

Drying Incubators Sterilization **Convection Ovens Water Baths**



Incubators



Convection Ovens



Water Baths





Incubators and Ovens with new controller for each application

The new Incubator and ovens from Phoenix Instrument consists of two versions, Basic and professional. The two different controllers allow an easy setting of all operating parameters and optimal temperature control. The large backlit display clearly shows in every moment the temperature set and that one inside as well as other parameters.

The introduction of user friendly icons makes interpretation of the functions and commands extremely intuitive. Moreover the limited number of adjustment keys ensures operability very simple and intuitive.

All our instruments are environmental-friendly with reduced power consumption and improved protection.

All instruments will be supplied with a calibration report.



Basic

- · Wide backlit LCD display
- · Easy to read Icons
- Timer and continuous function
- · Visual and sound alarm
- Fan speed control
- · Program start delay
- · Safety temperature for sample protection



Professional

- 7 programs x 10 steps
- · Wide backlit LCD display
- · Easy to read Icons
- · Visual and sound alarm
- Fan speed control
- Repeatable working cycles
- · Safety temperature for sample protection
- Program start delay
- Safety temperature for sample protection



Natural convection oven

from +5 °C up to +300 °C

deal for everyday use in the processes of drying and sterilization, the natural convection ovens are characterized by a high load capacity and by the accurate temperature control.

The possibility to heat the samples up to $300 \,^{\circ}$ C allows any type of sterilization process. The minimum heating times, the heating power properly dimensioned and the perfect tightness of the seals, ensure low energy consumption in every application.



All products available as Basic- or Professional- Model



TIN-TN200

Please find accessories on last page

| Technical data | TIN-TN30 | TIN-TN50 | TIN-TN115 | TIN-TN200 |
|---------------------------------|-------------------|-------------------|-------------------|-------------------|
| Volume | 30 Liters | 50 Liters | 115 Liters | 200 Liters |
| Max. Temperature/Resolution | +200/0,1 °C | +300/0,1 °C | +300/0,1 °C | +300/0,1 °C |
| Temp. homogeneity at 150 °C | ±3,5 °C | ±3,5 °C | ±3,5 °C | ±4 °C |
| Temperature variation at 150 °C | ±0,5 °C | ±0,5 °C | ±0,5 °C | ±0,7 °C |
| Heating up time at 150 °C (min) | 14 | 16 | 18 | 20 |
| Timer | 99:59 / continous | 99:59 / continous | 99:59 / continous | 99:59 / continous |
| Int. Dimension (WxHxD) in mm | 320 x 320 x 285 | 400 x 420 x 330 | 520 x 495 x 450 | 650 x 640 x 495 |
| No. of shelves (standard/max) | 2/4 | 2/5 | 2/6 | 2/9 |
| Min. distance between shelves | 50 mm | 50 mm | 50 mm | 50 mm |
| Max. load of shelves (kg) | 10 | 15 | 20 | 20 |
| Voltage/Power | 230 V / 700 W | 230 V / 1000 W | 230 V / 1900 W | 230 V / 2100 W |
| Ext. Dimension (WxHxD) in mm | 460 x 660 x 530 | 660 x 630 x 470 | 790 x 750 x 600 | 915 x 905 x 600 |
| Weight (kg) | 40 | 53 | 74 | 103 |
| Safety class | 3,1 | 3.1 | 3.1 | 3.1 |
| | | | | |



Forced air oven

from +10 °C up to +300 °C

The forced air ovens TIN-TF 50, -TF 120,- TF 200 and -TF 400 control very efficiently the temperature starting from 10 ° C above ambient temperature up to 300 °C. The PID controller, with wide backlit color display, clearly shows in every moment the temperature set and that one inside as well as other parameters.

The forced air circulation, adjustable in three levels (High, Medium, Low), guarantees a perfect air replacement and homogeneity of temperature in every parts of the chamber. A through hole of 5 mm diameter supplied as standard on the top side of the oven permits to introduce an external probe for the check or certification of the temperature.





