

## Model MK 240 | Dynamic climate chambers for rapid temperature changes

The BINDER MK series chamber is suitable for all heat and cold tests between -40 °C and 180 °C. The MK is a clever alternative to complex individual solutions for cyclical temperature tests.

## **BENEFITS**

- Homogeneous climate conditions thanks to APT line™ technology
- · Comprehensive programming and data acquisition
- · Large heated viewing window



Model 240

## MAIN FEATURES

- Temperature range: -40 °C to 180 °C
- APT.line<sup>™</sup> preheating chamber technology
- Programmable condensation protection for test material
- Heated viewing window with LED interior lighting
- BINDER Multi Management Software APT-COM™ Basic Edition
- · Troubleshooting system with visual and audible alarms
- Intuitive touchscreen controller with time-segment and real-time programming
- Internal data logger, measured values can be read out in open format via USB
- · Access port with silicone plug, 50 mm, left
- Class 2 independent adjustable temperature safety device (DIN 12880) with visual alarm
- 4 castors, two with brakes



Model 240

- · Computer interface: Ethernet
- · 230 V power socket on the right-side control panel
- · Adjustable ramp function
- · Integrated chart recorder
- · Real-time clock
- · Door heating
- · 1 stainless steel rack
- · Inner chamber made of stainless steel
- CFC-free refrigerant R-452A
- · Cooling with compressor cooling unit

## ORDERING INFORMATION

Interior volume [L]	Voltage	Option model	Version	ArtNo.
Model MK 240				
228	400 V 3~ ph 50 Hz	Standard	MK240-400V	9020-0376
	480 V 3~ ph 60 Hz	with voltage and frequency converter	MK240-480V-C	9020-0355



