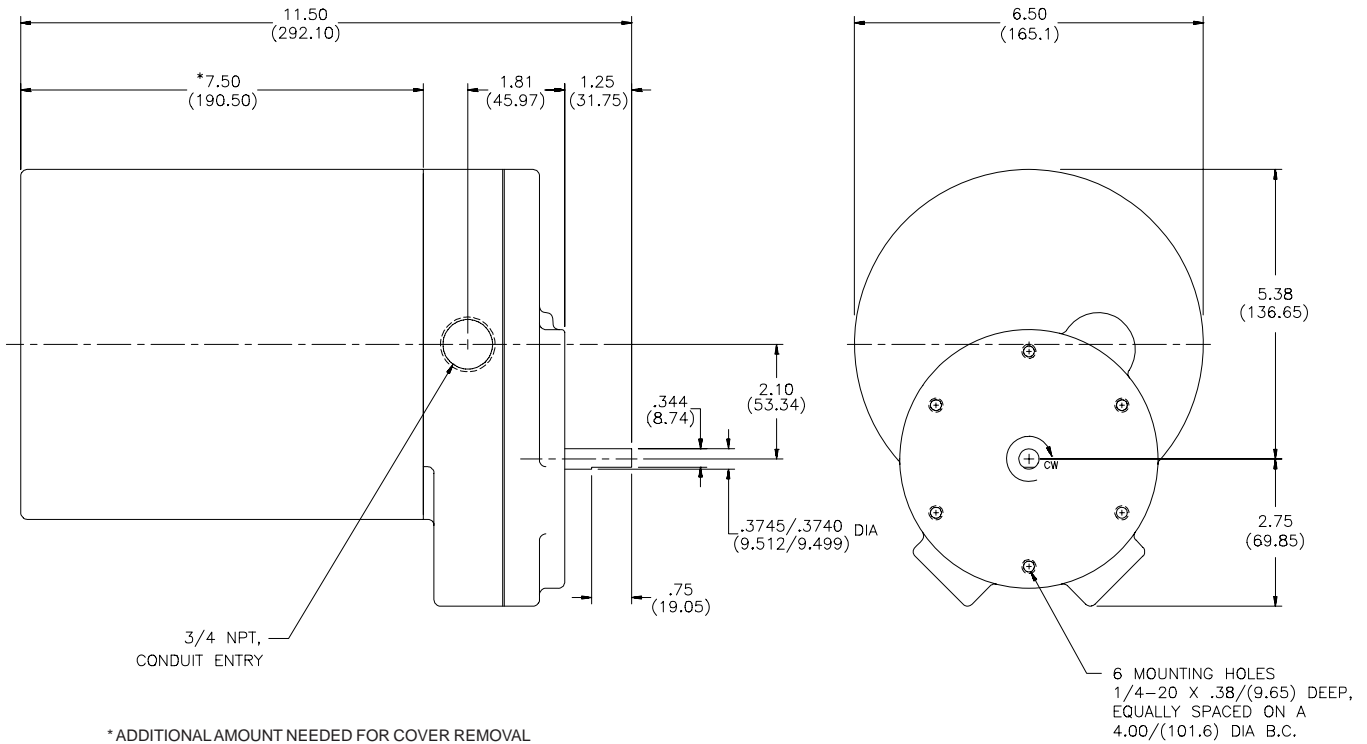
Notes:

1. An increase in command at terminal 1 of AD-7530 will result in a voltage increase at terminal 22 with respect to terminal 21 causing the actuator to rotate CW as shown and the feedback potentiometer wiper to move as shown by arrow.
2. To reverse shaft direction
Change wires on the actuator as follows:
Reverse wires to terminals 1 and 2 (Armature).
Reverse wires to terminals 3 and 4 (Tachometer).
Reverse wires to terminals 7 and 9 (Potentiometer).

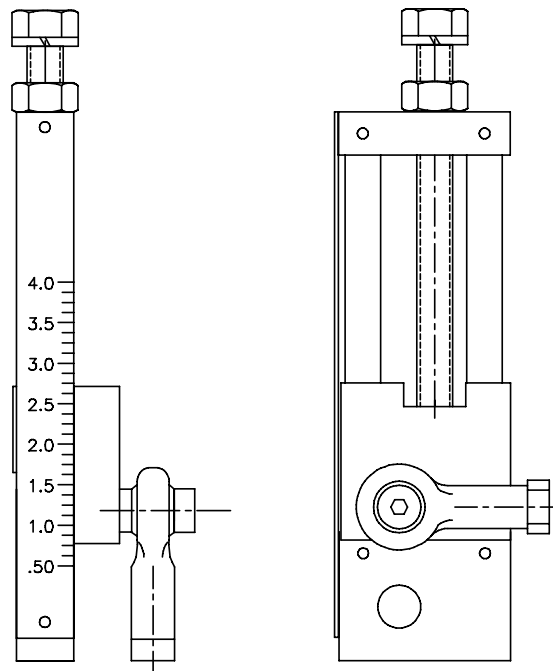
*These dimensions and specifications are subject to change without notice.
Current drawings and specifications are available upon request.*

TA-1200 MAJOR DIMENSIONS

INCHES
(MILLIMETERS)

