

memmert

m360 - PRODUCT CATALOGUE

02-2025



m360 SELECT SERIES

m360 MODIFICATIONS






MADE IN GERMANY.

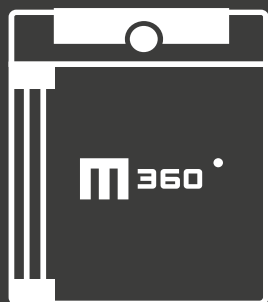


m360

SOLUTIONS FOR YOU

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m360 SELECT SERIES

CONSTANT CLIMATE CHAMBERS HPPCeco

CLIMATE CHAMBERS ICHC

CLIMATE CHAMBERS ICH

UNIVERSAL OVENS U

PASS-THROUGH OVENS UF TS

VACUUM OVENS VOcool

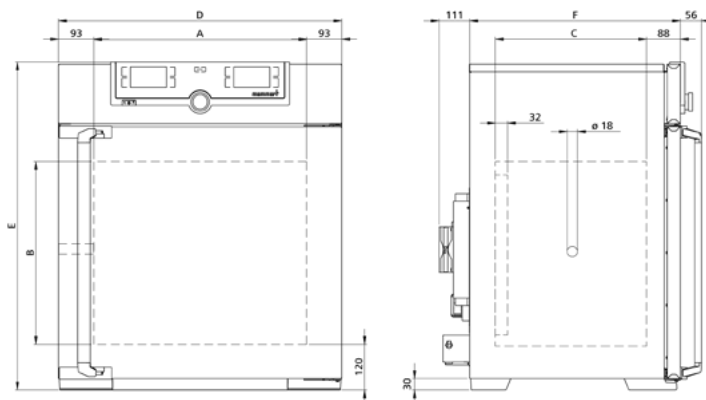
DISHWASHER UFdw

PLASTICINE OVEN UFPlplus

CONSTANT CLIMATE CHAMBERS HPPCeco

- Interior: stainless steel, mat. 1.4301 (ASTM 304), deepdrawn
- Housing: textured stainless steel 1.4016 (ASTM 430), rear zinc-plated steel 1.0037 (St37-2), intuitively operated TwinDISPLAY (TFT colour display) with touchscreen
- Door: Sizes 110 to 1060: fully insulated stainless steel doors with 2-point locking (compression door lock) and inner glass door, Sizes 1400 and 2200: stainless steel doors with glass sectors, fully heated inner glass panes integrated in the full-sight glass door with 2-point locking (compression door lock), sizes 750, 1060 and 1400 two leaves, size 2200 three leaves
- Connection: mains cable with plug (German type)
- Installation: Sizes 110 and 260: 4 adjustable appliance feet, Sizes 410 to 1060: on lockable castors, Sizes 1400 and 2200: on height-adjustable and lockable castors

Interfaces:



Prices in EUR

Model sizes/Description				110	260	410	750	1060	1400	2200
Stainless steel interior	Volume	I		108	256	384	749	1060	1360	2140
	Width	(A)	mm	560	640		1040		1250	1972
	Height	(B)	mm	480	800	1200			1450	
	Depth (less 32 mm for fan - Peltier)	(C)	mm	400	500		600	850	750	
	Max. number of grids/shelves	number		5	9	14			28	42
	Max. loading per grid/shelf	kg		20			30	60	30	
	Max. loading of chamber	kg		150	200				250	330
	Max. loading per slide-in drip tray	kg		3	4		8		-	
	Max. loading per bottom drip tray	kg		3	4		8		-	
Textured stainless steel exterior	Width	(D)	mm	745	824		1224		1435	2157
	Height (sizes 410, 750, 1060, 1400 and 2200 with castors)	(E)	mm	864	1183	1720			1913	
	Depth (without door handle, depth of handle +56 mm, +111 mm Peltier element)	(F)	mm	555	655		755	1005	905	
Standard equipment	Standard works calibration certificate (measuring point chamber center)			+25 °C / 60 % rh, +40 °C / 75 % rh						
	Standard works calibration certificate (measuring point chamber center)			5 % CO ₂ at +40 °C / 75 % rh						
	Stainless steel grid, electropolished	Number		2					4	6
	Water tank including connection hose			●						
	Door-open-recognition			●						
	Entry port (silicone), 18 mm clear diameter, moisture tight, can be closed by silicone stopper, in the side panel, centre left			●					-	
	Performance option P1, increases the number of installed Peltier modules.			-	●			-		

Prices in EUR

Model sizes/Description			110	260	410	750	1060	1400	2200
Temperature	Working temperature range without light, without humidity	°C	0 (at least 20 below ambient temperature) up to +70						
	Working temperature range without light, with humidity	°C	+5 (at least 20 below ambient temperature) up to +70					+15 (at least 10 below ambient temperature) up to +60	
	Working temperature range with light, without or with humidity	°C	+15 to +40				-		
	Setting temperature range without light, with humidity	°C	+5 to +70					+15 to +60	
	Setting temperature range with light, with humidity	°C	+5 to +70				-		
	Setting temperature range with light, without humidity	°C	0 to +70				-		
	Setting temperature range without light, without humidity	°C	0 to +70						
	Setting accuracy	°C	0.1						
Humidity	Setting range humidity without light	% rh	10 to 90					10 to 80	
	Setting range humidity with light	% rh	10 to 90				-		
	Setting accuracy	% rh	0.5						
CO ₂	Setting range CO ₂	% CO ₂	0 to 20						
	Setting accuracy CO ₂	% CO ₂	0,1						
	Variation in time CO ₂	% CO ₂	± 0,4						
Further data	Electrical load at 230 V, 50/60 Hz	W	420	700		1400		2000	
	Electrical load at 115 V, 50/60 Hz	W	420	700		1400		-	
	Peltier elements in the rear	number	1	2		4		6	
Packing data	Net weight	kg	64	101	142	213	259	347	474
	Gross weight (packed in carton)	kg	87	140	192	279	339	525	718
	Width	mm	830	930		1330	1370	1560	2300
	Height	mm	1050	1380	1930	1910	1970	2200	
	Depth	mm	800	930		1050	1300	1190	
Order No. Constant Climate Chambers CO ₂ C = CO ₂			HPP110Ceco	HPP260Ceco	HPP410Ceco	HPP750Ceco	HPP1060Ceco	HPP1400Ceco	HPP2200Ceco

Options		110	260	410	750	1060	1400	2200
Temperature restriction; Temperature: +60 °C		A8					-	
Chamber modification for the application of reinforced perforated stainless steel shelves or stainless steel grids (bearing rails mounted in the working chamber - standard with 1060) - includes replacement of standard grids by reinforced grids		-			K1	-		
Cold white 6,500 K light module: LED light strips on the side walls, 10 for model 110, 14 for model 260/410/750, programme-controlled dimming from 0 to 100 % (in 1 % increments), ramp programming in conjunction with temperature and humidity. Standard feed-through not required for sizes 110 and 260.		T7			-			
Light module cold white 6,500 K + warm white 2,700 K: LED light strips - 10 for model 110, 14 for model 260/410/750 - (alternating 5 or 7 light strips cold white and 5 or 7 light strips warm white) on the side walls, programme-controlled dimming from 0 to 100 % (in 1 % increments), ramp programming in conjunction with temperature and humidity. Standard feed-through not required for sizes 110 and 260.		T8			-			
Light module warm white 2,700 K: LED light strips on the side walls, 10 for model 110, 14 for model 260/410/750, programme-controlled dimming from 0 - 100 % (in 1 % increments), ramp programming in conjunction with temperature and humidity. Standard feed-through not required for sizes 110 and 260.		T9			-			
Entry port with 23 mm clear diameter, can be closed, standard position (F0 and F2 not for model size 260 with light module; F0 - F3 not for model size 110 with light module)	left centre/centre	F0					-	
	left centre/top	F1					-	
	right centre/centre	F2					-	
	right centre/top	F3					-	



Options		110	260	410	750	1060	1400	2200
Entry port with 23 mm clear diameter, can be closed, individual position (please state position)	left	F4						
	right	F5						
	rear	F6					-	
Entry port (silicone), 40 mm clear diameter, moisture tight, can be closed by silicone stopper, at the back (please state location)		F7					-	
Entry port (silicone), 40 mm clear diameter, moisture tight, can be closed by silicone stopper, standard position rear		D8						
4 - 20 mA current loop interface	Temperature controller actual value (-10 to +80 °C = 4 - 20 mA)	V3						
	CO ₂ controller, actual value (0 to 25 % CO ₂ = 4 - 20 mA)	V9						
	Temperature of a Pt100 sensor positioned flexibly in chamber for external temperature monitoring - price per sensor	V6						
	Humidity controller, actual value (0 to 100 % rh = 4 - 20 mA)	V7						
Compressed air dehumidification (efficient dehumidification of the interior by means of compressed air). Standard works calibration certificate (measuring point chamber centre) at +10 °C with 10 % rh		C9					-	
Door with lock and key (safety lock)	One lock	B6					-	
	Two locks (one each door)	-					B62	-
	Three locks (one each door)	-					B63	
Potential-free contact for combination error message (e.g. supply failure, sensor fault, fuse)		H6						
Process-dependent programmable door lock	One	D4					-	
	Two (one each door)	-					D42	-
	Three (one each door)	-					D43	
MobileALERT, notification by SMS in case of any error or alarm of the device (requires option H6)		C3						
MobileALERT for 2 alarm notifications; notification by SMS. temperature and humidity alarm (requires option H6)		C4						
Castor frame (2-part), height 140 mm		R9		-				



Accessories	110	260	410	750	1060	1400	2200
Stainless steel grid, electropolished	E20165	E28891		E20182	B41251	B38955	
Reinforced stainless steel grid, electropolished, max. loading 60 kg; size 750 with guide bars and fixing screws (requires option K1). Please consider max. loading of chamber	E29767	E29766		B32190	B32550	-	
Perforated stainless steel shelf	B00325	B29725		B00328	-		
Reinforced stainless steel shelf, max. loading 60 kg; with guide bars and fixing screws (requires option K1). Please consider max. loading of chamber	-			B32191	B32549	-	
Stainless steel slide-in drip tray, 15 mm rim, with guide bars and fixing screws (may affect the temperature distribution, requires option K1)	-			B32763	-		
Stainless steel slide-in drip tray, 15 mm rim (may affect the temperature distribution, not in connection with option K1 for sizes 450/750)	B02073	B29726		B02075	B32599	-	
Stainless steel bottom drip tray, 15 mm rim (may affect the temperature distribution, requires option K1)	-			B34055	-		
Stainless steel bottom drip tray, 15 mm rim (may affect the temperature distribution, not in connection with option K1 for sizes 450/750)	B04359	B29722		B04362	B29769	-	
Holder for water tank (sizes 110 - 750: 2.5 litres, sizes 1060/1400/2200: 10 litres) for mounting on the rear of the appliance. Standard equipment for sizes 410, 750, 1060, 1400 and 2200	B49092			-			
Central water supply with filter cartridges for connection to the domestic water supply. Product information on demand	ZWVR6						
Central water supply without filter cartridges for connection to the domestic water supply (only for demineralised water with a conductivity of > 1 to 10 µS/cm and a pH value between 5 and 7). Product information on demand	ZWVR7						
Flush-fit unit (stainless steel frame covering gap between oven and wall opening), with air slots	B29734	B29738	B42116	B29742		-	

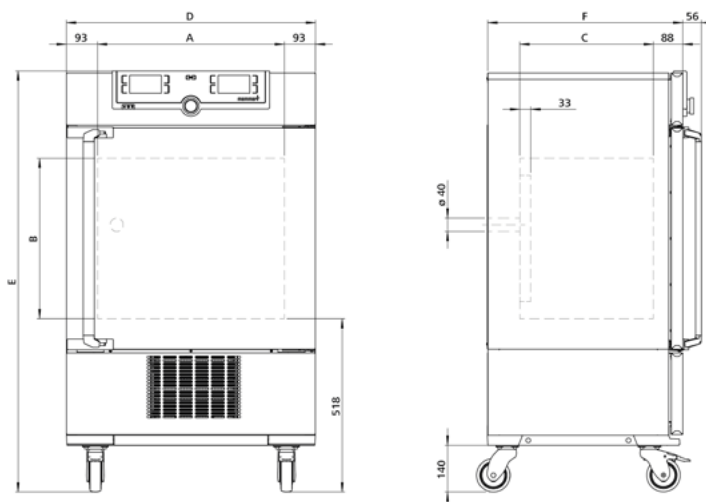
Prices in EUR

Accessories	110	260	410	750	1060	1400	2200
Flush-fit unit (stainless steel frame covering gap between oven and wall opening), without air slots	B29735	B29739	B42117	B29743		-	
Stacking set (4 pcs) for stacking of appliances of same size	B29744	-					
Set of height adjustable feet (4 pcs)	B29768		-				
Subframe, adjustable in height (height 500 mm)	B29749	B29751	-				
Subframe, on castors (height 560 mm)	B29750	-					
Subframe, adjustable in height, height 130 mm	B33661	B33664	-				
External measuring instrument with sensors for daylight and UV-light. Product information on demand	B04713				-		
External measuring instrument with additional measuring head for temperature and humidity measurement. Product information on demand	B04714						
Floor grid Heavy-duty; Please consider max. loading of chamber	E36692	E36704		B31972	E40438	-	
Stacking frame	B57998	B58000	-				

Accessories Software and Connectivity	110	260	410	750	1060	1400	2200
Basic license for „AtmoCONTROL FDA Edition“. Meets the requirements for the use of electronically stored records and electronic signatures as specified in the 21 CFR Part 11 regulation by the US Food and Drug Administration (FDA). Respective IQ/OQ documents available in German and English (at no extra charge).				FDAQ1			
FDA integration license for an additional device (up to a maximum of 31 units) into an already purchased FDA basic license.				FDAQ2			
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			
Ethernet connection cable 5 m for computer interface				E06189			
USB-Ethernet adapter				E06192			

CLIMATE CHAMBERS ICHC

- Interior: stainless steel, mat. 1.4301 (ASTM 304), deepdrawn
- Housing: textured stainless steel 1.4016 (ASTM 430), rear zinc-plated steel 1.0037 (St37-2), intuitively operated TwinDISPLAY (TFT colour display) with touchscreen
- Door: fully insulated stainless steel doors with 2-point locking (compression door lock) and inner glass door, size 750: two leaves
- Connection: mains cable with plug (German type)
- Installation: on lockable castors
- Interfaces:  



Prices in EUR

Model sizes/Description			110	260	750
Stainless steel interior	Volume	l	108	256	749
	Width	(A) mm	560	640	1040
	Height	(B) mm	480	800	1200
	Depth (less 33 mm for fan)	(C) mm	400	500	600
	Max. number of grids/shelves	number	5	9	14
	Max. loading per grid/shelf	kg	20		30
	Max. loading of chamber	kg	150	200	
	Max. loading per slide-in drip tray	kg	3	4	8
Textured stainless steel exterior	Width	(D) mm	745	824	1224
	Height (with castors)	(E) mm	1233	1552	1950
	Depth (without door handle, depth of handle +56 mm)	(F) mm	585	685	785
Standard equipment	Standard works calibration certificate (measuring point chamber center)		+10 °C , +37 °C , +30 °C / 60 % rh		
	Standard works calibration certificate (measuring point chamber center)	°C	5 % CO ₂ at +30 °C / 60 % rh		
	Stainless steel grid, electropolished	Number	2		
	Entry port (silicone), 40 mm clear diameter, moisture tight, can be closed by a silicone stopper, standard position at the back		●		
	Water tank including connection hose		●		
	CO ₂ connection set: hose with coupling and clamp		●		
	Door-open-recognition		●		
Temperature	Working temperature range without humidity	°C	0 to +60		
	Working temperature range with humidity	°C	+10 to +60		
	Setting temperature range	°C	0 to +60		
	Setting accuracy	°C	0.1		
Humidity	Setting range humidity	% rh	10 to 80		
	Setting accuracy	% rh	0.5		
CO ₂	Setting range CO ₂	% CO ₂	0 to 20		
	Setting accuracy CO ₂	% CO ₂	0,1		
	Variation in time CO ₂	% CO ₂	± 0,4		
Further data	Electrical load at 230/115 V, 50/60 Hz	W	1350		

Prices in EUR

Model sizes/Description			110	260	750
Packing data	Net weight	kg	114	160	249
	Gross weight (packed in carton)	kg	142	217	319
	Width	mm	880	930	1330
	Height	mm	1410	1760	2150
	Depth	mm	810	930	1050
Order No. Climate Chambers CO₂ ICH = Climate chamber C = CO ₂			ICH110C	ICH260C	ICH750C

Options		110	260	750
Voltage 115 V, 50/60 Hz		X2		
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 (ICH)		-		K1
Entry port with 23 mm clear diameter, can be closed, standard position (F1 and F3 not for models ICH L)	left centre/centre	F0		
	left centre/top	F1		
	right centre/top	-	F3	
Entry port (silicone), 40 mm clear diameter, moisture tight, can be closed by silicone stopper, at the back (please state location)		-	F7	
4 - 20 mA current loop interface	Humidity controller, actual value (0 to 100 % rh = 4 - 20 mA)	V7		
	Temperature controller actual value (-20 to +70 °C = 4 - 20 mA)	V3		
	Temperature of a Pt100 sensor positioned flexibly in chamber for external temperature monitoring (max. 3) - price per sensor (-20 to +70 °C = 4 - 20 mA)	V6		
	CO ₂ controller, actual value (0 to 25 % CO ₂ = 4 - 20 mA)	V9		
Fan speed monitoring with switching off the heating and with alarm in case of failure		V4		
Compressed air dehumidification (efficient dehumidification of the interior by means of compressed air). Standard works calibration certificate (measuring point chamber centre) at +10 °C with 10 % rh		C9		
Door with lock and key (safety lock)		B6		
Potential-free contact for combination error message (e.g. supply failure, sensor fault, fuse)		H6		
MobileALERT, notification by SMS in case of any error or alarm of the device (requires option H6)		C3		



Accessories		110	260	750
Stainless steel grid, electropolished		E20165	E28891	E20182
Reinforced stainless steel grid, electropolished, max. loading 60 kg; size 750 with guide bars and fixing screws (requires option K1). Please consider max. loading of chamber		E29767	E29766	B32190
Perforated stainless steel shelf		B00325	B29725	B00328
Reinforced stainless steel shelf, max. loading 60 kg; with guide bars and fixing screws (requires option K1). Please consider max. loading of chamber		-		B32191
Stainless steel slide-in drip tray, 15 mm rim, with guide bars and fixing screws (may affect the temperature distribution, requires option K1)		-		B32763
Stainless steel slide-in drip tray, 15 mm rim (may affect the temperature distribution, not in connection with option K1 for sizes 450/750)		B02073	B29726	B02075
Stainless steel bottom drip tray, 15 mm rim (may affect the temperature distribution, requires option K1)		-		B34055
Stainless steel bottom drip tray, 15 mm rim (may affect the temperature distribution, not in connection with option K1 for sizes 450/750)		B04359	B29722	B04362
Holder for water tank (2.5 litres) for mounting on the rear of the appliance. Standard equipment for size 750		E32172		-
Central water supply with filter cartridges for connection to the domestic water supply. Product information on demand		ZWVR6		
Central water supply without filter cartridges for connection to the domestic water supply (only for demineralised water with a conductivity of > 1 to 10 µS/cm and a pH value between 5 and 7). Product information on demand		ZWVR7		
External measuring instrument with additional measuring head for temperature and humidity measurement. Product information on demand		B04714		
Floor grid Heavy-duty; Please consider max. loading of chamber		E36692	E36704	B31972

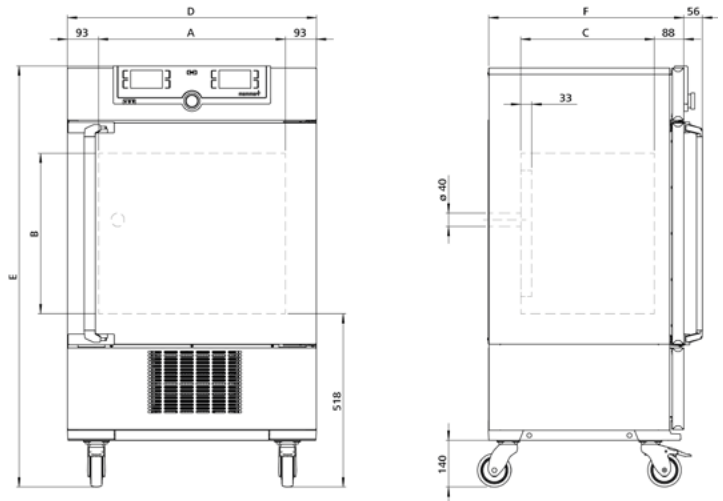
Accessories Software and Connectivity		110	260	750
Basic license for „AtmoCONTROL FDA Edition“. Meets the requirements for the use of electronically stored records and electronic signatures as specified in the 21 CFR Part 11 regulation by the US Food and Drug Administration (FDA). Respective IQ/OQ documents available in German and English (at no extra charge).		FDAQ1		
FDA integration license for an additional device (up to a maximum of 31 units) into an already purchased FDA basic license.		FDAQ2		



Accessories Software and Connectivity	110	260	750
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	
Ethernet connection cable 5 m for computer interface		E06189	
USB-Ethernet adapter		E06192	

CLIMATE CHAMBERS ICH

- Interior: stainless steel, mat. 1.4301 (ASTM 304), deepdrawn
- Housing: textured stainless steel 1.4016 (ASTM 430), rear zinc-plated steel 1.0037 (St37-2), intuitively operated TwinDISPLAY (TFT colour display) with touchscreen
- Door: fully insulated stainless steel doors with 2-point locking (compression door lock) and inner glass door, from size 450 two leaves
- Connection: mains cable with plug (German type)
- Installation: on lockable castors
- Interfaces:  



Prices in EUR

Model sizes/Description			450	450L
Stainless steel interior	Volume	l	449	
	Width	(A) mm	1040	
	Height	(B) mm	720	
	Depth (less 33 mm for fan)	(C) mm	600	
	Max. number of grids/shelves	number	14	
	Max. loading per grid/shelf	kg	30	
	Max. loading of chamber	kg	200	
	Max. loading per slide-in drip tray	kg	8	
Textured stainless steel exterior	Width	(D) mm	1224	
	Height (with castors)	(E) mm	1467	
	Depth (without door handle, depth of handle +56 mm)	(F) mm	785	
Standard equipment	Standard works calibration certificate (measuring point chamber center)	°C	+10 °C , +37 °C , +30 °C / 60 % rh	
	Stainless steel grid, electropolished	Number	2	
	Entry port (silicone), 40 mm clear diameter, moisture tight, can be closed by a silicone stopper, standard position at the back		●	
	Water tank including connection hose		●	
	Door-open-recognition		-	●
Temperature	Working temperature range without humidity ICH	°C	-10 to +60	
	Working temperature range ICH /ICH L with humidity and/ or light	°C	+10 to +60	
	Working temperature range ICH L without humidity	°C	0 to +60	
	Setting temperature range ICH	°C	-10 to +60	
	Setting temperature range ICH L	°C	0 to +60	
	Setting accuracy	°C	0.1	
Humidity	Setting range humidity	% rh	10 to 80	
	Setting accuracy	% rh	0.5	
Light	Illumination unit (only ICH L) acc. ICH Q1B, option 2; separately switchable via controller, one box; Number of fluorescent lights with cold white light: 4; Number of fluorescent lights with UV lamps: 2		-	●
Further data	Electrical load at 230/115 V, 50/60 Hz	W	1350	1550



Model sizes/Description			450	450L
Packing data	Net weight	kg	220	
	Gross weight (packed in carton)	kg	285	
	Width	mm	1330	
	Height	mm	2150	
	Depth	mm	1700	
Order No. Climate Chambers ICH = Climate chamber ICH L = Climate chamber with light			ICH450	ICH450L



Options		450	450L
Voltage 115 V, 50/60 Hz		X2	
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 (ICH)		K1	-
Alternative light boxes (replace the standard lighting; have to be ordered together with the chamber); number of fluorescent lamps: size 110: 6, with cold white light according to ICH guideline Q1B, option 2	one box	-	T81
Alternative light boxes (replace the standard lighting; have to be ordered together with the chamber); number of fluorescent UV lamps: 6, with UV-A radiation according to ICH guideline Q1B, option 2	one box	-	T01
Interior socket, ampacity 230V / 2,2A / 500W, can be switched off with the On/Off switch, cannot be switched individually, moisture tight IP68 (not for ICH110L) (max. one per appliance)		R3	
Entry port with 23 mm clear diameter, can be closed, standard position (F1 and F3 not for models ICH L)	left centre/centre	F0	-
	left centre/top	F1	-
	right centre/top	F3	-
Entry port (silicone), 40 mm clear diameter, moisture tight, can be closed by silicone stopper, at the back (please state location). Not for models ICH L		F7	-
4 - 20 mA current loop interface	Humidity controller, actual value (0 to 100 % rh = 4 - 20 mA)	V7	
	Temperature controller actual value (-20 to +70 °C = 4 - 20 mA)	V3	
	Temperature of a Pt100 sensor positioned flexibly in chamber for external temperature monitoring (max. 3) - price per sensor (-20 to +70 °C = 4 - 20 mA)	V6	
Fan speed monitoring with switching off the heating and with alarm in case of failure		V4	
Compressed air dehumidification (efficient dehumidification of the interior by means of compressed air). Standard works calibration certificate (measuring point chamber centre) at +10 °C with 10 % rh		C9	
Door with lock and key (safety lock)		B6	
Potential-free contact for combination error message (e.g. supply failure, sensor fault, fuse)		H6	
Door-open-recognition, shuts down humidity, light (standard with ICH L)		V5	-
MobileALERT, notification by SMS in case of any error or alarm of the device (requires option H6)		C3	

