

CO₂-cooled incubator ICPeco with TwinDISPLAY AtmoCONTROL software

Model sizes: 110 / 260 / 450 / 750

-12 °C to +60 °C

COMPRESSOR-COOLED INCUBATOR ICPeco These

environmentally-friendly cooled incubators are cooled with climate-friendly CO₂. Thanks to this refrigerant's excellent thermodynamic properties and the finely adjusted control technology, an ICPeco is both powerful and high-precision. Without critical temperature overshoots, it keeps the temperatures exactly at the setpoint.



Refrigerant CO₂ is climate-friendly

A CO_2 -cooled incubator ICPeco is in every respect positive for the ecological balance of a laboratory. Legal restrictions for use are completely excluded in the future, as the refrigerant CO_2 (R744), unlike fluorine-based refrigerants, has no greenhouse gas reduction potential. It is a by-product of industrial processes, which is why far less energy is used for its manufacture than for synthetic, fluorinated refrigerants. R744 is neither flammable nor toxic and does not cause ozone depletion in the atmosphere.



Refrigerant CO₂ ensures better cooling performance

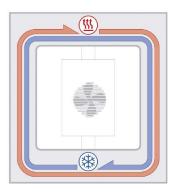
The contribution to process optimisation is also impressive. An ICPeco is extremely powerful. Compared to appliances with R134a as refrigerant, it has faster temperature change rates during cooling-down.



Completely enclosed working chamber

Cooling and heating units are situated outside the working chamber inside the air jacket temperature control system surrounding the entire chamber interior ensuring quick and precise temperature control. The motor-driven forced air circulation, adjustable in 10 % steps via the ControlCOCKPIT ensures optimum temperature distribution.

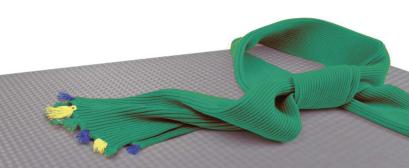




ICP air jacket temperature control system

Integrated energy saving function

The cooling unit works extremely energy-efficient because the heating is completely switched off in cooling mode. An intelligent DEFROST function enables defrosting as required.



COMPRESSOR-COOLED INCUBATORS ICPeco

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

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



Stainless steel, material 1.4301 (ASTM 304) Interior:

Housing:

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

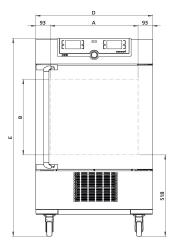
Connection: Mains cable with plug (German type)

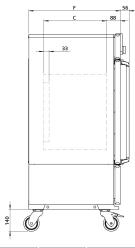
Mounted on lockable castors Installation:

Interfaces:

Ethernet D LAN D







Model sizes/Descrip	otion		110	260	450	750	
Stainless steel interior	Volume	approx. l	108	256	449	749	
	Width	(A) mm	560	640	10	40	
	Height	(B) mm	480	800	720	1200	
	Depth (less 33 mm for fan)	(C) mm	400	500 60		00	
	Max. number of grids/shelves	number	5	9	8	14	
	Max. loading per grid/shelf	kg	2	20 30			
	Max. loading of chamber	kg	150	200			
	Max. loading per slide-in drip tray	kg	3	4		3	
	Max. loading per bottom drip tray	kg	3	4		3	
Textured stainless	Width	(D) mm	745	824	12	24	
steel exterior	Height (with castors)	(E) mm	1233	1552	1467	1950	
	Depth (without door handle, depth of handle +56 mm)	(F) mm	584	684	7	84	
Standard	Stainless steel grids, electropolished	number	2				
equipment	Standard works calibration certificate (measuring point chamber center)	°C	+10 and +37				
Temperature	Working temperature range (not suitable for long-term storing at sub-zero temperatures. During permanent operation, the inner glass door may ice over)	°C	-12 to +60				
	Setting temperature range	°C	-12 to +60				
	Setting accuracy	°C	0.1				
Further data	Electrical load at 230 V, 50 Hz	approx. W	1200				
Packing data	Net weight	approx. kg	118	162	222	254	
	Gross weight (packed in carton)	approx. kg	146	219	287	324	
	Width	approx. mm	880	930	13	30	
	Height	approx. mm	1410	1760	1700	2150	
	Depth	approx. mm	810	930	10	50	
Ouder No. Commun	oscor Cooled Incubators				ICDAFO		

