# eControls

# Submittal

# Model ZCDWLB

Patent US 10,520,212 B1

Job:	
Location:	
Engineer:	
Contractor:	
Contractor PO No.:	
Buyer	
Architect:	
Notes:	



#### ZCDWLB-K1

#### 2-Zone, Wireless Automatic Comfort Control Kit

Kit includes a ZCDWLB 2-Zone Wireless Automatic Comfort Control, a DC3 Wireless Damper Control and one TSWL Wireless Temperature Sensor.

#### ZCDWLB-K2

#### 2-Zone, Wireless Automatic Comfort Control Kit

Kit includes a ZCDWLB 2-Zone Wireless Automatic Comfort Control, a DC3 Wireless Damper Control and two TSWL Wireless Temperature Sensors.

#### **R80CJ-XX** Damper

Modulating, Round, Plug&Play Damper. Unsealed. XX diameter from 6 to 20 inches. Includes 25' Plug&Play cable.

Model (s)		Qty	Notes
ZCDWLB-K1			
ZCDWLB-K2			
	Size	Qty	Notes
R80CJ-			
R80CJ-			
R80CJ-			
Approval			

### FEATURES

- Simple wireless installation. Reduces rough in wiring.
- ZCDWLB monitors the equipment and the upstairs and downstairs temperatures and automatically distributes more heating or cooling to the zone that needs it to keep the upstairs and downstairs temperatures within 2°.
- Optional Manual Operation Homeowner can manually direct more heating or cooling to the upstairs or downstairs zone as desired to improve comfort and save energy.
- Night Comfort Option saves 30% in energy at night by automatically distributing more heating or cooling to the upstairs zone and 30% less to the unoccupied downstairs zone.
- Compatible with Smart, OEM and simple 24VAC thermostat. Operation is independent of the thermostat.

# **ZCDWLB Wireless 2-Zone Comfort Control**

#### HVAC Equipment

Use with any equipment. ZCDWLB only monitors the equipment.

## Compatible Thermostat

Compatible with Smart, OEM or simple 24VAC thermostats.

#### Airflow Modes Automatic or Manual Control.

Airflow Adjustment Range 40 to 160% of nominal airflow.

Airflow Adjustment Increment 2% adjustment to airflow.

#### Airflow Adjustment Interval

Automatically adjusts airflow every 2 minutes during heating and cooling calls.

Wirina No wiring - Battery powered.

#### Wireless Control

Communicates wirelessly with DC3 Damper Control Module. See Wireless Specs.

LCD Display 1 square inch LCD display.

Power Powered by two AA Batteries.

Installation Any wall using hardware provided.

Mechanical 3.30 x 3.30 x 1.00 inches.

# Wireless Specs

Wireless Protocol Uses 915MHz ISM Band.

Wireless Linking ZCDWLB, DC3 and TSWL are pre-linked using a unique address.

Wireless Range More than 100 feet in a home.

FCC Compliance Complies with Part 15 of the FCC Rules.

### **DC3 Wireless Damper Control Module**

#### Operation

Monitors the equipment and controls modulating dampers controlling the distribution of heating and cooling to the upstairs and downstairs zones.

Modulating Damper Connection RJ11 connectors for plug&play connection to dampers.

#### Wireless Control

Damper positions wirelessly communicated by the ZCDWLB control. See Wireless Specs below.

#### Maximum Number of Dampers

Up to 4 dampers in the upstairs space and 4 dampers in the downstairs space can be daisy chain connected and controlled.

Power 24VAC. Uses equipment 24VAC at R and C terminals.

Mechanical 4 x 4 x1.25 inches.

### **TSWL Wireless Sensor**

Accuracy 1% at 77° F.

Range 0 to 170° F.

Wireless Control Communicates wirelessly with DC3 Damper Control. See Wireless Specs.

Single Sensor Installation One TSWL sensor is installed upstairs, in the bedroom hallway directly to the wall using hardware provided.

#### Dual Sensor Installation

Two TSWL sensors are installed upstairs, one in the bedroom hallway and one typically in the master bedroom, directly to the wall using hardware provided. The two temperatures are averaged.

Mechanical 3.15 x 3.15 x .80 inches

Power Powered by two AAA Batteries

# Specifications

## R80CJ-XX Damper

Actuator Type A80MJ. Power modulating. Electronic control of the motor for long life.

Actuator Mounting Two screws. Keyed shaft for automatic alignment.

Connection RJ11 Plug&Play cable. 25' Cable included with damper.

Operation Time Fully opens in approximately 3 seconds.

LED Indicators Green LED indicates fully open and red LED indicates fully closed.

Electrical Power 24VAC or 24VDC. 2VA when positioning. 1VA when holding.

Damper Type Unsealed

Damper Material 24 GA galvanized steel.

Blade Material 20 GA galvanized steel.

Temperature, Operating -20° to 175° F.

Maximum Static Pressure 1.0 inch H<sub>2</sub>O.

Multiple Damper Connection

A second RJ11 connector on the damper actuator can be used to daisy chain connect 3 additional dampers.

Available Sizes 6" - 20" Diameter.

#### Warranty

5-year warranty, limited to the repair or replacement of the product due to defective material or workmanship.

# eControls

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