



# Thermo Scientific Heraeus® Heating and Drying Ovens

Quality that meets every laboratory need



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# Thermo Scientific Heraeus Heating and Drying Ovens



With over 80 years of experience, our portfolio of heating and drying ovens offers you a comprehensive selection of ovens with reliable 24/7 operation.

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For precise and reproducible temperature performance combined with the highest standards of workmanship and long-lasting reliability, there's only one choice – Thermo Scientific.

## Choose a Thermo Scientific oven for your everyday applications or for your specialized laboratory needs

#### **Heraeus Function Line Series**

Easy to use and operate, all three oven sizes provide cost-effective, space-saving solutions for routine applications.

- **Optimal volume/footprint** The ratio of internal volume to footprint allows you to optimize your lab bench space.
- The all-purpose answer Natural convection and air circulation drying options to meet general drying needs.
- User-friendly operation With an ergonomic, easy-to-understand digital interface.

#### Heraeus Series 6000

All six models can be tailored to meet every application.

- Unique modular design Choose from a large variety of sizes and options to get exactly the solution you need.
- High performance Series 6000 ovens reach temperatures up to 300° C.
- **High reliability** All units have minimal heating and recovery times.

#### Heraeus Vacutherm® Ovens

A choice of three models allows gentle drying of heat sensitive materials.

- **Significantly reduced drying times** Heraeus Vacutherm can dry up to six times faster than conventional ovens.
- Meeting your application needs Safe drying of flammable solvents, elimination of oxidation associated with heat treatment, targeted recovery of degassed products.
- Your choice of heating Choose between jacket or shelf heating. The shelf heating provides rapid heating-up and process times.







Heraeus Function Line Series – page 4

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Our Heraeus heating and drying ovens are designed for your laboratory requirements – all with safety as a first priority.



# We have the solution

#### **Ovens for Specific Applications**

With our wide range of special application ovens, we can meet all your research and industrial needs, from plastics and electronics to pharmaceutical and car manufacturing.

- **Temperature precision** For specific heat treatment processes and drying of protective heat sensitive materials, we have a precise answer.
- Safety for high-risk heating

Where there's a risk of fire, explosion or the release of aggressive gases or vapors, we offer a safe oven solution.

• Material-specific

There are Heraeus ovens specifically designed for materials testing, including cable testing ovens for rubber and plastics.

• Space saving

A choice of built-in and underbench ovens optimize your laboratory space.

#### **Customized Products**

We will work in partnership with you to tailor-make your oven to meet your particular specifications.

• Competent advice

Explain your application need to our specialist and we will suggest the right product.





# **Thermo Scientific Heraeus Function Line Heating and Drying Ovens**

Our Heraeus Function Line heating and drying ovens are available in three capacities -60, 110 and 200 l - and in a choice of heating types. With an optimized volume-footprint ratio, Function Line ovens save as much space as possible on the lab bench. Reliable and easy to operate, Heraeus Function Line ovens are designed for continuous unattended operation (with upper temperature limit cutout) and offer the perfect combination of quality and value.



# **Solutions for everyday applications**

The Heraeus Function Line drying ovens with natural convection are used for thermal processes: heated storage, heat treatment and thermal testing, and for conventional drying processes with temperatures up to 250 °C.

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Heraeus Function Line drying ovens with air circulation are designed for high performance drying and thermal processes that require increased fresh air supply, short process and heat-up times, and precise heat control to 250 °C.

#### • Three oven sizes

There are three space-saving oven sizes to choose from: 60, 110 and 200 l.

#### • Intuitive use

Temperature is regulated by a precise microprocessor-based controller with large, clearly arranged, eye-level displays.

#### • Easy-to-clean

An interchangeable silicone door gasket, removable shelf supports and rounded corners make cleaning easy and safe.

**PI** 



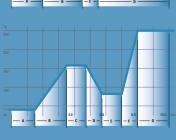


With an interchangeable door gasket, removable shelves and coved corners of the stainless steel interior, cleaning is easy and safe.

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Two types of user-friendly controls complement the Function Line – Standard Version and P-Version. P-Version models provide user-defined programming of the temperature profile. (see example below)



Program Profile of P-Version

# Space-saving oven with user-friendly features

Intelligent solutions and advanced design provide a large volume in a small footprint for optimal results.