Order No. Compressor-Cooled Incubators

ICP110eco ICP260eco ICP450eco ICP750eco

Options		110	260	450	750			
Chamber modification for the application of reinforce grids (bearing rails mounted in the working chamber reinforced grids		- K1						
Interior socket, ampacity 230 V/2.2 A, can be switched off with the On/Off switch, cannot be switched individually, moisture tight IP68			R3					
Entry port, 23 mm clear diameter, for introducing connections at the side, can be closed by flap and silicone stopper, standard positions	left centre/centre left centre/top right centre/top	-	F0 F1 - F3					
Entry port (silicone), 40 mm clear diameter, moisture (please state location)	tight, can be closed by silicone stopper, at the back	F7						
4 - 20 mA current loop interface	Temperature controller, actual value (-20 to +70 °C = $4 - 20$ mA)	V3		/3				
	Temperature of a Pt100 sensor positioned flexibly in chamber for external temperature monitoring (max. 3) - price per sensor (-20 to $+70 ^{\circ}\text{C} = 4 - 20 \text{mA}$)		\	/6				
Fan speed monitoring with switching off the heating	and with alarm in case of failure	V4						
Works calibration certificate for 3 temperatures: 0, +37, +60 °C			D00130					
Works calibration certificate for one (freely selectable) temperature value according to customer specification		D00109						
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			V5					
MobileALERT, notification by SMS in case of any error	or alarm of the device (requires option H6)		([3				

Mobile ALERY, Hountagion by Sivis in case of any chor of alarm of the device (requires option 110)				
Accessories	110	260	450	750
Stainless steel grid, electropolished	E20165	E28891 E20182		182
Reinforced stainless steel grid, electropolished, max. loading 60 kg; from size 450 with guide bars and fixing screws (only in connection with option K1). Please consider max. loading of chamber	E29767	E29766	B32	190
Perforated stainless steel shelf	B00325	25 B29725 B00328		328
Reinforced stainless steel shelf, max. loading 60 kg; with guide bars and fixing screws (requires option K1). Please consider max. loading of chamber		-	B32	191
Stainless steel slide-in drip tray, 15 mm rim (may affect the temperature distribution, not in connection with option K1)	E02073	E29726	E02	075
Stainless steel slide-in drip tray, 15 mm rim, with guide bars and fixing screws (may affect the temperature distribution, only in connection with option K1)	- B32		763	
Stainless steel bottom drip tray, 15 mm rim (may affect the temperature distribution, not in connection with option K1)	B04359	B29722	B04	362
Stainless steel bottom drip tray, 15 mm rim (may affect the temperature distribution, only in connection with option K1)		-	B34	055
USB-Ethernet adapter		E06	192	
Ethernet connection cable 5 m for computer interface	E06189			
USB User-ID stick (with User-ID licence): Oven-linked authorisation licence (User-ID-programme) on Memory-stick, prevents undesired manipulation by unauthorised third parties. When reordering please specify serial number	B33170			
FDA conforming software AtmoCONTROL (FDA edition). Meets the requirements for the use of electronically stored data sets and electronic signatures as laid down in Regulation 21 CFR Part 11 of the US Food and Drug Administration (FDA). Base licence for the control of one unit. Respective IQ/OQ documents available in German and English language (without surcharge)	FDAQ1			
Integration of additional units (up to max. 31 units) into an already existent FDA-software licence	FDAQ2			
DAkkS calibration for one free-selectable temperature value according to method C (DKD-R 5-7)	E39696		696	
S calibration for further temperature values according to method C (DKD-R 5-7)		E39697		
IQ document with device-specific works test data, OQ/PQ check list as support for validation by customer	D00		0124	
IQ/OQ document with device-specific works test data for one free-selectable temperature value, incl. temperature distribution survey at Memmert for 27 measuring points to DIN 12880:2007-05. PQ check list as support for validation by customer. 305 € for further temperature values	D00127			
On-site IQ/OQ for a freely selectable temperature value, including temperature distribution survey for 27 measuring points to DIN 12880: 2007-05 (excluding travel costs, not subject to discount, GER, AT, FR only)	DLQ100			
Extension of DLQ100 by an additional freely selectable temperature value (not subject to discount)	DLQ100A			
dividual on-site Performance Qualification (PQ)		DLQ200		
Maintenance ICP/ ICPeco - carrying out and documentation according to Memmert maintenance plan (excluding travel costs, not subject to discount, GER, AT, FR only)	S00315			
Maintenance contract ICP/ ICPeco - carrying out and documentation according to Memmert maintenance plan, minimum duration 3 years (excluding travel costs, not subject to discount, GER, AT, FR only)		S003	315J	
Calibration of one freely selectable temperature value (excluding travel costs, not subject to discount, GER, AT, FR only)		S00205		
Calibration of an additional temperature value (not subject to discount)		S00	215	

COMPRESSOR-COOLED INCUBATORS ICP

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Housing:

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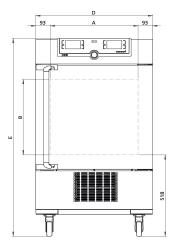
Connection: Mains cable with plug (German type)

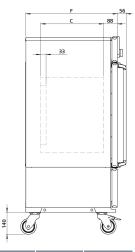
Installation: Mounted on lockable castors

Interfaces:

Ethernet D LAN D







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	Depth (less 33 mm for fan)	(C) mm	400	500 6		00
	Max. number of grids/shelves	number	5	9	8	14
	Max. loading per grid/shelf	kg	20 30			0
	Max. loading of chamber	kg	150	200		
	Max. loading per slide-in drip tray	kg	3	4		3
	Max. loading per bottom drip tray	kg	3	4	1	3
Textured stainless	Width	(D) mm	745	824	12	24
steel exterior	Height (with castors)	(E) mm	1233	1552	1467	1950
	Depth (without door handle, depth of handle +56 mm)	(F) mm	584	684	78	34
Standard	Stainless steel grids, electropolished	number	2			
equipment	Standard works calibration certificate (measuring point chamber center)	°C	+10 and +37			
Temperature	Working temperature range (not suitable for long-term storing at sub-zero temperatures. During permanent operation, the inner glass door may ice over)	°C	-12 to +60			
	Setting temperature range	°C	-12 to +60			
	Setting accuracy	°C	0.1			
Further data	Electrical load at 230/115 V, 50/60 Hz	approx. W	1200			
Packing data	Net weight	approx. kg	113	157	217	249
	Gross weight (packed in carton)	approx. kg	141	214	282	319
	Width	approx. mm	880	930	13	30
	Height	approx. mm	1410	1760	1700	2150
	Depth	approx. mm	810	930	10	50
Order No. Compre	ssor-Cooled Incubators		ICP110	ICP260	ICP450	ICP750

Options		110	260	450	750		
Voltage 115 V, 50/60 Hz		X2					
Chamber modification for the application of reinfor grids (bearing rails mounted in the working chamber reinforced grids	ced perforated stainless steel shelves or stainless steel er) - includes replacement of standard grids by	- K1					
Interior socket, ampacity 230 V/2.2 A, can be switch individually, moisture tight IP68	hed off with the On/Off switch, cannot be switched	R3					
Entry port, 23 mm clear diameter, for introducing connections at the side, can be closed by flap and silicone stopper, standard positions	left centre/centre left centre/top		F0 F1				
Sincorre Stopper, Standard positions	right centre/top	-		F3			
Entry port (silicone), 40 mm clear diameter, moistu (please state location)	re tight, can be closed by silicone stopper, at the back	F7					
4 - 20 mA current loop interface	4 - 20 mA current loop interface (-20 to +70 $^{\circ}$ C = 4 to 20 mA)		V	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)		V	/ 6			
Fan speed monitoring with switching off the heating	ng and with alarm in case of failure		V	' 4			
Works calibration certificate for 3 temperatures: 0,	D00130						
Works calibration certificate for one (freely selectable) temperature value according to customer specification			D00109				
Door with lock and key (safety lock)	B6						
Potential-free contact for combination error message	g. supply failure, sensor fault, fuse) H6						
Door-open-recognition	pen-recognition V5						
MobileALERT, notification by SMS in case of any en	or or alarm of the device (requires option H6)		C	:3			

Accessories	110	260	450	750
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Perforated stainless steel shelf	B00325	B29725 B00328		328
Reinforced stainless steel shelf, max. loading 60 kg; with guide bars and fixing screws (requires option K1). Please consider max. loading of chamber	- B3219		191	
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Stainless steel slide-in drip tray, 15 mm rim, with guide bars and fixing screws (may affect the temperature distribution, only in connection with option K1)		- B3		763
Stainless steel bottom drip tray, 15 mm rim (may affect the temperature distribution, not in connection with option K1)	B04359	B29722	B04	362
Stainless steel bottom drip tray, 15 mm rim (may affect the temperature distribution, only in connection with option K1)		-	B34	055
USB-Ethernet adapter		E06	192	
Ethernet connection cable 5 m for computer interface		E06	189	
USB User-ID stick (with User-ID licence): Oven-linked authorisation licence (User-ID-programme) on Memory-stick, prevents undesired manipulation by unauthorised third parties. When reordering please specify serial number	B33170			
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Integration of additional units (up to max. 31 units) into an already existent FDA-software licence	FDAQ2			
DAkkS calibration for one free-selectable temperature value according to method C (DKD-R 5-7)	E3969		E39696	
DAkkS calibration for further temperature values according to method C (DKD-R 5-7)	E3		E39697	
IQ document with device-specific works test data, OQ/PQ check list as support for validation by customer	D00		0124	
IQ/OQ document with device-specific works test data for one free-selectable temperature value, incl. temperature distribution survey at Memmert for 27 measuring points to DIN 12880:2007-05. PQ check list as support for validation by customer. 305 € for further temperature values	D00127		1127	
On-site IQ/OQ for a freely selectable temperature value, including temperature distribution survey for 27 measuring points to DIN 12880: 2007-05 (excluding travel costs, not subject to discount, GER, AT, FR only)	DLQ100			
Extension of DLQ100 by an additional freely selectable temperature value (not subject to discount)	DLQ100A			
dividual on-site Performance Qualification (PQ)		DLQ200		
Maintenance ICP/ ICPeco - carrying out and documentation according to Memmert maintenance plan (excluding travel costs, not subject to discount, GER, AT, FR only)	S00315			
Maintenance contract ICP/ ICPeco - carrying out and documentation according to Memmert maintenance plan, minimum duration 3 years (excluding travel costs, not subject to discount, GER, AT, FR only)	S00315J			
Calibration of one freely selectable temperature value (excluding travel costs, not subject to discount, GER, AT, FR only)		S00205		
Calibration of an additional temperature value (not subject to discount)		S00215		