#### **GEN V - SYSTEM CONTROLLER**

## SUBMITTAL



### **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. It supports A2L, ADR & 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 via a 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. Leaving 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 is 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.



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The GEN V provides a logic-based feature to assign priority to each thermostat. A priority vote of 0, 1, 2, or 3 votes may be assigned to each thermostat in the system at the HUB stat.

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 from set point. Each thermostat also supports a 2-8 hour override during unoccupied periods.

An on-board diagnostic feature quickly identifies and leads the installer to wiring errors quickly.

#### TECHNICAL DATA

Electrical

Supply Voltage: 24 VAC Power consumption: 0.7 VA

Inputs:

24 VAC

2 Temperature Sensing Thermistor

Outputs: 24vac

5 SPST dry contacts, 1A @ 24 VAC

ADR, FDD and A2L

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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