DAMPER ACTUATOR

ACT Series

GINICE CO., Ltd.

www.ginice.com

1. ACT012 / 013 Series

▶ On/Off or Floating control

Features

- Designed for use in a wide variety of HVAC damper applications and cover for control of damper surfaces up to 3㎡ (The sizing of actuator depends on the damper manufacturer's specification)
- On/Off (2-step : Full Open/Close) or 3-step(Open/Close/Floating) control.
- Over-current prevention circuit for protecting damage of motor and energy-saving on stand-by
- The closing operation applied to the circuit of torque limit switch provide the perfect sealing of the damper.
- Easy wiring due to the installed terminal block and holder of cable gland.
- Change direction of rotation easily with built-in switch. No need to change wiring.

Model Selection

MODEL	DESCRIPTION
ACT012-24	On/Off or Floating control, 24VDC or AC, 60Hz, 20Nm
ACT012-24S	On/Off or Floating control, 24VDC or AC, 60Hz, 20Nm, Auxiliary switch
ACT012H-24	On/Off or Floating control, 24VDC or AC, 60Hz, 30Nm
ACT012H-24S	On/Off or Floating control, 24VDC or AC, 60Hz, 30Nm, Auxiliary switch
ACT013-220	On/Off or Floating control, 110~220VAC, 60Hz, 20Nm
ACT013-220S	On/Off or Floating control, 110~220VAC, 60Hz, 20Nm, Auxiliary switch
ACT013H-220	On/Off or Floating control, 110~220VAC, 60Hz, 30Nm
ACT013H-220S	On/Off or Floating control, 110~220VAC, 60Hz, 30Nm, Auxiliary switch

Specification

Specification \ Model			ACT012-24 ACT012-24S ACT012H-24 ACT012H-24S	ACT013-220 ACT013-220S ACT013H-220 ACT013H-220S
Supply power			24VDC±10% or 24VAC±20%, 60Hz	110-220VAC, 60Hz
Power consumption	Stand-by		1.4VA	2.0VA
	20Nm	Rated current	4.5VA	5.0VA
		Max. current	6.0VA	6.5VA
	30Nm	Rated current	8.0VA	8.5VA
		Max. current	9.5VA	10.0VA
Control type			on-off(2-step) or floating(3-step)	
Running torque			20Nm(standard) / 30Nm (“H” type) (45Nm as option)	
Holding torque			30Nm	
Running time			80~150sec(standard) / 60~100sec(“H” type)	
Ambient temperature			-15℃ ~ 50℃	
Feedback			Built-in auxiliary switch 2xSPST, 250V, 2A) (“S “type)	
Angle of rotation			90° Mechanical stop	
Direction of rotation			Reversible(CW/CCW) with built-in switch	
Wiring connection			Terminal block(AWG18~26)	
Cable entry			PF1/2”(CTG16) X 1EA	
Weight / Dimension			1.4kg, 120mm x 190mm x 67mm (W x L x H)	

Note :

“H” indicate High Torque.

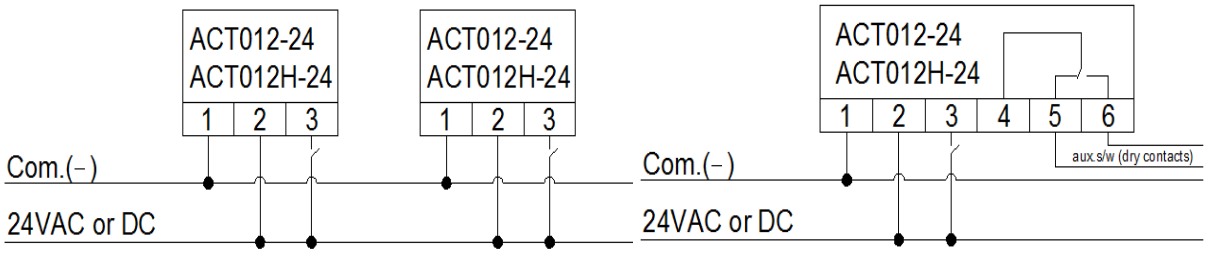
“S” mean Auxiliary switch.

Max. 10 actuator can be connected in parallel.

