

Dynamic climate chambers



MK | MKF | MKT | MKFT series



Dynamic climate chambers

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BINDER environmental chambers are perfectly suited to material testing under dynamic conditions. The standard rapid alternation speeds of around 5 K/min make standard-compliant testing possible.

An environmental simulation chamber of the MK and MKT Series is suitable for complex temperature profiles in the range of -40 °C or -70 °C to 180 °C.

MKF and MKFT Series of dynamic climate chambers not only make material testing in this temperature range possible, but can also regulate humidity in the range of 10 % to 98 % RH.

PRODUCT SELECTION DYNAMIC CLIMATE CHAMBERS

Features	Series MK › Page 6	Series MKF › Page 13	Series MKT › Page 21	Series MKFT › Page 27
Model				
Model 56	•	•	–	–
Model 115	•	•	•	•
Model 240	•	•	•	•
Model 400	•	•	–	–
Model 720	•	•	•	•
Model 1020	•	•	–	–
General data				
Temperature range [°C]	-40...180	-40...180	-70...180	-70...180
Humidity range	–	10...98	–	10...98
Ethernet interface	•	•	•	•
USB interface	•	•	•	•
Forced convection	•	•	•	•
Controller and timer functions				
Controller display	TFT touch			
Ramp function	•	•	•	•
Time delayed ON	•	•	•	•
Programming option	•	•	•	•
Class 1 temperature safety device	•	•	•	•
Class 2 independent adjustable temperature safety device	•	•	•	•
Temperature alarm, acoustic	•	•	•	•
Temperature alarm, visual	•	•	•	•

•Standard equipment

ADVANTAGES AT A GLANCE



HOMOGENEOUS TEMPERATURE DISTRIBUTION

Series MK, MKF, MKT, MKFT

BINDER APT.line™ preheating chamber technology ensures long-term operational stability even under full load.



FLEXIBLE WATER SUPPLY

Series MKF, MKFT

The flexible water supply is easy to handle and can be operated independently of the water supply and water quality.



CONVENIENT WORK ENVIRONMENT

Series MK, MKF, MKT, MKFT

With our high level of standard equipment, such as the heated viewing window with LED illumination and a large access area for easy assembly a convenient work environment can be established.



PROGRAMMING AND DATA COLLECTION

Series MK, MKF, MKT, MKFT

with the program controller featuring a color display and Multi Management Software APT-COM™ for remote programming through a PC.

Series MK | 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.



MK 56 model

BENEFITS

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

MAIN FEATURES

- Temperature range: -40 °C to +180 °C
- APT.line™ preheating chamber technology
- Intuitive touchscreen controller with time-segment and real-time programming
- Internal data logger, measured values can be read out in open format via USB
- BINDER Multi Management Software APT-COM™ Basic Edition
- Programmable condensation protection for test material
- Troubleshooting system with visual and audible alarms
- CFC-free refrigerant R-452A
- 1 stainless steel rack
- Access port with silicone plug (models 56, 115, 240, 400), 50 mm, left

AVAILABLE SIZES

Model	Interior volume [L]	Online data sheets
MK 56	60	› go2binder.com/en-MK56
MK 115	115	› go2binder.com/en-MK115
MK 240	228	› go2binder.com/en-MK240
MK 400	417	› go2binder.com/en-MK400
MK 720	734	› go2binder.com/en-MK720
MK 1020	991	› go2binder.com/en-MK1020



Find all details online: go2binder.com/en-MK

OPTIONAL EQUIPMENT

Access port with silicone plug	For introducing external measuring instruments. Large selection of different diameters and positions (left, right, or top)	
BINDER PURE AQUA Service	System for preparation or complete desalination of tap water, complete set containing PURE AQUA 300 single-use cartridge, measuring device, and all necessary connecting parts.	
Dry-air purge	Suitable for simulating a dry, cold climate. In the MKF and MKFT series with controlled humidity, the temperature-humidity chart is significantly expanded, while the option of simulating current automobile industry standards, such as PV 2005; PV 1200; PR 308.2, is also available.	
Services	You can access our installation, maintenance, calibration, validation, or warranty services by taking out a Maintenance Service Agreement or by simply getting in touch when you need us. More information is available in the accessories and services chapter.	
BINDER INDIVIDUAL	Using a BINDER series production product as a basis, we develop individual solutions as a single unit or in small batches. All products are tested, certified, and supplied with a full functional guarantee and warranty. More information is available in the accessories and services chapter.	

► All extras online go2binder.com/en-options

TECHNICAL DATA

Description	MK 56	MK 115	MK 240	MK 400	MK 720	MK 1020
Measures						
Interior volume [L]	60	115	228	417	734	991
Net weight of the unit (empty) [kg]	165	260	340	413	570	621
Permitted load [kg]	60	60	70	150	160	200
Load per rack [kg]	15	30	30	30	40	40
Wall clearance back [mm]	300	300	300	500	300	300
Wall clearance sidewise [mm]	200	200	200	300	200	200
Internal Dimensions						
Width [mm]	400	600	735	735	1200	1200
Height [mm]	420	480	700	700	1020	1020
Depth [mm]	350	400	443	810	600	810
Housing dimensions not incl. fittings and connections						
Width net [mm]	720	980	1115	1115	1580	1580
Height net [mm]	1445	1725	1710	1710	2005	2005
Depth net [mm]	778	865	925	1400	1140	1480
Performance Data Temperature						
Temperature range [°C]	-40...180	-40...180	-40...180	-40...180	-40...180	-40...180
Temperature variation [± K]	–	–	–	0.1...1.2	–	0.1...1.8
Temperature variation depending on setpoint [± K]	0.5...1.5	0.1...2	0.1...1.2	–	0.3...2	–
Temperature fluctuation [± K]	–	–	–	0.1...0.5	–	0.1...0.5
Temperature fluctuation depending on setpoint [± K]	0.1...0.5	0.1...0.5	0.1...0.5	–	0.1...0.5	–
Heating-up time from -40 °C to 180 °C [min]	–	–	–	55	–	60
Average heating-up rate according to IEC 60068-3-5 [K/min]	5	5.3	5	5	4	5.5
Average cooling down time according to IEC 60068-3-5 [K/min]	5	5	4.5	5	4.5	5
Electrical data						
Nominal power (version 400V) [kW]	–	–	–	7	–	11.5
Nominal power (version 480V) [kW]	–	–	–	–	–	11.5
Nominal power (version 230 V) [kW]	2.8	–	–	–	–	–
Nominal power (version 240 V) [kW]	2.8	–	–	–	–	–
Nominal power (version 400 V) [kW]	–	3.5	5.6	–	8.7	–
Nominal power (version 480 V) [kW]	–	3.5	5.6	–	8.7	–
Environment-specific data						
Energy consumption at 20 °C	600 W	650 Wh/h	1300 Wh/h	1400 Wh/h	1900 Wh/h	1500 Wh/h
Fixtures						
Number of shelves (std./max.)	1/4	1/4	1/6	1/6	1/11	1/11

ORDERING INFORMATION [Art. No.]

Further details: Go to www.binder-world.com > Search > Enter Article Number

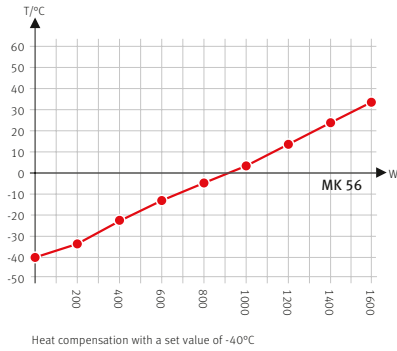
Voltage	Option model	MK 56	MK 115	MK 240	MK 400	MK 720	MK 1020
480 V 3~ 60 Hz	with voltage and frequency converter	–	9020-0303	9020-0355	–	9020-0356	–
			–	–	9020-0445	–	9020-0447
400 V 3~ 50 Hz	Standard	–	9020-0375	9020-0376	9020-0406	9020-0377	9020-0407
240 V 1~ 60 Hz	Standard	9020-0388	–	–	–	–	–
230 V 1~ 50 Hz	Standard	9020-0374	–	–	–	–	–

EXTRACT OF FULLFILLED STANDARDS

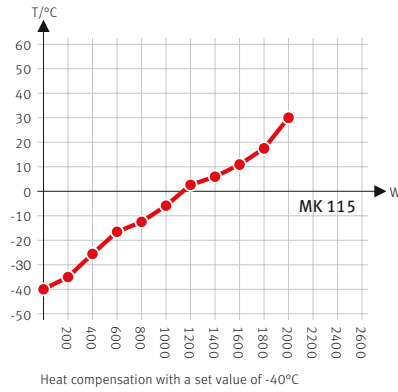
- MIL STD 810:2000-01
- DIN EN 60068-2-14

