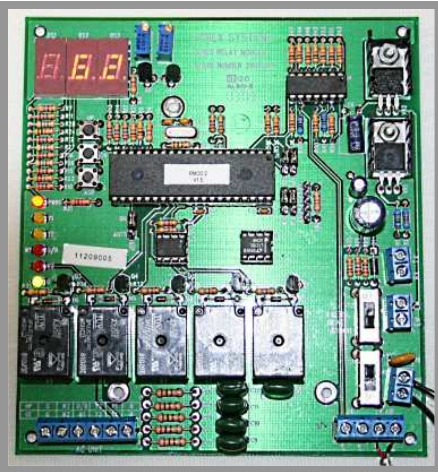


RMOD II UNIT RELAY MODULE



SUBMITTAL



RMOD II Unit Relay Module *HVAC and ModStat Controller*

DESCRIPTION

The Zonex Systems **RMOD** Relay Module is a microprocessor based, digital communicating relay module used in the *Zonex Commander (Plus)* control system.

The RMOD controls a zoned 2H/2C Gas/Electric HVAC unit or 3H/2C zoned Heat Pump unit and manages up to 20 zone thermostats.

The RMOD communicates with the Command Center and ModStat or MODS2 thermostats assigned to it. Each thermostat can send a heat or cool call to the RMOD. The RMOD polls the number of heat or cool calls and turns the HVAC unit on based on the majority of calls.

The HVAC unit is staged based on leaving air temperature. If communication is lost for 8 minutes, the RMOD will control the HVAC unit based on return air temperature. The default set points are 70 heat and 75 cool.

The RMOD comes with two analog DC sensors (LAT) for supply air and return air to monitor and display temperatures on the RMOD or remotely on the *ZonexCommander (Plus)* software.

TECHNICAL DATA

Electrical

Supply Voltage: 24vac

Power Consumption: 20 VA max.

Inputs:

- 2 – 5 V dc analog air temperature sensors
- 1 – RS 485 communication link terminal
- 24vac power terminal

Outputs:

- 5 – 1 amp, relays

Environmental

Operating temperature: 25° to 125°F (0 to 71°C)

Operating humidity: 5% to 95%, non-condensing

General

Communication: RS-485 twisted pair

Enclosure: NEMA 1

Enclosure dimensions: 7" H x 7" W x 2.5" D

Rev 1/22/10

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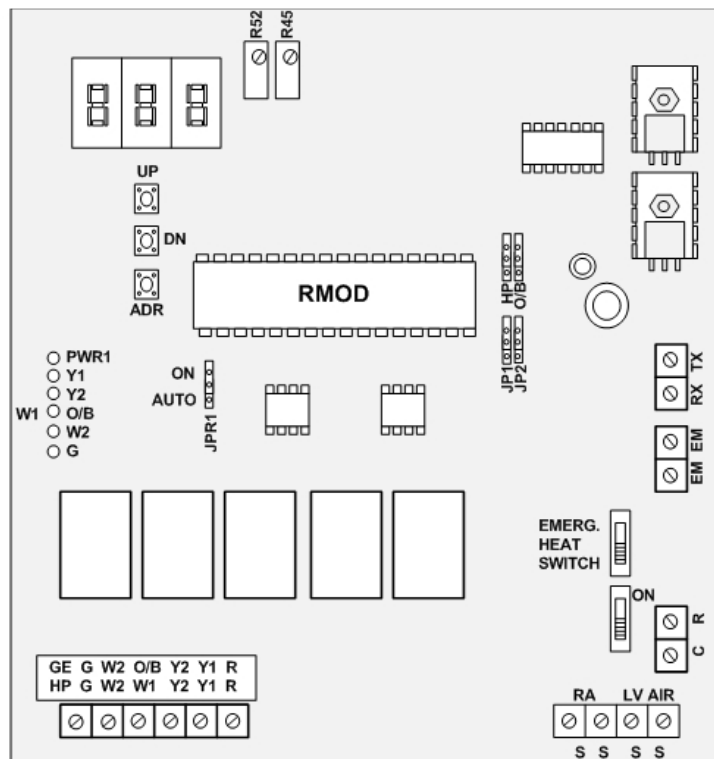
FEATURES

- Controls 1 - 2H/2C HVAC Gas/Electric unit or 1 - 3H/2C Heat Pump unit with up to 20 zones
- Up to 4 **RMODs** can be linked to 1 Command Center
- LED display
 - Supply Air
 - Return Air
 - Address #
- Adjustable high and low temperature limits
- Unit staging based on leaving air temperature
- Non-volatile memory
- Power and unit status LEDs

ORDERING INFORMATION

| <u>Part No.</u> | <u>Description</u> |
|-----------------|--------------------|
| RMOD | Unit Relay Module |

TERMINAL FUNCTIONS



RMOD

- TX** – Data transmit
- RX** – Data receive
- C** – 24vac power common
- R** – 24vac power input
- RA** – Mixed/return air sensor input
- LV** – Leaving/supply air sensor input
- R45** – MIX calibration
- R52** – LV calibration

Gas/Electric

- G** – Fan output
- W2** – Stage 2 heat output
- W1** – Stage 1 heat output
- Y2** – Stage 2 cool output
- Y1** – Stage 1 cool output
- R** – 24vac from HVAC unit transformer

Heat Pump

- G** – Fan output
- W2** – Aux heat output
- O/B** – Reversing valve signal
- Y2** – Stage 2 compressor
- Y1** – Stage 1 compressor
- R** – 24vac from HVAC unit transformer