

Heating and drying ovens

COMMUNICATION. COMFORT. SIMPLY GREAT.

UNIVERSAL OVEN U
PASS-THROUGH OVEN UF TS
PARAFFIN OVEN UNPA
STERILISER S
VACUUM OVEN VO
BLANKET WARMER IFbw
100% ATMOSAFE. MADE IN GERMANY.

www.memmert.com | www.atmosafe.net







Simply boundless. Boundlessly simple.

Drying, heating, ageing, testing, sterilising, burning-in, curing, storing. 100% AtmoSAFE.

From very small to very large! 32 litres or 1060 litres chamber volume? Standard applications or high demand for functionality, programming and documentation? In any case, all Memmert heating and drying ovens feature user-friendliness and state-of-the-art communication interfaces as a basic. Each individual appliance complies with the strict requirements of DIN 12880:2007-05 and is equipped with a maximum of safety functions. Each individual Memmert heating and drying oven is 100% AtmoSAFE.



UNIVERSAL OVENS U

PAGE 4 - 8

Drying, burning-in, ageing, vulcanising, degassing, curing, burn-in testing, conditioning, heated storage

PASS-THROUGH OVENS UF TS

PAGE 9 - 12

In-line curing and tempering

PARAFFIN OVENS UNpa

PAGE 13 - 16

Tempering of embedding media like paraffin and wax

STERILISERS S

PAGE 17 - 21

Sterilising of instruments and laboratory glass

VACUUM OVENS VO

PAGE 22 - 26

Drying, burning-in, ageing, curing, degassing, conditioning, oxygen-free storing

BLANKET WARMERS IFbw

PAGE 27 - 30

Warming and keeping warm of non-sterile cloths and blankets



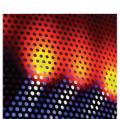
Universal Oven UN/UNm and UF/UFm with SingleDISPLAY Universal Oven UNplus/UNmplus and UFplus/UFmplus with TwinDISPLAY Natural convection or forced ventilation

Model sizes: 30 / 55 / 75 / 110 / 160 / 260 / 450 / 750 / 1060 +20 °C up to +300 °C

AtmoCONTROL software

UNIVERSAL OVEN U The all-round genius among the heating ovens covers a multitude of applications, ideally at temperatures above +50 °C. Without compromises! Thanks to two model variants and nine sizes, optionally with natural or forced convection, industry, science and research institutes will find a heating and drying oven which combines top precision and safety with optimal operating comfort.





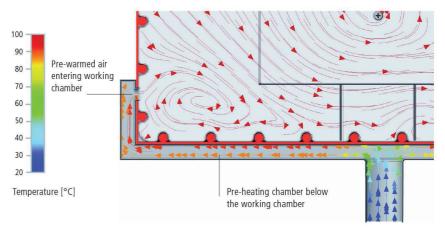
Defined and programme-controlled fan speed

Air exchange rates and air flap position can be controlled electronically at the ControlCOCKPIT. More inlet and outlet openings lead to a higher air exchange and reduced drying times. Various applications recommend or even require controlled ventilation. When drying powder, sand or corn, reducing the ventilation prevents undesired swirls.

Other applications like testing of wires or cables demand for defined air exchange rates. UFplus/UFmplus appliances feature easy programming of temperature and air exchange rates with the AtmoCONTROL software.

Fresh air is preheated

Temperature deviations caused by fresh air can influence sample characteristics or prolong drying. In Memmert universal ovens, the fresh air is therefore fed through a pre-heating chamber and introduced into the working chamber.



Air supply from outside



The universal oven Um is a medical device:

Memmert universal ovens Um are a Class I medical device in accordance with the EU directive 93/42/EEC. In accordance with the intended use Memmert heating oven Um or Umplus may be used for heating fango, silicate and APS packs for physical therapy and keeping them warm.

UNIVERSAL OVENS U

according to DIN 12880:2007-05, EN 61010-1 (IEC 61010-1), EN 61010-2-010

Standard units are safety-approved and bear the test marks: (EAC not valid for medical devices)





Interior: Stainless steel, material 1.4301 (ASTM 304), with

all-round deep-drawn ribs to integrate the large-area heating with ceramic-metal sheath

Textured stainless steel, rear zinc-plated steel, intuitively operated SingleDISPLAY or TwinDISPLAY (TFT colour display) with touchscreen, fully insulated Housing:

stainless steel door, (from size 450 two leaves)

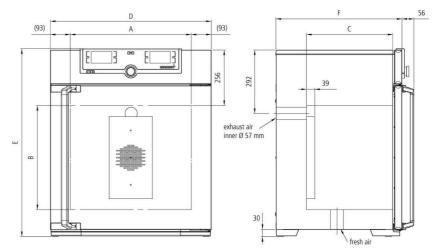
Admixture of pre-heated fresh air by electronically adjustable air flap Fresh air:

Mains cable with plug (German type) CEE plug for 400 V Connection:

4 feet; sizes 450, 750 and 1060 mounted on lockable castors Installation:

Ethernet USB Interfaces:

LAN D USB: only TwinDISPLAY



Jacob Besch	iption		30	55	75	110	160	260	450	750	1060
Stainless steel	Volume	approx. l	32	53	74	108	161	256	449	749	1060
interior	Width	(A) mm		400		56	50	640		1040	
	Height	(B) mm	320	400	560	480	720	800	720	12	00
	Depth (less 39 mm for fan)	(C) mm	250	33	30	40	00	500	60	00	850
	Max. number of grids/shelves	number	3	4	6	5	8	9	8		4
	Max. loading per grid/shelf	kg			2	0			3	0	60
	Max. loading of chamber	kg	60					3(00		
	Max. loading per slide-in drip tray	kg	1,5			3		4		8	
	Max. loading per bottom drip tray	kg		1,5		3	3	4		8	
Textured stainless	Width	(D) mm		585		74	15	824		1224	
Height (size 450, 750, 1060 with castors)		(E) mm	704	784	944	864	1104	1183	1247	17	20
	Depth (without door handle), door (F) handle + 56 mm		434	51	14	58	34	684	78	34	1035
Standard Stainless steel grids, equipment electropolished Standard works calibration certificate (measuring point chamber center)		number	1	1 2							
		°C					+160				
	chamber center)										
Temperature	chamber center) Working temperature range	°C	at least 5	(UN/UNplu	s/UNm/UNn	nplus) or 10	(UF/UFplus/ +300	UFm/UFmpl	us) above an	nbient tempe	erature to
Temperature	•	°C	at least 5	(UN/UNplu	s/UNm/UNn		(UF/UFplus/ +300 +20 to +300		us) above an	nbient tempe	erature to
Temperature	Working temperature range		at least 5	(UN/UNplu	s/UNm/UNn		+300)	us) above an	nbient tempe	erature to
	Working temperature range Setting temperature range Setting accuracy	°C	at least 5	(UN/UNplu	s/UNm/UNn 2500		+300 +20 to +300)	us) above an	nbient tempe	erature to
	Working temperature range Setting temperature range	°C				up to 99.	+300 +20 to +300 9: 0.1 / from 3200) 100: 0.5	us) above an	nbient tempe - -	erature to
	Working temperature range Setting temperature range Setting accuracy Electrical load at 230 V, 50/60 Hz	°C °C approx. W	1600	2000		up to 99.	+300 +20 to +300 9: 0.1 / from 3200) 100: 0.5	us) above an	-	erature to
Further data	Working temperature range Setting temperature range Setting accuracy Electrical load at 230 V, 50/60 Hz Electrical load at 115 V, 50/60 Hz Electrical load at 400 V and 3 x	°C °C approx. W approx. W	1600	2000		up to 99.	+300 +20 to +300 9: 0.1 / from 3200) 100: 0.5		-	
Further data	Working temperature range Setting temperature range Setting accuracy Electrical load at 230 V, 50/60 Hz Electrical load at 115 V, 50/60 Hz Electrical load at 400 V and 3 x 230 V w/o neutral, 50/60 Hz	°C °C approx. W approx. W	1600 1600	2000 1700	2500	up to 99. 2800 18	+300 +20 to +300 9: 0.1 / from 3200) 100: 0.5 3400	5800	- - 70	00
Temperature Further data Packing data	Working temperature range Setting temperature range Setting accuracy Electrical load at 230 V, 50/60 Hz Electrical load at 115 V, 50/60 Hz Electrical load at 400 V and 3 x 230 V w/o neutral, 50/60 Hz Net weight	°C °C approx. W approx. W approx. W	1600 1600	2000 1700 57	2500 66 85	up to 99. 2800 18	+300 +20 to +300 9: 0.1 / from 3200 00	100: 0.5 3400	5800 161	- - 70 217 288	00 252
Further data	Working temperature range Setting temperature range Setting accuracy Electrical load at 230 V, 50/60 Hz Electrical load at 115 V, 50/60 Hz Electrical load at 400 V and 3 x 230 V w/o neutral, 50/60 Hz Net weight Gross weight (packed in carton)	°C °C approx. W approx. W approx. W approx. kg approx. kg	1600 1600 45 61	2000 1700 57 76	2500 66 85	up to 99. 2800 18 - 74 99	+300 +20 to +300 9: 0.1 / from 3200 00	1100: 0.5 3400 1100: 110 110	5800 161 227	- - 70 217 288	00 252 416
Further data	Working temperature range Setting temperature range Setting accuracy Electrical load at 230 V, 50/60 Hz Electrical load at 115 V, 50/60 Hz Electrical load at 400 V and 3 x 230 V w/o neutral, 50/60 Hz Net weight Gross weight (packed in carton) Width	°C °C approx. W approx. W approx. W approx. kg approx. kg approx. mm	1600 1600 45 61 660	2000 1700 57 76	2500 66 85 30 1130	up to 99. 2800 18 - 74 99	+300 +20 to +300 9: 0.1 / from 3200 00 96 122 80 1300	1100: 0.5 3400 1100: 110 110 161 930	5800 161 227	- - 70 217 288 30 1910	00 252 416 1370 1970
Further data Packing data Universal Ovens	Working temperature range Setting temperature range Setting accuracy Electrical load at 230 V, 50/60 Hz Electrical load at 115 V, 50/60 Hz Electrical load at 400 V and 3 x 230 V w/o neutral, 50/60 Hz Net weight Gross weight (packed in carton) Width Height Depth	°C °C approx. W approx. W approx. W approx. kg approx. kg approx. mm	1600 1600 45 61 660 890	2000 1700 57 76 73	2500 66 85 30 1130	up to 99. 2800 18 - 74 99 83	+300 +20 to +300 9: 0.1 / from 3200 00 96 122 80 1300	1100: 0.5 3400 1100: 0.5 3400 110 161 930 1380	5800 161 227 13	- - 70 217 288 30 1910	00 252 416 1370
Further data Packing data Universal Ovens U = Universal Ovens N = Natural con	Working temperature range Setting temperature range Setting accuracy Electrical load at 230 V, 50/60 Hz Electrical load at 115 V, 50/60 Hz Electrical load at 400 V and 3 x 230 V w/o neutral, 50/60 Hz Net weight Gross weight (packed in carton) Width Height Depth Oven	°C °C approx. W approx. W approx. W approx. kg approx. kg approx. mm	1600 1600 45 61 660 890 650 UN30 UN30m UN30plus	2000 1700 57 76 73 950 67 UN55 UN55m	2500 66 85 80 1130 70 UN75	up to 99. 2800 18 74 99 83 1050 80 UN110 UN110m UN110plus	+300 +20 to +300 9: 0.1 / from 3200 00 96 122 80 1300 00 UN160 UN160m UN160obus	1100: 0.5 3400 1100: 0.5 3400 110 161 930 1380 930 UN260	5800 161 227 13 1440 10 UN450 UN450m UN450plus	- - 217 288 30 1910 50 UN750 UN750m UN750plus	00 252 416 1370 1970
Further data Packing data Universal Ovens U = Universal (Working temperature range Setting temperature range Setting accuracy Electrical load at 230 V, 50/60 Hz Electrical load at 115 V, 50/60 Hz Electrical load at 400 V and 3 x 230 V w/o neutral, 50/60 Hz Net weight Gross weight (packed in carton) Width Height Depth Oven Invection circulation evice	°C °C approx. W approx. W approx. W approx. kg approx. kg approx. mm	1600 1600 45 61 660 890 650 UN30 UN30m UN30plus	2000 1700 57 76 73 950 67 UN55 UN55m	2500 66 85 30 1130 70 UN75 UN75m	up to 99. 2800 18 74 99 83 1050 80 UN110 UN110m UN110plus	+300 +20 to +300 9: 0.1 / from 3200 00 96 122 80 1300 00 UN160 UN160m UN160obus	1100: 0.5 3400 1100: 0.5 3400 110 161 930 1380 930 UN260 UN260m UN260plus	5800 161 227 13 1440 10 UN450 UN450m UN450plus	- - 217 288 30 1910 50 UN750 UN750m UN750plus	252 416 1370 1970 1300

