



**Heated column enclosures**

Heated column enclosures allow a column to be operated at temperatures independent of other controlled zones in the instrument. They are similar in construction to our heated valve enclosures (*page 201*), except instead of a valve heater block they contain a column mandrel which will accept 1/8" columns up to 10' long. The HCE2 can have a heated valve installed adjacent to the heated column, with a valve heater block ordered separately.

Includes one column mandrel, insulated enclosure, and heater assembly (standard heater block, heater cartridge, line cord). Standard voltage: 110 VAC. For a 230 VAC model, add -220 to the product number. Insulation is 1/2" thick, so internal dimensions are 1" smaller than the exterior size given below.

Capacity	Exterior dimensions (Interior approx 1" smaller)	Rating	Prod No
<b>Heated column enclosure</b>			
1 column	4" x 4-1/4" x 3-5/8"d	65W/350°C	HCE1
	4-1/4" x 5-1/8" x 3-5/8"d	65W/350°C	HCEB
	8" x 8" x 6"d	65W/350°C	HCEC
2 columns	8" x 5-1/4" x 4"d	65W/350°C	HCE2
<b>Column mandrel</b> (heater assembly not included with column mandrel)			CM

**ITC Instrumentation temperature controller**



The ITC is an isothermal proportional controller for use in the thermal systems common to analytical instrumentation, and is often used with heated valve enclosures. The desired temperature is set in 1°C increments on the front panel. A thermocouple sensor provides quick recognition of temperature changes. The power to the heater can be attenuated from 0-90% in 10% increments, an easy-to-use feature which improves temperature stability at the set point to 0.5°C. Maximum output current is 10 amps.

The ITC is available with a range of 0°C to 399°C, in 110 VAC or 230 VAC.

		Prod No
0°C to 399°C	110 VAC	ITC10399
	230 VAC	ITC10399-220
Replacement thermocouple		I-21014-01

**MORE INFORMATION**  
Heated valve enclosures . . . . . page 201