



Consistent performance, at a high degree

Thermo Scientific Vacuum Ovens

Gentle drying for delicate samples

Reliably and gently dry samples and fine materials at low temperatures with Thermo Scientific™ Vacuum Ovens. These ovens are well suited for a variety of heating applications in a reduced atmosphere, and where drying requires a lower temperature than standard drying ovens.

Under a vacuum, humidity evaporates below the usual boiling point of the liquid that needs to be removed. Applications that may benefit from this approach include:

- Moisture removal from food such as dairy products
- Moisture removal from sensitive products such as electronics
- Complex vacuum drying processes, with specific goals such as:
 - Prevention of oxidation
 - Removal of moisture residue by addressing capillary effects
- Defined heating protocols with temperature ramping under vacuum
- Storage of oxygen sensitive material in the presence of inert gas, e.g. nitrogen
- Tempering
- Solvent, epoxy and essential oil removal

Heat Transfer under vacuum

Heat transfer to samples in a vacuum is mainly reached via the shelving. Unlike in regular heating and drying ovens, there is no heat transfer via convection. A good contact of the samples with the shelving is therefore crucial for the heating and

drying effectiveness. If samples are in containers, it's important that the containers have a good temperature conductivity.

How to measure temperature in a vacuum oven

To measure the chamber temperature, the probe needs to have full contact with the shelf. For best results it is recommended to connect the probe with a piece of metal with high temperature conductivity.

Tips for inert gas applications

The use of inert gas atmosphere might be required to avoid oxidation processes, related to presence of oxygen. If the application requires replacing the vacuum with an inert gas, use only a non-combustible, nonflammable, non-corrosive gas –

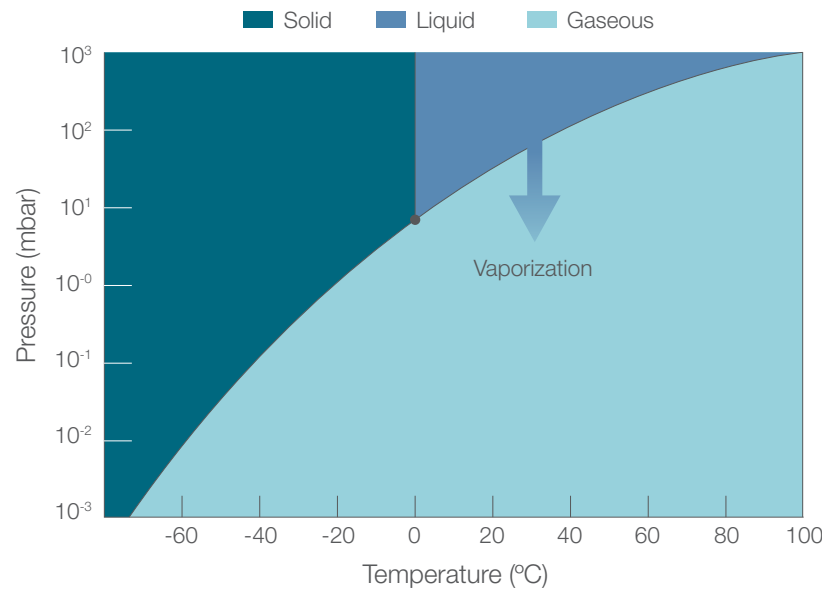
such as nitrogen or argon. Purging the chamber several times will help reduce the oxygen content to a minimum.

Note that vacuum ovens chambers are not made for positive pressure. The gas inflow therefore should be controlled, and conducted with low pressure.

Electrical plug configurations

High temperature in an oven requires significant power, often requiring a non-standard electrical connection.

Many of our ovens offer a choice of electrical configurations. Choose the model that best fits your needs and local circuit requirements.



The graph to the left illustrates that water will evaporate at a much lower temperature than 100°C, with lower pressure.

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Vacutherm Vacuum Ovens

Vacutherm Vacuum Ovens provide precise and fast heating and heat transfer up to 400°C, which helps minimize operation time. These vacuum ovens are designed to be compliant with the highest temperature requirements for heating applications under a vacuum. Starting with high quality models, application specific configurations can be implemented with a wide selection of equipment options.