All products available as Basic- or Professional- Model



| Technical data Volume Max. Temperature/Resolution Temp. homogeneity at 150 °C Temperature variation at 150 °C Heating up time at 150 °C (min) Timer Int. Dimension (WxHxD) in mm No. of shelves (standard/max) Min. distance between shelves Max load of shelves (kg) | TIN-TF50 50 Liters +300/0,1 °C ±2% ±0,3 °C 20 99:59 / continous 400 x 415 x 310 2/5 50 mm | TIN-TF120 120 Liters +300/0,1 °C ±2% ±0,3 °C 24 99:59 / continous 520 x 530 x 435 2/7 50 mm | TIN-TF200 200 Liters +300/0,1 °C ±2% ±0,4 °C 30 99:59 / continous 645 x 650 x 495 2/9 50 mm 20 | TIN-TF400 400 Liters +300/0,1 °C ±2% ±0,5 °C 50 99:59 / continous 1000 x 800 x 500 2/10 50 mm |
|---|---|--|--|--|
| • | -, | - / | -, - | , |
| Timer | 99:59 / continous | 99:59 / continous | 99:59 / continous | 99:59 / continous |
| Int. Dimension (WxHxD) in mm | 400 x 415 x 310 | 520 x 530 x 435 | 645 x 650 x 495 | 1000 x 800 x 500 |
| No. of shelves (standard/max) | 2/5 | 2/7 | 2/9 | 2/10 |
| Min. distance between shelves | 50 mm | 50 mm | 50 mm | 50 mm |
| Max. load of shelves (kg) | 15 | 20 | 20 | 20 |
| Voltage/Power | 230 V / 980 W | 230 V / 1900 W | 230 V / 2400 W | 230 V / 3200 W |
| Ext. Dimension (WxHxD) in mm | 665 x 635 x 570 | 785 x 750 x 690 | 920 x 870 x 755 | 1260 x 1060 x 750 |
| Weight (kg) | 54 | 74 | 103 | 160 |
| Safety class | 3.1 | 3.1 | 3.1 | 3.1 |



Natural convection incubators

from +5 °c up to 70 °C

The organic materials used in the typical laboratory application require a constant and gentle heating. The temperature distribution in the incubators is obtained without forced air circulation but using only the natural convection, which does not stress the sample and allows its uniform growth.

The wide door glass window allows a constant check of the status of the samples inside the chamber without opening the door, thereby avoiding unnecessary heat loss and temperature changes.



TIN-IN16



TIN-IN35

All products available as Basic- or Professional- Model



TIN-IN55

| Technical data | TIN-IN16 | TIN-IN35 | TIN-IN55 |
|--------------------------------|-------------------|-------------------|-------------------|
| Volume | 16 Liters | 35 Liters | 55 Liters |
| Max. Temperature/Resolution | +70/0,1 °C | +70/0,1 °C | +70/0,1 °C |
| Temp. homogeneity at 37 °C | ±0,4 °C | ±0,4 °C | ±0,5 °C |
| Temperature variation at 37 °C | ±0,3 °C | ±0,3 °C | ±0,3 °C |
| Heating up time at 37 °C (min) | 18 | 22 | 25 |
| Timer | 99:59 / continous | 99:59 / continous | 99:59 / continous |
| Int. Dimension (WxHxD) in mm | 270 x 230 x 255 | 360 x 300 x 320 | 400 x 360 x 385 |
| No. of shelves (standard/max) | 2/6 | 2/6 | 2/5 |
| Min. distance between shelves | 25 mm | 30 mm | 50 mm |
| Max. load of shelves (kg) | 5 | 7,5 | 10 |
| Voltage/Power | 230 V / 85 W | 230 V / 125 W | 230 V / 250 W |
| Ext. Dimension (WxHxD) in mm | 505 x 370 x 400 | 595 x 440 x 460 | 635 x 500 x 545 |
| Weight (kg) | 23 | 33 | 42 |
| Safety class | 2 | 2 | 2 |



Natural convection Incubators

with higher volumes

ncubators with higher volume, thanks to the optimal placing of the heating elements, ensure high performance in homogeneity and stability of temperature and the proper incubation of the samples.