Valloge TFS V 2016/20 179 Extended overtemperature presentation by additionally integrated PTS 00 open for integrated reportation by additionally integrated PTS 00 open for integrating expectation by additionally integrated PTS 00 open for integrating expectation by additionally integrated PTS 00 open for integrated	Options	30	55	75	110	160	260	450	750	1060	
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Iterative 200 °C Communication of the Communication	Pt100 sensor for independent temperature monitoring for models					A6					
Camber most fill control for the supplication of intrinseed perforated sharless social shelves or Statings set of Stat						В0					
Chamber modification for the application of reinforced perhashed at miscales such advisory or statistics steed pick (periang pilot mounted in the working (chamber) - includes epidement of standard grids by Farbaier fillow (flower) and include and pilot pilot (periang pilot) and pilot (periang pi	Full-sight glass door (4-layer insulating glass borsilicat) Temperature-range up to max. 300 °C					B1					
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Interior socket (can only be ordered with limited temperature rangemax. 47 0°C, ampacity 200 V. 2 A. Can be switched with the On COT which, cannot be worked individually, mosture tight PR8 (Ontion AR) notices of the birth individually and the switched of the County of the County 20 V. 2 A. Can be switched on off to a transfer or cannot be according to the county of the County o	bottom (for UF/UFplus/UFm/UFmplus). For sizes 30 - 260 castor					R8					
max. 79 °C, ampacity 230 V, 22 A, can be switched off with the Oct Off switch, cannot be switched includially, mosture upin FRS (Chapter's society can only be ordered with limited representative ange- max. 79 °C, ampacity 230 V, 22 A, can be switched north five turbules which in control panel, moisture night 1968 (requires option AB) Interior nearly gastight with possibility for gas inlext outlet through 2 tubes with bill volves Tarry port, 23 mole deal diameter, left centre/centre for indication, occardior, 1969, and the left centre/centre for indication, occardior, 1969, and the left centre/centre for indication geometric or the for indication of the left centre/centre for indication geometric or the for indication of the left centre/centre for indication geometric or the for indication of the left centre/centre for indication geometric or the fight centre/centre fight fight centre/centre fight fight centre/centre fight figh	3 3					R0					
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Enty port, 23 mm clear diameter, for infructuring connections at the lett centre/top side, can be closed by flap, in special positions, state location, and provided in the letter design of the lette						K2					
for introducing connections at the side, can be closed by flap, in precial positions in the back wall please, state location). Entry port, 120 mm clear diameter, can be closed by flap, in special positions in the back wall please, state location). Entry port, 100 mm clear diameter, can be closed by flap, in special positions in the back wall please, state location). Entry port, 140 mm clear diameter, can be closed by flap, in special positions in the back wall please, state location). Entry port, 150 mm clear diameter, can be closed by flap, in special positions in the back wall please, state location). Entry port, 100 mm clear diameter, can be closed by flap, in special positions in the back wall please, state location). Entry port, 100 mm clear diameter, can be closed by flap, in special positions in the back wall please, state location, and possible for UT/UIpsut/UIm/Implies size 30 x 30 x 5). Entry port, 100 mm clear diameter, can be closed by flap, in special positions in the back wall please, state location, and possible for UT/UIpsut/UIm/Implies size 75). Entry port, 100 mm clear diameter, can be closed by flap, in special positions in the back wall please, state location, and consider the value of the control of the											
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positions in the back wall (please, state location) Entry port, Tio 0 mm clear diameter, can be closed by flap, in special positions in the back wall (please, state location; not possible for UF/UFplus/UFm/UFmplus size 30-75) Entry port, Tio 0 mm clear diameter, can be closed by flap, in special positions in the back wall (please, state location; not possible for UF/UFplus/UFm/UFmplus size 30-75) 4 - 20 mA current loop interface (0 to +310 °C = 4 - 20 mA) Temperature of a Pt 100 sensor positioned flexibly in chamber for external temperature monitoring (max 1 SingleDSPLAY) - price per sensor Fan speed monitoring with switching off the heating and with alarm in case of failure - optional for UFplus/UFmplus only Works calibration certificate for 3 temperatures: +100, +160, +220 °C Works calibration certificate for one (freely selectable) temperature value according to customer specification Door with lock and key (safety lock) Door with lock and key (safety lock) Potential-free contact (24 V/2 A) with socket, according to NAMUR NE 28 for external monitoring (indicates when setpoint is reached) Potential-free contact (24 V/2 A) with socket, according to NAMUR NE 28 for external monitoring (indicates when setpoint is reached) Potential-free contact (24 V/2 A) with socket, according to NAMUR NE 28 for external monitoring (indicates when setpoint is reached) Potential-free contact (24 V/2 A) with socket, according to NAMUR NE 28 for external monitoring (indicates when setpoint is reached) Potential-free contact (24 V/2 A) with socket, according to NAMUR NE 28, for sociated for combination error message (e.g. supply failure, sensor fault, fuse) H74 H74 H74 H74 H74 H75 Protests-dependent programmable door lock (only for units with fining long proteins of the contact (24 V/2 A) A contacts on 3-phase appliances	Entry port, 14 mm clear diameter, can be closed by flap, in special positions in the back wall (please, state location)					D6					
positions in the back wall (please, state location; not possible for UF/UF/pls/UF/m/UFmplus size 30-75) Entry port, 100 mm dear diameter, can be closed by flap, in special positions in the back wall (please, state location; not possible for UF/UFplus/UFm/UFmplus size 75) 4-20 mA current loop interface (to +310 °C = 4 - 20 mA) Temperature of a Pt100 sensor positioned flexibly in chamber for external temperature monitoring (max. 1 SingleDSPLAY) and surface of a Pt100 sensor positioned flexibly in chamber for external temperature monitoring (max. 1 SingleDSPLAY) and surface of a Pt100 sensor positioned flexibly in chamber for external temperature monitoring (max. 1 SingleDSPLAY) and surface of a lutre - optional for Ufplus/UFmplus only Works calibration certificate for 3 temperatures; +100, +160, +220 °C Morks calibration certificate for 3 temperatures; +100, +160, +220 °C Door with lock and key (safety lock) Boor hinged on the left B8	Entry port, 38 mm clear diameter, can be closed by flap, in special positions in the back wall (please, state location)	F7									
positions in the back wall (please, state location; not possible for UFUFUFUSUS (PMUFUFUFUS) (pure 275) 4 - 20 mA current loop interface (0 to +310 °C = 4 - 20 mA) Femperature of a Pt100 sensor positioned flexibly in chamber for external temperature monitoring (max. 1 SingleDISPLAY, max. 3 TwinDISPLAY) - price per sensor Fan speed monitoring with switching off the heating and with alarm in case of failure - optional for UFplus/UFmplus only Works calibration certificate for 3 temperatures: +100, +160, +220 °C Works calibration certificate for one (freely selectable) temperature value according to customer specification Door with lock and key (safety lock) Boor hinged on the left Potential-free contact (24 V/2 A) with socket, according to NAMUR NE 28 for external monitoring (indicates when setpoint is reached) Potential-free contact (24 V/2 A) Potential-free contact (24 V/2 A) Potential-free contact (24 V/2 A) Virial Name (Potential-free contact (24 V/2 A) Virial N	positions in the back wall (please, state location; not possible for	F8									
(0 to +310 °C = 4 - 2 0 mA) Temperature of a Pt100 sensor positioned flexibly in chamber for external temperature monitoring (max. SingleIDSPLAY) max. 3 rwinDISPLAY) Fan speed monitoring with switching off the heating and with alarm in case of failure - optional for UFplus/UFmplus only Works calibration certificate for 3 temperatures: +100, +160, +220 °C Works calibration certificate for one (freely selectable) temperature value according to customer specification Door with lock and key (safety lock) Door hinged on the left Potential-free contact (24 V/2 A) with socket, according to NAMUR NE 28 for external monitoring (indicates when setpoint is reached) Potential-free contact (24 V/2 A) 2 contacts with socket to NAMUR RE 28, for sor sor fault, fuse) Potential-free contact (24 V/2 A) 2 contacts with socket to NAMUR RE 28, for sor sor fault, fuse) Potential-free contact (24 V/2 A) 2 contacts with socket to NAMUR RE 28, for sor signal generation, controlled by programme segment, for free-selectable functions to be activated (e.g. activation of audible and visual signals, exhaust motors, fans, stirrers, etc.), only for runis with TwinDISPLAY) as 2 contacts on 1-phase appliances; max. 4 contacts on 3-phase appliances appliances.	positions in the back wall (please, state location; not possible for	- F9									
Temperature of a Pt100 sensor positioned flexibly in chamber for external temperature monitoring (max. 1 SingleDISPLAY) roise per sensor Fan speed monitoring with switching off the heating and with alarm in case of failure - optional for UFplux/UFmplus only Works calibration certificate for 3 temperatures: +100, +160, +220 °C Works calibration certificate for one (freely selectable) temperature value according to customer specification Door with lock and key (safety lock) Door hinged on the left B8 - Potential-free contact (24 V/2 A) with socket, according to NAMUR NE 28 for external monitoring (indicates when setpoint is reached) Potential-free contact (724 V/2 A) a contacts with socket to NAMUR NE 28, for signal generation, controlled by programme segment, for free-selectable functions to be activated (e.g. activation of audible and visual signals, exhaust motors, fans, stirres, etc.). Only for units with TwinDISPLAY; max. 2 contacts on 1-phase appliances; max. 4 contacts on 3-phase appliances appliances appliances on the position of audible and visual signals, exhaust motors, fans, stirres, etc.). Only for units with TwinDISPLAY; max. 2 contacts on 1-phase appliances; max. 4 contacts on 3-phase appliances; max. 4 contacts on 3-phase appliances on the position of audible and visual signals, exhaust motors, fans, stirres, etc.). Only for units with TwinDISPLAY; max. 2 contacts on 1-phase appliances; max. 4 contacts on 3-phase appliances on the position of audible and visual signals, exhaust motors, fans, stirres, etc.). Only for units with TwinDISPLAY on the position of audible and visual signals, exhaust motors, fans, stirres, etc.). Only for units with TwinDISPLAY on the position of audible and visual signals, exhaust motors, fans, stirres, etc.). Only for units with TwinDISPLAY on the position of audible and visual signals, exhaust motors.	4 - 20 mA current loop interface Temperature controller, actual (0 to $+310$ °C = 4 - 20 mA)					V3					
in case of failure - optional for UFplus/UFmplus only Works calibration certificate for 3 temperatures: +100, +160, +220 °C Works calibration certificate for one (freely selectable) temperature value according to customer specification Door with lock and key (safety lock) Door hinged on the left B8 - Potential-free contact (24 V/2 A) with socket, according to NAMUR NE 28 for external monitoring (indicates when setpoint is reached) Potential-free contact for combination error message (e.g. supply failure, sensor fault, fuse) Potential-free contact (24 V/2 A) Po	Temperature of a Pt100 sensor positioned flexibly in chamber for external temperature monitoring (max. 1 SingleDISPLAY, max. 3					V6					
Works calibration certificate for one (freely selectable) temperature value according to customer specification Door with lock and key (safety lock) B6 Potential-free contact (24 V/2 A) with socket, according to NAMUR NE 28 for external monitoring (indicates when setpoint is reached) Potential-free contact for combination error message (e.g. supply failure, sensor fault, fuse) Potential-free contact (24 V/2 A) Potential-free c						V4					
value according to customer specification Door with lock and key (safety lock) Door hinged on the left Potential-free contact (24 V/2 A) with socket, according to NAMUR NE 28 for external monitoring (indicates when setpoint is reached) Potential-free contact for combination error message (e.g. supply failure, sensor fault, fuse) Potential-free contact (24 V/2 A) Potential-free contact (24 V/2 A) Potential-free contact (24 V/2 A) Vith socket to NAMUR NE 28, for signal generation, controlled by programme segment, for free-selectable functions to be activated (e.g. activation of audible and visual signals, exhaust motors, fans, stirrers, etc.). Only for units with TwinDISPLAY; max. 2 contacts on 1-phase appliances; max. 4 contacts on 3-phase appliances Process-dependent programmable door lock (only for units with TwinDISPLAY)	·					D00128					
Door hinged on the left Potential-free contact (24 V/2 A) with socket, according to NAMUR NE 28 for external monitoring (indicates when setpoint is reached) Potential-free contact for combination error message (e.g. supply failure, sensor fault, fuse) Potential-free contact (24 V/2 A) Potential-free contact (24 V/2 A) With socket to NAMUR NE 28, for signal generation, controlled by programme segment, for free-selectable functions to be activated (e.g. activation of audible and visual signals, exhaust motors, fans, stirrers, etc.). Only for units with TwinDISPLAY; max. 2 contacts on 1-phase appliances Process-dependent programmable door lock (only for units with TwinDISPLAY) D4						D00109					
Potential-free contact (24 V/2 A) with socket, according to NAMUR NE 28 for external monitoring (indicates when setpoint is reached) Potential-free contact for combination error message (e.g. supply failure, sensor fault, fuse) Potential-free contact (24 V/2 A) Potential-free contact (24 V/2	· · ·				0	В6					
Potential-free contact for combination error message (e.g. supply failure, sensor fault, fuse) Potential-free contact (24 V/2 A) Potential-free contact (24 V/2 A) With socket to NAMUR NE 28, for Signal generation, controlled by programme segment, for free- selectable functions to be activated (e.g. activation of audible and visual signals, exhaust motors, fans, stirrers, etc.). Only for units with TwinDISPLAY; max. 2 contacts on 1-phase appliances; max. 4 contacts on 3-phase appliances Process-dependent programmable door lock (only for units with TwinDISPLAY)	Potential-free contact (24 V/2 A) with socket, according to NAMUR NE			В	ŏ	H5			-		
Potential-free contact (24 V/2 A) with socket to NAMUR NE 28, for signal generation, controlled by programme segment, for free- selectable functions to be activated (e.g. activation of audible and visual signals, exhaust motors, fans, stirrers, etc.). Only for units with TwinDISPLAY; max. 2 contacts on 1-phase appliances; max. 4 contacts on 3-phase appliances Process-dependent programmable door lock (only for units with TwinDISPLAY)	Potential-free contact for combination error message (e.g. supply					Н6					
with socket to NAMUR NE 28, for signal generation, controlled by programme segment, for free-selectable functions to be activated (e.g. activation of audible and visual signals, exhaust motors, fans, stirrers, etc.). Only for units with TwinDISPLAY; max. 2 contacts on 1-phase appliances; max. 4 contacts on 3-phase appliances Process-dependent programmable door lock (only for units with TwinDISPLAY)	Potential-free contact (24 V/2 A) 2 contacts					H72					
TwinDISPLAY)	with socket to NAMUR NE 28, for signal generation, controlled by programme segment, for free-selectable functions to be activated (e.g. activation of audible and visual signals, exhaust motors, fans, stirrers, etc.). Only for units with TwinDISPLAY; max. 2 contacts on 1-phase appliances; max. 4 contacts on 3-phase appliances								H74		
Door-open-recognition (only for units with TwinDISPLAY) V5						D4					
						V5					

