

ZDS15 RECTANGULAR ZONE CONTROL DAMPER

APPLICATION

Ruskin Model ZDS15 is an aluminum commercial zone control damper assembly that includes a modulating actuator, integral duct temperature sensor, actuator logic board and (ship loose) P+I wall thermostat. All components are factory commissioned to simplify field installation. The ZDS15 can be tied into an air handling unit when ordered as a component of the Z2000 zone comfort system. Additional ZDS15 dampers may be ordered without the logic board and controlled by the primary damper logic board. One Primary ZDS15 damper logic board can control up to three additional ZDS15 tracer dampers within the same zone. The ZDS15, with standard Z2000RT wall thermostat, is also a stand-alone device for single zone applications.

STANDARD CONSTRUCTION

FRAME

.063" (1.5) extruded aluminum frame

BLADE

.063" (1.5) extruded aluminum with integral reinforcement spine

BLADE ACTION

Parallel

BEARINGS

Nylon

MAXIMUM STATIC PRESSURE

2" water column (500 Pa)

MAXIMUM SYSTEM VELOCITY

2000 Feet Per Minute (10.2 m/s)

ACTUATOR

3-wire floating point
24 VAC, 50/60Hz

TIMING

90 seconds at 60 Hz, 108 at 50 Hz

POWER CONSUMPTION

2 VA modulating

ACTUATOR TORQUE

44-lb-in (5Nm)

AGENCY LISTINGS

UL873, cUL C22.2 No. 24-93

THERMOSTAT

Model Z2000RT

MINIMUM SIZE

8" x 8" (203 x 203)

MAXIMUM SIZE

32" x 24" (813 x 610)

OPERATING TEMPERATURE

-22 to 130 degrees Fahrenheit (-30 to 54.4°C)

PACKAGE CONTENTS

- Damper
- Factory mounted actuator with logic board
- Integral duct sensor
- Z2000RT wall thermostat
- Installation Instructions

FEATURES

- Factory mounted & commissioned actuator with logic board
- Damper side plate for easy installation
- Integrated auto changeover sensor
- 5 year warranty

NOTE: Dimensions shown in parentheses () indicate millimeters.



STANDARD ZDS15 PACKAGE

VARIATIONS

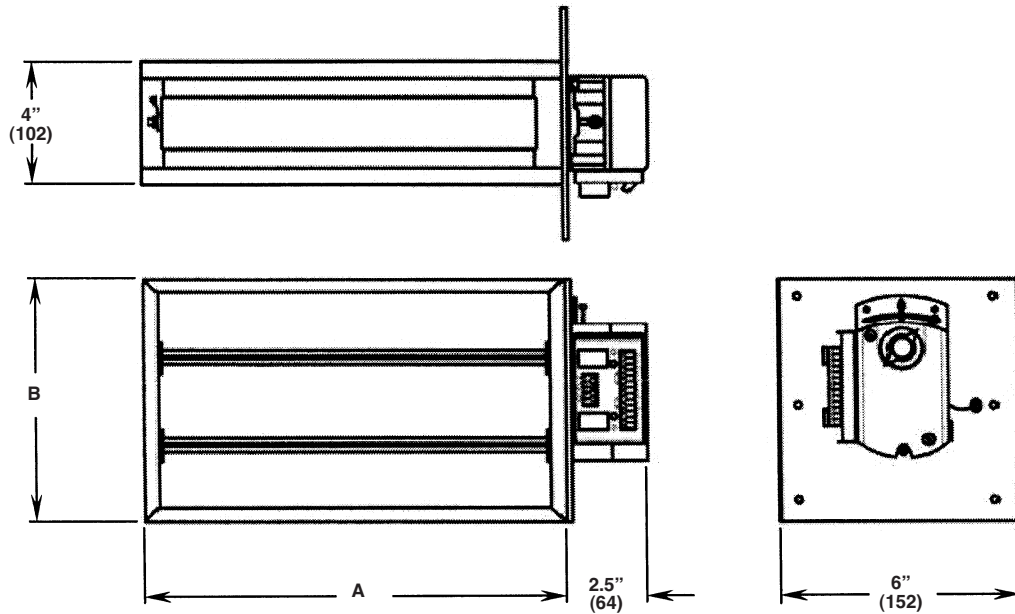
- Tracer control package (omit logic board, sensor & wall stat)
The tracer damper copies the primary damper blade position.
Wire to a primary damper logic board for larger zones.

SEQUENCE OF OPERATION

As part of the Z2000 comfort system, the Ruskin model ZDS15 compares the duct temperature with the demand of the zone and modulates either open or closed to satisfy the demand. For further details, refer to the Z2000 Modulating zone Comfort System control Panel literature.

The ZDS15 may be used as a stand-alone zone control device (without the Z2000 comfort system control panel). In this application the Z2000RT wall stat is set to the desired temperature and the actuator modulates the damper to satisfy the call for either cooling or heating. During the heating cycle the damper modulates closed on call for cooling and modulates open on call for heat. During the cooling cycle the damper modulates open on call for cooling and modulates closed on call for heat.

DIMENSIONAL DETAILS



SUGGESTED SPECIFICATION

Furnish and install, at locations shown on plans, or as in accordance with schedules, electronic zone control dampers built to the following minimum requirements. Frame shall be .063" (1.5) extruded aluminum minimum. Blade shall be minimum .063" (1.5) extruded parallel action with integrated reinforcing spine, strengthening the blade along its length. Shaft shall ride on nylon bushings, at both ends, to provide smooth and quiet operation. Damper shall be equipped with a factory furnished, mounted and cycle tested 24 VAC

electric floating point actuator with a logic board control and duct sensor. All components shall be wired together to ensure product compatibility and reduce field labor. Actuator shall be UL873 and cUL listed. Power consumption shall not exceed 3.3 VA at any time during operation. Assembly shall be designed to withstand 2 inches of water column and 2,000 feet per minute (500 Pa and 10.2 m/s) system velocity. Complete assembly shall be, in all respects, equivalent to Ruskin model ZDS15 Zone Control Damper.

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