

# Thermostatic cabinets

## Application

- BOD determination
- microbiological research
- plant growing and microorganisms breeding at specified temperature
- storing infusion liquids and samples for physicochemical analysis



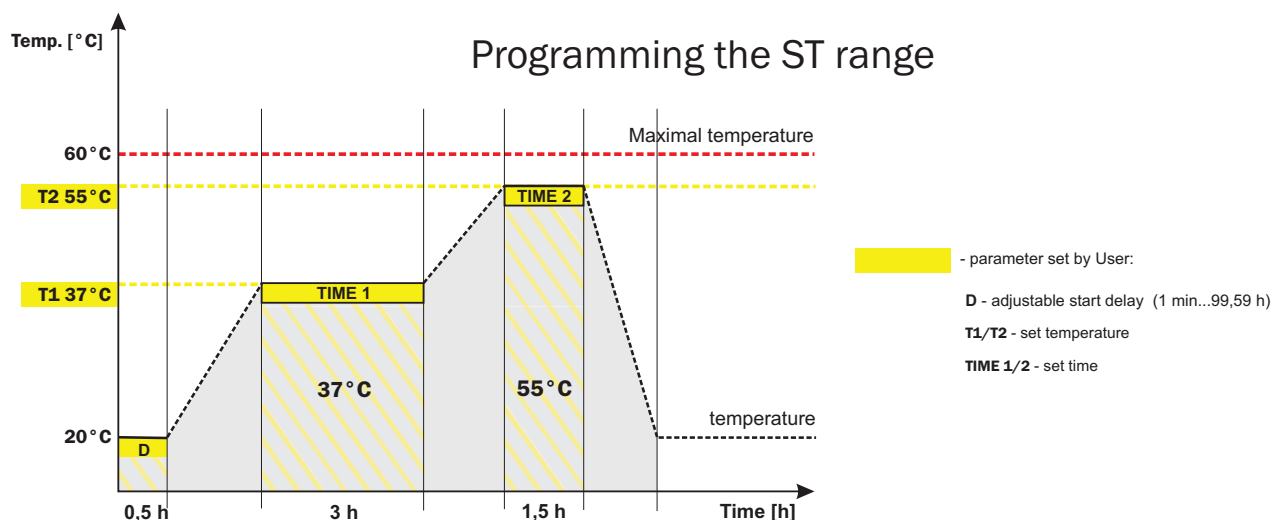
# Thermostatic cabinets

## Advantages

- single or double chamber versions
- aluminum (**NEW ST+ range!**) or stainless steel interior (depending on model)
- housing, depending on model: powder coated sheet, stainless steel linen finish (**INOX/G**) or polished (**INOX/S**)
- thermal insulation - polyurethane foam
- solid, glass (**ST\*/A option**) or double (**ST\*/C option**) door type
- forced air convection
- heating and cooling systems to hold set temperature regardless of ambient conditions
- defrosting function
- wheels with ST 1200 model
- three temperature ranges available
  - +3...+40°C
  - +3...+50°C (**ST/50 option**)
  - +3...+60°C (**ST/60 option**)
- LCD time and temperature display
- microprocessor time and temperature control
- temperature sensor fail alarm (see page 56)
- power failure control system (see page 56)
- real time clock
- sound alarm (see page 56)
- self-check function (auto control)
- automatic fan shut down after completing the program

## Program possibilities

- six segment temperature-time profile
- temperature or time program priority
- cycle run of the program
- 3 user programs memory
- adjustable start delay feature (from 1 min to 99,59 h)
- adjustable time of holding the set temperature (from 1 min to 99,59 h), or continuous operating
- recording min, average and max temperature value separately for each segment
- overview of set parameters during operating time
- over temperature sound alarm



All POL-EKO-APARATURA products can be provided with IQ, OQ, PQ qualifications (see page 70)



All POL-EKO-APARATURA products can be supplied with a calibration certificate issued by an accredited Measurement Laboratory. Further information is available on pages 69-70 and our website [www.pol-eko.eu](http://www.pol-eko.eu)

# Thermostatic cabinets



**NEW ST+ RANGE!!!**

Models ST 2...ST 5 were previously available with plastic interior. These models are available now as new “+” range with aluminum interior and adjustable shelves! Housing remains powder painted. New range of ST 2+...ST 5+ series gives additionally possibilities of any chambers combination due to the same base structure. Stainless steel interior and housing on request.