Key features:

- 3 convenient chamber sizes from 25L to 128L
- Choice of jacket heated and shelf heated models:
 - Jacket-heated, Model M – all 3 sizes: temperature range: ambient +15°C to 200°C
 - Shelf heated, Model P – only 2 larger sizes: Temperature range: ambient +10°C to 300°C / 400°C. The shelves incorporate heating coils supplying direct heat transfer to the load
- Convenient control with digital display for single-setpoint, see options on page 6
- Upper limit cut-out for oven and sample protection
- Rapid ventilation valve for quick ventilation of the chamber
- Additional precision valve for gentle ventilation
- Inert gas connection for controlled atmosphere. A safety valve prevents overpressure inside the vacuum chamber
- DN 25 access port in the rear wall

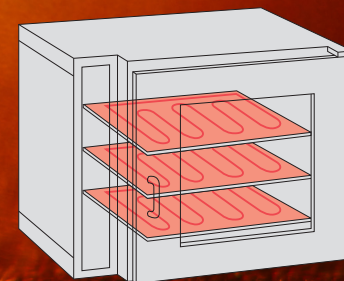
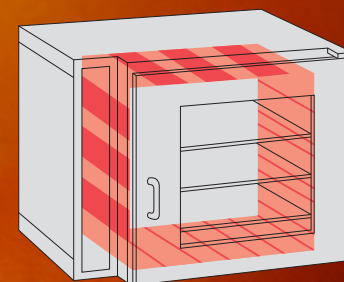


Models VT6060 and VT6130

- Adjustable independent over-temperature controls
Access port available for external temperature sensor and remote monitoring
- Stainless steel vacuum fittings, tubing and ball valve
- A double-pane door made of safety glass helps to ensure implosion protection and is designed to add additional safety for the user
- Certified safety (GS-mark)
- Made out of high quality stainless steel (1.4404/316L) for corrosion resistance and rounded corners help with ease-of-cleaning
- Our Custom Projects department can customize Vacutherm vacuum ovens and offer specific modifications. We have some special models available, which comply with European regulations for use with flammable solvents. Please contact your Thermo Scientific Sales representative.

Model M, Jacket Heating

- Rated temperature of 200°C The large direct contact heating elements are reinforced at the front to help ensure a homogeneous temperature across on the shelf.



Model P, Shelf Heating

- Rated temperature of 300/400°C
- Rapid heat-up times
- Direct heat transfer helps ensure short process times
- Each shelf is temperature controlled with over-temperature protection