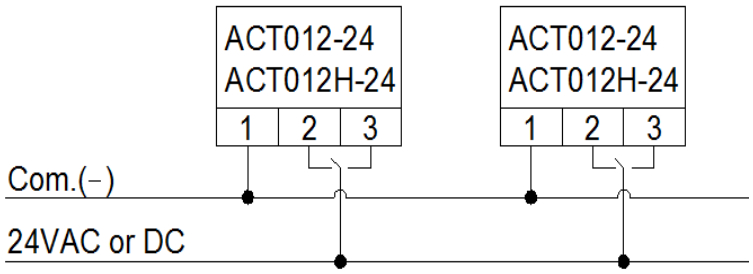
Bigger torque is available. Please contact factory in advance.

Wiring Diagram – ACT012 Series

ex.1) ON-OFF control(2-step control)

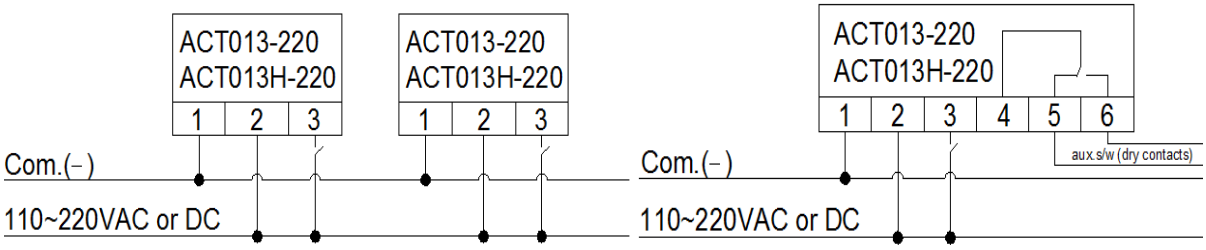


ex.2) Floating control(3-step control)

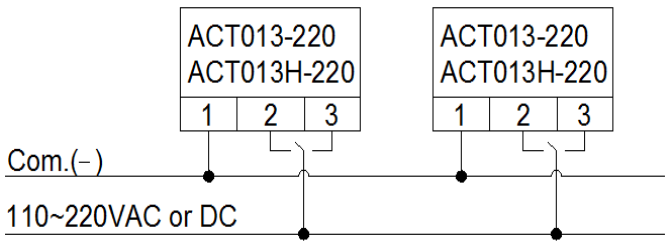


Wiring Diagram – ACT013 Series

ex.1) ON-OFF control(2-step control)



ex.2) Floating control(3-step control)



2. ACT016 - 24 Series

▶ Proportional

Features

- Designed for use in a wide variety of HVAC damper applications and cover for control of damper surfaces up to 3㎡ (The sizing of actuator depends on the damper manufacturer's specification)
- Proportional control using Input signal(0~10VDC, 2~10VDC or 4~20mA)
- Safe operation due to the over-current protecting function, Speed detecting/Noise filtering function by application of torque limit switching circuit
- The closing operation by application of torque limit switching circuit provide the perfect sealing of the damper.
- Master actuator can be linked and operated to several salve actuator.
- Easy installation because of V-clamp(mounted directly to a damper shaft), One-touch cover, Gear release button

Specification

Specification			ACT016-24, ACT016-24F ACT016H-24, ACT016H-24F
Supply power			24VDC±10% or 24VAC±10%, 50/60Hz
Power consumption	Stand-by		3.0VA
	20Nm	Rated current	5.5VA
		Max. current	7.0VA
	30Nm	Rated current	9.0VA
		Max. current	10.5VA
Control type			Proportional
Running torque			20Nm (Standard) / 30Nm ("H" type) (45Nm as option)
Holding torque			30Nm
Running time			80~150sec (standard) type / 60~100sec ("H" type)
Ambient temperature			-15℃ ~ 50℃
Input signal			0~10VDC, 2~10VDC or 4~20mA
Feedback signal			0~10VDC
Accuracy			±4%
Direction of rotation			Reversible(CW/CCW) with built-in switch
Wiring connection			Terminal block(AWG18~26)
Cable Entry			PF1/2"(CTG16) X 1EA
Weight / Dimension			1.4kg, 120mm x 190mm x 67mm (W x L x H)

Note :