## Standard equipment

- solid door
- temperature range +3...+40 °C
- RS 232 interface; RS 232 cable must be purchased additionally (RSK)
- wire shelves (with slides set) in case of aluminum interior and stainless steel wire shelves in case of stainless steel interior
- manufacturer's test certificate at +37 °C
- operation manual in English and English menu (other languages on request)
- over temperature protection 1.0 class according to DIN 12880

## Options and accessories (icon description see page 51)










# ST Thermostatic cabinets

## Single chamber cabinets



### Available options

- ST/50** - extended temperature range to +50 °C
- ST/60** - extended temperature range to +60 °C
- ST\*/C** - internal glass door
- ST\*/A** - external glass door
- PLUS** - automatic defrosting during operating
- FOT** - photoperiodic system

Parameter		Model	ST 1+	ST 2+	ST 3+	ST 4+	ST 5+	ST 500	ST 700	ST 1200	
											
air convection			forced								
chamber capacity <sup>1</sup>	[l]		68	150	200	250	300	493	625	1365	
	[cu ft]		2,4	5,2	7,0	8,8	10,5	17,4	22,0	48,2	
door type			solid / glass or double <sup>2</sup> (option)								
temperature range	[°C]		+3...+40 / up to +50 or +60 (option)								
	[°F]		+37...+104/ up to +122 or +140 (option)								
controller			microprocessor with external display								
interior			aluminum (stainless steel on request)					aluminum / stainless steel			
housing			powder coated sheet (stainless steel on request)					powder coated sheet / stainless steel (INOX/G or INOX/S)		powder coated sheet / stainless steel (INOX/S)	
overall dims [mm]	width		550	600	600	600	600	635	725	1440	
	height		600	850	1050	1250	1450	2025	2025	2025	
	depth		650	600	600	600	600	810	860	860	
internal dims [mm]	width		470	520	520	520	520	510	600	1310	
	height		430	660	860	1060	1260	1510	1510	1510	
	depth		300	490	490	490	490	640	690	690	
nominal power [W]			160	170	170	330	330	400	400	550	
weight [kg]			30	48	52	61	66	105	115	195	
temperature resolution [°C]			every 0,1								
temperature fluctuation <sup>3</sup> at +37 °C [°C]			±0,2	±0,2	±0,3	±0,3	±0,3	±0,2	±0,2	±0,3	
over temperature protection			class 1.0 according to DIN 12880								
voltage 50/60 Hz [V]			110-120/220-240								
shelves fitted / max			2/2	3/4	3/4	4/6	4/7	3/11	3/11	2 x 3/11 <sup>4</sup>	
warranty			24 months								
manufacturer			POLEKO-APARATURA								

- 1 - working capacity of chamber can be smaller
- 2 - glass inside, solid outside
- 3 - fluctuation measured in centre of the chamber
- 4 - two columns with 3 shelves each

# Double chamber cabinets



## Available options








- ST/50** - extended temperature range up to +50 °C
- ST/60** - extended temperature range up to +60 °C
- ST\*/C** - internal glass door
- ST\*/A** - external glass door
- PLUS** - automatic defrosting during operating
- FOT** - photoperiodic system

## Example of configuration

To configure a double-chamber thermostatic cabinet, e.g.:

- upper chamber equipped with solid door and temperature up to +60 °C
- lower chamber equipped with double door and temperature up to +40 °C, you select:

for ST 1/1+: ST 1/1+ and ST/60 option for upper chamber + ST 1/C option for lower chamber

Parameter		Model	ST 1/1+	ST 1/1/1+	ST 2/2+	ST 2/3+	ST 2/4+	ST 3/3+	ST 350/350	
										
air convection			forced							
upper/lower <sup>1</sup> chamber capacity	[l]		68/68	68/68/68	150/150	150/200	150/250	200/200	294/294	
	[cu ft]		2,4/2,4	2,4/2,4/2,4	5,2/5,2	5,2/7,0	5,2/8,5	7,0/7,0	10,3/10,3	
door type			solid / glass or double <sup>3</sup> (option)							
temperature range	[ °C]		+3...+40 / up to +50 or +60 (option)							
	[ °F]		+37...+104/ up to 122 or +140 (option)							
controller			microprocessor with external display separate for each chamber							
interior			aluminum (stainless steel on request)							aluminum / stainless steel
housing			powder coated sheet (stainless steel on request)							powder coated sheet / stainless steel (INOX/S)
overall dims [mm]	width		550	550	600	600	600	600	720	
	height		1170	1740	1670	1870	2070	2070	2025	
	depth		600	600	600	600	600	600	860	
internal dims [mm] (each chamber)	width		470	470	520	520	520	520	600	
	height		430	430	660	660/860	860	660/1060	700	
	depth		300	300	490	490	490	490	700	
nominal power [W]			320	480	350	350	350	350	800	
weight [kg]			65	100	100	105	110	115	162	
temperature resolution [ °C]			every 0,1							
temperature fluctuation <sup>2</sup> at +37 °C [ °C]			±0,2	±0,2	±0,3	±0,3	±0,3	±0,3	±0,5	
over temperature protection			class 1.0 according to DIN 12880							
voltage 50/60Hz [V]			110-120/220-240							
shelves fitted / max (each chamber)			2/2	2/2	3/4	3/4	3/4	3/4	2/6	
warranty			24 months							
manufacturer			POL-EKO-APARATURA							

1 - working capacity of chamber can be smaller

2 - fluctuation measured in centre of the chamber

3 - glass inside, solid outside