DIGI3UEL UNIVERSAL 3-ZONE CONTROLLER

SUBMITTAL





DIGI3UEL Universal Gas Electric/Heat Pump 3-Zone Controller

DESCRIPTION

The DIGI3UEL is a microprocessor based, auto changeover 1H/1C GE or 2H/1C HP system controller. The DIGI3UEL supports up to three zones utilizing pressure dependent, two position motorized dampers. Mode management is vote initiated, based upon first called first served, with an opposite mode caller to initiate a changeover sequence. Upon a thermostat call for the opposite mode, a fifteen-minute cycle timer is initiated in an attempt to satisfy current mode callers. Upon time completion, a successive three-minute purge cycle is initiated prior to mode changeover.

The DIGI3UEL uses a LAT sensor to control leaving air temperature and protect coil from freezing, heat exchanger from overheating or high limits from being exceeded on the heat pump.

The DIGI3UEL can be field configured for either GE or HP operation. By moving the Jumper for GE/HP, controller is reset for desired operation. If controller will control a B mode system, the O/B jumper will need to be placed in the B position.

ORDERING INFORMATION

Part No. Description

DIGI3UEL Universal 3-zone controller with

LAT sensor included

Electrical:

Supply Voltage: 24vac **Power consumption:** 3.0 VA

nputs:

- Digital leaving air temperature sensor
- 3- digital / mechanical gas / electric thermostats (DIGI3U uses GE thermostats for GE and HP applications)

Outputs:

• 4- SPST dry contacts, 2A @ 24vac

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:

Dimensions: 6" H x 9 3/4" W x 1 1/2" D

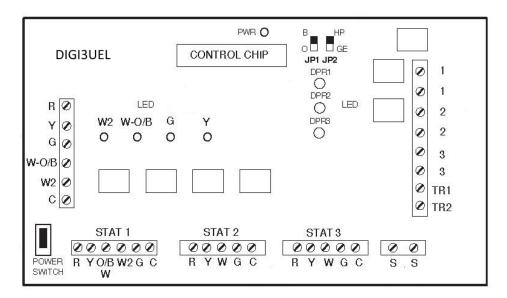
Terminal Functions

R 24 volt in C 24 volt common Y Compressor W/OB Heat or Reversing valve W2 Auxiliary heat G Fan

Rev 8/21/15

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TERMINAL FUNCTIONS



OUTPUTS:

Equipment terminal strip

+/- Nominal 5V DC to leaving air sensor, LAT

W2- Auxiliary heat relay output

G- Fan relay output

Y1- Compressor first stage output

O/B- Reversing valve output

R- 24vac input from equipment transformer

C- 24vac common input from equipment transformer

<u>FEATURES</u>

- Intelligent time and temperature staging
- On board leaving air temperature control
- Auto changeover controller
- Supports 2-3 zones
- Uses standard 18 gauge thermostat wire
- 24vac operation
- Automatic purge mode
- LED status indicators for all system functions
- Dampers can be slaved for larger air volume requirements
- Commercial and residential application
- Initiate Auto / On fan control from any thermostat

Damper terminal strip

1/1-3/3- 24vac output to power close damper

TR1- 24vac damper power input, from external transformer

transformer

TR2- 24vac damper common, from external transformer

THERMOSTAT INPUTS:

R- 24vac input.

C- 24vac common (not required with all thermostats)

G- Fan relay input

Y- Cooling / heating input

O/B- Reversing valve / mode input

W- Heating input

W2- 2nd stage heat / emergency heat