- B03 E02 B04 B29756	R9 75 1164 1916	110 E20 B00 E020 B04 B29758	767 325 073	260 E28891 E29766 B29725 E29726	B32 B002 B32 E020 B32 E020 B32 GA2	190 328 191 763 362 055	1060 B41251 B32550 B32549 - B32599 - B29769 -
E20 - B03 E02 B04 B29756	916 	E20 E29 B00. E024 B04.	165 767 325 073 359 B29759 E06192 E06189 B33170	E28891 E29766 B29725 E29726	B32 B003 B32 E020 B32 B043	182 190 328 191 075 763 362 055	B41251 B32550 B32549 - B32599
- B03 E02 B04 B29756	916 	E29 B00. - E021 - B04.	767 325 073 359 829759 E06192 E06189 B33170	E29766 B29725 E29726	B32 B000 B32 E020 B32 B040	190 328 191 763 362 055	B32550 B32549 - B32599
B04		B00. E02i B04. B29758	325 073 359 829759 E06192 E06189 B33170	B29725 E29726	B003 B32 E020 B32 B043	328 191 2075 763 362 2055	B32549 - B32599
B04		B04 B29758	073 359 B29759 E06192 E06189 B33170	E29726	B32 E020 B32 B04:	191 075 763 362 055	B32599
B04	B29757 GA1Q5	B04 B29758	B29759 E06192 E06189 B33170		E020 B32 ² B04:	075 763 362 055	-
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B29756	B29757 GA1Q5	B29758	B29759 E06192 E06189 B33170	B29722	B04:	362 055	- B29769 -
B29756	B29757 GA1Q5	B29758	B29759 E06192 E06189 B33170	B29722	B34	055	B29769 -
	GA1Q5		E06192 E06189 B33170		-		-
	GA1Q5		E06192 E06189 B33170		GA2	2Q5	
B29	B29	768	E06189 B33170		GA2	2Q5	
B29		768	E06189 B33170				
B29		768	B33170				
B29		768					
B29		768	B33172				
B29		768					
B29	744					-	
					-		
			B29718				
			B29719				
B29730	B29732	B29734	B29736	B29738	B29740	B29	9742
B29731	B29733	B29735	B29737	B29739	B29741	B29	9743
B29	747	B29	749	B29751	B29753		-
B29	748	B29	750		-	-	
B33	659	B33	661	B33664		-	
use se e FDAQ1							
			FDAQ2				
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D00124							
				FDAQ2 D00124	FDAQ2	FDAQ2 D00124	FDAQ2 D00124



Pass-through oven UFTS
TwinDISPLAY
Forced convection
AtmoCONTROL standard software

Model sizes: 160 / 260 / 450 / 750 +20 °C to +250 °C

PASS-THROUGH OVEN UF TS Pass-through ovens UF TS are based on a standard heating oven and feature all technological highlights like product specific heating and perfectly adjusted control technology. Thanks to an additional side feed-through, curing of lead frames and adhesive bonds or tempering of components can be controlled automatically within a running production process.





High feed-through thanks to in-line capability

Temperature control processes in a Memmert pass-through oven can be controlled fully electronically. The synchronised loading of parts is done by means of belt input and output at the side. To increase the feed-through for endless loading, turn pulleys can be installed in the chamber on request. Windows at the front and rear enable simple loading by hand, and also allow the temperature control process to be permanently observed. Another advantage not to be missed out: constant temperatures inside the temperature-control chamber as it does not have to be opened for loading.



In-line capable pass-through oven (belt input and output at the side)



In the position of an expansion of the R&D departments of customers, the customisation department at Memmert provides support for complex applications and finds tailor-made solutions. Many customers are supported from development to production.



