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SUBMITTAL SHEET

# **ARD and EARD Series Damper**

### Job Name Engineer **Mechanical Contractor** Contractor's P.O. No. Representative Notes

Model(s)			
	Qty.	Notes	
	Qty.	Notes	
	Qty.	Notes	
Approval			
Service			
Tag No.			

#### APPLICATION

The ARD is a power close and spring open zone damper. It has a 24-volt motor used to control circulating air in HVAC systems and is used when normally-open damper is required. The ARD is typically used with Honeywell TrueZONE electronic zoning systems and others.

The EARD is a power open and spring closed fresh air damper. It has a 24-volt motor used to control circulating air in fresh air ventilation. The EARD is typically controlled by an IAQ thermostat or other whole house ventilation control.

### ARD AND EARD FEATURES

#### ARD Features

- Adjustable close position range stops.
- Shipped as power closed/spring return open damper.
- Available in 5 to 10 inch, 12, 14, 16, 18, and 20 inch diameter
- Male (crimped) and female (uncrimped) ends to connect to any rigid or flexible round duct.
- Rated to operate up to 1 in. wc.
- Blade closes off tightly against gasket for minimal leakage.
- Fail-safe, normally open operation.
- Simple, easy-to-wire, two-wire (M1 and M6) installation. Optional third wire (M4) powers LED in open position only (does not power motor).

#### **EARD Features**

- Adjustable open position range stops.
- Shipped as power open/spring return closed damper.
- Available in 5 to 8 inch diameter sizes.
- Blade closes off tightly against gasket for minimal leakage.
- Galvanized steel damper construction.
- Rated to operate up to 1 in. wc.
- Simple, easy-to-wire, two-wire installation.
- Male (crimped) and female (uncrimped) ends to connect to any rigid or flexible round duct.

#### **SPECIFICATIONS**

#### **IMPORTANT**

The specifications given in this publication do not include normal manufacturing tolerances. Therefore, this unit may not exactly match the listed specifications. Also, this product is tested and calibrated under closely controlled conditions, and some minor differences in performance can be expected if those conditions are changed.

Motor Electrical Rating: 24 Vac, 60 Hz, 8VA.

Motor Electrical Connection: Push terminals. Solid (not stranded)

wire is recommend.

Motor Nominal Angular Rotation: 90°.

Motor Torque: Minimum 71 in.-oz. (500 millinewton meters) output torque available when motor is energized and device is at the spring return initial start position.

Nominal Motor Timing at 77%F (25%C) Ambient: Energized at rated load: 30 seconds. De-energized (spring return): 10 seconds.

Motor Ambient Temperature Rating: 40 to 140F (5 to 60C).

Leakage: Less than 1% at 1/2 in. wc.

**Pressure Drop:** Maximum at full open: 0.0329 in. wc at 800 ft/min.

Maximum Static Pressure: 1 in. wc for all models.

Motor Shaft Rotation Direction: Clockwise, when energized and viewed from the base or shaft end.

Motor Mounting Means: Direct connection to damper shaft.

Motor Mounting Position: Multi-poise.

#### Construction

#### **ARD Dampers**

Frame: Galvanized steel spiral duct, crimped on downstream side.

**ARD Sizes:** 5 to 10 inch, 12, 14, 16, 18, and 20 inch diameter.

Gauge: ARD5-ARD12: 24 gauge frame, and 22 gauge blade.

Blade: ARD14-ARD20: 22 gauge frame, and 20 gauge blade.

#### **EARD Dampers**

Frame: Galvanized steel spiral duct. EARD Sizes: 5 to 8 inch diameter.

#### REPLACEMENT PARTS

Actuator assembly: ARD: M847D-ZONE EARD: M847D-VENT







#### Table 1. ARD models.

ARD models
ARD5TZ
ARD6TZ
ARD7TZ
ARD8TZ
ARD9TZ
ARD10TZ
ARD12TZ
ARD14TZ
ARD16TZ
ARD18TZ
ARD20TZ

#### Table 2. EARD models.

EARD models				
EARD5TZ				
EARD6TZ				
EARD7TZ				
EARD8TZ				

Damper dimensions: ARD and EARD dampers are all approx. 2\* longer than the damper diameter. Damper diameter is the number listed after ARD. (Example ARD8TZ is 8\* diameter).

Table 3. Approximate ARD/EARD Bleed Rate.

Range stop setting	Bleed Rate
0	Closed
1	16%
2	30%
3	50%

## **Dimensions in inches** (mm).



