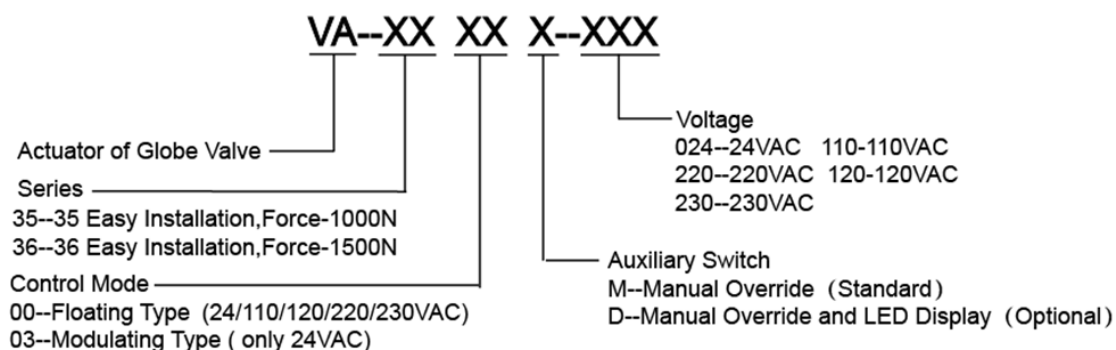


## Description

VA-35(6)00 series intelligent actuator is electromechanical product. Matched with VB-3000Q series valve body, it is used to control flow rate in HVAC system



## Model Selection



## Characteristics

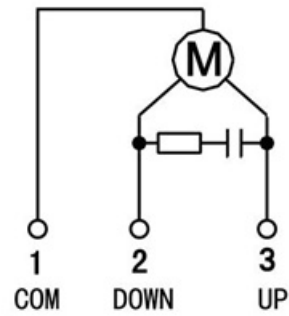
- Low AC voltage synchronic reversible motor.
- Hall switch sensor
- Self-adjusting function, automatic record stroke data
- Working state (DA or RA) can be selected by jumper.
- 0(2)~10V DC or (0)4~20mA DC input signal control, proportional control
- 0~10V DC feedback signal.
- Valve plug position indicator
- Fire-resistant ABS plastic casing.
- Conveniently mounting.
- Is a direct replacement part for Honeywell ML7984A4009

## Specifications and Technical Data

MODEL	VA-3500M	VA-3503M	VA-3603M	VA-3600M
NORMAL FORCE	1000N		1500N	
OPERATION TIME	50Hz: 4.6s/mm	60Hz: 3.8s/mm	50Hz: 7.77s/mm	60Hz: 6.45s/mm
MOTOR	24VAC 5.5VA, 220/230VAC 5.5VA		24VAC±10%, 50 / 60Hz, 5.5VA	24VAC 5.5VA, 220/230VAC 5.5VA
CONTROL SIGNAL	--	0(2)~10V DC (input impedance: 200KΩ)Or 0(4)~20mA DC (input impedance: 500Ω)	--	--
FEEDBACK	--	0~10V DC (1mA)	--	--
POWER CONSUMPTION OF PCB	--	1VA	--	--
OPERATION	Bidirectional control		Proportional control, direct or reversible	Bidirectional control
DEFAULT SETTING	Valve stem at fully closed position		Input signal: 0~10VDC; Working mode: DA	Valve stem at fully closed position
MATERIAL	GEARS	Stainless steel; POM plastic		Stainless steel; brass
	BRACKET	Die-casting aluminum alloyed		
	HOUSING	Fire-proof ABS engineering plastic (UL94V-0)		
OPERATION TEMP.	2~55℃			
STORAGE TEMP.	- 20~65℃			
MAX. HUMIDITY	< 90% no condensation			
IP CLASS	IP54			
ACCESSORIES	U-connector, lock nut			

