

Intelligent Component Series

Direct Coupled Damper Actuator

(Spring-return Type)

General

Model MY8045A3001 direct coupled damper actuator is a motorized actuator to open/close air damper for ventilation and air-conditioning systems.

Model MY8045A3001 has the spring-return function that automatically rotates the damper shaft to the damper closing position and shuts off the damper in the event of power shutdown. This is suitable for controlling air dampers in the systems requiring high safety.

Model MY8045A3001 communicates with the controller via SAnet (our proprietary protocol).



Features

- SAnet inputs the position control signal from the controller and outputs the position feedback signal to the controller.
- Spring-return mechanism rotates the damper shaft to the damper closing direction and then stops the shaft at the shutoff position.
- Torque limit function protects the motor from overload.
- Manual override function enables to adjust the actuator without being powered.
- Rotating direction is reversible by turning the actuator the other way around.
Rotating direction is also reversible by the rotating direction switch. Note that the spring-return direction is not reversible by this switch.
- Brushless DC motor stabilize the operating time regardless of the size of the load.

Model Numbers

Model number	Specification
MY8045A3001	Intelligent Component Series direct coupled damper actuator (modulating control, spring-return type)



Safety Instructions

Please read instructions carefully and use the product as specified in this manual. Be sure to keep this manual nearby for ready reference.







Usage Restrictions




This product is targeted for general air conditioning. Do not use this product in a situation where human life may be affected. If this product is used in a clean room or a place where reliability or control accuracy is particularly required, please contact our sales representative. Azbil Corporation will not bear any responsibility for the results produced by the operators.












Warnings and Cautions







	WARNING	Alerts users that improper handling may cause death or serious injury.
	CAUTION	Alerts users that improper handling may cause minor injury or material loss.

Signs

	Alerts users possible hazardous conditions caused by erroneous operation or erroneous use. The symbol inside  indicates the specific type of danger. (For example, the sign on the left warns of the risk of electric shock.)
	Notifies users that specific actions are prohibited to prevent possible danger. The symbol inside  graphically indicates the prohibited action. (For example, the sign on the left notifies that disassembly is prohibited.)
	Instructs users to carry out a specific obligatory action to prevent possible danger. The symbol inside  graphically indicates the actual action to be carried out. (For example, the sign on the left indicates general instructions.)

 WARNING	
	Before wiring and maintenance, be sure to turn off the power to the product. Failure to do so might cause electric shock.
	Do not disassemble the spring unit of the product. The spring unit might rapidly rotate or jump out of the actuator, resulting in serious injury.

 CAUTION		(1/2)
	Store the products in package. Storing unpackaged products might damage or stain the products.	
	Do not send shock to the product. Doing so might damage the product.	
	Install and use the product in a location that meets the operating conditions (temperature, humidity, power, vibration, shock, mounting direction, atmospheric condition, etc.) as listed in the specifications. Failure to do so might cause fire or device failure.	
	Take anti-lightning measures based on regional and building characteristics. Lightning might cause fire or critical damage to the product without the anti-lightning measures.	
	Do not install the product in an environment with high heat radiation. High heat radiation might cause malfunction of the actuator.	
	Do not use the product in an atmosphere containing corrosive gas. Doing so might damage the actuator or its components.	
	Installation and wiring must be performed by qualified personnel in accordance with all applicable safety standards.	
	All wiring must comply with applicable codes and ordinances.	
	Provide a circuit breaker for the power to the product.	
	Provide a circuit protector (e.g., a fuse, cut-off device) for the control panel to ensure your safety.	

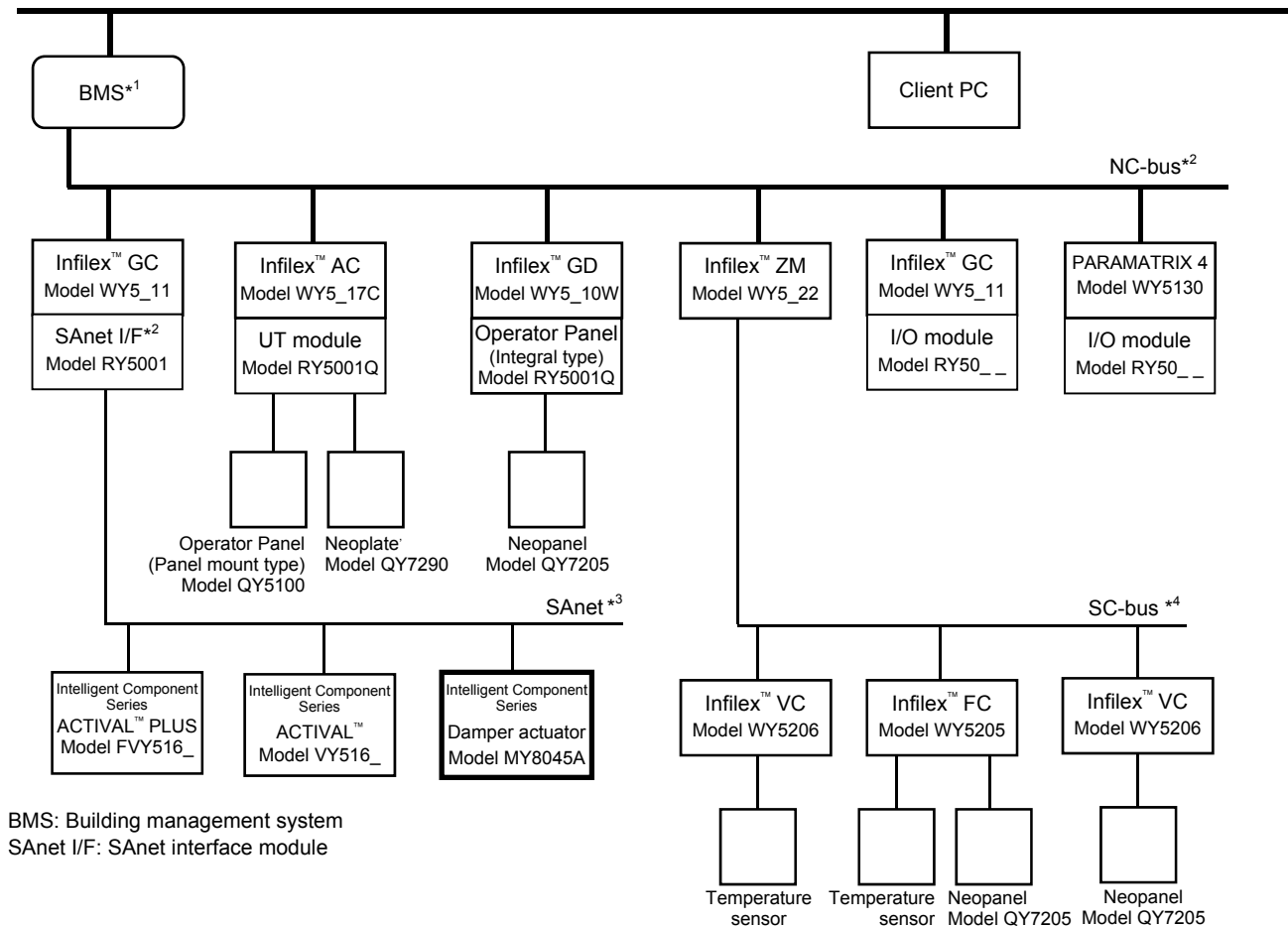
⚠ CAUTION (2/2)	
	If more than the rated power voltage is applied to the product, replace the product with new one for your safety. Failure to do so might cause fire.
	Do not use the product for an application that requires extremely frequent open/close operations. Doing so might cause device failure.
	Do not place your hand around the product or bring your face close to the product. The product might rotate due to inappropriate installation, malfunction, or damage, causing injury.
	Do not touch the moving parts of the product. Doing so might cause injury.
	Do not disassemble the product. Doing so might cause electric shock or device failure.
	Dispose of the product as industrial waste in accordance with your local regulations. Do not reuse all or part of this product.

