

7. Heating and cooling technology

Heating/Universal, Heating and Drying incubators

Universal drying oven LLG-uniOVEN 42 and LLG-uniOVEN 110

1

Microprocessor controlled universal drying oven with **forced convection** including two shelves. Each shelf of the uniOVEN 42 and uniOVEN 110 has a load capacity of 20 kg, the total load capacity of each unit is 50 kg. The maximum number of shelves is 7 for uniOVEN 42 and 10 for uniOVEN 110 with a distance of 40 mm between shelves.

- Quick and intuitive operation
- Microprocessor control with integrated auto-diagnostic system
- Forced convection with fan
- Digital display for time and temperature
- **Timer:** 1 minute to 99.9 h and continuous
- Delayed start timer: 1 minute to 99.9 h
- Outlet for vapour exhaustion
- Acoustical and visible information for end of program
- Acoustical and optical alarm at temperature differences
- Interior made of stainless steel
- Adjustable over temperature protection at 300 °C

Scope of supply: LLG-uniOVEN incl. 2 shelves

Specifications	LLG-uniOVEN 42 // LLG-uniOVEN 110
Internal volume:	42 l // 110 l
Temperature range:	50 ... 250 °C
Temperature accuracy:	±1 °C (at 70 °C)
Temperature uniformity:	±2 °C (at 70 °C)
Permissible ambient temperature:	5 ... 40 °C
Permissible relative moisture:	80 %, not condensing
Dimensions (W x D x H):	420 x 280 x 360 // 500 x 445 x 500 mm
Weight:	39 kg // 66 kg
Power supply:	230 V, 50/60 Hz
Warranty:	3 years



6.263 670

2



6.263 675

Type	Nom. capacity	Internal dimensions (W x D x H) mm	External dimensions (W x D x H) mm	Rated capacity kW	Plug type	PK	Cat. No.
LLG-uniOVEN 42	42	420 x 280 x 360	705 x 505 x 540	0.85	EU	1	6.263 670
LLG-uniOVEN 42	42	420 x 280 x 360	705 x 505 x 540	0.85	UK	1	6.263 673
LLG-uniOVEN 110	110	500 x 445 x 500	790 x 665 x 680	1.55	EU	1	6.263 675
LLG-uniOVEN 110	110	500 x 445 x 500	790 x 665 x 680	1.55	UK	1	6.263 678

Accessories for Universal drying ovens LLG-uniOVEN 42/110

Description	PK	Cat. No.
Shelf for LLG-uniOVEN 42	1	6.263 671
Shelf carrier for LLG-uniOVEN 42	2	6.263 672
Shelf for LLG-uniOVEN 110	1	6.263 676
Shelf carrier for LLG-uniOVEN 110	2	6.263 677

3 Drying oven E28 series

3

Robust, space-saving, low-profile ovens with mechanical and adjustable chamber ventilation.

BINDER

- Temperature range: 60 to 230 °C
- Hydraulic thermostat temperature control
- Adjustable exhaust air flap
- Timer 0 to 120 min
- Available with, or without, TB (Class 1)
- Power supply 230 V, 50/60 Hz

The number of shelves included in the scope of delivery is listed in the table.



Type	Nom. capacity	Max. grids	Included grids	Internal dimensions (W x D x H) mm	External dimensions (W x D x H) mm	Rated capacity kW	PK	Cat. No.
E 28	28	4	2	400 x 250 x 280	580 x 425 x 405	0.8	1	9.883 543
E 28*	28	4	2	400 x 250 x 280	580 x 425 x 405	0.8	1	9.883 544

* with TB (Class 1)

1 Universal Ovens UN/UF and UNplus/UFplus

The all-round genius among heating ovens covers a multitude of applications, ideally at temperatures above +50 °C. The fresh air is preheated in the pre-heating chamber to avoid temperature fluctuations.

