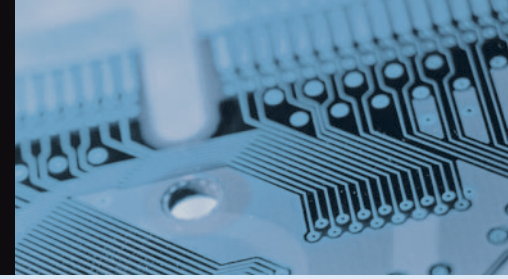




## Thermo Scientific Heraeus® Heating and Drying Ovens

Quality that meets every laboratory need

# 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.**

**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 Function Line Series – page 4

### 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 Series 6000 – page 6

### 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 Vacutherm Ovens – page 7



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 its 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 under-bench 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 cut-out) 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.

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.



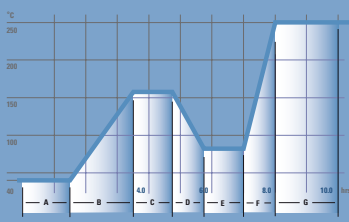
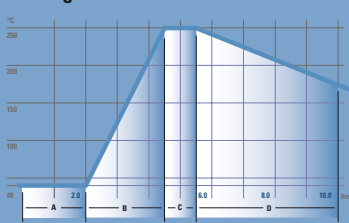


With an interchangeable door gasket, removable shelves and covered corners of the stainless steel interior, cleaning is easy and safe.



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 Standard Version



▲ 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.

Corrosion-resistant stainless steel inner casing with rounded corners for time-saving cleaning

Sturdy one-point door latch provides optimal sealing

Removable shelf supports help make cleaning easy



Interchangeable door gasket made of highly resistant degassed silicone rubber

Sophisticated programmable controller with easy-to-read large digital display

Fresh air supply (UT) and oven temperature controls (Class 2) for unattended operation

Robust door hinge with integrated cable ducts

# 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.



## Series 6000 Options







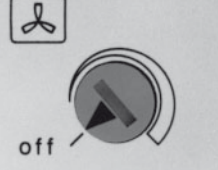
if you need more than our standard solutions



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

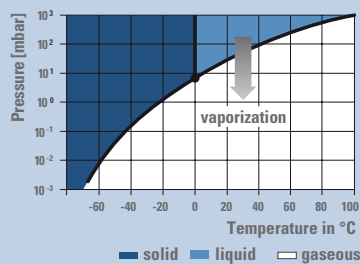
## The perfect choice

- 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.

	Standard	Optional
	<b>Process control</b>	
	Throttle valve for smooth adjustment of air changes	
	<b>Temperature documentation</b>	
		Connection facility for an external temperature recorder for measuring with Pt 100 temperature sensor, connection via DIN 41524 plug. Sensor permanently installed.
	<b>Temperature controller</b>	
	<b>Kelvitron®</b> 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.	<b>Programmable controller</b> <ul style="list-style-type: none"> <li>• Thermicon® P</li> <li>• Eurotherm 2404/P4</li> </ul> <b>Controller with analog interface</b> <ul style="list-style-type: none"> <li>• Digicon® S</li> </ul> Detailed information on request.
	<b>RS 232 interface</b> for Kelvitron T	
	<b>Upper temperature limit protection</b>	
	<b>Adjustable upper limit cut-out</b> Safety Class 2, switches off equipment at an adjustable temperature limit independently of the temperature controller. Class 3.1 available as option.	<b>Adjustable upper and lower temperature limit protection</b> Safety Class 3.3, independent of temperature controller. Automatically takes over the temperature control if the upper or lower limit set is exceeded.
	<b>Time Operation</b>	
	<b>24-hour timer (20 h at 60 Hz)</b> for switching on and off <ul style="list-style-type: none"> <li>• Pre-heating for the next day</li> <li>• Timed shutdown of heating without manual intervention</li> </ul>	<b>Daily, weekly or digital weekly timer</b> <ul style="list-style-type: none"> <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>
	<b>Speed setting for the air-circulation fan</b>	
	<ul style="list-style-type: none"> <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 l. 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 l and temperatures to 200 °C the VT 6025 convinces with a compact design.



