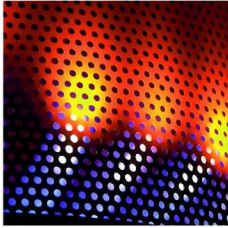Universal Oven UN/UNm and UF/UFm with SingleDISPLAY
Universal Oven UNplus/UNmplus and UFplus/UFmplus
with TwinDISPLAY
Natural convection or forced ventilation
AtmoCONTROL software

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

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.
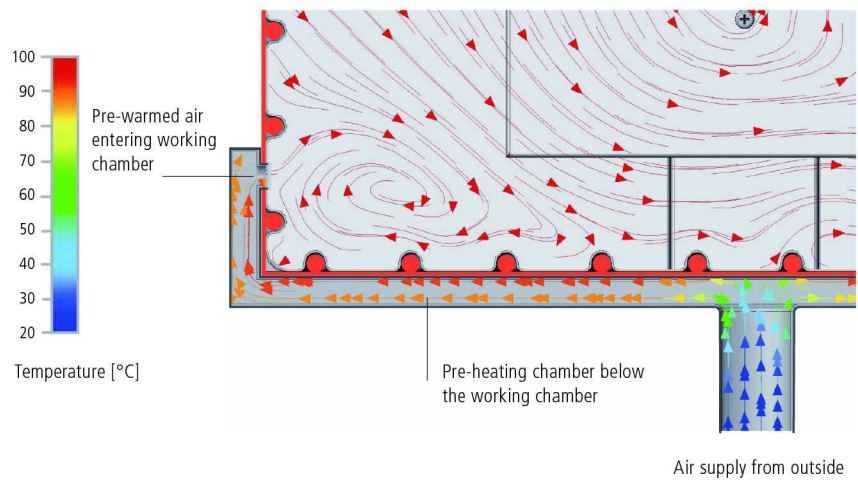
Defined and programme-controlled fan speed

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.

Pre-warmed air entering working chamber

Temperature [°C]

Pre-heating chamber below 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:
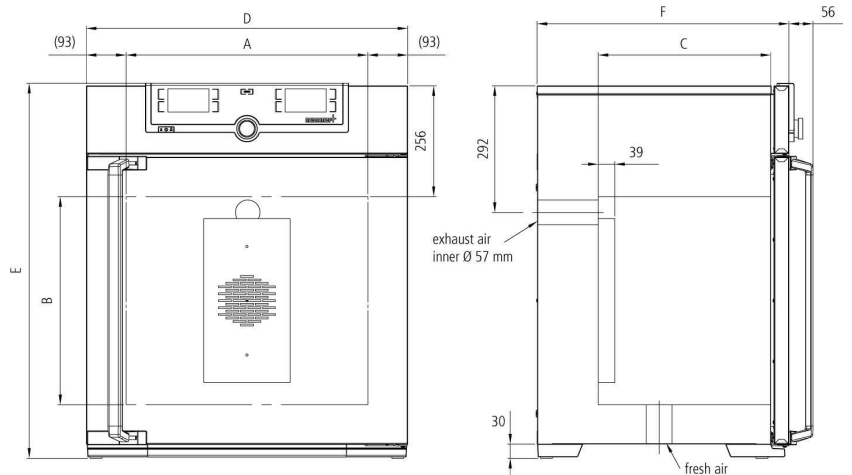(EAC not valid for medical devices)

Interior:	Stainless steel, material 1.4301 (ASTM 304), with all-round deep-drawn ribs to integrate the large-area heating with ceramic-metal sheath
Housing:	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)
Fresh air:	Admixture of pre-heated fresh air by electronically adjustable air flap
Connection:	Mains cable with plug (German type) CEE plug for 400 V
Installation:	4 feet; sizes 450, 750 and 1060 mounted on lockable castors
Interfaces:	Ethernet / LAN USB