Specifications for VacuTherm Vacuum Ovens

Cat. No.	Model	Temperature range	Spatial temperature deviation ^{2, 3}	Heat output (at maximum temperature)	Internal dimensions W x H x D	External dimensions ¹ W x H x D	Number of shelves	Electrical	Plug type	Shipping weight
Jacket-heating models 25L, (0.88 cu.ft.)										
Models with no inert gas connection / access port										
51014550	VT 6025	Ambient +15°C to 200°C	±4 (@200°C)	340 Wh/h	300 x 275 x 307mm (11.8 x 10.8 x 12.1in.)	480 x 600 x 450 mm (18.9 x 23.6 x 17.7in.)	2	230V 50/60Hz, 1.3kW	CEE 7/7	58kg (128 lb.)
51014551	VT 6025	Ambient +15°C to 200°C	±4 (@200°C)	340 Wh/h	300 x 275 x 307mm (11.8 x 10.8 x 12.1in.)	480 x 600 x 450 mm (18.9 x 23.6 x 17.7in.)	2	120V 60Hz, 1.3kW	Nema 5-15	58kg (128 lb.)
Model with inert gas connection and access port										
51014552	VT 6025	Ambient +15°C to 200°C	±4 (@200°C)	340 Wh/h	300 x 275 x 307mm (11.8 x 10.8 x 12.1in.)	480 x 600 x 450 mm (18.9 x 23.6 x 17.7in.)	2	230V 50/60Hz, 1.3kW	CEE 7/7	58kg (128 lb.)
Model with inert gas connection, access port, and digital pressure display with recorder output										
51014553	VT 6025	Ambient +15°C to 200°C	±4 (@200°C)	340 Wh/h	300 x 275 x 307 mm (11.8 x 10.8 x 12.1in.)	480 x 600 x 450 mm (18.9 x 23.6 x 17.7in.)	2	230V 50/60Hz, 1.3kW	CEE 7/7	58kg (128 lb.)
Jacket-heating models 53L, (1.87 cu.ft.)										
51014539	VT 6060 M	Ambient +15°C to 200°C	±4 (@200°C)	540Wh/h	415 x 345 x 371 mm (16.3 x 13.6 x 14.6in.)	744 x 576 x 570 mm (29.3 x 22.7 x 22.4in.)	2	230V 50/60Hz, 1.7kW	CEE 7/7	82kg (181 lb.)
51014540	VT 6060 M	Ambient +15°C to 200°C	±4 (@200°C)	550Wh/h	415 x 345 x 371 mm (16.3 x 13.6 x 14.6in.)	744 x 576 x 570 mm (29.3 x 22.7 x 22.4in.)	2	120V 60Hz, 1.4kW	Nema 5-15	82kg (181 lb.)
Shelf-heating models 53L, (1.87 cu.ft.)										
51014542	VT 6060 P	Ambient +10°C to 300° (on option: 400°C)	±3 (@200°C) ±7 (@300°C) ±9 (@400°C)	450 Wh/h	415 x 345 x 371 mm (16.3 x 13.6 x 14.6in.)	744 x 576 x 570 mm (29.3 x 22.7 x 22.4in.)	2	230V 50/60Hz, 1.6kW	CEE 7/7	90kg (198 lb.)
51023263	VT 6060 P	Ambient +10°C to 300° (on option: 400°C)	±3 (@200°C) ±7 (@300°C) ±9 (@400°C)	450 Wh/h	415 x 345 x 371 mm (16.3 x 13.6 x 14.6in.)	744 x 576 x 570 mm (29.3 x 22.7 x 22.4in.)	2	120V 60Hz, 1.4kW	Nema 5-15	90kg (198 lb.)
Jacket-heating models 128L, (4.52 cu.ft.)										
51014541	VT 6130 M	Ambient +15°C to 200°C	±7 (@200°C)	870 Wh/h	495 x 489 x 529 (19.5 x 19.3 x 20.8in.)	895 x 720 x 750 mm (35.2 x 28.3 x 29.5in.)	3	230V 50/60Hz, 2.2kW	CEE 7/7	153kg (337 lb.)
51023262	VT 6130 M	Ambient +15°C to 200°C	±7 (@200°C)	870 Wh/h	495 x 489 x 529 (19.5 x 19.3 x 20.8in.)	895 x 720 x 750 mm (35.2 x 28.3 x 29.5in.)	3	208V 60Hz, 1.8kW	Nema 6-15	150kg (331 lb.)
Shelf-heating models 128L, (4.52 cu.ft.)										
51014543	VT 6130 P	Ambient +10°C to 300° (on option: 400°C)	±4 (@200°C) ±7 (@300°C) ±9 (@400°C)	880 Wh/h	495 x 489 x 529 mm (19.5 x 19.3 x 20.8in.)	895 x 720 x 750 mm (35.2 x 28.3 x 29.5in.)	3	230V 50/60Hz, 3.0kW	CEE 7/7	164kg (362 lb.)
51023264	VT 6130 P	Ambient +10°C to 300° (on option: 400°C)	±4 (@200°C) ±7 (@300°C) ±9 (@400°C)	880 Wh/h	495 x 489 x 529 mm (19.5 x 19.3 x 20.8in.)	895 x 720 x 750 mm (35.2 x 28.3 x 29.5in.)	3	208V 60Hz, 2.5kW	Nema 6-15	164kg (362 lb.)

¹ Depth without handle and wall distance. Dimensions: handle 70 mm, wall distance 80 mm

² The values stated apply to the empty oven and vacuum operation in acc. with DIN 12880, part 2

³ Measured on the shelves

Pump connection: DN 25 – 25.4 mm / 1.0 in

Inert gas connection: inner diameter 4 mm / 0.16 in

Vacuum operation to 20 mbar can be obtained using a single stage mechanical pump with a free air capacity of at least 35 liters per minute.

Ordering Alerts: Please choose correct electrical model for your country

Certifications: CE, GS (230V, 50 / 60 Hz models) and cCSAus (120V and 208V, 60Hz models)

Warranty: 2 years (parts and labor)

Build your own Vacutherm Vacuum Oven to suit your needs

Available regulation and control modules for Vacutherm 6000 ovens

Control options

Standard control jacket-heated models:

- Single setpoint Jumo control
- Large display of set and actual temperature



Optional control jacket-heated models: (please add separate order code to base model)

- Programmable Jumo control, allows to save 1 program with up to 24 temperature steps (soaking or ramping)
- Data interface RS485 for temperature logging included

Standard control shelf-heated models:

- Single setpoint Digicon™ S control
- Digital display of set or actual temperature
- External setting of preset value 0...20 mA
- External temperature registration 0...10 V
Connection via plug in accordance with DIN 41524

Digicon temperature controller with analog interface

- Digicon S for shelf-heated models P only
- Digital display of set or actual temperature
- External setting of preset value 0...20 mA
- External temperature registration 0...10 V
- Connection via a plug in accordance with DIN 41524



Pressure control option

Pressure controller with solenoid valve

- Digital pressure display from 1 to 1400 mbars
- Pressure range is controlled via two pre-selected set points with a stainless steel solenoid valve
- Pressure can be controlled from 5 to 1400 mbars
- Recorder connection 0...1V for pressure documentation



Note: this option is not available for the North American voltage models.