Accessories		450	450L
Stainless steel grid, electropolished		E20182	
Reinforced stainless steel grid, electropolished, max. loading 60 kg; from size 450 with guide bars and fixing screws (requires option K1). Please consider max. loading of chamber		B32190	-
Perforated stainless steel shelf		B00328	
Reinforced stainless steel shelf, max. loading 60 kg; with guide bars and fixing screws (requires option K1). Please consider max. loading of chamber		B32191	-
Stainless steel slide-in drip tray, 15 mm rim (may affect the temperature distribution, not in connection with option K1 for sizes 450/750)		B02075	
Stainless steel slide-in drip tray, 15 mm rim, with guide bars and fixing screws (may affect the temperature distribution, requires option K1)		B32763	-
Stainless steel bottom drip tray, 15 mm rim (may affect the temperature distribution, not in connection with option K1 for sizes 450/750)		B04362	
Stainless steel bottom drip tray, 15 mm rim (may affect the temperature distribution, requires option K1)		B34055	-
Central water supply with filter cartridges for connection to the domestic water supply. Product information on demand		ZWVR6	
Central water supply without filter cartridges for connection to the domestic water supply (only for demineralised water with a conductivity of > 1 to 10 µS/cm and a pH value between 5 and 7). Product information on demand		ZWVR7	
External measuring instrument with sensors for daylight and UV-light. Product information on demand (only ICH L)		-	B04713
External measuring instrument with additional measuring head for temperature and humidity measurement. Product information on demand		B04714	

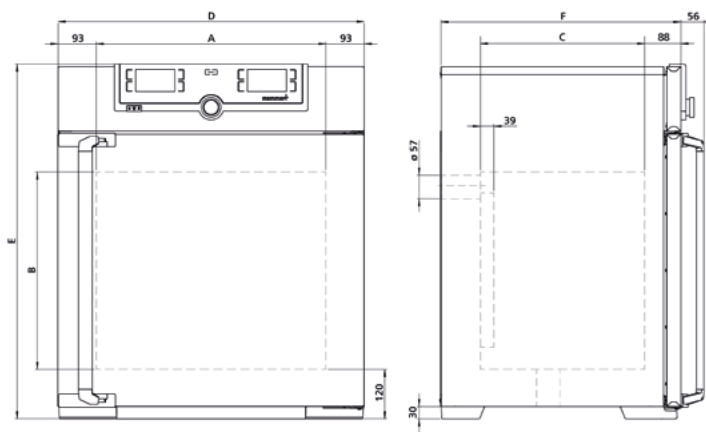
		Prices in EUR	
Accessories		450	450L
Floor grid Heavy-duty; Please consider max. loading of chamber		B31972	
Accessories Software and Connectivity		450	450L
Basic license for „AtmoCONTROL FDA Edition“. Meets the requirements for the use of electronically stored records and electronic signatures as specified in the 21 CFR Part 11 regulation by the US Food and Drug Administration (FDA). Respective IQ/OQ documents available in German and English (at no extra charge).		FDAQ1	
FDA integration license for an additional device (up to a maximum of 31 units) into an already purchased FDA basic license.		FDAQ2	
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	
Ethernet connection cable 5 m for computer interface		E06189	
USB-Ethernet adapter		E06192	



UNIVERSAL OVENS U

- 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 1.4016 (ASTM 430), rear zinc-plated steel 1.0037 (St37-2), intuitively operated SingleDISPLAY or TwinDISPLAY (TFT colour display) with touchscreen
- Door: fully insulated stainless steel doors with 2-point locking (compression door lock), from size 450 two leaves
- Connection: mains cable with plug (German type) CEE plug for 400 V
- Installation: Size 250: 4 adjustable appliance feet, Sizes 400 to 2500: on lockable castors
- Interfaces:  

USB: only TwinDISPLAY



Prices in EUR

Model sizes/Description				250	400	600	1550	2500
Stainless steel interior	Volume	I		256	384	600	1550	2554
	Width	(A)	mm	800	640		1040	1680
	Height	(B)	mm	640	1200	1680	1520	
	Depth (less 39 mm for fan)	(C)	mm	500			1000	
	Max. number of grids/shelves		number	7	14	20	18	
	Max. loading per grid/shelf		kg	20			60	
	Max. loading of chamber		kg	300				
	Max. loading per slide-in drip tray		kg	4	8			
	Max. loading per bottom drip tray		kg	4	8			
Textured stainless steel exterior	Width	(D)	mm	984	824		1224	1861
	Height (sizes 450, 750, 1060 with castors)	(E)	mm	1023	1720	2200	1982	1983
	Depth (without door handle, depth of handle +56 mm)	(F)	mm	684			1186	
Standard equipment	Standard works calibration certificate (measuring point chamber center)		°C	+ 160				
	Stainless steel grid, electropolished		Number	2				
Temperature	Working temperature range		°C	at least 5 (UNplus) 10 (UFplus) above ambient temperature up to +300				at least 10 above ambient temperature up to +250
	Setting temperature range		°C	+20 to +300				+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		W	3350		-		
	Electrical load at 400 V and 3 x 230V w/o neutral, 50/60 Hz		W	-		6500	7000	8000
Packing data	Net weight		kg	110	161	135	217	675
	Gross weight (packed in carton)		kg	161	227	296	288	1020
	Width		mm	1090	930		1336	1980
	Height		mm	1360	1930	2320	2264	2260
	Depth		mm	930			1430	
Order No. Universal Ovens U = Universal Oven N = Natural convection F = Forced air circulation plus = Model with TwinDISPLAY				UF250plus	UF400plus	UF600plus	UF1550plus	UF2500plus
				UN250plus	UN400plus	-		

Prices in EUR

Options	250	400	600	1550	2500
Voltage 115 V, 50/60 Hz	X2		-		
Temperature restriction; Temperatures: +60, +70, +80, +95, +100, +120, +160, +180, +200 or +250 °C (Please indicate upon ordering)	A8				
Full-sight glass door (4-layer insulating glass) Temperature-range up to max. +250 °C (requires option A8 against surcharge)	B0		-		
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			-	
Interior lighting for observing the load	R0				
Interior socket (can only be ordered with limited temperature range - max. +60 °C), ampacity 230 V / 2,2A / 500W, can be switched off with the On/Off switch, cannot be switched individually, moisture tight IP68 (requires option A8 against surcharge) (max. one per appliance)	R3				
Interior nearly gastight - technical clarification required for combination with other options	K2			-	
Interior nearly gastight with possibility for gas inlet/outlet through 2 tubes with ball valves - technical clarification required for combination with other options	K3			-	
Entry port with 23 mm clear diameter, can be closed, standard position	left centre/centre		F0		
	left centre/top		F1		
	right centre/centre		F2		
	right centre/top		F3		
Entry port with 23 mm clear diameter, can be closed, individual position (please state position)	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 with 57 mm clear diameter, can be closed by flap, individual positions in the back wall (please state position, not possible for devices with forced air circulation of sizes 30-75)				F8	
Entry port with 100 mm clear diameter, can be closed by flap, individual positions in the back wall (please state position, not possible for devices with forced air circulation of size 75)				F9	
4 - 20 mA current loop interface (0 to +310 °C = Temperature controller, actual value 4 - 20 mA) Temperature of a Pt100 sensor positioned flexibly in chamber for external temperature monitoring (max. 1 SingleDISPLAY, max. 3 Twin-DISPLAY) - price per sensor				V3	
				V6	
Fan speed monitoring with switching off the heating and with alarm in case of failure (for UFplus)	V4		-		
Door with lock and key (safety lock)				B6	
Potential-free contact for combination error message (e.g. supply failure, sensor fault, fuse)				H6	
Potential-free contact (24 V/2 A) with socket, 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	2 contacts		H72		
Process-dependent programmable door lock (only for units with TwinDISPLAY)				D4	
Door-open-recognition (only for units with TwinDISPLAY)				V5	
Flexible Pt100 temperature sensor, positioned flexibly in chamber or load, for local temperature measurement (up to 1 additional sensor is possible). The measured temperature will 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	
Castor frame (2-part), height 140 mm	R9	-			
Fresh-air filter (filtration efficiency 80 %) mounted at the device bottom (for devices with forced air circulation, sizes 30 - 260 require castor frame R9 or subframe)	R8			-	

Accessories	250	400	600	1550	2500
Reinforced stainless steel shelf, max. loading 60 kg; with guide bars and fixing screws (requires option K1). Please consider max. loading of chamber	-			B50539	B58583
Reinforced stainless steel grid, electropolished, max. loading 60 kg; from size 450 with guide bars and fixing screws (requires option K1). Please consider max. loading of chamber	-	E29766		B58238	B57167
Stainless steel bottom drip tray, 15 mm rim (may affect the temperature distribution)	B60474	B29722		B60632	B60682
Stainless steel slide-in drip tray, 15 mm rim (may affect the temperature distribution)	B60476	B29726		B60669	B60696
Stainless steel grid, electropolished	E20167	E28891		-	



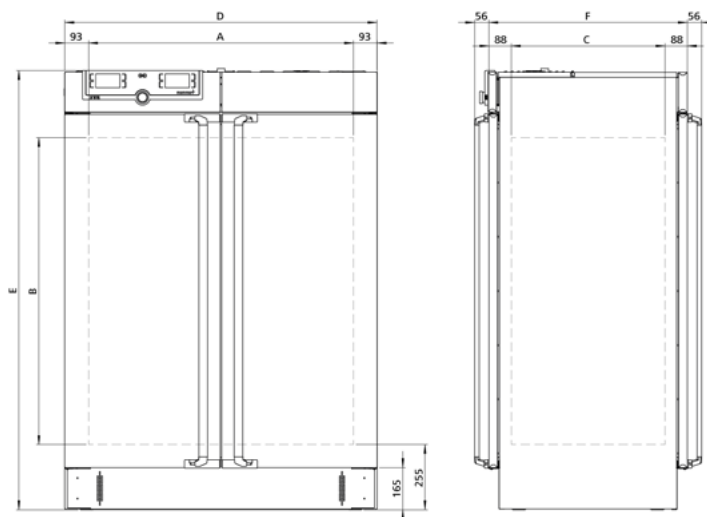
Prices in EUR

Accessories	250	400	600	1550	2500
Perforated stainless steel shelf	B00326	B29725		-	
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			
Set of height adjustable feet (4 pcs)	B29768		-		
Floor grid Heavy-duty; Please consider max. loading of chamber	E60492	E36704		E50547	-
Stacking frame	B60479		-		

Accessories Software and Connectivity	250	400	600	1550	2500
Basic license for „AtmoCONTROL FDA Edition“. Meets the requirements for the use of electronically stored records and electronic signatures as specified in the 21 CFR Part 11 regulation by the US Food and Drug Administration (FDA). For devices with TwinDISPLAY only. Respective IQ/OQ documents available in German and English (at no extra charge).			FDAQ1		
FDA integration license for an additional device (up to a maximum of 31 units) into an already purchased FDA basic license (for devices with TwinDISPLAY only).			FDAQ2		
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		
Ethernet connection cable 5 m for computer interface			E06189		
USB-Ethernet adapter			E06192		

PASS-THROUGH OVENS UF TS

- 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 1.4016 (ASTM 430), intuitively operated TwinDISPLAY (TFT colour display) with touchscreen
- Door: fully insulated stainless steel doors with 2-point locking (compression door lock)
- Connection: mains cable with plug (German type) CEE plug for 400 V
- Installation: 4 adjustable appliance feet
- Interfaces:  



Prices in EUR

Model sizes/Description				1250
Stainless steel interior	Volume	I		1248
	Width	(A)	mm	1040
	Height	(B)	mm	1200
	Depth	(C)	mm	1000
	Max. number of grids/shelves	number		14
	Max. loading per grid/shelf	kg		60
	Max. loading of chamber	kg		300
	Max. loading per slide-in drip tray	kg		8
	Max. loading per bottom drip tray	kg		8
Textured stainless steel exterior	Width	(D)	mm	1224
	Height	(E)	mm	1714
	Depth (without door handle, depth of handle 2x +56 mm)	(F)	mm	1181
Standard equipment	Standard works calibration certificate (measuring point chamber center)	°C		+ 160
	Stainless steel grid, electropolished	Number		2
	Heavy-duty extension (Option K1).			●
Temperature	Working temperature range	°C		at least 10 above ambient temperature up 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 400 V and 3 x 230V w/o neutral, 50/60 Hz	W		7000
Packing data	Net weight	kg		372
	Gross weight (packed in carton)	kg		600
	Width	mm		1330
	Height	mm		1920
	Depth	mm		1050
Order No. Pass-Through Ovens				UF1250TS




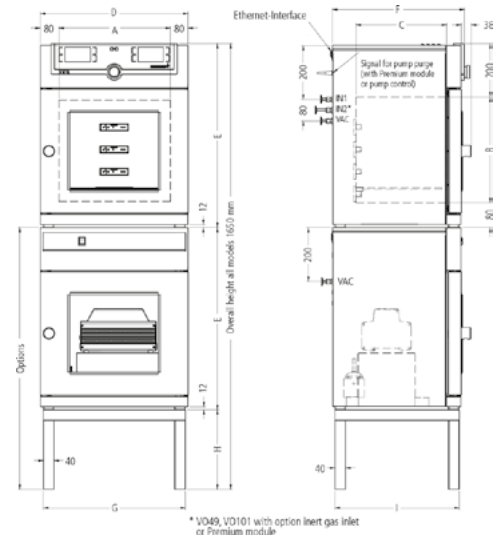
		Prices in EUR
Options		1250
Temperature restriction; Temperatures: +60, +70, +80, +95, +100, +120, +160, +180 or +200 °C (Please indicate upon ordering)		A8
Full-sight glass door (4 layer insulating glass) - extra cost per side - Temperature-range up to max. +250 °C		B0
Entry port with 23 mm clear diameter, can be closed, standard position	left centre/centre	F0
	left centre/top	F1
	right centre/centre	F2
	right centre/top	F3
Entry port with 23 mm clear diameter, can be closed, individual position (please state position)	left	F4
	right	F5
Locking mechanism to prevent simultaneous opening of doors for contamination protection in case of wall installation (requires option V5)		D5
4 - 20 mA current loop interface (0 to +260 °C = 4 - 20 mA)	Temperature controller, actual value	V3
	Temperature of a Pt100 sensor positioned flexibly in chamber for external temperature monitoring (max. 3) - price per sensor	V6
Door with lock (safety lock); per side		B6
Potential-free contact for combination error message (e.g. supply failure, sensor fault, fuse)		H6
Potential-free contact (24 V/2 A) with socket, 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	2 contacts	H72
Process-dependent electromagnetic door lock (both sides)		D4
Door-open-recognition; per side		V5
Flexible Pt100 temperature sensor, positioned flexibly in chamber or load, for local temperature measurement (up to 1 additional sensor is possible). The measured temperature will 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

Accessories	1250
Reinforced stainless steel grid, electropolished, max. loading 60 kg. Please consider max. loading of chamber	B58903
Reinforced stainless steel shelf, max. loading 60 kg. Please consider max. loading of chamber	B58948
Flush-fit unit set (stainless steel frame covering gap between oven and wall opening), without air slots - technical clarification required	B33207

Accessories Software and Connectivity	1250
Basic license for „AtmoCONTROL FDA Edition“. Meets the requirements for the use of electronically stored records and electronic signatures as specified in the 21 CFR Part 11 regulation by the US Food and Drug Administration (FDA). Respective IQ/OQ documents available in German and English (at no extra charge).	FDAQ1
FDA integration license for an additional device (up to a maximum of 31 units) into an already purchased FDA basic license.	FDAQ2
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
Ethernet connection cable 5 m for computer interface	E06189
USB-Ethernet adapter	E06192

VACUUM OVENS VOcool

- Interior:** stainless steel interior, material 1.4404 (ASTM 316 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 1.4016 (ASTM 430), rear zinc-plated steel 1.0037 (St37-2), intuitively operated TwinDISPLAY (TFT colour display) with touchscreen
- Door:** full-sight glass door, inside spring-loaded, 15mm thick glazed panel in safety glass, outside with anti-splitter screen
- Connection:** mains cable with plug (German type)
- Installation:** 4 adjustable appliance feet
- Interfaces:**  



Prices in EUR

Model sizes/Description			29	49	101
Stainless steel interior	Volume	l	29	49	101
	Width (A)	mm	385		545
	Height (B)	mm	305	385	465
	Depth (C)	mm	250	330	400
	Max. number of thermoshelves	number	1		
	Max. loading of chamber	kg	40	60	
	Max. loading per thermoshelf	kg	20		
Textured stainless steel exterior	Width (D)	mm	550		710
	Height (E)	mm	607	687	767
	Depth (without door handle, depth of handle +38 mm) (F)	mm	400	480	550
Standard equipment	Standard works calibration certificate		+ 10 °C / 20 mbar		
	Cooling plate made of anodized aluminum with integrated cooling circuit and large-area heating, including on-site sensors (Pt100, 4-wire measurement), MLC (Multi-Level-Controlling), and calibration certificate (only with new orders).	Number	1		
Temperature	Working temperature range	°C	+5 to +90		
	Setting temperature range	°C	+5 to +90		
	Setting accuracy	°C	0.1		
	Temperature variation in time (aluminium thermoshelf)	K	≤ ± 0,3		
	Temperature uniformity (surface) at +80 °C/ 20 mbar (aluminium thermoshelf)	K	≤ ± 0,5		
Pressure (vacuum)	Adjustment range pressure	mbar	5 to 1100		
	Permitted final vacuum	mbar	0.01		
	Maximum leakage rate	bar/h	0.01		
Further data	Electrical load at 230 V, 50/60 Hz	W	500	600	750
Packing data	Net weight	kg	66	95	130
	Gross weight (packed in carton)	kg	87	116	160
	Packed dimensions (Width, Height, Depth)		660/870/590		830/1050/800
	Net weight pump module without/with pump	kg	25/41	30/46	41/57
	Gross weight pump module without/with pump (packed in carton)	kg	46/62	51/67	66/82
	Packed dimensions pump module (Width, Height, Depth)		660/870/590		830/1050/800
Order No. Vacuum Cabinets Cool VO = Vacuum Cabinet cool = Cooling function			VO29cool	VO49cool	VO101cool



Prices in EUR

Options		29	49	101
Temperature restriction; Temperatures: +60, +70 or +80 °C (Please indicate upon ordering)		A8		
4 - 20 mA current loop interface (requires option T5m)	Temperature of a Pt100 sensor positioned flexibly in chamber for external temperature monitoring - price per sensor	V6		
	Temperature controller, actual value (0 to +100 °C = 4 - 20 mA)	V3		
Potential-free contact for combination error message (e.g. supply failure, sensor fault, fuse)		H6		
MobileALERT, notification by SMS in case of any error or alarm of the device (requires option H6)		C3		
MobileALERT for 2 alarm notifications; notification by SMS. temperature and vacuum alarm (requires option T5m and H6)		-	C4	
Premium module: comprises the inert gas inlet		T5m		

Accessories	29	49	101
Subframe, tubular steel, black enamelled (for stacking unit consisting of vacuum oven and pump module, total height: 1650 mm, see „further data" and sketch of oven dimensions)	E02030	E02031	E02037
Signal cable (3 m) for control of rotation speed and optimising pump performance by demand-controlled activation of purge of Memmert pump (not required with pump module)	B39410		
Noise-insulated vacuum pump module without pump (exterior dimensions and -material No. s. vacuum oven) with antivibration metal plate at the bottom to accommodate the vacuum pump, incl. full-sight glass door. Socket, signal cable and connecting hose to the vacuum oven	PM29	PM49	PM101
Noise-insulated vacuum pump module, as above, however with built-in pump, 230 V, 50/60 Hz	PMP29	PMP49	PMP101
Vacuum connecting hose (3 m) from oven to Memmert pump incl. optimised connection accessories (partially stainless steel), (not required with pump module)	B04026		
Vacuum pump with chemically resistant 4x diaphragm, pump capacity at atm. pressures: approx. 50 NI/min = 3,0 m³/h and autom. purge control, 230 V, 50 Hz. Max. guarantee period 2 years (requires accessories B39410 and B04026)	E07509		
Stacking subframe Adjustable	B50577		B59029

Accessories Software and Connectivity	29	49	101
Basic license for „AtmoCONTROL FDA Edition". Meets the requirements for the use of electronically stored records and electronic signatures as specified in the 21 CFR Part 11 regulation by the US Food and Drug Administration (FDA). For devices with TwinDISPLAY only. Respective IQ/OQ documents available in German and English (at no extra charge).	FDAQ1		
FDA integration license for an additional device (up to a maximum of 31 units) into an already purchased FDA basic license.	FDAQ2		
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		
Ethernet connection cable 5 m for computer interface	E06189		
USB-Ethernet adapter	E06192		

DISHWASHER UFdw

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 1.4016 (ASTM 430), rear zinc-plated steel 1.0037 (St37-2), intuitively operated SingleDISPLAY or TwinDISPLAY (TFT colour display) with touchscreen

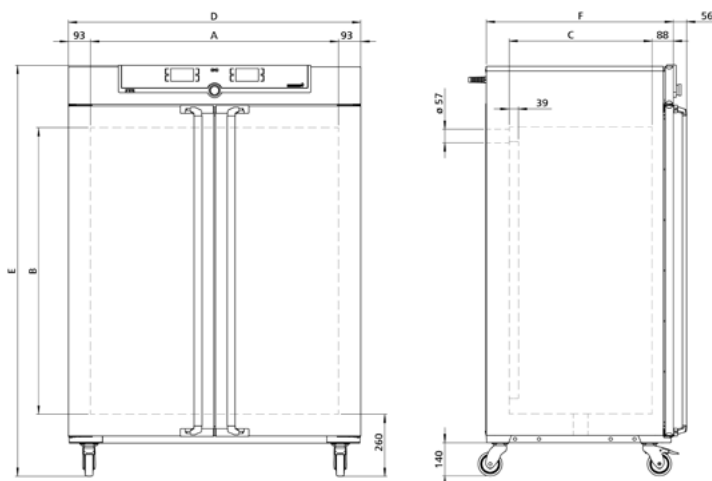
Door: fully insulated stainless steel doors with 2-point locking (compression door lock), size 750: two leaves

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

Installation: on lockable castors

Interfaces:  

USB: only TwinDISPLAY



Prices in EUR

Model sizes/Description				750
Stainless steel interior	Volume	I		749
	Width	(A)	mm	1040
	Height	(B)	mm	1200
	Depth (less 39 mm for fan)	(C)	mm	600
	Max. number of grids/shelves	number		14
	Max. loading per grid/shelf	kg		30
	Max. loading of chamber	kg		300
	Max. loading per slide-in drip tray	kg		8
	Max. loading per bottom drip tray	kg		8
Textured stainless steel exterior	Width	(D)	mm	1224
	Height (sizes 450, 750, 1060 with castors)	(E)	mm	1720
	Depth (without door handle, depth of handle +56 mm)	(F)	mm	784
Standard equipment	Standard works calibration certificate (measuring point chamber center)	°C		+80
	Loading set consisting of 8 grids and 16 spacer bars - incl. 3 wire baskets for cups/glasses, made of stainless steel, material 1.4301 (ASTM 304).			●
Temperature	Working temperature range	°C		at least 10 above ambient temperature up to +100
	Setting temperature range	°C		+20 to +100
	Setting accuracy	°C		up to 99.9: 0.1 / from 100: 0.5
Further data	Electrical load at 400 V and 3 x 230V w/o neutral, 50/60 Hz	W		4800
Packing data	Net weight	kg		217
	Gross weight (packed in carton)	kg		288
	Width	mm		1330
	Height	mm		1910
	Depth	mm		1050
Order No. Universal Cabinet Dishwasher U = Universal Cabinet F = Forced Air Circulation dw = Dishwasher				UF750dw



Prices in EUR

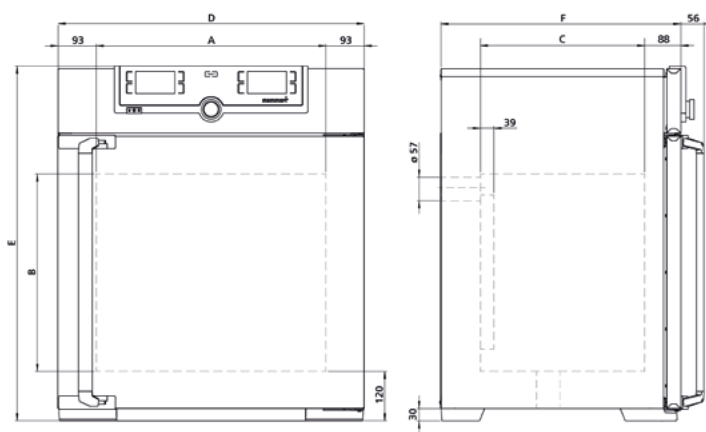
Options	750
Potential-free contact for combination error message (e.g. supply failure, sensor fault, fuse)	H6
Potential-free contact (24 V/2 A) with socket, for signal generation, controlled by programme segment, for free-selectable functions to be activated (e.g. activation of audible and visual signals, exhaust motors, fans, stirrers, etc.). Only for units with TwinDISPLAY	2 contacts H72
Process-dependent programmable door lock	D4
Door-open-recognition	V5
Accessories	750
Additional loading set consisting of 8 grids as well as 6 place settings and 3 grid baskets for cups/glasses, made of stainless steel, material 1.4301 (ASTM 304)	B51799
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
Accessories Software and Connectivity	750
Basic license for „AtmoCONTROL FDA Edition“. Meets the requirements for the use of electronically stored records and electronic signatures as specified in the 21 CFR Part 11 regulation by the US Food and Drug Administration (FDA). For devices with TwinDISPLAY only. Respective IQ/OQ documents available in German and English (at no extra charge).	FDAQ1
FDA integration license for an additional device (up to a maximum of 31 units) into an already purchased FDA basic license (for devices with TwinDISPLAY only).	FDAQ2
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
Ethernet connection cable 5 m for computer interface	E06189
USB-Ethernet adapter	E06192