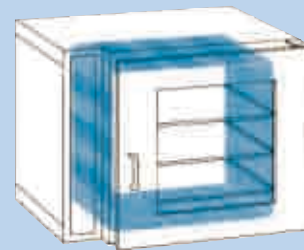


### Two Types of Heating

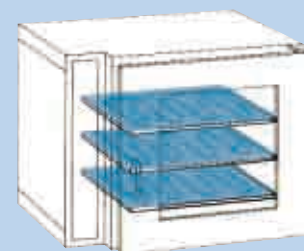
A choice of jacket- (model M) or shelf- heating (model P) ensure that ovens can meet your application requirements.

- 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



### ▼ 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:

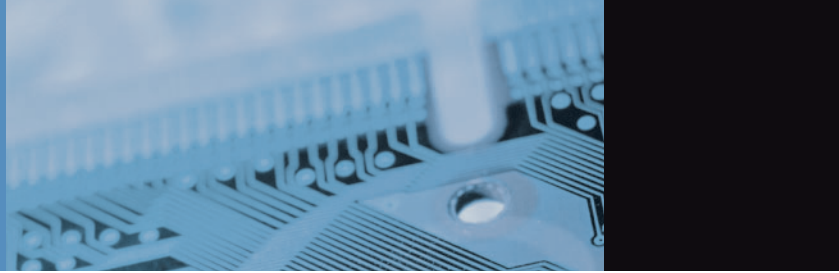
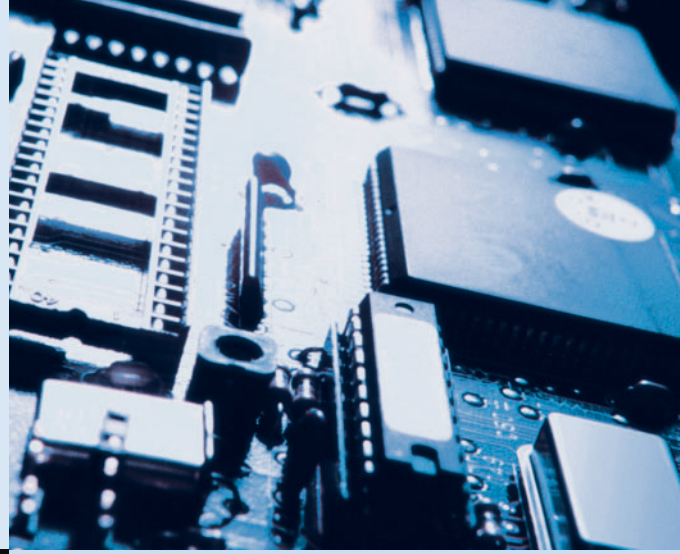
- **Pressure Heat Activation:** automatic heat shut off when pressure is too high
- **Permanent Control Panel Ventilation:** prevents solvent leakage using two independent generating fans

*\* Please check your local standards and regulations.*

The Heraeus Vacutherm VT 6060 and VT 6130 are available with two 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

- 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

### Heraeus UT 6050

- Recirculated air drying oven providing constant temperatures for material testing
- Ensures minimal spatial temperature deviation ( $\pm 2$  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.