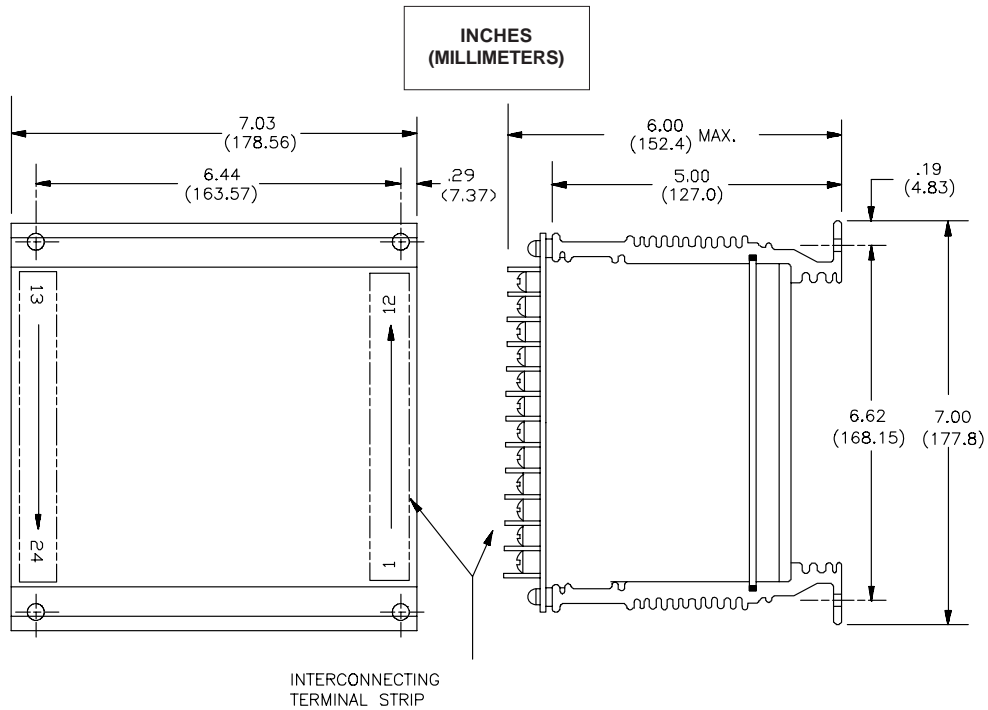


Calibrated Drive Arm (D040)

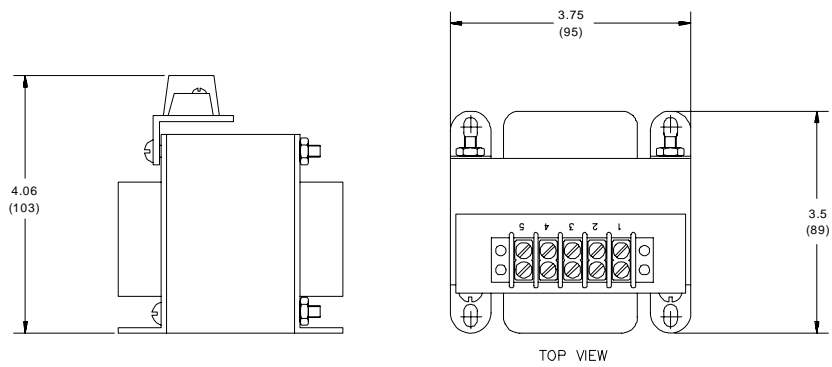


These dimensions are subject to change without notice and should not be used for preparation of drawings or fabrication of installation mounting. For current installation manuals and other product information, see www.jordancontrols.com.

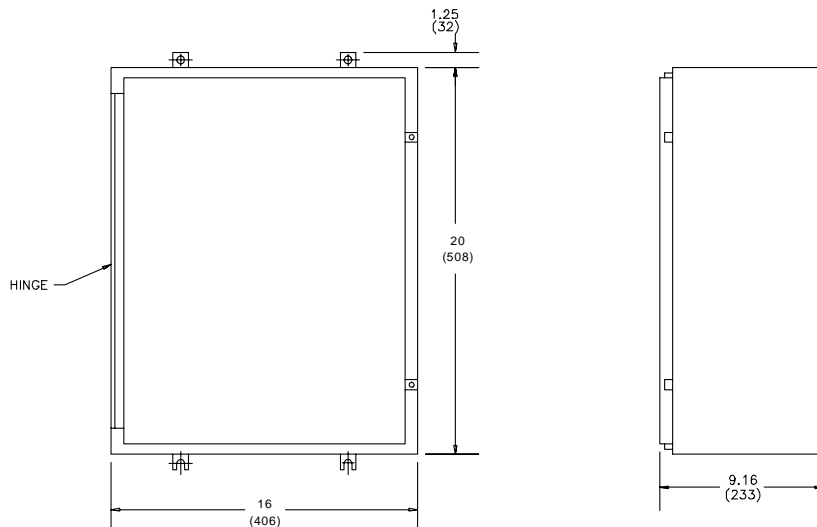
TA-1200-R MAJOR DIMENSIONS



INPUT TRANSFORMER



TA-1200-E ENCLOSURE



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