PLASTICINE OVEN UFPIplus

- 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 1.4016 (ASTM 430), rear zinc-plated steel 1.0037 (St37-2), intuitively operated SingleDISPLAY or TwinDISPLAY (TFT colour display) with touchscreen
- Door: fully insulated stainless steel doors with 2-point locking (compression door lock), from size 450 two leaves
- Connection: mains cable with plug (German type) CEE plug for 400 V
- Installation: Size 260: 4 adjustable appliance feet, Sizes 450 to 1060: on lockable castors
- Interfaces:



USB: only TwinDISPLAY



Prices in EUR

Model sizes/Description				260	450	750	1060
Stainless steel interior	Volume	I		256	449	749	1060
	Width	(A)	mm	640	1040		
	Height	(B)	mm	800	720	1200	
	Depth (less 39 mm for fan)	(C)	mm	500	600		850
	Max. number of grids/shelves		number	9	8	14	
	Max. loading per grid/shelf		kg	60			
	Max. loading of chamber		kg	300			
	Max. loading per slide-in drip tray		kg	4	8		
	Max. loading per bottom drip tray		kg	4	8		
Textured stainless steel exterior	Width	(D)	mm	824	1224		
	Height (sizes 450, 750, 1060 with castors)	(E)	mm	1183	1247	1720	
	Depth (without door handle, depth of handle +56 mm)	(F)	mm	684	784		1035
Standard equipment	Standard works calibration certificate (measuring point chamber center)		°C	+37			
	Stainless steel grids, designed for Plastelin application.		Number	2			
	Heavy-duty extension (Option K1).			●			
	Door-open-recognition			●			
Temperature	Working temperature range		°C	at least 10 above ambient temperature up to +80			
	Setting temperature range		°C	+20 to +80			
	Setting accuracy		°C	up to 99.9: 0.1 / from 100: 0.5			
Further data	Electrical load at 230 V, 50/60 Hz		W	840	-		
	Electrical load at 115 V, 50/60 Hz		W	840	-		
	Electrical load at 400 V and 3 x 230V w/o neutral, 50/60 Hz		W	-	1450	1725	
	Electrical load at 3 x 208 V w/o neutral, 50/60 Hz		W	-	1450	1725	
Packing data	Net weight		kg	110	161	217	260
	Gross weight (packed in carton)		kg	161	227	288	424
	Width		mm	930	1330		1370
	Height		mm	1380	1440	1910	1970
	Depth		mm	930	1050		1300
Order No. Plasticine oven: U = Universal oven N = Natural Convection pl = Plasticine				UF260Plplus	UF450Plplus	UF750Plplus	UF1060Plplus

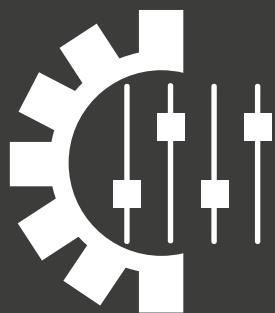


Options	260	450	750	1060
Voltage 115 V, 50/60 Hz	X2	-		
Full-sight glass door (4-layer insulating glass)	B0			
Interior nearly gastight with possibility for gas inlet/outlet through 2 tubes with ball valves - technical clarification required for combination with other options	K3			
Entry port with 23 mm clear diameter, can be closed, standard position	left centre/centre	F0		
	left centre/top	F1		
	right centre/centre	F2		
	right centre/top	F3		
Entry port with 23 mm clear diameter, can be closed, individual position (please state position)	left	F4		
	right	F5		
	rear	F6		
Entry port (silicone), 40 mm clear diameter, gas tight, can be closed by 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 = 4 - 20 mA) Temperature controller, actual value Temperature of a Pt100 sensor positioned flexibly in chamber for external temperature monitoring (max. 1 SingleDISPLAY, max. 3 TwinDISPLAY) - price per sensor	V3			
	V6			
Fan speed monitoring with switching off the heating and with alarm in case of failure (for UFplus)	V4			
Door with lock and key (safety lock)	B6			
Door hinged on the left	B8	-		
Potential-free contact for combination error message (e.g. supply failure, sensor fault, fuse)	H6			
Potential-free contact (24 V/2 A) with socket, 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 2 contacts	H72			
Process-dependent programmable door lock (only for units with TwinDISPLAY)	D4			
Flexible Pt100 temperature sensor, positioned flexibly in chamber or load, for local temperature measurement (up to 1 additional sensor is possible). The measured temperature will 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			
Castor frame (2-part), height 140 mm	R9	-		
Fresh-air filter (filtration efficiency 80 %) mounted at the device bottom (for devices with forced air circulation, sizes 30 - 260 require castor frame R9 or subframe)	R8			

Accessories	260	450	750	1060
Reinforced stainless steel grid shelf, electro-polished, loadable up to 60 kg; designed for Plastelin application.	B42444	B42447		B42450
Reinforced stainless steel perforated sheet, loadable up to 60 kg, designed for Plastelin application.	B42445	B42448		B42451
Stainless steel grid, electropolished	E28891	-		B41251
Reinforced stainless steel grid, electropolished, max. loading 60 kg; from size 450 with guide bars and fixing screws (requires option K1). Please consider max. loading of chamber	E29766	B32190		B32550
Perforated stainless steel shelf	B29725	-		
Reinforced stainless steel shelf, max. loading 60 kg; with guide bars and fixing screws (requires option K1). Please consider max. loading of chamber	-	B32191		B32549
Stainless steel slide-in drip tray, 15 mm rim, with guide bars and fixing screws (may affect the temperature distribution, requires option K1)	-	B32763		-
Stainless steel slide-in drip tray, 15 mm rim (may affect the temperature distribution, not in connection with option K1 for sizes 450/750)	B29726	-		B32599
Stainless steel bottom drip tray, 15 mm rim (may affect the temperature distribution, requires option K1)	-	B34055		-
Stainless steel bottom drip tray, 15 mm rim (may affect the temperature distribution, not in connection with option K1 for sizes 450/750)	B29722	-		B29769
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	B29738	B29740	B29742	
Flush-fit unit (stainless steel frame covering gap between oven and wall opening), without air slots	B29739	B29741	B29743	
Set of height adjustable feet (4 pcs)	B29768	-		

Prices in EUR				
Accessories	260	450	750	1060
Subframe, adjustable in height (size 30 to 75: height 600 mm, from size 110: height 500 mm)	B29751	B29753	-	
Subframe, adjustable in height, height 130 mm	B33664	-		
Floor grid Heavy-duty; Please consider max. loading of chamber	E36704	B31972		E40438

Accessories Software and Connectivity	260	450	750	1060
Basic license for „AtmoCONTROL FDA Edition“. Meets the requirements for the use of electronically stored records and electronic signatures as specified in the 21 CFR Part 11 regulation by the US Food and Drug Administration (FDA). For devices with TwinDISPLAY only. Respective IQ/OQ documents available in German and English (at no extra charge).		FDAQ1		
FDA integration license for an additional device (up to a maximum of 31 units) into an already purchased FDA basic license (for devices with TwinDISPLAY only).		FDAQ2		
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		
Ethernet connection cable 5 m for computer interface		E06189		
USB-Ethernet adapter		E06192		



m360 MODIFICATIONS

CONSTANT CLIMATE CHAMBERS HPPeco

HUMIDITY CHAMBERS HCP

CLIMATE CHAMBERS ICH

UNIVERSAL OVENS U

PASS-THROUGH OVENS UF TS

VACUUM OVENS VO

INCUBATORS I

CO₂ INCUBATORS ICO

COMPRESSOR-COOLED INCUBATORS ICP

PELTIER-COOLED INCUBATORS IPPeco



CONSTANT CLIMATE CHAMBERS HPPeco

Prices in EUR

Options Mechanics		110	260	410	750	1060	1400	2200
Metal outer door¹ Inspection window; non-heated		B0m					-	
Metal outer door¹ Inspection window; heated		-		B3m			-	
Door hinge Exchange		B8m			-			
Heavy-duty Interior modification option K1		-	K1		-			
Maintenance flap Electronics box		M1m			-			
ESD modification		M3m					-	
Levelling castors Max. height: 102 mm; requires option R9 for appliances up to and including size 260 at extra cost		M4m						
Levelling feet Max. height: 140 mm; requires option R9 for appliances up to and including size 260 at extra cost		M5m						
Telescopic slides Grid; price per grid		M6m	-					
Telescopic slides Perforated sheet; price per perforated sheet		M7m	-					
Heavy-duty frame Base frame; requires option R9 for appliances size 260 at extra cost		-	M10m	-				
		-			M20m	-		
		-			M30m	-		
Heavy-duty frame Interior fittings; requires base frame at extra cost		-	M11m	-				
		-			M22m	-		
		-			M31m	-		
Heavy-duty frame Grid; price per grating; requires base frame and interior fittings at extra cost		-	M12m	-				
		-			M23m	-		
		-			M32m	-		
Entry port Inner diameter 14 mm	back panel	N0m						
	side panel	N1m						
Entry port Inner diameter 23 mm	back panel	-					N2m	
Entry port Inner diameter 38 mm	back panel	N4m						
	side panel	N5m						
Entry port Inner diameter 57 mm	back panel	N6m						
	side panel	N7m						
Entry port Inner diameter 80 mm	back panel	N8m						
	side panel	N9m						
Entry port Inner diameter 100 mm	back panel	N10m						
	side panel	N11m						
Entry port Inner diameter 120 mm	back panel	N12m						
	side panel	N13m						
Entry port Inner diameter 40 mm; Silicone	back panel	-					N20m	
Entry port Inner diameter 80 mm; Silicone	back panel	N21m						
Entry port Inner diameter 120 mm; Silicone	back panel	N22m						
Door hinge Max. opening angle 95°; price per door		Q0m						
Door hinge Max. opening angle 120°; price per door		Q1m						
Seal Viton; housing; temperature resistance: +250 °C		Q2m					-	
Seal Housing; ESD protection; temperature resistance: +180 °C		Q3m					-	
Door handlebar Reinforced; price per door		-		Q4m				
Options Electronics		110	260	410	750	1060	1400	2200
Signal lamp Control panel; red, yellow, green; requires option H6 and H72 at extra cost		E0m					-	
Signal lamp Top cover; 3 lights (red, yellow, green); requires option H6 and H72 at extra cost		E1m					-	
Signal lamp Top cover; one multi-coloured light; requires option H6 and H72 at extra cost		E2m					-	

Prices in EUR

Options Electronics		110	260	410	750	1060	1400	2200
Control unit External		E4m						
Control box External		E5m						
Supply and exhaust air flap Rear panel		E6m						
Door Electric lock; safety switch		E7m			-			
Door Safety sensor for external opening detection.		E8m						
Emergency stop switch Switch for device shutdown		E9m						
Key switch Switching the device on and off using the key switch in the cover box		E10m						
Energy meter integrated measuring device for data logging		E11m						
Pt100 sensor Freely positionable; Connection socket on the rear of the appliance		H4m						
Potential-free contact Message TARGET-value reached		H5m						
Potential-free contact Programmable; only for appliances with TwinDISPLAY	2 contacts (A, B)	H7m2						
	4 contacts (A, B, C, D)	-			H7m4			
Pt100 sensor Freely positionable	1 sensor	H8m						
	2 sensors	H8m2						
	3 sensors	H8m3						
Lighting¹ Interior K1 modification; LED light strips; cool white 6,500 K; requires option K1 at extra charge, except from size 1060	first level	-	J07m					
	each additional level	-	J07mx					
Lighting¹ Interior K1 modification; LED light strips; cool white 6,500 K + warm white 2,700 K; requires option K1 at extra charge, except from size 1060	first level	-	J08m					
	each additional level	-	J08mx					
Lighting¹ Interior K1 modification; LED light strips; warm white 2,700 K; requires option K1 at extra charge, except from size 1060	first level	-	J09m					
	each additional level	-	J09mx					
Lighting¹ Grid; LED light strips; cool white 6,500 K	first level	J17m				-	J17m	
	each additional level	J17mx				-	J17mx	
Lighting¹ Grid; LED light strips; cool white 6,500 K + warm white 2,700 K	first level	J18m				-	J18m	
	each additional level	J18mx				-	J18mx	
Lighting¹ Grid; LED light strips; warm white 2,700 K	first level	J19m				-	J19m	
	each additional level	J19mx				-	J19mx	
Lighting¹ Grid reinforced; LED light strips; cool white 6,500 K; requires option K1 at extra charge, except from size 1060	first level	-			J27m		-	
	each additional level	-			J27mx		-	
Lighting¹ Grid reinforced; LED light strips; cool white 6,500 K + warm white 2,700 K; requires option K1 at extra charge, except from size 1060	first level	-			J28m		-	
	each additional level	-			J28mx		-	
Lighting¹ Grid reinforced; LED light strips; warm white 2,700 K; requires option K1 at extra charge, except from size 1060	first level	-			J29m		-	
	each additional level	-			J29mx		-	
Socket outlet Interior; switchable via appliance; temperature resistance: +60 °C; requires option A8 at extra cost		R3m						
Socket outlet Interior; separately switchable; temperature resistance: +60 °C; requires option A8 at extra cost		R4m						
Socket outlet Interior; switchable via appliance; UK; temperature resistance: +40 °C; requires option A8 at extra cost		R33m						
Socket outlet Interior; separately switchable; UK; temperature resistance: +40 °C; requires option A8 at extra cost		R44m						
Parameter monitoring O₂; temperature resistance: +200 °C		U0m						
Parameter monitoring CO₂; temperature resistance: +70 °C		U2m						
4 - 20 mA current loop interface	Temperature of a Pt100 sensor positioned flexibly in chamber for external temperature monitoring (max. 3) - price per sensor	V6						
Interface 4-20mA Humidity		V7m						

Technical data and drawings are subject to change without notice. The illustration is exemplary and may differ from the respective appliance size.

¹ Requires Performance Option P1 at extra cost



Accessories	110	260	410	750	1060	1400	2200
Connection cable 5m; 230V	B58607						
Stainless steel slide-in drip tray, 15 mm rim (may affect the temperature distribution)	-					B60715	
Stainless steel bottom drip tray, 15 mm rim (may affect the temperature distribution)	-					B60708	
Floor grid Heavy-duty; Please consider max. loading of chamber	E36692	E36704		B31972	E40438	-	
Grid Reinforced; max. load 60 kg; Please consider max. loading of chamber	-					B59004	
Reinforced stainless steel shelf, max. loading 60 kg. Please consider max. loading of chamber	-					B59007	
Perforated sheet Reinforced; max. load 100 kg; requires option K1 against surcharge (except size 1060); Please consider max. loading of chamber	-	B58460		B58461	B58462	-	
Perforated sheet Reinforced; max. load 80 kg; Please consider max. loading of chamber	-	B57086		B52092	-		
Plug Ø23 mm; silicone; temperature resistance: +200 °C	E05387						
Plug Ø37-40 mm; silicone; temperature resistance: +200 °C	E07479						
Plug Ø57 mm; silicone; temperature resistance: +200 °C	E05389						
Plug Ø100 mm; silicone; temperature resistance: +200 °C	E05386						
Plug Ø14 mm; silicone sponge; temperature resistance: +180 °C	E05790						
Plug Ø23 mm; silicone sponge; temperature resistance: +180 °C	E05361						
Plug Ø37-40 mm; silicone sponge; temperature resistance: +180 °C	E05362						
Plug Ø57 mm; silicone sponge; temperature resistance: +180 °C	E07865						
Plug Ø80 mm; silicone sponge; temperature resistance: +180 °C	E05625						
Plug Ø100 mm; silicone sponge; temperature resistance: +180 °C	E07866						
Plug Ø120 mm; silicone sponge; temperature resistance: +180 °C	E05920						
Stacking frame	B57998	B58000	-				
Telescopic slide Grid; price per grid; requires option K1	-	B43102		B43093	B43100	-	
Telescopic slide Perforated sheet; price per perforated sheet; requires option K1	-	B51618		B44476	B56888	-	

HUMIDITY CHAMBERS HCP

Prices in EUR

Options Electronics	50	105	150	240
Control unit External	E4m			
Door Safety sensor for external opening detection.	E8m			
Energy meter integrated measuring device for data logging	E11m			
Accessories	50	105	150	240
Connection cable 5m; 230V	B58607			
Plug Ø23 mm; silicone; temperature resistance: +200 °C	E05387			
Plug Ø37-40 mm; silicone; temperature resistance: +200 °C	E07479			
Plug Ø57 mm; silicone; temperature resistance: +200 °C	E05389			
Plug Ø100 mm; silicone; temperature resistance: +200 °C	E05386			
Plug Ø14 mm; silicone sponge; temperature resistance: +180 °C	E05790			
Plug Ø23 mm; silicone sponge; temperature resistance: +180 °C	E05361			
Plug Ø37-40 mm; silicone sponge; temperature resistance: +180 °C	E05362			
Plug Ø57 mm; silicone sponge; temperature resistance: +180 °C	E07865			
Plug Ø80 mm; silicone sponge; temperature resistance: +180 °C	E05625			
Plug Ø100 mm; silicone sponge; temperature resistance: +180 °C	E07866			
Plug Ø120 mm; silicone sponge; temperature resistance: +180 °C	E05920			



CLIMATE CHAMBERS ICH

Prices in EUR

Options Mechanics		110	260	750
Metal outer door Inspection window; non-heated		B0m		
Metal outer door Inspection window; heated		-		B3m
Door hinge Exchange		B8m		-
Heavy-duty Interior modification option K1		-	K1	-
Levelling castors Max. height: 102 mm; requires option R9 for appliances up to and including size 260 at extra cost		M4m		
Levelling feet Max. height: 140 mm; requires option R9 for appliances up to and including size 260 at extra cost		M5m		
Entry port Inner diameter 14 mm	back panel	N0m		
	side panel	N1m		
Entry port Inner diameter 23 mm	back panel	N2m		
	side panel	N3m		
Entry port Inner diameter 38 mm	back panel	N4m		
	side panel	N5m		
Entry port Inner diameter 57 mm	back panel	N6m		
	side panel	N7m		
Entry port Inner diameter 80 mm	back panel	N8m		
	side panel	N9m		
Entry port Inner diameter 100 mm	back panel	N10m		
	side panel	N11m		
Entry port Inner diameter 120 mm	back panel	N12m		
	side panel	N13m		
Door hinge Max. opening angle 95°; price per door		Q0m		
Door hinge Max. opening angle 120°; price per door		Q1m		
Seal Viton; housing; temperature resistance: +250 °C		Q2m		
Seal Housing; ESD protection; temperature resistance: +180 °C		Q3m		
Door handlebar Reinforced; price per door		-		Q4m
Options Electronics		110	260	750
Signal lamp Control panel; red, yellow, green; requires option H6 and H72 at extra cost		E0m		
Signal lamp Top cover; 3 lights (red, yellow, green); requires option H6 and H72 at extra cost		E1m		
Signal lamp Top cover; one multi-coloured light; requires option H6 and H72 at extra cost		E2m		
Control unit External		E4m		
Control box External		E5m		
Supply and exhaust air flap Rear panel		E6m		
Door Electric lock; safety switch		E7m		-
Door Safety sensor for external opening detection.		E8m		
Emergency stop switch Switch for device shutdown		E9m		
Key switch Switching the device on and off using the key switch in the cover box		E10m		
Energy meter integrated measuring device for data logging		E11m		
Pt100 sensor Freely positionable; Connection socket on the rear of the appliance		H4m		
Potential-free contact Message TARGET-value reached		H5m		
Potential-free contact Programmable; only for appliances with TwinDISPLAY	2 contacts (A, B)	H7m2		
	4 contacts (A, B, C, D)	-		H7m4
Pt100 sensor Freely positionable	1 sensor	H8m		
	2 sensors	H8m2		
	3 sensors	H8m3		
Lighting Interior		R0m		
Socket outlet Interior; switchable via appliance; temperature resistance: +60 °C; requires option A8 at extra cost		R3m		
Socket outlet Interior; separately switchable; temperature resistance: +60 °C; requires option A8 at extra cost		R4m		
Socket outlet Interior; switchable via appliance; UK; temperature resistance: +40 °C; requires option A8 at extra cost		R33m		
Socket outlet Interior; separately switchable; UK; temperature resistance: +40 °C; requires option A8 at extra cost		R44m		

Prices in EUR

Options Electronics	110	260	750
Parameter monitoring O ₂ ; temperature resistance: +200 °C	U0m		
Parameter monitoring CO ₂ ; temperature resistance: +70 °C	U2m		
Interface 4-20mA Humidity	V7m		
Accessories	110	260	750
Connection cable 5m; 230V	B58607		
Floor grid Heavy-duty; Please consider max. loading of chamber	E36692	E36704	B31972
Perforated sheet Reinforced; max. load 100 kg; requires option K1; Please consider max. loading of chamber	-	B58460	B58461
Perforated sheet Reinforced; max. load 80 kg; Please consider max. loading of chamber	-	B57086	B52092
Plug Ø23 mm; silicone; temperature resistance: +200 °C	E05387		
Plug Ø37-40 mm; silicone; temperature resistance: +200 °C	E07479		
Plug Ø57 mm; silicone; temperature resistance: +200 °C	E05389		
Plug Ø100 mm; silicone; temperature resistance: +200 °C	E05386		
Plug Ø14 mm; silicone sponge; temperature resistance: +180 °C	E05790		
Plug Ø23 mm; silicone sponge; temperature resistance: +180 °C	E05361		
Plug Ø37-40 mm; silicone sponge; temperature resistance: +180 °C	E05362		
Plug Ø57 mm; silicone sponge; temperature resistance: +180 °C	E07865		
Plug Ø80 mm; silicone sponge; temperature resistance: +180 °C	E05625		
Plug Ø100 mm; silicone sponge; temperature resistance: +180 °C	E07866		
Plug Ø120 mm; silicone sponge; temperature resistance: +180 °C	E05920		
Telescopic slide Grid; price per grid; requires option K1	-	B43102	B43093
Telescopic slide Perforated sheet; price per perforated sheet; requires option K1	-	B51618	B44476



UNIVERSAL OVENS U

Prices in EUR

Options Mechanics	30	55	75	110	160	260	450	750	1060
Heavy-duty Interior modification option K1	-					K1	-		
Door lock Magnetic; temperature resistance: +200 °C; requires option A8 at extra cost	M0m							-	
Maintenance flap Electronics box	-			M1m			-		
Insulation Modification for particle reduction	M2m								
ESD modification	-			M3m					
Levelling castors Max. height: 102 mm; requires option R9 for appliances up to and including size 260 at extra cost	M4m								
Levelling feet Max. height: 140 mm; requires option R9 for appliances up to and including size 260 at extra cost	M5m								
Telescopic slides Grid; price per grid	-	M6m				-			
Telescopic slides Perforated sheet; price per perforated sheet	-	M7m				-			
Heavy-duty frame Base frame; requires option R9 for appliances size 260 at extra cost	-					M10m	-		
	-					M20m		-	
	-					M30m			
Heavy-duty frame Interior fittings; requires base frame at extra cost	-					M11m	-		
	-					M21m	-		
	-					M22m	-		
	-					M31m			
Heavy-duty frame Grid; price per grating; requires base frame and interior fittings at extra cost	-					M12m	-		
	-					M23m		-	
	-					M32m			
Entry port Inner diameter 14 mm	side panel	N51m							
Entry port Inner diameter 38 mm	side panel	N56m							
Entry port Inner diameter 57 mm	back panel	F8m	-						
	side panel	N59m							
Entry port Inner diameter 80 mm	back panel	N60m							
	side panel	N61m							
Entry port Inner diameter 100 mm	back panel	F9m	-						
	side panel	N63m							
Entry port Inner diameter 120 mm	back panel	N64m							
	side panel	N65m							
Door hinge Max. opening angle 95°; price per door					Q0m				
Door hinge Max. opening angle 120°; price per door					Q1m				
Seal Viton; housing; temperature resistance: +250 °C; requires option A8 at extra cost					Q2m				
Seal Housing; ESD protection; temperature resistance: +180 °C; requires option A8 at extra cost					Q3m				
Door handlebar Reinforced; price per door	-							Q4m	
Filter holder (one filter) Air inlet; filter available separately as an accessory; requires a base frame or option R9 for appliances up to and including size 260					R81m				
Filter holder (two filters) Air inlet; filter available separately as an accessory; requires a base frame or option R9 for appliances up to and including size 260					R82m				
Options Electronics	30	55	75	110	160	260	450	750	1060
Signal lamp Control panel; red, yellow, green; requires option H6 and H72 at extra cost	-			E0m					
Signal lamp Top cover; 3 lights (red, yellow, green); requires option H6 and H72 at extra cost	-			E1m					