Memmert

Specifications

Type designation:	N = Natural convection F = Forced air circulation plus = TwinDISPLAY
Working temperature range:	at least 5 °C (UN/UNplus) or 10 °C (UF/UFplus) above ambient to +300 °C
Setting temperature range:	+20 to +300 °C
Setting accuracy:	up to 99.9 °C: 0.1 °C/from 100 °C: 0.5 °C
Power supply:	230 V, 50/60 Hz (sizes 30 - 260) 400 V (sizes 450 - 1060)

Universal Ovens UN and UF

SingleDISPLAY: ControlCOCKPIT with one colour display

Memmert

You can find a detailed description of the "SingleDISPLAY" model at www.memmert.com

Type	Nom. capacity	Max. grids	Included grids	Internal dimensions (W x D x H) mm	External dimensions (W x D x H) mm	Rated capacity kW	Net weight		PK	Cat. No.
	L						kg			
UN30	32	3	1	400 x 250* x 320	585 x 434** x 704	1.6	45	1	9.869 681	
UN55	53	4	1	400 x 330* x 400	585 x 514** x 784	2.0	57	1	9.869 682	
UN75	74	6	2	400 x 330* x 560	585 x 514** x 944	2.5	66	1	9.869 683	
UN110	108	5	2	560 x 400* x 480	745 x 584** x 864	2.8	74	1	9.869 684	
UN160	161	8	2	560 x 400* x 720	745 x 584** x 1104	3.2	96	1	9.869 685	
UN260	256	9	2	640 x 500* x 800	824 x 684** x 1183	3.4	110	1	9.869 686	
UN450	449	8	2	1040 x 600* x 720	1224 x 784** x 1247	5.8	161	1	9.869 687	
UN750	749	14	2	1040 x 600* x 1200	1224 x 784** x 1720	7.0	217	1	9.869 688	
UF30	32	3	1	400 x 250* x 320	585 x 434** x 704	1.6	45	1	9.869 697	
UF55	53	4	1	400 x 330* x 400	585 x 514** x 784	2.0	57	1	9.869 698	
UF75	74	6	2	400 x 330* x 560	585 x 514** x 944	2.5	66	1	9.869 699	
UF110	108	5	2	560 x 400* x 480	745 x 584** x 864	2.8	74	1	9.869 700	
UF160	161	8	2	560 x 400* x 720	745 x 584** x 1104	3.2	96	1	9.869 701	
UF260	256	9	2	640 x 500* x 800	824 x 684** x 1183	3.4	110	1	9.869 702	
UF450	449	8	2	1040 x 600* x 720	1224 x 784** x 1247	5.8	161	1	9.869 703	
UF750	749	14	2	1040 x 600* x 1200	1224 x 784** x 1720	7.0	217	1	9.869 704	
UF1060	1060	14	1	1040 x 850* x 1200	1224 x 1035** x 1720	7.0	252	1	6.266 314	

* Less 39 mm for fan

**Depth without door handle, please add 56 mm

1



9.869 695

2



9.869 697

Universal Ovens UNplus and UFplus

TwinDISPLAY: ControlCOCKPIT with two colour displays

Memmert

You can find a detailed description of the "TwinDISPLAY" model at www.memmert.com

Type	Nom. capacity	Max. grids	Included grids	Internal dimensions (W x D x H) mm	External dimensions (W x D x H) mm	Rated capacity kW	Net weight kg	PK	Cat. No.
	L								
UN30plus	32	3	1	400 x 250* x 320	585 x 434** x 704	1.6	45	1	9.869 689
UN55plus	53	4	1	400 x 330* x 400	585 x 514** x 784	2.0	57	1	9.869 690
UN75plus	74	6	2	400 x 330* x 560	585 x 514** x 944	2.5	66	1	9.869 691
UN110plus	108	5	2	560 x 400* x 480	745 x 584** x 864	2.8	74	1	9.869 692
UN160plus	161	8	2	560 x 400* x 720	745 x 584** x 1104	3.2	96	1	9.869 693
UN260plus	256	9	2	640 x 500* x 800	824 x 684** x 1183	3.4	110	1	9.869 694
UN450plus	449	8	2	1040 x 600* x 720	1224 x 784** x 1247	5.8	161	1	9.869 695
UN750plus	749	14	2	1040 x 600* x 1200	1224 x 784** x 1720	7.0	217	1	9.869 696
UF30plus	32	3	1	400 x 250* x 320	585 x 434** x 704	1.6	45	1	9.869 705
UF55plus	53	4	1	400 x 330* x 400	585 x 514** x 784	2.0	57	1	9.869 706
UF75plus	74	6	2	400 x 330* x 560	585 x 514** x 944	2.5	66	1	9.869 707
UF110plus	108	5	2	560 x 400* x 480	745 x 584** x 864	2.8	74	1	9.869 708
UF160plus	161	8	2	560 x 400* x 720	745 x 584** x 1104	3.2	96	1	9.869 709
UF260plus	256	9	2	640 x 500* x 800	824 x 684** x 1183	3.4	110	1	9.869 710
UF450plus	449	8	2	1040 x 600* x 720	1224 x 784** x 1247	5.8	161	1	9.869 711
UF750plus	749	14	2	1040 x 600* x 1200	1224 x 784** x 1720	7.0	217	1	9.869 712
UF1060plus	1060	14	1	1040 x 850* x 1200	1224 x 1035** x 1720	7.0	252	1	9.869 713