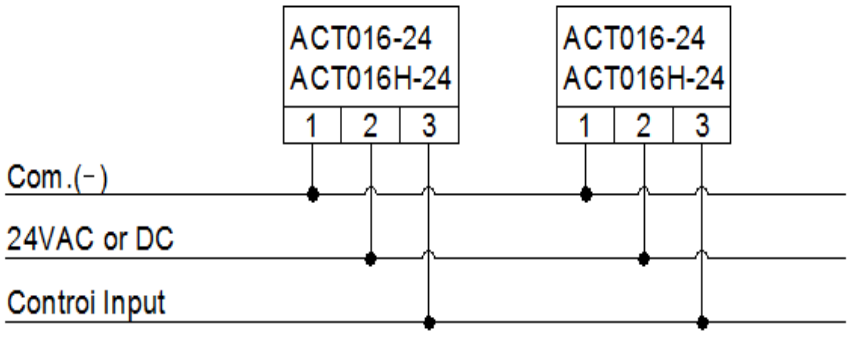
"F" indicate Feedback(0~10VDC).

Max. 10 actuator can be connected in parallel.

Bigger torque is available. Please contact factory in advance.

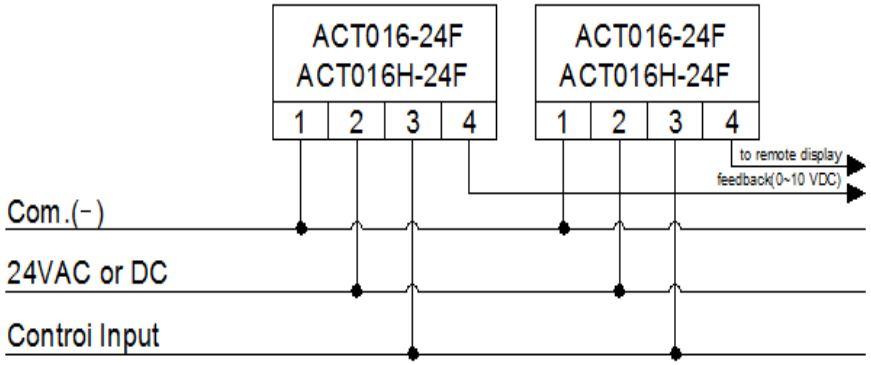
Wiring Diagram – ACT016 Series

ex.1) Proportional control



※Control input = 0~10VDC, 2~10VDC, 4~20mA

ex.2) Proportional control(feedback output)



※Control input = 0~10VDC, 2~10VDC, 4~20mA

3. ACT019-24S Series

▶ High Speed Damper Actuators

Features

- For application which requires high speed on-off control but not require frequent operation, such as fire dampers or smoke dampers.
- The damper actuator is fully protected against overloading by over-current protection circuit.
- Motor power is disconnected at the end position by torque limit switching circuit, which achieves the complete closing and energy saving
- Easy installation by means of one-touch cover, direct mounting device and gear release button etc.
- Easy wiring and clean finish by means of built-in selectable switch for operating direction, cable entry for cable gland or conduit connector, and etc

Specification

Specification	ACT019-24S	ACT019-24SA
Supplying power	24VAC±20%, 50/60Hz or 24VDC±10%	
Power consumption	1.75VA at stand-by, 6VA at 20 Nm, 7.5VA at full load	
Control type	on-off(2-step)	
Rated torque	20Nm(200Kg-cm)	
Operating time	28 ~ 45 sec / 90º	
Enclosure	Dust proof and drip-proof (IEC IP53)	
Ambient temperature	-15℃ ~ 50℃	
Angle of rotation	90° Mechanical stop	
Direction of rotation	Reversible(CW/CCW) with built-in switch	
Wiring connection	TB for AWG 26 ~ 18	TB for AWG 22 ~ 12
Cable entry	PF 1/2" (CTG16) x 1ea	
Auxiliary switch	2 x SPST(250V, 2A)	±24VDC (Output for open or close)
Weight/Dimension	1.4Kg, 120mm x 190mm x 67mm (W x L x H)	

Note :

"A" indicate built-in terminal block for auxiliary output

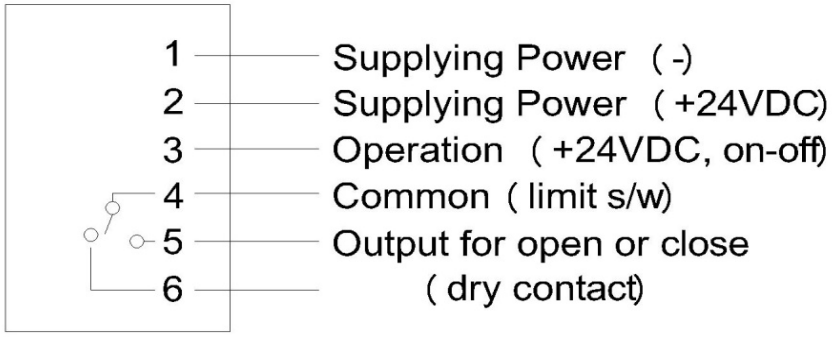
"S" : Auxiliary switch

Max. 10 actuator can be connected in parallel.

