

# Climatic chambers with energy-saving FIT LED phytotron system



*Climatic chambers with phytotron system placed in the door, side walls and fixed as over-shelf panel*

## Climatic chambers with FIT S phytotron system

- available TOP+ version
- temperature, humidity and illumination intensity control
- illumination system: day and night simulation system with intensity control (every 10%) placed in the side walls
- temperature range - lighting off: -10 to +60 °C
- temperature range - lighting on: +10 to +50 °C
- light colour selection
- illumination power of up to 15 000 LUX per shelf
- program priority: temperature or time



### Standard equipment

- double door (solid outside, glass inside)
- wheels with brakes
- RS 232 interface and USB port; RS 232 or USB cable must be purchased additionally (RSK or USBK)
- stainless steel wire shelves (2-6 pieces, depending on model) with slides set
- manufacturer's test certificate at 25 °C and 60% humidity
- operation manual in English and English menu (other languages on request)
- over temperature protection according to DIN 12880: class 3.3
- container for deionised water
- container for waste water
- open door alarm
- access port for external sensor (diameter: 30 mm)

## Climatic chambers with FIT P phytotron system

- available TOP+ version
- temperature, humidity and illumination intensity control
- illumination system: day and night simulation system with intensity control (every 10%) fixed as over-shelf panel
- temperature range - lighting off: -10 to +60 °C
- temperature range - lighting on: +10 to +50 °C
- light colour selection
- illumination power of up to 15 000 LUX per shelf
- program priority: temperature or time





## Climatic chambers with FIT DS phytotron system

- available TOP+ version
- temperature, humidity and illumination intensity control
- Illumination system: day and night simulation system with intensity control (every 10%) placed in the door and in the side walls
- temperature range - lighting off: -10 to +60 °C
- temperature range - lighting on: +10 to +50 °C
- light colour selection
- illumination power of up to 15 000 LUX per shelf
- program priority: temperature or time



### Program possibilities of the “TOP+” range

- multisegment temperature-time profile
- 7 days programming
- temperature and humidity calibration at 3 points
- password protected settings
- 20 user programs memory
- memory for data storage
- full colour touch screen
- USB port (for external memory e.g. pendrive)
- Ethernet

## Climatic chambers with FIT LED phytotron system










- available TOP+ version
- temperature, humidity and illumination intensity control
- Illumination system: day and night simulation system with intensity control fixed as LED over-shelf panel
- temperature range - lighting off: -10 to +60 °C
- temperature range - lighting on: +10 to +50 °C
- light colour selection
- illumination power of up to 15 000 LUX per shelf
- program priority: temperature or time

Climatic chambers with energy-saving FIT LED phytotron system use blue and red LEDs which are especially useful in plant growing. Most plants use daylight that is absorbed by chlorophyll most optimally in the blue portion of the electromagnetic spectrum, followed by the red portion.

This makes plant growing under lighting of these colours more economical than under any other colour, as the lighting energy is delivered in the spectrum that can be absorbed most efficiently. Thus, this solution preserves electric energy too.

Available soon!



Model		KK 115	KK 240	KK 350	KK 400	KK 500	KK 700	KK 750	KK 1200	KK 1450
Parameter										
air convection		forced								
chamber capacity <sup>1</sup>	[l]	115	245	335	424	493	625	749	1365	1460
	[cu ft]	115	245	335	424	493	625	749	1365	1460
door type		double (external solid, internal glass) / external glass (option)								
temperature range	[°C]	-10...+60 (with phytotron ON +10...+50)								
	[°F]	+14...+140 (with phytotron ON +50...+122)								
humidity range [%]		30...90 (with temperature range +10...+60)								
phytotron system** (available models)	FIT DS option	-	-	YES	-	YES	YES	-	-	-
	FIT P option	YES	YES	-	YES	YES	YES	YES	YES	YES
	FIT S option	-	-	-	-	YES	YES	-	-	-
	FIT LED option	-	-	-	-	YES	YES	-	YES	YES
controller		microprocessor with external display								
interior		acid-proof stainless steel according to DIN 1.4301								
housing		powder coated sheet / stainless steel (INOX/G)								
overall dims [mm] <sup>2</sup>	width	650	815	645	1015	645	735	1260	1470	1450
	height	1200	1490	2025	1740	2025	2025	1890	2000	1970
	depth	710	770	980	770	1025	1075	870	1075	1175
internal dims [mm]	width	460	600	500	800	510	600	1040	1310	1340
	height	540	800	1340	1040	1525	1510	1200	1510	1460
	depth	450	510	500	510	635	690	600	690	750
max shelf workload [kg]*	-	10	10	10	10	20	30	10	30	30
	PW version	50	100	100	100	100	100	100	100	100
max unit workload [kg]	-	60	90	100	120	100	150	140	300	300
	W version	120	300	on request	300	on request	on request	300	on request	on request
nominal power [W]	-	1000	1500	1400	2000	1600	1600	2500	2200	2200
	FIT version	1200	1800	2600	2300	2000	2000	2900	3000	3000
weight [kg]		90	140	125	185	130	170	275	220	230
temperature resolution [°C]		every 0,1								
over temperature protection		class 3.3								
voltage 50/60 Hz [V]		115/230								
wire shelf fitted/max <sup>3</sup>		2/7	3/10	3/11	3/14	3/11	3/11	5/16	2 x 3/11	2 x 3/11
over-shelf illumination panels (FIT P option) fitted/max <sup>3</sup>		1/1	1/2	-/-	1/2	1/3	1/3	1/2	1/3	1/3
max illumination power [lux]	FIT version	5000	10000	15000	15000	15000	15000	15000	15000	15000
warranty		24 months								
manufacturer		POL-EKO-APARATURA								

\* - at even surface workload  
 \*\* - FIT DS - lamps in door and walls  
 FIT P - over-shelf panel with lamps  
 FIT S - lamps in walls  
 FIT options can not be combined!

1 - working capacity of chamber can be smaller  
 2 - overall dims for units without FIT DS/FIT D option, dims of power cable (50 mm) and shelf for water container (250 mm) not included  
 3 - "fitted" number of shelves/panels fitted, included in price  
 - "max" number of shelves/panels which can be fitted