IMPORTANT:

- After installation, check fully open, shut-off, and spring-return operations of the damper actuator.
- Check that the damper shaft is held by the shaft clamp without slipping inside the clamp, and that the actuator is securely attached to the universal bracket when the actuator closes the damper from fully open position to fully closed position or opens the damper from fully closed position to fully open position..

System Configuration

BACnet® IP



Note:

*1 For the building management system compatible with the SAnet network, refer to our sales person.

*2 For detailed specifications of NC-bus, refer to the **Specifications/Instructions** of the controllers connected to NC-bus.



*3 - SAnet I/F module is connectable to the NC-bus and IP communication models of Infilex GC/Infilex GD, not connectable to the LC-bus (LonTalk®) communication model.

- For detailed specifications of SAnet, refer to **Installation Manual of Intelligent Component Series for SAnet Communication (AB-6713)**.

*4 For detailed specifications of SC-bus, refer to the **Specifications/Instructions** of the SC-bus communication models of the sub-controllers.

Figure 1. System configuration example

Specifications

Item		Specification
Rated power supply voltage		24 V AC, 50 Hz/60 Hz
Operating voltage range		19.2 V AC to 28.8 V AC
Power consumption	Running	8.5 W, 11 VA
	Holding	3.5 W
Angle of rotation		Max. 95° (Max. limit is adjustable from 33 % to 100 %.)
Running time	Motor (0→100 % position)	Approx. 100 s
	Spring return (100→0 % position)	Approx. 25 s
Torque	Running	20 N·m
	Holding	20 N·m
	Spring return	20 N·m
Environmental conditions	Rated operating conditions	Ambient temperature
		Ambient humidity
		Vibration
	Transport/storage conditions	Ambient temperature
		Ambient humidity
	Vibration	
Protection rating		IEC IP54 (dust-proof and splash-proof) with the cable conduit facing downward * Do not use the actuator outdoors exposed to rain.
Cable		0.75 mm ² x 3 cores, approx. 1 m long
Materials	Housing	Polycarbonate resin
	Clamp	Galvanized steel
	Universal bracket	Galvanized steel plate
Color	Housing	Gray
Weight		Approx. 2.0 kg
Applicable damper shaft		 10 mm to 25.4 mm, 15 mm long or longer
		 10 mm to 25.4 mm, 15 mm long or longer
Withstand voltage	Between case and cable	1 mA or less at 500 V AC for 1 min.
Insulation resistance	Between case and cable	100 MΩ or higher at 500 V DC
Position control signal,	position feedback signal	via SAnet
Communication (SAnet)	Transmission system	Voltage transmission
	Transmission speed	1200 bps
	Transmission distance	Transmission distance varies depending on the number of devices and the type of devices to be connected to. For details on the transmission distance, refer to Installation Manual of Intelligent Component Series for SAnet Communication (AB-6713) .
Accessories		Universal bracket x 1 (Part No. 12596-00001)
		Plastic bag for protection
		M4 tapping screws x 2
		Crank handle for manual operation x 1
		Installation instruction sheet x 1
Optional items (Order separately.)		Attachment (Model Z-AF) for replacing the former models*

IEC: International Electrotechnical Commission

Note:

- * Mounting dimensions of Model MY8045A3001 differ from the mounting dimensions of Model MY8045A2001. This attachment allows to replace Model MY8045A2001 with Model MY8045A3001 without changing the mounting position of the universal bracket.

LED/Switch Operation

Item		Operation
Power LED (green) and angle of rotation adaption switch	Power OFF	LED OFF.
	Power ON	LED ON.
	Adaption in process	Angle of rotation memorized by pressing the switch.
Operating status LED (yellow) and service pin switch	SAnet communication active	LED OFF.
	Adaption or Synchronisation in process.	LED ON.
	Addressing request sent or Addressing	LED blinking (every 1.5 second) LED continues to blink till the communication link between the actuator and the controller becomes established after addressing.
	SAnet communication active	LED blinking (at irregular period)
	Addressing	Address assigned by pressing the switch after addressing request (sent by the controller).

Functional Description

Function		Description
Data monitoring* ¹		Building management system or the controller (Inflex GC or Inflex GD) monitors and controls the following items: Damper position setting, damper position measuring
Damper position adjustment	Adaption (setting of rotation angle)	Rotation angle of the damper (controlled by the actuator) is adjustable with our engineering tool (PC-MMI or Data Setter).
	Synchronisation* ² (position alignment)	Actual damper position and the position of the actuator are matched with our engineering tool (PC-MMI or Data Setter) or when power is restored from blackout.

Note:

*1 Above functions are available in combination with Inflex GC/Inflex GD and our building management system.

*2 Synchronisation at the time of power restoration is enabled/disabled by parameter setting.

