

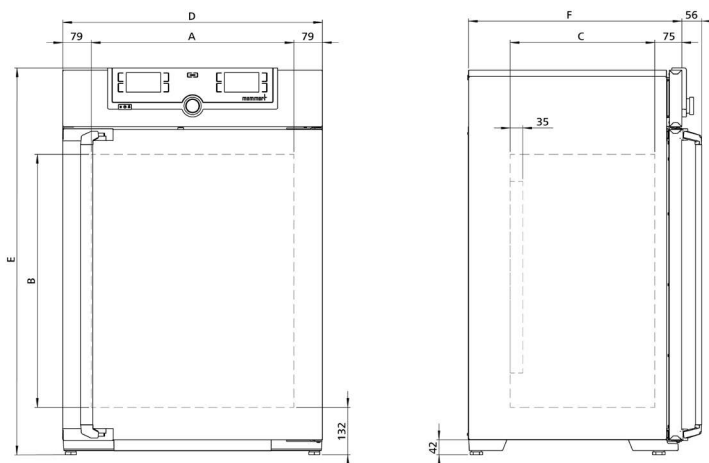
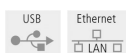
CO₂ INCUBATORS ICO

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

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



- Interior: stainless steel, material 1.4301 (ASTM 304), deepdrawn, seamlessly welded
- 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 door with 2-point locking (compression door lock) and heated inner glass door
- Connection: mains cable with plug (German type)
- Installation: 4 adjustable appliance feet
- Interfaces:



Model sizes/Description				50	105	150	240
Stainless steel interior	Volume	I		56	107	156	241
	Width	(A)	mm	400	560		600
	Height	(B)	mm	425	480	700	810
	Depth (less 35 mm for fan)	(C)	mm	330	400		500
	Max. number of grids/shelves		number	5	6	10	12
	Max. loading per grid/shelf		kg	15			
	Max. loading of chamber		kg	75	90	120	140
Textured stainless steel exterior	Width	(D)	mm	559	719		759
	Height	(E)	mm	795	850	1070	1180
	Depth (without door handle, depth of handle +56 mm)	(F)	mm	521	591		691
Standard equipment	Works calibration certificate (measuring point chamber centre) at +37 °C, 5 % CO ₂ for standard units			●			
	Works calibration certificate at +37 °C, 5 % CO ₂ and 90 % rh (requires option K7); standard equipment for units with active humidity control			●			
	Works calibration certificate at +37 °C, 5 % CO ₂ , 90 % rh and 10 % O ₂ (requires option K7 and option T6); standard equipment for units with O ₂ control			●			
	Perforated stainless steel shelf	number	1	2			
	Stainless steel water dish (not applicable with option K7)			●			
	CO ₂ connection set: hose with coupling and clamp			●			
	Standard sterilisation programme (without removing the sensors), humidity and CO ₂ sensor sterilised inside the CO ₂ incubator			60 minutes at 180 °C			
	Membrane filter (in order to remove impurities and pollutants, all incoming gases pass through a membrane filter before they reach the chamber)			●			
Temperature	Working temperature range	°C	at least 5 above ambient temperature up to +50				
	Setting temperature range	°C	+18 to +50				
	Setting accuracy	°C	0,1				
	Temperature fluctuations with time at +37 °C	K	± 0,1				
	Temperature variation in chamber at +37 °C	K	± 0,3				
Humidity	Setting range active humidity control (with option K7)	% rh	40 to 97 and rh-off				
	Setting accuracy	% rh	0,5				
CO ₂ / O ₂	Variation in time CO ₂	% CO ₂	± 0,2				
	Setting accuracy CO ₂	% CO ₂	0,1				
	Setting range CO ₂	% CO ₂	0 to 20				
	Setting accuracy O ₂	% O ₂	0,1				
	Setting range O ₂	% O ₂	1 to 20				
Further data	Electrical load at 230 V, 50/60 Hz	W	1100	1300	1500	1650	
	Electrical load at 115 V, 50/60 Hz	W	1100	1300	1500	1650	

Model sizes/Description			50	105	150	240
Packing data	Net weight	kg	55	75	90	110
	Gross weight (packed in carton)	kg	74	100	116	145
	Width	mm	730	800		840
	Height	mm	950	1030	1250	1360
	Depth	mm	640	800		900
Order No. CO ₂ Incubators			ICO50	ICO105	ICO150	ICO240

