## **BASIC Series Installation, Operation & Maintenance**

# BASIC ON OFF & FAILSAFE SERIES (12VDC, 24VAC, 24VDC, 110VAC & 220VAC)

Thank you for purchasing the AVA range of electric quarter turn actuators.

Please follow the basic instructions on how to use your product to ensure that the product's 12 month warranty is not void. The following points cover the Basic

### **GENERAL POINTS TO NOTE AND FOLLOW:**

- Your actuator does not require you to remove the cover at any point. Removing the cover will invalidate the warranty.
- If your actuator is a B20 series the actuator is pre wired. The cable should come as a cut flying lead but should you receive with our factory standard white PIN connector, please remove and terminate as required. This fitting is purely for our test panels to enable quick testing of product.
- Actuator, if not supplied with valve mounted, should be sized correctly to ensure valve (including safety factor) is covered by actuator torque output.
- Actuators are IP67 rated, please check online for full IP ratings and what IP67 is and isn't covered for.
- All actuators have manual override via mechanical override, allen key is supplied with actuators as standard.
- Please check actuator technical datasheet for actuator current draw to size power supply correctly.
- If purchasing a Basic 20 failsafe actuator, note that your actuator has an internal capacitor. This means that when you first power your actuator you will need to allow an initial charge time for the actuator. This is typically around 20 seconds. After this period the actuator will operate as normal. On power loss or removing the live feed it will close using the capacitor.
- If you have purchased a 60 or 110 series failsafe actuator, your actuator has an internal battery pack for failsafe functionality. This will have a factory test charge and requires 24 hours initial charge to give full charge.
- Actuators hold CE certification, copy of certificate and declaration available online.
- Actuators are **NOT ATEX** rated and are not designed for hazardous area use, only for safe area use.
- Refer to the actuators technical datasheet for maximum and minimum temperature ratings.
- Do not install 'upside down', vertical or horizontal installation is fine.
- Please refer to www.avactuators.co.uk for full detailed technical specification or call technical support of +44(0)1386 556847.

#### WIRING: These are the standard stocked wiring diagrams.



Volt free aux contacts



FAILSAFE WIRING 'B' FOR AC

Volt free aux contacts



## www.avactuators.co.uk

# SMART ACTUATORS (12VDC,95-265V or 24VAC/DC)

Thank you for purchasing the AVA range of electric quarter turn actuators.

Please follow the basic instructions on how to use your product to ensure that the product's 12 month warranty is not void. The following points cover the Smart series for On Off and Failsafe functions whilst the reverse of this

document covers the Smart series for On Off, Failsafe, Modulating, Modulating Failsafe and so on.

### **GENERAL POINTS APPLY TO SMART & BASIC—PLEASE READ REVERSE POINTS**

- The Smart actuator introduces the OLED screen and 3 buttons. The screen displays actuator status including input command, status and position. The screen also displays the internal menu system.
- Hold down the bottom button to display a flashing K3 after 5 seconds you will put the actuator into manual local control. You can now control the actuator open/ close independent of the powered command. For some models this option might be password protected. To come out of this mode simply press the M button or wait for around 20 seconds and the unit will time out. The actuator WILL NOT stay in MANUAL.
- The top M button will take you into the MENU mode. This varies between actuator but is generally used to set working
  angle, close position adjustment, working speed and for failsafe actuators you can select if the actuator will fail open or
  closed on power fail. The Modulating actuators have their own options also. See specific actuator technical IOM's for full
  menu system. Note on some models this feature might be password protected.
- Do not put any force onto the screen and DO NOT remove clear cover over screen and buttons.
- If your actuator displays ALERT this is to advise of an issue with the actuator. If fitted to a valve, check the torque is not more than the actuator can output. If the valve is jammed, free the blockage and re power the actuator. If the actuator is not fitted to a valve, check power supply. If ALERT remains on screen, call technical support.
- If the actuator shows NO CTRL—this means there is no modulating control signal. Check wiring.
- If actuators shows Pwr Cut—this means the actuator cannot see a live voltage. Check wiring

#### WIRING: These are the standard stocked wiring diagrams.

**ON OFF & FAILSAFE** 



#### MODULATING



#### Local controls:



	M button is used to enter and switch menus.
<b>)</b>	K2 is used in conjunction with K3 for adjusting values.
	K3 is used for changing settings, navigating menus, exiting and saving.
	OLED Screen with clear blue letters against a black background

## www.avactuators.co.uk