* Less 39 mm for fan

**Depth without door handle, please add 56 mm

Suitable accessories can be found in our online shop.

1



9.869 708

2 3 Heating ovens, ED, FD, FED series - Classic.Line

Diversity for all types of thermal, whether efficient drying, long-term controlled elevated temperatures or sterilization tasks for homogeneous temperature distribution: a BINDER oven and heating chamber is up to any tasks thanks to its wide temperature range.

ED Series: Drying ovens with gravity convection.

FD Series: Drying ovens with forced convection.

FED Series: Heating chambers with forced convection and enhanced timer functions.

Equipment:

- Temperature range from 5°C above ambient temperature to 300 °C
- Independent adjustable temperature safety device class 2 (DIN 12880), with visual temperature alarm
- Optional RS 422 Interface for APT-COM™ Data Control System communication software

The number of shelves included in the scope of delivery is listed in the table.

BINDER



3



Type	Nom. capacity	Max. grids	Included grids	Internal dimensions (W x D x H) mm	External dimensions (W x D x H) mm	Rated capacity kW	Type of auxiliary energy	PK	Cat. No.
	L								
ED 23	20	4	2	222 x 300 x 330	435 x 520 x 495	0.8	230 V, 50/60 Hz	1	9.883 529
ED 23	20	4	2	222 x 300 x 330	435 x 520 x 495	8.0	230 V, 50/60 Hz	1	9.883 530
ED 400	400	10	2	1000 x 520 x 800	1235 x 765 x 1025	3.4	400 V, 50/60 Hz	1	9.883 551
FD 23	20	4	2	222 x 300 x 330	435 x 520 x 495	0.8	230 V, 50/60 Hz	1	9.883 808
FED 400	400	10	2	1000 x 510 x 800	1235 x 765 x 1025	3.4	400 V, 50/60 Hz	1	9.883 803

* with RS 422



1 Heating ovens ED-S/FD-S Solid.Line

For drying and heating in research and quality control.
With ramp function, optical temperature alert and delayed power-off.

BINDER

- APT.line™ preheating chamber technology
- Natural convection with homogenous temperature distribution
- Adjustable exhaust air flap
- Digital controller with timer
- Easy and ergonomical door opening
- Class 2 integrated independent adjustable temperature safety device (DIN 12880) with visual alarm

Scope of delivery: Heating oven, 1 chrome plated rack incl. shelf supports

Heating oven ED-S 56 Solid.Line with natural convection

With natural convection for homogenous temperature distribution.

BINDER

Specifications

Temperature range:	RT + 10 °C ... 250 °C
Temperature variation at 150 °C:	±2.8 °C
Heating-up time to 150 °C:	60 min
Permitted load:	30 kg
Weight:	38 kg
Power supply:	230 V, 50/60 Hz

Type	PK	Cat. No.
ED-S 56	1	4.665 042

Heating oven ED-S 115 Solid.Line with natural convection



With natural convection for homogenous temperature distribution.

BINDER

Specifications

Temperature range:	RT + 7 °C ... 250 °C
Temperature variation at 150 °C:	±2.8 °C
Heating-up time to 150 °C:	55 min
Interior volume:	118 l
Internal dimensions:	550 x 390 x 550 mm
External dimensions:	745 x 565 x 735 mm
Permitted load:	75 kg
Max. shelves:	5
Weight:	54 kg
Power supply:	230 V, 50/60 Hz

Type	PK	Cat. No.
ED-S 115	1	4.667 816

Heating oven FD-S 56 Solid.Line with forced convection

With forced convection for homogenous temperature distribution.

