

# Electric actuator

Bernard electric

AT 3911 (200-800 Nm)

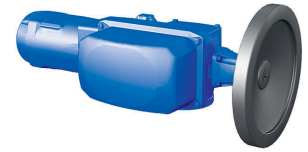
## Internet\_Variants

### Range of application

Weather-proof actuator for On/Off, positioning or modulating maneuvering for ball- and butterfly valves. Torque from 200 to 800 Nm.

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

Actuator Bernard Electrical AT 3911 for 90° maneuvering of ball-, butterfly- as well as plug valves



### Quality assurance

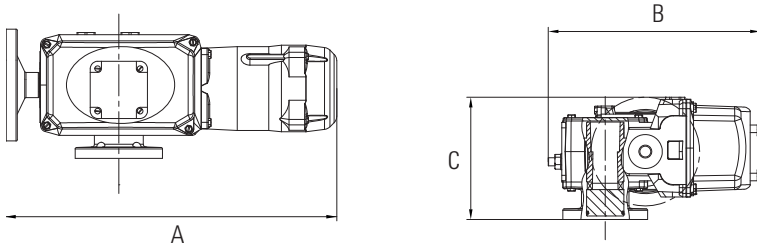
CE marked

EC directives 2004/108/EC, 2006/95/EC, following the standards in EN 61000-6-4, EN 61000-6-2, EN 60034-1 och EN 60529.

IP 67 rated

### Material specification

	Detail	Material	Surface treatment
1	Body	Aluminum	Zinc primer, epoxy layer and RAL 5002 blue polyurethane top coat
2	Cover	Aluminum	Zinc primer, epoxy layer and RAL 5002 blue polyurethane top coat
3	Drive shaft	Massive steel	Untreated



### Dimension and weight

Actuator/ Fig. no	Drift shaft*	A	B	C	Weight
20	22	538	313	180	18
25	22	538	313	180	18
60	27	587	313	180	20
80	27	587	313	211	25

Dimension in mm, weight in kg. \*Possible to get in requested sizes, parallel or in a 45° rotation

### Dimension and weight

Actuator / Fig. no	Drift shaft*	A	B	C	Weight
3911-20-2B3P	Depending on valve	479	389	336	25
3911-25-8B3P	Depending on valve	459	389	336	22
3911-60-8B3P	Depending on valve	528	389	336	27
3911-80-8C3P	Depending on valve	528	389	336	28

Dimension in mm, weight in kg. \*Possible to get in requested sizes, parallel, keyway or in a 45° rotation.

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## Function and design

### Standard version

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

The actuator is a compact combination of an electric motor with thermal protection and a self-locking worm gear. As standard with a hand wheel and position indicator.

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

Design lifetime 20 000 cycles for On/Off or 300 000 starts for positioning. Tested according to EN 15714-2 class A and B

## Standard performance

Standardutförande	
Motor duty	S4-30% ED, 360 starter/h max. S4-50% for modulating class III S4-100% for continues modulating
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 3911 On/Off	Torque Nm		Operating time (50 Hz) s	ISO-connection	230 V AC 50 Hz Ampere			400 V AC 50 Hz Ampere			24 VDC
	Start	Stop			Start	Stop	Kw	Start	Stop	Kw	
20	200	200	5	F07/10	0,9	0,6	0,06	0,9	0,6	0,06	
25	250	250	5, 10, 30, 50	F07/10	0,9	0,6	0,03	0,5	0,3	0,03	
60	600	600	30, 60	F07/10	1,7	1,2	0,06	0,8	0,3	0,03	-
80	800	800	30, 60	F12	3	2	0,9				

## Accessories and options

Standard version, see above.

### Possible options and variants

Actuator Intelli+, see separate datasheets for possible features, such as summer alarm, bus-control, walking-time control etc.

### Power supply 3-phase

380/415 V - 50Hz, 440/460 V - 60 Hz

Rätten till ändringar utan föregående meddelande förbehålls.  
Armatec ansvarar inte för eventuella tryckfel eller misstänksänd.  
Dokumentet får kopieras endast i sin helhet.

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230 V - 50 Hz, 220/230 V - 60 Hz  
500 V - 50 Hz eller 5775 V - 60 Hz

## Phase 1

110, 115, 120, 220 V - 50 Hz  
115 V-60 Hz  
24V - 50 Hz

## DC

24, 48, 110 or 220 VDC  
For other time periods, contact Armatec  
For an off-shore painted actuator, contact Armatec  
For an ATEX-rated actuator, contact Armatec

## Installation

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

- The actuator must be connected as per the wiring diagram, see the manual.
- 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 manual for start-up, storage and maintenance

## Marking

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

## Options for control

Control signal	230 V, 50 Hz	3-phase 400 V, 50 Hz	24 V
4-20 mA or 0-10 V	Minigam, Integral, Posigam	Intelli, Integral, Posigam	Intelli, Integral, Posigam
Profibus DP	Intelli, Integral, Posigam	Intelli, Integral, Posigam	Intelli, Integral, Posigam

## How to order

Example: 3911-25-8B3A					
AT3911	-4*	3**	A***	3****	A*****
Fig. n0.	Size	Operating time	Connection	Voltage	Options
Example: 3911-25-8B3P (Regulation with an Intelli ecu)					
* 4, 6, 10 or 15 depending on needed torque					
** =Time: 1=3s, 2=5s, 3=6s, 4=10 s, 5=15s, 6=20s, 7=25s, 8=30s, 9=35s, 10=45s, 11=50s, 12=60s					
*** A=F05/07, B=F07/10, C=F12					
**** 0=24 VDC, 3=230 VAC, 4=400 VAC					
***** A=On/Off, B=Integral, C=Posigam, D=Minigam, E=1000 Ohm POT, P=Intelli					