


AU Series Industrial Electric Actuators 21,300 in-lb to 70,800 in-lb

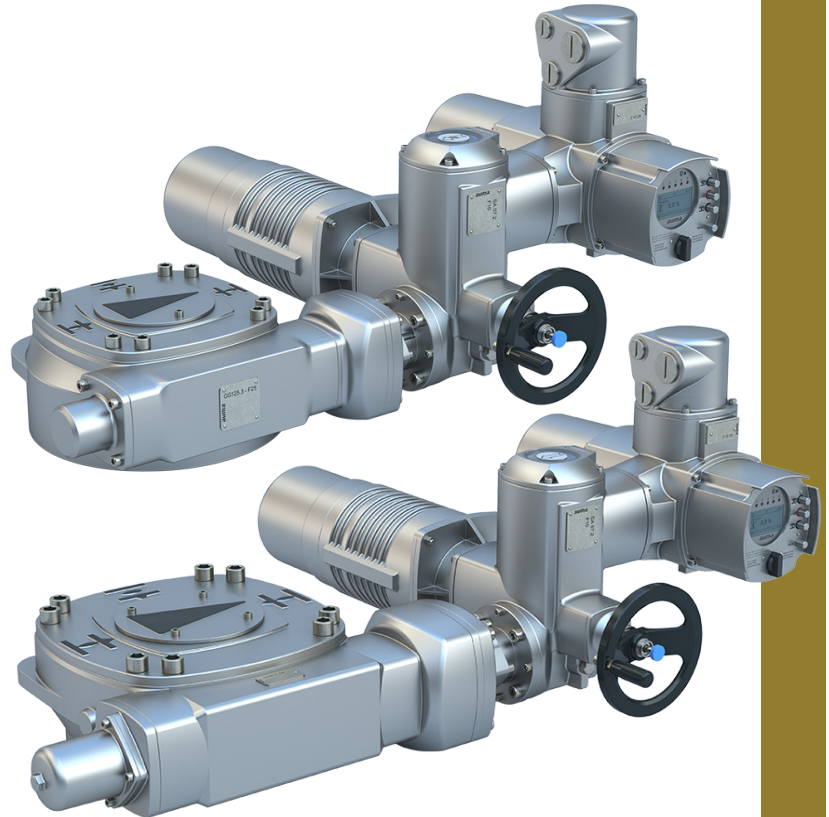
DOCUMENT	
CONTENTS	Features
	Specifications
	Cv Tables
	Cut-Away View
	Dimensions
Close-Off Charts	
LOOKING FOR MORE	
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Application

AU Series Electric actuators provide precise, durable control of quarter turn valves including rubber seated butterfly valves, high performance butterfly valves and industrial ball valves. The compact industrial housing is rated to NEMA 4X (IP 67) standards for outdoor use. All models include integrated controls and a manual override handwheel.

The standard AU models are 120V single phase. Three phase units are available as an option. All AU series actuators include two auxiliary switches, torque switches, a position indicator and a heater. Modulating units provide position feedback as standard.

AU series actuators mount directly to Bray butterfly valves and ball valves without the need for adapter bracket. Thermal overload protection is provided by means of PTC thermistors connected directly to the motor windings.



Features and Benefits

- Heavy Duty Design**

Rated for 15K full stroke cycles, 2.5M repositions

- Manual Declutchable Override Handwheel**

Manual positioning without disconnecting power

- Position and Motion Indicator Lights**

For operation feedback

- Integrated Digital Display Controls**

Local menu driven actuator operation without DIP switches

Model Number Selection Chart

Model Number	Torque in.lbs.	On/Off	Modulating
7AU-2130	21,300	●	
AU-2130SV			●
AU-4068	40,680	●	
AU-4068SV			●
AU-7080	70,800	●	
AU-7080SV			●

Note - Heaters and Auxiliary Switches are standard with all models.