# 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 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



\* Please check your local standards and regulations



# Thermo Scientific Heating and Drying Ovens

## 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
<b>Dimensions (w x h x d)</b>							
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
<b>Operating temperature</b>							
from T <sub>A</sub> <sup>2)</sup> + 10 °C / + 20 °C to	°C	250	250	250	250	250	250
<b>Temperature deviations</b>							
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
<b>Heat transfer to environment</b>	W	500	700	1000	700	850	1100
<b>Electrical data (nominal values)</b>							
Operating voltage <sup>3)</sup>	V	230, 1/PE AC	230, 1/PE AC	230, 1/PE AC	230, 1/PE AC	230, 1/PE AC	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		T 6	T 12	T 20	UT 6	UT 12	UT 20
230 V <sup>-1)</sup>	Order no.	50042293	50042303	50042309	50042297	50042305	50042311
with additional mechanical weekly program timer; 230 V <sup>-1)</sup>	Order no.	50045756	50045761	50045766	50045758	50045763	50045768
<b>Programmable models</b>		<b>T 6 P</b>	<b>T 12 P</b>	<b>T 20 P</b>	<b>UT 6 P</b>	<b>UT 12 P</b>	<b>UT 20 P</b>
230 V <sup>-1)</sup>	Order no.	50042294	50042304	50042310	50042298	50042306	50042312
with additional mechanical weekly program timer; 230 V <sup>-1)</sup>	Order no.	50045757	50045762	50045767	50045759	50045764	50045769
<b>Accessories</b>							
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 supports)		50044620	50044610	50044621	50044611	50044612	50044613
<b>Options</b>						<b>T-models</b>	<b>UT-models</b>
<b>Access ports</b>	in the center of the corresponding wall of the inner casing top: ø 23 mm (T/UT)					50049336	50049342
	right-hand wall: ø 18 mm (T), ø 23 mm (UT)					50049337	50049343
	left-hand wall: ø 18 mm (T), ø 23 mm (UT)					50049338	50049344
	top: ø 58 mm (T/UT)					50049339	50049345
	right-hand wall: ø 53 mm (T), ø 58 mm (UT)					50049340	50049346
	left-hand wall: ø 53 mm (T), ø 58 mm (UT)					50049341	50049347
<b>Manufacturer's</b>							
<b>Calibration Certificate</b>	Calibration Certificate for 150 °C at center of the inner chamber					50057685	50057685
	Calibration at additional temperature (max. 2)					50057686	50057686
	Record of 150 °C according to DIN 12880 measuring at 27 points					50044952	50044952
	Record of additional temperature according to DIN 12880					50057687	50057687

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

## Heraeus Series 6000



### Technical Specifications

Standard models		T 6030	T/UT 6060	T/UT 6120	T/UT 6200	T/UT 6420	T/UT 6760
<b>Dimensions (w x h x d)</b>							
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
<b>Inner casing</b>							
Total volume	L	30	57/52	107/94	196/180	409/375	751/689
Internal dimensions (w x h x d)	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	15.9 x 15.0 x 14.6/13.3	21.8 x 20.6 x 14.6/12.7	21.8 x 25.4 x 21.7/19.8	21.4 x 53.8 x 51.9 x 21.7/20.6	39.4 x 53.8/51.9 x 21.7/20.6
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
<b>Temperature</b>							
Temperature range <sup>1)</sup>	°C	300	300	300	300	300	300
Spatial temperature deviation <sup>2)</sup>	at 70 °C	± 1.5	2/1	2/1	2/1	3/1.5	2/2
	at 150 °C	± 3	4/3	4/3	4/3	3.5/3	5/4
	at 300 °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
<b>Electrical data</b>							
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  $T_{\text{ambient}} + 10$  °C to 300 °C, control range UT: electronic controller from  $T_{\text{ambient}} + 20$  °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
<b>Standard Models</b>			<b>UT 6060</b>	<b>UT 6120</b>	<b>UT 6200</b>	<b>UT 6420</b>	<b>UT 6760</b>
Volume of work space L			52	94	180	375	689
Order No.			51014393	51012499	51014889	51015272	51015273
<b>Options</b>	<b>Models</b>	<b>6030</b>	<b>6060</b>	<b>6120</b>	<b>6200</b>	<b>6420</b>	<b>6760</b>
<b>Temperature controller<sup>1)</sup></b>							
Thermicon® P <sup>2)</sup>		51900003	51900062	51900062	51900062	51900004	51900004
Digicon® 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
<b>Temperature regulation</b>							
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
<b>Temperature sensor<sup>1)</sup></b>							
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		51900046	51900047	51900047	51900047	51900046	51900046
Digital recording of sample temperature with display (Please select sensor as accessory)		51900054	51900055	51900055	51900055	51900054	51900054

<sup>1)</sup> Only one option from this group possible <sup>2)</sup> No digital interface with this option <sup>3)</sup> Not available for 100–127 V

