Humidity chamber HCP
with TwinDISPLAY
AtmoCONTROL software

Model sizes: 50 / 105 / 150 / 240
+18 °C to +90 °C
Humidity 20 to 95% rh

HUMIDITY CHAMBER HCP with active humidity control from 20 % to 95 % rh and unsurpassed real temperature-humidity homogeneity over the entire interior, this nearly condensation-free climate chamber offers the full range of comfort, reliability and safety. It is ideally suited for environmental tests, accelerated life tests, stress tests of drug substance according to ICH Q1A and 85/85 tests to IEC 60068-2-67 and IEC 60068-2-78. It is also used in building physics and biological research.

Optimum homogeneity of humidity and temperature

Active humidity control guarantees ideal homogeneity of temperature and humidity as well as short recovery times after opening the door. In addition, in combination with heating on all six sides, including the heated inner glass door, it minimises vaporisation in the interior and thus the risk of condensed water dripping onto the test object. An aluminium thermal conduction layer supports the optimal temperature distribution and serves as a heat accumulator if there is a temporary power failure.

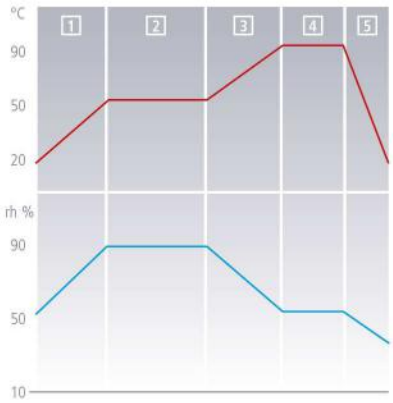
Comfortable equipment for accelerated service life tests

Service life tests such as 85/85 tests run over 1,000 hours and more. The humidity chamber HCP offers a wide range of comfort functions: Standard entry ports at the back, battery-buffered ControlCOCKPIT (option), with SetpointWAIT function process time does not start until the set temperature is reached, alarm messages can be sent via e-mail or SMS (option) and much more.

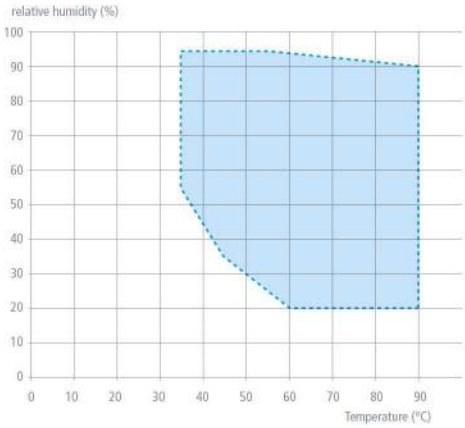
Ramp programming

Essential for the exact simulation of environmental conditions in research: intuitive and fast ramp programming. Thanks to the AtmoCONTROL software, different set values of temperature and humidity can be combined on time ramps.

Ramp programming



Temperature-humidity working range



Note: Within the respective temperature-humidity range, permanent operation is possible (at an ambient temperature of 22 °C ± 3 K; relative humidity < 50 %). Condensation may occur in the threshold range. To which extent depends on the humidity content of the chamber load and the ambient conditions.

HUMIDITY CHAMBERS HCP

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:

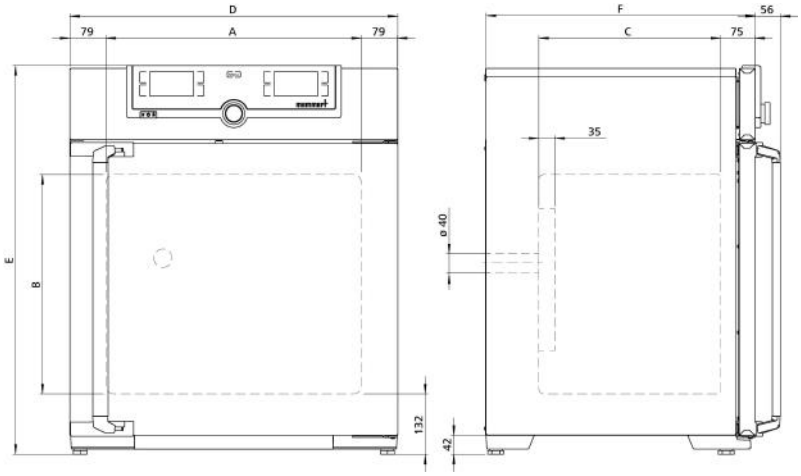
Interior: Stainless steel, material 1.4301 (ASTM 304), deep-drawn, seamlessly welded

Housing: Textured stainless steel, rear zinc-plated steel, intuitively operated TwinDISPLAY (TFT colour display) with touchscreen; fully insulated stainless steel door and heated inner glass door