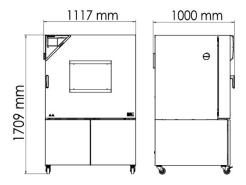
## **TECHNICAL DATA**

Anticle Number         920-03376         9020-03355           Performace Data Temperature         Vericance Data Temperature (PCL)         40180         40180           Temperature variation depending on selpoint (£ K)         0.112         0.105         0.105           Coding down time from 180 °C to -40 °C [min]         110         110         110           Average bending or setzoring to EC 80088-3 [K/min]         45         45           Average coding down time according to EC 80088-3 [K/min]         45         45           Average coding down time according to EC 80088-3 [K/min]         45         45           Reservations of State (M)         2000         200           Electrical data         40         40           Reserve (Voltage V)         50         56         60           Power frequency [kt]         50         60         60           Normal power [kV]         50         56         60           Normal voltage (M)         45         49         40           Power frequency [kt]         45         49         40           Unit face [A]         45         49         40           Name [A]         41         43         43         44           Height (min)         40	Description	MK240-400V <sup>1</sup>	MK240-480V-C <sup>1</sup>
Temperature variation depending on selpoint [st N]         40180         40120           Temperature function depending on selpoint [st N]         0105         0105           Average heating-up rate according to IcC 60068-35 [Krim]         10         110           Average heating-up rate according to IcC 60068-35 [Krim]         110         110           Average cooling down time from 180 °C to 40 °C [min]         110         100           Average cooling down time according to IcC 60068-35 [Krim]         200         200           Max. heat compensation at 25 °C [W]         200         200           Bowlet for Usage [V]         400         400           Power frequency [Vs]         56         5           Nominal power [KW]         56         5           Nominal power [KW]         60         6           Nominal power [KW]         40         40           Nominal power [KW]         56         5           Nominal power [KW]         50         6           William [Km]         40         43           Height [Km]         70         70           William [Km]         70         70           William [Km]         70         70           William [Km]         71         115	Article Number	9020-0376	9020-0355
Temperature variation depending on setpoint [± K]         0.12         0.125         0.105           Average heating-up rate according to IEC 60068-3-5 [K/min]         5         5           Cooling down time from 180°C to -40°C [min]         10         10           Average cooling down time according to IEC 60068-3-5 [K/min]         4.5         4.5           Max. heat compensation at 25°C [M]         2000         2000           Electrical data         480         480           Power frequency [t-2]         60         60           Nominal power [kW]         5.6         5.6           Phase (Nominal vottage)         6         6           Phase (Nominal vottage)         443         43           Phase (Nominal vottage)         70         3           Power frequency [t-2]         443         43           Phase (Nominal vottage)         443         43           Phase (Nominal vottage)         70         70           Phase (Nominal vottage)         443         43           Height (Irm]         70         70           Width (Irm]         70         70           Width (Irm]         70         70           Width (Irm]         115         115           Height (Ir	Performance Data Temperature		
Temperature fluctuation depending on setpoint [£ K]         0.10.5         0.10.5           Average heating-up rate according to IEC 60088-3 [K/min]         5         5           Cooling down time from 180° Ct 0-40° (C [min])         110         10           Max. head compensation at 25° (C [W])         2000         2000           Blectical data         ************************************	Temperature range [°C]	-40180	-40180
Average heating-up rate according to IEC 60084-5 [K/min] 5 10 10 10 10 10 10 10 10 10 10 10 10 10	Temperature variation depending on setpoint [± K]	0.11.2	0.11.2
Cooling down time from 180 °C to -40 °C (min)         110         10           Average cooling down time according to IEC 60068-3-5 [K/min]         4.5         4.5           Max. heat compensation at 25 °C [VI]         2000         2000           Electrical data             Rated Voltage [V]         400         480           Power frequency [Hz]         5.6         6.6           Nominal power [kW]         5.6         5.6           Unit fuse [A]         16         16           Phase (Normial voltage)         3-         3-           Internal Dimensions          70           Depth [mm]         443         443           Height [mm]         735         735           Housing dimensions not incl. fittings and connections            Width [mm]         1115         1115           Height net [mm]         1710         70           Depth net [mm]         26         925           Measures          58           Viewing window width [mm]         508         58           Viewing window width [mm]         300         30           Vall clearance sidewise [mm]         20         20           Unit do	Temperature fluctuation depending on setpoint [± K]	0.10.5	0.10.5