# Thermo Scientific Heating and Drying Ovens



## Heraeus Series 6000

### Ordering Information

Options	Models	6030	6060	6120	6200	6420	6760
<b>Timers<sup>1)</sup></b>							
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
<b>Fresh air fan</b>							
with speed setting only for UT <sup>2)</sup>		–	51900285	51900285	51900285	51900285	51900285
<b>Inner casing version with conditional gas-tightness<sup>1)</sup></b>							
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
<b>Door version</b>							
Left-hinged door		50027652	50027652	50027652	50027652	–	–
Lockable door		51900059	51900059	51900059	51900059	51900059	51900059
Door window incl. internal lighting for T		–	51900011	51900012	51900013	51900014	51900015
Door window incl. internal lighting for UT		–	51900016	51900017	51900018	51900019	51900020
<b>Connection for central monitoring</b>		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
<b>VITON® door seal</b>		50027746	50027747	50027748	50027752	50027789	50028180
<b>Access ports</b>							
(Standard access port in the middle of the appropriate inner casing wall. Other positions possible on request.)							
Top <sup>1)</sup>	∅ 23 mm	–	50049348	50049348	50049348	–	–
Right-hand side wall <sup>2)</sup>	∅ 18 mm	50049349	50049349	50049349	50049349	50049349	50049349
Left-hand side wall	∅ 18 mm	50049350	–	–	–	50049350	50049350
Top	∅ 58 mm	–	50049351	50049351	50049351	–	–
Right-hand side wall <sup>2)</sup>	∅ 53 mm	50049352	50049352	50049352	50049352	50049352	50049352
Left-hand side wall	∅ 53 mm	50049353	–	–	–	50049353	50049353
<b>Additional measurements for the location grid</b>							
Work space, centre T/UT Y =		120	120/105	120/97	210/187	210/196	210/196
<b>Power access ports with 10 measuring terminals</b>							
(Terminals located at the side)		50027659	50027659	50027659	50027659	50027659	50027659
<b>Temp. sensor PT 100 for recording of sample temp.</b>							
Max. temperature 220 °C, flexible cable		50034313	50034313	50034313	50034313	50034314	50034314
Max. temperature 300 °C, rigid cable		50034315	50034315	50034315	50034315	50034316	50034316
<b>Wire mesh shelf</b>							
with 2 shelf supports	T	50029401	50029402	50029403	50029404	50029405	50029406
with 2 shelf supports	UT	–	50029413	50029414	50029415	50029416	50029417
<b>Stainless steel perforated shelf</b>							
with 2 shelf supports	T	50029487	50029488	50029489	50029490	50029491	50029492
with 2 shelf supports	UT	–	50044614	50044615	50044616	50044617	50044618
<b>Stacking frame</b>							
		–	50027660	50027661	50027661	–	–
<b>Four height-adjustable feet</b>							
		50010923	50010923	50010923	50010923	–	–
<b>Fine fresh-air filter</b>							
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
<b>Support frame</b>							
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

<sup>2)</sup> with T/UT 6060 and 6120 access ports displaced 50 mm upwards from the centre