HEAT COMPENSATION

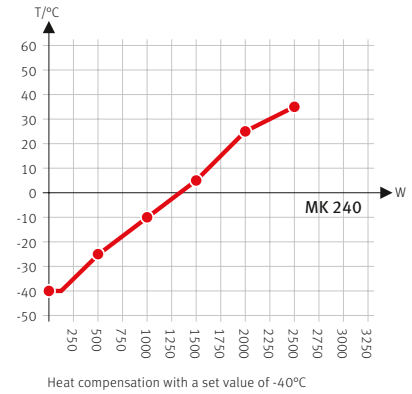
MK 56



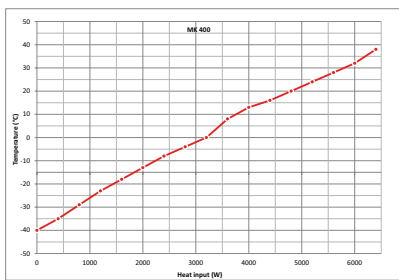
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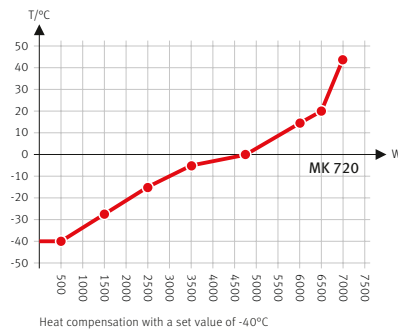
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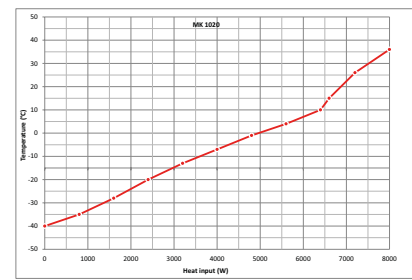
MK 400



MK 720

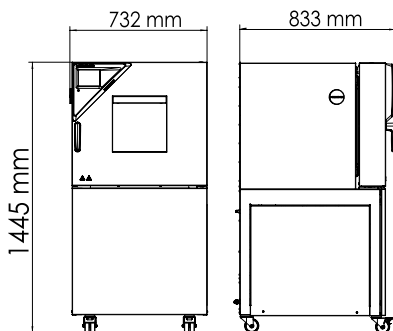


MK 1020

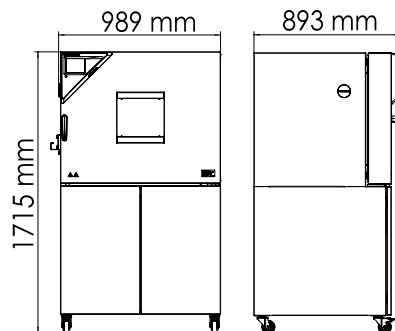


DIMENSIONS incl. fittings and connections [mm]

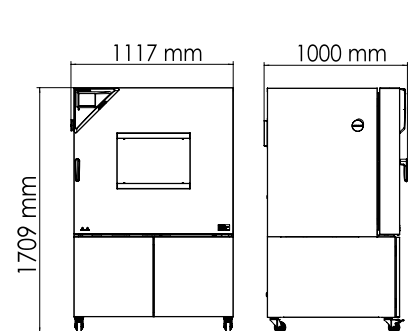
MK 56



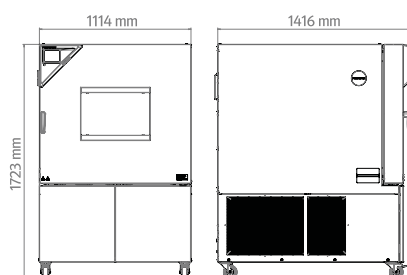
MK 115



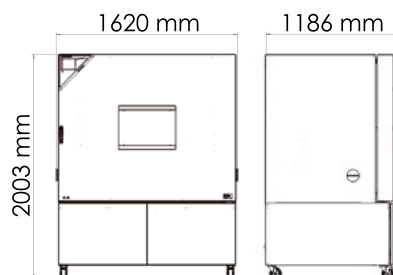
MK 240



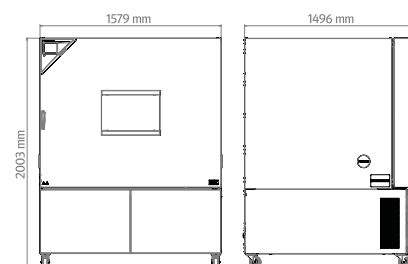
MK 400



MK 720



MK 1020



ORDERING INFORMATION OPTIONS

Bezeichnung	Beschreibung	MK 56	MK 115	MK 240	MK 400	MK 720	MK 1020	Art.-Nr.
Access port with silicone plug	left							
	30 mm	•	•	•	•	•	•	8012-1322
	50 mm	•	•	•	•	•	•	8012-1328
	80 mm	•	•	•	•	•	•	8012-1334
	100 mm	–	•	•	•	•	•	8012-1542
	125 mm	–	•	•	•	•	•	8012-1351
	right							
	30 mm	•	•	•	•	•	•	8012-1319
	50 mm	•	•	•	•	•	•	8012-1325
	80 mm	•	•	•	•	•	•	8012-1331
	100 mm	–	•	•	•	•	•	8012-1539
	125 mm	–	•	•	•	•	•	8012-1348
	top							
	80 mm	•	•	•	•	•	•	8012-1536
	100 mm	–	•	•	•	•	•	8012-1530
	125 mm	–	•	•	•	•	•	8012-1533
Analog output 4-20 mA	for temperature values (output not adjustable)	•	•	•	•	•	•	8012-1084
Calibration certificate, expanded	for temperature; for extending the measurement in center of chamber to include another test temperature	•	•	•	•	•	•	8012-1124
Calibration certificate, temperature	for temperature, measurement in center of chamber at specified temperature	•	•	•	•	•	•	8012-1143
	temperature measurement incl. certificate and 27 measuring points at specified temperature	•	•	•	•	•	•	8012-1602
	temperature measurement incl. certificate, 15- 18 measuring points at specified temperature	•	•	•	•	•	•	8012-1581
	temperature measurement incl. certificate, 9 measuring points at specified temperature	•	•	•	•	•	•	8012-1560
Compressed air connection		•	–	–	–	–	–	8012-1795
	for the connection to an existing pressurized air network	–	•	–	–	–	–	8012-1801
		–	–	•	•	–	–	8012-1089
		–	–	–	–	•	•	8012-1797
Door lock	lockable door handle	•	–	–	–	–	–	8012-1782
		–	•	•	•	•	•	8012-1861

Bezeichnung	Beschreibung	MK 56	MK 115	MK 240	MK 400	MK 720	MK 1020	Art.-Nr.
Dry-air purge	uncontrolled, incl. connection; for preventing condensation	•	–	–	–	–	–	8012-1806
		–	•	–	–	–	–	8012-1087
		–	–	•	–	–	–	8012-1865
		–	–	–	–	•	–	8012-1866
Notch-type access port	notch-type access port in door, 100 x 35 mm	–	•	–	–	–	–	8012-1849
		–	–	•	•	–	–	8012-1850
		–	–	–	–	•	•	8012-1851
Pt 100 temperature sensor	additional flexible Pt 100, interior, for displaying the temperature on the unit display	•	•	•	•	•	•	8012-1093
RS 485 interface, 2-wire	Additional serial interface can be used parallel to Ethernet, for Multi Management Software APT-COM™	•	•	•	•	•	•	8012-1768
Temperature safety device class 2	with visual alarm (DIN 12880)	•	•	•	•	•	•	8012-1792
Water cooling	for reduced heat loss to ambient air	•	–	–	–	–	–	8012-1815
Zero voltage relay contacts	for controlling 3 relay contacts via program regulators, accessible via 6-pin DIN socket (max. 24 V - 2.5 A)	•	•	•	•	•	•	8012-1095