PASS-THROUGH OVENS UF TS

according to DIN 12880:2007-05, EN 61010-1 (IEC 61010-1), EN 61010-2-010

Standard units are safety-approved and bear the test marks: $\,$ C \in ERIC



Interior: Stainless steel, mat. 1.4301 (ASTM 304), with all-

round deep-drawn ribs to integrate the large-area

heating with ceramic-metal sheath

Housing:

Textured stainless steel, intuitively operated TwinDISPLAY (TFT colour displays) with touchscreen, fully insulated stainless steel door on both sides (from model size 450 two leaves), pass-through

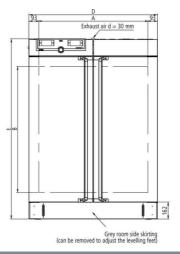
Admixture of pre-heated fresh air by electronically adjustable air flap Fresh air:

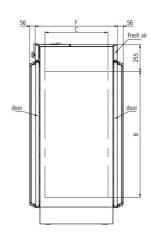
Mains cable with plug (German type) (CEE plug for 400 V) Connection:

Installation:

Interfaces:







Model sizes/Descrip	ption		160	260	450	750
Stainless steel	Volume	approx. l	161	256	449	749
interior	Width	(A) mm	560	640	10	40
	Height	(B) mm	720	800	720	1200
	Depth	(C) mm	400	500	6	00
	Max. number of grids/shelves	number	8	9	8	14
	Max. loading per grid/shelf	kg	2	0		0
	Max. loading of chamber	kg	210		300	
	Max. loading per slide-in drip tray	kg	3	4		
	Max. loading per bottom drip tray	kg	3	4		3
Textured stainless	Width	(D) mm	745	825	12	24
steel exterior	Height	(E) mm	1233	1314	1233	1714
	Depth (without door handle, depth of handle 2 x 56 mm)	(F) mm	582	682	78	32
Standard	Stainless steel grids, electropolished	number			2	
equipment	Standard works calibration certificate (measuring point chamber center)	°C		+1	60	
Temperature	Working temperature range	°C	at least '	10 above am +2	bient tempe 250	rature to
	Setting temperature range	°C		+20 to	+250	
	Setting accuracy	°C	up	to 99.9: 0.1	/ from 100:	0.5
Further data	Electrical load at 230 V, 50/60 Hz	approx. W	3200	3400		
	Electrical load at 115 V, 50/60 Hz	approx. W	18	00		-
	Electrical load at 400 V and 3 x 230 V w/o neutral, 50/60 Hz	approx. W			4800	5000
Packing data	Net weight	approx. kg	120	138	213	260
	Gross weight (packed in carton)	approx. kg	146	189	279	331
	Width	approx. mm	830	930	13	30
	Height	approx. mm	1300	1380	1450	1920
	Depth	approx. mm	800	930	10	50
Order No. Pass-Th	rough Ovens		UF160TS	UF260TS	UF450TS	UF750TS

Options		160	260	450	750
Voltage 115 V, 50/60 Hz		X	(2		-
Full-sight glass door (4 layer insulating glass) - extra co	st per side - Temperature-range up to max. 250 °C		[В0	
Chamber modification for the application of reinforced grids (bearing rails mounted in the working chamber) reinforced grids			-		K1
Entry port, 23 mm clear diameter, for introducing connections at the side, can be closed by flap, standard positions	left centre/centre left centre/top right centre/centre right centre/top		ĺ	F0 F1 F2 F3	
Entry port, 23 mm clear diameter for introducing connections at the side, can be closed by flap, in special positions (please, state location)	left right			F4 F5	
Locking mechanism to prevent simultaneous opening installation	of doors for contamination protection in case of wall]	D5	
4 - 20 mA current loop interface (0 to +260 °C = 4 - 20 mA)	Temperature controller, actual value Temperature of a Pt100 sensor positioned flexibly in chamber for external temperature monitoring (max. 3) - price per sensor			V3 V6	
Fan speed monitoring with switching off the heating a	nd with alarm in case of failure		\	V4	
Works calibration certificate for 3 temperatures: +100,			D0	0128	
Works calibration certificate for one (freely selectable) specification	emperature value according to customer		D0	0109	
Door with lock (safety lock); per side			I	B6	
Door hinged on the left; price per side		В	38		-
Potential-free contact (24 V/2 A) with socket, according when setpoint is reached)	to NAMUR NE 28 for external monitoring (indicates		ŀ	H5	
Potential-free contact for combination error message (e	e.g. supply failure, sensor fault, fuse)		l	H6	
Potential-free contact (24 V/2 A) with socket to NAMUR NE 28, for signal generation, controlled by programme segment, for free-selectable functions to be activated (e.g. activation of audible and visual signals, exhaust motors, fans, stirrers, etc.); max. 2 contacts on 1-phase appliances; max. 4 contacts on 3-phase appliances	2 contacts 4 contacts		- -	172 F	174
Process-dependent electromagnetic door lock (both sig	les)		[04	
Door-open-recognition; per side			\	V5	
Flexible Pt100 for positioning in chamber or in load wite external temperature recording (load temperature) ma	h socket, 4-pin, according to NAMUR NE 28, for x. 3 sensors		ŀ	H4	
Flexible Pt100 temperature sensor, positioned flexibly measurement (up to 3 additional sensors are possible) indicated on the display, recorded in the integral data AtmoCONTROL software	. The measured temperature can, if required, be store, and can be documented via the		ŀ	H8	
MobileALERT, notification by SMS in case of any error of	· · ·		(C3	
Temperature restriction; Temperatures: +60, +70, +80 indicate upon ordering)	+95, +100, +120, +160, +180 or +200°C (Please,		,	48	

Accessories	160	260	450	750
Stainless steel grid, electropolished	E20165	E28891	E20	182
Additional reinforced stainless steel grid, electropolished, max. loading 60 kg; with guide bars and fixing screws (only in connection with option K1). Please consider max. loading of chamber		-	B32	190
Perforated stainless steel shelf	B00325	B29725	B00	328
Additional reinforced stainless steel shelf, max. loading 60 kg; with guide bars and fixing screws (only in connection with option K1). Please consider max. loading of chamber		-	B32	191
Stainless steel slide-in drip tray, 15 mm rim (may affect the temperature distribution) - cannot be used in connection with option K1	E02073	E29726	E02	075
Stainless steel slide-in drip tray, 15 mm rim, with guide bars and fixing screws (may affect the temperature distribution) - can be used only in connection with option K1		-	B32	763
Stainless steel bottom drip tray, 15 mm rim (may affect the temperature distribution) - cannot be used in connection with option K1	B04359	B29722	B04	362
Stainless steel bottom drip tray, 15 mm rim (may affect the temperature distribution) - can be used only in connection with option K1		-	B34	055
Flush-fit unit set (stainless steel frame covering gap between oven and wall opening), without air slots - technical clarification required	B33204	B33205	B33206	B33207
Guarantee extension by 1 year	GA1Q5		GA2Q5	
USB-Ethernet adapter		E06	192	
Ethernet connection cable 5 m for computer interface		E06	189	
USB User-ID stick (with User-ID licence): Oven-linked authorisation licence (User-ID-programme) on Memory-stick, prevents undesired manipulation by unauthorised third parties. When reordering please specify serial number		B33	170	
Set of height adjustable feet (4 pcs)	B29	768	-	
FDA confroming software AtmoCONTROL (FDA edition). Meets the requirements for the use of electronically stored data sets and electronic signatures as laid down in Regulation 21 CFR Part 11 of the US Food and Drug Administration (FDA). Base licence for the control of one unit. Respective IQ/OQ documents available in German and English language (without surcharge)		FD.	AQ1	
Integration of additional units (up to max. 15 units) into an already existent FDA-software licence		FD.	AQ2	
IQ document with device-specific works test data, OQ/PQ check list as support for validation by customer		D00	124	
IQ/OQ document with device-specific works test data for one free-selectable temperature value, incl. temperature distribution survey at Memmert for 27 measuring points to DIN 12880:2007-05. PQ check list as support for validation by customer. 305 € for further temperature values and validation at customer site on demand (GER, AT, CH only)		D00	1127	



Paraffin oven UNpa with TwinDISPLAY AtmoCONTROL software

Model sizes: 30 / 55 / 75 / 110 / 160 +20 °C to +80 °C

PARAFFIN OVEN UNpa Five model sizes, five times high-precision temperature control of the embedding medium paraffin in science and research. The range of functions and thermal safety of paraffin ovens UNpa are designed specifically for absolutely reliable sample preparation in the laboratory. The benefits for the user: an optimal cost/benefit ratio for an appliance that guarantees, for many years, precise and even temperature control for embedding media without any loss in quality whatsoever.



Safe warming of paraffin

Thanks to its high capillarity, liquid paraffin is an ideal embedding medium. This property, however, may lead to oily residue in tiny cavities. For this reason, the interior chamber of paraffin ovens UNpa is designed almost gas tight. There is definitely no danger of ignition of residue or damage to mechanical and electronic components.



Absolutely uniform temperature distribution

Due to the almost gas tight chamber, no outside air is exchanged. Therefore, the advantages of the uniform temperature distribution by the large surface all-round heating system applied in Memmert heating ovens come fully into play. Also without forced convection, the perfect interaction of the control system and heating unit ensures unparalleled temperature homogeneity and stability.