Timer option

Weekly* digital program timer

- Programs on and off cycles based on actual time (e.g. 'On' at 06:00 hours and 'Off' at 2:00 hours); shortest switching interval 10 min; 16 hour power reserve in case of power failure



Note: timer functions cannot be combined with the digital load temperature display.

*also available as a daily digital program timer (except for 120V and 208V models)

Monitoring options

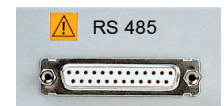
Digital load temperature display

- Temperature measured directly at load
- Temperature of load shown at front control panel of oven with flexible Pt 100 temperature sensor
- External temperature recorder can be connected



RS 485 interface for temperature logging

- Document temperature data
- No software provided



Note: for order information and availability of each option by oven model see next page

Ordering information

Our Vacuotherm product line offers a variety of options to accommodate specific requirements. Available control options, timer functions, and monitoring support are shown below. The order table below provides information on availability by model. Please note that each listed option can be ordered only with one of the listed equipment skus.

Ordering information for factory installed options

Cat. No.	Options for Vacuotherm 6060 and 6130 M/P	Please order in conjunction with following equipment	Details
51901481	RS485 computer interface for Jumo controller	51014539, 51014540, 51014541, 51023262	For running temperature programs: X programs, up to 24 program steps each, contains ethernet interface for data logging
51901472	Programmable control	51014539, 51014540, 51014541, 51023262	Save one program with up to 24 program steps, this option contains RS485 interface for data logging at the rear of the unit.
51900284	RS 232 computer interface for Kelvtron™ controller	51014539, 51014540, 51014541, 51023262	Interface at rear of unit.
51900069*	Digital pressure display	51014539, 51014541, 51014542, 51014543	Instead of standard analog pressure display.
51900193*	Pressure controller with solenoid valve and digital pressure display	51014539, 51014541, 51014542, 51014543	Digital pressure controller - contains digital pressure display
51900071	VITON™ door gasket for VT 6060 M	51014539, 51014540	Compared to standard door gaskets VITON provides increased resistance to highly caustic substances. (installation by trained technician)
51900072	VITON door gasket for VT 6130 M	51014541, 51023262	
51900073*	Digital 24 hour timer (20 hour at 60Hz)	51014539, 51014541, 51014542, 51014543	All timer options allow to program "on" and "off" cycles for the oven. Please only choose one of these options.
51900161	Weekly program timer, digital	51014539, 51014540, 51014541, 51014542, 51014543, 51023262, 51023263, 51023264	Timer options cannot be combined with the digital sample temperature display.
51900074	Digital sample temperature display with flexible Pt 100 temperature sensor and socket for external data recorder	51014539, 51014540, 51014541, 51014542, 51014543, 51023262, 51023263, 51023264	Display and connection at front control panel. Sensor has to be inserted in oven via access port at rear of unit. Cannot be combined with timer option.
Cat. No.	Extended rated temperature, Digicon S temperature controller, analog interface 0-20mA / 0-10V included		
51900195	Digicon S (300 °C): VT 6060 P and VT 6130 P	51014542, 51014543, 51023263, 51023264	
51900196	Digicon S (400 °C): VT 6060 P	51014542, 51023263	Please order in conjunction with desired base shelf-heated model.
51900197	Digicon S (400 °C): VT 6130 P	51014543, 51023264	With the 400° C option, the oven comes without inspection window.
Cat. No.	Vacuum chamber with rounded corners at the rear (note: round corners on both sides are standard in all models)		
51900075	Vacuum chamber with rounded corners at the rear for VT 6060 M	51014539, 51014540	
51900077	Vacuum chamber with rounded corners at the rear for VT 6060 P	51014542, 51023263	
51900076	Vacuum chamber with rounded corners at the rear for VT 6130 M	51014541, 51023262	
51900078	Vacuum chamber with rounded corners at the rear for VT 6130 P	51014543, 51023264	Rounded corners at rear of inner chamber make cleaning even easier.
Cat. No.	Options for Vacuotherm 6025		
51900326	Precision control valve for standard model	51014550, 51014551	Note: Precision valve is standard on all other models
51901481	RS485 computer interface for Jumo controller	51014550, 51014551, 51014552, 51014553	Interface at rear of unit.
51901472	Programmable control	51014550, 51014551, 51014552, 51014553	Save one program with up to 24 program steps, this option contains RS485 interface for data logging at the rear of the unit.