Average cooling down time according to IEC 60088-3 [K/min]         4.5         4.5           Max. heat compensation at 25 °C [M]         2000         2000           Electrical data         ****         ****           Rated Voltage [M]         400         480           Power frequency [Hz]         50         60           Nominal power [kM]         5.6         5.6           Unit fuse [A]         16         3-           Phase (Nominal voltage)         3-         3-           Internal Dimensions         ***         70           Internal [mm]         70         70           Width [mm]         73         73           Housing dimensions not incl. fittings and connections         ***           Width [mm]         1115         1115           Height net [mm]         1710         1710           Depth net [mm]         95         95           Measures         ***         Yes (Max Max Max Max Max Max Max Max Max Max	Average heating-up rate according to IEC 60068-3-5 [K/min]	5	5
Max. heat compensation at 25 °C [W]         2000         2000           Electrical date         Temper fequency [Hz]         400         480           Nominal power [KW]         5.6         5.6         5.6           Nominal power [KW]         16         16         16           Phase (Nominal voltage)         3-         3-         18           Phase (Nominal voltage)         443         443         445           Height [mm]         700         700         10           Width [mm]         70         70         115           Housing dimensions to incl. fittings and connections         45         115           Width net [mm]         1115         115         115           Height net [mm]         1710         1710         1710           Depth net [mm]         50         56         8           Westing window width [mm]         50         56         8           Westing window width [mm]         300         30         30           Westing window height [mm]         300         30         30           Well clearance sidewise [mm]         20         22         28           Well velagation of the unit (empty) [kg]         30         70         70	Cooling down time from 180 °C to -40 °C [min]	110	110
Electrical data           Rated Voltage [V]         400         480           Power frequency [Hz]         50         60           Nominal power [kW]         5.6         5.6           Unit fuse [A]         16         16           Phase (Nominal voltage)         3-         3-           Internal Dimensions         W         443           Beight [mm]         700         70           Width [mm]         735         735           Housing dimensions not incl. fittings and connections         735         735           Housing there [mm]         1115         1115           Height [mm]         925         95           Height net [mm]         1710         1710           Depth net [mm]         508         508           Viewing window width [mm]         508         508           Viewing window height [mm]         300         300           Wall clearance back [mm]         300         300           Wall clearance sidewise [mm]         300         300           Wall clearance sidewise [mm]         340         340           Level up of the unit (empty) [kg]         340         300           Level up to the unit (empty) [kg]         30 <td< td=""><td>Average cooling down time according to IEC 60068-3-5 [K/min]</td><td>4.5</td><td>4.5</td></td<>	Average cooling down time according to IEC 60068-3-5 [K/min]	4.5	4.5
Rated Voltage [V]         400         480           Power frequency [Hz]         50         60           Nominal power [kV]         5.6         5.6           Unit fuse [A]         16         6           Phase (Nomial voltage)         3-         3-           Internal Dimensions         W         43           Height [mm]         403         43           Height [mm]         700         70           Width [mm]         75         70           Housing dimensions not incl. fittings and connections         1115         1115           Height net [mm]         1710         1710           Depth net [mm]         925         95           Wessures         925         95           Viewing window width [mm]         508         508           Viewing window width [mm]         90         90           Viewing window height [mm]         300         300           Viel clearance idewise [mm]         200         200           Natl veight of the unit (empty [kg]         40         30           Net veight of the unit (empty [kg]         30         30           Let veight of the unit (empty [kg]         40         70           Let veight of the unit (em	Max. heat compensation at 25 °C [W]	2000	2000
Power frequency [Hz]         50         60           Nominal power [kW]         5.8         5.8           Unit fuse [A]         16         16           Phase (Nominal voltage)         3-         3-           Phase (Nominal voltage)         43         43           Height [mm]         40         70           Phish [mm]         70         70           Width [mm]         115         115           Height [mm]         110         115           Height net [mm]         22         28           Height net [mm]         508         58           Pay and the firm]         508         58           Pey ing window width [mm]         508         58           Viewing window height [mm]         300         300           Wall clearance back [mm]         300         300           Wall clearance sidewise [mm]         228         228           Net weight of the unit (empty) [kg]         34         30           permitted load [kg]         70         30           poor         70         30           Door         70         30           poor         70         30           poor         70	Electrical data		
Nominal power [kV]         5.6         5.6           Unit fuse [A]         16         16           Phase (Nominal voltage)         3-         3-           Internal Dimensions	Rated Voltage [V]	400	480