# Thermo Scientific Heraeus Series 6000 Heating and Drying Ovens

Our Heraeus Series 6000 heating and drying ovens are modular across the entire range. Safety is guaranteed with features such as tilt-proof shelves. Efficient insulation ensures low surface temperatures and economical operation.



# For your specific requirements

Virtually every heating and drying requirement in the laboratory can benefit from the Series 6000 ovens' premium reliability, safety and quality.



Six models with interior volumes ranging from 30 to 750 l offer the widest sample capacities and volumes. For optimum temperature control accuracy and high work loads with fast rates, Series UT forced-air circulation drying ovens are the answer.



For routine everyday laboratory and standard applications, Series T drying ovens with natural convection are the perfect choice.

# The perfect choice

#### • Whatever the application

The Series 6000 oven's modular design and wide variety of features and sizes can accommodate any laboratory need. We offer a comprehensive and flexible range of options: Various volumes, special temperature controllers, access ports, etc.

- **High performance and efficiency** With extremely short heat-up and recovery times, the ovens can reach temperatures up to 300 °C. A low level of heat emission ensures low energy consumption.
- Long-lasting reliability Our Heraeus Series 6000 ovens are made exclusively with high quality materials and components from our ISO-certified production plant in Germany.



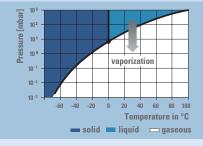
# **Series 6000 Options**

if you need more than our standard solutions

	Standard	Optional
	Process control	
	Throttle valve for smooth adjustment of air changes	
~	Temperature documentation	
Pt 100		Connection facility for an external tempe- rature recorder for measuring with Pt 100 temperature sensor, connection via DIN 41524 plug. Sensor permanently installed.
	Temperature controller	
*aeus kelviton* t <b>300</b> + + +	Kelvitron® Microprocessor temperature controller. Accurate display of the set point or actual reading PD/PID control response for rapid heating, minimum overshoot and low control deviation.	<ul> <li>Programmable contoller</li> <li>Thermicon® P</li> <li>Eurotherm 2404/P4</li> <li>Controller with analog interface</li> <li>Digicon® S Detailed information on request.</li> </ul>
•	<b>RS 232 interface</b> for Kelvitron T	
	Upper temperature limit protection	
10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Adjustable upper limit cut-out Safety Class 2, switches off equipment at an adjustable temperature limit independently of the temperature controller. Class 3.1 available as option.	Adjustable upper and lower temperature limit protection Safety Class 3.3, independent of temperature controller. Automatically takes over the temperature control if the upper or lower limit set is exceeded.
	Time Operation	
	<ul> <li>24-hour timer (20 h at 60 Hz) for switching on and off</li> <li>Pre-heating for the next day</li> <li>Timed shutdown of heating without manual intervention</li> </ul>	<ul> <li>Daily, weekly or digital weekly timer</li> <li>For automatic repetition of an on-off cycle over a period of time</li> <li>Power reserver in the event of power failure</li> </ul>
	Speed setting for the air-circulation fai	n
off	<ul> <li>Speed continuously variable (20–100%)</li> <li>Air-circulation fan can be turned off (not on UT 6420 and UT 6760)</li> <li>Air velocity can be adjusted to requirements, e.g. for drying powders</li> </ul>	

# **Thermo Scientific Heraeus Vacutherm Ovens**

There are three oven sizes with volumes of 25, 53 and 128 I. The system is modular, allowing application-specific configurations through the selection of a wide range of equipment options. The specific heating technology provides significantly reduced heating-up times. With double-pane safety glass doors, implosion protection is guaranteed throughout the equipment's life. An upper limit cut-out ensures protection of oven and product.



◀ Water: Lower pressure means lower boiling point



# Well thought-out

# Vacuum applications offer many benefits

- Gentle drying of heat-sensitive materials
- Significantly reduced drying times
- Residue-free drying of intricately designed parts
- Elimination of oxidation associated with heat treatment
- Safe drying of flammable solvents
- Targeted recovery of degassed products

# The fast and gentle choice

# The compact Vacuum Drying Oven Heraeus Vacutherm VT 6025 – good things come in small packages

The space saving unit VT6025 is jacket heated. The vacuum chamber and all parts that come into contact with media are made of stainless steel. They are electropolished to ensure exceptional resistance to corrosion.

