

Automatic Damper Kit

2-Position Type JD-05T

Instruction Manual

Kansai Electric Heat Corp.

OP-003

Date Created: September 2021

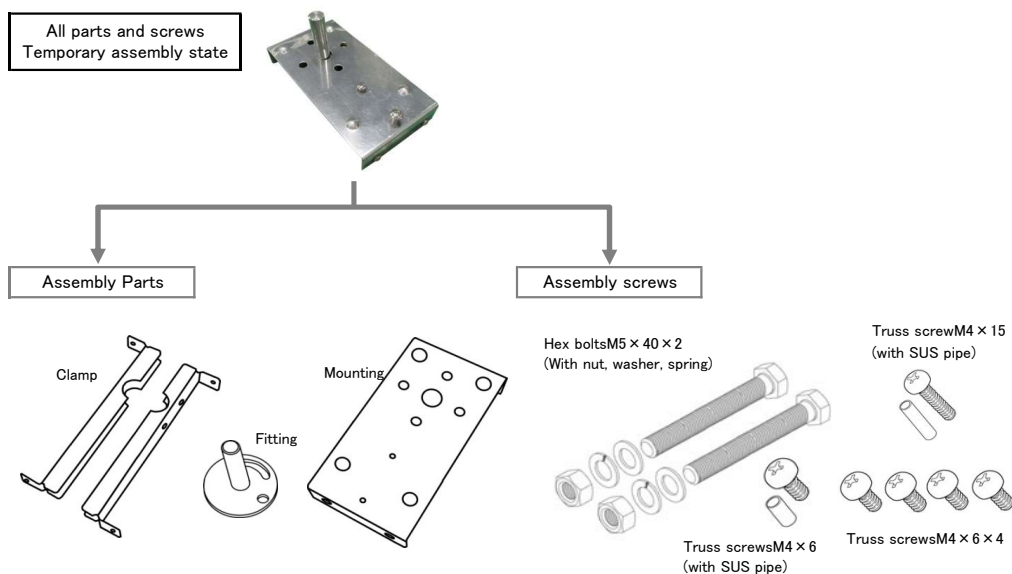
1. Specifications

- Rated Voltage AC 24V 50/60Hz or DC 24V
- Output Shaft 5 N·m
- Rotation Time Approx. 30 sec/90°
- Operating ambient temp -5° C to +40° C (No freezing)
- Operating ambient humidity 85% R.H. or below (non-condensing)
- Power Consumption 5VA (AC) / 2.4W (DC)
- Opening/Closing 90°
- Expected service life Approximately 25,000 cycles

2. Assembly Preparation

- Please check the included assembly parts.
All parts and screws are included in a pre-assembled state. Please disassemble them to verify.

All parts and screws
Temporary assembly state

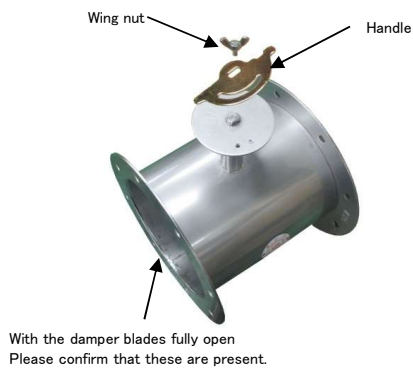


- Please prepare assembly tools yourself.
 - Phillips screwdriver
 - 8mm spanner or 8mm box-end wrench
 - 3.5mm hex wrench



3. Assembly

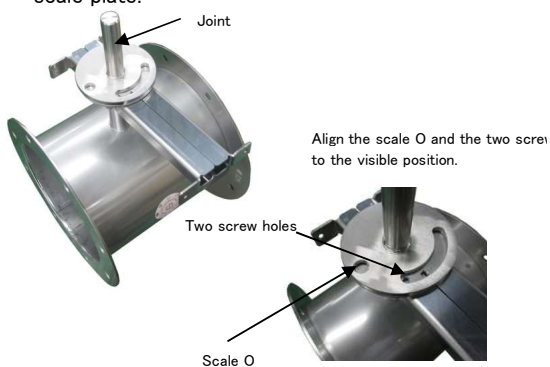
- ① Remove the damper handle and wing nut while fully open.



- ② Clamp the damper shaft section, then assemble the hex bolt with the washer using the spring and nut.



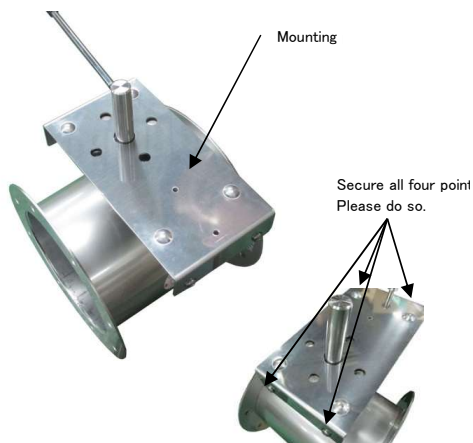
- ③ Install the fitting by aligning it with the damper's scale plate.



