

No Bypass • Use Any Tstat • Plug&Play • Comfort and Energy Savings

The **ZCDC 2-Zone Plug&Play Comfort Control** is an effective alternative to traditional zoning - typically priced at about half the cost and installable in as little as two hours.

While the thermostat controls the activation of heating and cooling calls, the ZCDC system monitors the upstairs and downstairs zone temperatures and uses modulating dampers to dynamically adjust the distribution of heating and cooling to the zones to provide whole home comfort and energy savings in every season.



ZCDC 2-Zone Comfort Control

FEATURES

Eliminates Bypass Damper and Duct

The modulating dampers never close and the airflow through the equipment doesn't change.

Eliminates Discharge Air Temperature Sensor

With bypass eliminated, the return air temperature is not altered.

Eliminates Separate 24VAC Transformer

The dampers require only 2VA when positioning and 1VA when holding position allowing the control to be powered using the HVAC equipment 24VAC.

Use with Any 24VAC Thermostat

Works with any gas/electric or heat pump thermostat with 24VAC outputs to control the HVAC equipment.

Plug&Play Connection Eliminates Wiring Errors

The ZCDC uses P&P cables to connect the control and the dampers. Cables are provided with the products.

Saves 30% in Energy at Night

The ZCDC saves the homeowner 30% in energy each night by automatically directing 30% more heating or cooling to the upstairs sleeping zone and 30% less to the unoccupied downstairs zone.

Comfort and Save Energy

Meets the builder's demand for a comfortable home and energy savings. The homeowner can use automatic whole home comfort control or focus more heating or cooling to an occupied zone and less to an unoccupied zone, saving energy and improving comfort.

EASY INSTALLATION

- ▶ Install modulating dampers in the trunks supplying air to the upstairs and downstairs zones.
- ▶ Mount the DC3C Damper Control near the equipment and wire the 5 terminals on the DC3C to the appropriate HVAC equipment terminals and connect the dampers to the DC3C using the plug&play cables provided.
- ▶ Connect the DC3C to the TS4B sensor located in the upstairs bedroom hallway or the primary bedroom using 2 conductor thermostat cable.
- ▶ Connect the DC3C to the ZCDC 2-Zone Comfort Control located in the downstairs living space using the 40' plug&play cable provided.



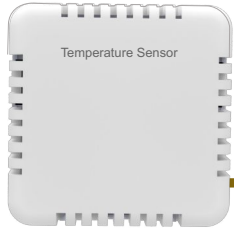
Proudly designed, engineered
and assembled in the USA

Patent US 10,520,212 B1

eControls

Wiring Diagram

TS4B 2-Wire Temperature Sensor
Monitors the upstairs temperature



Installed in Zone2

Optionally the ZCDC can be installed Upstairs and the TS4B can be installed Downstairs

ZCDC Plug&Play Comfort Control
Monitors downstairs temperature and selects Comfort Mode



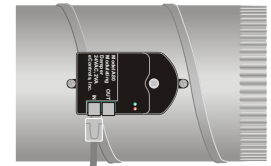
Installed in Zone1

DC3C Damper Control
Powered by equipment 24VAC. Monitors equipment terminals for heating or cooling Calls. Controls the distribution of airflow using modulating dampers

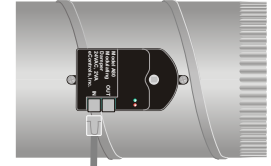


Installed near HVAC Equipment

R80CJ-XX Modulating Plug&Play Damper
Installed in Zone2 trunk



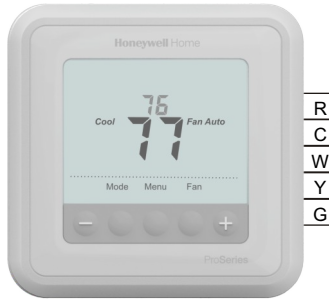
R80CJ-XX Modulating Plug&Play Damper
Installed in Zone1 trunk



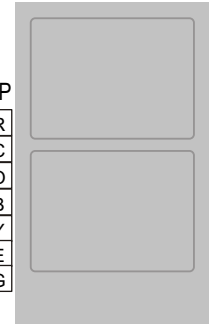
Plug&Play cables provided with dampers.

40' Plug&Play cable provided with Damper Control and installed at rough-in.

Use Smart, OEM or simple 24VAC thermostat



HVAC Equipment Indoor Unit



How It Works

The ZCDC monitors the equipment for heating and cooling calls and monitors the downstairs temperature at its location and the upstairs temperature at the sensor.

If the upstairs and downstairs temperatures differ by 2 degrees or more, the ZCDC automatically distributes 2% more heating or cooling to the zone that needs it every 2 minutes.

To distribute more heating or cooling upstairs, the upstairs damper fully opens and the downstairs damper partially closes, forcing more heating or cooling to the upstairs zone. To distribute more heating or cooling downstairs, the downstairs damper fully opens and the upstairs damper partially closes, forcing more heating or cooling to the downstairs zone.

The ZCDC system dynamically adjusts the dampers to find the right distribution of heating or cooling to provide a comfortable home and save energy in every season.

Ordering Information

ZCDC	2-Zone, Automatic Comfort Control with LCD display and soft rubber keys.
DC3C	Damper Control Module with P&P connectors for connecting ZCDC and dampers. 40-foot P&P cable included.
TS4B	Temperature sensor for single sensor installations.
TS4B2	Temperature sensor for two-sensor installations. Includes two sensors.
R80CJ-XX	Round, Modulating Plug&Play Damper, 6 to 20-inch diameter (XX). Plug&Play cables supplied with damper.
RT80CJ-HHxDD	Rectangular, Modulating Plug&Play Damper available in 8x8 to 20x16 sizes. Plug&Play cables supplied with damper.

Limited 5-Year Warranty

The 5-year warranty is limited to the repair or replacement of defective product due to parts failure or defective workmanship.



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