USB: only TwinDISPLAY

exhaust air inner Ø 57 mm

fresh air

Model sizes/Description			30	55	75	110	160	260	450	750	1060
Stainless steel interior	Volume	approx. l	32	53	74	108	161	256	449	749	1060
	Width (A) mm		400			560		640	1040		
	Height (B) mm		320	400	560	480	720	800	720	1200	
	Depth (less 39 mm for fan) (C) mm		250	330		400		500	600		850
	Max. number of grids/shelves	number	3	4	6	5	8	9	8	14	
	Max. loading per grid/shelf	kg	20						30		60
	Max. loading of chamber	kg	60	80	120	175	210	300			
	Max. loading per slide-in drip tray	kg	1,5			3		4	8		
	Max. loading per bottom drip tray	kg	1,5			3		4	8		
Textured stainless steel exterior	Width (D) mm		585			745		824	1224		
	Height (size 450, 750, 1060 with castors) (E) mm		704	784	944	864	1104	1183	1247	1720	
	Depth (without door handle), door handle + 56 mm (F) mm		434	514		584		684	784		1035
Standard equipment	Stainless steel grids, electropolished	number	1	2							1
	Standard works calibration certificate (measuring point chamber center)	°C	+160								
Temperature	Working temperature range	°C	at least 5 (UN/UNplus/UNm/UNmplus) or 10 (UF/UFplus/UFm/UFmplus) above ambient temperature to +300								
	Setting temperature range	°C	+20 to +300								
	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	1800				-		
	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	45	57	66	74	96	110	161	217	252
	Gross weight (packed in carton)	approx. kg	61	76	85	99	122	161	227	288	416
	Width	approx. mm	660	730		830		930	1330		1370
	Height	approx. mm	890	950	1130	1050	1300	1380	1440	1910	1970
	Depth	approx. mm	650	670		800		930	1050		1300

Universal Ovens

U = Universal Oven
N = Natural convection
F = Forced air circulation
m = Medical device
plus = Model with TwinDISPLAY

	30	55	75	110	160	260	450	750	1060
	UN30 UN30m	UN55 UN55m	UN75 UN75m	UN110 UN110m	UN160 UN160m	UN260 UN260m	UN450 UN450m	UN750 UN750m	-
	UN30plus UN30mplus	UN55plus UN55mplus	UN75plus UN75mplus	UN110plus UN110mplus	UN160plus UN160mplus	UN260plus UN260mplus	UN450plus UN450mplus	UN750plus UN750mplus	-
	UF30 UF30m	UF55 UF55m	UF75 UF75m	UF110 UF110m	UF160 UF160m	UF260 UF260m	UF450 UF450m	UF750 UF750m	UF1060 UF1060m
	UF30plus UF30mplus	UF55plus UF55mplus	UF75plus UF75mplus	UF110plus UF110mplus	UF160plus UF160mplus	UF260plus UF260mplus	UF450plus UF450mplus	UF750plus UF750mplus	UF1060plus UF1060mplus

Prices for options are only valid when ordering new appliances.
Not all options/accessories are combinable with each other. Please contact us for individual combination requests.

Options	30	55	75	110	160	260	450	750	1060
Voltage 115 V, 50/60 Hz					X2			-	
Extended overtemperature protection by additionally integrated Pt100 sensor for independent temperature monitoring for models with SingleDISPLAY					A6				
Full-sight glass door (4-layer insulating glass) Temperature-range up to max. 250 °C					B0				
Full-sight glass door (4-layer insulating glass borsilicat) Temperature-range up to max. 300 °C					B1				
Chamber modification for the application of reinforced perforated stainless steel shelves or stainless steel grids (bearing rails mounted in the working chamber) - includes replacement of standard grids by reinforced grids				-				K1	-
Fresh-air filter (filtration efficiency 80 %) mounted at the appliance bottom (for UF/UFplus/UFm/UFmplus). For sizes 30 - 260 castor frame R9 or subframe necessary					R8				
Interior lighting for observing the load					R0				
Interior socket (can only be ordered with limited temperature range - max. +70 °C), ampacity 230 V, 2.2 A, can be switched off with the On/Off switch, cannot be switched individually, moisture tight IP68 (option A8 necessary)					R3				
Interior socket (can only be ordered with limited temperature range - max. +70 °C), ampacity 230 V/2.2 A, can be switched on/off via tumbler switch in control panel, moisture tight IP68 (requires option A8)					R4				
Interior nearly gastight					K2				
Interior nearly gastight with possibility for gas inlet/outlet through 2 tubes with ball valves					K3				
Entry port, 23 mm clear diameter, for introducing connections at the side, can be closed by flap, standard positions — left centre/centre					F0				
right centre/top					F1				
right centre/centre					F2				
right centre/top					F3				
Entry port, 23 mm clear diameter, can be closed by flap, in special positions (please state location) — left					F4				
right					F5				
rear					F6				
Entry port, 14 mm clear diameter, can be closed by flap, in special positions in the back wall (please, state location)					D6				
Entry port, 38 mm clear diameter, can be closed by flap, in special positions in the back wall (please, state location)					F7				
Entry port, 57 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)					F8				
Entry port, 100 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 75)	-				F9				
4 - 20 mA current loop interface (0 to +310 °C = 4 - 20 mA) — Temperature controller, actual value					V3				
Temperature of a Pt100 sensor positioned flexibly in chamber for external temperature monitoring (max. 1 SingleDISPLAY, max. 3 TwinDISPLAY) - price per sensor					V6				
Fan speed monitoring with switching off the heating and with alarm in case of failure - optional for UFplus/UFmplus only					V4				
Works calibration certificate for 3 temperatures: +100, +160, +220 °C					D00128				
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)					H5				
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 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 — 2 contacts					H72				
4 contacts				-				H74	
Process-dependent programmable door lock (only for units with TwinDISPLAY)					D4				
Door-open-recognition (only for units with TwinDISPLAY)					V5				