ORDERING INFORMATION ACCESSORIES

Bezeichnung	Beschreibung	MK 56	MK 115	MK 240	MK 400	MK 720	MK 1020	Art.-Nr.
APT-COM™ 4 GLP-Edition	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.							
	version 4, GLP edition	•	•	•	•	•	•	9053-0042
APT-COM™ 4 PROFESSIONAL-Edition	convenient unit and user management built on the BASIC edition. Suitable for networking up to 100 units.							
	version 4, PROFESSIONAL edition	•	•	•	•	•	•	9053-0040
pH-neutral detergent	concentrated, for gentle remove of residual contaminants; 1 kg	•	•	•	•	•	•	1002-0016
Qualification documents	IQ/OQ documents – supporting documents for validation performed by customers, consisting of: IQ/OQ checklists incl. calibration guide and comprehensive unit documentation; parameters: temperature, CO ₂ , O ₂ , pressure, depending on unit							
	Digital in PDF format	•	•	•	•	•	•	7057-0001
	Hard copy inside folder	•	•	•	•	•	•	7007-0001
	IQ/OQ/PQ documents – supporting documents for validation performed by customers, according to customer requirements, PQ section added to qualification folder IQ/OQ; parameters: temperature, CO ₂ , O ₂ – or pressure, depending on unit							
	Digital in PDF format	•	•	•	•	•	•	7057-0005
	Hard copy inside folder	•	•	•	•	•	•	7007-0005
Rack	stainless steel	•	–	–	–	–	–	8012-2085
		–	•	–	–	–	–	8012-2048
		–	–	•	–	–	–	8012-2053
		–	–	–	•	–	–	8012-2123
		–	–	–	–	•	–	8012-2054
		–	–	–	–	–	•	8012-2124
Rack accessories	fasteners (1 set of 4) for additional security of racks	•	•	•	•	•	•	8012-0620

Bezeichnung	Beschreibung	MK 56	MK 115	MK 240	MK 400	MK 720	MK 1020	Art.-Nr.
Rack, reinforced	stainless steel, with fasteners (1 set of 4)	•	–	–	–	–	–	8012-1091
		–	•	–	–	–	–	8012-0709
		–	–	•	–	–	–	8012-0605
		–	–	–	•	–	–	8012-2104
		–	–	–	–	•	–	8012-0684
		–	–	–	–	–	•	8012-2105
RS 485 / RS 422 interface converter	RS 422 cable set and RS 485 / RS 422 interface converter for connection to 10-way plug distributor							
	115 V option model	•	•	•	•	•	•	8012-0599
	230 V option model	•	•	•	•	•	•	8012-0589
Shelf, perforated	Stainless steel	•	–	–	–	–	–	6004-0182
		–	•	–	–	–	–	6004-0030
		–	–	•	–	–	–	8009-0447
		–	–	–	•	–	–	8009-1182
		–	–	–	–	•	–	8009-0511
		–	–	–	–	–	•	8009-1183
Water supply set	consisting of fresh- and waste-water containers (20 liters each), cabling and pump							
	external, free-standing	•	–	–	–	–	–	8012-1846
WLAN kit	The kit contains a client bridge that establishes a wireless connection between BINDER units and APT-COM4, LIMS, or customer-specific software via an Ethernet interface. It provides an alternative solution in situations where units need to be positioned in locations without an on-site Ethernet connection. In secured networks, installation and configuration must be performed by the customer's IT service.	•	•	•	•	•	•	8500-0164

Series MKF | for rapid temperature changes with humidity control

A BINDER MKF series environmental simulation chamber is ideally suited for any cold and heat testing based on current temperature and climate testing methods according to DIN and IEC standards. The comprehensive standard equipment for this environmental simulation chamber ensures ease of operation.



MKF 56 model

BENEFITS

- Homogeneous climate conditions thanks to APT.line™ technology
- Automatic water and wastewater management
- Pressure humidification with fast response times
- Comprehensive programming and data acquisition
- Large heated viewing window

MAIN FEATURES

- Temperature range: -40 °C to +180 °C
- Humidity range: 10% to 98% RH
- Humidity regulation with capacitive humidity sensor and steam humidification
- APT.line™ preheating chamber technology
- Intuitive touchscreen controller with time-segment and real-time programming
- CFC-free refrigerant R-452A
- Integrated water-storage tank, 20 L
- 1 stainless steel rack
- Access port with silicone plug (models 56, 115, 240, 400), 50 mm, left
- 2 access ports with silicone plugs (models 720, 1020), 80 mm, left and right

AVAILABLE SIZES

Model	Interior volume [L]	Online data sheets
MKF 56	60	› go2binder.com/en-MKF56
MKF 115	115	› go2binder.com/en-MKF115
MKF 240	228	› go2binder.com/en-MKF240
MKF 400	417	› go2binder.com/en-MKF400
MKF 720	734	› go2binder.com/en-MKF720
MKF 1020	991	› go2binder.com/en-MKF1020



Find all details online: go2binder.com/en-MKF

OPTIONAL EQUIPMENT

Access port with silicone plug	For introducing external measuring instruments. Large selection of different diameters and positions (left, right, or top)	
BINDER PURE AQUA Service	System for preparation or complete desalination of tap water, complete set containing PURE AQUA 300 single-use cartridge, measuring device, and all necessary connecting parts.	
Dry-air purge	Suitable for simulating a dry, cold climate. In the MKF and MKFT series with controlled humidity, the temperature-humidity chart is significantly expanded, while the option of simulating current automobile industry standards, such as PV 2005; PV 1200; PR 308.2, is also available.	
Services	You can access our installation, maintenance, calibration, validation, or warranty services by taking out a Maintenance Service Agreement or by simply getting in touch when you need us. More information is available in the accessories and services chapter.	
BINDER INDIVIDUAL	Using a BINDER series production product as a basis, we develop individual solutions as a single unit or in small batches. All products are tested, certified, and supplied with a full functional guarantee and warranty. More information is available in the accessories and services chapter.	

► All extras online go2binder.com/en-options

TECHNICAL DATA

Description	MKF 56	MKF 115	MKF 240	MKF 400	MKF 720	MKF 1020
Measures						
Interior volume [L]	60	115	228	417	734	991
Net weight of the unit (empty) [kg]	175	280	360	432	590	636
Permitted load [kg]	60	60	70	150	160	200
Load per rack [kg]	15	30	30	30	40	40
Wall clearance back [mm]	300	300	300	500	300	300
Wall clearance sidewise [mm]	200	200	200	300	200	200
Internal Dimensions						
Width [mm]	400	600	735	735	1200	1200
Height [mm]	420	480	700	700	1020	1020
Depth [mm]	348	400	443	810	600	810
Housing dimensions not incl. fittings and connections						
Width net [mm]	720	980	1115	1115	1580	1580
Height net [mm]	1445	1725	1715	1710	2005	2005
Depth net [mm]	780	865	925	1400	1140	1480
Performance Data Temperature						
Temperature range [°C]	-40...180	-40...180	-40...180	-40...180	-40...180	-40...180
Temperature variation [± K]	–	–	–	0.1...1.2	–	0.1...1.8
Temperature variation depending on setpoint [± K]	0.5...1.5	0.1...1.3	0.1...1.5	–	0.1...1.8	–
Temperature fluctuation [± K]	–	–	–	0.1...0.5	–	0.1...0.5
Temperature fluctuation depending on setpoint [± K]	0.1...0.5	0.1...0.6	0.1...0.5	–	0.1...0.5	–
Heating-up time from -40 °C to 180 °C [min]	–	–	–	55	–	60
Average heating-up rate according to IEC 60068-3-5 [K/min]	5	5.5	5	5	4.8	5.5
Average cooling down time according to IEC 60068-3-5 [K/min]	5	4.5	5	5	4.8	5
Performance Data Climate						
Temperature range [°C]	10...95	10...95	10...95	10...95	10...95	10...95
Temperature variation [± K]	–	–	–	0.1...1.5	–	0.1...2
Temperature fluctuation [± K]	–	–	–	0.1...1.3	–	0.1...1.5
Temperature fluctuation depending on setpoint [± K]	0.1...0.5	0.1...1.3	0.1...1.3	–	0.2...1.5	–
Humidity range	10...98	10...98	10...98	10...98	10...98	10...98
Humidity fluctuation depending on setpoint [± % RH]	≤2,5	≤2,5	≤2,5	2,5	≤2,5	2,5
Electrical data						
Nominal power (version 230 V) [kW]	2.8	–	–	–	–	–
Nominal power (version 240 V) [kW]	2.8	–	–	–	–	–
Nominal power (version 400 V) [kW]	–	4.8	6.8	8	11	12.5
Nominal power (version 480 V) [kW]	–	4.8	6.8	8	11	12.5
Environment-specific data						
Energy consumption at 25 °C and 60 % RH	–	–	–	1900 ± % RH	–	2200 W
Fixtures						
Number of shelves (std./max.)	1/4	1/4	1/6	1/6	1/11	1/11

ORDERING INFORMATION [Art. No.]