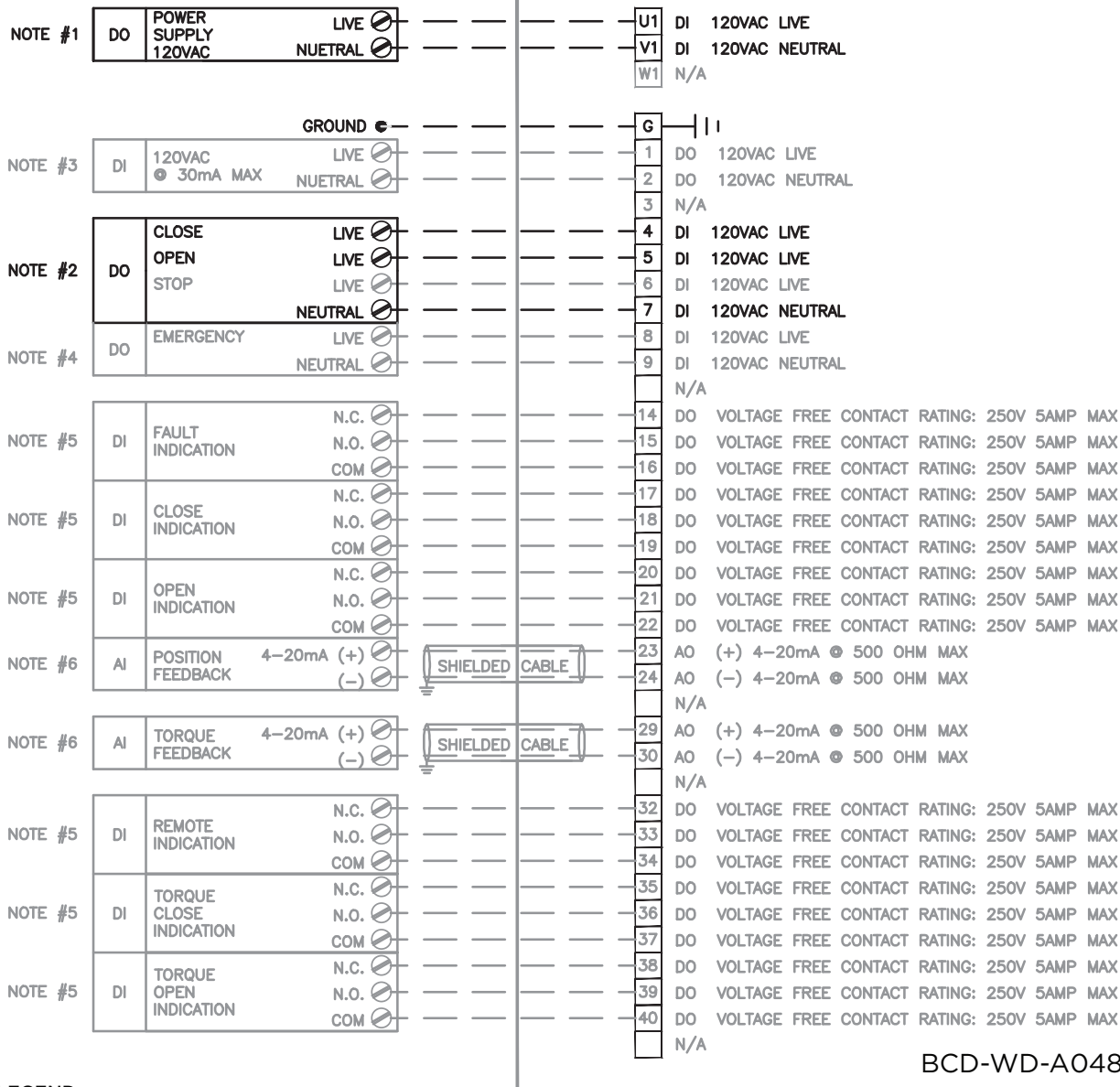
AU Series - Technical Specifications

Technical Specifications - Actuator		
Control Type	AU-xxxx	On/Off or Floating
	AU-xxxxSV	Modulating
Power Supply	120 VAC, 60 Hz, +/- 10%, Single-Phase, Reversible, Permanent Split Capacitor Induction Motor	
Current Draw	Full Load	AU-2130 5.9 A
		AU-4068 & AU-7080 6.4 A
	Locked Rotor	14 A
Motor Protection	1 Ph-1 thermal switch 284°F (140°C) Class F insulation, tropicalized winding	
Control Module Voltage	On/Off, Floating	110 - 120 VAC
	Modulating	24 VDC
Output Aux. Voltage	On/Off, Floating	115 VAC - 30 mA
	Modulating	24 VDC - 100 mA
Feedback Signal	4 to 20 mA	
Torque	21,300 in-lb to 70,800 in-lb (2,407 Nm to 8,000 Nm)	
Control Input Signal	Modulating	4 to 20 mA
Output Contacts	6 Output contacts: 6 NO/NC without common 5A	
Output Signals	Default Setting - Fault, End pos. CLOSED End pos. OPEN, Selector sw. REMOTE, Torque fault CLOSE, Torque fault OPEN	
Terminal Strip	Power Terminals	8 to 10 AWG (6 to 10 mm ²)
	Controls Contacts	14 AWG (2.5 mm ²)
Enclosure	NEMA types 6P (IP68) Corrosion Protection: KS	
Heater	On/Off, Floating	120 V internal (12.5 W)
	Modulating	24 V internal (12.5 W)