The difference from the smaller models is the presence of the double door, with the inner glass full-width, which ensures a perfect observation of the samples in the chamber without unnecessary heat losses.



| Technical data Volume Max. Temperature/Resolution Temp. homogeneity at 37 °C Temperature variation at 37 °C Heating up time at 37 °C (min) Timer Int. Dimension (WxHxD) in mm No. of shelves (standard/max) Min. distance between shelves Max. load of shelves (kg) Voltage/Power Ext. Dimension (WxHxD) in mm | TIN-IN120 120 Liters +70/0,1 °C ±0,5 °C ±0,3 °C 30 99:59 / continous 520 x 460 x 500 2/7 50 mm 10 230 V / 350 W 755 x 610 x 645 | TIN-IN200 200 Liters +70/0,1 °C ±0,5 °C ±0,3 °C 35 99:59 / continous 610 x 600 x 575 2/9 50 mm 10 230 V / 600 W 850 x 755 x 710 |
|--|---|---|
| 0 | | |
| Weight (kg) Safety class | 61 2 | 77 2 |



Water Bath

from RT+5 °C over romm temperature to +100 °C

The waterbaths are generally used in the laboratory to maintain the temperature of the samples constant. The waterbaths WB series, thanks to the maximum operating temperature of 100°C, meet the different needs of operators and therefore allow them to be used in numerous applications.

The model WB 22 pump ensures a faster and more uniform temperature distribution due to the recirculation pump which is equipped.



| Technical data | WB-12 | WB-22 | WB-22-P |
|-----------------------------------|-------------------|-------------------|-------------------|
| Volume | 12 Liters | 22 Liters | 22 Liters |
| Max. Temperature/Resolution | +100/0,1 °C | +100/0,1 °C | + 85/0,1 °C |
| Temp. homogeneity at 37 °C | ±0,5 °C | ±0,5 °C | ±0,2 °C |
| Temperature variation at 37 °C | ±0,1 °C | ±0,1 °C | ±0,1 °C |
| Timer | 99:59 / continous | 99:59 / continous | 99:59 / continous |
| Overheat control | yes | yes | yes |
| Int. Dimension (WxHxD) in mm | 390 x 220 | 490 x 290 | 490x 290 |
| Min. height with hud closed in mm | 150 | 150 | 150 |
| Voltage/Power | 230 V / 300 W | 230 V / 1100 W | 230 V / 1100 W |
| Ext. Dimension (WxHxD) in mm | 480 x 375 x 310 | 680 x 395 x 310 | 680 x 395 x 310 |
| Maximum capacity | 4 Modules | 8 Modules | 8 Modules |
| Weight (kg) | 12 | 18 | 19 |
| Safety class | 2 | 2 | 2 |



Accessories

For Ovens

| Steel wire shelf for TN 30 |
|--|
| Steel holed platform for TN 30 |
| Steel wire shelf for TN 50 / TF 50 |
| Steel holed platform for TN 50 / TF 50 |
| Steel wire shelf for TN 115 / TF 120 |
| Steel holed platform for TN 115 / TF 120 |
| Steel wire shelf for TN 200 / TF 200 |
| Steel holed platform for TN 200 / TF 200 |
| Steel wire shelf for TF 400 |
| Steel holed platform for TF 400 |
| Wheels for Model 200/400, Set (4 pcs.) |
| |

For Water Baths

| TIN-1001802 | Rack 1 for tubes Ø 13 mm / 20 positions |
|-------------|--|
| TIN-1001812 | Rack 2 for tubes Ø 18 mm / 20 positions |
| TIN-1001822 | Rack 3 for tubes Ø 31 mm / 5 positions |
| TIN-1001842 | Rack 4 for tubes Ø 56 mm / 8 positions (biberon) |
| TIN-1001852 | Rack 5 for blood bags / 5 positions |



Maximum modules in place

TIN-1001802





TIN-1001822

For Incubators

| TIN-1001112 | Steel wire shelf for IN 16 |
|-------------|-------------------------------|
| TIN-1001122 | Steel wire shelf for IN 35 |
| TIN-1001132 | Steel wire shelf for IN 55 |
| TIN-1001142 | Steel wire shelf for IN 120 |
| TIN-1001152 | Steel wire shelf for IN 200 |
| TIN-1001172 | Wheels for IN200 Set (4 pcs.) |
| | |



Steel wire shelf and holed platform



WB-12: equipped with 4 Modules



TIN-1001842



TINI-1001852

In addition to Water Baths, Incubators, Ovens Phoenix Instrument also offers Rotary Evaporator, Balances, Centrifuges, Liquid Handling, Stirrer, Mixer, Shakers, pH- and conductivity meter





TIN-1001812







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