Further details: Go to www.binder-world.com › Search › Enter Article Number

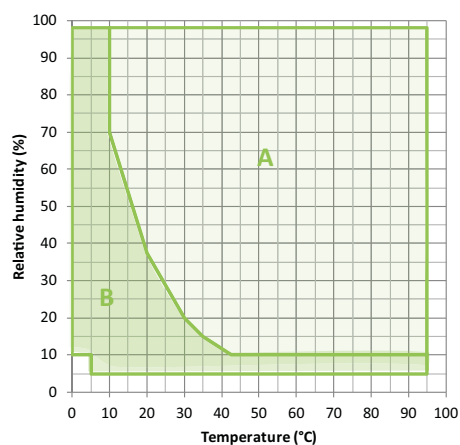
Voltage	Option model	MKF 56	MKF 115	MKF 240	MKF 400	MKF 720	MKF 1020
480 V 3~ 60 Hz	with voltage and frequency converter	–	9020-0357	9020-0358	–	9020-0359	–
400 V 3~ 50 Hz	Standard	–	–	–	9020-0446	–	9020-0448
200...230 V 1~ 50 Hz	Standard	9020-0378	–	–	–	–	–
200...240 V 1~ 60 Hz	Standard	9020-0389	–	–	–	–	–

EXTRACT OF FULLFILLED STANDARDS

- DIN EN 60068-2-30: 2006-06
- DIN EN 60068-2-38: 2010-06
- MIL STD 810:2000-01
- DIN EN 60068-2-66

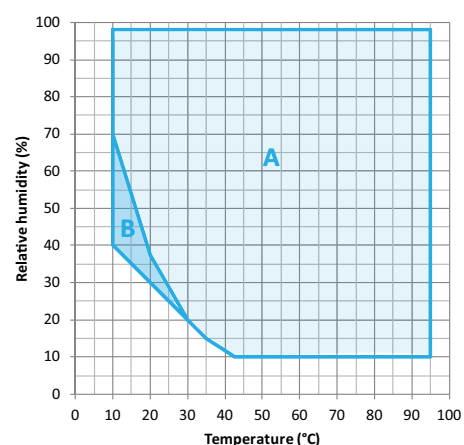
TEMPERATURE-HUMIDITY CHART

MKF 56, MKF 115, MKF 240, MKF 720



A: Standard Climate range
B: Expanded range with controlled dry-air purge

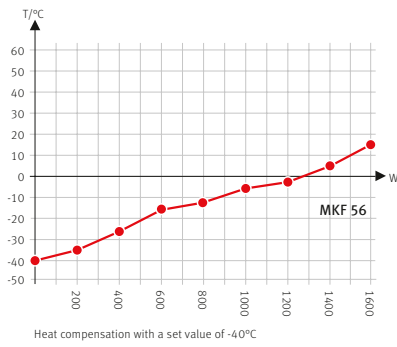
MKF 56, MKF 115, MKF 240, MKF 720, MKF 400, MKF 1020



A: Standard Climate range
B: Time-limited operation (max. 24 hours)

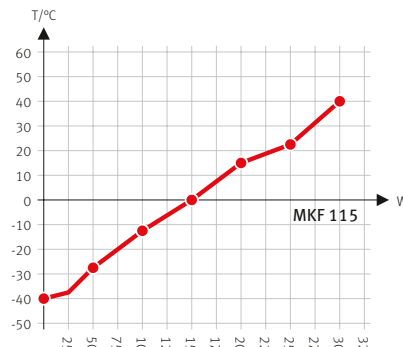
HEAT COMPENSATION

MKF 56



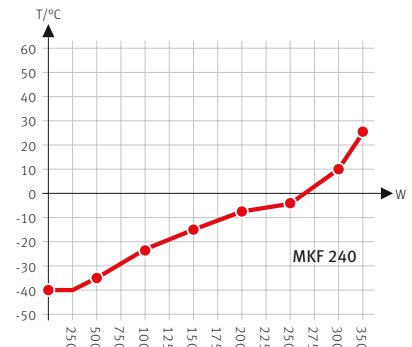
Heat compensation with a set value of -40°C

MKF 115



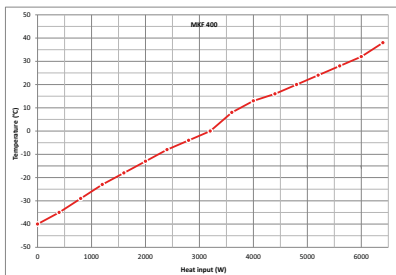
Heat compensation with a set value of -40°C

MKF 240

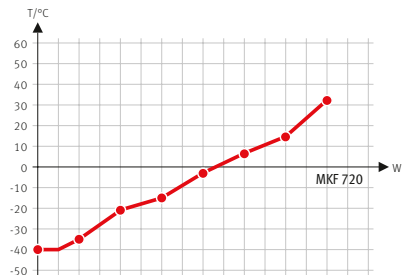


Heat compensation with a set value of -40°C

MKF 400

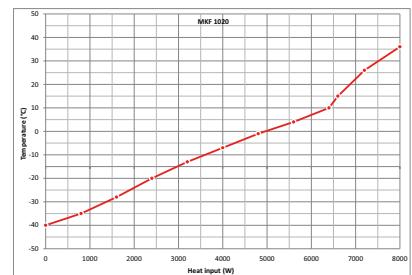


MKF 720



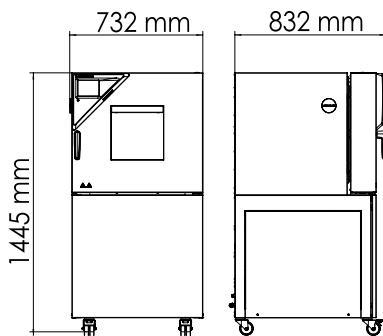
Heat compensation with a set value of -40°C

MKF 1020

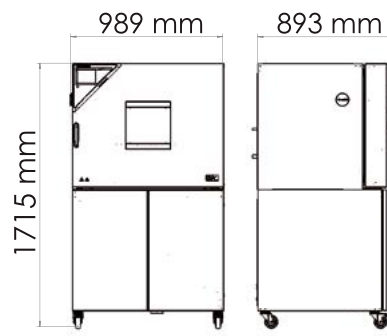


DIMENSIONS incl. fittings and connections [mm]