Prices in EUR

Options Electronics	30	55	75	110	160	260	450	750	1060	
Signal lamp Top cover; one multi-coloured light; requires option H6 and H72 at extra cost	-			E2m						
Exhaust air extraction Rapid cooling fan	-		E3m							
Control unit External	E4m									
Control box External	-			E5m						
Door Electric lock; safety switch	-			E7m			-			
Door Safety sensor for external opening detection.	E8m									
Emergency stop switch Switch for device shutdown	E9m									
Key switch Switching the device on and off using the key switch in the cover box	E10m									
Energy meter integrated measuring device for data logging	E11m									
Pt100 sensor Freely positionable; Connection socket on the rear of the appliance	H4m									
Potential-free contact Message TARGET-value reached	H5m									
Potential-free contact Programmable; only for appliances with TwinDISPLAY	4 contacts (A, B, C, D)						-			H7m4
Pt100 sensor Freely positionable	2 sensors		H8m2							
	3 sensors		H8m3							
Socket outlet Interior; separately switchable; temperature resistance: +60 °C; requires option A8 at extra cost	R4m									
Socket outlet Interior; switchable via appliance; UK; temperature resistance: +40 °C; requires option A8 at extra cost	R33m									
Socket outlet Interior; separately switchable; UK; temperature resistance: +40 °C; requires option A8 at extra cost	R44m									
Parameter monitoring O ₂ ; temperature resistance: +200 °C; requires option A8 at extra cost	U0m									
Parameter monitoring Humidity; temperature resistance +180 °C; requires option A8 at extra cost	U1m									
Parameter monitoring CO ₂ ; temperature resistance: +70 °C; requires option A8 at extra cost	U2m									
Interface 4-20mA Humidity; requires option U1m at extra cost	V7m									

Accessories	30	55	75	110	160	260	450	750	1060
Air filter Supply air opening; filter class: F7; requires option R81m / R82m	E07438								
Air filter Supply air opening; filter class: H13; requires option R81m / R82m	E07439								
Connection cable 5m; 230V	B58607						-		
Exhaust air Rear wall; condensate drainage	B37684								
Floor grid Heavy-duty; Please consider max. loading of chamber	E50944	E46407		E36692		E36704	B31972		E40438
Perforated sheet Reinforced; max. load 100 kg; requires option K1 against surcharge (except size 1060); Please consider max. loading of chamber	-					B58460	B58461		B58462
Perforated sheet Reinforced; max. load 80 kg; Please consider max. loading of chamber	-					B57086	B52092		-
Plug Ø23 mm; silicone; temperature resistance: +200 °C	E05387								
Plug Ø37-40 mm; silicone; temperature resistance: +200 °C	E07479								
Plug Ø37-40 mm; silicone; temperature resistance: +300 °C	E07699								
Plug Ø57 mm; silicone; temperature resistance: +200 °C	E05389								



Prices in EUR

Accessories	30	55	75	110	160	260	450	750	1060
Plug Ø100 mm; silicone; temperature resistance: +200 °C	E05386								
Plug Ø23 mm; silicone; temperature resistance: +300 °C	E07698								
Plug Ø57 mm; silicone; temperature resistance: +300 °C	E07700								
Plug Ø80 mm; silicone; temperature resistance: +300 °C	E07701								
Plug Ø100-120 mm; silicone; temperature resistance: +300 °C	E07702								
Stacking frame	-	B50598		B50599		B50600		-	
Telescopic slide Grid; price per grid; requires option K1			-			B43102	B43093		B43100
Telescopic slide Perforated sheet; price per perforated sheet; requires option K1			-			B51618	B44476		B56888

PASS-THROUGH OVENS UF TS

Prices in EUR

Options Mechanics	160	260	450	750
Supply air filter integrated filter at the supply air inlet	R8m			
Heavy-duty Interior modification option K1	-	K1	-	
Door lock Magnetic; temperature resistance: +200 °C; requires option A8 at extra cost; per side	M0m			-
Entry port Inner diameter 14 mm	side panel	N51m		
Entry port Inner diameter 38 mm	side panel	N56m		
Entry port Inner diameter 57 mm	side panel	N59m		
Door hinge Max. opening angle 95°; price per door	Q0m			
Door hinge Max. opening angle 120°; price per door	Q1m			
Seal Viton; housing; temperature resistance: +250 °C; per side	Q2m			
Seal Housing; ESD protection; temperature resistance: +180 °C; requires option A8 at extra cost; per side	Q3m			
Door handlebar Reinforced; price per door	-			Q4m
Options Electronics	160	260	450	750
Signal lamp Control panel; red, yellow, green; requires option H6 and H72 at extra cost	E0m			
Signal lamp Top cover; 3 lights (red, yellow, green); requires option H6 and H72 at extra cost	E1m			
Signal lamp Top cover; one multi-coloured light; requires option H6 and H72 at extra cost	E2m			
Exhaust air extraction Rapid cooling fan	E3m			
Control unit External	E4m			
Door Safety sensor for external opening detection.	E8m			
Emergency stop switch Switch for device shutdown	E9m			
Key switch Switching the device on and off using the key switch in the cover box	E10m			
Pt100 sensor Freely positionable; Connection socket on the rear of the appliance	H4m			
Potential-free contact Message TARGET-value reached	H5m			
Potential-free contact Programmable; only for appliances with TwinDISPLAY	4 contacts (A, B, C, D)	H7m4		
Pt100 sensor Freely positionable	2 sensors	H8m2		
	3 sensors	H8m3		
Accessories	160	260	450	750
Connection cable 5m; 230V	B58607		-	
Floor grid Heavy-duty; Please consider max. loading of chamber	E36692	E36704	B31972	
Perforated sheet Reinforced; max. load 100 kg; requires option K1 against surcharge (except size 1060); Please consider max. loading of chamber	-	B58460	B58461	
Perforated sheet Reinforced; max. load 80 kg; Please consider max. loading of chamber	-	B57086	B52092	
Plug Ø23 mm; silicone; temperature resistance: +200 °C	E05387			
Plug Ø37-40 mm; silicone; temperature resistance: +200 °C	E07479			
Plug Ø37-40 mm; silicone; temperature resistance: +300 °C	E07699			
Plug Ø57 mm; silicone; temperature resistance: +200 °C	E05389			
Plug Ø23 mm; silicone; temperature resistance: +300 °C	E07698			
Plug Ø57 mm; silicone; temperature resistance: +300 °C	E07700			



VACUUM OVENS VO

Prices in EUR

Options Mechanics	29	49	101
Door hinge Exchange	B8m		
Door lock Magnetic; temperature resistance: +200 °C	M0m		
Entry port DN16 ISO-KF	N30m		
Entry port DN25 ISO-KF	N31m		
Entry port DN40 ISO-KF	N32m		
Entry port DN50 ISO-KF	N33m		
Entry port DN16 ISO-CF	N40m		
Entry port DN25 ISO-CF	N41m		
Entry port DN40 ISO-CF	N42m		
Entry port DN50 ISO-CF	N43m		
Options Electronics	29	49	101
Extended temperature range 220 °C; not in combination with option T5; size 29: max. 1 thermoshelf; size 49 and 101: max. 2 thermoshelves	A8m		
Signal lamp Control panel; red, yellow, green; requires option H6 and H72 at extra cost	-		E0m
Signal lamp Top cover; 3 lights (red, yellow, green); requires option H6 and H72 at extra cost	-	E1m	
Signal lamp Top cover; one multi-coloured light; requires option H6 and H72 at extra cost	E2m		
Control unit External	E4m		
Door Safety sensor for external opening detection.	E8m		
Energy meter integrated measuring device for data logging	E11m		
Potential-free contact Programmable; only for appliances with TwinDISPLAY	1 contact (A)	H7m	
	2 contacts (A, B)	H7m2	
	3 contacts (A, B, C)	H7m3	
Pt100 sensor Freely positionable (an additional Pt100 requires a slot for a thermoshelf)	H8m		
Lighting Interior	R0m		
Door Opening detection	V5m		
Accessories	29	49	101
Connection cable 5m; 230V	B58607		
Stacking subframe Adjustable	B50577		B59029

INCUBATORS I

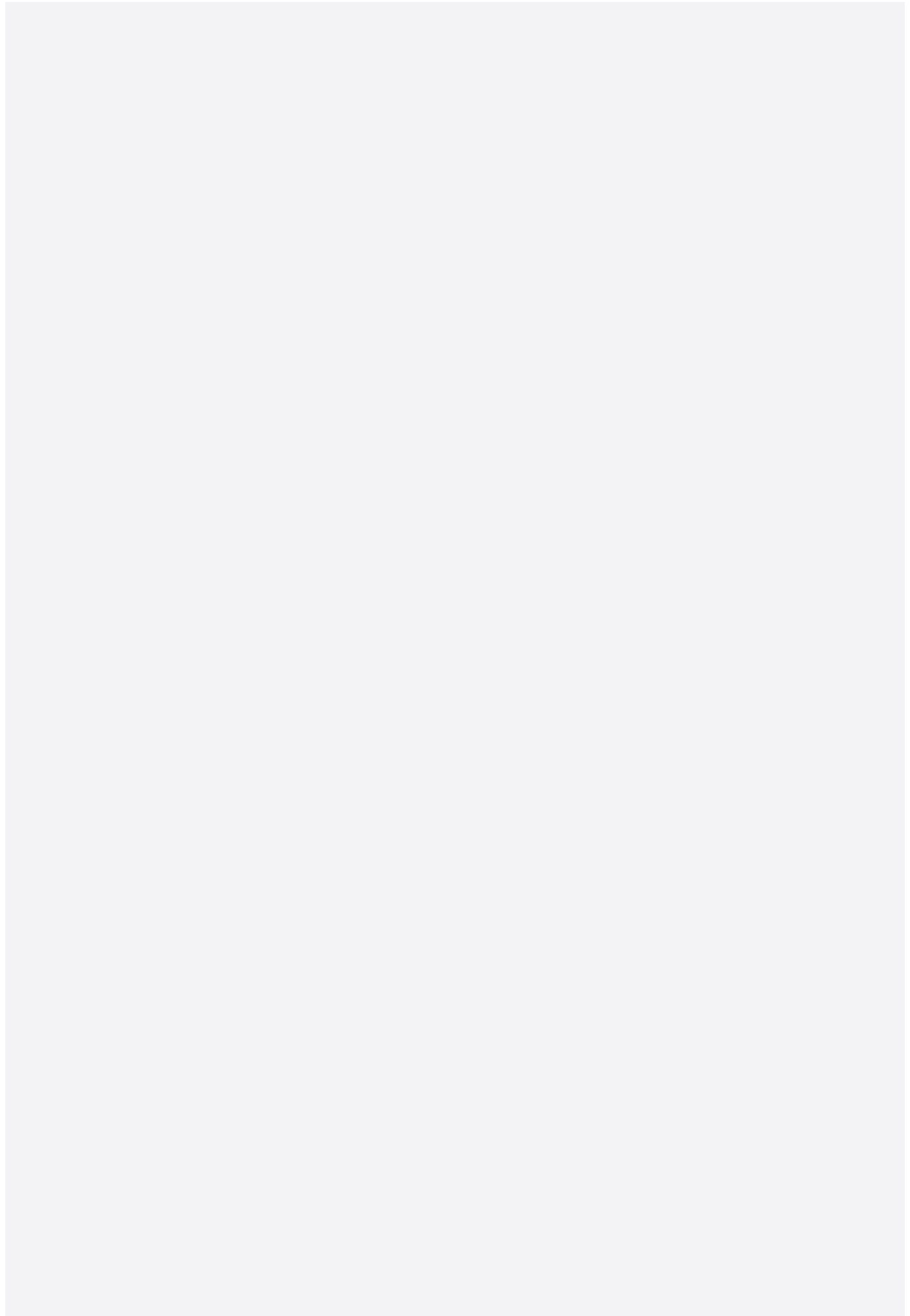
Prices in EUR

Options Mechanics		30	55	75	110	160	260	450	750
Heavy-duty Interior modification option K1		-					K1	-	
Door lock Magnetic; temperature resistance: +200 °C		M0m							-
Maintenance flap Electronics box		-			M1m			-	
Insulation Modification for particle reduction		M2m							
ESD modification		-			M3m				
Levelling castors Max. height: 102 mm; requires option R9 for appliances up to and including size 260 at extra cost		M4m							
Levelling feet Max. height: 140 mm; requires option R9 for appliances up to and including size 260 at extra cost		M5m							
Telescopic slides Grid; price per grid		-	M6m			-			
Telescopic slides Perforated sheet; price per perforated sheet		-	M7m			-			
Heavy-duty frame Base frame; requires option R9 for appliances size 260 at extra cost		-				M10m	-		
		-				M20m			
Heavy-duty frame Interior fittings; requires base frame at extra cost		-				M11m	-		
		-				M21m		-	
		-				M22m			
Heavy-duty frame Grid; price per grating; requires base frame and interior fittings at extra cost		-				M12m	-		
		-				M23m			
Entry port Inner diameter 14 mm	side panel	N51m							
Entry port Inner diameter 38 mm	side panel	N56m							
Entry port Inner diameter 57 mm	back panel	F8m			-				
	side panel	N59m							
Entry port Inner diameter 80 mm	back panel	N60m							
	side panel	N61m							
Entry port Inner diameter 100 mm	back panel	F9m			-				
	side panel	N63m							
Entry port Inner diameter 120 mm	back panel	N64m							
	side panel	N65m							
Door hinge Max. opening angle 95°; price per door		Q0m							
Door hinge Max. opening angle 120°; price per door		Q1m							
Seal Viton; housing; temperature resistance: +250 °C		Q2m							
Seal Housing; ESD protection; temperature resistance: +180 °C		Q3m							
Door handlebar Reinforced; price per door		-							Q4m
Filter holder (one filter) Air inlet; filter available separately as an accessory; requires a base frame or option R9 for appliances up to and including size 260		R81m							
Filter holder (two filters) Air inlet; filter available separately as an accessory; requires a base frame or option R9 for appliances up to and including size 260		R82m							
Options Electronics		30	55	75	110	160	260	450	750
Signal lamp Control panel; red, yellow, green; requires option H6 and H72 at extra cost		-			E0m				
Signal lamp Top cover; 3 lights (red, yellow, green); requires option H6 and H72 at extra cost		-			E1m				
Signal lamp Top cover; one multi-coloured light; requires option H6 and H72 at extra cost		-			E2m				
Exhaust air extraction Rapid cooling fan		-		E3m					
Control unit External		E4m							
Control box External		-			E5m				
Door Electric lock; safety switch		-			E7m			-	
Door Safety sensor for external opening detection.		E8m							
Emergency stop switch Switch for device shutdown		E9m							



Options Electronics		30	55	75	110	160	260	450	750
Key switch Switching the device on and off using the key switch in the cover box		E10m							
Energy meter integrated measuring device for data logging		E11m							
Pt100 sensor Freely positionable; Connection socket on the rear of the appliance		H4m							
Potential-free contact Message TARGET-value reached		H5m							
Potential-free contact Programmable; only for appliances with TwinDISPLAY		2 contacts (A, B)		H7m2					
		4 contacts (A, B, C, D)		-				H7m4	
Pt100 sensor Freely positionable		2 sensors		H8m2					
		3 sensors		H8m3					
Socket outlet Interior; separately switchable; temperature resistance: +60 °C; requires option A8 at extra cost		R4m							
Socket outlet Interior; switchable via appliance; UK; temperature resistance: +40 °C; requires option A8 at extra cost		R33m							
Socket outlet Interior; separately switchable; UK; temperature resistance: +40 °C; requires option A8 at extra cost		R44m							
Parameter monitoring O ₂ ; temperature resistance: +200 °C		U0m							
Parameter monitoring Humidity; temperature resistance +180 °C		U1m							
Parameter monitoring CO ₂ ; temperature resistance: +70 °C		U2m							
Interface 4-20mA Humidity; requires option U1m at extra cost		V7m							
Accessories		30	55	75	110	160	260	450	750
Air filter Supply air opening; filter class: F7; requires option R81m / R82m		E07438							
Air filter Supply air opening; filter class: H13; requires option R81m / R82m		E07439							
Connection cable 5m; 230V		B58607							
Exhaust air Rear wall; condensate drainage		B37684							
Floor grid Heavy-duty; Please consider max. loading of chamber		E50944	E46407		E36692		E36704	B31972	
Perforated sheet Reinforced; max. load 100 kg; requires option K1 against surcharge (except size 1060); Please consider max. loading of chamber		-					B58460	B58461	
Perforated sheet Reinforced; max. load 80 kg; Please consider max. loading of chamber		-					B57086	B52092	
Plug Ø23 mm; silicone; temperature resistance: +200 °C		E05387							
Plug Ø37-40 mm; silicone; temperature resistance: +200 °C		E07479							
Plug Ø57 mm; silicone; temperature resistance: +200 °C		E05389							
Plug Ø100 mm; silicone; temperature resistance: +200 °C		E05386							
Plug Ø14 mm; silicone sponge; temperature resistance: +180 °C		E05790							
Plug Ø23 mm; silicone sponge; temperature resistance: +180 °C		E05361							
Plug Ø37-40 mm; silicone sponge; temperature resistance: +180 °C		E05362							
Plug Ø57 mm; silicone sponge; temperature resistance: +180 °C		E07865							
Plug Ø80 mm; silicone sponge; temperature resistance: +180 °C		E05625							
Plug Ø100 mm; silicone sponge; temperature resistance: +180 °C		E07866							
Plug Ø120 mm; silicone sponge; temperature resistance: +180 °C		E05920							
Stacking frame		-	B50598		B50599		B50600	-	
Telescopic slide Grid; price per grid; requires option K1		-					B43102	B43093	
Telescopic slide Perforated sheet; price per perforated sheet; requires option K1		-					B51618	B44476	

Prices in EUR



CO₂ INCUBATORS ICO

Prices in EUR

Options Electronics	50	105	150	240
Door Electric lock	D4m			
Control unit External	E4m			
Door Safety sensor for external opening detection.	E8m			
Energy meter integrated measuring device for data logging	E11m			
Accessories	50	105	150	240
Connection cable 5m; 230V	B58607			
Plug Ø23 mm; silicone; temperature resistance: +200 °C	E05387			
Plug Ø37-40 mm; silicone; temperature resistance: +200 °C	E07479			
Plug Ø57 mm; silicone; temperature resistance: +200 °C	E05389			
Plug Ø100 mm; silicone; temperature resistance: +200 °C	E05386			
Plug Ø14 mm; silicone sponge; temperature resistance: +180 °C	E05790			
Plug Ø23 mm; silicone sponge; temperature resistance: +180 °C	E05361			
Plug Ø37-40 mm; silicone sponge; temperature resistance: +180 °C	E05362			
Plug Ø57 mm; silicone sponge; temperature resistance: +180 °C	E07865			
Plug Ø80 mm; silicone sponge; temperature resistance: +180 °C	E05625			
Plug Ø100 mm; silicone sponge; temperature resistance: +180 °C	E07866			
Plug Ø120 mm; silicone sponge; temperature resistance: +180 °C	E05920			

COMPRESSOR-COOLED INCUBATORS ICP

Prices in EUR

Options Mechanics		110	260	450	750
Metal outer door Inspection window; non-heated		B0m		-	B0m
Metal outer door Inspection window; heated		-			B3m
Door hinge Exchange		B8m		-	
Heavy-duty Interior modification option K1		-	K1	-	
Levelling castors Max. height: 102 mm; requires option R9 for appliances up to and including size 260 at extra cost		M4m			
Levelling feet Max. height: 140 mm; requires option R9 for appliances up to and including size 260 at extra cost		M5m			
Entry port Inner diameter 14 mm	back panel	N0m			
	side panel	N1m			
Entry port Inner diameter 23 mm	back panel	N2m			
	side panel	N3m			
Entry port Inner diameter 38 mm	back panel	N4m			
	side panel	N5m			
Entry port Inner diameter 57 mm	back panel	N6m			
	side panel	N7m			
Entry port Inner diameter 80 mm	back panel	N8m			
	side panel	N9m			
Entry port Inner diameter 100 mm	back panel	N10m			
	side panel	N11m			
Entry port Inner diameter 120 mm	back panel	N12m			
	side panel	N13m			
Door hinge Max. opening angle 95°; price per door		Q0m			
Door hinge Max. opening angle 120°; price per door		Q1m			
Seal Viton; housing; temperature resistance: +250 °C		Q2m			
Seal Housing; ESD protection; temperature resistance: +180 °C		Q3m			
Door handlebar Reinforced; price per door		-			Q4m
Options Electronics		110	260	450	750
Compressed air drying Dehumidification module; requires option U1m at extra cost		C9m			
Signal lamp Control panel; red, yellow, green; requires option H6 and H72 at extra cost		E0m			
Signal lamp Top cover; 3 lights (red, yellow, green); requires option H6 and H72 at extra cost		E1m			
Signal lamp Top cover; one multi-coloured light; requires option H6 and H72 at extra cost		E2m			
Control unit External		E4m			
Control box External		E5m			
Supply and exhaust air flap Rear panel		E6m			
Door Electric lock; safety switch		E7m		-	
Door Safety sensor for external opening detection.		E8m			
Emergency stop switch Switch for device shutdown		E9m			
Key switch Switching the device on and off using the key switch in the cover box		E10m			
Energy meter integrated measuring device for data logging		E11m			
Pt100 sensor Freely positionable; Connection socket on the rear of the appliance		H4m			
Potential-free contact Message TARGET-value reached		H5m			
Potential-free contact Programmable; only for appliances with TwinDISPLAY	2 contacts (A, B)	H7m2			
	4 contacts (A, B, C, D)	-		H7m4	
Pt100 sensor Freely positionable	1 sensor	H8m			
	2 sensors	H8m2			
	3 sensors	H8m3			
Lighting Interior		R0m			
Socket outlet Interior; switchable via appliance; temperature resistance: +60 °C; requires option A8 at extra cost		R3m			



Prices in EUR

Options Electronics	110	260	450	750
Socket outlet Interior; separately switchable; temperature resistance: +60 °C; requires option A8 at extra cost	R4m			
Socket outlet Interior; switchable via appliance; UK; temperature resistance: +40 °C; requires option A8 at extra cost	R33m			
Socket outlet Interior; separately switchable; UK; temperature resistance: +40 °C; requires option A8 at extra cost	R44m			
Parameter monitoring Humidity; temperature resistance: +180 °C	U1m			
Parameter monitoring CO ₂ ; temperature resistance: +70 °C	U2m			
Interface 4-20mA Humidity; requires option U1m at extra cost	V7m			
Accessories	110	260	450	750
Connection cable 5m; 230V	B58607			
Floor grid Heavy-duty; Please consider max. loading of chamber	E36692	E36704	B31972	
Perforated sheet Reinforced; max. load 100 kg; requires option K1; Please consider max. loading of chamber	-	B58460	B58461	
Perforated sheet Reinforced; max. load 80 kg; Please consider max. loading of chamber	-	B57086	B52092	
Plug Ø23 mm; silicone; temperature resistance: +200 °C	E05387			
Plug Ø37-40 mm; silicone; temperature resistance: +200 °C	E07479			
Plug Ø57 mm; silicone; temperature resistance: +200 °C	E05389			
Plug Ø100 mm; silicone; temperature resistance: +200 °C	E05386			
Plug Ø14 mm; silicone sponge; temperature resistance: +180 °C	E05790			
Plug Ø23 mm; silicone sponge; temperature resistance: +180 °C	E05361			
Plug Ø37-40 mm; silicone sponge; temperature resistance: +180 °C	E05362			
Plug Ø57 mm; silicone sponge; temperature resistance: +180 °C	E07865			
Plug Ø80 mm; silicone sponge; temperature resistance: +180 °C	E05625			
Plug Ø100 mm; silicone sponge; temperature resistance: +180 °C	E07866			
Plug Ø120 mm; silicone sponge; temperature resistance: +180 °C	E05920			
Telescopic slide Grid; price per grid; requires option K1	-	B43102	B43093	
Telescopic slide Perforated sheet; price per perforated sheet; requires option K1	-	B51618		

PELTIER-COOLED INCUBATORS IPPeco

Prices in EUR

Options Mechanics	30	55	110	260	410	750	1060	1400	2200
Metal outer door Inspection window; non-heated	-				B0m			-	
Metal outer door Inspection window; heated		-				B3m		-	
Door hinge Exchange			B8m				-		
Entry port Inner diameter 23 mm back panel				-				F6m	
Heavy-duty Interior modification option K1		-			K1		-		
Maintenance flap Electronics box	-			M1m			-		
ESD modification	-				M3m			-	
Levelling castors Max. height: 102 mm; requires option R9 for appliances up to and including size 260 at extra cost					M4m				
Levelling feet Max. height: 140 mm; requires option R9 for appliances up to and including size 260 at extra cost					M5m				
Telescopic slides Grid; price per grid	-		M6m			-			
Telescopic slides Perforated sheet; price per perforated sheet	-		M7m			-			
Heavy-duty frame Base frame; requires option R9 for appliances size 260 at extra cost		-		M10m			-		
			-			M20m		-	
				-			M30m		-
Heavy-duty frame Interior fittings; requires base frame at extra cost		-		M11m			-		
			-			M22m		-	
				-			M31m		-
Heavy-duty frame Grid; price per grating; requires base frame and interior fittings at extra cost		-		M12m			-		
			-			M23m		-	
				-			M32m		-
Entry port Inner diameter 40 mm; Silicone back panel				-				N20m	
Entry port Inner diameter 80 mm; Silicone back panel				-				N21m	
Entry port Inner diameter 120 mm; Silicone back panel								N22m	
Entry port Inner diameter 14 mm back panel					D6m				
					N51m				
Entry port Inner diameter 38 mm side panel					N56m				
				-				F7m	
Entry port Inner diameter 57 mm back panel					F8m				
					N59m				
Entry port Inner diameter 80 mm back panel					N60m				
					N61m				
Entry port Inner diameter 100 mm back panel					F9m				
					N63m				
Entry port Inner diameter 120 mm back panel					N64m				
					N65m				
Door hinge Max. opening angle 95°; price per door					Q0m				
Door hinge Max. opening angle 120°; price per door					Q1m				
Seal Viton; housing; temperature resistance: +250 °C				Q2m				-	
Seal Housing; ESD protection; temperature resistance: +180 °C				Q3m				-	
Door handlebar Reinforced; price per door		-					Q4m		