*Option only available for 230V-50/60Hz models - not available for North American voltages

Accessories

Some options are also available as retrofit kits and can be installed in the field. Please contact our service department for details.

Cat. No.	Description	Dimensions and weight
50028403	Additional shelf for VT6025 (incl. Shelf supports)	-
50043975	Additional shelf for VT6060 M (incl. Shelf supports)	-
50043976	Additional shelf for VT6130 M (incl. Shelf supports)	-
50048621	Stainless steel tray for VT6060 M/P	-
50048619	Stainless steel tray for VT6130 M/P	-
50048620	Aluminum tray for VT6060 M/P	-
50048618	Aluminum tray for VT6130 M/P	-
50046860	Stainless steel vacuum connection kit for tubing, 10mm diameter (all models)	-
50029890	Support frame, 780 mm height, for VT6060 M/P	WxDxH 734x465x780mm / 8.9x18.3x30.7in. Weight: 14.5kg / 32lb
50029597	Support frame, 780 mm height, for VT6130 M/P	WxDxH 885x645x780mm / 4.8x25.4x30.7in. Weight: 16.5kg / 36.4lb

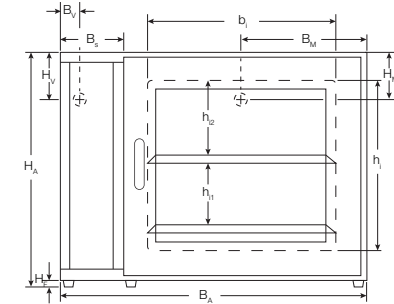
IQ/OQ documents available:

English: IOQDOCE89003503
 German: IOQDOCG89003503
 French: IOQDOCF89003503

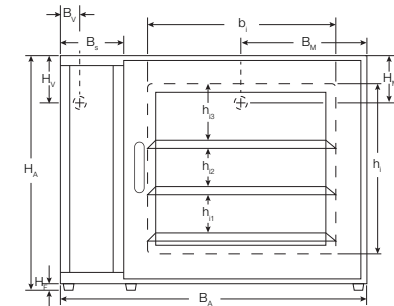
Please ask for calibration services. We can provide calibration certificates ex factory, for measurements in middle of workspace or additional measuring point.

Vacutherm 6000 Technical Data

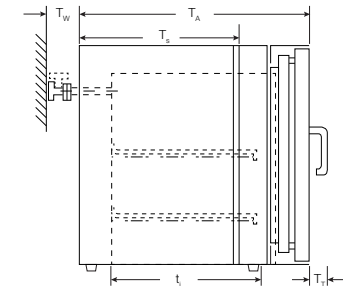
		Jacket heating		Shelf heating		
		VT 6060 M	VT 6130 M	VT 6060 P	VT 6130 P	
Total volume	l	53	128	53	128	
Internal dimensions	mm	bi	415	495	415	495
		hi	345	489	–	–
		ti	371	529	371	529
		h ₁₁	124	124	119	119
		h ₁₂	155	124	140	119
		h ₁₃	–	158	–	146
Vacuum suction sockets	mm	B _V	53	53	53	53
		H _V	132	132	132	132
Vacuum measuring sockets	mm	H _M	132	132	132	132
		B _M	298	373	298	373
		B _A	744	895	744	895
External dimensions	mm	H _A	576	720	576	720
		T _A	570	750	570	750
Feet height	H _F	24 ²	24	24	24	
Door handle depth	T _T	60	60	60	60	
Control box width	B _S	149	149	149	149	
Control box depth	T _S	400	580	400	580	
Distance for options	T _W	80	80	80	80	
T _W with inert gas connection	T _{W Inert}	160	160	160	160	
Temperature ^{1, 2}						
Rated temperature ¹	°C	200	200	300/400	300/400	
Spatial temperature deviation ³ at 200 °C	± °C	± 4	± 6	± 3	± 4	
at 300 °C	± °C	–	–	± 7	± 7	
at 400 °C	± °C	–	–	± 9	± 9	
Temperature deviation in time	°C	<= 0.5	<= 0.5	<= 0.5	<= 0.5	
Heating-up time to 98 % of ^{1, 3} 200 °C	min	75	140	25	25	
300 °C	min	–	–	35	40	
400 °C	min	–	–	50	60	
Electrical protection						
Protection class		I	I	I	I	
Protection type		IP 20	IP 20	IP 20	IP 20	
Vacuum						
Vacuum connection with tube shaft Ø 20 mm	DN	25	25	25	25	
Measuring connection	DN	25	25	25	25	
Max. final vacuum	mbar (hPa)	1x10 ⁻²	1x10 ⁻²	1x10 ⁻²	1x10 ⁻²	
Leak rate	mbar x l/s	<1x10 ⁻²	<1x10 ⁻²	<1x10 ⁻²	<1x10 ⁻²	
Shelves	no. (max.)	2 (4)	3 (5)	2 (2)	3 (3)	
Usable area	mm W/D	400/312	480/470	400/297	465/417	
Weight (empty)	kg	82	153	90	164	
Permissible total load	kg	40	60	40	60	
Max. load of shelf ⁴	kg	20	20	20	20	
Heat transfer to environment at 200 °C	Wh/h ⁵	550	870	–	–	
Heat transfer to environment at 300 °C	Wh/h ⁵	–	–	450	880	