BINDER

Specifications

Temperature range:	RT + 10 °C ... 250 °C
Temperature variation at 150 °C:	±2.6 °C
Heating-up time to 150 °C:	20 min
Permitted load:	30 kg
Weight:	38 kg
Power supply:	230 V, 50/60 Hz

Type	PK	Cat. No.
FD-S 56	1	4.665 196

Heating oven FD-S 115 Solid.Line with forced convection



With forced convection for homogenous temperature distribution.

BINDER

Specifications

Temperature range:	RT + 10 °C ... 250 °C
Temperature variation at 150 °C:	±2.4 °C
Heating-up time to 150 °C:	22 min
Interior volume:	106 l
Internal dimensions:	550 x 350 x 550 mm
External dimensions:	745 x 565 x 735 mm
Permitted load:	75 kg
Max. shelves:	5
Weight:	54 kg
Power supply:	230 V, 50/60 Hz

Type	PK	Cat. No.
FD-S 115	1	4.665 522

1 Heating ovens, ED, FD, FED series - Avantgarde.Line

The drying chambers with natural convection (Type designation ED) or forced convection (Type designation FD, FED) are renowned due to their new design, convenient operation, and efficiency. The latest APT.line™ technology offers outstanding temperature accuracy.

BINDER



Equipment:

- Temperature range series ED: room temperature plus 5-6 °C to 300 °C
- Temperature range series FD, FED: room temperature plus 10 °C to 300 °C
- Controller with LCD display
- Electromechanical control of the exhaust air flap
- Class 2 independent temperature safety device (DIN 12880) with visual temperature alarm
- USB port for recording data

The number of shelves included in the scope of delivery is listed in the table.

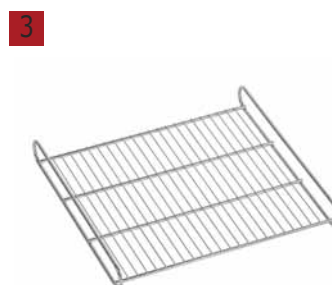
Type	Nom. capacity L	Max. grids	Included grids	Internal dimensions (W x D x H) mm	External dimensions (W x D x H) mm	Rated capacity kW	Type of auxiliary energy	PK	Cat. No.
ED 56	57	4	2	360 x 380 x 420	560 x 565 x 625	1.05	230 V, 50/60 Hz	1	4.658 061
ED 115	114	5	2	510 x 425 x 530	710 x 605 x 735	1.25	230 V, 50/60 Hz	1	4.658 059
ED 260	260	8	2	610 x 550 x 760	810 x 760 x 965	2.25	230 V, 50/60 Hz	1	6.280 292
FD 56	60	4	2	400 x 345 x 440	560 x 565 x 625	1.10	230 V, 50/60 Hz	1	6.280 069
FD 115	116	5	2	550 x 385 x 550	710 x 605 x 735	1.30	230 V, 50/60 Hz	1	4.658 060
FD 260	260	8	2	650 x 515 x 780	810 x 760 x 965	2.30	230 V, 50/60 Hz	1	6.280 362
FD 720	741	16	2	1000 x 570 x 1300	1165 x 870 x 1590	4.50	400 V, 50/60 Hz	1	6.291 250
FED 56	60	4	2	400 x 345 x 440	560 x 565 x 625	1.10	230 V, 50/60 Hz	1	6.280 295
FED 115	116	5	2	550 x 385 x 550	710 x 605 x 735	1.30	230 V, 50/60 Hz	1	6.280 284
FED 260	260	8	2	650 x 515 x 780	810 x 760 x 965	2.30	230 V, 50/60 Hz	1	6.280 296
FED 720	741	16	2	1000 x 570 x 1300	1165 x 870 x 1590	4.50	400 V, 50/60 Hz	1	4.668 970

2 3 Accessories for incubators, drying and heat chambers

Insert grids and shelves, chrome-plated or stainless steel.

