

Contactor Control Panels

Heatrex can provide a control system for any electric process heating application. Our experienced engineering staff can design control systems ranging from ON/OFF logic to full SCR with PID logic. Optional features include ramp/soak, computer interface capability and various control schemes as required.

Heatrex offers two standard control panel designs: Full SCR PID control and ON/OFF contactor control. All components are factory mounted and wired in compliance with the National Electric Code.

These charts are a sample of standard control panel designs. Custom control panels, designed specifically for a customer's application, are available.

A Vernier type control panel can also be supplied. Vernier type control utilizes contactors, one SCR controller, and a microprocessor-based sequencer. The sequencer controls the staging of the contactors and the SCR controller. The SCR controller serves to fill in the gaps between the step-controlled stages. Vernier type control is not quite as accurate as full SCR control, but more accurate than contactor (step) control.

This contactor-based system with ON/OFF process temperature control is recommended for less demanding applications. Systems with two or more heating stages utilize an electronic sequencer (step controller), driven by a proportional output temperature controller to minimize the amount of load cycling while providing good outlet temperature control.

Standard Features:

- Microprocessor-based sequencer (for panels with two or more heating stages)
- Indicating PID temperature controller (adjustable process temperature with thermocouple input)
- NEMA 12 painted steel enclosure, wall mount unless otherwise noted
- Overtemperature controller (adjustable temperature limit with thermocouple input)
- Door interlock disconnect switch
- Manual reset pushbutton with built-in pilot light (red) for visual "OVERTEMPERATURE" alarm
- Selector switch – ON/OFF with built-in pilot light (green) for "POWER ON" indication
- Control power transformer
- Disconnecting magnetic contactors
- Circuit fusing

Amps	No. of Circuits	Amps Per Circuit	Maximum KW		Approximate Dimensions (Inches)			Estimated Weight (lb.)
			240V/3Ph	480V/3Ph	Height	Width	Depth	
48	1	48	19	39	24	24	8	85
96	2	48	39	79	30	24	8	105
144	3	48	59	119	36	30	8	160
192	4	48	79	159	42	30	8	175
240	5	48	99	199	48	36	8	260
288	6	48	119	239	48	36	8	265
336	7	48	139	279	60	36	8	320
384	8	48	159	319	60	36	8	330
432*	9	48	179	359	60	48	12	585
480*	10	48	199	399	60	48	12	600
528*	11	48	219	438	60	60	12	680
576*	12	48	239	478	60	60	12	685
624*	13	48	259	518	72	60	12	800
672*	14	48	279	558	72	60	12	805
720*	15	48	299	598	72	60	12	815
768*	16	48	319	638	72	72	12	930
816*	17	48	339	678	72	72	12	945
864*	18	48	359	718	72	72	12	950
912*	19	48	379	758	72	72	12	960
960*	20	48	399	798	72	72	12	965