#### Comfort Model of VT 6025

- Ideal for chemical-pharmaceutical laboratories
- Inert gas connection with precision valve and overpressure safety valve precisely releases non-flammable, non-toxic gases (VDI 20465)
- Standard DN25 access port in rear wall, e.g. for measuring



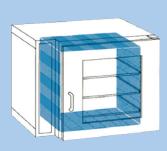
With a total volume of 25 I and temperatures to 200 °C the VT 6025 convinces with a compact design.



#### **Two Types of Heating**

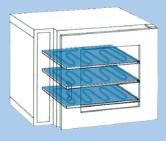
A choice of jacket- (model M) or shelfheating (model P) ensure that ovens can meet your application requirements.

- Model M transfers heat from the vacuum chamber via the shelves to the load and is rated to 200 °C.
- Through shelf heating, model P uses direct energy transportation, reducing drying process times by as much as six-fold compared to standard methods. Their rated temperature is 300/400 °C.



▼ Model M – Jacket Heating

<sup>▼</sup> Model P – Shelf Heating



## The intelligent, modular system - user friendly as never before

# The Heraeus Vacutherm – for all your application needs

The Heraeus Vacutherm meets all the demands relating to vacuum heat treatment – from simple routines to complicated processes involving temperatures up to 400 °C.

- Additional precision valve for gentle ventilation
- Inert gas connection for controlled atmosphere with overpressure safety valve



# The Heraeus Vacutherm BL – for flammable solvents

Heraeus Vacutherm BL\* versions deliver optimal safety features for drying applications using flammable solvents. Ask for additional information on our BL versions:

- Pressure Heat Activation: automatic heat shut off when pressure is too high
- Permanent Control Panel Ventilation:

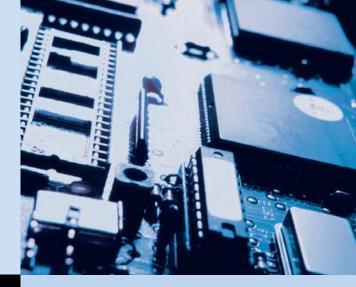
prevents solvent leakage using two independent generating fans

\* Please check your local standards and regulations.

The Heraeus Vacutherm VT 6060 and VT 6130 are available with tw different types of heating.

# Application specific ovens

You may have highly specific heating and drying requirements. To satisfy as many as possible, we offer a broad spectrum of specialized ovens – from space-saving, built-in and under-counter ovens to those designed for specific material testing such as plastics and rubber.





# The definitive choice for your needs

#### Heraeus ET 6080, ET 6130, EUT 6130

- Space-saving range of underbench drying ovens
- Natural convection and forced air circulation models
- 78 or 125 l sizes, up to 220 °C

#### Heraeus WU 6100

# Heraeus UT 6050

- Forced-air circulation oven for high quality materials testing
- For exacting heat processes up to 500 °C
- Provides precise and even temperature distribution and accurate maintenance of selected temperature
- Recirculated air drying oven providing constant temperatures for material testing
- Ensures minimal spatial temperature deviation (+/- 2 K at 250 °C)
- Available in four versions including cable testing and tempering procedures

#### Heraeus TK 6060

- Cabinet for testing insulating and sheathing materials in cables and leads
- Aluminum Iso box interior, ventilated by air jacket for uniform temperature distribution
- Pt100 sensor provides excellent temperature response within test cabinet









# Customized products – ovens that are made for you

Whatever your specific oven need, contact your sales representative.





#### Heraeus FT 6060\*

- Developed for heat treatments of combustible and explosive solvents
- Ensures safe and reliable heat treatment in case of build-up of explosive atmospheres
- Able to handle unlimited solvent quantities

#### Heraeus LUT 6050\*

- Specially developed for the drying of lacquers and other coating materials
- The attended high amount of fresh air prevents the formation of an explosive atmosphere
- Two versions available: LUT 6050 for normal installations; LUT 6050F for areas exposed to fire risk

# Exactly your choice

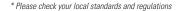
### Your individual solution

Certain applications may necessitate a highly specialized oven with unique requirements.

We will work in partnership with the customer, developing an oven to match their needs precisely.









