

HPLC Accessories Temperature Control

Eppendorf HPLC Temperature Control Systems

Column temperature control leads to:

- More reproducible retention times
- More stable baselines
- Faster analyses
- Less system wear

Column temperature control is essential to reproducible retention times and detector baseline stability in reversed phase, ion exchange, and size exclusion liquid chromatography. The temperature variation in most labs – a 3-4°C daily fluctuation – is sufficient to cause errors in quantification or peak identification, particularly in automated systems and systems incorporating temperature-sensitive detectors.

To enable you to design a temperature control system that best matches your needs, we offer these Eppendorf heater and control Model CH-500 incorporates both heat and control functions; Models CH-30, CH-430, and CH-460 heaters (next page) MUST be connected to a separate controller.

SPECIFICATIONS				
FOR TEMPERATURE CONTROLLERS				
Model:	CH-500 ¹	TC-45	TC-50	TC-55 ²
Temperature Range:	amb.-150°C	30-65°C	amb.-150°C	amb.-150°C
Readability:	0.1°C	5°C	0.1°C	0.01°C
Setability:	0.1°C	5°C	0.1°C	0.01°C
Set Control:	10 turn potentiometer	8 DIP switches	10 turn potentiometer	membrane switches or RS-232
Typical Stability:	±0.1°C	±0.1°C	±0.1°C	±0.01°C
Absolute Accuracy:	±1°C (50°C)	±1°C (50°C)	±1°C (50°C)	±1°C (50°C)
Display:	3 1/2 digit LED	DIP switches	4 digit LED	5 digit LED each
Power:	120/240VAC	120/240VAC	120/240VAC	120/240VAC
FOR COLUMN HEATERS				
Model:	CH-30, CH-500 ¹	CH-430	CH-460	
Temperature Range:	amb.-150°C	amb.-150°C	amb.-150°C	
Length: ³	≤30cm	≤30cm	≤50cm	
OD:	CH-30: ≤1/2" OD CH-500: two 1/2" OD plus two 1/8" OD	≤1/2" OD (four)	≤1/2" OD (four)	
Injector Heating:	No	Yes (two)	Yes (two)	
Power:	120/240VAC	120/240VAC	120/240VAC	
Sensor:	1000 ohm RTD	1000 ohm RTD	1000 ohm RTD	
Element:	125W	300W	500W	

¹ Heater/controller (combined).

² Model TC-55 can control 2 heaters independently.

³ Not including endfittings.

⁴ Heating channels for 1/8" columns can be used to heat solvent before it enters the injector.



CH-500 HPLC Column Heater System

This heater/controller essentially combines the features of the CH-30 heater and the TC-50 controller in a single unit. It includes Eppendorf's innovative reversible heating blocks and remote heater on/off capability. Alternatively, the heating channels for 1/8" columns can be used to heat solvent before it enters the injector.

CE/CSA/UL approved.

CH-500 HEATING COLUMN COMBINATIONS	
Two 1/4" x <30cm and two 1/8" x <30cm columns.	
One 3/8" x <30cm column and 1/4" x <30cm column and one 1/8" x <30cm column.	
One 1/2" x <30cm column and 1/4" x <30cm column and one 1/8" x <30cm column.	
Two 3/8" x <30cm columns.	
Two 1/2" x <30cm columns.	
One 3/8" x <30cm column and one 1/2" x <30cm column.	

DESCRIPTION	CAT. NO.	PRICE
CH-500 COLUMN HEATING SYSTEM		
120V	500844	
240V, with standard European cord	500852	
240V, with UK cord	500860	
REPLACEMENT HEATING BLOCKS FOR CH-500		
4" (pk. of 2)	500879	
1" (pk. of 2)	500895	

Order: 1.800.325.3010 Technical Service: 1.800.359.3041 Web: www.sigma-aldrich.com/supelco

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TC-45
56760-U

Eppendorf TC-45 Temperature Controller

This low-cost controller will control a CH-30, CH-430, or CH-460 Eppendorf heater from 30-65°C. Temperature is set via DIP switches in 5°C increments.

DESCRIPTION	CAT. NO.	PRICE
120V	56760-U	
240V ¹	500763	



CH-30
56766

Eppendorf CH-30 Column Heater

Holds one column up to 1/2" OD or two columns up to 3/8" OD. Maximum column length is 30cm (not including endfittings).

DESCRIPTION	CAT. NO.	PRICE
120V	56766	
240V ¹	500801	

TC-50
56762



Eppendorf TC-50 Temperature Controller

Controls a CH-30, CH-430, or CH-460 Eppendorf heater from ambient temperature to 150°C. Temperature is set via a 10 turn potentiometer. The set point and actual temperature are displayed on an LED display. Includes remote heater on/off capability and solid state control.

DESCRIPTION	CAT. NO.	PRICE
120V	56762	
240V ¹	500771	



CH-430
56768

Eppendorf CH-430 Column Heater

The model CH-430 column heater is like the model CH-30, except that it is wider, to accommodate up to four 30cm long columns (not including endfittings). The CH-430 heater also has provisions for heating two 7000 series Rheodyne valves.

DESCRIPTION	CAT. NO.	PRICE
120V	56768	
240V ¹	500828	

TC-55
56764



Eppendorf TC-55 Temperature Controller

This top-of-the-line controller will control up to two CH-30, CH-430, or CH-460 Eppendorf heaters, using microprocessor technology. Proportional heating is used to maintain very stable temperatures. Temperature is set via up/down membrane switches (1 set for each of 2 ovens).

Set point and actual temperature are displayed on an LED display. Includes an RS-232 interface for external control of temperature programming, recording, etc.

DESCRIPTION	CAT. NO.	PRICE
120V	56764	
240V ¹	500798	

Eppendorf CH-460 Column Heater

The model CH-460 is like the model CH-430, except that it is longer, to accommodate up to four 50cm long columns (not including endfittings). The CH-460 heater also has provisions for heating two 7000 series Rheodyne valves.

DESCRIPTION	CAT. NO.	PRICE
120V	56770-U	
240V ¹	500836	
COLUMN ENVELOPES FOR CH-30, CH-430, OR CH-460 COLUMN HEATERS		
1/4 OD (in.)	56772-U	
3/8 OD (in.)	56773	
1/2 OD (in.)	56774-U	

¹ Does not have a CE mark.