Positions of the actuator and of the damper are matched by fully closing the actuator and the damper.

Dimensions and Maintenance Clearance

IMPORTANT:

Besides the below maintenance clearance, leave enough clearance for a tool, such as a torque wrench, to tighten the hexagonal nuts of the shaft clamp.

Side view

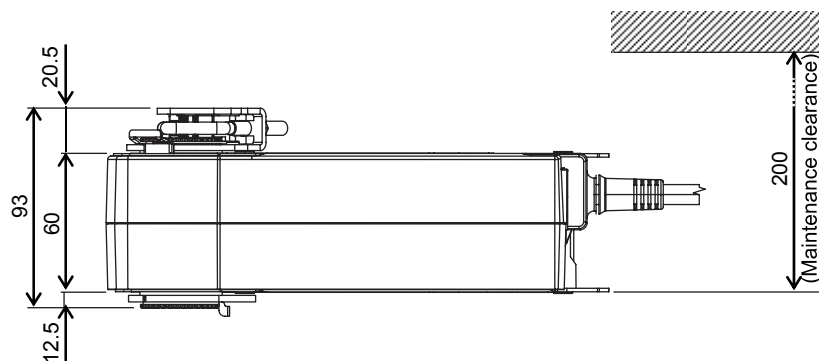


Figure 2. Dimensions and maintenance clearance (mm): Side view

Front view

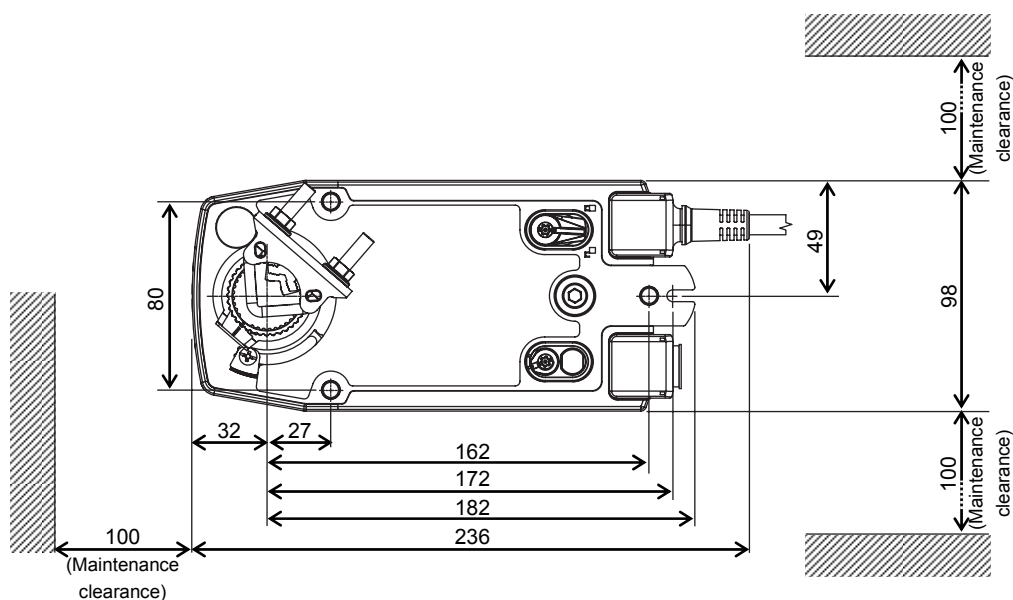


Figure 3. Dimensions and maintenance clearance (mm): Front view

Universal bracket (Part No. 12596-00001)

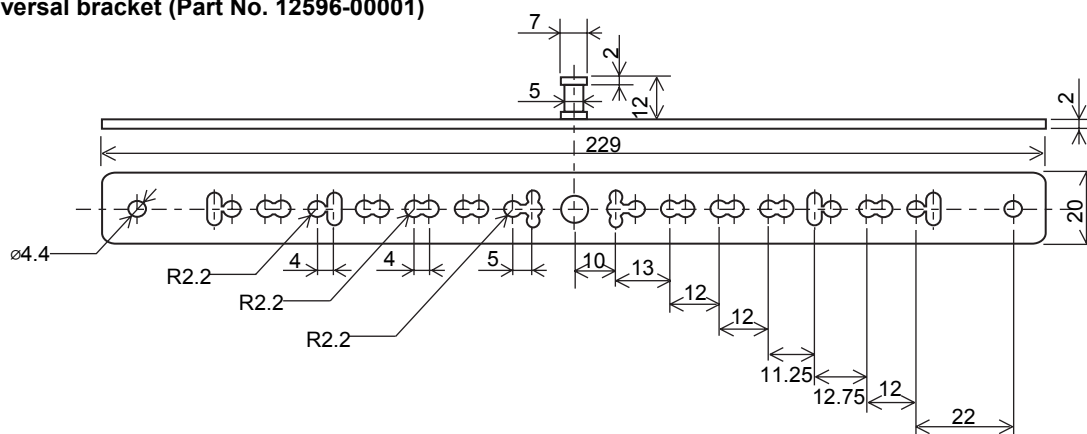
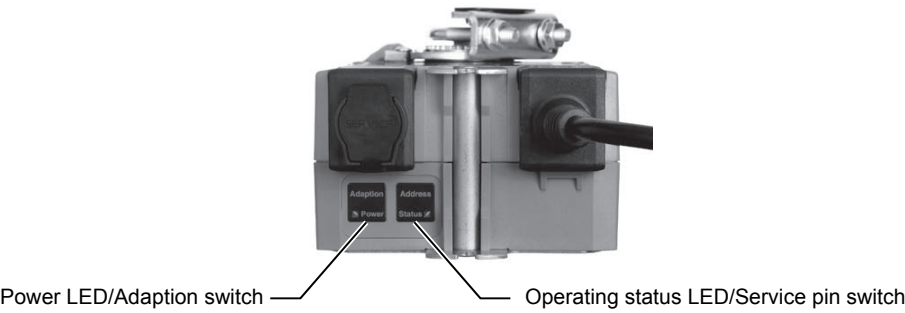
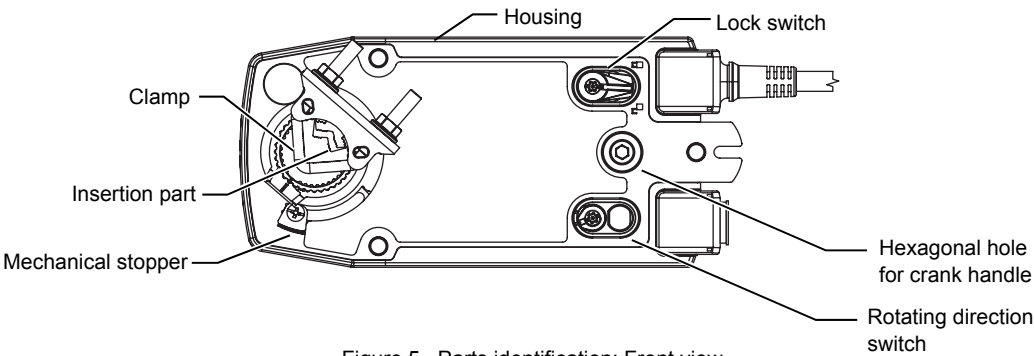