# **Heraeus Function Line**

Technical Specifications



Standard models		T 6/T 6 P	T 12/T 12 P	T 20/T 20 P	UT 6/UT 6 P	UT 12/UT 12 P	UT 20/UT 20 P
Interior volume	L	57	110	199	64	112	210
Dimensions (w x h x d)							
External dimensions <sup>1)</sup>	mm	552/700/540	696/850/540	754/910/720	552/700/540	696/850/540	754/910/720
	inch	21.7/27.6/21.3	27.4/33.5/21.3	29.7/35.8/28.3	21.7/27.6/21.3	27.4/33.5/21.3	29.7/35.8/28.3
Interior dimensions	mm	352/424/386	496/575/386	554/637/566	408/459/344	552/610/334	610/672/514
	inch	13.9/16.7/15.2	19.5/22.6/15.2	21.8/25.1/22.3	16.1/18.1/13.5	21.7/24.0/13.1	24.0/26.4/20.2
Shelves standard/max.	No.	2/10	2/15	2/17	2/9	2/14	2/16
Shelf dimensions (w/d)	mm	336/365	480/365	538/545	362/333	506/323	564/503
	inch	13.2/14.4	18.9/14.4	21.2/21.5	14.3/13.1	19.9/12.7	22.2/19.8
Operating temperature							
from $T_A^{(2)}$ + 10 °C / + 20 °C to	°C	250	250	250	250	250	250
Temperature deviations							
at 150 °C (acc. to DIN 12880, Part 2)	± ° C (spatial)	5	5	4	3	3	4
	± ° C (temporal)	0.3	0.5	0.5	0.3	0.3	0.5
Heat transfer to environment	W	500	700	1000	700	850	1100
Electrical data (nominal values)							
Operating voltage <sup>3)</sup>	V	230, 1/PE AC					
Frequency	Hz	50-60	50-60	50-60	50-60	50-60	50-60
Power consumption	kW	1.22	1.82	2.22	1.27	2.32	2.32

<sup>1)</sup> Depth without handle and wall distance. Dimensions: handle 70 mm, wall distance 80 mm <sup>2)</sup> T<sub>A</sub> = Ambient temperature : T-Models + 10 °C, UT-Models + 20 °C <sup>3)</sup> Other voltages on request. All specifications are typical measured values for series models.

Ordering Information						
Standard models	Τ6	T 12	T 20	UT 6	UT 12	UT 20
230 V~1) Order I	no. 50042293	50042303	50042309	50042297	50042305	50042311
with additional mechanical weekly						
program timer; 230 V~ <sup>1)</sup> Order i	no. 50045756	50045761	50045766	50045758	50045763	50045768
Programmable models	T 6 P	T 12 P	T 20 P	UT 6 P	UT 12 P	UT 20 P
230 V~1) Order I	no. 50042294	50042304	50042310	50042298	50042306	50042312
with additional mechanical weekly						
program timer; 230 V~ <sup>1)</sup> Order i	no. 50045757	50045762	50045767	50045759	50045764	50045769
Accessories	T 6/T 6 P	T 12/T 12 P	T 20/T 20 P	UT 6/UT 6 P	UT 12/UT 12 P	UT 20/UT 20 F
Support frame 780 mm in height	50045045	50045046	50045047	50045045	50045046	50045047
Support frame 300 mm in height	50045049	50045050	50045051	50045049	50045050	50045051
Stacking kits	50042906	50042907	50042908	50042906	50042907	50042908
Shelf set (wire-mesh, incl. 2 supports)	50042913	50042914	50042915	50042916	50042917	50042918
Shelf set (perforated stainless steel, incl. 2 su	ipports) 50044620	50044610	50044621	50044611	50044612	50044613
Options					T-models	UT-models
Access ports in the	center of the correspondir					
ø 23 m	m (T/UT)	50049336	50049342			
right-h	and wall: ø 18 mm (T), ø 2	23 mm (UT)	50049337	50049343		
left-ha	nd wall: ø 18 mm (T), ø 23	3 mm (UT)			50049338	50049344
top: ø	58 mm (T/UT)				50049339	50049345
right-h	and wall: ø 53 mm (T), ø 5	58 mm (UT)			50049340	50049346
left-ha	nd wall: ø 53 mm (T), ø 58	3 mm (UT)			50049341	50049347
Manufacturer's						
Calibration Certificate Calibra	ation Certificate for 150 °C	50057685	50057685			
Calibra	ation at additional temper	50057686	50057686			
Record	l of 150 °C according to D	IN 12880 measuring a	at 27 points		50044952	50044952
Record	l of additional temperatur	e according to DIN 12	880		50057687	50057687