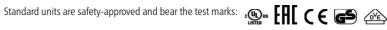


Air flow with natural convection



PARAFFIN OVENS UNpa

according to DIN 12880:2007-05, EN 61010-1 (IEC 61010-1), EN 61010-2-010



Interior: Stainless steel, material 1.4301 (ASTM 304), with

all-round deep-drawn ribs to integrate the large-area heating with ceramic-metal sheath, nearly

gastight

Housing:

Textured stainless steel, rear zinc-plated steel, intuitively operated TwinDISPLAY (TFT colour display) with touchscreen, fully insulated stainless

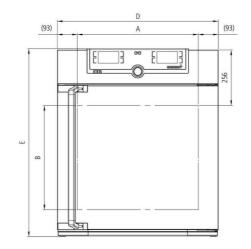
steel door

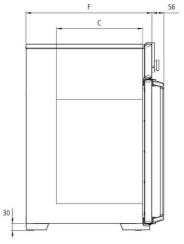
Connection: Mains cable with plug (German type)

Installation: 4 feet

Interfaces:







Model sizes/Descrip	otion		30	55	75	110	160
Stainless steel	Volume	approx. l	32	53	74	108	161
interior	Width	(A) mm		400		5	60
	Height	(B) mm	320	400	560	480	720
	Depth	(C) mm	250	3.	30	4	00
	Max. number of grids/shelves	number	3	4	6	5	8
	Max. loading per grid/shelf	kg			20		
	Max. loading of chamber	kg	60	80	120	175	210
	Max. loading per slide-in drip tray	kg		1,5			3
	Max. loading per bottom drip tray	kg		1,5			3
Textured stainless	Width	(D) mm		585		7	45
steel exterior	Height	(E) mm	704	784	944	864	1104
	Depth (without door handle), door handle + 56 mm	(F) mm	434	5	14	5	84
Standard	Stainless steel grids, electropolished	number		1		2	
equipment	Standard works calibration certificate (measuring point chamber center)	°C			+80		
Temperature	Working temperature range	°C	at le	east 5 above	ambient ter	nperature to	+80
	Setting temperature range	°C			+20 to +80		
	Setting accuracy	°C			0.1		
Further data	Electrical load at 230 V, 50/60 Hz	approx. W	1600	2000	2500	2800	3200
	Electrical load at 115 V, 50/60 Hz	approx. W	1600	1700		1800	
Packing data	Net weight	approx. kg	45	55	66	75	96
	Gross weight (packed in carton)	approx. kg	61	74	85	100	122
	Width	approx. mm	660	7.	30	8	30
	Height	approx. mm	890	950	1130	1050	1300
	Depth	approx. mm	650	6	70	8	00
Order No. Paraffin	n Ovens		UN30pa	UN55pa	UN75pa	UN110pa	UN160p

Options	30 55 75 110 160
Voltage 115 V, 50/60 Hz	X2
Full-sight glass door (4-layer insulating glass)	ВО
Entry port, 23 mm clear diameter, for left centre/cent	re F0
introducing connections at the side, gastight, left centre/to can be closed by flap and silicone stopper,	pp F1
standard positions - technical clarification right centre/cent	re F2
required right centre/to	pp F3
	·ft F4
can be closed by flap and silicone stopper, in special positions (please, state location) -	ht F5
technical clarification required	ar F6
Entry port (silicone), 40 mm clear diameter, gas tight, can be closed by flap and silicone stopper, in special positions at the back (please, state location) - technical clarification required	F7
4 - 20 mA current loop interface (0 to +90 °C = Temperature controller, actual value	ie V3
4 - 20 mA) Temperature of a Pt100 sensor positione flexibly in chamber for external temperature monitoring (max. 3) - price per sensor	e V6
Gas inlet/outlet through 2 tubes with ball valves	K3
Works calibration certificate for 3 temperatures: +37 °C, +52 °C, +70 °C	D00126
Works calibration certificate for one (freely selectable) temperature value according to customer specification	D00109
Door with lock and key (safety lock)	B6
Door hinged on the left	B8
Potential-free contact (24 V/2 A) with socket, according to NAMUR NE 28 for external monitoring (indicates when setpoint is reached)	Н5
Potential-free contact for combination error message (e.g. supply failure, sensor fault, fuse)	H6
Potential-free contact (24 V/2 A) with socket to 2 contact NAMUR NE 28, for signal generation, controlled by programme segment, for free-selectable functions to be activated (e.g. activation of audible and visual signals, exhaust motors, fans, stirrers, etc.)	ts H72
Process-dependent programmable door lock	D4
Door-open-recognition	V5
Flexible Pt100 for positioning in chamber or in load with socket, 4-pin, according to NAMUR NE 28, for external temperature recording (load temperature) max. 3 sensors	H4
Flexible Pt100 temperature sensor, positioned flexibly in chamber or load, for local temperature measurement (up to 3 additional sensors are possible). The measured temperature can, if required, be indicated on the display, recorded in the integral data store, and can be documented via the AtmoCONTROL software	H8
${\it Mobile ALERT, notification by SMS in case of any error or alarm of the device. Requires option H6}$	G
Castor frame (2-part), height 140 mm	R9
Temperature restriction; Temperatures: $+60$, $+70$, $+80$, $+95$, $+100$, $+120$, $+160$, $+180$ or $+200$ °C (Please, indicate upon ordering)	A8

Accessories	30	55	75	110	160		
Stainless steel grid, electropolished	E28884	E20	164	E20	165		
Perforated stainless steel shelf	B29727	B03	916	B00	325		
Stainless steel slide-in drip tray, 15 mm rim (may affect the temperature distribution)	E02070	E02072		E02	073		
Stainless steel bottom drip tray, 15 mm rim (may affect the temperature distribution)	B04356	B04	358	B04	359		
Wall bracket for wall mounting	B29755	B29756	B29757	B29758	B29759		
Guarantee extension by 1 year	GA1Q5						
USB-Ethernet adapter			E06192				
Ethernet connection cable 5 m for computer interface			E06189				
USB User-ID stick (with User-ID licence): Oven-linked authorisation licence (User-ID-programme) on Memory-stick, prevents undesired manipulation by unauthorised third parties. When reordering please specify serial number			B33170				
Set of height adjustable feet (4 pcs)			B29768				
Stacking set (4 pcs) for stacking of appliances of same size		B29	744		-		
Flush-fit unit (stainless steel frame covering gap between oven and wall opening), with air slots	B29728	B29730	B29732	B29734	B29736		
Flush-fit unit (stainless steel frame covering gap between oven and wall opening), without air slots	B29729	B29731	B29733	B29735	B29737		
Subframe, adjustable in height (size 30 to 75: height 600 mm, size 110 to 160: height 500 mm)	B29745	B29747		B29749			
Subframe, on castors (size 30 to 75: height 660 mm, size 110 to 160: height 560 mm)	B29746	B29	748	B29	750		
Subframe, adjustable in height, height 130 mm, for example for units with fresh air filter	B33657	B33659		B33	661		
FDA confroming software AtmoCONTROL (FDA edition). Meets the requirements for the use of electronically stored data sets and electronic signatures as laid down in Regulation 21 CFR Part 11 of the US Food and Drug Administration (FDA). Base licence for the control of one unit. Respective IQ/OQ documents available in German and English language (without surcharge)			FDAQ1				
Integration of additional units (up to max. 15 units) into an already existent FDA-software licence			FDAQ2				
IQ document with device-specific works test data, OQ/PQ check list as support for validation by customer			D00124				
IQ/OQ document with device-specific works test data for one free-selectable temperature value, incl. temperature distribution survey at Memmert for 9 measuring points (size 30), 27 measuring points (sizes 55 - 1060) to DIN 12880:2007-05. PQ check list as support for validation by customer. 305 € for further temperature values and validation at customer site on demand (GER, AT, CH only)	D00125		D00	0127			



Steriliser SN and SF with SingleDISPLAY
Steriliser SNplus and SFplus with TwinDISPLAY
Natural convection or forced ventilation
AtmoCONTROL software

Model sizes: 30 / 55 / 75 / 110 / 160 / 260 / 450 / 750 +20 °C to +250 °C

STERILISER S Medicine has the goal of protecting and saving lives. Therefore, disinfection of receptacles and instruments is not enough. The setpoint-dependent programme resume function SetpointWAIT of Memmert hot air sterilisers guarantees precise sterilisation times and the complete killing off of even the most resistant microorganisms. All Memmert sterilisers are classified as class IIb medical device.

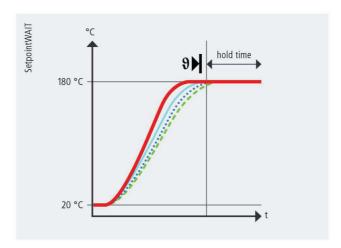






SetpointWAIT function

Exactly timed temperature control helps to save lives when it comes to sterilisation of instruments and laboratory equipment. Therefore, the SetpointWAIT function guarantees that the sterilisation time does not start before the compensation time is reached. When measuring with additional freely positionable Pt100 sensors (optional), reaching the set temperature at all measuring points on the chamber load is decisive for the continuation of the programme. Up to three measurements can be displayed directly on the ControlCOCKPIT or one measurement on an external measuring device or a $4-20\,\text{mA}$ interface.



When the SetpointWAIT function is activated, the hold time does not start until the temperature within a very narrow tolerance range is reached at all measuring points

Temperature of the Pt100 sensor inside the chamber

.....

Temperature of the flexible Pt100 sensors inside the chamber

Validation without problems

Particularly thanks to the SetpointWAIT function, Memmert hot air sterilisers comply with all strict requirements on quality assurance and can therefore be validated without problems. Besides the possibility to measure the temperature directly at the load inside the chamber (optional), the appliances completely document the entire process. In combination with the User-ID-Key for TwinDISPLAY appliances, the process-controlled door locking mechanism (optional) is the icing on the cake in terms of safety.



The steriliser S is a medical device:

All Memmert sterilisers are classified as class IIb medical device. The appliances may be used for sterilising medical material through dry heat at atmospheric pressure. They are also suited without restriction for the special application of depyrogenisation with hot air.

and EN 61010-2-40

according to DIN 12880:2007-05, EN 61010-1 (IEC 61010-1), EN 61010-2-010

Standard units are safety-approved and bear the test marks:



Interior:

Stainless steel, material 1.4301 (ASTM 304), with all-round deep-drawn ribs to integrate the largearea heating with ceramic-metal sheath

Textured stainless steel, rear zinc-plated steel, intuitively operated SingleDISPLAY or TwinDISPLAY (TFT colour display) with touchscreen, fully insulated

stainless steel door (from size 450 two leaves)

Admixture of pre-heated fresh air by electronically adjustable air flap Fresh air:

Connection: Mains cable with plug (German type) CEE plug for

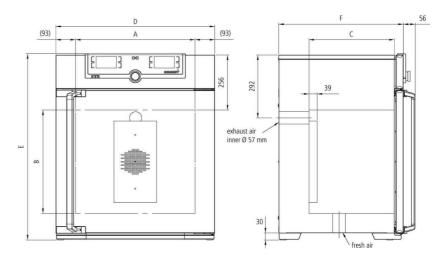
Installation: 4 feet; sizes 450/750 mounted on lockable castors

Interfaces:

Housing:

Ethernet USB LAN D

USB: only TwinDISPLAY



Model sizes/Descrip	otion		30	55	75	110	160	260	450	750	
Stainless steel	Volume	approx. l	32	53	74	108	161	256	449	749	
interior	Width	(A) mm		400		56	50	640	10	40	
	Height	(B) mm	320	400	560	480	720	800	720	1200	
	Depth (less max. 39 mm for fan)	(C) mm	250	33	30	400		500	60	00	
	Max. number of grids/shelves	number	3	4	6	5	8	9	8	14	
	Max. loading per grid/shelf	kg			2	0			3	0	
	Max. loading of chamber	kg	60	80	120	175	210		300		
	Max. loading per slide-in drip tray	kg		1,5			3	4	8	3	
	Max. loading per bottom drip tray	kg		1,5			3	4	8	3	
Textured stainless	Width	(D) mm		585		74	45	824	12	24	
steel exterior	Height (size 450, 750 with castors)	(E) mm	704	784	944	864	1104	1183	1247	1720	
	Depth (without door handle), door handle +56 mm	(F) mm	434	51	14	58	34	684	78	34	
Standard	Stainless steel grids, electropolished	number		1				2			
equipment	Standard works calibration certificate (measuring point chamber center)	°C				+′	160				
Temperature	Working temperature range	°C	at least 5 (SN/SNplus) 10 (SF/SFplus) above ambient temperature to +250								
	Setting temperature range	°C	+20 to +250								
	Setting accuracy	°C	up to 99.9: 0.1 / from 100: 0.5								
Further data	Electrical load at 230 V, 50/60 Hz	approx. W	1600	2000	2500	2800	3200	3400		_	
	Electrical load at 115 V, 50/60 Hz	approx. W	1600	1700			00		-		
	Electrical load at 400 V and 3 x 230 V w/o neutral, 50/60 Hz	approx. W		-					5800	7000	
Packing data	Net weight	approx. kg	46	57	66	74	96	110	161	217	
3	Gross weight (packed in carton)	approx. kg	62	76	85	99	122	161	227	288	
	Width	approx. mm	660	73	30	83	30	930	13	30	
	Height	approx. mm	890	950	1130	1050	1300	1380	1440	1910	
	Depth	approx. mm	650	67	70	80	00	930	10	50	
Order No. Sterilis	ers		SN30	SN55	SN75	SN110	SN160	SN260	SN450	SN750	
S = Steriliser			SN30plus	SN55plus	SN75plus				SN450plus		
N = Natural con	vection		SF30	SF55	SF75	SF110	SF160	SF260	SF450	SF750	
F = Forced air c plus = Model with			SF30plus	SF55plus	SF75plus	SF110plus	SF160plus	SF260plus	SF450plus	SF750pl	

Options		30	55	75	110	160	260		450	750		
									750			
Voltage 115 V, 50/60 Hz Extended overtemperature protection by	y additionally integrated Pt100			Х	2				-			
sensor for independent temperature mo SingleDISPLAY	onitoring for models with					A6						
Full-sight glass door (4-layer insulating Interior lighting for observing the load	glass)	B0 R0										
Chamber modification for the application	on of reinforced perforated stainless					NU						
steel shelves or stainless steel grids (be- chamber) - includes replacement of star	aring rails mounted in the working ndard grids by reinforced grids	- K1										
Fresh-air filter (filtration efficiency 80 %) (for SF/SFplus). For sizes 30 - 260 castor	frame or subframe necessary	R8										
Entry port, 23 mm clear diameter, for introducing connections at the	left centre/centre left centre/top					F0 F1						
side, can be closed by flap, standard positions	right centre/centre					F2						
positions	right centre/top					F3						
Entry port, 23 mm clear diameter, can be closed by flap, in special	left					F4						
positions (please state location)	right rear					F5 F6						
Entry port, 14 mm clear diameter, can be						D6						
in the back wall (please, state location) Entry port, 38 mm clear diameter, can be	e closed by flap, in special positions					F7						
in the back wall (please, state location)	Tomporature controllertl											
4 - 20 mA current loop interface (0 to $+260 ^{\circ}\text{C} = 4 - 20 \text{mA}$)	Temperature controller, actual value Temperature of a Pt100 sensor					V3						
	positioned flexibly in chamber for external temperature monitoring					V6						
	(max. 1 SingleDISPLAY, max. 3					VO						
Fan speed monitoring with switching of	TwinDISPLAY) - price per sensor f the heating and with alarm in					V4						
case of failure - optional for SFplus only Works calibration certificate for 3 tempe	roturos: ,160 ,100 ,250°C					00132						
Works calibration certificate for one (free												
according to customer specification	<u> </u>				L	00109						
Door with lock and key (safety lock); sta Door hinged on the left	ndard with 450 and 750			R	χ	B6						
Potential-free contact (24 V/2 A) with so for external monitoring (indicates when		B8 - H5										
Potential-free contact for combination e sensor fault, fuse)		H6										
Potential-free contact (24 V/2 A)	2 contacts					H72						
with socket to NAMUR NE 28, for signal generation, controlled by	4 contacts			-					H74	4		
programme segment, for free- selectable functions to be activated												
(e.g. activation of audible and visual signals, exhaust motors, fans,												
stirrers, etc.). Only for units with												
TwinDISPLAY; max. 2 contacts on 1-phase appliances; max. 4 contacts												
on 3-phase appliances	ala da familia fama de de de de											
Process-dependent programmable door TwinDISPLAY)						D4						
Door-open-recognition (only for units w						V5						
Flexible Pt100 for positioning in chamber according to NAMUR NE 28, for externatemperature) max. 3 sensors						H4						
Flexible Pt100 temperature sensor, posi												
for local temperature measurement (up possible). The measured temperature ca	an, if required, be indicated on the					Н8						
display, recorded in the integral data sto AtmoCONTROL software	ore, and can be documented via the											
MobileALERT, notification by SMS in cast device. Requires option H6	e of any error or alarm of the					C3						
Castor frame (2-part), height 140 mm				R	9				-			
Accessories			30	55	75	110	160 2	260	450	750		
Stainless steel grid, electropolished			E28884	E201	64	E20165	E28	8891	E20)182		
Additional reinforced stainless steel gric with guide bars and fixing screws (only	d, electropolished, max. loading 60 kg; in connection with option K1). Please c	from size 450 consider max.		-		E29767	E29	9766		2190		
loading of chamber	, , , , , , , , , , , , , , , , , , , ,		D20727	500-	1.0							
Perforated stainless steel shelf			B29727	B039	16	B00325	B29	9725	R00	0328		

E02070

E02072

Additional reinforced stainless steel shelf, max. loading 60 kg; with guide bars and fixing screws (only in connection with option K1). Please consider max. loading of chamber

Stainless steel slide-in drip tray, 15 mm rim (may affect the temperature distribution) - cannot be used in connection with option $\rm K1$

E29726

E02073

B32191

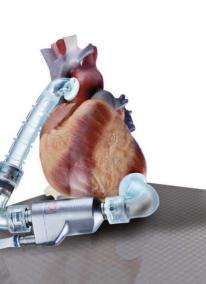
E02075



Vacuum oven VO with TwinDISPLAY AtmoCONTROL software

Model sizes:
29 / 49 / 101
+20 °C to +200 °C
5 mbar to 1100 mbar
Accessories: lower pump chamber and energy-efficient vacuum pump

VACUUM OVEN VO The high-performance turbo dryer impresses with its many intelligent Memmert features for gentle drying and precise, rapid temperature control: digital pressure control, directly heated and individually controllable thermoshelves, and simple programming via ControlCOCKPIT or AtmoCONTROL software. Combined together, the speed-controlled vacuum pump and the vacuum oven VO are an unbeatable energy-efficient pairing. The pump fits neatly inside the matching lower chamber.

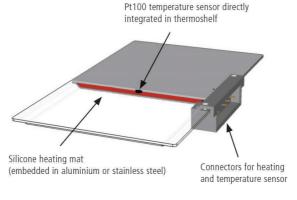






Unique precision: Memmert VO direct heating

Available only from Memmert: multi-level sensing and heating. For really short heating-up and processing times, heating is provided via individually positionable thermoshelves with integrated shelf heating and sensors. The separate control circuits react precisely to different loads or humidity levels and ensure the setpoint temperature is consistently maintained. Due to the direct contact between the heating and the chamber load, there is practically no loss of heat. Each thermoshelf can be calibrated individually.



Removable thermoshelf with direct heating system and sensor

Multi-level sensing and heating

Optional vacuum pump saves around 70 % energy

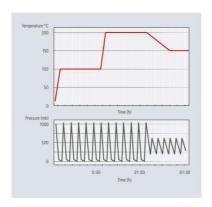
The speed-controlled chemically resistant Memmert vacuum pump is automatically detected by each vacuum oven VO. Thanks to intelligent speed control, it controls the setpoint with great precision. The energy efficiency is also obvious, with measurements showing energy savings of around 70 % in ramp mode compared with vacuum pumps that are not controlled; it is even possible to achieve higher savings at constant vacuum levels. The final vacuum level of up to 2 mbar favours a wide range of applications, while pump control (based on individual requirements) significantly extends the service life of membranes. If another vacuum pump or a central vacuum supply is connected, vacuum control is achieved via solenoid valves.



Turbo drying thanks to vacuum cycles

Digitally controlled vacuum cycles, during which the working chamber is intermittently vented at short intervals, can achieve further significant reductions in drying times. The AtmoCONTROL software makes it quick and easy to program ramps with different temperature and vacuum setpoints.





Example of ramp programming

Convenience in a package: the Premium Module

The basic version of the vacuum oven VO features a thermoshelf and two thermoshelf connectors (VO29: 1 thermoshelf connector). The Premium Module includes the option for switching to inert gas, a programmable, digitally controlled gas inlet with flow reduction; there is also the MobileALERT option with separate error messages for temperature and pressure as well as (depending on the appliance size) additional thermoshelves and thermoshelf connectors (see the technical data for details).

