Bernard EZ, electrical AT 3901

# Internet\_Variants

## Range of application

Weather-proof actuator for On/Off manuvering or positioning of ball valves, butterfly or where a 90° rotation is needed. Torque 250 or 600 Nm.

## UEC.11 Actuator for valve, electric, two-position without spring return

Actuator Bernard Electrical AT 3900 for 90° maneuvering of ball valves, butterfly or where a 90° rotation is needed.



# **Quality assurance**

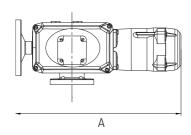
#### **CE-Marking**

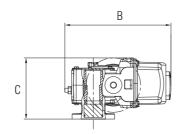
EC Directives 2004/108/EC, 2006/95/EC and complies with EN 61000-6-4, EN 61000-6-2, EN 60034-1 and EN 60529.

IP 67 rated.

# **Material specification**

	Detail	Material	Surface treatment
1	Body	Aluminum	Epoxy painted RAL 2010
2	Cover	Aluminum	Epoxy painted RAL 2010
3	Drive shaft	Massive steel	Untreated





#### **Dimension and weight**

Actuator/ Fig. no	Standard drive shaft	Α	В	С	Weight
25	22	518	313	180	18
60	27	587	313	180	20

Dimension in mm, weight in kg \*ls avaliable in requested size, parallel or a  $45^{\circ}$  rotation

#### **Function and design**

#### Standard version

Reversible actuator in two sizes, for rotating 0-90 °, adjustable through a combination of cams, mechanical end stop and/or torque switches.

The acutator is a compact combination of an ctric motor with thermal overload protection and self-locking, permanently lubricated worm gear. Standard with manual emergency operation.

The actuator mounting dimensions in relation to the fittings are according to ISO 5211

Design time 20 000 cycles (On-Off) / 300 000 starts for modulating (positioning).

Bernard EZ, electrical AT 3901

Tested according to EN 15714-2 class A and B

# **Standard performance**

Standard performance							
Motor duty	S4-25% ED. 360 starter/h max						
Enclosures	IP67						
Temperature	-20°C to +60°C						
Anti condensation heater	Yes						
Thermal overload protection	Thermostats						
Permanently lubricated gear	Gear						
Cable entries	2 st.M20x1,5						
End switches	250V, max 16A						
Torque switches	Yes						
Terminal block	8 connections.						

#### **Technical data**

Actuator 3901 on/off	Torque Nm		Operating time (50 Hz) s	ISO-connection	230 V A	230 V AC 50 Hz Ampere		400 V AC 50 Hz Ampere			24 VDC
	Star t	Sto p			Start	Stop	kW	Start	Stop	kW	
25	250	250	30	F07/10	0,9	0,6	0,03	0,5	0,3	0,03	Yes
60	600	600	30	F07/10	1,7	1,2	0,06	0,8	0,3	0,06	-

# **Technical data**

Actuator 3901 for positioning	Torque Nm		Operating time (50 Hz) s	ISO-Connection	230 V A	230 V AC 50 Hz Ampere		400 V AC 50 Hz Ampere		24VDC	
	Star t	Sto p			Start	Stop	kW	Start	Stop	kW	
25	250	12 5 25	30	F07/10	0,9	0,6	0,03	0,5	0,3	0,03	Yes
60	600	0	30	F07/10	1,7	1,2	0,06	0,8	0,3	0,06	No

### **Dimensioning**

Acutator size		25	60
Ball valve			
AT 3502, 3522, 3542, 3547	DN	80-125	125-200
AT 3507, 3527	DN	65-100	125-150
AT 3582, 3585	DN	125	150-200
AT 3590	DN	100	125-350
Butterfly valve			
AT 2310-2319	DN	200	250-300

# **Accessories and options**

On/off is avaliable in two different variants

- 1. The basic version with electromechanical circuit breaker. A feedback signal 4-20mA is possible with accessories POT and TAM.
- 2. With LCD display and push buttons, this includes control with either 4-20 mA or 0-10 V.

For regulatory

Precision is better than 2%, adjusting the dead band with potentiometer.

Rätten till ändringar utan föregående meddelar Armatec ansvarar inte för eventuella tryckfel el Dokumenten får konienss endast i sin helhet

# **Electric actuator**

Bernard EZ, electrical AT 3901

AT 3901 (250-600 Nm)

Configurable input, 4-20 mA, 0-20 mA or 0-10 V.

Output signal is same as input.

3 LED lights; Green (open), red (closed), yellow (torque switch or overheating enabled).

Mounting kit and stem extension.

#### Installation

During all work with the actuator the power MUST be disconnected.

- The actuator must be connected as per the wiring diagram.
- Each actuator must be powered by an individual switch or relay contact, minimum 16A, to prevent cross-feed between the actuators.
- At outdoor installation, the actuator should be protected by a roof or cap.
- Installation with the motor downwards should be avoided.
- Turn the valve with the control unit's hand wheel to centre position. See indication on top of the device.
- Always connect the heater.
- Check that the actuator turns the valve in the desired direction.
- The correct limit switch (open or closed) shall break the motor current.
- Cable entries must comply at least to the lowest protection class of devices.

See the separate sheet for start-up, storage and maintenance.

#### Marking

Article number, manufacturer, serial number, voltage and current. Wiring diagram is placed by the motor at delivery.

### How to order

Example: 3901-25-8B3A								
AT3901	AT3901 -25* 8** B*** 3****							
Fig. no.	Size	Operation time	Connection	Voltage	Options			

Example: 3901-25-8B3C (Poaitioning with 4-20 mA or 0-10V Control signal)



<sup>\* 25</sup> eller 60 depending on needed torque

<sup>\*\* 8=30</sup> s

<sup>\*\*\*</sup> B=F07/10

<sup>\*\*\*\* 0=24</sup> VDC, 3=230 VAC, 4=400 VAC

<sup>\*\*\*\*\*</sup> A=On/Off, B= On/off Logic, C=Regulating D=, E=1000 ohm POT, I=TAM