<sup>1)</sup>Other voltages on request

#### **Heraeus Series 6000**



Standard models		T 6030	T/UT 6060	T/UT 6120	T/UT 6200	T/UT 6420	T/UT 6760
Dimensions	(w x h x d)						
Outer casing	mm	552 x 552 x 535	744 x 552 x 535	895 x 696 x 535	895 x 816 x 715	744 x 1707 x 715	1200 x 1707 x 715
	inch	21.7 x 21.7 x 21.1	29.3 x 21.7 x 21.1	35.2 x 27.4 x 21.1	35.2 x 35.1 x 28.1	29.3 x 67.2 x 28.1	47.2 x 67.2 x 28.1
Height feet/roller	mm	24	24	24	24	106	106
	inch	0.9	0.9	0.9	0.9	4.2	4.2
Inner casing							
Total volume	L	30	57/52	107/94	196/180	409/375	751/689
Internal dimensions	(wxhxd)						
	mm	352 x 231 x 370	403 x 380 x 370/339	554 x 524 x 370/323	554 x 644 x 550/503	544 x 1366/1319 x 550/522	1000 x 1366/1319 x 550/522
	inch	13.9 x 9.1 x 14.6	15.9x15.0x14.6/13.3	21.8x20.6x14.6/12.7	21.8x25.4x21.7/19.8	21.4x53.8x51.9x21.7/20.6	39.4x53.8/51.9x21.7/20.6
Shelves stand./max.	. No.	1/4	2/9	2/14	2/18	2/39	2/39
Weight empty	kg	40	50/53	65/75	92/100	153/163	223/241
	lbs.	88	110/116	143/165	203/220	337/359	492/531
Temperature							
Temperature range <sup>1)</sup>	°C	300	300	300	300	300	300
Spatial temperature							
deviation <sup>2)</sup> at 70 °C	±°С	1.5	2/1	2/1	2/1	3/1.5	2/2
at 150 °C	±°C	3	4/3	4/3	4/3	3.5/3	5/4
at 300 °C	±°C	6	5/7	5/7	5/6	4/6	6/7
Temp. deviation							
over time	±°C	≤0.5	≤0.5	≤0.5	≤0.5	≤0.5	≤0.5
Electrical data							
Rated voltage							
(50/60 Hz) <sup>3)</sup>	V	230~	230~	230~	230~	400.3~/N	400.3~/N
Rated power	kW	0.8	1.6/1.65	2.2/2.4	2.7/2.8	4.1/4.2	6.1/6.3
Nominal temperature	;						
at 300 °C	Wh/h	415	550/900	780/1280	1000/1570	1800/2500	2600/3300

<sup>1)</sup> Control range T: electronic controller from T<sub>ambient</sub> +10 °C to 300 °C; control range UT: electronic controller from T<sub>ambient</sub> +20 °C to 300 °C <sup>2</sup>) The values stated apply to the unloaded oven in conjunction with wire mesh trays (measurement according to DIN 12880, Part 2), air flap closed. <sup>3</sup> Other voltages on request

Ordering Information						
Standard Models	T 6030	T 6060	T 6120	T 6200	T 6420	T 6760
Volume of work space L	30	57	107	196	409	751
Order no.	51013448	51015264	51015265	51015266	51013301	51015267
Standard Models	_	UT 6060	UT 6120	UT 6200	UT 6420	UT 6760
Volume of work space L		52	94	180	375	689
Order No.	-	51014393	51012499	51014889	51015272	51015273
Options Models	6030	6060	6120	6200	6420	6760
Temperature controller <sup>1)</sup>						
Thermicon <sup>®</sup> P <sup>2)</sup>	51900003	51900062	51900062	51900062	51900004	51900004
Digicon <sup>®</sup> S with analog interface <sup>2</sup>	51900048	51900049	51900049	51900049	51900050	51900050
Eurotherm 2404/P4						
with RS 232 interface	51900297	51900297	51900297	51900297	51900297	51900297
Eurotherm 2404/P4						
with RS 422/485 interface	51900298	51900298	51900298	51900298	51900298	51900298
Temperature regulation						
Adjustable upper temperature						
limit controller	51900167	51900168	51900168	51900168	51900167	51900167
Adjustable upper and lower						
temperature limit controller	51900163 <sup>3)</sup>	51900164 <sup>3)</sup>	51900164	51900164	51900163	51900163
Temperature sensor 1)						
Temperature recorder	51900290	51900290	51900290	51900290	51900290	51900290
PT 100 – connection						
for external temperature recorder	51900009	51900010	51900010	51900010	51900009	51900009
NiCr-Ni – connection						
for external temperature recorder		51900047	51900047	51900047	51900046	51900046
Digital recording of sample tempe	rature with dis	play				
(Please select sensor as accessory)	51900054	51900055	51900055	51900055	51900054	51900054
<sup>1)</sup> Only one option from this group possi	ble <sup>2)</sup> No digital	interface with this option	<sup>3)</sup> Not available fo	or 100–127 V		