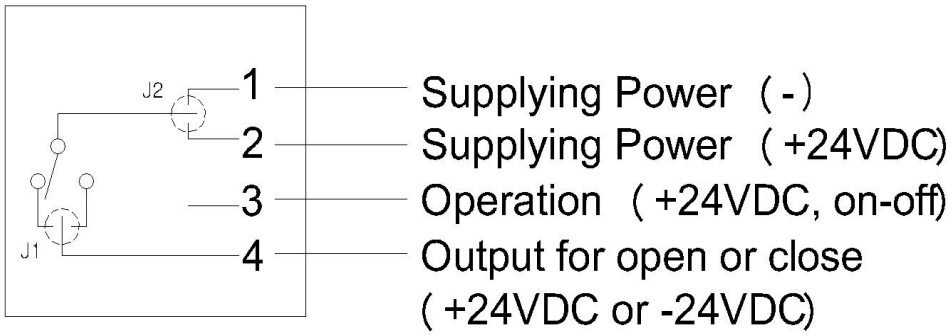
Bigger torque is available. Please contact factory in advance.

Wiring Diagram – ACT019 Series

▼ACT019-24S



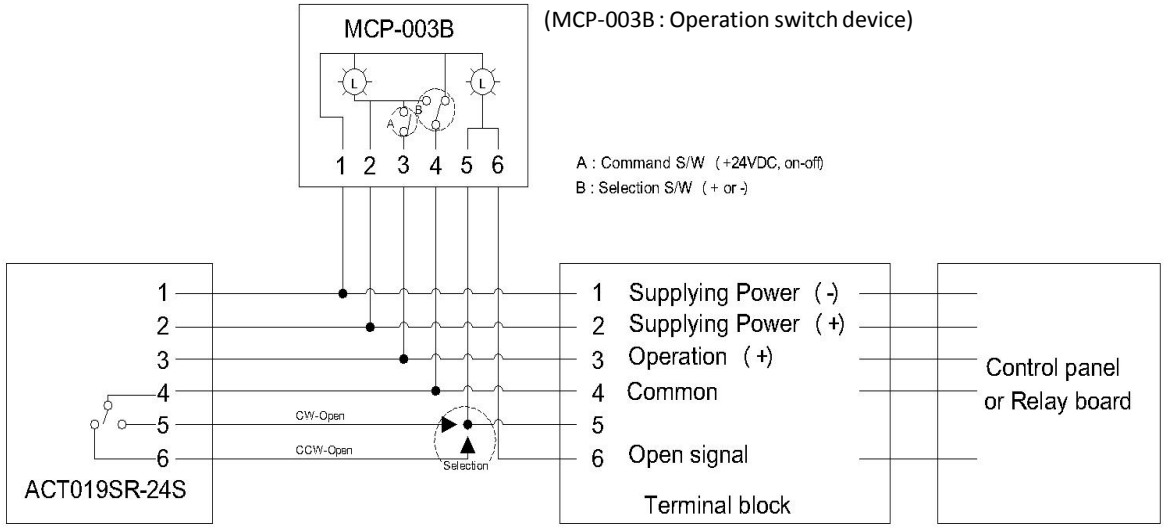
▼ACT019-24SA



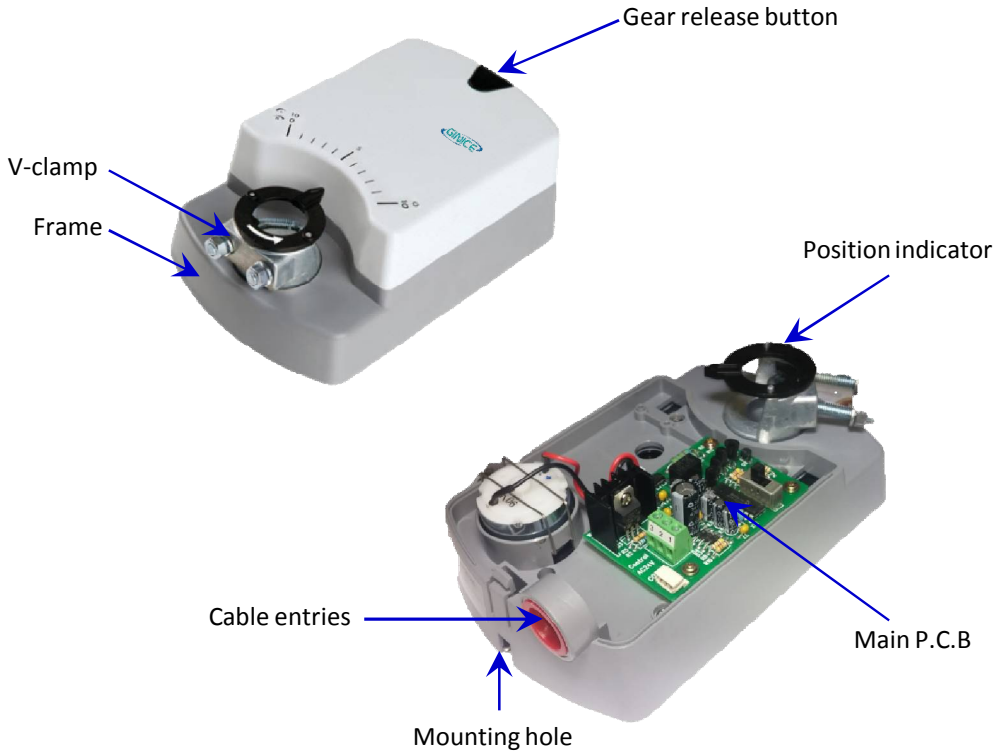