VACUUM OVENS VO

according to DIN 12880:2007-05, EN 61010-1 (IEC 61010-1)

Standard units are safety-approved and bear the test marks: $\mathsf{C} \in \mathsf{EHL} \ ext{ }$





Stainless steel interior, material 1.4404 (ASTM 316 Interior:

L), hermetically welded, with removable mountings at the sides for cleaning, including thermoshelf guide bars, as well as mounting on top to avoid turbulences

Housing:

Textured stainless steel, rear zinc-plated steel, intuitively operated TwinDISPLAY (TFT colour displays) with touchscreen, safety glass door with inner bullet-proof glass and external anti-splinter

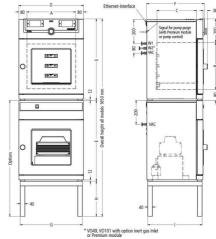
Mains cable with plug (German type) Connection:

Installation: 4 feet

Interfaces:







tainless steel nterior	Volume		approx. I	29	49	101
interior	Width	(A)	mm		35	545
	Height	(B)	mm	305	385	465
	Depth	(C)	mm	250	330	400
	Distance between thermoshelves		mm		5	95
	Maximum load per oven		pprox. kg	40	6	
	Max. number of thermoshelves		number	1	2	
	Max. number of thermoshelves (with premium module)		number	2		1
	Max. loading per thermoshelf		kg		20	
extured stainless	Width	(D)	mm	5	50	710
teel exterior	Height	(E)	mm	607	687	767
	Depth (without door handle, depth of handle 38 mm)	(F)	mm	400	480	550
	Safety glass door: Textured stainless steel frame with spring-loaded safety glass on inside and anti-splinter screen ESG on outside of door				•	
	Door Seal: Endless silicone profile seal				•	
Standard equipment	Thermoshelves – aluminium eloxadised , mat. 3.3547 (ASTM B209) – with integrated large-area heating including local temperature sensing (Pt100, 4-wire-circuit); individual overtemp. protection for each shelf. Further data see stainless steel number inner working chamber		number		1	
	Works calibration certificate (measuring point in the middle of the individual shelf for $+160$ °C at 20 mbar pressure): a separate certificate is prepared for each thermoshelf ordered and shipped together with the vacuum oven		°C		•	
emperature	Temperature sensors Pt100 Class A in 4-wire circuit individually for each thermoshelf				•	
	Working temperature range		°C		st 5 above an perature to +	
	Setting temperature range		°C		+20 to +200)
	Setting accuracy		°C	up to 99	.9: 0.1 / from	100: 0.
	Temperature variation in time (to DIN 12880:2007-05) (aluminium thermoshelf)		K		\leq ± 0.3	
	Temperature uniformity (surface) at +160 °C/20 mbar (aluminium thermoshelf)		K		\leq ± 2,5	
ressure (vacuum)	Vacuum connection with small flange DN16, and gas inlet with small flange DN 16				•	
	Digital electronic pressure control for a speed-controlled vacuum pump. Tubing for vacuum, air and inert gas are made of material 1.4571 (ASTM 316 Ti). Adjustable from 5 mbar up to 1100 mbar. Programmable, digitally controlled inlet for air				•	
	Pump control: optimised rinsing procedures for the pump membranes as well as signal output for pump ON/OFF				•	
	Rapid air intake for door opening without alteration of selected vacuum setpoint				•	
	Permitted final vacuum		mbar		0.01	
	Maximum leakage rate		bar/h		0.01	
ontrol technology	Digital over- and undertemperature monitor				•	
3)	Temperature monitoring band automatically linked to the setpoint (ASF)				•	
	Monitor relay for reliable heating cut-off in case of fault				•	
	Mechanical temperature limiter (TB)				•	
	Multi-Level-Overtemperature-Protection (MLOP) for each thermoshelf				•	
urther data	Subframe tubular steel (extra cost), black enamelled (for stacking unit consisting of vacuum oven and pump module, total height: 1650 mm, see sketch of oven dimensions G/H/I) Width/Height/Depth		mm	529/450/ 383	529/290/ 463	689/13 533

Model sizes/Des	cription			29	49	101
Further data	Electrical load (maximally equipped)	at 230 V, 50/60 Hz	approx. W	820	2020	2420
Packing data	Net weight vacuum oven		approx. kg	55	83	110
	Gross weight vacuum oven (packed	in carton)	approx. kg	76	104	135
	Packed dimensions Vacuum oven (W	/idth, Height, Depth)	approx. mm	660/87	70/590	830/1050 800
	Net weight pump module without/v	· · ·	approx. kg	25/41	30/46	41/57
	Gross weight pump module without	/with pump (packed in carton)	approx. kg	46/62	51/67	66/82
	Packed dimensions pump module (V	Vidth, Height, Depth)	approx. mm	660/8	70/590	830/1050 800
Order No. Vacu	um Ovens			VO29	VO49	V0101
Options			29	49		101
	comprises the inert gas inlet (only size 4 a additional thermoshelf (sizes 49/101)	9 and 101), extra connectors for thermoshelves, 1 (size 29), 2		T5		
	loop interface (only with option T5)	Temperature actual value (0 to 210 °C = 4 - 20 mA)	-		V3	
		Vacuum actual value (0 bis 1200 mbar = 4 - 20 mA)	-		W2	
		Temperature of a Pt100 sensor positioned flexibly in chamber for external temperature monitoring - price per sensor		V6		
reely positioned lata logger. Requ		stable at ControlCOCKPIT, alarm values captured in internal	-		Н9	
	tact (24 V/2 A) with socket, according to	NAMUR NE 28 for combination error message (e.g. supply		Н6		
lexible Pt100 for emperature reco	positioning in chamber or in load with sording (load temperature) max. 3 sensors	cket, 4-pin, according to NAMUR NE 28, for external		H4		
Potential-free con programme segm motors, fans, stirr	tact (24 V/2 A) with socket, according to ent for a total of one freely selected funct ers etc.)	NAMUR NE 28, triple, for signal generation, controlled by ion to be activated (e.g. acoustic and visual signals, exhaust		H7		
	•	rm of the device. Requires option H6		C3		
MobileALERT, not	ification by SMS in case of any error or ala	and of the device. Requires option no				
MobileALERT for 2	2 alarm notifications; temperature and va	cuum alarm (only with option T5)	-		C4	
MobileALERT for 2 Temperature restrordering)	2 alarm notifications; temperature and va iction; Temperatures: +60, +70, +80, +9	cuum alarm (only with option T5) 5, +100, +120, +160 or +180°C (Please, indicate upon	-	A8	C4	
MobileALERT for 2 Temperature restrordering)	2 alarm notifications; temperature and va iction; Temperatures: +60, +70, +80, +9 certificate for one (freely selectable) temp	cuum alarm (only with option T5)	-		C4	
MobileALERT for 2 Temperature restrordering) Works calibration customer specifica	2 alarm notifications; temperature and va iction; Temperatures: +60, +70, +80, +9 certificate for one (freely selectable) temp	cuum alarm (only with option T5) 5, +100, +120, +160 or +180°C (Please, indicate upon	-	A8	C4 49	101
MobileALERT for a Temperature restrordering) Works calibration customer specifica Accessories Additional therma	2 alarm notifications; temperature and va iction; Temperatures: +60, +70, +80, +9 certificate for one (freely selectable) temp ation	cuum alarm (only with option T5) 5, +100, +120, +160 or +180°C (Please, indicate upon	- cluding local temperatur and calibration certificat	A8 D00116	49	
MobileALERT for a Temperature restrordering) Works calibration customer specificates Accessories Additional thermore sensing (Pt100, 4 Additional thermore ocal temperature	2 alarm notifications; temperature and va iction; Temperatures: +60, +70, +80, +9 certificate for one (freely selectable) temp ation oshelf - aluminium eloxadised material W -wire-circuit); individual overtemp. protect oshelf - stainless steel material 1.4404 (A sensing (Pt100, 4-wire-circuit); individual	cuum alarm (only with option T5) 5, +100, +120, +160 or +180°C (Please, indicate upon perature and pressure value (per thermoshelf) according to 2-St. 3.3547 (ASTM B209) with integrated large-area heating inc	and calibration certificate- e-area heating including	A8 D00116 29 B00741	49 B00743	B00744
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Blanket warmer IFbw with SingleDISPLAY Forced ventilation AtmoCONTROL software

Model sizes: 110 / 260 / 450 / 750 +20 °C to +80 °C

BLANKET WARMER IFbw In this special blanket warmer IFbw, blankets and cloths preheated to a precise temperature to keep patients warm are always close at hand. This minimises the risk of complications such as wound infections, cardiovascular disorders, cardiac arrhythmia or vascular disorders. The blanket warmer IFbw is a Class I medical device in accordance with EU Directive 93/42/EEC. Thanks to its stainless steel inside and outside surfaces, it is easy to clean.







Elaborate safety functions

The Memmert blanket warmer IFbw has an impressive range of built-in safety features:

- The heating power is limited to 80 °C to prevent overheating the cotton fabrics if the chamber is overloaded
- Hermetically sealed interior
- Permanent air circulation
- Constant surface temperature monitoring with two additional Pt100 sensors
- Automatic door-open-recognition ensures that the heating and fan are turned off when the door is opened
- The power supply is cut by mechanical temperature limiters as soon as the temperature reaches 85 °C

Temperature monitoring inside the chamber

Three Pt100 sensors monitor and limit the temperature in the chamber. The two surface sensors have been built into the appliance in such way that they retain full functionality even if the chamber is fully loaded.



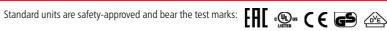
The blanket warmer IFbw is a medical device:

Memmert blanket warmers IFbw are a Class I medical device in accordance with the EU Directive 93/42/EEC. According to the intended purpose, Memmert blanket warmers are suitable for warming non-sterile blankets and cloths.



BLANKET WARMERS IFbw

according to DIN 12880:2007-05, EN 61010-1 (IEC 61010-1), EN 61010-2-010





Interior: Stainless steel, material 1.4301 (ASTM 304) with

all-round deep-drawn ribs to integrate the large-area heating with ceramic-metal sheath

Textured stainless steel, rear zinc-plated steel, intuitively operated SingleDISPLAY (TFT colour display) with touchscreen; outside fully insulated stainless steel door (from size 450 two leaves)

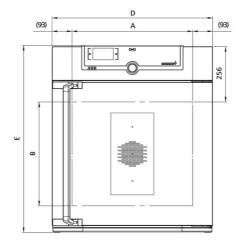
Mains cable with plug (German type) Connection: 4 feet; size 450 and 750 mounted on lockable Installation:

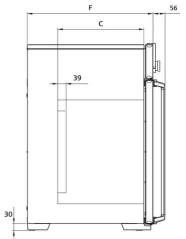
castors

Interfaces:

Housing:

Ethernet D LAN D





			1			
Model sizes/Descri	ption		110	260	450	750
Stainless steel	Volume	approx. l	108	256	449	749
interior	Width	(A) mm	560	640 10		40
	Height	(B) mm	480	800	720	1200
	Depth (less 39 mm for fan)	(C) mm	400	500	8 30	00
	Max. number of grids/shelves	number	5	9		14
	Max. loading per grid/shelf	kg		20		0
	Max. loading of chamber	kg	175		300	
Textured stainless	Width	(D) mm	745	824	12	24
steel exterior	Height (size 450, 750 with castors)	(E) mm	864	1183	1247	1720
	Depth (without door handle), door handle + 56mm	(F) mm	584	684	78	84
Standard	Stainless steel grids, electropolished	number	2			
equipment	Forced convection fix at 100%		•			
	Door-open-recognition		•			
	Works calibration certificate (measuring point chamber centre)	°C	+37			
Temperature	Working temperature range	°C	at least 10 above ambient temperature up +80			iture up t
	Setting temperature range	°C		+201	to +80	
	Setting accuracy	°C		C).1	
Further data	Electrical load at 230 V, 50/60 Hz	approx. W	1400	1700	1800	2000
	Electrical load at 115 V, 50/60 Hz	approx. W	9	00	1500	1800
Packing data	Net weight	approx. kg	74	110	161	217
racking data	Gross weight (packed in carton)	approx. kg	99	161	227	288
	Width	approx. mm	830	930	13	30
	Height	approx. mm	1050	1380	1440	1910
	Depth	approx. mm	800	930	10	50
Order No. Blanket	t warmers					
I = Incubator F = Forced conve bw = Blanket warr			IF110bw	IF260bw	IF450bw	IF750b

