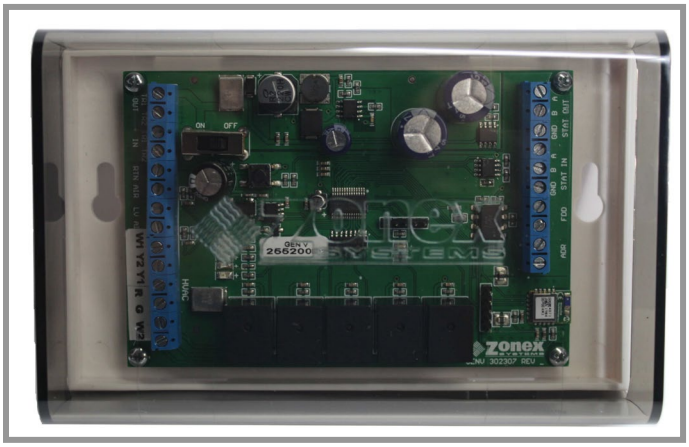
GEN V - SYSTEM CONTROLLER

SUBMITTAL



GEN V

System Controller

DESCRIPTION

The *GEN V* is a microcontroller based, auto changeover Universal Gas/Electric or Heat Pump system controller (Part # GEN V). The *GEN V* controls a zoned 2H/2C Gas/Electric HVAC unit or 3H/2C zoned Heat Pump unit and supports ADR and FDD requirements, along with fan control strategies to insure pre and post building purge and communicates with and supports up to 20 zones, utilizing pressure dependent, modulating dampers.

Standalone units may also be networked in and controlled from one central location using the SATouchX thermostat on each RTU or Split system.

The *GEN V* gathers information every 60 seconds from each thermostat in the system over a 2-wire data link.

The *GEN V* is equipped with integrated capacity control and High and Low temperature limits to protect compressors and heat exchanger. Outside air and return Air sensors are also provided. The HVAC unit is staged based on leaving air temperature and time. Auto changeover operation is vote based, predicated on a first call, first served, majority wins on changeover algorithm.

When the current mode callers are satisfied, a four-minute purge cycle is initiated prior to mode change-over.

The *GEN V* communicates with an EzTouchV HUB thermostat that allows configuration of *GEN V* controller along with every zone stat controlling modulating dampers or stand-alone units. From the Hub thermostat you can monitor communications and operations of the entire system. Modify zone thermostat set points individually or globally, set a global or individual schedule per zone and vacation schedules. The system operation meets Title 24 requirements.

Additional control strategies, including variance from setpoint, are also selectable features to initiate changeover.

The *GEN V* provides a software-based feature to assign priority. A priority vote of 0, 1, 2, or 3 votes may be established for every stat in the system at the *GEN V* controller.

The *GEN V* controller is equipped with a lock / unlock feature providing a central point to remotely lock all the EzTouchX's in the system. Locked thermostats will support a +/- 2° local adjustment or 0° variance. Each thermostat also supports a 2-8 hour override during unoccupied periods.

An on-board diagnostic feature identifies and leads the Installer to wiring errors quickly, if required.

TECHNICAL DATA

Electrical
Supply Voltage: 24vac
Power consumption: 0.7 VA
Inputs:
24vac
1 Temperature Sensing Thermistor
Outputs:
24vac
5 SPST dry contacts, 1A @ 24vac
Fuse protection: Use Fused Transformer

Environmental
Operating temperature*:* 32 to 160° F (0 to 71° C)
Operating humidity: 10-95**%,** non-condensing
Storage temperature: 0 to 160° F (-18 to 71° C)

General
Communications: 2 wire Plenum rated twisted pair Zonex Wire
Enclosure Dimensions: 4" H x 6 1/8" W x 1 3/4" D

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