

GBA05 SERIES ACTUATOR



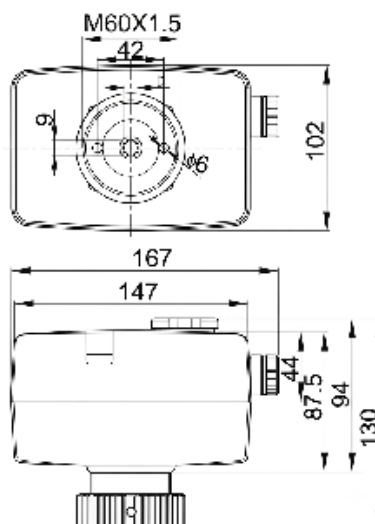
DESCRIPTION

GBA05 series actuator is using bi-directional motor. Matching with Fig.AUG09-DF Pressure Independent Balancing and Control Valve, it is mainly used in central air-conditioning system, heating system, water treatment, and production industry to control the flow of chilled/hot medium.

CHARACTERISTIC

- Bi-directional AC motor
- Easy & flexible installation
- Position feedback auxiliary switch for option
- Die-casting aluminum alloy chassis, fireproof ABS engineering plastic, measure up UL94V-0 standard
- Pass reliability and safety test
- Built-in limiter for power saving and longer motor life
- Suitable for DN65-DN100 flanged ball valve
- 0(2)~10V DC or 0(4)~20mA DC control input signal, proportional control, and 0~10V DC feedback for option.

DIMENSIONS

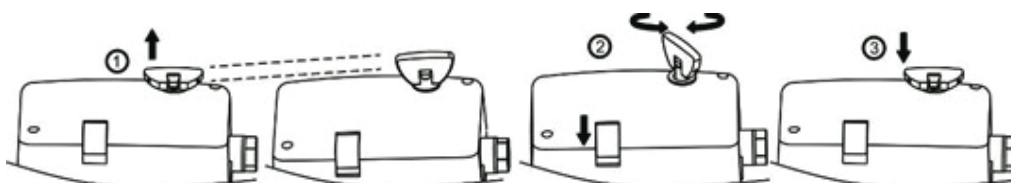


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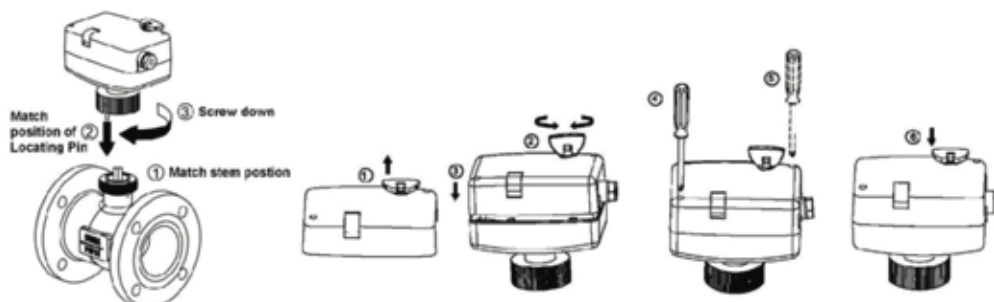
SPECIFICATIONS AND DATA

MODEL		VA C05 - 024E	VA C05 - 024	VAC05-110	VAC05-220
POWERSUPPLY		24VAC	24VAC	110VAC	220VAC
POWERCONSUMPTION		Load 5.5VA	Load 4.5VA		Load 8.5VA
CONTROLSIGNAL		0(2)~10V DC (input impedance: 200KΩ) or 0(4)~20mA DC (input impedance: 500Ω)	3 point floating signal		
FEEDBACKSIGNAL		0~10VDC (1mA)			
DEFAULT SETTING		Input: 0~10VDC; Mode:DA			
CURRENTFREQUENCY		50/60Hz			
TORQUE		≥25Nm			
OPERATION TIME(0~90°)		160s (50Hz) / 133s(60Hz)			
ROTATABLEANGEL		90°<Limiter≤95°			
CONNECTINGWIRES		0.5~1 mm ²			
MATERIAL	HOUSING	Fireproof ABS engineering plastic			
	CHASSIS	Die-casting aluminum alloy			
	GEAR	POM (polyoxymethylene) + steel			
OPERATIONTEMP.		-5~+50°C			
STORAGETEMP.		-30~+70°C			
IP CLASS		I			