- ④ Secure the fitting using M4 × 6 truss screws with the SUS pipe inserted.



- ⑤ Secure the mounting plate to the clamp using truss screws M4 × 6.



- ⑥ Secure the drive unit body to the mounting plate using truss screws M4 × 15 with the SUS pipe inserted, and tighten the two damper shaft sections with a hex wrench.



※ The drive unit, including the mounting plate and fitting, incorporates necessary structural clearances. Therefore, slight play between the fitting and drive unit is normal and does not affect operation.

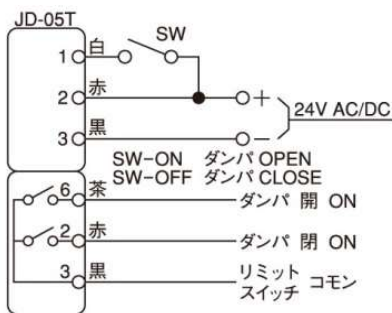
4. Installation

- ① Securely fix the damper body to prevent tilting or distortion of the damper due to the load from the drive unit. If the damper tilts or becomes distorted, the damper blades may lock, potentially causing the motor to burn out.
- ② Take particular care to avoid tilt or distortion when using the flangeless type damper. Additionally, use the double-flanged damper if the hot air temperature inside the damper exceeds 150° C.
- ③ The drive unit mounting direction is 360° free if there is no interference from flanges, etc. If changing the mounting direction, modify the clamp mounting direction in step 3. Assembly, item ②.
- ④ Locations where installation is not possible
 - Locations with Vibration
 - Locations exposed to wind and rain
 - Near Combustible Materials
 - Locations with ambient humidity of 85% R.H. or higher
 - Locations with floating acidic gases, corrosive gases, etc.
 - Locations outside the ambient temperature range of -5° C to +40° C

5. Wiring and Operation

- ① The automatic damper wiring consists of two cables: the power supply cable (black cable: 3 cores – white, red, black) and the output signal cable (gray cable: 3 cores – brown, red, black). Ensure each cable is wired correctly without mistake.
- ② Ensure a dedicated power circuit is available (for parallel operation, ensure sufficient power capacity for the number of units).
- ③ Install a junction box near the damper and connect the wiring inside the box.
- ④ Configure the circuit according to the connection example below.

〈Connection Example〉

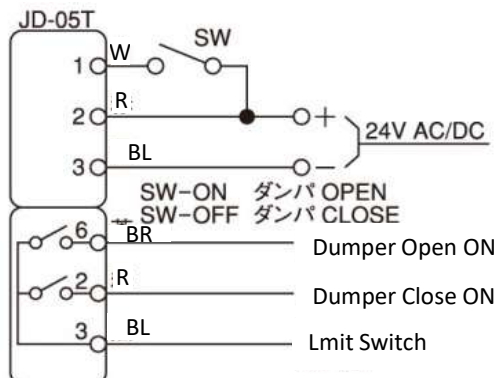


- When supplying AC24V to power supply wires 2 (red) and 3 (black), and DC24V positive to 2 (red) and negative to 3 (black) while the automatic damper is open, the damper closes and output signal wires 3 (black) and 2 (red) turn ON.
- When the automatic damper is in the closed state, supply AC 24V to power supply lines 1 (white wire) and 3 (black wire), and supply DC 24V positive to line 1 (white wire) and negative to line 3 (black wire). This will open the automatic damper, and output signal lines 3 (black wire) and 6 (brown wire) will turn ON.

- ⑤ The output signal wires (gray cable: 3-core brown, red, black) should be used to indicate the damper's open/closed status.
(Contact capacity: 250 VAC, 3 A)
- ⑥ To stop the damper at an intermediate position, configure a circuit that interrupts power supply to lines 1 (white wire) and 2 (red wire) at the desired stop position (see connection example on the right).

Caution : The drive unit moves slightly during operation, so ensure the wiring has some slack.

Caution : Take care to prevent wiring from contacting high-temperature areas such as the damper section.



6. Precautions for Use

- ① Always perform a test run to confirm operation.
- ② Do not disassemble the drive unit to adjust internal components. This may cause misalignment of the opening/closing angle, incorrect output of opening/closing signals, and malfunctions.
- ③ Do not touch the drive unit switch (pre-adjusted at the factory). Doing so may cause malfunctions.
- ④ If dust or debris adheres to the damper blades, rotation time may increase, or full closure/opening may become impossible. Inspect the damper interior periodically.



Hot Air Generator

Manufacturer
Distributor



Kansai Electric Heat Corp.

Head Office 5-4-18 Takai Nishi, Higashi-Osaka City, Osaka 577-8566

TEL (06) 6785-6001 FAX (06) 6785-6002

Tokyo Branch 2-4-4 Minamikamata, Ota-ku, Tokyo 144-0035

TEL (03) 5710-2001 FAX (03) 5710-2005

Website www.kansaidennetsu.co.jp