Options Electronics		30	55	110	260	410	750	1060	1400	2200
Compressed air drying Dehumidification module; requires option U1m at extra cost		C9m							-	
Signal lamp Control panel; red, yellow, green; requires option H6 and H72 at extra cost		E0m								
Signal lamp Top cover; 3 lights (red, yellow, green); requires option H6 and H72 at extra cost		E1m								
Signal lamp Top cover; one multi-coloured light; requires option H6 and H72 at extra cost		E2m								
Control unit External		E4m								
Control box External		-			E5m					
Supply and exhaust air flap Rear panel		E6m								
Door Electric lock; safety switch		-			E7m					
Door Safety sensor for external opening detection.		E8m								
Emergency stop switch Switch for device shutdown		E9m								
Key switch Switching the device on and off using the key switch in the cover box		E10m								
Energy meter integrated measuring device for data logging		E11m								
Pt100 sensor Freely positionable; Connection socket on the rear of the appliance		H4m								
Potential-free contact Message TARGET-value reached		H5m								
Potential-free contact Programmable; only for appliances with TwinDISPLAY	1 contact (A)	H7m								
	2 contacts (A, B)	H7m2								
	4 contacts (A, B, C, D)	-						H7m4		
Pt100 sensor Freely positionable	1 sensor	H8m								
	2 sensors	H8m2								
	3 sensors	H8m3								
Lighting Interior K1 modification; LED light strips; cool white 6,500 K; requires option K1 at extra charge, except from size 1060	first level	-			J07m					
	each additional level	-			J07mx					
Lighting Interior K1 modification; LED light strips; cool white 6,500 K + warm white 2,700 K; requires option K1 at extra charge, except from size 1060	first level	-			J08m					
	each additional level	-			J08mx					
4 - 20 mA current loop interface	Temperature of a Pt100 sensor positioned flexibly in chamber for external temperature monitoring (max. 1 SingleDISPLAY, max. 3 TwinDISPLAY) - price per sensor	V6								
Lighting Interior K1 modification; LED light strips; warm white 2,700 K; requires option K1 at extra charge, except from size 1060	first level	-			J09m					
	each additional level	-			J09mx					
Lighting Grid; LED light strips; cool white 6,500 K	first level	-		J17m				-		J17m
	each additional level	-		J17mx				-		J17mx
Lighting Grid; LED light strips; cool white 6,500 K + warm white 2,700 K	first level	-		J18m				-		J18m
	each additional level	-		J18mx				-		J18mx
Lighting Grid; LED light strips; warm white 2,700 K	first level	-		J19m				-		J19m
	each additional level	-		J19mx				-		J19mx
Lighting Grid reinforced; LED light strips; cool white 6,500 K; requires option K1 at extra charge, except from size 1060	first level	-					J27m		-	
	each additional level	-					J27mx		-	

Prices in EUR

Options Electronics		30	55	110	260	410	750	1060	1400	2200
Lighting Grid reinforced; LED light strips; cool white 6,500 K + warm white 2,700 K; requires option K1 at extra charge, except from size 1060	first level	-					J28m	-		
	each additional level	-					J28mx	-		
Lighting Grid reinforced; LED light strips; warm white 2,700 K; requires option K1 at extra charge, except from size 1060	first level	-					J29m	-		
	each additional level	-					J29mx	-		
Socket outlet Interior; switchable via appliance; temperature resistance: +60 °C; requires option A8 at extra cost		R3m								
Socket outlet Interior; separately switchable; temperature resistance: +60 °C; requires option A8 at extra cost		R4m								
Socket outlet Interior; switchable via appliance; UK; temperature resistance: +40 °C; requires option A8 at extra cost		R33m								
Socket outlet Interior; separately switchable; UK; temperature resistance: +40 °C; requires option A8 at extra cost		R44m								
Parameter monitoring O ₂ ; temperature resistance: +200 °C		U0m								
Parameter monitoring Humidity; temperature resistance +180 °C		U1m								
Parameter monitoring CO ₂ ; temperature resistance: +70 °C		U2m								
Interface 4-20mA Humidity; requires option U1m at extra cost		-		V7m						
Accessories		30	55	110	260	410	750	1060	1400	2200
Connection cable 5m; 230V		B58607								
Stainless steel slide-in drip tray, 15 mm rim (may affect the temperature distribution)		-							B60715	
Stainless steel bottom drip tray, 15 mm rim (may affect the temperature distribution)		-							B60708	
Floor grid Heavy-duty; Please consider max. loading of chamber		E50944	E46407	E36692	E36704		B31972	E40438	-	
Grid Reinforced; max. load 60 kg; Please consider max. loading of chamber		-							B59004	
Reinforced stainless steel shelf, max. loading 60 kg. Please consider max. loading of chamber		-							B59007	
Perforated sheet Reinforced; max. load 100 kg; requires option K1 against surcharge (except size 1060); Please consider max. loading of chamber		-			B58460		B58461	B58462	-	
Perforated sheet Reinforced; max. load 80 kg; Please consider max. loading of chamber		-			B57086		B52092	-		
Plug Ø23 mm; silicone; temperature resistance: +200 °C		E05387								
Plug Ø37-40 mm; silicone; temperature resistance: +200 °C		E07479								
Plug Ø57 mm; silicone; temperature resistance: +200 °C		E05389								
Plug Ø100 mm; silicone; temperature resistance: +200 °C		E05386								
Plug Ø14 mm; silicone sponge; temperature resistance: +180 °C		E05790								
Plug Ø23 mm; silicone sponge; temperature resistance: +180 °C		E05361								
Plug Ø37-40 mm; silicone sponge; temperature resistance: +180 °C		E05362								
Plug Ø57 mm; silicone sponge; temperature resistance: +180 °C		E07865								



Prices in EUR

Accessories	30	55	110	260	410	750	1060	1400	2200
Plug Ø80 mm; silicone sponge; temperature resistance: +180 °C	E05625								
Plug Ø100 mm; silicone sponge; temperature resistance: +180 °C	E07866								
Plug Ø120 mm; silicone sponge; temperature resistance: +180 °C	E05920								
Stacking frame	-		B57998	B58000			-		
Telescopic slide Grid; price per grid; requires option K1		-		B43102		B43093	B43100		-
Telescopic slide Perforated sheet; price per perforated sheet; requires option K1		-		B51618		B44476	B56888		-

PERSONAL NOTES



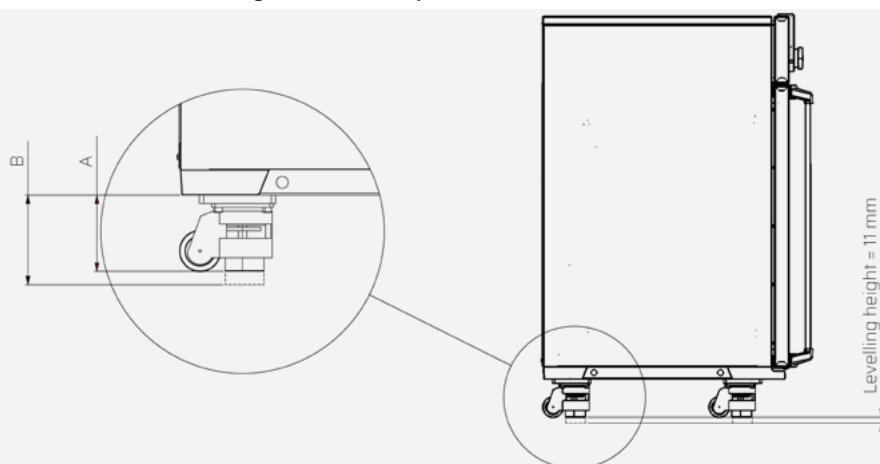
**TECHNICAL
INFORMATION
MECHANICS**

- Setup | Levelling castors
- Setup | Levelling feet
- Entry port | Moisture tight
- Entry port | KF / CF
- Entry port | Silicone
- Entry ports
- Modification | ESD protection
- Modification | Insulation protection
- Heavy-duty | Base frame
- Heavy-duty | Grid (for heavy-duty interior frame)
- Heavy-duty | Interior frame
- Telescopic slides | Sizes 55 to 160
- Door | Limit opening angle
- Door | Replace door stop
- Door | Seals
- Door | Handlebar
- Door | Magnetic door lock
- Door | Full-sight glass
- Maintenance | Electronics box
- Supply air | Filter system
- Supply air | UFTS filter



Setup | Levelling castors

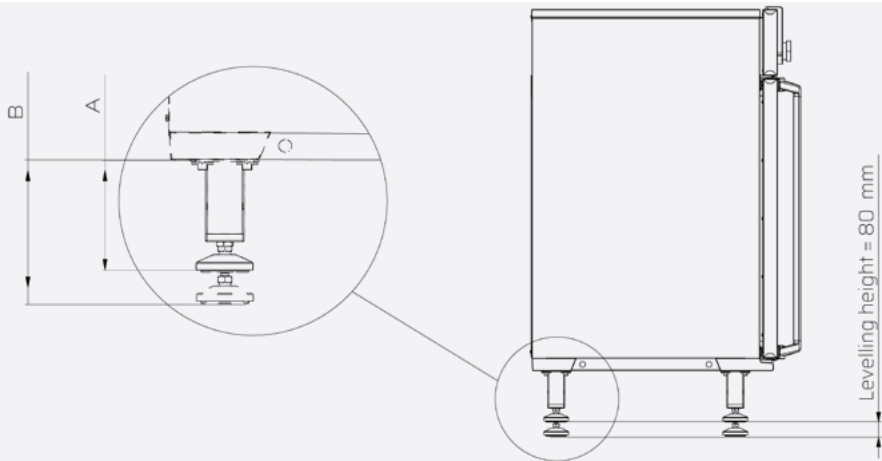
On request, the castors on Memmert appliances can be replaced with heavy-duty levelling castors. This allows the appliance to be moved to the desired installation location. On uneven surfaces, the levelling castors can be adjusted to level the floor.



Model sizes/Description			Levelling castors
Description	Specification		Castor with levelling feet
Technical data	Technical feature		movable
	Minimum height	A mm	91
	Maximum height	B mm	102
Ordering information	Further options (only after technical clarification)		ESD protection design or cleanroom suitability after technical clarification
	Retrofitting		Retrofitting possible (after technical clarification)
	Required option (depending on device type)		R9
Order no.			M4m

Setup | Levelling feet

On request, the castors on Memmert appliances can be replaced with levelling feet. This ensures that users cannot move the appliance. On uneven surfaces, the levelling feet can be adjusted to compensate the unevenness in the floor.

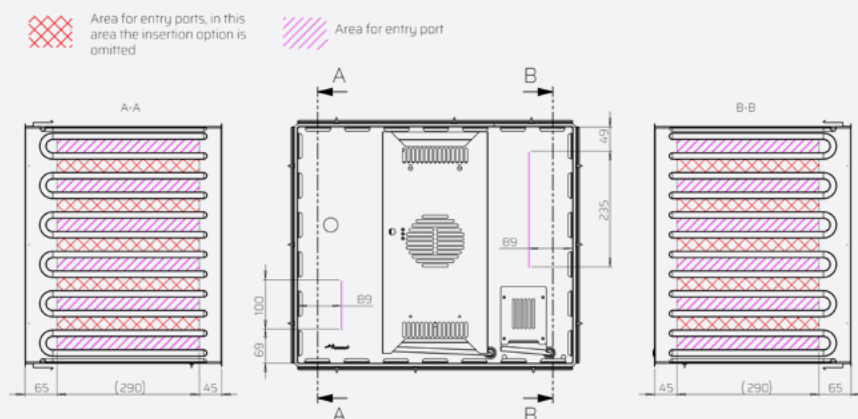


Model sizes/Description		Levelling feet
Description	Specification	Levelling feet
Technical data	Technical feature	not movable
	Minimum height A mm	60
	Maximum height B mm	140
Ordering information	Further options (only after technical clarification)	<ul style="list-style-type: none">• Cleanroom suitability possible after technical clarification• Customised heights on request
	Retrofitting	Retrofitting possible (after technical clarification)
	Required option (depending on device type)	R9
Order no.		M5m



Entry port | Moisture tight

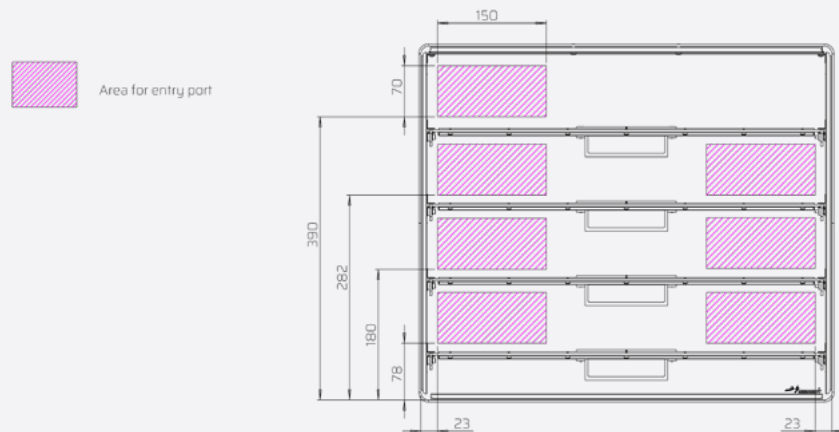
Moisture-tight entry ports are mainly used, for example, to insert sensors into the appliance. This entry port is specially welded to prevent moisture escaping from the chamber and to ensure that the climate remains constant.



Model sizes/Description		Ø14		Ø23		Ø38		Ø57		Ø80		Ø100		Ø120			
Description	Specification	Entry ports for appliances with humidity control or special sealing requirements															
Technical data	Clear diameter	mm		14		23		38		57		80		100		120	
	Technical feature	moisture tight															
	Side panel	-	●	-	●	-	●	-	●	-	●	-	●	-	●		
	Back panel	●	-	●	-	●	-	●	-	●	-	●	-	●	-		
	Closure	Flap incl. plug								Slider incl. plug							
Ordering information	Retrofitting	Retrofitting possible (after technical clarification)															
Order no.		N0m	N1m	N2m	N3m	N4m	N5m	N6m	N7m	N8m	N9m	N10m	N11m	N12m	N13m		

Entry port | KF / CF

These entry ports were specially designed for vacuum ovens. The entry ports are welded vacuum-tight. This means that measuring sensors can be inserted into the device without pressure loss during vacuum operation.

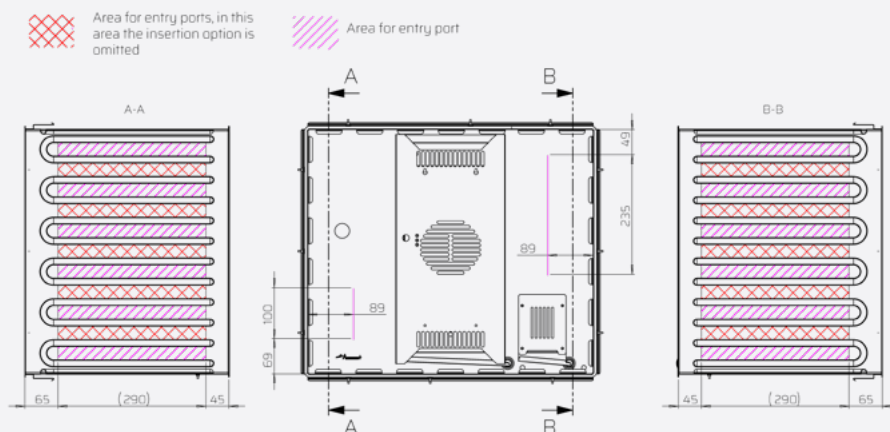


Model sizes/Description		DN16		DN25		DN40		DN50	
Description	Specification	DN16		DN25		DN40		DN50	
	Design	ISO-KF	ISO-CF	ISO-KF	ISO-CF	ISO-KF	ISO-CF	ISO-KF	ISO-CF
Technical data	Technical feature	pressure tight							
	Back panel	●							
Ordering information	Further options (only after technical clarification)	<ul style="list-style-type: none"> further pressure-resistant connections, e.g. power supply <ul style="list-style-type: none"> further sizes on request further product series on request Lateral insertion of an entry port on request 							
	Retrofitting	Retrofitting possible (after technical clarification)							
	Product requirements	Vacuum oven VO							
Order no.		N30m	N40m	N31m	N41m	N32m	N42m	N33m	N43m



Entry port | Silicone

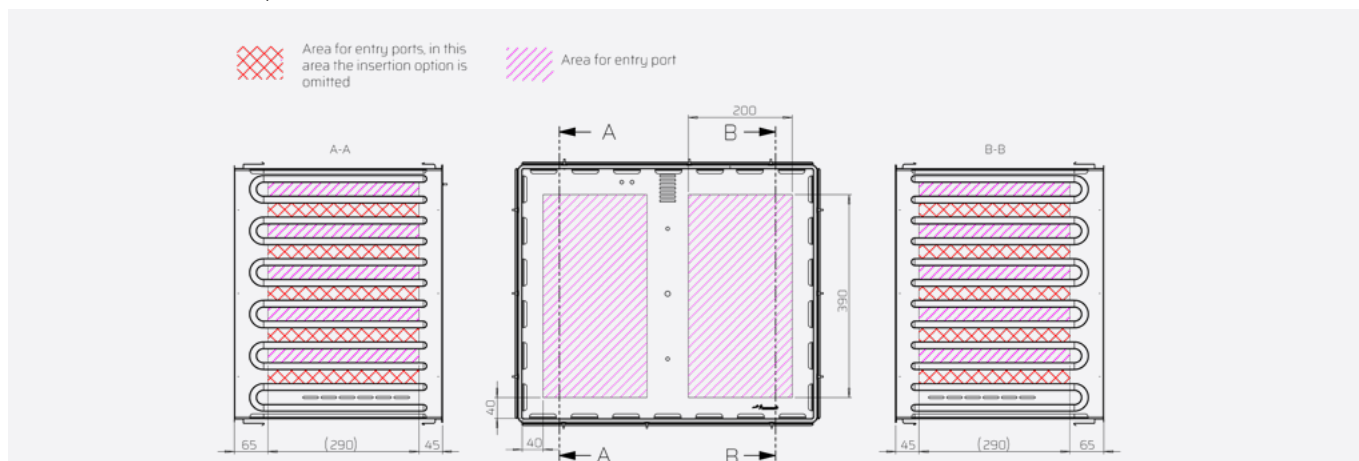
In addition to moisture tight entry seals, which are welded into the device, m360 offers plugged silicone entry ports in a moisture tight design.



Model sizes/Description		ø40	ø80	ø120	
Description	Specification	Silicone entry ports for appliances with humidity control or special sealing requirements			
Technical data	Clear diameter	mm	40	80	120
	Technical feature	moisture-tight			
	Side panel	-			
	Back panel	●			
	Closure	Plug			
	Material	Silicone			
Ordering information	Further options (only after technical clarification)	Lateral mounting on request			
	Retrofitting	Retrofitting possible (after technical clarification)			
Order no.		N20m	N21m	N22m	

Entry ports

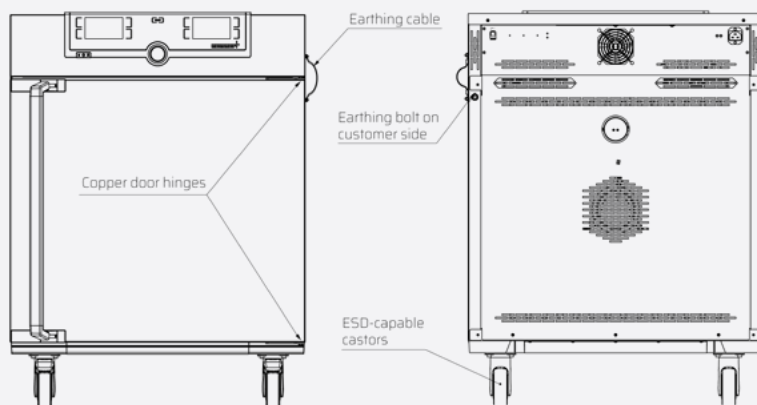
Round entry ports are mainly used for the insertion measuring sensors. The Memmert standard portfolio offers side entry ports with a diameter of up to 23 mm. m360 manufactures special entry ports with wider diameters that can also be individually positioned. Depending on the design, round entry ports can be closed with an ear cap or slider.



Model sizes/Description		Ø14		Ø23	Ø38		Ø57		Ø80		Ø100		Ø120			
Description	Specification			Entry ports for devices without special sealing requirements												
Technical data	Clear diameter	mm			14	23	38		57		80		100		120	
	Technical feature			Not welded = not moisture-tight												
	Side panel	-	●	-		●	-	●	-	●	-	●	-	●		
	Back panel	●	-	●	-	●	-	●	-	●	-	●	-	●		
	Closure			Flap						Slider						
Ordering information	Further options (only after technical clarification)			Intermediate sizes from Ø57mm possible												
	Additional information			Sealing plugs for entry ports available as accessories												
	Retrofitting			Retrofitting possible (after technical clarification)												
Order no.				D6m	N51m	F6m	F7m	N56m	F8m	N59m	N60m	N61m	F9m	N63m	N64m	N65m

**Modification | ESD protection (in accordance with DIN EN 61340-5-1)**

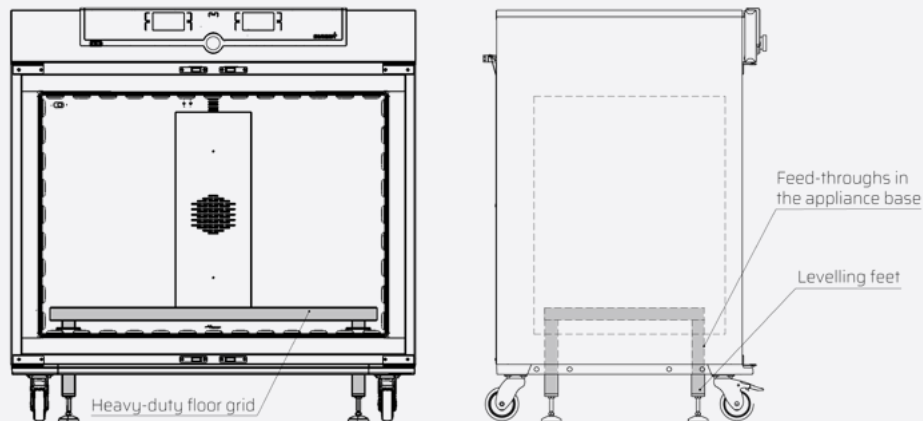
m360 offers an ESD device modification as an accessory. The ESD modification package includes the replacement of the standard seal with an ESD-compliant seal, as well as additional safety measures against electrostatic charging of the device, such as ESD-capable casters and grounding bolts. The modification is suitable for use in EPAs (Electrostatic Protected Areas) and is based on the relevant standard: DIN EN 61340-5-1.



Model sizes/Description		110	160	260	450	750/1060
Description	Specification	ESD-safe equipment and connection options for earth connections				
	Design	Use of ESD-compatible components				
Technical data	Technical feature	ESD protection				
	Temperature resistance (additional option may be required)	180 °C				
Ordering information	Additional information	ESD test report on request				
	Retrofitting	Retrofitting not possible				
	Restrictions	Appliance sizes without castors require an additional castor frame				
	Required option (depending on device type)	A8 R9				
Order no.		M3m				

Heavy-duty | Base frame

Heavy components can exceed the maximum load of the appliance due to their high weight. A heavy-duty base frame is therefore recommended for particularly heavy loads. Since the feet of the shelf unit stand directly on the foundation of the installation location, no load is placed on the appliance.

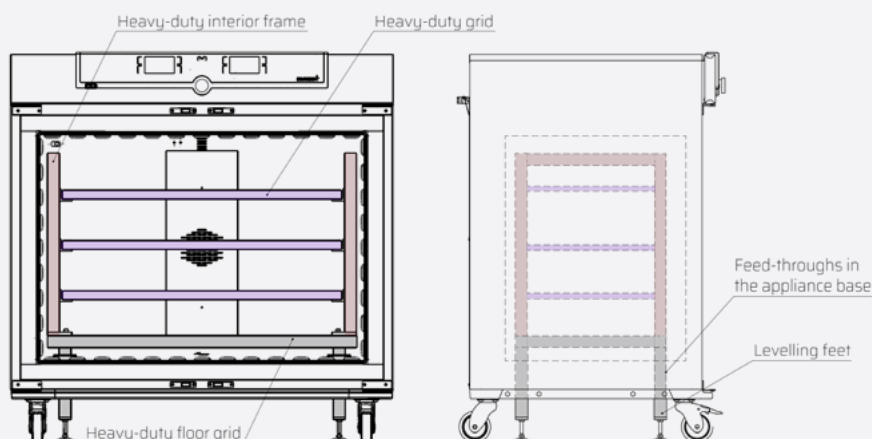


Model sizes/Description		260	450	750	1060
Description	Specification	Frame inside the interior, weight transfer to the floor			
	Design	four entry ports on the base of the appliance			
Technical data	Position on the appliance	Interior			
	Technical feature	levelling feet			
	Max. Weight load frame	800			
	Material	stainless steel 1.4301 (ASTM 304)			
Ordering information	Additional information	Base frame for further heavy-duty interior fittings			
	Retrofitting	Retrofitting not possible			
	Extensions	M11m M12m	M21m M23m	M22m M23m	M31m M32m
Order no.		M10m	M20m		M30m



Heavy-duty | Interior frame

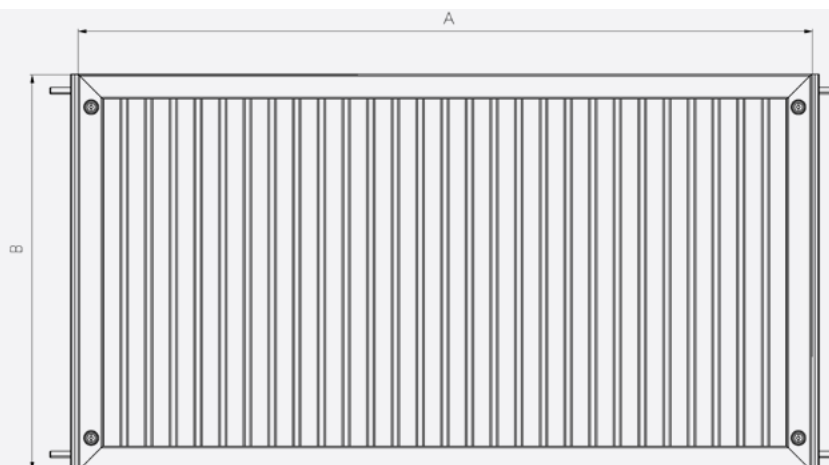
The heavy-duty base frame of the appliance can be extended with a complete interior frame. Additional shelves can be used to increase the support surface in the interior considerably.