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Not all options/accessories are combinable with each other. Please contact us for individual combination requests.

Nov-2019

Options	30	55	75	110	160	260	450	750	1060
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				
MobileALERT, notification by SMS in case of any error or alarm of the device. Requires option H6					C3				
Temperature restriction; Temperatures: +60, +70, +80, +95, +100, +120, +160, +180, +200 or +250°C (Please, indicate upon ordering)					A8				
Castor frame (2-part), height 140 mm				R9				-	

Accessories	30	55	75	110	160	260	450	750	1060
Stainless steel grid, electropolished	E28884	E20164		E20165		E28891	E20182		B41251
Additional reinforced stainless steel grid, electropolished, max. loading 60 kg; from size 450 with guide bars and fixing screws (only in connection with option K1). Please consider max. loading of chamber		-			E29767	E29766	B32190		B32550
Perforated stainless steel shelf	B29727	B03916		B00325		B29725	B00328		B32549
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				-			B32191		-
Stainless steel slide-in drip tray, 15 mm rim (may affect the temperature distribution) - cannot be used in connection with option K1	E02070	E02072		E02073		E29726	E02075		B32599
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				-			B32763		-
Stainless steel bottom drip tray, 15 mm rim (may affect the temperature distribution) - cannot be used in connection with option K1	B04356	B04358		B04359		B29722	B04362		B29769
Stainless steel bottom drip tray, 15 mm rim (may affect the temperature distribution) - can be used only in connection with option K1				-			B34055		-
Wall bracket for wall mounting	B29755	B29756	B29757	B29758	B29759		-		
Guarantee extension by 1 year		GA1Q5					GA2Q5		
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 (only for units with TwinDISPLAY)				B33170					
USB stick with documentation software AtmoCONTROL and operation manual for products with SingleDISPLAY (the standard equipment of appliances with TwinDISPLAY includes one USB stick with AtmoCONTROL). When reordering please specify serial number				B33172					
Set of height adjustable feet (4 pcs)				B29768				-	
Stacking set (4 pcs) for stacking of appliances of same size			B29744				-		
Plug-in tube extension (outer diam. 60.3 mm, inner 57 mm), straight, for exhaust air ducting (if necessary for connection by hose)				B29718					
Plug-in tube extension (outer diam. 60.3 mm, inner 57 mm), angled, for exhaust air ducting (if necessary for connection by hose)				B29719					
Flush-fit unit (stainless steel frame covering gap between oven and wall opening), with air slots	B29728	B29730	B29732	B29734	B29736	B29738	B29740	B29742	
Flush-fit unit (stainless steel frame covering gap between oven and wall opening), without air slots	B29729	B29731	B29733	B29735	B29737	B29739	B29741	B29743	
Subframe, adjustable in height (size 30 to 75: height 600 mm, size 110 to 450: height 500 mm)	B29745	B29747		B29749		B29751	B29753		-
Subframe, on castors (size 30 to 75: height 660 mm, size 110 to 160: height 560 mm)	B29746	B29748		B29750			-		
Subframe, adjustable in height, height 130 mm, for example for units with fresh air filter	B33657	B33659		B33661		B33664		-	
Software conforming to FDA AtmoCONTROL. 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 (only for units with TwinDISPLAY). Respective IQ/OQ documents available in German and English language (without surcharge)				FDAQ1					
Integration of one additional unit (up to max. 15 units) into an already existent FDA-software licence (only for units with TwinDISPLAY)				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				D00127				