J1 : Jumper for open or close

J2 : Jumper for selection of polarity(feedback)

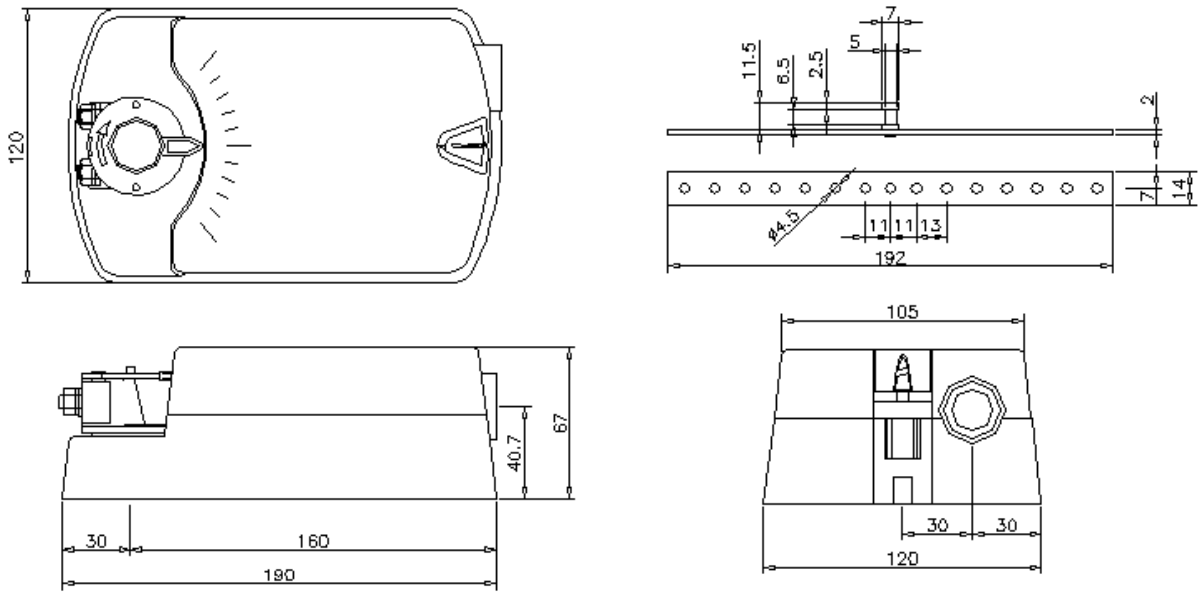
▼Application (Combination of ACT019S & MCP-003B)



CONSTRUCTION (INSIDN)



Outline dimension



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