

# RECTANGULAR MODULATING SUPPLY DAMPER

## SUBMITTAL



## *Rectangular Modulating Supply Damper*

\*Controlled by Wireless Programmable Thermostat

Part #WCD

## DESCRIPTION

The **WCD** is a rectangular heavy duty power open / power close modulating, pressure dependent supply damper. This is designed for applications on Zonex Wireless control systems. The dampers are available from 6" X 6" to 48" X 48" in 2" increments. The rectangular will operate with a maximum pressure differential of 1.75" W.C.

Rectangular dampers feature parallel blade construction for height dimensions to 14" and opposed blade construction for height dimensions 16" through 48". WCD dampers 6" in height use a single damper blade.

The damper assembly is enclosed in a 16" long, 20 gauge galvanized steel sleeve, with standard slip and drive connections. Damper blades are bolted to a hexagonal damper shaft which rotates with stainless steel bushings. Damper blades close against steel blade stops. The damper linkage is non-adjustable and fully enclosed within the damper. Damper minimum and maximum positions are field adjustable on the actuator.

For supply applications, the rectangular is wired to the Damper Control Board for modulating operation.

WCD dampers can be slaved or wired in parallel to provide additional zone CFM capacity if required.

## TECHNICAL DATA

### **Electrical:**

**Supply Voltage:** 24vac

**Power consumption:** 2 VA maximum (1.5W)

### **Environmental:**

**Operating temperature:** 20 to 125° F (-7 to 52° C)

**Operating humidity:** 10-95% non-condensing

**Storage temperature:** -20 to 130° F (-29 to 54° C)

### **General:**

**Shell:** 20 gauge cold rolled galvanized steel

**Shaft:** 1/2" dia. plated steel, hexagonal

**Blades:** 16 gauge galvanized

**Bushings:** Stainless steel Celcon

**Actuator:** Modulating or Power Open / Power Close

**Stroke:** 90°

### **Communication:**

Proprietary wireless network protocol, with up to 100' transmission range.

### **Notes:**

\*Compatible only with GEN III VVT and SubZone wireless systems.

REV 10/16/15

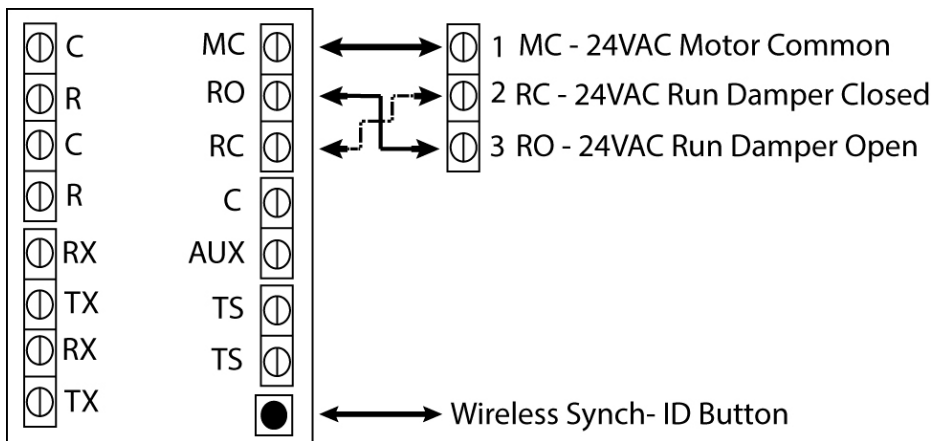
# WCD- RECTANGULAR MODULATING SUPPLY DAMPER