Model sizes/Description		260	450	750	1060
Description	Specification	Heavy-duty interior frame			
Technical data	Position on the appliance	Interior			
	Max. Number of levels	number	3	6	
	Max. Weight load per level	kg	200		
	Max. Weight load frame	kg	800		
	Material	stainless steel 1.4301 (ASTM 304)			
Ordering information	Additional information	incl. one heavy-duty grid			
	Retrofitting	Retrofitting not possible			
	Product requirements	Heavy-duty base frame			
	Required option (depending on device type)	M10m	M20m		M30m
	Extensions	M12m	M23m		M32m
Order no.		M11m	M21m	M22m	M31m

Heavy-duty | Grid (for heavy-duty interior frame)

Extension of the slide-in levels for the heavy-duty interior frame.

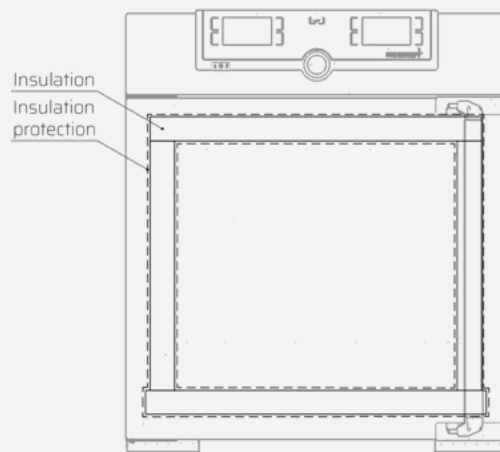


Model sizes/Description				260	450	750	1060
Description	Specification			Grid for heavy-duty interior frame			
Technical data	Position on the appliance			Interior			
	Max. Number of levels		number	3		6	
	Max. Weight load per level		kg	200			
	Width grid		A mm	492	892		
	Depth grid		B mm	382	482		732
	Material			stainless steel 1.4301 (ASTM 304)			
Ordering information	Retrofitting			Retrofitting not possible			
	Product requirements			Heavy-duty base frame with interior frame			
	Required option (depending on device type)			M10m M11m	M20m M21m	M20m M22m	M30m M31m
Order no.				M12m	M23m		M32m



Modification | Insulation protection

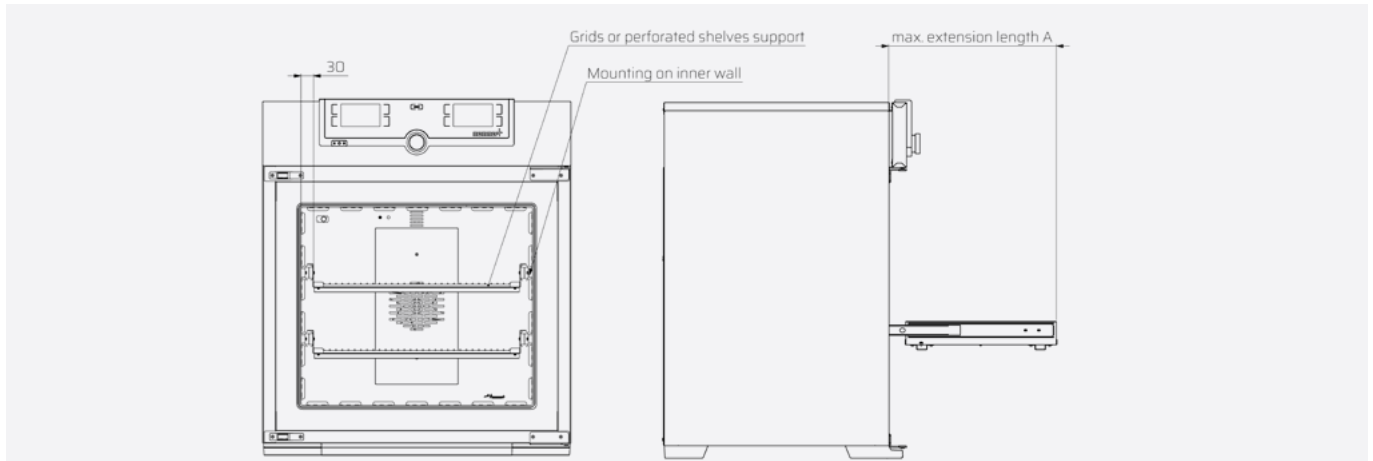
The Memmert appliances are often used in cleanrooms. In order to reduce the particle load in the interior of the appliance, the rock wool insulation can also be packed in aluminium foil.



Model sizes/Description		Insulation protection
Description	Specification	Reduction of particle pollution through insulation wrapped in aluminium foil
Ordering information	Additional information	<ul style="list-style-type: none">No improvement in the ISO cleanroom classHeat output of the appliances deviates from the standard
	Retrofitting	Retrofitting not possible
	Product requirements	Insulation material: rock wool/glass wool
Order no.		M2m

Telescopic slides | Sizes 55 to 160

Telescopic slides enable Memmert appliances to be loaded more ergonomically. The pull-outs can be combined with grids and perforated shelves and each pull-out can carry a load of 60 kg. As a rule, three to four telescopic rails can be installed per appliance, but more pull-outs are possible after technical clarification.

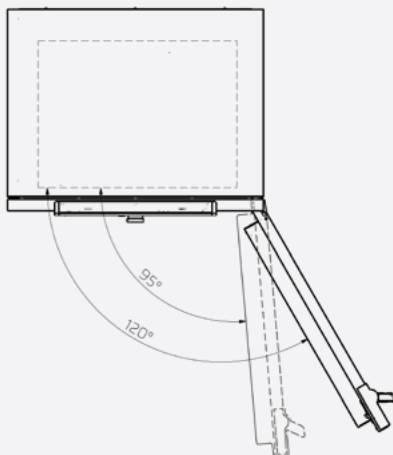


Model sizes/Description				55/75	110/160	55/75	110/160
Description	Specification			Telescopic slides			
	Design			Grid		Perforated sheet	
Technical data	Position on the appliance			Interior			
	Max. Weight load per level						



Door | Limit opening angle

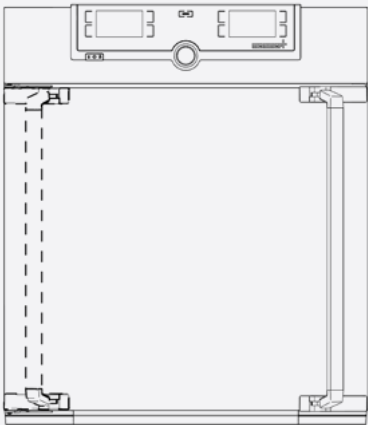
This equipment enables efficient use of space thanks to customisable opening angles of 95° or 120°, allowing the working range to be more flexible and functional.



Model sizes/Description		all sizes	
Description	Specification	Limiting the door opening angle	
Technical data	Technical feature	95°	120°
Ordering information	Additional information	For appliances with double doors, the hinges can be combined as required	
	Retrofitting	Retrofitting possible (after technical clarification)	
Order no.		Q0m	Q1m

Door | Replace door stop

For ergonomic reasons or to save space on-site, it may be advisable for some cases to mount the door hinge on the left-hand side so that the door handle is on the right-hand side. m360 attaches the door handle to your desired side at the factory.

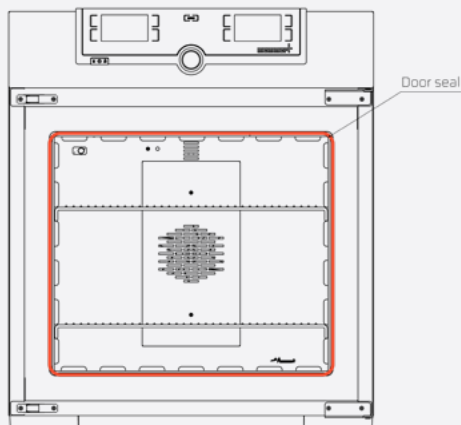


Model sizes/Description		30 bis 410
Description	Specification	Moving the door hinge to the other side (left - right)
Ordering information	Additional information	For appliances with a glass inner door, the stop is also replaced
	Retrofitting	Retrofitting possible (after technical clarification)
	Product requirements	single-leaf door
Order no.		B8m



Door | Seals

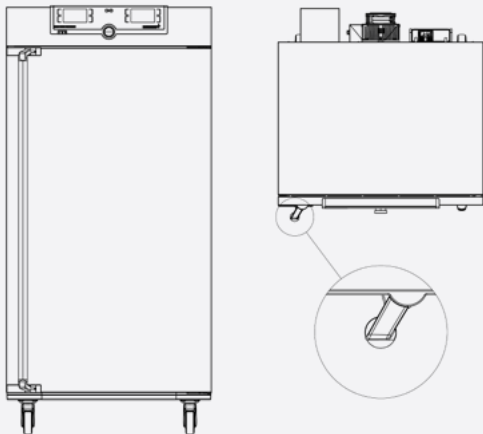
For special applications, it may be necessary to replace the standard seal of a Memmert appliance with low-silicone seals. In this case, a low-silicone Viton seal is recommended, which is heat-resistant up to 250°C for long-term processes. ESD seals are conductive and therefore provide greater protection against electrostatic discharge.



Model sizes/Description			ESD	Viton
Description	Specification		Replacing the standard seal	
	Design		ESD protection	Silicone-free Viton seal
Technical data	Temperature resistance (additional option may be required)	°C	180	250
Ordering information	Retrofitting		Retrofitting possible (after technical clarification)	
	Required option (depending on device type)		A8	
Order no.			Q3m	Q2m

Door | Handlebar

Particularly for XXL appliances, but also for smaller Memmert appliances that are opened and closed very frequently, it is advisable to replace the aluminium handlebar with a reinforced handlebar made of stainless steel.

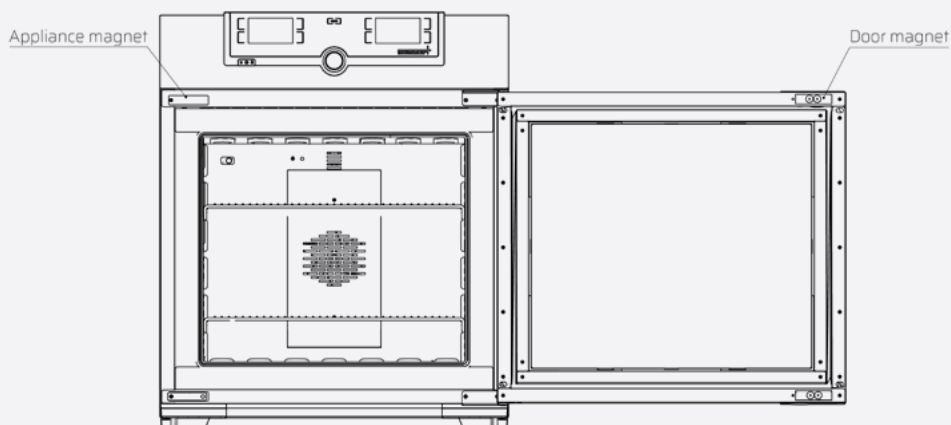


Model sizes/Description		from size 410
Description	Specification	Reinforced door handlebar
Technical data	Material	stainless steel 1.4301 (ASTM 304)
Ordering information	Retrofitting	Retrofitting possible (after technical clarification)
	Product requirements	for appliances from size 410
Order no.		Q4m



Door | Magnetic door lock

Certain processes require the appliance door to be frequently opened. For more ergonomic handling, a magnetic closure is the perfect solution. Thanks to the magnet, the door closes automatically and can withstand constant load of opening and closing.

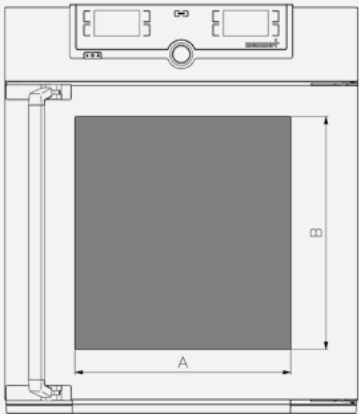


Model sizes/Description

Description	Specification	Door lock
	Design	magnetic
Technical data	Temperature resistance (additional option may be required)	200 °C
Ordering information	Retrofitting	Retrofitting possible (after technical clarification)
	Product requirements	single-leaf door
	Required option (depending on device type)	A8
Order no.		M0m

Door | Full-sight glass

The full-sight glass door provides a direct view of the interior without having to open the oven. It is the ideal solution for laboratories and industry, offering maximum control over work processes.

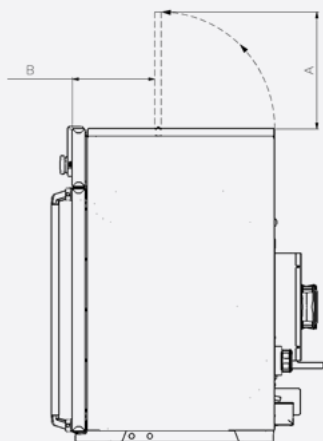


Model sizes/Description		110	260	410	750/1060	410	750/1060
Description	Specification	Outer door inspection window					
	Design	Unheated				Heated	
Technical data	Inspection window width	mm	388		241		
	Inspection window height	mm	425	744	1144		
Ordering information	Additional information	Inner glass door not applicable					
	Retrofitting	Retrofitting possible (after technical clarification)					
Order no.		B0m				B3m	



Maintenance | Electronics box

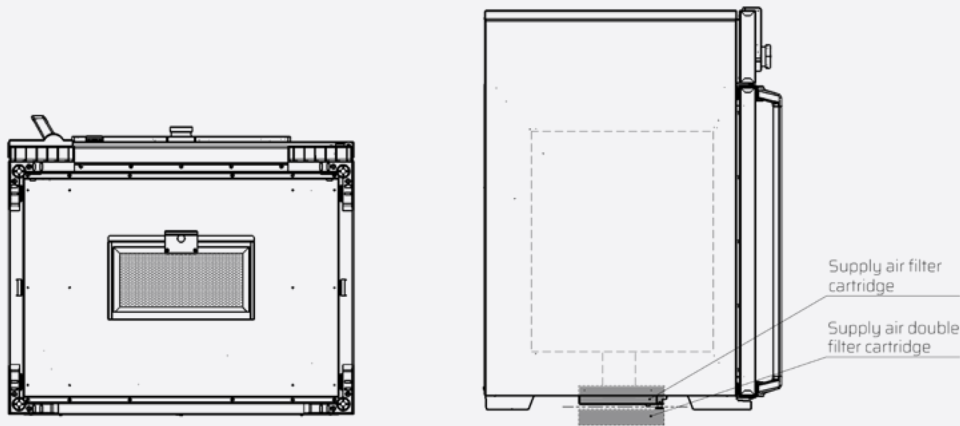
To save space or for certain applications in cleanrooms, appliances are often recessed into a wall. As a result, the cover of the electronics box can no longer be opened. With the „maintenance hatch“ modification, the conventional appliance cover is replaced by a two-part cover.



Model sizes/Description		110/160		260/410	
Description	Specification		Maintenance hatch		
Technical data	Position on the appliance		Electronic box		
	Height flap	mm	350		450
	Distance front panel	mm	237		
	Material		textured stainless steel 1.4016 (ASTM 430)		
Ordering information	Retrofitting		Retrofitting not possible		
	Product requirements		for appliances up to size 410		
Order no.		M1m			

Supply air | Filter system

Supply air filter system for controlled air quality in the interior. Depending on the version, the air filter holders offer capacity for up to two filters. Depending on the requirements, the filter holder can be fitted with a suitable filter.

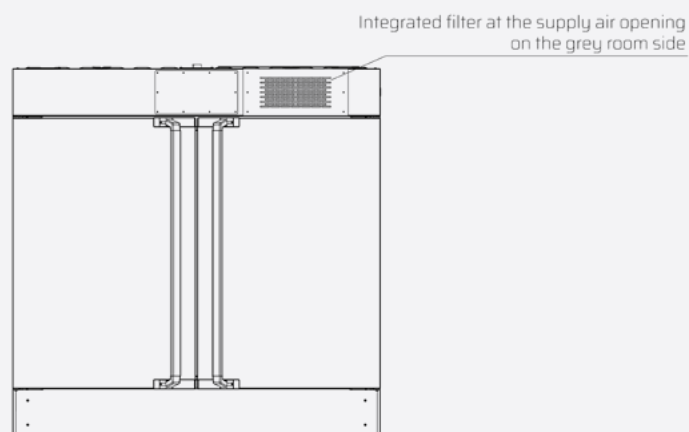


Model sizes/Description		Two Filter system	Single Filtersystem
Description	Specification	Filter holder for supply air opening	
	Design	2 Filter	1 Filter
Technical data	Material	stainless steel 1.4301 (ASTM 304)	
Ordering information	Additional information	Filter holder without filter	
	Retrofitting	Retrofitting possible (after technical clarification)	
	Required option (depending on device type)	R9	
	Extensions	E07439 Filter class F7 E07438 Filter class H13 E06024 Filter class G3	
Order no.		R82m	R81m



Supply air | UFTS filter

The integrated supply air filtration system ensures controlled air quality inside the chamber. The filter housing can be equipped with the appropriate filter and easily replaced if necessary – for consistently clean supply air.

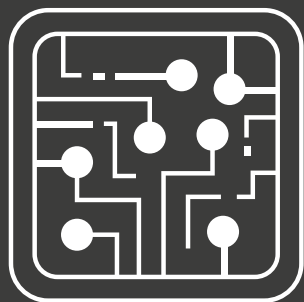


Model sizes/Description

Description	Specification	Integrated filter at the supply air opening in the panel box
Technical data	Position on the appliance	Front cover
Ordering information	Further options (only after technical clarification)	Filter class selectable: <ul style="list-style-type: none">• G3, F7, or H13 Other filter classes available upon request
	Retrofitting	Retrofitting not possible
	Product requirements	Pass-through oven UFTS
	Extensions	E07439 Filter class F7 E07438 Filter class H13 E06024 Filter class G3
Order no.		R8m

PERSONAL NOTES

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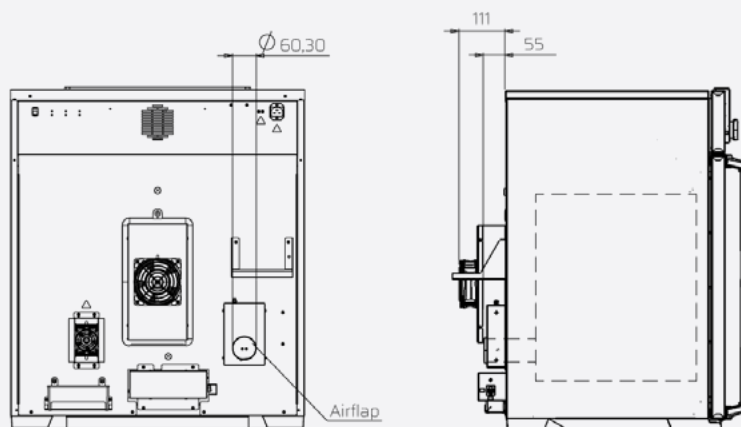
TECHNICAL INFORMATION ELECTRONICS

Supply and exhaust air flap | Rear panel
Compressed air drying
Energy meter
External control cabinet
External control unit
Main switch | Key switch
Light | Lighting interior
Light | Lighting LED light strips - grid
Light | Lighting LED light strips - K1 extension
Light | Lighting interior
Emergency stop button
Exhaust air extraction | Rapid cooling fan
Sensors | Temperature
Sensors | Further parameters
Interfaces | Potential free contact
Interfaces | 4-20mA
Signal lamp | Control panel
Signal lamp | Top cover
Socket outlet | Interior
Door | Safety interlock
Door | CO₂ incubator locking
Door monitoring



Supply and exhaust air flap | Rear panel

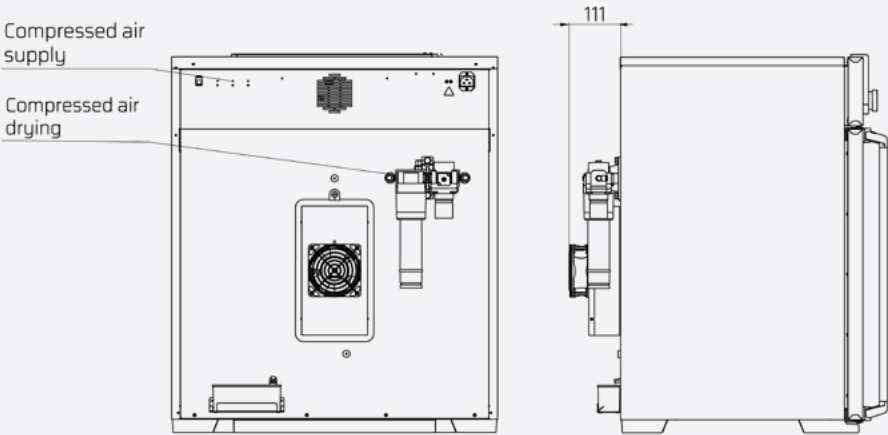
The supply and exhaust air flap enables precise regulation of the air exchange, resulting in an increased air exchange rate to ensure optimal air quality.



Model sizes/Description		Supply and exhaust air flap
Description	Specification	Electronically adjustable air flap for product series: HPPeco, IPPeco, ICH and ICP
Technical data	Technical feature	Opening degree adjustable in 10 % increments
	Option to control or programme the parameters	AtmoCONTROL AtmoWEB ControlCOCKPIT
Ordering information	Additional information	Programmable via AtmoCONTROL or AtmoWEB
	Retrofitting	Retrofitting possible (after technical clarification)
Order no.		E6m

Compressed air drying

This option extends the temperature-humidity operational range of the appliance. Thanks to the efficient dehumidification of the interior by means of a compressed air supply, it is possible to dehumidify the air in the appliance to a relative humidity of up to 10 % even at 10 °C.

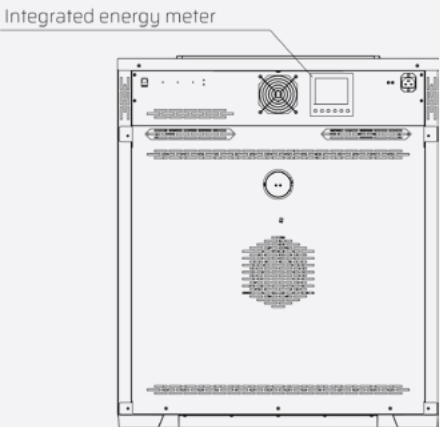


Model sizes/Description			Compressed air drying
Description	Specification		Efficient dehumidification of the interior using a compressed air supply
Technical data	Working pressure depending on operating condition	bar	0.2
	Max. permissible pressure	bar	5
Ordering information	Retrofitting		Retrofitting possible (after technical clarification)
	Required option (depending on device type)		U1m
Order no.			C9m



Energy meter

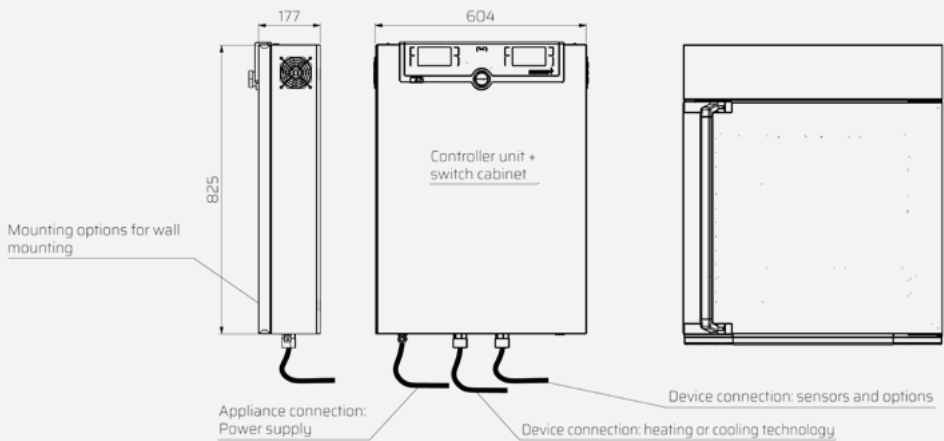
The energy meter enables precise measurement and monitoring of energy consumption and electrical parameters in the Memmert device. Measurement values are clearly displayed on a backlit LCD screen, while quick-select buttons ensure easy operation. With true RMS measurement, pulse output, and RS485 communication, efficient energy utilization is supported.



Model sizes/Description		all sizes
Description	Specification	<ul style="list-style-type: none">• Voltage, L-L, L-N and average• Current – phase, total, and maximum demand<ul style="list-style-type: none">• Power factor per phase and average• Total harmonic current and voltage distortion<ul style="list-style-type: none">• Neutral current, calculated• Frequency• Operating hours, hours and minutes• Power, active, reactive, and apparent• Minimal/Maximum power demand – active, reactive, and apparent• Energy Active – active, reactive, and apparent
Technical data	Position on the appliance	Electronic box rear position
Ordering information	Retrofitting	Retrofitting not possible
Order no.		E11m

External control cabinet

This option offers a convenient and device-independent arrangement of all electronic components and the control unit, so that operation and maintenance can be carried out from a different location.