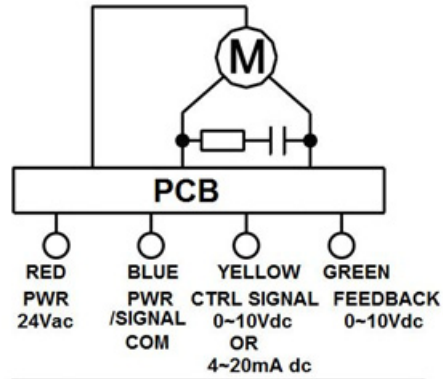
## Wiring Diagram

### VA-35(6)00



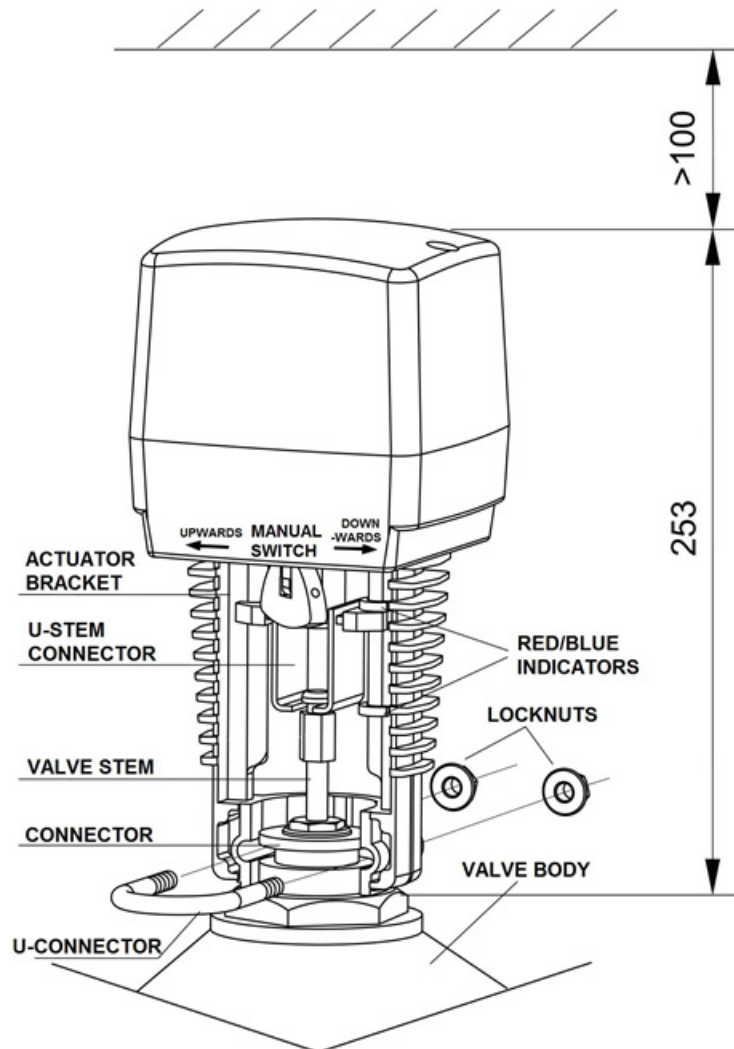
TERMINAL	VALVE STEM
1-2	DOWNWARDS
1-3	UPWARDS

### VA-35(6)03



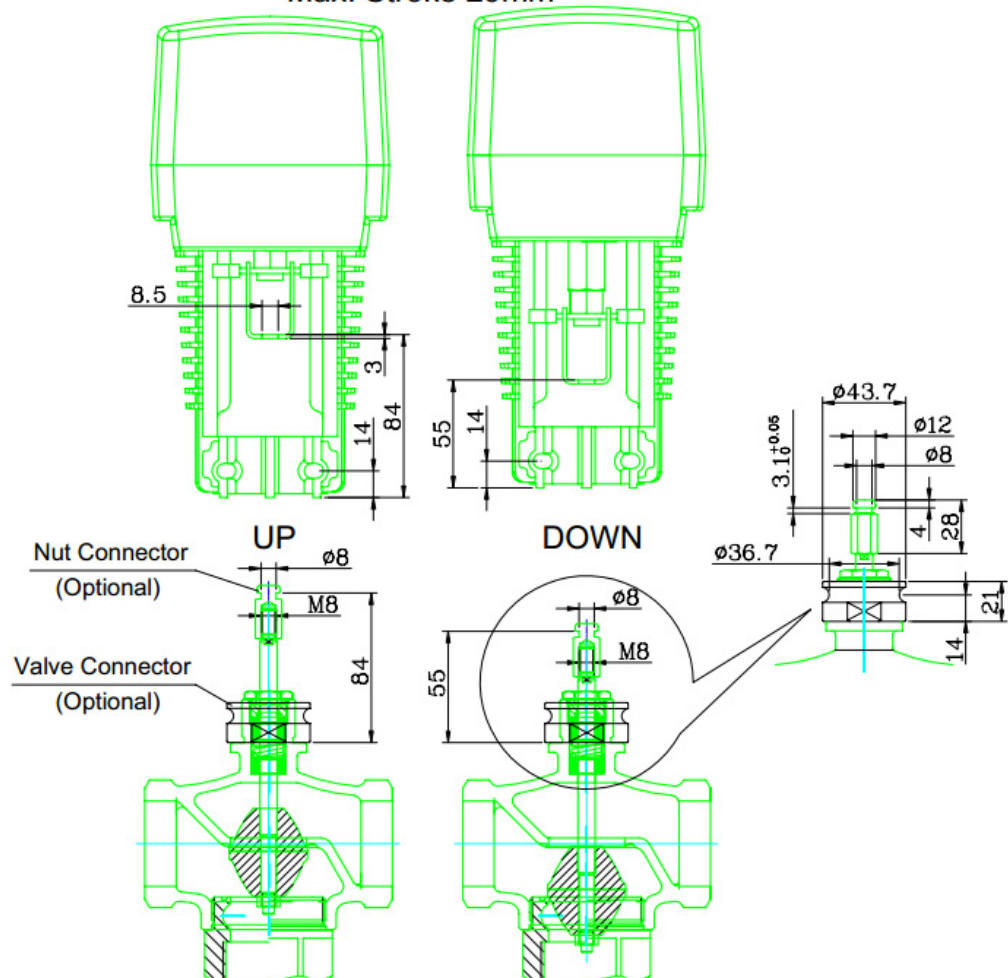
INPUT SIGNAL		VALVE STEM
DA	RA	
INCREASE	DECREASE	DOWNWARDS
DECREASE	INCREASE	UPWARDS

