



The Viconics R851B/R851V series step controller is designed for cost effective, precise modulation of multi-stage control application. A common application is a multi step electric boiler.

An integrated vernier control output will give a precise and full modulation of the load from 0 to 100% of the total capacity.

Available Models

Model	Boiler application	Heater application	4 stage unit control	8 stage unit control
R851B-4	•		•	
R851B-8	•			•
R851V-4		•	•	
R851V-8		•		•

Features And Benefits

Features	Benefits
Microcomputer-based design	Accuracy and reliability
Adjustable step-up and step-down time delay	Tailored to exact application
Adjustable Vernier ratio	Simplifies design of proportional stage
0-10 Vdc analog Vernier output	Permits use of SCR power controller
Up to 16 stages	One product family can handle all applications
Progressive or linear sequencing	Increased flexibility
Test button	Quick troubleshooting

Dip Switch Configuration

Using input dip switches:

Input signal	S1	S2	S3	S4
0 to 10 Vdc control signal (2 to 10 Vdc control range)	OFF	OFF	OFF	ON
4 to 20 mA control signal	OFF	OFF	ON	OFF
0 to 135 W control signal	ON	ON	OFF	OFF

Using control dip switches:

Sequence of operation	S1	Vernier stage (on R851V)	S2	Step down interstage and minimum time ON (on R851B)	S2
FIFO (First in first out)	ON	Vdc pulsed signal (SSR)	ON	5 seconds	ON
LIFO (Last in first out)	OFF	0-10 Vdc (SCR)	OFF	2 seconds	OFF

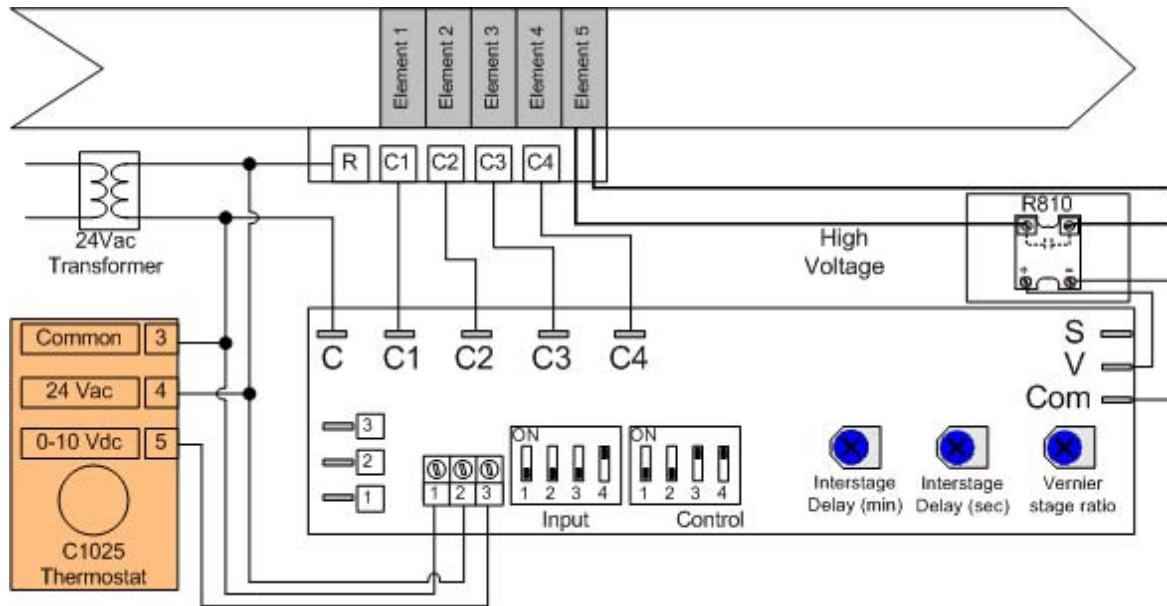
Number of stages	S3	S4
1	OFF	OFF
2	ON	OFF
3	OFF	ON
4	ON	ON

***4 stages model**

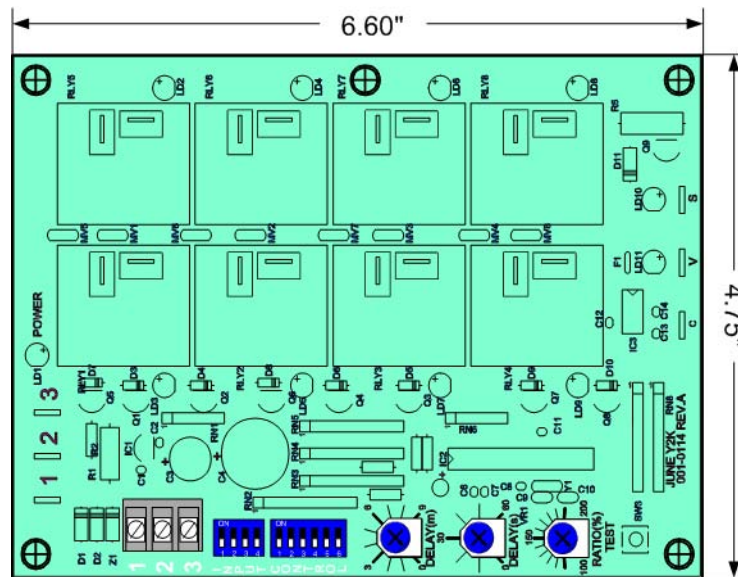
Number of stages	S3	S4	S5	S6
1	OFF	OFF	OFF	OFF
2	ON	OFF	OFF	OFF
3	OFF	ON	OFF	OFF
4	ON	ON	OFF	OFF
5	OFF	OFF	ON	OFF
6	ON	OFF	ON	OFF
7	OFF	ON	ON	OFF
8	ON	ON	ON	OFF

***8 stages model**

Five Stages Electric Duct Heater With A C1025 Thermostat



Dimensions



Specifications

- Operating conditions:** 0°C to 80°C (32°F to 176°F) 0 % to 95 % R.H. non-condensing
- Relay outputs:** Pilot duty: Motor load:
 - 24 - 120 Vac – 720 VA - 120 Vac – 1 HP
 - 240 Vac – 690 VA - 240 Vac – 2 HP
- Vernier stage:** 0 to 10 Vdc, 5 mA max.
- Input impedance:** 0 to 10 Vdc into 2Kohms minimum
- Power supply:** 24 Vac -15%, +10% 50/60 Hz; up to 18 VA Use a Class 1 (properly fused) or Class 2, CSA or UL recognized transformer for power supply & relay outputs.
- UL recognized:** File # E212649