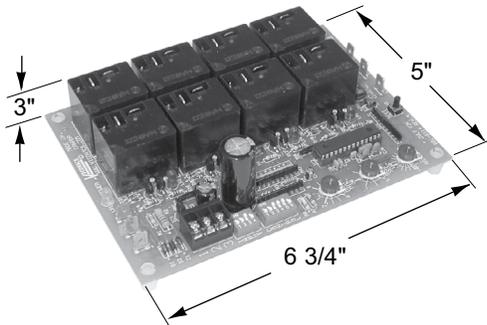


## Electronic Step Controls

A step control will bring on stages a few seconds apart. As the process reaches set point, stages will drop out until the heat required balances the losses. Under steady state operation some stages remain on and one or two stages may cycle to maintain straight line control.

### Series R851B Step Control

The R851B is frequently used in boiler and duct heater systems.

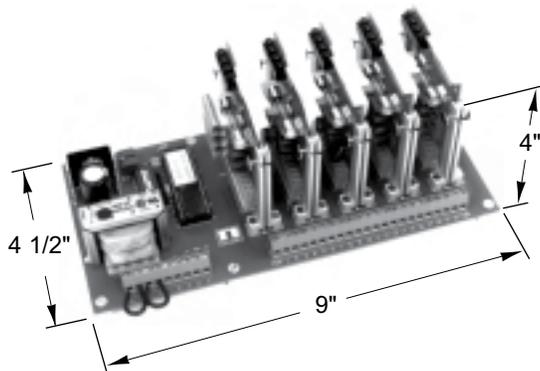


**R851B Series Step Control**

No. of Stages	Input Signal	Relay Rating	Power	Catalog Number
4	0-135 Ω	10 Amp		R815B-4
8	2-10VDC	240VAC	24VAC	R851B-8
	4-20 mA	MAX		

## Sequence

**Selectable:** First stage in, last stage out; or first stage in, first stage out.



## Base Load Step Controls

A base load step control is used with a number of contactors and an SCR. Contactors step on approximately 80% of the load while the last 20% is controlled by an SCR for very fine trimming.

A temperature control feeds a signal to the SCR. A signal from the SCR indicating the SCR is at 100% output will cause the step control to bring on stages. If the SCR is at zero output, stages will drop out. As long as the SCR is modulating, base loads are neither added nor dropped out.

### 566 Series Step Control

The 566 base load step control is made up of a motherboard and 1 to 5 output boards, each with 4 outputs, for a maximum of 20 stages (as shown above).

Time delay between stages is independently adjustable for up and down sequencing from 1 to 200 seconds per stage. This step control can operate in base load control mode by receiving a signal from an SCR. It can also operate in standard step control mode receiving process signals directly from a control.

**566 Series Step Control Mother Board with Relay Boards (4 Per Card)**

No. of Stages	Input Signal	Relay Rating	Power	Catalog Number
4				566-4
8				566-8
12	0 - 135 Ω	24 - 120 Amp	120VAC	566-12
16	4 - 20 mA	2 Amp Max		
20	0 - 10V (SCR)	Per Stage		566-16
				566-20

## To Order Specify

Quantity, part number, input and number of stages.

Electronic, Baseload, R851B & Series 566