Conduit Entries	Plug/socket 100 mm, 2 x 3/4" NPT; 1 x 1-1/4" NPT	
Operating Time	60 Seconds	
Angle of Rotation	92° maximum	
Manual Operation	Declutchable	To close the valve, turn handwheel clockwise.
	Override Handwheel	Drive shaft (valve) turns clockwise in close direction.
Dimensions	See Page 4	
Weights	AU-2130	158 lbs. (72 kg)
	AU-4068	181 lbs. (82 kg)
	AU-7080	278 lbs. (127 kg)
Ambient Temperature	-13°F to 158°F (-25°C to 70°C)	
Fail Position	Loss of supply power - Fail-in-place	
Duty Cycle	On/Off, Floating	S2 -15 min continuous, max. six starts/minute
	Modulating	S4 - 25% Intermittent duty
Life Cycle	15,000 Full Stroke Cycles; 2,500,000 Repositions at Rated Running Torque	
Certifications	CE	
Warranty	3 Years limited from time of shipment.	

Disclaimer - The performance specifications are nominal and conform to acceptable industry standards. For application at conditions beyond these specifications consult the local Bray office. Bray, Inc. shall not be liable for damages resulting from misapplication or misuse of its products.

FIELD WIRING

ACTUATOR



BCD-WD-A048

LEGEND:

TERMINAL SYMBOLS

FIELD WIRING

FACTORY WIRING

GROUND

CALIBRATION SEQUENCE:

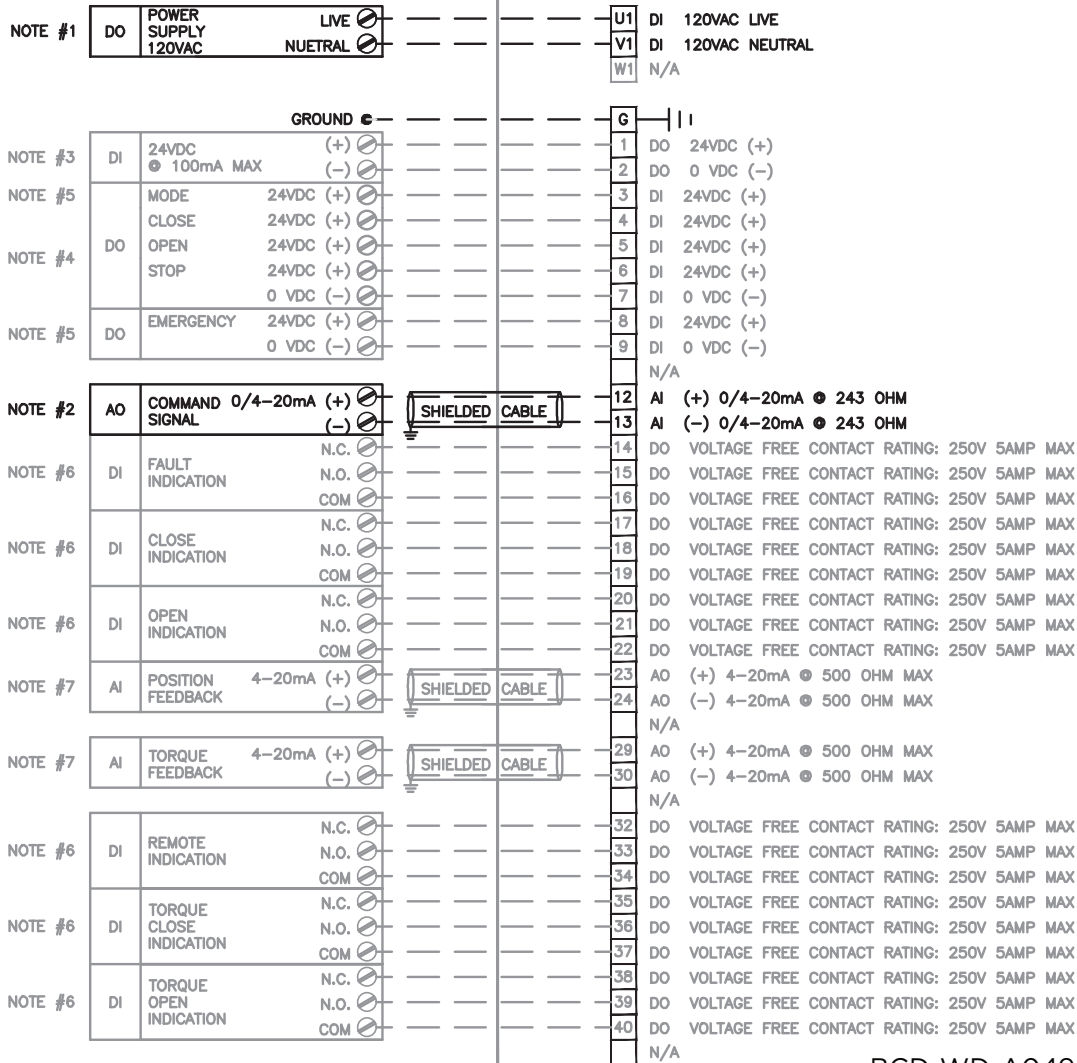
ACTUATOR THAT WAS FACTORY MOUNTED TO VALVE WAS CALIBRATED BY THE FACTORY IN ACCORDANCE WITH THE APPLICABLE AUMA OPERATION MANUAL.

NOTES:

1. POWER INPUT FROM FIELD CONTROL PANEL TO ACTUATOR
2. 120VAC COMMAND SIGNAL INPUT FROM FIELD CONTROL PANEL TO ACTUATOR (LIVE AND NEUTRAL BOTH REQUIRED FOR OPERATION)
3. OPTIONAL: POWER OUTPUT FROM ACTUATOR TO BE USED BY FIELD CONTROL PANEL CONTACTS FOR ACTUATOR INPUTS
4. OPTIONAL: 120VAC COMMAND SIGNAL INPUT FROM FIELD CONTROL PANEL TO ACTUATOR (LIVE AND NEUTRAL BOTH REQUIRED FOR OPERATION). FUNCTIONAL PURPOSE IS DETERMINED BY PROGRAMMING SELECTION
5. OPTIONAL: DIGITAL OUTPUT FROM ACTUATOR, VOLTAGE FREE CONTACT. RATING: 250V 5AMP
6. OPTIONAL: ANALOG OUTPUT FROM ACTUATOR TO BE USED BY FIELD PLC FROM MONITORING. 4-20mA @ 500 OHM MAX