## Heraeus Vacuotherm Series



### Technical Specifications

Standard models		Jacket heating		Shelf heating		Compact model VT 6025
		VT 6060 M	VT 6130 M	VT 6060 P	VT 6130 P	
Total volume	L	53	128	53	128	25
<b>Dimensions (w x h x d)</b>						
Internal dimensions	mm	415 x 345 x 371	495 x 489 x 529	415 x - x 371	495 x - x 592	300 x 275 x 307
	inch	16.3 x 13.6 x 14.6	19.5 x 19.3 x 20.8	16.3 x - x 14.6	19.5 x - x 23.3	11.8 x 10.8 x 12.1
External dimensions <sup>1)</sup>	mm	744 x 576 x 570	895 x 720 x 750	744 x 576 x 570	895 x 720 x 750	480 x 600 x 450
	inch	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	18.9 x 23.6 x 17.7
Shelves (standard/max.)	no	2/4	3/5	2/2	3/3	2/4
Usable area (w/d)	mm	400/312	480/470	400/297	465/417	270/250
	inch	15.7/12.3	18.9/18.5	15.7/11.7	18.3/16.4	10.6/9.8
<b>Temperature <sup>2)</sup></b>						
Rated temperature <sup>3)</sup>	°C	200	200	300/400	300/400	200
Spatial temperature deviation <sup>4)</sup> at 200/300/400 °C	± °C	± 4/-/-	± 6/-/-	± 3/± 7/± 9	± 4/± 7/± 9	± 4/-/-
<b>Electrical protection</b>						
Protection class / Protection type		I / IP 20	I / IP 20	I / IP 20	I / IP 20	I / IP 20
<b>Vacuum</b>						
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>
<b>Weight (empty)</b>	kg	82	153	90	164	58
	lbs.	180.8	337.3	198.4	361.5	127.8
Permissible total load	kg	40	60	40	60	40
	lbs.	88.2	132.3	88.2	132.3	88.2
Max. load of shelf <sup>5)</sup>	kg	20	20	20	20	20
	lbs.	44.1	44.1	44.1	44.1	44.1
<b>Electrical input power</b>						
Voltage <sup>6)</sup>	V-(50/60 Hz)	230 ± 10 %	230 ± 10 %	230 ± 10 %	230 ± 10 %	230 ± 10 %
Power	kW	1.7	2.2	1.6	3.0	1.3
Heat transfer to environment at 200 °C/300 °C	Wh/h	550/-	870/-	-/450	-/880	340/-

<sup>1)</sup> Depth without handle and wall distance. Dimensions: handle 70 mm, wall distance 80 mm <sup>2)</sup> The values stated apply to the empty oven and vacuum operation in acc. with DIN 12880, part 2)

<sup>3)</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

<sup>6)</sup> Other voltages on request

### Ordering Information

Standard models		Jacket heating		Shelf heating		
		VT 6060 M	VT 6130 M	VT 6060 P	VT 6130 P	
Total volume	L	53	128	53	128	
Order no.		51014539	510114541	510114542	510114543	
<b>Accessories for Vacuotherm 6000</b>		<b>VT 6060 M/P</b>		<b>VT 6130 M/P</b>		
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 diameter of 10 mm (all models)						50046860

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

# Thermo Scientific Heating and Drying Ovens



## Heraeus Vacuotherm Series

### Ordering Information

Options for Vacuotherm 6000 M/P	Order no.	Options for vacuotherm 6000 M/P	Order no.
RS 232 computer interface for Kelvitrone® 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	51900194
Pressure controller with solenoid valve	51900193	(300 °C): VT 6060 P and VT 6130 P	51900195
VITON door gasket for VT 6060 M	51900071	(400 °C): VT 6060 P	51900196
VITON door gasket for VT 6130 M	51900072	VT 6130 P	51900197
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	51900079
Weekly program timer, mechanical	51900008	for VT 6130 P	51900080
Weekly program timer, digital	51900161	Central monitoring connection	51900081
Digital sample temperature display with flexible Pt 100 temperature sensor and socket for external data recorder	51900074	Vacuum chamber with rounded corners at the rear	
Thermicon® P temperature program controller (for M-models only)	51900209	for VT 6060 M	51900075
Eurotherm 2404/P4 temperature controller with RS 232 interface (for M-models only)	51900297	for VT 6060 P	51900077
Eurotherm 2404/P4 temperature controller with RS 422/485 interface (for M-models only)	51900298	for VT 6130 M	51900076
		for VT 6130 P	51900078
		Temperature recorder with flexible Pt 100 temperature sensor (not in combination with the 400 °C model)	51900291

### 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>1)</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
<b>Options/Accessories for VT 6025</b>	
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

### Technical Specifications / Ordering Information

Pumps		Diaphragm pumps			Rotary vane pumps
		MD 12H	HMD 4C	HMZ 2C	RE 9H
Rated pumping capacity (Pneurop)	m <sup>3</sup> /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
<b>Vacucenter® with pump model</b>		<b>MD 12H</b>	<b>HMD 4C</b>		<b>RE 9H</b>
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		I	I	–	I
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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