Figure 4. Dimensions (mm): Universal bracket

Parts Identifications



Installation

⚠ CAUTION	
⊘	Do not send shock to the product. Doing so might damage the product.
!	Install and use the product in a location that meets the operating conditions (temperature, humidity, power, vibration, shock, mounting direction, atmospheric condition, etc.) as listed in the specifications. Failure to do so might cause fire or device failure.
⚡	Take anti-lightning measures based on regional and building characteristics. Lightning might cause fire or critical damage to the product without the anti-lightning measures.
⊘	Do not install the product in an environment with high heat radiation. High heat radiation might cause malfunction of the actuator.
⊘	Do not use the product in an atmosphere containing corrosive gas. Doing so might damage the actuator or its components.
!	Installation and wiring must be performed by qualified personnel in accordance with all applicable safety standards.

IMPORTANT:

- Avoid application that keeps the actuator open and close operations excessively frequent.
- Meet the actuator rotating direction with the damper rotating direction.
- For perfect installation, firmly tighten the screws of the actuator without loose connection.
- Leave clearance for maintenance as shown in Figs. 2 and 3. Besides, leave a clearance for a tool (e.g., torque wrench) to tighten the hexagonal nuts of the clamp.

Prior to installation

- 1) Check the shape and size of the damper shaft.
Depending on the shape and size of the shaft, the insertion part of the clamp needs to be removed. See the **Removal of the clamp insertion part** section.

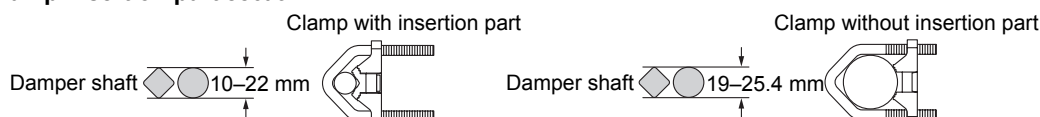


Figure 7. Clamp types corresponding to shape and size of damper shaft

- 2) Check the length of the damper shaft.
Installation steps differ depending on the length of the damper shaft.
- 3) Check the rotating direction of the damper shaft and meet the actuator rotating direction with the shaft rotating direction.
Actuator mounting orientation differ depending on the damper shaft rotating direction.
Spring-return direction of the actuator is indicated with "L" (left) or "R" (right) printed on the actuator front or rear face near the shaft mounting hole. "L" face must face the front for the counterclockwise spring-return direction, and "R" face must face the front for the clockwise spring-return direction.

Installation steps:**Mounting on minimum of 85 mm long damper shaft**

For mounting the actuator on the damper shaft rotating counterclockwise ("L" direction) to close, follow the steps 1) through 4).

For mounting the actuator on the damper shaft rotating clockwise ("R" direction) to close, follow the below instruction **Mounting on the damper shaft rotating clockwise to close** first, then go to the steps 1) through 4).

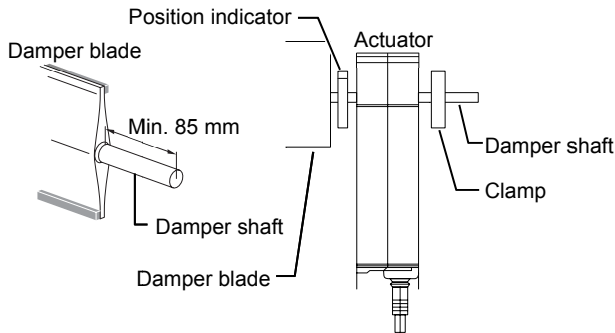


Figure 8. Installation image for min. 85 mm long damper shaft

Mounting on the damper shaft rotating clockwise to close

Follow the below instructions to mount the actuator rotating clockwise ("R" direction).

1. Pull out the C-clip and remove the position indicator from the "R" face of the actuator.
2. Pull out the C-clip and remove the clamp from the "L" face of the actuator.
3. Meet the mark of the clamp with the mark on the shaft mounting hole, and attach the clamp to the "R" face.
4. Fix the clamp with the C-clip pulled out at the step 2.
5. Attach the position indicator to the "L" face.
6. Fix the position indicator with the C-clip pulled out at the step 1.
7. Unscrew the M4 screw of the mechanical stopper on the "L" face and remove the mechanical stopper.
8. Attach the mechanical stopper to the full-open position on the "R" face with the M4 screw.

- 1) Mount the actuator on the damper shaft.
Position the actuator as near the damper blade as possible, but do not allow the actuator to touch the damper.

Note:

* Check the actuator spring-return direction. The "L" face of the actuator must face the front for damper shaft rotating counterclockwise to close, and the "R" face must face the front for the damper shaft rotating clockwise to close.

- 2) Temporarily fix the actuator.
Position the actuator mounting hole line parallel to the damper shaft, as shown in Fig. 11 and tighten the hexagonal nuts of the clamp.