## Installation



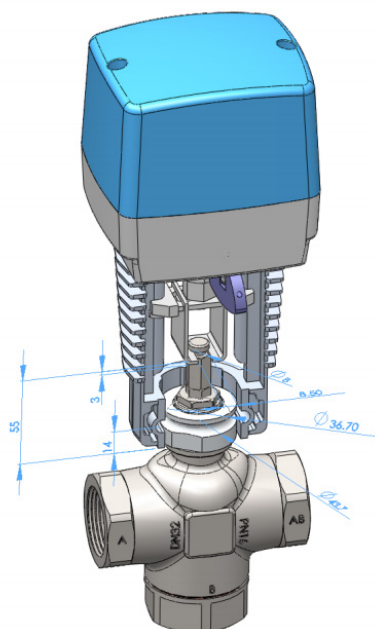
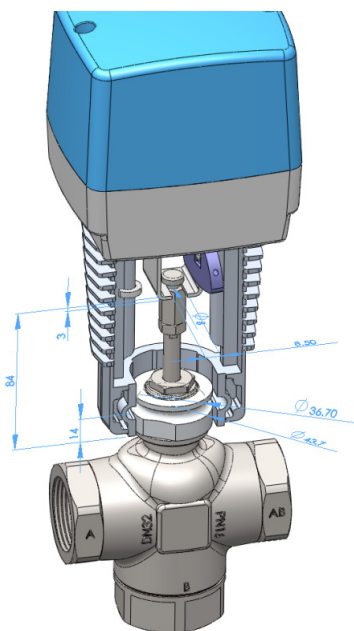
# Dimensions

## VA-35(6)00 Actuator Max. Stroke 29mm



Up

Down



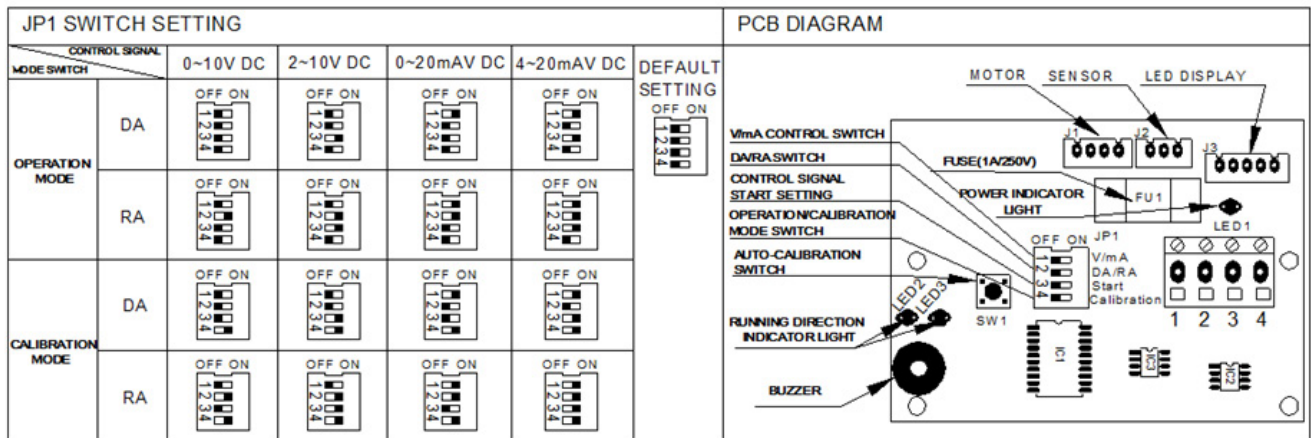
## PCB Setting

1. Calibration mode: After power is on, set JP1 switch as request (refer to the following list). First, switch “4” of JP1 to position ON, then press auto-calibration switch, buzzer will sound every 5 seconds, and the actuator stem is going down (opening valve) until gears are blocked (has reached the maximum stroke). Then the stem will go upward until gears are blocked again (has been in the initial position). Buzzer will make a long sound to indicate the calibration mode is over. MCU will keep the data in memory even power is off.

Then switch “4” of JP1 back to position OFF to transform to operation mode. If this step is missed, the actuator will operate as usual, but it will go through the calibration mode every time when power is on.

2. Operation mode: The actuator will return to fully closed position every time when power is on. It will close the valve at first, and then the buzzer will make a long sound to indicate the actuator is ready for control signal.

3. Calibration mode/operation mode shift: If user needs to switch calibration/operation mode, make sure the JP1 has been set correctly, then press auto-calibration switch. Don't need to cut off power.



Notice: We strongly recommend that JP1 switch should be set on operation mode in normal use.

If power supply is switched from 50Hz to 60Hz, please operate calibration/operation status shift again. For a fully function of the actuator, Please indicate current frequency of local power in orders.