

## 6 Zone HVAC Control Unit

- RS232 or RS485 Communications
- 6 Independent Zones
- Uses TS15/36 Wall Display Units
- Outside Temperature Sensor Input
- 3-Wire Zone Damper Outputs
- Vent Damper Output
- Standard or Heat Pump HVAC System
- Multi-stage Support
- Auto Changeover
- LED Status Indicators on All Outputs
- Optional Hydronic/Radiant Zone Outputs
- *CommStar* Network and WinEVM Compatible



### HVAC Zone Control Unit

The ZC6R HVAC Zone Control Unit is a complete zoning solution for residential style forced air Heating/Cooling systems up to 5 tons. It provides 6 fully independent zones on a single HVAC mechanical system.

### Zone Wall Display Units

Each zone is controlled by a TS15 or TS36 wall display unit. These user interfaces provide complete control of each zone, including Setpoint, Zone Mode, and Fan Mode. Each zones can be set to any mode, Off, Heat Cool or Auto, independent of other zones.

### Auto Changeover Feature

The system features auto changeover from heating to cooling. Heating is given priority and as soon as all zones in the heating mode satisfy, the system will switch over to satisfy the cooling calls. Truly a set and forget zone system.

### HVAC System Compatibility

The ZC6R works with either Standard Gas/Electric or Heat Pump HVAC systems. Typically a maximum 5 ton/2000 cfm systems. Heating and Cooling systems can be powered by separate transformers (RH and RC inputs).

Standard Systems features:

- Multi-stage: 2 stage heating, 2 stage cooling
- Selectable Auto Fan or Fan with heat operation

Heat Pump Systems features:

- Multi-stage: 3 stage heat and 2 stage cool
- Selectable Changeover with cooling or Changeover with heating

**Zone Dampers** The ZC6R zone damper relay outputs are 3 wire Power Open/Power Close. Contact rating is 1 amp. 2 wire normally open/spring return dampers may be used with the unit. It is recommended that the 3 wire RCS RDMNO-FP series dampers be used for best results. RD series dampers draw .5A each, RDM dampers draw .1A each.

**Vent Damper** The vent damper output is a 3 wire power open/power close relay for a fresh air vent damper.

**Outside Temperature Sensor** A remote outside temperature sensor can be connected to the ZC6R. The outside temperature information will be displayed on the Wall Display Units and can be requested by the network. Refer to OS10 sensor info.

**Serial Communications** The ZC6R has models either RS232 or RS485 serial communications. Communications parameters are 9600 Baud, No parity, 8 data bits, and 1 stop bit. RS485 communication is compatible with *CommStar* network controllers.

**Wiring:** The Wall Display Units are 4 wire and can be wired with Cat 3 or 5 wiring (up to 500 Ft). The HVAC system and Damper wiring is typically thermostat wiring (18Ga, Solid).

**Power:** 24VAC TRANSFORMER REQUIRED (NOT INCLUDED). The transformer VA rating should be determined by the total damper load plus wall display unit load. Add another 100 mA for control unit itself. For a fully loaded 6 zone system with 6 dampers, use a 75VA transformer.

**Size:** 12"x9"x 1.75"

Ordering Information::	Model	Description	Part Number
	ZC6R-485	6 Zone Control Unit with RS485 interface	001-00324
	ZC6R-232	6 Zone Control Unit with RS232 interface	001-00359

System Diagram