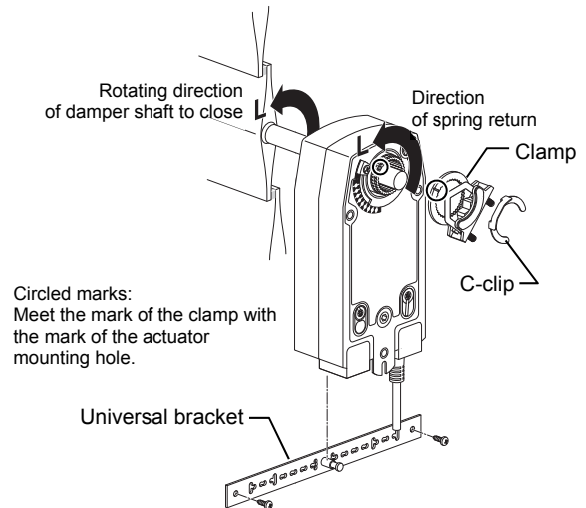


Figure 9. Temporary installation for min. 85 mm long damper shaft (counterclockwise rotation for closing)

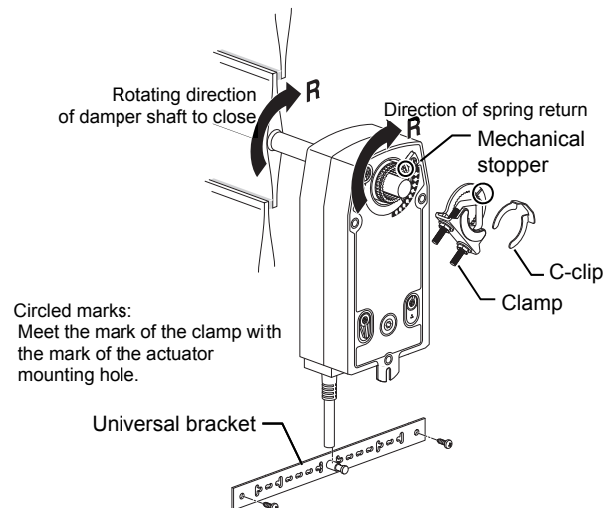


Figure 10. Temporary installation for min. 85 mm long damper shaft (clockwise rotation for closing)

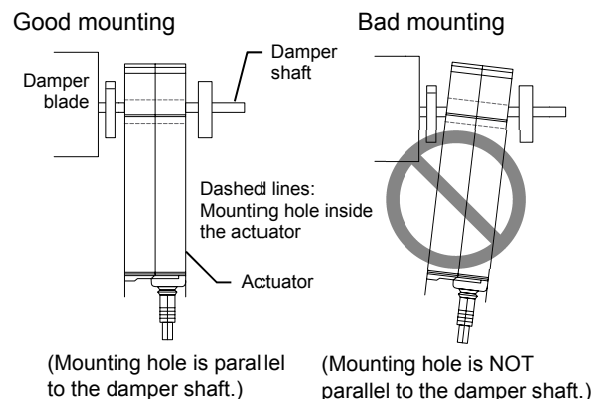


Figure 11. Good and bad mounting orientation for min. 85 mm long damper shaft

- 3) Attach the universal bracket (accessory) to the duct. Position the universal bracket so that its mounting screws do not touch the damper blade.

<Precautions for mounting the universal bracket>

Follow the below instructions for bending the universal bracket at the specified positions to mount.

- a. Position the actuator on the damper shaft as near the damper blade as possible in order to bend the universal bracket as little as possible.
- b. Bend the universal bracket at the specified positions (once for each position). Note that the bending angle must be 45° or less. See the figure below.

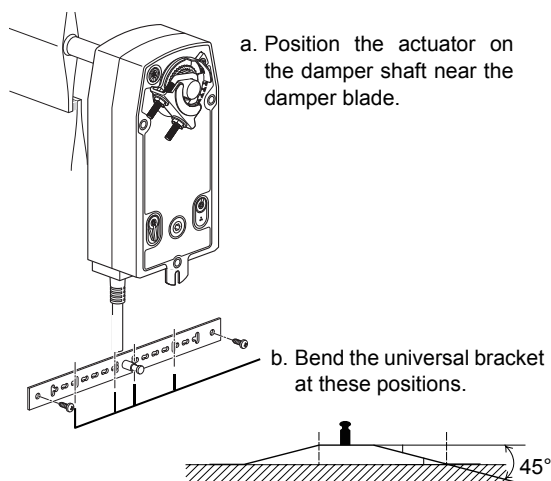


Figure 12. Bending the universal bracket

- 4) Fix the actuator with the universal bracket on the duct. Insert the pin of the universal bracket into the notch of the actuator to fix the actuator on the duct.

Note:

- * The universal bracket prevents the actuator from rolling.
- * The actuator will slightly pitch when actuating the damper shaft.

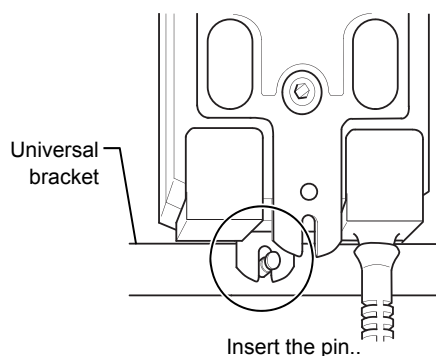


Figure 13. Fixing the actuator with the universal bracket

Jump to the **Installation steps: Common to any length of the damper shaft** section.

Installation steps:

Mounting on 15–85 mm long damper shaft

Installation steps differ depending on the damper shaft rotating direction. See 3) of **Prior to installation** section, and go to the corresponding installation steps.

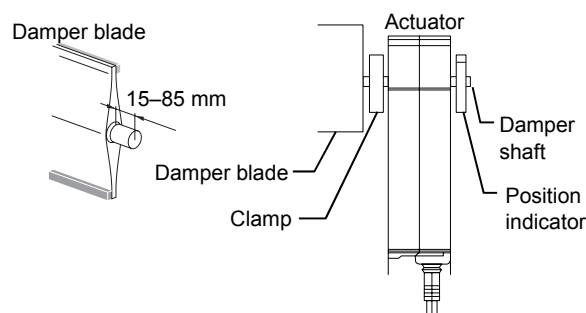


Figure 14. Installation image for 15–85 mm long damper shaft

Mounting on the damper shaft rotating counterclockwise ("L" direction) to close

- 1) Pull out the C-clip and remove the clamp from the "L" face of the actuator.
- 2) Attach the clamp to the damper shaft as near the damper blade as possible. (Make sure that the clamp does not touch the damper.)
- 3) Temporarily fix the clamp on the damper shaft. Set the clamp mounting orientation so that the mounting hole line of the actuator to be mounted at the steps 7) and 8) is parallel to the damper shaft, and tighten the hexagonal nuts of the clamp.
- 4) Pull out the C-clip and remove the position indicator from the "R" face of the actuator.
- 5) Meet the mark of the position indicator with the mark on the shaft mounting hole, and attach the position indicator to the "L" face of the actuator.
- 6) Fix the position indicator with the C-clip pulled out at the step 4).
- 7) Mount the actuator on the damper shaft so that the "L" face of the actuator faces the front.