# Heraeus Series 6000



SUPPH to a substance

Ordering Information							
Options	Models	6030	6060	6120	6200	6420	6760
Timers <sup>1)</sup>							
Daily program timer		51900159	51900160	51900160	51900160	51900159	51900159
Weekly program timer		51900007	51900008	51900008	51900008	51900007	51900007
Digital weekly program timer		51900161	51900162	51900162	51900162	51900161	51900161
Fresh air fan							
with speed setting only for UT <sup>2)</sup>		-	51900285	51900285	51900285	51900285	51900285
Inner casing version with condit	ional gas-tig	htness <sup>1)</sup>					
with inert gas connection for T		51900100	51900101	51900102	51900103	on request	on request
with inert gas connection for UT		-	51900106	51900107	51900108	on request	on request
incl. throttle valve for T		51900261	51900262	51900263	51900264	on request	on request
incl. throttle valve for UT		-	51900265	51900266	51900267	on request	on request
Door version							
Left-hinged door		50027652	50027652	50027652	50027652	-	-
Lockable door		51900059	51900059	51900059	51900059	51900059	51900059
Door window incl. internal lighting for	or T	-	51900011	51900012	51900013	51900014	51900015
Door window incl. internal lighting for	or UT	-	51900016	51900017	51900018	51900019	51900020
<b>Connection for central monitorin</b>	g	51900063	51900064	51900064	51900064	51900063	51900063

<sup>1)</sup> Only one option from this group possible <sup>2)</sup> Not available for 100–127 V

Accessories	Models	6030	6060	6120	6200	6420	6760
VITON <sup>®</sup> door seal		50027746	50027747	50027748	50027752	50027789	50028180
Access ports							
(Standard access port in the middle	of the approp	riate inner casing v	wall. Other positions p	cossible on request.)			
Top 1)	Ø 23 mm	_	50049348	50049348	50049348	_	_
Right-hand side wall 2)	Ø 18 mm	50049349	50049349	50049349	50049349	50049349	50049349
Left-hand side wall	Ø 18 mm	50049350	-	-	-	50049350	50049350
Тор	Ø 58 mm	-	50049351	50049351	50049351	-	-
Right-hand side wall 2)	Ø 53 mm	50049352	50049352	50049352	50049352	50049352	50049352
Left-hand side wall	Ø 53 mm	50049353	-	_	_	50049353	50049353
Additional measurements for the	e location gr	id					
Work space, centre T/UT Y =		120	120/105	120/97	210/187	210/196	210/196
Power access ports with 10 mea	suring term	inals					
(Terminals located at the side)		50027659	50027659	50027659	50027659	50027659	50027659
Temp. sensor PT 100 for recordin	g of sample	temp.					
Max. temperature 220 °C, flexible ca	able	50034313	50034313	50034313	50034313	50034314	50034314
Max. temperature 300 °C, rigid cabl	е	50034315	50034315	50034315	50034315	50034316	50034316
Wire mesh shelf							
with 2 shelf supports	Т	50029401	50029402	50029403	50029404	50029405	50029406
with 2 shelf supports	UT	-	50029413	50029414	50029415	50029416	50029417
Stainless steel perforated shelf							
with 2 shelf supports	Т	50029487	50029488	50029489	50029490	50029491	50029492
with 2 shelf supports	UT	-	50044614	50044615	50044616	50044617	50044618
Stacking frame		_	50027660	50027661	50027661	-	-
Four height-adjustable feet		50010923	50010923	50010923	50010923	_	-
Fine fresh-air filter							
for connection to fresh-air connectors	T/UT	50030850	50030850	50030850	50030850	50030850	50030850
for fresh-air fan	T/UT	50027662	50027662	50027662	50027662	50027662	50027662
Support frame							
780 mm high	T/UT	-	50029890	50029596	50029597	-	-
300 mm high	T/UT	_	50031349	50034303	50031348	-	-