Options	50	105	150	240
Voltage 115 V, 50/60 Hz		X2		
Battery-buffered ControlCOCKPIT: Uninterrupted supply for the entire display unit (ControlCOCKPIT) and therefore complete documentation of all parameters even when there is a power failure. The CO ₂ parameter is continuously regulated		C2		
Two gas connections with quick release connectors for automatic switch-over of gas cylinders; incl. two CO ₂ connection sets: hose with coupling and clamp		T1		
Electropolished interior		T2		
Active microprocessor control for humidifying and dehumidifying (40 - 97 % rh), incl. digital indication and auto-diagnostic system ensures even more rapid reaching of set humidity and very short recovery times while avoiding condensate formation. Humidity supply with water (only for demineralised water with a conductivity of 5 to 10 µS/cm and a pH value between 5 and 7; from an external tank) by a self-priming pump; integral bacteria block by generating hot steam, dehumidifying via sterile filter (combination of options K7 and F7 for ICO50 not possible)		K7		
Control of oxygen concentration by N ₂ inlet; adjustment range 1 % up to 20 % O ₂ ; setting accuracy 0.1 % (requires option K7). Incl. N ₂ connection set: hose with coupling and clamp		T6		
Peltier cooling unit enables a working temperature of +37 °C even at higher ambient temperatures of up to +35 °C (combination of options K5 and F7 for ICO50 and ICO105 not possible)		K5		
Capacitive humidity sensor for measuring and displaying the relative humidity		K6		
Entry port (silicone), 40 mm clear diameter, moisture tight, can be closed by silicone stopper, at the back, centre right; not available for ICO50 with active humidity control (option K7) or humidity display (option K6)		F7		
4 - 20 mA current loop interface	Temperature controller, actual value (0 to +70 °C = 4 - 20 mA)	V3		
	Humidity controller, actual value (0 to 100 % rh = 4 - 20 mA) (requires option K7 or K6)	V7		
	CO ₂ controller, actual value (0 to 25 % CO ₂ = 4 - 20 mA) (requires option T6 or K7)	V9		
	O ₂ controller, actual value (0 to 25 % O ₂ = 4 - 20 mA) (requires option T6 or K7)	V1		
Heated inner door with partitioned glass doors; size 105/150/240 has 2/3/4 partitioned glass doors	-		K4	
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		
MobileALERT, notification by SMS in case of any error or alarm of the device (requires option H6)		C3		
MobileALERT for up to 4 alarm messages (requires option H6 and K6 or K7); alarm via SMS text; temperature and CO ₂ alarm (standard), additionally humidity alarm (with option K6 or K7) and O ₂ alarm (with option T6)		C4		

Accessories			50	105	150	240
Perforated stainless steel shelf			E35160	E37418		E35158
Central water supply, with filter cartridges for connection to the domestic water supply (requires option K7). 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 5 to 10 µS/cm and a pH value between 5 and 7, requires option K7). Product information on demand				ZWVR7		
Stacking set (consisting of stacking corners, one connecting plate for the rear, two wall brackets) for stacking of two units of same size (requires subframe B33509 or B43598)				-		B48129
Stacking set (consisting of stacking corners, one connecting plate for the rear, two wall brackets) for stacking of two units of same size			-		B42114	-
Stacking set (4 pcs) for stacking of appliances of same size			B29744		-	
Subframe, on castors (height 120 mm; stainless steel, material 1.4301)				-		B43598
Subframe (622 mm high) adjustable in height (sizes 150/240: should not be used for 2 stacked units)			B33504	B33505		B33506
Subframe (130 mm high); sizes 150/240: only in combination with the corresponding stacking sets for stacked appliances			B33507	B33508		B33509
Water dish				B38737		
3 HEPA14-filters (B49800) for chamber according to EN 1822, packed in sterile condition, incl. fixing unit				B39698		
HEPA14-filter for chamber according to EN 1822, packed in sterile condition, incl. fixing unit				B49800		
CO ₂ pressure reducing valve to DIN 8546, incl. gas cylinder monitor				E02087		
N ₂ pressure reducing valve to DIN EN ISO 2503, incl. gas cylinder monitor (requires option T6)				E06162		
External measuring instrument with additional measuring head for temperature and humidity measurement. Product information on demand				B04714		