- 8) Fix the clamp on the "R" face of the actuator with the C-clip pulled out at the step 1).

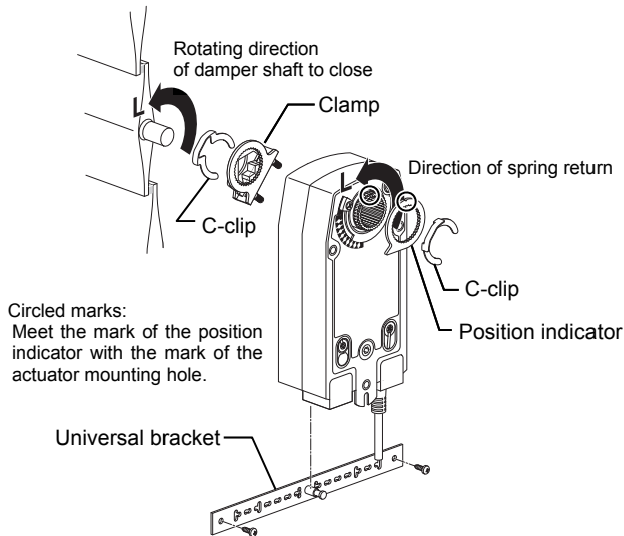


Figure 15. Temporary installation for 15–85 mm long damper shaft (counterclockwise rotation for closing)

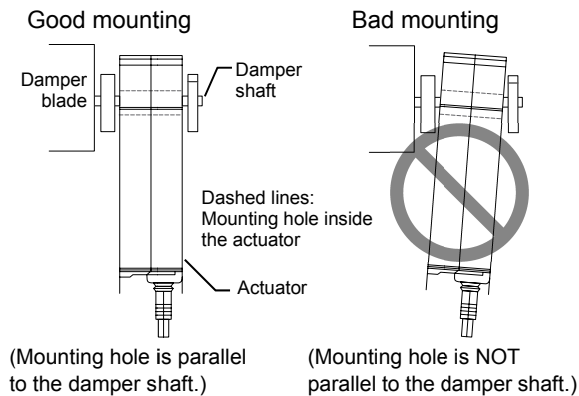


Figure 16. Good and bad mounting orientation for 15–85 mm long damper shaft

- 9) Attach the universal bracket (accessory) to the duct. Position the universal bracket so that its mounting screws do not touch the damper blade.

Note:

- * To bend the universal bracket for mounting on the duct, see the following:

Mounting on the damper shaft rotating clockwise to close
3) <Precautions for mounting the universal bracket>

- 10) Fix the actuator with the universal bracket on the duct. Insert the pin of the universal bracket into the notch of the actuator to fix the actuator on the duct. See Fig. 11.

Note:

- * The universal bracket prevents the actuator from rolling.
- * The actuator will slightly pitch when actuating the damper shaft.

Jump to the **Installation steps: Common to any length of the damper shaft** section.

Mounting on the damper shaft rotating clockwise ("R" direction) to close

- 1) Pull out the C-clip and remove the clamp from the "L" face of the actuator.
- 2) Attach the clamp to the damper shaft as near the damper blade as possible. (Make sure that the clamp does not touch the damper.)
- 3) Temporarily fix the clamp on the damper shaft. Set the clamp mounting orientation so that the mounting hole line of the actuator to be mounted at the steps 6) and 7) is parallel to the damper shaft, and tighten the hexagonal nuts of the clamp.
- 4) Unscrew the M4 screw of the mechanical stopper on the "L" face and remove the mechanical stopper.
- 5) Attach the mechanical stopper to the full-open position on the "R" face with the M4 screw.
- 6) Mount the actuator on the damper shaft so that the "R" face of the actuator faces the front
- 7) Fix the clamp on the "R" face of the actuator with the C-clip pulled out at the step 1). See Fig. 16 for the actuator mounting orientation.

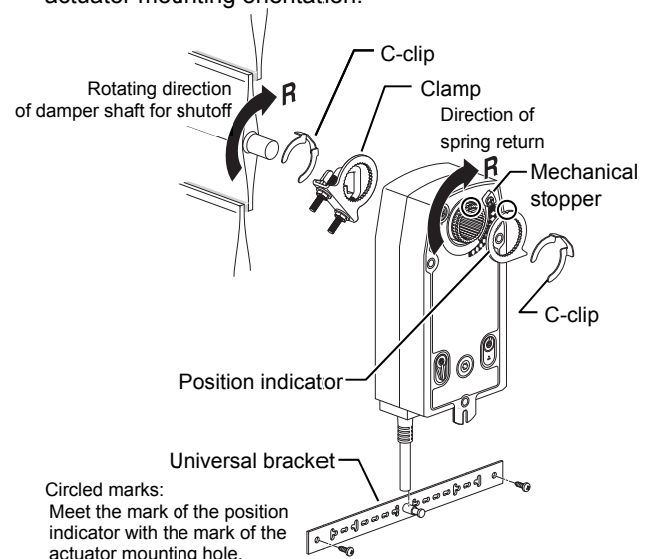


Figure 17. Temporary installation for 15–85 mm long damper shaft (clockwise rotation for closing)

- 8) Attach the universal bracket (accessory) to the duct. Position the universal bracket so that its mounting screws do not touch the damper blade.

Note:

- * To bend the universal bracket for mounting on the duct, see the following:

Mounting on the damper shaft rotating clockwise to close
3) <Precautions for mounting the universal bracket>

- 9) Fix the actuator with the universal bracket on the duct. Insert the pin of the universal bracket into the notch of the actuator to fix the actuator on the duct. See Fig. 11.

Note:

- * The universal bracket prevents the actuator from rolling.
- * The actuator will slightly pitch when actuating the damper shaft.

Jump to the **Installation steps: Common to any length of the damper shaft** section.

Installation steps:**Common to any length of the damper shaft for each rotation.**

The following installation steps are common to the both min. 85 mm long and 15–85 mm long damper shafts rotating clockwise and counterclockwise. After completing the before-mentioned steps, follow the below steps to complete the installation.