Front view of model VT 6060



Front view of model VT 6130



Side view of models VT 6060 and VT 6130

Notes:

- Shelf positions are not flexible due to the specific heating technology in vacuum ovens, with heat transfer via the shelving.
- The shelves in shelf-heated models cannot be removed.

¹ The values stated apply to the empty oven and vacuum operation in acc. with DIN 12880, part 2)

² Control range M: electronic controller from TA + 15 °C; control range P: electronic controller from TA + 10 °C; TA = Ambient temperature

³ Measured on the shelves

⁴ Distributed load

⁵ In line with heat transfer to the environment

Technical data for Vacuotherm 6025 Vacuum Ovens

Total volume	25 L
Internal dimensions	300/275/307 mm (w/h/d)
Internal height above shelf	120 mm
External dimensions mm	480/600/450 (w/h/d)
Shelves	2 (4) number (max.)
Usable area	270/250 mm (w/d)
Weight (empty)	58 kg
Total permissible load	40 kg
Max. load/shelf ¹	20 kg
Electrical power	
Heat transfer to environment at 200 °C ²	340 Wh/h
Temperature	
Rated temperature ³	200 °C
Spatial temperature deviation at 200 °C ⁴	± 4 ± °C
Temperature deviation in time at 200 °C	<0.5 ± °C
Heating-up time to 98 % of 200 °C ^{4, 5}	<100 min
Electrical protection	
Protection class	I
Protection type	IP 20
Vacuum	
Max. final vacuum mbar	1x10 ⁻² (hPa)
Leak rate	< 1x10 ⁻² $\frac{\text{mbar} \times \text{l}}{\text{s}}$

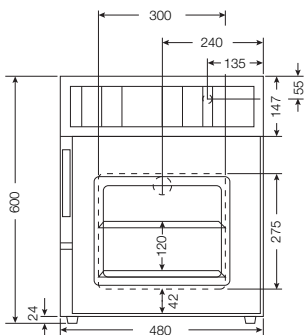
¹ Distributed load

² In line with heat transfer to the location

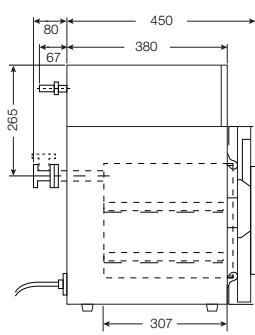
³ Control range with electronic controller from TA+ 15°C; TA = ambient temperature

⁴ Measured on the shelves

⁵ The values stated apply to the empty oven and vacuum operation (measured in acc. with DIN 12880, part 2)



Front view of model VT 6025



Side view of model VT 6025



Lindberg/Blue M Vacuum Ovens

Developed for industrial, life science, and general laboratory uses requiring higher performance standards than conventional ovens, Lindberg/Blue M vacuum ovens feature digital controls, laboratory grade cabinet construction and operational features which offer safety, quality, convenience, and high-drying performance. In addition, exterior options and accessories are available to meet individual lab requirements.