Unit fuse [A]         16         16           Phase (Nominal voltage)         3-         3-           Internal Dimensions         Width Company         443         443           Height [mm]         700         700         700           Width [mm]         735         35         35           Housing dimensions not incl. fittings and connections         Width net [mm]         1115         1115           Height net [mm]         1710         1710         70           Depth net [mm]         925         925           Measures         Viewing window width [mm]         508         508           Viewing window height [mm]         300         300           Wall clearance back [mm]         200         20           Interior volume [L]         228         228           Net weight of the unit (empty) [kg]         340         30           permitted load [kg]         70         70           Load per rack [kg]         30         30           Doors         Unit doors         1         1           Environment-specific data         5         6         6           Fixtures         4         6         6	Power frequency [Hz]	50	60
Phase (Nominal voltage)         3~         3~           Internal Dimensions         443         444         443         443         444         443         444         444         444         443         444         443         444         443         444         443         444         443         444         443         444         443         444         443         444         444         443         444         444         444         444         444         444         444	Nominal power [kW]	5.6	5.6
Internal Dimensions           Depth [mm]         443         443           Height [mm]         700         700           Width [mm]         735         735           Housing dimensions not incl. fittings and connections         ************************************	Unit fuse [A]	16	16
Depth [mm]         443         443           Height [mm]         700         700           Width [mm]         735         735           Housing dimensions not incl. fittings and connections         Width net [mm]         1115         1115           Height net [mm]         1710         1710         1710           Depth net [mm]         925         925           Measures         Viewing window width [mm]         508         508           Viewing window height [mm]         300         300           Wall clearance back [mm]         300         300           Wall clearance sidewise [mm]         200         228           Net weight of the unit (empty) [kg]         340         340           permitted load [kg]         70         70           Load per rack [kg]         30         30           Doors         70         70           Unit doors         1         1         1           Environment-specific data         2         6         7           Sound-pressure level [dB(A)]         62         6         7	Phase (Nominal voltage)	3~	3~
Height [mm]         700         700           Width [mm]         735         735           Housing dimensions not incl. fittings and connections         ************************************	Internal Dimensions		
Width [mm]         735         735           Housing dimensions not incl. fittings and connections         1115         1115           Width net [mm]         1710         1710           Depth net [mm]         925         925           Measures         Viewing window width [mm]         508         508           Viewing window height [mm]         300         300           Wall clearance back [mm]         300         300           Wall clearance sidewise [mm]         200         228           Net weight of the unit (empty) [kg]         340         340           permitted load [kg]         70         70           Load per rack [kg]         30         30           Doors         Unit doors         1         1           Environment-specific data         5         6         6           Sound-pressure level [dB(A)]         62         6         6	Depth [mm]	443	443
Housing dimensions not incl. fittings and connections           Width net [mm]         1115         1116           Height net [mm]         1710         1710           Depth net [mm]         925         925           Measures         Viewing window width [mm]         508         508           Viewing window height [mm]         300         300           Wall clearance back [mm]         300         300           Wall clearance sidewise [mm]         200         200           Interior volume [L]         228         228           Net weight of the unit (empty) [kg]         340         340           permitted load [kg]         70         70           Load per rack [kg]         30         30           Doors         Unit doors         1         1           Unit doors         62         67           Fixtures	Height [mm]	700	700
Width net [mm]       1115       1115         Height net [mm]       1710       1710         Depth net [mm]       925       925         Measures       Viewing window width [mm]       508       508         Viewing window height [mm]       300       300         Wall clearance back [mm]       300       300         Wall clearance sidewise [mm]       200       228         Net weight of the unit (empty) [kg]       340       340         permitted load [kg]       70       70         Load per rack [kg]       30       30         Doors       Unit doors       1       1         Environment-specific data       50       67         Fixtures	Width [mm]	735	735
