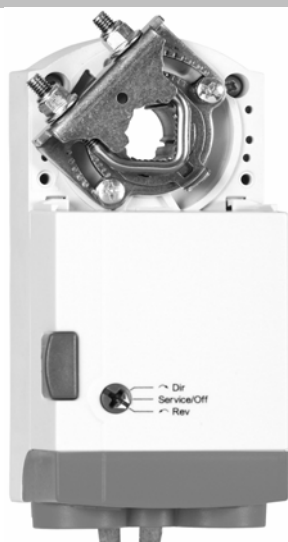


N05, N10 SERIES

NON-SPRING RETURN DIRECT-COUPLED DAMPER ACTUATORS FOR FLOATING AND TWO-POSITION CONTROL

PRODUCT DATA



GENERAL

This non-spring return direct-coupled damper actuator provides floating and two-position control for:

- air dampers,
- VAV units,
- air handlers,
- ventilation flaps,
- louvers, and
- reliable control for air damper applications with up to 10 sq.ft. / 44 lb-in. (5 Nm) and 20 sq.ft. / 88 lb-in. (10 Nm) (seal- less damper blades; air friction-dependent).

FEATURES

- **Declutch for manual adjustment**
- **Adjustable mechanical end limits**
- **Removable access cover for direct wiring**
- **Mountable in any orientation**
- **Rotation direction and service/OFF switch**

SPECIFICATIONS

Supply voltage

CN6105/CN6110	24 Vac/dc -15%/+20%, 50/60 Hz
CN4605/CN4610	230 Vac -15%/+20%, 50/60 Hz

Nominal voltage

CN6105/CN6110	24 Vac/dc, 50/60 Hz
CN4605/CN4610	230 Vac, 50/60 Hz

All values stated hereinafter apply to operation under nominal voltage conditions.

Power consumption

CN6105/CN6110	5 VA / 2 W
CN4605/CN4610	22 VA / 2W, 50 Hz 25 VA / 2W, 60 Hz

Ambient limits

Ambient operating limits	-5...+140 °F (-20...+60 °C)
Ambient storage limits	-22...+176 °F (-30...+80 °C)
Relative humidity	5...95%, non-condensing

Safety

Protection standard	IP54
Protection class	II as per EN 60730-1
Overvoltage category	II

Lifetime

Full strokes	60000
Repositions	1.5 million

Mounting

Round damper shaft	3/8 in...5/8 in.
Square damper shaft	1/4 in...1/2 in.; 45° steps
Shaft length	min. 1-5/8 in.

End switches (when included)

Rating	Class II
Triggering points	5° / 85°

Torque rating

	44 lb-in. (5Nm) / 88 lb-in. (10 Nm)
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Runtime for 90°

CN6105	90 sec (dc / 60 Hz ac)
CN6110	90 sec (dc / 50 Hz ac)
CN4605	65...110 sec (60 / 50 Hz)
CN4610	65...140 sec (60 / 50 Hz)

Rotation stroke

	95° ± 3°
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Dimensions

	see "Dimensions" on page 6
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Weight (without cables)

	1 lbs.
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Noise rating

	35 dB(A) max. at 1 m
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Certification

CN6105/CN6110	CE & UL
CN4605/CN4610	CE

PRODUCT IDENTIFICATION SYSTEM

C -Electrical Motor						
N -Fail Safe Function (Non-Spring Return)						
61 -24V Floating Control						
75 -24V Modulating Control						
46 -230V Floating Control						
05 -5 Nm (44 lb-in.)						
10 -10 Nm (88 lb-in.)						
A -Standard Model						
1 -No Feedback						
2 -Voltage Feedback Signal						
0 -No Internal Auxiliary Switches						
2 -Two Internal Auxiliary Switches						
XX -System Controlled Numbers						

C	N	61	10	A	1	0	XX
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Model	Description
CN6105A1011	5Nm, 24Vac/Vdc, floating control, non-spring return, no feedback and without aux. Switch
CN4605A1001	5Nm, 230Vac, floating control, non-spring return, no feedback and without aux. Switch
CN6110A1003	10Nm, 24Vac/Vdc, floating control, non-spring return, no feedback and without aux. Switch
CN6110A1201	10Nm, 24Vac/Vdc, floating control, non-spring return, no feedback and with aux. Switch
CN4610A1001	10Nm, 230Vac, floating control, non-spring return, no feedback and without aux. Switch

BASIC FEATURES

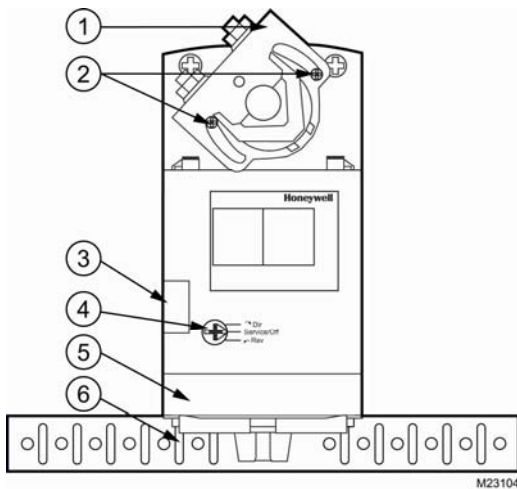


Fig. 1. Setting units and control elements

Legend for Fig. 1:

- 1) Universal shaft adapter
- 2) Mechanical end limits (manually adjustable)
- 3) Declutch button
- 4) Function selection switch
- 5) Removable access cover
- 6) Anti-rotation bracket

Contents of Package

The delivery package includes the actuator, parts 1 through 6 (see Fig. 1), plus two cable grommets and a spare cable grommet.

RUN MODES

The function selection switch (see Fig. 2) can be used to place the actuator into any one of two different modes:

- Service/Off; or
- the floating/2-position run mode (“Dir” for CCW-closing dampers or “Rev” for CW-closing dampers).

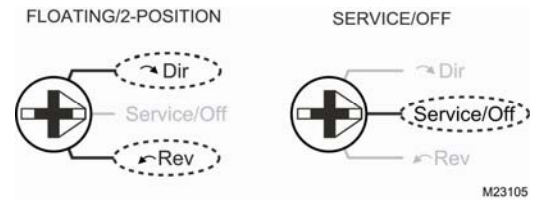


Fig. 2. Function selection switch

Power-Off Behavior

If power is removed, the shaft adapter remains in position.

Service/Off

If the function selection switch is set to the “Service/Off” position, then all rotary movement is cancelled, and all control signals are ignored, thus allowing the actuator to be manually operated safely.