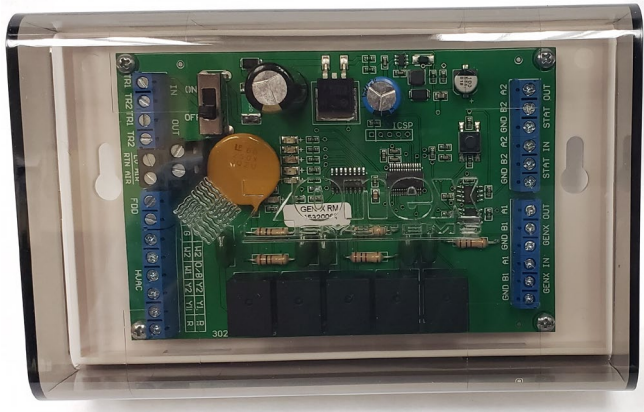


GEN X- RM ADD-ON VVT SYSTEM CONTROLLER

SUBMITTAL



GEN X-RM **System Controller** **To Expand System Capability**

DESCRIPTION

The GEN X-RM is a microcontroller based, auto changeover Universal Gas/Electric or Heat Pump system controller (Part # GEN X-RM). The GEN X-RM controls units that communicate with the GEN X system that will control a zoned 2H/2C Gas/Electric unit or 3H/2C zoned Heat Pump unit and communicates with and supports up to 20 zones per GEN X-RM, utilizing pressure dependent, modulating dampers and thermostats. GEN X-RM communicates with the GEN X communications hub via (RS485) communication loop and is accessed through the mobile app via your mobile phone, tablet, or the internet.

The GEN X gathers information every 60 seconds from each thermostat (EzTouchX), or standalone thermostats (SATouchX) to control non-zoned units). The thermostats communicate with the system over a 2-wire data link directing control-based decisions to the HVAC equipment.

The GEN X is powered with one 24V/100VA transformer, which also powers all dampers and thermostats in the system. Power from the controller, along with a 2-wire twisted pair communications loop, is daisy chained from thermostat to thermostat to streamline installation & system communications.

The GEN X-RM is equipped with integrated capacity control and High and Low temperature limits to protect compressors and heat exchanger. Supply 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.

Additional control strategies are established on the APP based communications hub which shall interact and initiate control decisions with the GEN X system controller and each thermostat or remote sensor in the system.

TECHNICAL DATA

Electrical

Supply Voltage: 24vac

Power consumption: 0.7 VA

Inputs:

24vac

2 Temperature Sensing Thermistors

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: 6 ¼" x 4 ¼" x 1"

7/11/2022