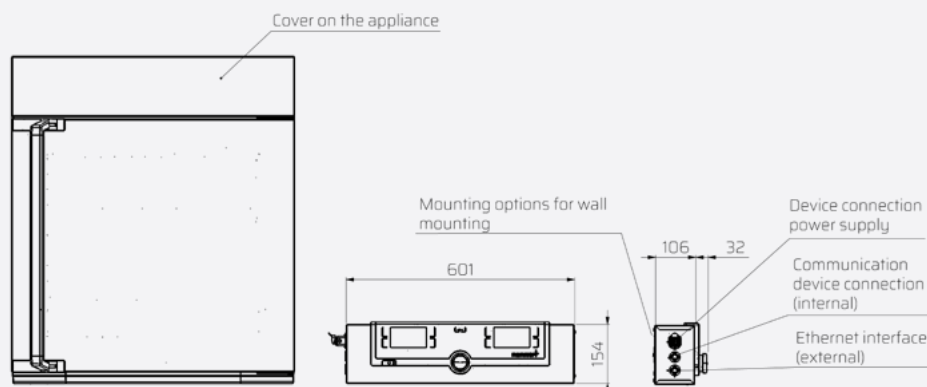


Model sizes/Description		External control cabinet
Description	Specification	External units for electronic components
Technical data	Protection class	IP20
	Technical feature	Connection cable 3 m
Ordering information	Further options (only after technical clarification)	Alternative lengths of connection cables possible
	Retrofitting	Retrofitting not possible
Order no.		E5m



External control unit

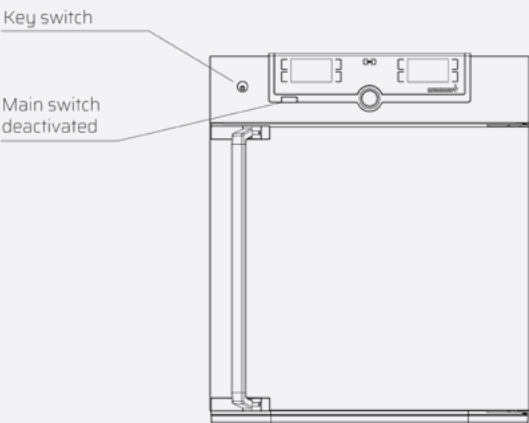
Equipping the Memmert oven with an external control unit allows the oven to be conveniently controlled remotely from any other position in the room. This ensures flexible and efficient operation.



Model sizes/Description		External control unit
Description	Specification	External unit for regulator module
Technical data	Protection class	IP20
	Technical feature	Connection cable 3 m
Ordering information	Further options (only after technical clarification)	Alternative lengths of connection cables possible
	Retrofitting	Retrofitting possible (after technical clarification)
Order no.		E4m

Main switch | Key switch

The standard main switch is replaced with a key switch, allowing the device to be turned on or off only with a key. This prevents unauthorized access and enables controlled usage. Perfect for enhanced security in sensitive applications.

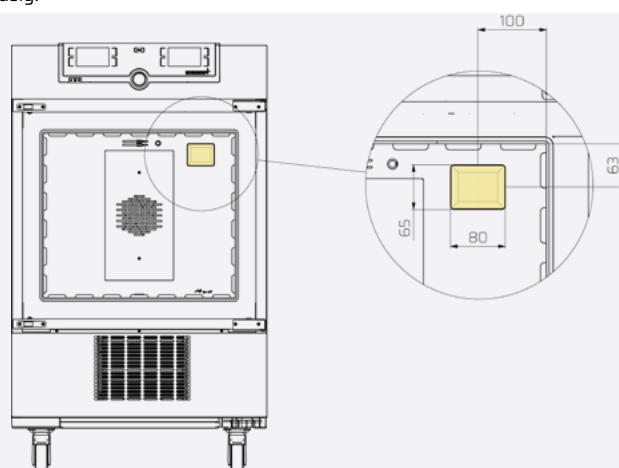


Model sizes/Description		all sizes
Description	Specification	Key switch for on/off function: Main switch is replaced by a key switch
	Design	Process-dependent programmable door lock
Technical data	Position on the appliance	Front cover
Ordering information	Additional information	ON/OFF switch on the ControlCOCKPIT is disabled
	Retrofitting	Retrofitting not possible
Order no.		E10m



Light | Lighting interior

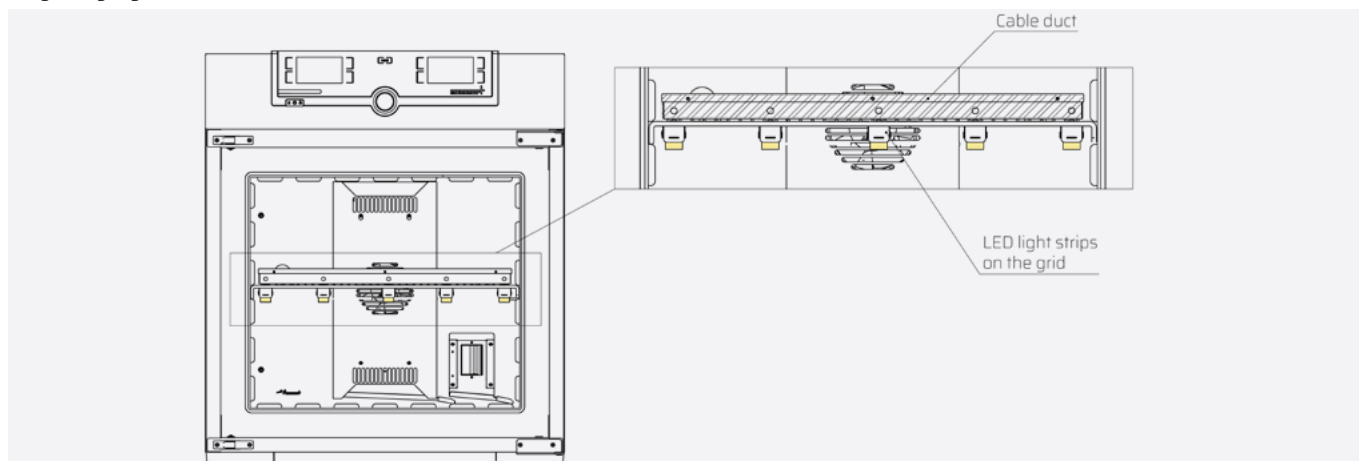
To provide a better view of the load inside the appliance chamber, m360 offers special lighting for monitoring the load. The lights can be switched on manually as well as being switched on continuously.



Model sizes/Description		110 - 260	450 - 750
Description	Specification	Interior lighting for observation	
	Design	1 light	2 lights
Technical data	Position on the appliance	Interior	
	Technical feature	switchable: ON/OFF	
	Option to control or programme the parameters	AtmoCONTROL AtmoWEB ControlCOCKPIT	
Ordering information	Retrofitting	Retrofitting possible (after technical clarification)	
Order no.		R0m	

Light | Lighting LED light strips - grid

For certain applications, such as plant or mushroom cultivation, it is vital to illuminate the load from above. The m360 LED grid offers this feature. The light can be dimmed in 1 % increments and is available in warm white, cool white and a combination of both. Certain sequences can be programmed via AtmoCONTROL, e.g. a day/night simulation.



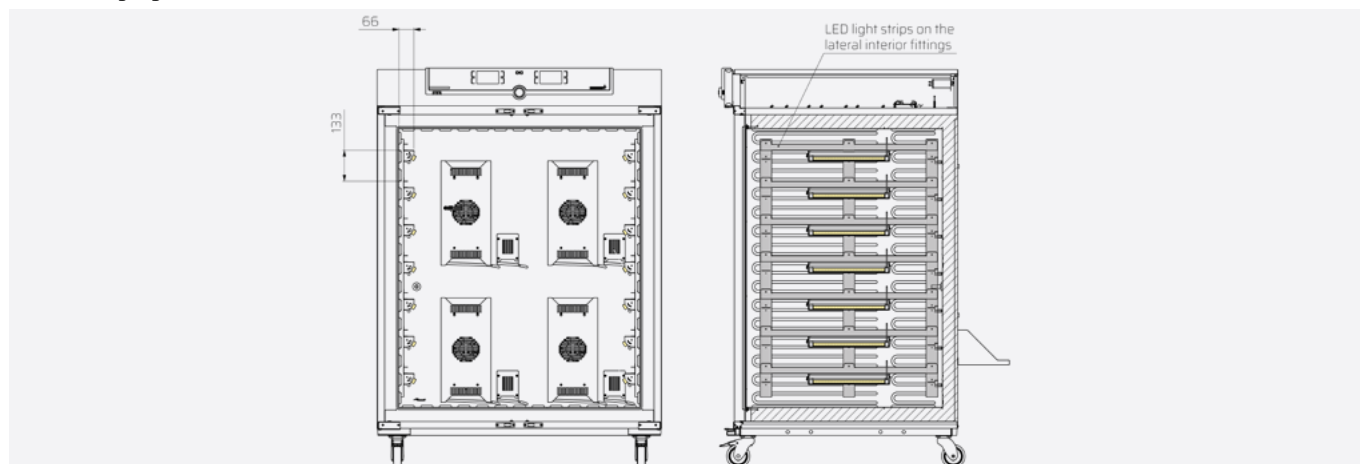
Model sizes/Description		Cold white		Cold white + warm white		Cold white		Warm white	
Description	Specification	Dimmable LED light strips (0-100 % in 1 % increments)							
	Design	Mounting on the grid							
Technical data	Position on the appliance	Grid		Reinforced grid		Grid		Reinforced grid	
	Colour temperature	6500	6500 + 2700	mixed: 6500 + 2700	6500	2700			
	Protection class	IP44							
	Limited working temperature range	°C	+15 to +40						
	Option to control or programme the parameters		AtmoCONTROL AtmoWEB ControlCOCKPIT						
Ordering information	Retrofitting	Retrofitting possible (after technical clarification)							
	Product requirements	TwinDISPLAY							
Order no.		J17m	J18m	J28m	J27m	J19m	J29m		
LED equipment per model size		110	260	410	750	1060	1400	2200	

LED equipment per model size			110	260	410	750	1060	1400	2200
Equipment	Max. Number of illuminated levels	number	2	3				5	6
	LED light strips per slide-in level	number	5				3		



Light | Lighting LED light strips - K1 extension

The m360 solution combines LED lighting with the storage of heavy loads. Mounted LED light strips on the K1 heavy-duty extension provide light-intensive illumination and enable precise control in 1 % increments. Available as warm white, cool white or combined. Programmable sequences with AtmoCONTROL, such as day/night simulation.

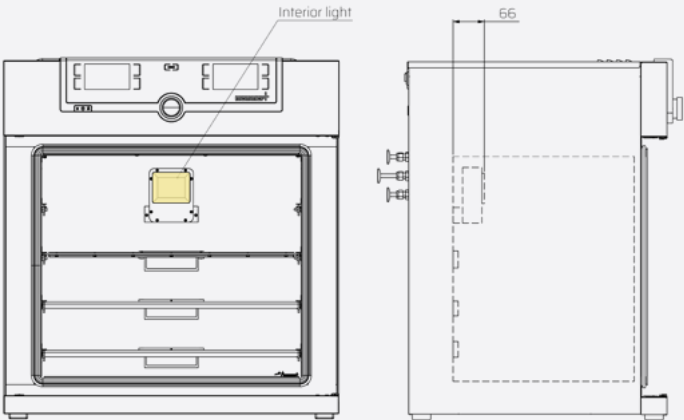


Model sizes/Description		Cold white	Warm white	Cold white + warm white
Description	Specification	Dimmable LED light strips (0-100 % in 1 % increments)		
	Design	Mounting on the K1 extension		
Technical data	Colour temperature	6500	2700	2700 + 6500
	Protection class	IP44		
	Limited working temperature range °C	+15 to +40		
	Option to control or programme the parameters	AtmoCONTROL AtmoWEB ControlCOCKPIT		
Ordering information	Additional information	K1 extension only required for appliance sizes 410 and 750		
	Retrofitting	Retrofitting possible (after technical clarification)		
	Product requirements	TwinDISPLAY		
	Required option (depending on device type)	K1		
Order no.		J07m	J09m	J08m

LED equipment per model size			410	750	1060	1400	2200
Equipment	Max. Number of illuminated levels	number	7			8	9
	LED light strips per slide-in level	number	2				

Light | Lighting interior

Thanks to the special m360 solution, lighting is now available for the vacuum oven. The light replaces the thermoshelf and illuminates the interior of the vacuum chamber to ensure optimum viewing of the process from the outside.

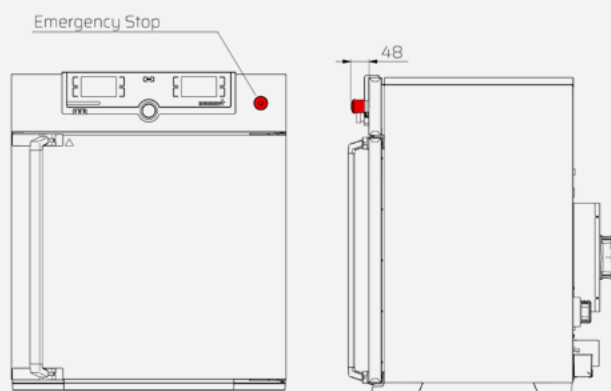


Model sizes/Description		Vacuum oven VO
Description	Specification	Interior lighting for observation
Technical data	Position on the appliance	Flange socket
	Option to control or programme the parameters	AtmoCONTROL AtmoWEB ControlCOCKPIT
Ordering information	Retrofitting	Retrofitting possible (after technical clarification)
	Product requirements	Vacuum oven VO
	Restrictions	at least one slot for a thermoshelf is not available (depending on product size)
Order no.		R0m



Emergency stop button

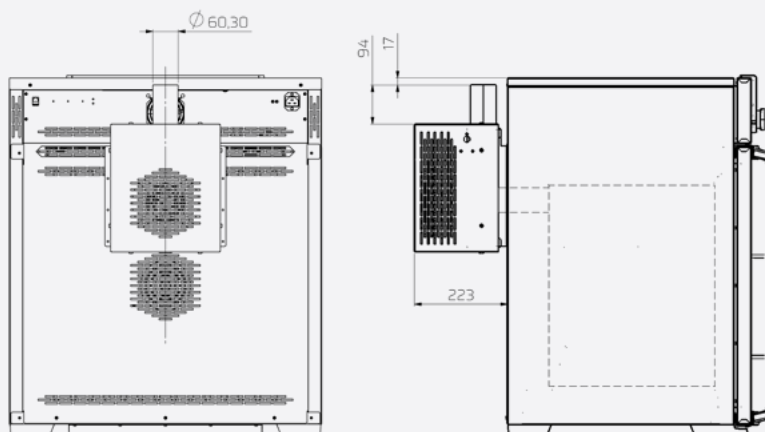
In an emergency, the emergency stop button ensures that all appliance functions are quickly switched off and immediately disconnected from the power supply - for greater safety and quick action in dangerous situations.



Model sizes/Description		all sizes
Description	Specification	<ul style="list-style-type: none">Emergency stop button for disconnecting the power supply<ul style="list-style-type: none">Bypass-safe according to ISO 13850/EN 418<ul style="list-style-type: none">VDE 0660 IEC/EN 60947Mechanical lifespan: $> 0.1 \times 10^6$Actuation force ≤ 50 NUnilluminated
Technical data	Position on the appliance	Front cover
Ordering information	Additional information	Observe country-specific regulations
	Retrofitting	Retrofitting not possible
Order no.		E9m

Exhaust air extraction | Rapid cooling fan

A rapid cooling fan has two functions: On the one hand, it cools the appliance many times faster after a tempering process without having to open the door. On the other hand, the fan increases the air exchange rate of the appliance. The rapid cooling fan can be adjusted in 10 per cent increments depending on the exhaust air flap and can be controlled via a controller on the exhaust air flap, but also via the AtmoCONTROL software.

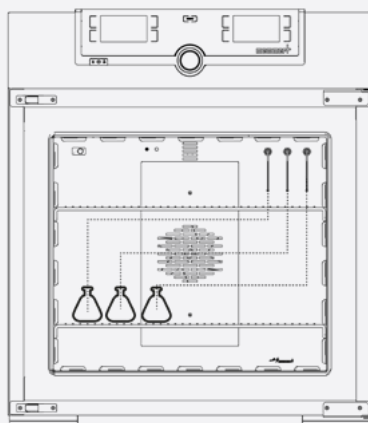


Model sizes/Description		Rapid cooling fan
Description	Specification	Efficient extraction of exhaust air
	Design	Adjustable via exhaust air flap in 10 % increments
Technical data	Position on the appliance	rear position
	Technical feature	Hose connection ø60.3 mm
	Option to control or programme the parameters	AtmoCONTROL AtmoWEB ControlCOCKPIT
Ordering information	Retrofitting	Retrofitting possible (after technical clarification)
	Product requirements	Exhaust air opening
	Restrictions	Performance data deviate from the standard appliances
Order no.		E3m



Sensors | Temperature

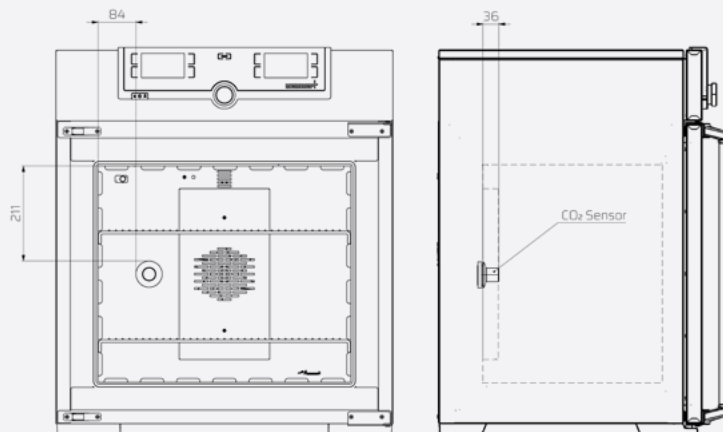
With additional, freely positionable temperature sensors, users have the option of measuring not only the air temperature, but also the temperature of the charging material or water in a tray, for example.



Model sizes/Description		Flexible temperature sensors			
Description	Specification	Pt100 can be flexibly positioned in the interior			
	Design	Connection socket (4-pin) on the rear of the appliance	Temperature indication on the display		
Technical data	Max. Quantity	number	1	2	3
	Option to evaluate the parameters		Interface for external systems	AtmoCONTROL AtmoWEB ControlCOCKPIT	
Ordering information	Retrofitting	Retrofitting possible (after technical clarification)			
Order no.		H4m	H8m	H8m2	H8m3

Sensors | Further parameters

In special applications, it is necessary to monitor a parameter such as relative humidity, although the device cannot actively control the parameter. In this case, m360 can, for example, install a humidity sensor in a UF device, which displays and logs the relative humidity. However, it is still not possible to control the humidity parameter.



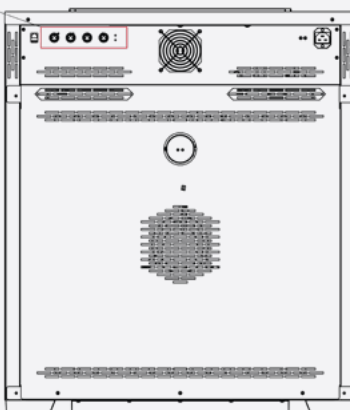
Model sizes/Description		CO ₂	Humidity	O ₂
Description	Specification	Measuring sensors for non-adjustable parameters		
Technical data	Position on the appliance	Interior		
	Technical feature	CO ₂	Humidity	O ₂
	Measuring range of the sensor	0 to 20 % CO ₂	0 to 100 % rh	0 to 25 % O ₂
	Option to evaluate the parameters	AtmoCONTROL AtmoWEB ControlCOCKPIT		
	Temperature resistance (additional option may be required)	70 °C	180	200
Ordering information	Retrofitting	Retrofitting possible (after technical clarification)		
	Product requirements	TwinDISPLAY		
	Restrictions	Parameters are displayed and logged on the appliance display. They cannot be controlled.		
	Required option (depending on device type)	A8		
Order no.		U2m	U1m	U0m



Interfaces | Potential free contact

Potential-free contacts are available for all UF/IF appliances in the Memmert standard portfolio. The m360 team of experts has developed a special configuration for the other product models. Using the AtmoCONTROL appliance software, a dependency can be programmed for options H7 / H72/ H74 and an additional signal is sent to the potential-free contact, e.g. the command to activate ventilation when 300 °C is reached. With the H5option, an interface is mounted on the rear panel of the appliance where external devices, e.g. for humidity monitoring, can be connected.

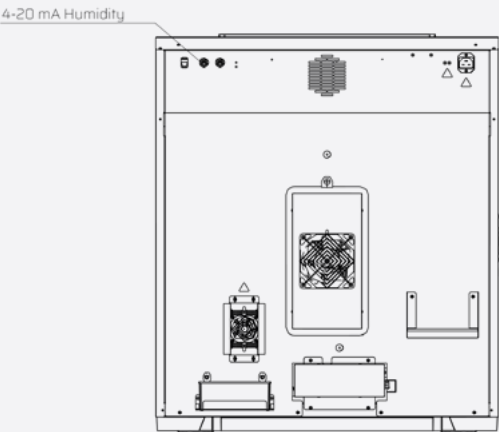
Potential-free contacts



Model sizes/Description		Potential free contact					
Description	Specification	Potential free switching contact (24V / 2A)					
	Design	programmable				Target value reached	
Technical data	Max. Quantity	number	1	2	3	4	1
	Option to control or programme the parameters		AtmoCONTROL				-
	Option to evaluate the parameters		AtmoWEB Interface for external systems				Interface for external systems
Ordering information	Retrofitting		Retrofitting possible (after technical clarification)				
	Product requirements		TwinDISPLAY				-
Order no.			H7m	H7m2	H7m3	H7m4	H5m

Interfaces | 4-20mA

To log the relative humidity in the appliance via an external system, a 4-20mA interface can be installed to output the actual value.

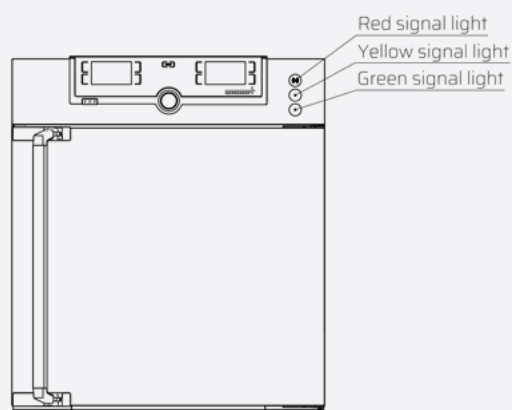


Model sizes/Description		4-20mA interface
Description	Specification	Parameter evaluation humidity via 4-20mA
	Design	0 to 100 % rh = 4-20mA
Technical data	Technical feature	Humidity
	Option to evaluate the parameters	Interface for external systems
Ordering information	Additional information	An additional option may be required for devices without a humidity sensor
	Retrofitting	Retrofitting possible (after technical clarification)
Order no.		V7m



Signal lamp | Control panel

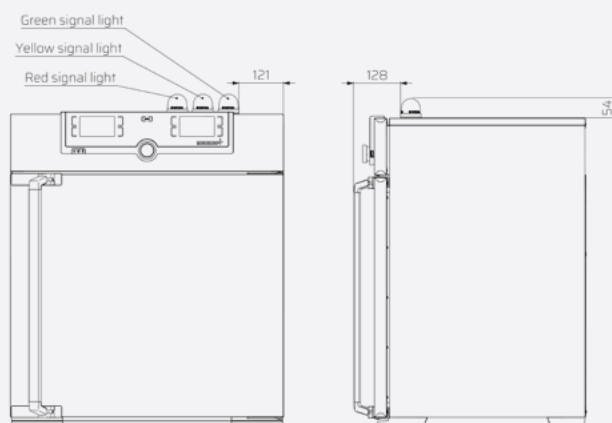
Signal lights allow the user to identify the current status of the ongoing process in the Memmert appliance: green for ongoing operation, yellow for standby and red for an error message. They are particularly useful when several appliances are in use at the same time. They are mounted on the upper panel of the appliance.



Model sizes/Description		Signal lamp Control panel
Description	Specification	Status signal lamps Red = error/alarm Yellow = standby Green = programme is running
Technical data	Position on the appliance	Front cover
	Technical feature	single-colour lights
Ordering information	Retrofitting	Retrofitting possible (after technical clarification)
	Product requirements	TwinDISPLAY
	Restrictions	Other options may be excluded by the installation
	Required option (depending on device type)	H6 H72
Order no.		E0m

Signal lamp | Top cover

Signal lights allow the user to recognise the ongoing process in the Memmert appliance: green for operation, yellow for standby and red for an error message. They are particularly useful when several appliances are in use at the same time. They are mounted on the upper panel of the appliance.

