

# Glass Oven B-585



en

# A multitude of possibilities in a minimum of space

With its unique design and simple operation, the Glass Oven B-585 opens up a wide range of possibilities for the laboratory. Small and medium sized test quantities in particular need to be dried quickly and carefully, using a method that can be reproduced – an ideal application for this flexible product. Depending on the configuration, substances can also be distilled, sublimated or freeze dried. A glass tube with an electrically conductive coating serves as the heating element. This heats the whole length of the oven area up to a maximum of 300 °C. The transparent sample area is easily visible and if there are signs of thermal degradation, the process can be interrupted.



## Advantages

The advantages over a conventional vacuum-drying oven:

- requires minimal space
- shorter heating time
- high energy efficiency
- steady vacuum
- no cross contamination
- optimal visibility of the substance
- low investment costs
- option of keeping the sample in motion
- output to start and stop the vacuum pump



## Glass Oven B-585 Kugelrohr

- to distil small quantities of substances
- for distilling solvents with low boiling points
- for rotational drying
- variable rotation up to 50 rpm
- temperature and time can be programmed at 3 levels

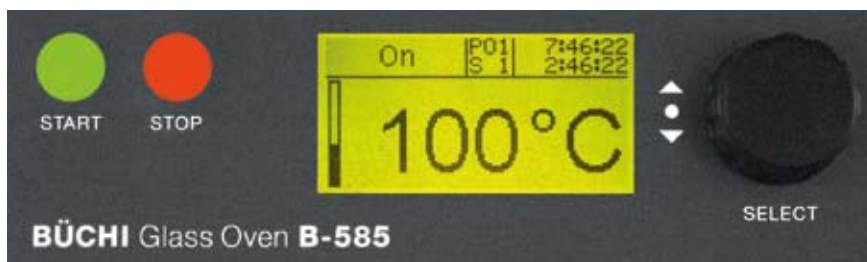
## Glass Oven B-585 Drying

- working angle can be easily set from 0° to + 90°
- temperature and time can be programmed at 3 levels
- vacuum-proof design
- optional ventilation with inert gas
- no cross contamination

	Order no.
Kugelrohr 100 V – 230 V, 50/60 Hz	46601
Conversion kit for drying	37010

	Order no.
Drying 100 V – 230 V, 50/60 Hz	46600
Kugelrohr conversion kit	46617

The bright, clear graphic display and a rotary/push button make the appliance particularly simple to use. The display has 6 different language options and the temperature can be registered in both °C and °F. 10 programmes can be stored in the integrated memory. To round off the innovation, an external vacuum pump can be switched on at the start of the programme and then off again on completion.



### Ball tube distillation

The fractionated distillation process separates a multiple component mixture. In principle, as many balls as there are components in the mixture are connected together. The ball tube is then removed from the heating area ball by ball to enable the mixture to fractionate. The component with the lowest boiling point will condense in the outermost, coolest ball. To protect thermo labile substances the use of a vacuum is recommended.



### Freeze drying

With the new freeze drying insert, it is possible to lyophilise small product samples and acquire first indications of their drying behaviour. The design is particularly suitable for drying organic samples, for pharmaceutical and food-processing solutions as well as for extreme temperature conserving processes. Due to the addition of heat via radiation, the substance is freeze dried quickly and evenly. This has particular advantages for secondary drying; the evacuated intermediate space prevents local defrosting caused by heat conduction.



### Drying accessory

A maximum of 100 ml to 250 ml can be dried using the drying accessory. If required, the drying tube can be ventilated with protective gas. The drying hood can be filled with a drying solution (silica gel,  $\text{CaCl}_2$  or  $\text{P}_2\text{O}_5$ ) to dry strongly hygroscopic substances. Found in the delivery checklist B-585 Drying!

	Order no.
Drying accessory	37010



### Sublimation accessory

Substances can be physically cleansed via sublimation. A solid matter passes directly into its gaseous state and is resublimated on a cold surface. The sublimation accessory is inserted into the drying oven and cooled with water or another cooling medium.

	Order no.
Sublimation accessory	37133



### Freeze drying accessory

This accessory enables quick and simple freeze drying. A cooler with a re-circulating thermostat or a cold trap for dry ice is also needed. The vacuum source must reach a final vacuum of under 2 mbar.

	Order no.
Freeze drying accessory	46710
Cooler compl. with receiving flask	46711
Cold trap compl. with receiving flask	46712

# Accessories



	Order no.
<b>Rotation drying flask</b> Compl., with NS 24/29 for drying solid substances up to 30 ml	37143
<b>Ball tube with 2 balls, compl.,</b> with NS 14.5/23 for 40 ml	37117
<b>Ball tube with 3 balls, compl.,</b> with NS 14.5/23 for 20 ml	37107
<b>Ball tube with 4 balls, compl.</b> round with NS 14.5/23 for 5 ml	37118
<b>Cooling device</b>	37152

	Order no.
<b>Vacuum Pump V-700</b> Completely enclosed, quiet chemically resistant PTFE diaphragm pump with a transparent window heads and with a flow rate of 1.8 m <sup>3</sup> /h and an ultimate vacuum of under 10 mbar.	71000
100 V – 240 V 50/60 Hz	71000
Communication cable	46728
B-585 to V-500/V-700	46728

	Order no.
<b>Vacuum Pump V-700 advanced</b> Completely enclosed, quiet chemically resistant PTFE diaphragm pump with a transparent window heads and with a flow rate of 1.8 m <sup>3</sup> /h and an ultimate vacuum of under 10 mbar, including a vacuum controller V-850.	71210
100 V – 240 V 50/60 Hz	71210

# Technical data

<b>Glass Oven B-585</b>	Electrical requirements Frequency Power consumption Warm-up time to 300 °C Temperature regulation range Temperature precision	100 V – 230 V ± 15% 50 – 60 Hz max. 450 W approx. 10 min. (differs for undervoltage) 40 – 300 °C +/- 5 °C (in oven centre at 300 °C)
<b>B-585 Drying</b>	Drying volume Dimensions Weight	max. 100 – 250 ml 410 x 300 x 300 mm (w x h x d) 9.5 kg
<b>B-585 Kugelrohr</b>	Distillation volume Rotation speed Dimensions Weight	5 – 40 ml 0 – 50 rpm 650 x 300 x 300 mm (w x h x d) 11.5 kg

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