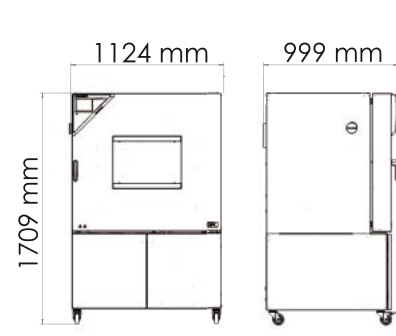
MKF 56



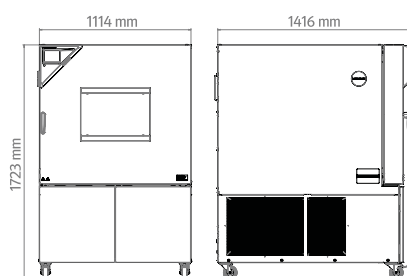
MKF 115



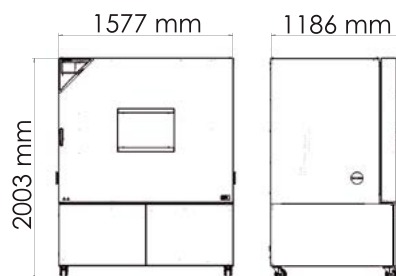
MKF 240



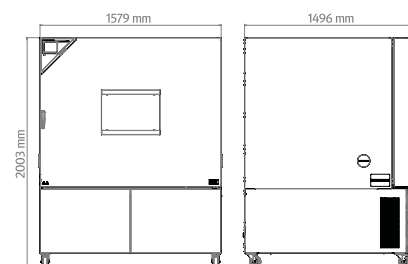
MKF 400



MKF 720



MKF 1020



ORDERING INFORMATION OPTIONS

Bezeichnung	Beschreibung	MKF 56	MKF 115	MKF 240	MKF 400	MKF 720	MKF 1020	Art.-Nr.
Access port with silicone plug	left							
	30 mm	•	•	•	•	•	•	8012-1323
	50 mm	•	•	•	•	•	•	8012-1329
	80 mm	•	•	•	•	•	•	8012-1335
	100 mm	–	•	•	•	•	•	8012-1543
	125 mm	–	•	•	•	•	•	8012-1352
	right							
	30 mm	•	•	•	•	•	•	8012-1320
	50 mm	•	•	•	•	•	•	8012-1326
	80 mm	•	•	•	•	•	•	8012-1332
	100 mm	–	•	•	•	•	•	8012-1540
	125 mm	–	•	•	•	•	•	8012-1349
	top							
	80 mm	•	•	•	•	•	•	8012-1537
	100 mm	–	•	•	•	•	•	8012-1531
	125 mm	–	•	•	•	•	•	8012-1534
Analog output 4-20 mA	for temperature and humidity values (output not adjustable)	•	•	•	•	•	•	8012-1085
Calibration certificate, expanded	for temperature and humidity; for extending the measurement in center of chamber to include another test value	•	•	•	•	•	•	8012-1194
Calibration certificate, temperature	temperature measurement incl. certificate and 27 measuring points at specified temperature	•	•	•	•	•	•	8012-1609
	temperature measurement incl. certificate, 15- 18 measuring points at specified temperature	•	•	•	•	•	•	8012-1589
	temperature measurement incl. certificate, 9 measuring points at specified temperature	•	•	•	•	•	•	8012-1568
Calibration certificate, temperature and humidity	Measurement in center of chamber at 25 °C / 60% RH or at specified test values	•	•	•	•	•	•	8012-1188
	temperature (according to DIN12880) and humidity measurement incl. certificate, 27 temperature measuring points and 1 humidity measuring point, at 25 °C / 60 % RH or at specified values	•	•	•	•	•	•	8012-1615
Compressed air connection	for the connection to an existing pressurized air network	•	–	–	–	–	–	8012-1796
		–	•	–	–	–	–	8012-1802
		–	–	•	•	–	–	8012-1787
		–	–	–	–	•	•	8012-1798
Door lock	lockable door handle	•	–	–	–	–	–	8012-1096
		–	•	•	•	•	•	8012-1862

Bezeichnung	Beschreibung	MKF 56	MKF 115	MKF 240	MKF 400	MKF 720	MKF 1020	Art.-Nr.
Dry-air purge	controlled, incl. connection; suitable for the simulation of current automobile industry standards	•	–	–	–	–	–	8012-1088
		–	•	–	–	–	–	8012-1863
		–	–	•	–	–	–	8012-1869
		–	–	–	–	•	–	8012-1870
Notch-type access port	notch-type access port in door, 100 x 35 mm	–	•	–	–	–	–	8012-1853
		–	–	•	•	–	–	8012-1856
		–	–	–	–	•	•	8012-1859
Pt 100 temperature sensor	additional flexible Pt 100, interior, for displaying the temperature on the unit display	•	•	•	•	•	•	8012-1094
RS 485 interface, 2-wire	Additional serial interface can be used parallel to Ethernet, for Multi Management Software APT-COM™	•	•	•	•	•	•	8012-1769
Temperature safety device class 2	with visual alarm (DIN 12880)	•	–	–	–	–	–	8012-1097
		–	•	•	•	•	•	8012-1864
Water circuit	allows condensed water to be reused	–	•	•	•	•	•	8012-1512
Water cooling	for reduced heat loss to ambient air	•	–	–	–	–	–	8012-1098
		–	•	–	–	–	–	8012-0843
		–	–	•	–	–	–	8012-0842
		–	–	–	–	•	–	8012-0804

ORDERING INFORMATION ACCESSORIES

Bezeichnung	Beschreibung	MKF 56	MKF 115	MKF 240	MKF 400	MKF 720	MKF 1020	Art.-Nr.
APT-COM™ 4 GLP-Edition	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.							
	version 4, GLP edition	•	•	•	•	•	•	9053-0042
APT-COM™ 4 PROFESSIONAL-Edition	convenient unit and user management built on the BASIC edition. Suitable for networking up to 100 units.							
	version 4, PROFESSIONAL edition	•	•	•	•	•	•	9053-0040
BINDER PURE AQUA SERVICE	System for preparation or complete desalination of tap water, complete set containing PURE AQUA 300 single-use cartridge, measuring device, and all necessary connecting parts	•	•	•	•	•	•	8012-0759
BINDER PURE AQUA SERVICE, accessories	Single-use, replacement cartridge for BINDER PURE AQUA System	•	•	•	•	•	•	6011-0165
pH-neutral detergent	concentrated, for gentle remove of residual contaminants; 1 kg	•	•	•	•	•	•	1002-0016
Qualification documents	IQ/OQ documents – supporting documents for validation performed by customers, consisting of: IQ/OQ checklists incl. calibration guide and comprehensive unit documentation; parameters: temperature and humidity values							
	Digital in PDF format	•	•	•	•	•	•	7057-0002
	Hard copy inside folder	•	•	•	•	•	•	7007-0002
	IQ/OQ/PQ documents – supporting documents for validation performed by customers, according to customer requirements, PQ section added to qualification folder IQ/OQ; parameters: temperature and humidity values							
	Digital in PDF format	•	•	•	•	•	•	7057-0006
	Hard copy inside folder	•	•	•	•	•	•	7007-0006

Bezeichnung	Beschreibung	MKF 56	MKF 115	MKF 240	MKF 400	MKF 720	MKF 1020	Art.-Nr.
Rack	stainless steel	•	–	–	–	–	–	8012-2085
		–	•	–	–	–	–	8012-2048
		–	–	•	–	–	–	8012-2053
		–	–	–	•	–	–	8012-2123
		–	–	–	–	•	–	8012-2054
		–	–	–	–	–	•	8012-2124
Rack accessories	fasteners (1 set of 4) for additional security of racks	•	•	•	•	•	•	8012-0620
Rack, reinforced	stainless steel, with fasteners (1 set of 4)	•	–	–	–	–	–	8012-1091
		–	•	–	–	–	–	8012-0709
		–	–	•	–	–	–	8012-0605
		–	–	–	•	–	–	8012-2104
		–	–	–	–	•	–	8012-0684
		–	–	–	–	–	•	8012-2105
RS 485 / RS 422 interface converter	RS 422 cable set and RS 485 / RS 422 interface converter for connection to 10-way plug distributor							
	115 V option model	•	•	•	•	•	•	8012-0599
	230 V option model	•	•	•	•	•	•	8012-0589
Shelf, perforated	Stainless steel	•	–	–	–	–	–	6004-0182
		–	•	–	–	–	–	6004-0030
		–	–	•	–	–	–	8009-0447
		–	–	–	–	•	–	8009-0511
		–	–	–	–	–	•	8009-1183
Water supply set	consisting of fresh- and waste-water containers (20 liters each), cabling and pump							
	external, free-standing	•	–	–	–	–	–	8012-1846
WLAN kit	The kit contains a client bridge that establishes a wireless connection between BINDER units and APT-COM4, LIMS, or customer-specific software via an Ethernet interface. It provides an alternative solution in situations where units need to be positioned in locations without an on-site Ethernet connection. In secured networks, installation and configuration must be performed by the customer's IT service.	•	•	•	•	•	•	8500-0164

Series MKT | for rapid temperature changes with extended low temperature range

Temperature ranges between -70 °C and 180 °C, with the added benefit of natural simulation, are what make the BINDER MKT series so unique. At the same time, this environmental simulation chamber fulfills the very highest precision and performance requirements for cyclical temperature tests.



Model MKT 240

BENEFITS

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

MAIN FEATURES

- Temperature range: -70 °C to +180 °C
- 4 zero-voltage relay contacts
- APT.line™ 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 (Models 115, 240: 50 mm, left)

AVAILABLE SIZES

Model	Interior volume [L]	Online data sheets
MKT 115	115	› go2binder.com/en-MKT115
MKT 240	228	› go2binder.com/en-MKT240
MKT 720	734	› go2binder.com/en-MKT720



Find all details online: go2binder.com/en-MKT

OPTIONAL EQUIPMENT

Access port with silicone plug	For introducing external measuring instruments. Large selection of different diameters and positions (left, right, or top)	
BINDER PURE AQUA Service	System for preparation or complete desalination of tap water, complete set containing PURE AQUA 300 single-use cartridge, measuring device, and all necessary connecting parts.	
Dry-air purge	Suitable for simulating a dry, cold climate. In the MKF and MKFT series with controlled humidity, the temperature-humidity chart is significantly expanded, while the option of simulating current automobile industry standards, such as PV 2005; PV 1200; PR 308.2, is also available.	
Services	You can access our installation, maintenance, calibration, validation, or warranty services by taking out a Maintenance Service Agreement or by simply getting in touch when you need us. More information is available in the accessories and services chapter.	
BINDER INDIVIDUAL	Using a BINDER series production product as a basis, we develop individual solutions as a single unit or in small batches. All products are tested, certified, and supplied with a full functional guarantee and warranty. More information is available in the accessories and services chapter.	