Height net [rmn]         1710         1710           Depth net [rmn]         925         925           Measures         Viewing window width [rmn]         508         508           Viewing window height [rmn]         300         300           Wall clearance back [rmn]         300         300           Wall clearance sidewise [rmn]         200         200           Interior volume [L]         228         228           Net weight of the unit (empty) [kg]         340         340           Load per rack [kg]         30         30           Doors         Unit doors         1         1           Unit doors         62         67           Fixtures	Housing dimensions not incl. fittings and connections		
Depth net [mm]         925         925           Measures         Viewing window width [mm]         508         508           Viewing window height [mm]         300         300           Wall clearance back [mm]         300         300           Wall clearance sidewise [mm]         200         200           Interior volume [L]         228         228           Net weight of the unit (empty) [kg]         340         340           permitted load [kg]         70         70           Load per rack [kg]         30         30           Doors         Unit doors         1         1           Environment-specific data         50         67           Fixtures	Width net [mm]	1115	1115
Measures           Viewing window width [mm]         508         508           Viewing window height [mm]         300         300           Wall clearance back [mm]         300         300           Wall clearance sidewise [mm]         200         200           Interior volume [L]         228         228           Net weight of the unit (empty) [kg]         340         340           permitted load [kg]         70         70           Load per rack [kg]         30         30           Doors         Unit doors         1         1           Environment-specific data         50         67           Sound-pressure level [dB(A)]         62         67           Fixtures	Height net [mm]	1710	1710
Viewing window width [mm]         508         508           Viewing window height [mm]         300         300           Wall clearance back [mm]         200         200           Interior volume [L]         228         228           Net weight of the unit (empty) [kg]         340         340           permitted load [kg]         70         70           Load per rack [kg]         30         30           Doors         Unit doors         1         1           Environment-specific data         50         67           Fixtures	Depth net [mm]	925	925
Viewing window height [mm]       300       300         Wall clearance back [mm]       300       300         Wall clearance sidewise [mm]       200       200         Interior volume [L]       228       228         Net weight of the unit (empty) [kg]       340       340         permitted load [kg]       70       70         Load per rack [kg]       30       30         Doors       1       1         Unit doors       1       1         Environment-specific data         Sound-pressure level [dB(A)]       62       67         Fixtures	Measures		
Wall clearance back [mm]       300       300         Wall clearance sidewise [mm]       200       200         Interior volume [L]       228       228         Net weight of the unit (empty) [kg]       340       340         permitted load [kg]       70       70         Load per rack [kg]       30       30         Doors       1       1         Unit doors       1       1         Environment-specific data       5         Sound-pressure level [dB(A)]       62       67         Fixtures	Viewing window width [mm]	508	508
Wall clearance sidewise [mm]       200       200         Interior volume [L]       228       228         Net weight of the unit (empty) [kg]       340       340         permitted load [kg]       70       70         Load per rack [kg]       30       30         Doors       Unit doors       1       1         Environment-specific data       5       67         Sound-pressure level [dB(A)]       62       67         Fixtures	Viewing window height [mm]	300	300
Interior volume [L]         228         228           Net weight of the unit (empty) [kg]         340         340           permitted load [kg]         70         70           Load per rack [kg]         30         30           Doors         Unit doors         1         1           Environment-specific data         5         62         67           Fixtures         Fixtures         5         62         67	Wall clearance back [mm]	300	300
Net weight of the unit (empty) [kg]       340       340         permitted load [kg]       70       70         Load per rack [kg]       30       30         Doors         Unit doors       1       1         Environment-specific data         Sound-pressure level [dB(A)]       62       67         Fixtures	Wall clearance sidewise [mm]	200	200
permitted load [kg]         70         70           Load per rack [kg]         30         30           Doors         Unit doors         1         1           Environment-specific data         5         67           Fixtures         Fixtures         50         67	Interior volume [L]	228	228
Load per rack [kg]       30       30         Doors       Unit doors       1       1         Environment-specific data         Sound-pressure level [dB(A)]       62       67         Fixtures	Net weight of the unit (empty) [kg]	340	340
Doors           Unit doors         1         1           Environment-specific data         5         67           Fixtures         Fixtures         67	permitted load [kg]	70	70
Unit doors         1         1           Environment-specific data         5         67           Fixtures         60         67	Load per rack [kg]	30	30
Environment-specific data  Sound-pressure level [dB(A)] 62 67  Fixtures	Doors		
Sound-pressure level [dB(A)] 62 67 Fixtures	Unit doors	1	1
Fixtures	Environment-specific data		
	Sound-pressure level [dB(A)]	62	67
Number of shelves (std./max.) 1/6 1/6	Fixtures		
	Number of shelves (std./max.)	1/6	1/6