Key features:

- Two chamber sizes 18.6L and 42.5L
- Temperature range: ambient +6°C to +260°C;
- Heating technology: Jacket heating
- Single setpoint digital microprocessor control, with one ramp to setpoint
- Simultaneous LED display of setpoint and actual temperature with push-button view
- Independent over-temperature safety system factory set with reset push-button
- 25.4 mm / 1 in. manifold at rear of unit connects to pump (not included) or in-house vacuum source, can also be used as port
- Alternative 3/8 in / 9.5mm vacuum connection included
- 1/4 in / 6.4mm inert gas connection for non-flammable, non-corrosive inert gases and separate vent port located on back
- Vacuum, gas and inlet valves conveniently located on front

- Vacuum capability: 1.33 mbar
- Viewing windows: 0.5in. (1.3cm) thick in two smaller capacity models; permit observation of work in progress without loss of heat
- Aluminum shelves for fast heat transfer; removable
- High-temperature silicone gasket for a positive seal; Buna N seals available for applications below 150°C that require no silicone
- Magnetic latch door seal.



Vacuum and gas control – above door



Model VO914A-1



Specifications for Lindberg/Blue M Vacuum Ovens

Cat. No.	Control details / display	Temperature range	Temperature resolution / uniformity	Interior dimensions D x W x H	Exterior dimensions L x W x H	Number of shelves	Finish	Electrical	Plug type	Shipping weight
Capacity 18.6L (0.65 cu. ft.)										
VO914A-1	PID control; single setpoint; dual digital display	Ambient +6° to 260°C	±1°C/ ±3.5°C	36 x 23 x 23cm (14 x 9 x 9in.)	58 x 46 x 66cm (23 x 18 x 26in.)	3	Painted Steel	120V 50/60Hz 750w	Nema 5-15	68kg (150 lb.)
Capacity 42.5L (1.5 cu. ft.)										
VO1218A-1	PID control; single setpoint; dual digital display	Ambient +6° to 260°C	±1°C/ ±3.5°C	46 x 31 x 31cm (18 x 12 x 12in.)	66 x 53 x 74cm (26 x 21 x 29in.)	3	Painted Steel	120V 50/60Hz, 1250w	Nema 5-15	113kg (250 lb.)

Pump connection: 25.4 mm / 1.0 in
 Alternative pump connection: 9.5 mm / 0.38 in.
 Inert gas connection: inner diameter 6.4 mm / 0.25 in
 Vacuum operation to 20 mbar can be obtained using a singlestage mechanical pump with a free air capacity of 35 liters per minute.
 Warranty: 2 years (parts and labor)
 Certification: All models carry UL (no cUL)

Ordering Alert: Products not available in Europe – no CE.

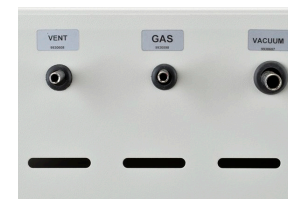
Accessories for Lindberg/Blue M Vacuum Ovens

- Connection kit (needed only if fittings, clamps, and hose are not supplied with the pump)
- Silicone replacement gaskets
- Buna-N silicone-free gaskets, for silicone-free applications, for temperatures up to 150°C only

Cat. No.	Description	For use with
118961	Connection Kit – includes NW fittings, centering rings, connectors, vacuum clamps and hose to connect vacuum pump to oven.	All Lindberg/Blue M vacuum ovens
305994H01	Silicone replacement gasket (red)	VO914 Series
305992H01	Silicone replacement gasket (red)	VO1218 Series
118974	Buna-N silicone-free gasket, for temperatures up to 150°C only	VO914 Series
118977	Buna-N silicone-free gasket, for temperatures up to 150°C only	VO1218 Series
IQ/OQ documents available:		English: IOQDOCE89003503; French: IOQDOCF89003503



Buna-N silicone-free gasket



Pump/gas connection on the back of the unit

Thermo Scientific Standard Vacuum Ovens

Our basic vacuum ovens line offers a maximum temperature of 220°C, and is ideally suited for applications like drying, curing, vacuum embedding and plating applications.

Key features:

