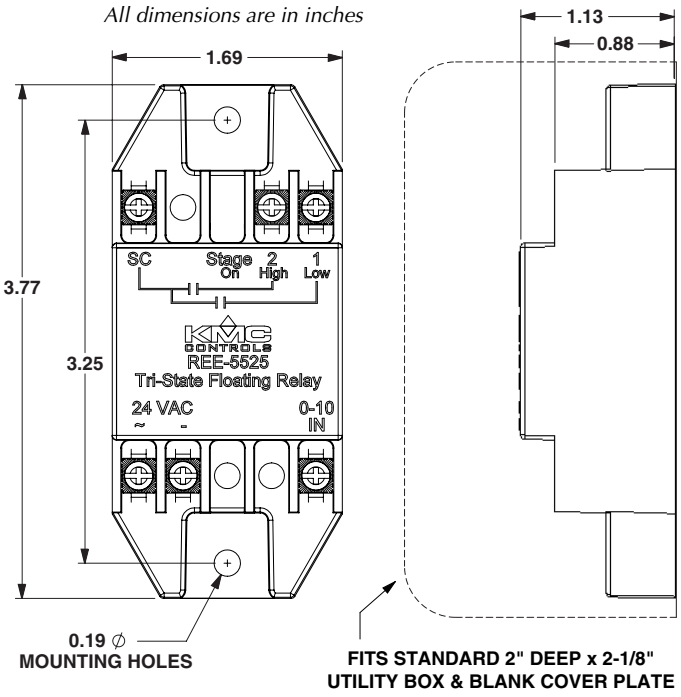
Installation Guide

Mounting

The module may be mounted directly to a control box surface or in a 2 x 4" electrical handy box. Add a blank cover to conceal the module if desired.

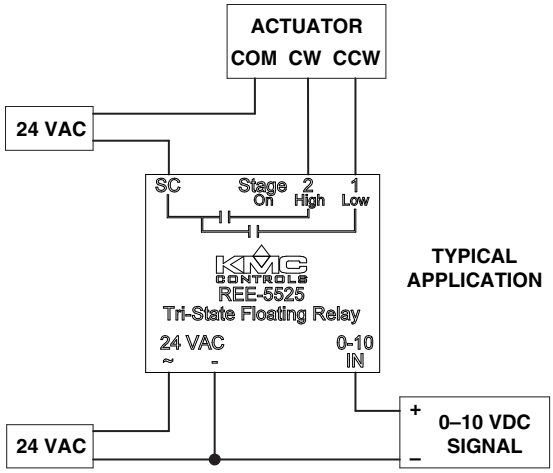


Connections and Wiring

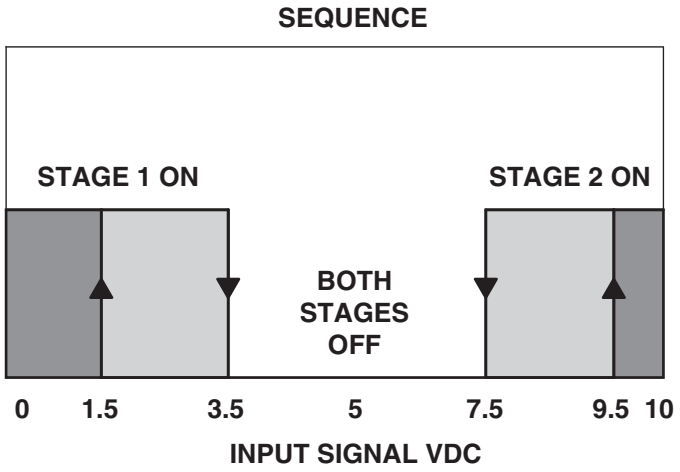
Connect as shown. Supply the relay with 24 VAC (+20%/–15%, Class 2 only). (Use wire size of 14 to 22 AWG, stranded.)

NOTE: The 24 VAC sources can be the same or separate, with no regard to phasing.

NOTE: Triac outputs are for 24 VAC loads only. Outputs are optically isolated from the control 24 VAC power.



Sequence



The stage sequence operates in this manner:

- Stage **1** turns on at or below 1.5 VDC* and off at or above 3.5 VDC. (It is on at 0 VDC.)
- Stage **2** turns on at or above 9.5 VDC* and turns off at or below 7.5 VDC. (It is on at 10 VDC.)
- **Both** outputs are off between 3.5 and 7.5 VDC.

*NOTE: In the **dark** grey regions of the chart, the stage is definitely **on** for the given voltage. In the **light** grey regions, however, on or off **depends** on the previous state. For example, at 2 VDC, Stage 1 will be on if the previous voltage was 0 VDC (Stage 1 on) but off if the previous voltage was 5 VDC (Stage 1 off).

Specifications

Supply Voltage	24 VAC (+20%/–15%) @ 1 VA plus output loads, Class 2 only
Input Signal	0 to 10 VDC
Switching Differential	2 VDC (see Sequence chart)
Output Types	Optically isolated triacs, zero crossing
Output Capacity	30 VAC max., 12 VA
Connections	Plated screw terminals
Wire Size	14–22 AWG, stranded
Material	Beige flame-retardant plastic
Weight	2 oz. (57 grams)
Approvals	SASO PCP Registration KSA R-103263
Temperature Limits	
Operating	32 to 120° F (0 to 49° C)
Shipping	–40 to 160° F (–40 to 71° C)

Troubleshooting

- Check the wiring.
- Check the voltage from the controller, measured from Terminal – (under 24 VAC) to Terminal 0–10 IN. (See the Sequence chart on the previous page.)
- Check the voltage across the triac and load. (See the chart below.)

Stage Status	Normal Triac Voltage (Approximate and With Load)	
	Across **Load** (Actuator Common to Terminal 1 or 2)	Across **Triac** (Terminal SC to Terminal 1 or 2)
On	24 VAC	1 VAC
BOTH Off	0 VAC	24 VAC

NOTE: Triac outputs are for 24 VAC loads only.

Maintenance

No routine maintenance is required, however protection from extremes of humidity and dirt is recommended. Careful installation will also ensure long term reliability and performance.

Important Notices

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