Options	110	260	450	750	
Voltage 115 V, 50/60 Hz		X	2		
Full-sight glass door (4-layer insulating glass)		В	0		
4 - 20 mA current loop interface (0 to +90 $^{\circ}$ C = 4 - Temperature controller, actual value 20 mA)		V	3		
Works calibration certificate for one (freely selectable) temperature value according to customer specification	D00109				
Door with lock and key (safety lock)		B6			
Door hinged on the left		В8 -			
Potential-free contact (24 V/2 A) with socket, according to NAMUR NE 28 for external monitoring (indicates when setpoint is reached)		Н	5		
Potential-free contact for combination error message (e.g. supply failure, sensor fault, fuse)		H6			
Flexible Pt100 for positioning in chamber or in load with socket, 4-pin, according to NAMUR NE 28, for external temperature recording (load temperature) max. 3 sensors		H4			
MobileALERT, notification by SMS in case of any error or alarm of the device. Requires option H6		C	3		
Castor frame (2-part), height 140 mm	F	R9		=	

Accessories	110	260	450	750
Stainless steel grid, electropolished	E20165	E28891	E20	182
Perforated stainless steel shelf	B00325	B29725	B00	328
Wall bracket for wall mounting	B29758		-	
Guarantee extension by 1 year	GA1Q5		GA2Q5	
USB-Ethernet adapter		E06	192	
Ethernet connection cable 5 m for computer interface		E06	189	
USB stick with documentation software AtmoCONTROL and operation manual. When reordering please specify serial number		B33	172	
Stacking set (4 pcs) for stacking of appliances of same size	B29744		-	
Flush-fit unit (stainless steel frame covering gap between oven and wall opening), with air slots	B29734	B29738	B29740	B29742
Flush-fit unit (stainless steel frame covering gap between oven and wall opening), without air slots	B29735	B29739	B29741	B29743
Subframe, adjustable in height (height 500 mm)	B29749	B29751	B29753	-
Subframe, on castors (height 560 mm)	B29750		-	
Subframe, adjustable in height, height 130 mm, for example for units with fresh air filter	B33661	B33664		-
IQ document with device-specific works test data, OQ/PQ check list as support for validation by customer		D00	124	
IQ/OQ document with device-specific works test data for one free-selectable temperature value, incl. temperature distribution survey at Memmert for 27 measuring points to DIN 12880:2007-05. PQ check list as support for validation by customer. 305 € for further temperature values and validation at customer site on demand (GER, AT, CH only)		D00	127	

MODEL VARIANTS

SingleDISPLAY ControlCOCKPIT with one TFT display	TwinDISPLAY ControlCOCKPIT with two TFT displays
AVAILABLE APPLIANCES UN/UNm / UF/UFm / IN/INm / IF/IFm / IFbw / SN / SF / IPP / IPS	AVAILABLE APPLIANCES UNplus/UNmplus / UFplus/UFmplus / UF TS / UNpa INplus/INmplus / IFplus/IFmplus / SNplus / SFplus / VO ICOmed / IPPplus / ICPeco / ICP / HPP / ICHeco / ICH / HCP
One high-resolution TFT colour display with touch-sensitive buttons for selection of functions	Two high-resolution TFT colour displays with touch-sensitive buttons for selection of functions
Available parameters on the ControlCOCKPIT: Temperature (Celsius or Fahrenheit), fan speed, exhaust air flap position, programme time	Available parameters on the ControlCOCKPIT: Temperature (Celsius or Fahrenheit), fan speed, exhaust air flap position, programme time, relative humidity, illumination, $\mathrm{CO_2}$
One temperature sensor Pt100 DIN class A in a 4-wire circuit	Two Pt100 sensors DIN class A in a 4-wire circuit for mutual monitoring, taking over functions in case of an error
	HeatBALANCE function for application specific adjustment of heat output distribution (balance) between the upper and lower heating groups in an adjustment range between -50 % and \pm 50 % (not valid for models 30, HPP110, IPP110plus, ICP, ICH)
AtmoCONTROL software for reading out, managing and organising the data logger via Ethernet interface (temporary trial version can be downloaded). USB stick with AtmoCONTROL software available as accessory (on demand)	AtmoCONTROL software on a USB stick for programming, managing and transferring programmes via Ethernet interface or USB port
	ControlCOCKPIT with USB port for uploading programmes, reading out protocol logs, activating the User-ID function
	Displaying of already logged protocol data on the ControlCOCKPIT (max 10,000 values correspond to approx. 1 week)
Ethernet interface on the rear of the appliance for reading out the protocol log and for online logging	Ethernet interface on the rear of the appliance for reading out the protocol log and for uploading programmes and for online logging
Double overtemperature protection: Electronic temperature monitoring with freely adjustable monitoring temperature, for models U, I, S with option A6 TWW/TWB (protection class 3.1 or 2), mechanical temperature limiter TB acc. to DIN 12880	Multiple overtemperature protection: Electronic temperature monitoring TWW/TWB (protection class 3.1 or 2 resp. 3.3 for units with active cooling) and mechanical temperature limiter TB (protection class 1) acc. to DIN 12880, AutoSAFETY automatically adjusts to the set value within a freely adjustable tolerance range. Setting individual MIN / MAX values for over/undertemperature and also for all other parameters such as relative humidity, CO ₂
PID microprocessor control with	integrated auto-diagnostic system
Structured stainless steel housing, scratch-resis	tant, robust and durable; rear of zinc-plated steel
High-temperature connectors on the rea	ar of the appliance for single-phase power

High-temperature connectors on the rear of the appliance for single-phase power connection according to country specific systems and IEC standards

Internal data logger with a storage capacity of at least 10 years

German, English, French, Spanish, Polish, Czech, Hungarian language settings available on the ControlCOCKPIT

Digital backwards counter with target time setting, adjustable from 1 minute to 99 days

The SetpointWAIT function guarantees that the process time does not start until the set temperature is reached at all measuring points – optional for temperature values recorded by the freely positionable Pt100 sensors inside the chamber

Adjustment of three calibration values for temperature and additional appliance specific parameters directly at the ControlCOCKPIT

SOFTWARE AtmoCONTROL

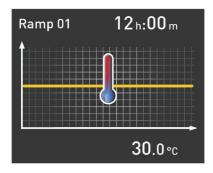
AtmoCONTROL

The innovative control and logging software

Parameters such as temperature and humidity as well as the process time can be set directly at the ControlCOCKPIT. Ramp programming is done via the control and logging software AtmoCONTROL, which features a completely new software design.

Drag, drop & go!

Numerical and graphic programming of complex processes is a thing of the past. Today, programming is done via AtmoCONTROL by means of the mouse or touchpad on your notebook. Even the most complex ramp programmes are created within minutes. Simply drag & drop the graphical symbols for the desired parameters to the input field and change the values according to your wishes with a mouse click.



Programme functions for appliances with SingleDISPLAY and TwinDISPLAY

- · Reading out, managing and organising the data logger
- Saving the log memory in various formats
- Online monitoring of up to 32 connected appliances
- · Optical alarms when the alarm limits individually set at the ControlCOCKPIT are exceeded
- Automatic alarm to one or several e-mail addresses

Additional functions for appliances with TwinDISPLAY

- Intuitive programming and archiving of ramps and programme sequences
- Synchronous visualisation of the created programme sequence during programming
- Application-specific repeat functions (loops) can be inserted within a temperature control programme in any place
- Simple creation of repeating weekly programmes
- Programming, managing and transferring programmes via Ethernet interface or USB port



myAtmoSAFE: CUSTOMER-SPECIFIC SOLUTIONS



Customisation department

Memmert myAtmoSAFE meets any specific customer demand.

The customisation department adapts standard appliances to special needs. Their solutions are economic as well as technologically advanced and customers profit from the full guarantee period. Some customer-specific development projects, such as special model sizes 400, 1400 and 2200 of the HPP even made their way into the standard product range.

If users want to make sure they chose the right appliance offering the right suit of parameters and functions, they can have their application tested in advance in the Memmert MPTC Test Centre.

Customer-specific adjustment of standard models:

- Feed-throughs and ducts
- Special fittings for special applications (e.g. weighing equipment)
- · Limiting temperatures in the heating and cooling range
- Air exchange rates
- Relative humidity
- (Wall) Frames

- Telescopic trays
- Heavy duty appliances, heavy duty bottom grids
- Special bases, stacking frames
- Central or integrated water supply
- Special model sizes
- Appliances for integration in the production lines

24 HOURS AT YOUR SERVICE

www.memmert.com

Here you can find the latest news concerning our company and products, as well as detailed descriptions of every single product. Additional information on the technologies used will support your sales arguments. In addition to this, data sheets, certificates, operating instructions and brochures are available for download. Service notifications can be submitted to our service team using the corresponding form.

Dedicated login area for our trading partners

- Technical information:
 - Service instructions, software download, wiring diagrams, maintenance schedules etc.
- Marketing/sales information:
 - Press releases, product photos, image photos, videos, order form for advertising material etc.
- Download of price list and spare parts price list
- Dates and registration form for sales and service trainings

www.atmosafe.net

The Memmert expert platform AtmoSAFE.net contains application examples for our temperature control appliances in the fields of life science, medicine, automotive, electronics, pharmaceutics, food, material testing and industry. In addition to this, general topics concerning research and industry are dealt with.

Applications: Incubating and breeding, drying under vacuum, heat drying, degassing under vacuum, determination of water and dry content, material testing, sample storage, conditioning, sterilisation, climate testing, stability and storage tests.

Our tip:

Please consider the Memmert customer information, which we regularly send exclusively to our trading partners. We inform you about campaigns, upcoming product launches, service offers and new application reports!

PERSONAL NOTES

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	July 1



HEATING AND DRYING OVENS

INCUBATORS

CLIMATE CHAMBERS

WATERBATHS / OILBATHS

YOUR MEMMERT PARTNER

SCO Tech

Auf der Heide 15 D- 37351 Dingelstädt Federal Republic of Germany P: +49 (36075) 439340 F: +49 (36075) 439308 http://www.sco-tech.com





Memmert GmbH + Co. KG