BINDER

Type	For	PK	Cat. No.
Shelves, perforated	BF 56, FD 56, MKF 56, MK 56, FED 56	1	6.272 895
Shelves, perforated, stainless steel	BD 56, ED 56	1	6.290 544
Shelves, perforated, stainless steel	FD 115, FED 115, BF 115	1	6.313 969
Shelves, perforated, stainless steel	KBF-S 240, KBF P 240, KBF LQC 240, KBWF 240, KB 400, KB 240, KBF 240, KMF 240, KBW 400, KBW 240	1	6.233 078
Shelves, perforated, stainless steel	FP 720, M 720	1	6.242 769
Shelves, perforated, stainless steel	KMF 720, KB 720, KBF P 720, KBF LQC 720, KBF-S 720, KBF 720, KBWF 720, KBW 720	1	6.237 182
Shelves, perforated, stainless steel	KBF 1020, KBF-S 1020	1	6.312 312
Insert grids, chrome-plated	BF 56, FD 56, FED 56	1	6.280 337
Insert grids, chrome-plated	BD 115, ED 115	1	6.283 062
Insert grids, chrome-plated	FD 115, FED 115, BF 115	1	6.287 278
Insert grids, chrome-plated	FP 115, M 115, FDL 115	1	6.901 132
Insert grids, chrome-plated	ED 260, BD 260	1	4.664 397
Insert grids, chrome-plated	FED 260, BF 260, FD 260	1	6.270 116
Insert grids, chrome-plated	BF 400, BD 400, FP 400, ED 400, FED 400, M 400	1	6.223 529
Insert grids, chrome-plated	BF 720, FD 720, FED 720	1	6.291 569
Insert grids, chrome-plated	FP 720, M 720	1	6.510 242
Insert grids, stainless steel	MKT 115, KB 115, FP 115, MK 115, MKF 115, M 115, MKFT 115, FDL 115	1	6.059 089
Insert grids, stainless steel	M 240, FP240	1	6.058 638
Insert grids, stainless steel	KBF-S 240, KBF P 240, KBF LQC 240, KBWF 240, KB 400, KB 240, KBF 240, KBW 400, KBW 240, KMF 240	1	6.206 325
Insert grids, stainless steel	FED 260, BF 260, FD 260	1	6.314 255
Insert grids, reinforced, stainless steel	FP 720, M 720	1	6.240 557
Insert grids, stainless steel	BF 720, FD 720, FED 720	1	6.275 805
Insert grids, stainless steel	ED 720, BD 720	1	6.313 789



DryingOven 125 basic dry/control dry

Powerful drying cabinets with rapid heating and exact temperature regulation guarantees reproducible results. Thanks to its high quality insulation, the device has a very large interior of 125L in relation to its total volume. This structure also reduces odour emissions, operating costs, and ensures excellent temperature uniformity.

IKA

- Oven basic dry with natural convection up to 250 °C
- Oven control dry with recirculating air up to 300 °C
- Electronically adjustable ventilation
- Clear LED display and control menu
- Key lock function
- Timer from 1 minute up to 100 days
- Adjustable temperature limit
- USB Interface
- For up to 6 shelves
- Interior made of stainless steel
- Also available with glass door
- Door opening possible up to max. 180°

Additional features Oven 125 control dry:

- Recirculating air drying cabinet with automatic fan switch-off
- Recirculating air adjustable in 10 steps
- Real-time clock
- Temperature selection limited TWB (DIN 12880)
- Illuminated interior
- Cable bushing at the rear for measurements inside the oven
- RS 232 Interface
- Direct saving of data on USB stick
- Interface for additional temperature sensor (display and control possible)
- 2 large TFT Displays

Scope of supply: Oven with 2 shelves and calibration certificate at 160 °C.

Specifications

Internal volume:	basic dry // control dry 125 l
Ambient temperature:	5 ... 40 °C
Working temperature:	RT+ 5 ... 250 °C // RT+ 5 ... 300 °C
Adjustment and display resolution:	0.1 K
Temperature stability (150 °C):	±0.3 K
Ambient humidity:	80 %
Heating power:	2400 W
Outer Dimensions (W x D x H):	700 x 650 x 825 mm
Inner Dimensions (W x D x H):	550 x 525 x 450 mm
Weight:	55 kg // 82 kg
Power supply:	230 V, 50/60 Hz
Protection class:	IP 20

Type	Nom. capacity	Max. grids	Included grids	Internal dimensions (W x D x H) mm	External dimensions (W x D x H) mm	Rated capacity kW	PK Cat. No.
	L						
Oven basic dry	125	6	2	550 x 525 x 450	700 x 650 x 825	2.45	1 6.289 337
Oven basic dry - glass	125	6	2	550 x 525 x 450	700 x 650 x 825	2.45	1 6.289 338 ■
Oven control dry	125	6	2	550 x 525 x 450	700 x 650 x 825	2.45	1 4.663 261 ■
Oven control dry - glass	125	6	2	550 x 525 x 450	700 x 650 x 825	2.45	1 4.663 262

■ 1


6.289 338

■ 2


4.663 261

1 Ovens Heratherm™

1

The series provide bench-top models with 60, 100 or 180 l as well as floor models with 400 or 750 l chamber volume and 3 different fittings, each optionally with gravity or mechanical convection.