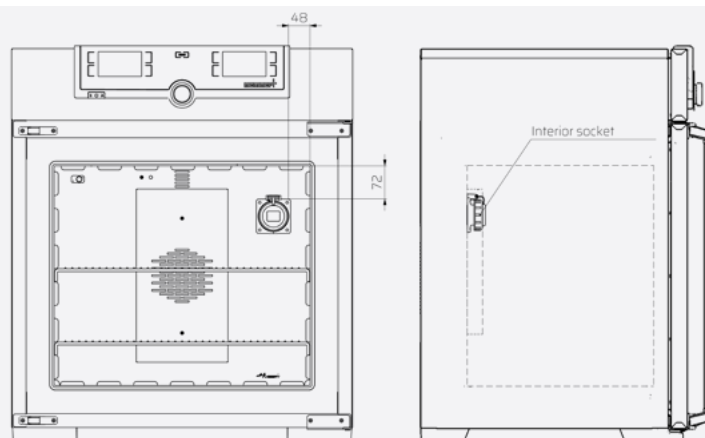


Model sizes/Description		Signal lamp Top cover	
Description	Specification	Status signal lamps Red = error/alarm Yellow = standby Green = programme is running	
Technical data	Position on the appliance	Top cover	
	Technical feature	single-colour lights	multicolor light
	Max. Quantity	3	1
Ordering information	Retrofitting	Retrofitting possible (after technical clarification)	
	Product requirements	TwinDISPLAY	
	Restrictions	Other options may be excluded by the installation	
	Required option (depending on device type)	H6 H72	
Order no.		E1m	E2m



Socket outlet | Interior

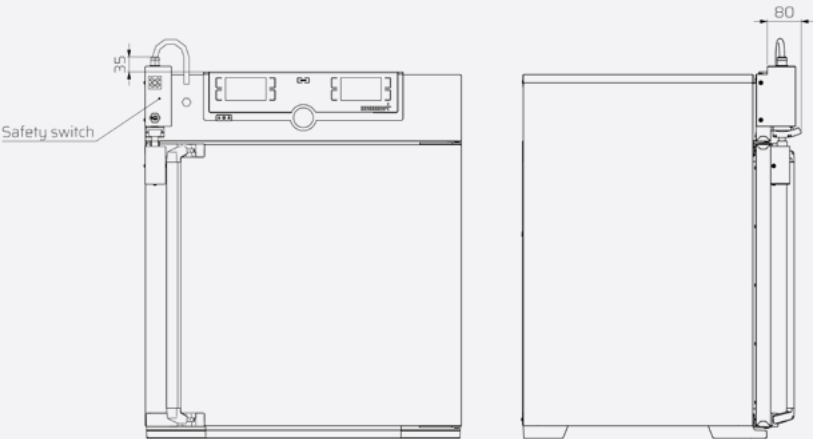
Many users connect additional appliances to their Memmert oven, e.g. shaking devices or scales. If you cannot have an entry port installed and would like more than one interior socket for your appliance, you may contact m360.



Model sizes/Description		Socket outlet			
Description	Specification	Socket outlet in the interior			
	Design	switched on/off via toggle switch on the control panel		switched off via the main switch	
Technical data	Position on the appliance	Interior			
	Socket outlet for plug type	Type F „Schuko-plug“	Type G „UK-plug“	Type F „Schuko-plug“	Type G „UK-plug“
	Protection class	IP68	IP66	IP68	IP66
	Technical feature	230 V / 2,2 A			
	Temperature resistance (additional option may be required) °C	60	40	60	40
Ordering information	Retrofitting	Retrofitting possible (after technical clarification)			
	Required option (depending on device type)	A8			
Order no.		R4m	R44m	R3m	R33m

Door | Safety interlock

The safety door interlock meets high safety standards and can be controlled via external systems. Reliable safety switches make it possible to control almost all process steps and ensure process safety inside the appliance.

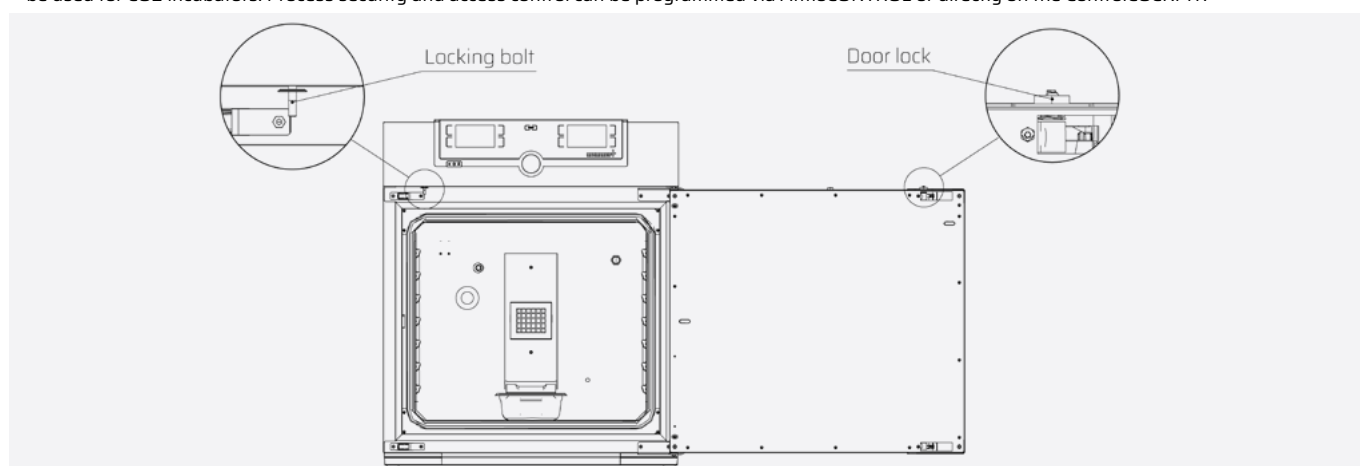


Model sizes/Description		Safety door interlock
Description		Electronic door lock with safety switch: <ul style="list-style-type: none"> Safety switch with guard locking and integrated evaluation electronics <ul style="list-style-type: none"> Locking force up to 6500 N Short circuit monitoring 2 safety outputs (semiconductor outputs) Category 4 / PL e according to EN ISO 13849-1 <ul style="list-style-type: none"> With M23 plug connector (RC18)
	Specification	
Technical data	Option to control or programme the parameters	Interface for external systems
	Option to evaluate the parameters	Interface for external systems
Ordering information	Additional information	Control and programming is performed by external systems
	Retrofitting	Retrofitting possible (after technical clarification)
	Product requirements	single-leaf door
Order no.		E7m



Door | CO₂ incubator locking

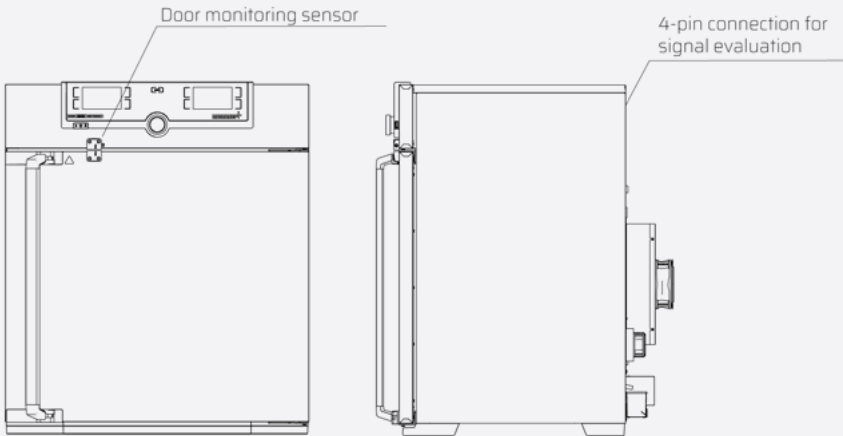
An addition to the standard option portfolio for the ICO appliance series is now available. The process-dependent door lock, developed by m360, can now also be used for CO₂ incubators. Process security and access control can be programmed via AtmoCONTROL or directly on the ControlCOCKPIT.



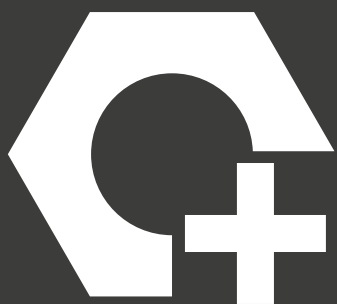
Model sizes/Description		CO ₂ incubator door locking
Description	Specification	Electronic door lock
	Design	Process-dependent programmable door lock
Technical data	Option to control or programme the parameters	AtmoCONTROL AtmoWEB ControlCOCKPIT
Ordering information	Retrofitting	Retrofitting possible (after technical clarification)
	Product requirements	Incubator ICO
Order no.		D4m

Door monitoring

The door status is reliably detected and transmitted to connected control systems. This ensures the monitoring of safety-critical processes and secures operations effectively. An ideal addition to any security system.



Model sizes/Description		all sizes
Description	Specification	Door monitoring sensor for detecting the open and closed status <ul style="list-style-type: none">• Sensor principle: magnetic• Switching distance: 3 mm• Code level according to ISO 14119: low• Classification according to EN 60947-5-3: P0DB• Connection at the device rear: 4-pin plug
Technical data	Position on the appliance	side position
	Option to evaluate the parameters	Interface for external systems
Ordering information	Retrofitting	Retrofitting possible (after technical clarification)
Order no.		E8m



**TECHNICAL
INFORMATION
ACCESSORIES**

Exhaust air | Condensate drainage

Connection cable | lengths

Setup | Stacking rack for vacuum ovens

Setup | Stacking frame

Shelves | Perforated sheets, grids

Heavy-duty | Floor grid

Plug | Stopper entry port

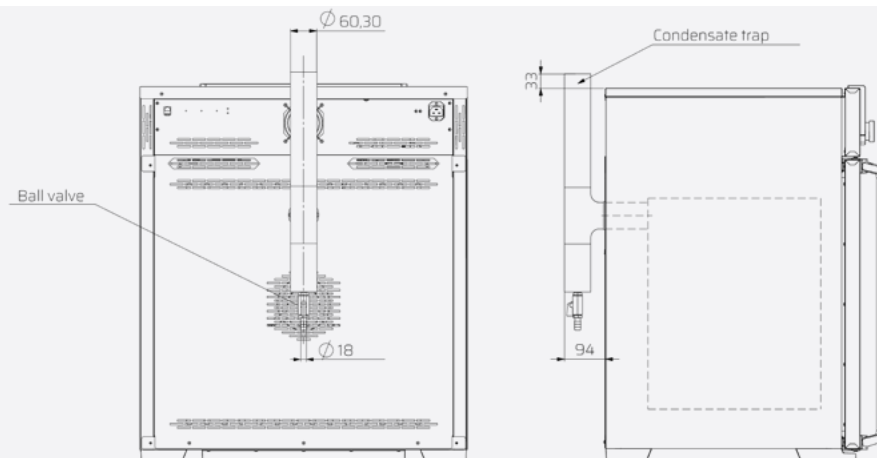
Telescopic slides | Sizes 260 to 1060

Supply air | Filter



Exhaust air | Condensate drainage

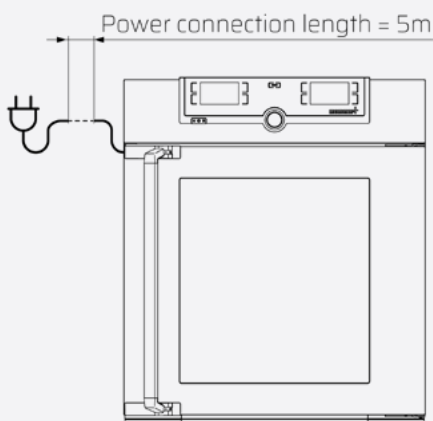
The drying process in a Memmert appliance can produce humid air that needs to be removed. The moist air may condense in the exhaust air and drip down. A special valve with hose nozzle allows the water to run off in a controlled manner. The exhaust air condensate trap is made of stainless steel and is very easy to install - even retrospectively and without a technician.



Model sizes/Description		Condensate drainage
Description	Specification	Condensate drainage for exhaust air opening <ul style="list-style-type: none">Exhaust air pipe $\varnothing 60,3$ mmCondensate drainage $\varnothing 18$ mm
Technical data	Material	stainless steel 1.4301 (ASTM 304)
Ordering information	Retrofitting	Retrofitting possible (after technical clarification)
Order no.		B37684

Connection cable | lengths

With a generous length of 5 metres, the power connection cable for Memmert ovens (230V) ensures a convenient connection and enables the appliance to be supplied with power if it cannot be set up in the immediate vicinity of a socket outlet.



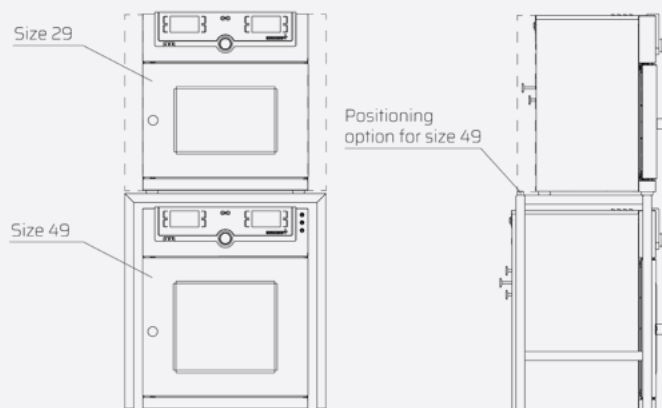
Model sizes/Description

Description	Specification	Extended power connection cable
	Design	5 m
Technical data	Socket outlet for plug type	Type F „Schuko-plug“
	Protection class	IP20
	Technical feature	230 V
Order no.		B58607



Setup | Stacking rack for vacuum ovens

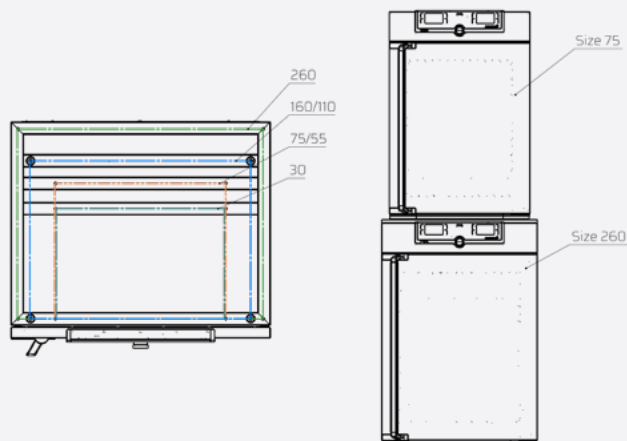
The stacking rack for vacuum ovens enables the space-saving and ergonomic installation of various sizes of vacuum ovens. This allows work processes to be optimised and organisation in the laboratory to be flexible.



Model sizes/Description		29/49	101
Description	Specification	Rack for stacking vacuum ovens VO	
	Design	Stacking of sizes 29 and 49	Stacking of size 101
Ordering information	Additional information	<ul style="list-style-type: none">For appliances of different sizes, the larger appliance must always be at the bottomStacking of different sizes possible	
	Retrofitting	Retrofitting possible (after technical clarification)	
Order no.		B50577	B59029

Setup | Stacking frame

To save space in the laboratory or workshop, Memmert appliances can be stacked. The m360 stacking frame enables appliances of different sizes to be stacked safely, e.g. a UF55 on top of an IF160. For safety reasons, only two appliances can be stacked on top of each other, with the larger of the two appliances at the bottom.

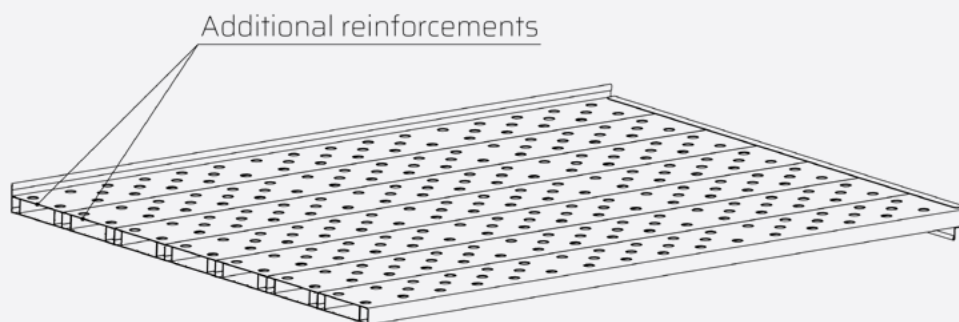


Model sizes/Description		IPPeco /HPPeco		U / I		
Description	Specification	Stacking frame for stacking appliances				
	Design	110	260	55 / 75	110 / 160	260
Technical data	Material	stainless steel 1.4301 (ASTM 304)				
Ordering information	Additional information	<ul style="list-style-type: none">For appliances of different sizes, the larger appliance must always be at the bottom<ul style="list-style-type: none">Stacking of different sizes possible				
	Retrofitting	Retrofitting possible (after technical clarification)				
Order no.		B57998	B58000	B50598	B50599	B50600



Shelves | Perforated sheets, grids

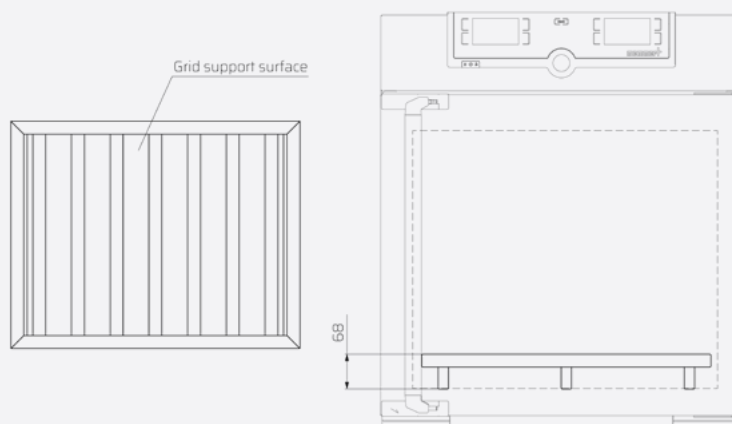
The reinforced perforated shelves are equipped with additional reinforcements and are designed for higher loads. The load capacity increases to 80 kg for appliances without interior fittings (K1) and to 100 kg for appliances with interior fittings (K1). It is essential to ensure that the maximum load limit of the appliance is not exceeded.



Model sizes/Description		260 / 410	450 / 750	1060	260 / 410	450 / 750	1400 / 2200
Description	Specification	Reinforced shelves and special sizes					
	Design	Perforated sheet					Reinforced grid
Technical data	Max. Weight load per level	kg		100	80	60	
	Material	stainless steel 1.4301 (ASTM 304)					
Ordering information	Retrofitting	Retrofitting possible (after technical clarification)					
	Restrictions	Mind the maximum weight load of the appliances					
	Required option (depending on device type)	K1		-			
Order no.		B58460	B58461	B58462	B57086	B52092	B59007 B59004

Heavy-duty | Floor grid

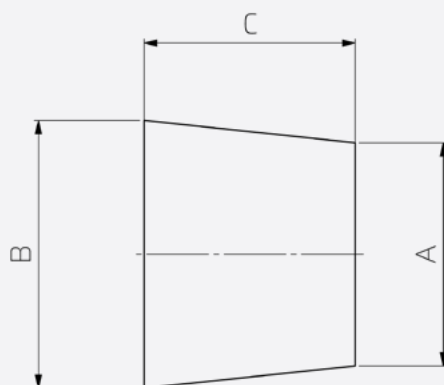
In some applications, the load exceeds the permissible maximum weight of 25 kg - 30 kg per shelf level. The usual perforated shelves and grids must then no longer be loaded. In such cases, a heavy-duty floor grid is recommended that can carry loads of up to 300 kg, depending on the appliance. The heavy-duty floor grid is made of stainless steel and can be combined with all options. On request, the floor grating can also be adapted so that special interior fittings can be attached.



Model sizes/Description		30	55/75	110/160	260/410		450/750	1060	
Description	Specification	Floor grid for product storage at the base of the appliance							
Technical data	Position on the appliance	Below the appliance							
	Material	stainless steel 1.4301 (ASTM 304)							
Ordering information	Restrictions	The maximum weight load of the appliance must not be exceeded							
Order no.		E50944	E46407	E36692	E60492	E36704	B31972	E40438	E50547

**Plug | Stopper entry port**

In order to keep the climatic conditions of an appliance with a entry port constant during operation, the use of a stopper is recommended.



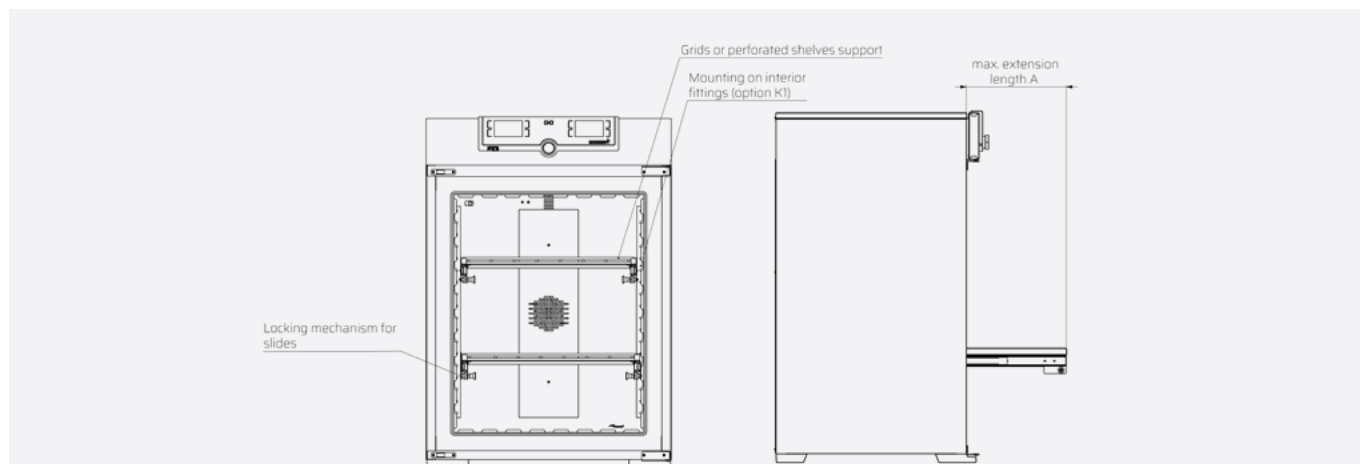
Model sizes/Description				Ø23	Ø37	Ø57	Ø100
Description	Specification			Stopper for entry ports			
Technical data	Outer diameter	A	mm	21	37	50.5	94
	Outer diameter	B	mm	27	45	59.5	107
	Length	C	mm	30	42	45	64
	Temperature resistance (additional option may be required)		°C	200			
	Material				Silicone		
Order no.				E05387	E07479	E05389	E05386

Model sizes/Description				Ø23	Ø37	Ø57	Ø80	Ø100-120
Description	Specification			Stopper for entry ports				
Technical data	Outer diameter	A	mm	21	33.2	53.8	69.9	88.9
	Outer diameter	B	mm	27	41.2	63.7	88.9	127
	Length	C	mm	28.3	25.4		38.1	50.8
	Temperature resistance (additional option may be required)		°C	300				
	Material				Silicone			
Order no.				E07698	E07699	E07700	E07701	E07702

Model sizes/Description				Ø14	Ø23	Ø37	Ø57	Ø80	Ø100	Ø120
Description	Specification			Stopper for entry ports						
Technical data	Outer diameter	A	mm	13	23	38	55	75	96	116
	Outer diameter	B	mm	17.5	30	42	66	87	108	128
	Length	C	mm	25	33	46	52			
	Temperature resistance (additional option may be required)		°C	180						
	Material				Silicone (sponge)					
Order no.				E05790	E05361	E05362	E07865	E05625	E07866	E05920

Telescopic slides | Sizes 260 to 1060

Telescopic slides enable a Memmert appliance to be loaded more ergonomically. The pull-outs can be combined with grids and perforated shelves and each pull-out can carry a load of 60 kg. As a rule, three to four telescopic slides can be installed per appliance, but more slides are also possible after technical clarification.

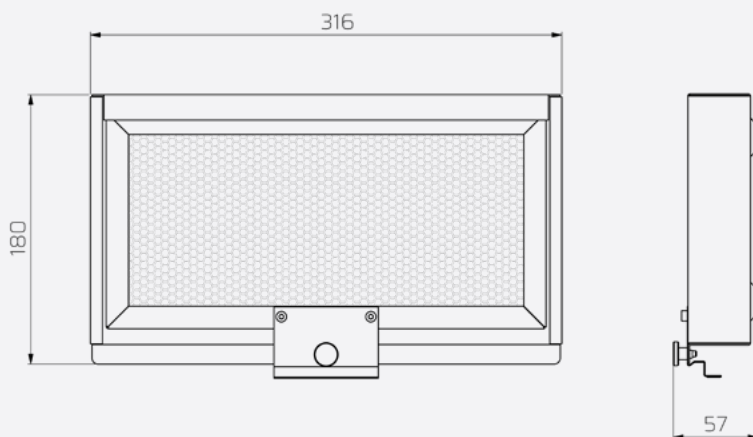


Model sizes/Description				260/410	450/750	1060	260/410	450/750	1060
Description	Specification			Installation of telescopic slides					
	Design			Grid			Perforated sheet		
Technical data	Position on the appliance			Interior K1 extension					
	Max. Weight load per level								



Supply air | Filter

G3 filter (option R8) with 80% separation efficiency can be configured for Memmert appliances from series production. This filter prevents coarse particles from entering the interior of the appliance. For users who want to work with as few particles as possible but do not have a clean room, m360 offers the HEPA filter H13 (filtration efficiency of 99.95%). Other filter types, such as an F7 ultra-fine filter, are also available on request and after technical consultation.



Model sizes/Description

Description	Specification	Filter for supply air filter holder	
Technical data	Filter class	F7	H13
Ordering information	Retrofitting	Retrofitting possible (after technical clarification)	
	Required option (depending on device type)	R81m R82m R8	
Order no.		E07438	E07439

PERSONAL NOTES

SOLUTIONS FOR YOU



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