- 1) Check that the damper shaft is in the fully closed position. Then, tighten the hexagonal nuts (with 10 mm width across flats) to completely mount the actuator on the damper shaft. Note that nut tightening torque is 10 N·m.

IMPORTANT:

Tighten the hexagonal nuts of the clamp with 10 N·m torque.

Smaller than the 10 N·m torque might cause loose connection of the clamp on the damper shaft, and the actuator therefore may not be able to fully open or close the damper. Larger than the 10 N·m torque might wear out the thread of the hexagonal nuts/clamp.

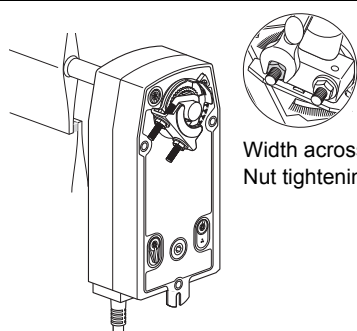


Figure 18. Tightening the nuts of the clamp

IMPORTANT:

- After installation, check fully open, shut-off, and spring-return operations of the actuator.
- Check that the damper shaft is held by the shaft clamp without slipping inside the clamp, and that the actuator is securely attached to the universal bracket.

Removal of clamp insertion part

- 1) Pull out the C-clip and remove the clamp from the actuator.
- 2) Remove the black resin cap attached to the clamp.

Note:

* Be sure to keep the removed cap.

The cap will be attached to the clamp again.

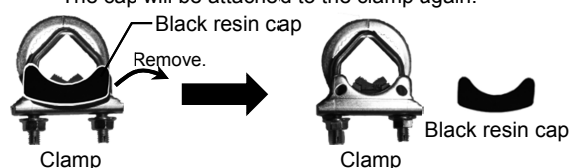


Figure 19. Removing the black resin cap

- 3) Pull out the insertion part.

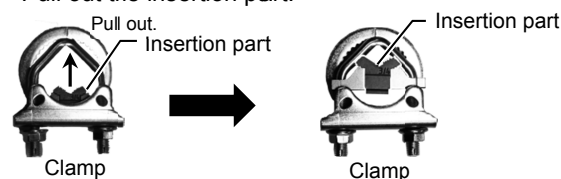


Figure 20. Pulling the insertion part

- 4) Remove the insertion part from the holder.

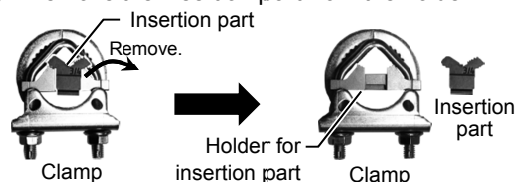


Figure 21. Removing the insertion part

- 5) Press the holder for the insertion part back in the position.

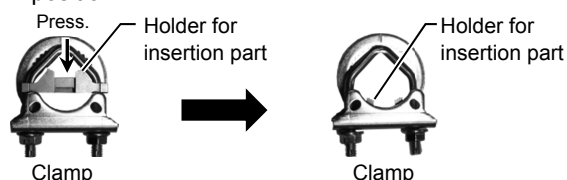


Figure 22. Pressing the holder for the insertion part

- 6) Attach the black resin cap (removed at the step 2)) to the clamp.

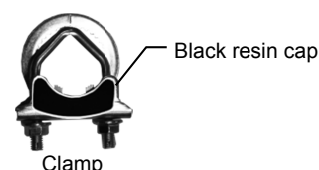




Figure 23. Attaching the black resin cap


- 7) Meet the mark of the clamp with the mark of the mounting holder and attach the clamp to the actuator.
- 8) Fix the clamp with the C-clip pulled out at the step 1).


Wiring

 **WARNING**




Before wiring and maintenance, be sure to turn off the power to the product.
Failure to do so might cause electric shock.


 **CAUTION**




Installation and wiring must be performed by qualified personnel in accordance with all applicable safety standards.



All wiring must comply with applicable codes and ordinances.



Provide a circuit breaker for the power to the product.



Provide a circuit protector (e.g., a fuse, cut-off device) for the control panel to ensure your safety.

Wiring diagrams

Wiring numbers are indicated on the lead wire insulating jackets.

Note:
See the following manual for details.

AB-6713
Intelligent Component Series for SAnet Communication
Installation Manual

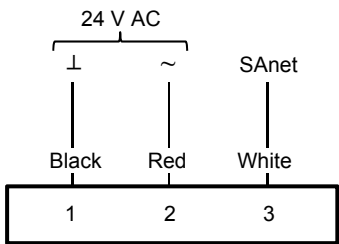





Figure 24. Wiring diagram

Setting


 **WARNING**




Before wiring and maintenance, be sure to turn off the power to the product.
Failure to do so might cause electric shock.




Do not disassemble the spring unit of the product.
The spring unit might rapidly rotate or jump out of the actuator, resulting in serious injury.


 **CAUTION**



If more than the rated power voltage is applied to the product, replace the product with new one for your safety.
Failure to do so might cause fire.



Do not place your hand around the product or bring your face close to the product.
The product might rotate due to inappropriate installation, malfunction, or damage, causing injury.



Do not touch the moving parts of the product.
Doing so might cause injury.

IMPORTANT:

- After changing the mechanical stopper position, make sure that the damper shaft is stopped at the changed mechanical stopper position.
- Check that the set screws of the mechanical stopper are not loose.
- Address setting must be performed by our serviceperson or qualified expert.

Address setting (Addressing)

To SAnet interface module, the damper actuator Model MY8045A3001 and other Intelligent Component Series devices including ACTIVAL and ACTIVAL PLUS are connected via SAnet. Set address for the terminal devices (Intelligent Component Series devices) so that the SAnet interface module can recognize all the terminal devices connected. See Table 1 for the basic address setting. Note that our engineering tool PC-MMI or Data Setter is required for addressing.

Setting with service pin switch (manual switch):

- 1) Start addressing operation* using Data Setter or PC-MMI. Then, press the service pin switch. Do not press and hold the switch for longer than five seconds.
- 2) Address is set within five seconds after pressing the service pin switch.

Note:
Communication trouble and duplicated address cause addressing error. Check that address is correctly set in Data Setter or PC-MMI.

Setting based on SAnet ID:

With Data Setter or PC-MMI, enter the SAnet ID (on the SAnet ID label) and address number to set. The SAnet ID label is attached on a side surface of the actuator.