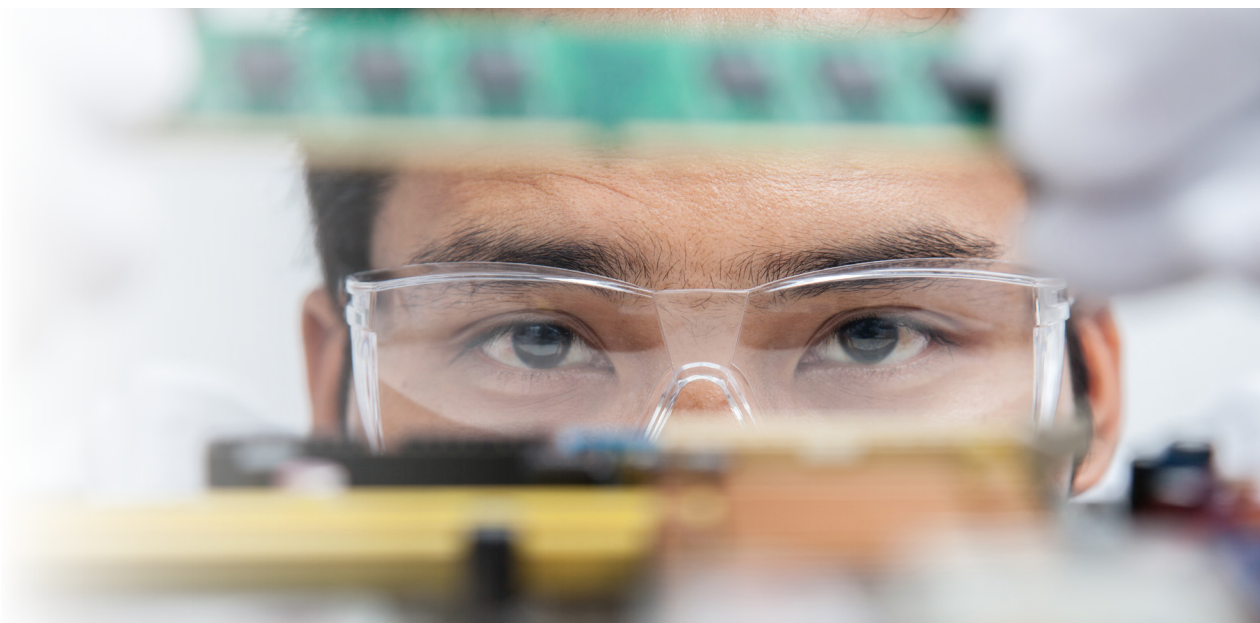
- Two convenient chamber sizes: 19.8L (0.7 cuft), 65.1L (2.3 cuft)
- Temperature Range: Ambient +10° to 220°C
- Hydraulic thermostat temperature with LED display (1°C increments)
- Polycarbonate safety shield protects door glass
- Silicone door gasket and positive latch door maintain seal at all vacuum levels
- Vacuum and air lines are corrosion resistant stainless-steel tubing
- Powder-coated heavy-gauge steel exterior for durability and includes tow removable aluminum stacking shelves
- Radiant warm-wall heating system helps optimize uniformity
- Front-mounted three-way valve for evacuation, venting and purging of inert gases



Model 3608-5 w LED



Model 3618-5 w LED



Specifications for Thermo Scientific Standard Vacuum Ovens

Cat. No.	Control details / display	Temperature range	Temperature uniformity	Temperature resolution	Interior dimensions D x W x H	Exterior dimensions L x W x H	Number of shelves	Electrical	Plug type	Shipping weight
Capacity 19.8L (0.7 cu. ft.)										
3608-5	Hydraulic thermostat / LED display w 1°C increments	Ambient +5° to 220°C	±6.0°C at 150°C, 25in.Hg	±1.0°C	30 × 25 × 25cm (12 × 10 × 10in.)	40 × 50 × 41cm (16×19.8 × 16.25in.)	2	120V 50/60Hz, 600w, 5A	Nema 5-15	59kg (130 lb.)
Capacity 65.1L (2.3 cu. ft.)										
3618-5	Hydraulic thermostat / LED display w 1°C increments	Ambient +5° to 220°C	±5.0°C at 100°C 25in.Hg	±1.0°C	51 × 36 × 36cm (20 × 14 × 14in.)	64 × 64 × 56cm (25 × 25 × 22in.)	2	120V 50/60Hz, 1600w, 13.3A	Nema 5-15	134kg (295 lb.)

Calibration certificates	260049 Certifies calibration at specified temperature
	260029 Provides information and serial numbers of test equipment use for end of line test
Conformance certificates	Certifies that a specific product serial number has been tested at end of line and conforms to all of the testing performed
IQ/OQ documents available:	English: IOQDOCE89003503; German: IOQDOCG89003503; French: IOQDOCF89003503

Pump connection: 6.4 mm / 0.25in
 Vent (can be used for inertgas connection): 6.4 mm / 0.25in
 Vacuum operation to 20 mbar can be obtained using a singlestage mechanical pump with a free air capacity of 35 liters per minute.
 Warranty: 1 year (parts and labor)
 Certification: All items were tested to UL/CSA 61010-1 2nd Edition.

Shelf for 3608 models: 810-439-00
 Shelf for 3618 models: 810-440-00







Learn more at thermofisher.com/vacuumovens

For Laboratory Use. It is the customer's responsibility to ensure that the performance of the product is suitable for customer's specific use or application.

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