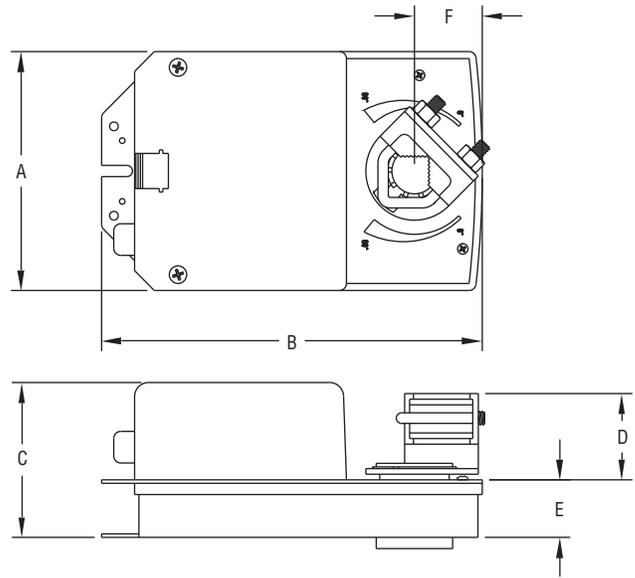




Series DDD 88, 132, 177, 265 in-lb Modulating Damper Actuator

Specifications - Installation and Operating Instructions



Size	A	B	C	D	E	F
10 Nm & 15 Nm (88 in-lb) (132 in-lb)	4-17/64 (108.35)	6-55/64 (174.23)	2-49/64 (70.25)	1-35/32 (39.19)	1-1/32 (26.19)	1-15/64 (31.35)
20 Nm & 30 Nm (177 in-lb) (265 in-lb)	4-57/64 (124.22)	7-23/32 (196.06)	2-23/32 (69.06)			1-25/64 (35.32)

DDD Series Direct Coupled Actuators are non-spring return actuators that are perfect for positioning of dampers and valves in HVAC systems. Actuators are designed to accept 4 to 20 mA or 0 to 10 VDC modulating control signals and are 24 VAC powered. Actuators produce 88 to 265 in-lb (10 to 30 Nm) of torque. Unit features a 0 to 10 VDC feedback signal of damper position.

Features

- Direct mount.
- Actuator travel indicator.
- Overload protection.
- Manual override.
- Modulating 4 to 20 mA or 0 to 10 VDC control signal.
- Position feedback signal.
- 60,000 cycles nominal.

FUNCTION TESTING

Press the manual button on the back of the actuator. The gearing inside the actuator will break away. The damper can be operated manually while pressing the manual button. **DO NOT OPERATE WHEN POWER IS ON!**

SPECIFICATIONS

Power Requirements: 24 VAC, $\pm 10\%$, 50/60 Hz, single phase.

Power Consumption: 7.5 VA.

Control Input: 4-20 mA or 0-10 VDC.

Overload Protection: Magnetic clutch.

Angle of Rotation: 95° (mechanically adjustable).

Accuracy: $\pm 5\%$.

Fits Shaft Diameter: 0.4" - 0.75" (10-20 mm).

Position Indication: Visual indicator.

Direction of Rotation: CW/CCW.

Running Time: 88 in-lb: 66 sec., 132 in-lb: 90 sec., 177 in-lb: 110 sec., 265 in-lb: 143 sec.

Electrical Connection: Terminal block, 18 AWG.

Manual Override: Push button.

Temperature Limit: -22 to 122°F (-30 to 50°C).

Sound: <45 dB.

Life Expectancy: 60000 full cycles.

Housing: NEMA 2 (IP42).

Standard Accessories: (2) imitative baffles, (2) baffle setscrews, (1) setting bracket.

Weight: 2.98 lb (1.35 kg) 88, 132 in-lb models; 3.79 lb (1.72 kg) 177, 265 in-lb models.

WIRING DIAGRAM

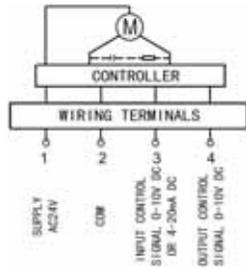


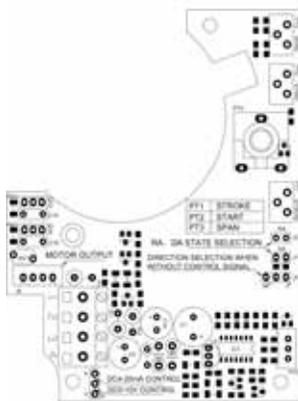
Chart 1: Actuator Action

INPUT CONTROL SIGNAL		ROTATE DIRECTION
DA	RA	
INCREASING	DECREASING	↻
DECREASING	INCREASING	↻

Set Up

- Set jumper J1 or jumper J2 to proper selection for reverse or direct acting. See Chart 1: Actuator Action above for more details.
- Set jumper J3 for Voltage or Current input control signal.
- Set jumper J4 for actuator direction on loss of control signal.
- Potentiometer PT1 adjusts the stroke of the actuator.

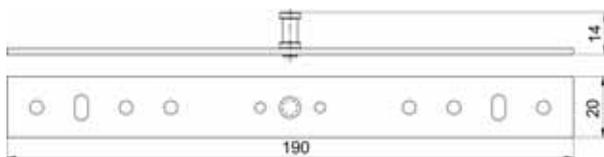
Set up for 88, 132 in-lb



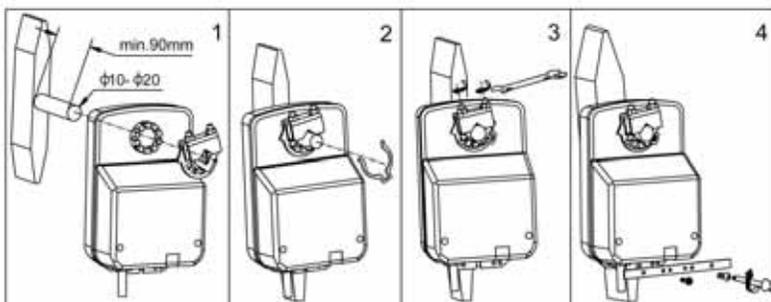
Set up for 177, 265 in-lb



Standard setting bracket (dimension in mm)



INSTALLATION DIAGRAM



MAINTENANCE

Upon final installation of the Series DDD Non-Spring Return Direct Coupled Actuator, no routine maintenance is required. A periodic check of the system calibration is recommended. The Series DDD is not field serviceable and should be returned if repair is needed (field repair should not be attempted and may void warranty). Be sure to include a brief description of the problem plus any relevant application notes. Contact customer service to receive a return good authorization number before shipping.