► All extras online go2binder.com/en-options

TECHNICAL DATA

Description	MKT 115	MKT 240	MKT 720
Measures			
Interior volume [L]	115	228	734
Net weight of the unit (empty) [kg]	305	380	610
Permitted load [kg]	60	70	160
Load per rack [kg]	30	30	40
Wall clearance back [mm]	300	300	300
Wall clearance sidewise [mm]	200	200	200
Internal Dimensions			
Width [mm]	600	735	1200
Height [mm]	480	700	1020
Depth [mm]	400	443	600
Housing dimensions not incl. fittings and connections			
Width net [mm]	980	1115	1580
Height net [mm]	1725	1935	2005
Depth net [mm]	865	925	1140
Performance Data Temperature			
Temperature range [°C]	-70...180	-70...180	-70...180
Temperature variation depending on setpoint [± K]	0.2...1.8	0.1...1.0	0.3...2
Temperature fluctuation depending on setpoint [± K]	0.1...0.6	0.1...0.4	0.1...0.5
Average heating-up rate according to IEC 60068-3-5 [K/min]	5.3	5	4.5
Average cooling down time according to IEC 60068-3-5 [K/min]	4.2	4.2	4
Electrical data			
Nominal power (version 400 V) [kW]	5.5	6.5	13
Nominal power (version 480 V) [kW]	5.5	6.5	13
Fixtures			
Number of shelves (std./max.)	1/4	1/6	1/11

ORDERING INFORMATION [Art. No.]

Further details: Go to www.binder-world.com › Search › Enter Article Number

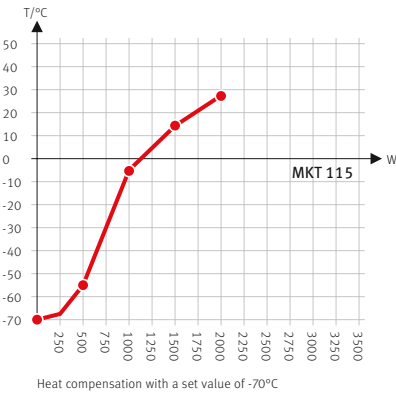
Voltage	Option model	MKT 115	MKT 240	MKT 720
480 V 3~ 60 Hz	with voltage and frequency converter	9020-0363	9020-0364	9020-0365
400 V 3~ 50 Hz	Standard	9020-0385	9020-0386	9020-0387

EXTRACT OF FULLFILLED STANDARDS

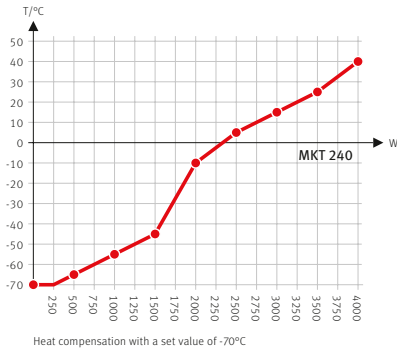
- DIN EN 60068-2-1: 2008-01
- DIN EN 60068-3-5:2002-12
- MIL STD 810:2000-01

HEAT COMPENSATION

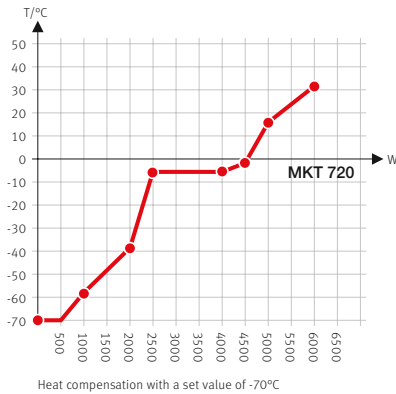
MKT 115



MKT 240

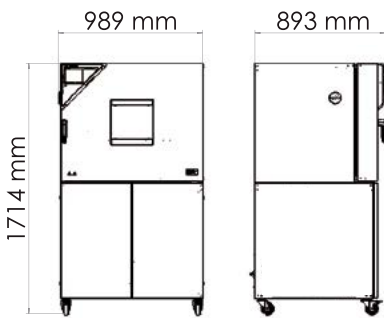


MKT 720

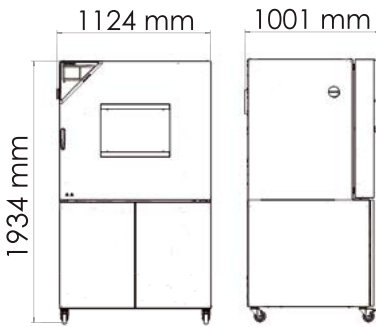


DIMENSIONS incl. fittings and connections [mm]

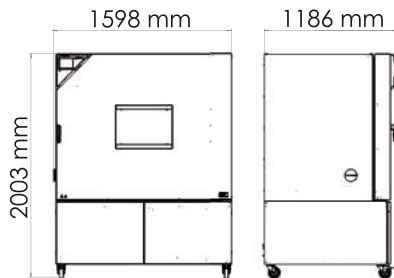
MKT 115



MKT 240



MKT 720



ORDERING INFORMATION OPTIONS

Bezeichnung	Beschreibung	MKT 115	MKT 240	MKT 720	Art.-Nr.
Access port with silicone plug	left				
	30 mm	•	•	•	8012-1324
	50 mm	•	•	•	8012-1330
	80 mm	•	•	•	8012-1336
	100 mm	•	•	•	8012-1544
	125 mm	•	•	•	8012-1353
	right				
	30 mm	•	•	•	8012-1321
	50 mm	•	•	•	8012-1327
	80 mm	•	•	•	8012-1333
	100 mm	•	•	•	8012-1541
	125 mm	•	•	•	8012-1350
	top				
	80 mm	•	•	•	8012-1538
	100 mm	•	•	•	8012-1532
	125 mm	•	•	•	8012-1535

Bezeichnung	Beschreibung	MKT 115	MKT 240	MKT 720	Art.-Nr.
Analog output 4-20 mA	for temperature values (output not adjustable)	•	•	•	8012-1785
Calibration certificate, expanded	for temperature; for extending the measurement in center of chamber to include another test temperature	•	•	•	8012-1125
Calibration certificate, temperature	for temperature, measurement in center of chamber at specified temperature	•	•	•	8012-1144
	temperature measurement incl. certificate and 27 measuring points at specified temperature	•	•	•	8012-1603
	temperature measurement incl. certificate, 15- 18 measuring points at specified temperature	•	•	•	8012-1582
	temperature measurement incl. certificate, 9 measuring points at specified temperature	•	•	•	8012-1561
Compressed air connection	for the connection to an existing pressurized air network	•	–	–	8012-1804
		–	•	–	8012-1788
		–	–	•	8012-1800
Door lock	lockable door handle	•	•	•	8012-1784
Dry-air purge	uncontrolled, incl. connection; for preventing condensation	•	–	–	8012-1805
		–	•	–	8012-1867
		–	–	•	8012-1868
Notch-type access port	notch-type access port in door, 100 x 35 mm	•	–	–	8012-1852
		–	•	–	8012-1855
		–	–	•	8012-1858
Pt 100 temperature sensor	additional flexible Pt 100, interior, for displaying the temperature on the unit display	•	•	•	8012-1790
RS 485 interface, 2-wire	Additional serial interface can be used parallel to Ethernet, for Multi Management Software APT-COM™	•	•	•	8012-1770
Temperature safety device class 2	with visual alarm (DIN 12880)	•	•	•	8012-1794

ORDERING INFORMATION ACCESSORIES

Bezeichnung	Beschreibung	MKT 115	MKT 240	MKT 720	Art.-Nr.
APT-COM™ 4 GLP-Edition	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. version 4, GLP edition	•	•	•	9053-0042
APT-COM™ 4 PROFESSIONAL-Edition	convenient unit and user management built on the BASIC edition. Suitable for networking up to 100 units. version 4, PROFESSIONAL edition	•	•	•	9053-0040
pH-neutral detergent	concentrated, for gentle remove of residual contaminants; 1 kg	•	•	•	1002-0016
Qualification documents	IQ/OQ documents – supporting documents for validation performed by customers, consisting of: IQ/OQ checklists incl. calibration guide and comprehensive unit documentation; parameters: temperature, CO ₂ , O ₂ , pressure, depending on unit				
	Digital in PDF format	•	•	•	7057-0001
	Hard copy inside folder	•	•	•	7007-0001
	IQ/OQ/PQ documents – supporting documents for validation performed by customers, according to customer requirements, PQ section added to qualification folder IQ/OQ; parameters: temperature, CO ₂ , O ₂ – or pressure, depending on unit				
	Digital in PDF format	•	•	•	7057-0005
	Hard copy inside folder	•	•	•	7007-0005
Rack	stainless steel	•	–	–	8012-2048
		–	•	–	8012-2053
		–	–	•	8012-2054