<sup>1)</sup> Access port displaced 100 mm away from the centre to the left

 $^{\rm 2)}$  with T/UT 6060 and 6120 access ports displaced 50 mm upwards from the centre



## **Heraeus Vacutherm Series**

Technical Specifications

Standard models		Compact model VT 6025	Jacket heating VT 6060 M	VT 6130 M	Shelf heating VT 6060 P	VT 6130 P
Total volume	L	25	53	128	53	128
Dimensions (w x h x d)						
Internal dimensions	mm	300 x 275 x 307	415 x 345 x 371	495 x 489 x 529	415x-x371	495 x - x 592
	inch	11.8 x 10.8 x 12.1	16.3 x 13.6 x 14.6	19.5 x 19.3 x 20.8	16.3 x-x14.6	19.5 x-x 23.3
External dimensions 1)	mm	480 x 600 x 450	744 x 576 x 570	895 x 720 x 750	744 x 576 x 570	895 x 720 x 750
	inch	18.9x23.6x17.7	29.3 x 22.7 x 22.4	35.2 x 28.3 x 29.5	29.3 x 22.7 x 22.4	35.2 x 28.3 x 29.5
Shelves (standard/max.)	no	2/4	2/4	3/5	2/2	3/3
Usable area (w/d)	mm	270/250	400/312	480/470	400/297	465/417
	inch	10.6/9.8	15.7/12.3	18.9/18.5	15.7/11.7	18.3/16.4
Temperature <sup>2)</sup>						
Rated temperature <sup>3)</sup>	°C	200	200	200	300/400	300/400
Spatial temperature deviation <sup>4)</sup> at 200/300/400 °C	±°C	± 4/-/-	± 4//-	± 6/—/—	± 3/± 7/± 9	± 4/± 7/± 9
Electrical protection						
Protection class / Protection type		I/IP 20	I/IP 20	I/IP 20	I/IP 20	I/IP 20
Vacuum						
Vacuum connection with tube shaft Ø 20 mm	DN	25	25	25	25	25
Measuring connection	DN	25	25	25	25	25
Max. final vacuum	mbar (hPa)	1 x 10 <sup>-2</sup>	1 x 10 <sup>-2</sup>	1 x 10 <sup>-2</sup>	1 x 10 <sup>-2</sup>	1 x 10 <sup>-2</sup>
Weight (empty)	kg	58	82	153	90	164
	lbs.	127.8	180.8	337.3	198.4	361.5
Permissible total load	kg	40	40	60	40	60
	lbs.	88.2	88.2	132.3	88.2	132.3
Max. load of shelf <sup>5)</sup>	kg	20	20	20	20	20
	lbs.	44.1	44.1	44.1	44.1	44.1
Electrical input power						
Voltage <sup>6)</sup>	V~(50/60 Hz)	230±10%	230±10%	230±10%	230±10%	230±10%
Power	kW	1.3	1.7	2.2	1.6	3.0
Heat transfer to environment at 200 °C/300 °C	Wh/h	340/-	550/-	870/-	-/450	-/880

<sup>9</sup> Depth without handle and wall distance. Dimensions: handle 70mm, wall distance 80mm <sup>2</sup> The values stated apply to the empty oven and vacuum operation in acc. with DIN 12880, part 2] <sup>9</sup> Control range M: electronic controller from T<sub>A</sub> + 15 °C; control range P: electronic controller from T<sub>A</sub> + 10 °C; T<sub>A</sub> = Ambient temperature <sup>4</sup> Measured on the shelves <sup>5</sup> Distributed load

6) Other voltages on request



#### Ordering Information

	Order no.	
VT 6025 standard model, 230 V, 50/60 Hz <sup>1)</sup>	51014550	
VT 6025 Comfort oven with inert gas connection, 230 V, 50/60 Hz <sup>1)</sup>	51014552	
VT 6025 Comfort oven with inert gas connection and digital pressure display with recorder output, 230 V, 50/60 Hz <sup>11</sup>	51014553	
VT 6025 Comfort oven with inert gas connection and digital pressure display with recorder output and Digicon® S temperature controller		
with interface 0–20 mA/0–10 V, 230 V, 50/60 Hz <sup>1)</sup>	51014554	
Options/Accessories for VT 6025		
Precision control valve (only for order no. 51014550)	51900326	
Additional shelf (incl. shelf supports)	50028403	
RS 232 computer interface	51900284	
<sup>1</sup> Other voltages on request		oll www.oomaat
	SIL	15