Thermo Scientific

- Very high energy efficiency, environmentally friendly materials (reduced use of formaldehyde), reduced heat emission
- Programmable timer
- Small footprint
- Flexible shelf system doubles the number of shelves and therefore the footprint
- Very good spatial and temporal temperature stability
- Automatic visual and acoustic over-temperature alarm
- Very low temperatures at outer wall
- Easy to read vacuum fluorescent display
- Intuitive user interface for setting temperature
- Easy cleaning due to edgeless fabrication



Heratherm™ General Protocol:

Perfect for routine daily work from 10 to 250 °C. Chambers made from corrosion-resistant st. steel with rounded corners. Timer, mechanical exhaust vent as well as 2 shelves are incl. as standard.

Heratherm™ Advanced Protocol:

For a greater flexibility and accuracy of temperature values. With V2A st. steel interior, works up to 330 °C at highly stable temperatures. Digital timer for daily or weekly On/OFF cycles. Up to 10 cycles can be stored and combined as ramps. Fan speed and air valve can be integrated into ramp programming. Selectable quick start function allows for extremely fast heating.

Specifications

Power supply: 230 V, 60 Hz

Temperature range: 10 to 250 °C (General Protocol/Advanced Protocol floor models)

10 to 330 °C (Advanced Protocol benchtop models/Advanced Protocol Security)

2 Heratherm™ General Protocol Ovens

2

Thermo Scientific™ Heratherm™ General Protocol ovens are perfect for routine daily work, providing the ideal heating and drying solution for your applications.

Thermo Scientific

- Low energy consumption
- Built in timer
- Excellent footprint/volume ratio
- Tabletop models in 3 sizes (60 L, 100 L, 180 L), floor models in 2 sizes (400 L, 750 L)
- Inner chambers made from corrosion-resistant stainless steel with rounded corners for easy cleaning
- Large, easy to view vacuum fluorescent display
- Simple, microprocessor-based touch button controls
- Doors can be opened over 180° making these units easy to access
- Automatic overtemperature alarm system to protect samples
- Gravity convection units (Type designation OGS) are designed to protect delicate samples while offering temperature uniformity of ±4 °C with temperature stability of ±0.4 °C at 150 °C
- Mechanical convection models (Type designation OM) provide a temperature uniformity of ±3.3 °C with temperature stability of ±0.3 °C at 150 °C
- The exhaust vent can be used as an access port for an external temperature sensor
- Lockable casters for easy mobility and stability (floor models only)
- All Heratherm™ ovens come standard with a RS232 data interface



The number of shelves included in the scope of delivery is listed in the table.

Type	Nom. capacity	Max. grids	Included grids	Internal dimensions (W x D x H) mm	External dimensions (W x D x H) mm	Rated capacity kW	PK	Cat. No.
	L							
OGS60	65	13	2	328 x 415 x 480	530 x 565 x 720	1.80	1	4.009 206
OGS100	105	16	2	438 x 414 x 580	640 x 565 x 820	3.10	1	4.009 207
OGS180	176	19	2	438 x 589 x 680	640 x 738 x 920	3.10	1	4.009 208
OGS400	419	39	2	544 x 590 x 1307	778 x 770 x 1545	2.40	1	9.534 156
OGS750	774	39	2	1004 x 590 x 1307	1261 x 770 x 1545	3.00	1	9.534 159
OGS750-3/N/PE	774	39	2	1004 x 590 x 1307	1261 x 770 x 1545	6.35	1	9.534 161
OMS60	66	13	2	354 x 368 x 508	530 x 565 x 720	1.40	1	4.009 209
OMS100	104	16	2	464 x 368 x 608	640 x 565 x 820	3.06	1	4.009 210
OMS180	179	19	2	464 x 543 x 708	640 x 738 x 920	3.06	1	4.009 211

1 2 Heratherm™ Advanced Protocol Ovens

As well as incorporating all the benefits of Thermo Scientific™ Heratherm™ General Protocol ovens, the Heratherm™ Advanced Protocol range boasts additional features providing even more flexibility, accuracy and dependability.