Bezeichnung	Beschreibung	MKT 115	MKT 240	MKT 720	Art.-Nr.
Rack accessories	fasteners (1 set of 4) for additional security of racks	•	•	•	8012-0620
		•	–	–	8012-0709
Rack, reinforced	stainless steel, with fasteners (1 set of 4)	–	•	–	8012-0605
		–	–	•	8012-0684
RS 485 / RS 422 interface converter	RS 422 cable set and RS 485 / RS 422 interface converter for connection to 10-way plug distributor				
	115 V option model	•	•	•	8012-0599
	230 V option model	•	•	•	8012-0589
Shelf, perforated	Stainless steel	•	–	–	6004-0030
		–	•	–	8009-0447
		–	–	•	8009-0511
WLAN kit	The kit contains a client bridge that establishes a wireless connection between BINDER units and APT-COM4, LIMS, or customer-specific software via an Ethernet interface. It provides an alternative solution in situations where units need to be positioned in locations without an on-site Ethernet connection. In secured networks, installation and configuration must be performed by the customer's IT service.	•	•	•	8500-0164

Series MKFT | for rapid temperature changes with humidity control and extended low temperature range

The BINDER MKFT series environmental simulation chamber for low temperature alternating climate profiles is the specialist for dynamic alternating climate change between -70 °C and 180 °C. Large performance reserves and rapid cooling make the MKFT environmental simulation chamber the high-end product for complex standards-based climate tests.



Model MKFT 240

BENEFITS

- Homogeneous climate conditions thanks to
- APT.line™ technology
- Automatic water and wastewater management
- Pressure humidification with fast response times
- Comprehensive programming and data acquisition
- Large heated viewing window

MAIN FEATURES

- Temperature range: -70 °C to +180 °C
- Humidity range: 10 % to 98 % RH
- Integrated water-storage tank, 20 liters
- 4 zero-voltage relay contacts
- APT.line™ preheating chamber technology
- Programmable condensation protection for test material
- Intuitive touchscreen controller with time-segment and real-time programming
- Internal data logger, measured values can be read out in open format via USB
- Heated viewing window with LED interior lighting
- Humidity regulation with capacitive humidity sensor and vapor humidification

AVAILABLE SIZES

Model	Interior volume [L]	Online data sheets
MKFT 115	115	› go2binder.com/en-MKFT115
MKFT 240	228	› go2binder.com/en-MKFT240
MKFT 720	734	› go2binder.com/en-MKFT720



Find all details online: go2binder.com/en-MKFT

OPTIONAL EQUIPMENT

Access port with silicone plug	For introducing external measuring instruments. Large selection of different diameters and positions (left, right, or top)	
BINDER PURE AQUA Service	System for preparation or complete desalination of tap water, complete set containing PURE AQUA 300 single-use cartridge, measuring device, and all necessary connecting parts.	
Dry-air purge	Suitable for simulating a dry, cold climate. In the MKF and MKFT series with controlled humidity, the temperature-humidity chart is significantly expanded, while the option of simulating current automobile industry standards, such as PV 2005; PV 1200; PR 308.2, is also available.	
Services	You can access our installation, maintenance, calibration, validation, or warranty services by taking out a Maintenance Service Agreement or by simply getting in touch when you need us. More information is available in the accessories and services chapter.	
BINDER INDIVIDUAL	Using a BINDER series production product as a basis, we develop individual solutions as a single unit or in small batches. All products are tested, certified, and supplied with a full functional guarantee and warranty. More information is available in the accessories and services chapter.	

► All extras online go2binder.com/en-options

TECHNICAL DATA

Description	MKFT 115	MKFT 240	MKFT 720
Measures			
Interior volume [L]	115	228	734
Net weight of the unit (empty) [kg]	494	579	887
Permitted load [kg]	60	70	160
Load per rack [kg]	30	30	40
Wall clearance back [mm]	300	300	300
Wall clearance sidewise [mm]	200	200	200
Internal Dimensions			
Width [mm]	600	735	1200
Height [mm]	480	700	1020
Depth [mm]	400	443	600
Housing dimensions not incl. fittings and connections			
Width net [mm]	980	1115	1580
Height net [mm]	1725	1940	2005
Depth net [mm]	865	925	1140
Performance Data Temperature			
Temperature range [°C]	-70...180	-70...180	-70...180
Temperature variation depending on setpoint [± K]	0.1...1.3	0.2...1.8	0.3...2.0
Temperature fluctuation depending on setpoint [± K]	0.1...0.1	0.1...0.5	0.1...0.1
Average heating-up rate according to IEC 60068-3-5 [K/min]	5.5	5	4.8
Average cooling down time according to IEC 60068-3-5 [K/min]	4.2	4.2	4
Performance Data Climate			
Temperature range [°C]	10...95	10...95	10...95
Temperature fluctuation depending on setpoint [± K]	0.1...1	0.1...1.5	0.1...1
Humidity range	10...98	10...98	10...98
Humidity fluctuation depending on setpoint [± % RH]	≤2,5	≤2,5	≤2,5
Electrical data			
Nominal power (version 400 V) [kW]	5	6	11
Nominal power (version 480 V) [kW]	5	6	11
Fixtures			
Number of shelves (std./max.)	1/4	1/6	1/11

ORDERING INFORMATION [Art. No.]

Further details: Go to www.binder-world.com > Search > Enter Article Number

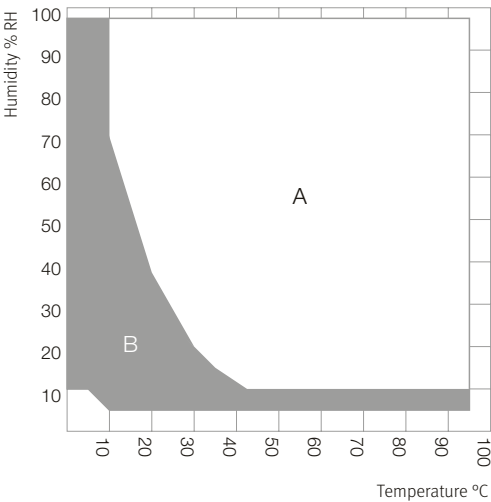
Voltage	Option model	MKFT 115	MKFT 240	MKFT 720
480 V 3~ 60 Hz	with voltage and frequency converter	9020-0362	9020-0361	9020-0360
400 V 3~ 50 Hz	Standard	9020-0382	9020-0383	9020-0384

EXTRACT OF FULLFILLED STANDARDS

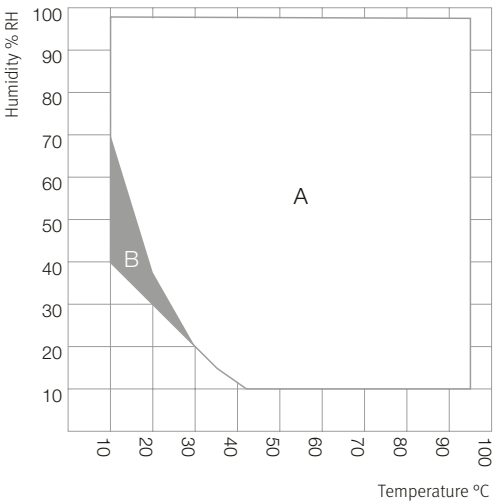
- DIN EN 60068-2-30: 2006-06
- DIN EN 60068-2-38: 2010-06
- DIN EN 60068-2-1: 2008-01
- MIL STD 331:2005-01
- DIN EN 60068-3-6:2002-12