MANUAL OPERATION

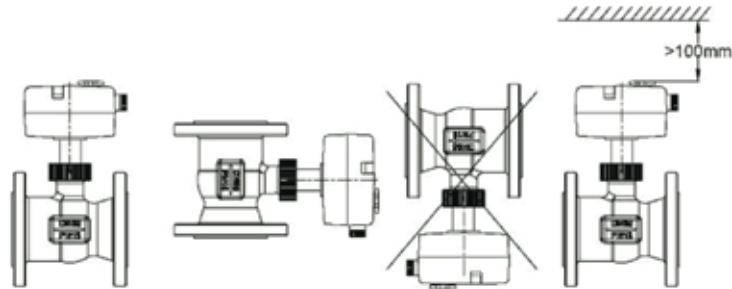


INSTALLATION

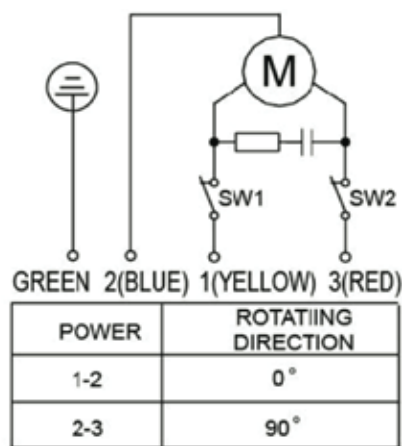


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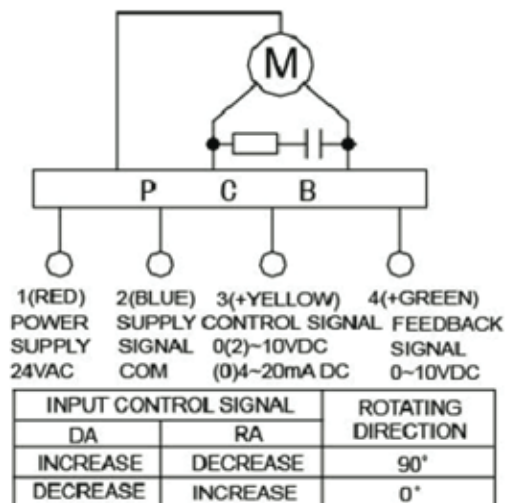
DIMENSIONS



WIRING



PCB WIRING



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WARNING

- Cut off power supply when repairing or maintaining.
- Do not connect or disconnect wire when power is on.
- Please install the actuator cover properly when the actuator is working.

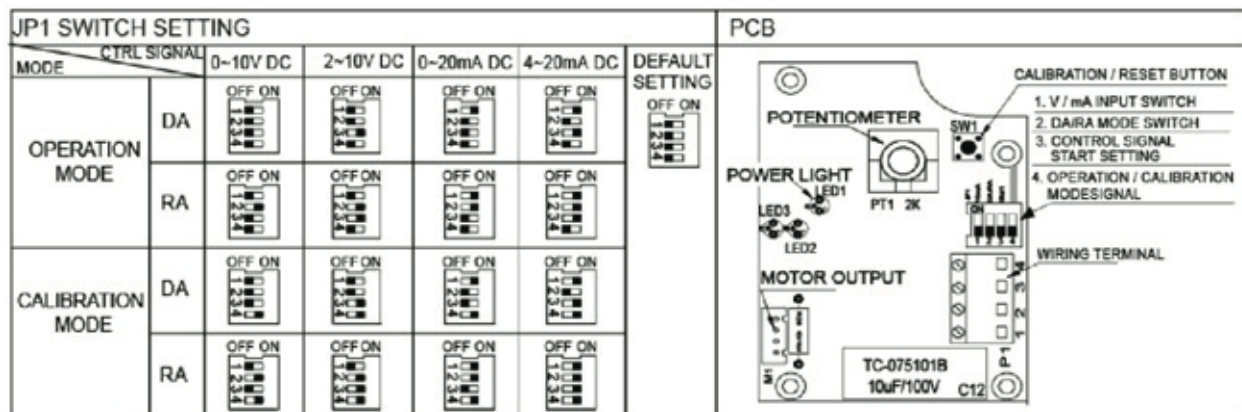
PCB SETTING

• **Calibration mode:** After power is on, set JP1 switch "4" to position "ON" as request (refer to the below JP1 switch setting diagram), then press SW1 calibration/reset button, power LED is flashing during calibration, and the actuator stem is rotating till to the end (has reached the end position of ball valves).

Afterward the stem will rotate back to initial position. Power LED will stop flashing after the calibration mode is over. MCU will keep the position data in memory even power is off. Then JP1 switch "4" is needed to set to "OFF" after the calibration is finished and back to operation mode. If this JP1 switch "4" is forgotten to set to "OFF" during operation, the actuator will operate as usual, but it will go through the calibration mode every time when power is on.

• **Operation mode:** When power is on, the actuator will work according to the control signal.

• **Calibration/operation mode shift:** If user needs to switch calibration/operation mode, make sure the JP1 has been set correctly, then press SW 1 calibration/reset button. Don't need to cut off power.



Note: It is strongly recommended that JP1 switch should be set on operation mode in normal use.