Connection: Mains cable with plug (German type)

Installation: 4 adjustable feet

Interfaces: Ethernet LAN, USB



Model sizes/Description				50	105	150	240
Stainless steel interior	Volume		approx. l	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 (variable through adjustable feet)	(E)	mm	795	850	1070	1180
	Depth (without door handle, depth of handle +56 mm)	(F)	mm	521	591		691
	Fully insulated heated stainless steel door			●			
	Additional heated inner glass door			●			
Standard equipment	Stainless steel shelves, perforated		number	1	2		
	Entry port (silicone), 40 mm clear diameter, moisture tight, can be closed by silicone stopper, at the back, centre left			●			
	Door-open-recognition incl. alarm, shuts down fan			●			
	Standard works calibration certificate (measuring point chamber center)			+60 °C with 75 % rh			
Temperature	Working temperature range		°C	at least 7 above ambient temperature up to +90			
	Setting temperature range		°C	+18 to +90			
	Setting accuracy		°C	0.1			
Humidity	Capacitive humidity sensor for measuring and displaying the relative humidity			●			
	Active microprocessor control for humidifying and dehumidifying (20 – 95 % rh), incl. digital indication and auto-diagnostic system ensures even more rapid reaching of set humidity and very short recovery times. 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			●			
	Setting range active humidity control		% rh	20 to 95 and rh-Off			
	Setting accuracy		% rh	0.5			
Further data	Electrical load at 230/115 V, 50/60 Hz		approx. W	1520	1720	1800	1840
Packing data	Net weight		approx. kg	55	75	90	110
	Gross weight (packed in carton)		approx. kg	74	100	116	145
	Width		approx. mm	730	800		840
	Height		approx. mm	950	1030	1250	1360
	Depth		approx. mm	640	800		900
Order No. Humidity Chambers				HCP50	HCP105	HCP150	HCP240

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

Options		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		C2			
Entry port, 23 mm clear diameter, at the side	left centre/top	F1			
	right centre/top	F3			
4 - 20 mA current loop interface	Temperature controller, actual value (0 to +100 °C = 4 - 20 mA)	V3			
	Humidity controller, actual value (0 to 100 % rh = 4 - 20 mA)	V7			
Works calibration certificate for one (freely selectable) temperature and humidity value according to customer specification		D00105			
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 humidity alarm		C4			
Door with lock and key (safety lock)		B6			

Accessories	50	105	150	240
Perforated stainless steel shelf	E35160	E37418		E35158
Stainless steel grid, electropolished	E20164	E20165		E43118
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
Subframe, on castors (height 120 mm; stainless steel, material 1.4301)	-			B43598
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 5 to 10 µS/cm and a pH value between 5 and 7). Product information on demand	ZWVR7			
Guarantee extension by 1 year	GA3Q5			
USB-Ethernet adapter	E06192			
Ethernet connection cable 5 m for computer interface	E06189			
USB User-ID stick (with User-ID licence): Oven-linked authorisation licence (User-ID-programme) on Memory-stick, prevents undesired manipulation by unauthorised third parties. When reordering please specify serial number	B33170			
Stacking set (4 pcs) for stacking of appliances of same size	B29744		-	
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 (consisting of stacking corners, one connecting plate for the rear, two wall brackets) for stacking of two units of same size (only in connection with subframe B33509 or B43598)	-			B48129
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			
External measuring instrument with additional measuring head for temperature and humidity measurement. Product information on demand	B04714			
DAkkS calibration for one (freely selectable) temperature and humidity value according to method C (DKD-R 5-7)	E48847			
DAkkS calibration for further temperature and humidity values according to method C (DKD-R 5-7)	E48848			
IQ document with device-specific works test data, OQ/PQ check list as support for validation by customer	D00124			
IQ/OQ document with device-specific works test data for one free-selectable temperature and humidity 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. 475 € for further temperature and humidity values	D00136			
On-site IQ/OQ for a freely selectable temperature and humidity 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)	DLQ101			
Extension of DLQ101 by an additional freely selectable temperature and humidity value (not subject to discount)	DLQ101A			
Individual on-site Performance Qualification (PQ)	DLQ200			
Maintenance HCP - carrying out and documentation according to Memmert maintenance plan (excluding travel costs, not subject to discount, GER, AT, FR only)	S00313			
Maintenance contract HCP - carrying out and documentation according to Memmert maintenance plan, minimum duration 3 years (excluding travel costs, not subject to discount, GER, AT, FR only)	S00313J			
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			
Calibration of one freely selectable temperature and humidity value (excluding travel costs, not subject to discount, GER, AT, FR only)	S00207			
Calibration of an additional temperature and humidity value (not subject to discount)	S00216			

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