FIELD WIRING

ACTUATOR



BCD-WD-A049

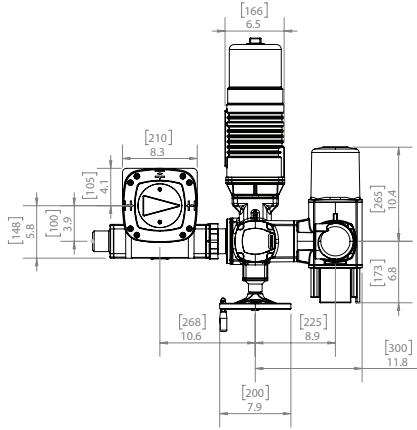
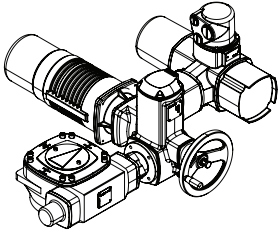
LEGEND:
 TERMINAL SYMBOLS [X] ○ ●
 FIELD WIRING — — —
 FACTORY WIRING — — —
 GROUND ⊥

CALIBRATION SEQUENCE:
 ACTUATOR THAT WAS FACTORY MOUNTED TO VALVE WAS CALIBRATED BY THE FACTORY IN ACCORDANCE WITH THE APPLICABLE AUMA OPERATION MANUAL.

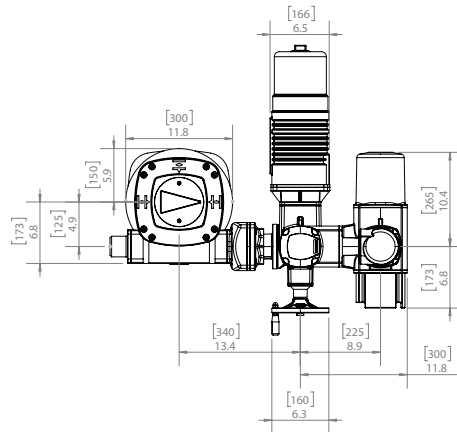
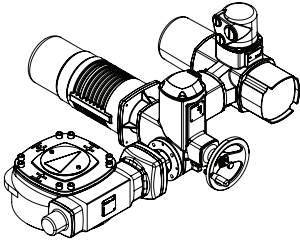
- NOTES:**
- POWER INPUT FROM FIELD CONTROL PANEL TO ACTUATOR
 - 0/4-20mA COMMAND SIGNAL INPUT FROM FIELD CONTROL PANEL TO ACTUATOR
 - OPTIONAL: POWER OUTPUT FROM ACTUATOR TO BE USED BY FIELD CONTROL PANEL CONTACTS FOR ACTUATOR INPUTS
 - OPTIONAL: 24VDC COMMAND SIGNAL INPUT FROM FIELD CONTROL PANEL TO ACTUATOR (POSITIVE (+) AND NEGATIVE (-) BOTH REQUIRED FOR OPERATION)
 - OPTIONAL: 24VDC COMMAND SIGNAL INPUT FROM FIELD CONTROL PANEL TO ACTUATOR (POSITIVE (+) AND NEGATIVE (-) BOTH REQUIRED FOR OPERATION). FUNCTIONAL PURPOSE IS DETERMINED BY PROGRAMMING SELECTION
 - OPTIONAL: DIGITAL OUTPUT FROM ACTUATOR, VOLTAGE FREE CONTACT, RATING: 250V 5AMP
 - OPTIONAL: ANALOG OUTPUT FROM ACTUATOR TO BE USED BY FIELD PLC FROM MONITORING. 4-20mA @ 500 OHM MAX

AU Series - Dimensions - in. [mm]

AU-2130



AU-4068



AU-7080