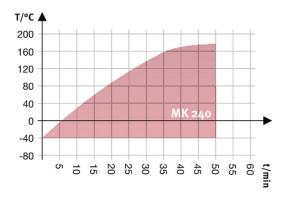
<sup>1</sup> All technical data is specified for unloaded units with standard equipment at an ambient temperature of +22 °C ±3 °C and a power supply voltage fluctuation of ±10 %. The temperature data is determined in accordance to BINDER factory standard following DIN 12880, observing the recommended wall clearances of 10 % of the height, width, and depth of the inner chamber. Technical data refers to 100 % fan speed. All indications are average values, typical for units produced in series. We reserve the right to change technical specifications at any time.

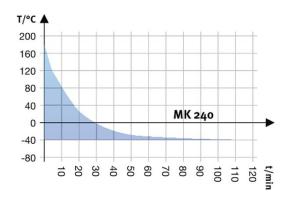


## DIMENSIONS incl. fittings and connections [mm]

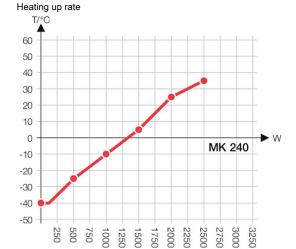


## **CHARTS**





Cooling down rate



Heat compensation chart



## **OPTIONS AND ACCESSORIES**

Designation	Description	*	ArtNo.
Access port	notch-type access port in door, 100 x 35 mm	_	8012-1850
	left		
	30 mm	01	8012-1322
	50 mm	01	8012-1328
	80 mm	01	8012-1334
	100 mm	01, 11	8012-1542
	125 mm	01, 11	8012-135
	right		
Access port with silicone	30 mm	01	8012-1319
olug	50 mm	01	8012-1325
	80 mm	01	8012-133 <sup>-</sup>
	100 mm	01, 11	8012-1539
	125 mm	01, 11	8012-1348
	top		
	80 mm	01	8012-1536
	100 mm	01, 11	8012-1530
	125 mm	01, 11	8012-1533
Analog output 4-20 mA	for temperature values (output not adjustable)	-	8012-108
APT-COM™ 4 GLP-	for working under GLP-compliant conditions. Measured values are documented in a tamper-proof way in line with the requirements of FDA Regulation 21 CFR 11.		00.12.00
Edition	version 4, GLP edition	19	9053-0042
APT-COM™ 4	convenient unit and user management built on the BASIC edition. Suitable for networking up to 100 units.		
PROFESSIONAL- Edition	version 4, PROFESSIONAL edition	19	9053-0040
Calibration certificate, expanded	for temperature; for extending the measurement in center of chamber to include another test temperature	-	8012-1124
	for temperature, measurement in center of chamber at specified temperature	-	8012-114
Calibration certificate,	temperature measurement incl. certificate and 27 measuring points at specified temperature	-	8012-160
emperature	temperature measurement incl. certificate, 15- 18 measuring points at specified temperature	-	8012-158
	temperature measurement incl. certificate, 9 measuring points at specified temperature	-	8012-1560
Data Logger Kit	T 220: For continuous temperature logging from -90 °C to 220 °C. The kit includes 1 data logger, Pt 100 sensor with 2 m extension cable and 1 magnetic fixture for mounting to the BINDER unit	19	8012-071
Data Logger Software	LOG ANALYZE software kit, configuration and evaluation software for all BINDER Data Logger Kits (incl. USB data cable)	19	8012-082
Door lock	lockable door handle	-	8012-186
Dry-air purge	uncontrolled, incl. connection; for preventing condensation	-	8012-186
Ory-air purge, connection	for the connection to an existing pressurized air network	-	8012-108
H-neutral detergent	concentrated, for gentle remove of residual contaminants; 1 kg	_	1002-0016
Pt 100 temperature sensor	additional flexible Pt 100, interior, for displaying the temperature on the unit display	-	8012-109
Rack	stainless steel	-	6004-009
Rack accessories	fasteners (1 set of 4) for additional security of racks	-	8012-062
Rack, reinforced	stainless steel, with fasteners (1 set of 4)	-	8012-060
	RS 422 cable set and RS 485 / RS 422 interface converter for connection to 10-way plug distributor		
RS 485 / RS 422	115 V option model	_	8012-0599
interface converter	230 V option model	_	8012-0589
RS 485 interface, 2-wire	Additional serial interface can be used parallel to Ethernet, for Multi Management Software APT-COM™	_	8012-176
Shelf, perforated	Stainless steel	_	8009-044
Femperature safety	with visual alarm (DIN 12880)	-	8012-1792
Zero voltage relay	for controlling 3 relay contacts via program regulators, accessible via 6-pin DIN socket (max. 24 V - 2.5 A)		8012-109