Thermo Scientific

- Sophisticated timer extends the automation options available to the user: turn on or off after a pre-set time, choose between a recurring weekly timer or run oven based on the 24 hour clock
- Highest level of temperature uniformity
- Exceptionally low energy consumption - 60 litre models just need 170W (gravity convection) and 275W (mechanical convection) per hour to maintain 150°C
- Adjustable fan speed for application related airflow
- Programmable controller for temperature ramps and dwells (store up to 10 programs with 10 discrete steps, features electronically controlled fan speed and damper position)
- Access port allows the introduction of sensors for independent data monitoring
- A simple calibration routine ensures temperature accuracy over time
- Boost function enables rapid heating up - no need to run the oven 24/7 (tabletop models only)
- Optional stainless steel exterior

The number of shelves included in the scope of delivery is listed in the table.

Specifications

Type designation:

OGH = Natural convection

OMH = Forced air circulation

Temperature range:

10 to 330 °C

Power supply:

230 V/50 Hz

Type	Nom. capacity L	Max. grids	Included grids	Internal dimensions (W x D x H) mm	External dimensions (W x D x H) mm	Rated capacity kW	PK	Cat. No.
OGH60	61	13	2	328 x 389 x 480	530 x 565 x 720	1.80	1	4.009 212
OGH60 SS*	61	13	2	328 x 389 x 480	530 x 565 x 720	1.80	1	4.009 215
OGH100	99	16	2	438 x 389 x 580	640 x 565 x 820	3.10	1	4.009 213
OGH100 SS*	99	16	2	438 x 389 x 580	640 x 565 x 820	3.10	1	4.009 216
OGH180	168	19	2	438 x 564 x 680	640 x 738 x 920	3.10	1	4.009 214
OGH180 SS*	168	19	2	438 x 564 x 680	640 x 738 x 920	3.10	1	4.009 217
OMH60	62	13	2	354 x 343 x 508	530 x 565 x 720	1.40	1	4.009 218
OMH60 SS*	62	13	2	354 x 343 x 508	530 x 565 x 720	1.40	1	4.009 221
OMH100	97	16	2	464 x 343 x 608	640 x 565 x 820	3.06	1	4.009 219
OMH100 SS*	97	16	2	464 x 343 x 608	640 x 565 x 820	3.06	1	4.009 222
OMH180	170	19	2	464 x 518 x 708	640 x 738 x 920	3.06	1	4.009 220
OMH180 SS*	170	19	2	464 x 518 x 708	640 x 738 x 920	3.06	1	4.009 223
OMH400	396	39	2	544 x 545 x 1335	778 x 770 x 1545	3.00	1	9.534 157
OMH400 SS	396	39	2	544 x 545 x 1335	778 x 770 x 1545	3.00	1	9.534 158
OMH750	731	39	2	1004 x 545 x 1335	1261 x 770 x 1545	3.00	1	9.534 162
OMH750 SS	731	39	2	1004 x 545 x 1335	1261 x 770 x 1545	3.00	1	9.534 163
OMH750-3P	731	39	2	1004 x 545 x 1335	1261 x 770 x 1545	5.75	1	9.534 165

*Stainless steel housing.

1



2



1 Heratherm™ Advanced Protocol Security Ovens

1

The Thermo Scientific™ Heratherm™ Advanced Protocol Security portfolio combines the benefits of the Advanced Protocol line with an extra layer of security for applications where process reliability and sample protection are paramount.

Thermo Scientific

Additional security features provide peace of mind for precious samples:

- Auto-dry function deactivates oven when the samples are dry, saving energy (optional sample temperature sensor is required to utilize this feature)
- Standard overtemperature alarm and an additional undertemperature alarm
- Door lock prevents disruption, tampering or accidental opening
- Door alarm notifies the operator when door is left open accidentally
- Socket for independent sample sensor (option): When connected, exact sample temperature is shown on display for additional peace of mind

The number of shelves included in the scope of delivery is listed in the table.