#### **Heraeus Vacutherm Series**

Ordering Information



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Standard models		Jacket heating	Jacket heating			
		VT 6060 M	VT 6130 M	VT 6060 P	VT 6130 P	
Total volume	L	53	128	53	128	
Order no.		51014539	51014541	51014542	51014543	
Accessories for Vacutherm 6000		VT 6060 M/P		VT 6130 M/P		
Support frame, 780 mm height		50029890		50029597		
Additional shelves including shelf supports		50043975		50043976		
Tray made of stainless steel		50048621		50048619		
Tray made of aluminium steel		50048620		50048618		
Stainless steel vacuum connection kit for tubing	with a diamete	r of 10 mm (all models				50046860

<sup>1)</sup> All Heraeus pumps are equipped with the necessary components for connection to Heraeus Vacuum Ovens

#### Ordering Information

Options for Vacutherm 6000 M/P	Order no.	Options for vacutherm 6000 M/P	Order no	
RS 232 computer interface for Kelvitron® controller	51900284	Digicon® S temperature controller with analog interface 0–20 mA/0–10 V		
Digital pressure display	51900069	(200 °C): VT 6060 M and VT 6130 M	5190019	
Pressure controller with solenoid valve	51900193	(300 °C): VT 6060 P and VT 6130 P	5190019	
VITON door gasket for VT 6060 M	51900071	(400 °C): VT 6060 P	5190019	
VITON door gasket for VT 6130 M	51900072	VT 6130 P	5190019	
Daily program timer, mechanical	51900205	Rated temperature of 400 °C, (door without inspection window)		
24 hour timer (20 h at 60 Hz)	51900073	for VT 6060 P	5190007	
Weekly program timer, mechanical	51900008	for VT 6130 P	5190008	
Weekly program timer, digital	51900161	Central monitoring connection	5190008	
Digital sample temperature display with flexible Pt 100		Vacuum chamber with rounded corners at the rear		
temperature sensor and socket for external data recorder	51900074	for VT 6060 M	5190007	
Thermicon <sup>®</sup> P temperature program controller		for VT 6060 P	5190007	
for M-models only)	51900209	for VT 6130 M	5190007	
Eurotherm 2404/P4 temperature controller with		for VT 6130 P	5190007	
RS 232 interface (for M-models only)	51900297	Temperature recorder with flexible Pt 100 temperature sensor		
Eurotherm 2404/P4 temperature controller with		(not in combination with the 400 °C model)	5190029	
RS 422/485 interface (for M-models only)	51900298			

#### Technical Specifications/Ordering Information

Pumps		Diaphragm pum	ps		Rotary vane pumps
-		MD 12H	HMD 4C	HMZ 2C	RE 9H
Rated pumping capacity (Pneurop)	m³/h	9.6	3.0	1.7	8.6
Total final pressure without gas ballast	mbar	2	2	10	0.1
Total final pressure with gas ballast	mbar	<10	<10	<20	6 x 10 <sup>-1</sup>
Water vapor compatibility	mbar	-	-	_	40
Capacity of trap	ml	725	500	500	500
Weight	kg	24	18	14	21.6
Dimensions with trap (w/h/d)	mm	240 x 300 x 610	241 x 500 x 338	241 x 326 x 336	260 x 232 x 460
Order no.		50040078	50028362	50028364	50028361
Vacucenter <sup>®</sup> with pump model		MD 12H	HMD 4C		RE 9H
Voltage	V3N~, 50/60 Hz	400	400	_	400
Max. rated power	kW	3.37	3.20	_	3.37
External dimensions (w/h/d)	mm	895/650/900	895/650/900	-	895/650/900
Total weight	kg	88	80	_	86
Protection class				-	1
Protection type		IP 20	IP 20	-	IP 20
Order no <sup>.1)</sup>		50044332	50044333	_	50044334

<sup>1)</sup> in combination with VT 6060 or VT 6130

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