## TYPICAL RECTANGULAR SUPPLY CAPACITY

		← WIDTH IN INCHES →																				
		8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48
8	8	300	400	500	610	710	820	925	1050	1175	1250	1400	1500	1600	1725	1825	2000	2100	2200	2275	2400	2525
10	10	400	540	680	825	975	1125	1300	1400	1590	1750	1975	2100	2175	2400	2600	2775	2900	3000	3200	3400	3600
12	12	500	680	850	1000	1200	1400	1600	1850	2000	2300	2550	2700	2850	3100	3400	3600	3800	3975	4200	4450	5775
14	14	610	825	1000	1250	1500	1750	2000	2250	2500	2900	3150	3425	3625	3825	4200	4600	4800	5000	5300	5750	6000
16	16	710	975	1200	1500	1800	2100	2450	2700	3000	3600	3950	4200	4425	4650	5100	5600	5780	6025	6500	7000	7400
18	18	820	1125	1400	1750	2100	2500	2850	3080	3600	4400	4600	4950	5100	5600	6000	6500	7000	7150	7600	8100	8600
20	20	925	1300	1600	2000	2450	2850	3400	3775	4000	4800	5500	5700	6000	6600	7100	7900	8025	8500	9000	9600	10075
22	22	1050	1400	1850	2250	2700	3080	3775	4300	4800	5100	6000	6350	6800	7200	7800	8600	9000	9600	10000	11500	12500
24	24	1175	1590	2000	2500	3000	3600	4000	4800	5400	6100	7000	7150	7600	8600	9100	10000	10700	11500	12000	13050	14700
26	26	1250	1750	2300	2900	3600	4400	4800	5100	6100	6700	7800	8400	8900	10000	10900	11075	12050	13000	14000	15000	15900
28	28	1400	1975	2550	3150	3950	4600	5500	6000	7000	7800	8400	9150	10000	10700	11900	13000	13800	14900	15200	16500	17500
30	30	1500	2100	2700	3425	4200	4950	5700	6350	7150	8400	9150	10000	11000	11800	12400	13800	14200	15000	16000	17400	18500
32	32	1600	2175	2850	3625	4425	5100	6000	6800	7600	8900	10000	11000	11250	12700	13900	14900	15200	16900	17300	19000	20500
34	34	1725	2400	3100	3825	4650	5600	6600	7200	8600	10000	10700	11800	12700	14100	15000	16500	17200	18100	19200	20500	21900
36	36	1825	2600	3400	4200	5100	6000	7100	7800	9100	10900	11900	12400	13900	15000	16100	17400	18500	20000	21500	22900	24200
38	38	2000	2775	3600	4600	5600	6500	7900	8600	10000	11075	13000	13800	14900	16500	17400	17800	20000	21900	22600	24000	25100
40	40	2100	2900	3800	4800	5780	7000	8025	9000	10700	12050	13800	14200	15200	17200	18500	20000	21000	22200	24900	25000	27000
42	42	2200	3000	3975	5000	6025	7150	8500	9600	11500	13000	14900	15000	16900	18100	20000	21900	22200	22800	25100	26900	30000
44	44	2275	3200	4200	5300	6500	7600	9000	10000	12000	14000	15200	16000	17300	19200	21500	22600	24900	25100	26500	30000	32000
46	46	2400	3400	4450	5750	7000	8100	9600	11500	13050	15000	16500	17400	19000	20500	22900	24000	25000	26900	30000	30500	32800
48	48	2525	3600	5775	6000	7400	8600	1075	12500	14700	15900	17500	18500	20500	21900	24200	25100	27000	30000	32000	32800	35600

These air quantities were derived from duct sizing chart .1" friction loss per 100' of duct. All CFMs listed are approximate. For accurate selection, use duct sizing table or device.

### TERMINAL FUNCTIONS



<b>TERMINAL CONNECTIONS</b>
R - 24VAC power input In / Out
C - 24VAC power common In / Out
RO - Damper run open signal
RC - Damper run closed signal
MC - 24VAC motor common
TS - Duct temperature sensor
TS - Duct temperature sensor
AUX / C - Auxiliary Heat
RX - Data Receive In / Out
TX - Data Transmit In / Out