Note:

See the following manual for details.

AB-6713

Intelligent Component Series for SAnet Communication Installation Manual

Table 1. Basic address setting of this product and other Intelligent Component Series devices

Add.	Device	Sub-DO	Sub-DI
1	Outdoor air damper	—	—
2	Exhaust air damper	—	—
3	Return air damper	—	—
4	Switch damper of total heat exchanger for outdoor air	—	—
5	Switch damper of total heat exchanger for exhaust air	—	—
6	ACTIVAL PLUS / Chilled/hot water valve / Chilled water valve	—	Filter alarm
7	Reserved for ACTIVAL PLUS* ²	—	—
8	ACTIVAL PLUS / Hot water valve (Chilled water valve* ³)	Humidifying ON/OFF	—
9	Reserved for ACTIVAL PLUS* ²	—	—
A (10)	Humidifying valve	—	—* ⁴
B (11)	Reserved	—	—
C (12)	Reserved	—	—
D (13)	Reserved	—	—
E (14)	Reserved	—	—
F (15)	Reserved	—	—

Note:

*1 Items in bold characters are the basic address to set for this product.

Assign the addresses 1 through 8 to this product. If address 9 or greater number is assigned to this product, the product may not properly work.

*2 Since ACTIVAL PLUS requires two consecutive address numbers, the address 7 or 9 must be reserved for ACTIVAL PLUS.

*3 For 'chilled/hot water valve + chilled water valve' application, set 6 for chilled/hot water valve and 8 for chilled water valve.

*4 When the spring-return type ACTIVAL is assigned to the address A (10), its sub-DI is used for forced shutoff input for interlock operation.

System indication label

System indication label is attached to the product. Write down the name of the SAnet system, host controller number of the SAnet system, SAnet line number, and address.

SYSTEM NAME		
CON No.	SAnet No.	ADDRESS

Write down the following.

- SYSTEM NAME:
System name or device number
- CON No.:
Host controller number
(Inflex GC/Inflex GD number)
- SAnet No.:
SAnet line number
- ADDRESS:
SAnet address

Figure 25. System indication label

Adaption (rotating angle setting)

IMPORTANT:

Before adaption, check that the rotating direction of the actuator is correct.

The actuator recognizes the damper rotating angle through the adaption. Ask our serviceperson for details.

Synchronisation (position alignment)

When the actuator mounting position on the damper shaft is changed, the actuator needs to adjust its position setting with the actual damper position through the synchronisation. Ask our serviceperson for details.

Setting the maximum position

To set the maximum angle to 95° or smaller, change the mechanical stopper position within 33–100 % range. Mechanical stopper changed to the desired position must be fixed with the M4 screw.

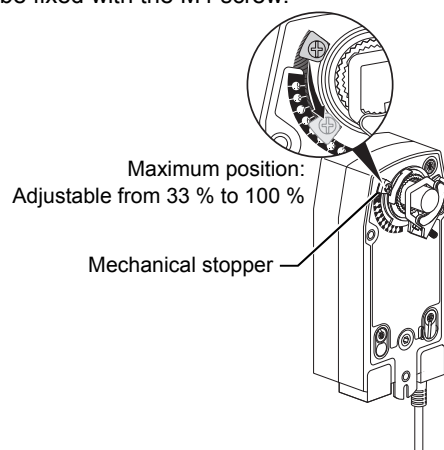


Figure 26. Setting the angle of rotation

Manual Override

⚠ WARNING



Before wiring and maintenance, be sure to turn off the power to the product.
Failure to do so might cause electric shock.

⚠ CAUTION



Do not place your hand around the product or bring your face close to the product.
The product might rotate due to inappropriate installation, malfunction, or damage, causing injury.



Do not touch the moving parts of the product.
Doing so might cause injury.

To lock the damper at the desired position, use the crank handle (accessory).

- 1) Insert the crank handle into the hexagonal hole provided on the "L" or "R" face of the actuator, and rotate the crank handle to the direction the arrow (printed above the hexagonal hole) indicates.

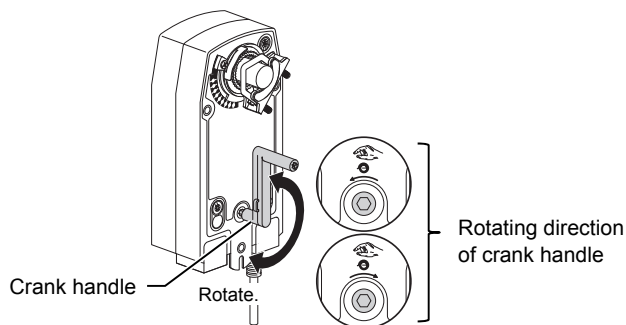


Figure 27. Manually opening the damper

- 2) When the damper blade reaches the desired position, lock the actuator with the lock switch and remove the crank handle.

IMPORTANT:

After using the crank handle, attach the crank handle as "A" in the below figure shows. Completely attach the crank handle to the hexagonal hole so that it does not come off.

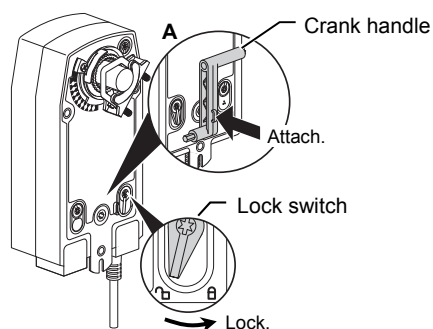


Figure 28. Locking the damper position

Rotating Direction Switch

Motor rotating direction according to the input signal is reversible by the rotating direction switch.

To change the motor rotating direction, attach the crank handle to the rotating direction switch provided on the "L" or "R" face of the actuator and turn the rotating direction switch. Rotating direction of the motor is indicated with "L" and "R" printed above the rotating direction switch.

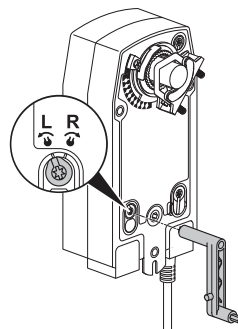


Figure 29. Changing the rotating direction switch

Blank page added for editing purpose.

Blank page added for editing purpose.

Blank page added for editing purpose



Specifications are subject to change without notice.

Azbil Corporation
Building Systems Company

<http://www.azbil.com/>