

Model ZCDWLR

Patent US 10,520,212 B1

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

| Model (s) | Qty | Notes | |
|-----------|------|-------|-------|
| ZCDWLR-K1 | | | |
| ZCDWLR-K2 | | | |
| | Size | Qty | Notes |
| R80CJ- | | | |
| R80CJ- | | | |
| R80CJ- | | | |
| RT80CJ- | | | |
| RT80CJ- | | | |
| RT80CJ- | | | |
| Approval | | | |



FEATURES

- Simple wireless installation. Reduces rough in wiring.
- ZCDWLR 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.

ZCDWLR-K1

2-Zone, Wireless Automatic Comfort Control Kit

Kit includes a ZCDWLR 2-Zone Wireless Automatic Comfort Control, a DC3 Wireless Damper Control and one TS510W Wired Temperature Sensor.

ZCDWLR-K2

2-Zone, Wireless Automatic Comfort Control Kit

Kit includes a ZCDWLR 2-Zone Wireless Automatic Comfort Control, a DC3 Wireless Damper Control and two TS520W Wired Temperature Sensors.

R80CJ-XX Damper

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

RT80CJ-HHxDD

Modulating, Rectangular, Plug&Play Damper. Unsealed. Available in 8 x 8 thru 16 x 20 in 2 inch increments. Actuator on HH, first dimension side. Includes 25' plug&play cable.

Specifications

ZCDWLR Wireless 2-Zone Comfort Control

HVAC Equipment

Use with any equipment. ZCDWLR 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.

Wiring

Wires to R and C at the thermostat or at the equipment.

Wireless Control

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

LCD Display

1 square inch LCD display.

Power

Powered by 24VAC from R and C at the thermostat or at the equipment.

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

ZCDWLR and DC3 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 ZCDWLR 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 x 1.25 inches.

TS5 Wired Sensor

Accuracy

1% at 77° F.

Range

0 to 170° F.

Installation

Installed directly to wall using hardware provided.

Single Sensor Installation

One TS510W sensor is installed upstairs, in the bedroom hallway directly to the wall using hardware provided or in a single gang box.

Dual Sensor Installation

Two TS520W sensors are installed upstairs, one in the bedroom hallway and one typically in the master bedroom, directly to the wall using hardware provided or in a single gang box. The two temperatures are averaged.

Mechanical

4.88 x 3.13 x .25 inches

Connection to DC3

2 Conductor 18 or 20 GA thermostat cable.

R80CJ-XX Damper or RT80CJ-HHxDD 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 H₂O.

Multiple Damper Connection

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

Available Round Sizes

6" - 20" Diameter.

Available Rectangular Sizes

8" by 8" thru 16" by 20" in 2-inch increments.

Warranty

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

eControls

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