Specifications

Type designation: OGH = Natural convection, OGH = Forced air circulation
 Temperature range: 10 to 330 °C
 Power supply: 230 V/50 Hz

Type	Nom. capacity	Max. grids	Included grids	Internal dimensions (W x D x H) mm	External dimensions (W x D x H) mm	Rated capacity kW	PK	Cat. No.
OGH60-S	61	13	2	328 x 389 x 480	530 x 565 x 720	1.81	1	4.009 224
OGH60-S SS*	61	13	2	328 x 389 x 480	530 x 565 x 720	1.81	1	4.009 227
OGH100-S	99	16	2	438 x 389 x 580	640 x 565 x 820	3.10	1	4.009 225
OGH100-S SS*	99	16	2	438 x 389 x 580	640 x 565 x 820	3.10	1	4.009 228
OGH180-S	168	19	2	438 x 564 x 680	640 x 738 x 920	3.10	1	4.009 226
OGH180-S SS*	168	19	2	438 x 564 x 680	640 x 738 x 920	3.10	1	4.009 229
OMH60-S	62	13	2	328 x 343 x 508	530 x 565 x 720	1.40	1	4.009 230
OMH60-S SS*	62	13	2	328 x 343 x 508	530 x 565 x 720	1.40	1	4.009 233
OMH100-S	97	16	2	438 x 343 x 608	640 x 565 x 820	3.06	1	4.009 231
OMH100-S SS*	97	16	2	438 x 343 x 608	640 x 565 x 820	3.06	1	4.009 234
OMH180-S	170	19	2	464 x 518 x 708	640 x 738 x 920	3.06	1	4.009 232
OMH180-S SS*	170	19	2	464 x 518 x 708	640 x 738 x 920	3.06	1	4.009 235

*Stainless steel housing.

Accessories for Heratherm™ Ovens

Thermo Scientific

For	Description	PK	Cat. No.
OGS60, OGH60, OGH60 SS, OGH60-S, OGH60-S SS	Shelf incl. 2 shelf supports	1	4.009 236
OGS100, OGH100, OGH100 SS, OGH100-S, OGH100-S SS	Shelf incl. 2 shelf supports	1	4.009 237
OGS180, OGH180, OGH180 SS, OGH180-S, OGH180-S SS	Shelf incl. 2 shelf supports	1	4.009 238
OMS60, OMH60, OMH60 SS, OMH60-S, OMH60-S SS	Shelf incl. 2 shelf supports	1	4.009 239
OMS100, OMH100, OMH100 SS, OMH100-S, OMH100-S SS	Shelf incl. 2 shelf supports	1	4.009 240
OMS180, OMH180, OMH180 SS, OMH180-S, OMH180-S SS	Shelf incl. 2 shelf supports	1	4.009 241
OGS60, OGH60, OGH60 SS, OGH60-S, OGH60-S SS, OMS60, OMH60, OMH60 SS, OMH60-S, OMH60-S SS	Kit for stacking 60 L units	1	4.009 246
OGS100, OGH100, OGH100 SS, OGH100-S, OGH100-S SS, OMS100, OMH100, OMH100 SS, OMH100-S, OMH100-S SS	Kit for stacking 100 L units	1	4.009 247
OGS180, OGH180, OGH180 SS, OGH180-S, OGH180-S SS, OMS180, OMH180, OMH180 SS, OMH180-S, OMH180-S SS	Kit for stacking 180 L units	1	4.009 248
OGS60, OGH60, OGH60 SS, OGH60-S, OGH60-S SS, OMS60, OMH60, OMH60 SS, OMH60-S, OMH60-S SS	Support stand with castors	1	4.009 249
OGS100, OGH100, OGH100 SS, OGH100-S, OGH100-S SS, OMS100, OMH100, OMH100 SS, OMH100-S, OMH100-S SS	Support stand with castors	1	4.009 250
OGS180, OGH180, OGH180 SS, OGH180-S, OGH180-S SS, OMS180, OMH180, OMH180 SS, OMH180-S, OMH180-S SS	Support stand with castors	1	4.009 251
OGS750 / OMH750	Wire mesh shelf	1	9.534 167
OMH750 3PH / IMH750-S	Wire mesh shelf	1	9.534 168
400 L Modelle	Silicone-free Viton sealing	1	9.534 171
750 L Modelle	Silicone-free Viton sealing	1	9.534 172