TEMPERATURE-HUMIDITY CHART

MKFT 115, MKFT 240, MKFT 720

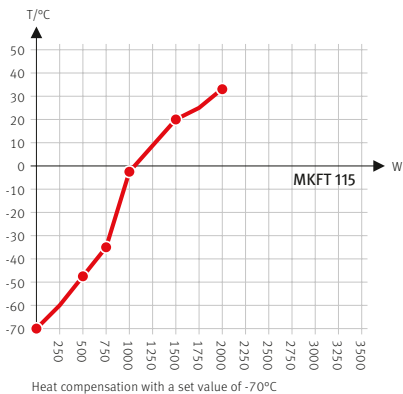


MKFT 115, MKFT 240, MKFT 720

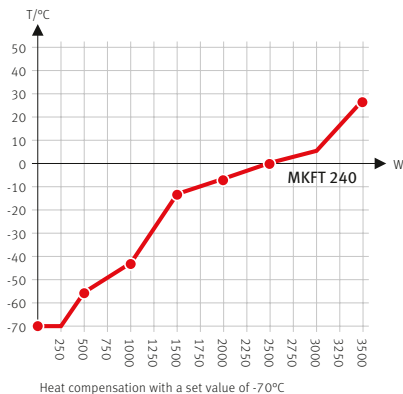


HEAT COMPENSATION

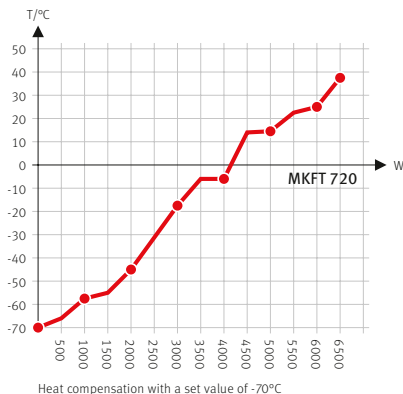
MKFT 115



MKFT 240

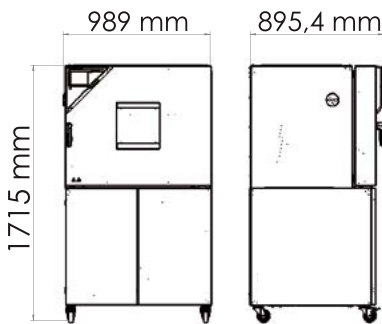


MKFT 720

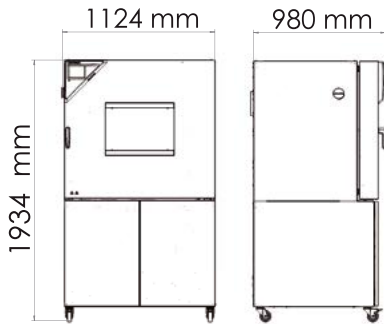


DIMENSIONS incl. fittings and connections [mm]

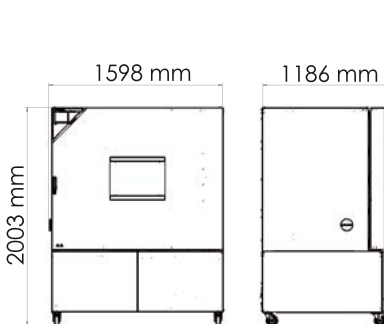
MKFT 115



MKFT 240



MKFT 720



ORDERING INFORMATION OPTIONS

Bezeichnung	Beschreibung	MKFT 115	MKFT 240	MKFT 720	Art.-Nr.
Access port with sili- cone plug	left				
	30 mm	•	•	•	8012-0509
	50 mm	•	•	•	8012-0511
	80 mm	•	•	•	8012-0513
	100 mm	•	•	•	8012-0836
	125 mm	•	•	•	8012-0533
	right				
	30 mm	•	•	•	8012-0508
	50 mm	•	•	•	8012-0510
	80 mm	•	•	•	8012-0512
	100 mm	•	•	•	8012-0835
	125 mm	•	•	•	8012-0532
	top				
	80 mm	•	•	•	8012-0834
	100 mm	•	•	•	8012-0832
	125 mm	•	•	•	8012-0833
Analog output 4-20 mA	for temperature and humidity values (output not adjustable)	•	•	•	8012-1786
Calibration certificate, expanded	for temperature and humidity; for extending the measurement in center of chamber to include another test value	•	•	•	8012-1193
Calibration certificate, temperature	temperature measurement incl. certificate and 27 measuring points at specified temperature	•	•	•	8012-1608
	temperature measurement incl. certificate, 15- 18 measuring points at specified temperature	•	•	•	8012-1588
	temperature measurement incl. certificate, 9 measuring points at specified temperature	•	•	•	8012-1567
Calibration certificate, temperature and humidity	Measurement in center of chamber at 25 °C / 60% RH or at specified test values	•	•	•	8012-1187
	temperature (according to DIN12880) and humidity measurement incl. certificate, 27 temperature measuring points and 1 humidity measuring point, at 25 °C / 60 % RH or at specified values	•	•	•	8012-1614
Compressed air connection	for the connection to an existing pressurized air network	•	–	–	8012-1803
		–	•	–	8012-1090
		–	–	•	8012-1799
Door lock	lockable door handle	•	•	•	8012-1783
Dry-air purge	controlled, incl. connection; suitable for the simulation of current automobile industry standards	•	–	–	8012-1789
		–	•	–	8012-1871
		–	–	•	8012-1872
Notch-type access port	notch-type access port in door, 100 x 35 mm	•	–	–	8012-1854
		–	•	–	8012-1857
		–	–	•	8012-1860
Pt 100 temperature sensor	additional flexible Pt 100, interior, for displaying the temperature on the unit display	•	•	•	8012-1791
RS 485 interface, 2-wire	Additional serial interface can be used parallel to Ethernet, for Multi Management Software APT-COM™	•	•	•	8012-1767
Temperature safety device class 2	with visual alarm (DIN 12880)	•	•	•	8012-1793
Water circuit	allows condensed water to be reused	•	•	•	8012-0785
Water cooling	for reduced heat loss to ambient air	–	–	•	8012-0758

ORDERING INFORMATION ACCESSORIES

Bezeichnung	Beschreibung	MKFT 115	MKFT 240	MKFT 720	Art.-Nr.
APT-COM™ 4 GLP-Edition	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. version 4, GLP edition	•	•	•	9053-0042
APT-COM™ 4 PROFESSIONAL-Edition	convenient unit and user management built on the BASIC edition. Suitable for networking up to 100 units. version 4, PROFESSIONAL edition	•	•	•	9053-0040
BINDER PURE AQUA SERVICE	System for preparation or complete desalination of tap water, complete set containing PURE AQUA 300 single-use cartridge, measuring device, and all necessary connecting parts	•	•	•	8012-0759
BINDER PURE AQUA SERVICE, accessories	Single-use, replacement cartridge for BINDER PURE AQUA System	•	•	•	6011-0165
pH-neutral detergent	concentrated, for gentle remove of residual contaminants; 1 kg	•	•	•	1002-0016
Qualification documents	IQ/OQ documents – supporting documents for validation performed by customers, consisting of: IQ/OQ checklists incl. calibration guide and comprehensive unit documentation; parameters: temperature and humidity values Digital in PDF format	•	•	•	7057-0002
	Hard copy inside folder	•	•	•	7007-0002
	IQ/OQ/PQ documents – supporting documents for validation performed by customers, according to customer requirements, PQ section added to qualification folder IQ/OQ; parameters: temperature and humidity values Digital in PDF format	•	•	•	7057-0006
	Hard copy inside folder	•	•	•	7007-0006
	Rack	•	–	–	8012-2048
		–	•	–	8012-2053
Rack accessories	fasteners (1 set of 4) for additional security of racks	–	–	•	8012-2054
		•	•	•	8012-0620
		•	–	–	8012-0709
Rack, reinforced	stainless steel, with fasteners (1 set of 4)	–	•	–	8012-0605
		–	–	•	8012-0684
		•	•	•	8012-0599
RS 485 / RS 422 interface converter	RS 422 cable set and RS 485 / RS 422 interface converter for connection to 10-way plug distributor	•	•	•	8012-0589
	115 V option model	•	•	•	8012-0589
	230 V option model	•	–	–	6004-0030
Shelf, perforated	Stainless steel	–	•	–	8009-0447
		–	–	•	8009-0511
		•	•	•	8500-0164
WLAN kit	The kit contains a client bridge that establishes a wireless connection between BINDER units and APT-COM4, LIMS, or customer-specific software via an Ethernet interface. It provides an alternative solution in situations where units need to be positioned in locations without an on-site Ethernet connection. In secured networks, installation and configuration must be performed by the customer's IT service.	•	•	•	8500-0164

BINDER products

CO₂ incubators

Incubators

Cooling incubators

Growth chambers

Ultralow temperature freezers

Drying and heating chambers

Safety drying chambers

Vacuum drying chambers

Constant climate chambers

Dynamic climate chambers

Battery test chambers

Multi Management Software



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