

GEN XV Communicating SYSTEM CONTROLLER

SUBMITTAL



GEN XV Wi-Fi Mobile APP based System Controller

DESCRIPTION

The GEN XV is a microcontroller based, auto changeover Universal system controller (Part # GEN XV). The GEN XV controls a fan coil or indoor unit in VRF applications and supports up to 20 energy saving pressure independent self-balancing Smart Air Valves (SAV). Communications hub is APP based and accessed via mobile phone, tablets, or web browser.

The GEN XV gathers information every 60 seconds from each thermostat (EzTouchX) that communicates with Smart Air Valves over a 2-wire data link directing control-based decisions to the fan coil or indoor unit.

The GEN XV is powered with one 24 V 100VA transformer, which also powers all Smart Air Valves (SAV) and thermostats in the system. Power from the controller, along with a 2-wire twisted pair communications loop, is daisy chained from SAV to SAV and thermostat to thermostat to streamline installation and system communications.

The GEN XV is equipped with leaving air, return air, and outside air sensors. Capacity control is governed by the VRF unit's internal high & low limits. Auto changeover operation is vote based, predicated on a first call, first served, majority wins on changeover algorithm.

The Gen XV is expandable with up to 20 additional VRF fan coils using the add-on GEN X RMV controller that is daisy chained via the (RS485) communications loop. Each GEN X RMV supports up to 20 Smart Air Valves (SAV) per fan coil.

TECHNICAL DATA

Electrical

Supply Voltage: 24vac

Power consumption: 0.7 VA

Inputs:

24vac

3 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"

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