<sup>\*</sup> Notes > See last page



## **SERVICES**

Designation	Description	*	ArtNo.
Installation services			
Installation	and set up of unit at operating location, connect to existing connections	13, 18	DL10-0300
Instruction	unit function instructions for operation and programming of the controller	18	DL10-0700
Preventive maintenance			
Preventive maintenance	Executive of equipment inspection according to maintenance plan	14, 18	DL20-0500
Calibration services			
Calibration temperature incl. certificate	including certificate, one measuring point in center of chamber at specified temperature	14, 16, 17, 18	DL30-0101
Temperature measurement 18 measuring points	including certificate, 18 measuring points at specified temperature	14, 16, 17, 18	DL30-0118
Temperature measurement 27 measuring points	including certificate, 27 measuring points at specified temperature	14, 16, 17, 18	DL30-0127
Temperature measurement 9 measuring points	including certificate, 9 measuring points at specified temperature	14, 16, 17, 18	DL30-0109
Validation services			
Execution of IQ/OQ	in accordance with qualification folder	15, 18, 20	DL41-0200
Execution of IQ/OQ/PQ	in accordance with customer's requirement, price: on request	15, 18	DL44-0500
Qualification folder IQ/OQ	supporting documents for validation performed by customer, consisting of: IQ/OQ checklists, unit schematics, QM certificate in accordance with ISO 9001	15, 18, 20	8012-0863
Qualification folder IQ/OQ/PQ	supporting documents for validation performed by customer, in accordance with customer's requirement, extension of Qualification folder IQ/OQ by chapter PQ	15, 18	8012-0951
Warranty service			
Extension of the warranty from 2 to 3 years	beginning with the date of delivery, wearing parts are not included	-	DL01-1041
Extension of the warranty from 2 to 5 years	beginning with the date of delivery, wearing parts are not included	-	DL01-1042

<sup>\*</sup> Notes > See last page



# Lithium ion battery cell testing chambers

The BINDER test chambers for aging and performance of lithium-ion energy storage devices offer maximum application convenience and meet Eucar/Hazard level 4\*. BINDER supplies test chambers with a standard package for aging tests, as well as a more extensive package for carrying out performance and aging tests.



## PACKAGE P - FOR PERFORMANCE AND AGING TESTS

### **Application:**

Cells and modules are tested at different temperatures with and without a current supply to measure performance.

#### Solution:

- Class 2 independent temperature safety device when temperature is set to 120 °C
- Temperature range limited to 120 °C on the controller
- Stainless steel pressure relief flap installed in the middle of the top of the unit
- Enhanced door lock mechanism with reinforced brackets
- Inert gas connections





### **PACKAGE A - FOR AGING TESTS**

## Application:

Cells and modules are tested at different temperatures always without a current supply in order to assess aging during storage.

## Solution:

- Class 2 independent temperature safety device when temperature is set to 120 °C.
- Temperature range limited to 120 °C on the controller

## **FURTHER ADJUSTMENTS AVAILABLE ON REQUEST:**

BINDER series units are converted by our BINDER INDIVIDUAL department according to special customer requirements, and equipped with additional functions.



Program sequence display using indicator lamps



Electromechanical door lock mechanism controlled in a program and/or manually



Additional access ports available in almost all sizes and locations

## **TIPS AND TRICKS**





Learn more in our user report:

TÜV SÜD Battery Testing GmbH -Energy storage device in hardness test

> go2binder.com/en-TUEV-SUED-Battery-Testing

## Find out more >



Pricing on any accessories shown can be found by keying the part number into the search box on our website.

The specifications listed in this brochure are subject to change by the manufacturer and therefore cannot be guaranteed to be correct. If there are aspects of the specification that must be guaranteed, please provide these to our sales team so that details can be confirmed.

## www.wolflabs.co.uk

Tel: 01759 301142

Fax: 01759 301143

sales@wolflabs.co.uk

Please contact us if this literature doesn't answer all your questions.