

## BFAS-□ Series Controllers

### ● Summarize:

BFAS series controller is a new generation of intelligent controller based on the BFA series. Adoption of microprocessor technology remarkably improves protection functions of controllers and reduces requirements for the installation and adjusting persons' experience and technical background.

### ● Characteristics:

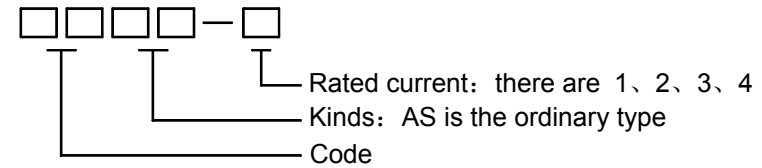
1. Digit display the valve position and auto-set the zero and full.
2. Press reminds function.
3. Flash hints the working process both in open and close direction.
4. LED display the full open/close position, external/local control, and failure/protection.
5. Sound and light alarm (with silence function) to over torque and failure (such as overcurrent, motor overheated, motor stall, etc.) protection.
6. The valve can be set to beyond torque when open it in the full close position with the max. torque (this can trouble shoot the sticking by long time unused) and can be set to beyond travel when close it not in the full close position with the max. torque.
7. Overall & mounting dimensions and external circuit wiring are compatible with the old products.

### ● Technique data

1. Working voltage: 380V, 50Hz, three phase four line.
2. Working environment:
  - ◇ Environment temperature: -20~40℃
  - ◇ Relative humidity: less than 80% ( $20 \pm 5^\circ\text{C}$ )
  - ◇ Apply to circumstances without strong corrosive and explosive medium.

### ● Model:

Model	Rated power (W)	Rated current(A)	Weight (kg)
BFAS -1	$P \leq 90$	$I < 1$	2.5
BFAS -2	$120 \leq P \leq 1100$	$1 \leq I < 5$	3
BFAS -3	$1100 < P \leq 2200$	$5 \leq I < 10$	3
BFAS -4	$3000 \leq P \leq 4000$	$10 \leq I < 16$	3



### ● Panel layout

Indicator: Digital display.

Keystrokes:

- Shift (Local/Remote)
- Open (Open the valve)
- Close (Close the valve)
- Stop (Stop the valve operation)

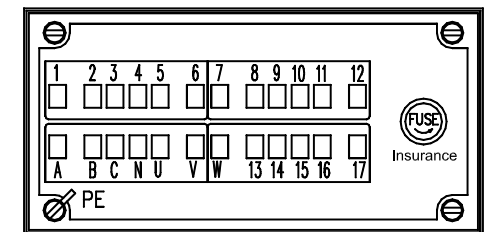
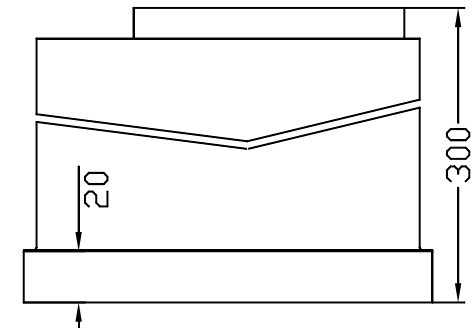
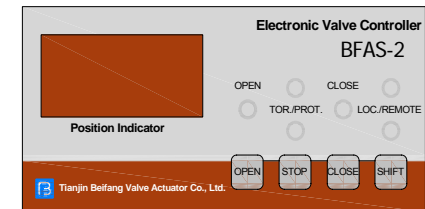
Indicator light: LED display.

- Open: Display the valve opening in place.
- Close: Display the valve closing in place.
- Local /Remote: Red shows the local state, green shows the remote state.

Tor./Prot.: Red is for over-torque and green is for control circuit fault.

- Overall dimensions:  
Dimensions of the hole:  
 $152^{+1} \times 76^{+1} \text{mm}$ .

- The back panel:  
For electrical connection.



## ● Installation and adjustment:

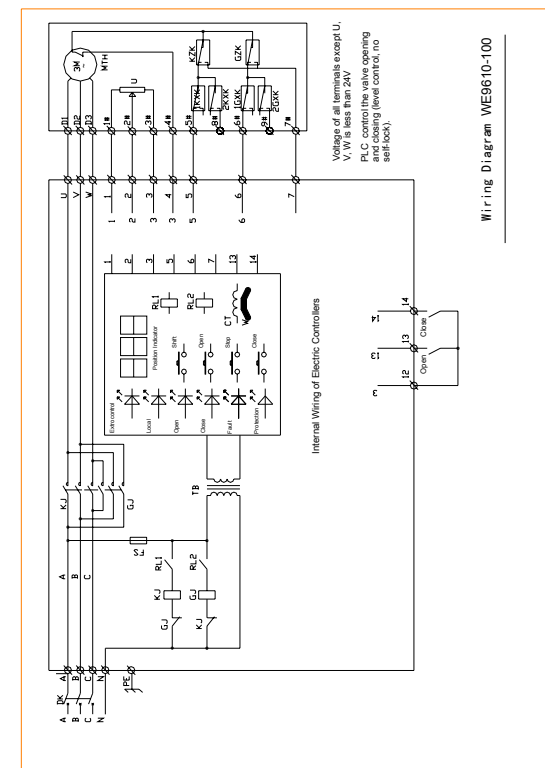
## ■ Principles:

### I. Installation must only be carried out by an electrician who possess operating certificate in accordance with the applicable electrical engineering rules.

### II. Laypeople don't dismantle the case with high voltage.

1. The mechanical parts of actuators have been adjusted and work well. Please refer to relevant instruction manual for the adjustment.
2. Install the controller according to the drawing.
3. Please connect the terminals of controller and actuator referring to the wiring diagram. It is needn't to connect 12, 13, 14 if the local buttons are not selected.
4. Connect three-phase supply to terminals A, B, C, and N.
5. Check to ensure the proper connection, then manual operates the valve to about 50% opening. Turn power on and check if the controller is in "Local" state, if not please press **Shift**.
6. Press **Open**, one possibility if the rotating direction is right, the actuator will run to the full open position with **Open** flashing, then the **Open** lights, the indicator will automatically set to 100%. Press **Close**, the actuator will run to the full close position with **Close** flashing, and then the **Close** lights, the indicator will automatically set to 0%. another possibility If the direction is wrong, should immediately press the **Stop** button and turn it off, cut off power supply, correcting the power phase sequence, According to the above method to adjust again. Thus the adjusting is complete.
7. Press **Stop** during running, the actuator will stop in the instant position. Press **Stop** during idle state will eliminate noise.
8. The controller is in "remote" state with pressing **Shift**. The independent terminals 12, 13, 14 are for inputting control signals which pointing control the operation of the actuator. These terminals can be connected to the actuator with local buttons to control the actuator in site, and can be used for inputting signals of computer or PLC controlling.
9. An air switch is provided with every controller.

## ● Wiring diagram:



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